



Typical Characteristics
ON
P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

PMI MODEL P8T-2G18G-60-T-SFF-NSI IS A SINGLE POLE EIGHT THROW, NON-REFLECTIVE/ABSORPTIVE SWITCH MODULE WITH LOW LOSS, HIGH SPEED AND WITH INTEGRAL TTL DRIVER, DESIGNED FOR BROAD BAND OPERATIONS.



May 11, 2020

Designed By:

Dr. Ashok Gorwara

Drawn By:

Garrett Radtke

Tested and Reported By:

Alfredo Lopez

Sebastian Palacio



Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Outline Drawing

DESCRIPTION

PMI MODEL P8T-2G18G-60-T-SFF-NSI IS A 2GHZ TO 18GHZ SINGLE POLE EIGHT THROW, ABSORPTIVE SWITCH MODULE WITH LOW LOSS, HIGH SPEED AND WITH INTEGRAL TTL DRIVER AND 3 BIT DECODER, DESIGNED FOR BROADBAND OPERATIONS.

SPECIFICATIONS:

- FREQUENCY: 2 GHz TO 18 GHz
- INSERTION LOSS: 2-6 GHz - 2.5dB MAX
6-12 GHz - 3.5dB MAX
12-18 GHz - 4.5dB MAX
- ISOLATION: 60dB MIN
- VSWR: ON IN/OUT: 2.0:1 MAX
ABSORPTIVE OUT/OFF: 2.0:1 MAX
- INSERTION LOSS FLATNESS / 1GHz: +/-0.5 dB MAX
- RF INPUT POWER: +20 dBm MAX
- SWITCHING SPEED: 100 ns MAX
- IIP3: 40 dBm TYP.
- IMPEDANCE: 50 OHMS
- CONTROL: 3 BIT TTL LOGIC (SEE TABLE)
- POWER SUPPLY: +5V @ 300 mA MAX.
-5V @ 100mA MAX.
- SIZE: Ø1.500 CIRCLE POINT TO POINT X 0.400 (H)
- WEIGHT: 2.5 OUNCES TYPICAL
- FINISH: BLUE PAINT

TRUTH TABLE

E1	E2	E3	PATH ON
0	0	0	J1
1	0	0	J2
0	1	0	J3
1	1	0	J4
0	0	1	J5
1	0	1	J6
0	1	1	J7
1	1	1	J8

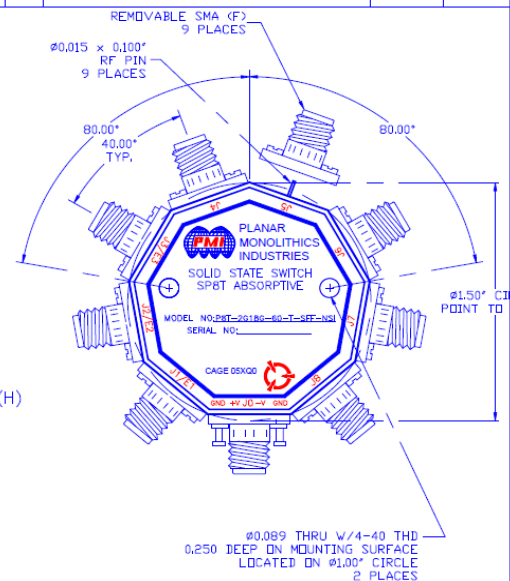
ENVIRONMENTAL RATINGS

- TEMPERATURE: 0 °C TO +60 °C (OPERATING)
-65 °C TO +125 °C (STORAGE)
- HUMIDITY: MIL-STD-202, METHOD 103B COND. B
- SHOCK: MIL-STD-202, METHOD 213B COND. B
- VIBRATION: MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	INITIAL RELEASE	7/10/2020	



PLANAR MONOLITHICS INDUSTRIES, INC.
7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: (301)-662-5019, FAX: (301)-662-1731
WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN	FPK		1/22/20	PRODUCT FEATURE	
REDRAWN				P8T-2G18G-60-T-SFF-NSI	
ISSUED					
SIZE	A	FORM NO.	05XQ0	DWG NO.	27038820
SCALE	N/S				
				SHEET	1 OF 2



Typical Characteristics **ON** **P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)**

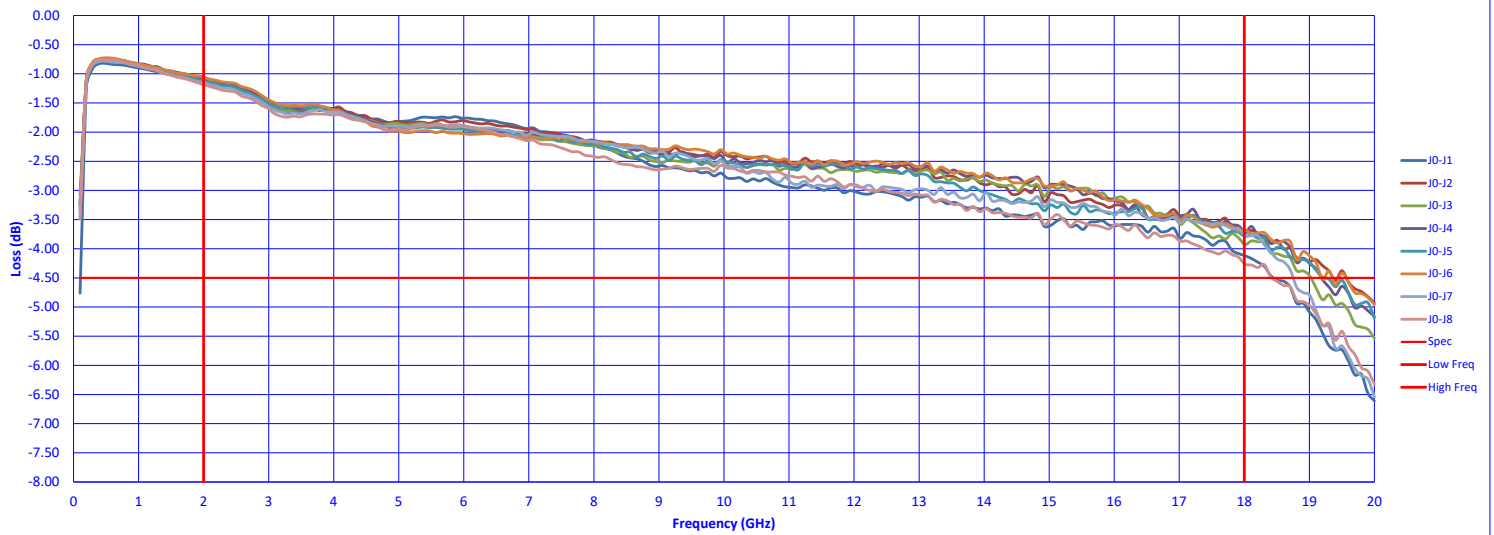
Technical Specifications

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS			QA QC
			+25°C	0°C	+60°C	
1	Frequency Range:	2 to 18 GHz	Spec 2 to 18 GHz	2 to 18 GHz	2 to 18 GHz	
		(Usable 200MHz to 19GHz	Tested 200MHz to 19GHz	Tested 200MHz to 19GHz	Tested 200MHz to 19GHz	
2	Insertion Loss:	2 - 6 GHz - 2.5 dB Max.	2.04 dB	2.02 dB	2.09 dB	
		6 -12 GHz - 3.5 dB Max.	3.04 dB	3.03 dB	3.04 dB	
		12 -18 GHz - 4.5 dB Max.	4.26 dB	4.24 dBm	4.32 dBm	
		200MHz to 19GHz	5.09 dB	5.07 dB	5.05 dB	
			See Graphs	See Graphs	See Graphs	
3	Isolation:	60 dB Min.	67.73 dB - 2 to 18GHz	67.73 dB - 2 to 18GHz	67.56 dB - 2 to 18GHz	
			65.39 dB - 200MHz to 19GHz	65.62 dB - 200MHz to 19GHz	64.7 dB - 200MHz to 19GHz	
			See Graphs	See Graphs	See Graphs	
4	VSWR: In/Out Absortive Out/OFF	2.0:1 Max.	1.88:1 2 to 18 GHz	1.9:1 2 to 18 GHz	1.88:1 2 to 18 GHz	
			2.18:1 200MHz to 19GHz	2.25:1 200MHz to 19GHz	2.09:1 200MHz to 19GHz	
			See Graphs	See Graphs	See Graphs	
5	Insertion Loss Flatnness / 1GHz	± 0.5 dB Max	0.32 dB (±) - 2 to 18GHz	0.46 dB (±) - 2 to 18 GHz	0.45 dB (±) - 2 to 18 GHz	
			0.66 dB (±) - 200MHz to 19GHz	0.57 dB (±) - 200MHz to 19GHz	0.57 dB (±) - 200MHz to 19GHz	
			See Graphs	See Graphs	See Graphs	
6	RF Input Power (CW)	+20dBm Max.	2.5 Watts (+34dBm) & 18GHz Pass See Graph	2.5 Watts (+34dBm) & 18GHz Pass See Graph	2.5 Watts (+34dBm) & 18GHz Pass See Graph	
7	Switching Speed	100ns Max.	ON : 76.20ns	ON : 76.20ns	ON : 76.20ns	
			OFF : 33.20 ns	OFF : 33.20 ns	OFF : 33.20 ns	
			Rise Time : 55.6 ns Fall Time : 13.4 ns See Plots	Rise Time : 55.6 ns Fall Time : 13.4 ns See Plots	Rise Time : 55.6 ns Fall Time : 13.4 ns See Plots	
8	IIP3	+30dBm Typ.	41.88 dBm See Plots	41.88 dBm See Plots	41.88 dBm See Plots	
9	P1dB	Not Specified	+33 dBm See Graphs	+33 dBm See Graphs	+33 dBm See Graphs	
10	Video Transients	Not Specified	820 mV P-P	820 mV P-P	820 mV P-P	
11	Hot Switching	+20dBm Max.	Pass - Tested from 1kHz to 1MHz TTL PRF & 50% DC	Pass - Tested from 1kHz to 1MHz TTL PRF & 50% DC	Pass - Tested from 1kHz to 1MHz TTL PRF & 50% DC	
12	Impedance	50Ω	Pass	Pass	Pass	
13	Power Supply:	+5 VDC @ 300 mA Typ.	+5 VDC @ 118 mA	+5 VDC @ 120 mA	+5 VDC @ 125 mA	
		-5 VDC @ 100 mA Typ.	-5 VDC @ 52 mA	-5 VDC @ 54 mA	-5 VDC @ 55 mA	
14	Control Signal:	3 Bit TTL: Logic (See Table)				Pass
		E1	E2	E3	PATH ON	
		0	0	0	J1	
		1	0	0	J2	
		0	1	0	J3	
		1	1	0	J4	
		0	0	1	J5	
		1	0	1	J6	
		0	1	1	J7	
		1	1	1	J8	

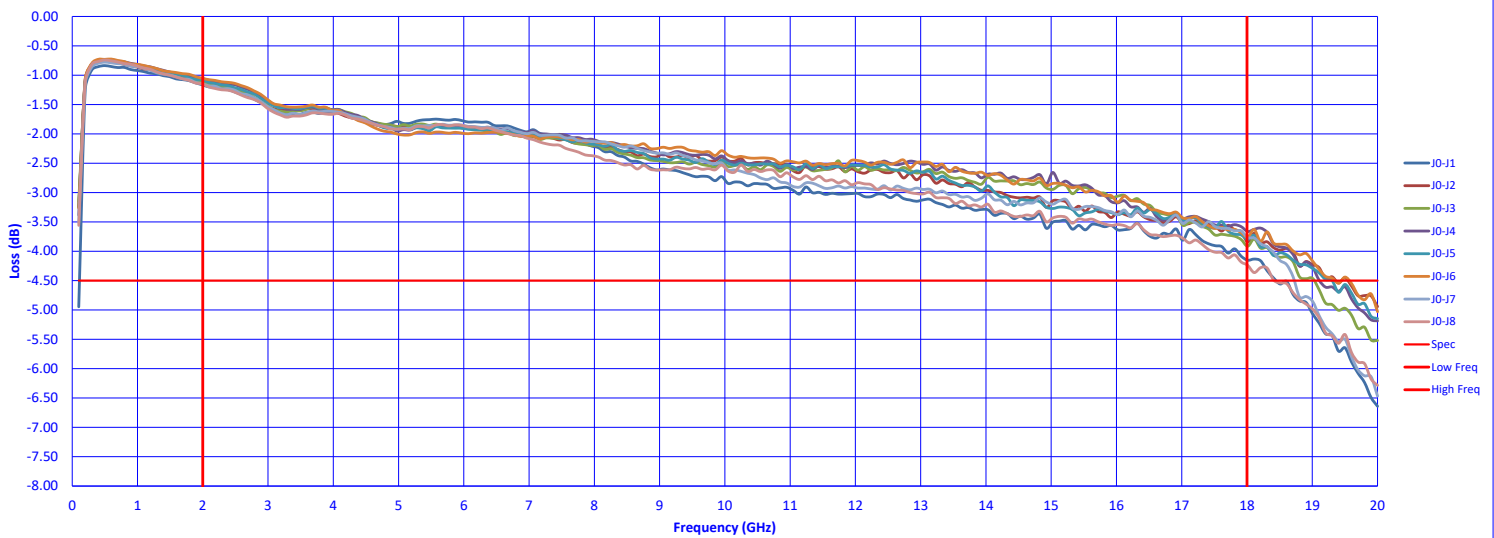


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

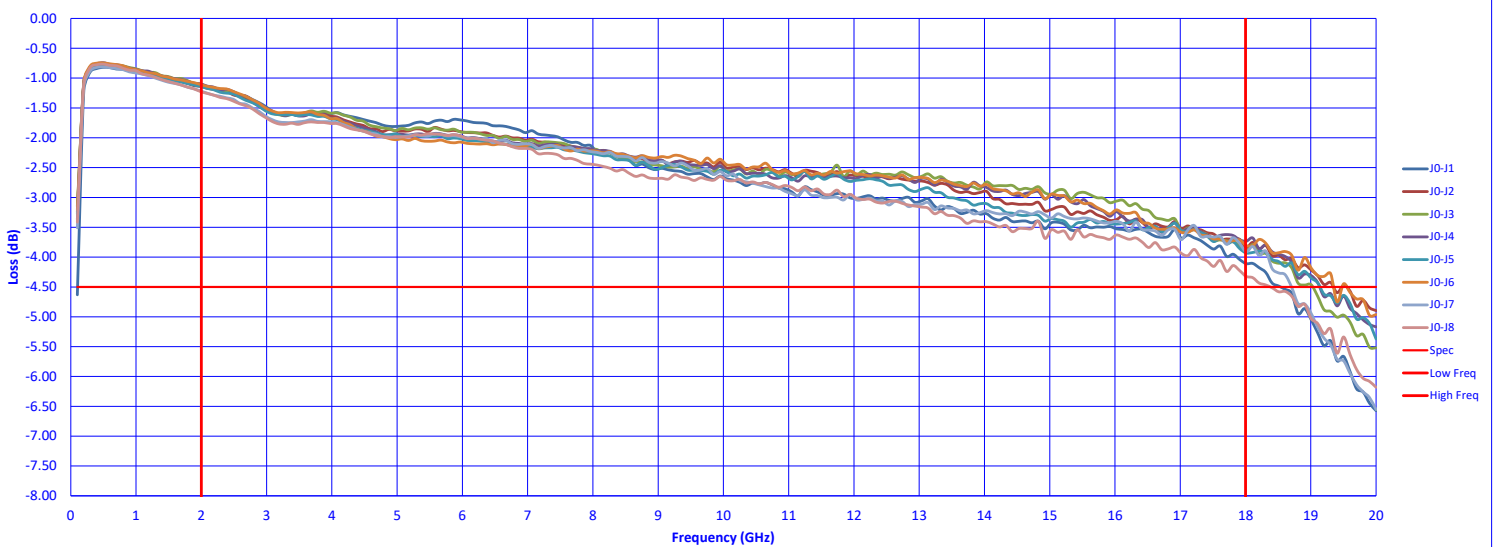
Insertion Loss (+25°C)



Insertion Loss (0°C)

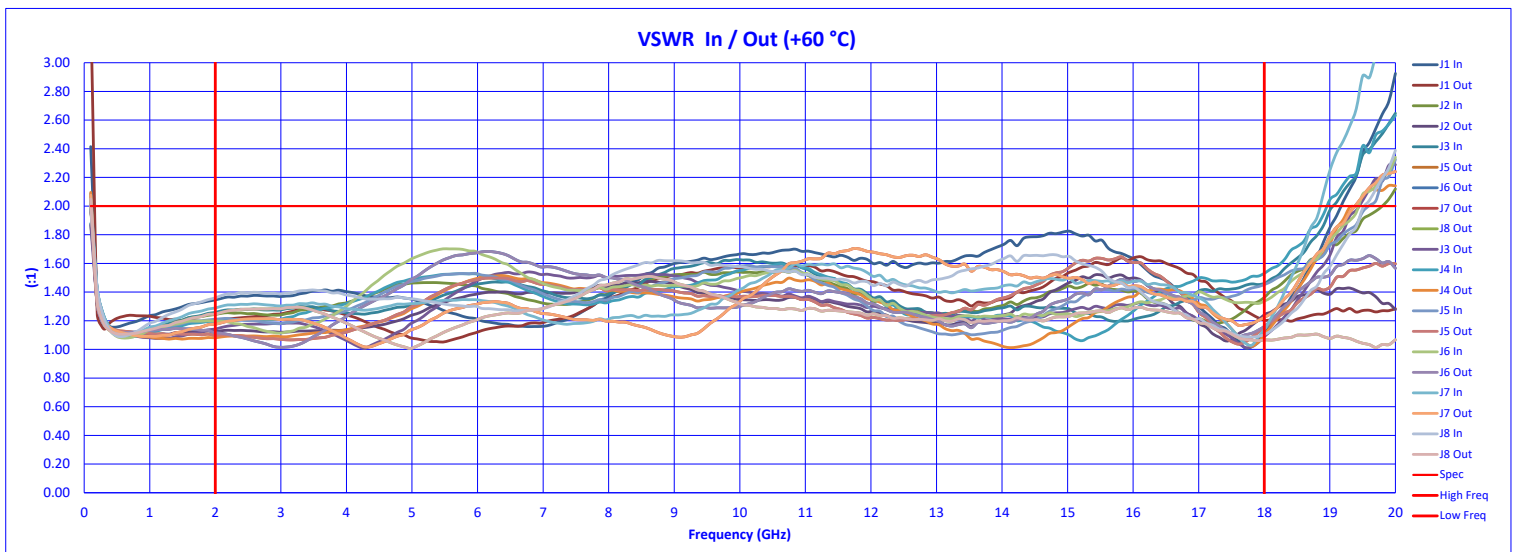
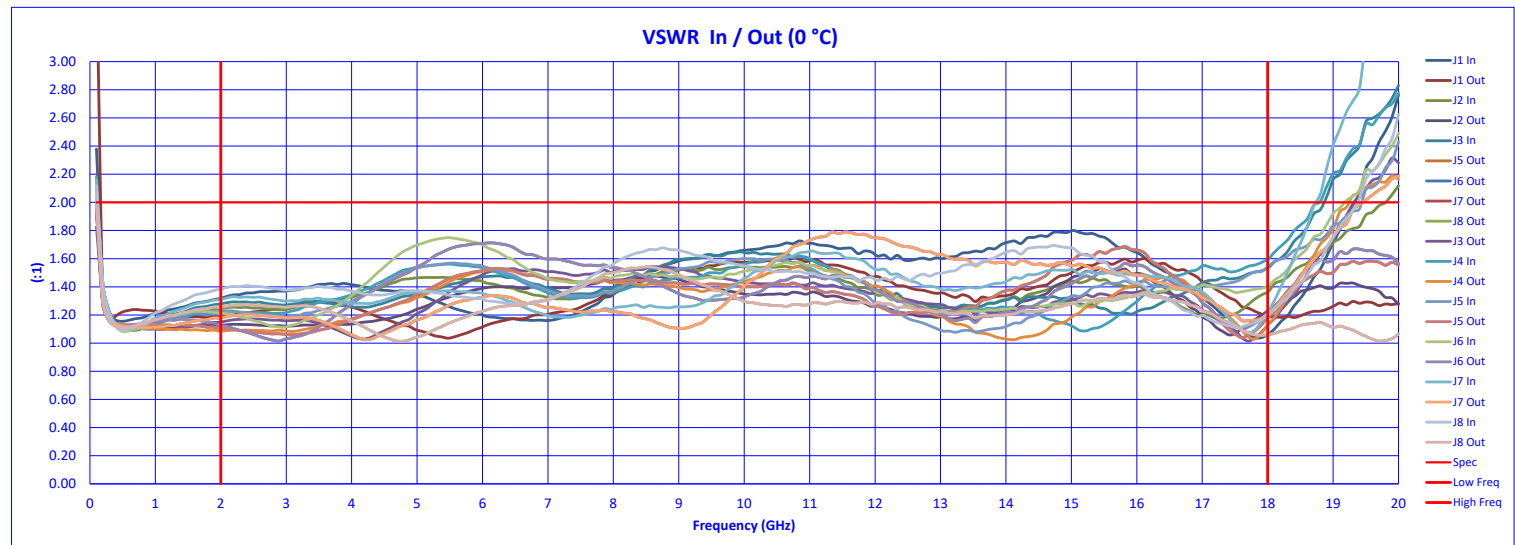
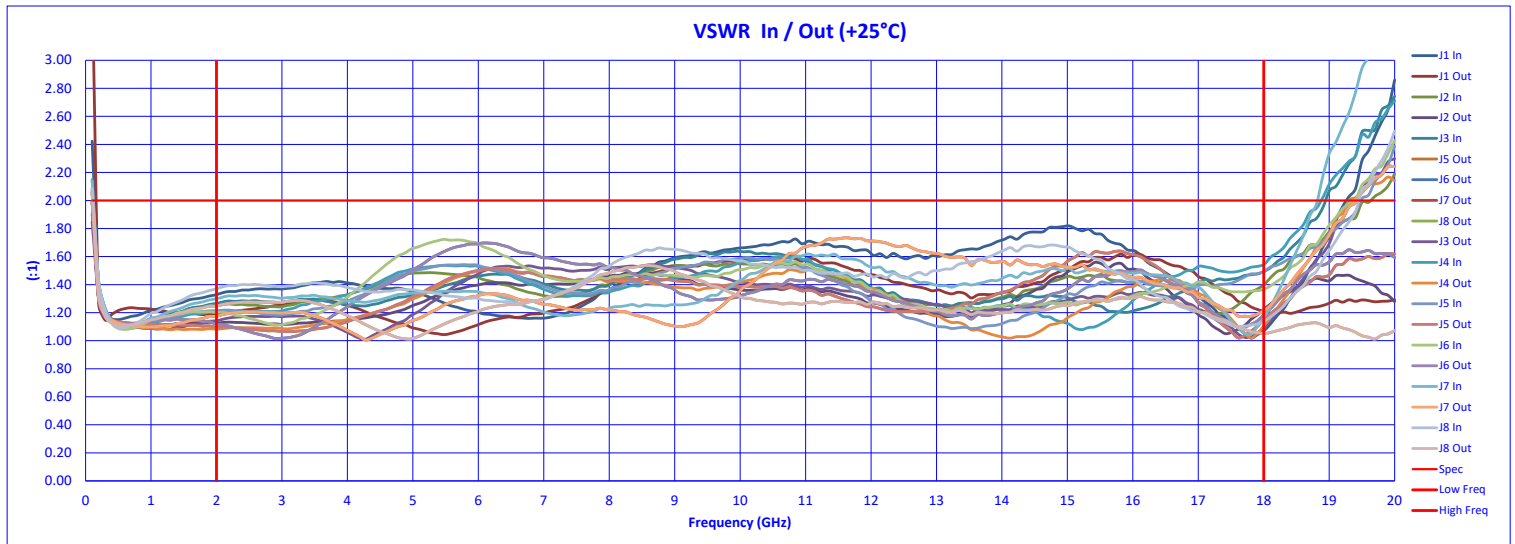


Insertion Loss (+60°C)





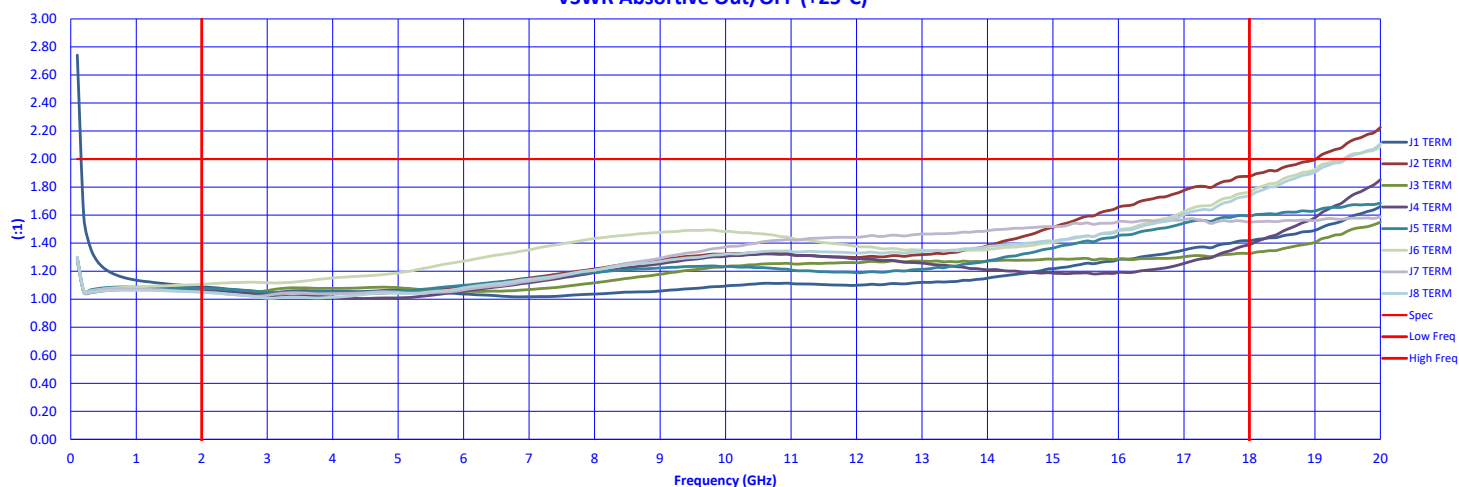
Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)



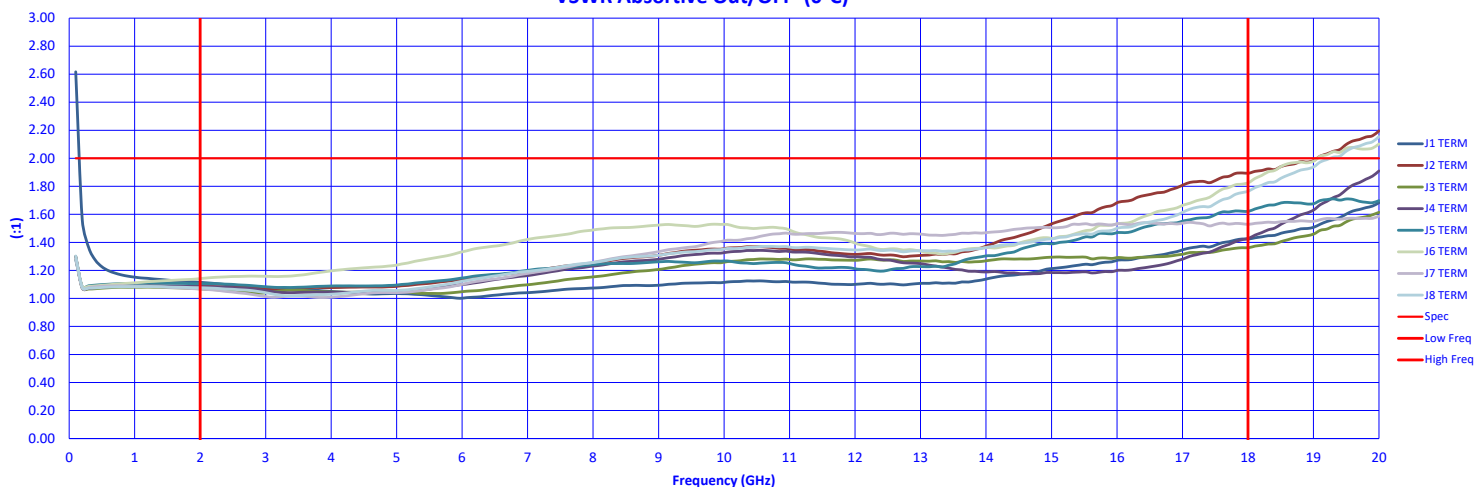


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

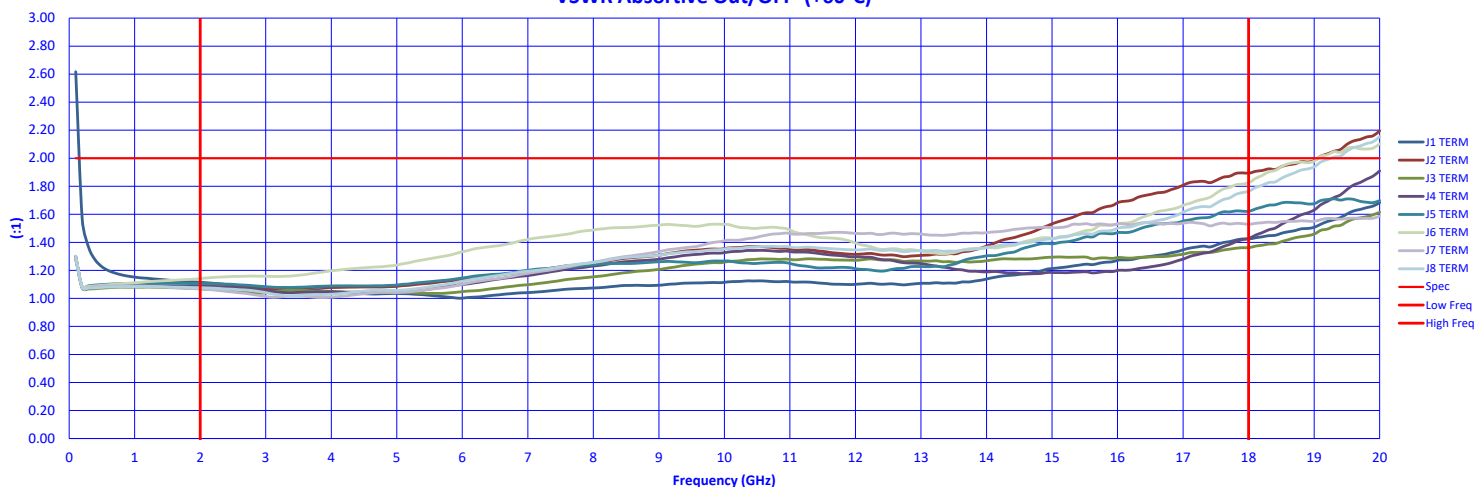
VSWR Absorptive Out/OFF (+25°C)



VSWR Absorptive Out/OFF (0°C)

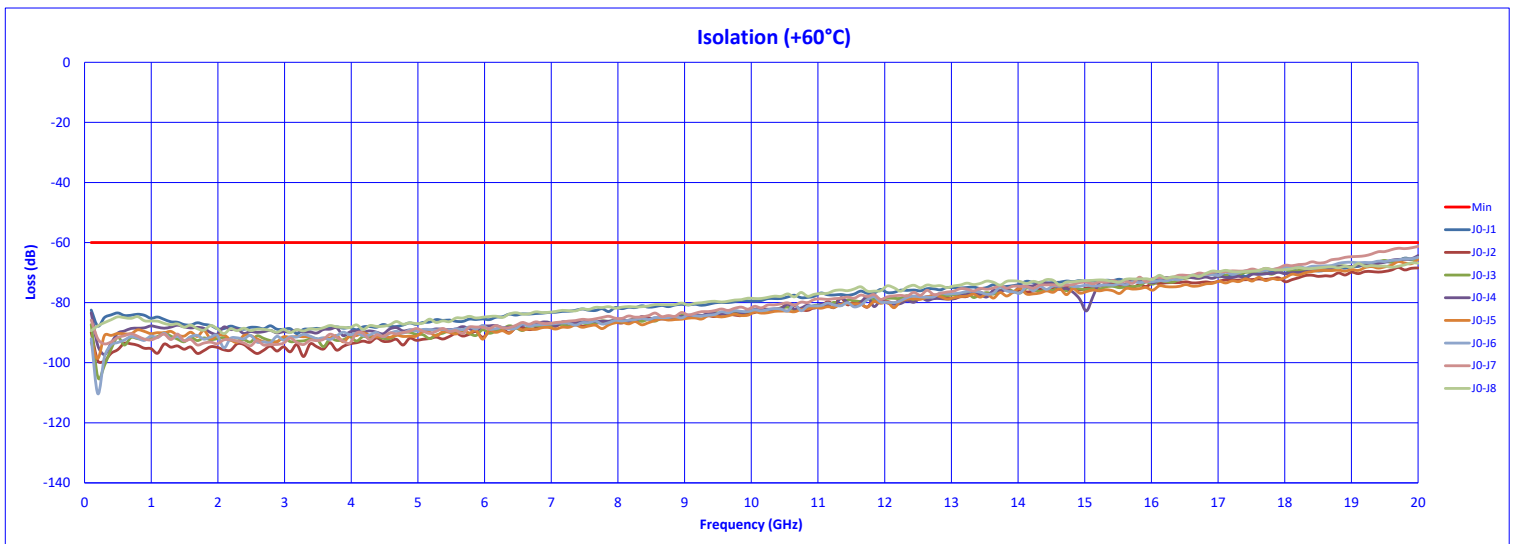
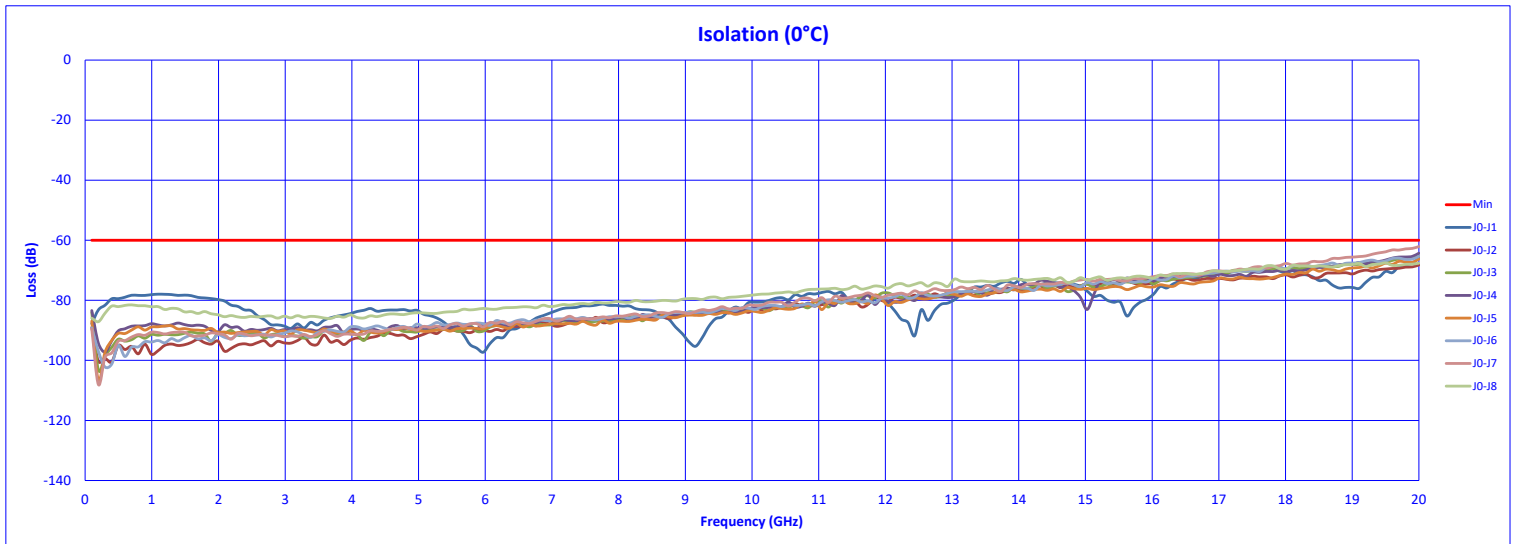
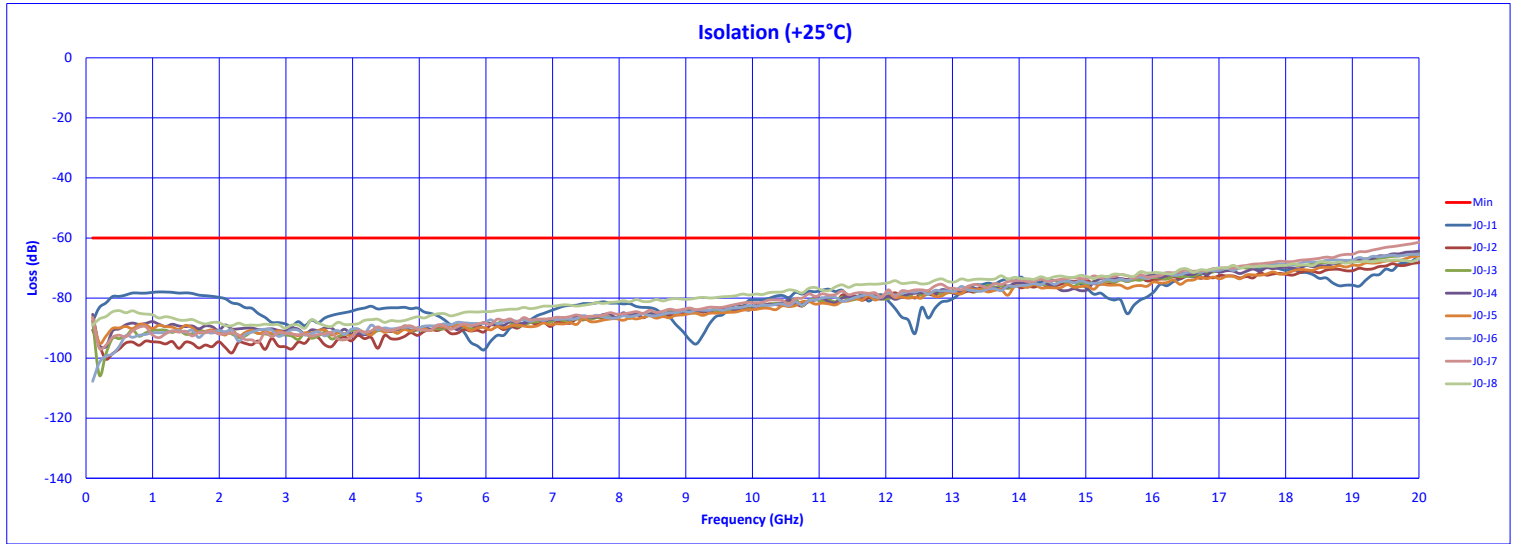


VSWR Absorptive Out/OFF (+60°C)



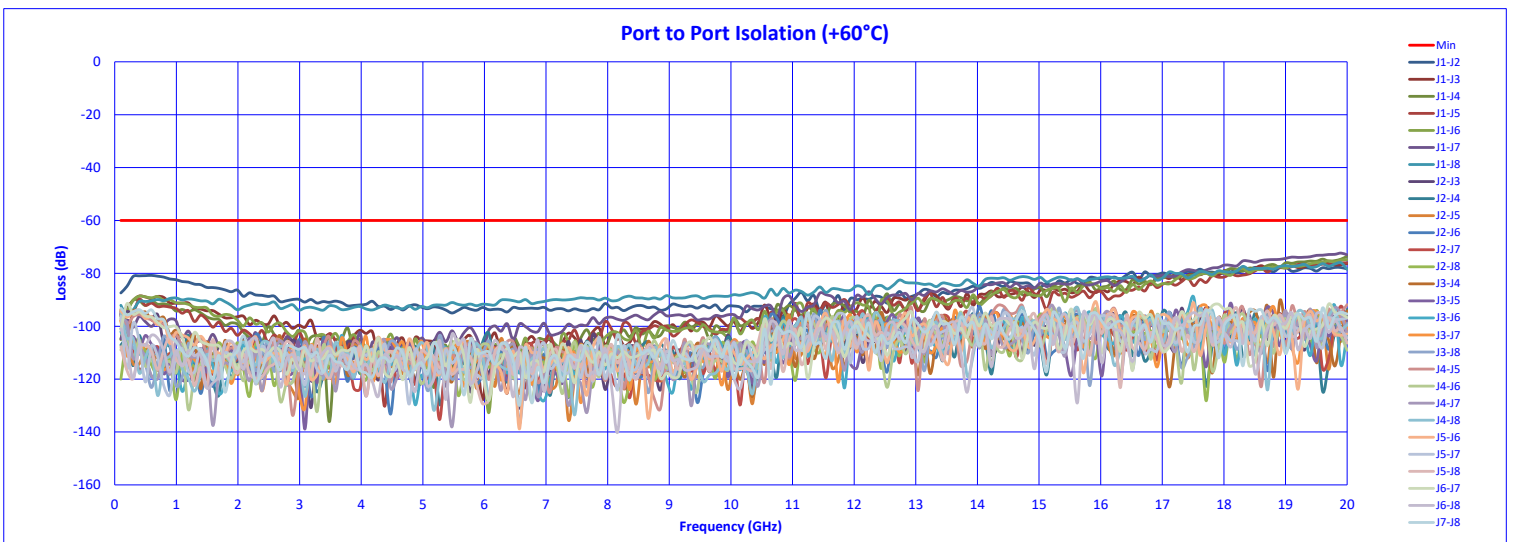
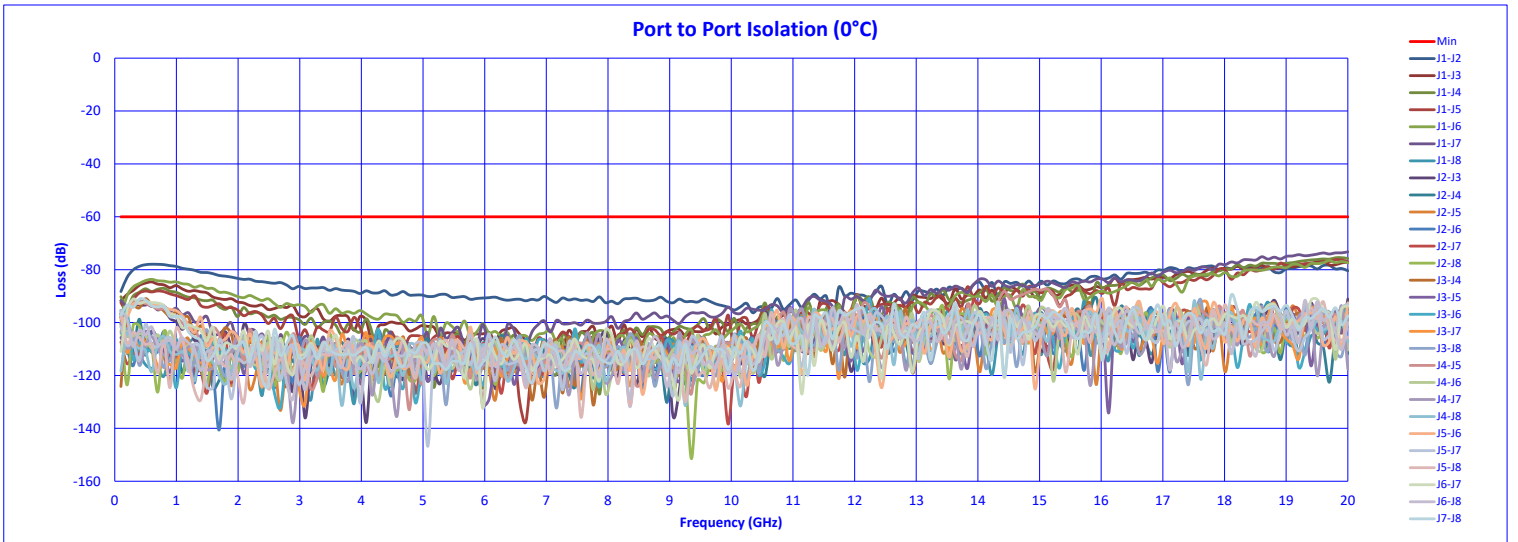
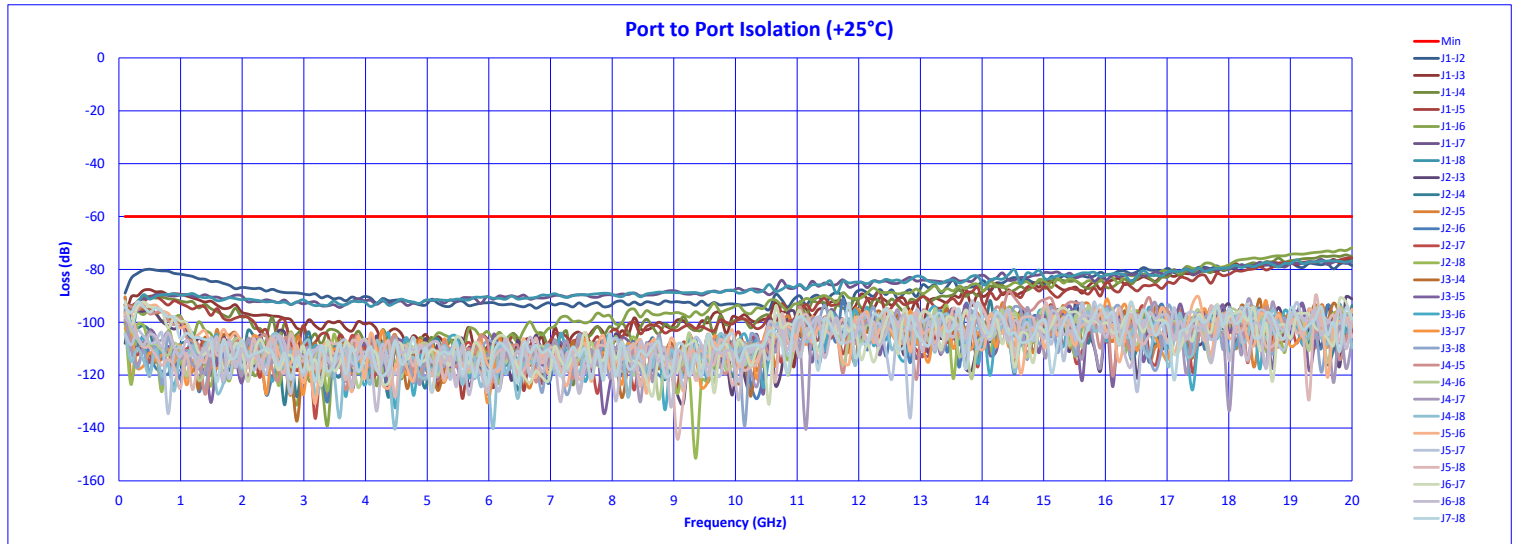


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)





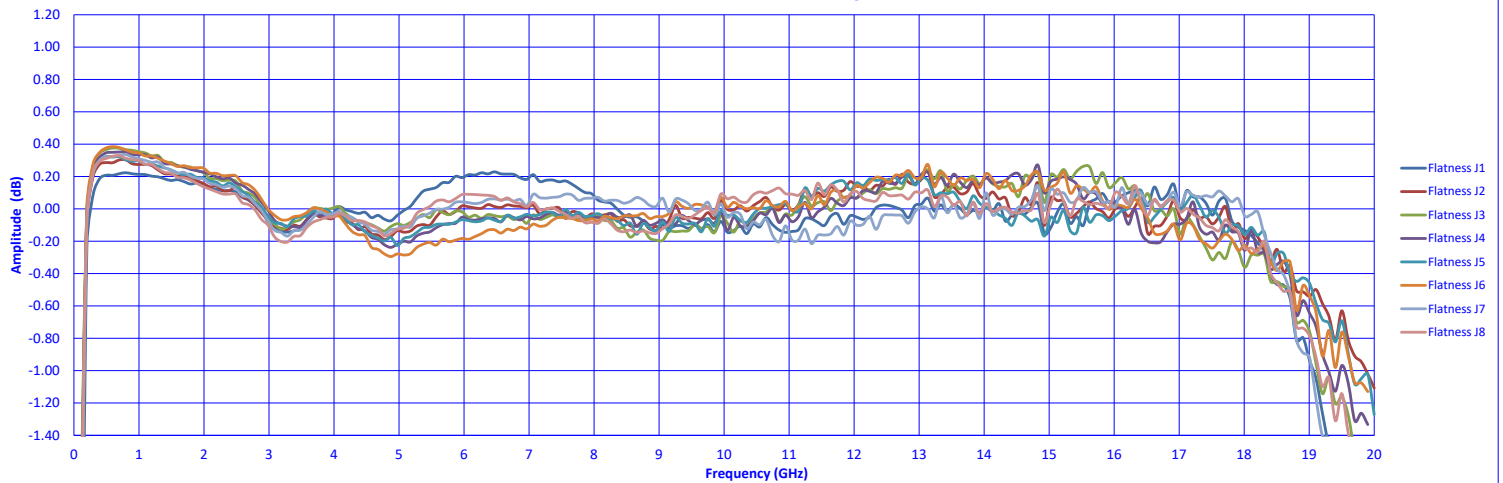
Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)



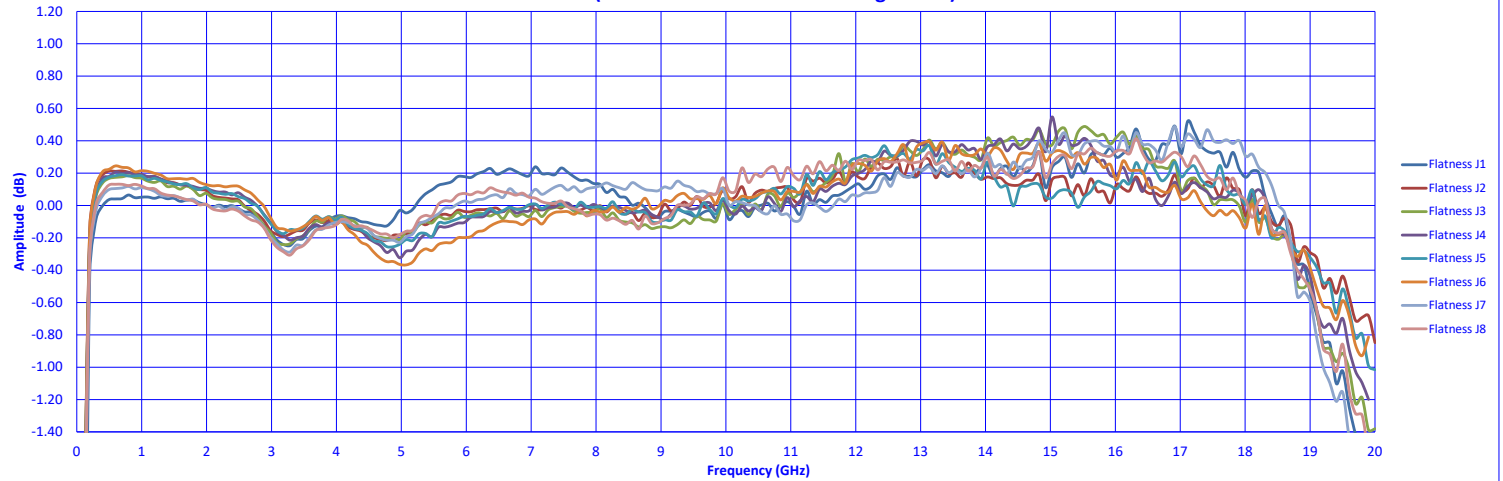


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

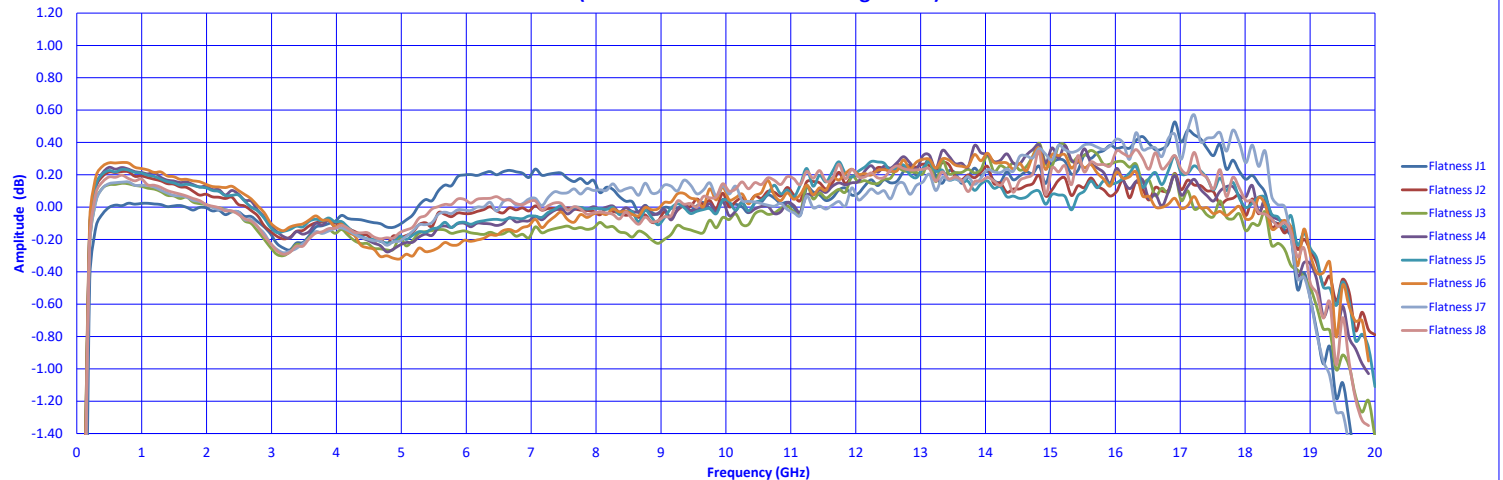
Insertion Loss Flatness (Variation from a Best Fit Straight Line) = +25°C



Insertion Loss Flatness (Variation from a Best Fit Straight Line) = 0°C



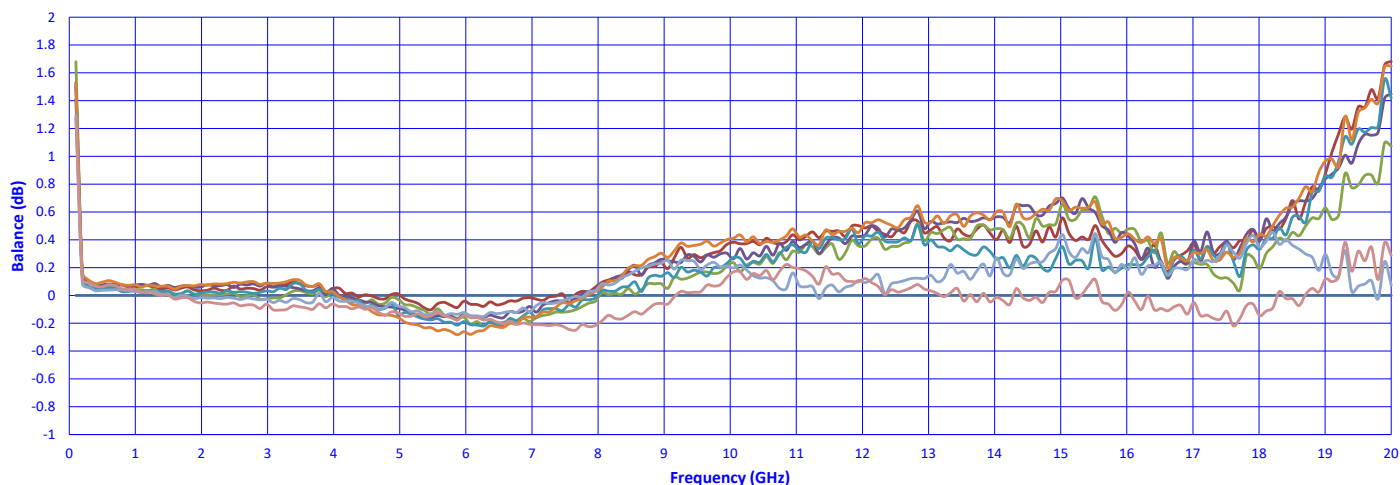
Insertion Loss Flatness (Variation from a Best Fit Straight Line) = +60°C



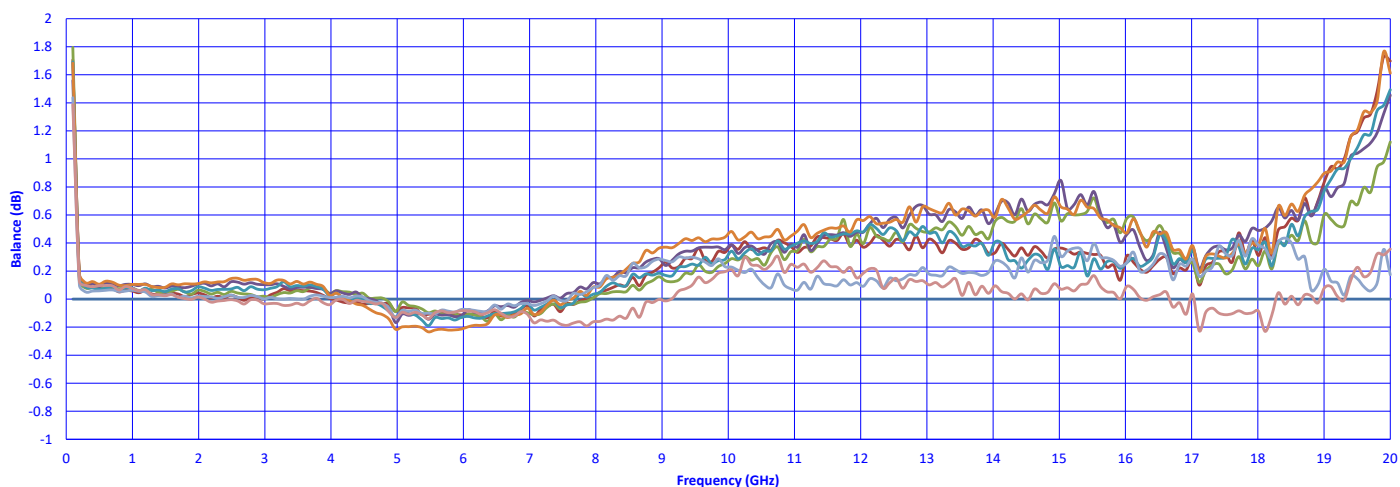


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

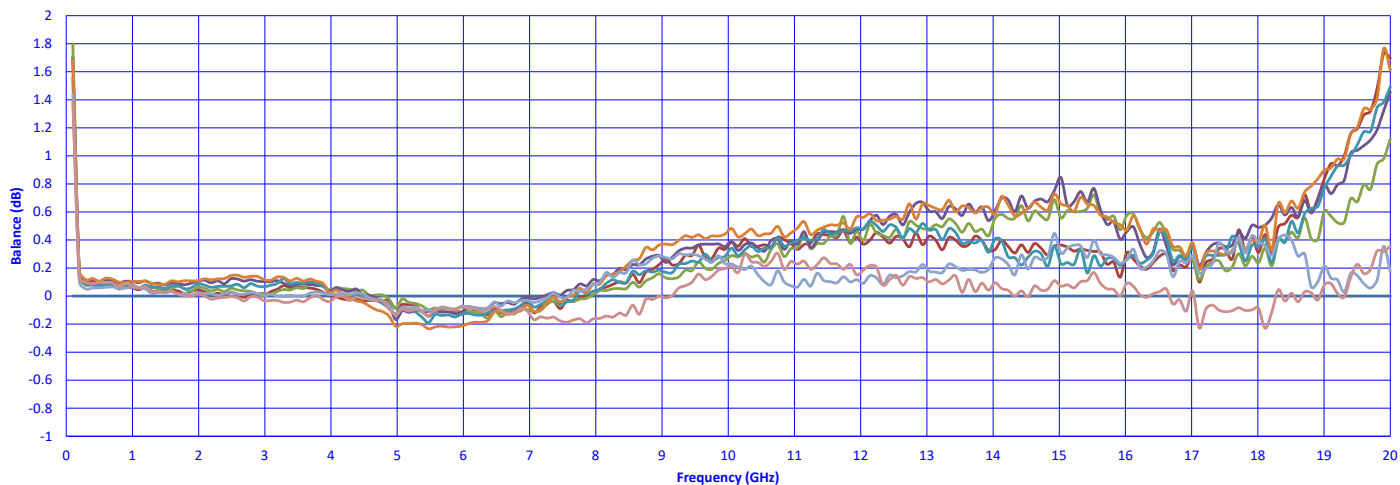
Amplitude Balance (Ref J0-J1) = +25°C



Amplitude Balance (Ref J0-J1) = 0°C



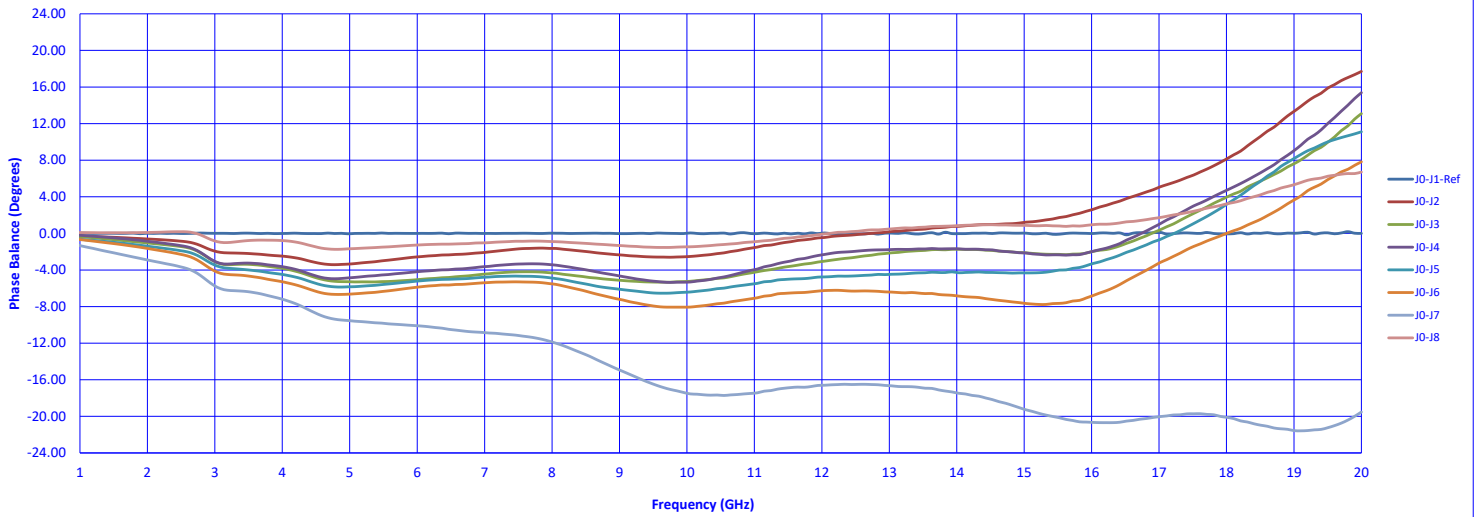
Amplitude Balance (Ref J0-J1) = +60°C



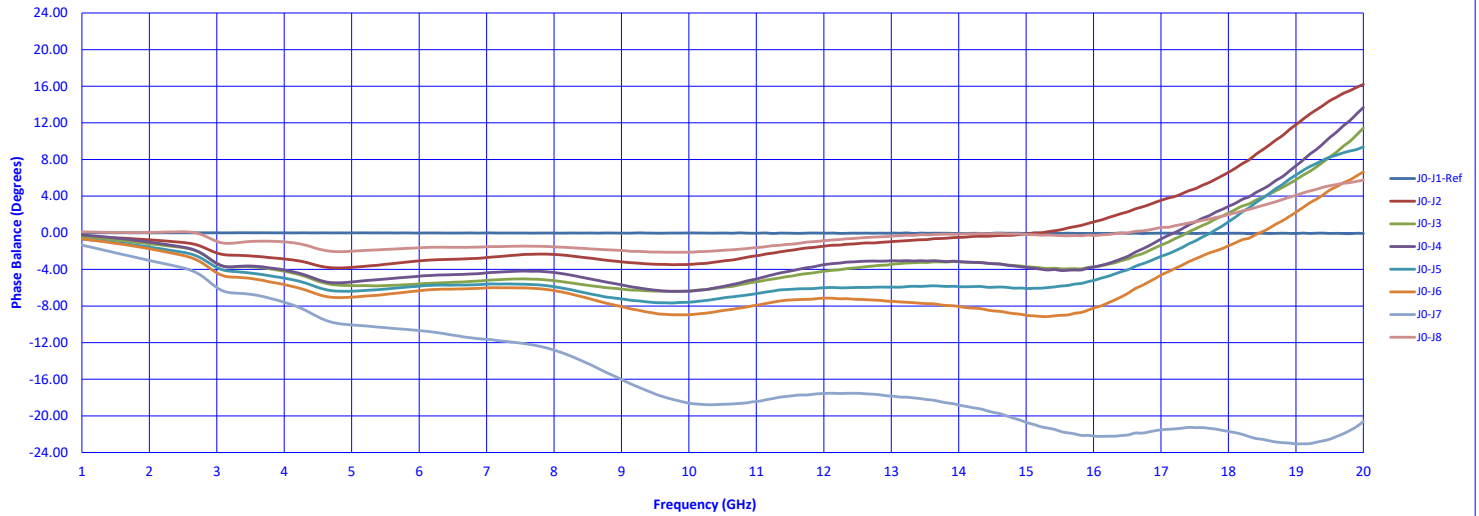


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

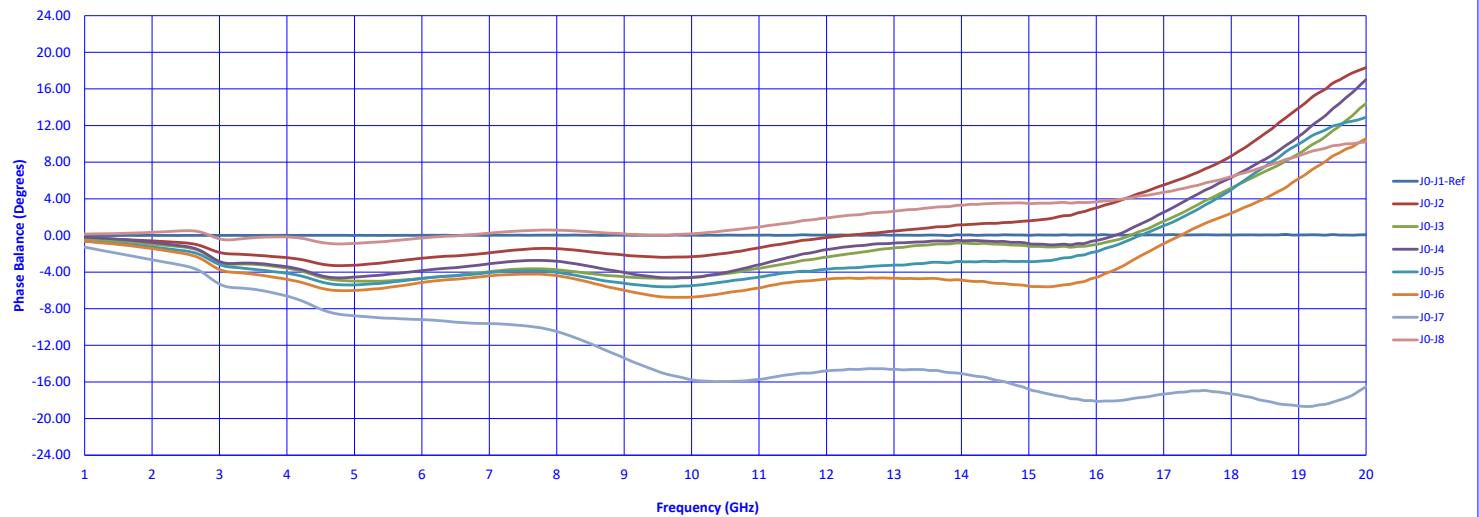
Phase Balance (+25°C)



Phase Balance (0°C)



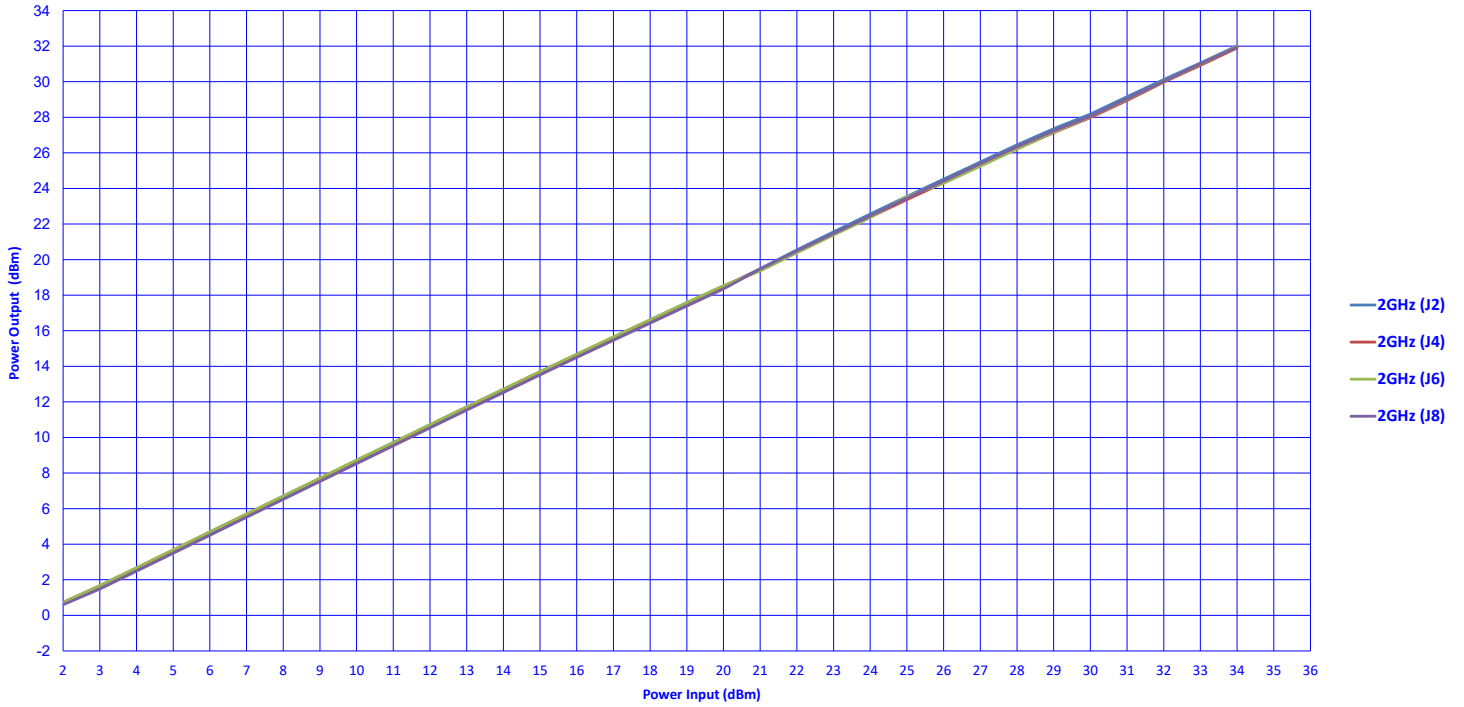
Phase Balance (+60°C)





Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

High Power Test Graph 2 GHz (J2,J4,J6,J8)



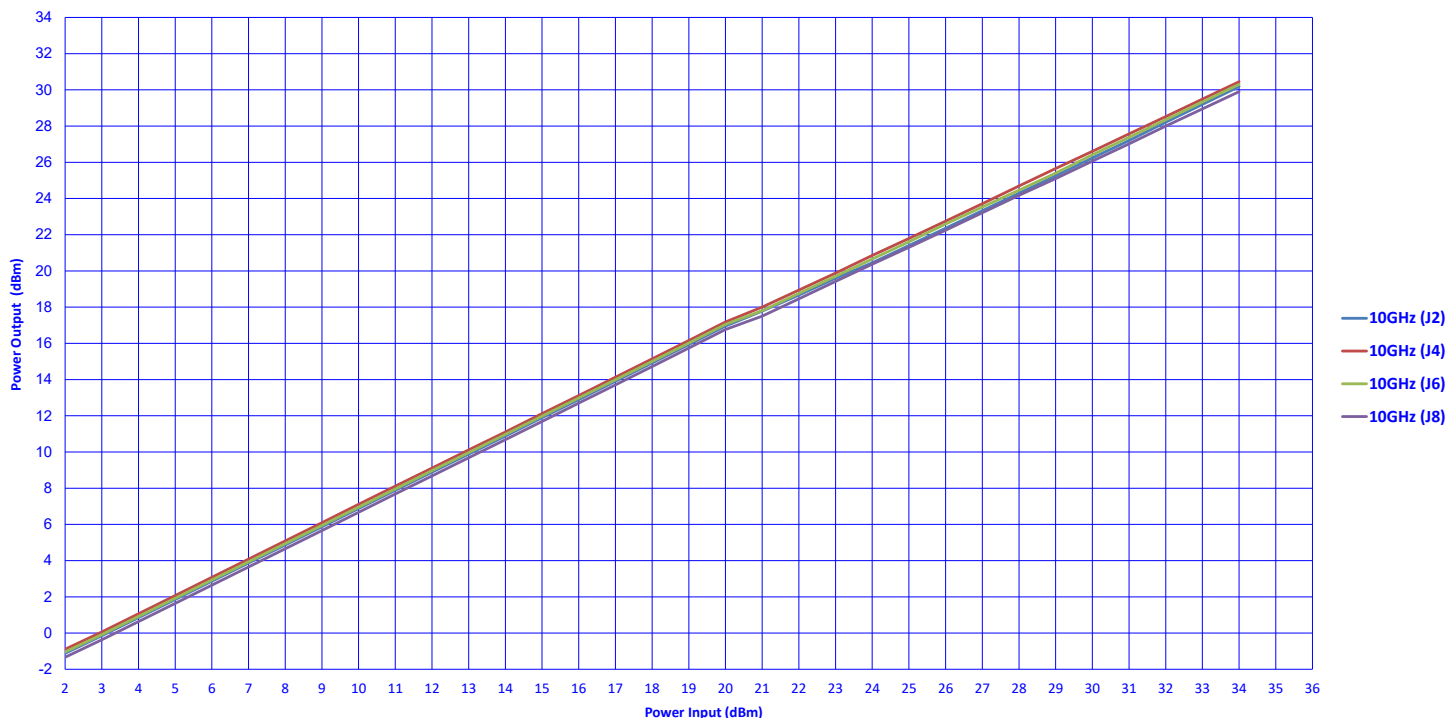
High Power Test Data

2GHz (J2)				2GHz (J4)				2GHz (J6)				2GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	
0	-1.343	1.343	0.000	0	-1.292	1.292	0.000	0	-1.290	1.290	0.000	0	-1.411	1.411	0.000	
1	-0.339	1.339	-0.004	1	-0.287	1.287	-0.006	1	-0.286	1.286	-0.004	1	-0.406	1.406	-0.005	
2	0.671	1.329	-0.014	2	0.724	1.277	-0.016	2	0.726	1.275	-0.016	2	0.603	1.397	-0.014	
3	1.598	1.402	0.059	3	1.662	1.338	0.046	3	1.673	1.327	0.037	3	1.479	1.521	0.110	
4	2.605	1.395	0.052	4	2.668	1.332	0.040	4	2.678	1.322	0.032	4	2.486	1.514	0.103	
5	3.612	1.388	0.045	5	3.674	1.326	0.034	5	3.685	1.315	0.025	5	3.492	1.508	0.097	
6	4.619	1.381	0.038	6	4.682	1.319	0.027	6	4.693	1.308	0.018	6	4.501	1.499	0.088	
7	5.629	1.372	0.029	7	5.690	1.310	0.018	7	5.703	1.297	0.007	7	5.511	1.489	0.078	
8	6.637	1.363	0.020	8	6.698	1.302	0.010	8	6.711	1.290	0.000	8	6.518	1.482	0.071	
9	7.642	1.358	0.015	9	7.705	1.295	0.003	9	7.718	1.282	-0.008	9	7.532	1.468	0.057	
10	8.652	1.348	0.005	10	8.712	1.288	-0.004	10	8.727	1.273	-0.017	10	8.529	1.472	0.061	
11	9.647	1.353	0.010	11	9.711	1.289	-0.003	11	9.723	1.277	-0.013	11	9.533	1.467	0.056	
12	10.655	1.345	0.002	12	10.712	1.288	-0.004	12	10.728	1.272	-0.018	12	10.539	1.461	0.050	
13	11.657	1.343	0.000	13	11.717	1.283	-0.009	13	11.727	1.273	-0.017	13	11.538	1.462	0.051	
14	12.647	1.353	0.010	14	12.707	1.293	0.001	14	12.719	1.281	-0.009	14	12.530	1.470	0.059	
15	13.630	1.370	0.027	15	13.691	1.309	0.017	15	13.703	1.297	0.007	15	13.516	1.484	0.073	
16	14.612	1.388	0.045	16	14.669	1.331	0.039	16	14.683	1.317	0.027	16	14.495	1.505	0.094	
17	15.584	1.416	0.073	17	15.639	1.361	0.069	17	15.656	1.344	0.054	17	15.465	1.535	0.124	
18	16.549	1.451	0.108	18	16.602	1.396	0.106	18	16.619	1.381	0.091	18	16.431	1.569	0.158	
19	17.512	1.488	0.145	19	17.565	1.435	0.143	19	17.582	1.418	0.128	19	17.392	1.608	0.197	
20	18.469	1.531	0.188	20	18.518	1.482	0.190	20	18.535	1.465	0.175	20	18.349	1.651	0.240	
21	19.49	1.510	0.167	21	19.41	1.590	0.296	21	19.36	1.640	0.350	21	19.47	1.530	0.119	
22	20.56	1.450	0.107	22	20.43	1.570	0.278	22	20.39	1.610	0.320	22	20.49	1.510	0.099	
23	21.56	1.440	0.097	23	21.42	1.580	0.288	23	21.38	1.620	0.330	23	21.47	1.530	0.119	
24	22.56	1.440	0.097	24	22.39	1.610	0.318	24	22.36	1.640	0.350	24	22.45	1.550	0.139	
25	23.55	1.450	0.107	25	23.37	1.630	0.338	25	23.54	1.460	0.170	25	23.46	1.540	0.129	
26	24.52	1.480	0.137	26	24.32	1.680	0.388	26	24.29	1.710	0.420	26	24.41	1.590	0.179	
27	25.49	1.510	0.167	27	25.28	1.720	0.428	27	25.25	1.750	0.460	27	25.39	1.610	0.199	
28	26.45	1.550	0.207	28	26.23	1.770	0.478	28	26.22	1.780	0.490	28	26.34	1.660	0.249	
29	27.36	1.640	0.297	29	27.14	1.860	0.568	29	27.16	1.840	0.550	29	27.24	1.760	0.349	
30	28.18	1.820	0.477	30	27.98	2.020	0.728	30	28.03	1.970	0.680	30	28.06	1.940	0.529	1 Watt
31	29.16	1.840	0.497	31	28.95	2.050	0.758	31	29.01	1.990	0.700	31	29.04	1.960	0.549	
32	30.12	1.880	0.537	32	29.98	2.020	0.728	32	30.02	1.980	0.690	32	30.02	1.980	0.569	1.6 Watt
33	31.05	1.950	0.607	33	30.92	2.080	0.788	33	30.98	2.020	0.730	33	31.00	2.000	0.589	
34	32.02	1.980	0.637	34	31.90	2.100	0.808	34	31.99	2.010	0.720	34	31.95	2.060	0.639	2.5 Watt
Do not Exceed				Do not Exceed				Do not Exceed				Do not Exceed				



Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

High Power Test Graph 10 GHz (J2,J4,J6,J8)



High Power Test Data																
10GHz (J2)				10GHz (J4)				10GHz (J6)				10GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	
0	-3.115	3.115	0.000	0	-2.897	2.897	0.000	0	-3.047	3.047	0.000	0	-3.338	3.338	0.000	
1	-2.116	3.116	0.001	1	-1.896	2.896	-0.001	1	-2.044	3.044	-0.003	1	-2.335	3.335	-0.004	
2	-1.117	3.117	0.002	2	-0.893	2.893	-0.004	2	-1.044	3.044	-0.003	2	-1.332	3.332	-0.006	
3	-0.147	3.147	0.032	3	0.064	2.936	0.039	3	-0.086	3.086	0.039	3	-0.371	3.371	0.033	
4	0.853	3.147	0.032	4	1.068	2.932	0.035	4	0.917	3.083	0.036	4	0.631	3.369	0.031	
5	1.857	3.143	0.028	5	2.073	2.927	0.030	5	1.923	3.077	0.030	5	1.637	3.363	0.025	
6	2.861	3.139	0.024	6	3.078	2.922	0.025	6	2.930	3.070	0.023	6	2.643	3.357	0.019	
7	3.863	3.137	0.022	7	4.080	2.920	0.023	7	3.933	3.067	0.020	7	3.648	3.352	0.014	
8	4.866	3.134	0.019	8	5.086	2.914	0.017	8	4.940	3.060	0.013	8	4.653	3.347	0.009	
9	5.871	3.129	0.014	9	6.091	2.909	0.012	9	5.946	3.054	0.007	9	5.660	3.340	0.002	
10	6.875	3.125	0.010	10	7.107	2.893	-0.004	10	6.951	3.049	0.002	10	6.665	3.335	-0.003	
11	7.881	3.119	0.004	11	8.111	2.889	-0.008	11	7.957	3.043	-0.004	11	7.681	3.319	-0.019	
12	8.883	3.117	0.002	12	9.107	2.893	-0.004	12	8.967	3.033	-0.014	12	8.677	3.323	-0.015	
13	9.884	3.116	0.001	13	10.112	2.888	-0.009	13	9.969	3.032	-0.016	13	9.686	3.314	-0.024	
14	10.882	3.118	0.003	14	11.108	2.892	-0.005	14	10.968	3.032	-0.015	14	10.683	3.317	-0.021	
15	11.896	3.104	-0.011	15	12.117	2.883	-0.014	15	11.975	3.025	-0.022	15	11.688	3.312	-0.026	
16	12.894	3.106	-0.009	16	13.118	2.882	-0.015	16	12.980	3.020	-0.027	16	12.701	3.299	-0.039	
17	13.905	3.095	-0.020	17	14.130	2.870	-0.027	17	13.991	3.009	-0.038	17	13.709	3.291	-0.047	
18	14.920	3.080	-0.035	18	15.144	2.856	-0.041	18	15.003	2.997	-0.050	18	14.723	3.277	-0.061	
19	15.933	3.067	-0.048	19	16.158	2.842	-0.055	19	16.019	2.981	-0.066	19	15.740	3.260	-0.078	
20	16.957	3.043	-0.072	20	17.182	2.818	-0.079	20	17.044	2.956	-0.091	20	16.765	3.235	-0.103	
21	17.780	3.220	0.105	21	18.000	3.000	0.103	21	17.800	3.200	0.153	21	17.500	3.500	0.162	
22	18.670	3.330	0.215	22	18.940	3.060	0.163	22	18.760	3.240	0.193	22	18.460	3.540	0.202	
23	19.600	3.400	0.285	23	19.880	3.120	0.223	23	19.710	3.290	0.243	23	19.420	3.580	0.242	
24	20.450	3.550	0.435	24	20.850	3.150	0.253	24	20.650	3.350	0.303	24	20.370	3.630	0.292	
25	21.400	3.600	0.485	25	21.790	3.210	0.313	25	21.610	3.390	0.343	25	21.300	3.700	0.362	
26	22.360	3.640	0.525	26	22.750	3.250	0.353	26	22.590	3.410	0.363	26	22.250	3.750	0.412	
27	23.330	3.670	0.555	27	23.710	3.290	0.393	27	23.530	3.470	0.423	27	23.210	3.790	0.452	
28	24.290	3.710	0.595	28	24.690	3.310	0.413	28	24.460	3.540	0.493	28	24.180	3.820	0.482	
29	25.250	3.750	0.635	29	25.660	3.340	0.443	29	25.400	3.600	0.553	29	25.100	3.900	0.562	
30	26.240	3.760	0.645	30	26.600	3.400	0.503	30	26.410	3.590	0.543	30	26.060	3.940	0.602	1 Watt
31	27.200	3.800	0.685	31	27.570	3.430	0.533	31	27.380	3.620	0.573	31	27.020	3.980	0.642	1.26 Watt
32	28.220	3.780	0.665	32	28.520	3.480	0.583	32	28.350	3.650	0.603	32	28.000	4.000	0.662	1.6 Watt
33	29.200	3.800	0.685	33	29.490	3.510	0.613	33	29.330	3.670	0.623	33	28.950	4.050	0.712	2 Watt
34	30.180	3.820	0.705	34	30.450	3.550	0.653	34	30.3	3.700	0.653	34	29.900	4.100	0.762	2.5 Watt
Do not Exceed				Do not Exceed				Do not Exceed				Do not Exceed				



Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

High Power Test Graph 18 GHz (J2,J4,J6,J8)



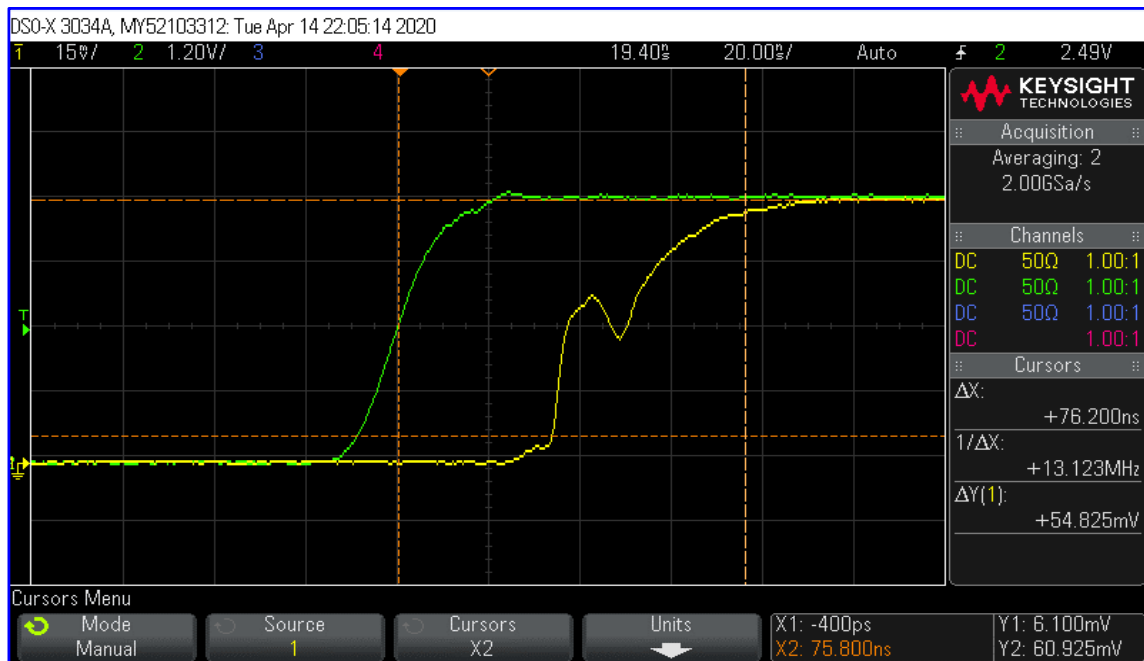
High Power Test Data And P1dB

18GHz (J2)				18GHz (J4)				18GHz (J6)				18GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)	
0	-3.919	3.919	-0.001	0	-3.780	3.780	0.000	0	-4.155	4.155	0.000	0	-4.417	4.417	0.000	
1	-2.932	3.932	0.013	1	-2.793	3.793	0.013	1	-3.167	4.167	0.012	1	-3.431	4.431	0.014	
2	-1.940	3.940	0.021	2	-1.802	3.802	0.022	2	-2.177	4.177	0.022	2	-2.439	4.439	0.022	
3	-0.921	3.921	0.002	3	-0.752	3.752	-0.028	3	-1.151	4.151	-0.004	3	-1.506	4.506	0.089	
4	0.066	3.934	0.015	4	0.237	3.763	-0.017	4	-0.161	4.161	0.006	4	-0.516	4.516	0.099	
5	1.060	3.940	0.021	5	1.232	3.768	-0.012	5	0.831	4.169	0.014	5	0.476	4.525	0.108	
6	2.056	3.944	0.025	6	2.230	3.770	-0.010	6	1.829	4.171	0.016	6	1.475	4.525	0.108	
7	3.053	3.948	0.028	7	3.227	3.773	-0.007	7	2.827	4.173	0.018	7	2.476	4.524	0.107	
8	4.053	3.948	0.028	8	4.228	3.773	-0.007	8	3.825	4.175	0.020	8	3.478	4.522	0.105	
9	5.053	3.947	0.028	9	5.229	3.772	-0.009	9	4.825	4.175	0.020	9	4.482	4.518	0.101	
10	6.055	3.945	0.026	10	6.230	3.770	-0.010	10	5.827	4.174	0.018	10	5.487	4.513	0.096	
11	7.057	3.943	0.024	11	7.226	3.774	-0.006	11	6.829	4.172	0.016	11	6.493	4.507	0.090	
12	8.055	3.945	0.026	12	8.228	3.773	-0.007	12	7.822	4.178	0.023	12	7.499	4.501	0.084	
13	9.058	3.942	0.023	13	9.238	3.762	-0.018	13	8.832	4.168	0.013	13	8.507	4.493	0.076	
14	10.063	3.937	0.018	14	10.241	3.759	-0.021	14	9.837	4.163	0.008	14	9.518	4.482	0.065	
15	11.063	3.917	-0.002	15	11.259	3.741	-0.039	15	10.855	4.145	-0.010	15	10.538	4.462	0.045	
16	12.102	3.898	-0.021	16	12.281	3.719	-0.061	16	11.872	4.128	-0.027	16	11.569	4.431	0.014	
17	13.125	3.875	-0.044	17	13.300	3.700	-0.080	17	12.895	4.105	-0.050	17	12.597	4.403	-0.014	
18	14.156	3.844	-0.075	18	14.328	3.672	-0.108	18	13.921	4.079	-0.076	18	13.638	4.362	-0.055	
19	15.197	3.803	-0.116	19	15.363	3.637	-0.143	19	14.960	4.040	-0.115	19	14.685	4.315	-0.102	
20	15.935	4.065	0.146	20	15.920	4.080	0.300	20	15.757	4.243	0.088	20	15.669	4.331	-0.086	
21	16.78	4.220	0.301	21	16.9	4.100	0.320	21	16.25	4.750	0.595	21	16.6	4.400	-0.017	
22	17.82	4.180	0.261	22	17.94	4.060	0.280	22	17.29	4.710	0.555	22	17.7	4.300	-0.117	
23	18.82	4.180	0.261	23	18.95	4.050	0.270	23	18.3	4.700	0.545	23	18.58	4.420	0.003	
24	19.83	4.170	0.251	24	19.97	4.030	0.250	24	19.33	4.670	0.515	24	19.5	4.500	0.083	
25	20.88	4.120	0.201	25	21.01	3.990	0.210	25	20.37	4.630	0.475	25	20.48	4.520	0.103	
26	21.9	4.100	0.181	26	22.03	3.970	0.190	26	21.39	4.610	0.455	26	21.02	4.980	0.563	
27	22.91	4.090	0.171	27	23.04	3.960	0.180	27	22.4	4.600	0.445	27	22.05	4.950	0.533	
28	23.91	4.090	0.171	28	24.04	3.960	0.180	28	23.41	4.590	0.435	28	23.07	4.930	0.513	
29	24.91	4.090	0.171	29	25.03	3.970	0.190	29	24.43	4.570	0.415	29	24.08	4.920	0.503	
30	25.93	4.070	0.151	30	26.07	3.930	0.150	30	25.48	4.520	0.365	30	25.12	4.880	0.463	1 Watt
31	26.9	4.100	0.181	31	27.02	3.980	0.200	31	26.45	4.550	0.395	31	26.1	4.900	0.483	1.26 Watt
32	27.8	4.200	0.281	32	27.98	4.020	0.240	32	27.38	4.620	0.465	32	26.73	5.270	0.853	1.6 Watt
33	28.75	4.250	0.331	33	28.9	4.100	0.320	33	28.30	4.700	0.545	33	27.6	5.400	0.983	2 Watt
34	29.88	4.320	0.401	34	29.85	4.150	0.370	34	29.20	4.800	0.645	34	28.44	5.560	1.143	2.5 Watt
Do not Exceed				Do not Exceed				Do not Exceed				Do not Exceed				P1dB

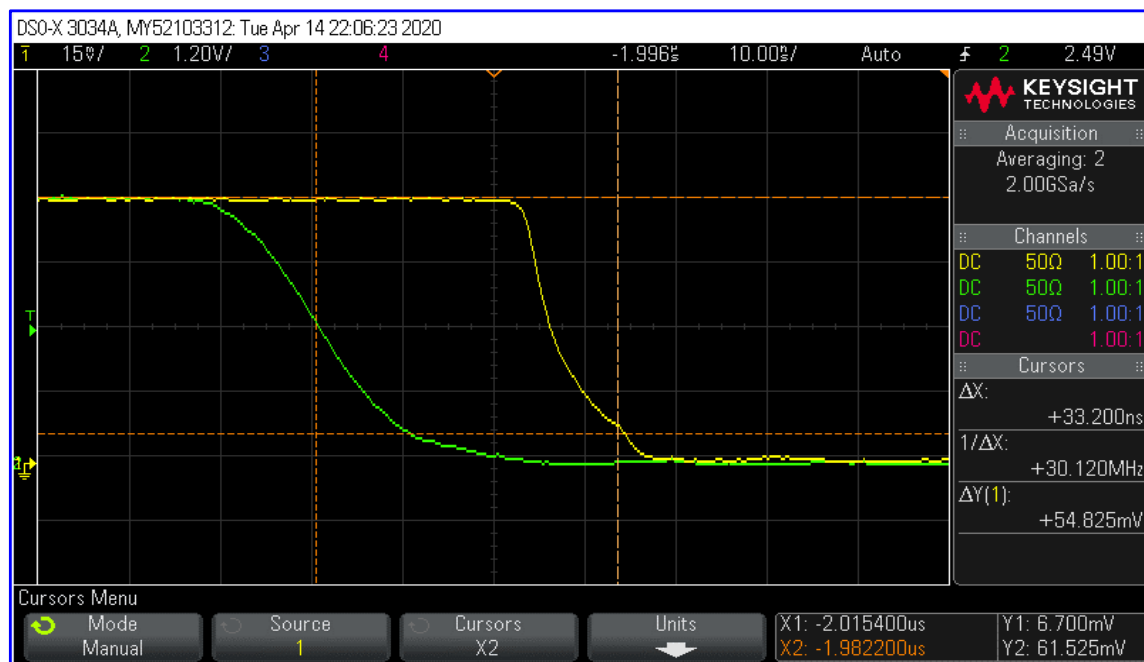


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Switching Speed ON 20 ns Per Div.



Switching Speed OFF 10 ns Per Div.

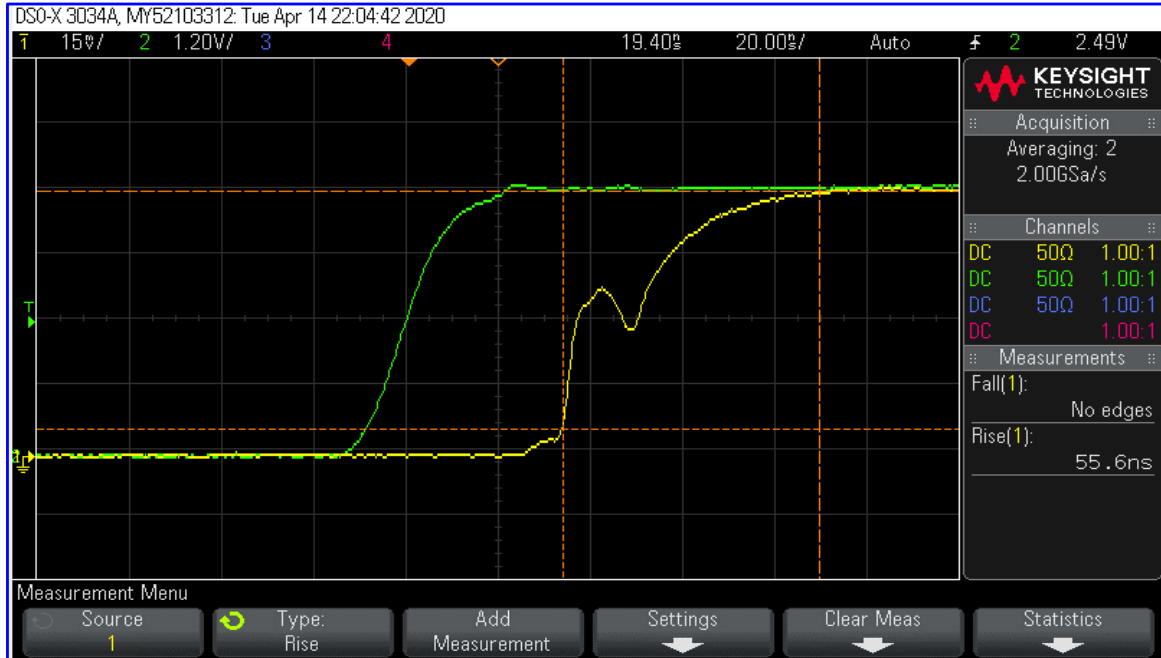


Green Trace = TTL Signal
Yellow Trace = RF Signal

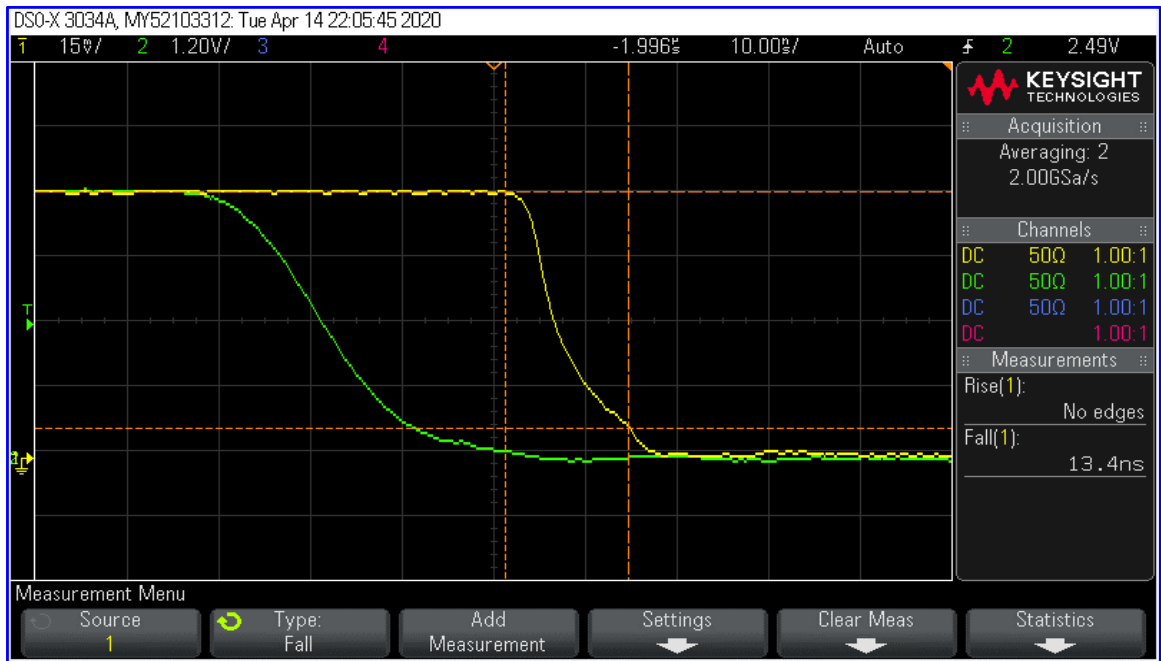


Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Rise Time
20 ns Per Div.



Fall Time
10 ns Per Div.

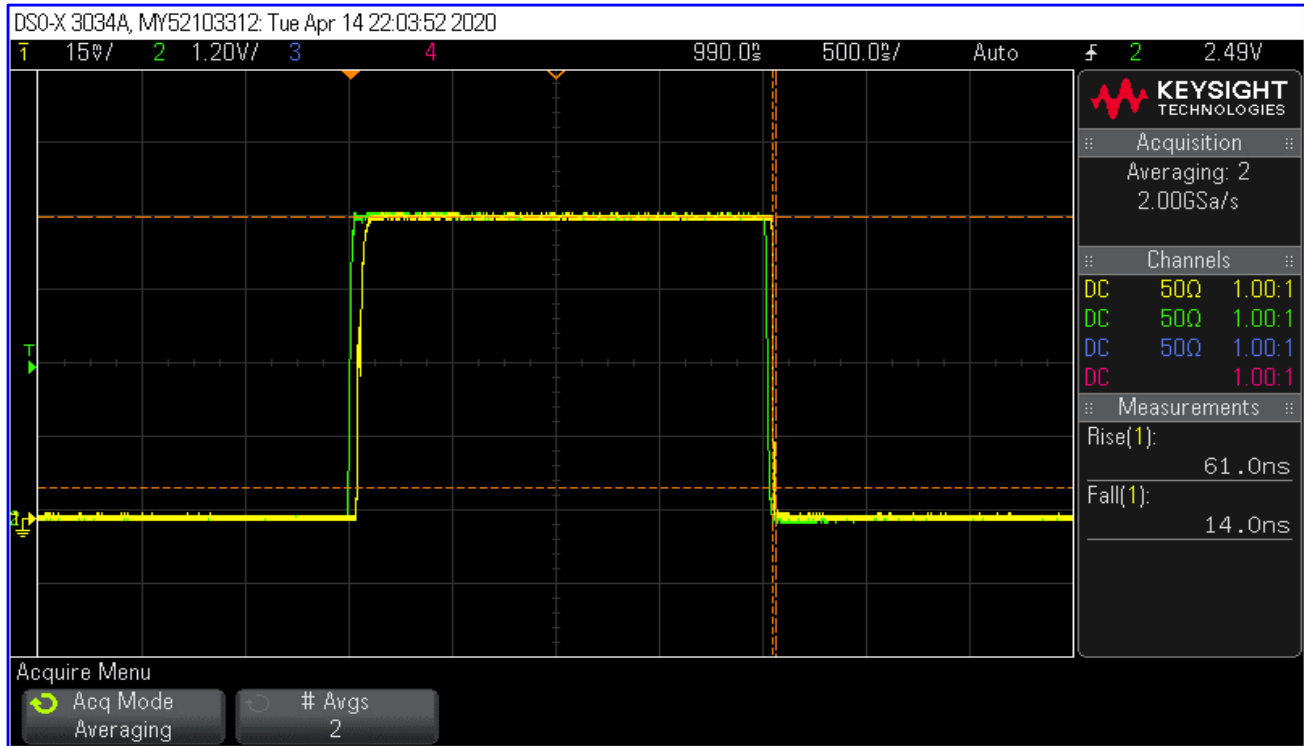


Green Trace = TTL Signal
Yellow Trace = RF Signal



Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

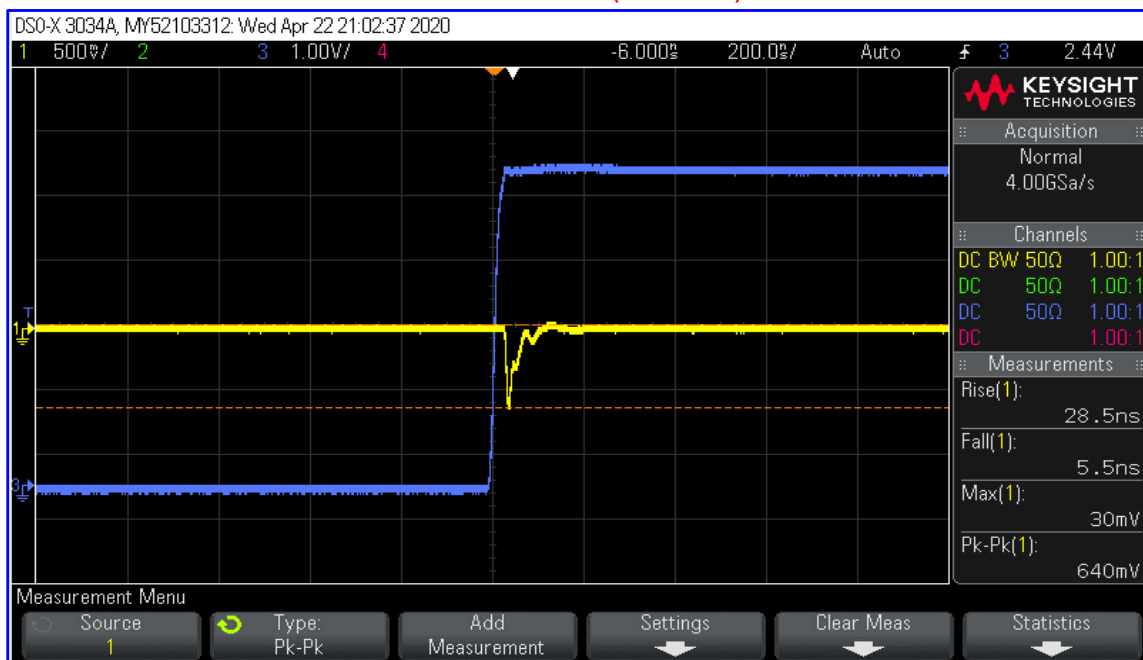
Full Pulse
500 ns Per Div.





Typical Characteristics ON P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

Output Video Transients
BW = 350MHz, 50Ω
Measured Value (640mV P-P)



Output Video Transients
BW = 350MHz, 50Ω
Measured Value (820mV P-P)

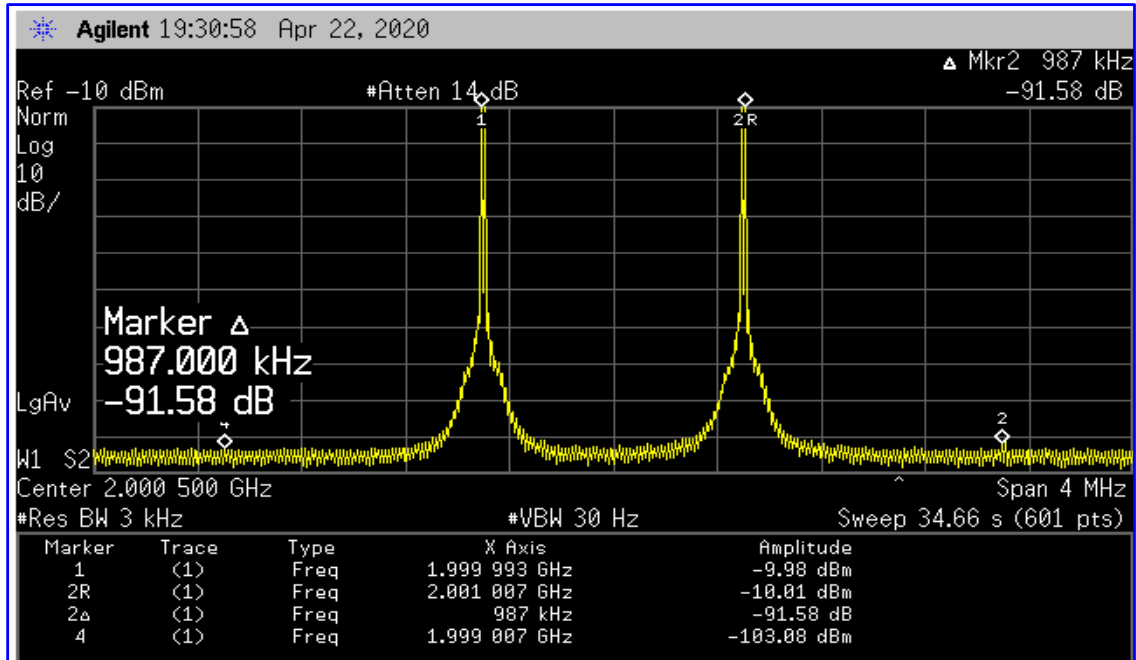


TTL Signal (Trigger) = Blue
Video Signal = Yellow



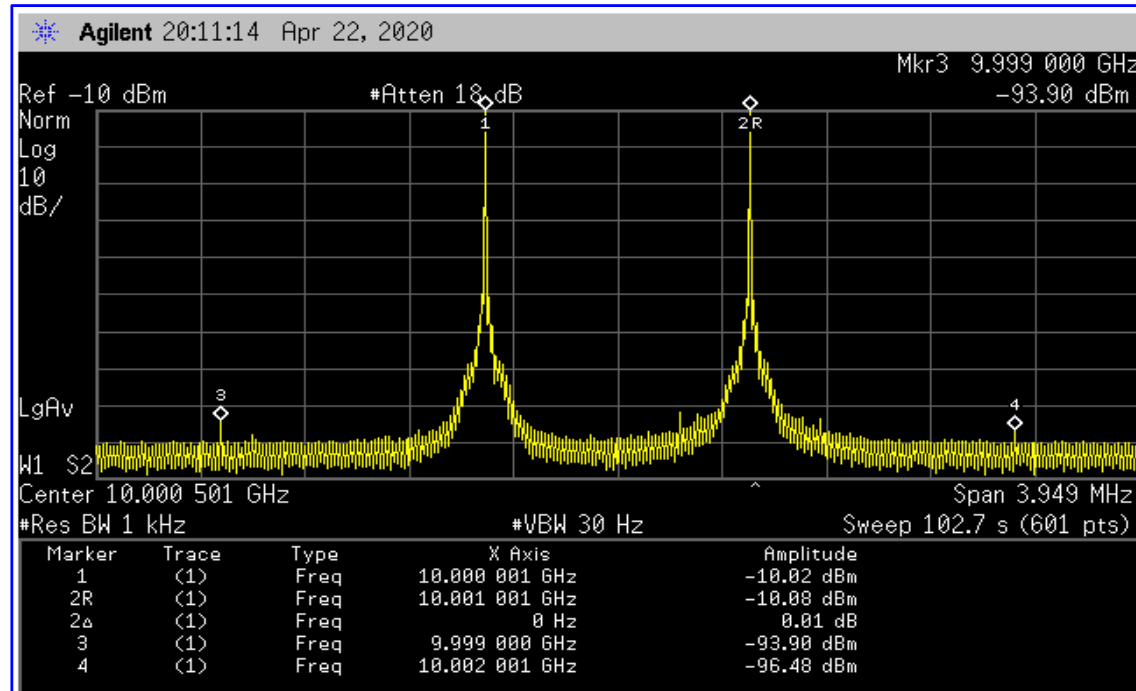
Typical Characteristics
ON
P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

IIP3 And OIP3 @ 2GHz



OIP3 = Pout +dBc/2 **40.79 dBm**
IIP3 = OIP3 - Insertion Loss **41.88 dBm**

IIP3 And OIP3 @ 10GHz

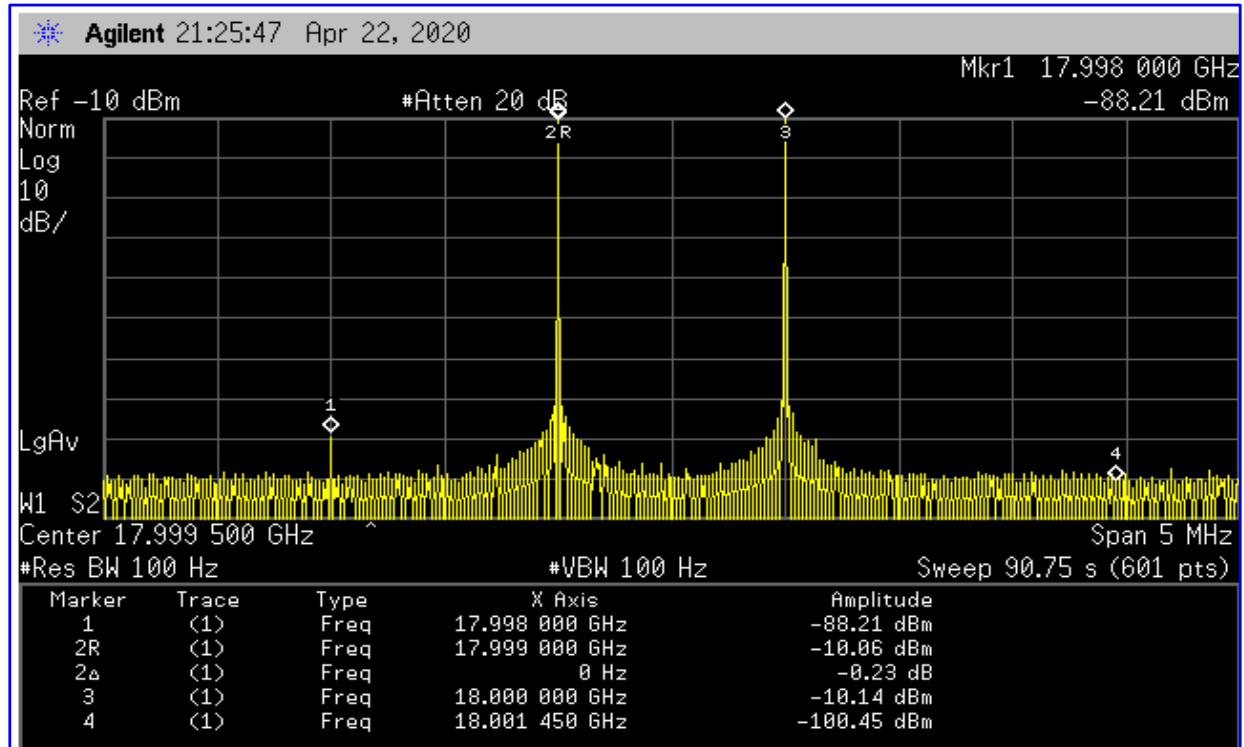


OIP3 = Pout +dBc/2 **41.95 dBm**
IIP3 = OIP3 - Insertion Loss **44.47 dBm**



Typical Characteristics
ON
P8T-2G18G-60-T-SFF-NSI - (Usable 200MHz to 19GHz)

IIP3 And OIP3 @ 18GHz



OIP3 = Pout +dBc/2 **39.11 dBm**
IIP3 = OIP3 - Insertion Loss **42.84 dBm**

!Agilent Technologies,N5230A,US43500312,A.07.50.67
!Agilent N5230A: A.07.50.67
!Date: Thursday, May 19, 2016
!Correction: S11(Full 2 Port(1,2))
!S21(Full 2 Port(1,2))
!S12(Full 2 Port(1,2))
!S22(Full 2 Port(1,2))
!S2P File: Measurement S11, S21,

#	Hz	S	dB	R			
		J1				J2	
Frequency					Frequency		
(Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	(Hz)	S11 (dB)	S21 (dB)
100000000	-7.62378	-4.76126	-4.77111	-4.974	100000000	-9.21281	-3.259455
199500000	-15.6877	-1.21372	-1.1995	-18.656	199500000	-15.5081	-1.07178
299000000	-20.8927	-0.90178	-0.89547	-23.292	299000000	-20.2488	-0.807632
398500000	-22.7948	-0.82452	-0.82891	-21.3596	398500000	-24.075	-0.750699
498000000	-23.1109	-0.82116	-0.8304	-20.265	498000000	-26.5646	-0.754862
597500000	-22.5999	-0.83839	-0.83014	-19.781	597500000	-27.2987	-0.769733
697000000	-21.962	-0.84522	-0.84563	-19.5399	697000000	-26.9443	-0.76682
796500000	-21.6174	-0.85591	-0.875	-19.7105	796500000	-25.7994	-0.780281
896000000	-20.8774	-0.87916	-0.8678	-19.7673	896000000	-24.4754	-0.818479
995500000	-20.1763	-0.89984	-0.90839	-19.8685	995500000	-23.1424	-0.83776
1095000000	-19.905	-0.91764	-0.91015	-20.2236	1095000000	-22.7019	-0.850922
1194500000	-19.3677	-0.9443	-0.94154	-20.36	1194500000	-21.8698	-0.872222
1294000000	-19.0734	-0.96531	-0.96996	-20.8277	1294000000	-21.2378	-0.913545
1393500000	-18.7384	-0.99452	-0.99726	-20.7703	1393500000	-20.8544	-0.950941
1493000000	-18.3543	-1.02162	-1.01421	-21.1207	1493000000	-20.3806	-0.967333
1592500000	-17.8683	-1.03326	-1.04372	-21.1411	1592500000	-19.808	-0.994267
1692000000	-17.7118	-1.06192	-1.05993	-21.1969	1692000000	-19.5643	-1.00957
1791500000	-17.5275	-1.09365	-1.08317	-21.4121	1791500000	-19.436	-1.03272
1891000000	-17.2368	-1.10442	-1.10624	-21.1054	1891000000	-19.1653	-1.064902
1990500000	-17.0423	-1.1302	-1.1165	-21.2902	1990500000	-19.1027	-1.096054
2090000000	-16.7205	-1.16869	-1.1622	-20.97	2090000000	-18.8943	-1.131235
2189500000	-16.5213	-1.19343	-1.19615	-20.6397	2189500000	-18.712	-1.140717
2289000000	-16.518	-1.21985	-1.20747	-20.436	2289000000	-18.8799	-1.182563
2388500000	-16.3091	-1.23522	-1.26745	-20.1905	2388500000	-18.799	-1.197884
2488000000	-16.3055	-1.26001	-1.27913	-20.0092	2488000000	-18.9805	-1.19267
2587500000	-16.1679	-1.3097	-1.30195	-19.8087	2587500000	-18.9503	-1.263497
2687000000	-16.1217	-1.3453	-1.33585	-19.5787	2687000000	-19.1708	-1.293895
2786500000	-16.1751	-1.39406	-1.40322	-19.3974	2786500000	-19.2809	-1.34485
2886000000	-16.1279	-1.44451	-1.4449	-19.0763	2886000000	-19.3202	-1.406175
2985500000	-16.1585	-1.52705	-1.53676	-19.0031	2985500000	-19.3623	-1.465052
3085000000	-16.0609	-1.57592	-1.56532	-18.7009	3085000000	-19.0419	-1.514883
3184500000	-15.9696	-1.61936	-1.61951	-18.3899	3184500000	-18.8339	-1.543292
3284000000	-15.7332	-1.6435	-1.6405	-18.0839	3284000000	-18.3514	-1.565402
3383500000	-15.5847	-1.65144	-1.63782	-17.9687	3383500000	-18.2481	-1.553257
3483000000	-15.3139	-1.65634	-1.60659	-17.9381	3483000000	-17.8663	-1.572644
3582500000	-15.2913	-1.61447	-1.62022	-18.0068	3582500000	-17.8474	-1.5458
3682000000	-15.1693	-1.58827	-1.61677	-18.1504	3682000000	-17.5598	-1.523243
3781500000	-15.279	-1.63107	-1.59603	-18.2474	3781500000	-17.508	-1.556758
3881000000	-15.1801	-1.60414	-1.60658	-18.5896	3881000000	-17.2368	-1.579108
3980500000	-15.3313	-1.64504	-1.59666	-18.9816	3980500000	-17.0848	-1.5961

4080000000	-15.4271	-1.62114	-1.62501	-19.3608
4179500000	-15.619	-1.65622	-1.64064	-19.898
4279000000	-15.8183	-1.68441	-1.67087	-20.6161
4378500000	-15.9406	-1.71248	-1.70324	-21.4002
4478000000	-16.0524	-1.7222	-1.73071	-22.1473
4577500000	-16.0848	-1.77225	-1.77709	-22.844
4677000000	-16.1099	-1.77498	-1.80835	-23.7654
4776500000	-16.0219	-1.81545	-1.83124	-24.6624
4876000000	-16.2262	-1.84189	-1.81565	-25.1094
4975500000	-16.4248	-1.82471	-1.81976	-26.8877
5075000000	-16.6978	-1.81149	-1.78406	-27.9219
5174500000	-17.1028	-1.80313	-1.79103	-29.3305
5274000000	-17.5086	-1.77006	-1.78653	-31.2925
5373500000	-17.9664	-1.74269	-1.78647	-32.1793
5473000000	-18.4944	-1.74746	-1.7495	-33.5269
5572500000	-19.0785	-1.75358	-1.71964	-32.086
5672000000	-19.4209	-1.74056	-1.72675	-30.2383
5771500000	-19.9124	-1.75554	-1.72451	-28.6762
5871000000	-20.3263	-1.73512	-1.78456	-26.9656
5970500000	-20.4666	-1.7602	-1.74272	-25.7221
6070000000	-21.1805	-1.75858	-1.77904	-24.4476
6169500000	-21.3145	-1.7775	-1.78414	-23.5261
6269000000	-21.6714	-1.78031	-1.83051	-22.9993
6368500000	-21.871	-1.80397	-1.84132	-22.4851
6468000000	-21.839	-1.80827	-1.83065	-22.1496
6567500000	-22.3697	-1.83745	-1.83656	-22.2916
6667000000	-22.4922	-1.85563	-1.85774	-22.1025
6766500000	-22.6663	-1.87466	-1.8976	-21.3896
6866000000	-22.5493	-1.91263	-1.91115	-21.184
6965500000	-22.5909	-1.93898	-1.91196	-21.1269
7065000000	-22.3855	-1.92642	-1.93235	-20.5848
7164500000	-21.8788	-1.9856	-1.98995	-20.2534
7264000000	-21.277	-1.99464	-2.00302	-19.9658
7363500000	-20.8427	-2.01001	-2.00293	-19.6725
7463000000	-20.0422	-2.03765	-2.04373	-19.2671
7562500000	-19.3111	-2.04925	-2.0663	-18.6193
7662000000	-18.5294	-2.08656	-2.07725	-18.0305
7761500000	-17.8264	-2.1298	-2.11409	-17.4601
7861000000	-16.8655	-2.17103	-2.14375	-16.7562
7960500000	-16.6261	-2.19472	-2.18721	-16.6395
8060000000	-15.915	-2.25177	-2.19176	-16.1194
8159500000	-15.4179	-2.28002	-2.25757	-15.7986
8259000000	-14.899	-2.30456	-2.31329	-15.3561
8358500000	-14.4821	-2.35844	-2.31968	-15.0966
8458000000	-14.1974	-2.41135	-2.37527	-14.8296
8557500000	-13.7257	-2.44199	-2.47173	-14.4686
8657000000	-13.5882	-2.45632	-2.43591	-14.2421
8756500000	-13.2041	-2.49946	-2.49485	-14.0954
8856000000	-13.1026	-2.56318	-2.50622	-13.9207
8955500000	-12.9038	-2.59035	-2.57828	-13.8235
9055000000	-12.7695	-2.57238	-2.60573	-13.6906
9154500000	-12.7015	-2.61232	-2.62616	-13.6155

4080000000	-16.7567	-1.56869
4179500000	-16.454	-1.641987
4279000000	-16.217	-1.667692
4378500000	-15.8262	-1.722283
4478000000	-15.4702	-1.717273
4577500000	-15.1039	-1.77671
4677000000	-14.8042	-1.797225
4776500000	-14.4755	-1.840114
4876000000	-14.3787	-1.834673
4975500000	-14.2494	-1.813365
5075000000	-14.2215	-1.836907
5174500000	-14.2012	-1.843968
5274000000	-14.1854	-1.827151
5373500000	-14.2245	-1.832244
5473000000	-14.28	-1.850522
5572500000	-14.3445	-1.81332
5672000000	-14.3983	-1.790077
5771500000	-14.4756	-1.826251
5871000000	-14.6011	-1.821795
5970500000	-14.633	-1.801595
6070000000	-14.9302	-1.821544
6169500000	-15.0991	-1.842694
6269000000	-15.3074	-1.859083
6368500000	-15.5492	-1.850309
6468000000	-15.6945	-1.876332
6567500000	-16.0837	-1.896452
6667000000	-16.3461	-1.894658
6766500000	-16.6494	-1.915436
6866000000	-16.8239	-1.932474
6965500000	-17.0941	-1.954612
7065000000	-17.2823	-1.953011
7164500000	-17.3209	-2.021376
7264000000	-17.2786	-2.005071
7363500000	-17.3041	-2.015059
7463000000	-17.0512	-2.026765
7562500000	-16.8162	-2.105279
7662000000	-16.5237	-2.078884
7761500000	-16.2083	-2.10037
7861000000	-15.6263	-2.144495
7960500000	-15.6102	-2.134683
8060000000	-15.1782	-2.156905
8159500000	-14.9211	-2.169134
8259000000	-14.6013	-2.177365
8358500000	-14.3809	-2.236651
8458000000	-14.3328	-2.241817
8557500000	-13.9681	-2.293946
8657000000	-13.9143	-2.306947
8756500000	-13.6678	-2.297223
8856000000	-13.6905	-2.35557
8955500000	-13.514	-2.353334
9055000000	-13.4873	-2.380226
9154500000	-13.5055	-2.34122

9254000000	-12.6451	-2.61158	-2.67307	-13.4971	9254000000	-13.6097	-2.2663
9353500000	-12.4825	-2.62895	-2.6097	-13.5464	9353500000	-13.4391	-2.359349
9453000000	-12.3599	-2.66192	-2.6606	-13.3485	9453000000	-13.3799	-2.368441
9552500000	-12.4665	-2.65885	-2.65327	-13.3423	9552500000	-13.5103	-2.387827
9652000000	-12.373	-2.69729	-2.73164	-13.1845	9652000000	-13.5314	-2.40535
9751500000	-12.2399	-2.68916	-2.74533	-13.1333	9751500000	-13.3804	-2.381599
9851000000	-12.1999	-2.75163	-2.69019	-13.1157	9851000000	-13.411	-2.430398
9950500000	-12.115	-2.70261	-2.75045	-13.1557	9950500000	-13.3289	-2.33561
1.005E+10	-12.0787	-2.78663	-2.73627	-13.0669	1.005E+10	-13.3655	-2.404242
1.015E+10	-12.031	-2.79317	-2.74606	-13.0344	1.015E+10	-13.3714	-2.421564
1.0249E+10	-11.9742	-2.78301	-2.77772	-13.0383	1.0249E+10	-13.4505	-2.409972
1.0349E+10	-11.8766	-2.84544	-2.83923	-12.9533	1.0349E+10	-13.3604	-2.456792
1.0448E+10	-11.884	-2.80254	-2.81485	-12.9494	1.0448E+10	-13.4421	-2.437883
1.0548E+10	-11.7725	-2.83739	-2.81406	-12.9047	1.0548E+10	-13.4087	-2.426974
1.0647E+10	-11.6601	-2.79661	-2.82972	-12.9143	1.0647E+10	-13.3581	-2.41609
1.0747E+10	-11.6874	-2.85724	-2.8725	-12.8044	1.0747E+10	-13.4803	-2.487229
1.0846E+10	-11.4965	-2.90715	-2.92537	-12.9157	1.0846E+10	-13.35	-2.521911
1.0946E+10	-11.8093	-2.93797	-2.93462	-13.124	1.0946E+10	-13.7275	-2.501899
1.1045E+10	-11.6371	-2.94963	-2.95349	-12.8767	1.1045E+10	-13.8547	-2.549933
1.1145E+10	-11.7443	-2.95557	-2.91341	-12.9664	1.1145E+10	-14.0237	-2.530548
1.1244E+10	-11.8714	-2.90439	-2.98019	-13.2654	1.1244E+10	-14.2518	-2.447677
1.1344E+10	-11.8401	-2.9224	-2.99783	-13.2698	1.1344E+10	-14.5048	-2.506764
1.1443E+10	-12.0085	-2.9604	-2.99213	-13.2797	1.1443E+10	-14.7003	-2.499338
1.1543E+10	-11.982	-2.99709	-2.96391	-13.503	1.1543E+10	-14.9275	-2.536781
1.1642E+10	-12.0411	-2.95531	-2.99151	-13.6972	1.1642E+10	-15.1698	-2.49214
1.1742E+10	-12.2826	-2.95751	-3.04342	-13.9416	1.1742E+10	-15.7626	-2.533208
1.1841E+10	-12.2393	-3.03984	-3.03629	-13.9925	1.1841E+10	-15.7232	-2.540861
1.1941E+10	-12.2538	-3.00316	-3.0045	-14.4387	1.1941E+10	-16.1738	-2.501541
1.204E+10	-12.6486	-3.02888	-3.05744	-14.4188	1.204E+10	-16.888	-2.544089
1.214E+10	-12.5154	-3.0597	-3.02201	-14.7156	1.214E+10	-16.7872	-2.558406
1.2239E+10	-12.8108	-3.06067	-3.05237	-14.8757	1.2239E+10	-17.5401	-2.600179
1.2339E+10	-12.4898	-3.02078	-2.97487	-15.2428	1.2339E+10	-17.2205	-2.581159
1.2438E+10	-12.7494	-3.02202	-3.09057	-15.321	1.2438E+10	-17.974	-2.600092
1.2538E+10	-12.9195	-3.04104	-3.05863	-15.5444	1.2538E+10	-18.4646	-2.571541
1.2637E+10	-12.7413	-3.06956	-3.09961	-15.7543	1.2637E+10	-18.3753	-2.618256
1.2737E+10	-12.661	-3.10341	-3.1326	-15.8926	1.2737E+10	-18.1412	-2.569315
1.2836E+10	-12.8852	-3.16665	-3.07218	-16.1041	1.2836E+10	-18.8451	-2.632614
1.2936E+10	-12.6635	-3.1089	-3.08833	-16.4196	1.2936E+10	-18.862	-2.658726
1.3035E+10	-12.7212	-3.11615	-3.17159	-16.2915	1.3035E+10	-19.0414	-2.643974
1.3135E+10	-12.5931	-3.09638	-3.12318	-16.6561	1.3135E+10	-18.9074	-2.602957
1.3234E+10	-12.5744	-3.19332	-3.18012	-16.886	1.3234E+10	-19.1887	-2.779085
1.3334E+10	-12.3016	-3.17156	-3.25481	-16.6312	1.3334E+10	-18.6789	-2.778038
1.3433E+10	-12.2212	-3.22856	-3.18341	-16.8366	1.3433E+10	-18.5427	-2.751295
1.3533E+10	-12.1585	-3.20373	-3.22329	-17.5715	1.3533E+10	-18.4319	-2.763353
1.3632E+10	-12.1699	-3.24402	-3.26763	-17.046	1.3632E+10	-18.6744	-2.816988
1.3732E+10	-11.9897	-3.2981	-3.29896	-16.9747	1.3732E+10	-18.1398	-2.821722
1.3831E+10	-11.8625	-3.28957	-3.28664	-17.0153	1.3831E+10	-18.0714	-2.782546
1.3931E+10	-11.6568	-3.31786	-3.29713	-16.8675	1.3931E+10	-17.656	-2.869622
1.403E+10	-11.5298	-3.30412	-3.2796	-16.6373	1.403E+10	-17.3566	-2.902818
1.413E+10	-11.3601	-3.34597	-3.37868	-16.4915	1.413E+10	-16.9842	-2.877171
1.4229E+10	-11.5096	-3.31526	-3.44898	-15.8539	1.4229E+10	-17.2691	-2.934978
1.4329E+10	-11.2192	-3.44055	-3.34454	-15.806	1.4329E+10	-16.4894	-2.942216
1.4428E+10	-11.0888	-3.42004	-3.39811	-15.5859	1.4428E+10	-16.2767	-3.06536
1.4528E+10	-11.0796	-3.42425	-3.41223	-15.3218	1.4528E+10	-16.1205	-3.056889
1.4627E+10	-11.0639	-3.44694	-3.42424	-15.182	1.4627E+10	-15.7176	-2.982953

1.4727E+10	-10.8214	-3.4229	-3.38105	-14.5807	1.4727E+10	-15.265	-3.039147
1.4826E+10	-10.8143	-3.41196	-3.49995	-14.2471	1.4826E+10	-15.0554	-2.919773
1.4926E+10	-10.7786	-3.61599	-3.50626	-13.9764	1.4926E+10	-14.799	-3.196428
1.5025E+10	-10.7364	-3.59839	-3.48621	-13.8377	1.5025E+10	-14.5637	-3.040254
1.5125E+10	-10.8804	-3.52023	-3.51136	-13.4324	1.5125E+10	-14.7628	-3.072687
1.5224E+10	-11.008	-3.48622	-3.58388	-13.1428	1.5224E+10	-14.6542	-3.09107
1.5324E+10	-10.9189	-3.62193	-3.63049	-13.168	1.5324E+10	-14.4639	-3.201777
1.5423E+10	-11.1689	-3.59669	-3.50082	-12.8206	1.5423E+10	-14.5562	-3.193625
1.5523E+10	-11.2154	-3.6694	-3.55513	-12.8164	1.5523E+10	-14.3798	-3.166743
1.5622E+10	-11.5887	-3.54944	-3.57791	-13.0088	1.5622E+10	-14.8716	-3.151343
1.5722E+10	-11.7669	-3.53874	-3.55192	-12.7597	1.5722E+10	-15.055	-3.206704
1.5821E+10	-11.8715	-3.52141	-3.55108	-12.5527	1.5821E+10	-15.1522	-3.239449
1.5921E+10	-12.2344	-3.59415	-3.5598	-12.8052	1.5921E+10	-15.2614	-3.293511
1.602E+10	-12.2855	-3.60622	-3.56752	-12.5434	1.602E+10	-15.362	-3.250201
1.612E+10	-12.6242	-3.58548	-3.64266	-12.5749	1.612E+10	-15.7154	-3.260999
1.6219E+10	-13.1908	-3.58396	-3.61677	-12.8386	1.6219E+10	-16.2987	-3.325758
1.6319E+10	-13.5379	-3.58675	-3.64848	-12.9815	1.6319E+10	-16.8098	-3.282788
1.6418E+10	-13.8649	-3.61013	-3.66519	-13.0039	1.6418E+10	-17.1844	-3.248077
1.6518E+10	-14.2701	-3.71573	-3.67058	-13.281	1.6518E+10	-17.3504	-3.474251
1.6617E+10	-14.7744	-3.61588	-3.72755	-13.4983	1.6617E+10	-18.1199	-3.443841
1.6717E+10	-15.4132	-3.7088	-3.72958	-13.5846	1.6717E+10	-18.8843	-3.451985
1.6816E+10	-16.174	-3.69637	-3.71524	-13.8836	1.6816E+10	-19.4997	-3.407475
1.6916E+10	-16.9733	-3.64806	-3.7207	-14.0641	1.6916E+10	-20.3574	-3.327829
1.7015E+10	-17.45	-3.8217	-3.72447	-14.6657	1.7015E+10	-20.0048	-3.447607
1.7115E+10	-18.4229	-3.72233	-3.82328	-14.8781	1.7115E+10	-20.6745	-3.473944
1.7214E+10	-19.4192	-3.77813	-3.752	-15.4967	1.7214E+10	-21.2204	-3.427171
1.7314E+10	-21.1562	-3.79517	-3.78006	-15.9948	1.7314E+10	-21.18	-3.490809
1.7413E+10	-22.1648	-3.85067	-3.88751	-16.6803	1.7413E+10	-20.6521	-3.49737
1.7513E+10	-24.4383	-3.94055	-3.87848	-17.1478	1.7513E+10	-19.8819	-3.556528
1.7612E+10	-27.3924	-3.87057	-3.96783	-18.2312	1.7612E+10	-18.8532	-3.528095
1.7712E+10	-32.0429	-3.87218	-3.83684	-18.5489	1.7712E+10	-17.725	-3.477419
1.7811E+10	-40.4096	-4.0279	-3.95396	-19.4166	1.7811E+10	-16.6303	-3.637121
1.7911E+10	-33.0751	-4.08264	-4.06949	-20.0019	1.7911E+10	-16.1188	-3.611103
1.801E+10	-29.0215	-4.11967	-4.07999	-20.6442	1.801E+10	-15.5332	-3.717708
1.811E+10	-24.7342	-4.16724	-4.20576	-20.9627	1.811E+10	-14.6778	-3.685963
1.8209E+10	-21.6079	-4.23159	-4.30934	-20.9617	1.8209E+10	-14.0616	-3.736186
1.8309E+10	-19.7318	-4.30108	-4.308	-20.6568	1.8309E+10	-13.826	-3.823648
1.8408E+10	-17.5613	-4.46327	-4.45164	-21.0301	1.8408E+10	-13.077	-3.910391
1.8508E+10	-16.3186	-4.53832	-4.4984	-20.6045	1.8508E+10	-12.6895	-3.855971
1.8607E+10	-15.1189	-4.55863	-4.6173	-20.0431	1.8607E+10	-12.465	-4.009283
1.8707E+10	-13.7275	-4.65798	-4.72025	-19.517	1.8707E+10	-11.8949	-3.984956
1.8806E+10	-13.0508	-4.93566	-4.87644	-19.3609	1.8806E+10	-11.8733	-4.154807
1.8906E+10	-12.0106	-4.93301	-4.94037	-19.0384	1.8906E+10	-11.5318	-4.174666
1.9005E+10	-11.2895	-5.09087	-4.93946	-18.552	1.9005E+10	-11.05	-4.215689
1.9105E+10	-10.4521	-5.22024	-5.18133	-17.995	1.9105E+10	-10.7988	-4.188955
1.9204E+10	-9.80537	-5.45116	-5.25146	-18.3585	1.9204E+10	-10.5274	-4.290084
1.9304E+10	-9.38224	-5.66528	-5.50633	-17.9061	1.9304E+10	-10.3709	-4.3828
1.9403E+10	-9.07182	-5.73968	-5.54155	-18.2013	1.9403E+10	-10.3108	-4.544629
1.9503E+10	-8.14756	-5.73229	-5.66047	-17.9258	1.9503E+10	-9.61557	-4.376695
1.9602E+10	-7.87533	-5.92737	-6.00489	-18.0585	1.9602E+10	-9.62095	-4.574282
1.9702E+10	-7.48699	-6.16462	-6.00672	-18.2923	1.9702E+10	-9.36614	-4.685566
1.9801E+10	-7.16267	-6.15152	-6.25465	-18.1819	1.9801E+10	-9.21518	-4.734273
1.9901E+10	-6.89284	-6.47952	-6.45941	-18.149	1.9901E+10	-8.97219	-4.823482
2E+10	-6.34119	-6.60761	-6.41216	-17.912	2E+10	-8.56522	-4.925547

J3

S12 (dB)	S22 (dB)	Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-3.32034	-9.62553	100000000	-10.1395	-3.08128	-3.10766	-10.5362
-1.05666	-17.8078	199500000	-15.2732	-1.10924	-1.10804	-17.4826
-0.83506	-21.9036	299000000	-19.7512	-0.84187	-0.85671	-21.2871
-0.7565	-23.7696	398500000	-23.1723	-0.78198	-0.78425	-23.1745
-0.75687	-24.7466	498000000	-25.4619	-0.77398	-0.77762	-24.4257
-0.76528	-25.1977	597500000	-26.3479	-0.77828	-0.77744	-25.2075
-0.76997	-25.3924	697000000	-26.4211	-0.794	-0.79602	-26.0466
-0.80478	-25.6537	796500000	-25.6165	-0.81616	-0.81432	-26.8559
-0.80428	-25.6905	896000000	-24.4364	-0.83353	-0.82775	-27.5141
-0.84495	-25.3168	995500000	-23.2608	-0.85659	-0.85943	-27.5269
-0.87331	-25.4062	1095000000	-22.8749	-0.87693	-0.88297	-28.0482
-0.89319	-25.1671	1194500000	-22.0194	-0.90924	-0.90861	-27.72
-0.93139	-25.4163	1294000000	-21.3051	-0.92113	-0.9333	-27.9819
-0.95594	-24.7432	1393500000	-20.8923	-0.97527	-0.96751	-26.8501
-0.9749	-24.8588	1493000000	-20.3772	-0.99151	-0.99255	-26.4803
-0.99909	-24.5599	1592500000	-19.6823	-1.02383	-1.02686	-25.497
-1.0169	-24.4526	1692000000	-19.4104	-1.04894	-1.04189	-24.9675
-1.05475	-24.5867	1791500000	-19.2267	-1.06096	-1.07041	-24.5329
-1.0738	-24.1964	1891000000	-18.8156	-1.09621	-1.10122	-23.7273
-1.07042	-24.542	1990500000	-18.6331	-1.12214	-1.12951	-23.5974
-1.11305	-24.2984	2090000000	-18.3266	-1.17115	-1.152	-23.0073
-1.1427	-24.1252	2189500000	-18.1187	-1.18801	-1.19323	-22.4866
-1.18605	-24.2699	2289000000	-18.2057	-1.21495	-1.21008	-22.2495
-1.22008	-24.3092	2388500000	-18.088	-1.22411	-1.26743	-22.0854
-1.21078	-24.5053	2488000000	-18.1586	-1.24447	-1.27965	-21.9868
-1.23632	-24.6604	2587500000	-18.0784	-1.31874	-1.29969	-21.9748
-1.28649	-24.8901	2687000000	-18.2215	-1.34752	-1.34889	-21.9948
-1.36088	-25.1664	2786500000	-18.3058	-1.38813	-1.41696	-22.0271
-1.42939	-24.8805	2886000000	-18.3741	-1.47115	-1.48355	-21.8989
-1.48206	-25.2088	2985500000	-18.4479	-1.55162	-1.56354	-22.0603
-1.51016	-25.1607	3085000000	-18.2019	-1.59398	-1.5965	-21.9145
-1.56603	-24.912	3184500000	-18.0728	-1.63733	-1.63913	-21.8899
-1.58168	-24.5633	3284000000	-17.7845	-1.6382	-1.65434	-21.8618
-1.56661	-24.4832	3383500000	-17.8628	-1.62119	-1.63151	-22.2439
-1.55165	-24.2021	3483000000	-17.7506	-1.62119	-1.6109	-22.8349
-1.5418	-24.1224	3582500000	-17.9998	-1.59345	-1.59276	-23.5566
-1.55112	-24.136	3682000000	-18.1482	-1.5773	-1.60812	-24.5346
-1.53882	-23.7069	3781500000	-18.4968	-1.59217	-1.60191	-25.8736
-1.55341	-23.6818	3881000000	-18.6075	-1.61306	-1.59626	-27.7535
-1.55127	-23.5626	3980500000	-18.912	-1.61859	-1.5985	-30.2164

-1.59578	-23.0824	4080000000	-19.0269	-1.6234	-1.63376	-34.0865
-1.63074	-22.7499	4179500000	-19.119	-1.67902	-1.67633	-40.9768
-1.65758	-22.4579	4279000000	-19.1507	-1.72027	-1.70327	-45.0314
-1.70216	-22.0644	4378500000	-18.8442	-1.75856	-1.73784	-35.2573
-1.75072	-21.7113	4478000000	-18.6037	-1.77855	-1.75644	-30.9718
-1.77265	-21.3564	4577500000	-18.1591	-1.80387	-1.80868	-28.5378
-1.83041	-20.9035	4677000000	-17.8199	-1.83809	-1.86236	-26.1848
-1.82968	-20.4043	4776500000	-17.4747	-1.87083	-1.87216	-24.4828
-1.85613	-19.9321	4876000000	-17.3744	-1.85583	-1.87145	-23.4191
-1.84748	-19.1856	4975500000	-17.0982	-1.85275	-1.87063	-21.6156
-1.80965	-18.6854	5075000000	-16.9684	-1.87683	-1.86657	-20.6495
-1.84268	-18.2069	5174500000	-16.6914	-1.87272	-1.82694	-19.5554
-1.81212	-17.5813	5274000000	-16.3899	-1.85969	-1.83313	-18.4774
-1.82781	-17.1538	5373500000	-16.1037	-1.8509	-1.8881	-17.736
-1.80541	-16.81	5473000000	-15.7581	-1.88417	-1.86642	-16.7756
-1.7971	-16.4878	5572500000	-15.4891	-1.84948	-1.8678	-16.1716
-1.79812	-16.1958	5672000000	-15.2936	-1.88059	-1.85351	-15.612
-1.80442	-15.9993	5771500000	-14.977	-1.90747	-1.88969	-15.2196
-1.84295	-15.7604	5871000000	-14.7708	-1.89836	-1.93725	-14.7401
-1.83291	-15.6498	5970500000	-14.5582	-1.91717	-1.93718	-14.4296
-1.84413	-15.4705	6070000000	-14.4822	-1.96439	-1.96026	-14.0421
-1.85718	-15.3437	6169500000	-14.3691	-1.96559	-1.97917	-13.8315
-1.86295	-15.3168	6269000000	-14.3453	-1.99849	-1.99522	-13.6398
-1.92698	-15.3235	6368500000	-14.3713	-1.9891	-2.04095	-13.5883
-1.89545	-15.3648	6468000000	-14.3225	-2.00952	-2.05971	-13.5538
-1.87857	-15.5465	6567500000	-14.4753	-2.03046	-2.04442	-13.6624
-1.90635	-15.6512	6667000000	-14.7254	-2.03997	-2.04719	-13.6692
-1.95146	-15.5031	6766500000	-14.9381	-2.07527	-2.07539	-13.5239
-1.94493	-15.5659	6866000000	-15.0798	-2.07828	-2.11552	-13.6263
-1.90369	-15.6709	6965500000	-15.388	-2.12615	-2.06421	-13.7451
-1.9759	-15.55	7065000000	-15.6133	-2.08764	-2.11228	-13.7193
-1.99775	-15.4854	7164500000	-15.9269	-2.12975	-2.12825	-13.8028
-2.00627	-15.4794	7264000000	-16.1714	-2.13072	-2.133	-13.8342
-2.01394	-15.5111	7363500000	-16.3115	-2.12937	-2.13205	-13.9901
-2.01961	-15.4326	7463000000	-16.3135	-2.15836	-2.16068	-14.0364
-2.04042	-15.2569	7562500000	-16.3291	-2.16457	-2.15799	-13.954
-2.05707	-15.0284	7662000000	-16.3822	-2.18883	-2.1721	-13.9526
-2.08724	-14.8906	7761500000	-16.1892	-2.20963	-2.19653	-13.872
-2.11032	-14.4944	7861000000	-15.8051	-2.22613	-2.22925	-13.6623
-2.10965	-14.6338	7960500000	-15.7659	-2.23632	-2.24778	-13.8898
-2.19062	-14.4638	8060000000	-15.3414	-2.23202	-2.26317	-13.6893
-2.18694	-14.4527	8159500000	-15.1179	-2.27392	-2.28747	-13.6563
-2.21121	-14.2318	8259000000	-14.6603	-2.28943	-2.30651	-13.5803
-2.20842	-14.308	8358500000	-14.3729	-2.3498	-2.33378	-13.5429
-2.21508	-14.2911	8458000000	-14.3639	-2.36176	-2.36704	-13.5912
-2.3142	-14.2135	8557500000	-13.8451	-2.43204	-2.40603	-13.4716
-2.27518	-14.2401	8657000000	-13.7035	-2.41478	-2.37771	-13.4243
-2.30425	-14.4302	8756500000	-13.4052	-2.415	-2.40662	-13.4925
-2.29981	-14.5094	8856000000	-13.2381	-2.47987	-2.42315	-13.5939
-2.3419	-14.5614	8955500000	-12.997	-2.50587	-2.47632	-13.5796
-2.32807	-14.8209	9055000000	-12.9123	-2.52134	-2.51117	-13.7298
-2.32847	-14.9709	9154500000	-12.8053	-2.48029	-2.51391	-13.8321

-2.31632	-15.1006	9254000000	-12.8129	-2.49485	-2.48105	-13.9743
-2.34677	-15.5031	9353500000	-12.6426	-2.50441	-2.50971	-14.2816
-2.37008	-15.5304	9453000000	-12.4737	-2.5163	-2.51378	-14.3251
-2.3326	-15.7321	9552500000	-12.5134	-2.49142	-2.51392	-14.4855
-2.36812	-15.7868	9652000000	-12.5772	-2.5285	-2.4957	-14.6011
-2.33073	-15.9866	9751500000	-12.3914	-2.53208	-2.54406	-14.7648
-2.35131	-16.0894	9851000000	-12.3988	-2.58418	-2.51389	-14.9685
-2.40673	-16.2491	9950500000	-12.3256	-2.49282	-2.59539	-15.2236
-2.39032	-16.3484	1.005E+10	-12.3701	-2.55122	-2.53416	-15.2909
-2.45177	-16.3412	1.015E+10	-12.3554	-2.62159	-2.57076	-15.4025
-2.46055	-16.3834	1.0249E+10	-12.5088	-2.56506	-2.54992	-15.5898
-2.42191	-16.1939	1.0349E+10	-12.4714	-2.60672	-2.63162	-15.5199
-2.43739	-16.1487	1.0448E+10	-12.5424	-2.57742	-2.5838	-15.5486
-2.45836	-16.1003	1.0548E+10	-12.507	-2.55776	-2.62172	-15.6502
-2.43015	-16.2338	1.0647E+10	-12.5891	-2.56607	-2.60961	-15.8813
-2.49736	-15.9936	1.0747E+10	-12.713	-2.54864	-2.57272	-15.4926
-2.48228	-15.9993	1.0846E+10	-12.6691	-2.65108	-2.58945	-15.7046
-2.50083	-16.2998	1.0946E+10	-13.0138	-2.62011	-2.57128	-15.9133
-2.52593	-15.9571	1.1045E+10	-13.1522	-2.63988	-2.60388	-15.7287
-2.47132	-16.2088	1.1145E+10	-13.402	-2.59154	-2.61165	-16.015
-2.58	-16.5542	1.1244E+10	-13.565	-2.55408	-2.67895	-16.2253
-2.48873	-16.4243	1.1344E+10	-13.9122	-2.62556	-2.65395	-16.0035
-2.53358	-16.6538	1.1443E+10	-13.9414	-2.61859	-2.67469	-16.1556
-2.54718	-16.9331	1.1543E+10	-14.3133	-2.62712	-2.61842	-16.3845
-2.5267	-17.2459	1.1642E+10	-14.5551	-2.69507	-2.62128	-16.457
-2.55975	-17.4503	1.1742E+10	-14.9714	-2.65081	-2.63114	-16.5423
-2.52496	-17.7768	1.1841E+10	-14.9789	-2.64251	-2.6275	-16.8027
-2.54716	-18.5095	1.1941E+10	-15.5472	-2.64729	-2.71021	-17.2692
-2.51604	-18.5191	1.204E+10	-16.0908	-2.67272	-2.6525	-17.043
-2.54739	-18.8392	1.214E+10	-16.0227	-2.65488	-2.63448	-17.2955
-2.57224	-19.1964	1.2239E+10	-16.8344	-2.64909	-2.66865	-17.5585
-2.52666	-19.9824	1.2339E+10	-16.6941	-2.68796	-2.59764	-17.8321
-2.55375	-19.9131	1.2438E+10	-17.3906	-2.6703	-2.67659	-17.9472
-2.59335	-20.1707	1.2538E+10	-17.9622	-2.68797	-2.64039	-17.8093
-2.65513	-20.5008	1.2637E+10	-17.9451	-2.69202	-2.62682	-18.1654
-2.64487	-20.9919	1.2737E+10	-18.1075	-2.70856	-2.65636	-18.4331
-2.61438	-20.9747	1.2836E+10	-18.4294	-2.64865	-2.68398	-18.5107
-2.60881	-21.3705	1.2936E+10	-18.7418	-2.71501	-2.66374	-18.7682
-2.63428	-21.2155	1.3035E+10	-19.1492	-2.66436	-2.709	-18.8366
-2.72693	-22.0193	1.3135E+10	-18.9153	-2.65182	-2.76426	-19.4072
-2.7072	-21.9206	1.3234E+10	-19.1502	-2.71961	-2.67214	-19.6237
-2.78876	-21.5229	1.3334E+10	-18.6833	-2.68374	-2.7716	-19.4992
-2.73938	-20.9761	1.3433E+10	-18.5564	-2.82347	-2.74335	-19.5186
-2.76473	-22.4639	1.3533E+10	-18.5995	-2.796	-2.82147	-20.868
-2.85453	-20.5295	1.3632E+10	-18.6277	-2.83731	-2.79145	-19.7414
-2.83199	-20.6603	1.3732E+10	-18.3171	-2.79942	-2.81395	-20.1328
-2.83767	-20.1464	1.3831E+10	-18.1701	-2.78525	-2.86639	-20.2971
-2.87105	-19.4336	1.3931E+10	-17.7926	-2.8467	-2.83374	-20.0042
-2.87791	-18.8492	1.403E+10	-17.659	-2.82362	-2.85511	-19.9927
-2.90149	-18.4858	1.413E+10	-17.2917	-2.87407	-2.88118	-19.9736
-2.98609	-17.4491	1.4229E+10	-18.006	-2.90566	-2.92069	-19.1663
-3.04393	-17.1218	1.4329E+10	-17.2596	-2.92069	-2.93997	-19.25
-2.91996	-16.7334	1.4428E+10	-17.1947	-2.91416	-2.91822	-19.4392
-3.01259	-16.2327	1.4528E+10	-17.4086	-3.00948	-2.86827	-19.2263
-2.99878	-16.0226	1.4627E+10	-17.3403	-2.89381	-2.88874	-19.2556

-3.0519	-15.1343	1.4727E+10	-17.0965	-2.92464	-2.93859	-18.4018
-3.06358	-14.6855	1.4826E+10	-17.29	-2.90355	-2.95667	-18.1797
-3.14231	-14.5137	1.4926E+10	-17.327	-3.10153	-2.98129	-18.1883
-3.04961	-14.0123	1.5025E+10	-17.6332	-2.94174	-2.88776	-17.8941
-3.11341	-13.7615	1.5125E+10	-18.2577	-2.97221	-2.9608	-17.5188
-3.18794	-13.5205	1.5224E+10	-18.5003	-2.93777	-3.03242	-17.3097
-3.25309	-13.552	1.5324E+10	-18.3185	-3.00986	-3.06996	-17.6139
-3.07837	-13.2118	1.5423E+10	-18.978	-2.97627	-2.98257	-17.2958
-3.2095	-13.336	1.5523E+10	-19.2566	-2.96019	-3.00235	-17.3128
-3.23205	-13.6956	1.5622E+10	-20.3508	-2.97643	-3.0943	-17.4054
-3.22977	-13.3789	1.5722E+10	-20.5188	-3.0933	-3.09686	-16.9578
-3.29922	-13.3168	1.5821E+10	-20.6585	-3.03936	-3.09907	-16.695
-3.19252	-13.8283	1.5921E+10	-20.7468	-3.14597	-2.96576	-16.9879
-3.35542	-13.8337	1.602E+10	-20.2474	-3.12946	-3.10771	-16.8551
-3.36676	-14.0571	1.612E+10	-19.868	-3.11122	-3.20654	-16.6513
-3.34541	-14.685	1.6219E+10	-19.4658	-3.19592	-3.23132	-16.8543
-3.36403	-15.1219	1.6319E+10	-18.9662	-3.1918	-3.28535	-17.1293
-3.29898	-15.5781	1.6418E+10	-18.3682	-3.30338	-3.25408	-17.0747
-3.41197	-16.1786	1.6518E+10	-17.4758	-3.26583	-3.35603	-17.3958
-3.38954	-17.1018	1.6617E+10	-17.2471	-3.38463	-3.43942	-17.683
-3.40079	-17.6158	1.6717E+10	-16.7152	-3.39278	-3.4327	-17.5411
-3.38327	-18.6936	1.6816E+10	-16.3452	-3.44525	-3.45552	-18.4678
-3.34197	-19.9202	1.6916E+10	-15.7375	-3.41593	-3.49043	-19.0044
-3.35686	-21.6493	1.7015E+10	-15.2249	-3.585	-3.58174	-20.2368
-3.42291	-22.9309	1.7115E+10	-14.9084	-3.49906	-3.5565	-20.7146
-3.51786	-25.9495	1.7214E+10	-15.1191	-3.55462	-3.59007	-22.283
-3.4447	-28.5532	1.7314E+10	-14.8745	-3.64155	-3.67896	-23.8638
-3.55912	-32.2094	1.7413E+10	-14.9825	-3.72654	-3.73627	-24.8836
-3.44525	-30.6775	1.7513E+10	-14.8826	-3.81389	-3.7701	-27.3014
-3.55484	-28.0275	1.7612E+10	-14.7738	-3.78144	-3.79487	-33.0101
-3.59297	-25.6677	1.7712E+10	-14.4815	-3.83234	-3.73037	-38.6108
-3.57682	-22.8784	1.7811E+10	-14.4014	-3.74061	-3.76661	-37.4442
-3.60859	-21.3505	1.7911E+10	-14.2903	-3.8117	-3.78583	-31.094
-3.6814	-19.8431	1.801E+10	-14.0499	-3.92856	-3.82351	-26.6485
-3.71976	-18.6756	1.811E+10	-13.667	-3.86607	-3.89542	-23.2627
-3.81525	-17.8099	1.8209E+10	-13.1386	-3.88118	-3.90067	-20.6008
-3.73189	-17.0737	1.8309E+10	-12.7745	-3.8893	-3.97333	-18.9369
-3.93116	-16.5552	1.8408E+10	-12.1389	-4.07109	-4.08065	-17.5661
-3.93699	-15.8412	1.8508E+10	-11.7232	-4.08543	-4.11548	-15.8839
-4.00949	-15.3636	1.8607E+10	-11.2643	-4.12977	-4.20373	-14.8033
-4.04916	-15.1106	1.8707E+10	-10.555	-4.15853	-4.26975	-13.8168
-4.10238	-14.7995	1.8806E+10	-10.3514	-4.37837	-4.19789	-12.9531
-4.12143	-14.9831	1.8906E+10	-9.82909	-4.37995	-4.42453	-12.4739
-4.0146	-15.0833	1.9005E+10	-9.15096	-4.46233	-4.32963	-11.7527
-4.22946	-14.5005	1.9105E+10	-8.98774	-4.67485	-4.57003	-10.7416
-4.22496	-14.4871	1.9204E+10	-8.60493	-4.8751	-4.66432	-10.3707
-4.40183	-14.4672	1.9304E+10	-8.24871	-4.78885	-4.8184	-9.76256
-4.53035	-14.8365	1.9403E+10	-8.01028	-4.9643	-4.94915	-9.57447
-4.50389	-15.1054	1.9503E+10	-7.39106	-4.93764	-5.03767	-9.12711
-4.62367	-15.4074	1.9602E+10	-7.361	-5.06509	-5.1511	-8.73355
-4.56936	-15.7532	1.9702E+10	-7.34114	-5.2997	-5.17246	-8.5814
-4.70719	-16.7536	1.9801E+10	-6.91058	-5.34379	-5.34853	-8.529
-4.6728	-17.1163	1.9901E+10	-6.82141	-5.38295	-5.45448	-8.18769
-4.79867	-18.2516	2E+10	-6.63721	-5.53416	-5.29827	-8.09949

J4

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
100000000	-8.75266	-3.35181	-3.35523	-9.19666
199500000	-15.2369	-1.07723	-1.07858	-17.374
299000000	-19.6848	-0.80813	-0.83749	-21.3528
398500000	-23.3731	-0.75816	-0.75785	-23.3396
498000000	-25.8585	-0.74545	-0.75538	-24.5879
597500000	-27.177	-0.75603	-0.76129	-25.2299
697000000	-27.4602	-0.76778	-0.76704	-25.8849
796500000	-26.7185	-0.77973	-0.79899	-26.457
896000000	-25.6239	-0.80998	-0.80392	-27.0561
995500000	-24.3387	-0.82603	-0.82837	-27.1219
1095000000	-24.0439	-0.83769	-0.85109	-27.779
1194500000	-23.2814	-0.87204	-0.87728	-27.832
1294000000	-22.6293	-0.87979	-0.92909	-28.5413
1393500000	-22.266	-0.9332	-0.93106	-27.9292
1493000000	-21.8952	-0.9496	-0.9603	-28.3897
1592500000	-21.2889	-0.97545	-0.98202	-28.1075
1692000000	-21.1123	-0.99481	-0.98843	-28.1358
1791500000	-21.0132	-1.02346	-1.03014	-28.2853
1891000000	-20.6513	-1.04573	-1.04712	-27.7449
1990500000	-20.7037	-1.06916	-1.0743	-28.0912
2090000000	-20.4029	-1.09165	-1.1003	-27.7245
2189500000	-20.2663	-1.12357	-1.11753	-27.2134
2289000000	-20.387	-1.14947	-1.15469	-27.077
2388500000	-20.3638	-1.15802	-1.19676	-27.0568
2488000000	-20.5347	-1.20294	-1.20404	-27.0904
2587500000	-20.3804	-1.2296	-1.23999	-27.1156
2687000000	-20.4904	-1.26974	-1.27389	-27.2506
2786500000	-20.4997	-1.31112	-1.32703	-27.459
2886000000	-20.5031	-1.37719	-1.40171	-27.0764
2985500000	-20.3736	-1.43922	-1.46864	-27.554
3085000000	-19.9526	-1.51526	-1.52386	-27.8603
3184500000	-19.6419	-1.55165	-1.58337	-27.3092
3284000000	-19.001	-1.57802	-1.60595	-26.6541
3383500000	-18.8023	-1.59502	-1.6145	-26.1749
3483000000	-18.2716	-1.60843	-1.59711	-25.4293
3582500000	-18.1265	-1.58073	-1.58432	-25.0022
3682000000	-17.7956	-1.55595	-1.58248	-24.6827
3781500000	-17.6709	-1.57796	-1.57564	-23.9283
3881000000	-17.3532	-1.59901	-1.59238	-23.7046
3980500000	-17.0778	-1.5954	-1.57339	-23.1936

J5

Frequency (Hz)	S11 (dB)	S21 (dB)
1E+08	-9.06945	-3.23308
2E+08	-15.6228	-1.08423
2.99E+08	-20.1862	-0.83717
3.99E+08	-23.8854	-0.77474
4.98E+08	-26.3638	-0.7638
5.98E+08	-27.3429	-0.78161
6.97E+08	-27.2929	-0.79408
7.97E+08	-26.3476	-0.82785
8.96E+08	-25.1538	-0.85165
9.96E+08	-23.7268	-0.86275
1.1E+09	-23.4537	-0.89801
1.19E+09	-22.6785	-0.91074
1.29E+09	-22.0681	-0.9386
1.39E+09	-21.7349	-0.9645
1.49E+09	-21.3464	-0.99115
1.59E+09	-20.7835	-1.02391
1.69E+09	-20.6627	-1.04943
1.79E+09	-20.5203	-1.06116
1.89E+09	-20.3189	-1.09496
1.99E+09	-20.3032	-1.11205
2.09E+09	-20.1809	-1.14546
2.19E+09	-20.1324	-1.16796
2.29E+09	-20.3523	-1.20553
2.39E+09	-20.3952	-1.20134
2.49E+09	-20.6534	-1.23743
2.59E+09	-20.7199	-1.28292
2.69E+09	-21.0751	-1.32246
2.79E+09	-21.3014	-1.37985
2.89E+09	-21.4769	-1.42219
2.99E+09	-21.576	-1.49401
3.09E+09	-21.2639	-1.54903
3.18E+09	-21.0781	-1.56714
3.28E+09	-20.4945	-1.60072
3.38E+09	-20.3868	-1.56759
3.48E+09	-19.8331	-1.56981
3.58E+09	-19.7112	-1.57823
3.68E+09	-19.2909	-1.56457
3.78E+09	-19.0946	-1.58507
3.88E+09	-18.6504	-1.57904
3.98E+09	-18.2571	-1.63103

4080000000	-16.7409	-1.61757	-1.62993	-22.6077	4.08E+09	-17.7235	-1.63459
4179500000	-16.3749	-1.66204	-1.65733	-21.9977	4.18E+09	-17.2575	-1.68477
4279000000	-16.0833	-1.70216	-1.67865	-21.4691	4.28E+09	-16.8391	-1.73462
4378500000	-15.6126	-1.74308	-1.75518	-20.9535	4.38E+09	-16.2307	-1.74868
4478000000	-15.2706	-1.76931	-1.79138	-20.4658	4.48E+09	-15.7865	-1.80728
4577500000	-14.852	-1.82307	-1.85035	-20.0868	4.58E+09	-15.2826	-1.84303
4677000000	-14.5057	-1.84887	-1.86324	-19.4921	4.68E+09	-14.8624	-1.87423
4776500000	-14.1614	-1.89597	-1.92429	-19.0114	4.78E+09	-14.5018	-1.90694
4876000000	-14.0344	-1.92533	-1.91506	-18.6085	4.88E+09	-14.3098	-1.89943
4975500000	-13.8484	-1.91851	-1.94238	-17.8616	4.98E+09	-14.1016	-1.96389
5075000000	-13.7441	-1.9147	-1.90674	-17.4236	5.08E+09	-13.9219	-1.93404
5174500000	-13.6732	-1.93256	-1.91187	-16.8939	5.17E+09	-13.8057	-1.93819
5274000000	-13.595	-1.90831	-1.90988	-16.2887	5.27E+09	-13.6759	-1.92558
5373500000	-13.5395	-1.90527	-1.9536	-15.8734	5.37E+09	-13.5394	-1.91208
5473000000	-13.4812	-1.91092	-1.90234	-15.3662	5.47E+09	-13.4702	-1.92299
5572500000	-13.5064	-1.89834	-1.89093	-14.9884	5.57E+09	-13.4391	-1.92025
5672000000	-13.5348	-1.89308	-1.87994	-14.6747	5.67E+09	-13.455	-1.93229
5771500000	-13.4966	-1.89996	-1.90585	-14.4715	5.77E+09	-13.4138	-1.94851
5871000000	-13.556	-1.91131	-1.93072	-14.2207	5.87E+09	-13.4451	-1.94869
5970500000	-13.5408	-1.88737	-1.91388	-14.0742	5.97E+09	-13.438	-1.94847
6070000000	-13.7546	-1.91553	-1.94365	-13.8977	6.07E+09	-13.6289	-1.9687
6169500000	-13.8977	-1.93257	-1.9554	-13.7981	6.17E+09	-13.7399	-1.99025
6269000000	-14.0463	-1.93835	-1.98606	-13.7987	6.27E+09	-13.8845	-1.99926
6368500000	-14.2774	-1.94577	-1.99357	-13.7671	6.37E+09	-14.0811	-1.99595
6468000000	-14.3992	-1.96327	-1.98301	-13.8278	6.47E+09	-14.1831	-2.02379
6567500000	-14.7722	-1.99794	-1.97371	-14.0483	6.57E+09	-14.4591	-2.04598
6667000000	-15.0799	-1.97174	-1.97005	-14.1589	6.67E+09	-14.7667	-2.02104
6766500000	-15.4298	-1.99827	-2.019	-14.1234	6.77E+09	-15.1041	-2.05519
6866000000	-15.688	-2.02587	-2.0156	-14.2699	6.87E+09	-15.3111	-2.06039
6965500000	-16.0865	-2.01807	-2.03727	-14.5196	6.97E+09	-15.6601	-2.05989
7065000000	-16.4318	-2.04669	-2.06332	-14.5172	7.07E+09	-15.9912	-2.08321
7164500000	-16.7453	-2.05505	-2.05585	-14.6418	7.16E+09	-16.308	-2.08982
7264000000	-16.9731	-2.04645	-2.05082	-14.7426	7.26E+09	-16.5639	-2.08935
7363500000	-17.1896	-2.04817	-2.04021	-14.938	7.36E+09	-16.747	-2.1068
7463000000	-17.1908	-2.07786	-2.04748	-15.0637	7.46E+09	-16.7762	-2.14644
7562500000	-17.1829	-2.07283	-2.06424	-15.0414	7.56E+09	-16.803	-2.1156
7662000000	-17.2224	-2.10833	-2.06661	-15.0866	7.66E+09	-16.8816	-2.1699
7761500000	-17.0415	-2.11687	-2.11659	-15.05	7.76E+09	-16.7085	-2.16225
7861000000	-16.6207	-2.14273	-2.11891	-14.8904	7.86E+09	-16.339	-2.20251
7960500000	-16.7499	-2.15364	-2.11838	-15.1773	7.96E+09	-16.3855	-2.21213
8060000000	-16.3865	-2.1736	-2.16545	-15.0828	8.06E+09	-15.9808	-2.21445
8159500000	-16.1851	-2.18334	-2.17741	-15.1742	8.16E+09	-15.8101	-2.24954
8259000000	-15.8908	-2.17394	-2.20594	-15.126	8.26E+09	-15.3891	-2.27322
8358500000	-15.6723	-2.21187	-2.19213	-15.2745	8.36E+09	-15.112	-2.29927
8458000000	-15.7425	-2.2244	-2.22378	-15.3593	8.46E+09	-15.174	-2.34614
8557500000	-15.3237	-2.22556	-2.29937	-15.3176	8.56E+09	-14.6596	-2.34468
8657000000	-15.2477	-2.31051	-2.29298	-15.4249	8.66E+09	-14.5089	-2.42823
8756500000	-15.0477	-2.28529	-2.2866	-15.5808	8.76E+09	-14.2342	-2.37567
8856000000	-14.9757	-2.3294	-2.28036	-15.6217	8.86E+09	-14.0859	-2.4187
8955500000	-14.7292	-2.33053	-2.33166	-15.8583	8.96E+09	-13.7892	-2.45234
9055000000	-14.6844	-2.32269	-2.3688	-15.9449	9.06E+09	-13.7058	-2.40871
9154500000	-14.6262	-2.37059	-2.36424	-16.0059	9.15E+09	-13.6119	-2.48283

9254000000	-14.5218	-2.37504	-2.32997	-16.0075	9.25E+09	-13.5043	-2.4099
9353500000	-14.3829	-2.33648	-2.32121	-16.3033	9.35E+09	-13.4269	-2.46077
9453000000	-14.0845	-2.38217	-2.37668	-16.0923	9.45E+09	-13.1967	-2.48068
9552500000	-14.0103	-2.41838	-2.37346	-16.0154	9.55E+09	-13.2121	-2.49095
9652000000	-14.0477	-2.40703	-2.41708	-15.8498	9.65E+09	-13.2652	-2.55785
9751500000	-13.6545	-2.41429	-2.42831	-15.7201	9.75E+09	-12.9985	-2.48963
9851000000	-13.5594	-2.45301	-2.38158	-15.5302	9.85E+09	-12.9718	-2.55205
9950500000	-13.331	-2.39915	-2.48411	-15.4255	9.95E+09	-12.9134	-2.47155
10050000000	-13.1666	-2.52387	-2.42881	-15.158	1.01E+10	-12.8293	-2.51361
10149500000	-13.0418	-2.4559	-2.49163	-15.0036	1.01E+10	-12.8206	-2.5259
10249000000	-13.0725	-2.52146	-2.47713	-14.8141	1.02E+10	-12.9367	-2.57189
10348500000	-12.9367	-2.53913	-2.48939	-14.5108	1.03E+10	-12.8932	-2.59998
10448000000	-12.8883	-2.51857	-2.50627	-14.3372	1.04E+10	-12.997	-2.56427
10547500000	-12.753	-2.48458	-2.5635	-14.2419	1.05E+10	-12.9456	-2.54278
10647000000	-12.7552	-2.50758	-2.53327	-14.2675	1.06E+10	-13.0493	-2.55616
10746500000	-12.8127	-2.48221	-2.5611	-13.905	1.07E+10	-13.2694	-2.55953
10846000000	-12.6914	-2.5834	-2.54746	-13.9614	1.08E+10	-13.1874	-2.56275
10945500000	-12.9477	-2.55025	-2.56247	-14.1173	1.09E+10	-13.6139	-2.57453
11045000000	-12.9795	-2.60517	-2.588	-13.8904	1.1E+10	-13.7029	-2.62548
11144500000	-13.4603	-2.58757	-2.52975	-14.0608	1.11E+10	-14.2056	-2.64551
11244000000	-13.6005	-2.51238	-2.60783	-14.372	1.12E+10	-14.4642	-2.51671
11343500000	-13.7766	-2.62087	-2.56032	-14.2717	1.13E+10	-14.7499	-2.58628
11443000000	-13.9142	-2.5977	-2.55892	-14.421	1.14E+10	-15.0492	-2.549
11542500000	-14.2661	-2.58253	-2.5723	-14.5464	1.15E+10	-15.5913	-2.58064
11642000000	-14.486	-2.54208	-2.52325	-14.8773	1.16E+10	-15.8721	-2.55573
11741500000	-15.0938	-2.58528	-2.60644	-15.1916	1.17E+10	-16.514	-2.54883
11841000000	-15.164	-2.61341	-2.62094	-15.4938	1.18E+10	-16.7989	-2.56257
11940500000	-15.7816	-2.57962	-2.54568	-16.0445	1.19E+10	-17.5669	-2.63061
12040000000	-16.4734	-2.59349	-2.54808	-16.0911	1.2E+10	-18.5006	-2.60026
12139500000	-16.4504	-2.56024	-2.52855	-16.5641	1.21E+10	-18.5414	-2.63295
12239000000	-17.5007	-2.57957	-2.57048	-17.0081	1.22E+10	-19.9151	-2.60597
12338500000	-17.3297	-2.6009	-2.52217	-17.823	1.23E+10	-19.8205	-2.62958
12438000000	-18.2079	-2.54517	-2.5362	-17.9498	1.24E+10	-21.1511	-2.63885
12537500000	-18.9809	-2.57035	-2.53482	-18.4918	1.25E+10	-22.3044	-2.6555
12637000000	-19.0056	-2.58355	-2.53917	-19.3617	1.26E+10	-22.7387	-2.65633
12736500000	-19.0605	-2.55949	-2.62582	-19.8495	1.27E+10	-23.4464	-2.70589
12836000000	-19.8866	-2.55963	-2.56155	-20.5713	1.28E+10	-24.5168	-2.65961
12935500000	-19.9348	-2.62885	-2.54812	-21.6253	1.29E+10	-25.4821	-2.7444
13035000000	-20.225	-2.5843	-2.61348	-21.9455	1.3E+10	-26.4509	-2.71627
13134500000	-20.1488	-2.58337	-2.63668	-23.2676	1.31E+10	-26.5976	-2.74439
13234000000	-20.3247	-2.67123	-2.63491	-24.2978	1.32E+10	-27.589	-2.84734
13333500000	-19.607	-2.64246	-2.73989	-24.2727	1.33E+10	-27.1411	-2.85024
13433000000	-19.668	-2.70478	-2.63437	-25.4136	1.34E+10	-26.8061	-2.87063
13532500000	-19.4724	-2.6495	-2.66658	-28.5456	1.35E+10	-27.6205	-2.87625
13632000000	-19.9456	-2.71248	-2.71222	-28.4967	1.36E+10	-27.3071	-2.94734
13731500000	-19.4599	-2.75967	-2.80537	-30.378	1.37E+10	-26.2047	-3.00604
13831000000	-19.4875	-2.7316	-2.74247	-32.8551	1.38E+10	-25.8866	-2.941
13930500000	-19.0854	-2.77145	-2.725	-35.474	1.39E+10	-25.4949	-3.00216
14030000000	-19.207	-2.73911	-2.74527	-38.296	1.4E+10	-24.4886	-3.0429
14129500000	-19.0805	-2.78549	-2.79043	-41.0258	1.41E+10	-23.4636	-3.07514
14229000000	-20.0932	-2.79377	-2.87983	-36.8595	1.42E+10	-23.249	-3.11743
14328500000	-19.9481	-2.79726	-2.80008	-37.0455	1.43E+10	-21.8538	-3.15297
14428000000	-20.1199	-2.77511	-2.78677	-35.1955	1.44E+10	-21.1817	-3.21044
14527500000	-20.6845	-2.7821	-2.79421	-31.5453	1.45E+10	-20.608	-3.14291
14627000000	-21.9957	-2.86557	-2.81835	-28.2463	1.46E+10	-19.5904	-3.1816

14726500000	-22.1488	-2.84531	-2.8599	-25.5892	1.47E+10	-18.6957	-3.2282
14826000000	-23.4002	-2.76889	-2.86347	-24.8856	1.48E+10	-18.1978	-3.23332
14925500000	-24.0478	-2.95458	-2.90302	-23.8614	1.49E+10	-17.5113	-3.34938
15025000000	-25.033	-2.89725	-2.78687	-22.0816	1.5E+10	-16.8777	-3.24719
15124500000	-27.5191	-2.89646	-2.90614	-21.0299	1.51E+10	-17.0084	-3.29404
15224000000	-28.3657	-2.89602	-2.97835	-19.988	1.52E+10	-16.3219	-3.2342
15323500000	-26.9688	-2.92572	-2.97393	-19.5212	1.53E+10	-15.8294	-3.37272
15423000000	-26.5184	-2.96925	-2.88438	-18.4668	1.54E+10	-15.6654	-3.39972
15522500000	-24.8023	-3.07301	-3.06556	-18.1309	1.55E+10	-15.2218	-3.25676
15622000000	-23.3183	-3.0474	-3.11834	-17.4475	1.56E+10	-15.3918	-3.36461
15721500000	-21.5186	-3.06918	-3.08722	-16.6274	1.57E+10	-15.1653	-3.33353
15821000000	-20.18	-3.13969	-3.1061	-16.2785	1.58E+10	-15.0622	-3.35266
15920500000	-19.1095	-3.14216	-3.1362	-15.8542	1.59E+10	-15.3	-3.39781
16020000000	-17.8167	-3.18144	-3.23407	-15.7575	1.6E+10	-15.1013	-3.38404
16119500000	-16.996	-3.21356	-3.28306	-15.1716	1.61E+10	-15.1264	-3.3642
16219000000	-16.4002	-3.3249	-3.32331	-15.1519	1.62E+10	-15.4897	-3.36448
16318500000	-15.7968	-3.24691	-3.35879	-15.1017	1.63E+10	-15.5851	-3.3109
16418000000	-15.2177	-3.40778	-3.35841	-14.9099	1.64E+10	-15.7289	-3.28646
16517500000	-14.6242	-3.47021	-3.382	-15.0465	1.65E+10	-15.629	-3.49293
16617000000	-14.6053	-3.49314	-3.40723	-15.014	1.66E+10	-15.8274	-3.4764
16716500000	-14.3846	-3.50029	-3.46568	-15.072	1.67E+10	-16.1655	-3.44372
16816000000	-14.0203	-3.45205	-3.43333	-15.7044	1.68E+10	-16.063	-3.41323
16915500000	-13.9338	-3.41805	-3.44296	-16.0935	1.69E+10	-16.1158	-3.39888
17015000000	-13.5554	-3.43125	-3.50181	-16.8777	1.7E+10	-15.6085	-3.49654
17114500000	-13.6304	-3.40983	-3.47439	-17.2828	1.71E+10	-15.5622	-3.45909
17214000000	-13.7519	-3.32141	-3.51638	-18.5292	1.72E+10	-15.7523	-3.4289
17313500000	-13.9808	-3.49295	-3.53142	-19.7628	1.73E+10	-15.5574	-3.50689
17413000000	-14.0935	-3.54796	-3.57138	-20.8064	1.74E+10	-15.4976	-3.59322
17512500000	-14.137	-3.54871	-3.48539	-23.1495	1.75E+10	-15.3602	-3.56464
17612000000	-14.0485	-3.61155	-3.52555	-26.5662	1.76E+10	-15.0114	-3.6229
17711500000	-13.8689	-3.53185	-3.61631	-32.3341	1.77E+10	-14.6295	-3.73543
17811000000	-13.6472	-3.58732	-3.54218	-40.9214	1.78E+10	-14.309	-3.70183
17910500000	-13.5709	-3.60885	-3.61803	-31.3018	1.79E+10	-14.3254	-3.71877
18010000000	-13.3789	-3.72961	-3.62198	-25.6585	1.8E+10	-14.0093	-3.78777
18109500000	-12.7588	-3.61693	-3.65848	-22.1491	1.81E+10	-13.611	-3.75727
18209000000	-12.4499	-3.7683	-3.6553	-19.5934	1.82E+10	-13.459	-3.82113
18308500000	-12.0402	-3.78387	-3.78876	-17.7339	1.83E+10	-13.1724	-3.81423
18408000000	-11.4213	-3.89998	-3.77302	-16.2957	1.84E+10	-12.8633	-4.02808
18507500000	-11.0511	-3.88364	-3.88328	-14.8043	1.85E+10	-12.7133	-3.97503
18607000000	-10.6609	-3.87841	-4.0056	-13.6989	1.86E+10	-12.5189	-3.99128
18706500000	-10.0483	-3.97932	-4.07921	-12.8868	1.87E+10	-12.1355	-4.13129
18806000000	-9.87063	-4.23831	-4.11149	-12.0208	1.88E+10	-11.9838	-4.19192
18905500000	-9.40784	-4.16149	-4.21621	-11.654	1.89E+10	-11.6853	-4.18431
19005000000	-8.90326	-4.25283	-4.18925	-11.1914	1.9E+10	-11.1547	-4.23264
19104500000	-8.59894	-4.34828	-4.37471	-10.3564	1.91E+10	-10.8998	-4.37048
19204000000	-8.3897	-4.53436	-4.44715	-10.0924	1.92E+10	-10.5521	-4.48553
19303500000	-8.17169	-4.65764	-4.61484	-9.53393	1.93E+10	-10.3632	-4.52394
19403000000	-8.016	-4.78909	-4.61435	-9.41731	1.94E+10	-10.0383	-4.65322
19502500000	-7.46088	-4.64364	-4.85825	-9.23645	1.95E+10	-9.46106	-4.53616
19602000000	-7.52037	-4.76942	-4.92338	-8.91195	1.96E+10	-9.32061	-4.75508
19701500000	-7.17757	-5.01295	-4.87994	-8.91088	1.97E+10	-8.81637	-4.95749
19801000000	-7.09878	-4.97951	-4.97692	-8.84326	1.98E+10	-8.56883	-4.93766
19900500000	-6.88883	-5.06288	-5.05302	-8.66726	1.99E+10	-8.27582	-4.92554
20000000000	-6.72957	-5.15997	-5.07209	-8.80314	2E+10	-7.75341	-5.18818

J6

S12 (dB)	S22 (dB)	Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	Frequency (Hz)
-3.27374	-9.61681	1E+08	-9.05732	-3.23114	-3.24405	-9.55541	1E+08
-1.07246	-17.9428	2E+08	-15.556	-1.04979	-1.04094	-17.7945	2E+08
-0.8494	-21.5932	2.99E+08	-20.3898	-0.79242	-0.81038	-22.1506	2.99E+08
-0.76752	-23.1694	3.99E+08	-24.6811	-0.73937	-0.7413	-24.0676	3.99E+08
-0.77921	-24.0449	4.98E+08	-27.5309	-0.72573	-0.73408	-24.945	4.98E+08
-0.77591	-24.3148	5.98E+08	-28.2968	-0.73173	-0.74551	-24.9388	5.98E+08
-0.79489	-24.6103	6.97E+08	-27.6599	-0.75052	-0.7641	-24.7183	6.97E+08
-0.82185	-24.9594	7.97E+08	-26.3654	-0.77839	-0.79473	-24.5136	7.97E+08
-0.83499	-25.1472	8.96E+08	-24.8458	-0.80622	-0.80469	-24.1064	8.96E+08
-0.85262	-25.0537	9.96E+08	-23.4585	-0.82331	-0.83389	-23.652	9.96E+08
-0.88955	-25.3924	1.1E+09	-23.0348	-0.85623	-0.84582	-23.4911	1.1E+09
-0.90692	-25.3093	1.19E+09	-22.1734	-0.86951	-0.87441	-23.1597	1.19E+09
-0.93999	-25.6927	1.29E+09	-21.7141	-0.89733	-0.90254	-23.3105	1.29E+09
-0.97875	-25.3314	1.39E+09	-21.3702	-0.928	-0.93895	-22.9042	1.39E+09
-0.99106	-25.6636	1.49E+09	-21.0258	-0.95571	-0.94832	-23.1235	1.49E+09
-1.02743	-25.6405	1.59E+09	-20.5971	-0.98794	-0.98707	-23.2261	1.59E+09
-1.03778	-25.7339	1.69E+09	-20.5833	-0.9965	-0.99525	-23.3572	1.69E+09
-1.06614	-26.1566	1.79E+09	-20.6523	-1.02139	-1.03033	-23.8945	1.79E+09
-1.07664	-25.9923	1.89E+09	-20.5879	-1.03568	-1.03306	-23.9012	1.89E+09
-1.10982	-26.7533	1.99E+09	-20.7021	-1.05102	-1.07212	-25.0567	1.99E+09
-1.13159	-26.6526	2.09E+09	-20.745	-1.09579	-1.08661	-25.3306	2.09E+09
-1.15929	-26.8143	2.19E+09	-21.0062	-1.11015	-1.12086	-26.0969	2.19E+09
-1.19905	-27.1396	2.29E+09	-21.6503	-1.13856	-1.1305	-27.1191	2.29E+09
-1.23242	-27.4435	2.39E+09	-21.8425	-1.15011	-1.1801	-28.3522	2.39E+09
-1.25797	-27.9823	2.49E+09	-22.6263	-1.16542	-1.19314	-29.8811	2.49E+09
-1.2742	-28.3363	2.59E+09	-23.1374	-1.22072	-1.22587	-31.8226	2.59E+09
-1.32395	-28.8482	2.69E+09	-23.9864	-1.24805	-1.26189	-33.8602	2.69E+09
-1.38166	-29.3587	2.79E+09	-24.7624	-1.29461	-1.34136	-36.4477	2.79E+09
-1.45835	-29.2753	2.89E+09	-25.2691	-1.36489	-1.39926	-41.873	2.89E+09
-1.51345	-29.9283	2.99E+09	-25.4635	-1.43833	-1.45809	-41.2306	2.99E+09
-1.55731	-30.0803	3.09E+09	-24.6631	-1.48978	-1.48754	-39.6711	3.09E+09
-1.58428	-29.8916	3.18E+09	-24.1183	-1.53003	-1.54543	-36.649	3.18E+09
-1.60861	-29.3995	3.28E+09	-22.8534	-1.54481	-1.58081	-33.5405	3.28E+09
-1.60003	-29.1845	3.38E+09	-22.4356	-1.53852	-1.55794	-29.9277	3.38E+09
-1.55876	-28.1617	3.48E+09	-21.3909	-1.54611	-1.53623	-26.9183	3.48E+09
-1.55926	-27.4904	3.58E+09	-20.8755	-1.53969	-1.54524	-24.9396	3.58E+09
-1.59614	-26.9521	3.68E+09	-19.9287	-1.52361	-1.55828	-23.3343	3.68E+09
-1.59269	-25.6697	3.78E+09	-19.2019	-1.54669	-1.56344	-21.649	3.78E+09
-1.60397	-24.9982	3.88E+09	-18.3716	-1.57524	-1.56802	-20.5399	3.88E+09
-1.59783	-24.1216	3.98E+09	-17.5927	-1.61811	-1.59541	-19.5231	3.98E+09

-1.6368	-23.1197	4.08E+09	-16.6966	-1.62893	-1.63875	-18.5039	4.08E+09
-1.69217	-22.3259	4.18E+09	-15.9234	-1.69056	-1.69552	-17.7574	4.18E+09
-1.70809	-21.6676	4.28E+09	-15.2729	-1.75031	-1.73221	-17.0912	4.28E+09
-1.77678	-21.046	4.38E+09	-14.5638	-1.78381	-1.79948	-16.5308	4.38E+09
-1.80014	-20.4461	4.48E+09	-14.0099	-1.80271	-1.83966	-16.0358	4.48E+09
-1.88551	-20.0047	4.58E+09	-13.4866	-1.88885	-1.86157	-15.6435	4.58E+09
-1.94124	-19.3835	4.68E+09	-13.0483	-1.91407	-1.93584	-15.2226	4.68E+09
-1.95498	-18.7599	4.78E+09	-12.6727	-1.95609	-1.98217	-14.8336	4.78E+09
-1.95421	-18.2626	4.88E+09	-12.4697	-1.98548	-1.98638	-14.4974	4.88E+09
-1.93405	-17.4639	4.98E+09	-12.1677	-1.98259	-2.00345	-13.9832	4.98E+09
-1.9089	-17.0052	5.08E+09	-12.0271	-2.00256	-1.9819	-13.6371	5.08E+09
-1.92369	-16.5052	5.17E+09	-11.8602	-2.00871	-1.97924	-13.2736	5.17E+09
-1.91831	-15.9262	5.27E+09	-11.7209	-1.98236	-1.99116	-12.8765	5.27E+09
-1.96345	-15.5681	5.37E+09	-11.6133	-1.97552	-2.01806	-12.5999	5.37E+09
-1.9286	-15.1278	5.47E+09	-11.5177	-1.97848	-2.0058	-12.3624	5.47E+09
-1.92516	-14.7731	5.57E+09	-11.573	-2.00839	-1.98947	-12.1555	5.57E+09
-1.91836	-14.5184	5.67E+09	-11.5558	-1.98499	-1.98801	-12.0098	5.67E+09
-1.92592	-14.3407	5.77E+09	-11.5799	-2.01412	-2.0092	-11.9251	5.77E+09
-1.96217	-14.1467	5.87E+09	-11.6839	-2.01762	-2.01788	-11.8209	5.87E+09
-1.95492	-14.0089	5.97E+09	-11.7364	-2.0204	-2.02746	-11.8181	5.97E+09
-1.98052	-13.8998	6.07E+09	-12.0022	-2.03878	-2.02238	-11.7518	6.07E+09
-1.99427	-13.8377	6.17E+09	-12.1473	-2.03539	-2.04795	-11.7645	6.17E+09
-1.98461	-13.7997	6.27E+09	-12.3583	-2.03122	-2.04016	-11.7989	6.27E+09
-2.03611	-13.8675	6.37E+09	-12.6275	-2.02232	-2.08629	-11.9145	6.37E+09
-2.05182	-13.938	6.47E+09	-12.8072	-2.03346	-2.0728	-12.0365	6.47E+09
-2.02367	-14.1285	6.57E+09	-13.1812	-2.06717	-2.02779	-12.2559	6.57E+09
-2.02171	-14.2481	6.67E+09	-13.5276	-2.05666	-2.05001	-12.4265	6.67E+09
-2.05147	-14.1776	6.77E+09	-13.8544	-2.07822	-2.09266	-12.4682	6.77E+09
-2.04351	-14.3299	6.87E+09	-14.0726	-2.07073	-2.09711	-12.6043	6.87E+09
-2.05771	-14.5781	6.97E+09	-14.4132	-2.09486	-2.03929	-12.8032	6.97E+09
-2.07033	-14.5784	7.07E+09	-14.6734	-2.07866	-2.0938	-12.8401	7.07E+09
-2.09638	-14.6735	7.16E+09	-14.8805	-2.1053	-2.11004	-12.9339	7.16E+09
-2.11215	-14.7597	7.26E+09	-15.025	-2.11208	-2.10669	-13.1085	7.26E+09
-2.08713	-14.9197	7.36E+09	-15.1633	-2.09405	-2.09695	-13.2189	7.36E+09
-2.1453	-15.0504	7.46E+09	-15.1561	-2.08924	-2.12131	-13.3404	7.46E+09
-2.13118	-14.9453	7.56E+09	-15.1503	-2.10797	-2.11343	-13.3905	7.56E+09
-2.15575	-15.0067	7.66E+09	-15.1005	-2.12439	-2.14307	-13.3735	7.66E+09
-2.16216	-14.9381	7.76E+09	-14.9831	-2.15026	-2.14023	-13.4476	7.76E+09
-2.20113	-14.7911	7.86E+09	-14.714	-2.16485	-2.16894	-13.3519	7.86E+09
-2.21494	-15.0755	7.96E+09	-14.8321	-2.1659	-2.16652	-13.6117	7.96E+09
-2.22426	-14.877	8.06E+09	-14.6027	-2.19204	-2.16014	-13.6873	8.06E+09
-2.24336	-14.8849	8.16E+09	-14.5759	-2.17785	-2.18526	-13.9005	8.16E+09
-2.2895	-14.8095	8.26E+09	-14.4363	-2.19918	-2.21353	-13.9458	8.26E+09
-2.29252	-14.8699	8.36E+09	-14.4245	-2.2194	-2.20364	-14.3042	8.36E+09
-2.3246	-14.9401	8.46E+09	-14.4885	-2.21452	-2.23506	-14.5138	8.46E+09
-2.35939	-14.8491	8.56E+09	-14.2837	-2.2281	-2.26953	-14.7003	8.56E+09
-2.37815	-14.8309	8.66E+09	-14.4359	-2.24034	-2.22903	-15.0434	8.66E+09
-2.38489	-14.9064	8.76E+09	-14.3792	-2.24032	-2.23767	-15.3784	8.76E+09
-2.37256	-14.918	8.86E+09	-14.5005	-2.2845	-2.22067	-15.7701	8.86E+09
-2.43128	-15.0066	8.96E+09	-14.4468	-2.28635	-2.27905	-16.0265	8.96E+09
-2.43579	-15.1223	9.06E+09	-14.5559	-2.29907	-2.26579	-16.6928	9.06E+09
-2.4183	-15.1649	9.15E+09	-14.6265	-2.29137	-2.26571	-17.0674	9.15E+09

-2.45049	-15.2518	9.25E+09	-14.6955	-2.23485	-2.28665	-17.3672	9.25E+09
-2.41622	-15.5979	9.35E+09	-14.6474	-2.27568	-2.24611	-17.9261	9.35E+09
-2.47929	-15.538	9.45E+09	-14.4861	-2.30197	-2.28527	-17.8798	9.45E+09
-2.45534	-15.6097	9.55E+09	-14.5411	-2.29089	-2.28277	-17.9568	9.55E+09
-2.48828	-15.6205	9.65E+09	-14.5917	-2.30729	-2.28165	-17.8412	9.65E+09
-2.48165	-15.6889	9.75E+09	-14.2895	-2.33441	-2.38004	-17.749	9.75E+09
-2.44714	-15.7237	9.85E+09	-14.2066	-2.3749	-2.24941	-17.5864	9.85E+09
-2.57587	-15.8059	9.95E+09	-13.9313	-2.30085	-2.39406	-17.4632	9.95E+09
-2.49909	-15.7783	1.01E+10	-13.8641	-2.37505	-2.34401	-17.0381	1.01E+10
-2.5388	-15.824	1.01E+10	-13.6918	-2.35789	-2.42108	-16.736	1.01E+10
-2.59614	-15.8985	1.02E+10	-13.7201	-2.3969	-2.405	-16.5059	1.02E+10
-2.53065	-15.797	1.03E+10	-13.5307	-2.42399	-2.39891	-16.0182	1.03E+10
-2.57206	-15.8192	1.04E+10	-13.4694	-2.43063	-2.45439	-15.7748	1.04E+10
-2.55264	-15.8128	1.05E+10	-13.3226	-2.45043	-2.47076	-15.4958	1.05E+10
-2.53275	-16.0438	1.06E+10	-13.2885	-2.4149	-2.45826	-15.5475	1.06E+10
-2.55705	-15.8842	1.07E+10	-13.3897	-2.4584	-2.44278	-14.9818	1.07E+10
-2.59085	-16.1041	1.08E+10	-13.1746	-2.48014	-2.4393	-15.0396	1.08E+10
-2.6076	-16.4333	1.09E+10	-13.4374	-2.45906	-2.50166	-15.1191	1.09E+10
-2.65253	-16.3083	1.1E+10	-13.3795	-2.53038	-2.58388	-14.9145	1.1E+10
-2.54504	-16.5417	1.11E+10	-13.7876	-2.52094	-2.46839	-14.9626	1.11E+10
-2.63442	-17.1082	1.12E+10	-13.9188	-2.51256	-2.57464	-15.1981	1.12E+10
-2.61133	-16.8955	1.13E+10	-14.1571	-2.55858	-2.51614	-14.9306	1.13E+10
-2.58523	-17.2479	1.14E+10	-14.2877	-2.48938	-2.48608	-15.0911	1.14E+10
-2.57723	-17.6406	1.15E+10	-14.5742	-2.56018	-2.54482	-15.25	1.15E+10
-2.58707	-17.9848	1.16E+10	-14.6938	-2.49647	-2.50387	-15.5647	1.16E+10
-2.60505	-18.3805	1.17E+10	-15.2307	-2.49651	-2.52811	-15.6271	1.17E+10
-2.62898	-18.7266	1.18E+10	-15.2624	-2.55623	-2.55984	-15.9649	1.18E+10
-2.60364	-19.2991	1.19E+10	-15.8884	-2.55183	-2.5404	-16.485	1.19E+10
-2.58068	-19.3504	1.2E+10	-16.4609	-2.50639	-2.56159	-16.5781	1.2E+10
-2.61423	-19.7665	1.21E+10	-16.4976	-2.53713	-2.46553	-16.9947	1.21E+10
-2.62997	-20.219	1.22E+10	-17.2832	-2.5163	-2.54444	-17.4721	1.22E+10
-2.53962	-20.4016	1.23E+10	-17.0628	-2.49647	-2.45605	-18.0447	1.23E+10
-2.60406	-20.5984	1.24E+10	-18.0131	-2.51711	-2.58723	-18.2541	1.24E+10
-2.66194	-20.4898	1.25E+10	-18.7558	-2.55413	-2.59009	-18.5841	1.25E+10
-2.67139	-20.5383	1.26E+10	-18.6966	-2.52411	-2.52769	-19.0378	1.26E+10
-2.71367	-20.5885	1.27E+10	-18.9013	-2.5396	-2.60594	-19.5014	1.27E+10
-2.72311	-20.3335	1.28E+10	-19.5659	-2.52175	-2.5988	-19.8905	1.28E+10
-2.68184	-19.9436	1.29E+10	-19.7301	-2.58045	-2.49719	-20.3828	1.29E+10
-2.82099	-20.019	1.3E+10	-20.1597	-2.59142	-2.54424	-20.6021	1.3E+10
-2.84436	-19.9651	1.31E+10	-19.9674	-2.52466	-2.58726	-21.5025	1.31E+10
-2.83168	-19.6144	1.32E+10	-20.3724	-2.67566	-2.6407	-21.7938	1.32E+10
-2.85091	-19.3047	1.33E+10	-19.622	-2.59896	-2.68063	-21.4631	1.33E+10
-2.8481	-18.6904	1.34E+10	-19.6399	-2.6483	-2.61622	-21.5661	1.34E+10
-2.89161	-18.7784	1.35E+10	-19.7705	-2.70737	-2.66259	-22.8618	1.35E+10
-2.93148	-17.8922	1.36E+10	-19.8729	-2.67454	-2.69954	-21.4234	1.36E+10
-2.98272	-17.6662	1.37E+10	-19.5524	-2.70386	-2.80911	-21.68	1.37E+10
-2.97938	-17.3499	1.38E+10	-19.3865	-2.7109	-2.76982	-21.5237	1.38E+10
-2.99841	-16.8863	1.39E+10	-19.2475	-2.77545	-2.70046	-21.0604	1.39E+10
-2.96016	-16.585	1.4E+10	-19.0545	-2.70146	-2.74159	-20.6781	1.4E+10
-2.99894	-16.3223	1.41E+10	-18.7318	-2.7486	-2.80413	-20.5949	1.41E+10
-3.15124	-15.8084	1.42E+10	-19.5846	-2.8212	-2.81302	-19.5464	1.42E+10
-3.15424	-15.308	1.43E+10	-18.756	-2.78338	-2.81014	-19.1942	1.43E+10
-3.13197	-15.1665	1.44E+10	-18.7573	-2.85955	-2.78506	-19.0172	1.44E+10
-3.14215	-14.8196	1.45E+10	-18.961	-2.8714	-2.78034	-18.4778	1.45E+10
-3.20292	-14.479	1.46E+10	-18.7948	-2.85782	-2.84428	-18.0989	1.46E+10

-3.21541	-13.8572	1.47E+10	-18.4589	-2.80333	-2.85562	-17.0776	1.47E+10
-3.32814	-13.5609	1.48E+10	-18.6623	-2.79853	-2.83407	-16.7692	1.48E+10
-3.27375	-13.4837	1.49E+10	-18.5252	-2.92232	-2.84961	-16.5156	1.49E+10
-3.26811	-13.022	1.5E+10	-18.3851	-2.91941	-2.87828	-15.9921	1.5E+10
-3.2994	-12.7578	1.51E+10	-18.9436	-2.90801	-2.92045	-15.3767	1.51E+10
-3.4184	-12.437	1.52E+10	-18.5165	-2.85185	-2.93261	-14.9295	1.52E+10
-3.37091	-12.6848	1.53E+10	-18.0075	-2.99568	-3.0424	-15.1737	1.53E+10
-3.39752	-12.3599	1.54E+10	-18.1168	-2.96394	-3.00897	-14.6169	1.54E+10
-3.3427	-12.429	1.55E+10	-17.946	-2.99755	-2.98609	-14.5509	1.55E+10
-3.37034	-12.4746	1.56E+10	-18.0363	-3.0343	-3.03287	-14.4416	1.56E+10
-3.4077	-12.3489	1.57E+10	-17.8577	-3.00991	-3.07143	-14.0583	1.57E+10
-3.42279	-12.322	1.58E+10	-17.6567	-3.10921	-3.11435	-14.0139	1.58E+10
-3.34183	-12.5065	1.59E+10	-17.5309	-3.17636	-3.16889	-14.1251	1.59E+10
-3.37995	-12.6016	1.6E+10	-17.108	-3.16289	-3.25001	-14.0604	1.6E+10
-3.44487	-12.7518	1.61E+10	-16.8038	-3.18069	-3.30844	-13.9161	1.61E+10
-3.38544	-13.0874	1.62E+10	-16.8217	-3.20373	-3.26131	-14.2673	1.62E+10
-3.3844	-13.4237	1.63E+10	-16.53	-3.16603	-3.29088	-14.5358	1.63E+10
-3.42307	-13.8231	1.64E+10	-16.2666	-3.23741	-3.1877	-14.6875	1.64E+10
-3.48216	-14.4251	1.65E+10	-15.8862	-3.31061	-3.40136	-15.1448	1.65E+10
-3.37661	-14.9988	1.66E+10	-16.0264	-3.41603	-3.3241	-15.4933	1.66E+10
-3.45044	-15.3582	1.67E+10	-15.9618	-3.4362	-3.37083	-15.7555	1.67E+10
-3.4046	-16.3979	1.68E+10	-15.73	-3.42952	-3.43735	-16.6797	1.68E+10
-3.38858	-17.1696	1.69E+10	-15.5723	-3.40089	-3.45255	-17.1418	1.69E+10
-3.44295	-18.7156	1.7E+10	-15.2086	-3.51295	-3.53745	-18.4594	1.7E+10
-3.48475	-19.5977	1.71E+10	-15.3778	-3.42276	-3.50073	-19.0801	1.71E+10
-3.58245	-21.8743	1.72E+10	-15.9117	-3.45119	-3.58228	-20.6586	1.72E+10
-3.52578	-23.8626	1.73E+10	-15.9671	-3.5472	-3.55228	-21.9195	1.73E+10
-3.5883	-26.6947	1.74E+10	-16.3153	-3.58905	-3.62496	-23.3004	1.74E+10
-3.55541	-30.5588	1.75E+10	-16.5587	-3.62928	-3.57226	-24.7122	1.75E+10
-3.67749	-40.2501	1.76E+10	-16.5637	-3.59715	-3.53689	-26.9252	1.76E+10
-3.66805	-34.3835	1.77E+10	-16.5803	-3.56983	-3.663	-26.5805	1.77E+10
-3.69158	-29.4174	1.78E+10	-16.4451	-3.61555	-3.60489	-25.0903	1.78E+10
-3.76604	-25.9576	1.79E+10	-16.4027	-3.69762	-3.69628	-23.4666	1.79E+10
-3.77696	-22.8912	1.8E+10	-16.1835	-3.67789	-3.68444	-21.2699	1.8E+10
-3.7996	-21.0113	1.81E+10	-15.6777	-3.74185	-3.7044	-19.6771	1.81E+10
-3.91491	-19.6632	1.82E+10	-15.127	-3.72961	-3.77686	-18.142	1.82E+10
-3.8194	-18.5544	1.83E+10	-14.5445	-3.72424	-3.67718	-16.8908	1.83E+10
-3.90201	-17.6589	1.84E+10	-13.7323	-3.83583	-3.86355	-16.208	1.84E+10
-3.96326	-16.4205	1.85E+10	-13.3516	-3.90314	-3.88661	-15.094	1.85E+10
-4.04318	-15.7602	1.86E+10	-12.8217	-3.85805	-3.94129	-14.3555	1.86E+10
-4.0926	-15.2403	1.87E+10	-11.9456	-3.87594	-3.96166	-13.9178	1.87E+10
-4.07527	-14.6154	1.88E+10	-11.8449	-4.18841	-4.07469	-13.4206	1.88E+10
-4.30447	-14.657	1.89E+10	-11.2037	-4.04736	-4.07441	-13.4605	1.89E+10
-4.12669	-14.3915	1.9E+10	-10.6735	-4.12486	-4.06975	-13.1568	1.9E+10
-4.27845	-13.4766	1.91E+10	-10.3	-4.23972	-4.19796	-12.5349	1.91E+10
-4.32826	-13.3859	1.92E+10	-9.89827	-4.52442	-4.24929	-12.5061	1.92E+10
-4.62891	-12.8985	1.93E+10	-9.66562	-4.37865	-4.41369	-12.2168	1.93E+10
-4.63247	-13.0248	1.94E+10	-9.50262	-4.62189	-4.43286	-12.4239	1.94E+10
-4.60167	-12.9294	1.95E+10	-8.94062	-4.41553	-4.45965	-12.3779	1.95E+10
-4.67152	-12.7285	1.96E+10	-8.73705	-4.5797	-4.56715	-12.2664	1.96E+10
-4.80101	-12.903	1.97E+10	-8.3997	-4.7552	-4.63867	-12.5045	1.97E+10
-4.86567	-12.8191	1.98E+10	-8.31466	-4.76946	-4.73547	-12.4973	1.98E+10
-4.99358	-12.5218	1.99E+10	-7.95236	-4.83687	-4.74878	-12.5311	1.99E+10
-5.03187	-12.5294	2E+10	-7.60745	-4.95996	-4.80672	-12.805	2E+10

J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-8.79877	-3.4672	-3.4804	-9.19994
-15.2005	-1.13037	-1.11676	-17.3253
-19.7196	-0.84547	-0.86342	-21.2988
-23.3474	-0.79036	-0.79475	-23.233
-25.6933	-0.78484	-0.78604	-24.5171
-26.52	-0.80045	-0.79545	-25.2391
-26.2295	-0.8046	-0.81529	-25.8977
-25.1265	-0.81617	-0.8231	-26.4652
-23.9332	-0.84666	-0.83548	-26.5943
-22.5444	-0.87234	-0.87498	-26.4285
-22.1204	-0.89655	-0.89235	-26.4145
-21.2069	-0.92386	-0.91569	-25.8228
-20.4909	-0.93653	-0.96051	-25.8131
-20.0126	-0.9861	-0.99661	-24.786
-19.4652	-1.01577	-1.01201	-24.3868
-18.8363	-1.04941	-1.04674	-23.532
-18.5309	-1.05996	-1.06959	-23.0687
-18.2983	-1.0992	-1.10182	-22.6897
-17.9248	-1.12671	-1.11644	-22.0281
-17.751	-1.14602	-1.15177	-21.9294
-17.4455	-1.18854	-1.17344	-21.4451
-17.2065	-1.2116	-1.21891	-21.0251
-17.2692	-1.24276	-1.24243	-20.8595
-17.1375	-1.24977	-1.28177	-20.671
-17.2118	-1.2797	-1.28543	-20.6186
-17.1339	-1.33874	-1.32221	-20.6141
-17.2596	-1.3638	-1.37825	-20.6831
-17.3861	-1.41879	-1.43321	-20.8099
-17.4754	-1.47628	-1.50866	-20.8091
-17.6297	-1.55452	-1.55971	-20.9482
-17.5081	-1.62694	-1.60405	-20.8355
-17.467	-1.65538	-1.68474	-20.7754
-17.2243	-1.69293	-1.70748	-20.7232
-17.243	-1.67436	-1.69615	-21.08
-17.1091	-1.68575	-1.65642	-21.61
-17.3367	-1.66564	-1.6584	-22.3768
-17.4049	-1.63651	-1.65281	-23.3756
-17.7075	-1.61565	-1.64647	-24.6206
-17.7602	-1.64924	-1.63264	-26.2961
-18.076	-1.65853	-1.63209	-28.459

J8

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-9.07114	-3.49073	-3.50487	-9.28876
2E+08	-15.2219	-1.09898	-1.0952	-17.348
2.99E+08	-20.1705	-0.81038	-0.83629	-22.034
3.99E+08	-24.5051	-0.75824	-0.75634	-24.5746
4.98E+08	-27.0838	-0.75841	-0.7488	-25.733
5.98E+08	-27.1427	-0.7617	-0.75491	-25.7514
6.97E+08	-25.7491	-0.77527	-0.77337	-25.3614
7.97E+08	-24.2334	-0.80764	-0.80881	-24.9533
8.96E+08	-22.585	-0.83317	-0.83393	-24.0874
9.96E+08	-21.0802	-0.85458	-0.85281	-23.2862
1.1E+09	-20.4921	-0.89479	-0.88331	-22.7574
1.19E+09	-19.5493	-0.9132	-0.92454	-22.0472
1.29E+09	-18.8903	-0.95466	-0.95484	-21.7777
1.39E+09	-18.3649	-0.99569	-0.9914	-20.9851
1.49E+09	-17.8278	-1.01674	-1.01033	-20.6515
1.59E+09	-17.2335	-1.05931	-1.05283	-20.1089
1.69E+09	-16.9063	-1.07974	-1.06095	-19.7655
1.79E+09	-16.6833	-1.10992	-1.10217	-19.5864
1.89E+09	-16.3762	-1.14745	-1.14438	-19.1769
1.99E+09	-16.1532	-1.18434	-1.16432	-19.185
2.09E+09	-15.8735	-1.21639	-1.20399	-18.8642
2.19E+09	-15.6886	-1.24816	-1.2302	-18.6076
2.29E+09	-15.7076	-1.28024	-1.27208	-18.4972
2.39E+09	-15.5515	-1.29735	-1.29504	-18.376
2.49E+09	-15.5873	-1.31373	-1.32105	-18.3454
2.59E+09	-15.5331	-1.38361	-1.36031	-18.3681
2.69E+09	-15.615	-1.41287	-1.4089	-18.3645
2.79E+09	-15.6893	-1.46335	-1.45577	-18.3714
2.89E+09	-15.7429	-1.53801	-1.55032	-18.3481
2.99E+09	-15.8369	-1.58973	-1.60802	-18.393
3.09E+09	-15.7554	-1.67886	-1.65486	-18.1919
3.18E+09	-15.7073	-1.72444	-1.70525	-18.0904
3.28E+09	-15.496	-1.7445	-1.76047	-18.0264
3.38E+09	-15.4431	-1.72624	-1.73503	-18.1712
3.48E+09	-15.3121	-1.73803	-1.70686	-18.496
3.58E+09	-15.3964	-1.70384	-1.69803	-18.8405
3.68E+09	-15.4431	-1.68807	-1.69472	-19.3533
3.78E+09	-15.6621	-1.69077	-1.68989	-19.9555
3.88E+09	-15.6769	-1.69286	-1.68116	-20.6683
3.98E+09	-15.9189	-1.70703	-1.67403	-21.5101

-18.1968	-1.66101	-1.65338	-31.4401	4.08E+09	-16.0975	-1.70088	-1.71332	-22.5366
-18.2816	-1.69864	-1.68611	-36.4238	4.18E+09	-16.3073	-1.73586	-1.73128	-23.7766
-18.3865	-1.72605	-1.72007	-51.2435	4.28E+09	-16.5253	-1.7799	-1.75417	-25.3538
-18.146	-1.76726	-1.76885	-40.6327	4.38E+09	-16.5858	-1.79573	-1.78369	-27.2026
-17.9449	-1.79893	-1.8131	-33.824	4.48E+09	-16.609	-1.82156	-1.82701	-29.3326
-17.6322	-1.85003	-1.83468	-30.6297	4.58E+09	-16.4749	-1.86214	-1.85608	-31.3875
-17.3003	-1.87219	-1.92748	-28.153	4.68E+09	-16.428	-1.89565	-1.94231	-34.695
-16.9889	-1.90214	-1.90245	-26.3748	4.78E+09	-16.1972	-1.95772	-1.94589	-39.3556
-16.9312	-1.89196	-1.90701	-25.4335	4.88E+09	-16.26	-1.95958	-1.96105	-43.3396
-16.7804	-1.90089	-1.93044	-23.6719	4.98E+09	-16.2645	-1.95016	-1.95116	-44.1015
-16.7536	-1.89917	-1.88608	-22.8387	5.08E+09	-16.3891	-1.96061	-1.92256	-37.0247
-16.6847	-1.91987	-1.90175	-21.7892	5.17E+09	-16.5547	-1.95227	-1.93768	-32.3681
-16.6362	-1.88076	-1.90405	-20.67	5.27E+09	-16.7032	-1.90288	-1.90422	-28.8936
-16.5624	-1.88037	-1.89864	-19.9081	5.37E+09	-16.8527	-1.89583	-1.92701	-26.7949
-16.4686	-1.87871	-1.8742	-18.9633	5.47E+09	-17.11	-1.89396	-1.88398	-25.1201
-16.493	-1.86936	-1.86995	-18.4362	5.57E+09	-17.2616	-1.87736	-1.88078	-23.8267
-16.5566	-1.88365	-1.86357	-18.0288	5.67E+09	-17.3585	-1.88682	-1.86385	-22.7932
-16.4877	-1.88647	-1.86643	-17.7676	5.77E+09	-17.5053	-1.91487	-1.87516	-22.0504
-16.5082	-1.87107	-1.91587	-17.4169	5.87E+09	-17.6338	-1.91149	-1.91705	-21.1899
-16.5247	-1.88311	-1.91222	-17.2739	5.97E+09	-17.5805	-1.90334	-1.90888	-20.6594
-16.7246	-1.90292	-1.91048	-16.9313	6.07E+09	-17.9427	-1.91905	-1.9286	-19.966
-16.887	-1.92386	-1.946	-16.8632	6.17E+09	-18.0345	-1.93708	-1.96104	-19.5412
-17.0949	-1.93179	-1.9383	-16.8952	6.27E+09	-18.1724	-1.95675	-1.97206	-19.2186
-17.4871	-1.92718	-1.98014	-17.0055	6.37E+09	-18.2783	-1.97561	-2.02365	-19.0306
-17.7133	-1.93945	-1.98794	-17.2101	6.47E+09	-18.2395	-1.9994	-2.02887	-18.8435
-18.2605	-1.96111	-1.96336	-17.6365	6.57E+09	-18.5207	-2.04032	-2.012	-18.8735
-18.9304	-1.97083	-1.97013	-17.9775	6.67E+09	-18.4811	-2.04162	-2.03765	-18.7583
-19.4677	-1.99755	-2.00757	-17.9771	6.77E+09	-18.385	-2.08285	-2.08845	-18.2801
-19.8578	-2.00228	-2.00262	-18.2997	6.87E+09	-18.1366	-2.11085	-2.10755	-18.0491
-20.4612	-2.05593	-1.97916	-18.7182	6.97E+09	-17.9763	-2.14672	-2.11016	-17.8891
-20.9786	-1.99977	-2.04173	-18.8526	7.07E+09	-17.6854	-2.13706	-2.18984	-17.4455
-21.3487	-2.03577	-2.03667	-19.1029	7.16E+09	-17.1614	-2.19732	-2.17602	-17.1044
-21.6054	-2.05365	-2.05649	-19.446	7.26E+09	-16.6787	-2.21119	-2.21589	-16.864
-21.7568	-2.06364	-2.07223	-19.8276	7.36E+09	-16.351	-2.22068	-2.20816	-16.4712
-21.4643	-2.07483	-2.09427	-20.0743	7.46E+09	-15.8317	-2.25864	-2.27575	-16.1727
-21.2422	-2.07368	-2.08962	-20.13	7.56E+09	-15.3393	-2.29361	-2.27695	-15.7363
-20.8717	-2.09331	-2.0832	-19.949	7.66E+09	-14.8208	-2.33532	-2.33334	-15.2534
-20.4596	-2.1416	-2.11325	-19.9834	7.76E+09	-14.4046	-2.33838	-2.33902	-14.8745
-19.7355	-2.14425	-2.15524	-19.6672	7.86E+09	-13.8168	-2.39609	-2.37627	-14.4235
-19.9345	-2.15839	-2.13316	-20.06	7.96E+09	-13.7106	-2.41066	-2.39132	-14.3021
-19.3808	-2.16778	-2.19194	-20.1837	8.06E+09	-13.2855	-2.43395	-2.44027	-14.0511
-19.2904	-2.20544	-2.19287	-20.4992	8.16E+09	-12.993	-2.42277	-2.44356	-13.9266
-19.0909	-2.21588	-2.21555	-20.6105	8.26E+09	-12.7787	-2.46992	-2.50714	-13.6978
-18.8296	-2.23202	-2.20837	-21.3444	8.36E+09	-12.6388	-2.52667	-2.49267	-13.6819
-19.2261	-2.26374	-2.26568	-21.8417	8.46E+09	-12.4586	-2.55267	-2.5465	-13.5649
-18.874	-2.26759	-2.28333	-22.264	8.56E+09	-12.2399	-2.55892	-2.56075	-13.4921
-19.0005	-2.25801	-2.28791	-23.0885	8.66E+09	-12.2609	-2.59109	-2.59738	-13.5132
-19.0027	-2.28913	-2.30324	-24.0217	8.76E+09	-12.0933	-2.59756	-2.58404	-13.6052
-19.1471	-2.33712	-2.27	-25.0404	8.86E+09	-12.1583	-2.62656	-2.57166	-13.7951
-18.8714	-2.35793	-2.35157	-25.7479	8.96E+09	-12.1823	-2.64724	-2.63534	-13.9198
-18.9276	-2.32221	-2.32492	-26.4027	9.06E+09	-12.2182	-2.63438	-2.62474	-14.2685
-18.8828	-2.42313	-2.35192	-26.1646	9.15E+09	-12.3145	-2.62258	-2.60442	-14.4812

-18.6622	-2.3576	-2.41764	-25.2507	9.25E+09	-12.4552	-2.58266	-2.62173	-14.7134
-18.4002	-2.37861	-2.36245	-24.5332	9.35E+09	-12.4936	-2.60913	-2.55432	-14.997
-17.7493	-2.41609	-2.40515	-22.7763	9.45E+09	-12.5303	-2.63826	-2.61878	-15.2224
-17.1354	-2.47233	-2.42161	-21.0271	9.55E+09	-12.835	-2.63226	-2.63817	-15.6951
-17.0656	-2.47743	-2.45274	-19.9502	9.65E+09	-12.8276	-2.62177	-2.67359	-15.8731
-16.2322	-2.45108	-2.50314	-18.7627	9.75E+09	-12.8942	-2.62199	-2.62368	-16.2306
-15.8622	-2.54658	-2.48872	-17.6278	9.85E+09	-12.9704	-2.67388	-2.59568	-16.6866
-15.2176	-2.49115	-2.54323	-16.9329	9.95E+09	-13.0915	-2.57131	-2.65986	-17.0773
-14.8452	-2.58869	-2.56383	-15.9564	1.01E+10	-13.1009	-2.61699	-2.61343	-17.5644
-14.324	-2.57404	-2.62267	-15.4909	1.01E+10	-13.3217	-2.62391	-2.64723	-17.6486
-14.2133	-2.6006	-2.60785	-14.8791	1.02E+10	-13.3914	-2.66739	-2.66838	-17.9871
-13.8782	-2.70455	-2.63249	-14.1667	1.03E+10	-13.4179	-2.68794	-2.67635	-18.106
-13.5253	-2.6781	-2.72519	-13.6841	1.04E+10	-13.5905	-2.66011	-2.64952	-18.3063
-13.1389	-2.70997	-2.74487	-13.2417	1.05E+10	-13.6803	-2.65826	-2.66227	-18.3971
-13.0505	-2.69148	-2.74479	-12.9832	1.06E+10	-13.6403	-2.6833	-2.67653	-18.727
-13.0698	-2.806	-2.78331	-12.5158	1.07E+10	-13.696	-2.68391	-2.63043	-18.5409
-12.7265	-2.85873	-2.88147	-12.4596	1.08E+10	-13.6432	-2.68494	-2.72775	-18.615
-12.6792	-2.77609	-2.77016	-12.1107	1.09E+10	-13.929	-2.73643	-2.69985	-18.7759
-12.5372	-2.87863	-2.89126	-11.9503	1.1E+10	-13.9258	-2.75619	-2.79736	-18.3906
-12.6858	-2.89368	-2.83343	-11.9047	1.11E+10	-14.0662	-2.77966	-2.72849	-18.3496
-12.613	-2.84071	-2.92416	-11.7558	1.12E+10	-14.2345	-2.76643	-2.86301	-18.7073
-12.6767	-2.94532	-2.92967	-11.5092	1.13E+10	-14.2396	-2.84065	-2.79281	-18.3729
-12.5482	-2.90844	-2.93645	-11.5066	1.14E+10	-14.2895	-2.75513	-2.78074	-18.1896
-12.882	-2.92259	-2.88867	-11.4504	1.15E+10	-14.285	-2.84382	-2.84247	-18.2834
-12.9288	-2.92931	-2.93036	-11.4213	1.16E+10	-14.2163	-2.79896	-2.83922	-18.3816
-12.9524	-2.89903	-2.96838	-11.483	1.17E+10	-14.5867	-2.84968	-2.90131	-18.4142
-13.1147	-2.96742	-2.94484	-11.4665	1.18E+10	-14.3751	-2.93941	-2.87877	-18.3264
-13.4949	-2.89539	-2.92474	-11.6108	1.19E+10	-14.3357	-2.90501	-2.90547	-18.8164
-13.7024	-2.93623	-2.95269	-11.6276	1.2E+10	-14.6582	-2.90718	-2.87936	-18.3164
-13.6549	-2.94487	-2.94726	-11.6768	1.21E+10	-14.4646	-2.96757	-2.96391	-18.711
-14.1245	-2.91094	-2.96162	-11.7654	1.22E+10	-14.7359	-2.99659	-2.91106	-18.6804
-14.0742	-3.0061	-2.87914	-11.9287	1.23E+10	-14.2763	-3.01552	-2.89983	-19.3033
-14.5006	-2.93878	-2.97962	-11.9905	1.24E+10	-14.5925	-2.98081	-3.01669	-19.1508
-14.6665	-2.94644	-2.9527	-11.9227	1.25E+10	-14.7817	-3.01687	-2.98577	-19.3757
-14.9601	-2.9627	-2.9614	-12.1099	1.26E+10	-14.3991	-3.03324	-3.00979	-19.5944
-15.2976	-2.98189	-2.98952	-12.301	1.27E+10	-14.1605	-3.04705	-3.05971	-19.5377
-15.2721	-3.04269	-3.00858	-12.37	1.28E+10	-14.422	-3.08839	-3.05248	-19.8743
-15.4822	-2.9874	-2.96098	-12.4716	1.29E+10	-14.0206	-3.06197	-3.00698	-20.1903
-15.725	-2.97191	-3.01746	-12.5208	1.3E+10	-13.9939	-3.08294	-3.15014	-20.0943
-15.6985	-2.99874	-3.02714	-12.714	1.31E+10	-13.8266	-3.08255	-3.14296	-20.5975
-15.9085	-3.06927	-3.08063	-12.8003	1.32E+10	-13.8068	-3.20164	-3.19123	-20.7449
-15.624	-2.94944	-3.06899	-12.7645	1.33E+10	-13.3923	-3.1528	-3.21897	-20.2475
-15.4308	-3.06745	-3.03015	-12.8491	1.34E+10	-13.2629	-3.17758	-3.18839	-20.5843
-15.6136	-3.03066	-3.08125	-13.4824	1.35E+10	-13.1403	-3.2442	-3.24879	-21.3676
-15.4363	-3.1282	-3.10451	-12.9877	1.36E+10	-13.0913	-3.23719	-3.26531	-20.7065
-15.2599	-3.12156	-3.17156	-13.0276	1.37E+10	-12.8657	-3.34329	-3.28252	-20.8896
-15.0462	-3.06401	-3.10436	-13.2142	1.38E+10	-12.7025	-3.27467	-3.26184	-20.9154
-15.0615	-3.177	-3.12067	-13.193	1.39E+10	-12.4661	-3.36493	-3.3326	-21.1045
-14.7031	-3.03356	-3.10284	-13.1447	1.4E+10	-12.2668	-3.31753	-3.3494	-20.8319
-14.4533	-3.18525	-3.12833	-13.4458	1.41E+10	-12.0669	-3.38368	-3.35048	-20.6995
-14.6972	-3.16764	-3.19869	-13.0107	1.42E+10	-12.3255	-3.38008	-3.41054	-20.0481
-14.1958	-3.17893	-3.13468	-13.2568	1.43E+10	-11.9997	-3.3911	-3.44585	-20.1671
-14.344	-3.22597	-3.12076	-13.4256	1.44E+10	-11.9279	-3.43589	-3.41064	-20.1841
-14.117	-3.19735	-3.17616	-13.4102	1.45E+10	-12.0079	-3.46004	-3.40835	-20.0201
-14.0113	-3.20706	-3.18651	-13.5859	1.46E+10	-12.0015	-3.45999	-3.45841	-20.1451

-13.791	-3.18062	-3.18316	-13.4117	1.47E+10	-11.8948	-3.47352	-3.37524	-19.8517
-13.8197	-3.10797	-3.153	-13.3596	1.48E+10	-11.9064	-3.38936	-3.48604	-19.3254
-13.9697	-3.27821	-3.30587	-13.5712	1.49E+10	-12.0061	-3.58646	-3.50157	-19.075
-13.7452	-3.16049	-3.20404	-13.6513	1.5E+10	-12.0418	-3.48957	-3.48098	-19.0797
-14.2112	-3.20586	-3.23245	-13.6472	1.51E+10	-12.3085	-3.4126	-3.52644	-18.5004
-14.0866	-3.21275	-3.27954	-13.4342	1.52E+10	-12.5236	-3.50415	-3.58745	-18.3212
-13.8835	-3.28525	-3.34663	-13.9004	1.53E+10	-12.65	-3.61249	-3.58323	-18.214
-13.9278	-3.28751	-3.25294	-13.8194	1.54E+10	-12.9217	-3.52519	-3.55759	-17.9071
-14.0166	-3.2244	-3.25291	-14.0295	1.55E+10	-13.0301	-3.55547	-3.60005	-18.0003
-14.0232	-3.26906	-3.28453	-14.2096	1.56E+10	-13.7478	-3.59099	-3.58948	-18.1694
-14.0538	-3.28	-3.34339	-14.3325	1.57E+10	-14.0867	-3.60046	-3.61877	-17.7689
-14.186	-3.35846	-3.30832	-14.2345	1.58E+10	-14.3896	-3.62854	-3.62641	-17.4396
-14.2055	-3.37159	-3.30625	-14.5458	1.59E+10	-14.8835	-3.66058	-3.62083	-17.7056
-14.25	-3.41936	-3.45909	-14.6816	1.6E+10	-14.9784	-3.5822	-3.72405	-17.5398
-14.1619	-3.31381	-3.36561	-14.7059	1.61E+10	-15.5622	-3.62565	-3.65474	-17.3312
-14.3918	-3.43216	-3.42543	-15.069	1.62E+10	-16.3535	-3.68565	-3.7027	-17.7123
-14.4056	-3.37473	-3.46838	-15.3734	1.63E+10	-16.8974	-3.59138	-3.68376	-17.9417
-14.4501	-3.39512	-3.44571	-15.497	1.64E+10	-17.3544	-3.71366	-3.62041	-17.9867
-14.5326	-3.47608	-3.52051	-15.6911	1.65E+10	-17.5401	-3.80956	-3.78656	-18.2899
-14.7836	-3.46879	-3.45954	-15.9803	1.66E+10	-18.3564	-3.72665	-3.70212	-18.413
-15.3085	-3.51488	-3.54062	-15.9975	1.67E+10	-19.2586	-3.79038	-3.83749	-18.6671
-15.3598	-3.50041	-3.51478	-16.5434	1.68E+10	-19.693	-3.76788	-3.78927	-19.2896
-15.7829	-3.46159	-3.5206	-16.6414	1.69E+10	-20.3922	-3.78236	-3.76737	-19.544
-15.9443	-3.56234	-3.56658	-17.5449	1.7E+10	-20.5153	-3.87255	-3.81239	-20.7281
-16.8845	-3.48943	-3.53374	-17.7205	1.71E+10	-21.3957	-3.8672	-3.84061	-20.8289
-18.2278	-3.52564	-3.57616	-18.4805	1.72E+10	-22.4708	-3.91927	-3.99465	-21.9449
-19.2706	-3.55192	-3.59315	-19.1255	1.73E+10	-23.4793	-3.9603	-3.94939	-22.8146
-21.1921	-3.55742	-3.59945	-20.0646	1.74E+10	-24.3752	-4.02198	-4.00109	-23.384
-23.9314	-3.57951	-3.56527	-20.286	1.75E+10	-25.8385	-4.05349	-3.98853	-24.8933
-27.4309	-3.55818	-3.61196	-21.8472	1.76E+10	-26.2824	-4.08933	-4.02265	-27.0562
-32.037	-3.60459	-3.60184	-21.909	1.77E+10	-26.1173	-4.03745	-4.05478	-28.1655
-32.8559	-3.65481	-3.59303	-21.9104	1.78E+10	-25.546	-4.10016	-4.11771	-30.2786
-26.01	-3.65101	-3.65164	-21.1739	1.79E+10	-24.9918	-4.14468	-4.16755	-31.1055
-22.1429	-3.77304	-3.72344	-20.2005	1.8E+10	-23.7252	-4.2647	-4.24515	-31.9701
-19.1288	-3.77781	-3.74719	-18.9248	1.81E+10	-21.9995	-4.27915	-4.27984	-30.7503
-16.7599	-3.77714	-3.81389	-17.4207	1.82E+10	-20.5159	-4.32146	-4.32737	-29.1874
-14.9534	-3.93353	-3.87358	-16.2074	1.83E+10	-19.0967	-4.27289	-4.28774	-28.0036
-13.3995	-4.06156	-3.99503	-15.3609	1.84E+10	-17.4976	-4.48599	-4.50121	-26.8339
-12.2582	-4.17837	-4.13618	-14.3593	1.85E+10	-16.5461	-4.56237	-4.53908	-25.564
-11.2785	-4.22551	-4.31258	-13.6024	1.86E+10	-15.6653	-4.63128	-4.64137	-24.9975
-10.214	-4.361	-4.41623	-12.8939	1.87E+10	-14.5738	-4.65083	-4.64955	-24.5833
-9.68832	-4.66149	-4.5047	-12.2596	1.88E+10	-14.0339	-4.88485	-4.73273	-24.4633
-8.61968	-4.75248	-4.65561	-11.8686	1.89E+10	-12.9664	-4.90851	-5.05423	-25.5845
-7.93216	-4.79545	-4.72819	-11.2069	1.9E+10	-12.2559	-4.97294	-4.88763	-26.9465
-7.64318	-5.06456	-5.06191	-10.6036	1.91E+10	-11.5793	-5.12081	-5.0752	-25.8496
-7.27329	-5.31186	-5.05009	-10.361	1.92E+10	-10.9697	-5.31984	-5.10464	-27.261
-6.96232	-5.34271	-5.34058	-9.8138	1.93E+10	-10.5289	-5.28262	-5.27706	-28.3903
-6.55888	-5.71151	-5.4901	-9.63589	1.94E+10	-10.0311	-5.56544	-5.43411	-30.7692
-6.14271	-5.66527	-5.64317	-9.19593	1.95E+10	-9.10967	-5.41413	-5.54932	-35.3707
-5.97194	-5.84512	-5.87808	-8.96648	1.96E+10	-8.91963	-5.67793	-5.68806	-38.1591
-5.71329	-6.05922	-5.90637	-8.71356	1.97E+10	-8.48045	-5.81661	-5.6567	-44.3545
-5.45089	-6.17744	-6.17904	-8.59659	1.98E+10	-8.15705	-6.03818	-5.96333	-34.2106
-5.30021	-6.23536	-6.34794	-8.33709	1.99E+10	-7.80524	-6.10006	-6.10542	-32.4786
-5.10886	-6.53557	-6.44632	-8.33691	2E+10	-7.37734	-6.31969	-6.05608	-29.1482

|

J0-J1

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-3.72249	-92.5344	-95.4367	-6.64213
-1.18367	-84.3939	-84.0448	-12.8689
-0.74917	-82.5261	-80.9744	-16.1251
-0.68829	-80.3242	-80.2798	-18.3313
-0.77153	-80.2735	-79.7936	-19.905
-0.8958	-79.811	-80.3333	-21.0902
-1.05666	-79.1545	-79.5614	-22.0128
-1.23503	-79.2084	-79.3743	-22.7917
-1.38442	-79.2439	-79.4789	-23.399
-1.53587	-79.0106	-79.1495	-23.9034
-1.6691	-78.8734	-79.2023	-24.3747
-1.81206	-78.939	-79.2478	-24.6713
-1.93526	-79.0543	-79.6075	-25.103
-2.06628	-79.3521	-79.4557	-25.4361
-2.17141	-79.2893	-79.121	-25.832
-2.27	-79.4858	-79.6998	-26.1782
-2.40577	-80.087	-79.6911	-26.4544
-2.5079	-80.2984	-80.4034	-26.7735
-2.62557	-80.5236	-80.3948	-27.0837
-2.75409	-80.8745	-80.6362	-27.3468
-2.89554	-81.4043	-82.1975	-27.7
-3.01437	-82.7883	-82.1375	-28.0746
-3.13121	-83.2341	-83.2964	-28.516
-3.21838	-84.4222	-83.9375	-29.1067
-3.29669	-84.6591	-84.9849	-29.4897
-3.33388	-86.523	-85.9808	-30.085
-3.3205	-87.7745	-87.4536	-30.555
-3.29439	-89.4996	-88.1407	-31.3855
-3.24413	-89.6196	-89.4515	-32.2195
-3.15643	-90.0909	-90.4159	-32.7127
-3.01883	-90.9183	-89.6991	-32.7084
-2.86453	-89.4762	-91.2454	-32.2323
-2.7266	-90.8643	-90.5679	-31.3991
-2.56247	-88.988	-89.9925	-30.823
-2.43079	-89.8633	-88.9146	-30.6686
-2.30061	-88.2394	-88.1819	-30.528
-2.1941	-87.4077	-87.7655	-30.9154
-2.16186	-86.9012	-87.4093	-31.0697
-2.12802	-86.4691	-86.1768	-31.275
-2.15453	-86.0388	-85.9519	-31.3022

J0-J2

S11 (dB)	S21 (dB)	S12 (dB)
-10.0673	-93.8865	-92.9629
-14.9859	-96.7876	-102.421
-19.3109	-101.155	-104.726
-22.4351	-99.2345	-100.481
-24.5451	-97.7361	-96.2003
-25.4288	-95.7241	-98.1743
-25.3851	-95.4244	-95.4997
-24.7932	-96.5105	-95.261
-24.0695	-95.1277	-94.2455
-23.3489	-95.4193	-96.0715
-22.5993	-95.5249	-95.5587
-21.9515	-96.1356	-95.9482
-21.5036	-95.3886	-96.5648
-21.079	-97.6959	-95.6699
-20.6353	-95.6465	-94.5148
-20.2246	-96.0665	-96.5175
-19.9307	-97.6418	-95.0457
-19.6086	-96.6772	-95.6807
-19.3906	-97.256	-95.4131
-19.1437	-95.6488	-94.9708
-18.9544	-97.5911	-96.1197
-18.8009	-99.4119	-96.9917
-18.6209	-95.9312	-95.0925
-18.5229	-96.2994	-98.2792
-18.4171	-96.7433	-98.3631
-18.3696	-95.6117	-97.3992
-18.3674	-98.3803	-96.4251
-18.3868	-94.782	-98.2292
-18.3538	-97.374	-94.4149
-18.2453	-97.6657	-96.6933
-18.0283	-98.4743	-99.6199
-17.7841	-96.1847	-96.4974
-17.5818	-96.6178	-96.95
-17.4905	-94.2913	-94.8134
-17.5543	-94.7308	-96.0841
-17.701	-97.099	-95.191
-17.9189	-97.6964	-96.398
-18.2445	-95.2939	-95.2514
-18.5668	-94.5519	-95.9205
-18.918	-95.8579	-94.7475

-2.21374	-85.334	-85.5706	-31.3948	-19.1933	-93.9758	-94.793
-2.35822	-84.9797	-84.4472	-31.3638	-19.3558	-95.1474	-94.3119
-2.56056	-84.4078	-85.1864	-31.4983	-19.3863	-94.7841	-94.9477
-2.83143	-85.3432	-84.3427	-31.5768	-19.1705	-98.4389	-97.1421
-3.15282	-85.0969	-84.736	-31.4299	-18.818	-94.2027	-95.1346
-3.54917	-84.9953	-85.0375	-31.142	-18.4126	-95.3217	-93.9283
-3.9782	-85.013	-84.9905	-30.8517	-18.0598	-95.4078	-94.8013
-4.40775	-84.8912	-85.0327	-30.363	-17.758	-94.642	-94.6623
-4.79412	-85.3799	-84.874	-30.2369	-17.4568	-93.3591	-95.0618
-5.11761	-85.1435	-85.5297	-30.0217	-17.1881	-94.2473	-93.4387
-5.32642	-86.449	-85.9239	-30.391	-16.9444	-92.9276	-94.3278
-5.40798	-86.9348	-86.832	-30.5387	-16.6777	-92.358	-92.2694
-5.34502	-87.653	-87.6804	-31.0896	-16.4084	-92.6406	-93.1007
-5.16159	-88.9351	-88.8998	-31.4267	-16.0937	-92.0166	-92.7453
-4.90754	-90.6071	-89.6954	-31.6506	-15.7638	-93.656	-93.1853
-4.58255	-90.6886	-90.9863	-31.9893	-15.4488	-93.4996	-91.2976
-4.28467	-93.0918	-93.5886	-32.5291	-15.1867	-92.2482	-91.4777
-4.00379	-96.4726	-96.415	-33.067	-14.9635	-92.7993	-93.456
-3.76273	-97.6383	-97.257	-33.8683	-14.7482	-92.5424	-91.4399
-3.5389	-99.0512	-99.8524	-34.7703	-14.574	-93.1037	-90.493
-3.39105	-96.189	-99.303	-35.0095	-14.443	-90.8209	-91.823
-3.26309	-94.2024	-96.5501	-35.9861	-14.3869	-91.1494	-91.288
-3.1886	-94.1771	-94.2214	-36.4642	-14.3831	-92.3534	-91.8539
-3.14286	-91.6646	-92.1406	-36.9756	-14.4238	-91.0726	-91.4447
-3.10833	-91.245	-91.6	-37.8128	-14.4678	-91.9051	-90.8406
-3.09415	-90.0177	-89.0048	-39.2304	-14.5776	-90.647	-91.2156
-3.11158	-89.1097	-88.0739	-40.2431	-14.7028	-90.0343	-90.3409
-3.22627	-87.7473	-87.3769	-41.4003	-14.9641	-90.6595	-90.4543
-3.26637	-87.0301	-86.9671	-41.6163	-15.1762	-89.9495	-89.206
-3.31498	-86.216	-86.2443	-41.2134	-15.4049	-91.4275	-91.1638
-3.40787	-85.3908	-85.2349	-41.1485	-15.6481	-90.0251	-89.9138
-3.50307	-84.7032	-85.1724	-40.6056	-15.9252	-90.1528	-89.1234
-3.53953	-84.4666	-84.8571	-40.71	-16.0524	-90.4012	-89.2519
-3.56435	-84.3803	-84.3065	-40.2279	-16.2262	-88.9646	-89.8891
-3.60208	-83.8691	-84.21	-39.3063	-16.2638	-89.3005	-89.2855
-3.61294	-83.9021	-84.0046	-37.873	-16.278	-88.3634	-89.2889
-3.63979	-83.6895	-84.1394	-36.8078	-16.2512	-88.497	-89.275
-3.64881	-83.3745	-83.6502	-36.07	-16.066	-88.9248	-88.1536
-3.67668	-83.8731	-83.7452	-35.4726	-15.8344	-88.5878	-87.604
-3.65997	-83.8765	-84.286	-35.0547	-15.5344	-88.7381	-89.0788
-3.67254	-84.2009	-83.8818	-34.6034	-15.2675	-87.5588	-87.9735
-3.71308	-84.1621	-84.1696	-34.1442	-14.967	-87.8696	-88.3292
-3.82943	-85.1182	-84.3269	-33.4327	-14.6353	-87.584	-87.5696
-3.94548	-85.4707	-84.6956	-32.9306	-14.4006	-88.7824	-86.7595
-4.13648	-85.613	-86.3868	-32.2084	-14.1192	-87.8547	-87.2498
-4.38162	-86.2815	-86.5674	-32.1737	-13.8829	-88.455	-88.3014
-4.69858	-87.9341	-86.8456	-31.8932	-13.6773	-87.6731	-88.4135
-5.07425	-88.889	-89.0148	-31.8519	-13.4687	-87.9787	-87.5564
-5.49452	-91.5303	-91.5697	-31.6783	-13.3561	-88.0493	-87.4785
-5.88786	-93.7096	-93.0724	-31.1876	-13.2001	-87.701	-86.9466
-6.19148	-96.3943	-95.7145	-30.6471	-13.1538	-86.9705	-86.9668
-6.34663	-97.9199	-95.2631	-30.0292	-13.0567	-86.4892	-86.5046

-6.27077	-95.0424	-92.3389	-29.7484	-12.9848	-87.0096	-87.0981
-6.04073	-91.2608	-92.5767	-29.1699	-12.9141	-86.541	-86.3673
-5.66639	-88.802	-88.9383	-28.8479	-12.9115	-86.1403	-86.3183
-5.28159	-88.2172	-88.0138	-28.554	-12.8616	-85.7442	-86.4047
-4.8605	-86.1871	-86.276	-28.1571	-12.8427	-85.9328	-86.3109
-4.48984	-84.9383	-85.2136	-27.57	-12.7531	-86.0621	-86.1368
-4.18029	-85.4514	-84.6529	-27.3275	-12.7034	-85.1644	-86.1231
-3.86382	-83.439	-84.1765	-27.182	-12.6228	-85.6604	-86.1016
-3.66039	-83.4105	-83.4718	-26.7149	-12.5811	-85.9845	-85.2555
-3.45343	-83.3547	-82.727	-26.5232	-12.5205	-85.1206	-85.1918
-3.2917	-82.8839	-82.7748	-26.3671	-12.4487	-84.3474	-85.3613
-3.22645	-82.2029	-81.7403	-25.9689	-12.4454	-84.6258	-85.02
-3.14771	-81.9344	-81.9924	-25.7905	-12.4495	-84.9501	-84.7001
-3.07204	-82.6622	-79.8844	-25.4738	-12.3776	-84.356	-85.1304
-3.01532	-80.9113	-80.5672	-25.3673	-12.3898	-84.4282	-83.514
-3.05473	-81.5347	-81.2126	-25.4729	-12.4681	-85.155	-84.093
-3.08233	-80.6915	-80.8194	-25.4572	-12.4884	-83.5221	-83.7117
-3.14595	-80.8391	-80.0273	-25.3349	-12.6425	-82.5857	-84.0576
-3.27529	-80.3432	-81.4196	-25.6736	-12.8248	-83.3038	-82.7659
-3.34687	-79.9942	-80.1133	-25.7414	-12.9599	-83.6585	-83.3139
-3.48872	-80.7247	-80.7568	-25.7757	-13.1518	-84.4177	-81.5694
-3.65964	-80.3038	-81.2611	-25.8351	-13.3556	-81.5193	-82.9561
-3.78905	-82.5665	-80.8809	-26.0273	-13.6579	-82.1181	-83.5361
-4.03406	-83.0873	-80.9804	-26.1694	-14.0334	-81.9246	-82.0269
-4.25613	-81.8061	-81.6621	-26.3233	-14.3856	-83.2055	-82.5015
-4.5216	-83.9624	-82.9083	-26.3569	-14.8003	-82.3799	-82.635
-4.82001	-82.5612	-82.1952	-26.4424	-15.2117	-81.7252	-83.0527
-5.02531	-81.9126	-84.8506	-26.6225	-15.6426	-82.4095	-81.5565
-5.39219	-84.0396	-85.8183	-26.3869	-16.2574	-81.83	-81.9072
-5.5983	-86.5286	-88.3981	-26.2394	-16.6931	-80.8047	-81.276
-5.87553	-89.3802	-87.7715	-25.9016	-17.3034	-82.1975	-80.6322
-6.10576	-90.3771	-90.229	-26.1962	-17.6568	-81.4451	-81.9921
-6.24262	-94.8553	-90.7133	-25.9757	-18.2749	-82.6005	-81.3891
-6.44827	-86.1888	-87.1846	-25.5132	-18.7953	-80.9424	-81.6392
-6.51679	-89.7462	-87.6045	-25.6141	-19.3345	-81.3238	-82.3244
-6.64281	-86.5214	-85.6335	-25.7089	-19.6405	-81.6043	-81.286
-6.73423	-84.4849	-84.736	-25.3354	-20.0048	-80.6159	-79.6975
-6.80431	-84.035	-84.3647	-25.0532	-20.1166	-80.8116	-80.8315
-6.85553	-82.9498	-83.5729	-24.9116	-20.2272	-80.3352	-80.7812
-6.93473	-81.1915	-81.9761	-24.9397	-20.2727	-80.9415	-80.4214
-6.96837	-80.4532	-80.6672	-24.6743	-20.2741	-80.4746	-80.0526
-6.95986	-78.7546	-79.6297	-24.7877	-19.8642	-80.7583	-79.0262
-6.93495	-78.7995	-79.1502	-24.5786	-19.5238	-79.1133	-79.0513
-6.866	-78.233	-78.5157	-24.4952	-19.188	-80.4999	-80.3852
-6.75812	-78.5573	-78.1469	-23.9863	-18.7424	-80.0699	-81.2064
-6.6305	-77.5117	-77.9423	-24.0244	-18.4109	-78.5051	-79.6161
-6.4567	-76.9722	-77.8977	-23.6157	-17.8839	-78.7804	-79.608
-6.22819	-77.6991	-77.0695	-23.4356	-17.2834	-78.4608	-79.204
-5.89251	-76.3156	-78.0521	-22.982	-16.7466	-79.4922	-78.2503
-5.62995	-78.0852	-77.7435	-22.6015	-16.3342	-78.9288	-78.579
-5.4553	-77.8631	-77.8478	-22.3281	-16.1532	-79.2806	-79.5255
-5.12598	-78.138	-77.6106	-22.0514	-15.7958	-78.4103	-79.1894
-4.88848	-77.5422	-77.5353	-21.7936	-15.6025	-79.1141	-78.0493
-4.61865	-77.5354	-77.9175	-21.5527	-15.4634	-78.9645	-77.87
-4.4125	-77.7363	-78.7761	-21.295	-15.4835	-78.3738	-77.2932

-4.24761	-77.7256	-79.5943	-20.974	-15.6008	-77.6952	-77.9425
-4.16321	-78.0481	-79.3959	-20.6641	-15.8827	-77.4704	-77.5963
-4.17305	-78.9617	-78.9411	-20.224	-16.4708	-77.3524	-78.9176
-4.04865	-80.5218	-79.6364	-20.1231	-16.7924	-77.2399	-77.4827
-4.1574	-82.2428	-81.0741	-19.8802	-17.8061	-78.2951	-77.5654
-4.32494	-81.8449	-81.1555	-19.7186	-18.841	-78.4779	-78.2034
-4.70577	-83.5563	-83.1444	-19.3957	-20.529	-78.4859	-77.4356
-4.85315	-84.2464	-83.477	-19.1584	-21.9029	-78.1122	-77.3915
-5.24506	-84.2576	-88.1628	-18.8688	-23.4049	-76.8947	-76.8802
-5.64066	-88.7703	-89.505	-18.9917	-24.0927	-76.9469	-76.9041
-6.06229	-85.9607	-86.001	-18.7097	-23.58	-77.1519	-77.3145
-6.32844	-84.1456	-86.3706	-18.5231	-21.9314	-76.4521	-76.5503
-6.5144	-83.2329	-84.8735	-18.4434	-20.5459	-77.5918	-77.0896
-6.55576	-81.5877	-81.7027	-18.085	-19.1372	-77.2024	-77.1227
-6.36156	-79.0001	-80.3952	-18.058	-18.2301	-76.9416	-77.0814
-6.0633	-79.466	-78.8946	-17.9962	-17.46	-76.8558	-77.2384
-5.74167	-78.0789	-77.2531	-17.711	-16.9905	-76.2005	-75.851
-5.45799	-77.2724	-77.2008	-17.528	-16.6381	-76.6956	-76.9382
-5.18105	-76.473	-75.8955	-17.3866	-16.4406	-75.9601	-77.3149
-5.08149	-76.5686	-76.2559	-17.2448	-16.3609	-75.9119	-76.1562
-4.87195	-75.9819	-76.259	-17.1195	-16.2105	-76.8862	-76.09
-4.85363	-74.8486	-75.3999	-16.8799	-16.2635	-76.4013	-76.3825
-4.81654	-74.8802	-75.2406	-16.7148	-16.0733	-76.5851	-77.5748
-4.9868	-74.589	-75.7083	-16.4795	-15.9049	-75.9161	-76.5524
-5.12026	-74.619	-75.0026	-16.2646	-15.7203	-76.1079	-77.2066
-5.47377	-74.1985	-74.8363	-16.1048	-15.7545	-76.0549	-76.4766
-5.91698	-73.7031	-74.3923	-16.0838	-15.8355	-76.7859	-75.6946
-6.53894	-73.6101	-74.3471	-16.1909	-15.6285	-76.33	-76.7993
-7.30451	-73.5652	-73.3967	-15.8597	-15.5907	-76.8399	-75.5351
-8.29122	-74.3136	-73.2408	-15.6623	-15.3823	-75.1421	-76.5251
-9.57118	-73.3208	-73.3288	-15.5799	-15.2575	-75.8506	-75.6325
-11.0712	-73.5138	-73.4875	-15.3578	-14.8807	-75.6177	-75.6903
-12.517	-74.3756	-74.6064	-15.247	-14.6643	-75.3891	-75.9744
-13.2508	-74.8944	-74.6267	-15.2576	-14.2049	-75.8666	-75.5421
-12.6109	-74.3463	-74.7528	-15.0966	-13.5867	-76.0283	-75.696
-11.1821	-75.6456	-75.2768	-15.0252	-13.0735	-75.2814	-74.995
-9.62955	-75.8025	-76.0317	-14.9143	-12.4097	-74.8242	-75.0171
-8.19054	-76.6579	-76.2518	-14.8924	-11.8971	-75.0302	-74.801
-7.06616	-77.9867	-77.8735	-14.6883	-11.394	-75.4194	-74.8382
-6.20171	-77.8556	-77.8343	-14.5606	-10.9408	-74.7055	-75.9753
-5.47426	-79.6146	-79.0637	-14.4745	-10.3981	-74.3936	-74.8738
-5.09992	-80.853	-79.9449	-14.2632	-10.1597	-74.5952	-74.7292
-4.55894	-80.6391	-81.1883	-14.2205	-9.62997	-75.0908	-74.5456
-4.13834	-80.8106	-80.0336	-14.0921	-9.11502	-75.095	-74.6822
-4.10239	-81.2463	-80.0123	-13.8156	-8.95451	-74.2759	-74.0508
-4.00041	-79.4518	-82.6297	-13.5643	-8.71956	-74.7169	-74.9459
-4.02074	-78.0137	-79.157	-13.4317	-8.5736	-74.6584	-74.4161
-3.99717	-77.9368	-78.5264	-13.2582	-8.34365	-74.0425	-73.5211
-3.78768	-76.085	-77.8043	-12.9863	-7.8828	-73.6892	-73.2545
-3.9858	-76.711	-75.4312	-12.7564	-7.81502	-73.119	-73.5876
-4.18117	-74.8776	-75.5312	-12.6235	-7.69842	-73.8389	-73.3935
-4.29444	-74.384	-74.9321	-12.4562	-7.45206	-73.8087	-73.3041
-4.57211	-74.1377	-73.4887	-12.3286	-7.25023	-73.2951	-72.5853
-4.89701	-72.456	-72.8001	-12.0891	-6.98197	-73.1593	-73.0652

J0-J3

J0-

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)
-18.0815	-8.73141	-90.8563	-86.4271	-17.9461	-9.0805	-88.7646
-31.5405	-14.9529	-106.75	-110.541	-32.4795	-15.3246	-96.7982
-31.5958	-19.3478	-99.4182	-97.757	-33.0436	-19.7696	-97.0174
-30.668	-22.6322	-94.1793	-96.2951	-31.8132	-23.0591	-91.697
-29.9693	-25.0084	-94.2771	-93.4438	-30.8345	-25.2918	-91.0134
-29.6285	-26.1755	-93.5121	-92.415	-30.3086	-26.143	-89.6551
-29.4256	-26.3166	-91.3939	-92.0022	-29.9548	-25.9626	-89.0999
-29.3001	-25.8046	-93.5401	-91.5084	-29.6496	-25.2428	-89.5504
-29.3711	-25.1261	-92.385	-92.2235	-29.7202	-24.4463	-89.25
-29.3285	-24.4455	-91.6183	-91.7553	-29.6029	-23.7084	-88.6745
-29.4011	-23.7421	-91.5711	-91.8309	-29.6164	-22.9912	-89.5475
-29.3017	-23.1607	-91.5833	-92.9958	-29.5236	-22.4136	-90.3697
-29.4312	-22.8079	-92.3723	-91.9536	-29.5492	-22.0543	-89.6093
-29.4734	-22.4906	-91.6128	-93.0018	-29.5718	-21.7479	-90.2419
-29.6822	-22.1525	-93.0288	-91.8271	-29.7968	-21.4348	-90.4594
-29.816	-21.8528	-92.8746	-93.4286	-29.9169	-21.1735	-90.2613
-29.8704	-21.6924	-91.7938	-92.6163	-29.9686	-21.0673	-91.2393
-30.0042	-21.4805	-92.2447	-93.78	-30.0708	-20.9123	-90.2709
-30.1534	-21.3947	-92.3704	-92.7917	-30.2376	-20.8944	-90.5674
-30.2368	-21.2552	-92.6819	-93.5817	-30.4316	-20.8525	-91.8589
-30.3981	-21.1657	-92.5076	-93.6286	-30.8167	-20.8806	-90.0531
-30.5546	-21.0969	-93.1762	-92.4233	-30.9885	-20.9552	-91.4325
-30.7992	-20.9646	-94.3472	-93.2104	-31.1776	-20.9664	-91.3887
-31.187	-20.902	-93.8432	-91.9912	-31.6254	-21.0757	-91.173
-31.3372	-20.79	-92.5161	-92.1728	-31.8709	-21.1452	-91.1812
-31.7725	-20.7039	-93.0936	-93.23	-32.1031	-21.2624	-91.7018
-32.0721	-20.6033	-93.2852	-93.138	-32.1589	-21.389	-91.7065
-32.6728	-20.5074	-93.6884	-95.2244	-32.2277	-21.4992	-91.537
-33.4909	-20.3247	-93.5645	-94.8492	-31.5961	-21.5052	-92.135
-34.0682	-20.058	-93.8844	-94.5819	-30.6725	-21.3857	-92.4155
-34.3914	-19.6746	-94.213	-93.5645	-29.6273	-21.082	-91.5206
-34.1451	-19.2549	-95.4441	-93.9512	-28.8803	-20.6988	-91.9115
-33.3399	-18.8048	-93.3461	-94.6408	-28.4315	-20.2882	-93.5469
-32.81	-18.4179	-94.9789	-93.9748	-28.1463	-19.9481	-92.1855
-32.4122	-18.1529	-94.2532	-94.9612	-28.2314	-19.7107	-92.4054
-32.2107	-17.9246	-93.0368	-94.8793	-28.2157	-19.4644	-91.5685
-32.3333	-17.727	-95.1728	-94.0341	-28.4673	-19.2065	-91.5311
-32.3326	-17.6135	-94.4208	-92.7367	-28.6038	-19.0063	-93.035
-32.7427	-17.4294	-93.6086	-92.8115	-28.5758	-18.7034	-91.9906
-32.8447	-17.2327	-92.6343	-95.2339	-28.5914	-18.3717	-93.6558

-33.0011	-16.9794	-92.0969	-93.3577	-28.5956	-17.9756	-93.3467
-33.0276	-16.6671	-93.3212	-92.7257	-28.5388	-17.518	-93.8612
-33.097	-16.32	-93.8612	-93.0754	-28.4792	-17.0361	-93.1337
-33.2854	-15.8859	-92.6154	-92.4447	-28.3221	-16.4807	-91.9124
-33.3446	-15.4421	-92.6946	-93.1835	-28.1202	-15.9439	-92.664
-33.5149	-15.0087	-92.2303	-91.988	-27.883	-15.4381	-92.9765
-33.4259	-14.6454	-93.5465	-92.4533	-27.7976	-15.0246	-92.3436
-33.3184	-14.3558	-91.0941	-91.8376	-27.6785	-14.6976	-91.6348
-32.7431	-14.0894	-92.8042	-92.7282	-27.8637	-14.3921	-92.8327
-32.3792	-13.8995	-92.5237	-92.2663	-27.9316	-14.1625	-92.1136
-31.5067	-13.7727	-92.5855	-92.1553	-28.4375	-13.9924	-91.4565
-31.1045	-13.6836	-92.1889	-92.1862	-28.6637	-13.8578	-92.3727
-30.3873	-13.6215	-92.1812	-93.0643	-29.2261	-13.7543	-91.4872
-29.9087	-13.5624	-92.0745	-91.1686	-29.6716	-13.6567	-91.586
-29.6802	-13.4997	-90.9893	-92.9285	-29.841	-13.5624	-91.0089
-29.2307	-13.4618	-91.8532	-91.9347	-30.1599	-13.4934	-92.4473
-28.6177	-13.4601	-91.508	-91.6695	-30.7362	-13.4654	-90.4722
-28.1421	-13.5013	-92.1009	-90.6535	-31.0737	-13.4769	-90.9891
-27.6185	-13.5445	-91.4494	-92.0759	-31.3907	-13.49	-91.4422
-27.0966	-13.6068	-90.0757	-91.9166	-31.5372	-13.5213	-90.1291
-26.8522	-13.7112	-90.5147	-90.0801	-31.1602	-13.5884	-90.4993
-26.2994	-13.8744	-90.4039	-90.5886	-31.4007	-13.7082	-90.8722
-25.9338	-14.0755	-89.4193	-90.5344	-31.4152	-13.8626	-91.034
-25.5457	-14.3124	-90.1308	-91.6728	-31.1569	-14.0492	-89.6741
-25.1281	-14.5449	-91.4014	-88.8661	-30.9766	-14.2266	-90.2495
-24.7083	-14.8396	-91.0045	-90.1054	-31.1284	-14.4639	-90.5358
-24.2791	-15.1179	-90.1924	-89.776	-30.7571	-14.6872	-89.5729
-23.8991	-15.5308	-89.9631	-90.2757	-30.6159	-15.046	-89.0654
-23.4534	-15.8865	-89.4922	-89.8238	-30.0834	-15.349	-89.6994
-23.176	-16.2364	-90.163	-89.9614	-29.7029	-15.6535	-89.1293
-22.8572	-16.5724	-89.2022	-88.6315	-29.317	-15.9594	-89.2811
-22.5414	-16.9112	-89.5955	-89.0074	-28.8175	-16.284	-88.6479
-22.2517	-17.0843	-89.5808	-88.9402	-28.4782	-16.4536	-89.3574
-21.9253	-17.2977	-89.0507	-89.0798	-28.0995	-16.6714	-87.969
-21.6154	-17.301	-89.2263	-88.5026	-27.6778	-16.7141	-88.217
-21.2936	-17.2871	-89.3066	-88.9626	-27.1006	-16.743	-88.4505
-21.0682	-17.2373	-88.7092	-88.3979	-26.5989	-16.7355	-88.395
-20.7858	-17.0224	-88.5031	-88.1612	-26.1557	-16.5645	-87.6068
-20.5728	-16.7995	-88.4623	-88.4753	-25.6768	-16.3666	-87.472
-20.3052	-16.5386	-88.7042	-88.4408	-25.326	-16.1161	-88.7339
-20.083	-16.2928	-87.4906	-89.1261	-24.9032	-15.8845	-87.0823
-19.8492	-16.056	-89.0564	-87.8222	-24.5303	-15.637	-88.0593
-19.5537	-15.8002	-87.5904	-87.7934	-24.0916	-15.3596	-87.3748
-19.3334	-15.6373	-87.4547	-87.9408	-23.731	-15.1688	-88.7186
-19.0731	-15.4363	-87.669	-87.5052	-23.3185	-14.9337	-87.4813
-18.9267	-15.2908	-87.3383	-88.2188	-23.0403	-14.7414	-87.6965
-18.734	-15.179	-88.3927	-87.1395	-22.6781	-14.5754	-87.6864
-18.6143	-15.0635	-86.6343	-87.5966	-22.4498	-14.3984	-87.1675
-18.458	-15.0359	-87.3529	-87.5195	-22.2085	-14.3092	-87.3057
-18.2919	-14.9356	-86.5856	-87.3213	-21.8866	-14.1576	-86.8399
-18.0954	-14.9558	-86.4658	-87.3915	-21.6107	-14.1187	-86.6823
-17.9015	-14.881	-86.759	-86.8349	-21.265	-14.0071	-86.7669

-17.7976	-14.8098	-86.7267	-86.482	-21.0482	-13.91	-86.4969
-17.6216	-14.6983	-86.7964	-86.2267	-20.7351	-13.8018	-87.0332
-17.5306	-14.635	-86.8921	-86.2454	-20.5502	-13.7529	-85.6369
-17.4672	-14.4823	-86.8604	-86.3136	-20.3825	-13.6435	-86.5375
-17.3601	-14.3361	-86.4953	-85.8159	-20.1792	-13.5599	-85.7497
-17.2111	-14.0918	-86.1139	-85.8057	-19.9589	-13.401	-86.6067
-17.1618	-13.8876	-85.6094	-85.1993	-19.7857	-13.2879	-86.0171
-17.1809	-13.6363	-86.1343	-85.935	-19.7696	-13.1439	-86.4153
-17.0566	-13.4314	-84.8115	-85.4525	-19.5228	-13.0494	-85.0416
-17.0687	-13.2224	-85.5897	-85.6225	-19.4883	-12.9497	-84.7035
-17.084	-13.0099	-84.6786	-84.4402	-19.4319	-12.8467	-84.7205
-16.9843	-12.8767	-84.3742	-84.2765	-19.2529	-12.8258	-84.6245
-17.0018	-12.7716	-84.2279	-84.5625	-19.2239	-12.8244	-84.1007
-16.9276	-12.6048	-83.6138	-85.5299	-19.0526	-12.7594	-83.1356
-16.9399	-12.539	-82.9607	-82.7364	-18.9968	-12.7924	-84.6198
-16.9983	-12.5522	-85.1293	-84.4286	-18.9557	-12.9002	-84.4387
-17.0785	-12.5199	-83.3621	-85.4245	-18.953	-12.9662	-83.7796
-17.0953	-12.6366	-83.0841	-82.3394	-18.8893	-13.1789	-83.1934
-17.3153	-12.7869	-83.8333	-83.908	-19.0581	-13.4374	-82.5911
-17.3838	-12.9076	-83.217	-83.3495	-19.0419	-13.6566	-83.7706
-17.3832	-13.0906	-83.7724	-82.8765	-18.9295	-13.9478	-84.078
-17.4404	-13.2961	-82.2799	-84.0971	-18.9027	-14.2676	-82.6838
-17.54	-13.6078	-83.3325	-82.8217	-18.9373	-14.7194	-82.0675
-17.5678	-14.002	-83.0841	-82.4244	-18.8527	-15.2632	-82.2789
-17.6306	-14.3831	-82.5953	-83.3952	-18.8484	-15.8109	-82.72
-17.6439	-14.8402	-81.8459	-83.6584	-18.7797	-16.4498	-81.6884
-17.6808	-15.3066	-82.3024	-82.2148	-18.7498	-17.1186	-82.8012
-17.7292	-15.7922	-82.9938	-82.1792	-18.7422	-17.8547	-82.8406
-17.7366	-16.5	-82.8822	-81.1495	-18.7708	-18.8437	-82.0609
-17.6341	-17.0322	-81.7614	-81.3872	-18.6121	-19.6658	-82.9704
-17.5309	-17.7437	-81.6071	-81.0214	-18.4948	-20.7659	-82.2515
-17.6382	-18.2003	-82.2947	-80.703	-18.5983	-21.5929	-81.266
-17.6142	-18.9717	-80.7554	-81.4548	-18.5877	-22.8357	-80.9463
-17.4313	-19.6661	-81.8206	-81.1831	-18.4041	-23.9783	-80.8342
-17.4425	-20.3159	-81.4234	-81.6874	-18.4325	-25.352	-81.0631
-17.5508	-20.8993	-80.6766	-80.061	-18.5968	-26.0449	-81.2151
-17.3657	-21.3638	-81.4399	-80.3652	-18.4413	-27.149	-79.7788
-17.2948	-21.624	-80.9511	-80.2775	-18.4434	-27.6498	-80.1559
-17.2339	-21.8709	-80.1325	-80.4121	-18.4603	-27.9716	-81.1806
-17.1772	-22.0745	-80.3707	-79.7034	-18.494	-28.1072	-79.9918
-17.0333	-22.244	-79.6376	-79.455	-18.4177	-27.9811	-80.2637
-17.0974	-21.9552	-80.4171	-80.1447	-18.6068	-27.222	-79.4223
-16.9147	-21.7538	-80.124	-79.1892	-18.5178	-26.525	-80.1111
-16.8522	-21.4564	-78.5397	-79.596	-18.6078	-26.0697	-80.0042
-16.5602	-21.1612	-79.2715	-79.5822	-18.4374	-25.1116	-79.4067
-16.4582	-20.925	-78.7574	-79.9965	-18.5448	-24.4541	-79.7499
-16.2765	-20.3529	-79.5757	-78.3457	-18.5012	-23.7682	-79.0105
-16.1007	-19.814	-78.8911	-80.0699	-18.5229	-22.69	-77.8581
-15.833	-19.3508	-78.2002	-79.6267	-18.3893	-21.756	-77.7041
-15.6249	-19.0013	-78.1663	-78.3665	-18.3396	-20.9415	-77.5519
-15.3508	-18.9476	-78.4792	-79.0624	-18.2744	-20.4077	-76.6511
-15.1646	-18.6923	-78.4275	-77.9841	-18.254	-19.6731	-76.4559
-15.0134	-18.6196	-78.5293	-78.3383	-18.2883	-19.1329	-78.139
-14.7867	-18.6493	-78.6095	-77.9437	-18.2603	-18.6468	-78.6522
-14.6012	-18.889	-77.2093	-79.561	-18.2578	-18.2657	-80.2699

-14.3971	-19.2369	-78.0596	-78.2807	-18.2163	-18.0268	-80.3406
-14.1185	-19.8341	-78.9695	-78.6353	-18.1312	-17.9005	-79.6511
-13.9126	-21.0484	-77.939	-78.2328	-18.0243	-17.8341	-80.5049
-13.7524	-21.9651	-78.5485	-77.175	-18.0978	-17.5612	-80.1078
-13.543	-24.2378	-77.42	-78.2612	-18.0159	-17.7333	-77.4511
-13.3942	-27.2965	-78.1679	-77.3944	-18.0778	-17.6994	-76.4725
-13.2015	-34.6191	-77.2796	-77.5287	-18.0179	-17.814	-76.14
-12.975	-42.3172	-77.7713	-78.5657	-17.9495	-17.6524	-76.4141
-12.8159	-30.1059	-76.9577	-77.1832	-17.9205	-17.4301	-76.5908
-12.7949	-25.1315	-77.5066	-77.418	-18.2021	-17.1859	-77.0408
-12.5433	-21.7592	-77.0206	-77.0916	-18.0147	-16.8156	-76.2051
-12.4058	-19.4278	-77.1014	-77.0922	-18.0458	-16.1728	-75.9745
-12.3115	-17.6455	-76.4099	-76.9184	-18.1359	-15.6821	-75.7814
-12.0989	-16.3761	-76.3373	-76.7593	-17.9698	-15.0701	-75.3594
-12.0375	-15.4459	-76.4514	-77.2959	-18.0813	-14.6622	-76.3242
-11.9761	-14.7	-76.8845	-75.7031	-18.1591	-14.3205	-75.8533
-11.7619	-14.2648	-75.7816	-75.906	-17.9968	-14.1181	-75.3192
-11.6545	-13.9706	-76.1936	-75.997	-17.9591	-14.0747	-75.0156
-11.5824	-13.828	-75.9996	-75.2333	-17.9503	-14.2282	-75.5902
-11.4765	-13.8594	-76.0263	-75.1298	-17.9026	-14.5094	-75.6379
-11.4504	-13.8453	-75.2048	-74.5479	-17.9201	-14.9147	-74.686
-11.313	-14.0667	-75.1628	-74.8987	-17.8736	-15.4478	-75.7809
-11.2043	-14.1116	-74.6883	-74.6315	-17.7711	-15.8698	-74.1997
-11.0452	-14.2186	-74.092	-74.1214	-17.6044	-16.2369	-74.8195
-10.9195	-14.2683	-74.0921	-74.3859	-17.465	-16.4903	-74.2764
-10.8446	-14.5022	-74.3222	-74.2132	-17.4061	-16.753	-74.3646
-10.8447	-14.7462	-73.3798	-74.1572	-17.4859	-16.9301	-75.3239
-10.903	-14.6972	-73.744	-74.0243	-17.6094	-16.6314	-74.5983
-10.7145	-14.7445	-73.1568	-73.1871	-17.4069	-16.3777	-73.8836
-10.578	-14.5973	-73.4362	-73.9739	-17.2507	-15.8961	-74.638
-10.5327	-14.4855	-73.0945	-73.5655	-17.196	-15.5284	-73.4561
-10.3605	-14.1182	-72.8606	-72.6787	-17.0703	-14.958	-73.8142
-10.3257	-13.8856	-73.3751	-73.7575	-17.027	-14.6531	-73.5015
-10.3125	-13.4181	-72.9201	-72.8832	-17.0719	-14.1766	-73.4911
-10.1901	-12.8228	-72.7545	-73.0945	-16.8292	-13.6619	-73.6528
-10.1368	-12.3323	-73.0668	-72.8397	-16.7443	-13.3	-73.9895
-10.0414	-11.6948	-72.9335	-72.5576	-16.6186	-12.8126	-72.9304
-10.0585	-11.2305	-72.7612	-72.3785	-16.6018	-12.5425	-73.4774
-9.91356	-10.765	-72.4935	-72.4615	-16.3261	-12.2806	-73.1115
-9.8292	-10.3634	-72.3538	-72.555	-16.1388	-12.0693	-73.1733
-9.77602	-9.8648	-72.71	-72.438	-15.9403	-11.7278	-72.6287
-9.67686	-9.67253	-72.8325	-72.9238	-15.7875	-11.7061	-72.5252
-9.63364	-9.18484	-72.0199	-72.1466	-15.6447	-11.35	-72.1712
-9.55949	-8.72513	-72.5055	-72.1553	-15.4506	-10.9746	-72.0894
-9.36591	-8.61208	-71.9937	-72.2776	-15.0173	-10.9386	-71.7276
-9.26365	-8.43736	-71.7639	-72.058	-14.8555	-10.7911	-71.8357
-9.17166	-8.33407	-71.8778	-71.5261	-14.5992	-10.6986	-71.4552
-9.10072	-8.15274	-71.7739	-71.7808	-14.5212	-10.47	-70.7449
-8.91905	-7.74264	-71.3844	-71.4686	-14.1706	-9.95198	-70.5752
-8.80047	-7.7257	-71.2003	-71.6755	-13.9299	-9.81974	-70.0658
-8.73823	-7.65776	-71.3125	-71.3343	-13.8252	-9.58087	-70.3086
-8.63201	-7.45252	-70.9349	-71.2397	-13.7378	-9.17378	-69.7269
-8.57435	-7.29429	-70.929	-70.6598	-13.5578	-8.78006	-69.7021
-8.40367	-7.0702	-70.8474	-70.4352	-13.3351	-8.28302	-69.5283

-J4

J0-J5

S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-88.7662	-17.7687	-9.12914	-89.6457	-89.9461	-18.5087	-8.88439
-103.85	-31.9792	-15.2562	-96.0038	-104.012	-31.0821	-14.914
-93.8548	-32.1808	-19.9823	-93.5292	-95.6589	-29.8487	-19.3147
-89.9765	-31.0313	-23.717	-90.8858	-93.0436	-28.8559	-22.5587
-89.6297	-30.2011	-26.3601	-90.7199	-91.5427	-28.1971	-24.7271
-90.3606	-29.773	-27.1562	-90.2455	-90.5952	-27.8534	-25.4929
-89.0479	-29.5066	-26.5611	-90.9687	-90.3823	-27.6413	-25.2223
-89.8172	-29.3546	-25.4482	-89.5905	-89.867	-27.5521	-24.4203
-89.194	-29.4332	-24.3732	-89.758	-89.3976	-27.6329	-23.5368
-88.9958	-29.3914	-23.4775	-90.9648	-90.9417	-27.6345	-22.7056
-88.9715	-29.4682	-22.6928	-89.9802	-90.3116	-27.7071	-21.8886
-90.4346	-29.3844	-22.0973	-90.438	-90.4958	-27.6437	-21.1931
-88.9628	-29.5424	-21.7267	-90.6056	-90.5619	-27.8005	-20.6914
-90.3989	-29.6025	-21.4488	-91.4265	-90.5125	-27.8531	-20.2285
-90.0794	-29.843	-21.1918	-90.0708	-90.854	-28.02	-19.7572
-90.2026	-29.9956	-21.0139	-90.9006	-91.0358	-28.1212	-19.3263
-90.2198	-30.1012	-21.0276	-92.6193	-91.7883	-28.2081	-19.0127
-90.8718	-30.3096	-20.9888	-92.1219	-92.9347	-28.3811	-18.6753
-91.1036	-30.5822	-21.1162	-91.6759	-91.6609	-28.5924	-18.4397
-92.2794	-30.762	-21.2729	-92.3746	-91.5193	-28.6974	-18.1865
-90.7924	-31.0244	-21.5365	-93.4555	-92.0676	-28.7965	-17.9943
-89.8356	-31.2005	-21.9007	-91.674	-91.6818	-28.8627	-17.84
-90.6332	-31.5308	-22.2058	-93.9617	-93.4408	-29.0718	-17.6619
-91.9548	-32.0999	-22.679	-92.6503	-91.5917	-29.401	-17.5637
-92.5338	-32.4326	-23.1405	-91.9692	-92.7377	-29.5844	-17.4613
-90.8504	-33.1354	-23.7162	-93.0963	-93.1433	-30.0439	-17.4192
-91.3896	-33.6417	-24.3601	-92.5625	-93.0998	-30.3164	-17.4338
-92.3035	-34.6615	-24.9175	-93.0343	-92.0394	-30.813	-17.4757
-93.2442	-36.0904	-25.168	-92.2863	-94.2949	-31.5554	-17.4975
-93.4142	-37.6596	-24.962	-93.114	-94.0317	-32.2095	-17.4883
-92.0556	-39.5275	-24.2718	-93.4143	-94.0075	-32.8065	-17.3996
-93.8854	-40.7847	-23.44	-94.0868	-92.1846	-32.9934	-17.2469
-93.1724	-40.2156	-22.6122	-93.1748	-93.5213	-32.7175	-17.0713
-91.1825	-39.281	-21.9231	-93.1586	-93.5134	-32.5703	-16.9488
-92.7977	-38.7767	-21.3527	-92.4301	-92.5522	-32.2476	-16.9509
-92.1343	-38.3019	-20.724	-92.1711	-92.5807	-32.053	-17.0371
-93.2905	-39.0496	-20.0399	-93.855	-93.5796	-31.9368	-17.1999
-92.462	-39.4874	-19.4016	-93.2437	-92.2579	-31.7558	-17.4672
-93.9047	-40.7238	-18.6401	-93.4621	-93.8513	-31.8947	-17.7453
-92.946	-41.7704	-17.8655	-94.1937	-93.059	-31.9016	-18.0619

-92.8438	-43.4857	-17.0895	-92.5383	-93.6547	-31.932	-18.3176
-92.3782	-45.3348	-16.3167	-93.0683	-93.2799	-32.0969	-18.4968
-92.3398	-48.1462	-15.5895	-93.9873	-92.3276	-32.1219	-18.5779
-92.1359	-51.5975	-14.8736	-91.8136	-91.5675	-32.2437	-18.4482
-91.9172	-51.8644	-14.2383	-93.2254	-91.9185	-32.271	-18.1745
-91.455	-50.4287	-13.6701	-92.7327	-91.7325	-32.3692	-17.8364
-91.8345	-47.9657	-13.2104	-93.5174	-92.6766	-32.2111	-17.5338
-91.8926	-47.3071	-12.8495	-92.3559	-92.6497	-32.1535	-17.274
-91.929	-46.8123	-12.508	-92.933	-92.6151	-31.7603	-17.054
-93.1777	-47.1275	-12.2462	-91.826	-92.3063	-31.5813	-16.894
-92.0249	-45.4087	-12.0394	-92.0714	-92.4395	-30.9085	-16.7965
-90.699	-44.342	-11.8747	-92.743	-92.8521	-30.6176	-16.7259
-91.9057	-41.534	-11.7496	-91.3172	-92.4753	-29.9018	-16.666
-91.7296	-39.4613	-11.6509	-91.6022	-93.0964	-29.3146	-16.5832
-91.096	-37.7535	-11.5693	-91.293	-91.4597	-28.859	-16.4854
-91.6202	-36.1184	-11.5269	-90.7827	-92.1923	-28.2968	-16.4138
-90.9462	-34.6682	-11.5336	-91.2474	-91.4496	-27.7617	-16.3806
-91.1855	-33.5372	-11.5997	-92.7695	-90.1952	-27.3767	-16.4021
-91.736	-32.4688	-11.6827	-91.8941	-91.4633	-27.0076	-16.4309
-90.6095	-31.4109	-11.7861	-91.7734	-92.3159	-26.6037	-16.5076
-90.996	-30.6688	-11.9438	-92.5693	-90.586	-26.3206	-16.6388
-89.7167	-29.7233	-12.1525	-91.517	-92.71	-25.8868	-16.8644
-90.2291	-29.0643	-12.3945	-91.9694	-90.5003	-25.5714	-17.1602
-90.1825	-28.3583	-12.6734	-91.3036	-91.0122	-25.1924	-17.5193
-90.5554	-27.7416	-12.9452	-91.0338	-91.6956	-24.8463	-17.8926
-90.0918	-27.2667	-13.268	-91.3642	-90.5556	-24.6276	-18.383
-89.612	-26.7184	-13.5665	-91.5847	-90.7504	-24.3216	-18.8603
-89.4933	-26.2818	-13.9647	-91.3231	-90.6643	-24.1065	-19.5292
-88.6282	-25.6746	-14.2983	-90.3666	-90.986	-23.7336	-20.152
-88.8465	-25.29	-14.6061	-90.9413	-90.971	-23.5117	-20.7536
-89.1898	-24.8445	-14.8798	-90.6371	-90.5651	-23.2298	-21.2832
-88.9114	-24.3672	-15.1328	-90.7152	-89.1738	-22.8818	-21.7388
-89.4496	-23.9739	-15.2555	-90.2954	-90.6271	-22.6425	-21.9008
-89.1765	-23.5751	-15.3917	-90.8696	-89.0375	-22.4192	-22.0621
-88.7259	-23.1847	-15.3626	-88.7119	-90.1974	-22.2292	-21.7822
-87.8553	-22.7566	-15.3216	-89.943	-89.6406	-21.9643	-21.4785
-88.5916	-22.4305	-15.2753	-90.01	-89.8674	-21.7963	-21.1395
-88.2588	-22.0473	-15.1208	-89.4856	-90.4105	-21.5912	-20.6302
-87.9914	-21.7418	-14.9874	-89.1931	-88.6165	-21.4019	-20.2105
-86.6638	-21.3769	-14.8374	-89.0899	-90.3797	-21.1817	-19.8405
-88.0478	-21.1211	-14.6954	-89.6126	-91.3402	-21.036	-19.4786
-87.88	-20.8574	-14.5886	-88.8672	-88.8482	-20.9004	-19.2392
-87.8991	-20.5358	-14.4815	-89.2271	-88.7707	-20.7258	-19.0281
-87.1088	-20.2983	-14.4428	-88.7203	-88.6419	-20.6202	-18.9404
-88.3038	-20.0032	-14.3914	-88.2631	-89.3812	-20.4752	-18.8624
-87.2734	-19.8252	-14.3952	-89.0277	-88.3563	-20.4032	-18.8968
-87.9969	-19.5999	-14.433	-88.585	-88.8738	-20.2579	-18.9982
-87.5407	-19.4472	-14.4727	-88.965	-88.1936	-20.1922	-19.1131
-86.9905	-19.2654	-14.5996	-87.9738	-87.9927	-20.1228	-19.3259
-87.6463	-19.0869	-14.6484	-88.0921	-87.454	-20.0141	-19.3643
-86.5505	-18.874	-14.8288	-87.5779	-88.5859	-19.9438	-19.5574
-87.0285	-18.6599	-14.9094	-87.5668	-87.8839	-19.8299	-19.4878

-86.9202	-18.517	-14.9944	-88.187	-87.3449	-19.8026	-19.3156
-85.9269	-18.2862	-15.0173	-87.5119	-87.0052	-19.6595	-18.973
-85.9717	-18.1402	-15.0768	-87.498	-87.5372	-19.617	-18.5751
-85.7317	-18.0352	-15.0277	-87.3824	-85.9241	-19.5999	-18.0065
-85.3936	-17.8868	-14.9545	-87.3113	-87.5137	-19.5602	-17.4033
-85.4084	-17.6911	-14.7551	-87.1229	-86.2587	-19.4936	-16.6892
-85.9525	-17.622	-14.5652	-86.6158	-87.6599	-19.5112	-16.076
-85.4574	-17.6083	-14.3232	-86.3291	-86.0985	-19.6607	-15.433
-84.1763	-17.4601	-14.1042	-86.2988	-86.2872	-19.6045	-14.8805
-84.4771	-17.4221	-13.8702	-85.9151	-86.1279	-19.7111	-14.4062
-85.3309	-17.3972	-13.6242	-86.0004	-85.6257	-19.7937	-13.9421
-85.3003	-17.267	-13.4614	-86.47	-85.4435	-19.7585	-13.5832
-83.948	-17.2476	-13.3269	-85.1315	-85.2784	-19.8924	-13.2939
-84.7198	-17.1565	-13.1225	-85.3867	-83.8094	-19.8738	-12.9713
-84.9947	-17.1319	-13.0271	-85.0262	-84.3704	-19.9819	-12.7679
-82.9987	-17.1642	-13.0126	-83.7601	-85.809	-20.0991	-12.6552
-82.8366	-17.2167	-12.9542	-83.7257	-84.4123	-20.2505	-12.5005
-82.8195	-17.1844	-13.0512	-84.6022	-85.0812	-20.3078	-12.5043
-83.7563	-17.3586	-13.189	-84.3232	-84.1675	-20.6221	-12.5338
-83.6307	-17.4047	-13.2902	-84.5934	-82.4174	-20.7292	-12.5523
-81.8111	-17.4088	-13.4601	-84.798	-84.9835	-20.7098	-12.6069
-81.9541	-17.4613	-13.6499	-83.7555	-83.231	-20.8159	-12.6722
-81.6689	-17.5562	-13.9473	-83.5156	-84.8985	-20.9885	-12.8555
-82.1922	-17.6231	-14.328	-82.6778	-84.1165	-20.9945	-13.0771
-81.9067	-17.6725	-14.6896	-83.191	-81.7356	-21.0931	-13.2907
-81.2292	-17.7085	-15.1266	-81.7569	-84.1043	-21.0814	-13.5182
-83.6906	-17.8204	-15.5754	-83.2157	-82.681	-21.0955	-13.7399
-82.8309	-17.9837	-16.0372	-81.9659	-83.6135	-21.1598	-13.9752
-81.1363	-17.9965	-16.7152	-80.9733	-81.9794	-21.2907	-14.3192
-82.0546	-18.0586	-17.2077	-82.4551	-81.1931	-21.1076	-14.4942
-82.7141	-18.0377	-17.8771	-82.2795	-82.0699	-20.989	-14.817
-81.0877	-18.278	-18.2785	-82.6656	-82.3959	-21.0928	-14.928
-80.6628	-18.319	-18.987	-82.335	-82.0264	-21.1054	-15.1968
-82.0818	-18.2867	-19.6039	-82.6523	-82.2538	-20.7894	-15.3832
-81.7009	-18.4997	-20.2144	-80.4435	-81.7357	-20.6896	-15.6034
-80.6404	-18.6815	-20.667	-82.1766	-82.2012	-20.7947	-15.6077
-80.595	-18.7215	-21.091	-81.9953	-82.032	-20.4797	-15.7343
-79.7062	-18.7895	-21.2766	-80.77	-81.4745	-20.3763	-15.6644
-79.5211	-18.8974	-21.4409	-81.0089	-80.5864	-20.2787	-15.6583
-80.3343	-19.1111	-21.5498	-81.3406	-81.2352	-20.1248	-15.6045
-80.1829	-19.2267	-21.6032	-79.6896	-80.5333	-19.8347	-15.5563
-80.4028	-19.3329	-21.1907	-80.045	-80.1527	-19.9339	-15.2867
-79.8058	-19.4703	-20.8395	-80.0342	-79.2901	-19.5815	-15.0856
-79.5344	-19.6755	-20.4882	-80.835	-81.3225	-19.4852	-14.9081
-79.2804	-19.7815	-20.0338	-80.4049	-80.5895	-19.0976	-14.6759
-79.739	-20.1136	-19.6941	-80.2145	-80.3288	-18.9699	-14.5502
-79.07	-20.1368	-19.1249	-82.0133	-80.9271	-18.7899	-14.2966
-79.0797	-20.3621	-18.4867	-79.1635	-80.0664	-18.6159	-13.9876
-77.3009	-20.4348	-17.9412	-78.9576	-79.1395	-18.31	-13.6981
-77.9432	-20.3837	-17.5028	-79.5291	-78.3834	-18.1026	-13.5238
-77.2362	-20.6447	-17.3507	-78.4649	-78.2794	-17.772	-13.5352
-76.577	-20.8026	-17.0001	-79.792	-79.968	-17.5456	-13.3793
-77.8921	-20.8006	-16.8287	-79.7316	-80.0465	-17.4664	-13.366
-78.6263	-21.1119	-16.7495	-79.7586	-79.6262	-17.1779	-13.3837
-78.1789	-21.2049	-16.8291	-79.7061	-79.555	-17.0089	-13.5096

-80.7784	-21.2609	-17.0319	-78.7431	-79.6435	-16.8019	-13.7119
-81.3385	-21.4038	-17.4197	-79.6577	-79.4195	-16.5126	-14.0227
-79.7039	-21.2564	-18.1294	-79.52	-80.8422	-16.3488	-14.4839
-80.9308	-21.4469	-18.5092	-79.3476	-80.4663	-16.1828	-14.6542
-77.783	-21.4908	-19.5853	-80.3477	-78.9574	-15.9166	-15.1873
-76.3582	-21.5581	-20.4409	-78.3607	-79.7351	-15.7889	-15.4997
-76.6663	-21.4009	-21.4773	-79.044	-79.5861	-15.6393	-15.8565
-76.1183	-21.3823	-21.5284	-79.0698	-79.1567	-15.4453	-15.7236
-76.1622	-21.3149	-20.9867	-78.9781	-78.4631	-15.2839	-15.4641
-76.0769	-21.6759	-20.0501	-80.142	-78.9444	-15.3762	-15.0914
-76.2956	-21.5493	-18.949	-79.381	-78.4709	-15.0706	-14.6857
-76.5936	-21.4432	-17.7351	-79.1668	-79.3459	-14.9374	-14.1018
-76.0998	-21.5022	-16.9305	-79.4744	-78.7194	-14.8755	-13.7993
-75.8211	-21.1466	-16.1481	-78.0229	-78.9529	-14.6191	-13.4213
-75.2132	-21.2197	-15.7075	-78.3707	-78.673	-14.5833	-13.2748
-75.7272	-21.1743	-15.3657	-78.1996	-77.521	-14.5015	-13.2477
-75.4331	-20.8096	-15.1682	-77.286	-78.3889	-14.2782	-13.2323
-75.3249	-20.5794	-15.0745	-78.7259	-77.9798	-14.1371	-13.3862
-75.0877	-20.4028	-15.1158	-77.6708	-79.0757	-14.0515	-13.6977
-75.6316	-20.1828	-15.2164	-77.4442	-77.5124	-13.9211	-13.9922
-75.0724	-19.9648	-15.3623	-76.5099	-78.3291	-13.8567	-14.533
-75.5676	-19.6527	-15.6024	-76.9541	-77.39	-13.7143	-15.0134
-75.2829	-19.278	-15.7342	-76.381	-77.59	-13.5639	-15.6258
-74.3949	-18.8628	-15.8837	-77.0728	-76.2903	-13.3928	-16.3714
-74.7485	-18.4722	-16.0552	-76.2137	-77.3636	-13.2559	-17.2767
-74.4191	-18.1222	-16.4083	-76.2264	-76.6664	-13.1543	-18.3989
-74.6234	-17.9281	-16.8994	-77.0901	-75.5359	-13.1865	-20.024
-74.3206	-17.8141	-17.0987	-75.8857	-75.9415	-13.257	-22.2044
-74.3879	-17.2884	-17.4119	-75.8366	-77.1317	-13.0394	-25.0289
-73.7489	-16.8828	-17.4768	-76.0336	-75.3901	-12.9151	-29.595
-74.4099	-16.6194	-17.6116	-75.7227	-76.4915	-12.9223	-38.3625
-73.9825	-16.225	-17.2721	-75.0129	-75.5816	-12.7896	-30.7198
-73.7975	-15.9408	-17.0993	-75.7735	-75.2713	-12.7675	-24.7658
-73.7576	-15.7468	-16.4873	-75.5952	-74.3619	-12.8024	-21.4351
-72.925	-15.3379	-15.686	-74.7108	-74.9105	-12.6865	-18.4723
-73.2865	-15.0696	-15.0011	-74.3091	-74.0229	-12.6691	-16.5805
-73.464	-14.7772	-14.1847	-74.4193	-75.1396	-12.6228	-14.9682
-73.4565	-14.5849	-13.5355	-74.7725	-73.5236	-12.6592	-13.5671
-72.141	-14.1999	-12.9608	-73.8768	-73.6533	-12.5333	-12.4507
-72.8986	-13.9192	-12.4506	-73.7747	-73.2484	-12.5007	-11.4985
-72.3852	-13.6684	-11.864	-73.901	-73.7706	-12.5074	-10.5673
-72.0379	-13.3822	-11.628	-73.4031	-73.9519	-12.4063	-9.98908
-71.6373	-13.1975	-11.1128	-73.8429	-73.0968	-12.4406	-9.22188
-71.6583	-12.9436	-10.5924	-73.2982	-72.954	-12.4115	-8.47772
-71.4438	-12.5388	-10.4396	-73.4973	-73.6795	-12.249	-8.07526
-71.0335	-12.2832	-10.2176	-72.7763	-72.7117	-12.1749	-7.6418
-71.1938	-12.0515	-10.0822	-72.8969	-73.2934	-12.1572	-7.3127
-71.1004	-11.8778	-9.84735	-72.8562	-72.1396	-12.1528	-6.94167
-70.6929	-11.5471	-9.3476	-72.1702	-72.8136	-12.0317	-6.36954
-70.5041	-11.2866	-9.25615	-72.3209	-71.9636	-11.9638	-6.20266
-69.7847	-11.1388	-9.07158	-72.4877	-71.7326	-11.9837	-5.95988
-69.7748	-10.933	-8.75787	-71.8207	-72.4198	-11.9459	-5.69493
-69.837	-10.7569	-8.44599	-71.1265	-72.3111	-11.9551	-5.46277
-68.7935	-10.492	-8.04164	-71.418	-71.9021	-11.8557	-5.17288

J0-J6

S21 (dB)	S12 (dB)	S22 (dB)
-110.949	-116.711	-18.123
-102.598	-112.97	-30.6244
-100.093	-103.739	-30.6072
-99.4105	-99.4256	-29.7297
-96.8242	-95.9962	-28.9747
-93.2383	-93.3506	-28.48
-93.8285	-92.962	-28.1164
-93.1509	-93.1091	-27.8806
-92.9289	-93.0837	-27.7395
-92.3615	-93.4169	-27.5769
-92.4078	-91.8488	-27.4227
-92.2896	-92.7337	-27.1444
-91.9651	-92.2973	-27.0835
-91.799	-91.7229	-26.9027
-92.3565	-93.0574	-26.7454
-91.7249	-93.2289	-26.5521
-94.1296	-92.1844	-26.3691
-92.3548	-92.2337	-26.2546
-92.7078	-91.8981	-26.1671
-91.8567	-91.8235	-25.9853
-92.3363	-93.4257	-25.7338
-91.7716	-93.0442	-25.4858
-95.5268	-92.8576	-25.339
-93.2457	-92.8913	-25.2094
-92.5152	-93.2337	-25.0379
-91.8435	-93.6059	-25.006
-91.6244	-93.2653	-24.8947
-91.9213	-93.1228	-24.8576
-94.104	-94.9826	-24.987
-93.2812	-92.9494	-25.1027
-92.0873	-92.9016	-25.2293
-92.2406	-93.5053	-25.2084
-93.8689	-94.451	-25.0342
-93.3717	-93.0539	-24.8829
-92.7282	-93.1835	-24.5641
-94.1345	-93.0366	-24.2934
-92.8224	-92.1772	-23.939
-92.3936	-93.1659	-23.5897
-93.7089	-93.8525	-23.3492
-91.9924	-91.6657	-23.1068

J0-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-9.14063	-90.0582	-92.7989	-18.1121
-14.9417	-97.8558	-103.569	-32.6024
-19.7478	-96.5381	-96.8501	-31.3242
-23.5288	-93.8147	-93.322	-30.0774
-25.8843	-93.1511	-91.4209	-29.3688
-26.0058	-93.7071	-92.9121	-29.0965
-24.8694	-91.7402	-92.15	-28.99
-23.472	-90.5302	-92.4739	-28.904
-22.2221	-90.4091	-91.7421	-29.1115
-21.1851	-93.1443	-91.2514	-29.162
-20.2673	-94.0923	-91.1426	-29.34
-19.5212	-92.824	-93.1261	-29.4191
-18.9621	-91.8305	-92.1539	-29.6377
-18.4746	-92.3291	-92.9388	-29.8015
-18.0035	-92.0908	-93.2417	-30.2424
-17.5848	-93.6475	-94.1746	-30.5701
-17.2871	-92.4599	-94.1145	-30.8812
-16.9669	-92.6722	-92.5515	-31.2093
-16.7391	-92.0838	-93.4718	-31.6205
-16.5123	-93.1276	-93.6573	-31.9619
-16.3447	-93.0919	-92.9204	-32.6913
-16.2105	-92.8477	-92.93	-33.2282
-16.0501	-93.5234	-92.5109	-33.9077
-15.9598	-95.0779	-94.707	-35.0955
-15.8615	-95.2039	-92.7078	-35.8566
-15.8148	-96.1047	-93.9001	-37.0659
-15.8259	-92.8003	-94.3684	-38.0093
-15.8475	-94.2914	-95.8874	-39.5811
-15.8531	-92.9622	-93.359	-39.3121
-15.8335	-93.2215	-94.6545	-37.8185
-15.7457	-93.6346	-94.6796	-35.7299
-15.5908	-93.881	-93.7454	-34.1663
-15.4133	-93.6866	-94.0337	-33.3872
-15.2557	-94.3985	-94.5672	-32.9065
-15.1871	-93.8219	-93.6671	-33.1461
-15.1834	-93.5516	-94.3144	-33.395
-15.2486	-93.1808	-92.4477	-34.0578
-15.4036	-95.2493	-94.2476	-34.552
-15.5908	-95.5257	-93.4684	-34.4502
-15.8442	-94.6731	-94.0069	-34.3471

-91.8985	-92.7294	-22.8777	-16.0865	-92.5924	-92.6198	-34.2523
-93.4687	-92.5274	-22.749	-16.3373	-93.1151	-91.7792	-34.0914
-90.7455	-89.8736	-22.5633	-16.5697	-92.6572	-92.4377	-33.9396
-92.3097	-92.386	-22.4487	-16.6945	-91.3708	-91.9036	-33.4835
-91.7407	-93.7215	-22.311	-16.6969	-92.4706	-90.7728	-33.0524
-92.1796	-91.399	-22.2053	-16.636	-92.639	-93.2735	-32.4042
-91.9267	-91.3167	-22.0191	-16.5647	-92.0884	-91.9654	-31.9498
-91.6627	-91.2153	-21.8529	-16.483	-91.2867	-91.2265	-31.7
-91.7306	-91.2589	-21.605	-16.44	-91.1808	-92.0498	-31.9615
-92.0347	-91.0847	-21.4114	-16.4411	-92.3052	-91.831	-32.2153
-91.3531	-92.3043	-21.0813	-16.5007	-92.5575	-91.6214	-33.0419
-91.2425	-91.1022	-20.8612	-16.636	-92.6058	-91.979	-33.3658
-91.2213	-91.4393	-20.481	-16.7691	-90.8304	-91.1347	-33.6259
-90.5372	-89.8749	-20.1423	-16.9079	-91.0965	-90.7767	-33.486
-90.8932	-90.9972	-19.842	-17.0102	-92.2691	-90.6292	-32.7324
-90.0865	-91.4543	-19.5068	-17.13	-91.3963	-91.014	-32.2695
-90.2309	-91.993	-19.1924	-17.2281	-90.4925	-92.5044	-32.1773
-90.434	-90.5933	-18.9544	-17.37	-91.0909	-89.7132	-31.8106
-90.4831	-90.2264	-18.7297	-17.4792	-90.6468	-89.8071	-31.1408
-90.4712	-89.3163	-18.4969	-17.5873	-90.0712	-89.7043	-30.2321
-89.2868	-90.3002	-18.3072	-17.7221	-90.6935	-89.739	-29.2168
-90.5477	-89.688	-18.0402	-17.8933	-88.9607	-90.2887	-28.4874
-90.0209	-89.5622	-17.8169	-18.0715	-89.3955	-89.7003	-27.9319
-89.4412	-91.0229	-17.5959	-18.2469	-88.8881	-88.6585	-27.4432
-89.7179	-89.9506	-17.3896	-18.368	-89.9761	-88.8875	-26.9455
-89.2667	-89.6321	-17.2451	-18.5095	-88.4806	-88.6068	-26.6861
-89.7985	-90.1683	-17.0652	-18.5165	-89.2726	-89.1608	-26.0764
-89.1419	-89.4827	-16.9288	-18.5593	-89.0423	-89.6488	-25.6115
-89.5175	-89.3951	-16.716	-18.4692	-88.9819	-88.88	-24.933
-88.9457	-89.2177	-16.5597	-18.2627	-88.9279	-88.3614	-24.5136
-89.2526	-89.5663	-16.3701	-17.9481	-88.3782	-88.417	-24.1225
-88.9584	-89.166	-16.1588	-17.569	-88.5472	-88.6168	-23.7341
-89.191	-88.8998	-16	-17.1121	-88.1906	-87.8952	-23.4102
-88.8663	-88.8813	-15.8455	-16.6694	-87.696	-88.5742	-22.9715
-87.9429	-88.8583	-15.7183	-16.1088	-88.3749	-87.6444	-22.5013
-88.4141	-88.2666	-15.5573	-15.5821	-88.1288	-87.6578	-22.0477
-87.8514	-89.3989	-15.4432	-15.1135	-88.1264	-88.0478	-21.6098
-88.4307	-88.0865	-15.2851	-14.6205	-87.8392	-86.965	-21.1657
-88.8224	-88.4932	-15.1631	-14.1993	-87.025	-88.4427	-20.8564
-88.7769	-89.1583	-15.0322	-13.8081	-87.4983	-87.2889	-20.6215
-88.1232	-87.6546	-14.9392	-13.4291	-87.3923	-86.2334	-20.311
-88.366	-88.0627	-14.8611	-13.1314	-87.1305	-87.2258	-19.9812
-87.9766	-88.4922	-14.7574	-12.8626	-86.7474	-87.4809	-19.5998
-87.437	-87.2399	-14.6911	-12.6497	-87.3242	-86.2677	-19.2884
-88.0517	-87.8615	-14.6277	-12.4567	-86.3431	-87.3957	-18.9679
-88.1043	-87.6173	-14.563	-12.3281	-87.059	-86.7166	-18.7737
-87.593	-87.7862	-14.474	-12.2439	-86.6182	-86.9819	-18.5642
-87.1822	-87.0492	-14.4273	-12.1821	-86.0032	-86.9057	-18.3825
-87.1264	-86.9714	-14.3693	-12.2097	-86.3947	-86.4019	-18.2067
-86.6103	-86.3034	-14.3344	-12.2008	-86.0977	-86.3778	-17.9977
-86.9888	-87.2599	-14.2837	-12.3123	-85.6426	-85.5494	-17.7394
-86.2687	-86.2436	-14.2334	-12.3872	-86.2698	-85.9499	-17.4741

-86.2705	-85.9151	-14.218	-12.5037	-85.8837	-85.7909	-17.2961
-86.3522	-86.3696	-14.1316	-12.6036	-85.4212	-85.3444	-17.0989
-85.9686	-86.5823	-14.1037	-12.7886	-85.533	-84.8743	-16.9388
-86.3771	-86.1897	-14.107	-12.9313	-85.5355	-85.745	-16.8494
-85.798	-85.8335	-14.0967	-13.1008	-85.0284	-85.2012	-16.66
-85.6048	-86.2316	-14.0575	-13.2007	-84.5466	-85.7793	-16.4279
-85.4046	-85.8224	-14.1119	-13.2937	-84.2107	-84.5059	-16.278
-84.7432	-85.4279	-14.2067	-13.3812	-83.908	-83.9705	-16.1819
-85.0935	-85.4701	-14.2006	-13.4756	-84.2336	-83.8523	-15.9904
-84.7245	-85.0679	-14.28	-13.4839	-83.9756	-83.8675	-15.9759
-84.8477	-84.7131	-14.3452	-13.484	-83.2574	-83.4586	-15.8929
-84.565	-85.6404	-14.3399	-13.539	-83.3528	-83.8222	-15.7016
-84.3785	-84.3886	-14.4271	-13.5581	-83.4444	-83.1171	-15.6083
-84.9917	-83.5479	-14.4532	-13.4683	-84.635	-82.1859	-15.421
-83.6541	-84.3797	-14.5319	-13.4321	-82.8501	-83.5369	-15.3117
-84.836	-83.5406	-14.6155	-13.4374	-82.8276	-82.4643	-15.2215
-83.3018	-84.684	-14.7708	-13.3901	-81.4567	-82.9267	-15.1971
-83.0719	-83.2283	-14.8167	-13.4229	-82.2505	-81.8896	-15.1151
-82.5534	-82.9422	-15.0306	-13.4918	-81.4603	-82.88	-15.1856
-82.1004	-82.4374	-15.1376	-13.4642	-81.8927	-82.224	-15.1441
-82.2767	-82.0143	-15.1735	-13.5159	-81.6853	-82.1257	-15.0148
-83.6173	-83.8146	-15.2936	-13.5508	-80.5936	-81.9089	-14.9632
-83.0912	-80.7071	-15.4355	-13.5909	-81.8082	-81.2374	-14.9488
-82.3408	-83.5204	-15.5252	-13.7137	-81.299	-82.082	-14.9062
-81.7711	-82.4502	-15.6141	-13.7714	-81.0993	-81.6906	-14.8685
-81.2456	-82.0118	-15.6843	-13.9137	-81.3442	-81.4764	-14.8542
-82.1985	-81.7977	-15.7723	-14.0296	-81.241	-80.8838	-14.8462
-82.1564	-80.6634	-15.9152	-14.0713	-82.6645	-80.7597	-14.8659
-80.6532	-80.5258	-16.0455	-14.3364	-80.1865	-80.5542	-14.833
-81.5274	-82.0333	-16.0654	-14.4022	-82.5346	-80.221	-14.7516
-80.973	-81.0733	-16.0841	-14.5637	-80.5059	-79.4615	-14.6531
-80.4119	-81.4155	-16.2723	-14.5164	-80.7679	-81.041	-14.759
-80.5107	-79.6243	-16.367	-14.6942	-80.2338	-79.8246	-14.7156
-80.1077	-82.8435	-16.2885	-14.8297	-80.2218	-80.4399	-14.6095
-81.2545	-79.8512	-16.3673	-14.8582	-80.4155	-79.1647	-14.6419
-79.9619	-80.344	-16.5355	-14.9683	-78.9804	-79.7974	-14.7096
-80.1865	-80.2346	-16.4694	-14.9372	-78.4452	-79.0566	-14.59
-80.149	-78.9794	-16.5104	-14.813	-79.608	-80.1394	-14.5264
-80.3639	-79.145	-16.5683	-14.7681	-79.7631	-79.1875	-14.4813
-78.647	-79.9357	-16.6112	-14.6776	-80.25	-79.099	-14.4882
-79.9316	-79.8021	-16.559	-14.6037	-79.1348	-79.079	-14.445
-80.1514	-79.4053	-16.6933	-14.305	-78.4473	-80.1772	-14.4564
-80.4068	-79.024	-16.5829	-14.0534	-79.0443	-79.5696	-14.4108
-79.7119	-79.6038	-16.6342	-13.7721	-79.6135	-80.4835	-14.3812
-79.5602	-77.9955	-16.4962	-13.4965	-78.2977	-79.6684	-14.2823
-80.2544	-78.9606	-16.5586	-13.2877	-78.6318	-77.9481	-14.3025
-78.6906	-79.1844	-16.5383	-12.8765	-77.6042	-77.6081	-14.2132
-78.9358	-80.9899	-16.5413	-12.4911	-77.4276	-78.7765	-14.2135
-78.5032	-78.6692	-16.4105	-12.1031	-77.0859	-78.4363	-14.106
-78.4359	-78.4757	-16.3205	-11.8295	-77.6949	-77.3239	-14.0274
-77.9611	-78.8221	-16.1899	-11.7109	-77.5661	-77.5879	-14.0026
-78.4161	-78.108	-16.1107	-11.4262	-76.8951	-77.2868	-13.9532
-77.1105	-79.3595	-16.1082	-11.2617	-77.5911	-77.9543	-13.888
-78.3018	-78.0502	-15.9848	-11.1113	-77.344	-76.0985	-13.8928
-77.4539	-77.3869	-15.9193	-11.0549	-76.952	-76.5408	-13.838

-77.1427	-77.7011	-15.7992	-11.0322	-76.6435	-76.9891	-13.8092
-77.7126	-78.1277	-15.6122	-11.1156	-76.3847	-76.8763	-13.7484
-77.1995	-76.7916	-15.5314	-11.3713	-76.7522	-76.775	-13.738
-77.8174	-77.1394	-15.4495	-11.4114	-76.7361	-76.375	-13.7252
-78.0378	-77.3109	-15.217	-11.8297	-75.8125	-76.0436	-13.7169
-77.6374	-76.4963	-15.099	-12.2499	-76.5143	-77.1046	-13.6141
-76.7469	-77.6527	-14.9735	-12.951	-76.1602	-76.5519	-13.421
-77.2115	-76.7755	-14.8321	-13.4156	-76.1516	-75.908	-13.4702
-76.7304	-77.4627	-14.6812	-14.092	-75.3802	-76.0372	-13.3918
-77.1814	-77.4609	-14.7743	-14.753	-75.8128	-76.0321	-13.5255
-76.3531	-76.2866	-14.4686	-15.483	-76.6791	-76.1496	-13.4323
-76.1896	-76.5605	-14.349	-15.8404	-75.5358	-75.9769	-13.4218
-76.6162	-76.395	-14.2777	-16.3215	-76.3896	-75.586	-13.4015
-76.0844	-76.1095	-14.0173	-16.26	-76.2067	-75.2601	-13.2539
-75.151	-75.2738	-13.9489	-16.2432	-75.8785	-74.8382	-13.2811
-74.8652	-76.1815	-13.8313	-16.2051	-74.9995	-75.5484	-13.3237
-75.595	-74.9886	-13.5918	-16.015	-74.96	-75.0121	-13.2241
-75.3972	-75.3804	-13.4275	-16.0299	-74.6004	-75.0433	-13.169
-74.8203	-75.2259	-13.2827	-16.2999	-74.1409	-74.7995	-13.2107
-74.5394	-74.8173	-13.1134	-16.5365	-74.5561	-73.785	-13.2305
-74.8616	-74.4786	-13.0145	-17.2444	-74.4074	-73.6608	-13.2502
-74.3206	-74.646	-12.8627	-17.803	-74.3423	-74.2464	-13.159
-74.2369	-73.4979	-12.6509	-18.658	-73.6536	-73.4757	-13.1691
-74.2234	-73.8677	-12.4206	-19.6211	-73.6475	-73.2577	-13.0972
-73.5305	-74.2486	-12.2312	-20.7864	-73.3798	-73.4625	-13.0196
-74.2562	-74.065	-12.0848	-22.0213	-73.5604	-73.3153	-13.1214
-73.4203	-73.3982	-12.0406	-23.7984	-72.9409	-73.3589	-13.207
-73.0253	-73.4047	-12.0142	-25.786	-72.6961	-72.1813	-13.4372
-73.2199	-73.2154	-11.7573	-27.6608	-72.2805	-72.6153	-13.2795
-73.0756	-73.0911	-11.5574	-28.9116	-72.1735	-72.2315	-13.1872
-72.7997	-72.5844	-11.4948	-29.5282	-71.959	-72.8629	-13.2677
-72.4591	-72.5357	-11.3035	-27.4194	-71.7775	-71.7749	-13.1928
-72.3139	-72.2691	-11.2242	-25.5918	-71.3839	-71.8933	-13.252
-72.5924	-72.1967	-11.1485	-23.6483	-71.6483	-71.848	-13.3208
-72.7155	-72.9164	-10.9358	-21.4924	-71.6358	-71.1056	-13.2815
-72.2101	-71.9058	-10.8279	-20.0764	-71.199	-70.9366	-13.2692
-71.5428	-71.5615	-10.7018	-18.7445	-71.1938	-71.2198	-13.2441
-71.8031	-72.0363	-10.6671	-17.5171	-71.0984	-70.7669	-13.2859
-71.8909	-71.9679	-10.4649	-16.5778	-70.9384	-71.0263	-13.2071
-71.2848	-71.2035	-10.3356	-15.7107	-70.5817	-70.256	-13.1748
-71.1839	-70.9915	-10.2616	-14.7881	-70.8935	-70.7091	-13.1911
-71.5222	-71.521	-10.1392	-14.265	-70.4715	-70.1659	-13.1392
-71.4826	-71.2674	-10.0976	-13.5156	-70.2091	-70.2244	-13.1709
-71.4347	-70.7167	-9.98645	-12.6614	-70.1868	-69.2763	-13.2005
-70.739	-71.3072	-9.77429	-12.1373	-69.6483	-69.5095	-13.0994
-71.5405	-71.0779	-9.71202	-11.5988	-69.8626	-69.0266	-13.0064
-70.4935	-71.3769	-9.60912	-11.1277	-69.3587	-68.9185	-13.0466
-70.8731	-70.3761	-9.59535	-10.6128	-69.3046	-69.079	-13.0775
-70.4229	-70.912	-9.41948	-9.86313	-68.7776	-69.0663	-13.0115
-70.2861	-70.7043	-9.3205	-9.48164	-68.7085	-68.5148	-12.9788
-70.7027	-70.2713	-9.30928	-9.03018	-68.6075	-68.4789	-12.9911
-70.4186	-70.4003	-9.24003	-8.57469	-68.3705	-68.1245	-12.966
-70.2302	-70.1561	-9.19504	-8.10845	-68.1154	-68.0223	-13.0097
-70.5138	-69.9775	-9.05498	-7.56694	-67.937	-67.7205	-12.8662

J0-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-8.88764	-92.5242	-91.6812	-17.71
-14.915	-88.0773	-89.1489	-31.7272
-19.3151	-86.9648	-86.5601	-32.5708
-22.5587	-85.3223	-85.26	-31.6287
-24.7197	-84.9368	-84.5902	-30.8031
-25.4753	-85.6497	-84.809	-30.4327
-25.1959	-85.0213	-85.46	-30.2321
-24.3894	-85.847	-86.2144	-30.1016
-23.5031	-86.1739	-86.2725	-30.2174
-22.6722	-86.4158	-86.6418	-30.1966
-21.8548	-87.5341	-87.4155	-30.3033
-21.1609	-87.1127	-87.5187	-30.2811
-20.6611	-87.5498	-87.7071	-30.4828
-20.1995	-88.3038	-87.5668	-30.5847
-19.729	-88.3981	-88.9206	-30.9369
-19.3001	-88.1904	-89.1523	-31.1974
-18.9895	-89.1254	-88.8468	-31.415
-18.6536	-89.7417	-89.5775	-31.6741
-18.4202	-89.2868	-89.7035	-31.9915
-18.1705	-89.319	-89.1419	-32.1978
-17.9824	-90.4119	-90.0531	-32.6845
-17.8327	-90.4381	-90.306	-33.1408
-17.656	-89.6529	-90.3036	-33.7594
-17.5611	-90.3694	-89.502	-34.7695
-17.461	-90.282	-89.5769	-35.4341
-17.421	-90.4459	-90.7861	-36.7268
-17.4389	-90.1104	-90.5949	-37.8739
-17.4827	-90.3553	-89.4036	-39.9138
-17.5067	-90.3461	-90.4017	-43.4602
-17.4997	-91.6087	-89.9855	-48.6018
-17.4125	-90.6556	-89.5331	-49.7749
-17.2604	-90.7059	-90.3472	-45.1963
-17.0854	-91.7903	-90.4878	-43.6987
-16.9613	-88.9251	-89.5882	-42.5184
-16.9618	-89.9934	-90.6348	-43.3305
-17.0447	-90.8838	-90.2051	-44.0211
-17.2054	-91.189	-89.7762	-46.0928
-17.4706	-89.7544	-89.5527	-47.2246
-17.7445	-90.5288	-89.6577	-44.9643
-18.0569	-90.4518	-89.0686	-43.5117

J1-J2

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-4.85728	-88.9905	-88.2253	-18.0677
-18.643	-83.3988	-83.3171	-31.6686
-22.7873	-81.5369	-81.6684	-31.6635
-20.5931	-80.2635	-79.8	-30.6348
-19.55	-79.9442	-80.064	-29.9773
-19.1162	-80.2885	-80.0046	-29.667
-19.0076	-80.5578	-80.4188	-29.4338
-19.0635	-80.6604	-81.0422	-29.3134
-19.2534	-81.5116	-81.39	-29.4038
-19.5343	-81.7696	-81.8778	-29.3705
-19.8022	-82.2185	-82.2919	-29.4574
-20.1096	-82.6472	-82.3197	-29.3661
-20.5375	-83.5487	-82.6154	-29.4701
-20.9244	-83.7113	-83.6312	-29.5028
-21.2041	-84.5973	-84.0151	-29.7541
-21.4067	-84.5486	-84.4453	-29.9224
-21.6352	-85.2803	-84.8305	-30.0073
-21.6817	-86.0011	-85.1515	-30.1536
-21.7365	-87.3254	-86.5903	-30.2676
-21.6508	-86.8234	-86.3302	-30.3473
-21.5377	-87.0151	-86.7218	-30.5547
-21.3944	-87.2981	-86.6074	-30.732
-21.0816	-87.1626	-87.4112	-31.0209
-20.8219	-88.1768	-88.3761	-31.4213
-20.4782	-87.5382	-88.0673	-31.5269
-20.1709	-88.3354	-88.5588	-31.9256
-19.9274	-88.7577	-87.657	-32.1704
-19.6188	-88.8417	-89.0739	-32.7208
-19.2882	-88.8848	-89.0015	-33.5313
-18.9693	-89.2437	-89.1989	-34.2042
-18.6506	-89.6142	-89.3417	-34.7117
-18.2826	-89.2441	-89.9383	-34.506
-17.9834	-90.7418	-89.4486	-33.5768
-17.7689	-90.0818	-90.0342	-32.8466
-17.6793	-91.1352	-90.5102	-32.3206
-17.7168	-90.8334	-90.1947	-32.0749
-17.8481	-91.8785	-91.525	-32.217
-18.0388	-90.459	-90.0948	-32.2985
-18.3448	-91.2386	-89.7009	-32.8298
-18.7661	-90.2557	-90.4377	-33.0673

-18.3099	-90.2648	-89.8621	-42.1343	-19.2342	-90.7872	-91.2395	-33.2686
-18.4868	-89.151	-89.8243	-40.8101	-19.8443	-92.7704	-89.8448	-33.228
-18.5682	-88.9845	-89.3837	-39.121	-20.5419	-91.0317	-91.3846	-33.1987
-18.4423	-88.8538	-89.0423	-37.2399	-21.3594	-91.8715	-90.0521	-33.2996
-18.1717	-89.9177	-88.8391	-35.8141	-22.1449	-91.649	-90.3906	-33.3325
-17.839	-89.3575	-88.2408	-34.529	-23.019	-91.5035	-91.6355	-33.5664
-17.5404	-89.6114	-88.3615	-33.7179	-23.9363	-91.9488	-91.3011	-33.6041
-17.2835	-89.4414	-88.1094	-33.4269	-24.9102	-92.6453	-92.3754	-33.6119
-17.0671	-88.7632	-88.8229	-33.586	-26.1767	-93.3844	-92.1304	-33.0863
-16.9117	-88.1822	-88.4355	-33.8127	-27.7177	-93.479	-91.799	-32.7026
-16.8185	-88.5931	-87.6459	-34.1034	-29.4323	-91.2896	-93.6398	-31.7503
-16.7544	-87.7107	-87.2128	-33.9638	-31.7052	-92.7767	-91.4135	-31.2531
-16.6996	-87.1678	-88.9366	-33.444	-33.5295	-93.8975	-93.5892	-30.4914
-16.6215	-87.0806	-87.909	-32.8667	-34.1075	-93.9404	-92.8143	-29.9944
-16.5259	-87.8223	-87.2543	-31.9691	-32.5746	-92.2283	-92.1722	-29.7729
-16.4557	-87.3378	-86.7388	-31.3099	-30.251	-92.0217	-94.7421	-29.329
-16.4216	-86.6663	-86.0621	-30.8881	-28.3961	-93.7135	-92.135	-28.7174
-16.4428	-86.5032	-87.1387	-30.2687	-26.7573	-93.2992	-94.2073	-28.2275
-16.4695	-86.5816	-86.9671	-29.4344	-25.4275	-92.7921	-92.3696	-27.6655
-16.5453	-86.4068	-86.2612	-28.5126	-24.386	-92.6371	-93.6965	-27.1281
-16.6705	-86.4231	-86.5979	-27.6669	-23.4718	-92.5747	-93.196	-26.8961
-16.8911	-86.0664	-85.6959	-27.0108	-22.7667	-93.3063	-91.9715	-26.3597
-17.1803	-85.8866	-85.6514	-26.5406	-22.1944	-93.3418	-95.063	-26.0001
-17.5316	-85.6721	-86.0401	-26.1064	-21.7216	-93.1142	-92.6645	-25.5817
-17.8983	-85.6815	-85.7577	-25.6709	-21.31	-93.731	-92.9016	-25.1215
-18.3834	-85.1649	-85.2804	-25.4052	-20.9324	-94.1605	-93.1316	-24.6459
-18.8519	-85.5601	-85.5803	-24.898	-20.6997	-93.3935	-92.665	-24.1793
-19.5139	-85.3093	-85.4398	-24.5203	-20.5034	-94.6904	-93.3597	-23.7984
-20.1319	-84.8002	-85.0029	-23.9879	-20.2507	-93.5331	-93.4133	-23.3927
-20.7293	-84.8535	-85.4716	-23.6878	-20.0332	-92.622	-93.244	-23.152
-21.257	-84.7163	-85.2005	-23.395	-19.8554	-93.4683	-93.1405	-22.8661
-21.7119	-84.4284	-84.4861	-23.1011	-19.6918	-92.8777	-93.0678	-22.5638
-21.8737	-84.5932	-84.7088	-22.8408	-19.4842	-93.3021	-92.8768	-22.2478
-22.0349	-84.8955	-84.8133	-22.4843	-19.1522	-94.1901	-93.9422	-21.8779
-21.7578	-84.6452	-84.6082	-22.1006	-19.0161	-92.6635	-94.3191	-21.526
-21.4536	-84.3787	-83.763	-21.7298	-18.732	-93.9409	-92.3319	-21.1845
-21.1144	-83.8561	-84.5859	-21.3995	-18.4051	-93.0452	-92.5011	-20.9838
-20.6038	-84.1302	-83.6257	-21.0502	-18.1617	-92.6008	-92.3716	-20.7771
-20.182	-83.8366	-84.1196	-20.8113	-17.8293	-94.1374	-91.4263	-20.6193
-19.81	-83.7186	-84.0418	-20.6401	-17.4691	-93.8352	-93.176	-20.378
-19.444	-83.3327	-83.469	-20.3756	-17.1186	-92.2746	-93.6938	-20.1768
-19.2043	-83.6893	-83.7704	-20.1155	-16.7633	-91.9838	-91.9563	-19.9204
-18.9897	-82.9557	-83.5362	-19.7913	-16.4181	-93.4488	-91.8689	-19.588
-18.9014	-83.6709	-83.6149	-19.5426	-16.0393	-92.3539	-92.5081	-19.3326
-18.8271	-83.69	-83.3917	-19.2811	-15.6997	-93.3956	-92.3903	-19.0785
-18.8562	-83.0284	-83.7197	-19.1507	-15.3695	-92.2557	-93.3184	-18.9478
-18.9631	-83.5386	-83.6244	-18.9979	-15.028	-92.6831	-92.0806	-18.7848
-19.0837	-82.9826	-83.2533	-18.8846	-14.7025	-93.2606	-91.4452	-18.7013
-19.3025	-82.7978	-83.2113	-18.773	-14.3871	-91.946	-92.8668	-18.5602
-19.3503	-83.0355	-82.9068	-18.6164	-14.1174	-92.395	-92.1192	-18.383
-19.554	-83.0073	-82.7119	-18.4143	-13.7911	-92.1965	-92.4841	-18.1579
-19.4991	-82.6416	-82.2327	-18.1955	-13.5295	-92.5413	-92.585	-17.9306

-19.341	-82.332	-83.0171	-18.0649	-13.2479	-92.4548	-92.8277	-17.8083
-19.0038	-82.5797	-82.335	-17.913	-13.0209	-93.5657	-91.5988	-17.6115
-18.6187	-82.4706	-81.9899	-17.7944	-12.7774	-92.0192	-94.33	-17.5129
-18.0543	-82.186	-81.7282	-17.7497	-12.5918	-93.6038	-92.6816	-17.4407
-17.4517	-82.088	-82.1773	-17.6089	-12.4074	-92.5538	-93.3485	-17.3566
-16.7382	-81.8222	-81.8795	-17.4205	-12.2888	-93.4601	-92.9853	-17.2197
-16.1212	-81.3424	-82.0601	-17.3089	-12.1695	-93.135	-93.3772	-17.1758
-15.4732	-81.5485	-81.3951	-17.2648	-12.0887	-93.0435	-95.0403	-17.1926
-14.9169	-81.2835	-81.2973	-17.0969	-12.0118	-93.3651	-93.607	-17.0564
-14.4393	-81.4411	-81.5088	-17.1433	-12.0159	-93.5149	-93.7513	-17.0473
-13.9699	-80.85	-80.7013	-17.0928	-12.0443	-93.1496	-93.4314	-17.0426
-13.6085	-80.7268	-81.1313	-16.9482	-12.0928	-93.221	-91.8534	-16.9245
-13.3151	-80.6145	-80.6996	-16.9014	-12.1547	-94.0421	-92.949	-16.9328
-12.9879	-79.917	-80.4172	-16.7586	-12.3117	-95.2087	-95.7337	-16.88
-12.7825	-80.2637	-80.5547	-16.7039	-12.4563	-89.5109	-95.0422	-16.9264
-12.6629	-80.9965	-80.8173	-16.6734	-12.6556	-91.3522	-93.0547	-17.0186
-12.5059	-79.444	-80.0634	-16.6924	-12.8731	-94.3128	-95.5936	-17.1439
-12.5047	-79.2342	-79.45	-16.6564	-13.0839	-91.3516	-93.3303	-17.1556
-12.5319	-80.1383	-79.1409	-16.8084	-13.3229	-90.0288	-92.0511	-17.3608
-12.5472	-80.3193	-79.2773	-16.8141	-13.6385	-93.3739	-90.8052	-17.399
-12.5973	-79.0461	-78.8708	-16.7354	-13.9701	-90.4818	-93.4212	-17.3761
-12.6535	-78.4202	-79.5228	-16.736	-14.2214	-89.94	-89.3344	-17.4162
-12.8356	-79.1856	-79.0937	-16.7988	-14.4878	-93.3274	-91.0382	-17.5351
-13.0489	-78.4153	-78.9194	-16.8093	-14.7099	-89.9779	-90.0932	-17.6085
-13.2609	-78.3513	-77.3101	-16.8315	-14.9786	-88.8223	-92.6026	-17.7338
-13.4843	-78.2041	-79.504	-16.8671	-15.1526	-90.2109	-87.854	-17.7891
-13.7042	-78.3403	-78.3695	-16.9064	-15.3412	-95.3144	-88.6321	-17.844
-13.9389	-78.1293	-78.1452	-16.9706	-15.4279	-89.1096	-86.9007	-17.859
-14.2845	-77.8279	-77.6344	-16.9997	-15.4851	-87.7445	-88.1393	-17.7874
-14.4602	-77.1843	-78.2564	-16.9212	-15.5112	-88.9251	-89.46	-17.6257
-14.7859	-78.138	-78.707	-16.8382	-15.5446	-90.1793	-86.5467	-17.4856
-14.9022	-78.008	-77.337	-16.9869	-15.6586	-87.6613	-89.3765	-17.5815
-15.1787	-77.7648	-78.3885	-16.9775	-15.5769	-89.4985	-88.4286	-17.589
-15.3755	-78.33	-78.0417	-16.8482	-15.6028	-87.7693	-89.766	-17.4487
-15.6097	-78.1295	-77.3221	-16.9001	-15.4685	-91.2384	-88.8752	-17.488
-15.6249	-77.1691	-77.6504	-17.0072	-15.5192	-88.9897	-88.7669	-17.608
-15.765	-76.6946	-77.7807	-16.8393	-15.4494	-87.7366	-87.5855	-17.3955
-15.712	-77.558	-77.2045	-16.7513	-15.3987	-90.2413	-87.9562	-17.2692
-15.7196	-77.7174	-77.3242	-16.6959	-15.4021	-85.8322	-88.5896	-17.1505
-15.6785	-76.7039	-77.0076	-16.6737	-15.3841	-86.9602	-90.2713	-17.0629
-15.649	-77.3021	-77.9181	-16.5762	-15.364	-85.8247	-89.8704	-16.9109
-15.3903	-76.9168	-76.7063	-16.6426	-15.4197	-88.86	-85.4541	-16.9876
-15.1965	-76.8536	-77.1478	-16.5396	-15.4695	-86.463	-92.2307	-16.8352
-15.0265	-77.0396	-77.9654	-16.5076	-15.5121	-84.0926	-87.2393	-16.8194
-14.799	-76.909	-76.7962	-16.345	-15.5725	-87.9025	-86.59	-16.5348
-14.6765	-75.9315	-76.729	-16.3173	-15.6621	-86.9255	-89.0589	-16.4556
-14.4176	-76.9579	-76.4995	-16.2058	-15.6793	-86.6797	-86.9382	-16.2378
-14.1034	-76.4814	-76.8591	-16.1673	-15.937	-86.06	-84.2455	-16.0444
-13.8035	-76.8142	-76.2252	-15.976	-16.0354	-84.3363	-86.4696	-15.7655
-13.6175	-76.9524	-77.66	-15.9102	-16.2317	-88.0289	-84.5715	-15.5459
-13.6042	-77.1345	-76.6193	-15.816	-16.2906	-85.1907	-83.8023	-15.2827
-13.4232	-76.2984	-76.4655	-15.7355	-16.4195	-85.1614	-85.6917	-15.1233
-13.3799	-76.9892	-76.8336	-15.712	-16.4579	-83.8283	-83.9548	-14.9817
-13.3527	-76.3854	-76.7679	-15.6291	-16.399	-83.0913	-84.7361	-14.7903
-13.4287	-76.1242	-76.3455	-15.5464	-16.318	-84.0205	-85.121	-14.6109

-13.5713	-76.5417	-76.4595	-15.4615	-16.0758	-83.7854	-83.4077	-14.4097
-13.819	-76.4649	-77.089	-15.3486	-15.799	-84.8914	-83.3155	-14.1342
-14.209	-76.0126	-77.4509	-15.2747	-15.4942	-85.134	-85.9779	-13.9298
-14.3303	-76.3593	-76.9145	-15.2892	-15.2701	-85.3417	-83.6346	-13.7522
-14.8365	-76.9269	-76.9331	-15.1217	-14.8439	-82.724	-83.8424	-13.5679
-15.1912	-76.129	-76.708	-15.0633	-14.5209	-83.8309	-84.4561	-13.4119
-15.6809	-76.5065	-75.9513	-14.8334	-14.0741	-82.4159	-83.5717	-13.2331
-15.7573	-75.5519	-76.7128	-14.7946	-13.6898	-83.2933	-83.8364	-13.0221
-15.7456	-75.7123	-76.0277	-14.6938	-13.3116	-83.0909	-84.122	-12.8871
-15.5748	-76.1174	-76.4797	-14.7627	-13.0761	-82.5222	-81.4266	-12.8725
-15.2761	-76.3997	-75.7747	-14.4918	-12.8315	-82.9537	-82.7942	-12.6419
-14.6706	-74.8458	-74.9271	-14.4428	-12.6651	-82.5012	-83.9376	-12.4962
-14.2556	-75.3435	-75.7823	-14.3705	-12.4438	-81.0964	-82.3875	-12.4018
-13.6963	-75.0737	-75.6738	-14.1138	-12.4517	-82.0954	-82.3776	-12.1666
-13.3405	-75.2166	-75.7446	-14.0585	-12.3987	-81.7602	-81.1958	-12.0965
-13.096	-75.6417	-75.0769	-13.9971	-12.3438	-80.6296	-81.3296	-12.0304
-12.9151	-75.3863	-75.2983	-13.7685	-12.4256	-80.6973	-81.453	-11.8287
-12.9367	-74.149	-74.5358	-13.5989	-12.5321	-81.6441	-81.7869	-11.7235
-13.1841	-74.0913	-74.7603	-13.4838	-12.6265	-80.8233	-81.1336	-11.6273
-13.4939	-75.2154	-74.4675	-13.3458	-12.9136	-79.3407	-81.1319	-11.5288
-14.1206	-74.3791	-73.8283	-13.2475	-12.9598	-80.251	-80.487	-11.4992
-14.7461	-74.5074	-74.5418	-13.078	-13.3577	-80.3843	-80.1852	-11.3349
-15.5583	-74.1412	-74.1148	-12.9135	-13.55	-80.7062	-80.6147	-11.1991
-16.5385	-73.7531	-74.5625	-12.6684	-13.8781	-79.5974	-79.6022	-11.0356
-17.6734	-73.8632	-73.3649	-12.4745	-14.1636	-81.2402	-78.9964	-10.908
-18.9946	-73.0126	-73.9839	-12.3752	-14.7533	-81.0437	-80.0348	-10.839
-20.7831	-74.0235	-73.6019	-12.3057	-15.4437	-79.3626	-79.6244	-10.8255
-23.1065	-73.4924	-73.7766	-12.3361	-15.9117	-80.2407	-80.3707	-10.9028
-25.9995	-73.6528	-73.2696	-12.0686	-16.6391	-79.2182	-78.4144	-10.7038
-30.178	-73.4104	-72.9316	-11.8437	-17.2548	-79.1765	-80.5629	-10.5535
-35.2925	-73.3563	-72.7443	-11.7507	-18.1343	-79.6456	-78.6405	-10.5055
-29.6228	-73.5566	-73.0168	-11.5357	-18.6768	-78.6852	-80.0205	-10.3403
-24.6799	-73.3018	-73.3734	-11.4526	-19.6799	-80.4402	-78.9463	-10.3197
-21.5673	-73.3812	-73.2855	-11.3649	-20.0844	-79.3462	-78.7354	-10.3351
-18.6912	-72.8392	-73.155	-11.1574	-20.391	-79.5847	-79.4935	-10.2347
-16.805	-73.2582	-73.2577	-11.0353	-20.5481	-78.215	-78.9017	-10.1935
-15.1775	-73.2209	-72.7627	-10.8879	-20.3136	-79.162	-79.0937	-10.0967
-13.7448	-73.6612	-73.2121	-10.844	-20.2324	-78.1464	-78.6326	-10.1095
-12.5955	-72.465	-72.9042	-10.6563	-20.2049	-79.0826	-78.8354	-9.96066
-11.6067	-72.6696	-73.6595	-10.5149	-20.1308	-78.1432	-78.3738	-9.8834
-10.643	-73.0109	-72.6365	-10.4106	-19.8157	-78.7486	-78.5406	-9.8464
-10.037	-72.8962	-73.5569	-10.2816	-20.0915	-78.9954	-78.3742	-9.7479
-9.25118	-73.292	-72.7242	-10.2235	-19.8822	-78.7725	-79.6932	-9.74902
-8.48521	-72.9044	-73.0469	-10.1226	-19.6253	-77.1123	-78.2882	-9.66782
-8.06734	-73.0776	-73.0983	-9.91802	-20.0532	-78.7869	-79.0623	-9.47261
-7.6261	-73.0662	-73.1376	-9.80949	-20.3029	-79.2764	-78.1662	-9.34522
-7.29188	-73.2474	-73.3223	-9.71277	-20.6831	-77.7424	-78.9467	-9.22602
-6.91532	-73.1591	-73.1528	-9.67767	-20.5716	-77.9547	-76.762	-9.12246
-6.34517	-73.0544	-73.5577	-9.48379	-20.216	-78.2351	-77.924	-8.93318
-6.17418	-73.0229	-73.4002	-9.36979	-20.2233	-77.9026	-78.1131	-8.80078
-5.93604	-73.1514	-73.2685	-9.30496	-20.0604	-79.7977	-76.7998	-8.73441
-5.67891	-73.5833	-73.53	-9.20454	-19.1619	-78.0313	-78.8558	-8.62488
-5.45441	-73.9364	-73.3229	-9.14347	-18.5061	-77.4086	-77.7503	-8.56414
-5.16177	-73.0824	-73.1979	-8.95509	-18.2379	-78.5517	-79.0538	-8.37082

J1-J3

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-4.84712	-99.1731	-93.3382	-17.8862
-18.613	-90.4475	-89.1247	-32.6376
-22.7682	-90.009	-90.7361	-33.2799
-20.584	-87.9408	-87.3989	-31.8901
-19.543	-87.6424	-87.647	-30.9549
-19.1098	-88.476	-87.5684	-30.4342
-19.0021	-88.4576	-88.4509	-30.0584
-19.0582	-89.4848	-88.2333	-29.7659
-19.2478	-89.2176	-87.8737	-29.8308
-19.5299	-89.4331	-89.3621	-29.7033
-19.7984	-90.0497	-89.8234	-29.7196
-20.1057	-90.7981	-91.1712	-29.6004
-20.5354	-91.5137	-90.1606	-29.5929
-20.9221	-92.3559	-92.2157	-29.6168
-21.203	-92.0084	-92.3878	-29.8617
-21.4064	-93.5583	-92.5853	-29.9979
-21.6349	-94.8033	-94.2385	-30.0792
-21.6832	-94.5583	-94.534	-30.1436
-21.7382	-93.359	-92.3552	-30.2945
-21.6516	-96.1391	-95.3079	-30.5052
-21.5394	-96.865	-95.9043	-30.9273
-21.3967	-97.4299	-99.5856	-31.1102
-21.0819	-97.3019	-98.1227	-31.2815
-20.8231	-97.2135	-96.6363	-31.682
-20.4778	-97.6873	-96.0527	-31.8428
-20.1696	-97.7908	-98.3838	-32.0342
-19.9272	-98.5079	-98.8506	-32.1083
-19.618	-99.0016	-100.751	-32.2462
-19.2869	-102.2	-100.779	-31.6981
-18.9687	-102.346	-104.021	-30.774
-18.6498	-99.0477	-97.702	-29.6328
-18.2812	-101.347	-98.7452	-28.788
-17.9829	-102.625	-100.812	-28.2677
-17.7682	-99.8424	-100.804	-27.973
-17.6783	-100.221	-106.88	-28.1094
-17.7166	-99.7184	-109.168	-28.1542
-17.8487	-102.339	-99.2397	-28.4566
-18.0393	-103.297	-100.408	-28.5961
-18.3454	-99.7476	-103.225	-28.4904
-18.7681	-100.656	-104.857	-28.3911

J1-J4

S11 (dB)	S21 (dB)	S12 (dB)
-4.84028	-93.3979	-100.232
-18.5935	-95.3036	-98.6689
-22.7494	-92.0602	-90.4154
-20.574	-90.6171	-90.6357
-19.5362	-90.2443	-89.5631
-19.1037	-90.8664	-89.9113
-18.996	-90.5307	-90.5313
-19.0533	-91.0789	-90.1042
-19.2437	-91.3743	-90.8959
-19.5264	-91.9368	-92.866
-19.7952	-92.4086	-91.9054
-20.1042	-92.2181	-94.047
-20.5343	-94.5681	-93.8841
-20.922	-93.2358	-94.0508
-21.2042	-94.8566	-95.6661
-21.4079	-95.9581	-95.4967
-21.6368	-97.2445	-95.162
-21.6855	-97.9433	-97.1305
-21.7403	-94.7021	-100.503
-21.6541	-98.0631	-99.1026
-21.5414	-97.8335	-97.1592
-21.3983	-102.156	-101.252
-21.0847	-102.394	-104.493
-20.8246	-105.026	-102.354
-20.4799	-98.1174	-99.2004
-20.1704	-108.045	-107.196
-19.9279	-100.564	-102.599
-19.6187	-106.101	-102.894
-19.288	-104.575	-104.793
-18.9686	-102.613	-100.033
-18.6503	-106.715	-103.971
-18.2817	-104.364	-104.342
-17.9836	-108.2	-103.557
-17.7684	-103.258	-113.001
-17.6784	-102.816	-107.469
-17.7167	-104.328	-107.457
-17.849	-109.176	-100.38
-18.0392	-107.023	-109.244
-18.3468	-103.363	-102.251
-18.7706	-107.074	-105.378

-19.236	-100.382	-104.816	-28.2996	-19.2385	-107.963	-116.843
-19.8478	-102.68	-102.285	-28.2299	-19.8502	-110.289	-110.246
-20.5457	-108.028	-104.257	-28.2296	-20.5484	-102.759	-108.151
-21.3639	-103.824	-100.328	-28.1724	-21.3659	-107.53	-120.049
-22.1515	-102.493	-105.961	-28.0345	-22.1534	-106.688	-113.035
-23.0255	-104.166	-101.184	-27.7904	-23.0274	-121.424	-112.792
-23.943	-108.482	-102.98	-27.6465	-23.9449	-110.015	-107.598
-24.9194	-105.066	-108.664	-27.4638	-24.9207	-110.346	-102.888
-26.1867	-106.576	-101.449	-27.6017	-26.1878	-112.454	-117.466
-27.7286	-104.586	-103.553	-27.657	-27.7323	-111.854	-112.034
-29.4474	-107.959	-103.839	-28.1906	-29.4523	-105.745	-112.093
-31.7348	-105.446	-109.725	-28.4763	-31.7441	-116.473	-109.694
-33.5749	-107.791	-107.227	-29.0626	-33.6024	-111.339	-111.222
-34.1745	-110.409	-118.459	-29.4959	-34.2169	-107.29	-110.973
-32.6356	-107.285	-110.98	-29.6014	-32.6689	-107.056	-111.671
-30.2967	-108.307	-109.229	-29.8615	-30.3233	-110.254	-109.443
-28.4324	-101.94	-106.579	-30.4132	-28.4537	-114.538	-117.069
-26.7849	-109.804	-107.189	-30.7815	-26.8027	-111.853	-107.957
-25.4504	-104.956	-118.567	-31.1634	-25.4637	-107.882	-126.016
-24.4056	-106.146	-109.502	-31.3193	-24.4172	-111.339	-115.481
-23.4869	-109.742	-102.639	-30.9205	-23.4976	-107.092	-136.006
-22.7785	-103.914	-106.572	-31.1111	-22.7867	-117.524	-116.454
-22.2014	-109.834	-114.083	-31.1824	-22.2082	-114.03	-105.725
-21.7256	-107.85	-106.586	-31.0214	-21.7341	-104.6	-120.95
-21.3147	-116.911	-106.595	-31.012	-21.3186	-105.864	-113.115
-20.9337	-107.259	-107.607	-31.2241	-20.9358	-111.61	-104.862
-20.6998	-106.25	-109.241	-30.8214	-20.7009	-111.837	-106.577
-20.5015	-109.02	-111.403	-30.6092	-20.5007	-104.971	-110.466
-20.2464	-105.488	-112.202	-30.0231	-20.2454	-104.182	-114.395
-20.0283	-116.743	-101.453	-29.6781	-20.0272	-109.021	-104.399
-19.8504	-102.117	-104.217	-29.4245	-19.8485	-107.926	-113.093
-19.6861	-108.737	-104.562	-29.1124	-19.6854	-105.545	-104.461
-19.4786	-108.576	-107.808	-28.9053	-19.478	-103.501	-109.786
-19.1487	-104.865	-102.597	-28.5393	-19.1475	-123.664	-104.942
-19.0128	-103.818	-102.799	-28.0062	-19.0116	-109.456	-104.996
-18.7288	-107.213	-108.152	-27.2563	-18.7288	-106.554	-102.219
-18.4035	-103.752	-109.706	-26.7233	-18.4047	-104.627	-103.097
-18.1604	-101.7	-113.05	-26.2982	-18.1639	-101.565	-104.685
-17.8297	-104.076	-109.969	-25.8766	-17.8323	-104.823	-108.998
-17.4699	-108.686	-100.257	-25.6096	-17.4731	-101.634	-98.5164
-17.12	-106.576	-104.805	-25.2629	-17.1229	-102.974	-102.781
-16.7661	-103.182	-107.023	-24.8873	-16.7721	-100.273	-99.3995
-16.4217	-104.796	-105.417	-24.351	-16.4262	-103.825	-102.757
-16.0432	-98.3212	-101.198	-23.8714	-16.0473	-107.419	-109.445
-15.7047	-102.437	-101.003	-23.401	-15.7078	-101.968	-98.9207
-15.3737	-102.885	-101.13	-23.0959	-15.3765	-98.8642	-104.443
-15.0349	-101.86	-102.305	-22.7466	-15.0355	-101.872	-102.978
-14.7046	-99.9912	-102.949	-22.5637	-14.707	-104.498	-105.944
-14.3941	-101.295	-102.38	-22.3578	-14.394	-100.708	-100.194
-14.1222	-101.993	-100.551	-22.0248	-14.1229	-101.992	-99.6378
-13.7949	-99.1535	-98.5162	-21.7167	-13.796	-101.575	-103.316
-13.532	-99.4231	-100.18	-21.3151	-13.5334	-97.8582	-98.6377

-13.2508	-101.863	-101.097	-21.0592	-13.2539	-101.664	-101.098
-13.0228	-102.93	-101.911	-20.7066	-13.0238	-102.988	-103.762
-12.7803	-99.4455	-99.0181	-20.5139	-12.783	-102.808	-97.1183
-12.5938	-100.163	-98.61	-20.3253	-12.5946	-98.0315	-98.1312
-12.4084	-96.6003	-100.994	-20.1522	-12.4084	-104.763	-98.9869
-12.2896	-96.6544	-98.1914	-19.9467	-12.2884	-97.4493	-101.115
-12.1681	-104.306	-99.1384	-19.7904	-12.1687	-100.987	-100.708
-12.0875	-97.9705	-103.162	-19.7783	-12.0893	-99.6497	-99.9601
-12.0152	-98.4199	-96.6599	-19.5116	-12.0147	-99.0341	-103.237
-12.0171	-97.1127	-100.457	-19.4489	-12.0166	-99.0427	-99.8204
-12.0451	-99.184	-96.6766	-19.3823	-12.0433	-102.143	-96.4353
-12.0947	-99.9561	-96.7489	-19.1862	-12.0903	-99.3855	-96.7818
-12.1545	-98.9322	-97.9613	-19.1384	-12.1528	-97.6604	-96.0927
-12.3108	-98.1796	-101.389	-18.9858	-12.3146	-97.4122	-94.9789
-12.4564	-92.3805	-100.946	-18.9762	-12.4545	-101.934	-95.0833
-12.6558	-96.1702	-95.1666	-18.9979	-12.6563	-101.021	-99.6696
-12.873	-96.6722	-95.0546	-19.0536	-12.8731	-97.9054	-94.6682
-13.0847	-116.924	-93.9295	-19.0171	-13.0833	-100.45	-97.2662
-13.3217	-93.8523	-94.7373	-19.1902	-13.3244	-92.168	-95.3133
-13.6368	-94.9155	-106.107	-19.1515	-13.6375	-97.2817	-94.5438
-13.9689	-97.909	-93.6091	-19.0092	-13.9685	-92.295	-92.2408
-14.2216	-95.1867	-94.1745	-18.9509	-14.2208	-92.6523	-96.2995
-14.4877	-94.4622	-98.8577	-18.9893	-14.487	-92.7096	-96.4413
-14.7123	-92.4468	-99.1736	-18.9474	-14.7065	-98.2213	-101.807
-14.9779	-91.9409	-101.456	-19.0103	-14.9785	-93.6568	-90.0869
-15.1534	-91.9435	-93.6281	-18.9933	-15.1528	-94.687	-95.5249
-15.343	-95.309	-92.6388	-18.9868	-15.3433	-95.0454	-91.923
-15.4287	-94.0895	-97.6052	-18.9454	-15.4331	-91.1313	-98.5767
-15.4905	-89.3239	-90.097	-18.8704	-15.4893	-94.5939	-90.9667
-15.5164	-91.2299	-91.6787	-18.6313	-15.52	-96.3893	-89.8046
-15.5514	-94.5346	-99.3075	-18.4604	-15.5537	-91.4321	-89.6461
-15.6625	-90.8423	-89.1069	-18.5403	-15.6679	-92.1426	-93.3309
-15.5832	-91.8619	-90.6284	-18.5653	-15.5885	-93.5015	-95.0432
-15.6139	-93.585	-92.9888	-18.4053	-15.618	-91.205	-96.7756
-15.4787	-91.0297	-88.9407	-18.48	-15.4818	-93.81	-93.8521
-15.5275	-91.0805	-87.4778	-18.6716	-15.532	-95.6921	-93.9395
-15.4584	-95.7874	-91.4996	-18.4973	-15.4653	-91.4491	-88.8029
-15.4062	-92.3265	-93.1616	-18.4334	-15.417	-91.7025	-88.151
-15.4132	-100.817	-97.7669	-18.3894	-15.4171	-89.7616	-90.8777
-15.389	-92.3063	-90.2642	-18.3935	-15.3996	-92.212	-89.5858
-15.3688	-90.9273	-86.395	-18.3263	-15.3803	-91.1694	-89.0778
-15.4268	-91.7076	-90.6629	-18.534	-15.4337	-90.1089	-89.8591
-15.4776	-92.5579	-87.6992	-18.5076	-15.483	-90.1643	-89.1019
-15.5168	-89.9058	-89.1365	-18.6368	-15.5207	-89.5206	-88.6293
-15.5747	-90.5288	-91.5951	-18.4637	-15.5812	-87.5505	-89.7688
-15.6572	-87.2677	-91.1803	-18.5818	-15.6655	-90.202	-90.2514
-15.6847	-93.6725	-87.5741	-18.5046	-15.6826	-88.4496	-88.6786
-15.9342	-89.3324	-91.3942	-18.4884	-15.9386	-90.0083	-87.6107
-16.0337	-90.2488	-88.0064	-18.3534	-16.0316	-87.9886	-89.8229
-16.2293	-88.2454	-87.3583	-18.2648	-16.2298	-86.3101	-87.6525
-16.2862	-85.2819	-88.7204	-18.2057	-16.2884	-86.5836	-90.9598
-16.4164	-89.5265	-87.2564	-18.2179	-16.4171	-85.9982	-87.9363
-16.453	-87.7091	-89.7276	-18.2546	-16.4566	-88.4382	-85.9005
-16.3941	-89.9842	-86.2025	-18.2694	-16.3992	-87.7669	-87.2199
-16.3212	-88.8895	-91.9742	-18.2677	-16.3224	-86.4608	-87.5829

-16.081	-87.7567	-86.6723	-18.2195	-16.0886	-87.8084	-87.6498
-15.8108	-85.3572	-88.1673	-18.1253	-15.8132	-86.4737	-84.78
-15.4988	-86.7463	-88.4777	-17.9993	-15.5115	-84.4512	-87.9666
-15.2838	-84.1134	-86.3854	-18.0453	-15.2953	-87.1924	-86.458
-14.854	-84.6767	-91.1323	-17.9979	-14.8663	-84.4027	-85.7635
-14.5318	-86.4998	-83.8753	-18.0574	-14.5429	-83.9135	-84.4789
-14.0846	-87.7828	-88.3212	-18.026	-14.095	-84.2223	-88.5911
-13.696	-87.3631	-88.261	-17.9659	-13.7046	-84.5503	-87.3054
-13.3203	-86.7564	-85.2874	-17.971	-13.3273	-84.4413	-82.9443
-13.0784	-88.9951	-86.6429	-18.2592	-13.0825	-86.2423	-84.4301
-12.8299	-86.3452	-85.716	-18.1248	-12.8315	-87.2573	-84.4662
-12.6612	-84.829	-87.284	-18.126	-12.6604	-86.3412	-84.6563
-12.4363	-87.5335	-87.691	-18.2148	-12.4371	-83.7881	-87.5058
-12.4459	-85.065	-84.4793	-18.014	-12.4436	-86.8021	-87.0059
-12.3893	-83.9819	-83.4874	-18.1124	-12.3923	-86.5886	-83.7983
-12.3401	-83.4727	-85.3523	-18.1777	-12.3388	-84.9575	-83.0253
-12.4252	-85.7329	-85.4486	-18.035	-12.4262	-83.7047	-85.7831
-12.5301	-84.3451	-84.8512	-18.0093	-12.5328	-85.5698	-85.442
-12.6334	-83.8757	-85.6473	-17.9622	-12.6364	-83.3477	-83.3515
-12.9226	-82.8126	-84.0718	-17.9197	-12.9335	-81.8308	-82.7924
-12.974	-83.6522	-83.103	-17.9359	-12.984	-83.3195	-83.0991
-13.3756	-84.4645	-82.5861	-17.8221	-13.3908	-84.8649	-84.219
-13.5714	-82.2342	-83.3602	-17.6716	-13.5863	-82.9947	-83.1262
-13.8999	-82.0006	-82.3258	-17.5235	-13.9165	-82.8404	-81.141
-14.1893	-82.6553	-80.7144	-17.3607	-14.2054	-80.0472	-85.0646
-14.7865	-81.6304	-82.6709	-17.339	-14.8008	-82.5514	-82.2826
-15.4618	-81.5722	-81.1862	-17.4108	-15.4792	-80.39	-81.2106
-15.9335	-81.6515	-80.1092	-17.5993	-15.9488	-80.9087	-81.0636
-16.6573	-80.7601	-80.6499	-17.397	-16.6741	-81.2107	-81.3359
-17.268	-80.1768	-80.5391	-17.241	-17.2833	-80.6645	-79.5943
-18.1421	-80.7195	-79.2059	-17.1832	-18.1542	-81.1738	-80.2276
-18.6785	-80.6784	-79.1372	-17.0805	-18.6905	-79.2844	-79.6778
-19.6813	-79.3606	-78.444	-17.0981	-19.6872	-80.2211	-79.2092
-20.0801	-78.6262	-78.6551	-17.2252	-20.0849	-79.9617	-79.6635
-20.3823	-77.7832	-80.8331	-17.0765	-20.3835	-78.5751	-77.7223
-20.5414	-78.898	-78.4514	-17.0322	-20.5427	-78.9317	-77.7423
-20.3143	-78.5095	-78.7123	-16.9266	-20.3113	-78.1329	-78.9645
-20.2294	-79.081	-78.3782	-16.9142	-20.2325	-77.518	-78.4343
-20.2057	-78.6616	-78.2314	-16.6169	-20.2138	-78.3265	-77.0704
-20.1322	-78.0823	-78.1212	-16.4023	-20.144	-77.0467	-77.7683
-19.818	-77.2503	-77.2445	-16.1786	-19.8314	-77.1722	-77.3977
-20.1014	-77.6194	-78.1704	-16.0022	-20.1152	-75.6935	-76.6951
-19.8937	-77.5982	-77.8516	-15.8622	-19.9062	-77.1503	-77.0865
-19.6384	-77.6227	-77.4305	-15.6497	-19.6502	-76.661	-76.1758
-20.0681	-78.2765	-76.8669	-15.175	-20.0808	-76.4621	-76.2785
-20.3195	-77.3712	-78.1168	-14.9558	-20.3287	-75.9908	-76.2202
-20.7005	-77.194	-77.1556	-14.6178	-20.7125	-75.849	-75.7374
-20.5874	-77.1835	-77.571	-14.4496	-20.5968	-75.7609	-75.3291
-20.2386	-76.3503	-76.3232	-14.0545	-20.248	-75.0135	-74.9399
-20.2449	-77.2927	-76.9086	-13.7686	-20.2476	-75.1437	-74.8973
-20.0633	-76.2184	-76.4118	-13.6538	-20.0572	-74.8747	-74.842
-19.1675	-77.5644	-76.856	-13.5466	-19.1586	-75.1044	-74.4859
-18.5009	-76.5498	-77.0111	-13.3775	-18.4982	-74.5262	-74.9424
-18.2316	-76.1572	-76.2036	-13.1614	-18.232	-75.1839	-74.2653

J1-J5

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.756342	-4.834568	-93.324333	-98.907814	-18.553755	-4.8261552
-31.975492	-18.574678	-93.700676	-95.480354	-30.927326	-18.550264
-32.060112	-22.730835	-92.52993	-91.952354	-29.593367	-22.703499
-30.879015	-20.564861	-92.269524	-90.889801	-28.609434	-20.550749
-30.122065	-19.528473	-90.29203	-90.444153	-28.00852	-19.518236
-29.748009	-19.097155	-90.144974	-90.57943	-27.717098	-19.08889
-29.47699	-18.990641	-91.728523	-90.190315	-27.519323	-18.983208
-29.329424	-19.048229	-93.49881	-91.256561	-27.431187	-19.04147
-29.425438	-19.238792	-91.905106	-91.937485	-27.529655	-19.234106
-29.391943	-19.522129	-92.909874	-93.56987	-27.538424	-19.518814
-29.480574	-19.792246	-93.865532	-93.899788	-27.631336	-19.790438
-29.397024	-20.10252	-94.987053	-95.371597	-27.583029	-20.101486
-29.520712	-20.53352	-93.898117	-95.514816	-27.731817	-20.534109
-29.575756	-20.922482	-94.295448	-96.089264	-27.795328	-20.925337
-29.850769	-21.205635	-97.424637	-96.45108	-27.999964	-21.208967
-30.042532	-21.410418	-94.820038	-95.768181	-28.144735	-21.414639
-30.174147	-21.640697	-98.402267	-97.726936	-28.249388	-21.645615
-30.389238	-21.689756	-99.251053	-97.977303	-28.449169	-21.695597
-30.614147	-21.746321	-98.399742	-101.11026	-28.665472	-21.75145
-30.796741	-21.659405	-97.744019	-96.359573	-28.801153	-21.664995
-31.112608	-21.546896	-98.174355	-99.540649	-28.964556	-21.552185
-31.348289	-21.402311	-99.85923	-100.21506	-29.068977	-21.408054
-31.704525	-21.086918	-103.61861	-101.19131	-29.276258	-21.092026
-32.255859	-20.826385	-102.88546	-105.77647	-29.583548	-20.829891
-32.511208	-20.480949	-109.48545	-102.37738	-29.715338	-20.48303
-33.118385	-20.170704	-99.894371	-103.40768	-30.119942	-20.173157
-33.562313	-19.927773	-99.086975	-101.95158	-30.361479	-19.929592
-34.490749	-19.617121	-108.34631	-106.94733	-30.806602	-19.618294
-35.908455	-19.286146	-112.51192	-102.94294	-31.538147	-19.287443
-37.567219	-18.967276	-101.29588	-102.56657	-32.215294	-18.9671
-39.691357	-18.648148	-108.49081	-100.3374	-32.907074	-18.647936
-40.974003	-18.280384	-107.45494	-109.13614	-33.144978	-18.279819
-40.031788	-17.982046	-104.4239	-104.41467	-32.824787	-17.98225
-38.778824	-17.767824	-104.67995	-110.58706	-32.572403	-17.766983
-38.209877	-17.678419	-112.55351	-101.85324	-32.142868	-17.677664
-37.798664	-17.716814	-104.81547	-102.38914	-31.902615	-17.716122
-38.620846	-17.848703	-107.87962	-115.74922	-31.739443	-17.848642
-39.226341	-18.039576	-110.36739	-104.10997	-31.570948	-18.03969
-40.623066	-18.347548	-107.53762	-108.10784	-31.744911	-18.347309
-41.646164	-18.770514	-111.98938	-104.76823	-31.776638	-18.770775

-43.203438	-19.238987	-109.46516	-131.36052	-31.83234	-19.237957
-44.515137	-19.850065	-111.03757	-116.04582	-31.932661	-19.85013
-46.859306	-20.548988	-109.62058	-108.3559	-31.911974	-20.547819
-50.141666	-21.365091	-119.53336	-106.97913	-31.964567	-21.36466
-51.113621	-22.153563	-110.16483	-108.74706	-31.946241	-22.152655
-50.255959	-23.027227	-107.24037	-106.06079	-32.012321	-23.026175
-47.857578	-23.944483	-106.48759	-107.47848	-31.864853	-23.944113
-47.429447	-24.92004	-111.16403	-107.40357	-31.846792	-24.920467
-47.301426	-26.188732	-111.01449	-108.91651	-31.46339	-26.192539
-48.048428	-27.734375	-116.0716	-108.09737	-31.313459	-27.742628
-46.225868	-29.45639	-107.17332	-106.10548	-30.640577	-29.471952
-45.059891	-31.753805	-125.44958	-117.0939	-30.345221	-31.789505
-41.916977	-33.618935	-107.46574	-102.4696	-29.654301	-33.688309
-39.811501	-34.24511	-111.00088	-103.48177	-29.097935	-34.335781
-38.137241	-32.697994	-108.2586	-110.51825	-28.668987	-32.766647
-36.439346	-30.345375	-128.87964	-108.92995	-28.122349	-30.38781
-34.9048	-28.470839	-109.72125	-109.96201	-27.589098	-28.500231
-33.709328	-26.817392	-112.97434	-105.50248	-27.212177	-26.835855
-32.551517	-25.477503	-110.81876	-112.21613	-26.856403	-25.491478
-31.4468	-24.426914	-110.791	-112.04637	-26.462843	-24.437452
-30.755087	-23.506304	-124.81026	-113.14976	-26.224346	-23.513437
-29.850027	-22.794519	-113.09437	-106.91205	-25.804718	-22.798227
-29.200558	-22.214218	-111.56927	-107.04095	-25.490187	-22.217611
-28.434536	-21.739002	-105.55347	-110.67768	-25.078457	-21.739784
-27.727242	-21.324186	-107.74874	-107.36839	-24.7146	-21.326038
-27.14768	-20.942038	-125.89279	-113.52534	-24.452051	-20.941528
-26.537237	-20.706665	-109.01765	-102.77839	-24.125721	-20.706711
-26.08658	-20.508047	-106.45403	-113.81384	-23.917204	-20.507328
-25.550774	-20.250639	-110.11941	-114.47694	-23.588985	-20.251608
-25.241186	-20.031319	-107.93259	-109.64269	-23.416265	-20.031559
-24.851734	-19.85342	-104.42352	-106.44281	-23.183706	-19.851868
-24.402132	-19.690443	-104.31004	-108.65421	-22.884295	-19.688391
-23.984232	-19.479679	-105.55119	-104.59336	-22.657297	-19.4823
-23.534657	-19.149658	-108.83971	-103.31236	-22.425276	-19.151089
-23.110109	-19.016924	-104.82259	-103.50298	-22.220886	-19.017626
-22.671349	-18.734583	-104.78783	-107.91795	-21.948164	-18.73613
-22.381168	-18.410017	-107.77196	-105.16648	-21.797838	-18.409719
-22.087545	-18.16703	-105.395	-101.7278	-21.636839	-18.170223
-21.84866	-17.83802	-108.6956	-109.60816	-21.500134	-17.839169
-21.501095	-17.479788	-104.13113	-98.483978	-21.317177	-17.481152
-21.251406	-17.130802	-102.61097	-105.88058	-21.205521	-17.131857
-20.95529	-16.777115	-105.61492	-102.38831	-21.068317	-16.779678
-20.589884	-16.43141	-100.97307	-109.42897	-20.868511	-16.433062
-20.309929	-16.053181	-99.952507	-104.32598	-20.723507	-16.055178
-20.013968	-15.713246	-104.3959	-102.28131	-20.557695	-15.713883
-19.86269	-15.382143	-101.61131	-99.619949	-20.475559	-15.382815
-19.654121	-15.040965	-100.92142	-104.1954	-20.336031	-15.039496
-19.53546	-14.709963	-101.64378	-101.57879	-20.300764	-14.708892
-19.362968	-14.398086	-104.07531	-105.28373	-20.259008	-14.396455
-19.167328	-14.123341	-102.99104	-100.60667	-20.15259	-14.122961
-18.91691	-13.796709	-103.1256	-100.10188	-20.060061	-13.796343
-18.664486	-13.534796	-101.82279	-106.6526	-19.916637	-13.532096

-18.503443	-13.253704	-100.86518	-99.534851	-19.857525	-13.250444
-18.253452	-13.023892	-102.34794	-103.6369	-19.681166	-13.020741
-18.104586	-12.782188	-101.64281	-98.885162	-19.638279	-12.77988
-17.973833	-12.595446	-102.72293	-98.573563	-19.608608	-12.591712
-17.845154	-12.408145	-103.23586	-98.615807	-19.57777	-12.407382
-17.664267	-12.287953	-99.172157	-100.39989	-19.536964	-12.287908
-17.60751	-12.164642	-100.03368	-106.69599	-19.5695	-12.166822
-17.577747	-12.08361	-100.65578	-99.165146	-19.723928	-12.088235
-17.405802	-12.013193	-98.882515	-104.74834	-19.637234	-12.013172
-17.315693	-12.014368	-98.751549	-102.77972	-19.681307	-12.017053
-17.27363	-12.043308	-100.64407	-98.208801	-19.752636	-12.044543
-17.123941	-12.090449	-102.44076	-98.745949	-19.697083	-12.090701
-17.101738	-12.150405	-101.275	-100.73827	-19.810398	-12.153624
-17.048225	-12.308496	-97.7276	-101.44379	-19.81439	-12.3108
-17.069605	-12.454496	-101.62881	-97.736	-19.967211	-12.456861
-17.148516	-12.653291	-93.157051	-95.793121	-20.146189	-12.656281
-17.229237	-12.870362	-95.75322	-95.766563	-20.323881	-12.872393
-17.188377	-13.080654	-101.77881	-97.809944	-20.392956	-13.083906
-17.345383	-13.318602	-95.855247	-102.45358	-20.716364	-13.319516
-17.357061	-13.635584	-93.274071	-97.805397	-20.801783	-13.634283
-17.375456	-13.965669	-95.609306	-101.87663	-20.7665	-13.964645
-17.45001	-14.217625	-92.676186	-101.40222	-20.852058	-14.217692
-17.585133	-14.48494	-90.900917	-95.065674	-21.03256	-14.484433
-17.721016	-14.708204	-93.602592	-89.130241	-21.068289	-14.705746
-17.84363	-14.976721	-93.044739	-94.422073	-21.222704	-14.975368
-17.911465	-15.151504	-92.870758	-102.96442	-21.242569	-15.150797
-18.015554	-15.341784	-94.729126	-101.18609	-21.275335	-15.341177
-18.122265	-15.429483	-97.392868	-93.06324	-21.300814	-15.426583
-18.04517	-15.488752	-96.167473	-97.38752	-21.349537	-15.488707
-18.062849	-15.515062	-91.178627	-89.668343	-21.093769	-15.519701
-18.042076	-15.553432	-91.278931	-90.447914	-20.915022	-15.557506
-18.301146	-15.670757	-88.448441	-91.277008	-20.981611	-15.673573
-18.396469	-15.590844	-96.829506	-95.248505	-20.978195	-15.595531
-18.392401	-15.622631	-94.236565	-96.075935	-20.681446	-15.628824
-18.610357	-15.482837	-91.650429	-91.595932	-20.615686	-15.491272
-18.760033	-15.536996	-93.309639	-91.096848	-20.770126	-15.546349
-18.741137	-15.467943	-92.557564	-93.233284	-20.460032	-15.477879
-18.741936	-15.417312	-92.189629	-97.528015	-20.337219	-15.425796
-18.811489	-15.423272	-90.356468	-90.494934	-20.206003	-15.434573
-19.00955	-15.401285	-91.470322	-89.053558	-20.018776	-15.412319
-19.174015	-15.381662	-94.182816	-95.801643	-19.696648	-15.393366
-19.339516	-15.438783	-94.578735	-90.725845	-19.793747	-15.449059
-19.548805	-15.487813	-92.305946	-89.905281	-19.476004	-15.497059
-19.789515	-15.52732	-91.101357	-88.598427	-19.414371	-15.533433
-19.873419	-15.588196	-93.095711	-92.124374	-19.03105	-15.589955
-20.168335	-15.669438	-88.71833	-89.587608	-18.945164	-15.673483
-20.150091	-15.686426	-88.613327	-89.679276	-18.752453	-15.688567
-20.327337	-15.941321	-86.892647	-90.444695	-18.54944	-15.937027
-20.395597	-16.037735	-93.724297	-88.560158	-18.235678	-16.036037
-20.346895	-16.232616	-88.79464	-93.670013	-17.994528	-16.224531
-20.617022	-16.289701	-91.369881	-90.46302	-17.645819	-16.282356
-20.849966	-16.418243	-88.965523	-90.513565	-17.430622	-16.411282
-20.837997	-16.457272	-89.162003	-87.0737	-17.351994	-16.451149
-21.167152	-16.4018	-88.874245	-89.950722	-17.101458	-16.397194
-21.254511	-16.325359	-90.674103	-86.050766	-16.947603	-16.32185

-21.262144	-16.092844	-86.776962	-88.320061	-16.772408	-16.094135
-21.354172	-15.821314	-86.627144	-85.057838	-16.47484	-15.819192
-21.127737	-15.514763	-88.213257	-84.992142	-16.295055	-15.520589
-21.262932	-15.304849	-86.467606	-87.120277	-16.12215	-15.304914
-21.334118	-14.874888	-88.828674	-87.430412	-15.87232	-14.888162
-21.427612	-14.552579	-90.578522	-88.188599	-15.763537	-14.5669
-21.380529	-14.103254	-88.617668	-88.117188	-15.612052	-14.119981
-21.365503	-13.715006	-87.150856	-89.928192	-15.432034	-13.725823
-21.331787	-13.329981	-87.65976	-92.511436	-15.283023	-13.342853
-21.647764	-13.086271	-88.0793	-89.878731	-15.369989	-13.093451
-21.599977	-12.83278	-89.358238	-86.822243	-15.098942	-12.841596
-21.445601	-12.660624	-87.122292	-86.109306	-14.961388	-12.664126
-21.513857	-12.434034	-90.059074	-91.579857	-14.880383	-12.434911
-21.176956	-12.439145	-84.406517	-86.150566	-14.60705	-12.441976
-21.269297	-12.388865	-87.499153	-87.610985	-14.5517	-12.386939
-21.24626	-12.338341	-88.483208	-92.209297	-14.46199	-12.33819
-20.921612	-12.425969	-85.259857	-87.610161	-14.229702	-12.429258
-20.703203	-12.537024	-86.645294	-87.591995	-14.089751	-12.542935
-20.464552	-12.646455	-88.151184	-87.48481	-13.975518	-12.650895
-20.214235	-12.944281	-86.181129	-85.088661	-13.85193	-12.954874
-19.980659	-12.995053	-86.218262	-84.562775	-13.785693	-13.010854
-19.586042	-13.403563	-85.763329	-85.872101	-13.608666	-13.425615
-19.175541	-13.600796	-87.219887	-86.26638	-13.439578	-13.62309
-18.748283	-13.929712	-84.869453	-84.810738	-13.254323	-13.95837
-18.335268	-14.220747	-85.285835	-86.070488	-13.100942	-14.249429
-18.01696	-14.812688	-83.026115	-83.804306	-13.002044	-14.84112
-17.842651	-15.501213	-83.398605	-84.110085	-13.020462	-15.529922
-17.761923	-15.970019	-84.349174	-83.520416	-13.099057	-15.995792
-17.238831	-16.693613	-82.448509	-83.226357	-12.876667	-16.722591
-16.838194	-17.299753	-82.255028	-80.944649	-12.755943	-17.328243
-16.542675	-18.175308	-85.237434	-82.06871	-12.744705	-18.201748
-16.185171	-18.707226	-81.585999	-81.415154	-12.613388	-18.733328
-15.955092	-19.709793	-82.397072	-83.086166	-12.623505	-19.725729
-15.838875	-20.106064	-81.810562	-80.703926	-12.676791	-20.125925
-15.502429	-20.399218	-80.547203	-81.119568	-12.600171	-20.424023
-15.268422	-20.565594	-80.668022	-80.463631	-12.602426	-20.570974
-14.984753	-20.323729	-80.075966	-79.585358	-12.561297	-20.342813
-14.805473	-20.254763	-79.823479	-80.535072	-12.608173	-20.26313
-14.417845	-20.232759	-78.925735	-80.47316	-12.500113	-20.248911
-14.135225	-20.162706	-80.227615	-79.062057	-12.481262	-20.177244
-13.883701	-19.852316	-79.215446	-78.469955	-12.50774	-19.864195
-13.602753	-20.141758	-77.772949	-78.187721	-12.434793	-20.146656
-13.429337	-19.925966	-77.484299	-77.395935	-12.487747	-19.936209
-13.159046	-19.670107	-77.64296	-78.507172	-12.462233	-19.680777
-12.721968	-20.104006	-77.619492	-76.984016	-12.29423	-20.111469
-12.418265	-20.35482	-77.729431	-76.873688	-12.196766	-20.355364
-12.121778	-20.731657	-77.239426	-77.956871	-12.157698	-20.730352
-11.8717	-20.608644	-77.358856	-76.567093	-12.113258	-20.603361
-11.502383	-20.249071	-76.742645	-76.726234	-11.966387	-20.242699
-11.19944	-20.264454	-77.226677	-76.630463	-11.878574	-20.253757
-11.032672	-20.055578	-77.13369	-76.262215	-11.885066	-20.056454
-10.822431	-19.169281	-76.435486	-76.271301	-11.835455	-19.145649
-10.63314	-18.487743	-75.800781	-75.784378	-11.827241	-18.463587
-10.351748	-18.216444	-75.601685	-75.427002	-11.710683	-18.205231

J1-J6

S21 (dB)	S12 (dB)	S22 (dB)
-97.077995	-94.636284	-18.111925
-96.020439	-93.299202	-32.489269
-95.938919	-96.415703	-31.384005
-97.084351	-94.878532	-30.127777
-95.21122	-97.922302	-29.403948
-96.658157	-96.950661	-29.090725
-99.612022	-98.457558	-28.93083
-97.744637	-96.121979	-28.859905
-98.137436	-99.041672	-29.102728
-97.606949	-99.662178	-29.196705
-102.49617	-102.38441	-29.363134
-105.94973	-100.28631	-29.385477
-99.828293	-103.42245	-29.642927
-102.92887	-102.00766	-29.831142
-104.41254	-104.19828	-30.261484
-108.79228	-107.16792	-30.562744
-107.10218	-110.74516	-30.891876
-108.68208	-109.54149	-31.28632
-110.61681	-105.07173	-31.815443
-111.89505	-109.37851	-32.218773
-108.40983	-107.84646	-32.8391
-120.00224	-103.35917	-33.23999
-117.42826	-106.83765	-33.862984
-106.80846	-107.14776	-35.043041
-106.96899	-104.57089	-35.953262
-103.15697	-106.27802	-37.357418
-110.62822	-110.57985	-38.367027
-122.63766	-106.15193	-40.014805
-131.14641	-111.8125	-39.71854
-113.35302	-133.84129	-38.054047
-122.16853	-114.717	-35.975712
-120.33325	-109.75771	-34.615784
-122.24901	-109.70853	-33.88842
-139.0934	-113.59349	-33.325901
-110.52769	-106.86462	-33.431408
-107.20747	-119.10112	-33.551739
-108.93875	-106.9273	-34.130245
-110.89563	-107.45649	-34.734123
-109.87743	-112.61356	-34.906452
-109.21737	-105.60547	-35.037113

J1-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-4.8220558	-96.093338	-100.02168	-17.698097
-18.537189	-93.74453	-106.43967	-31.702562
-22.687546	-93.63208	-93.799706	-32.554596
-20.541388	-91.246933	-91.915825	-31.595125
-19.511793	-90.869148	-90.210983	-30.812904
-19.083248	-89.440353	-89.632454	-30.427044
-18.978456	-89.542862	-89.694405	-30.221088
-19.038452	-89.855087	-89.482002	-30.064262
-19.231609	-90.095795	-88.695953	-30.185526
-19.517818	-89.718994	-90.069748	-30.182367
-19.790503	-89.500801	-89.66687	-30.277527
-20.10309	-90.220024	-88.69574	-30.265692
-20.537708	-90.397499	-89.297058	-30.446957
-20.928869	-89.58255	-90.780907	-30.538881
-21.213959	-90.454094	-90.189087	-30.912073
-21.4212	-90.485619	-89.70591	-31.191118
-21.652048	-91.129585	-91.044479	-31.429867
-21.701967	-90.541901	-91.169319	-31.718561
-21.756969	-89.735458	-89.804893	-32.094933
-21.670584	-89.983139	-91.916397	-32.313667
-21.556524	-92.259987	-90.906845	-32.794151
-21.411613	-92.104668	-91.050461	-33.2085
-21.095613	-92.202621	-91.525238	-33.824535
-20.832003	-91.510979	-91.243454	-34.872643
-20.484659	-91.981644	-91.317795	-35.569908
-20.173925	-92.537735	-92.343315	-36.90337
-19.928652	-91.589073	-92.510239	-38.081161
-19.618446	-93.304268	-93.132858	-40.21088
-19.287035	-92.317047	-91.895348	-43.908382
-18.968039	-93.014091	-92.482666	-48.984882
-18.649075	-92.51712	-93.17308	-49.187046
-18.280556	-92.247688	-93.541161	-44.577316
-17.983019	-93.757965	-93.781837	-43.155006
-17.768873	-93.793419	-92.653999	-41.994205
-17.680197	-93.351891	-92.707863	-42.705162
-17.718967	-94.402328	-93.256699	-43.379627
-17.852289	-93.154282	-92.513565	-45.460022
-18.043501	-92.130623	-92.432617	-46.782825
-18.35177	-91.098785	-92.774094	-44.790298
-18.774401	-91.835861	-92.582649	-43.14463

-107.17767	-108.92144	-34.986713	-19.242308	-91.694145	-92.184067	-41.601414
-124.09078	-105.8707	-34.54604	-19.853548	-93.189636	-92.851982	-40.194504
-109.38989	-117.38279	-34.130161	-20.552547	-91.96006	-92.983963	-38.555725
-115.26286	-107.28306	-33.487213	-21.366787	-92.764221	-92.047707	-36.825676
-106.93699	-125.60704	-33.047569	-22.154722	-92.509438	-91.922287	-35.530636
-116.0283	-104.09159	-32.591385	-23.027788	-91.969185	-92.156876	-34.311501
-106.31902	-103.41871	-32.313965	-23.944729	-93.644096	-93.602013	-33.526169
-116.58245	-107.8925	-32.050983	-24.921822	-92.740067	-91.770966	-33.227726
-105.99027	-118.78852	-32.19445	-26.192825	-92.991592	-92.410309	-33.385418
-107.45123	-104.09272	-32.249535	-27.741365	-91.76236	-91.394623	-33.604748
-106.88322	-100.04404	-32.745392	-29.472544	-91.825378	-90.851509	-33.952328
-104.03736	-106.35106	-32.959358	-31.790701	-91.496773	-92.396355	-33.792561
-104.7621	-106.44618	-33.445007	-33.698013	-92.717911	-91.139305	-33.261349
-106.27499	-104.53867	-33.670322	-34.355045	-91.510033	-91.962326	-32.639614
-112.0525	-103.3717	-33.066357	-32.791466	-92.255928	-91.754395	-31.689957
-112.74101	-107.67635	-32.505871	-30.408468	-90.78997	-90.046036	-31.023392
-102.5042	-103.56526	-32.075481	-28.514809	-90.679176	-92.337875	-30.615675
-102.71516	-121.70824	-31.387928	-26.851292	-91.000061	-90.489075	-30.066025
-105.40473	-104.35459	-30.753695	-25.503923	-92.902855	-91.727524	-29.294283
-103.46528	-100.54773	-30.063335	-24.447445	-90.271576	-89.920959	-28.399759
-106.06197	-101.98375	-29.395826	-23.521751	-91.310837	-90.214127	-27.563869
-103.81155	-103.34895	-28.789827	-22.805677	-90.022118	-91.203835	-26.879747
-106.30921	-101.85209	-28.201231	-22.223173	-90.413109	-90.633827	-26.390499
-104.6104	-103.20312	-27.436934	-21.742634	-89.986031	-90.750725	-25.966652
-107.38918	-101.8614	-26.789419	-21.324867	-90.479263	-90.672104	-25.551693
-102.9889	-102.60168	-26.405783	-20.943197	-89.729561	-91.610535	-25.321947
-99.819397	-100.62113	-25.87056	-20.70648	-91.267258	-91.876938	-24.822266
-103.54561	-105.77248	-25.538937	-20.506201	-90.765305	-90.202744	-24.455112
-104.7429	-100.58382	-24.989643	-20.24975	-90.869682	-90.177376	-23.920746
-102.43932	-99.282013	-24.621378	-20.02891	-90.525269	-90.242355	-23.608448
-101.5334	-102.59787	-24.17382	-19.850637	-89.866859	-90.376122	-23.313707
-98.257133	-100.46848	-23.611443	-19.685812	-89.879669	-90.357384	-23.024628
-97.825829	-100.44339	-23.18774	-19.479116	-90.419411	-89.631004	-22.786789
-99.711868	-100.16255	-22.767544	-19.147573	-89.797966	-90.009369	-22.444361
-99.512802	-101.26556	-22.401533	-19.016365	-89.678642	-90.069832	-22.069267
-100.26714	-102.00788	-21.948668	-18.735821	-89.586929	-89.044083	-21.693966
-99.320839	-97.914619	-21.59614	-18.411484	-90.443108	-89.916573	-21.342144
-96.541016	-100.8224	-21.212446	-18.171394	-90.520149	-89.372307	-20.985447
-97.688049	-101.97968	-20.871737	-17.841824	-89.762512	-90.354034	-20.74478
-97.465034	-98.881737	-20.498959	-17.48419	-89.589485	-89.183235	-20.561256
-100.68421	-100.62427	-20.219685	-17.135906	-89.737122	-89.633041	-20.318411
-100.02123	-95.990585	-19.935337	-16.78241	-89.302788	-89.336784	-20.05619
-95.772842	-99.215279	-19.62534	-16.438251	-89.500008	-89.717262	-19.741697
-95.063835	-96.660034	-19.376667	-16.05825	-88.918922	-88.762146	-19.493687
-98.009644	-98.106033	-19.101131	-15.717975	-90.025719	-88.365982	-19.241426
-95.600685	-98.029152	-18.876249	-15.384728	-89.717079	-89.050316	-19.114616
-96.9459	-97.515617	-18.613323	-15.041857	-89.685875	-88.05619	-18.966297
-97.212349	-98.603752	-18.409653	-14.710264	-89.244965	-89.204712	-18.848118
-96.495697	-99.285988	-18.202175	-14.395623	-88.443405	-88.814995	-18.735338
-96.67086	-96.043976	-17.983767	-14.126045	-88.037697	-89.118027	-18.577549
-96.306244	-95.715187	-17.762304	-13.798511	-88.288223	-88.806786	-18.376848
-96.999153	-96.977921	-17.520002	-13.534505	-89.15036	-89.692764	-18.169441

-97.985634	-95.858932	-17.323631	-13.252831	-89.40596	-88.613106	-18.051817
-95.998459	-96.831665	-17.024572	-13.024565	-89.115265	-88.371582	-17.906986
-97.271301	-97.361816	-16.81983	-12.781512	-89.738609	-88.72271	-17.80246
-95.63372	-95.522797	-16.649956	-12.595909	-88.858925	-88.484772	-17.759106
-92.803703	-96.161125	-16.475296	-12.409619	-88.172798	-88.071815	-17.617102
-95.969582	-97.008125	-16.264193	-12.289935	-88.621758	-89.254242	-17.427357
-95.343269	-98.629387	-16.169468	-12.171377	-87.927361	-87.908043	-17.321201
-94.518707	-94.164864	-16.111406	-12.089658	-87.97464	-87.537231	-17.28587
-93.633484	-94.987343	-15.919031	-12.016318	-87.166847	-88.193565	-17.13652
-96.065239	-96.885536	-15.814817	-12.019316	-88.121651	-88.052223	-17.175089
-96.745964	-95.506111	-15.720675	-12.04754	-87.456467	-87.148895	-17.155409
-94.566635	-96.100845	-15.545112	-12.09591	-87.50145	-87.930779	-17.012354
-94.758148	-93.478607	-15.481715	-12.154729	-88.200386	-87.083023	-16.97768
-91.86087	-93.371635	-15.36176	-12.313622	-89.586052	-86.041077	-16.827835
-91.578194	-102.54633	-15.303831	-12.458395	-87.908607	-88.157478	-16.77405
-93.586868	-98.602974	-15.265861	-12.658239	-84.104591	-89.223587	-16.744984
-95.57679	-91.507187	-15.27247	-12.875998	-86.863548	-88.732925	-16.775408
-93.246559	-91.099075	-15.158799	-13.085437	-87.171257	-85.11647	-16.75153
-92.735077	-88.506485	-15.220876	-13.324472	-85.969406	-87.651985	-16.9074
-91.005257	-100.39602	-15.168609	-13.639607	-87.595421	-83.850342	-16.928158
-91.495354	-92.030327	-15.066222	-13.969293	-84.496605	-84.12059	-16.842688
-90.574684	-90.776245	-15.042189	-14.223018	-86.377098	-87.371948	-16.837366
-89.913925	-96.434814	-15.04774	-14.487088	-85.152634	-84.769234	-16.886675
-90.933067	-88.618362	-15.020185	-14.710813	-85.862106	-85.632317	-16.874737
-92.465904	-89.85482	-14.980891	-14.980874	-85.695992	-85.083687	-16.890787
-88.81913	-88.564392	-14.927036	-15.154596	-83.953865	-85.235878	-16.907366
-90.68399	-87.318581	-14.905772	-15.344033	-86.73838	-85.298454	-16.93989
-91.022263	-91.635216	-14.919662	-15.431648	-85.997292	-85.619835	-16.996733
-90.745201	-88.630493	-14.861361	-15.493308	-84.773712	-84.666924	-17.012823
-88.88485	-90.833366	-14.790384	-15.520418	-86.885422	-86.706352	-16.920362
-87.01535	-87.743652	-14.685335	-15.556288	-84.382469	-85.332008	-16.82835
-88.559151	-88.263969	-14.761425	-15.674848	-84.686684	-85.304909	-16.963242
-88.771149	-89.676407	-14.734962	-15.597736	-84.435555	-83.577286	-16.935802
-88.658195	-87.627991	-14.604675	-15.629991	-85.265869	-85.769302	-16.798172
-89.298134	-86.663025	-14.635687	-15.494445	-85.236664	-86.426407	-16.831619
-88.801704	-93.035332	-14.6826	-15.546655	-84.014198	-85.597862	-16.934317
-88.877121	-89.435333	-14.570314	-15.478206	-83.0242	-84.590721	-16.767258
-87.418854	-89.012337	-14.51802	-15.426394	-84.415726	-87.958038	-16.696169
-89.209068	-89.731895	-14.465434	-15.429787	-84.049263	-84.814117	-16.648016
-87.823456	-90.726318	-14.458259	-15.413906	-84.214378	-84.671936	-16.642975
-86.227341	-89.581909	-14.410198	-15.395801	-84.385551	-83.70385	-16.551601
-88.350014	-85.872574	-14.399389	-15.450308	-84.651451	-84.275101	-16.615011
-87.2798	-87.571114	-14.325226	-15.499002	-84.777374	-82.317863	-16.521532
-88.092636	-86.767586	-14.336747	-15.535769	-83.230743	-84.75058	-16.481176
-86.384972	-87.770813	-14.257861	-15.594556	-84.369949	-84.596191	-16.31465
-87.326973	-90.549019	-14.303909	-15.675861	-84.228767	-84.497589	-16.308153
-85.772881	-88.592926	-14.238729	-15.696914	-84.54554	-82.530251	-16.211847
-85.637482	-91.836739	-14.225929	-15.946806	-82.597435	-82.769348	-16.19318
-88.013054	-87.153923	-14.139731	-16.047268	-82.290627	-83.670631	-16.02809
-84.751595	-88.297592	-14.009587	-16.240747	-83.878792	-83.803299	-15.963541
-85.913635	-86.372826	-13.965787	-16.301348	-83.306999	-82.428551	-15.879422
-86.85218	-84.373741	-13.985836	-16.433029	-81.322891	-83.169548	-15.788507
-86.275864	-85.961815	-13.912637	-16.474888	-84.036919	-82.777031	-15.758553
-84.965706	-85.937424	-13.975162	-16.420938	-83.911278	-82.679588	-15.66761
-85.393394	-86.206551	-13.95277	-16.345564	-83.067764	-82.885078	-15.584744

-84.631134	-83.087807	-13.895157	-16.117968	-83.095795	-81.676254	-15.51268
-86.392723	-82.719803	-13.810669	-15.850933	-82.338348	-83.090645	-15.412043
-83.828934	-84.784126	-13.735208	-15.543597	-82.074738	-83.428497	-15.344528
-84.518349	-84.378052	-13.675907	-15.33587	-81.145058	-81.08004	-15.348517
-86.879379	-83.821167	-13.692593	-14.912247	-81.328964	-82.712906	-15.194503
-83.494011	-82.331406	-13.595626	-14.58687	-80.999382	-81.295326	-15.10031
-85.175911	-84.031685	-13.47846	-14.134475	-82.331123	-81.139816	-14.846502
-83.284271	-83.685204	-13.441132	-13.742768	-81.435173	-83.790794	-14.829078
-84.399338	-82.751945	-13.419818	-13.360265	-83.077713	-81.51844	-14.693053
-85.587929	-85.868362	-13.50773	-13.112353	-82.258934	-83.091606	-14.783925
-84.275932	-83.556931	-13.499582	-12.851626	-81.684784	-78.936867	-14.528008
-84.644295	-82.923874	-13.396144	-12.67703	-84.52166	-82.502121	-14.475145
-84.331207	-85.601013	-13.417765	-12.448381	-82.738228	-81.210403	-14.41243
-81.835831	-82.910522	-13.292612	-12.45387	-83.908173	-82.539978	-14.142036
-83.251526	-84.036736	-13.356354	-12.39746	-82.123772	-81.948753	-14.092396
-85.044128	-82.12957	-13.400226	-12.350037	-82.818497	-82.191681	-14.016124
-81.881065	-81.222961	-13.315001	-12.441976	-82.085632	-81.510139	-13.779701
-82.391251	-81.223068	-13.275826	-12.553988	-82.058228	-80.955742	-13.610631
-82.326553	-82.80896	-13.28769	-12.666364	-81.844971	-81.509209	-13.512229
-82.332336	-81.835152	-13.300771	-12.96595	-82.517143	-81.969627	-13.386373
-82.188477	-83.489479	-13.331571	-13.026898	-82.068245	-81.593681	-13.292155
-82.258217	-80.509735	-13.212252	-13.437179	-81.02327	-80.98349	-13.116927
-80.462334	-81.309883	-13.203346	-13.638336	-81.611084	-79.316414	-12.956877
-80.723663	-81.798584	-13.065502	-13.970139	-81.616455	-80.200958	-12.695271
-80.65258	-80.528313	-13.035782	-14.265091	-80.510551	-81.618607	-12.514988
-81.367439	-82.642395	-12.989688	-14.85634	-80.659401	-80.516701	-12.391655
-78.914139	-80.153702	-13.132617	-15.536327	-79.821846	-82.028961	-12.33699
-79.56591	-81.09449	-13.284295	-16.004387	-82.065048	-80.524727	-12.34646
-79.750221	-80.271057	-13.079491	-16.725859	-81.117073	-79.973892	-12.065626
-77.737579	-77.713799	-13.063486	-17.328724	-79.835136	-80.105339	-11.830249
-77.745827	-79.175148	-13.153853	-18.199957	-79.880135	-78.2211	-11.743153
-79.017532	-77.052933	-13.07653	-18.731005	-80.223045	-79.899887	-11.526143
-79.047295	-77.321846	-13.10773	-19.719334	-79.551216	-78.410912	-11.437076
-78.160645	-77.377235	-13.192489	-20.10894	-79.713821	-79.130859	-11.356193
-76.827652	-77.168625	-13.228218	-20.401237	-78.996605	-79.969482	-11.146434
-76.281517	-76.559105	-13.261229	-20.57226	-78.441963	-77.837952	-11.016553
-76.045967	-77.654457	-13.2623	-20.329443	-78.808762	-77.966637	-10.865485
-75.666702	-76.125694	-13.315083	-20.251289	-78.565025	-77.88427	-10.813138
-75.975166	-76.050163	-13.299398	-20.239492	-77.306839	-79.219131	-10.617731
-75.643433	-75.598633	-13.348385	-20.164001	-78.439072	-78.931351	-10.476254
-75.088493	-74.805405	-13.448211	-19.851675	-77.370064	-78.63092	-10.382363
-74.851189	-75.183922	-13.348857	-20.137495	-78.219658	-77.531204	-10.258183
-74.876068	-75.211121	-13.434725	-19.924576	-79.113289	-78.348557	-10.183027
-74.25267	-74.384537	-13.461457	-19.667027	-77.84201	-77.457901	-10.088696
-74.159813	-74.277153	-13.386511	-20.101185	-77.861313	-76.745483	-9.8766356
-74.252182	-74.192131	-13.288177	-20.345795	-77.684776	-77.161125	-9.7610769
-73.880898	-74.537247	-13.317055	-20.723928	-77.083641	-76.361633	-9.6578102
-73.587128	-73.801765	-13.264878	-20.600571	-77.187126	-76.687706	-9.6198359
-73.408806	-73.333778	-13.159982	-20.240587	-76.270676	-78.65773	-9.4395895
-73.035149	-73.652878	-13.089894	-20.253771	-78.141106	-78.273056	-9.3249464
-73.380257	-72.696182	-13.057398	-20.083874	-77.236084	-76.645508	-9.2682247
-72.696617	-72.739456	-12.955796	-19.156822	-76.953148	-78.539551	-9.1784544
-72.861824	-73.145699	-12.931208	-18.49741	-77.745827	-76.108757	-9.1242495
-71.766212	-71.754227	-12.757169	-18.22217	-76.950378	-75.757881	-8.9285879

J1-J8

J2-

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)
-4.8119082	-96.385971	-91.022591	-17.66139	-17.9563	-107.963
-18.505348	-105.45338	-100.86217	-31.720711	-31.4448	-95.1388
-22.651403	-93.679962	-93.852531	-32.659889	-31.8823	-95.6012
-20.522528	-89.591034	-92.029144	-31.694502	-30.8158	-95.9036
-19.497057	-91.250198	-89.65596	-30.900476	-30.178	-94.9869
-19.071545	-90.170799	-90.71524	-30.503532	-29.7355	-96.6982
-18.968433	-89.572868	-89.939545	-30.294138	-29.4796	-99.6466
-19.029852	-89.487122	-89.246681	-30.135765	-29.2667	-101.377
-19.225563	-89.233299	-89.354286	-30.258274	-29.2843	-102.568
-19.513702	-89.755585	-89.225258	-30.255262	-29.3145	-101.413
-19.788788	-89.595451	-89.900108	-30.349909	-29.2301	-103.124
-20.104017	-89.135681	-89.746101	-30.335802	-29.1573	-109.628
-20.541348	-90.202934	-90.071297	-30.520021	-29.2334	-105.928
-20.934992	-90.720749	-89.638321	-30.607363	-29.2175	-108.21
-21.223097	-90.572105	-91.123154	-30.978369	-29.3193	-107.091
-21.432123	-91.831932	-90.423019	-31.255693	-29.4309	-113.816
-21.663651	-91.556503	-89.962387	-31.490131	-29.3007	-105.21
-21.714445	-90.726089	-89.864922	-31.771372	-29.6514	-111.442
-21.77033	-91.049042	-91.883415	-32.135643	-29.7477	-105.934
-21.684011	-91.478859	-92.941566	-32.348488	-29.8882	-108.924
-21.568075	-91.244957	-90.601608	-32.831364	-29.9683	-113.193
-21.4223	-91.536469	-91.409264	-33.250214	-29.9677	-117.468
-21.10298	-91.870399	-92.744232	-33.872772	-30.4085	-104.765
-20.839352	-92.289665	-91.775764	-34.928051	-30.6206	-114.041
-20.489382	-92.16201	-92.114403	-35.634087	-31.1402	-109.278
-20.176914	-92.610115	-93.684204	-36.982262	-31.6114	-103.238
-19.930441	-92.366859	-91.827049	-38.188549	-32.1091	-103.832
-19.618513	-93.203667	-91.05175	-40.387032	-32.8228	-115.923
-19.28648	-92.400612	-91.68235	-44.244736	-33.7003	-117.988
-18.966917	-91.486572	-91.969109	-49.698654	-34.3426	-110.643
-18.647409	-92.821724	-92.595413	-49.143177	-34.4724	-114.057
-18.279921	-93.71254	-93.131798	-44.306301	-34.111	-109.709
-17.982824	-93.485825	-92.472206	-42.829506	-33.8479	-117.162
-17.76914	-93.604523	-94.212563	-41.683342	-33.5659	-112.267
-17.680771	-92.004967	-93.325089	-42.364418	-33.3145	-110.426
-17.72051	-93.259254	-92.228104	-43.011505	-33.3863	-108.394
-17.854235	-93.390404	-92.876434	-44.983891	-33.6341	-112.513
-18.045963	-92.099083	-92.698174	-46.239822	-33.8244	-125.75
-18.353365	-92.227585	-92.156044	-44.452103	-34.2243	-112.517
-18.777082	-92.303032	-92.987579	-42.944592	-34.499	-108.541

-19.244415	-94.023331	-93.320053	-41.533131	-34.8423	-115.462
-19.854349	-92.912888	-93.329056	-40.211052	-35.2309	-105.1
-20.551157	-91.563042	-92.308586	-38.624466	-35.2496	-113.335
-21.366951	-93.594543	-94.3536	-36.89838	-35.5516	-111.05
-22.150517	-92.618645	-92.604782	-35.581093	-35.9382	-108.337
-23.02146	-91.257294	-93.917862	-34.338131	-36.0248	-117.423
-23.937754	-92.121857	-94.076408	-33.537327	-35.6402	-112.879
-24.912582	-92.321205	-93.002647	-33.225758	-35.3349	-109.93
-26.184612	-92.893494	-92.303497	-33.390392	-34.4687	-114.538
-27.735662	-91.578644	-92.322144	-33.610474	-33.8317	-106.117
-29.472441	-91.659256	-92.060349	-33.982502	-33.0303	-117.246
-31.807331	-91.511902	-92.030357	-33.840359	-31.9746	-108.476
-33.746014	-91.66996	-91.786858	-33.323132	-31.0888	-118.858
-34.433708	-91.708298	-93.727455	-32.718494	-30.2684	-114.678
-32.860649	-91.241379	-93.258957	-31.775126	-29.5253	-110.424
-30.453205	-91.415779	-92.331696	-31.118998	-28.7299	-106.424
-28.548592	-91.57222	-91.342407	-30.727983	-28.0948	-123.857
-26.875973	-90.553261	-91.941742	-30.180313	-27.4426	-117.906
-25.521795	-90.561409	-91.300758	-29.400553	-26.9006	-112.159
-24.461994	-90.348129	-91.841194	-28.494638	-26.3594	-109.447
-23.532856	-90.907982	-89.701889	-27.646925	-25.9021	-107.43
-22.813883	-90.906509	-90.990379	-26.962603	-25.3934	-113.026
-22.22883	-91.289742	-90.766304	-26.478401	-24.8978	-107.628
-21.745888	-90.110115	-90.55188	-26.053547	-24.4615	-122.056
-21.329746	-91.232712	-90.568855	-25.636576	-24.1317	-106.872
-20.945698	-90.949638	-91.026016	-25.405329	-23.6831	-115.54
-20.709167	-90.850578	-90.404625	-24.896599	-23.419	-112.33
-20.508076	-90.567604	-89.590485	-24.522741	-22.9849	-104.912
-20.249949	-89.687332	-89.443108	-23.981335	-22.5937	-112.566
-20.029099	-89.842606	-89.879486	-23.666126	-22.2403	-118.393
-19.849915	-89.21196	-89.583961	-23.369905	-21.9147	-113.688
-19.683792	-90.034607	-89.118332	-23.077185	-21.5681	-110.23
-19.481913	-90.635132	-90.093185	-22.831532	-21.3821	-117.864
-19.153759	-89.965523	-89.96225	-22.4797	-21.0567	-119.079
-19.018429	-89.53968	-88.968956	-22.098635	-20.8341	-108.224
-18.74024	-89.694786	-89.575829	-21.716692	-20.5227	-113.533
-18.41585	-89.421455	-90.491081	-21.364201	-20.2572	-116.762
-18.177032	-89.215569	-89.685638	-21.00589	-20.0413	-111.832
-17.846123	-89.020889	-89.079323	-20.763401	-19.8771	-107.891
-17.489084	-89.155594	-89.36953	-20.58	-19.7463	-112.221
-17.140284	-89.980484	-89.893051	-20.332983	-19.5129	-104.32
-16.787804	-90.296898	-89.503197	-20.066908	-19.3952	-108.782
-16.441917	-89.025978	-88.769997	-19.749975	-19.2563	-111.137
-16.063301	-89.095428	-88.176155	-19.500494	-19.1128	-109.09
-15.722045	-90.381348	-90.187294	-19.246454	-18.9517	-116.067
-15.388759	-89.275742	-88.4049	-19.120909	-18.8394	-111.926
-15.045136	-88.955711	-89.750694	-18.972897	-18.7394	-113.772
-14.713515	-88.581604	-88.731163	-18.852247	-18.6206	-114.977
-14.398072	-88.683868	-88.441322	-18.738525	-18.5768	-114.038
-14.12741	-88.69928	-89.162926	-18.578173	-18.3872	-116.398
-13.800599	-88.808418	-88.786697	-18.375751	-18.4	-127.062
-13.537321	-88.833893	-88.834953	-18.165911	-18.2821	-130.722

-13.25588	-88.790932	-88.708801	-18.047783	-18.2107	-108.917
-13.026443	-88.747429	-89.483559	-17.902163	-18.0971	-111.999
-12.78723	-89.18679	-89.313812	-17.797834	-18.1001	-113.707
-12.597906	-88.456451	-88.886078	-17.751909	-18.0356	-110.206
-12.412785	-88.403145	-88.490288	-17.612846	-18.013	-109.807
-12.293458	-88.736374	-88.621613	-17.420935	-17.9041	-115.253
-12.173755	-88.052399	-88.160248	-17.315105	-17.8597	-114.59
-12.09392	-87.861008	-89.158859	-17.279016	-17.8092	-127.492
-12.020692	-88.974052	-87.51207	-17.124901	-17.8065	-108.558
-12.024102	-88.616585	-87.442635	-17.170061	-17.7803	-120.74
-12.051446	-87.58847	-86.763046	-17.150599	-17.7454	-126.642
-12.102535	-88.594269	-88.996567	-17.007807	-17.7777	-112.706
-12.161013	-88.018898	-86.42308	-16.972431	-17.8417	-114.033
-12.318563	-85.726448	-85.908089	-16.824759	-17.7281	-98.8802
-12.462383	-88.278343	-84.88282	-16.772907	-17.743	-123.797
-12.663539	-87.63089	-88.453918	-16.746769	-17.7893	-117.982
-12.881124	-86.265915	-86.613785	-16.777443	-17.7016	-96.8085
-13.091194	-86.844826	-84.484573	-16.749445	-17.7957	-95.7042
-13.328535	-85.714966	-87.453598	-16.909855	-17.836	-104.93
-13.643519	-87.375	-86.158081	-16.927574	-17.8019	-106.103
-13.973554	-85.860947	-83.522659	-16.840147	-17.7111	-98.5954
-14.227041	-85.828819	-84.976547	-16.838144	-17.5676	-100.658
-14.4934	-85.72216	-87.537064	-16.884018	-17.6337	-111.525
-14.715611	-84.376328	-86.664284	-16.876305	-17.6603	-100.425
-14.983854	-89.045937	-83.115257	-16.892262	-17.6604	-104.854
-15.162285	-84.491058	-85.476326	-16.913321	-17.5645	-102.534
-15.349931	-85.152542	-85.463753	-16.946276	-17.47	-107.387
-15.437814	-84.818985	-84.633011	-17.00289	-17.4378	-101.845
-15.50013	-84.87841	-84.697571	-17.018627	-17.3835	-103.044
-15.526644	-85.37619	-83.921082	-16.925514	-17.1954	-97.3718
-15.567597	-84.326523	-83.276566	-16.834423	-17.2055	-98.2331
-15.681867	-84.859909	-84.424438	-16.972948	-17.1196	-106.47
-15.604752	-83.780098	-85.366013	-16.950792	-17.0247	-103.527
-15.637306	-84.290741	-84.948967	-16.812243	-16.9237	-103.859
-15.500916	-84.008064	-84.910072	-16.847685	-16.9173	-102.233
-15.555386	-85.070152	-85.697563	-16.948433	-16.6501	-112.399
-15.48599	-83.843887	-86.879837	-16.780069	-16.6493	-101.106
-15.435113	-82.5438	-86.018517	-16.704834	-16.5042	-102.566
-15.438911	-82.943985	-84.990952	-16.655745	-16.4236	-102.989
-15.420403	-84.516159	-83.735603	-16.649384	-16.302	-111.456
-15.400419	-84.903427	-84.44297	-16.556969	-16.163	-96.6279
-15.454374	-85.349533	-82.400154	-16.62381	-16.0547	-106.256
-15.50617	-84.207565	-83.379829	-16.528465	-15.9437	-97.8104
-15.541807	-84.004883	-84.247253	-16.482344	-15.8726	-103.92
-15.602319	-85.12812	-83.219986	-16.323776	-15.7135	-99.9019
-15.683266	-84.266037	-82.541191	-16.312477	-15.5978	-117.451
-15.698615	-82.620644	-82.577934	-16.216623	-15.4767	-118.204
-15.955362	-82.642326	-82.559334	-16.191256	-15.4751	-107.437
-16.049154	-85.866074	-82.047363	-16.035526	-15.3212	-99.9299
-16.245197	-84.07444	-81.855141	-15.967527	-15.2729	-107.393
-16.305332	-83.421295	-83.443832	-15.883258	-15.0997	-97.4942
-16.436724	-83.7173	-81.152008	-15.795954	-15.0361	-97.3073
-16.480282	-82.004883	-83.569138	-15.765843	-14.9341	-99.1215
-16.425455	-80.117958	-84.49601	-15.674647	-14.8011	-102.664
-16.354101	-85.306374	-82.245544	-15.591037	-14.7127	-95.4158

-16.126505	-81.372452	-81.527733	-15.525376	-14.5542	-100.216
-15.86449	-81.795486	-82.528748	-15.413646	-14.4266	-111.136
-15.557524	-80.280579	-81.515083	-15.34951	-14.2946	-103.16
-15.3463	-83.62043	-82.866188	-15.336573	-14.2947	-95.5964
-14.928955	-83.223717	-83.103516	-15.190934	-14.1174	-96.0637
-14.605287	-82.440559	-81.160728	-15.096285	-14.0562	-97.4808
-14.15718	-82.06633	-81.760269	-14.841179	-13.8934	-102.427
-13.760373	-82.578247	-80.859795	-14.820695	-13.7089	-110.905
-13.374024	-82.136391	-82.827301	-14.683198	-13.5442	-92.1365
-13.121925	-81.325706	-81.511726	-14.771369	-13.4114	-108.61
-12.863105	-81.327576	-81.583252	-14.515042	-13.2573	-104.382
-12.685712	-81.099091	-83.110191	-14.466934	-13.1343	-109.638
-12.456777	-82.688362	-81.389008	-14.394919	-12.8997	-118.348
-12.460493	-82.046135	-82.903816	-14.128525	-12.8953	-96.7158
-12.406678	-81.681808	-82.154587	-14.078789	-12.6735	-97.9832
-12.35883	-81.610313	-81.347313	-14.005563	-12.5231	-97.7782
-12.452986	-82.262169	-82.865509	-13.768728	-12.3444	-106.311
-12.571429	-84.430412	-80.618439	-13.606829	-12.2543	-99.5202
-12.688187	-82.509705	-81.844955	-13.509248	-12.1075	-121.258
-12.990194	-80.466278	-82.113029	-13.380938	-12.0362	-98.9554
-13.048298	-82.150826	-82.097443	-13.286414	-11.6813	-104.087
-13.46637	-82.190933	-79.938866	-13.112248	-11.5752	-98.2054
-13.669044	-82.495995	-81.654175	-12.95314	-11.3496	-109.957
-13.99934	-80.903198	-80.293541	-12.699196	-11.4074	-105.474
-14.295343	-80.691322	-81.589165	-12.516074	-11.1524	-102.895
-14.876887	-80.697662	-79.855927	-12.39662	-11.1578	-99.1942
-15.572226	-79.87883	-79.877861	-12.341232	-10.9799	-99.4232
-16.034781	-80.672386	-80.350525	-12.358575	-10.7437	-101.641
-16.760288	-79.564728	-80.626846	-12.070208	-10.7145	-108.49
-17.359837	-80.770599	-80.000069	-11.841022	-10.5784	-105.971
-18.228415	-80.041451	-80.239769	-11.750861	-10.3131	-96.3221
-18.759401	-79.656494	-77.585831	-11.528464	-10.298	-100.013
-19.748461	-79.594337	-79.703049	-11.447255	-10.0403	-95.0959
-20.135771	-79.284203	-78.766663	-11.363146	-10.0162	-93.2866
-20.423061	-78.426437	-79.046158	-11.16079	-9.75034	-107.964
-20.588665	-79.277954	-78.555832	-11.027618	-9.68065	-98.9876
-20.352928	-78.55117	-79.231873	-10.879589	-9.61259	-96.6071
-20.279711	-78.980324	-78.51487	-10.826752	-9.46118	-108.731
-20.258497	-78.106339	-79.373215	-10.634743	-9.32489	-100.168
-20.189362	-77.361954	-78.134377	-10.493157	-9.20933	-104.961
-19.869164	-78.075134	-77.516396	-10.39416	-9.08408	-100.422
-20.150265	-79.032959	-78.422073	-10.269009	-9.06005	-94.4031
-19.940205	-77.749352	-78.681572	-10.200718	-8.9641	-99.0254
-19.679443	-77.714401	-77.201981	-10.111054	-8.80956	-95.5349
-20.108627	-76.37796	-76.632378	-9.8913431	-8.73847	-96.4963
-20.355366	-77.832489	-78.424156	-9.7748966	-8.66944	-93.4586
-20.737625	-77.269333	-77.087128	-9.671895	-8.61231	-103.307
-20.614147	-77.216934	-76.731346	-9.6351118	-8.60882	-102.573
-20.248758	-76.89856	-77.572899	-9.4500284	-8.46581	-109.183
-20.25404	-76.829025	-77.703415	-9.3435431	-8.47173	-93.5106
-20.070585	-76.734825	-77.723526	-9.2809801	-8.37106	-104.746
-19.165558	-76.98526	-77.34462	-9.1895428	-8.45602	-116.624
-18.499172	-77.250374	-76.519348	-9.1337042	-8.43431	-90.5649
-18.234488	-76.728432	-77.301804	-8.9383488	-8.3572	-91.179

-J3

J2-J4

S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-101.687	-17.8588	-17.9432	-90.5703	-100.083	-17.7121	-17.9346
-96.0105	-32.6834	-31.4377	-106.872	-102.53	-32.0301	-31.4385
-91.7472	-33.3969	-31.9072	-102.608	-107.832	-32.2344	-31.9265
-96.2777	-31.9996	-30.839	-101.363	-116.516	-31.0558	-30.8581
-94.3885	-31.0184	-30.2035	-103.377	-105.134	-30.2783	-30.223
-94.5848	-30.4741	-29.7623	-112.299	-113.085	-29.8692	-29.7821
-99.2282	-30.0957	-29.5102	-109.501	-104.594	-29.5901	-29.5277
-97.9207	-29.816	-29.2966	-112.224	-107.64	-29.4596	-29.3163
-98.5457	-29.8643	-29.314	-110.675	-109.357	-29.5273	-29.3336
-101.528	-29.7353	-29.3458	-108.16	-109.905	-29.47	-29.3644
-101.058	-29.772	-29.2619	-107.065	-110.285	-29.582	-29.2819
-105.842	-29.6417	-29.1882	-104.037	-107.551	-29.4898	-29.2073
-103.81	-29.6081	-29.266	-115.902	-112.423	-29.5936	-29.2866
-111.746	-29.6237	-29.2507	-112.918	-113.714	-29.6351	-29.2719
-112.749	-29.8898	-29.3555	-120.125	-106.512	-29.9129	-29.379
-118.015	-30.0328	-29.4664	-110.818	-109.831	-30.1162	-29.4899
-109.3	-30.0843	-29.3356	-111.843	-108.195	-30.225	-29.359
-107.393	-30.119	-29.6896	-118.322	-112.476	-30.4075	-29.7134
-103.651	-30.2507	-29.7867	-110.573	-107.439	-30.6017	-29.8127
-106.144	-30.4591	-29.9299	-118.541	-110.413	-30.7816	-29.9561
-117.832	-30.8802	-30.0116	-103.238	-110.428	-31.0924	-30.0422
-109.643	-31.0623	-30.0121	-105.445	-113.039	-31.3102	-30.0462
-112.368	-31.2332	-30.4552	-111.22	-118.494	-31.6687	-30.4907
-105.55	-31.6452	-30.6686	-116.79	-115.922	-32.2306	-30.7036
-115.304	-31.791	-31.1903	-110.433	-122.288	-32.5088	-31.2266
-121.545	-31.9688	-31.6638	-110.437	-117.554	-33.141	-31.7016
-112.307	-32.0095	-32.1637	-131.241	-112.135	-33.6007	-32.2045
-114.138	-32.0934	-32.8859	-112.08	-113.161	-34.5229	-32.9303
-108.672	-31.5211	-33.7702	-128.19	-121.868	-35.8596	-33.8215
-109.67	-30.6146	-34.4176	-111.637	-105.896	-37.4525	-34.4751
-105.381	-29.5147	-34.5456	-103.784	-112.899	-39.5079	-34.5991
-113.712	-28.7131	-34.1795	-120.385	-111.91	-40.7339	-34.2259
-100.869	-28.2161	-33.9107	-118.71	-111.717	-39.7857	-33.9548
-112.928	-27.9232	-33.6243	-112.287	-119.495	-38.5409	-33.6687
-116.206	-28.0412	-33.3747	-118.724	-110.193	-37.9765	-33.4187
-110.231	-28.0694	-33.4495	-120.556	-110.623	-37.6017	-33.5024
-112.134	-28.3502	-33.7002	-112.984	-105.263	-38.4431	-33.7584
-113.273	-28.4831	-33.8957	-108.522	-107.689	-39.0128	-33.9546
-107.403	-28.3721	-34.3032	-119.486	-110.089	-40.393	-34.3702
-107.187	-28.279	-34.5806	-109.62	-108.421	-41.3725	-34.6526

-115.297	-28.2018	-34.9231	-115.034	-118.307	-42.8812	-35.003
-105.519	-28.138	-35.3227	-112.036	-113.724	-44.1772	-35.405
-111.084	-28.1321	-35.3443	-115.198	-112.769	-46.7357	-35.4313
-115.557	-28.0577	-35.6565	-128.32	-117.462	-50.9464	-35.7476
-108.657	-27.917	-36.0502	-106.236	-110.953	-53.2975	-36.1529
-125.143	-27.678	-36.1401	-107.893	-108.974	-51.9219	-36.2411
-109.484	-27.5402	-35.7463	-118.513	-122.785	-48.7989	-35.8401
-127.233	-27.3645	-35.4349	-114.681	-119.934	-47.9769	-35.5215
-109.452	-27.5006	-34.5556	-118.018	-112.206	-48.0499	-34.6288
-112.611	-27.5718	-33.9066	-124.734	-108.306	-48.9874	-33.9747
-113.636	-28.1008	-33.0977	-108.383	-111.492	-47.3501	-33.1574
-117.016	-28.3916	-32.0352	-106.173	-117.361	-45.9474	-32.0889
-106.081	-28.9527	-31.1442	-114.452	-116.192	-42.463	-31.1974
-113.291	-29.3655	-30.3206	-114.592	-113.001	-40.2938	-30.3689
-107.535	-29.4747	-29.5751	-110.134	-107.794	-38.5771	-29.6207
-117.414	-29.7571	-28.7778	-108.556	-112.947	-36.9013	-28.8183
-107.444	-30.3123	-28.1362	-115.629	-113.08	-35.3676	-28.1743
-107.913	-30.6869	-27.4829	-109.117	-103.363	-34.1465	-27.5188
-108.362	-31.0841	-26.941	-111.729	-101.891	-32.8745	-26.9743
-109.225	-31.2668	-26.3981	-117.096	-109.325	-31.6406	-26.4322
-114.83	-30.8837	-25.9414	-110.406	-110.298	-30.8566	-25.9748
-103.808	-31.0752	-25.43	-109.347	-108.039	-29.9113	-25.4618
-108.552	-31.109	-24.9333	-109.885	-111.429	-29.2864	-24.963
-104.542	-30.9608	-24.4957	-108.368	-112.149	-28.5531	-24.5269
-122.162	-30.9494	-24.163	-125.534	-117.057	-27.8778	-24.1908
-113.184	-31.1882	-23.7115	-117.894	-106.589	-27.296	-23.7379
-121.137	-30.8496	-23.4463	-112.476	-107.395	-26.6575	-23.4728
-108.153	-30.6756	-23.0122	-109.609	-105.783	-26.1744	-23.0377
-124.933	-30.1196	-22.6187	-120.545	-113.391	-25.5979	-22.6442
-108.864	-29.7572	-22.2674	-111.246	-110.082	-25.2477	-22.2899
-109.327	-29.4685	-21.9408	-116.179	-113.049	-24.8447	-21.9637
-110.549	-29.1243	-21.5899	-116.111	-114.527	-24.421	-21.6172
-107.886	-28.9294	-21.4078	-114.425	-121.12	-24.0255	-21.4289
-110.037	-28.5528	-21.0784	-114.162	-106.061	-23.5873	-21.0979
-113.012	-28.0366	-20.8552	-110.59	-116.954	-23.1513	-20.8731
-110.025	-27.3292	-20.5436	-112.539	-107.228	-22.6986	-20.561
-105.57	-26.8027	-20.277	-111.284	-110.76	-22.3951	-20.2942
-104.196	-26.3785	-20.0594	-110.066	-106.407	-22.0839	-20.0755
-117.876	-25.9436	-19.8922	-111.349	-108.031	-21.835	-19.9063
-114.565	-25.6544	-19.76	-116.859	-101.785	-21.4968	-19.7702
-108.644	-25.2813	-19.5237	-109.793	-116.966	-21.2376	-19.5349
-115.646	-24.8867	-19.4056	-108.976	-111.026	-20.9436	-19.4153
-103.328	-24.3637	-19.2673	-111.633	-108.309	-20.5744	-19.2767
-103.804	-23.9097	-19.1252	-111.928	-108.46	-20.297	-19.1349
-117.335	-23.4627	-18.9614	-111.049	-106.422	-20.0039	-18.9684
-110.978	-23.1644	-18.8486	-111.672	-112.815	-19.847	-18.8574
-118.485	-22.8145	-18.7484	-105.829	-120.254	-19.6389	-18.7527
-111.185	-22.6146	-18.6272	-113.733	-110.201	-19.517	-18.6311
-107.854	-22.3922	-18.5829	-121.744	-109.12	-19.3395	-18.5892
-110.627	-22.0506	-18.3917	-111.74	-122.224	-19.1397	-18.396
-117.765	-21.745	-18.4057	-113.485	-110.91	-18.8924	-18.4089
-108.408	-21.3505	-18.2875	-107.634	-118.271	-18.641	-18.2907

-109.63	-21.1115	-18.2132	-110.061	-103.994	-18.4944	-18.2193
-117.147	-20.79	-18.0994	-111.707	-107.794	-18.2645	-18.1034
-112.498	-20.6081	-18.1011	-112.637	-110.387	-18.1252	-18.1036
-104.203	-20.4149	-18.0417	-110.176	-111.804	-17.9996	-18.0436
-110.807	-20.2169	-18.0195	-118.911	-112.32	-17.8644	-18.0223
-113.673	-20.0097	-17.9098	-105.261	-105.695	-17.6684	-17.9131
-110.209	-19.8433	-17.868	-110.449	-110.631	-17.5966	-17.8698
-111.346	-19.8162	-17.8179	-120.635	-108.438	-17.5785	-17.8222
-110.367	-19.5592	-17.8164	-109.182	-111.912	-17.4083	-17.8218
-105.434	-19.5202	-17.7873	-112.37	-113.736	-17.3596	-17.7908
-113.232	-19.4582	-17.7536	-114.782	-109.707	-17.322	-17.7589
-107.558	-19.264	-17.7861	-114.498	-110.134	-17.1745	-17.7918
-113.488	-19.2136	-17.8495	-110.532	-104.882	-17.1422	-17.8544
-100.057	-19.0456	-17.7352	-101.523	-96.28	-17.0684	-17.7409
-102.172	-19.0218	-17.7527	-100.595	-105.418	-17.0724	-17.7593
-100.956	-19.0266	-17.8016	-105.35	-105.406	-17.1345	-17.8069
-95.0688	-19.0648	-17.7078	-103.641	-95.2452	-17.2214	-17.7112
-94.1673	-19.0257	-17.8077	-98.9006	-110.109	-17.1923	-17.8162
-103.407	-19.2034	-17.8425	-97.5363	-105.784	-17.3571	-17.846
-99.5518	-19.1777	-17.8088	-98.1945	-102.052	-17.3904	-17.8143
-103.393	-19.0406	-17.7179	-110.276	-96.9572	-17.4135	-17.7218
-93.4758	-18.9824	-17.574	-99.3586	-96.2866	-17.4797	-17.5773
-107.066	-19.0138	-17.641	-101.772	-106.796	-17.6003	-17.6385
-97.3291	-18.9564	-17.667	-99.7135	-99.1038	-17.7191	-17.666
-95.083	-18.9989	-17.6638	-100.575	-106.8	-17.8285	-17.6615
-102.112	-18.9725	-17.5639	-103.697	-96.3891	-17.9033	-17.56
-90.8929	-18.9598	-17.4693	-103.885	-96.2005	-18.0224	-17.4629
-106.632	-18.9212	-17.4357	-105.745	-103.663	-18.1389	-17.4307
-101.827	-18.864	-17.3818	-99.4438	-103.325	-18.077	-17.3762
-102.186	-18.6421	-17.1971	-101.947	-105.278	-18.1043	-17.1905
-96.9869	-18.4718	-17.2051	-106.825	-107.481	-18.0824	-17.2033
-96.3637	-18.5512	-17.1232	-106.008	-100.671	-18.3367	-17.1138
-99.4054	-18.5642	-17.0229	-99.6431	-96.2641	-18.4162	-17.0181
-104.743	-18.3988	-16.9263	-100.724	-102.792	-18.4044	-16.9185
-103.781	-18.4454	-16.9179	-99.5766	-101.124	-18.6098	-16.9155
-108.864	-18.6182	-16.6501	-107.111	-119.193	-18.7605	-16.6458
-96.9224	-18.4382	-16.6499	-101.036	-99.8475	-18.7478	-16.6476
-99.0838	-18.3741	-16.5033	-107.421	-97.1024	-18.7532	-16.5023
-102.856	-18.3407	-16.4247	-101.557	-112.547	-18.8328	-16.4242
-96.3821	-18.3637	-16.3041	-102.066	-106.82	-19.0431	-16.3046
-97.5845	-18.2929	-16.1659	-105.807	-98.8587	-19.1959	-16.1665
-105.587	-18.4872	-16.0603	-103.339	-100.558	-19.3451	-16.06
-112.588	-18.4492	-15.9454	-101.945	-96.3056	-19.5407	-15.9469
-108.446	-18.5777	-15.8744	-101.152	-102.933	-19.756	-15.8739
-114.606	-18.4023	-15.7177	-108.53	-97.3744	-19.8283	-15.7193
-103.101	-18.5092	-15.6014	-94.6147	-101.812	-20.1361	-15.6039
-96.868	-18.436	-15.4855	-96.2144	-105.659	-20.1239	-15.4853
-99.0749	-18.4267	-15.4875	-106.526	-100.384	-20.3208	-15.4856
-97.7247	-18.3065	-15.3285	-107.504	-95.0221	-20.4017	-15.329
-102.684	-18.2405	-15.2745	-91.7517	-104.681	-20.3652	-15.2756
-96.9267	-18.1825	-15.0996	-104.74	-100.363	-20.6294	-15.0996
-95.3217	-18.1966	-15.0371	-100.249	-100.326	-20.8146	-15.0337
-97.271	-18.2319	-14.9319	-103.274	-94.8559	-20.7911	-14.9269
-97.7685	-18.2413	-14.7959	-102.661	-96.7022	-21.1193	-14.7931
-96.1924	-18.2435	-14.707	-101.736	-102.866	-21.1923	-14.7055

-101.444	-18.1924	-14.5479	-99.5306	-102.91	-21.2215	-14.5425
-106.47	-18.1107	-14.4189	-101.605	-105.683	-21.339	-14.4098
-97.6075	-18.0009	-14.2976	-98.167	-92.173	-21.1615	-14.2876
-106.057	-18.0665	-14.2954	-97.1529	-95.0866	-21.3354	-14.2888
-97.7718	-18.0304	-14.1134	-98.9589	-113.999	-21.3803	-14.1055
-105.25	-18.093	-14.0535	-98.6435	-118.358	-21.4875	-14.0528
-95.3551	-18.0384	-13.8904	-98.7016	-97.1996	-21.4065	-13.8914
-96.2811	-17.9924	-13.7059	-97.5503	-91.8548	-21.3812	-13.7066
-96.8451	-17.9913	-13.5425	-97.576	-98.1022	-21.373	-13.5407
-98.72	-18.2885	-13.4111	-95.4679	-102.359	-21.6975	-13.4103
-101.202	-18.1321	-13.2563	-107.978	-94.1697	-21.6291	-13.2571
-93.5699	-18.1412	-13.1342	-97.1158	-93.5667	-21.5147	-13.1315
-100.347	-18.2435	-12.9017	-95.8451	-104.167	-21.5888	-12.8976
-91.852	-18.0492	-12.8963	-103.493	-103.786	-21.2448	-12.8962
-98.2726	-18.1502	-12.6766	-104.556	-109.154	-21.3286	-12.676
-104.146	-18.2172	-12.5237	-101.494	-96.5529	-21.3062	-12.5293
-97.4193	-18.0759	-12.3367	-100.645	-98.3634	-20.9638	-12.3409
-95.0534	-18.0296	-12.2512	-113.989	-106.547	-20.7299	-12.2563
-107.673	-17.9872	-12.1064	-109.979	-95.3752	-20.4994	-12.1057
-93.3209	-17.9486	-12.0386	-105.17	-100.346	-20.2629	-12.0399
-102.112	-17.9501	-11.6848	-102.924	-96.5592	-20.018	-11.683
-93.8578	-17.8416	-11.5814	-109.306	-96.9858	-19.6334	-11.5777
-98.1026	-17.6948	-11.3489	-95.6367	-94.5269	-19.2343	-11.355
-101.361	-17.5382	-11.4094	-101.208	-102.319	-18.7931	-11.4091
-106.636	-17.3965	-11.1543	-102.771	-97.2127	-18.3613	-11.1525
-93.6583	-17.3709	-11.1581	-99.5606	-104.481	-18.0505	-11.1586
-96.6371	-17.4575	-10.9754	-97.9723	-106.819	-17.8716	-10.9764
-111.032	-17.6285	-10.7428	-109.577	-96.046	-17.7888	-10.7356
-94.3431	-17.4284	-10.7108	-100.128	-103.538	-17.2807	-10.7083
-94.3563	-17.2685	-10.5746	-102.575	-100.308	-16.864	-10.568
-91.6684	-17.2041	-10.3077	-97.8817	-109.68	-16.558	-10.3149
-93.3342	-17.0777	-10.2849	-98.2481	-106.323	-16.1779	-10.2842
-90.046	-17.0881	-10.0343	-102.48	-90.8602	-15.9653	-10.0386
-99.6454	-17.2088	-10.0201	-96.7646	-98.8192	-15.8423	-10.0108
-94.6193	-17.0457	-9.74875	-97.2799	-97.1943	-15.4814	-9.74551
-94.1278	-16.981	-9.68213	-94.5528	-95.7353	-15.236	-9.67717
-106.578	-16.8743	-9.60915	-97.5144	-101.698	-14.9526	-9.61096
-100.931	-16.8645	-9.46063	-99.7478	-102.821	-14.7742	-9.4577
-110.794	-16.5748	-9.32329	-105.228	-101.337	-14.3892	-9.32226
-103.007	-16.3719	-9.20736	-109.817	-96.6103	-14.1015	-9.2063
-96.0358	-16.1437	-9.07992	-98.097	-97.0519	-13.8466	-9.078
-113.312	-15.9775	-9.06818	-101.126	-98.2454	-13.5674	-9.06357
-93.2153	-15.8344	-8.96437	-104.861	-102.484	-13.3772	-8.96395
-96.9743	-15.6312	-8.80976	-96.374	-93.3028	-13.1218	-8.80877
-95.4247	-15.1673	-8.73724	-96.1464	-97.5476	-12.6905	-8.73906
-96.0083	-14.9505	-8.67064	-101.286	-98.2373	-12.3929	-8.67198
-101.5	-14.6251	-8.61295	-107.965	-110.313	-12.1105	-8.61494
-104.153	-14.4621	-8.61036	-100.054	-96.0855	-11.8704	-8.6214
-98.0912	-14.0667	-8.46052	-103.674	-110.232	-11.5028	-8.46232
-100.557	-13.7954	-8.47228	-116.069	-143.162	-11.2057	-8.47749
-100.895	-13.6776	-8.37058	-110.252	-106.332	-11.0392	-8.37271
-103.439	-13.5774	-8.45286	-101.152	-103.78	-10.8278	-8.4549
-91.4252	-13.4073	-8.43515	-104.337	-97.8724	-10.6314	-8.437
-99.2253	-13.1907	-8.35638	-93.6599	-102.412	-10.3505	-8.35862

Isolation
J2-J5

J2-J6

S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-90.3604	-112.382	-18.4984	-17.9278	-94.7416	-91.746	-18.1548
-121.151	-106.661	-31.1531	-31.4353	-101.144	-111.585	-30.5648
-108.442	-112.463	-29.8031	-31.9404	-108.883	-107.95	-30.3102
-109.896	-110.054	-28.7829	-30.8702	-105.248	-112.77	-29.4276
-112.424	-111.813	-28.1823	-30.2376	-112.101	-104.95	-28.7373
-115.303	-113.963	-27.8733	-29.7959	-117.332	-117.211	-28.3137
-113.917	-119.439	-27.6581	-29.5415	-118.517	-114.842	-27.974
-111.287	-138.4	-27.586	-29.3286	-119.634	-113.445	-27.7791
-113.45	-108.133	-27.6507	-29.3435	-114.233	-117.534	-27.6736
-113.576	-107.271	-27.6297	-29.3756	-121.559	-116.418	-27.5196
-119.706	-112.106	-27.7365	-29.2914	-112.297	-115.56	-27.4214
-118.628	-108.594	-27.6702	-29.2173	-107.224	-105.532	-27.1665
-111.293	-125.498	-27.7921	-29.2954	-126.164	-117.316	-27.1195
-113.849	-109.231	-27.8348	-29.2809	-117.221	-121.793	-26.9581
-116.341	-107.389	-28.039	-29.3885	-117.869	-112.555	-26.8616
-102.656	-110.53	-28.19	-29.4976	-114.166	-108.493	-26.7316
-116.744	-122.759	-28.2719	-29.3667	-113.601	-116.515	-26.5539
-115.727	-109.17	-28.4355	-29.7198	-106.031	-110.993	-26.4583
-114.689	-114.881	-28.5903	-29.8172	-104.824	-109.839	-26.3436
-120.846	-105.487	-28.6941	-29.9616	-119.324	-110.394	-26.1585
-109.849	-106.699	-28.8389	-30.0483	-109.869	-112.628	-25.9315
-106.354	-104.962	-28.9497	-30.0509	-108.711	-109.258	-25.7122
-108.917	-105.449	-29.1905	-30.497	-110.001	-109.836	-25.581
-115.742	-114.916	-29.5104	-30.7082	-127.44	-109.381	-25.4438
-106.226	-109.908	-29.6519	-31.2303	-120.566	-110.294	-25.2417
-109.669	-109.983	-30.0374	-31.7013	-118.862	-134.063	-25.1701
-114.521	-111.612	-30.2781	-32.2061	-116.999	-112.367	-25.0242
-127.604	-110.602	-30.7089	-32.9346	-118.126	-116.552	-24.932
-105.868	-105.472	-31.4133	-33.8259	-108.462	-107.097	-25.0256
-109.39	-109.566	-32.0868	-34.4764	-122.695	-104.019	-25.1315
-120.133	-119.509	-32.7914	-34.6018	-111.607	-117.649	-25.2918
-111.769	-120.906	-33.0516	-34.229	-113.142	-107.856	-25.302
-112.689	-110.01	-32.7329	-33.9525	-117.249	-117.97	-25.1458
-127.711	-115.16	-32.43	-33.6666	-130.118	-118.763	-24.9496
-109.273	-111.021	-31.9723	-33.4172	-109.172	-113.288	-24.5566
-116.919	-116.925	-31.7891	-33.4991	-117.025	-107.652	-24.2539
-107.367	-106.797	-31.7138	-33.7605	-112.134	-113.903	-23.8736
-119.5	-108.148	-31.6337	-33.9548	-118.264	-105.249	-23.5426
-118.284	-102.812	-31.9386	-34.372	-116.075	-108.984	-23.3337
-107.48	-120.258	-32.0448	-34.6512	-119.555	-106.218	-23.1048

-117.412	-118.2	-32.1464	-35.0025	-107.958	-111.999	-22.8849
-116.202	-113.071	-32.215	-35.4035	-111.622	-111.303	-22.7203
-113.402	-107.511	-32.1874	-35.4367	-109.157	-111.056	-22.5101
-109.877	-115.751	-32.1898	-35.7538	-121.945	-116.113	-22.3511
-104.537	-110.607	-32.155	-36.1607	-110.427	-107.202	-22.1871
-112.947	-107.789	-32.2421	-36.2589	-107.401	-107.284	-22.0745
-110.319	-111.005	-32.1543	-35.8548	-106.481	-104.433	-21.9139
-110.023	-121.045	-32.2114	-35.5358	-113.042	-111.726	-21.7826
-108.223	-108.489	-31.8676	-34.6412	-114.428	-116.709	-21.5504
-108.279	-111.46	-31.6836	-33.9866	-117.93	-111.896	-21.3569
-109.723	-105.028	-30.9109	-33.1709	-119.614	-114.588	-21.0031
-119.904	-118.26	-30.5709	-32.104	-120.676	-122.372	-20.7717
-122.749	-110.266	-29.8375	-31.2105	-113.137	-110.942	-20.4018
-116.58	-120.576	-29.3208	-30.382	-113.203	-107.284	-20.0904
-111.476	-108.46	-28.9166	-29.635	-108.906	-113.168	-19.8163
-120.705	-103.553	-28.4085	-28.8318	-112.005	-116.643	-19.4976
-113.566	-117.883	-27.8893	-28.1856	-120.934	-116.975	-19.189
-108.975	-113.691	-27.4914	-27.5305	-117.792	-108.025	-18.9474
-118.59	-113.938	-27.0548	-26.9869	-117.323	-107.959	-18.7133
-110.565	-106.152	-26.5718	-26.4454	-115.787	-106.361	-18.4647
-117.746	-107.789	-26.2828	-25.9876	-112.215	-109.953	-18.2942
-104.888	-105.676	-25.8543	-25.4774	-121.363	-115.343	-18.0445
-116.071	-111.582	-25.5723	-24.9781	-108.158	-120.717	-17.847
-108.498	-121.829	-25.1858	-24.5393	-114.264	-111.117	-17.6228
-116.232	-105.4	-24.8206	-24.2029	-120.326	-123.441	-17.4146
-120.352	-104.841	-24.5331	-23.7495	-108.756	-105.672	-17.2434
-124.817	-114.688	-24.1711	-23.484	-114.498	-113.88	-17.0535
-115.365	-118.526	-23.9233	-23.0491	-114.734	-111.822	-16.9041
-121.397	-103.887	-23.5617	-22.6542	-114.364	-119.663	-16.712
-114.171	-122.103	-23.3793	-22.3025	-123.221	-113.983	-16.5827
-108.231	-104.79	-23.1422	-21.9768	-115.524	-104.233	-16.4207
-110.315	-112.095	-22.8779	-21.6267	-115.318	-123.264	-16.2388
-113.035	-113.857	-22.6671	-21.4395	-118	-108.907	-16.0791
-108.784	-118.02	-22.4262	-21.1074	-109.157	-111.968	-15.9136
-115.906	-110.35	-22.194	-20.8827	-109.93	-109.888	-15.7699
-103.923	-114.036	-21.9113	-20.5694	-114.1	-113.864	-15.6058
-112.637	-108.138	-21.749	-20.3038	-111.067	-110.871	-15.5064
-110.128	-109.072	-21.5829	-20.084	-107.574	-105.226	-15.3812
-114.835	-112.573	-21.445	-19.9148	-111.864	-108.376	-15.285
-114.795	-108.439	-21.2808	-19.7738	-113.031	-108.374	-15.1758
-117.191	-115.666	-21.1535	-19.5374	-111.257	-106.864	-15.0857
-110.999	-114.018	-21.0081	-19.4184	-120.336	-109.391	-14.9967
-118.476	-117.792	-20.7809	-19.2794	-112.194	-121.726	-14.8692
-114.661	-118.538	-20.6226	-19.1379	-107.329	-108.603	-14.7856
-122.386	-108.747	-20.4482	-18.9699	-117.499	-111.355	-14.7155
-119.968	-119.876	-20.3821	-18.857	-122.664	-112.107	-14.6561
-112.007	-109.037	-20.2566	-18.7528	-117.816	-106.5	-14.5758
-113.988	-108.988	-20.2333	-18.6299	-119.976	-107.82	-14.5451
-116.063	-122.671	-20.1847	-18.5894	-121.201	-119.821	-14.4902
-119.2	-109.959	-20.0819	-18.3964	-118.964	-109.546	-14.445
-116.339	-107.067	-19.9778	-18.4093	-115.292	-110.081	-14.3725
-115.891	-115.781	-19.8166	-18.291	-118.848	-111.011	-14.3004

-104.606	-116.329	-19.7666	-18.2176	-118.631	-112.45	-14.2718
-111.622	-113.542	-19.6286	-18.105	-106.572	-110.572	-14.1922
-110.937	-120.406	-19.6051	-18.1028	-119.328	-107.047	-14.1605
-121.387	-113.202	-19.5797	-18.0447	-111.537	-107.947	-14.1568
-108.698	-112.072	-19.5552	-18.0231	-110.655	-140.885	-14.1474
-110.044	-106.336	-19.4988	-17.9123	-116.971	-105.461	-14.0995
-117.42	-113.178	-19.5185	-17.8728	-106.218	-108.883	-14.1429
-110.27	-109.449	-19.658	-17.8237	-109.167	-108.486	-14.2251
-116.911	-108.136	-19.563	-17.8273	-110.008	-105.219	-14.1932
-109.652	-110.436	-19.6526	-17.7925	-109.687	-109.942	-14.2562
-111.38	-111.335	-19.7416	-17.7609	-123.509	-113.819	-14.311
-118.416	-105.322	-19.6943	-17.7936	-128.899	-105.258	-14.2804
-109.747	-107.887	-19.8053	-17.8575	-120.804	-109.326	-14.3505
-101.623	-103.332	-19.7908	-17.7436	-105.418	-98.178	-14.3736
-116.743	-109.049	-19.9263	-17.7594	-111.266	-101.115	-14.4509
-101.574	-100.083	-20.0971	-17.8102	-100.52	-106.575	-14.5542
-97.4621	-104.392	-20.2821	-17.7156	-102.846	-95.0741	-14.7106
-102.92	-98.7207	-20.3742	-17.8138	-100.391	-97.2635	-14.768
-103.113	-99.6826	-20.714	-17.8514	-102.135	-106.811	-14.9778
-103.626	-107.267	-20.8296	-17.8146	-97.1886	-107.394	-15.0672
-105.726	-102.527	-20.8194	-17.724	-101.106	-104.588	-15.1035
-101.335	-99.5902	-20.906	-17.5814	-116.618	-100.925	-15.2071
-102.761	-95.1999	-21.0893	-17.6441	-105.185	-96.0989	-15.3459
-97.6225	-105.956	-21.1213	-17.6694	-102.975	-99.8378	-15.455
-100.987	-100.453	-21.2788	-17.6635	-107.178	-106.963	-15.5793
-98.8491	-102.9	-21.3143	-17.5633	-91.2843	-94.753	-15.6801
-111.472	-105.746	-21.3647	-17.4638	-103.76	-97.6104	-15.793
-95.0004	-108.42	-21.3843	-17.4286	-104.597	-94.9489	-15.9206
-96.8843	-99.1299	-21.4306	-17.3768	-100.329	-112.111	-16.0129
-103.704	-95.1718	-21.1618	-17.1941	-110.519	-112.562	-16.0108
-99.6889	-103.252	-20.9741	-17.2043	-98.243	-95.7485	-16.0103
-98.833	-97.1902	-21.038	-17.1121	-97.6852	-100.502	-16.2016
-96.0034	-102.65	-21.0303	-17.0223	-112.815	-102.803	-16.3178
-97.8729	-96.2331	-20.7422	-16.9238	-100.558	-97.1232	-16.2608
-107.749	-106.241	-20.6815	-16.9193	-101.283	-99.0073	-16.374
-95.8187	-97.9936	-20.8377	-16.6503	-101.851	-98.0928	-16.577
-106.742	-105.018	-20.5081	-16.6538	-115.255	-98.9152	-16.5072
-113.776	-104.287	-20.373	-16.5092	-96.4845	-103.905	-16.5371
-104.914	-110.073	-20.2203	-16.4309	-102.795	-107.363	-16.5682
-107.299	-103.755	-20.0363	-16.3123	-106.001	-109.648	-16.6154
-104.251	-104.648	-19.732	-16.1737	-107.962	-98.3734	-16.5724
-103.148	-97.5225	-19.8293	-16.0679	-95.6654	-96.117	-16.7334
-107.315	-104.42	-19.5302	-15.9574	-111.322	-105.058	-16.6706
-99.3648	-98.8209	-19.4719	-15.8825	-101.212	-105.253	-16.7733
-98.1232	-106.088	-19.0711	-15.7286	-116.942	-98.1535	-16.6403
-102.135	-97.5958	-18.9455	-15.6107	-93.28	-131.451	-16.7074
-98.9797	-97.5803	-18.7446	-15.4899	-100.081	-95.4681	-16.6596
-96.6985	-104.624	-18.52	-15.4879	-105.626	-98.325	-16.6363
-108.58	-100.189	-18.1849	-15.3372	-101.199	-100.483	-16.4962
-100.393	-100.268	-17.9628	-15.277	-110.504	-96.0176	-16.3962
-103.635	-96.4518	-17.62	-15.1019	-104.408	-103.899	-16.2504
-92.5916	-100.317	-17.4128	-15.0352	-95.6398	-101.481	-16.1925
-99.1319	-107.923	-17.327	-14.9259	-103.959	-109.914	-16.1795
-102.667	-100.742	-17.067	-14.7922	-119.611	-97.7944	-16.072
-96.5773	-105.714	-16.8975	-14.7007	-98.6698	-92.7092	-15.9966

-101.581	-108.172	-16.6975	-14.5482	-106.415	-99.1934	-15.886
-111.581	-94.8642	-16.4104	-14.4098	-97.8172	-96.4312	-15.6919
-103.667	-98.2915	-16.222	-14.2887	-98.2384	-103.026	-15.5711
-102.377	-98.9446	-16.0624	-14.291	-101.475	-98.2898	-15.4587
-93.9926	-94.3383	-15.8207	-14.102	-105.536	-102.272	-15.2547
-100.17	-95.7238	-15.7126	-14.0478	-103.008	-105.57	-15.1699
-93.7985	-98.3486	-15.5645	-13.8874	-97.2687	-109.143	-15.0362
-109.509	-99.4561	-15.3585	-13.6993	-102.377	-93.1524	-14.8678
-101.383	-104.636	-15.2279	-13.5353	-94.3432	-100.087	-14.7316
-93.8351	-100.657	-15.2991	-13.4067	-93.0596	-100.75	-14.8048
-92.9456	-92.6965	-14.9985	-13.2513	-100.017	-96.7545	-14.5201
-99.507	-98.9093	-14.8763	-13.1262	-101.698	-99.9944	-14.3785
-100.416	-97.6894	-14.8068	-12.8965	-100.736	-98.2063	-14.2867
-103.01	-92.873	-14.5452	-12.8933	-96.7509	-106.182	-14.0165
-107.29	-100.797	-14.4865	-12.6726	-95.7622	-99.2265	-13.9332
-98.8344	-99.4914	-14.4191	-12.5241	-101.861	-97.6482	-13.8178
-109.109	-97.3436	-14.1822	-12.3464	-103.523	-105.817	-13.5661
-99.735	-98.0893	-14.0466	-12.2543	-104.105	-96.556	-13.4007
-97.4649	-119.422	-13.9492	-12.1067	-101.071	-95.5519	-13.2597
-105.635	-111.451	-13.815	-12.038	-101.679	-101.104	-13.076
-115.121	-92.6785	-13.7576	-11.6798	-115.181	-113.747	-12.9777
-108.976	-99.9052	-13.581	-11.582	-98.4889	-95.0378	-12.7866
-109.122	-103.669	-13.4295	-11.356	-93.0772	-101.734	-12.5748
-101.188	-107.436	-13.2393	-11.4076	-100.465	-96.6915	-12.3597
-96.8808	-98.8411	-13.0905	-11.1501	-99.4289	-99.5904	-12.1636
-95.3264	-92.0734	-13.0128	-11.157	-102.395	-99.3133	-12.0331
-108.744	-104.916	-13.0292	-10.9719	-100.467	-102.252	-11.9754
-98.7285	-98.0876	-13.1154	-10.7372	-111.681	-100.974	-11.9705
-99.0568	-100.41	-12.9076	-10.7031	-96.5685	-102.984	-11.7238
-101.287	-97.861	-12.7874	-10.5654	-110.298	-94.8732	-11.5451
-99.529	-95.8799	-12.7604	-10.3111	-98.9806	-104.618	-11.4581
-100.8	-95.7232	-12.6214	-10.289	-97.5807	-97.8111	-11.2724
-98.4609	-95.9403	-12.6439	-10.0307	-96.2505	-96.8705	-11.2148
-96.8203	-94.6372	-12.705	-10.0079	-96.318	-102.252	-11.1831
-109.905	-99.1192	-12.6438	-9.74157	-97.5411	-99.3432	-11.0057
-104.482	-94.9482	-12.6391	-9.67472	-109.823	-98.9916	-10.9225
-100.329	-98.7427	-12.5994	-9.60571	-95.0438	-100.721	-10.8063
-116.956	-95.0185	-12.6583	-9.45436	-97.6786	-92.0907	-10.7878
-104.037	-98.9635	-12.5553	-9.3177	-94.5836	-97.1388	-10.5906
-104.76	-103.304	-12.5331	-9.20477	-99.4487	-94.3044	-10.4728
-107.096	-97.3004	-12.5484	-9.07888	-101.73	-108.75	-10.389
-109.223	-99.4203	-12.481	-9.06809	-96.8112	-110.394	-10.294
-99.1302	-100.08	-12.5439	-8.96203	-106.183	-93.7118	-10.2608
-96.5218	-122.184	-12.5185	-8.80666	-99.1134	-105.313	-10.1509
-103.07	-96.7126	-12.3493	-8.73732	-97.4293	-102.964	-9.92493
-102.224	-94.2508	-12.2453	-8.66824	-108.709	-102.982	-9.83419
-97.8982	-99.2724	-12.2033	-8.61671	-104.897	-96.9728	-9.70158
-109.767	-102.014	-12.1528	-8.61597	-107.752	-96.5924	-9.64075
-93.4991	-103.568	-11.9999	-8.46682	-109.795	-98.9468	-9.44492
-99.9626	-98.346	-11.8956	-8.47924	-93.8037	-99.8379	-9.32451
-100.869	-95.1612	-11.8985	-8.37312	-97.8194	-104.558	-9.29833
-96.8608	-104.812	-11.8508	-8.45713	-101.356	-94.9648	-9.21554
-98.2534	-96.9089	-11.8377	-8.43758	-97.9899	-97.3119	-9.15501
-100.563	-89.5814	-11.717	-8.35558	-96.8457	-100.055	-8.99566

J2-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.9248	-97.7463	-104.76	-18.0916
-31.4283	-106.526	-115.128	-32.551
-31.9491	-112.389	-109.631	-31.4168
-30.8826	-107.653	-112.528	-30.1259
-30.25	-115.311	-108.941	-29.4159
-29.8073	-105.475	-111.863	-29.1068
-29.5534	-112.17	-114.174	-28.9298
-29.3405	-111.187	-117.156	-28.8617
-29.3559	-117.829	-117.549	-29.1024
-29.3856	-113.962	-121.475	-29.197
-29.2979	-110.027	-113.826	-29.3758
-29.225	-110.164	-109.091	-29.4006
-29.3039	-110.321	-126.912	-29.6387
-29.2898	-105.959	-114.052	-29.8223
-29.3953	-109.304	-111.663	-30.2592
-29.5062	-116.854	-125.474	-30.5853
-29.3738	-106.324	-111.763	-30.886
-29.7248	-110.061	-116.224	-31.2676
-29.8221	-117.165	-109.124	-31.7643
-29.966	-109.087	-106.302	-32.1838
-30.0539	-122.032	-117.803	-32.8132
-30.0551	-111.895	-113.302	-33.2349
-30.5005	-120.884	-108.923	-33.8693
-30.7116	-108.949	-110.758	-35.0326
-31.2286	-108.471	-118.679	-35.9201
-31.6998	-120.101	-106.203	-37.2692
-32.2044	-109.837	-113.867	-38.2673
-32.9332	-108.383	-114.086	-39.7784
-33.8309	-118.218	-111.691	-39.414
-34.4846	-113.454	-105.132	-37.7519
-34.6095	-108.173	-128.148	-35.6939
-34.2364	-136.412	-112.596	-34.3753
-33.962	-111.586	-119.432	-33.6468
-33.6709	-117.773	-106.576	-33.1301
-33.4247	-110.362	-111.65	-33.2764
-33.5115	-113.001	-124.343	-33.4342
-33.7745	-111.41	-105.725	-34.0119
-33.9709	-104.976	-107.085	-34.5459
-34.3896	-107.731	-104.247	-34.6273
-34.6761	-108.878	-105.881	-34.7774

J2-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.92	-100.315	-99.1694	-17.6841
-31.4296	-123.597	-96.9477	-31.6148
-31.9553	-100.934	-106.79	-32.6545
-30.8857	-101.109	-105.074	-31.7186
-30.2556	-108.978	-104.767	-30.9376
-29.8127	-109.073	-110.394	-30.5159
-29.5577	-126.263	-112.452	-30.2436
-29.3442	-103.524	-113.147	-30.0968
-29.3581	-109.768	-105.294	-30.2419
-29.3883	-114.338	-108.429	-30.2856
-29.3033	-121.022	-112.078	-30.3946
-29.2289	-109.225	-109.751	-30.3164
-29.3095	-114.903	-109.345	-30.5207
-29.2969	-116.408	-105.53	-30.6286
-29.4027	-124.132	-110.738	-30.979
-29.5129	-109.14	-115.466	-31.1891
-29.3787	-117.046	-114.27	-31.4223
-29.7312	-122.193	-107.839	-31.7558
-29.8271	-113.053	-104.742	-32.2504
-29.972	-118.571	-120.666	-32.5917
-30.0626	-111.193	-107.396	-33.0159
-30.0669	-111.523	-105.57	-33.2337
-30.5116	-117.129	-105.032	-33.7485
-30.7227	-110.616	-113.079	-34.6708
-31.2434	-105.993	-108.888	-35.3658
-31.7143	-123.916	-115.583	-36.7742
-32.2192	-112.031	-121.499	-37.926
-32.9558	-103.604	-118.837	-40.0349
-33.8508	-109.833	-107.307	-43.7146
-34.5082	-113.612	-111.637	-48.6765
-34.6275	-118.981	-116.901	-49.5017
-34.2545	-113.178	-114.338	-45.6053
-33.9759	-111.257	-121.73	-44.1654
-33.6896	-126.045	-116.168	-42.7391
-33.4459	-104.674	-113.76	-43.0944
-33.538	-113.626	-121.053	-43.5527
-33.8079	-110.042	-112.116	-45.3905
-34.0107	-114.079	-106.538	-47.4059
-34.4341	-119.178	-107.977	-46.595
-34.7232	-118.544	-109.275	-44.922

-35.0295	-121.171	-114.929	-34.7306	-35.0837	-113.249	-110.646	-42.4349
-35.4271	-118.808	-109.846	-34.3778	-35.4796	-111.477	-121.687	-40.2241
-35.4646	-107.784	-112.222	-33.9778	-35.5217	-119.249	-104.078	-38.2503
-35.7919	-114.386	-103.334	-33.3559	-35.8472	-109.023	-110.394	-36.6374
-36.2056	-106.782	-107.6	-32.9214	-36.2646	-114.998	-110.709	-35.6223
-36.2978	-109.313	-103.497	-32.4669	-36.3608	-118.293	-113.613	-34.7707
-35.8942	-117.914	-113.699	-32.1786	-35.9522	-113.402	-117.285	-34.0403
-35.5681	-113.394	-108.153	-31.951	-35.6246	-121.608	-107.006	-33.5862
-34.6685	-110.732	-109.472	-32.1099	-34.7151	-121.831	-108.448	-33.4889
-34.0074	-117.499	-112.293	-32.2098	-34.0504	-108.468	-110.541	-33.4398
-33.1869	-119.973	-112.688	-32.6617	-33.2269	-112.038	-111.956	-33.5351
-32.1185	-110.124	-116.41	-32.891	-32.155	-120.081	-112.367	-33.4866
-31.2246	-114.421	-110.018	-33.3383	-31.2581	-112.697	-122.168	-33.3141
-30.3948	-111.302	-116.43	-33.5656	-30.4289	-118.871	-131.183	-32.8587
-29.6464	-107.778	-134.318	-32.9889	-29.6763	-113.573	-113.304	-31.9109
-28.8392	-109.315	-111.844	-32.4604	-28.8643	-111.294	-114.355	-31.0392
-28.1926	-107.548	-111.094	-32.0521	-28.2137	-112.171	-106.975	-30.3197
-27.5356	-109.881	-119.882	-31.3493	-27.5542	-115.959	-105.101	-29.5917
-26.9896	-109.203	-119.141	-30.6712	-27.0081	-107.834	-114.033	-28.9534
-26.4486	-110.103	-107.631	-29.957	-26.4662	-113.323	-107.653	-28.3051
-25.9912	-109.266	-113.418	-29.2834	-26.0096	-110.815	-122.033	-27.7084
-25.4804	-109.251	-114.389	-28.7044	-25.4979	-123.381	-114.409	-27.1004
-24.9793	-115.7	-112.363	-28.1628	-24.9949	-112.784	-120.326	-26.5636
-24.5415	-116.296	-116.049	-27.4152	-24.5551	-111.397	-110.423	-25.9403
-24.2028	-116.516	-108.594	-26.7739	-24.217	-113.731	-107.642	-25.3851
-23.7486	-112.661	-115.265	-26.3569	-23.7611	-114.159	-108.757	-25.0726
-23.4844	-116.323	-107.356	-25.8162	-23.4971	-111.338	-111.632	-24.6428
-23.051	-111.102	-113.711	-25.4636	-23.0633	-108.97	-110.557	-24.4012
-22.6563	-123.209	-144.476	-24.9353	-22.6678	-112.565	-108.696	-23.9667
-22.306	-114.842	-103.609	-24.5918	-22.3178	-116.76	-108.741	-23.7001
-21.9797	-112.294	-123.003	-24.1673	-21.9894	-108.728	-117.453	-23.3596
-21.6291	-117.053	-115.524	-23.6266	-21.6372	-111.282	-114.172	-22.9097
-21.4444	-115.058	-112.094	-23.1925	-21.4517	-116.398	-111.456	-22.5761
-21.1112	-107.118	-109.372	-22.7632	-21.1185	-112.567	-112.169	-22.2378
-20.8869	-109.368	-116.889	-22.3802	-20.8927	-113.328	-106.449	-21.9434
-20.5743	-115.721	-110.55	-21.9194	-20.5813	-112.06	-117.937	-21.5751
-20.3105	-114.78	-104.011	-21.5781	-20.3169	-107.788	-108.029	-21.2883
-20.0906	-126.951	-111.758	-21.2208	-20.0974	-111.19	-119.895	-20.9644
-19.9199	-112.844	-110.779	-20.8831	-19.9258	-116.853	-116.63	-20.6883
-19.774	-109.812	-108.362	-20.5139	-19.7769	-113.438	-109.594	-20.3961
-19.5431	-119.372	-108.912	-20.2245	-19.5442	-105.358	-111.08	-20.1705
-19.422	-115.039	-107.194	-19.941	-19.4209	-112.49	-117.602	-19.9458
-19.2811	-112.466	-104.74	-19.6172	-19.2823	-107.711	-111.44	-19.6971
-19.1381	-125.655	-112.125	-19.3595	-19.1381	-105.683	-107.983	-19.513
-18.9727	-110.25	-106.8	-19.0837	-18.9791	-111.772	-103.079	-19.3015
-18.8611	-110.966	-108.113	-18.8785	-18.8566	-119.24	-117.103	-19.1464
-18.7543	-111.036	-115.237	-18.617	-18.7527	-111.95	-110.398	-18.9549
-18.6308	-109.718	-112.277	-18.4263	-18.6274	-111.393	-112.741	-18.8274
-18.5912	-110.149	-109.63	-18.2243	-18.5891	-116.747	-106.297	-18.6968
-18.399	-119.272	-114.142	-18.0069	-18.3964	-113.321	-109.09	-18.555
-18.4112	-124.963	-122.635	-17.7832	-18.4086	-127.068	-106.696	-18.4123
-18.2925	-107.684	-105.599	-17.5351	-18.29	-116.772	-106.139	-18.2394

-18.2186	-113.494	-113.28	-17.3377	-18.2171	-120.445	-118.094	-18.1073
-18.1072	-111.313	-111.822	-17.0679	-18.1038	-151.485	-116.016	-17.8868
-18.1067	-113.52	-113.789	-16.867	-18.1042	-121.741	-109.449	-17.7459
-18.0477	-110.418	-112.521	-16.7009	-18.0425	-122.883	-105.644	-17.6531
-18.0249	-111.439	-105.997	-16.5243	-18.0205	-116.355	-109.328	-17.5389
-17.9167	-107.884	-110.15	-16.3178	-17.9109	-108.876	-105.049	-17.3921
-17.8763	-111.932	-106.768	-16.2144	-17.8717	-118.074	-110.362	-17.358
-17.829	-107.446	-106.546	-16.1563	-17.8239	-112.217	-106.827	-17.3627
-17.8268	-103.569	-115.185	-15.9667	-17.825	-106.419	-114.215	-17.2207
-17.7927	-109.081	-107	-15.8653	-17.789	-110.14	-115.331	-17.188
-17.7614	-106.802	-108.711	-15.7677	-17.7592	-112.998	-111.783	-17.1491
-17.794	-104.73	-112.375	-15.5859	-17.7906	-112.264	-114.316	-17.0159
-17.8565	-112.961	-110.088	-15.5159	-17.8548	-116.615	-109.275	-17.0184
-17.7423	-101.733	-100.423	-15.3921	-17.7422	-103.691	-99.1229	-16.9286
-17.7584	-105.384	-102.087	-15.3279	-17.758	-110.262	-105.933	-16.9349
-17.8129	-115.119	-99.1508	-15.2907	-17.8131	-104.487	-101.406	-16.9539
-17.7133	-100.352	-94.72	-15.2981	-17.7125	-114.33	-98.2796	-17.0049
-17.8098	-99.0316	-106.456	-15.1901	-17.8072	-106.647	-97.365	-16.9453
-17.8512	-96.8624	-104.046	-15.2473	-17.8438	-102.761	-101.511	-17.0779
-17.8116	-107.498	-103.937	-15.1889	-17.8092	-100.872	-103.293	-17.0779
-17.7209	-105.763	-101.24	-15.0891	-17.7157	-103.3	-106.903	-16.9998
-17.5786	-106.611	-102.261	-15.0526	-17.5744	-101.113	-104.396	-17.0124
-17.6417	-98.1015	-103.482	-15.0546	-17.635	-102.938	-99.628	-17.0694
-17.6662	-106.055	-97.9441	-15.0319	-17.6612	-104.134	-105.122	-17.0694
-17.6587	-101.418	-99.7063	-14.9994	-17.6518	-103.83	-103.607	-17.0733
-17.5593	-111.997	-96.6841	-14.9483	-17.5524	-101.988	-99.3949	-17.0437
-17.4576	-103.679	-115.448	-14.9256	-17.4526	-104.3	-98.9894	-17.0423
-17.4231	-99.9628	-96.81	-14.9359	-17.4106	-95.6547	-109.745	-17.0844
-17.3689	-106.233	-109.739	-14.8661	-17.3601	-101.712	-101.265	-17.0747
-17.1866	-100.201	-109.13	-14.7864	-17.1767	-107.05	-101.882	-16.9766
-17.1977	-107.527	-96.3122	-14.6756	-17.1883	-100.273	-98.7087	-16.8655
-17.1092	-105.424	-102.512	-14.754	-17.0967	-102.095	-98.1072	-16.9703
-17.0173	-99.9078	-100.184	-14.732	-17.0071	-100.707	-115.952	-16.9444
-16.9197	-101.402	-102.441	-14.5988	-16.9112	-98.8565	-94.1834	-16.7668
-16.9152	-97.1176	-101.486	-14.628	-16.9087	-98.2302	-101.644	-16.7834
-16.6473	-102.479	-104.519	-14.6782	-16.6409	-100.568	-106.378	-16.8524
-16.65	-107.607	-106.323	-14.5609	-16.6456	-97.6855	-105.22	-16.6875
-16.508	-110.417	-95.9687	-14.4921	-16.5055	-106.663	-98.9195	-16.606
-16.432	-113.052	-95.5217	-14.4313	-16.4299	-106.038	-101.12	-16.538
-16.313	-107.04	-99.2518	-14.426	-16.3114	-103.747	-100.238	-16.5039
-16.176	-106.031	-96.2767	-14.378	-16.1741	-100.856	-102.793	-16.3792
-16.0675	-102.883	-95.5609	-14.3681	-16.0678	-98.2319	-99.2796	-16.3936
-15.9586	-107.643	-96.3461	-14.3057	-15.9548	-93.9581	-102.133	-16.2562
-15.8839	-106.076	-102.274	-14.3293	-15.8814	-121.307	-118.845	-16.2471
-15.7297	-101.604	-98.682	-14.247	-15.7305	-98.9458	-96.5831	-16.1018
-15.6114	-97.2825	-96.1125	-14.2811	-15.6102	-96.6185	-99.0897	-16.1445
-15.4921	-98.8827	-93.9499	-14.2034	-15.493	-98.0962	-103.829	-16.0666
-15.4794	-116.932	-106.424	-14.1791	-15.4884	-100.288	-95.8596	-16.0386
-15.3341	-94.5953	-97.9885	-14.0913	-15.3342	-99.919	-94.8689	-15.8912
-15.2723	-105.505	-103.986	-13.9714	-15.2759	-111.959	-92.9475	-15.7464
-15.099	-103.996	-102.678	-13.9301	-15.0969	-97.8053	-113.154	-15.661
-15.0298	-100.179	-105.435	-13.9561	-15.0281	-100.325	-95.7276	-15.6224
-14.9205	-104.727	-94.3354	-13.872	-14.916	-94.2964	-104.549	-15.5857
-14.7865	-99.6074	-98.176	-13.9375	-14.7844	-96.0582	-94.3449	-15.5719
-14.7	-102.631	-104.853	-13.9049	-14.6966	-98.2045	-96.948	-15.5241

-14.5396	-102.136	-99.1011	-13.8523	-14.5333	-102.471	-94.4696	-15.4383
-14.4131	-101.397	-104.493	-13.7664	-14.4009	-107.794	-103.186	-15.3221
-14.2863	-103.926	-96.2293	-13.6902	-14.2841	-99.1386	-98.8936	-15.2367
-14.2862	-97.3144	-97.6575	-13.6429	-14.284	-100.165	-97.3562	-15.1978
-14.0973	-93.3573	-107.882	-13.6463	-14.0949	-99.0999	-99.3025	-15.0742
-14.049	-100.114	-90.2722	-13.5874	-14.0492	-99.9655	-100.032	-14.9635
-13.8853	-108.64	-94.1869	-13.4817	-13.8857	-100.42	-94.4439	-14.8359
-13.7063	-100.621	-99.7836	-13.4242	-13.7064	-105.48	-100.397	-14.7537
-13.537	-115.36	-100.576	-13.4149	-13.5391	-113.019	-94.7283	-14.657
-13.4099	-110.734	-96.7423	-13.4848	-13.4116	-102.292	-109.211	-14.8059
-13.2565	-104.77	-98.2599	-13.4773	-13.2569	-99.1048	-89.4024	-14.6097
-13.1303	-94.3462	-113.678	-13.3757	-13.1346	-103.33	-100.248	-14.4825
-12.9004	-99.6512	-104.172	-13.4039	-12.9023	-96.492	-97.9105	-14.4494
-12.8986	-107.564	-101.059	-13.2889	-12.8985	-103.414	-99.7912	-14.201
-12.6759	-100.71	-97.6396	-13.3509	-12.6784	-97.5877	-92.6383	-14.1816
-12.5295	-102.085	-102.673	-13.4134	-12.5317	-103.004	-95.7868	-14.118
-12.344	-96.0101	-102.655	-13.3122	-12.3513	-111.786	-99.0509	-13.8928
-12.2579	-111.595	-100.009	-13.2767	-12.2613	-99.2981	-94.3885	-13.7388
-12.1044	-98.1299	-108.705	-13.2959	-12.1129	-95.6455	-100.092	-13.6275
-12.0412	-94.2141	-100.777	-13.3057	-12.0449	-104.307	-106.985	-13.5011
-11.6845	-113.167	-91.2697	-13.331	-11.6869	-96.2374	-119.985	-13.4023
-11.5811	-116.182	-97.6343	-13.2089	-11.5843	-100.904	-111.27	-13.2053
-11.3548	-104.696	-104.669	-13.1931	-11.3584	-99.4831	-102.015	-13.0222
-11.408	-102.198	-95.0054	-13.0894	-11.409	-99.9411	-98.5864	-12.7588
-11.1488	-105.69	-92.9491	-13.0672	-11.1476	-97.0037	-96.0891	-12.5493
-11.1571	-103.635	-106.499	-13.0321	-11.158	-103.88	-102.814	-12.3907
-10.9693	-97.4125	-100.615	-13.1563	-10.9675	-98.1103	-97.795	-12.3656
-10.7343	-118.984	-107.473	-13.3059	-10.7305	-100.862	-99.7251	-12.3316
-10.699	-105.371	-112.083	-13.0911	-10.6979	-98.0486	-95.5324	-12.0173
-10.5619	-95.8499	-91.6534	-13.0751	-10.5576	-103.702	-98.9921	-11.8007
-10.309	-104.804	-98.8695	-13.1616	-10.3071	-104.816	-93.1007	-11.7228
-10.2776	-93.6541	-98.5696	-13.0815	-10.274	-101.652	-90.7455	-11.5145
-10.0253	-99.8442	-99.5049	-13.1174	-10.027	-96.6063	-95.6199	-11.412
-10.0056	-104.007	-98.4692	-13.2109	-10.0067	-101.585	-97.3337	-11.328
-9.73918	-98.4718	-102.949	-13.2306	-9.73657	-102.212	-99.7324	-11.133
-9.67128	-95.2257	-95.772	-13.2678	-9.66983	-103.539	-97.0079	-10.9984
-9.59969	-115.355	-97.1281	-13.2597	-9.5973	-98.5201	-101.424	-10.849
-9.45403	-96.0859	-105.66	-13.3053	-9.44942	-99.1536	-106.982	-10.7796
-9.31836	-102.388	-101.35	-13.2828	-9.31642	-98.4975	-96.3158	-10.5716
-9.20317	-109.275	-92.1425	-13.3281	-9.2025	-111.041	-91.7852	-10.4435
-9.07773	-106.605	-95.7328	-13.4377	-9.07476	-109.814	-103.765	-10.3548
-9.06438	-100.378	-100.854	-13.3464	-9.06293	-102.081	-94.3194	-10.1866
-8.96088	-107.309	-97.8582	-13.444	-8.95927	-111.492	-96.987	-10.1329
-8.8081	-101.144	-101.215	-13.4642	-8.80261	-99.0768	-92.4804	-10.0264
-8.73994	-107.909	-103.002	-13.3924	-8.74104	-101.721	-93.3734	-9.79948
-8.67106	-100.554	-104.481	-13.2748	-8.67577	-99.7767	-99.5564	-9.6908
-8.6215	-97.8455	-101.726	-13.2892	-8.61946	-105.537	-99.8341	-9.57938
-8.6194	-99.3077	-113.118	-13.2317	-8.62565	-99.4673	-99.1668	-9.5225
-8.46314	-97.9748	-110.038	-13.1365	-8.47422	-105.79	-98.5105	-9.33964
-8.48408	-98.9565	-95.9123	-13.0592	-8.48485	-102.487	-100.578	-9.23117
-8.37905	-102.351	-104.75	-13.0359	-8.38143	-96.4842	-97.0285	-9.18502
-8.4654	-100.109	-137.388	-12.9355	-8.47012	-97.6508	-97.1888	-9.07734
-8.44113	-97.7902	-108.581	-12.8909	-8.44177	-99.8423	-106.458	-9.01883
-8.35812	-103.685	-100.251	-12.7159	-8.35984	-99.2012	-102.362	-8.83668

J3-J4

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.8031	-100.083	-102.33	-17.7306
-32.4149	-93.7767	-97.8924	-32.0781
-33.4691	-95.1101	-93.8995	-32.195
-32.0241	-94.9573	-93.2635	-31.0304
-31.1369	-95.2151	-97.2817	-30.2416
-30.4907	-96.5071	-94.3747	-29.8287
-30.0744	-96.1422	-98.6236	-29.5736
-29.7593	-98.2985	-99.3569	-29.4165
-29.6859	-99.385	-99.3302	-29.4769
-29.6137	-100.179	-101.493	-29.4174
-29.5203	-101.62	-102.476	-29.4935
-29.469	-105.902	-103.852	-29.4062
-29.3953	-125.506	-105.544	-29.5316
-29.306	-105.669	-104.788	-29.5852
-29.413	-117.11	-106.779	-29.8514
-29.551	-107.94	-101.55	-30.0451
-29.4749	-104.675	-109.241	-30.1517
-29.75	-104.893	-107.744	-30.3131
-29.6847	-103.995	-111.038	-30.5019
-29.8537	-112.727	-113.41	-30.6794
-29.9862	-107.423	-112.241	-30.9859
-30.1268	-113.619	-110.469	-31.2441
-30.4068	-115.763	-108.535	-31.6234
-30.5557	-115.65	-104.496	-32.1908
-30.7575	-111.443	-113.383	-32.4608
-30.8961	-112.461	-109.503	-33.0507
-31.1294	-118.579	-113.014	-33.4703
-30.7864	-117.733	-114.85	-34.3835
-30.1627	-137.459	-110.98	-35.7239
-29.3522	-116.15	-111.431	-37.3307
-28.6168	-114.033	-126.604	-39.4135
-27.8559	-107.778	-108.148	-40.681
-27.43	-118.213	-105.056	-39.7086
-27.2036	-112.483	-119.411	-38.4682
-27.1551	-117.162	-108.667	-37.9126
-27.2845	-107.024	-106.802	-37.5693
-27.4403	-108.596	-103.861	-38.4756
-27.4733	-107.548	-105.504	-39.1273
-27.563	-111.123	-115.563	-40.5875
-27.688	-106.708	-115.998	-41.5368

J3-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.7867	-95.4015	-95.7702	-18.4908
-32.4122	-108.241	-102.206	-31.1366
-33.5065	-109.64	-108.911	-29.7505
-32.0641	-110.045	-101.367	-28.7676
-31.1784	-102.959	-107.838	-28.1645
-30.5392	-105.372	-105.31	-27.8609
-30.1264	-113.589	-109.638	-27.6763
-29.8158	-109.164	-105.258	-27.5793
-29.7451	-111.633	-112.805	-27.6354
-29.6747	-112.504	-115.676	-27.6091
-29.5817	-115.661	-102.654	-27.6888
-29.5304	-111.402	-111.1	-27.6232
-29.455	-110.271	-117.212	-27.7612
-29.3623	-112.301	-105.95	-27.8149
-29.4689	-130.372	-109.199	-28
-29.6061	-113.614	-110.424	-28.1539
-29.5288	-111.405	-107.735	-28.2406
-29.8004	-110	-118.741	-28.3917
-29.7302	-113.442	-109.042	-28.5416
-29.8946	-123.009	-107.165	-28.6441
-30.0234	-111.334	-117.541	-28.7937
-30.1634	-105.871	-115.338	-28.9449
-30.4342	-110.399	-104.546	-29.1987
-30.5773	-109.356	-117.009	-29.5133
-30.7665	-109.093	-108.063	-29.6469
-30.8922	-113.781	-111.282	-30.0145
-31.1125	-106.316	-109.976	-30.2402
-30.7529	-116.51	-107.247	-30.6729
-30.1176	-114.002	-108.237	-31.3724
-29.3023	-111.56	-112.637	-32.0577
-28.5671	-113.883	-110.675	-32.7871
-27.8098	-112.563	-120.619	-33.0765
-27.3866	-113.581	-113.983	-32.7398
-27.1596	-115.352	-109.919	-32.4142
-27.1118	-113.015	-116.027	-31.9596
-27.2372	-110.764	-112.372	-31.7814
-27.3902	-122.321	-112.418	-31.7236
-27.4215	-112.399	-106.551	-31.6728
-27.5057	-110.974	-106.02	-32.0052
-27.6243	-108.084	-113.705	-32.1122

-27.6498	-107.494	-115.981	-42.9007	-27.5838	-110.299	-112.135	-32.2033
-27.6061	-115.574	-112.712	-43.9762	-27.5387	-108.391	-108.841	-32.2
-27.5874	-109.163	-107.03	-46.05	-27.5172	-110.421	-107.565	-32.1208
-27.43	-120.662	-115.299	-49.1718	-27.3605	-125.819	-114.652	-32.0946
-27.1308	-110.707	-125.099	-50.4462	-27.0642	-108.088	-113.478	-32.0536
-26.9364	-110.181	-105.007	-49.8756	-26.8712	-106.864	-124.775	-32.1195
-26.9177	-125.147	-108.546	-47.9396	-26.8528	-115.831	-108.252	-32.0611
-26.9221	-111.845	-114.439	-48.0648	-26.8574	-121.027	-115.859	-32.1429
-27.1431	-106.216	-106.99	-48.4614	-27.0756	-108.439	-107.995	-31.8235
-27.3429	-112.196	-111.835	-49.7798	-27.2758	-117.506	-116.596	-31.6503
-27.6524	-116.721	-118.595	-47.3088	-27.5799	-114.261	-119.055	-30.8593
-28.153	-125.844	-120.928	-45.5011	-28.0825	-121.357	-125.363	-30.5102
-28.6534	-118.162	-115	-42.0003	-28.5716	-112.057	-127.766	-29.7825
-29.1236	-115.57	-114.186	-40.0179	-29.0421	-116.801	-110	-29.3122
-29.5297	-108.99	-117.316	-38.4272	-29.4488	-115.448	-110.738	-28.9338
-29.9744	-110.029	-110.921	-36.8831	-29.8913	-123.544	-105.929	-28.4702
-30.4041	-113.099	-114.301	-35.4202	-30.3226	-110.441	-115.347	-27.9721
-30.7529	-120.362	-125.76	-34.1561	-30.6766	-109.588	-115.618	-27.5572
-30.849	-114.282	-115.822	-32.8064	-30.7819	-111.205	-112.491	-27.0774
-30.9931	-113.932	-118.489	-31.5492	-30.9391	-127.192	-105.052	-26.5709
-30.8626	-108.458	-109.205	-30.7612	-30.8139	-104.987	-113.649	-26.2668
-30.9214	-115.045	-113.617	-29.8319	-30.8853	-110.521	-115.268	-25.8301
-30.9557	-112.43	-118.928	-29.2375	-30.9275	-111.574	-110.295	-25.5548
-30.88	-112.372	-108.374	-28.5497	-30.8666	-112.272	-110.821	-25.1807
-30.6449	-110.514	-121.727	-27.8759	-30.6457	-116.529	-119.66	-24.818
-30.3607	-118.349	-110.325	-27.2942	-30.3739	-106.992	-114.472	-24.5298
-30.2697	-112.635	-115.121	-26.6386	-30.2902	-110.807	-107.397	-24.1513
-30.074	-110.591	-110.344	-26.1406	-30.1103	-108.463	-112.042	-23.89
-29.6747	-109.141	-110.442	-25.5561	-29.7155	-116.159	-115.524	-23.5251
-29.3026	-115.326	-118.707	-25.2268	-29.3502	-111.287	-108.292	-23.3433
-28.9725	-117.297	-109.857	-24.8571	-29.0237	-110.867	-111.872	-23.1276
-28.5385	-111.317	-117.857	-24.4548	-28.5924	-107.463	-109.765	-22.8846
-28.2791	-117.373	-107.221	-24.0669	-28.3397	-114.31	-116.211	-22.6825
-27.5914	-107.255	-112.662	-23.6041	-27.649	-121.055	-110.839	-22.4391
-27.4276	-115.706	-101.759	-23.1513	-27.486	-113.436	-107.215	-22.1964
-26.9322	-104	-110.523	-22.7094	-26.9884	-108.496	-105.506	-21.9226
-26.4065	-117.257	-122.083	-22.4137	-26.4583	-118.7	-127.541	-21.754
-26.1172	-112.93	-107.214	-22.0872	-26.1721	-111.372	-117.67	-21.572
-25.8042	-110.08	-104.114	-21.8361	-25.8596	-134.314	-115.098	-21.43
-25.5395	-115.722	-107.363	-21.5175	-25.5955	-123.927	-113.552	-21.2811
-25.1045	-115.531	-114.716	-21.2354	-25.1526	-110.909	-107.302	-21.131
-24.8622	-128.563	-109.481	-20.9227	-24.9148	-106.093	-109.695	-20.9709
-24.6453	-116.798	-115.768	-20.5385	-24.6957	-107.075	-114.091	-20.7308
-24.3007	-114.682	-117.953	-20.2595	-24.3452	-111.903	-119.689	-20.5673
-23.9875	-106.626	-104.941	-19.9618	-24.0329	-118.04	-113.878	-20.3793
-23.7512	-118.428	-107.987	-19.8117	-23.795	-108.891	-105.998	-20.3163
-23.5037	-109.973	-110.145	-19.6189	-23.547	-106.97	-110.43	-20.2018
-23.253	-117.687	-117.672	-19.4983	-23.2973	-110.956	-111.285	-20.1867
-23.109	-111.766	-111.814	-19.3204	-23.1498	-111.79	-122.732	-20.1424
-22.7018	-107.642	-107.712	-19.1198	-22.7409	-112.63	-111.668	-20.0427
-22.6295	-114.716	-116.169	-18.8807	-22.6693	-115.677	-109.214	-19.9445
-22.3601	-109.811	-107.823	-18.6412	-22.3956	-111.351	-118.994	-19.7932

-22.1742	-111.508	-112.262	-18.5019	-22.2111	-115.644	-120.907	-19.7519
-21.8839	-113.654	-105.693	-18.2924	-21.919	-114.712	-105.508	-19.6292
-21.7636	-114.885	-115.658	-18.1614	-21.7957	-111.627	-114.446	-19.6153
-21.5807	-104.54	-116.27	-18.057	-21.6135	-115.324	-116.079	-19.6137
-21.4301	-111.593	-106.534	-17.9202	-21.4603	-106.042	-114.962	-19.585
-21.1958	-112.918	-124.362	-17.7196	-21.2248	-112.293	-110.151	-19.5216
-21.0061	-109.311	-118.21	-17.6395	-21.0307	-116.73	-112.558	-19.5228
-20.8633	-110.85	-107.984	-17.6096	-20.8919	-113.022	-116.848	-19.6476
-20.7622	-123.4	-110.54	-17.4372	-20.7911	-109.977	-110.101	-19.5479
-20.5333	-116.025	-105.957	-17.4085	-20.5575	-113.528	-115.254	-19.6462
-20.376	-127.982	-111.329	-17.3564	-20.4003	-111.804	-106.177	-19.713
-20.3128	-111.177	-111.217	-17.1973	-20.336	-105.061	-117.797	-19.6542
-20.2699	-110.263	-107.051	-17.1571	-20.2926	-127.281	-112.874	-19.7536
-19.9972	-100.802	-111.173	-17.0628	-20.0185	-105.918	-109.752	-19.722
-19.878	-101.984	-112.408	-17.0531	-19.8993	-109.988	-97.9826	-19.8412
-19.8067	-101.689	-99.9768	-17.1066	-19.8267	-99.9292	-97.8756	-19.992
-19.5772	-105.677	-99.567	-17.1724	-19.5987	-102.406	-104.893	-20.1624
-19.5621	-102.137	-112.937	-17.1426	-19.5853	-99.2963	-93.255	-20.2563
-19.5096	-105.216	-101.332	-17.2994	-19.5267	-99.1529	-100.305	-20.6025
-19.3217	-101.163	-106.906	-17.3272	-19.3383	-101.238	-112.272	-20.7206
-19.1282	-108.98	-97.0955	-17.3365	-19.1464	-115.091	-98.7027	-20.7183
-18.889	-101.549	-102.263	-17.3904	-18.9054	-98.9584	-101.506	-20.8129
-18.842	-102.296	-123.62	-17.5078	-18.8636	-110.394	-102.867	-21.0111
-18.7997	-102.677	-107.157	-17.6308	-18.8154	-95.5037	-110.355	-21.0558
-18.6883	-104.18	-100.094	-17.7444	-18.7064	-97.8769	-95.1322	-21.2292
-18.5311	-99.2842	-110.514	-17.8222	-18.5478	-102.101	-104.668	-21.2791
-18.3571	-106.812	-99.1052	-17.9349	-18.3733	-103.53	-102.359	-21.3311
-18.2585	-115.172	-103.785	-18.0598	-18.2759	-107.124	-98.7178	-21.3638
-18.1902	-98.1329	-96.435	-18.0115	-18.2048	-99.8422	-94.4343	-21.4267
-17.9684	-103.868	-106.993	-18.0566	-17.9833	-100.651	-96.6488	-21.1774
-17.9681	-97.842	-103.688	-18.0479	-17.9803	-97.9731	-105.03	-21.014
-17.8504	-95.7719	-105.315	-18.3205	-17.868	-112.383	-99.9225	-21.0927
-17.7722	-101.085	-97.634	-18.4057	-17.7891	-100.146	-111.456	-21.0743
-17.6862	-99.5292	-101.043	-18.4111	-17.6978	-96.3824	-101.958	-20.7976
-17.7293	-97.4823	-93.3984	-18.6267	-17.7403	-100.859	-96.0506	-20.7462
-17.4729	-104.812	-104.769	-18.7913	-17.4825	-105.127	-108.5	-20.904
-17.5392	-104.687	-105.895	-18.7936	-17.548	-106.197	-100.424	-20.5741
-17.4562	-104.144	-115.993	-18.8038	-17.4666	-113.455	-101.031	-20.425
-17.4535	-103.55	-102.775	-18.9014	-17.4604	-112.082	-101.03	-20.2685
-17.4104	-105.191	-106.606	-19.1202	-17.4174	-112.646	-112.343	-20.0719
-17.3495	-109.985	-106.754	-19.2801	-17.3545	-102.15	-99.9335	-19.7794
-17.3456	-102.587	-95.5532	-19.46	-17.3494	-112.183	-91.6957	-19.8676
-17.3343	-94.8363	-108.898	-19.6533	-17.3376	-98.5179	-98.8593	-19.5519
-17.3746	-104.483	-105.653	-19.8486	-17.3754	-94.8653	-101.101	-19.4536
-17.3419	-96.0859	-95.4744	-19.8918	-17.3455	-104.649	-108.13	-19.0478
-17.345	-104.432	-97.5532	-20.1923	-17.3466	-93.3466	-98.1641	-18.8815
-17.3606	-98.9109	-99.4206	-20.1665	-17.3622	-109.523	-99.155	-18.687
-17.5323	-105.085	-108.038	-20.3672	-17.5318	-109.265	-97.3888	-18.4429
-17.5447	-100.44	-95.0344	-20.42	-17.5377	-102.044	-98.1907	-18.1002
-17.6716	-101.33	-102.073	-20.3869	-17.6786	-112.54	-104.685	-17.8984
-17.6581	-107.061	-99.5757	-20.6474	-17.6595	-111.006	-98.3531	-17.5422
-17.8038	-97.8461	-105.091	-20.8015	-17.8075	-100.338	-92.7676	-17.3377
-17.9004	-99.4691	-103.297	-20.7777	-17.905	-101.971	-91.0509	-17.2617
-17.9947	-116.112	-97.3014	-21.0788	-17.9991	-98.8582	-101.201	-16.9907
-18.1452	-103.169	-112.262	-21.1381	-18.1517	-100.906	-100.13	-16.8369

-18.2055	-111.506	-104.808	-21.1535	-18.2048	-108.92	-91.6499	-16.6319
-18.3026	-106.573	-98.888	-21.3021	-18.3098	-101.671	-104.704	-16.3485
-18.4488	-97.4743	-97.179	-21.1465	-18.4492	-111.479	-92.6346	-16.1749
-18.7917	-95.0681	-94.2994	-21.3535	-18.7969	-96.0064	-96.3206	-16.0416
-18.7949	-104.207	-97.9903	-21.4198	-18.801	-99.3837	-96.8764	-15.7985
-19.0814	-98.5617	-95.0139	-21.5029	-19.0859	-95.1288	-102.967	-15.6817
-19.1394	-98.1102	-105.03	-21.4141	-19.1461	-96.7879	-101.165	-15.533
-19.2311	-97.8612	-101.911	-21.4172	-19.2368	-93.8037	-102.863	-15.3324
-19.3111	-98.9074	-98.838	-21.3722	-19.3196	-101.417	-103.855	-15.2089
-19.3798	-106.635	-98.3074	-21.7358	-19.3882	-122.133	-98.1734	-15.2651
-19.3979	-102.801	-100.821	-21.6121	-19.4059	-96.4608	-97.2752	-14.9575
-19.5703	-97.2387	-105.096	-21.5225	-19.5802	-101.836	-89.5626	-14.8495
-19.3717	-95.8697	-101.468	-21.5764	-19.383	-99.6069	-91.9689	-14.7667
-19.6644	-94.9166	-107.068	-21.2225	-19.6777	-97.6186	-98.7658	-14.5096
-19.4855	-95.9504	-95.5879	-21.2792	-19.4979	-124.388	-94.6804	-14.4514
-19.3801	-101.697	-103.229	-21.2625	-19.3883	-96.8704	-94.9876	-14.3902
-19.2815	-95.6575	-93.1752	-20.9336	-19.2944	-100.645	-101.148	-14.1636
-19.2455	-106.713	-94.6171	-20.7096	-19.2649	-100.833	-102.333	-14.0257
-19.018	-96.7834	-93.1738	-20.4865	-19.0339	-97.2028	-102.433	-13.9315
-19.0115	-98.6015	-98.2065	-20.2558	-19.0265	-114.946	-97.9585	-13.8062
-18.4068	-104.075	-103.665	-20.0149	-18.4241	-100.046	-96.2522	-13.7477
-18.3574	-93.8698	-94.4795	-19.6664	-18.375	-100.744	-93.8695	-13.5929
-17.9982	-98.0236	-94.3112	-19.2708	-18.0156	-99.6713	-100.344	-13.4473
-17.9874	-96.8438	-96.5545	-18.8472	-18.0043	-96.0292	-95.1161	-13.2729
-17.5925	-99.7549	-101.204	-18.4213	-17.6095	-100.959	-108.793	-13.1131
-17.6065	-99.9747	-92.4193	-18.1291	-17.6232	-93.0467	-96.041	-13.0505
-17.32	-108.227	-93.5779	-17.9267	-17.3332	-101.576	-96.817	-13.0578
-16.9213	-113.458	-102.084	-17.8309	-16.9381	-98.31	-97.7587	-13.153
-16.8504	-100.285	-99.6641	-17.3061	-16.8661	-103.736	-97.9238	-12.9425
-16.6214	-102.872	-97.9691	-16.8732	-16.6379	-96.2057	-97.5529	-12.8069
-16.3211	-93.9812	-103.61	-16.5736	-16.3385	-98.526	-96.5341	-12.7841
-16.2058	-100.056	-95.0252	-16.1776	-16.2237	-98.1292	-103.384	-12.6512
-15.8838	-104.089	-106.549	-15.9227	-15.9024	-93.4317	-105.777	-12.6616
-15.8736	-96.1612	-101.206	-15.7695	-15.891	-103.813	-92.4306	-12.7111
-15.4638	-102.272	-102.269	-15.3994	-15.4763	-98.9585	-95.6803	-12.63
-15.3926	-93.5317	-110.716	-15.1389	-15.4063	-104.732	-104.048	-12.6138
-15.2932	-96.882	-93.8118	-14.8408	-15.3055	-98.5741	-99.5397	-12.5691
-15.0809	-99.6459	-101.317	-14.6539	-15.095	-96.2412	-102.578	-12.621
-14.979	-91.3508	-99.9776	-14.2655	-14.9909	-100.081	-103.574	-12.512
-14.878	-109.661	-100.434	-13.9773	-14.891	-97.2347	-96.3466	-12.4814
-14.6891	-100.276	-108.713	-13.7177	-14.6994	-117.561	-99.4627	-12.4894
-14.7939	-97.0569	-92.5633	-13.4507	-14.8038	-97.6823	-95.1299	-12.4282
-14.6973	-97.8639	-97.0033	-13.2813	-14.7073	-102.953	-102.088	-12.4805
-14.4266	-102.529	-110.549	-13.038	-14.4317	-102.536	-98.3607	-12.4658
-14.3959	-100.328	-100.81	-12.6275	-14.404	-96.4927	-98.4904	-12.3011
-14.3915	-105.25	-105.995	-12.3482	-14.4012	-93.1558	-93.4531	-12.2088
-14.432	-99.9875	-111.87	-12.0816	-14.4377	-118.154	-94.5302	-12.1802
-14.4765	-93.1928	-98.4361	-11.8808	-14.4858	-107.079	-115.77	-12.1568
-14.2132	-102.989	-93.7645	-11.5301	-14.2196	-102.189	-108.454	-12.0148
-14.3276	-99.8132	-98.0747	-11.2569	-14.3197	-102.279	-95.0814	-11.9277
-14.32	-92.7365	-101.878	-11.1026	-14.3279	-98.6634	-94.8207	-11.9433
-14.403	-97.4499	-102.527	-10.9091	-14.4134	-100.569	-101.283	-11.9146
-14.3748	-106.451	-101.326	-10.7249	-14.3883	-97.9839	-96.881	-11.9118
-14.1299	-95.2047	-96.1326	-10.4447	-14.1367	-94.7878	-96.1847	-11.7942

J3-J6

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.7762	-93.5492	-98.6165	-18.088
-32.4076	-100.372	-99.4074	-30.6591
-33.5336	-107.217	-110.513	-30.5006
-32.087	-106.16	-107.219	-29.6479
-31.2007	-119.163	-112.558	-28.9418
-30.5608	-107.819	-111.379	-28.4872
-30.1486	-112.815	-110.204	-28.1401
-29.8365	-115.798	-112.747	-27.9082
-29.7672	-124.171	-111.822	-27.7521
-29.6967	-112.028	-113.134	-27.5489
-29.6043	-114.057	-104.461	-27.4209
-29.5531	-115.622	-106.21	-27.1371
-29.4741	-114.255	-104.657	-27.0747
-29.3822	-108.947	-116.668	-26.8936
-29.4861	-110.136	-108.237	-26.7648
-29.6252	-104.661	-108.121	-26.6256
-29.5449	-116.772	-103.752	-26.4323
-29.8155	-114.101	-115.593	-26.3133
-29.7418	-115.052	-104.339	-26.1617
-29.9056	-111.362	-108.93	-25.9583
-30.0316	-113.022	-111.208	-25.7277
-30.1707	-107.874	-108.873	-25.5444
-30.4402	-109.023	-107.456	-25.4305
-30.5802	-114.323	-107.059	-25.2913
-30.7641	-122.393	-113.296	-25.0834
-30.8865	-113.807	-114.314	-25.0035
-31.1014	-112.705	-113.114	-24.8613
-30.7363	-109.663	-112.246	-24.781
-30.0951	-114.821	-114.143	-24.8876
-29.2794	-109.587	-118.735	-25.0146
-28.5457	-113.011	-115.178	-25.1986
-27.7907	-108.708	-109.299	-25.2431
-27.3676	-111.703	-123.082	-25.0871
-27.1421	-109.641	-111.757	-24.884
-27.0939	-115.763	-125.616	-24.4925
-27.2197	-111.223	-114.66	-24.2051
-27.3695	-128.122	-112.621	-23.858
-27.3987	-107.167	-108.37	-23.5567
-27.4818	-114.655	-108.234	-23.3823
-27.6006	-123.792	-109.471	-23.1709

J3-J7

S11 (dB)	S21 (dB)	S12 (dB)
-17.7697	-102.268	-96.7876
-32.4072	-104.505	-106.196
-33.5493	-117.299	-99.9876
-32.1005	-116.476	-106.42
-31.2109	-111.467	-118.639
-30.5711	-114.115	-109.077
-30.16	-112.325	-117.038
-29.848	-110.097	-107.018
-29.7784	-115.367	-104.307
-29.7086	-108.638	-109.64
-29.6144	-123.61	-116.918
-29.5621	-114.553	-110.541
-29.4838	-114.13	-106.818
-29.3895	-114.468	-117.96
-29.4924	-116.462	-133.241
-29.6305	-117.49	-106.577
-29.5504	-115.333	-113.312
-29.8202	-115.541	-109.424
-29.7434	-111.252	-109.729
-29.9069	-111.254	-112.758
-30.0329	-111.24	-115.877
-30.171	-104.949	-117.007
-30.4398	-107.134	-118.336
-30.5761	-127.2	-110.862
-30.759	-110.144	-116.075
-30.8752	-118.573	-108.297
-31.0855	-112.087	-114.985
-30.7168	-112.019	-120.461
-30.0743	-108.557	-111.473
-29.2597	-127.483	-145.518
-28.5278	-111.048	-112.732
-27.7729	-117.955	-116.575
-27.3515	-122.063	-111.031
-27.1257	-113.671	-104.529
-27.076	-110.283	-106.991
-27.2001	-110.459	-108.265
-27.3493	-117.27	-111.286
-27.3773	-114.191	-110.985
-27.4574	-113.026	-111.753
-27.5754	-118.115	-110.414

-27.5571	-117.512	-109.707	-22.9678	-27.5292	-115.356	-108.375
-27.5097	-110.337	-105.165	-22.7856	-27.4828	-113.09	-110.477
-27.4893	-107.587	-110.019	-22.5722	-27.4617	-103.041	-109.594
-27.3319	-104.292	-111.935	-22.4042	-27.3068	-120.704	-121.103
-27.0364	-132.311	-110.432	-22.2387	-27.0102	-116.826	-122.207
-26.8456	-114.3	-114.2	-22.1271	-26.821	-116.065	-116.425
-26.8283	-106.161	-109.238	-21.982	-26.8028	-119.84	-109.892
-26.8328	-127.643	-122.318	-21.8714	-26.807	-118.252	-107.823
-27.0524	-112.508	-115.989	-21.6464	-27.0252	-107.139	-113.937
-27.2503	-117.82	-102.535	-21.4577	-27.2227	-109.708	-108.594
-27.5567	-117.15	-105.788	-21.0851	-27.5279	-108.041	-115.236
-28.0523	-112.337	-111.904	-20.846	-28.0228	-117.423	-107.101
-28.5468	-109.814	-103.239	-20.4677	-28.5122	-106.329	-129.466
-29.017	-105.426	-114.747	-20.1748	-28.9833	-111.636	-114.412
-29.4206	-105.415	-111.982	-19.9097	-29.3879	-108.137	-106.498
-29.8653	-112.331	-107.013	-19.6098	-29.8318	-114.707	-107.142
-30.2962	-121.167	-110.29	-19.3025	-30.2635	-114.476	-118.091
-30.6534	-109.821	-116.004	-19.0533	-30.6229	-116.957	-119.283
-30.7633	-113.511	-107.557	-18.7939	-30.7349	-104.959	-107.46
-30.9242	-112.493	-105.268	-18.5209	-30.8989	-130.164	-111.228
-30.8062	-109.112	-109.597	-18.3386	-30.7854	-119.666	-112.696
-30.8807	-117.542	-116.209	-18.0806	-30.8659	-112.228	-106.016
-30.9295	-116.553	-105.771	-17.884	-30.9174	-109.846	-108.275
-30.8762	-110.05	-105.765	-17.6585	-30.8615	-116.357	-109.235
-30.6628	-114.804	-106.694	-17.4479	-30.6547	-116.334	-106.764
-30.3876	-110.434	-113.502	-17.2619	-30.3929	-110.326	-115.099
-30.3125	-119.989	-109.142	-17.0542	-30.3204	-113.75	-118.951
-30.1358	-111.842	-119.072	-16.8918	-30.1492	-110.074	-108.981
-29.746	-109.65	-107.177	-16.6892	-29.7626	-111.699	-110.957
-29.3826	-110.035	-114.872	-16.5547	-29.3978	-109.75	-114.567
-29.0565	-116.778	-107.058	-16.3958	-29.0742	-118.056	-116.751
-28.6271	-104.17	-108.465	-16.2283	-28.6491	-114.446	-104.103
-28.3673	-111.594	-120.738	-16.0699	-28.3899	-117.383	-106.174
-27.6824	-112.945	-105.683	-15.9015	-27.7003	-117.969	-116.046
-27.5154	-112.119	-112.757	-15.7468	-27.5356	-114.428	-103.657
-27.018	-122.423	-106.478	-15.5806	-27.0353	-106.394	-110.283
-26.4868	-114.556	-111.229	-15.4743	-26.5016	-116.927	-118.068
-26.1994	-112.979	-111.159	-15.3378	-26.2161	-112.647	-111.607
-25.8872	-109.274	-106.464	-15.2391	-25.9049	-111.45	-117.983
-25.6234	-105.152	-113.304	-15.1373	-25.6443	-111.901	-111.732
-25.1846	-119.557	-112.419	-15.0367	-25.1985	-114.201	-107.531
-24.9436	-112.438	-111.209	-14.9433	-24.9583	-123.484	-110.24
-24.7214	-108.958	-106.469	-14.8024	-24.7383	-108.092	-120.196
-24.3736	-112.465	-106.513	-14.707	-24.384	-114.772	-113.612
-24.0526	-111.956	-126.024	-14.6231	-24.0674	-116.727	-117.38
-23.8168	-118.699	-104.598	-14.5665	-23.8371	-110.762	-116.922
-23.5712	-110.471	-115.094	-14.487	-23.5829	-107.048	-115.332
-23.3194	-107.694	-111.938	-14.4697	-23.3314	-111.011	-117.676
-23.1701	-133.12	-106.999	-14.4201	-23.1812	-109.697	-108.843
-22.7592	-111.006	-115.945	-14.3752	-22.7718	-114.656	-107.684
-22.6895	-113.791	-102.973	-14.3047	-22.6992	-116.961	-109.246
-22.416	-112.11	-118.009	-14.2227	-22.4259	-108.78	-114.175

-22.2302	-106.614	-119.625	-14.1953	-22.2392	-116.422	-108.335
-21.9328	-107.801	-113.263	-14.1219	-21.9423	-114.28	-123.396
-21.8161	-111.802	-113.604	-14.1036	-21.8244	-124.883	-114.639
-21.6276	-122.475	-109.339	-14.1177	-21.6337	-122.212	-112.539
-21.4768	-110.521	-112.704	-14.1072	-21.4834	-105.498	-110.164
-21.2406	-104.797	-105.815	-14.0599	-21.2462	-109.226	-108.158
-21.0451	-115.209	-106.87	-14.0949	-21.0488	-115.346	-108.534
-20.9027	-110.895	-112.443	-14.1724	-20.9084	-108.994	-118.787
-20.8014	-107.033	-115.6	-14.1368	-20.8059	-108.214	-103.872
-20.5719	-104.373	-104.279	-14.2096	-20.5763	-111.057	-106.514
-20.4108	-110.008	-108.969	-14.2638	-20.4136	-107.852	-104.995
-20.3473	-107.325	-118.272	-14.2388	-20.3507	-121.59	-106.4
-20.3036	-124.631	-115.197	-14.3086	-20.3068	-106.939	-100.634
-20.0287	-113.125	-110.485	-14.3274	-20.0325	-100.761	-100.343
-19.91	-102.054	-99.4621	-14.4008	-19.9128	-101.102	-112.91
-19.837	-105.159	-103.471	-14.4924	-19.8402	-103.607	-120.577
-19.6089	-105.949	-103.683	-14.6467	-19.61	-107.834	-102.059
-19.5913	-103.972	-117.527	-14.7125	-19.598	-108.648	-105.335
-19.5373	-110.445	-98.4848	-14.931	-19.5429	-100.818	-111.693
-19.3506	-102.075	-115.421	-15.0322	-19.3553	-108.447	-110.265
-19.156	-106.102	-106.58	-15.0836	-19.16	-97.87	-97.1688
-18.914	-103.033	-102.472	-15.1986	-18.9168	-102.223	-104.514
-18.8704	-110.684	-100.656	-15.3487	-18.8751	-102.46	-95.4488
-18.8252	-96.7392	-102.192	-15.4583	-18.8321	-100.616	-92.9457
-18.7151	-98.4331	-114.368	-15.5895	-18.7214	-99.9742	-94.3199
-18.5546	-105.713	-96.9535	-15.6935	-18.5641	-106.579	-97.556
-18.3837	-101.582	-99.906	-15.8138	-18.3892	-106.354	-102.401
-18.2837	-95.218	-99.908	-15.9389	-18.2946	-101.045	-96.9245
-18.2133	-102.79	-96.7621	-16.0353	-18.2216	-104.205	-112.57
-17.99	-94.2843	-101.985	-16.0355	-17.9958	-96.4053	-102.004
-17.9896	-108.829	-97.3349	-16.0432	-17.9943	-107.065	-103.051
-17.8721	-101.804	-106.861	-16.2306	-17.8764	-97.0144	-107.171
-17.7916	-106.787	-98.3448	-16.3313	-17.7985	-101.169	-96.739
-17.7053	-100.763	-107.242	-16.2845	-17.7086	-104.748	-104.462
-17.7459	-111.734	-98.2866	-16.4021	-17.7511	-107.766	-94.4799
-17.4884	-114.708	-96.3233	-16.6092	-17.4931	-107.416	-102.71
-17.5538	-106.791	-108.194	-16.5383	-17.5573	-95.5308	-107.654
-17.4693	-108.425	-96.5811	-16.5707	-17.4722	-107.293	-101.038
-17.4628	-105.035	-100.036	-16.6016	-17.467	-109.881	-95.3201
-17.4195	-96.3822	-103.703	-16.6411	-17.4211	-114.962	-101.101
-17.356	-94.0146	-99.6033	-16.6015	-17.3578	-101.258	-96.5573
-17.353	-98.8457	-108.529	-16.7626	-17.3503	-103.501	-107.38
-17.3387	-104.769	-94.239	-16.6929	-17.3412	-97.9479	-98.286
-17.3778	-98.1913	-107.602	-16.7743	-17.3785	-109.904	-109.694
-17.3446	-96.5493	-98.4645	-16.6251	-17.3433	-103.44	-103.732
-17.3454	-104.613	-101.406	-16.6657	-17.3461	-109.73	-104.234
-17.3611	-97.3289	-96.704	-16.6084	-17.3591	-109.999	-95.0226
-17.5307	-115.653	-102.664	-16.5655	-17.5325	-103.775	-92.6904
-17.5486	-104.905	-99.2959	-16.4101	-17.5434	-106.991	-99.7448
-17.6769	-120.133	-97.3838	-16.3152	-17.6726	-99.7212	-97.8056
-17.6588	-103.301	-96.1433	-16.1593	-17.6557	-109.387	-100.034
-17.8047	-102.157	-102.988	-16.0901	-17.802	-97.1305	-99.1817
-17.9069	-102.519	-104.32	-16.084	-17.9049	-109.112	-97.1267
-18.0004	-105.36	-100.087	-15.9633	-17.9954	-108.885	-105.7
-18.1564	-103.691	-101.037	-15.892	-18.152	-97.5953	-95.5817

-18.2099	-98.2034	-107.395	-15.7737	-18.2125	-101.229	-102.087
-18.3064	-103.777	-108.341	-15.5863	-18.313	-99.637	-113.566
-18.4527	-95.6788	-99.7866	-15.4758	-18.4557	-98.0217	-95.3486
-18.7924	-96.4861	-101.125	-15.3788	-18.7915	-101.133	-105.968
-18.8051	-100.644	-100.254	-15.1871	-18.8045	-104.821	-97.7642
-19.0867	-108.618	-98.6732	-15.0959	-19.0837	-97.2405	-101.134
-19.1439	-108.946	-100.231	-14.978	-19.1473	-95.9158	-102.423
-19.2368	-95.8392	-101.158	-14.7927	-19.2395	-99.1987	-97.0359
-19.317	-106.076	-94.7736	-14.6822	-19.3192	-99.7994	-103.756
-19.3878	-100.694	-105.003	-14.7359	-19.3883	-101.845	-96.5191
-19.4054	-99.7951	-106.231	-14.442	-19.4034	-99.3597	-111.891
-19.5777	-100.359	-105.425	-14.3249	-19.5782	-94.7446	-99.5221
-19.3811	-99.8565	-94.2793	-14.2339	-19.3791	-100.822	-98.6736
-19.6745	-107.232	-99.8189	-13.9767	-19.6723	-91.1639	-126.745
-19.4939	-101.032	-99.1131	-13.8942	-19.493	-97.3688	-95.8621
-19.3838	-101.517	-93.7766	-13.7941	-19.3855	-96.8392	-97.8319
-19.2891	-104.827	-99.4998	-13.542	-19.2843	-93.2148	-99.1911
-19.2554	-107.944	-102.011	-13.3816	-19.25	-102.137	-94.9827
-19.0326	-99.5573	-99.5618	-13.2443	-19.0287	-110.665	-95.9547
-19.0222	-99.9635	-108.807	-13.0663	-19.0192	-100.353	-93.9255
-18.4205	-94.2464	-95.347	-12.9798	-18.4168	-102.281	-92.9543
-18.371	-102.986	-95.4393	-12.8049	-18.3662	-105.763	-93.3
-18.0109	-105.707	-106.114	-12.6062	-18.0089	-111.141	-100.475
-17.9955	-109.854	-101.788	-12.388	-17.9942	-113.972	-107.852
-17.6135	-102.634	-101.381	-12.176	-17.6132	-100.667	-97.1152
-17.625	-97.3535	-102.817	-12.0539	-17.6255	-105.031	-101.93
-17.3411	-109.214	-95.8916	-11.9881	-17.3465	-103.749	-98.0611
-16.9442	-125.625	-102.961	-11.9897	-16.9483	-103.758	-104.107
-16.8719	-105.601	-96.5439	-11.7468	-16.8792	-99.0247	-97.793
-16.6494	-100.274	-98.4095	-11.5671	-16.6552	-94.8863	-102.318
-16.3395	-105.383	-107.426	-11.4727	-16.3474	-102.274	-92.414
-16.2358	-106.183	-108.08	-11.2817	-16.24	-104.898	-97.1899
-15.9087	-100.48	-94.9289	-11.2218	-15.911	-97.3634	-97.5634
-15.8991	-110.72	-95.7892	-11.1773	-15.899	-96.2383	-99.7776
-15.4784	-109.583	-96.5794	-10.9972	-15.4859	-100.281	-110.796
-15.4113	-102.119	-95.2156	-10.9006	-15.416	-102.301	-94.7049
-15.3097	-103.923	-98.4131	-10.774	-15.3136	-94.3295	-102.895
-15.098	-99.9426	-90.9832	-10.7574	-15.1039	-94.4626	-100.108
-14.9941	-117.666	-101.78	-10.5628	-14.9987	-101.898	-97.5733
-14.8933	-93.8761	-98.2171	-10.4385	-14.8947	-91.8257	-95.741
-14.7021	-103.206	-98.0878	-10.3472	-14.7055	-109.522	-99.2289
-14.806	-105.245	-99.5974	-10.2415	-14.8118	-96.746	-96.1552
-14.7076	-95.5533	-99.4444	-10.2096	-14.7199	-102.559	-101.263
-14.438	-98.2203	-95.4991	-10.0921	-14.4407	-109.031	-97.2914
-14.4075	-102.118	-100.75	-9.86244	-14.4097	-107.656	-103.416
-14.4016	-108.281	-92.2756	-9.77809	-14.4048	-104.093	-100.304
-14.4432	-99.4019	-103.911	-9.65243	-14.4471	-98.2851	-103.171
-14.4852	-101.457	-94.269	-9.60056	-14.4991	-98.589	-96.5683
-14.2184	-100.351	-98.0552	-9.40525	-14.2166	-103.253	-101.792
-14.323	-101.34	-99.3374	-9.27874	-14.3284	-109.541	-105.897
-14.3335	-105.437	-105.05	-9.24352	-14.335	-99.3064	-94.8145
-14.4139	-93.0767	-102.881	-9.16758	-14.418	-94.0969	-99.7562
-14.3951	-103.719	-101.572	-9.10488	-14.3921	-98.1474	-94.7081
-14.1401	-101.488	-93.9586	-8.9558	-14.1434	-101.843	-102.972

J3-J8

J4-

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)
-18.087	-17.7653	-93.7823	-98.1829	-17.682	-17.6931	-93.1481
-32.5528	-32.4152	-110.431	-101.377	-31.6772	-31.782	-94.1437
-31.3465	-33.5582	-117.374	-108.418	-32.6758	-32.1986	-95.4582
-30.0989	-32.1081	-110.7	-118.638	-31.7394	-30.9844	-93.6801
-29.4043	-31.216	-120.533	-105.858	-30.9563	-30.2628	-96.8148
-29.1045	-30.5755	-106.204	-123.917	-30.5229	-29.7612	-96.2721
-28.9563	-30.1624	-123.569	-105.635	-30.2633	-29.462	-95.8641
-28.8897	-29.8512	-105.289	-112.529	-30.1401	-29.2233	-99.2478
-29.1004	-29.7812	-117.733	-107.791	-30.2867	-29.22	-100.872
-29.1651	-29.711	-118.108	-105.698	-30.3155	-29.2343	-98.3148
-29.3532	-29.6156	-115.48	-126.006	-30.4503	-29.1536	-105.639
-29.4044	-29.5643	-108.436	-121.854	-30.4107	-29.0975	-107.221
-29.6438	-29.4855	-113.962	-109.909	-30.6456	-29.1776	-108.657
-29.8333	-29.3916	-125.862	-113.267	-30.7776	-29.1759	-127.17
-30.2578	-29.4934	-110.602	-110.57	-31.1401	-29.309	-116.541
-30.5848	-29.6318	-108.569	-118.162	-31.3969	-29.4537	-110.166
-30.8626	-29.5524	-122.936	-105.919	-31.6322	-29.3587	-115.58
-31.2214	-29.8209	-113.967	-122.655	-31.9862	-29.7484	-110.537
-31.7042	-29.7433	-109.755	-115.364	-32.4839	-29.8686	-106.889
-32.1645	-29.9065	-110.304	-104.393	-32.8659	-30.0749	-109.868
-32.8458	-30.0316	-107.272	-116.211	-33.3436	-30.2335	-110.41
-33.3169	-30.168	-110.75	-102.811	-33.6481	-30.3215	-115.204
-33.94	-30.4359	-105.8	-109.457	-34.2326	-30.8548	-106.084
-35.0554	-30.5732	-112.358	-112.335	-35.2012	-31.1538	-105.123
-35.9177	-30.7539	-115.43	-115.148	-35.905	-31.7758	-117.537
-37.2162	-30.8673	-105.881	-111.856	-37.3066	-32.3741	-121.995
-38.3009	-31.0754	-108.916	-105.007	-38.4862	-33.0774	-106.012
-39.9217	-30.7047	-111.805	-111.745	-40.4792	-34.029	-110.189
-39.6036	-30.0623	-110.28	-119.724	-43.8226	-35.3927	-113.463
-37.8609	-29.2475	-110.176	-104.445	-47.1348	-36.9645	-115.124
-35.7232	-28.5149	-110.363	-110.156	-46.9539	-38.4824	-116.176
-34.3256	-27.7613	-112.914	-119.741	-44.467	-39.0104	-122.303
-33.6051	-27.34	-109.052	-114.689	-43.7826	-38.853	-116.163
-33.1398	-27.1153	-112.694	-113.467	-42.9676	-38.1224	-111.966
-33.3522	-27.0646	-121.209	-118.09	-43.6993	-37.5448	-115.793
-33.5278	-27.1875	-109.475	-116.815	-44.5494	-37.8461	-115.008
-34.1025	-27.3366	-118.902	-110.15	-46.2721	-38.6904	-125.593
-34.6054	-27.3649	-122.761	-108.441	-47.7412	-39.261	-111.819
-34.6092	-27.444	-110.723	-112.259	-45.8869	-40.8277	-105.131
-34.7425	-27.5597	-113.853	-112.26	-44.1548	-43.0061	-120.216

-34.7062	-27.5147	-116.478	-108.745	-41.8297	-45.5335	-105.658
-34.4954	-27.4669	-113.886	-109.509	-39.9635	-50.3812	-111.927
-34.1632	-27.4456	-115.432	-105.845	-38.0804	-60.3051	-110.137
-33.5633	-27.2903	-110.508	-107.674	-36.4904	-55.0837	-108.062
-33.0912	-26.9944	-108.884	-111.486	-35.5112	-48.3263	-105.096
-32.568	-26.8065	-111.768	-106.457	-34.7062	-44.6728	-111.848
-32.2709	-26.7877	-110.829	-114.667	-34.077	-42.898	-111.502
-32.0618	-26.794	-122.946	-108.377	-33.7572	-41.8657	-118.203
-32.277	-27.011	-115.275	-103.576	-33.7249	-40.769	-118.543
-32.449	-27.209	-121.755	-116.958	-33.7884	-40.0748	-115.988
-32.9939	-27.5118	-113.208	-109.094	-33.8391	-40.1903	-113.489
-33.2534	-28.0079	-117.046	-106.317	-33.8098	-39.0855	-120.756
-33.6389	-28.4981	-116.618	-111.332	-33.5292	-38.2554	-107.341
-33.7845	-28.9669	-109.994	-109.447	-33.0407	-36.6166	-115.316
-33.1603	-29.3726	-111.638	-109.435	-32.1221	-35.1202	-116.698
-32.6797	-29.8145	-114.754	-112.476	-31.2657	-33.569	-110.832
-32.3233	-30.2464	-112.911	-110.024	-30.5435	-32.492	-110.016
-31.6574	-30.6054	-121.302	-112.369	-29.8052	-31.315	-111.343
-30.9371	-30.7206	-110.625	-107.783	-29.143	-30.3344	-105.263
-30.1229	-30.8862	-107.019	-110.249	-28.4492	-29.4969	-106.982
-29.3706	-30.7714	-107.52	-107.456	-27.8648	-28.7265	-119.952
-28.7354	-30.8556	-108.432	-117.103	-27.2645	-28.0024	-125.797
-28.2119	-30.9093	-118.075	-111.341	-26.7694	-27.3212	-113.061
-27.4976	-30.8649	-117.148	-106.686	-26.1585	-26.7301	-109.731
-26.9016	-30.6519	-114.829	-119.38	-25.6363	-26.267	-108.75
-26.4897	-30.393	-108.799	-109.821	-25.3142	-25.6883	-120.763
-25.9324	-30.3207	-110.321	-114.953	-24.8931	-25.3813	-109.563
-25.5336	-30.153	-114.691	-119.707	-24.6259	-24.8748	-122.705
-24.9727	-29.7666	-126.557	-118.496	-24.1988	-24.4075	-111.027
-24.6249	-29.4042	-108.805	-110.365	-23.948	-23.9925	-108.101
-24.2149	-29.0805	-115.177	-117.452	-23.6234	-23.6126	-114.646
-23.7323	-28.6539	-117.191	-110.356	-23.197	-23.188	-110.392
-23.3205	-28.3914	-127.473	-110.037	-22.8602	-22.95	-115.575
-22.8927	-27.7035	-119.008	-116.436	-22.5144	-22.5243	-121.362
-22.4788	-27.5446	-104.536	-115.295	-22.2083	-22.2492	-113.416
-22.0084	-27.0439	-111.072	-107.414	-21.8242	-21.8575	-115.104
-21.649	-26.5093	-111.916	-104.684	-21.5403	-21.5138	-112.801
-21.2743	-26.223	-107.535	-106.1	-21.2333	-21.2322	-107.87
-20.9512	-25.913	-116.43	-110.423	-20.9606	-21.0012	-115.073
-20.5987	-25.6535	-107.947	-123.95	-20.6526	-20.803	-112.647
-20.3075	-25.2098	-110.469	-108.465	-20.4281	-20.505	-110.77
-20.0079	-24.9683	-109.666	-104.285	-20.1979	-20.3389	-107.134
-19.6584	-24.7475	-109.188	-109.998	-19.9319	-20.1547	-128.044
-19.3758	-24.3944	-112.591	-106.09	-19.7352	-19.9701	-110.552
-19.0773	-24.0789	-117.835	-105.326	-19.5062	-19.7692	-114.949
-18.8694	-23.8381	-120.079	-104.198	-19.3605	-19.621	-111.609
-18.6186	-23.5916	-114.726	-109.271	-19.1643	-19.4834	-107.393
-18.4429	-23.3403	-115.9	-106.583	-19.0414	-19.3304	-107.807
-18.247	-23.1888	-118.558	-113.846	-18.9105	-19.264	-114.734
-18.0293	-22.7796	-119.947	-110.797	-18.7546	-19.0371	-109.331
-17.791	-22.7075	-111.141	-111.203	-18.5887	-19.0291	-114.173
-17.5285	-22.4338	-117.593	-112.304	-18.4032	-18.8748	-117.519

-17.3336	-22.2478	-115.243	-101.784	-18.2569	-18.7627	-120.52
-17.0724	-21.9498	-111.327	-114.677	-18.0336	-18.6088	-110.3
-16.8888	-21.8275	-110.54	-112.052	-17.885	-18.573	-118.011
-16.7352	-21.6413	-108.856	-106.029	-17.7764	-18.475	-109.7
-16.5599	-21.488	-113.191	-105.59	-17.6522	-18.4139	-106.837
-16.3464	-21.2489	-110.959	-105.026	-17.4872	-18.2623	-116.166
-16.2216	-21.0533	-113.174	-107.245	-17.4235	-18.2	-119.339
-16.1531	-20.9083	-112.013	-103.437	-17.4257	-18.1102	-107.777
-15.9554	-20.8047	-108.192	-108.456	-17.2659	-18.0777	-111.425
-15.8589	-20.5756	-139.252	-108.706	-17.2194	-18.0441	-107.656
-15.7623	-20.4131	-104.531	-105.787	-17.1677	-17.9926	-115.745
-15.5728	-20.3477	-105.48	-101.747	-17.0202	-17.9933	-109.199
-15.497	-20.304	-110.618	-110.302	-17.0075	-18.0423	-107.385
-15.3588	-20.0294	-100.315	-98.5189	-16.9111	-17.9316	-111.671
-15.2803	-19.9109	-106.31	-94.4778	-16.8935	-17.9584	-105.878
-15.2261	-19.8396	-99.5124	-105.101	-16.9032	-18.0132	-103.069
-15.2203	-19.6069	-101.208	-106.815	-16.9422	-17.9139	-102.373
-15.1199	-19.5933	-105.956	-109.564	-16.8719	-18.0159	-103.491
-15.1808	-19.5366	-110.045	-93.7432	-16.9978	-18.0413	-94.0888
-15.1298	-19.353	-99.63	-104.751	-16.9827	-18.0636	-103.221
-15.0346	-19.1589	-100.474	-98.6524	-16.9063	-17.9886	-106.982
-14.9997	-18.9176	-100.017	-111.896	-16.9069	-17.8696	-101.43
-15.0027	-18.8771	-93.5633	-102.533	-16.956	-17.9978	-98.122
-14.9777	-18.8341	-100.262	-101.761	-16.9467	-18.05	-98.0403
-14.948	-18.7256	-104.567	-100.403	-16.9501	-18.1288	-103.083
-14.9059	-18.5655	-101.427	-100.838	-16.9149	-18.0575	-119.354
-14.8932	-18.3913	-98.7161	-105.323	-16.9106	-18.0346	-104.193
-14.9038	-18.2955	-101.027	-96.8434	-16.9492	-18.0912	-108.147
-14.8408	-18.2232	-102.257	-97.6509	-16.9278	-18.0549	-100.918
-14.7634	-18.0003	-100.884	-105.61	-16.8377	-17.9789	-98.2934
-14.6602	-18.003	-94.2083	-101.504	-16.7268	-18.0798	-103.199
-14.7402	-17.8756	-104.16	-104.419	-16.8328	-18.1932	-102.423
-14.7128	-17.8032	-98.6168	-103.179	-16.8251	-18.1515	-103.024
-14.5864	-17.7133	-98.3551	-107.294	-16.6586	-18.1715	-97.4873
-14.6227	-17.7529	-107.008	-101.031	-16.6923	-18.2269	-104.488
-14.681	-17.4957	-97.3131	-101.892	-16.776	-18.1461	-102.066
-14.5674	-17.5605	-111.451	-105.496	-16.6341	-18.2452	-102.605
-14.5072	-17.4745	-104.228	-99.639	-16.5742	-18.2581	-121.644
-14.4586	-17.4706	-102.972	-104.517	-16.5264	-18.3334	-95.5876
-14.4532	-17.4236	-101.137	-101.763	-16.5119	-18.3408	-97.0718
-14.4143	-17.3601	-101.198	-104.751	-16.4138	-18.3296	-101.095
-14.4138	-17.3525	-100.374	-94.8317	-16.4522	-18.4482	-104.242
-14.3546	-17.3405	-97.6365	-97.412	-16.3407	-18.5234	-100.727
-14.3753	-17.3796	-97.6314	-98.8211	-16.3638	-18.5605	-96.7695
-14.2908	-17.3425	-96.66	-91.7864	-16.2263	-18.629	-102.583
-14.3238	-17.3435	-107.995	-95.2274	-16.2769	-18.6727	-104.887
-14.2321	-17.3563	-95.8944	-114.184	-16.1989	-18.6278	-99.4642
-14.2189	-17.5267	-100.566	-103.91	-16.1828	-18.8817	-99.0191
-14.121	-17.5378	-106.912	-104.626	-16.0485	-18.9499	-95.7713
-14.0048	-17.666	-101.491	-103.115	-15.9166	-19.1412	-100.909
-13.9618	-17.6524	-103.885	-104.676	-15.8346	-19.2356	-94.2665
-13.9678	-17.7998	-98.1022	-103.995	-15.809	-19.4538	-94.9345
-13.8793	-17.9017	-98.2369	-106.796	-15.7593	-19.6323	-88.3884
-13.9175	-17.9932	-94.0552	-105.156	-15.7477	-19.8078	-90.6883
-13.8753	-18.1461	-95.1097	-118.901	-15.6988	-20.0914	-93.7234

-13.825	-18.2151	-114.112	-101.73	-15.618	-20.2025	-95.7399
-13.7554	-18.3146	-101.092	-98.9076	-15.4946	-20.3478	-95.1219
-13.684	-18.4459	-108.134	-100.121	-15.3808	-20.7484	-92.3648
-13.6352	-18.7905	-103.971	-108.736	-15.3212	-21.0727	-91.3064
-13.6298	-18.8059	-94.0898	-98.1658	-15.212	-21.2743	-91.0467
-13.5683	-19.0862	-111.483	-106.492	-15.1138	-21.704	-96.8415
-13.4715	-19.1479	-100.05	-100.917	-14.9804	-22.1001	-94.2118
-13.405	-19.2431	-97.0053	-93.7291	-14.8548	-22.2514	-92.4025
-13.3997	-19.3238	-112.504	-103.332	-14.7638	-22.5701	-92.6253
-13.4672	-19.3925	-96.7321	-92.3695	-14.869	-22.6806	-93.4692
-13.4617	-19.4108	-99.415	-97.1716	-14.6841	-22.8681	-98.2644
-13.3702	-19.5858	-103.41	-100.042	-14.5319	-23.1829	-99.747
-13.3845	-19.3885	-100.308	-95.4983	-14.4862	-23.0577	-109.802
-13.2659	-19.6773	-99.3215	-93.8084	-14.2331	-23.4758	-94.8349
-13.3188	-19.4976	-95.3972	-105.044	-14.1983	-23.1861	-120.408
-13.3722	-19.3864	-93.8066	-93.8178	-14.1203	-23.0178	-100.467
-13.2752	-19.2915	-101.279	-95.7113	-13.8808	-22.7093	-104.73
-13.2278	-19.2542	-113.264	-93.6635	-13.7231	-22.4879	-110.616
-13.2644	-19.031	-97.8714	-97.201	-13.6074	-21.9826	-100.695
-13.2776	-19.0229	-103.71	-94.198	-13.4721	-21.7026	-94.8619
-13.3102	-18.4164	-113.617	-94.8312	-13.3607	-20.7218	-90.7173
-13.186	-18.3706	-118.214	-104.427	-13.1461	-20.3678	-100.21
-13.1785	-18.0091	-109.665	-95.585	-12.9599	-19.6967	-94.8666
-13.081	-17.9986	-93.7693	-95.6649	-12.7062	-19.4407	-95.7356
-13.0459	-17.6148	-98.1033	-130.058	-12.4991	-18.7542	-104.73
-13.0306	-17.6247	-99.1767	-104.046	-12.3318	-18.4851	-104.374
-13.1362	-17.3453	-110.996	-105.569	-12.2844	-17.8978	-101.444
-13.3206	-16.9488	-107.803	-101.248	-12.2695	-17.2565	-112.057
-13.1314	-16.8802	-102.016	-98.4462	-11.9633	-16.9405	-105.507
-13.1086	-16.6619	-98.1996	-90.8383	-11.7605	-16.4973	-99.989
-13.1824	-16.3502	-96.3291	-102.688	-11.6855	-15.941	-106.124
-13.1008	-16.2463	-94.2375	-99.8738	-11.4602	-15.6496	-103.806
-13.148	-15.9178	-110.431	-98.1906	-11.3701	-15.102	-104.165
-13.2284	-15.9087	-94.3134	-99.0444	-11.2972	-14.8982	-98.9055
-13.244	-15.4885	-104.232	-95.0847	-11.1162	-14.3201	-98.0666
-13.2796	-15.418	-98.4605	-95.2118	-11.002	-14.0787	-98.6132
-13.2774	-15.3153	-95.9249	-95.7056	-10.8603	-13.83	-114.935
-13.3393	-15.1054	-104.661	-102	-10.8014	-13.4702	-103.393
-13.3068	-15.0004	-102.108	-93.6373	-10.6057	-13.1837	-109.911
-13.3415	-14.8966	-98.7275	-102.164	-10.4861	-12.92	-94.1434
-13.4363	-14.7064	-112.081	-92.3295	-10.4061	-12.6172	-110.665
-13.3399	-14.8104	-103.547	-96.4539	-10.2417	-12.5165	-99.5197
-13.4443	-14.7133	-98.2916	-93.1016	-10.186	-12.2924	-100.314
-13.4592	-14.4408	-106.632	-96.6538	-10.0835	-11.9616	-106.123
-13.3951	-14.4045	-98.5425	-102.348	-9.87219	-11.7775	-96.5282
-13.2866	-14.4041	-103.156	-107.125	-9.75723	-11.6181	-102.404
-13.3084	-14.4462	-94.8823	-99.9645	-9.64968	-11.4838	-99.3229
-13.2572	-14.485	-99.7203	-94.3272	-9.57675	-11.4001	-103.936
-13.1494	-14.2423	-118.915	-96.5245	-9.39268	-11.0975	-99.3541
-13.0679	-14.3303	-104.017	-100.562	-9.28102	-11.0322	-102.918
-13.0333	-14.3306	-104.851	-106.938	-9.22198	-10.8591	-100.795
-12.941	-14.4223	-107.765	-98.506	-9.10913	-10.8676	-114.098
-12.8977	-14.3992	-98.1618	-103.085	-9.04538	-10.7649	-106.661
-12.7324	-14.1471	-109.338	-100.018	-8.86682	-10.5372	-99.7764

-J5

J4-J6

S12 (dB)	S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-93.778	-18.5337	-17.6737	-99.2103	-94.098	-18.1254	-17.6564
-98.0089	-31.0897	-31.7745	-103.296	-100.477	-30.6372	-31.7735
-96.1671	-29.6752	-32.2309	-106.434	-102.659	-30.4124	-32.2664
-92.3593	-28.6928	-31.0191	-109.6	-108.779	-29.5603	-31.0506
-94.9383	-28.0929	-30.3019	-108.257	-110.249	-28.8707	-30.3309
-95.0568	-27.781	-29.8043	-108.244	-114.458	-28.4246	-29.8346
-97.6418	-27.5952	-29.5084	-110.661	-104.668	-28.083	-29.5386
-98.2561	-27.5033	-29.2719	-112.542	-108.228	-27.8567	-29.3044
-101.18	-27.5583	-29.2724	-107.872	-109.346	-27.6962	-29.3055
-104.51	-27.5276	-29.2888	-110.449	-108.731	-27.49	-29.3237
-102.645	-27.596	-29.2084	-120.398	-105.888	-27.3617	-29.2451
-107.766	-27.5213	-29.154	-110.907	-109.632	-27.0763	-29.1927
-106.531	-27.6537	-29.2335	-121.829	-111.109	-27.0081	-29.2736
-109.489	-27.7161	-29.2354	-118.69	-112.539	-26.8316	-29.2741
-114.916	-27.909	-29.3701	-109.723	-110.261	-26.7131	-29.41
-131.039	-28.0646	-29.5166	-108.986	-114.927	-26.5903	-29.5569
-105.1	-28.1428	-29.42	-110.599	-112.61	-26.4024	-29.4623
-108.714	-28.2811	-29.8121	-108.732	-110.435	-26.2749	-29.8581
-116.386	-28.4138	-29.9338	-106.189	-115.939	-26.1085	-29.979
-112.954	-28.4971	-30.1404	-106.527	-108.224	-25.8846	-30.1883
-109.254	-28.6354	-30.302	-112.242	-106.308	-25.6471	-30.3493
-111.049	-28.7967	-30.3872	-115.581	-110.116	-25.4699	-30.4378
-112.666	-29.0635	-30.9237	-110.86	-111.158	-25.3674	-30.9778
-113.383	-29.3897	-31.2258	-112.919	-111	-25.2309	-31.2827
-108.856	-29.5175	-31.8545	-108.344	-107.499	-25.0198	-31.9166
-114.614	-29.8577	-32.4544	-109.653	-113.782	-24.9308	-32.522
-120.705	-30.0573	-33.1612	-110.376	-118.617	-24.7754	-33.2412
-110.479	-30.4526	-34.1221	-116.64	-107.855	-24.6802	-34.2055
-112.446	-31.1247	-35.495	-115.904	-106.95	-24.7693	-35.5852
-113.615	-31.7881	-37.0736	-110.482	-103.565	-24.8843	-37.1665
-107.593	-32.5379	-38.5926	-117.644	-111.865	-25.075	-38.6848
-105.33	-32.8644	-39.0869	-113.212	-111.519	-25.1392	-39.1266
-115.992	-32.5318	-38.8847	-109.946	-108.738	-24.9992	-38.8827
-114.402	-32.1772	-38.1302	-120.282	-108.271	-24.7873	-38.1147
-109.053	-31.6981	-37.5422	-114.805	-134.098	-24.3782	-37.525
-106.077	-31.4962	-37.8394	-113.594	-110.392	-24.0843	-37.8263
-118.593	-31.4432	-38.6855	-111.47	-110.376	-23.7382	-38.673
-111.01	-31.426	-39.2505	-113.579	-110.901	-23.4475	-39.2355
-119.7	-31.8059	-40.8068	-124.71	-109.875	-23.2968	-40.7801
-105.275	-31.965	-42.9775	-117.906	-103.932	-23.1104	-42.9365

-122.576	-32.0731	-45.4566	-109.312	-111.794	-22.9218	-45.3894
-107.564	-32.0462	-50.1467	-114.238	-112.087	-22.7291	-49.9083
-105.822	-31.9094	-59.3695	-112.353	-120.119	-22.4998	-58.1888
-117.534	-31.8384	-54.8165	-116.635	-109.019	-22.3086	-54.3099
-106.764	-31.7554	-48.1781	-106.182	-119.805	-22.1325	-47.9685
-115.548	-31.8192	-44.5975	-120.89	-106.94	-22.0215	-44.4642
-112.746	-31.8045	-42.8682	-108.43	-111.364	-21.8909	-42.7841
-110.346	-31.9533	-41.8406	-109.481	-113.142	-21.8011	-41.77
-116.564	-31.6782	-40.7859	-108.579	-114.429	-21.5912	-40.7629
-116.316	-31.5185	-40.1154	-107.834	-113.63	-21.4091	-40.12
-128.579	-30.7057	-40.2669	-110.939	-111.546	-21.0265	-40.3093
-110.893	-30.2921	-39.2054	-120.015	-112.394	-20.7757	-39.2974
-104.129	-29.5535	-38.4018	-111.311	-128.82	-20.3957	-38.5266
-113.569	-29.1166	-36.7559	-115.623	-111.777	-20.1171	-36.8785
-116.026	-28.7802	-35.2494	-113.149	-114.948	-19.8728	-35.3644
-105.628	-28.3533	-33.687	-110.646	-112.341	-19.5901	-33.789
-111.952	-27.8917	-32.6004	-119.091	-115.453	-19.299	-32.6981
-110.388	-27.4766	-31.4127	-114.581	-120.166	-19.046	-31.5014
-106.535	-26.9678	-30.424	-110.379	-108.763	-18.7731	-30.5065
-133.377	-26.4242	-29.5798	-113.619	-109.33	-18.4867	-29.6556
-106.406	-26.1052	-28.8033	-111.682	-112.633	-18.3018	-28.8732
-107.068	-25.6695	-28.0724	-110.022	-114.58	-18.0497	-28.1398
-111.554	-25.4192	-27.3901	-115.422	-110.803	-17.866	-27.4512
-107.295	-25.0818	-26.7931	-110.368	-120.143	-17.6503	-26.8507
-108.023	-24.7371	-26.3257	-121.964	-113.313	-17.4421	-26.3859
-109.92	-24.4437	-25.745	-111.142	-108.06	-17.2497	-25.8028
-113.208	-24.0473	-25.4355	-115.815	-112.426	-17.0319	-25.4907
-113.485	-23.7621	-24.9237	-110.034	-115.985	-16.8594	-24.9769
-106.688	-23.3909	-24.4528	-108.981	-110.937	-16.6569	-24.5046
-109.139	-23.2151	-24.0377	-111.405	-113.269	-16.528	-24.0846
-110.413	-23.0186	-23.6528	-116.394	-109.316	-16.3778	-23.7012
-110.667	-22.8072	-23.223	-112.461	-108.857	-16.2259	-23.2664
-116.642	-22.6268	-22.9896	-107.291	-112.716	-16.075	-23.0305
-111.698	-22.3774	-22.5599	-116.016	-109.25	-15.9062	-22.5977
-116.703	-22.1228	-22.2805	-113.764	-109.747	-15.7463	-22.3185
-117.683	-21.8411	-21.8884	-111.68	-104.203	-15.5762	-21.9235
-107.04	-21.6712	-21.5401	-107.625	-104.747	-15.4748	-21.5742
-116.825	-21.5027	-21.2576	-116.071	-118.207	-15.3463	-21.2898
-105.317	-21.377	-21.0251	-116.334	-104.844	-15.2555	-21.0563
-105.328	-21.2508	-20.8266	-106.734	-118.395	-15.1599	-20.8626
-105.455	-21.1058	-20.525	-118.792	-105.145	-15.0546	-20.5576
-110.061	-20.939	-20.3607	-118.076	-115.132	-14.9559	-20.3911
-115.001	-20.6847	-20.1736	-112.518	-109.349	-14.806	-20.2045
-110.436	-20.5075	-19.9886	-120.077	-115.869	-14.6992	-20.0209
-108.81	-20.3189	-19.7836	-107.02	-126.507	-14.6121	-19.8111
-116.72	-20.2605	-19.6363	-122.417	-120.882	-14.5633	-19.6644
-112.849	-20.1577	-19.5006	-109.62	-109.725	-14.4849	-19.5273
-111.249	-20.1547	-19.3457	-129.18	-107.708	-14.4661	-19.3723
-105.603	-20.1163	-19.2785	-114.86	-118.43	-14.4146	-19.3045
-111.637	-20.0088	-19.0525	-113.248	-109.935	-14.3619	-19.0759
-116.546	-19.896	-19.0425	-116.902	-113.7	-14.283	-19.0668
-110.481	-19.7368	-18.8882	-115.166	-108.929	-14.196	-18.9111

-114.879	-19.6965	-18.7726	-104.013	-115.437	-14.1699	-18.7996
-106.579	-19.5812	-18.6247	-120.798	-108.341	-14.0984	-18.6491
-108.726	-19.5766	-18.5861	-110.984	-144.422	-14.0826	-18.6107
-107.114	-19.5801	-18.4842	-111.457	-114.702	-14.0932	-18.5047
-112.277	-19.5491	-18.4228	-122.996	-110.028	-14.0826	-18.4439
-113.305	-19.4873	-18.2698	-107.271	-111.851	-14.0308	-18.2914
-117.89	-19.482	-18.2097	-117.526	-105.964	-14.062	-18.2289
-122.059	-19.5992	-18.1186	-116.404	-123.614	-14.1361	-18.1376
-107.079	-19.5035	-18.0823	-107.692	-113.175	-14.0988	-18.1014
-113.764	-19.6206	-18.0518	-116.228	-105.168	-14.1767	-18.0703
-113.862	-19.6858	-18.0001	-109.091	-115.383	-14.2325	-18.0164
-123.257	-19.6333	-17.9987	-108.387	-120.023	-14.2038	-18.0169
-113.93	-19.73	-18.0485	-109.273	-108.039	-14.2681	-18.0643
-103.375	-19.6959	-17.9375	-106.252	-100.507	-14.2895	-17.9524
-99.1128	-19.811	-17.9648	-100.043	-100.719	-14.3607	-17.9793
-99.8259	-19.9616	-18.0126	-105.388	-94.066	-14.4606	-18.0303
-99.0938	-20.1493	-17.9183	-120.114	-98.7434	-14.6237	-17.9342
-101.569	-20.2567	-18.0243	-109.732	-112.786	-14.6945	-18.0378
-101.447	-20.6127	-18.0464	-97.9078	-94.6391	-14.9213	-18.0596
-99.5161	-20.7363	-18.0665	-98.7701	-99.2578	-15.0251	-18.0814
-105.22	-20.726	-17.9929	-98.3688	-97.0921	-15.0772	-18.0056
-100.117	-20.8014	-17.8718	-99.647	-104.666	-15.1844	-17.8837
-100.453	-20.9846	-18.0001	-99.3957	-103.835	-15.3389	-18.0114
-108.227	-21.0301	-18.0536	-100.747	-104.033	-15.453	-18.0653
-104.96	-21.2087	-18.1322	-101.141	-110.557	-15.5957	-18.1469
-97.8789	-21.2628	-18.0644	-116.061	-101.366	-15.7062	-18.0761
-98.0737	-21.3225	-18.0452	-105.977	-95.9729	-15.8266	-18.0471
-95.8162	-21.3366	-18.098	-101.621	-105.177	-15.9418	-18.1088
-99.9828	-21.376	-18.0635	-107.694	-98.9548	-16.0219	-18.0721
-94.6603	-21.1041	-17.9828	-100.228	-121.37	-16.0088	-17.9938
-98.2246	-20.9153	-18.0855	-104.004	-95.4366	-16.0104	-18.0913
-92.3014	-20.9785	-18.1982	-97.6664	-95.5379	-16.1999	-18.2025
-96.6791	-20.9617	-18.1586	-102.044	-105.739	-16.3041	-18.1702
-103.075	-20.6994	-18.1771	-99.3875	-98.369	-16.2635	-18.1857
-94.9758	-20.6625	-18.2334	-102.384	-97.7866	-16.3852	-18.2384
-110.176	-20.8387	-18.1521	-101.008	-93.8274	-16.6006	-18.1583
-96.9497	-20.4989	-18.2488	-102.172	-95.8377	-16.5323	-18.2529
-99.5464	-20.3371	-18.2609	-105.601	-94.5946	-16.5591	-18.2646
-101.959	-20.1707	-18.335	-98.6466	-106.172	-16.5946	-18.3393
-114.652	-19.9789	-18.3417	-107.24	-100.104	-16.6399	-18.347
-98.3395	-19.6931	-18.3276	-94.7469	-100.489	-16.6194	-18.3347
-115.88	-19.8022	-18.4465	-104.93	-125.03	-16.8061	-18.4485
-105.324	-19.5166	-18.5207	-97.8547	-101.463	-16.7611	-18.5235
-113.103	-19.4345	-18.5573	-98.5249	-97.8542	-16.8458	-18.5563
-100.832	-19.026	-18.6271	-112.908	-99.8817	-16.6889	-18.6219
-95.1678	-18.8561	-18.6725	-108.888	-108.067	-16.7296	-18.6702
-110.798	-18.6495	-18.6258	-121.49	-92.8449	-16.6625	-18.6197
-95.2155	-18.394	-18.8763	-107.389	-98.4639	-16.6215	-18.8701
-92.4415	-18.0481	-18.9417	-105.657	-94.1413	-16.4583	-18.9339
-99.9244	-17.8585	-19.1354	-105.908	-99.2902	-16.3659	-19.1266
-95.6035	-17.506	-19.2253	-103.902	-93.5597	-16.2088	-19.2155
-91.9602	-17.3052	-19.4449	-95.1982	-108.143	-16.1354	-19.4336
-88.074	-17.2376	-19.6238	-107.938	-106.387	-16.1177	-19.6127
-100.952	-16.9676	-19.7956	-96.4234	-97.5474	-15.9966	-19.7813
-90.6708	-16.8116	-20.0723	-106.116	-101.549	-15.9205	-20.0553

-90.7532	-16.5988	-20.1917	-113.293	-105.652	-15.795	-20.1786
-100.472	-16.3162	-20.3386	-104.942	-103.884	-15.5942	-20.317
-90.523	-16.1393	-20.7438	-97.4014	-99.4866	-15.469	-20.7254
-90.7575	-16.0039	-21.0538	-94.5094	-110.76	-15.3761	-21.0288
-97.559	-15.7971	-21.2648	-101.443	-97.5866	-15.1942	-21.2407
-90.4321	-15.676	-21.6843	-104.931	-100.519	-15.1075	-21.6583
-121.241	-15.5134	-22.0823	-98.6016	-97.4576	-14.9744	-22.0488
-94.0863	-15.3209	-22.2347	-108.942	-97.1317	-14.7882	-22.2051
-98.0277	-15.195	-22.5489	-97.3683	-96.1298	-14.6756	-22.5187
-96.6432	-15.2455	-22.6652	-109.505	-98.856	-14.7212	-22.6284
-95.616	-14.9513	-22.851	-93.71	-100.685	-14.4292	-22.8135
-113.294	-14.8461	-23.1701	-102.96	-116.693	-14.3126	-23.1283
-96.176	-14.7685	-23.0468	-102.332	-105.915	-14.2199	-23.0048
-96.4281	-14.5107	-23.463	-96.4828	-98.0924	-13.9596	-23.4182
-93.1434	-14.4509	-23.1775	-95.0399	-101.086	-13.8716	-23.1413
-103.564	-14.3842	-23.0189	-108.668	-105.801	-13.7734	-22.9738
-103.62	-14.1653	-22.7079	-98.2542	-98.9771	-13.5274	-22.6664
-95.0071	-14.0389	-22.4903	-105.717	-98.4657	-13.3716	-22.4619
-96.9399	-13.9317	-21.9875	-108.132	-106.531	-13.223	-21.9624
-109.361	-13.8058	-21.7115	-95.7036	-99.9541	-13.0471	-21.688
-93.4799	-13.7455	-20.7331	-101.096	-97.0192	-12.9576	-20.7144
-100.491	-13.5847	-20.3777	-101.236	-103.225	-12.7753	-20.3632
-97.8924	-13.4259	-19.7032	-94.8577	-102.743	-12.5732	-19.6886
-106.802	-13.256	-19.4557	-97.9423	-95.5619	-12.3574	-19.4379
-99.5863	-13.106	-18.7662	-99.5947	-95.5147	-12.1435	-18.7622
-94.3041	-13.0352	-18.4979	-98.6545	-108.279	-12.0348	-18.4887
-95.2402	-13.0429	-17.9122	-99.5458	-95.6873	-11.9689	-17.9082
-108.155	-13.1454	-17.2698	-98.5183	-98.3944	-11.9752	-17.2648
-108.819	-12.9374	-16.9562	-95.3482	-99.3189	-11.7433	-16.9528
-92.2252	-12.8024	-16.5111	-105.978	-102.445	-11.5606	-16.5155
-97.6019	-12.7781	-15.9496	-114.839	-108.744	-11.4653	-15.9621
-97.8755	-12.6438	-15.6722	-99.4058	-103.472	-11.2779	-15.6725
-112.16	-12.6388	-15.1083	-105.282	-103.86	-11.23	-15.1117
-97.6255	-12.7152	-14.9113	-95.5517	-107.312	-11.1944	-14.9088
-101.986	-12.6338	-14.3347	-95.3611	-105.853	-11.0177	-14.3358
-94.7424	-12.625	-14.0874	-99.7521	-101.377	-10.9349	-14.0881
-95.711	-12.5781	-13.8388	-99.9863	-99.4302	-10.8086	-13.8394
-104.388	-12.637	-13.4783	-103.465	-93.8101	-10.7971	-13.4768
-92.2321	-12.5275	-13.1895	-96.5479	-90.9583	-10.6016	-13.1898
-99.065	-12.4972	-12.9249	-103.569	-103.912	-10.4781	-12.9245
-97.812	-12.507	-12.6224	-98.709	-92.6997	-10.387	-12.6228
-101.528	-12.455	-12.524	-103.79	-103.234	-10.2836	-12.5232
-94.6111	-12.5103	-12.2992	-102.744	-110.257	-10.2509	-12.2993
-103.422	-12.4962	-11.9631	-97.6641	-96.7314	-10.1377	-11.964
-104.806	-12.3304	-11.7786	-97.6283	-101.975	-9.89997	-11.7792
-94.4593	-12.2273	-11.6202	-99.1461	-98.109	-9.80737	-11.6218
-106.407	-12.1882	-11.4851	-110.747	-92.5417	-9.66973	-11.4842
-98.5628	-12.1513	-11.3937	-94.8221	-96.4155	-9.60553	-11.3987
-110.862	-12.0076	-11.1032	-95.8858	-97.2043	-9.39995	-11.1105
-94.4918	-11.9148	-11.0394	-115.226	-101.695	-9.26856	-11.042
-117.909	-11.9298	-10.8575	-100.929	-95.113	-9.23678	-10.8597
-101.484	-11.8987	-10.862	-94.6021	-91.3415	-9.15351	-10.8674
-101.103	-11.8902	-10.7683	-96.5885	-105.409	-9.09259	-10.7643
-105.942	-11.7654	-10.5392	-96.3503	-92.1026	-8.93259	-10.5392

J4-J7

S21 (dB)	S12 (dB)	S22 (dB)
-97.6649	-96.3399	-18.0951
-109.751	-98.9635	-32.5235
-115.921	-101.26	-31.2739
-109.506	-122.857	-30.052
-103.674	-112.908	-29.3688
-106.833	-112.35	-29.0733
-106.627	-104.786	-28.9334
-103.751	-111.212	-28.8713
-109.146	-126.872	-29.0797
-114.011	-110.147	-29.14
-110.545	-106.475	-29.3271
-115.993	-113.422	-29.3698
-117.598	-111.961	-29.6005
-119.067	-104.733	-29.7925
-111.087	-115.559	-30.2081
-108.475	-112.125	-30.539
-114.092	-104.311	-30.8076
-114.334	-107.57	-31.1381
-111.025	-109.442	-31.5878
-120.38	-117.297	-32.0478
-106.368	-109.294	-32.7429
-109.998	-104.72	-33.2642
-114.298	-114.337	-33.9
-113.796	-114.685	-34.9983
-115.123	-109.723	-35.8478
-104.635	-110.864	-37.091
-111.027	-104.728	-38.223
-105.618	-106.226	-40.002
-111.3	-122.338	-39.951
-110.595	-106.158	-38.277
-109.759	-112.468	-36.0217
-116.712	-108.64	-34.5037
-109.259	-115.594	-33.7126
-114.331	-112.887	-33.2432
-116.186	-106.278	-33.4985
-116.348	-122.156	-33.6663
-111.144	-116.471	-34.241
-116.536	-119.216	-34.6786
-113.274	-113.099	-34.5921
-114.436	-112.12	-34.6597

J4-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.6457	-104.466	-109.94	-17.7018
-31.776	-114.828	-97.3256	-31.6758
-32.2887	-109.805	-100.721	-32.538
-31.0695	-114.366	-107.704	-31.597
-30.3478	-119.955	-120.822	-30.83
-29.8499	-110.24	-107.968	-30.4308
-29.5544	-120.407	-105.31	-30.1789
-29.3205	-115.143	-109.008	-30.0631
-29.3221	-126.048	-111.633	-30.2003
-29.3412	-111.137	-118.208	-30.2049
-29.2644	-113.118	-119.104	-30.3313
-29.2105	-108.965	-109.598	-30.2839
-29.2914	-116.735	-104.372	-30.5095
-29.2915	-108.415	-113.479	-30.6472
-29.4284	-107.358	-112.436	-31.0005
-29.5784	-126.631	-109.024	-31.2651
-29.4843	-123.234	-111.386	-31.4764
-29.881	-113.37	-107.822	-31.8058
-30.0006	-111.765	-112.481	-32.2442
-30.2133	-117.487	-118.378	-32.6115
-30.3726	-112.263	-115.606	-33.0848
-30.4621	-108.731	-114.191	-33.4447
-31.0047	-108.193	-106.486	-34.0384
-31.3119	-116.768	-110.456	-34.9862
-31.9515	-104.968	-112.474	-35.6552
-32.5598	-104.911	-122.648	-36.9649
-33.2841	-118.446	-108.391	-38.1232
-34.252	-110.83	-116.91	-40.0763
-35.6366	-116.056	-115.933	-43.47
-37.2239	-108.622	-113.781	-47.5083
-38.7393	-106.933	-115.435	-48.1404
-39.1693	-127.048	-110.321	-45.1303
-38.9135	-121.838	-110.878	-44.0611
-38.14	-110.155	-106.67	-43.052
-37.5508	-117.948	-105.225	-43.8128
-37.8555	-136.136	-114.163	-44.492
-38.7064	-108.347	-115.486	-46.3368
-39.2743	-113.845	-108.678	-47.749
-40.8239	-118.575	-115.618	-45.8077
-42.9981	-116.487	-112.47	-44.3098

-106.243	-110.801	-34.6177	-45.45	-123.341	-107.889	-42.155
-113.196	-120.548	-34.5238	-49.9565	-106.981	-112.439	-40.3686
-120.094	-116.426	-34.2645	-58.1485	-113.485	-114.217	-38.4178
-118.963	-105.273	-33.6904	-53.9474	-119.246	-110.997	-36.6701
-106.123	-107.776	-33.1658	-47.8056	-140.442	-111.857	-35.5477
-118.818	-110.706	-32.5621	-44.3693	-116.786	-116.372	-34.6107
-113.458	-107.353	-32.2107	-42.7169	-116.022	-112.407	-33.946
-113.968	-116.69	-31.9935	-41.7116	-113.155	-108.236	-33.6469
-123.628	-111.235	-32.2271	-40.7128	-120.185	-114.563	-33.6606
-113.976	-110.914	-32.432	-40.0709	-121.012	-110.499	-33.7629
-107.791	-109.106	-33.0081	-40.2715	-117.604	-111.386	-33.8163
-107.5	-113.749	-33.2744	-39.265	-118.429	-112.498	-33.7681
-112.63	-112.415	-33.5795	-38.5044	-108.815	-124.723	-33.4317
-111.951	-119.716	-33.6702	-36.8644	-112.447	-111.504	-32.9717
-113.171	-112.282	-33.0453	-35.3546	-109.195	-109.629	-32.0733
-110.01	-110.282	-32.5872	-33.7834	-123.675	-111.948	-31.2649
-115.169	-111.107	-32.2514	-32.6928	-111.979	-114.216	-30.5835
-114.109	-118.612	-31.605	-31.4983	-113.772	-140.294	-29.8419
-113.26	-107.492	-30.8428	-30.5035	-124.392	-108.289	-29.114
-112.728	-106.4	-29.9508	-29.6502	-118.47	-143.081	-28.3515
-111.689	-125.846	-29.1565	-28.8661	-140.173	-108.652	-27.7219
-108.277	-109.288	-28.5084	-28.1328	-108.64	-111.486	-27.112
-110.041	-118.897	-28.0022	-27.4462	-119.621	-113.963	-26.6341
-115.777	-121.961	-27.3239	-26.846	-115.092	-118.292	-26.0269
-110.304	-111.887	-26.7386	-26.3814	-128.891	-105.771	-25.5239
-114.572	-116.102	-26.3239	-25.7978	-115.748	-117.492	-25.1853
-109.12	-106.888	-25.7419	-25.4863	-115.025	-111.55	-24.7397
-114.744	-115.981	-25.3278	-24.9725	-114.607	-109.272	-24.434
-113.047	-108.851	-24.7709	-24.4988	-112.411	-112.575	-24.0017
-116.49	-110.03	-24.4271	-24.0795	-108.64	-111.635	-23.7506
-106.518	-117.594	-24.039	-23.6938	-118.985	-111.433	-23.4448
-113.071	-108.607	-23.5984	-23.2573	-115.777	-108.549	-23.0565
-106.976	-113.58	-23.2118	-23.0206	-116.853	-122.378	-22.7344
-118.254	-111.264	-22.7823	-22.5912	-110.347	-109.567	-22.3941
-106.125	-109.319	-22.3641	-22.3104	-119.864	-110.308	-22.0662
-119.043	-113.237	-21.901	-21.9145	-108.659	-108.872	-21.6756
-110.562	-119.988	-21.5484	-21.5649	-116.452	-111.063	-21.3915
-116.169	-127.992	-21.1903	-21.281	-112.761	-112.124	-21.0935
-106.579	-106.864	-20.8752	-21.0486	-115.663	-118.041	-20.8284
-121.181	-119.166	-20.5458	-20.8521	-107.837	-119.421	-20.533
-109.534	-110.929	-20.2505	-20.5494	-105.974	-112.907	-20.3013
-117.169	-104.062	-19.9486	-20.3821	-108.533	-116	-20.063
-118.559	-119.34	-19.5868	-20.1956	-128.437	-106.794	-19.7742
-113.167	-112.814	-19.2958	-20.0119	-112.551	-109.253	-19.553
-130.118	-107.915	-18.9949	-19.8076	-124.09	-109.957	-19.3132
-107.667	-124.479	-18.7948	-19.6551	-116.664	-112.134	-19.1665
-122.551	-114.167	-18.5466	-19.5194	-116.891	-107.539	-18.9741
-104.619	-120.385	-18.3821	-19.3649	-106.158	-113.709	-18.8608
-118.071	-115.309	-18.1888	-19.2957	-121.072	-122.215	-18.729
-111.782	-109.054	-17.9675	-19.069	-110.431	-112.387	-18.5686
-118.28	-111.779	-17.7219	-19.0587	-115.66	-111.657	-18.3913
-112.753	-121.546	-17.4562	-18.9043	-120.844	-113.568	-18.1887

-119.488	-115.7	-17.2677	-18.7924	-117.631	-111.974	-18.0545
-108.909	-113.67	-17.011	-18.6408	-108.422	-117.933	-17.8376
-112.606	-105.497	-16.8366	-18.6024	-114.35	-115.342	-17.7096
-106.538	-114.174	-16.6845	-18.4998	-111.659	-130.964	-17.6102
-115.702	-126.276	-16.5142	-18.4376	-111.739	-126.455	-17.4847
-110.341	-111.227	-16.2995	-18.2851	-104.311	-105.34	-17.3236
-104.845	-104.705	-16.1818	-18.2214	-107.025	-117.866	-17.2547
-114.665	-105.538	-16.1155	-18.1265	-110.492	-112.05	-17.2576
-112.393	-114.871	-15.9147	-18.0934	-111.21	-111.22	-17.1001
-109.623	-113.575	-15.8266	-18.0627	-108.114	-107.889	-17.0555
-118.526	-110.507	-15.7365	-18.0097	-113.746	-112.002	-17.0165
-124.334	-116.394	-15.5555	-18.0092	-108.97	-122.423	-16.8763
-111.508	-105.498	-15.4805	-18.0566	-109.425	-112.082	-16.8643
-105.855	-110.824	-15.3491	-17.9457	-102.903	-96.2376	-16.7749
-111.006	-119.044	-15.2779	-17.9705	-101.952	-102.086	-16.7619
-101.256	-99.0603	-15.2348	-18.0239	-99.1646	-106.671	-16.7762
-100.71	-106.973	-15.2434	-17.9171	-102.896	-102.523	-16.8314
-104.734	-98.3321	-15.1501	-18.0249	-107.036	-98.7801	-16.7783
-107.839	-119.253	-15.228	-18.047	-97.9655	-106.188	-16.9229
-140.476	-99.9678	-15.1779	-18.0725	-107.288	-102.28	-16.9233
-98.7277	-95.9144	-15.0919	-17.9963	-105.715	-101.801	-16.8653
-99.3759	-98.7357	-15.0571	-17.8713	-110.094	-102.789	-16.8788
-102.853	-100.961	-15.0633	-18.0017	-101.243	-96.3478	-16.9388
-102.926	-96.0124	-15.0398	-18.0571	-102.509	-100.813	-16.9477
-103.403	-103.357	-15.0184	-18.1403	-99.556	-103.596	-16.975
-100.88	-95.5941	-14.9779	-18.0666	-102.966	-97.9093	-16.9575
-98.956	-96.8133	-14.9646	-18.0402	-98.9397	-99.1015	-16.9735
-105.572	-102.949	-14.9556	-18.1007	-116.44	-97.3557	-17.018
-102.36	-110.336	-14.873	-18.0642	-100.892	-103.651	-16.9914
-99.9964	-96.7605	-14.7822	-17.9847	-97.6103	-96.0929	-16.9007
-101.715	-102.832	-14.6695	-18.0822	-102.538	-92.3621	-16.7943
-101.559	-105.931	-14.741	-18.1948	-101.608	-98.218	-16.9094
-103.598	-109.49	-14.7075	-18.1553	-99.2319	-99.083	-16.9034
-100.729	-99.3771	-14.5792	-18.1754	-110.414	-101.946	-16.7523
-95.333	-100.272	-14.6068	-18.2296	-103.767	-94.5884	-16.7912
-107.86	-96.0257	-14.658	-18.1495	-101.787	-98.5989	-16.8921
-100.379	-111.955	-14.5371	-18.244	-106.84	-93.3177	-16.7508
-101.217	-99.7763	-14.4707	-18.2553	-98.3643	-97.1794	-16.6914
-105.3	-105.491	-14.4147	-18.3301	-99.9733	-99.9095	-16.6461
-98.9315	-101.477	-14.4117	-18.3358	-98.8562	-98.5172	-16.6384
-98.3116	-97.724	-14.3827	-18.3212	-111.398	-99.582	-16.5537
-111.521	-95.373	-14.3957	-18.4388	-98.3277	-97.3482	-16.612
-105.825	-112.199	-14.3549	-18.5135	-96.795	-103.13	-16.5142
-100.115	-107.512	-14.3792	-18.5471	-99.7097	-103.149	-16.5466
-102.213	-99.6092	-14.2841	-18.6133	-102.964	-96.5685	-16.401
-115.932	-98.4473	-14.3136	-18.6617	-107.555	-98.7414	-16.4443
-97.7126	-92.3374	-14.219	-18.6124	-103.098	-103.82	-16.3384
-99.0234	-113.365	-14.1978	-18.8598	-102.224	-103.222	-16.3064
-97.3283	-98.7658	-14.1119	-18.9248	-97.7589	-103.437	-16.1652
-99.6934	-97.9389	-13.9979	-19.1115	-97.9437	-100.732	-16.0232
-101.284	-95.5586	-13.9629	-19.2042	-95.6559	-103.379	-15.9249
-107.773	-104.052	-13.9703	-19.4232	-103.1	-98.239	-15.8904
-98.6099	-103.02	-13.8766	-19.5988	-105.1	-95.0279	-15.8241
-100.923	-106.692	-13.919	-19.776	-118.901	-104.046	-15.7854
-108.808	-99.6477	-13.8698	-20.0559	-106.326	-100.611	-15.7204

-94.5113	-104.292	-13.8205	-20.1668	-96.7668	-100.529	-15.6234
-100.612	-106.302	-13.7467	-20.3091	-104.303	-97.5174	-15.4891
-97.674	-107.286	-13.6671	-20.7199	-103.997	-103.823	-15.3558
-113.625	-94.2306	-13.6204	-21.0186	-102.584	-107.076	-15.2735
-100.502	-97.558	-13.6112	-21.2298	-100.743	-101.434	-15.1561
-105.212	-98.7721	-13.5605	-21.6479	-102.095	-99.0557	-15.0653
-97.9231	-103.602	-13.4728	-22.0377	-98.7348	-98.1799	-14.9324
-98.5052	-95.5689	-13.4068	-22.1931	-100.006	-96.7829	-14.7893
-105.739	-102.219	-13.3867	-22.5084	-101.767	-102.662	-14.6882
-113.909	-91.4192	-13.4465	-22.62	-100.332	-99.9108	-14.7657
-98.5331	-107.519	-13.4489	-22.8069	-96.0669	-96.9696	-14.58
-109.182	-97.4232	-13.3625	-23.1207	-103.131	-94.9689	-14.4291
-117.165	-96.3312	-13.3805	-23	-101.361	-93.194	-14.3746
-94.3055	-95.1885	-13.2695	-23.4098	-94.8801	-96.1697	-14.1268
-96.8832	-101.643	-13.329	-23.1336	-103.419	-98.4024	-14.0888
-99.2306	-98.4288	-13.395	-22.9684	-100.768	-98.6609	-14.0133
-103.121	-99.3592	-13.2904	-22.6666	-105.697	-100.342	-13.7714
-101.393	-96.1898	-13.249	-22.4644	-104.624	-96.5089	-13.6207
-96.8763	-97.1364	-13.2768	-21.9609	-99.1613	-99.5421	-13.5049
-101.723	-104.433	-13.2893	-21.6867	-109.626	-95.6778	-13.3675
-96.0575	-93.3059	-13.3187	-20.7149	-112.756	-108.646	-13.2699
-92.8287	-97.3879	-13.1867	-20.364	-99.5974	-96.6839	-13.052
-109.002	-99.5604	-13.1794	-19.6915	-97.5226	-96.2493	-12.8706
-97.6713	-102.667	-13.093	-19.4419	-116.807	-101.501	-12.6341
-102.225	-108.832	-13.0547	-18.767	-106.73	-100.02	-12.4324
-99.8507	-98.0794	-13.0271	-18.493	-96.6318	-91.4882	-12.2792
-119.717	-95.0614	-13.1201	-17.9138	-112.591	-101.802	-12.226
-101.669	-94.3067	-13.3167	-17.2769	-112.313	-97.4842	-12.2388
-96.4659	-99.1053	-13.1247	-16.9636	-98.2765	-97.1273	-11.9392
-100.334	-95.1385	-13.0953	-16.5189	-103.071	-99.7779	-11.7547
-105.189	-94.3726	-13.1665	-15.9657	-98.0675	-102.489	-11.6745
-103.459	-95.8385	-13.0777	-15.6727	-105.85	-97.1916	-11.4531
-104.861	-98.4848	-13.1204	-15.1201	-98.2537	-97.8057	-11.3752
-133.581	-108.403	-13.2158	-14.9199	-97.4519	-95.0111	-11.3157
-100.587	-94.6206	-13.2433	-14.3379	-97.0125	-94.6674	-11.1444
-112.363	-101.187	-13.2913	-14.0951	-107.748	-121.009	-11.0408
-91.6673	-97.9389	-13.2959	-13.8443	-105.25	-103.307	-10.9083
-96.6493	-102.209	-13.3763	-13.4822	-94.3592	-99.3273	-10.8634
-108.153	-96.5753	-13.356	-13.1939	-99.0907	-96.2293	-10.6736
-115.831	-94.838	-13.3999	-12.9282	-106.186	-105.962	-10.5597
-92.5148	-100.755	-13.499	-12.6249	-95.3789	-99.7777	-10.4797
-102.026	-94.1022	-13.438	-12.527	-99.9933	-92.2295	-10.3292
-99.2185	-88.6906	-13.5332	-12.3004	-102.958	-103.313	-10.2729
-102.317	-94.1707	-13.5522	-11.9673	-100.622	-95.2461	-10.1662
-103.103	-104.621	-13.4883	-11.7833	-100.749	-99.3095	-9.9488
-104.959	-98.8348	-13.349	-11.6248	-105.104	-97.8312	-9.82573
-99.7211	-101.262	-13.3728	-11.4874	-104.997	-104.502	-9.71399
-105.885	-95.462	-13.2863	-11.407	-97.3494	-98.1255	-9.62208
-104.717	-101.384	-13.17	-11.0999	-106.013	-96.3925	-9.42116
-99.8927	-92.2242	-13.0517	-11.0396	-108.207	-106.157	-9.29217
-122.85	-97.2968	-12.9977	-10.8575	-100.579	-100.31	-9.22325
-99.4138	-104.47	-12.8878	-10.8635	-98.1661	-100.563	-9.10414
-117.432	-98.0901	-12.8241	-10.7693	-97.2305	-111.625	-9.02632
-107.361	-93.6004	-12.6431	-10.5417	-109.685	-98.6064	-8.84479

J5-J6

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.4746	-96.3138	-91.0074	-18.1534
-30.9358	-96.3973	-92.8984	-30.6617
-29.7083	-94.3606	-95.0487	-30.37
-28.676	-92.6625	-93.9322	-29.4964
-28.1204	-93.7247	-94.7597	-28.8148
-27.7379	-93.5122	-93.8701	-28.3707
-27.517	-95.6327	-95.5824	-28.0244
-27.3411	-96.5871	-97.3624	-27.8001
-27.3507	-99.407	-100.762	-27.6484
-27.3823	-102.105	-100.137	-27.4393
-27.3218	-101.71	-101.29	-27.3127
-27.2807	-105.698	-102.932	-27.0341
-27.3821	-104.549	-105.887	-26.9684
-27.4075	-103.202	-105.804	-26.792
-27.5195	-108.394	-101.272	-26.6841
-27.6294	-108.738	-106.538	-26.5717
-27.557	-102.707	-107.67	-26.3886
-27.8788	-106.042	-104.725	-26.2669
-28.0142	-103.972	-104.49	-26.092
-28.1674	-107.88	-112.196	-25.8607
-28.2789	-113.118	-106.4	-25.6211
-28.3147	-113.39	-107.354	-25.4528
-28.7223	-114.216	-119.304	-25.3601
-28.9394	-111.73	-116.015	-25.2307
-29.4002	-105.538	-112.148	-25.0253
-29.8102	-111.283	-121.275	-24.9387
-30.1979	-116.085	-103.748	-24.7806
-30.8611	-115.576	-105.222	-24.6761
-31.7263	-108.751	-113.288	-24.7562
-32.5638	-122.771	-108.111	-24.864
-33.0913	-116.362	-115.762	-25.0646
-33.3819	-130.772	-117.889	-25.1406
-33.4804	-110.223	-111.785	-25.0081
-33.3759	-107.443	-120.587	-24.7903
-33.1668	-111.852	-110.753	-24.3709
-33.0912	-110.912	-130.404	-24.0631
-33.1021	-114.951	-112.619	-23.7094
-33.2118	-126.162	-108.188	-23.4242
-33.3128	-105.3	-107.356	-23.281
-33.2198	-121.56	-113.442	-23.1096

J5-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.4517	-104.461	-94.8543	-18.1111
-30.9575	-108.581	-117.236	-32.5328
-29.7424	-103.22	-105.352	-31.2237
-28.7092	-105.192	-105.496	-29.9942
-28.1527	-107.751	-114	-29.3249
-27.7742	-107.349	-109.576	-29.0426
-27.5566	-104.134	-111.095	-28.9098
-27.383	-134.542	-108.588	-28.8497
-27.3954	-111.466	-115.452	-29.0596
-27.4311	-109.252	-113.705	-29.1181
-27.3726	-112.942	-113.895	-29.3034
-27.3324	-112.492	-107.094	-29.3522
-27.4363	-116.283	-108.152	-29.5761
-27.4635	-111.402	-111.918	-29.7731
-27.5777	-105.755	-109.881	-30.2006
-27.6911	-110.677	-109.646	-30.5516
-27.6178	-108.517	-110.43	-30.8308
-27.9421	-121.411	-116.823	-31.1567
-28.0817	-107.889	-108.674	-31.5882
-28.2354	-116.644	-104.236	-32.0544
-28.3511	-112.692	-106.21	-32.7829
-28.3872	-118.123	-109.865	-33.3418
-28.7975	-113.845	-109.752	-34.0213
-29.0179	-119.648	-108.165	-35.1483
-29.4844	-105.902	-120.082	-35.9981
-29.9012	-105.59	-104.69	-37.2472
-30.2939	-113.017	-106.363	-38.4181
-30.9657	-127.161	-106.14	-40.2788
-31.8394	-111.989	-116.278	-40.3189
-32.6863	-120.148	-112.619	-38.6396
-33.2194	-114.651	-111.408	-36.2746
-33.5129	-110.825	-116.165	-34.6701
-33.6157	-110.433	-106.118	-33.8404
-33.5064	-113.397	-117.575	-33.3835
-33.2979	-113.569	-108.428	-33.683
-33.2206	-107.899	-105.928	-33.8751
-33.2328	-106.98	-106.556	-34.4879
-33.3471	-115.372	-113.781	-34.9156
-33.4453	-114.011	-108.439	-34.7662
-33.3484	-111.149	-103.258	-34.7828

-33.26	-104.253	-120.247	-22.9266	-33.3866	-113.692	-109.893	-34.7245
-33.2101	-111.417	-107.271	-22.7307	-33.3347	-116.004	-105.996	-34.6878
-32.9438	-123.671	-112.388	-22.4831	-33.0617	-108.282	-113.992	-34.4877
-32.7747	-124.899	-110.354	-22.2739	-32.8829	-115.21	-105.454	-33.9348
-32.8337	-117.563	-117.321	-22.0826	-32.9408	-119.685	-109.447	-33.3826
-32.6774	-110.867	-107.816	-21.9631	-32.7766	-115.101	-133.378	-32.7345
-32.344	-117.51	-111.204	-21.8361	-32.4373	-110.82	-107.847	-32.3467
-32.1253	-122.193	-114.658	-21.7607	-32.2174	-111.431	-107.667	-32.1251
-31.4049	-109.509	-117.171	-21.5587	-31.4894	-110.151	-112.76	-32.3878
-30.8734	-112.019	-112.443	-21.3774	-30.9559	-109.135	-118.01	-32.6319
-30.3757	-126.535	-113.849	-20.9843	-30.4548	-115.009	-116.346	-33.2711
-29.5589	-110.873	-121.336	-20.7158	-29.6324	-113.06	-117.62	-33.5731
-28.9572	-122.341	-117.959	-20.329	-29.0289	-109.431	-116.004	-33.8264
-28.277	-111.971	-109.369	-20.0523	-28.3449	-121.725	-117.173	-33.8625
-27.6707	-109.542	-110.747	-19.8138	-27.7345	-111.015	-113.099	-33.1964
-27.0142	-116.108	-113.865	-19.5349	-27.0749	-120.509	-115.273	-32.7259
-26.5467	-117.601	-110.082	-19.252	-26.6065	-115.817	-129.823	-32.4186
-26.0296	-108.012	-126.551	-18.9983	-26.0873	-119.393	-111.643	-31.7954
-25.5875	-108.435	-105.393	-18.7118	-25.6433	-113.756	-109.627	-30.9917
-25.1875	-115.591	-107.888	-18.413	-25.2415	-118.293	-110.863	-30.0293
-24.8176	-118.258	-109.535	-18.2244	-24.8706	-118.376	-118.429	-29.1893
-24.4511	-118.11	-105.578	-17.9715	-24.5017	-125.877	-110.746	-28.5138
-24.097	-108.584	-114.285	-17.7926	-24.1465	-108.54	-107.258	-28.0194
-23.7854	-114.179	-121.948	-17.5885	-23.834	-112.264	-106.518	-27.3627
-23.5498	-116.835	-114.291	-17.3844	-23.5997	-114.422	-105.141	-26.7902
-23.2146	-106.179	-103.088	-17.1872	-23.2639	-108.832	-113.717	-26.37
-23.0768	-119.351	-118.286	-16.9629	-23.1252	-120.539	-106.292	-25.7692
-22.7891	-120.737	-111.672	-16.7833	-22.8348	-112.24	-113.995	-25.3415
-22.5105	-112.167	-107.841	-16.5787	-22.5547	-115.35	-114.42	-24.7828
-22.2741	-119.411	-113.028	-16.4501	-22.3166	-110.246	-125.018	-24.4365
-22.0706	-112.85	-113.083	-16.3075	-22.1131	-117.485	-114.921	-24.0617
-21.8413	-117.805	-107.21	-16.165	-21.8791	-110.755	-113.466	-23.6464
-21.7667	-124.054	-107.787	-16.0232	-21.8059	-118.588	-111.371	-23.2732
-21.5051	-113.799	-116.448	-15.8503	-21.5432	-113.121	-120.035	-22.851
-21.4286	-109.975	-110.535	-15.687	-21.4663	-125.506	-124.888	-22.4166
-21.2207	-108.148	-106.13	-15.5134	-21.2559	-113.615	-104.855	-21.943
-21.0347	-122.414	-111.811	-15.4144	-21.0693	-116.053	-106.807	-21.5931
-20.9411	-108.808	-105.593	-15.2937	-20.9738	-110.154	-104.831	-21.2415
-20.8708	-105.106	-113.823	-15.2115	-20.9037	-117.62	-112.133	-20.9338
-20.8349	-117.625	-111.192	-15.124	-20.8694	-108.471	-113.964	-20.6087
-20.6808	-115.027	-114.396	-15.0246	-20.715	-106.156	-120.306	-20.303
-20.6614	-114.022	-114.465	-14.9199	-20.6913	-112.434	-103.954	-19.9912
-20.6338	-111.524	-102.913	-14.7659	-20.6656	-109.663	-118.591	-19.6139
-20.5611	-108.647	-104.25	-14.6596	-20.5917	-108.649	-122.439	-19.3138
-20.4881	-106.834	-110.398	-14.5759	-20.516	-113.8	-113.884	-19.0041
-20.4718	-126.945	-106.171	-14.5293	-20.4999	-121.345	-105.499	-18.8043
-20.4556	-106.732	-109.049	-14.4586	-20.485	-112.252	-112.723	-18.5578
-20.4306	-109.99	-119.077	-14.4487	-20.4592	-112.548	-109.618	-18.3932
-20.4861	-116.371	-112.113	-14.3976	-20.5147	-112.906	-107.933	-18.196
-20.3521	-105.95	-108.827	-14.3437	-20.3795	-115.076	-110.819	-17.967
-20.4746	-111.351	-113.107	-14.2611	-20.5016	-113.64	-121.076	-17.7129
-20.4335	-126.083	-109.334	-14.1746	-20.4596	-124.409	-105.026	-17.441

-20.4534	-109.748	-100.101	-14.1541	-20.4811	-111.778	-110.565	-17.2567
-20.3927	-112.332	-114.223	-14.0873	-20.4173	-105.687	-107.287	-17.0048
-20.4762	-110.494	-114.72	-14.0785	-20.5029	-108.711	-110.227	-16.8324
-20.4946	-113.183	-140.514	-14.0942	-20.5199	-116.761	-103.48	-16.6774
-20.549	-107.507	-107.667	-14.0874	-20.5737	-118.374	-103.564	-16.5023
-20.5066	-112.811	-110.522	-14.0355	-20.5308	-120.263	-119.668	-16.2856
-20.5155	-109.515	-108.685	-14.0672	-20.5378	-110.241	-110.44	-16.1617
-20.5496	-102.906	-106.893	-14.1407	-20.5745	-113.169	-115.487	-16.0968
-20.6342	-116.769	-111.178	-14.1128	-20.6576	-122.495	-117.493	-15.8887
-20.6154	-111.413	-107.578	-14.1958	-20.6387	-114.257	-117.727	-15.807
-20.6315	-114.89	-113.977	-14.2574	-20.6552	-110.237	-108.087	-15.717
-20.7425	-114.257	-107.874	-14.2368	-20.7657	-109.886	-104.83	-15.5341
-20.8842	-107.928	-111.618	-14.2996	-20.908	-110.809	-105.512	-15.4526
-20.7697	-101.956	-101.331	-14.3201	-20.7924	-113.756	-97.1068	-15.3197
-20.8212	-105.571	-110.905	-14.3935	-20.8453	-98.1381	-101.072	-15.2496
-20.9134	-102.485	-113.323	-14.4994	-20.9349	-97.944	-99.9371	-15.2129
-20.8186	-101.497	-99.2594	-14.6678	-20.8399	-112.353	-98.1503	-15.226
-20.9707	-104.14	-107.097	-14.7423	-20.9908	-107.32	-102.468	-15.1423
-21.0598	-113.28	-105.294	-14.9803	-21.0804	-113.186	-105.356	-15.2187
-20.9837	-102.498	-104.292	-15.0865	-21.0093	-104.272	-107.03	-15.1714
-20.8794	-107.589	-113.688	-15.1354	-20.9019	-100.259	-105.061	-15.0851
-20.7109	-102.094	-97.0887	-15.2374	-20.732	-97.87	-105.914	-15.05
-20.7768	-101.332	-108.706	-15.388	-20.7974	-99.3664	-98.214	-15.0583
-20.824	-100.519	-103.624	-15.5032	-20.845	-97.1678	-94.9351	-15.0395
-20.769	-106.097	-93.179	-15.6498	-20.7932	-101.822	-95.1814	-15.0262
-20.6489	-114.843	-102.342	-15.7644	-20.6719	-105.619	-97.3849	-14.991
-20.4945	-115.742	-99.957	-15.8888	-20.5203	-103.188	-96.6877	-14.9776
-20.419	-98.4171	-91.4884	-15.9898	-20.4436	-104.002	-98.0414	-14.9633
-20.3756	-98.4219	-91.7523	-16.054	-20.4018	-101.812	-96.5254	-14.8648
-20.1185	-96.15	-101.967	-16.0277	-20.1398	-108.159	-101.578	-14.7679
-20.1193	-107.628	-96.8336	-16.0141	-20.1389	-102.698	-98.653	-14.6523
-19.9255	-102.606	-104.795	-16.1948	-19.9487	-100.61	-96.1663	-14.7233
-19.8229	-101.661	-94.6107	-16.2899	-19.8495	-110.6	-109.087	-14.6916
-19.6728	-103.39	-104.27	-16.2496	-19.6966	-121.546	-98.7584	-14.5695
-19.7103	-108.04	-97.0543	-16.3693	-19.736	-100.296	-106.167	-14.5925
-19.3164	-97.7916	-103.543	-16.5753	-19.3418	-108.105	-106.326	-14.6416
-19.3419	-111.183	-97.282	-16.4934	-19.3654	-136.146	-96.3349	-14.5193
-19.1647	-96.7582	-103.986	-16.5033	-19.1871	-95.4794	-104.722	-14.4492
-19.0674	-104.024	-99.3629	-16.5238	-19.0909	-99.7431	-98.1886	-14.4012
-18.9382	-102.746	-95.6973	-16.5661	-18.9597	-98.1544	-108.269	-14.4046
-18.7824	-107.833	-98.0819	-16.5425	-18.8035	-98.0553	-95.7768	-14.384
-18.639	-102.768	-114.365	-16.73	-18.6607	-104.888	-103.819	-14.4093
-18.5039	-99.6965	-99.8898	-16.6901	-18.5261	-106.415	-101.054	-14.385
-18.4591	-98.5141	-95.784	-16.7788	-18.4772	-100.643	-94.0105	-14.412
-18.2686	-101.635	-93.4789	-16.615	-18.2907	-102.313	-96.0659	-14.3123
-18.1512	-96.2198	-94.799	-16.6478	-18.1732	-111.681	-104.404	-14.3441
-18.0898	-101.627	-95.9567	-16.5728	-18.1106	-97.2301	-94.6823	-14.2506
-18.0818	-109.34	-95.6517	-16.514	-18.1124	-110.095	-107.078	-14.2335
-17.9308	-110.062	-109.426	-16.354	-17.954	-104.226	-98.2753	-14.1526
-17.8841	-97.0292	-96.921	-16.2789	-17.9117	-106.66	-105.771	-14.0455
-17.6809	-100.984	-99.2919	-16.1208	-17.7055	-101.702	-91.0951	-14.0103
-17.616	-104.238	-94.3163	-16.0543	-17.641	-100.311	-110.564	-14.0158
-17.5132	-95.3897	-102.847	-16.0397	-17.5359	-95.2498	-112.889	-13.9148
-17.3832	-102.029	-99.8885	-15.9246	-17.4065	-111.845	-96.9394	-13.9591
-17.2833	-119.587	-98.0516	-15.8472	-17.3079	-105.475	-99.9182	-13.9083

-17.1369	-106.955	-109.336	-15.7235	-17.1638	-99.908	-95.6193	-13.8541
-17.0306	-102.752	-99.6601	-15.5272	-17.0554	-107.096	-103.839	-13.7902
-16.8657	-101.876	-101.204	-15.4002	-16.8846	-101.978	-101.905	-13.695
-16.9572	-109.739	-100.695	-15.3233	-16.9741	-100.045	-108.776	-13.6452
-16.7367	-97.2864	-97.0494	-15.1712	-16.7628	-108.319	-103.551	-13.6392
-16.7169	-104.944	-99.0448	-15.0821	-16.7359	-96.8808	-113.582	-13.5856
-16.4975	-100.158	-102.675	-14.9402	-16.517	-114.648	-95.9	-13.5018
-16.3612	-104.235	-100.098	-14.774	-16.3794	-98.3944	-101.978	-13.4384
-16.1813	-108.53	-97.1272	-14.6638	-16.1987	-106.565	-95.6966	-13.4138
-16.0616	-94.5212	-94.94	-14.7116	-16.076	-92.5032	-111.639	-13.4704
-15.8805	-101.001	-105.282	-14.4325	-15.893	-103.107	-104.602	-13.4739
-15.7833	-95.679	-92.7607	-14.3234	-15.7969	-92.2062	-94.9313	-13.3894
-15.4768	-95.4891	-93.4655	-14.2349	-15.4837	-103.774	-90.1315	-13.4009
-15.5009	-103.738	-96.1959	-13.978	-15.5097	-96.4114	-110.069	-13.2904
-15.2355	-101.018	-98.3318	-13.8927	-15.2452	-99.3499	-100.09	-13.3471
-15.0315	-115.012	-96.6538	-13.7917	-15.042	-101.161	-100.465	-13.4109
-14.8368	-105.088	-111.582	-13.5484	-14.8393	-101.769	-97.0591	-13.3174
-14.7148	-93.2227	-92.6655	-13.3901	-14.7286	-107.352	-96.2757	-13.2731
-14.5099	-99.0769	-94.6503	-13.2546	-14.5119	-126.277	-112.405	-13.2909
-14.4247	-99.3389	-99.2788	-13.0716	-14.4341	-99.6976	-107.104	-13.3012
-13.9765	-102.594	-102.206	-12.9773	-13.9825	-104.001	-99.1023	-13.3249
-13.8583	-103.444	-97.201	-12.7913	-13.8593	-100.871	-100.76	-13.193
-13.5763	-94.3338	-98.7815	-12.5738	-13.5841	-99.5942	-101.786	-13.1737
-13.6087	-101.5	-101.839	-12.3619	-13.6118	-107.886	-93.3559	-13.1005
-13.3131	-111.478	-96.2596	-12.1519	-13.318	-94.3865	-100.927	-13.0626
-13.3128	-104.138	-92.6429	-12.03	-13.318	-107.496	-92.8285	-13.0351
-13.1031	-102.376	-98.2234	-11.9675	-13.1051	-97.2165	-104.556	-13.118
-12.8404	-93.0903	-96.0665	-11.983	-12.8479	-96.0495	-100.738	-13.3125
-12.8131	-90.4241	-110.202	-11.7486	-12.8169	-97.9737	-96.2182	-13.1251
-12.6817	-101.521	-93.5923	-11.5605	-12.6833	-102.536	-105.255	-13.0821
-12.4294	-112.219	-100.212	-11.4616	-12.4298	-106.611	-94.7514	-13.1497
-12.4162	-99.0845	-96.3814	-11.2642	-12.4239	-104.743	-92.8361	-13.065
-12.1626	-97.1765	-107.14	-11.2116	-12.1614	-97.3488	-108.96	-13.1122
-12.1818	-106.107	-103.901	-11.1793	-12.1833	-99.6912	-98.6034	-13.215
-11.9057	-102.966	-90.7923	-11.0084	-11.9078	-99.7942	-93.8867	-13.2451
-11.8759	-96.9308	-91.4098	-10.9245	-11.8766	-94.2782	-97.8557	-13.2963
-11.852	-106.396	-102.909	-10.7979	-11.8543	-99.0081	-96.957	-13.3018
-11.7238	-108.842	-96.4957	-10.7851	-11.7228	-98.3564	-99.9142	-13.3868
-11.623	-96.8684	-93.8679	-10.5851	-11.6238	-95.3453	-95.8545	-13.3769
-11.5499	-97.7796	-108.786	-10.4619	-11.5491	-96.4521	-106.8	-13.4302
-11.4577	-100.982	-103.377	-10.3666	-11.4578	-101.613	-112.395	-13.5378
-11.5091	-97.2568	-94.6899	-10.2635	-11.5072	-108.423	-92.9479	-13.4735
-11.4732	-102.13	-100.973	-10.2329	-11.4665	-110.199	-103.771	-13.6023
-11.3491	-99.9248	-111.656	-10.1289	-11.3475	-99.7402	-98.6142	-13.6121
-11.3108	-98.7567	-96.4828	-9.88931	-11.31	-92.4094	-95.3454	-13.5523
-11.313	-105.509	-116.269	-9.78604	-11.3065	-99.0737	-100.381	-13.4031
-11.3175	-95.276	-93.5687	-9.64307	-11.3136	-97.1064	-99.7483	-13.4206
-11.4006	-96.7969	-98.6278	-9.57349	-11.4025	-98.1096	-103.09	-13.3324
-11.3114	-94.925	-101.811	-9.36762	-11.3077	-97.2115	-99.5776	-13.2028
-11.3818	-120.863	-96.052	-9.23239	-11.377	-99.2849	-94.9382	-13.0812
-11.3445	-100.736	-101.487	-9.1994	-11.3429	-101.393	-95.4631	-13.0219
-11.5453	-99.7705	-101.303	-9.12134	-11.5406	-100.369	-94.6864	-12.9079
-11.6385	-100.573	-101.077	-9.05868	-11.6353	-100.48	-97.0417	-12.835
-11.614	-95.0589	-114.002	-8.90228	-11.6159	-98.7398	-97.5034	-12.6347

J5-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.4369	-97.2449	-93.1716	-17.6988
-30.9748	-96.4442	-103.305	-31.6716
-29.7636	-105.117	-104.902	-32.4807
-28.7274	-109.27	-104.494	-31.5546
-28.1703	-109.506	-110.466	-30.8095
-27.791	-112.52	-112.972	-30.4112
-27.5748	-116.32	-114.75	-30.1657
-27.4026	-113.942	-106.95	-30.0373
-27.417	-116.887	-117.25	-30.1679
-27.455	-125.012	-119.275	-30.1613
-27.3986	-111.747	-118.151	-30.2934
-27.3604	-125.483	-113.175	-30.2435
-27.4642	-114.28	-107.308	-30.4472
-27.4948	-115.209	-114.352	-30.5755
-27.6094	-107.587	-112.697	-30.9216
-27.7247	-112.484	-108.307	-31.2014
-27.6518	-110.471	-106.313	-31.4042
-27.9809	-107.422	-113.689	-31.7118
-28.1221	-115.022	-108.361	-32.093
-28.2787	-112.49	-107.868	-32.4409
-28.3938	-117.156	-112.652	-32.9221
-28.4329	-106.007	-121.462	-33.3235
-28.8491	-117.679	-107.931	-33.9339
-29.0703	-109.848	-106.297	-34.8411
-29.543	-106.741	-107.508	-35.4722
-29.965	-114.982	-104.553	-36.6997
-30.3617	-118.865	-109.344	-37.8382
-31.038	-104.283	-106.058	-39.744
-31.9212	-112.503	-116.002	-43.0722
-32.7729	-114.673	-117.309	-47.4667
-33.3105	-111.815	-102.691	-49.0359
-33.6037	-117.614	-108.758	-45.6173
-33.7059	-116.88	-113.213	-44.2497
-33.5965	-107.981	-110.915	-43.082
-33.3862	-108.16	-105.839	-43.8947
-33.3089	-108.719	-108.733	-44.456
-33.3219	-121.913	-122.594	-46.416
-33.4347	-107.164	-108.825	-47.7411
-33.5343	-107.821	-104.546	-45.6691
-33.4341	-113.282	-107.457	-44.3028

J6-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.0893	-92.0573	-101.862	-18.1435
-30.4235	-101.093	-102.272	-32.5195
-30.3824	-94.2198	-96.011	-31.1457
-29.4586	-92.283	-92.6937	-29.9078
-28.7942	-94.139	-94.0889	-29.2386
-28.2673	-94.5319	-94.5946	-28.9554
-27.8897	-95.6323	-94.1461	-28.8209
-27.539	-102.078	-98.1249	-28.7561
-27.3654	-98.2069	-101.099	-28.9656
-27.2137	-99.6021	-103.202	-29.0201
-26.9423	-100.054	-102.911	-29.1955
-26.6813	-104.837	-107.132	-29.2429
-26.6065	-111.414	-106.255	-29.4598
-26.4388	-111.992	-107.467	-29.6529
-26.2958	-109.2	-115.903	-30.0899
-26.1332	-107.466	-110.808	-30.437
-25.8478	-117.129	-106.779	-30.7032
-25.8517	-114.43	-105.779	-31.0089
-25.7621	-108.185	-113.294	-31.4191
-25.6125	-109.319	-106.282	-31.8714
-25.4374	-122.47	-114.61	-32.5963
-25.2003	-111.885	-112.79	-33.182
-25.1944	-106.494	-103.996	-33.8758
-25.0715	-110.806	-107.982	-35.0052
-25.0695	-112.373	-114.525	-35.8146
-25.0214	-117.981	-107.958	-37.0196
-24.9169	-113.525	-105.823	-38.1804
-25.0211	-112.578	-106.571	-40.1518
-25.2068	-116.842	-104.441	-40.5094
-25.3972	-108.881	-112.067	-38.9981
-25.4702	-117.909	-110.493	-36.5657
-25.5511	-114.076	-105.642	-34.8566
-25.4902	-123.97	-106.877	-33.9625
-25.2848	-106.934	-118.915	-33.4844
-24.9887	-118.068	-106.912	-33.7918
-24.6303	-115.609	-110.267	-34.024
-24.2766	-107.421	-109.409	-34.6856
-24.0459	-110.559	-115.248	-35.1153
-23.7593	-109.878	-109.841	-34.9161
-23.4475	-106.252	-110.887	-34.8649

-33.4674	-109.009	-107.312	-42.2853	-23.2169	-109.988	-108.713	-34.7913
-33.4117	-118.208	-135.938	-40.6573	-22.9833	-112.096	-107.774	-34.7998
-33.1297	-111.501	-114.203	-38.6785	-22.7206	-123.336	-112.128	-34.6993
-32.9418	-107.4	-112.817	-36.8179	-22.5071	-122.623	-105.529	-34.1858
-32.9917	-128.371	-111.564	-35.5507	-22.3924	-108.022	-111.458	-33.6044
-32.8227	-109.216	-119.312	-34.5084	-22.2254	-108.178	-110.373	-32.8679
-32.4796	-109.418	-113.118	-33.8283	-22.0142	-113.948	-108.378	-32.4027
-32.2551	-116.56	-119.801	-33.5505	-21.8546	-109.766	-119.298	-32.152
-31.524	-108.615	-109.239	-33.6043	-21.5046	-114.797	-106.743	-32.4073
-30.9874	-111.395	-110.124	-33.746	-21.2316	-114.024	-103.041	-32.6786
-30.4877	-120.228	-110.82	-33.8102	-20.9358	-110.308	-106.772	-33.3771
-29.6605	-111.126	-114.237	-33.7559	-20.5352	-111.465	-112.712	-33.7036
-29.0549	-121.119	-115.142	-33.3602	-20.1916	-113.033	-131.117	-33.8954
-28.3687	-113.383	-129.86	-32.9099	-19.8311	-116.063	-107.997	-33.8622
-27.7557	-121.454	-113.536	-32.03	-19.4886	-105.642	-117.238	-33.1597
-27.0966	-115.887	-108.811	-31.265	-19.1187	-107.449	-108.362	-32.684
-26.6271	-115.511	-116.505	-30.6123	-18.8215	-115.643	-121.009	-32.4126
-26.1074	-117.546	-111.524	-29.8835	-18.5177	-107.66	-113.887	-31.8301
-25.6633	-113.653	-116.341	-29.1141	-18.2472	-110.485	-108.673	-31.0072
-25.2606	-126.651	-109.449	-28.2864	-17.9793	-124.946	-107.698	-29.9915
-24.8886	-114.819	-118.802	-27.6245	-17.7485	-108.166	-104.877	-29.1003
-24.5207	-110.655	-109.66	-27.0014	-17.5024	-105.122	-105.516	-28.3952
-24.1645	-110.472	-121.634	-26.5395	-17.2643	-105.772	-107.748	-27.9045
-23.8558	-109.945	-112.616	-25.9546	-17.0509	-110.201	-110.387	-27.2815
-23.619	-119.353	-111.422	-25.4602	-16.8791	-116.945	-110.827	-26.7324
-23.2838	-117.991	-108.155	-25.1091	-16.6559	-120.461	-107.301	-26.3097
-23.1456	-113.024	-109.306	-24.6417	-16.5322	-122.802	-125.156	-25.6997
-22.8552	-105.898	-110.402	-24.325	-16.3422	-118.402	-107.023	-25.2427
-22.575	-115.324	-119.032	-23.8863	-16.1493	-120.825	-104.397	-24.6661
-22.3366	-110.182	-114.861	-23.6343	-15.9771	-122.139	-114.587	-24.3174
-22.1347	-109.955	-117.671	-23.3362	-15.8164	-109.242	-117.638	-23.9587
-21.9027	-118.079	-115.342	-22.9883	-15.6569	-114.265	-113.264	-23.5691
-21.8225	-113.814	-111.904	-22.6838	-15.5656	-117.351	-112.741	-23.2203
-21.5612	-110.399	-111.731	-22.3487	-15.3918	-113.104	-115.723	-22.789
-21.4858	-121.612	-112.544	-22.0089	-15.2999	-111.335	-115.324	-22.3436
-21.276	-116.628	-108.823	-21.6187	-15.1436	-103.855	-110.674	-21.8622
-21.089	-116.181	-110.83	-21.3345	-15.0188	-115.209	-106.689	-21.512
-20.9938	-109.218	-117.518	-21.0417	-14.93	-113.318	-112.13	-21.1692
-20.9248	-108.861	-112.51	-20.786	-14.8599	-114.292	-109.853	-20.8719
-20.8888	-109.177	-105.102	-20.5076	-14.8086	-106.342	-108.597	-20.562
-20.7365	-113.339	-113.882	-20.273	-14.6977	-114.054	-113.941	-20.2629
-20.7158	-111.518	-108.764	-20.0289	-14.6576	-107.43	-113.485	-19.943
-20.687	-111.595	-108.854	-19.7241	-14.6164	-114.239	-112.723	-19.5529
-20.6134	-108.429	-116.809	-19.492	-14.5649	-114.706	-116.127	-19.2424
-20.5413	-124.252	-105.295	-19.2439	-14.5092	-116.081	-106.466	-18.9309
-20.5233	-108.789	-112.535	-19.1013	-14.4878	-121.801	-105.442	-18.734
-20.5069	-108.449	-111.342	-18.9098	-14.4666	-127.857	-124.328	-18.4968
-20.4809	-109.623	-124.611	-18.8072	-14.4322	-112.799	-103.348	-18.3416
-20.5369	-119.513	-121.587	-18.6766	-14.4556	-114.084	-103.509	-18.1414
-20.4022	-115.695	-108.795	-18.5118	-14.3904	-117.681	-107.601	-17.9052
-20.524	-144.046	-107.722	-18.3277	-14.4454	-118.705	-112.188	-17.6432
-20.482	-129.115	-114.509	-18.1158	-14.4227	-110.087	-113.001	-17.3674

-20.5024	-110.793	-108.627	-17.9869	-14.4261	-108.293	-108.609	-17.1852
-20.4365	-121.962	-112.667	-17.7785	-14.3994	-107.137	-115.814	-16.9365
-20.5273	-117.077	-106.675	-17.6582	-14.4606	-117.213	-117.432	-16.772
-20.5405	-115.764	-113.073	-17.5545	-14.4722	-104.964	-104.32	-16.6207
-20.5941	-115.922	-111.114	-17.4388	-14.5275	-126.699	-121.572	-16.4477
-20.5503	-106.427	-110.74	-17.2741	-14.5134	-109.546	-105.895	-16.2281
-20.5571	-110.111	-111.656	-17.2057	-14.5383	-108.313	-117.046	-16.1008
-20.5915	-123.793	-104.184	-17.2072	-14.5655	-114.592	-114.696	-16.0304
-20.6738	-116.191	-106.53	-17.0442	-14.6346	-106.712	-105.305	-15.8318
-20.6545	-118.252	-111.11	-17.0134	-14.6681	-109.802	-113.674	-15.7607
-20.6697	-116.888	-107.381	-16.9784	-14.7052	-116.502	-110.181	-15.6731
-20.7803	-115.635	-117.847	-16.8431	-14.8082	-110.436	-109.824	-15.4899
-20.9221	-108.817	-111.022	-16.8313	-14.9175	-108.886	-103.242	-15.4126
-20.8051	-106.616	-109.307	-16.744	-14.9027	-130.934	-99.5808	-15.2741
-20.856	-122.56	-98.662	-16.7377	-14.9721	-94.4844	-96.1589	-15.2074
-20.9463	-97.032	-99.9411	-16.7628	-15.0801	-101.992	-94.3225	-15.1786
-20.8532	-106.325	-99.835	-16.8256	-15.0784	-100.512	-97.5641	-15.202
-21.0088	-110.541	-102.104	-16.7843	-15.2197	-100.677	-99.9379	-15.1178
-21.0914	-100.625	-107.81	-16.9454	-15.3189	-95.5444	-102.971	-15.2007
-21.0156	-96.8911	-104.47	-16.9489	-15.3515	-105.22	-107.042	-15.1602
-20.9111	-103.173	-102.104	-16.8984	-15.3594	-103.236	-102.292	-15.0736
-20.7413	-113.805	-107.597	-16.9123	-15.3202	-110.845	-106.859	-15.0372
-20.8044	-103.151	-99.49	-16.9749	-15.428	-105.41	-102.714	-15.0434
-20.8534	-104.78	-95.1564	-16.9832	-15.517	-95.918	-99.6058	-15.0337
-20.8002	-102.432	-104.271	-17.0166	-15.5787	-104.216	-112.106	-15.0283
-20.6796	-98.8079	-112.398	-17.003	-15.5791	-101.386	-96.5348	-15.0012
-20.5254	-102.458	-103.471	-17.0189	-15.5746	-103.415	-94.8402	-14.9895
-20.4516	-100.686	-103.801	-17.042	-15.6111	-101.436	-93.9163	-14.9687
-20.4053	-98.5939	-104.749	-16.9986	-15.6559	-114.217	-97.5045	-14.8617
-20.1412	-107.086	-95.3008	-16.8868	-15.5736	-107.921	-97.8024	-14.7584
-20.1437	-99.7431	-92.5922	-16.7717	-15.6697	-115.1	-102.423	-14.6421
-19.9476	-108.345	-110.099	-16.8792	-15.6721	-107.747	-101.699	-14.7147
-19.8476	-95.0968	-96.7559	-16.8604	-15.6812	-100.16	-98.2264	-14.6831
-19.692	-97.9604	-100.686	-16.713	-15.6936	-96.008	-111.354	-14.5635
-19.7324	-101.145	-100.259	-16.7535	-15.78	-111.991	-103.723	-14.5895
-19.338	-103.308	-97.8816	-16.8529	-15.6437	-94.8153	-110.713	-14.6369
-19.3618	-99.3586	-107.57	-16.703	-15.7483	-102.181	-100.47	-14.5084
-19.1809	-96.4927	-101.017	-16.6396	-15.7204	-100.709	-105.871	-14.4286
-19.0864	-106.524	-102.414	-16.594	-15.7609	-96.1196	-97.7725	-14.3786
-18.9533	-108.878	-99.3711	-16.5885	-15.7653	-96.5845	-95.7724	-14.3878
-18.7986	-103.521	-111.736	-16.5145	-15.7526	-100.08	-97.2784	-14.3764
-18.6571	-109.197	-103.824	-16.5838	-15.772	-110.566	-98.9265	-14.4131
-18.5202	-104.521	-108.318	-16.5101	-15.7834	-98.2412	-103.582	-14.3878
-18.4717	-94.7125	-108.72	-16.5485	-15.838	-98.8669	-94.3521	-14.4163
-18.2847	-98.1706	-102.936	-16.3976	-15.8127	-102.346	-104.645	-14.3142
-18.1691	-104.396	-109.667	-16.4385	-15.8288	-95.3607	-100.454	-14.3415
-18.1	-104.27	-124.206	-16.3339	-15.8452	-99.0835	-106.304	-14.2449
-18.098	-93.2701	-103.965	-16.2971	-15.9838	-98.0928	-98.7319	-14.2281
-17.9472	-95.7618	-96.405	-16.1508	-15.9572	-103.112	-99.6146	-14.1511
-17.9025	-101.779	-100.92	-16.0174	-16.0384	-105.28	-95.2135	-14.0528
-17.6976	-100.995	-96.1589	-15.9225	-15.9885	-98.5706	-102.315	-14.0151
-17.6339	-98.2197	-102.457	-15.884	-16.0565	-108.176	-94.2027	-14.0203
-17.5304	-102.672	-93.2376	-15.817	-16.0809	-102.479	-100.581	-13.9145
-17.4035	-113.279	-108.477	-15.7815	-16.0712	-117.008	-101.044	-13.9533
-17.3032	-99.147	-101.006	-15.7111	-16.0978	-104.353	-112.678	-13.9018

-17.1578	-97.929	-110.211	-15.6066	-16.0459	-104.611	-95.3772	-13.8376
-17.0465	-98.3581	-93.7736	-15.4641	-16.0228	-115.347	-101.234	-13.7732
-16.8887	-105.059	-95.8203	-15.3238	-15.9771	-102.066	-91.9678	-13.6807
-16.9677	-92.5469	-94.3063	-15.2498	-16.1117	-104.039	-98.9795	-13.6223
-16.7594	-99.5151	-111.802	-15.1352	-15.9813	-101.285	-94.9403	-13.6212
-16.7359	-101.091	-96.2313	-15.0571	-16.0042	-95.8243	-101.437	-13.5624
-16.5167	-98.0612	-97.3054	-14.9263	-15.8415	-94.5864	-97.5102	-13.4822
-16.3798	-100.576	-96.2646	-14.7756	-15.728	-96.1852	-95.7753	-13.414
-16.1999	-102.939	-100.119	-14.684	-15.5736	-96.056	-103.211	-13.3854
-16.0791	-101.224	-92.1149	-14.7457	-15.4592	-98.1685	-95.6253	-13.4448
-15.8962	-99.8668	-108.722	-14.5654	-15.2853	-99.8024	-99.5967	-13.4556
-15.8006	-100.283	-97.7243	-14.4299	-15.176	-99.2426	-101.216	-13.3702
-15.4912	-96.5091	-97.21	-14.375	-14.8558	-100.922	-98.9734	-13.3841
-15.5145	-97.0925	-97.5799	-14.138	-14.8432	-100.218	-101.005	-13.2734
-15.2493	-105.45	-107.217	-14.1004	-14.5576	-103.963	-94.6286	-13.3316
-15.044	-94.5217	-98.9646	-14.0427	-14.3082	-103.242	-97.1183	-13.39
-14.8523	-103.558	-99.9942	-13.8012	-14.088	-98.5437	-96.0005	-13.3099
-14.7299	-96.8963	-104.353	-13.6465	-13.9162	-95.6158	-96.2725	-13.2657
-14.5219	-105.507	-94.9791	-13.5373	-13.6537	-98.7764	-106.698	-13.2841
-14.4382	-108.304	-96.8758	-13.3973	-13.5343	-103.74	-97.2072	-13.2894
-13.9893	-104.958	-104.853	-13.303	-13.0404	-96.4987	-100.829	-13.3176
-13.8643	-104.728	-103.841	-13.0812	-12.8957	-99.0631	-97.8641	-13.1851
-13.5935	-104.17	-94.4924	-12.8953	-12.5586	-99.0827	-102.918	-13.1674
-13.6143	-106.701	-105.749	-12.6678	-12.502	-100.942	-94.5937	-13.092
-13.3244	-105.017	-96.4788	-12.4603	-12.1522	-111.952	-124.776	-13.0689
-13.3258	-108.046	-94.3957	-12.312	-12.1096	-110.096	-98.1135	-13.0421
-13.1181	-105.783	-100.703	-12.2511	-11.8882	-103.071	-101.385	-13.1305
-12.8589	-99.3251	-107.95	-12.2803	-11.564	-107.105	-90.5405	-13.3218
-12.8289	-100.434	-95.6605	-11.9863	-11.4819	-97.0674	-103.057	-13.1389
-12.6982	-106.986	-91.405	-11.7959	-11.2934	-100.726	-110.412	-13.0992
-12.4411	-93.6925	-96.0478	-11.7066	-11.0164	-103.873	-111.125	-13.1722
-12.4458	-100.908	-95.5349	-11.4833	-10.9305	-93.1705	-107.495	-13.0904
-12.1728	-97.7825	-115.67	-11.4002	-10.6725	-101.8	-100.155	-13.1382
-12.1985	-96.2432	-97.5349	-11.36	-10.6312	-97.8035	-91.5373	-13.2466
-11.9201	-103.084	-94.7346	-11.1965	-10.3162	-96.5506	-92.3017	-13.2893
-11.8895	-103.414	-97.6323	-11.1	-10.2394	-95.9931	-96.5565	-13.343
-11.8691	-99.8445	-95.749	-10.956	-10.1316	-99.4594	-97.1397	-13.3547
-11.7385	-102.389	-95.7963	-10.9271	-9.97996	-94.5874	-104.114	-13.4464
-11.6378	-101.356	-102.742	-10.7361	-9.8548	-110.821	-90.8849	-13.4434
-11.5675	-109.334	-98.3894	-10.6168	-9.75089	-100.298	-99.8182	-13.4915
-11.4762	-109.067	-98.3295	-10.5303	-9.60231	-122.457	-94.4068	-13.6133
-11.5243	-106.861	-100.365	-10.3867	-9.6361	-101.788	-99.5809	-13.5615
-11.4897	-105.838	-102.215	-10.3376	-9.51567	-100.959	-99.2151	-13.6903
-11.3635	-99.3457	-108.846	-10.2131	-9.32437	-106.068	-95.0008	-13.7084
-11.3294	-104.082	-95.0673	-9.98288	-9.29657	-97.2653	-102.981	-13.6415
-11.3301	-104.459	-99.0732	-9.83857	-9.25594	-96.6521	-91.8988	-13.4872
-11.3333	-129.337	-96.1452	-9.71095	-9.24515	-97.1598	-95.6044	-13.4914
-11.419	-90.4566	-99.6159	-9.60811	-9.26157	-101.99	-92.6479	-13.3857
-11.328	-101.202	-102.41	-9.39257	-9.07337	-103.525	-96.5067	-13.2537
-11.4004	-100.107	-103.887	-9.24311	-9.13137	-106.142	-99.9064	-13.1176
-11.366	-97.3669	-102.688	-9.16009	-9.06271	-108.63	-91.799	-13.0499
-11.5657	-107.403	-102.243	-9.03496	-9.15129	-91.0219	-95.7233	-12.9249
-11.6611	-98.1569	-108.468	-8.95227	-9.14932	-92.2099	-98.111	-12.8395
-11.639	-105.615	-94.437	-8.76203	-9.04521	-99.7523	-99.6868	-12.629

J6-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.0606	-98.0476	-93.853	-17.7221
-30.4327	-101.5	-102.162	-31.6929
-30.4327	-105.467	-104.268	-32.4153
-29.5061	-108.595	-102.297	-31.475
-28.8415	-104.602	-104.842	-30.7432
-28.3184	-105.45	-105.797	-30.3603
-27.9462	-109.174	-106.918	-30.1328
-27.5989	-103.891	-106.891	-30.0004
-27.4287	-109.274	-107.358	-30.1335
-27.2803	-113.077	-112.882	-30.1266
-27.0095	-106.829	-111.232	-30.2529
-26.7491	-111.149	-117.111	-30.2119
-26.6773	-113.406	-116.827	-30.4103
-26.51	-109.568	-109.383	-30.5416
-26.3667	-112.818	-103.603	-30.9074
-26.2042	-105.591	-115.838	-31.2095
-25.9192	-122.192	-118.023	-31.4272
-25.9228	-106.736	-115.405	-31.7292
-25.8353	-117.127	-107.819	-32.0934
-25.6841	-110.062	-116.214	-32.4304
-25.5084	-114.405	-110.099	-32.9292
-25.2683	-112.142	-112.633	-33.3754
-25.2639	-115.164	-105.008	-34.0185
-25.1397	-116.784	-113.137	-34.943
-25.1385	-111.099	-105.057	-35.5581
-25.0915	-105.032	-109.997	-36.7459
-24.9867	-107.923	-115.673	-37.8298
-25.0926	-121.731	-115.658	-39.6292
-25.2807	-111.341	-108.057	-42.6956
-25.4726	-113.223	-117.483	-46.575
-25.5456	-111.146	-109.674	-48.5344
-25.6284	-110.292	-111.914	-45.6835
-25.5688	-108.877	-110.945	-44.4663
-25.364	-114.077	-109.298	-43.4189
-25.067	-115.919	-122.082	-44.4108
-24.7074	-112.829	-106.899	-45.0852
-24.3505	-110.617	-115.184	-47.2525
-24.1189	-124.697	-109.638	-48.3176
-23.83	-110.135	-110.426	-45.6594
-23.5159	-106.54	-107.973	-44.1179

J7-J8

S11 (dB)	S21 (dB)	S12 (dB)
-18.0902	-94.323	-98.5004
-32.3122	-96.2305	-92.0947
-31.2041	-92.2548	-92.9873
-29.9235	-94.0922	-94.5088
-29.3212	-96.1772	-94.9121
-28.953	-94.6094	-92.7831
-28.7779	-95.9591	-97.2743
-28.675	-97.9924	-97.7401
-28.7861	-98.2058	-98.9313
-28.9074	-106.283	-101.82
-28.9692	-104.103	-103.62
-29.0642	-105.603	-108.036
-29.2102	-105.847	-99.3768
-29.3094	-106.534	-109.107
-29.5932	-107.417	-109.479
-29.9159	-122.558	-106.153
-29.9955	-106.598	-116.823
-30.5522	-113.022	-113.951
-30.7599	-113.255	-102.584
-31.1826	-106.898	-105.809
-31.5762	-112.812	-108.964
-31.9738	-111.786	-106.58
-32.7793	-111.205	-105.854
-33.4063	-109.907	-111.187
-34.3525	-111.321	-108.374
-35.3334	-116.458	-113.184
-36.6729	-111.703	-116.633
-37.3178	-121.268	-108.393
-37.2211	-113.442	-114.537
-36.182	-118.901	-109.429
-34.9206	-110.281	-116.955
-33.4664	-122.695	-112.817
-32.586	-108.831	-111.099
-32.1409	-118.344	-126.316
-32.0937	-116.568	-115.013
-32.3766	-107.835	-114.318
-32.7352	-119.637	-118.249
-32.9164	-109.328	-115.536
-33.1206	-118.606	-108.14
-33.3374	-113.76	-119.266

-23.2846	-111.556	-114.163	-42.1622	-33.2127	-109.405	-113.875
-23.0505	-133.68	-107.042	-40.6735	-32.9537	-117.944	-110.374
-22.7852	-112.297	-117.382	-38.7479	-32.7624	-120.34	-109.759
-22.57	-120.238	-115.67	-36.826	-32.1759	-117.129	-109.466
-22.4534	-106.852	-103.256	-35.4912	-31.5257	-107.188	-108.369
-22.2863	-111.548	-109.238	-34.3933	-31.009	-115.69	-113.188
-22.0738	-110.301	-114.614	-33.7091	-30.7835	-113.103	-112.657
-21.9115	-110.31	-114.017	-33.4781	-30.6449	-105.683	-114.757
-21.561	-109.631	-108.83	-33.5834	-30.6471	-116.15	-121.07
-21.2863	-109.413	-105.456	-33.7844	-30.6912	-109.883	-105.877
-20.9886	-107.708	-114.122	-33.8728	-31.0264	-126.555	-122.164
-20.5858	-107.735	-107.545	-33.8118	-31.2414	-113.164	-103.328
-20.2405	-115.489	-105.607	-33.3234	-31.5208	-111.214	-107.632
-19.8788	-111.62	-109.404	-32.8397	-31.338	-111.913	-112.685
-19.5344	-124.417	-108.132	-31.9761	-30.9738	-107.474	-119.209
-19.1638	-108.575	-112.303	-31.2339	-30.414	-119.7	-108.688
-18.8653	-127.369	-106.655	-30.6225	-29.9958	-111.145	-108.867
-18.561	-117.132	-117.815	-29.9102	-29.3378	-120.778	-108.06
-18.2897	-119.621	-107.532	-29.1076	-28.6425	-111.589	-118.577
-18.0203	-125.666	-107.831	-28.2339	-28.0466	-123.615	-110.144
-17.7879	-118.719	-108.885	-27.5389	-27.3871	-112.53	-106.413
-17.5418	-116.618	-115.66	-26.906	-26.8219	-107.876	-104.638
-17.3027	-106.171	-109.464	-26.4594	-26.2822	-109.642	-119.767
-17.0888	-114.274	-103.584	-25.9005	-25.7858	-113.273	-109.806
-16.916	-110.952	-113.888	-25.4189	-25.3642	-123.003	-111.649
-16.6914	-112.517	-110.11	-25.0632	-24.8543	-107.75	-110.728
-16.5679	-105.581	-100.318	-24.583	-24.582	-111.518	-111.354
-16.3757	-111.426	-117.176	-24.2515	-24.1523	-108.689	-103.999
-16.1822	-118.84	-115.383	-23.813	-23.7147	-111.529	-116.819
-16.0098	-112.412	-107.915	-23.5603	-23.3217	-110.455	-115.359
-15.8481	-114.036	-111.258	-23.2834	-22.9664	-114.497	-111.031
-15.6886	-130.148	-118.011	-22.9698	-22.5618	-120.441	-133.429
-15.5948	-111.711	-113.814	-22.6857	-22.3166	-115.346	-108.242
-15.4211	-112.786	-114.736	-22.3535	-21.8661	-109.274	-117.111
-15.3289	-126.951	-119.838	-22.0046	-21.6066	-112.959	-111.445
-15.1708	-116.832	-124.48	-21.6085	-21.2069	-110.047	-104.222
-15.0462	-116.489	-115.603	-21.3303	-20.8371	-121.486	-111.875
-14.9553	-112.802	-106.66	-21.0487	-20.5579	-110.667	-112.12
-14.8852	-118.607	-114.151	-20.8056	-20.3105	-121.933	-115.372
-14.832	-110.567	-107.255	-20.5382	-20.1011	-104.289	-109.471
-14.723	-129.855	-109.718	-20.2976	-19.7839	-120.551	-113.126
-14.6828	-111.805	-113.036	-20.0486	-19.5944	-107.794	-108.891
-14.6406	-110.119	-107.854	-19.7289	-19.3949	-117.402	-106.918
-14.5882	-118.215	-106.744	-19.4861	-19.1731	-116.522	-130.839
-14.5315	-106.993	-105.652	-19.2347	-18.9454	-110.769	-110.82
-14.5071	-113.139	-109.477	-19.0939	-18.7709	-112.495	-133.487
-14.4877	-108.114	-115.153	-18.9059	-18.6039	-109.744	-107.689
-14.4536	-115.071	-112.55	-18.8094	-18.4211	-107.463	-113.793
-14.4769	-109.907	-114.842	-18.6767	-18.3069	-120.215	-110.443
-14.4081	-132.164	-104.895	-18.5057	-18.0485	-119.692	-109.029
-14.4658	-110.864	-117.607	-18.3101	-17.9834	-108.427	-112.606
-14.4419	-112.754	-109.442	-18.0928	-17.7889	-108.794	-116.112

-14.4457	-119.78	-105.36	-17.9686	-17.6371	-120.403	-114.102
-14.4167	-114.113	-116.573	-17.7644	-17.4382	-111.938	-113.39
-14.4814	-108.697	-117.666	-17.651	-17.3393	-120.423	-103.88
-14.4927	-120.336	-107.625	-17.5535	-17.1932	-104.681	-105.682
-14.5447	-110.311	-107.704	-17.4329	-17.0767	-109.388	-108.395
-14.5313	-111.867	-117.427	-17.2645	-16.8835	-110.219	-116.017
-14.5571	-110.718	-116.732	-17.1928	-16.747	-106.137	-105.902
-14.5815	-111.317	-106.717	-17.1907	-16.6069	-104.488	-99.5125
-14.6502	-129.439	-105.721	-17.0309	-16.5107	-115.062	-109.524
-14.6842	-109.097	-111.851	-17.0013	-16.3917	-109.99	-110.103
-14.7211	-111.462	-107.63	-16.9705	-16.2668	-108.953	-110.961
-14.8229	-107.934	-110.316	-16.8364	-16.2067	-108.669	-111.236
-14.9328	-109.726	-111.819	-16.8174	-16.1672	-108.859	-108.747
-14.9172	-99.8517	-111.592	-16.7289	-15.986	-103.5	-99.5811
-14.987	-101.583	-98.059	-16.7255	-15.9077	-103.849	-99.3439
-15.0957	-103.722	-98.4241	-16.7604	-15.8672	-107.874	-102.507
-15.0953	-110.468	-108.376	-16.8226	-15.7126	-119.281	-104.941
-15.2324	-102.766	-110.953	-16.7985	-15.7044	-100.337	-94.7263
-15.3393	-98.0875	-100.421	-16.9675	-15.654	-97.9412	-96.9724
-15.3665	-105.358	-100.078	-16.9758	-15.5506	-99.472	-113.209
-15.3744	-105.387	-105.204	-16.926	-15.4101	-103.648	-95.5885
-15.3327	-98.4287	-94.6518	-16.9355	-15.2276	-118.184	-102.823
-15.442	-113.422	-94.4029	-17.0022	-15.2102	-98.7214	-110.799
-15.5308	-104.777	-103.797	-17.0129	-15.1605	-101.113	-98.5048
-15.5944	-98.2627	-92.8552	-17.052	-15.1115	-105.67	-97.2501
-15.5952	-107.334	-107.1	-17.0449	-14.9772	-107.848	-107.334
-15.5892	-107.408	-99.8186	-17.0567	-14.8642	-92.7354	-116.51
-15.6241	-105.534	-106.611	-17.0645	-14.7931	-113.065	-98.0906
-15.6703	-97.2914	-96.0324	-16.9955	-14.7088	-108.325	-101.895
-15.5899	-98.191	-99.2694	-16.8714	-14.5351	-107.623	-102.251
-15.6826	-105.092	-100.745	-16.7497	-14.5132	-97.0252	-95.6431
-15.6878	-108.743	-100.309	-16.8456	-14.469	-97.6723	-107.241
-15.6994	-104.188	-107.889	-16.8313	-14.3627	-94.9267	-97.1441
-15.7058	-97.8615	-95.0227	-16.6798	-14.2933	-99.3086	-101.051
-15.7935	-100.066	-98.5266	-16.7162	-14.2475	-109.89	-97.9301
-15.6567	-97.259	-96.0709	-16.8136	-14.0866	-109.113	-99.6589
-15.7591	-102.748	-100.353	-16.6627	-14.0736	-97.4757	-103.803
-15.7326	-98.2091	-97.2172	-16.5962	-13.9773	-104.212	-102.213
-15.7701	-111.09	-98.8687	-16.5541	-13.9305	-107.29	-103.524
-15.7747	-99.6958	-96.7518	-16.5563	-13.8614	-108.686	-97.551
-15.7602	-110.533	-100.945	-16.5015	-13.7769	-97.8424	-103.094
-15.7779	-97.8105	-104.691	-16.5858	-13.7391	-96.6992	-102.683
-15.7926	-102.49	-98.2512	-16.5318	-13.6957	-103.393	-101.995
-15.8464	-105.723	-107.38	-16.5795	-13.6598	-102.164	-100.357
-15.8212	-100.831	-98.5608	-16.4226	-13.5908	-95.2721	-93.6286
-15.8364	-105.987	-102.034	-16.4677	-13.5535	-117.642	-93.9031
-15.8494	-92.0483	-101.769	-16.3659	-13.4316	-102.507	-98.6547
-15.9797	-98.5304	-98.6737	-16.3303	-13.5003	-92.4365	-105.264
-15.961	-105.196	-109.361	-16.1914	-13.4316	-100.693	-107.461
-16.0469	-102.505	-94.8727	-16.0651	-13.4576	-104.443	-105.038
-15.9983	-96.6552	-95.3773	-15.974	-13.4186	-96.3973	-97.5946
-16.0657	-98.9067	-94.563	-15.9364	-13.4501	-98.0956	-103.576
-16.089	-107.185	-106.335	-15.8646	-13.4498	-104.355	-102.998
-16.0811	-99.3904	-98.0085	-15.835	-13.4388	-104.022	-93.8644
-16.1068	-101.916	-96.0615	-15.7643	-13.488	-107.453	-105.736

-16.0646	-102.989	-107.298	-15.6538	-13.4373	-107.297	-97.4827
-16.042	-101.793	-100.08	-15.5195	-13.421	-105.312	-110.078
-15.986	-103.44	-95.7466	-15.3624	-13.518	-100.036	-95.0036
-16.1204	-105.956	-111.722	-15.2918	-13.5262	-99.3243	-94.956
-15.998	-95.9595	-108.17	-15.1855	-13.5483	-119.318	-108.719
-16.0211	-97.2158	-111.057	-15.1083	-13.6252	-108.613	-93.9598
-15.8618	-104.576	-114.393	-14.976	-13.7568	-100.159	-95.3309
-15.7449	-103.11	-112.071	-14.8234	-13.6719	-97.2093	-103.857
-15.5906	-105.518	-110.198	-14.726	-13.7275	-103.927	-109.374
-15.4786	-97.4892	-105.083	-14.7849	-13.7211	-107.356	-114.75
-15.303	-97.4891	-94.4529	-14.6092	-13.7798	-101.932	-100.597
-15.1937	-98.5158	-118.462	-14.4761	-13.8097	-97.3808	-94.0267
-14.8726	-100.448	-100.807	-14.415	-13.8375	-93.3513	-96.2974
-14.8621	-105.703	-95.5385	-14.1732	-13.9871	-98.2769	-90.3404
-14.5754	-95.9888	-92.3042	-14.1344	-13.946	-96.2852	-101.487
-14.3263	-102.088	-113.64	-14.0693	-14.0559	-108.566	-101.569
-14.103	-112.496	-93.8213	-13.8356	-13.9601	-100.892	-101.474
-13.9297	-116.565	-98.5626	-13.6798	-14.0488	-92.2088	-105.729
-13.6685	-97.8655	-113.443	-13.5492	-14.0942	-100.201	-95.1084
-13.551	-101.883	-93.1027	-13.4032	-14.0661	-95.3171	-95.3212
-13.0592	-96.7323	-91.478	-13.3029	-13.9558	-98.5012	-99.5503
-12.9102	-98.5503	-108.872	-13.0691	-13.8445	-105.06	-96.2232
-12.5755	-97.1262	-102.502	-12.8772	-13.7749	-100.769	-95.4544
-12.5186	-97.6245	-94.3488	-12.6463	-14.013	-100.663	-92.0504
-12.1662	-106.932	-97.2555	-12.4413	-13.8958	-121.901	-98.3588
-12.123	-99.5317	-100.539	-12.2914	-13.9243	-103.728	-100.869
-11.8983	-106.548	-97.4883	-12.2256	-13.7556	-102.628	-92.369
-11.5798	-101.424	-110.246	-12.2496	-13.6947	-99.7656	-103.192
-11.4924	-103.196	-90.7183	-11.9695	-13.7158	-98.4054	-104.223
-11.3079	-101.231	-100.916	-11.7688	-13.6865	-100.111	-95.4393
-11.0251	-115.378	-106.178	-11.6725	-13.4524	-97.0725	-94.7037
-10.9466	-103.815	-96.5116	-11.4493	-13.5623	-93.8063	-89.884
-10.6841	-97.1243	-96.2439	-11.3737	-13.2817	-101.116	-106.847
-10.6387	-114.62	-104.725	-11.3495	-13.3301	-95.0149	-100.622
-10.3251	-99.7669	-103.233	-11.1942	-13.1182	-100.41	-104.087
-10.2496	-105.603	-105.467	-11.099	-13.0811	-98.4532	-102.96
-10.1383	-114.22	-96.9158	-10.9641	-13.096	-93.2553	-91.3555
-9.98476	-100.365	-98.2731	-10.9368	-12.9613	-105.411	-98.2983
-9.86143	-101.923	-96.4547	-10.7492	-12.7891	-105.544	-96.9206
-9.75695	-117.573	-99.1584	-10.6372	-12.6786	-96.6501	-102.702
-9.60744	-99.0835	-96.3422	-10.5526	-12.5992	-97.7421	-99.3751
-9.64119	-101.573	-108.492	-10.409	-12.5699	-104.035	-100.484
-9.5243	-102.764	-100.759	-10.3651	-12.526	-106.043	-93.5807
-9.33278	-96.3401	-101.351	-10.2523	-12.4305	-94.517	-94.6107
-9.30286	-97.7892	-104.528	-10.0236	-12.3136	-97.6566	-104.929
-9.26026	-98.2813	-103.577	-9.8689	-12.269	-102.86	-103.995
-9.24735	-99.4663	-98.4998	-9.73482	-12.1837	-100.825	-98.4804
-9.25267	-95.3764	-97.768	-9.61779	-12.2503	-98.7347	-88.6638
-9.06893	-104.849	-97.2373	-9.40349	-12.1625	-94.1199	-98.9864
-9.12266	-99.5285	-100.572	-9.25951	-12.1556	-104.794	-94.2817
-9.06171	-100.591	-112.333	-9.16924	-12.0443	-99.9862	-98.922
-9.15287	-95.0161	-96.5696	-9.04091	-12.2103	-111.102	-97.6917
-9.13808	-110.064	-113.259	-8.9546	-12.2746	-94.6079	-90.2257
-9.03933	-99.5502	-96.05	-8.75584	-12.2337	-98.746	-94.852

			0.2 TO 19
	max	1.818979	2.178107
	Max	1.87791	1.997058
2 to 18	max	1.87791	2.178107

S22 (dB)	Frequency (GHz)	J1 In	J1 Out	J2 In	J2 Out	J3 In	J3 Out
-17.7603	0.1	2.423074	3.587444	2.059161	1.985785	1.90355	1.84615
-31.7133	0.1995	1.39318	1.264325	1.403048	1.295447	1.416398	1.308457
-32.3347	0.299	1.198365	1.14697	1.215271	1.174668	1.229421	1.188729
-31.367	0.3985	1.156304	1.187013	1.133454	1.138561	1.149161	1.149121
-30.6368	0.498	1.150298	1.214828	1.098558	1.122914	1.112651	1.127836
-30.2543	0.5975	1.160135	1.228545	1.09021	1.116331	1.101173	1.116193
-30.0151	0.697	1.173397	1.235735	1.094144	1.113607	1.100281	1.104932
-29.8847	0.7965	1.181048	1.230621	1.108126	1.110054	1.110553	1.095152
-30.0138	0.896	1.198748	1.228948	1.12706	1.109564	1.127669	1.087903
-29.9935	0.9955	1.217273	1.225995	1.149713	1.114656	1.147537	1.087769
-30.1166	1.095	1.224941	1.215965	1.158117	1.113416	1.154757	1.082445
-30.0731	1.1945	1.241025	1.212242	1.175409	1.116766	1.172155	1.085756
-30.2609	1.294	1.25037	1.200004	1.189905	1.113276	1.188302	1.083103
-30.3889	1.3935	1.261503	1.201464	1.199329	1.122966	1.198374	1.095219
-30.7538	1.493	1.274954	1.192731	1.211687	1.121241	1.211778	1.099567
-31.0563	1.5925	1.293095	1.192234	1.227755	1.125753	1.231459	1.112171
-31.264	1.692	1.299219	1.190886	1.234996	1.127415	1.239701	1.119644
-31.5442	1.7915	1.306621	1.18578	1.238911	1.125341	1.245454	1.126169
-31.8764	1.891	1.318721	1.193103	1.247409	1.13148	1.258891	1.139284
-32.1936	1.9905	1.327115	1.188655	1.249423	1.126029	1.265115	1.141532
-32.6832	2.09	1.341574	1.196434	1.256254	1.129846	1.27595	1.152238
-33.1409	2.1895	1.350885	1.204828	1.262404	1.132634	1.283583	1.162409
-33.7968	2.289	1.351041	1.2102	1.256734	1.130301	1.28036	1.167278
-34.7245	2.3885	1.361134	1.216878	1.259449	1.129674	1.284731	1.170741
-35.3227	2.488	1.361309	1.221962	1.253404	1.126596	1.282101	1.17286
-36.4722	2.5875	1.368139	1.227735	1.254399	1.124216	1.28509	1.173119
-37.5001	2.687	1.370468	1.234563	1.247234	1.120779	1.279782	1.172685
-39.2296	2.7865	1.367779	1.240102	1.243741	1.116777	1.276704	1.17199
-42.2175	2.886	1.370154	1.250276	1.242506	1.12092	1.274242	1.174771
-46.2407	2.9855	1.368612	1.252664	1.241192	1.116175	1.271605	1.171277
-49.333	3.085	1.373555	1.262784	1.251395	1.116857	1.280503	1.174429
-46.3407	3.1845	1.378246	1.273675	1.258275	1.120456	1.2853	1.174968
-44.9034	3.284	1.390722	1.284883	1.275058	1.125701	1.296356	1.175584
-43.6871	3.3835	1.398807	1.289239	1.278808	1.126939	1.293306	1.167395
-44.6925	3.483	1.414051	1.290406	1.293171	1.131389	1.297689	1.155528
-45.4662	3.5825	1.415351	1.287792	1.293903	1.132679	1.288057	1.142245
-48.1113	3.682	1.422466	1.282404	1.305309	1.132459	1.282489	1.126142
-49.282	3.7815	1.416063	1.278831	1.307414	1.139635	1.269874	1.107157
-46.0677	3.881	1.42183	1.266625	1.318718	1.140067	1.266001	1.085412
-44.3117	3.9805	1.413051	1.253367	1.325262	1.142141	1.255666	1.063653

-42.3567	4.08	1.407595	1.241239	1.339911	1.150829	1.251885	1.040306
-40.9559	4.1795	1.396919	1.225142	1.354101	1.157177	1.248896	1.018034
-39.0195	4.279	1.386178	1.205444	1.365683	1.162989	1.247877	1.011269
-37.0225	4.3785	1.379752	1.18606	1.38576	1.17119	1.257929	1.035134
-35.5802	4.478	1.373987	1.169425	1.40517	1.178927	1.266132	1.058197
-34.3733	4.5775	1.372339	1.155353	1.426342	1.187088	1.282082	1.077751
-33.6329	4.677	1.371062	1.138633	1.444633	1.198095	1.294973	1.10319
-33.4098	4.7765	1.375549	1.124185	1.465777	1.211049	1.308778	1.126945
-33.5435	4.876	1.365226	1.117591	1.472228	1.22416	1.312925	1.144679
-33.7879	4.9755	1.355506	1.094788	1.481017	1.246763	1.324677	1.181089
-33.9048	5.075	1.342619	1.083703	1.48294	1.263315	1.330372	1.204574
-33.8026	5.1745	1.32448	1.070729	1.484342	1.280318	1.342917	1.235266
-33.2376	5.274	1.307393	1.056028	1.485434	1.304441	1.357188	1.270559
-32.7056	5.3735	1.289325	1.050453	1.48273	1.32227	1.371379	1.298265
-31.8534	5.473	1.26996	1.043046	1.478921	1.337482	1.389389	1.339048
-31.1329	5.5725	1.250205	1.051012	1.474538	1.352481	1.404108	1.367954
-30.549	5.672	1.239378	1.063487	1.470917	1.36674	1.41522	1.397306
-29.8638	5.7715	1.224728	1.076474	1.465773	1.376713	1.433976	1.419516
-29.0356	5.871	1.213154	1.093902	1.45756	1.389265	1.446732	1.448667
-28.1272	5.9705	1.209382	1.109144	1.455502	1.395237	1.460351	1.468826
-27.4094	6.07	1.191282	1.127494	1.436832	1.40515	1.465333	1.495516
-26.7608	6.1695	1.188079	1.142781	1.426627	1.41234	1.472875	1.510779
-26.3297	6.269	1.179826	1.15239	1.414422	1.413879	1.474484	1.52517
-25.7984	6.3685	1.175382	1.162439	1.400764	1.413495	1.472725	1.529124
-25.3396	6.468	1.176087	1.169378	1.392811	1.411129	1.476026	1.531788
-24.9823	6.5675	1.16479	1.166402	1.372391	1.400916	1.46579	1.523452
-24.4937	6.667	1.162295	1.170376	1.359319	1.39516	1.449602	1.52293
-24.142	6.7665	1.158818	1.186308	1.344864	1.403327	1.436349	1.534107
-23.6938	6.866	1.161146	1.191196	1.336851	1.399842	1.42778	1.5262
-23.4465	6.9655	1.160315	1.192579	1.324858	1.394091	1.409812	1.517203
-23.1828	7.065	1.164466	1.206261	1.316791	1.400719	1.397232	1.519142
-22.8998	7.1645	1.175211	1.215146	1.315164	1.404319	1.380466	1.512901
-22.6329	7.264	1.188969	1.223198	1.316946	1.404654	1.367964	1.510583
-22.2971	7.3635	1.199625	1.231751	1.315869	1.402879	1.361015	1.499231
-21.9385	7.463	1.221028	1.244174	1.326728	1.407281	1.360915	1.495916
-21.5414	7.5625	1.242793	1.265592	1.337198	1.417343	1.360153	1.501829
-21.2685	7.662	1.268728	1.286895	1.350773	1.430866	1.357565	1.501932
-20.9988	7.7615	1.294721	1.30938	1.366117	1.43927	1.36707	1.507799
-20.7692	7.861	1.334973	1.339934	1.39652	1.464531	1.38688	1.523457
-20.5191	7.9605	1.345951	1.345324	1.397401	1.455453	1.388968	1.506501
-20.2867	8.06	1.381089	1.37058	1.421942	1.466555	1.412469	1.521409
-20.0292	8.1595	1.408115	1.387225	1.437391	1.467288	1.42551	1.523911
-19.6998	8.259	1.438749	1.411631	1.457546	1.482229	1.453749	1.529735
-19.4497	8.3585	1.465345	1.426775	1.472081	1.47701	1.472619	1.532632
-19.1983	8.458	1.484604	1.44305	1.475327	1.478165	1.473224	1.528899
-19.0631	8.5575	1.518664	1.466238	1.500811	1.483488	1.509775	1.538205
-18.8888	8.657	1.529126	1.48152	1.504709	1.481656	1.520337	1.541941
-18.8009	8.7565	1.559751	1.491739	1.523036	1.468781	1.543456	1.536566
-18.6668	8.856	1.568197	1.504242	1.521319	1.463543	1.556955	1.528686
-18.491	8.9555	1.585202	1.511373	1.534881	1.460139	1.577148	1.529793
-18.29	9.055	1.597039	1.521311	1.536967	1.443594	1.584463	1.518352
-18.0702	9.1545	1.603152	1.527028	1.535543	1.434346	1.593853	1.510732

-17.9498	9.254	1.608268	1.536203	1.527478	1.426535	1.593184	1.500367
-17.7535	9.3535	1.623347	1.532358	1.540765	1.403327	1.608497	1.478808
-17.6453	9.453	1.635021	1.547993	1.54547	1.401806	1.624175	1.475851
-17.5494	9.5525	1.624857	1.548492	1.535167	1.390784	1.620453	1.465116
-17.433	9.652	1.633764	1.561364	1.533527	1.387851	1.614509	1.45756
-17.2638	9.7515	1.646713	1.565627	1.545435	1.377371	1.631996	1.447108
-17.1873	9.851	1.65067	1.567098	1.542997	1.372104	1.631292	1.434494
-17.1822	9.9505	1.659164	1.563754	1.549571	1.364091	1.638342	1.419281
-17.0233	10.05	1.66284	1.571202	1.546626	1.359211	1.634042	1.415371
-17.007	10.1495	1.667714	1.573961	1.546153	1.359559	1.635456	1.408987
-16.9776	10.249	1.673564	1.573625	1.539863	1.357507	1.620883	1.398526
-16.8443	10.3485	1.683782	1.580905	1.547037	1.366837	1.624391	1.402393
-16.8202	10.448	1.683002	1.581245	1.54053	1.369102	1.617744	1.4008
-16.7246	10.5475	1.694888	1.585126	1.543177	1.371549	1.621046	1.395216
-16.7209	10.647	1.707142	1.584288	1.547219	1.364851	1.613411	1.382852
-16.7557	10.7465	1.70414	1.593939	1.537522	1.37701	1.602112	1.403913
-16.8328	10.846	1.725459	1.584161	1.547868	1.376714	1.606088	1.392263
-16.8088	10.9455	1.690934	1.5664	1.518529	1.361588	1.575711	1.381179
-16.9752	11.045	1.709685	1.587563	1.509067	1.378895	1.564051	1.390963
-16.9858	11.1445	1.697937	1.57978	1.496824	1.366093	1.543707	1.375906
-16.9311	11.244	1.684332	1.554719	1.480851	1.349328	1.530917	1.365273
-16.9353	11.3435	1.687653	1.55436	1.463843	1.355528	1.504862	1.376499
-16.9911	11.443	1.670024	1.553554	1.451194	1.344659	1.502746	1.368756
-17.0053	11.5425	1.672759	1.535739	1.437	1.331942	1.476648	1.357453
-17.0541	11.642	1.666675	1.520814	1.422436	1.318332	1.460548	1.353954
-17.0529	11.7415	1.642528	1.502727	1.389145	1.309783	1.43432	1.349891
-17.0621	11.841	1.646773	1.49906	1.391262	1.296657	1.433861	1.337811
-17.0598	11.9405	1.645344	1.468217	1.367845	1.269427	1.400874	1.317344
-16.9752	12.04	1.607949	1.469546	1.33396	1.269088	1.372034	1.327087
-16.8382	12.1395	1.620263	1.450221	1.338517	1.258096	1.375511	1.316231
-16.7059	12.239	1.593372	1.440186	1.306108	1.246417	1.336375	1.305363
-16.799	12.3385	1.622659	1.418161	1.319413	1.222723	1.342789	1.294498
-16.7826	12.438	1.59884	1.41364	1.289036	1.224707	1.312253	1.290059
-16.6394	12.5375	1.583835	1.401032	1.271012	1.217428	1.289488	1.295387
-16.6735	12.637	1.599565	1.389588	1.274199	1.208474	1.29014	1.281849
-16.7702	12.7365	1.606826	1.382261	1.282746	1.195892	1.284001	1.27213
-16.6071	12.836	1.586824	1.371359	1.2579	1.196317	1.272262	1.269385
-16.5253	12.9355	1.606591	1.355755	1.257332	1.186755	1.261387	1.260491
-16.4766	13.035	1.601369	1.361994	1.251411	1.19044	1.247926	1.258183
-16.4799	13.1345	1.613041	1.344551	1.25582	1.172158	1.255558	1.239799
-16.4334	13.234	1.614774	1.33405	1.246663	1.174297	1.247894	1.233209
-16.5343	13.3335	1.640673	1.345713	1.263538	1.18321	1.263387	1.236973
-16.487	13.433	1.648562	1.336274	1.26826	1.196283	1.267782	1.236384
-16.5348	13.5325	1.654797	1.304835	1.272172	1.162868	1.266279	1.198985
-16.3687	13.632	1.653657	1.326954	1.263694	1.207715	1.265304	1.229708
-16.4106	13.7315	1.671965	1.330093	1.2828	1.204294	1.276295	1.218483
-16.3004	13.831	1.685277	1.328304	1.285353	1.218102	1.281675	1.213951
-16.2581	13.9305	1.707502	1.334882	1.301438	1.238986	1.296037	1.222104
-16.125	14.03	1.721688	1.345427	1.313667	1.257761	1.301318	1.222431
-16.0078	14.1295	1.741199	1.352307	1.329676	1.270261	1.316393	1.222973
-15.9182	14.229	1.723972	1.384293	1.317348	1.309833	1.287821	1.247378
-15.8796	14.3285	1.757922	1.386833	1.352405	1.323656	1.317749	1.244715
-15.8057	14.428	1.77381	1.398737	1.362724	1.340981	1.320514	1.238813
-15.7718	14.5275	1.77495	1.413591	1.370528	1.364903	1.311503	1.245465
-15.6999	14.627	1.776902	1.421718	1.391561	1.375517	1.314352	1.24454

-15.585	14.7265	1.807784	1.458886	1.416873	1.424538	1.324753	1.273249
-15.4551	14.826	1.808703	1.481171	1.42924	1.452137	1.316465	1.281322
-15.2953	14.9255	1.813395	1.500215	1.444962	1.463263	1.314907	1.281004
-15.2283	15.025	1.818979	1.510324	1.459991	1.497639	1.30235	1.292097
-15.1453	15.1245	1.800128	1.541296	1.447236	1.515982	1.278457	1.306975
-15.0665	15.224	1.783888	1.564829	1.454138	1.534375	1.26975	1.315636
-14.9318	15.3235	1.795183	1.562734	1.466545	1.531923	1.276244	1.303126
-14.7904	15.423	1.763996	1.592503	1.460476	1.559112	1.253486	1.316221
-14.6911	15.5225	1.758378	1.592871	1.472155	1.548998	1.244506	1.315504
-14.7556	15.622	1.715065	1.576144	1.440441	1.520931	1.212492	1.311637
-14.5915	15.7215	1.695497	1.597912	1.429262	1.54555	1.207997	1.330842
-14.4622	15.821	1.684322	1.61678	1.423473	1.550542	1.204341	1.342749
-14.4027	15.9205	1.647254	1.593861	1.417084	1.511019	1.202064	1.329509
-14.1682	16.02	1.642244	1.617648	1.411292	1.510615	1.215311	1.335438
-14.1305	16.1195	1.610185	1.614727	1.391683	1.49445	1.22601	1.344776
-14.0677	16.219	1.560846	1.590913	1.36164	1.452172	1.237997	1.335474
-13.8449	16.3185	1.53302	1.578477	1.337489	1.42527	1.253874	1.323332
-13.6869	16.418	1.508319	1.576558	1.320958	1.399166	1.274451	1.325703
-13.5691	16.5175	1.479599	1.553447	1.313926	1.367604	1.308732	1.312037
-13.4219	16.617	1.446507	1.536107	1.28354	1.324521	1.318282	1.300364
-13.3205	16.7165	1.408378	1.529404	1.256589	1.303048	1.341816	1.306068
-13.0905	16.816	1.367834	1.506951	1.236959	1.263035	1.359365	1.270898
-12.8901	16.9155	1.330158	1.493951	1.212314	1.224503	1.390491	1.252619
-12.6566	17.015	1.309794	1.453403	1.222086	1.180325	1.419206	1.215601
-12.4628	17.1145	1.272496	1.44004	1.203924	1.153688	1.438171	1.202892
-12.3138	17.214	1.239429	1.403686	1.190321	1.106175	1.425438	1.166581
-12.2518	17.3135	1.19187	1.376946	1.191294	1.077607	1.44026	1.136965
-12.2873	17.413	1.169056	1.343429	1.204506	1.050274	1.433639	1.120874
-12	17.5125	1.127638	1.322533	1.225608	1.060262	1.439759	1.09018
-11.7924	17.612	1.089199	1.279424	1.257628	1.08265	1.446541	1.045745
-11.6971	17.7115	1.051272	1.268044	1.298697	1.109867	1.465385	1.023747
-11.4738	17.811	1.019263	1.239509	1.345753	1.15469	1.470708	1.027208
-11.4067	17.9105	1.045396	1.222169	1.370612	1.187228	1.478218	1.05736
-11.366	18.01	1.073384	1.204713	1.401654	1.226732	1.494961	1.097565
-11.2203	18.1095	1.1231	1.196616	1.452629	1.263651	1.523102	1.147502
-11.1294	18.209	1.181264	1.196641	1.49413	1.295363	1.565184	1.205843
-10.9943	18.3085	1.229991	1.204383	1.511187	1.325744	1.596595	1.25484
-10.9605	18.408	1.30525	1.194949	1.57035	1.349282	1.656764	1.305052
-10.7756	18.5075	1.360664	1.205746	1.604233	1.384966	1.700225	1.382716
-10.6573	18.607	1.425448	1.221	1.624997	1.411201	1.752516	1.444694
-10.5757	18.7065	1.518527	1.236433	1.68185	1.42594	1.843548	1.511864
-10.4401	18.806	1.57257	1.241237	1.684127	1.444929	1.872288	1.580926
-10.3968	18.9055	1.669811	1.25151	1.721463	1.433607	1.95208	1.624155
-10.2791	19.005	1.749515	1.267935	1.778628	1.427572	2.070781	1.697031
-10.0425	19.1045	1.857917	1.288237	1.810744	1.464131	2.102288	1.818289
-9.88541	19.204	1.955928	1.274801	1.847366	1.465009	2.181292	1.869511
-9.73645	19.3035	2.028182	1.291634	1.86948	1.466325	2.261948	1.962925
-9.62094	19.403	2.085903	1.280525	1.878164	1.442621	2.320254	1.994487
-9.39994	19.5025	2.286235	1.29088	1.987473	1.426249	2.490516	2.075309
-9.24232	19.602	2.35493	1.285837	1.986561	1.40871	2.499557	2.15391
-9.15474	19.7015	2.462175	1.277194	2.031073	1.38965	2.505575	2.186396
-9.02567	19.801	2.561226	1.281238	2.058719	1.340053	2.64502	2.197875
-8.93458	19.9005	2.651158	1.282458	2.105355	1.323894	2.676219	2.276524
-8.73116	20	2.860122	1.291408	2.189924	1.278678	2.743466	2.298007

VSWR/IN - OUT

J4 In	J4 Out	J5 In	J5 Out	J6 In	J6 Out	J7 In	J7 Out	J8 In	J8 Out
2.149915	2.062179	2.086361	1.987263	2.088705	1.997761	2.140356	2.061565	2.086034	2.04512
1.418507	1.312941	1.396712	1.290228	1.400387	1.295966	1.420635	1.314981	1.419383	1.314027
1.231383	1.187174	1.216998	1.181599	1.21144	1.169357	1.230352	1.188451	1.217432	1.171841
1.145503	1.146107	1.1366	1.149215	1.123903	1.133575	1.145966	1.148045	1.126599	1.125527
1.107352	1.125323	1.100979	1.133949	1.087726	1.119973	1.109527	1.126413	1.092575	1.109
1.091541	1.115876	1.089732	1.129585	1.080025	1.120063	1.09909	1.115747	1.09192	1.108757
1.088475	1.107009	1.090273	1.12498	1.086377	1.123339	1.102634	1.106844	1.108787	1.114036
1.096743	1.099848	1.101177	1.119761	1.10096	1.126468	1.117345	1.099749	1.130885	1.11985
1.110453	1.092884	1.116956	1.11705	1.121434	1.132941	1.1358	1.098205	1.160431	1.133252
1.129205	1.092151	1.139293	1.118392	1.143977	1.140582	1.161243	1.100192	1.193718	1.147074
1.133965	1.08515	1.144063	1.113607	1.151722	1.1434	1.169996	1.100362	1.208705	1.157032
1.147161	1.084611	1.158577	1.114762	1.168876	1.149393	1.190645	1.107819	1.235449	1.171559
1.159551	1.077718	1.17111	1.109535	1.178865	1.146633	1.208736	1.107945	1.256389	1.177443
1.166935	1.083629	1.178398	1.114454	1.186764	1.154198	1.221864	1.122324	1.274573	1.19606
1.174852	1.07914	1.187323	1.109923	1.195054	1.150065	1.238015	1.128446	1.294667	1.204522
1.188685	1.081861	1.201128	1.110231	1.205939	1.148171	1.258194	1.142678	1.318859	1.21915
1.192935	1.081584	1.20423	1.108988	1.206299	1.145789	1.268675	1.151086	1.333138	1.229001
1.195366	1.080136	1.207958	1.103543	1.2045	1.136448	1.276976	1.158357	1.343291	1.234329
1.204526	1.0855	1.213357	1.105625	1.20618	1.136335	1.290919	1.171968	1.357853	1.247039
1.203172	1.082021	1.213783	1.096338	1.203213	1.118349	1.297673	1.174105	1.368877	1.24678
1.211085	1.08571	1.217144	1.097516	1.202112	1.114465	1.309978	1.185012	1.383261	1.257259
1.214791	1.091141	1.218493	1.095631	1.195538	1.104294	1.320009	1.195073	1.393131	1.265999
1.211513	1.09265	1.212452	1.091954	1.180303	1.092182	1.317345	1.199201	1.392104	1.269862
1.21214	1.092876	1.211292	1.088652	1.176009	1.079496	1.322977	1.204017	1.400637	1.27417
1.207579	1.092501	1.204474	1.083099	1.15961	1.066241	1.319783	1.205378	1.398661	1.275272
1.211693	1.092221	1.202755	1.079648	1.149806	1.052624	1.323132	1.205494	1.40166	1.274457
1.208749	1.090733	1.193844	1.074919	1.134916	1.041392	1.317751	1.203702	1.397142	1.274587
1.208504	1.088488	1.188389	1.070492	1.122677	1.030566	1.312437	1.200455	1.39309	1.274337
1.208412	1.092657	1.184273	1.071196	1.115324	1.016252	1.308749	1.200475	1.390204	1.275177
1.211876	1.087482	1.181992	1.06587	1.112628	1.01751	1.30249	1.196978	1.385194	1.273562
1.223573	1.084324	1.189281	1.06469	1.124176	1.02099	1.30741	1.199806	1.389532	1.280871
1.232663	1.090096	1.193769	1.066158	1.132746	1.029855	1.309094	1.201333	1.392121	1.284641
1.252732	1.097498	1.208641	1.07015	1.155171	1.042977	1.319252	1.20267	1.403725	1.287048
1.25934	1.103314	1.211519	1.071971	1.163442	1.065875	1.318454	1.193723	1.40669	1.281634
1.27795	1.113098	1.227024	1.081331	1.186277	1.09444	1.324207	1.181217	1.414153	1.269901
1.283294	1.119138	1.230601	1.088154	1.198798	1.120051	1.314503	1.164644	1.409334	1.258054
1.295921	1.123879	1.243424	1.094055	1.224259	1.146202	1.311659	1.145459	1.406693	1.241473
1.300844	1.135883	1.249684	1.109841	1.246243	1.180332	1.29939	1.124822	1.39457	1.223491
1.313809	1.139675	1.264519	1.119196	1.274329	1.20744	1.297309	1.101809	1.393765	1.204085
1.325565	1.148769	1.278477	1.132693	1.303979	1.236245	1.285179	1.078487	1.380886	1.183507

1.340633	1.159979	1.298756	1.150135	1.342673	1.269626	1.280691	1.055058	1.371692	1.161401
1.357917	1.172623	1.317841	1.165693	1.380649	1.297419	1.277582	1.030651	1.361218	1.138442
1.372414	1.184454	1.336161	1.179911	1.416415	1.324983	1.273796	1.005496	1.350695	1.114141
1.397269	1.196845	1.365004	1.194558	1.459985	1.350436	1.28257	1.018769	1.34784	1.091259
1.416551	1.209404	1.387868	1.20993	1.49781	1.374839	1.290149	1.041569	1.346752	1.070712
1.441655	1.219771	1.415851	1.222089	1.537023	1.39558	1.302391	1.060605	1.353099	1.055401
1.463787	1.237191	1.441013	1.240534	1.572782	1.419343	1.316032	1.081416	1.355349	1.037528
1.487109	1.25239	1.464046	1.260772	1.605756	1.442803	1.329466	1.100845	1.366675	1.021775
1.496062	1.265966	1.476886	1.278276	1.624556	1.464332	1.332028	1.11304	1.363549	1.013709
1.509533	1.293354	1.491299	1.309221	1.653876	1.499728	1.338827	1.140239	1.363327	1.012551
1.517281	1.310884	1.50416	1.328749	1.668113	1.525376	1.340053	1.155454	1.357229	1.028573
1.522628	1.333694	1.51269	1.351652	1.685516	1.554047	1.343225	1.177188	1.349306	1.049341
1.528603	1.362132	1.522421	1.380506	1.700479	1.587579	1.345481	1.204043	1.342371	1.074514
1.532898	1.383269	1.532903	1.399722	1.712323	1.612421	1.34894	1.224853	1.335547	1.095855
1.537451	1.411052	1.538311	1.42492	1.72306	1.634786	1.3534	1.253971	1.324167	1.117437
1.535474	1.433284	1.540764	1.446587	1.716824	1.655097	1.352232	1.272023	1.317664	1.137591
1.533259	1.452827	1.539513	1.462953	1.718757	1.669891	1.349214	1.286957	1.313591	1.156334
1.536239	1.46604	1.542769	1.474794	1.716044	1.678684	1.352487	1.297018	1.307526	1.171489
1.531619	1.48299	1.540295	1.488136	1.704519	1.689696	1.35151	1.311161	1.302326	1.191055
1.532798	1.493233	1.540857	1.497884	1.698795	1.689991	1.350727	1.317144	1.304472	1.204316
1.516492	1.50592	1.526003	1.505766	1.670672	1.697122	1.341385	1.332023	1.290233	1.22319
1.505918	1.513252	1.517599	1.510324	1.655923	1.69575	1.334005	1.335072	1.286743	1.235695
1.495212	1.513212	1.506883	1.513134	1.635175	1.692053	1.324819	1.333636	1.281589	1.24571
1.479099	1.515563	1.492747	1.508132	1.609882	1.679792	1.308271	1.328734	1.277703	1.251762
1.470855	1.511054	1.485598	1.502987	1.593691	1.667144	1.299162	1.319858	1.279122	1.257954
1.446642	1.495068	1.466865	1.489405	1.561637	1.645138	1.278352	1.302219	1.269035	1.25695
1.427774	1.487282	1.446987	1.481108	1.53382	1.628651	1.255056	1.288903	1.27043	1.260826
1.407442	1.489768	1.426329	1.485979	1.509093	1.624699	1.237938	1.288918	1.273851	1.27764
1.393164	1.479607	1.414207	1.475523	1.49335	1.612009	1.226304	1.276925	1.282917	1.286192
1.372252	1.462875	1.394678	1.459055	1.469915	1.59404	1.209526	1.262191	1.28895	1.29229
1.355166	1.463033	1.37713	1.459036	1.452908	1.590779	1.196222	1.257649	1.300268	1.309978
1.340434	1.454938	1.361184	1.452905	1.43989	1.582584	1.18727	1.249415	1.321947	1.324408
1.330166	1.448508	1.34887	1.447429	1.431067	1.567699	1.181321	1.238605	1.343501	1.335037
1.320733	1.436359	1.340353	1.437475	1.422818	1.558525	1.17791	1.227182	1.35908	1.353275
1.320685	1.428743	1.339017	1.429541	1.423244	1.548644	1.184566	1.220121	1.385468	1.367899
1.321021	1.430084	1.337796	1.435912	1.423589	1.544628	1.189798	1.218561	1.412592	1.390556
1.319331	1.42737	1.334249	1.432174	1.426542	1.545988	1.198893	1.223679	1.443599	1.417549
1.327151	1.429563	1.342127	1.436349	1.433608	1.540094	1.20957	1.222694	1.470496	1.440264
1.346201	1.439281	1.359668	1.445453	1.45032	1.547714	1.229884	1.231909	1.51187	1.469234
1.340222	1.421995	1.357403	1.428033	1.442891	1.52732	1.224092	1.220525	1.519797	1.477412
1.357357	1.427598	1.37767	1.440109	1.45746	1.521559	1.240618	1.217067	1.553081	1.494872
1.367276	1.422179	1.386612	1.439618	1.459196	1.505716	1.243443	1.208518	1.577498	1.50382
1.382352	1.425024	1.40975	1.444302	1.468378	1.502425	1.249804	1.205588	1.596223	1.520768
1.394013	1.416324	1.42586	1.440548	1.469162	1.477266	1.258419	1.187371	1.608849	1.521969
1.390222	1.411446	1.42219	1.43623	1.464921	1.463251	1.245473	1.176027	1.625602	1.530929
1.413483	1.413838	1.453792	1.441834	1.47867	1.45119	1.256933	1.166977	1.646716	1.536598
1.41788	1.40772	1.463576	1.442967	1.468406	1.429959	1.252748	1.150716	1.64465	1.534946
1.429704	1.399019	1.48206	1.438294	1.472197	1.410359	1.252674	1.134332	1.661366	1.527823
1.434057	1.396775	1.492404	1.437585	1.464128	1.388743	1.247994	1.118584	1.654817	1.513477
1.449358	1.384062	1.51391	1.432179	1.467681	1.375318	1.257019	1.108803	1.652421	1.504308
1.452208	1.37953	1.520164	1.425247	1.460496	1.342851	1.255149	1.100505	1.648856	1.479709
1.455941	1.376374	1.527309	1.422725	1.455921	1.326019	1.256639	1.103443	1.639411	1.465399

1.46273	1.37629	1.535638	1.417637	1.451501	1.313228	1.264113	1.115583	1.625927	1.450358
1.471947	1.361416	1.541733	1.39808	1.454578	1.290866	1.273304	1.126165	1.622303	1.432761
1.492509	1.371958	1.560361	1.401383	1.465078	1.292649	1.297739	1.156662	1.618867	1.419353
1.497779	1.375887	1.559091	1.397433	1.461463	1.289694	1.323065	1.195023	1.591232	1.392776
1.495113	1.384513	1.554734	1.396841	1.458171	1.294145	1.326097	1.223644	1.591885	1.383282
1.52405	1.391427	1.577022	1.393115	1.478268	1.297752	1.364931	1.260678	1.586038	1.365007
1.531353	1.401819	1.579311	1.391236	1.483966	1.304234	1.38386	1.302566	1.579435	1.343139
1.549397	1.407682	1.584361	1.386838	1.503477	1.309253	1.419631	1.331952	1.569129	1.325588
1.562852	1.423136	1.591732	1.388309	1.508378	1.327302	1.442079	1.378934	1.568338	1.305122
1.573327	1.432363	1.592497	1.385876	1.521222	1.34086	1.475925	1.404012	1.550147	1.301733
1.570728	1.444019	1.582344	1.381951	1.519082	1.351619	1.483504	1.43998	1.544553	1.288538
1.582343	1.463452	1.586126	1.387312	1.533577	1.375743	1.507347	1.486738	1.542449	1.284056
1.586552	1.475032	1.577151	1.38613	1.538374	1.388496	1.534002	1.521802	1.528949	1.276688
1.598515	1.481534	1.58157	1.386471	1.550075	1.403734	1.565157	1.556658	1.52209	1.273416
1.598321	1.479777	1.572693	1.37443	1.552842	1.400857	1.572592	1.578338	1.525137	1.261891
1.5932	1.50539	1.554396	1.382704	1.544691	1.433686	1.570961	1.620228	1.520902	1.268323
1.604061	1.501298	1.561128	1.371357	1.562188	1.43019	1.600895	1.625512	1.524909	1.265743
1.581395	1.490191	1.527154	1.355094	1.540898	1.425435	1.605172	1.659604	1.503645	1.260232
1.578649	1.50645	1.520381	1.361172	1.545506	1.437799	1.618224	1.676048	1.503877	1.273648
1.539095	1.494183	1.484039	1.349921	1.514035	1.434853	1.604568	1.680821	1.493799	1.275122
1.528182	1.472682	1.466523	1.324245	1.504385	1.420772	1.611215	1.696696	1.482041	1.262565
1.514851	1.47949	1.448048	1.333624	1.48741	1.436807	1.605397	1.724022	1.481691	1.274283
1.504715	1.469397	1.429616	1.318247	1.478393	1.427105	1.6172	1.724316	1.478272	1.280955
1.479872	1.461119	1.39844	1.302056	1.459307	1.417741	1.587101	1.730734	1.478577	1.277519
1.465084	1.440092	1.383335	1.288624	1.45161	1.399906	1.583028	1.734083	1.4833	1.27397
1.42694	1.421158	1.351233	1.27401	1.418871	1.396478	1.580984	1.727005	1.458495	1.272804
1.422779	1.403848	1.337983	1.261905	1.417023	1.37849	1.567185	1.728886	1.472473	1.275958
1.388128	1.374394	1.30502	1.243167	1.382482	1.352615	1.536374	1.712598	1.475129	1.258865
1.35317	1.372019	1.26974	1.241564	1.353767	1.348202	1.520418	1.710737	1.453881	1.27632
1.35427	1.348861	1.268307	1.22897	1.352016	1.329211	1.524021	1.705309	1.4665	1.262437
1.307713	1.32862	1.22465	1.216091	1.31675	1.308884	1.489688	1.695655	1.448931	1.263488
1.314797	1.294853	1.22739	1.211122	1.326222	1.286358	1.493231	1.678306	1.479172	1.243035
1.280279	1.289959	1.191993	1.205905	1.287551	1.278585	1.464123	1.671876	1.458118	1.247876
1.253391	1.27005	1.166137	1.208765	1.26091	1.266814	1.453354	1.678937	1.446049	1.240776
1.252581	1.241212	1.157397	1.207483	1.262929	1.25153	1.435004	1.659682	1.470862	1.23409
1.25079	1.226546	1.144192	1.206164	1.256023	1.236907	1.414987	1.640727	1.487168	1.235802
1.225471	1.206614	1.126418	1.212961	1.234949	1.22536	1.41646	1.634055	1.469329	1.225827
1.224083	1.18087	1.112374	1.223833	1.230042	1.211627	1.404496	1.624377	1.497043	1.216885
1.215926	1.173754	1.099921	1.221684	1.217733	1.205808	1.391166	1.619761	1.498955	1.219559
1.218036	1.147413	1.098165	1.223217	1.223152	1.183681	1.392592	1.602023	1.511144	1.20593
1.213198	1.129855	1.087116	1.233486	1.211907	1.177087	1.381429	1.594301	1.512606	1.202114
1.233709	1.130256	1.091938	1.242991	1.233259	1.184593	1.396647	1.597486	1.544481	1.215308
1.231884	1.113314	1.095726	1.263144	1.232724	1.182218	1.407385	1.589984	1.55492	1.206274
1.237795	1.077678	1.086787	1.260147	1.228852	1.15501	1.397218	1.537354	1.56504	1.186826
1.223775	1.078133	1.090119	1.292172	1.225866	1.185518	1.407073	1.577948	1.569145	1.2031
1.238176	1.062443	1.102942	1.301032	1.235356	1.179631	1.417168	1.574535	1.588527	1.198443
1.23733	1.046588	1.106987	1.313948	1.24044	1.183191	1.429791	1.558913	1.603061	1.197796
1.249982	1.034254	1.112199	1.334036	1.244794	1.194202	1.428875	1.560666	1.624895	1.193125
1.24608	1.024635	1.126855	1.347878	1.250984	1.203831	1.451018	1.564676	1.644072	1.199898
1.25014	1.017932	1.143886	1.360486	1.261729	1.205996	1.467248	1.540233	1.664042	1.20328
1.219591	1.02913	1.147753	1.386702	1.234385	1.235538	1.45139	1.575979	1.638345	1.22086
1.223704	1.028504	1.17576	1.414389	1.260907	1.246488	1.484718	1.555419	1.670931	1.217527
1.218841	1.035389	1.191254	1.42263	1.260859	1.2522	1.474569	1.541832	1.678389	1.217055
1.203667	1.054377	1.205654	1.443675	1.254047	1.270544	1.490213	1.54306	1.670083	1.221652
1.172666	1.080511	1.23421	1.465548	1.259592	1.284324	1.497712	1.529304	1.67074	1.21814

1.169394	1.110921	1.262962	1.508887	1.271214	1.325573	1.513778	1.542937	1.681862	1.226481
1.145017	1.120844	1.280651	1.531238	1.264109	1.339339	1.511653	1.547096	1.680647	1.242344
1.133901	1.137005	1.307282	1.53725	1.268877	1.351156	1.500698	1.530442	1.670268	1.25032
1.118691	1.170822	1.334421	1.575017	1.273845	1.377084	1.517202	1.524291	1.666601	1.250166
1.087851	1.194954	1.328608	1.59809	1.25462	1.410452	1.483651	1.524606	1.64	1.269746
1.079369	1.222564	1.360504	1.62765	1.269182	1.436876	1.492356	1.541155	1.619491	1.276148
1.093866	1.236303	1.385588	1.604657	1.287765	1.422207	1.506956	1.505722	1.607827	1.280057
1.099109	1.270935	1.39439	1.635026	1.283656	1.456542	1.503732	1.511675	1.583648	1.291598
1.12208	1.283129	1.419389	1.62841	1.290107	1.460827	1.497331	1.496407	1.574325	1.288036
1.146492	1.309896	1.409593	1.624091	1.286677	1.468029	1.496863	1.483761	1.517005	1.2817
1.183311	1.345892	1.422704	1.636087	1.293503	1.49436	1.49468	1.475346	1.492353	1.296968
1.217169	1.362639	1.428835	1.638686	1.301412	1.497528	1.485398	1.48204	1.471499	1.310225
1.249203	1.384278	1.414851	1.62109	1.306483	1.489644	1.484042	1.461159	1.439706	1.299466
1.295096	1.389418	1.426496	1.61226	1.324253	1.49421	1.480973	1.452387	1.433889	1.30612
1.329153	1.422329	1.425002	1.598627	1.337762	1.504578	1.487076	1.450837	1.400045	1.314733
1.356689	1.423495	1.404074	1.569476	1.33695	1.479789	1.471354	1.428424	1.358961	1.299199
1.38732	1.42647	1.398782	1.541987	1.350472	1.461809	1.470426	1.410639	1.333539	1.290271
1.419627	1.438078	1.390953	1.511403	1.363225	1.452008	1.467463	1.403667	1.313759	1.288553
1.456068	1.429774	1.396371	1.469124	1.382597	1.423916	1.462021	1.392993	1.30611	1.277282
1.457291	1.431732	1.385695	1.432656	1.37532	1.403875	1.445927	1.377693	1.274876	1.272846
1.471836	1.428246	1.368261	1.411506	1.378653	1.389525	1.414357	1.376809	1.244443	1.263945
1.49707	1.392278	1.373447	1.356805	1.390895	1.343455	1.411415	1.349841	1.231141	1.243467
1.503297	1.371897	1.370763	1.321594	1.399488	1.32279	1.38806	1.345236	1.211374	1.23561
1.531662	1.334424	1.397497	1.262281	1.420162	1.271197	1.379561	1.305914	1.208089	1.202543
1.525887	1.31677	1.400047	1.23399	1.410392	1.250153	1.334116	1.298876	1.186165	1.199972
1.516701	1.268735	1.389696	1.175309	1.381261	1.204338	1.279548	1.27045	1.162728	1.173766
1.499898	1.22908	1.400312	1.136985	1.378377	1.174322	1.244066	1.248686	1.143609	1.15592
1.49187	1.200543	1.403633	1.097022	1.360825	1.146817	1.191003	1.220393	1.12863	1.145307
1.488815	1.149581	1.411396	1.061117	1.349116	1.123432	1.13583	1.214254	1.107614	1.120732
1.495058	1.098538	1.431888	1.019623	1.348882	1.094361	1.088786	1.175906	1.101978	1.092883
1.508027	1.049539	1.455725	1.038925	1.3481	1.098369	1.051307	1.174551	1.104038	1.081294
1.52461	1.01815	1.476939	1.07	1.354525	1.117865	1.046584	1.17452	1.111505	1.063184
1.530464	1.055966	1.475831	1.106071	1.35657	1.143833	1.105399	1.19144	1.119289	1.057282
1.545554	1.109991	1.497855	1.154446	1.367359	1.189137	1.169518	1.216601	1.13932	1.051714
1.597992	1.169388	1.527372	1.195411	1.393723	1.231615	1.24858	1.255242	1.172585	1.059745
1.626426	1.234119	1.539195	1.232026	1.424971	1.282719	1.339762	1.311004	1.208074	1.071947
1.666772	1.298345	1.562372	1.267851	1.46124	1.333831	1.435415	1.366165	1.249616	1.082886
1.734082	1.36179	1.588741	1.301324	1.518165	1.366133	1.543913	1.411356	1.30784	1.095406
1.778497	1.444627	1.602079	1.355708	1.547737	1.426932	1.644914	1.473534	1.349713	1.11126
1.829094	1.520679	1.619933	1.389276	1.592403	1.473795	1.750821	1.528038	1.394395	1.119206
1.917475	1.586681	1.657104	1.418309	1.676544	1.504459	1.892404	1.586063	1.459335	1.125394
1.945391	1.668762	1.672572	1.456639	1.687137	1.542236	1.975222	1.644774	1.496093	1.127249
2.023608	1.707817	1.704367	1.453961	1.759784	1.539078	2.178107	1.684624	1.579777	1.110984
2.119089	1.761268	1.765724	1.471368	1.82739	1.563666	2.340175	1.759402	1.645138	1.094119
2.182588	1.871567	1.797627	1.537808	1.87974	1.618442	2.417647	1.836877	1.716117	1.107469
2.229143	1.91071	1.843953	1.544993	1.940974	1.62113	2.526391	1.870898	1.788708	1.09062
2.280385	2.001468	1.870586	1.585663	1.979023	1.648997	2.627299	1.954559	1.847164	1.079135
2.318812	2.021922	1.919019	1.574779	2.006906	1.628893	2.773262	1.984032	1.92013	1.059611
2.469812	2.054763	2.014183	1.582978	2.111617	1.633292	2.94493	2.062316	2.078636	1.03467
2.452495	2.117344	2.039307	1.600718	2.153177	1.644113	3.022599	2.106483	2.115806	1.025031
2.55647	2.117559	2.136736	1.585266	2.22686	1.621284	3.149435	2.158107	2.208646	1.012188
2.58187	2.131235	2.189135	1.592633	2.246454	1.621956	3.290875	2.183098	2.28393	1.039723
2.652549	2.167912	2.255548	1.619666	2.334982	1.618795	3.37864	2.241245	2.373448	1.048703
2.709265	2.139455	2.38737	1.618956	2.427662	1.593879	3.497792	2.241287	2.494632	1.072284

VSWR - TERM

Frequency (GHz)	J1 TERM	J2 TERM	J3 TERM	J4 TERM	J5 TERM	J6 TERM	J7 TERM
0.1	2.741619	1.284975	1.290103	1.296977	1.269456	1.283425	1.283829
0.1995	1.58825	1.054408	1.048697	1.051659	1.057441	1.060643	1.047996
0.299	1.370294	1.054053	1.045565	1.050444	1.066497	1.060767	1.055818
0.3985	1.27578	1.06033	1.052682	1.057788	1.07485	1.067445	1.064713
0.498	1.224941	1.06555	1.059151	1.063768	1.080987	1.073795	1.070407
0.5975	1.193473	1.068262	1.062959	1.067098	1.084394	1.07829	1.072731
0.697	1.172298	1.069932	1.065663	1.06926	1.08657	1.081774	1.073661
0.7965	1.156365	1.070986	1.068091	1.070526	1.087503	1.084119	1.074421
0.896	1.145039	1.070388	1.067521	1.069869	1.086658	1.085555	1.072601
0.9955	1.136298	1.070746	1.068471	1.070218	1.086641	1.087243	1.072165
1.095	1.128637	1.070136	1.06836	1.069578	1.085889	1.088874	1.070649
1.1945	1.124051	1.070973	1.069121	1.070276	1.086545	1.091901	1.069986
1.294	1.117682	1.069886	1.06891	1.068965	1.084931	1.092577	1.068188
1.3935	1.113005	1.069535	1.068725	1.068474	1.084397	1.094617	1.066871
1.493	1.107698	1.067827	1.066909	1.066542	1.082724	1.09643	1.063456
1.5925	1.103273	1.066756	1.065959	1.065345	1.081726	1.098706	1.061035
1.692	1.099879	1.066325	1.065555	1.06453	1.080881	1.100914	1.058824
1.7915	1.096103	1.065278	1.064763	1.062952	1.079222	1.102322	1.056582
1.891	1.092576	1.064131	1.063493	1.060948	1.077244	1.103412	1.053895
1.9905	1.08969	1.063498	1.062046	1.059662	1.076281	1.105714	1.051765
2.09	1.085962	1.062294	1.059276	1.057835	1.075383	1.108989	1.047496
2.1895	1.082184	1.061147	1.058082	1.056641	1.074789	1.112324	1.044585
2.289	1.077953	1.059399	1.056795	1.05447	1.072946	1.114348	1.041162
2.3885	1.072642	1.056732	1.053864	1.050928	1.070137	1.116167	1.035806
2.488	1.0694	1.055732	1.052324	1.048967	1.068621	1.118621	1.032753
2.5875	1.064655	1.052936	1.050909	1.045075	1.064971	1.119083	1.028436
2.687	1.061144	1.051095	1.050575	1.042469	1.062901	1.120712	1.025472
2.7865	1.055414	1.0476	1.050165	1.037676	1.059302	1.121259	1.021211
2.886	1.050214	1.043229	1.054051	1.03187	1.054312	1.119359	1.021885
2.9855	1.047376	1.040393	1.060298	1.026532	1.050273	1.117686	1.026045
3.085	1.047401	1.038889	1.068272	1.021343	1.046855	1.115885	1.033243
3.1845	1.050138	1.040029	1.074632	1.018441	1.045835	1.116181	1.03993
3.284	1.055326	1.044003	1.078746	1.019702	1.04735	1.118674	1.043759
3.3835	1.059232	1.046836	1.081481	1.021965	1.048178	1.120885	1.046307
3.483	1.060326	1.049085	1.080655	1.023293	1.050048	1.125688	1.045018
3.5825	1.061341	1.050266	1.080807	1.024618	1.051211	1.129926	1.043719
3.682	1.058586	1.049544	1.078409	1.022564	1.051918	1.135703	1.040442
3.7815	1.057526	1.049548	1.077139	1.021443	1.053041	1.141667	1.038163
3.881	1.056144	1.047209	1.077398	1.018572	1.052177	1.145934	1.038621
3.9805	1.055963	1.046645	1.077254	1.016446	1.052135	1.150374	1.039091

4.08	1.055354	1.045794	1.077215	1.013479	1.051948	1.154705	1.039529
4.1795	1.055557	1.045651	1.077741	1.01088	1.050946	1.157196	1.040283
4.279	1.05468	1.04528	1.078298	1.00786	1.050796	1.160866	1.041008
4.3785	1.054175	1.044287	1.079784	1.005276	1.050071	1.163177	1.043266
4.478	1.055125	1.043979	1.081736	1.005116	1.04991	1.166	1.045518
4.5775	1.057035	1.043107	1.084095	1.006038	1.049335	1.168205	1.049132
4.677	1.05903	1.04356	1.08496	1.008026	1.050264	1.172162	1.051838
4.7765	1.062554	1.044115	1.086185	1.008661	1.050607	1.175781	1.053391
4.876	1.063498	1.047207	1.084289	1.009171	1.053012	1.18133	1.051767
4.9755	1.065143	1.049277	1.083605	1.008842	1.054146	1.185797	1.050239
5.075	1.062346	1.054626	1.078689	1.010788	1.058634	1.193691	1.045574
5.1745	1.061263	1.057289	1.076588	1.012206	1.060692	1.199156	1.04387
5.274	1.05739	1.062374	1.071615	1.016904	1.066078	1.209	1.042548
5.3735	1.055145	1.066024	1.067913	1.021508	1.070864	1.218217	1.043254
5.473	1.053704	1.067843	1.066557	1.026243	1.074822	1.226763	1.047267
5.5725	1.051597	1.071575	1.064082	1.031765	1.080026	1.236742	1.049919
5.672	1.048413	1.077011	1.059845	1.037646	1.085328	1.246545	1.050465
5.7715	1.04544	1.081522	1.057498	1.042994	1.089368	1.254263	1.052698
5.871	1.041352	1.086808	1.055381	1.048759	1.093428	1.261798	1.057043
5.9705	1.037198	1.092431	1.054429	1.055248	1.098093	1.269871	1.063534
6.07	1.036169	1.095195	1.056913	1.060325	1.101509	1.276654	1.071695
6.1695	1.032261	1.101769	1.055315	1.067496	1.106984	1.286528	1.07822
6.269	1.030507	1.106376	1.05522	1.073011	1.111161	1.295088	1.083603
6.3685	1.028737	1.111508	1.056934	1.079438	1.116407	1.303851	1.088655
6.468	1.026062	1.117322	1.058163	1.085533	1.121427	1.312292	1.094131
6.5675	1.022094	1.123491	1.057127	1.090559	1.124715	1.318365	1.097122
6.667	1.019639	1.130153	1.059697	1.096744	1.129477	1.326117	1.104554
6.7665	1.017168	1.136371	1.060704	1.101986	1.13294	1.332136	1.11062
6.866	1.016743	1.144068	1.064666	1.109776	1.139176	1.341781	1.120149
6.9655	1.017545	1.149092	1.067661	1.115032	1.143036	1.349067	1.126467
7.065	1.017678	1.155098	1.070843	1.121453	1.148104	1.358154	1.132679
7.1645	1.018829	1.161304	1.075194	1.128755	1.154626	1.368599	1.139169
7.264	1.018602	1.167232	1.078307	1.135122	1.159288	1.376678	1.144838
7.3635	1.019674	1.174193	1.081939	1.141922	1.163776	1.384738	1.152915
7.463	1.0219	1.181094	1.086192	1.148932	1.167702	1.391528	1.162112
7.5625	1.02588	1.188574	1.092387	1.157047	1.173347	1.400316	1.171546
7.662	1.029306	1.194012	1.098151	1.163546	1.177031	1.406688	1.181222
7.7615	1.031946	1.201069	1.103555	1.171556	1.181645	1.41571	1.19164
7.861	1.034259	1.206575	1.109746	1.178245	1.18602	1.422835	1.199278
7.9605	1.035978	1.213729	1.114528	1.186605	1.191253	1.430638	1.205303
8.06	1.037933	1.219877	1.120585	1.19272	1.194802	1.436282	1.213572
8.1595	1.040034	1.226554	1.126209	1.199253	1.198171	1.441093	1.222757
8.259	1.043526	1.235317	1.133183	1.207549	1.202603	1.447576	1.233925
8.3585	1.046176	1.242093	1.139222	1.213918	1.205336	1.451778	1.243503
8.458	1.05028	1.250382	1.146489	1.222132	1.209153	1.455842	1.253818
8.5575	1.050486	1.255179	1.151619	1.227254	1.211079	1.460035	1.260304
8.657	1.052186	1.261652	1.158586	1.233923	1.215023	1.465876	1.267509
8.7565	1.052442	1.265767	1.163155	1.238568	1.216831	1.468978	1.273939
8.856	1.053529	1.271248	1.168137	1.244228	1.218761	1.472866	1.280325
8.9555	1.056728	1.277209	1.175041	1.249933	1.221822	1.475218	1.288137
9.055	1.060481	1.284456	1.1812	1.256932	1.223826	1.478663	1.298129
9.1545	1.065084	1.291812	1.189255	1.264193	1.227116	1.482117	1.308805

9.254	1.067295	1.295844	1.194504	1.269164	1.227912	1.48318	1.316206
9.3535	1.072097	1.302815	1.202365	1.277417	1.232138	1.489191	1.324648
9.453	1.074922	1.306492	1.207168	1.282783	1.233408	1.491154	1.331688
9.5525	1.0776	1.309087	1.211635	1.286715	1.233923	1.49092	1.335696
9.652	1.081376	1.313521	1.217192	1.292378	1.235119	1.491644	1.344369
9.7515	1.087315	1.319816	1.223393	1.300042	1.237144	1.494418	1.355355
9.851	1.089898	1.321928	1.228408	1.3028	1.236608	1.490573	1.362663
9.9505	1.091486	1.321107	1.228879	1.303351	1.232103	1.483957	1.367438
10.05	1.096785	1.326492	1.236255	1.309379	1.233785	1.48438	1.377173
10.1495	1.099052	1.325963	1.237307	1.310944	1.230605	1.478917	1.377924
10.249	1.100939	1.325297	1.239038	1.311978	1.228172	1.47449	1.382245
10.3485	1.105924	1.329672	1.244623	1.317438	1.229207	1.474846	1.392428
10.448	1.108242	1.328897	1.245543	1.318259	1.225305	1.46899	1.397509
10.5475	1.112488	1.332188	1.251046	1.322154	1.225843	1.467254	1.407941
10.647	1.113954	1.331641	1.25287	1.323216	1.222738	1.462065	1.414176
10.7465	1.1125	1.32905	1.254223	1.321825	1.219425	1.456631	1.419403
10.846	1.112715	1.325534	1.254309	1.319575	1.215224	1.44673	1.420836
10.9455	1.114404	1.324805	1.256424	1.320959	1.21366	1.443853	1.425671
11.045	1.109789	1.315401	1.250867	1.313585	1.205287	1.430731	1.421507
11.1445	1.108889	1.312534	1.251395	1.311667	1.202516	1.424337	1.423957
11.244	1.108437	1.312561	1.255088	1.311498	1.203015	1.422222	1.431686
11.3435	1.107658	1.310188	1.255976	1.30933	1.200304	1.415221	1.434819
11.443	1.105178	1.306112	1.254829	1.305457	1.195977	1.407121	1.435695
11.5425	1.103383	1.304986	1.257645	1.302757	1.195827	1.402095	1.438307
11.642	1.101475	1.302456	1.25779	1.30078	1.193404	1.397189	1.440631
11.7415	1.101064	1.301923	1.260102	1.29935	1.193689	1.393361	1.441522
11.841	1.100024	1.300452	1.261117	1.294955	1.193344	1.388629	1.442014
11.9405	1.097871	1.29853	1.261375	1.288668	1.191782	1.381077	1.440794
12.04	1.100697	1.298239	1.260402	1.288183	1.188642	1.374339	1.442839
12.1395	1.10251	1.302313	1.265841	1.285834	1.193049	1.373327	1.44794
12.239	1.106792	1.306483	1.269946	1.286621	1.195962	1.372371	1.454211
12.3385	1.103048	1.302151	1.266322	1.277716	1.193411	1.362942	1.447474
12.438	1.105837	1.303112	1.266689	1.276228	1.193103	1.358301	1.45022
12.5375	1.11195	1.310564	1.273165	1.277398	1.200976	1.362146	1.45702
12.637	1.110586	1.310102	1.272153	1.269772	1.203536	1.358286	1.454929
12.7365	1.10932	1.305674	1.266373	1.263449	1.200842	1.350214	1.450602
12.836	1.114398	1.313287	1.271839	1.26208	1.209033	1.35336	1.458283
12.9355	1.118399	1.316264	1.271766	1.25977	1.211804	1.351405	1.462428
13.035	1.120462	1.318844	1.271167	1.256153	1.214453	1.348663	1.465394
13.1345	1.120049	1.321265	1.269974	1.249151	1.218705	1.346645	1.464937
13.234	1.124005	1.32751	1.272681	1.245455	1.226975	1.349102	1.4678
13.3335	1.122298	1.324712	1.266026	1.242109	1.22411	1.342829	1.467044
13.433	1.125466	1.332764	1.269135	1.237859	1.234476	1.347974	1.470079
13.5325	1.126753	1.335569	1.265993	1.231662	1.237403	1.34557	1.472062
13.632	1.134917	1.349045	1.271977	1.228529	1.249588	1.352081	1.478759
13.7315	1.134287	1.353899	1.268188	1.219017	1.253753	1.349122	1.477386
13.831	1.141213	1.362734	1.269721	1.218371	1.259756	1.350081	1.483512
13.9305	1.144386	1.371528	1.268957	1.212185	1.265712	1.349941	1.48349
14.03	1.152718	1.385398	1.273695	1.21023	1.276552	1.356193	1.490987
14.1295	1.160104	1.396597	1.275484	1.211603	1.284186	1.360574	1.496559
14.229	1.165646	1.411934	1.277846	1.204699	1.296845	1.367035	1.498335
14.3285	1.171469	1.422747	1.27859	1.20064	1.305885	1.371024	1.501888
14.428	1.17709	1.431771	1.27734	1.200691	1.30912	1.37115	1.506632
14.5275	1.182526	1.44573	1.278359	1.192945	1.321237	1.377461	1.506275
14.627	1.18854	1.457555	1.278451	1.190694	1.328586	1.380862	1.510298

14.7265	1.196336	1.470997	1.279972	1.189353	1.33785	1.387191	1.512431
14.826	1.204196	1.490108	1.283118	1.185976	1.351298	1.397293	1.51696
14.9255	1.215954	1.504833	1.287129	1.189461	1.359189	1.401754	1.517738
15.025	1.218754	1.516658	1.284365	1.184971	1.367394	1.406334	1.518697
15.1245	1.225657	1.532622	1.287445	1.183951	1.381003	1.419669	1.519327
15.224	1.230383	1.544333	1.285113	1.182402	1.387743	1.426635	1.52714
15.3235	1.240156	1.559962	1.287371	1.186043	1.395811	1.434189	1.542202
15.423	1.247633	1.579043	1.289972	1.18648	1.406568	1.442893	1.538312
15.5225	1.257105	1.59292	1.291082	1.188068	1.415776	1.452409	1.544523
15.622	1.253035	1.594782	1.280495	1.179724	1.410481	1.446509	1.533984
15.7215	1.262484	1.617662	1.28749	1.182603	1.428329	1.466237	1.541304
15.821	1.268948	1.630618	1.286318	1.185055	1.436391	1.474231	1.542134
15.9205	1.271767	1.639702	1.282944	1.183689	1.440198	1.479078	1.543747
16.02	1.284843	1.660796	1.289198	1.192102	1.456398	1.497285	1.555656
16.1195	1.285856	1.66704	1.284983	1.190339	1.458715	1.502201	1.553442
16.219	1.288194	1.673375	1.282082	1.191432	1.464063	1.510797	1.549985
16.3185	1.299252	1.696031	1.288171	1.200462	1.479042	1.528847	1.558098
16.418	1.306599	1.70776	1.289606	1.206402	1.488807	1.541687	1.562652
16.5175	1.312416	1.715768	1.289942	1.21109	1.494843	1.553306	1.559201
16.617	1.318379	1.727748	1.291772	1.217091	1.504219	1.567288	1.557578
16.7165	1.323753	1.730731	1.291098	1.223224	1.508924	1.575658	1.555959
16.816	1.334322	1.746739	1.292889	1.232342	1.519524	1.588796	1.563479
16.9155	1.341834	1.759713	1.296882	1.243832	1.531003	1.607738	1.562641
17.015	1.35288	1.77923	1.303507	1.257308	1.544447	1.629208	1.568646
17.1145	1.363322	1.795096	1.309176	1.270743	1.555492	1.647575	1.575222
17.214	1.371323	1.804764	1.31161	1.283453	1.563876	1.662228	1.566617
17.3135	1.372387	1.804746	1.308318	1.29079	1.561199	1.66673	1.559508
17.413	1.366986	1.797221	1.303308	1.2952	1.555406	1.669434	1.54092
17.5125	1.383989	1.821891	1.311575	1.316534	1.573539	1.696531	1.55357
17.612	1.394557	1.840381	1.318129	1.334192	1.584219	1.718574	1.561142
17.7115	1.399069	1.84664	1.32046	1.346263	1.583595	1.725658	1.554532
17.811	1.411534	1.870973	1.325893	1.365287	1.595248	1.747858	1.560676
17.9105	1.417921	1.876001	1.327788	1.379741	1.597223	1.757311	1.555816
18.01	1.417302	1.87791	1.325823	1.389992	1.594112	1.766489	1.550218
18.1095	1.426775	1.89596	1.336608	1.412669	1.604505	1.793021	1.553412
18.209	1.431055	1.903971	1.340481	1.428387	1.606088	1.806935	1.55441
18.3085	1.437808	1.918536	1.346301	1.446326	1.610312	1.823593	1.556463
18.408	1.439155	1.915903	1.34709	1.458614	1.60699	1.828248	1.553046
18.5075	1.451958	1.938543	1.360296	1.484432	1.618587	1.856112	1.559501
18.607	1.46019	1.952062	1.369604	1.504355	1.621639	1.874566	1.562167
18.7065	1.465845	1.960718	1.379772	1.522992	1.621009	1.885367	1.560817
18.806	1.480066	1.977138	1.387818	1.545288	1.630569	1.903598	1.565129
18.9055	1.483007	1.984411	1.395517	1.560291	1.627308	1.909912	1.562491
19.005	1.491969	1.997058	1.406268	1.581745	1.63008	1.927064	1.560048
19.1045	1.511959	2.031115	1.431535	1.618075	1.64582	1.961001	1.568462
19.204	1.530974	2.049735	1.441442	1.642462	1.653157	1.971274	1.576345
19.3035	1.541349	2.066873	1.457683	1.665618	1.654924	1.988571	1.57292
19.403	1.55531	2.080348	1.462771	1.683657	1.65537	1.990915	1.570309
19.5025	1.578067	2.115924	1.486468	1.719738	1.667637	2.021537	1.575915
19.602	1.598212	2.140005	1.50358	1.749855	1.674648	2.039329	1.578709
19.7015	1.610247	2.152931	1.511248	1.767663	1.672584	2.04137	1.577659
19.801	1.625828	2.175453	1.517754	1.793375	1.676511	2.0541	1.579813
19.9005	1.638048	2.187931	1.531475	1.816254	1.675552	2.062483	1.576062
20	1.661782	2.225956	1.549072	1.852313	1.685992	2.089159	1.588482

0.2 to 19	-65.3913
Max	-67.7328

J8 TERM

	J0-J1	J0-J2	J0-J3	J0-J4	J0-J5	J0-J6	J0-J7
1.29929	-87.7732	-90.6271	-87.775	-85.4128	-86.4127	-107.717	-86.591
1.05322	-83.1802	-95.7158	-105.641	-95.7209	-94.9195	-101.548	-96.7254
1.048175	-81.6244	-100.347	-98.5763	-96.2093	-92.692	-99.3009	-95.6926
1.053844	-79.4997	-98.4838	-93.3973	-90.9388	-90.1111	-98.6711	-93.0243
1.059372	-79.4523	-96.9813	-93.5032	-90.268	-89.9561	-96.0984	-92.3662
1.062039	-78.9726	-94.9544	-92.7338	-88.899	-89.4639	-92.5066	-92.9067
1.063534	-78.3093	-94.6575	-90.5999	-88.3321	-90.1746	-93.078	-90.9355
1.064527	-78.3525	-95.7302	-92.724	-88.7706	-88.7626	-92.3725	-89.714
1.063645	-78.3647	-94.3093	-91.5515	-88.44	-88.9063	-92.1227	-89.5624
1.063802	-78.1108	-94.5816	-90.7617	-87.8485	-90.102	-91.5381	-92.272
1.062999	-77.9557	-94.6739	-90.6941	-88.7099	-89.0822	-91.5515	-93.1958
1.063166	-77.9947	-95.2634	-90.674	-89.4976	-89.5272	-91.4201	-91.9001
1.061671	-78.089	-94.475	-91.4512	-88.7296	-89.667	-91.0678	-90.894
1.060929	-78.3575	-96.745	-90.6376	-89.3087	-90.462	-90.871	-91.343
1.058438	-78.2676	-94.6792	-92.0372	-89.5097	-89.0796	-91.4007	-91.075
1.056662	-78.4525	-95.0722	-91.8508	-89.2859	-89.8767	-90.737	-92.5981
1.055222	-79.0251	-96.6323	-90.7449	-90.2445	-91.5699	-93.1331	-91.4
1.053555	-79.2047	-95.6445	-91.1837	-89.2475	-91.0607	-91.3334	-91.573
1.051584	-79.4192	-96.1911	-91.2742	-89.5216	-90.5809	-91.6721	-90.9571
1.050343	-79.7443	-94.5527	-91.5597	-90.7897	-91.2626	-90.8056	-91.9816
1.047534	-80.2356	-96.4599	-91.3365	-88.9615	-92.3101	-91.2405	-91.9033
1.045047	-81.5949	-98.2712	-91.9882	-90.3089	-90.506	-90.6614	-91.6361
1.041885	-82.0142	-94.7486	-93.1322	-90.2392	-92.7562	-94.3882	-92.2806
1.037201	-83.187	-95.1015	-92.6191	-90.015	-91.449	-92.0956	-93.8281
1.034414	-83.3991	-95.5506	-91.2717	-89.9783	-90.7318	-91.3498	-93.9242
1.029585	-85.2133	-94.3482	-91.7748	-90.4722	-91.8133	-90.6228	-94.766
1.025877	-86.4292	-97.0864	-91.9377	-90.4368	-91.2401	-90.3764	-91.4365
1.020406	-88.1055	-93.4372	-92.3003	-90.2259	-91.6545	-90.6267	-92.8726
1.013519	-88.1751	-95.9679	-92.0933	-90.7578	-90.8641	-92.7391	-91.4859
1.007457	-88.5639	-96.2006	-92.3328	-90.9763	-91.62	-91.8429	-91.6669
1.006512	-89.3424	-96.9594	-92.619	-90.0054	-91.8653	-90.5976	-92.0077
1.011056	-87.8569	-94.6414	-93.8068	-90.3599	-92.5196	-90.7106	-92.2257
1.013151	-89.2208	-95.0524	-91.7079	-91.9689	-91.5741	-92.3241	-91.9937
1.015079	-87.3365	-92.7381	-93.3577	-90.5905	-91.591	-91.8332	-92.7242
1.013724	-88.2069	-93.1581	-92.632	-90.797	-90.8603	-91.1821	-92.1361
1.012668	-86.6249	-95.5532	-91.4434	-89.9878	-90.5928	-92.5948	-91.8859
1.009967	-85.8194	-96.1732	-93.5955	-89.9751	-92.2905	-91.2988	-91.5443
1.008744	-85.2701	-93.7372	-92.8287	-91.457	-91.6587	-90.8469	-93.6337
1.011357	-84.8649	-92.9728	-91.9956	-90.3916	-91.883	-92.1337	-93.8765
1.013439	-84.3937	-94.2618	-91.0157	-92.0604	-92.5627	-90.3743	-93.0146

1.015766	-83.7128	-92.4071	-90.4735	-91.7292	-90.9037	-90.2695	-90.9314
1.018387	-83.3234	-93.5054	-91.6421	-92.1992	-91.3835	-91.7782	-91.4164
1.022378	-82.7234	-93.1164	-92.141	-91.4315	-92.2527	-88.9951	-90.9312
1.027864	-83.6307	-96.7166	-90.8568	-90.1693	-90.0649	-90.5259	-89.6035
1.032917	-83.3747	-92.4854	-90.916	-90.8947	-91.4181	-89.938	-90.6717
1.038266	-83.2231	-93.545	-90.4264	-91.1535	-90.8896	-90.2907	-90.789
1.04209	-83.238	-93.6106	-91.7084	-90.4948	-91.6432	-90.0126	-90.2162
1.043556	-83.0757	-92.8019	-89.2233	-89.7388	-90.449	-89.7066	-89.3845
1.042748	-83.538	-91.5244	-90.9483	-90.9074	-91.0336	-89.7451	-89.2888
1.041624	-83.3188	-92.4339	-90.6709	-90.1951	-89.8621	-90.0521	-90.4043
1.040226	-84.6375	-91.0907	-90.7086	-89.5418	-90.1373	-89.3505	-90.6583
1.040891	-85.1317	-90.5141	-90.3162	-90.4401	-90.8048	-89.2338	-90.686
1.043468	-85.8829	-90.8135	-90.3216	-89.5789	-89.3916	-89.239	-88.9497
1.046525	-87.1925	-90.1844	-90.2236	-89.6807	-89.6902	-88.5617	-89.2162
1.05172	-88.8596	-91.8055	-89.1051	-89.098	-89.37	-88.9147	-90.3904
1.055913	-88.935	-91.6863	-90.0037	-90.549	-88.8625	-88.0782	-89.527
1.058776	-91.3512	-90.4581	-89.6274	-88.5791	-89.3152	-88.2459	-88.6089
1.063259	-94.7171	-90.9731	-90.1934	-89.0892	-90.821	-88.4198	-89.2044
1.069858	-95.9032	-90.7206	-89.5511	-89.5309	-89.9454	-88.4655	-88.7758
1.077985	-97.291	-91.3021	-88.1585	-88.2417	-89.8249	-88.4508	-88.1881
1.086304	-94.4305	-88.9994	-88.5504	-88.5838	-90.6006	-87.248	-88.7906
1.093392	-92.4249	-89.3067	-88.4384	-88.9397	-89.5268	-88.5123	-87.0368
1.098844	-92.3968	-90.4944	-87.4208	-89.0956	-89.9702	-87.9897	-87.4637
1.104174	-89.8606	-89.2223	-88.1417	-87.7283	-89.3076	-87.4189	-86.9609
1.109825	-89.4367	-90.0288	-89.3919	-88.2862	-89.01	-87.6844	-88.0367
1.113429	-88.1802	-88.7505	-88.974	-88.5378	-89.3182	-87.1996	-86.5194
1.120662	-87.2541	-88.1397	-88.1524	-87.6011	-89.5637	-87.7418	-87.3017
1.126364	-85.8726	-88.744	-87.8878	-87.0672	-89.2679	-87.0637	-87.0448
1.13489	-85.1175	-88.017	-87.4139	-87.6735	-88.3062	-87.4467	-86.9797
1.139964	-84.277	-89.4729	-88.0368	-87.1112	-88.8814	-86.8508	-86.872
1.14511	-83.4644	-88.0721	-87.1146	-87.2345	-88.5539	-87.174	-86.3784
1.15048	-82.7176	-88.1314	-87.4658	-86.5928	-88.6254	-86.8531	-86.5114
1.155415	-82.4719	-88.3961	-87.45	-87.311	-88.2061	-87.0789	-86.137
1.162456	-82.3703	-86.9495	-86.9213	-85.9208	-88.7628	-86.7723	-85.6323
1.170418	-81.8314	-87.2737	-87.068	-86.1392	-86.5655	-85.8537	-86.3001
1.178513	-81.8529	-86.2581	-87.142	-86.3777	-87.8274	-86.3062	-86.0551
1.186076	-81.6029	-86.4181	-86.5204	-86.2867	-87.8401	-85.727	-86.0331
1.194453	-81.2447	-86.8245	-86.2934	-85.4899	-87.3233	-86.2805	-85.6976
1.20042	-81.7021	-86.4433	-86.2362	-85.3293	-86.9906	-86.6575	-84.8808
1.204818	-81.6818	-86.6034	-86.4678	-86.5803	-86.8778	-86.611	-85.3399
1.211823	-81.9491	-85.4019	-85.2585	-84.9087	-87.3982	-85.9312	-85.2245
1.218965	-81.8821	-85.7005	-86.7825	-85.8759	-86.6176	-86.1882	-84.925
1.228243	-82.8136	-85.4066	-85.301	-85.2009	-86.9538	-85.7774	-84.5315
1.235653	-83.1123	-86.5457	-85.1049	-86.5067	-86.421	-85.2176	-85.0921
1.243734	-83.2016	-85.6128	-85.3072	-85.2569	-85.917	-85.8372	-84.0793
1.247877	-83.8396	-86.161	-84.9063	-85.4709	-86.683	-85.8762	-84.7914
1.252834	-85.4778	-85.3662	-85.978	-85.3758	-86.1568	-85.3526	-84.3602
1.256578	-86.3896	-85.6815	-84.2193	-84.8822	-86.5893	-84.9419	-83.7141
1.260329	-88.9672	-85.6937	-84.873	-84.9763	-85.5551	-84.8419	-84.0575
1.265695	-91.1192	-85.3477	-84.0797	-84.5093	-85.6397	-84.324	-83.7398
1.2728	-93.822	-84.5902	-83.9445	-84.3596	-85.1692	-84.6897	-83.3204
1.280737	-95.3075	-84.148	-84.2787	-84.3963	-85.084	-83.9774	-83.8467

1.285599	-92.4308	-84.7433	-84.2319	-84.1218	-85.7771	-84.0357	-83.5261
1.29137	-88.6318	-84.1816	-84.292	-84.6967	-85.0511	-84.0765	-83.0426
1.29597	-86.14	-83.7718	-84.3758	-83.2548	-85.0173	-83.6666	-83.1169
1.297724	-85.5584	-83.3563	-84.369	-84.1192	-84.8915	-84.0862	-83.0632
1.303327	-83.4899	-83.5275	-83.9668	-83.3427	-84.7534	-83.4907	-82.551
1.31101	-82.2491	-83.6805	-83.5818	-84.1924	-84.6333	-83.2704	-82.0955
1.315669	-82.6998	-82.734	-83.0252	-83.5641	-84.0637	-83.0297	-81.6641
1.317532	-80.7364	-83.3248	-83.6415	-84.0162	-83.8576	-82.4424	-81.4168
1.324735	-80.6239	-83.5803	-82.2603	-82.5177	-83.7852	-82.7185	-81.6449
1.322723	-80.5615	-82.699	-82.9681	-82.2476	-83.3892	-82.3667	-81.4015
1.324911	-80.1009	-81.9374	-82.1135	-82.1991	-83.4285	-82.4508	-80.6568
1.33127	-79.3575	-82.169	-81.7675	-82.0854	-83.8701	-82.1411	-80.6483
1.333358	-79.1319	-82.5122	-81.6505	-81.5821	-82.5672	-81.9479	-80.7663
1.339824	-79.8249	-81.929	-81.0561	-80.651	-82.8439	-82.5412	-81.925
1.342337	-78.1147	-82.0121	-80.3947	-82.1122	-82.47	-81.2392	-80.1587
1.343747	-78.6774	-82.6677	-82.5807	-81.9565	-81.2006	-82.3776	-80.0216
1.342871	-77.7843	-81.0002	-80.711	-81.1962	-81.1629	-80.8217	-78.598
1.344539	-77.9011	-80.0838	-80.464	-80.6431	-82.0277	-80.6129	-79.4744
1.337551	-77.3935	-80.7539	-81.1934	-79.986	-81.6977	-80.023	-78.5817
1.337296	-77.0386	-81.128	-80.6255	-81.183	-81.9479	-79.5794	-78.999
1.340889	-77.8203	-81.9701	-81.2183	-81.5657	-82.2813	-79.7641	-78.8446
1.340861	-77.3814	-79.0125	-79.6543	-80.0629	-81.1692	-81.0587	-77.6483
1.33799	-79.6061	-79.6188	-80.7139	-79.4698	-80.9666	-80.6018	-78.8998
1.337512	-80.0902	-79.3878	-80.457	-79.6964	-80.0972	-79.7806	-78.3764
1.336503	-78.8508	-80.7133	-79.9003	-80.178	-80.6353	-79.2747	-78.17
1.334897	-81.0049	-79.8467	-79.1951	-79.1032	-79.208	-78.7491	-78.4452
1.333136	-79.5213	-79.1844	-79.6599	-80.1878	-80.6531	-79.6423	-78.2736
1.330278	-78.9094	-79.908	-80.3465	-80.261	-79.3353	-79.6046	-79.7691
1.328991	-81.0107	-79.2859	-80.2095	-79.4674	-78.3731	-78.1468	-77.2503
1.332472	-83.4689	-78.2463	-79.1065	-80.4101	-79.8221	-78.9903	-79.5897
1.336204	-86.3195	-79.5973	-78.958	-79.6719	-79.6736	-78.4567	-77.595
1.329556	-87.3564	-78.864	-79.6067	-78.6651	-80.036	-77.9154	-77.7618
1.329972	-91.8333	-80.0004	-78.0851	-78.4011	-79.6961	-77.9936	-77.295
1.33575	-83.1478	-78.3708	-79.1326	-78.2639	-79.9968	-77.5535	-77.2754
1.333417	-86.6767	-78.7055	-78.7314	-78.4795	-77.7871	-78.7304	-77.4528
1.328659	-83.418	-79.0349	-77.9681	-78.6556	-79.4707	-77.4223	-75.9985
1.336152	-81.3183	-77.9833	-78.7912	-77.2192	-79.3357	-77.6647	-75.4025
1.340159	-80.9261	-78.1529	-78.2361	-77.5271	-78.0256	-77.5686	-76.6207
1.342708	-79.8336	-77.6912	-77.4682	-78.5963	-78.2926	-77.7725	-76.7912
1.343737	-78.0951	-78.3385	-77.7189	-77.4084	-78.5962	-76.1223	-77.2512
1.348292	-77.2598	-77.6955	-76.9179	-77.5925	-76.8423	-77.2559	-76.0656
1.345183	-75.5831	-77.9802	-77.7334	-76.7799	-77.1947	-77.5525	-75.4979
1.350018	-75.5709	-76.362	-77.3005	-77.4063	-77.1636	-77.7585	-75.9769
1.351537	-75.0292	-77.7365	-75.7437	-77.3547	-77.9588	-77.0045	-76.5828
1.359375	-75.3132	-77.2529	-76.4342	-76.6942	-77.4576	-76.8857	-75.1695
1.360729	-74.2136	-75.6834	-75.9579	-76.9903	-77.2085	-77.5506	-75.5102
1.366242	-73.6826	-75.9979	-76.7904	-76.2789	-79.0723	-75.9796	-74.5402
1.368171	-74.3812	-75.5912	-76.0444	-75.0866	-76.1614	-76.1604	-74.2506
1.377919	-73.0115	-76.5893	-75.3765	-74.965	-75.9147	-75.8018	-74.0524
1.381338	-74.7392	-76.0517	-75.2922	-74.7664	-76.454	-75.6873	-74.5097
1.386299	-74.5479	-76.3456	-75.5736	-73.8573	-75.3474	-75.1399	-74.3985
1.390598	-74.6974	-75.4681	-75.5068	-73.6587	-76.639	-75.6327	-73.7162
1.391863	-74.1222	-76.0487	-75.6151	-75.3639	-76.5211	-74.2509	-74.3651
1.396369	-74.1112	-75.9076	-75.6	-75.8701	-76.6157	-75.4304	-74.1466
1.400918	-74.2894	-75.3908	-74.3155	-77.4043	-76.5245	-74.5961	-73.745

1.405658	-74.3027	-74.6561	-75.135	-77.4953	-75.5149	-74.3393	-73.4629
1.412058	-74.6361	-74.5506	-76.066	-76.8822	-76.4243	-74.9141	-73.2767
1.416314	-75.3457	-74.156	-74.8375	-77.5503	-76.1706	-74.2772	-73.474
1.415475	-76.9234	-74.1996	-75.6068	-77.2106	-76.1004	-74.898	-73.5756
1.425282	-78.7225	-75.2224	-74.4478	-74.5546	-77.0537	-75.1298	-72.6066
1.428766	-78.3587	-75.3869	-75.2301	-73.5765	-75.1265	-74.7855	-73.3015
1.442816	-79.9344	-75.2842	-74.2698	-73.2143	-75.6713	-73.7512	-72.875
1.445239	-80.6498	-74.9186	-74.795	-73.4449	-75.67	-74.2476	-72.8641
1.451606	-80.5882	-73.7279	-73.9975	-73.5178	-75.7214	-73.7328	-72.1558
1.447239	-85.2209	-73.7956	-74.5302	-73.9934	-76.7774	-74.1471	-72.5437
1.4647	-82.422	-73.9452	-73.9273	-73.1359	-76.0475	-73.3432	-73.3991
1.467943	-80.6242	-73.2126	-74.0621	-72.8348	-75.8141	-73.0804	-72.1773
1.472779	-79.6388	-74.2983	-73.2639	-72.6392	-76.0766	-73.4399	-73.018
1.49044	-77.9815	-73.9522	-73.2078	-72.1779	-74.6389	-72.9215	-72.7873
1.494349	-75.4146	-73.6806	-73.3402	-73.1106	-75.0065	-71.9703	-72.5647
1.498726	-75.8821	-73.53	-73.6886	-72.5284	-74.8352	-71.6615	-71.5673
1.515459	-74.4921	-72.9177	-72.5898	-72.0723	-73.9751	-72.429	-71.5852
1.528304	-73.6623	-73.4475	-72.8902	-71.6078	-75.4395	-72.1598	-71.2052
1.537247	-72.7573	-72.4859	-72.7337	-72.12	-74.1779	-71.5097	-70.6648
1.548207	-72.9528	-72.4681	-72.6416	-72.1447	-73.9678	-71.1234	-71.0873
1.556185	-72.2731	-73.4342	-71.812	-71.1857	-73.0662	-71.4254	-70.8926
1.570265	-71.1522	-72.9938	-71.7175	-72.3289	-73.5409	-70.8911	-70.8419
1.584354	-71.2322	-73.2573	-71.2723	-70.7816	-72.9821	-70.836	-70.1921
1.606146	-70.7673	-72.4685	-70.507	-71.3883	-73.5763	-70.7104	-70.0852
1.624102	-70.8967	-72.6339	-70.5931	-70.8666	-72.7546	-70.1078	-69.8904
1.633548	-70.4204	-72.6277	-70.7676	-71.0432	-72.7975	-70.8051	-70.0348
1.640269	-69.9079	-73.2951	-69.7383	-71.8309	-73.5832	-69.8731	-69.389
1.637319	-69.7594	-72.8326	-70.0175	-71.0504	-72.2925	-69.4363	-69.1387
1.663874	-69.6246	-73.2834	-69.3429	-70.3349	-72.272	-69.5906	-68.701
1.687264	-70.443	-71.614	-69.6548	-71.0264	-72.4107	-69.4784	-68.6153
1.697246	-69.4487	-72.3732	-69.2622	-69.9242	-71.9873	-69.2299	-68.3544
1.721016	-69.4859	-71.9805	-69.12	-70.2269	-71.3111	-68.8436	-68.1227
1.730487	-70.293	-71.778	-69.5634	-69.8927	-72.0547	-68.6163	-67.7328
1.740637	-70.7747	-72.1489	-68.9915	-69.7615	-71.8074	-68.9145	-67.8753
1.765394	-70.1791	-72.3423	-68.8885	-70.0358	-70.9535	-68.9737	-67.858
1.780469	-71.414	-71.5452	-69.1857	-70.2212	-70.4879	-68.4805	-67.4218
1.799153	-71.5015	-71.0006	-69.0442	-69.1465	-70.6051	-67.8186	-67.2603
1.804841	-72.1946	-71.1198	-68.6901	-69.5774	-70.7444	-67.9673	-67.0368
1.829705	-73.4484	-71.5634	-68.4081	-69.2278	-69.9018	-67.9877	-66.76
1.84911	-73.297	-70.6962	-68.224	-69.2949	-69.7834	-67.4267	-66.3562
1.863805	-74.9566	-70.4086	-68.5515	-68.6493	-69.7697	-67.3079	-66.5325
1.882423	-75.9173	-70.4404	-68.4541	-68.2868	-69.2112	-67.3338	-65.8101
1.890981	-75.7061	-70.9161	-67.6399	-68.0097	-69.6586	-67.4352	-65.4566
1.906109	-75.7197	-70.8793	-68.0432	-67.8366	-69.0656	-67.3099	-65.3913
1.937836	-76.0261	-70.087	-67.3189	-67.3793	-69.1269	-66.4993	-64.5838
1.955259	-74.0006	-70.4268	-66.8888	-67.3013	-68.2908	-67.016	-64.5507
1.971149	-72.3484	-70.2756	-67.089	-66.7976	-68.3729	-66.1148	-64.0159
1.977003	-72.1971	-69.4979	-66.8096	-65.9558	-68.203	-66.2512	-63.5931
2.010194	-70.3527	-69.3125	-66.4468	-65.9315	-67.634	-66.0074	-63.1123
2.030417	-70.7836	-68.5447	-66.1352	-65.2964	-67.5659	-65.7064	-62.8634
2.042159	-68.713	-69.1533	-66.0128	-65.2957	-67.5303	-65.9475	-62.5482
2.060704	-68.2324	-69.0744	-65.5911	-64.7474	-66.883	-65.6492	-62.193
2.0722	-67.6581	-68.4717	-65.5461	-64.6392	-66.201	-65.3934	-61.88
2.10874	-65.8484	-68.2338	-65.3132	-64.3683	-66.2298	-65.5538	-61.4014

J0-J8	J1-J2	J1-J3	J1-J4	J1-J5	J1-J6	J1-J7	J1-J8	J2-J3
-89.0335	-88.9905	-99.173111	-93.397926	-93.324333	-97.077995	-96.093338	-96.385971	-107.96268
-86.9783	-83.3988	-90.44754	-95.303558	-93.700676	-96.020439	-93.74453	-105.45338	-95.138847
-86.1544	-81.5369	-90.009041	-92.060211	-92.52993	-95.938919	-93.63208	-93.679962	-95.601227
-84.564	-80.2635	-87.940819	-90.617134	-92.269524	-97.084351	-91.246933	-89.591034	-95.90358
-84.1783	-79.9442	-87.642426	-90.244263	-90.29203	-95.21122	-90.869148	-91.250198	-94.986946
-84.888	-80.2885	-88.475975	-90.866409	-90.144974	-96.658157	-89.440353	-90.170799	-96.698158
-84.246	-80.5578	-88.457634	-90.530724	-91.728523	-99.612022	-89.542862	-89.572868	-99.646591
-85.0393	-80.6604	-89.484764	-91.078865	-93.49881	-97.744637	-89.855087	-89.487122	-101.37748
-85.3407	-81.5116	-89.217606	-91.374275	-91.905106	-98.137436	-90.095795	-89.233299	-102.56766
-85.5613	-81.7696	-89.433121	-91.936844	-92.909874	-97.606949	-89.718994	-89.755585	-101.41294
-86.6394	-82.2185	-90.049728	-92.408592	-93.865532	-102.49617	-89.500801	-89.595451	-103.12389
-86.1995	-82.6472	-90.798126	-92.218132	-94.987053	-105.94973	-90.220024	-89.135681	-109.62801
-86.5951	-83.5487	-91.513748	-94.568138	-93.898117	-99.828293	-90.397499	-90.202934	-105.92829
-87.3081	-83.7113	-92.355934	-93.23584	-94.295448	-102.92887	-89.58255	-90.720749	-108.2096
-87.3814	-84.5973	-92.00843	-94.856613	-97.424637	-104.41254	-90.454094	-90.572105	-107.09141
-87.1311	-84.5486	-93.558296	-95.958138	-94.820038	-108.79228	-90.485619	-91.831932	-113.81629
-88.0457	-85.2803	-94.803261	-97.244507	-98.402267	-107.10218	-91.129585	-91.556503	-105.21002
-88.6318	-86.0011	-94.558319	-97.943321	-99.251053	-108.68208	-90.541901	-90.726089	-111.44218
-88.1393	-87.3254	-93.358955	-94.702095	-98.399742	-110.61681	-89.735458	-91.049042	-105.93368
-88.1346	-86.8234	-96.139053	-98.063148	-97.744019	-111.89505	-89.983139	-91.478859	-108.92422
-89.1955	-87.0151	-96.865005	-97.833488	-98.174355	-108.40983	-92.259987	-91.244957	-113.19253
-89.1899	-87.2981	-97.429916	-102.15553	-99.85923	-120.00224	-92.104668	-91.536469	-117.46781
-88.3727	-87.1626	-97.301857	-102.39367	-103.61861	-117.42826	-92.202621	-91.870399	-104.76546
-89.072	-88.1768	-97.213455	-105.02594	-102.88546	-106.80846	-91.510979	-92.289665	-114.04144
-88.9683	-87.5382	-97.687294	-98.117424	-109.48545	-106.96899	-91.981644	-92.16201	-109.27805
-89.0623	-88.3354	-97.790779	-108.04496	-99.894371	-103.15697	-92.537735	-92.610115	-103.23817
-88.6975	-88.7577	-98.507942	-100.56438	-99.086975	-110.62822	-91.589073	-92.366859	-103.83205
-88.8919	-88.8417	-99.00161	-106.10069	-108.34631	-122.63766	-93.304268	-93.203667	-115.92345
-88.8081	-88.8848	-102.20029	-104.57469	-112.51192	-131.14641	-92.317047	-92.400612	-117.98761
-90.019	-89.2437	-102.34633	-102.61327	-101.29588	-113.35302	-93.014091	-91.486572	-110.64274
-88.9767	-89.6142	-99.047661	-106.71536	-108.49081	-122.16853	-92.51712	-92.821724	-114.05656
-88.9815	-89.2441	-101.34727	-104.36353	-107.45494	-120.33325	-92.247688	-93.71254	-109.70906
-90.0458	-90.7418	-102.62486	-108.2	-104.4239	-122.24901	-93.757965	-93.485825	-117.16185
-87.1989	-90.0818	-99.842369	-103.25785	-104.67995	-139.0934	-93.793419	-93.604523	-112.26658
-88.2553	-91.1352	-100.22095	-102.81612	-112.55351	-110.52769	-93.351891	-92.004967	-110.42586
-89.1799	-90.8334	-99.718407	-104.3275	-104.81547	-107.20747	-94.402328	-93.259254	-108.39441
-89.501	-91.8785	-102.33912	-109.17578	-107.87962	-108.93875	-93.154282	-93.390404	-112.5128
-88.0636	-90.459	-103.29651	-107.0226	-110.36739	-110.89563	-92.130623	-92.099083	-125.74973
-88.8359	-91.2386	-99.747635	-103.36308	-107.53762	-109.87743	-91.098785	-92.227585	-112.5173
-88.7448	-90.2557	-100.65642	-107.07352	-111.98938	-109.21737	-91.835861	-92.303032	-108.54101

-88.5639	-90.7872	-100.38192	-107.96259	-109.46516	-107.17767	-91.694145	-94.023331	-115.46239
-87.4151	-92.7704	-102.68031	-110.28902	-111.03757	-124.09078	-93.189636	-92.912888	-105.09968
-87.2046	-91.0317	-108.02766	-102.75918	-109.62058	-109.38989	-91.96006	-91.563042	-113.33541
-87.0581	-91.8715	-103.82419	-107.53008	-119.53336	-115.26286	-92.764221	-93.594543	-111.05047
-88.0961	-91.649	-102.49348	-106.68774	-110.16483	-106.93699	-92.509438	-92.618645	-108.33719
-87.4954	-91.5035	-104.16582	-121.42439	-107.24037	-116.0283	-91.969185	-91.257294	-117.42295
-87.7157	-91.9488	-108.4824	-110.01543	-106.48759	-106.31902	-93.644096	-92.121857	-112.87871
-87.4837	-92.6453	-105.06558	-110.34566	-111.16403	-116.58245	-92.740067	-92.321205	-109.9298
-86.8036	-93.3844	-106.57567	-112.45357	-111.01449	-105.99027	-92.991592	-92.893494	-114.53807
-86.2321	-93.479	-104.58572	-111.85398	-116.0716	-107.45123	-91.76236	-91.578644	-106.11714
-86.6325	-91.2896	-107.9594	-105.74511	-107.17332	-106.88322	-91.825378	-91.659256	-117.24596
-85.7584	-92.7767	-105.44626	-116.4734	-125.44958	-104.03736	-91.496773	-91.511902	-108.47564
-85.2649	-93.8975	-107.7906	-111.33921	-107.46574	-104.7621	-92.717911	-91.66996	-118.85751
-85.1847	-93.9404	-110.40949	-107.29008	-111.00088	-106.27499	-91.510033	-91.708298	-114.67847
-85.9283	-92.2283	-107.28526	-107.05578	-108.2586	-112.0525	-92.255928	-91.241379	-110.42421
-85.4604	-92.0217	-108.307	-110.25449	-128.87964	-112.74101	-90.78997	-91.415779	-106.42354
-84.7794	-93.7135	-101.93971	-114.53763	-109.72125	-102.5042	-90.679176	-91.57222	-123.85662
-84.5883	-93.2992	-109.80392	-111.85296	-112.97434	-102.71516	-91.000061	-90.553261	-117.90633
-84.6701	-92.7921	-104.95634	-107.88177	-110.81876	-105.40473	-92.902855	-90.561409	-112.15865
-84.5035	-92.6371	-106.14619	-111.33914	-110.791	-103.46528	-90.271576	-90.348129	-109.44681
-84.504	-92.5747	-109.74222	-107.09151	-124.81026	-106.06197	-91.310837	-90.907982	-107.43031
-84.1293	-93.3063	-103.91413	-117.5239	-113.09437	-103.81155	-90.022118	-90.906509	-113.02622
-83.9298	-93.3418	-109.83385	-114.03037	-111.56927	-106.30921	-90.413109	-91.289742	-107.62769
-83.6965	-93.1142	-107.84988	-104.59981	-105.55347	-104.6104	-89.986031	-90.110115	-122.05644
-83.6821	-93.731	-116.91139	-105.86433	-107.74874	-107.38918	-90.479263	-91.232712	-106.87247
-83.1246	-94.1605	-107.2594	-111.60967	-125.89279	-102.9889	-89.729561	-90.949638	-115.53976
-83.5184	-93.3935	-106.2498	-111.83691	-109.01765	-99.819397	-91.267258	-90.850578	-112.32987
-83.2264	-94.6904	-109.01983	-104.97133	-106.45403	-103.54561	-90.765305	-90.567604	-104.91193
-82.6894	-93.5331	-105.4884	-104.18159	-110.11941	-104.7429	-90.869682	-89.687332	-112.56623
-82.7068	-92.622	-116.74305	-109.02125	-107.93259	-102.43932	-90.525269	-89.842606	-118.39298
-82.5792	-93.4683	-102.11675	-107.92606	-104.42352	-101.5334	-89.866859	-89.21196	-113.68814
-82.231	-92.8777	-108.7368	-105.54545	-104.31004	-98.257133	-89.879669	-90.034607	-110.22988
-82.3821	-93.3021	-108.57622	-103.50068	-105.55119	-97.825829	-90.419411	-90.635132	-117.86372
-82.6748	-94.1901	-104.865	-123.66351	-108.83971	-99.711868	-89.797966	-89.965523	-119.07891
-82.3866	-92.6635	-103.8179	-109.4557	-104.82259	-99.512802	-89.678642	-89.53968	-108.22401
-82.0851	-93.9409	-107.213	-106.55412	-104.78783	-100.26714	-89.586929	-89.694786	-113.53307
-81.5207	-93.0452	-103.75245	-104.62651	-107.77196	-99.320839	-90.443108	-89.421455	-116.76231
-81.7919	-92.6008	-101.70001	-101.56486	-105.395	-96.541016	-90.520149	-89.215569	-111.83161
-81.4405	-94.1374	-104.07648	-104.82289	-108.6956	-97.688049	-89.762512	-89.020889	-107.89086
-81.3079	-93.8352	-108.68587	-101.6338	-104.13113	-97.465034	-89.589485	-89.155594	-112.22076
-80.8987	-92.2746	-106.57587	-102.9744	-102.61097	-100.68421	-89.737122	-89.980484	-104.3204
-81.2666	-91.9838	-103.18156	-100.2729	-105.61492	-100.02123	-89.302788	-90.296898	-108.78171
-80.4858	-93.4488	-104.79615	-103.82461	-100.97307	-95.772842	-89.500008	-89.025978	-111.13657
-81.1442	-92.3539	-98.321213	-107.41879	-99.952507	-95.063835	-88.918922	-89.095428	-109.08953
-81.1373	-93.3956	-102.43725	-101.96835	-104.3959	-98.009644	-90.025719	-90.381348	-116.0667
-80.4694	-92.2557	-102.88523	-98.864151	-101.61131	-95.600685	-89.717079	-89.275742	-111.92599
-80.9475	-92.6831	-101.8595	-101.8718	-100.92142	-96.9459	-89.685875	-88.955711	-113.77174
-80.385	-93.2606	-99.991249	-104.49761	-101.64378	-97.212349	-89.244965	-88.581604	-114.97733
-80.1712	-91.946	-101.29466	-100.70834	-104.07531	-96.495697	-88.443405	-88.683868	-114.03825
-80.3882	-92.395	-101.99273	-101.99172	-102.99104	-96.67086	-88.037697	-88.69928	-116.39825
-80.3729	-92.1965	-99.153549	-101.57458	-103.1256	-96.306244	-88.288223	-88.808418	-127.06186
-80.019	-92.5413	-99.423126	-97.8582	-101.82279	-96.999153	-89.15036	-88.833893	-130.72188

-79.7493	-92.4548	-101.86319	-101.66424	-100.86518	-97.985634	-89.40596	-88.790932	-108.9173
-79.9706	-93.5657	-102.92981	-102.98756	-102.34794	-95.998459	-89.115265	-88.747429	-111.99854
-79.8324	-92.0192	-99.445473	-102.80759	-101.64281	-97.271301	-89.738609	-89.18679	-113.70701
-79.5537	-93.6038	-100.1627	-98.03154	-102.72293	-95.63372	-88.858925	-88.456451	-110.20633
-79.4663	-92.5538	-96.600334	-104.76344	-103.23586	-92.803703	-88.172798	-88.403145	-109.80653
-79.2002	-93.4601	-96.654411	-97.449341	-99.172157	-95.969582	-88.621758	-88.736374	-115.25307
-78.6686	-93.135	-104.30559	-100.98717	-100.03368	-95.343269	-87.927361	-88.052399	-114.58964
-78.9772	-93.0435	-97.970467	-99.649666	-100.65578	-94.518707	-87.97464	-87.861008	-127.49231
-78.6665	-93.3651	-98.419876	-99.034088	-98.882515	-93.633484	-87.166847	-88.974052	-108.55783
-78.8172	-93.5149	-97.112717	-99.042679	-98.751549	-96.065239	-88.121651	-88.616585	-120.74006
-78.1826	-93.1496	-99.184021	-102.14338	-100.64407	-96.745964	-87.456467	-87.58847	-126.64151
-78.0389	-93.221	-99.956093	-99.385475	-102.44076	-94.566635	-87.50145	-88.594269	-112.70616
-77.9544	-94.0421	-98.932228	-97.66037	-101.275	-94.758148	-88.200386	-88.018898	-114.03327
-77.2587	-95.2087	-98.179596	-97.412216	-97.7276	-91.86087	-89.586052	-85.726448	-98.880188
-77.5804	-89.5109	-92.380531	-101.93367	-101.62881	-91.578194	-87.908607	-88.278343	-123.79724
-78.3126	-91.3522	-96.170166	-101.02118	-93.157051	-93.586868	-84.104591	-87.63089	-117.98171
-76.759	-94.3128	-96.672211	-97.905357	-95.75322	-95.57679	-86.863548	-86.265915	-96.808464
-76.4978	-91.3516	-116.92369	-100.44957	-101.77881	-93.246559	-87.171257	-86.844826	-95.704163
-77.3821	-90.0288	-93.852333	-92.168045	-95.855247	-92.735077	-85.969406	-85.714966	-104.93037
-77.5396	-93.3739	-94.915543	-97.281708	-93.274071	-91.005257	-87.595421	-87.375	-106.10252
-76.2797	-90.4818	-97.908966	-92.294975	-95.609306	-91.495354	-84.496605	-85.860947	-98.595352
-75.5796	-89.94	-95.186714	-92.652298	-92.676186	-90.574684	-86.377098	-85.828819	-100.65833
-76.4305	-93.3274	-94.462196	-92.709648	-90.900917	-89.913925	-85.152634	-85.72216	-111.52522
-75.5715	-89.9779	-92.446838	-98.221291	-93.602592	-90.933067	-85.862106	-84.376328	-100.42466
-75.5523	-88.8223	-91.940933	-93.656784	-93.044739	-92.465904	-85.695992	-89.045937	-104.8539
-75.3544	-90.2109	-91.943504	-94.687004	-92.870758	-88.81913	-83.953865	-84.491058	-102.53356
-75.4009	-95.3144	-95.309021	-95.045357	-94.729126	-90.68399	-86.73838	-85.152542	-107.38729
-75.2243	-89.1096	-94.089508	-91.131317	-97.392868	-91.022263	-85.997292	-84.818985	-101.84529
-74.9207	-87.7445	-89.323891	-94.59391	-96.167473	-90.745201	-84.773712	-84.87841	-103.04418
-74.2168	-88.9251	-91.229897	-96.389267	-91.178627	-88.88485	-86.885422	-85.37619	-97.371811
-75.1414	-90.1793	-94.534615	-91.432076	-91.278931	-87.01535	-84.382469	-84.326523	-98.233139
-74.9925	-87.6613	-90.842293	-92.142609	-88.448441	-88.559151	-84.686684	-84.859909	-106.46966
-74.784	-89.4985	-91.861862	-93.501495	-96.829506	-88.771149	-84.435555	-83.780098	-103.52703
-75.3131	-87.7693	-93.58503	-91.205048	-94.236565	-88.658195	-85.265869	-84.290741	-103.8586
-75.0963	-91.2384	-91.029671	-93.809952	-91.650429	-89.298134	-85.236664	-84.008064	-102.23289
-74.1221	-88.9897	-91.080482	-95.692062	-93.309639	-88.801704	-84.014198	-85.070152	-112.39947
-73.6063	-87.7366	-95.787361	-91.44912	-92.557564	-88.877121	-83.0242	-83.843887	-101.10565
-74.496	-90.2413	-92.326469	-91.702469	-92.189629	-87.418854	-84.415726	-82.5438	-102.56647
-74.6345	-85.8322	-100.81684	-89.761574	-90.356468	-89.209068	-84.049263	-82.943985	-102.98881
-73.6213	-86.9602	-92.306274	-92.212006	-91.470322	-87.823456	-84.214378	-84.516159	-111.45572
-74.1004	-85.8247	-90.927254	-91.169434	-94.182816	-86.227341	-84.385551	-84.903427	-96.627876
-73.764	-88.86	-91.707626	-90.108932	-94.578735	-88.350014	-84.651451	-85.349533	-106.25646
-73.676	-86.463	-92.557869	-90.164299	-92.305946	-87.2798	-84.777374	-84.207565	-97.810448
-73.7954	-84.0926	-89.905846	-89.520554	-91.101357	-88.092636	-83.230743	-84.004883	-103.91955
-73.6718	-87.9025	-90.528793	-87.550529	-93.095711	-86.384972	-84.369949	-85.12812	-99.901917
-72.5882	-86.9255	-87.267746	-90.201965	-88.71833	-87.326973	-84.228767	-84.266037	-117.45097
-73.6833	-86.6797	-93.672531	-88.449631	-88.613327	-85.772881	-84.54554	-82.620644	-118.20364
-73.1165	-86.06	-89.332352	-90.008263	-86.892647	-85.637482	-82.597435	-82.642326	-107.43679
-73.4967	-84.3363	-90.248802	-87.988586	-93.724297	-88.013054	-82.290627	-85.866074	-99.929909
-73.5687	-88.0289	-88.245354	-86.310112	-88.79464	-84.751595	-83.878792	-84.07444	-107.39281
-73.7544	-85.1907	-85.281929	-86.583633	-91.369881	-85.913635	-83.306999	-83.421295	-97.494194
-72.9073	-85.1614	-89.526482	-85.998199	-88.965523	-86.85218	-81.322891	-83.7173	-97.307266
-73.5533	-83.8283	-87.709076	-88.438202	-89.162003	-86.275864	-84.036919	-82.004883	-99.121452
-72.9254	-83.0913	-89.984154	-87.766922	-88.874245	-84.965706	-83.911278	-80.117958	-102.6636
-72.6642	-84.0205	-88.889481	-86.46077	-90.674103	-85.393394	-83.067764	-85.306374	-95.41584

-73.0682	-83.7854	-87.756744	-87.808434	-86.776962	-84.631134	-83.095795	-81.372452	-100.2159
-73.0755	-84.8914	-85.357216	-86.473747	-86.627144	-86.392723	-82.338348	-81.795486	-111.13591
-72.4261	-85.134	-86.746254	-84.451248	-88.213257	-83.828934	-82.074738	-80.280579	-103.16015
-72.8697	-85.3417	-84.113365	-87.192436	-86.467606	-84.518349	-81.145058	-83.62043	-95.596428
-73.5143	-82.724	-84.676697	-84.402695	-88.828674	-86.879379	-81.328964	-83.223717	-96.06369
-72.6249	-83.8309	-86.499756	-83.913475	-90.578522	-83.494011	-80.999382	-82.440559	-97.480759
-72.894	-82.4159	-87.782761	-84.222267	-88.617668	-85.175911	-82.331123	-82.06633	-102.42709
-72.0267	-83.2933	-87.36306	-84.550308	-87.150856	-83.284271	-81.435173	-82.578247	-110.90491
-72.1569	-83.0909	-86.756439	-84.441345	-87.65976	-84.399338	-83.077713	-82.136391	-92.136536
-72.5264	-82.5222	-88.995148	-86.242279	-88.0793	-85.587929	-82.258934	-81.325706	-108.60978
-72.7992	-82.9537	-86.345169	-87.257256	-89.358238	-84.275932	-81.684784	-81.327576	-104.38171
-71.2173	-82.5012	-84.828995	-86.341156	-87.122292	-84.644295	-84.52166	-81.099091	-109.63802
-71.6829	-81.0964	-87.533478	-83.788078	-90.059074	-84.331207	-82.738228	-82.688362	-118.34827
-71.4916	-82.0954	-85.064972	-86.802086	-84.406517	-81.835831	-83.908173	-82.046135	-96.715828
-71.5909	-81.7602	-83.981926	-86.588646	-87.499153	-83.251526	-82.123772	-81.681808	-97.983192
-71.9561	-80.6296	-83.472664	-84.957542	-88.483208	-85.044128	-82.818497	-81.610313	-97.778183
-71.7949	-80.6973	-85.732941	-83.704735	-85.259857	-81.881065	-82.085632	-82.262169	-106.31133
-70.4354	-81.6441	-84.345055	-85.569756	-86.645294	-82.391251	-82.058228	-84.430412	-99.52018
-70.2817	-80.8233	-83.875671	-83.347687	-88.151184	-82.326553	-81.844971	-82.509705	-121.25803
-71.4887	-79.3407	-82.81263	-81.830795	-86.181129	-82.332336	-82.517143	-80.466278	-98.955421
-70.5888	-80.251	-83.652153	-83.31945	-86.218262	-82.188477	-82.068245	-82.150826	-104.08677
-70.7395	-80.3843	-84.464462	-84.864899	-85.763329	-82.258217	-81.02327	-82.190933	-98.205391
-70.3588	-80.7062	-82.234192	-82.994659	-87.219887	-80.462334	-81.611084	-82.495995	-109.95749
-69.8805	-79.5974	-82.000648	-82.840408	-84.869453	-80.723663	-81.616455	-80.903198	-105.47416
-69.9959	-81.2402	-82.655266	-80.047226	-85.285835	-80.65258	-80.510551	-80.691322	-102.89488
-69.0934	-81.0437	-81.630409	-82.551392	-83.026115	-81.367439	-80.659401	-80.697662	-99.194168
-70.0632	-79.3626	-81.572151	-80.389969	-83.398605	-78.914139	-79.821846	-79.87883	-99.423225
-69.4704	-80.2407	-81.651482	-80.90873	-84.349174	-79.56591	-82.065048	-80.672386	-101.64101
-69.5993	-79.2182	-80.760086	-81.210693	-82.448509	-79.750221	-81.117073	-79.564728	-108.49018
-69.321	-79.1765	-80.176834	-80.664467	-82.255028	-77.737579	-79.835136	-80.770599	-105.97084
-69.3189	-79.6456	-80.719452	-81.173782	-85.237434	-77.745827	-79.880135	-80.041451	-96.322113
-69.4564	-78.6852	-80.678375	-79.284439	-81.585999	-79.017532	-80.223045	-79.656494	-100.01307
-69.1572	-80.4402	-79.360626	-80.221115	-82.397072	-79.047295	-79.551216	-79.594337	-95.095863
-69.1165	-79.3462	-78.626205	-79.961716	-81.810562	-78.160645	-79.713821	-79.284203	-93.286568
-68.56	-79.5847	-77.783249	-78.57505	-80.547203	-76.827652	-78.996605	-78.426437	-107.96381
-68.9368	-78.215	-78.897964	-78.931679	-80.668022	-76.281517	-78.441963	-79.277954	-98.98764
-68.948	-79.162	-78.50946	-78.132912	-80.075966	-76.045967	-78.808762	-78.55117	-96.607079
-69.1752	-78.1464	-79.080994	-77.518044	-79.823479	-75.666702	-78.565025	-78.980324	-108.73066
-67.9026	-79.0826	-78.661629	-78.326469	-78.925735	-75.975166	-77.306839	-78.106339	-100.16802
-68.0383	-78.1432	-78.082336	-77.04673	-80.227615	-75.643433	-78.439072	-77.361954	-104.96127
-68.3601	-78.7486	-77.250267	-77.172234	-79.215446	-75.088493	-77.370064	-78.075134	-100.42214
-68.0114	-78.9954	-77.619431	-75.69352	-77.772949	-74.851189	-78.219658	-79.032959	-94.403137
-68.3835	-78.7725	-77.598213	-77.150345	-77.484299	-74.876068	-79.113289	-77.749352	-99.025368
-67.9315	-77.1123	-77.622749	-76.660957	-77.64296	-74.25267	-77.84201	-77.714401	-95.534851
-67.9568	-78.7869	-78.276482	-76.462059	-77.619492	-74.159813	-77.861313	-76.37796	-96.4963
-67.7464	-79.2764	-77.371162	-75.990761	-77.729431	-74.252182	-77.684776	-77.832489	-93.458572
-67.9647	-77.7424	-77.194008	-75.84903	-77.239426	-73.880898	-77.083641	-77.269333	-103.30677
-67.5936	-77.9547	-77.183517	-75.760925	-77.358856	-73.587128	-77.187126	-77.216934	-102.57331
-67.6403	-78.2351	-76.350288	-75.013451	-76.742645	-73.408806	-76.270676	-76.89856	-109.183
-67.3449	-77.9026	-77.292694	-75.143723	-77.226677	-73.035149	-78.141106	-76.829025	-93.510559
-67.3348	-79.7977	-76.218437	-74.874657	-77.13369	-73.380257	-77.236084	-76.734825	-104.74555
-67.5451	-78.0313	-77.564354	-75.104424	-76.435486	-72.696617	-76.953148	-76.98526	-116.6235
-67.8364	-77.4086	-76.549828	-74.52623	-75.800781	-72.861824	-77.745827	-77.250374	-90.564896
-66.7627	-78.5517	-76.157242	-75.183868	-75.601685	-71.766212	-76.950378	-76.728432	-91.178986

Isolation

J2-J4	J2-J5	J2-J6	J2-J7	J2-J8	J3-J4	J3-J5	J3-J6
-90.570259	-90.36042	-94.74157	-97.746323	-100.31509	-100.08324	-95.401459	-93.549217
-106.87228	-121.15134	-101.14426	-106.52637	-123.5971	-93.776672	-108.24075	-100.37199
-102.60814	-108.44191	-108.88274	-112.38893	-100.9341	-95.1101	-109.63956	-107.21664
-101.3625	-109.89561	-105.24805	-107.65258	-101.10897	-94.957321	-110.04486	-106.15991
-103.37672	-112.42352	-112.10071	-115.31131	-108.9781	-95.215088	-102.95851	-119.16334
-112.29868	-115.30272	-117.33175	-105.47538	-109.07344	-96.507088	-105.37163	-107.81853
-109.50092	-113.91727	-118.51656	-112.1703	-126.26339	-96.142227	-113.58855	-112.81464
-112.22393	-111.28671	-119.63362	-111.18693	-103.52361	-98.298508	-109.16396	-115.79785
-110.6748	-113.45021	-114.23303	-117.82864	-109.76841	-99.38504	-111.633	-124.17144
-108.16	-113.57572	-121.55907	-113.96217	-114.33784	-100.17876	-112.50419	-112.02763
-107.06538	-119.70561	-112.29651	-110.02716	-121.0224	-101.61977	-115.66121	-114.0569
-104.03669	-118.62809	-107.22445	-110.16367	-109.22456	-105.90166	-111.40199	-115.62235
-115.90228	-111.29279	-126.16431	-110.32068	-114.90282	-125.50574	-110.27062	-114.25466
-112.91836	-113.84949	-117.22128	-105.9589	-116.40848	-105.66913	-112.30081	-108.94666
-120.12548	-116.34149	-117.86874	-109.30361	-124.13181	-117.11023	-130.3718	-110.13586
-110.8181	-102.65553	-114.16608	-116.85427	-109.13963	-107.94045	-113.61434	-104.66148
-111.84303	-116.74366	-113.6011	-106.32378	-117.04591	-104.67538	-111.40496	-116.77245
-118.32211	-115.72738	-106.03124	-110.06102	-122.19292	-104.89275	-109.99972	-114.10094
-110.57315	-114.68928	-104.82368	-117.16497	-113.05302	-103.99454	-113.44167	-115.05238
-118.54105	-120.84551	-119.32441	-109.08688	-118.57084	-112.7273	-123.00868	-111.36178
-103.23818	-109.84879	-109.86906	-122.03221	-111.19283	-107.42345	-111.33448	-113.0216
-105.44508	-106.35373	-108.71111	-111.89466	-111.52272	-113.61871	-105.87106	-107.87441
-111.22044	-108.91743	-110.00104	-120.88432	-117.12912	-115.76277	-110.3987	-109.02329
-116.7897	-115.74202	-127.44013	-108.94868	-110.61641	-115.65004	-109.35631	-114.32294
-110.43291	-106.22642	-120.56612	-108.47069	-105.99339	-111.4425	-109.09281	-122.39309
-110.43652	-109.66876	-118.86186	-120.1005	-123.91626	-112.46115	-113.78072	-113.80714
-131.24141	-114.52135	-116.99944	-109.837	-112.03135	-118.57852	-106.31617	-112.7048
-112.08042	-127.60433	-118.12557	-108.38258	-103.6043	-117.73325	-116.50983	-109.66321
-128.18983	-105.86795	-108.46159	-118.21754	-109.83322	-137.45938	-114.00227	-114.82066
-111.63697	-109.39004	-122.69472	-113.45433	-113.61223	-116.14979	-111.56012	-109.58659
-103.78435	-120.13313	-111.60653	-108.17307	-118.98097	-114.03299	-113.88303	-113.01065
-120.38489	-111.76887	-113.14209	-136.41174	-113.17776	-107.77809	-112.56304	-108.70797
-118.71005	-112.68922	-117.24937	-111.58641	-111.25662	-118.2134	-113.58065	-111.70301
-112.28687	-127.71101	-130.11768	-117.7728	-126.04499	-112.48309	-115.35209	-109.64102
-118.72438	-109.27312	-109.17202	-110.36215	-104.67411	-117.16193	-113.01549	-115.76338
-120.55586	-116.91879	-117.02532	-113.00082	-113.62581	-107.0236	-110.76389	-111.22324
-112.98411	-107.36707	-112.13353	-111.40961	-110.04244	-108.59628	-122.32127	-128.12228
-108.52167	-119.49989	-118.26431	-104.97594	-114.07939	-107.54767	-112.39878	-107.16691
-119.48576	-118.28356	-116.07469	-107.73145	-119.17782	-111.12326	-110.97383	-114.65482
-109.61954	-107.48026	-119.5548	-108.8777	-118.54393	-106.70773	-108.0843	-123.79193

-115.03357	-117.4115	-107.95818	-121.17101	-113.24907	-107.49375	-110.29895	-117.51188
-112.03626	-116.20171	-111.62197	-118.8084	-111.47668	-115.57355	-108.39138	-110.33717
-115.19809	-113.40165	-109.15673	-107.78439	-119.24947	-109.16262	-110.42135	-107.58692
-128.31964	-109.87704	-121.94508	-114.38622	-109.0229	-120.66237	-125.81949	-104.29169
-106.23627	-104.53724	-110.42728	-106.78157	-114.99787	-110.70693	-108.08778	-132.31107
-107.89254	-112.94682	-107.40128	-109.31266	-118.29269	-110.18135	-106.86432	-114.29974
-118.51288	-110.31927	-106.48136	-117.91441	-113.40177	-125.14726	-115.83136	-106.16095
-114.68089	-110.02292	-113.04175	-113.39386	-121.60847	-111.845	-121.02731	-127.6428
-118.0183	-108.22256	-114.42807	-110.73157	-121.83128	-106.2157	-108.4389	-112.50787
-124.73421	-108.27939	-117.93044	-117.49882	-108.46764	-112.19621	-117.506	-117.82002
-108.38271	-109.72334	-119.61378	-119.97282	-112.03764	-116.721	-114.26076	-117.14971
-106.17281	-119.90429	-120.67558	-110.12384	-120.08149	-125.84422	-121.35739	-112.33691
-114.45164	-122.74875	-113.13702	-114.42142	-112.6971	-118.16221	-112.05714	-109.81447
-114.59232	-116.58027	-113.20304	-111.30183	-118.87102	-115.57023	-116.80088	-105.42618
-110.13447	-111.47578	-108.90588	-107.77824	-113.57304	-108.99009	-115.44819	-105.41486
-108.55553	-120.70495	-112.00455	-109.31548	-111.29441	-110.02926	-123.54364	-112.33125
-115.62894	-113.56583	-120.93401	-107.54831	-112.17052	-113.09908	-110.44143	-121.1666
-109.11656	-108.97519	-117.79235	-109.88091	-115.95911	-120.36159	-109.58847	-109.82086
-111.72935	-118.59021	-117.32342	-109.20332	-107.83429	-114.28171	-111.2047	-113.51078
-117.09601	-110.56512	-115.787	-110.10345	-113.3233	-113.93151	-127.1919	-112.49303
-110.4061	-117.74621	-112.21452	-109.26608	-110.81494	-108.45786	-104.98737	-109.1118
-109.34707	-104.88835	-121.36274	-109.25139	-123.38147	-115.04533	-110.52052	-117.54218
-109.885	-116.07124	-108.15781	-115.70019	-112.78432	-112.43027	-111.5743	-116.55256
-108.36836	-108.4984	-114.26408	-116.29639	-111.3972	-112.37185	-112.27217	-110.04978
-125.53407	-116.23199	-120.3261	-116.51565	-113.73127	-110.51369	-116.5294	-114.80441
-117.89355	-120.35199	-108.75639	-112.66096	-114.15939	-118.34911	-106.99203	-110.43371
-112.47593	-124.81651	-114.49803	-116.32267	-111.33814	-112.63517	-110.80651	-119.98928
-109.60891	-115.36491	-114.73445	-111.10179	-108.97019	-110.59091	-108.463	-111.84231
-120.54547	-121.39731	-114.36425	-123.20921	-112.56529	-109.14089	-116.15862	-109.65013
-111.24603	-114.17056	-123.22101	-114.84237	-116.75974	-115.32617	-111.28725	-110.03481
-116.17928	-108.2307	-115.5238	-112.29372	-108.72841	-117.29707	-110.86697	-116.7777
-116.11092	-110.31496	-115.31828	-117.05276	-111.28223	-111.31694	-107.46278	-104.1703
-114.42522	-113.03479	-118.00023	-115.05789	-116.39756	-117.37268	-114.30954	-111.59432
-114.1622	-108.78421	-109.15723	-107.11845	-112.56688	-107.25458	-121.05454	-112.94503
-110.59045	-115.90591	-109.9299	-109.36784	-113.32839	-115.70579	-113.43564	-112.11921
-112.53885	-103.92292	-114.10009	-115.72078	-112.0598	-104.00036	-108.49626	-122.42322
-111.28449	-112.63656	-111.06712	-114.77989	-107.78757	-117.2568	-118.69992	-114.55586
-110.0661	-110.12795	-107.57434	-126.95087	-111.18974	-112.92968	-111.3717	-112.97897
-111.3485	-114.83529	-111.86388	-112.84406	-116.85252	-110.07965	-134.31432	-109.2743
-116.85856	-114.79457	-113.03127	-109.81236	-113.43823	-115.72176	-123.92731	-105.15224
-109.79348	-117.19091	-111.25742	-119.37173	-105.35797	-115.53055	-110.90893	-119.55731
-108.97624	-110.99898	-120.33578	-115.03925	-112.49032	-128.563	-106.09348	-112.43816
-111.63344	-118.47592	-112.19397	-112.46622	-107.71069	-116.79752	-107.07466	-108.95796
-111.92787	-114.66077	-107.32851	-125.65514	-105.68301	-114.68235	-111.90341	-112.46478
-111.04948	-122.38569	-117.49851	-110.2504	-111.77169	-106.62579	-118.04001	-111.95633
-111.67233	-119.96817	-122.6638	-110.96581	-119.24013	-118.42802	-108.89131	-118.69891
-105.82943	-112.00728	-117.8157	-111.03613	-111.95	-109.97318	-106.97	-110.47067
-113.73271	-113.98828	-119.97604	-109.71754	-111.39307	-117.68731	-110.9563	-107.69408
-121.74405	-116.06285	-121.20111	-110.14853	-116.7468	-111.76592	-111.78973	-133.12012
-111.73991	-119.19956	-118.96415	-119.27208	-113.32073	-107.64169	-112.6304	-111.00642
-113.48531	-116.33878	-115.29247	-124.96309	-127.06757	-114.71579	-115.67697	-113.79137
-107.63396	-115.8905	-118.84782	-107.68428	-116.77216	-109.81065	-111.35074	-112.10989

-110.06075	-104.60595	-118.63116	-113.49429	-120.44479	-111.50832	-115.64413	-106.61382
-111.7072	-111.62245	-106.57182	-111.31254	-151.48531	-113.65385	-114.71249	-107.80059
-112.63708	-110.93743	-119.32819	-113.52007	-121.74116	-114.88504	-111.6265	-111.80188
-110.17619	-121.38727	-111.53733	-110.41803	-122.88348	-104.54005	-115.32433	-122.47548
-118.91109	-108.6975	-110.65455	-111.43946	-116.35485	-111.59256	-106.04196	-110.52133
-105.26052	-110.04385	-116.97067	-107.88424	-108.87613	-112.91753	-112.29254	-104.79674
-110.4493	-117.41977	-106.21848	-111.93212	-118.07437	-109.31087	-116.72986	-115.20901
-120.6345	-110.26956	-109.1671	-107.44551	-112.21725	-110.84993	-113.02185	-110.8954
-109.18207	-116.91093	-110.00822	-103.56889	-106.41911	-123.40048	-109.97701	-107.03335
-112.36987	-109.65174	-109.68716	-109.08073	-110.14035	-116.02467	-113.52836	-104.37264
-114.78223	-111.38009	-123.50881	-106.80154	-112.99758	-127.98169	-111.80393	-110.00822
-114.49795	-118.41561	-128.89865	-104.73002	-112.2639	-111.17741	-105.06113	-107.32523
-110.53217	-109.74734	-120.80428	-112.96101	-116.61465	-110.26308	-127.28128	-124.63058
-101.523	-101.62333	-105.41829	-101.73286	-103.69119	-100.80161	-105.91822	-113.12547
-100.5952	-116.74332	-111.26559	-105.38439	-110.26244	-101.98364	-109.98801	-102.05416
-105.35006	-101.57434	-100.51999	-115.11893	-104.48651	-101.68944	-99.929245	-105.15916
-103.64114	-97.462135	-102.8456	-100.35162	-114.33041	-105.6765	-102.40574	-105.94867
-98.900597	-102.92047	-100.39054	-99.031601	-106.64694	-102.13699	-99.29631	-103.97211
-97.536293	-103.11252	-102.13474	-96.862373	-102.76089	-105.21637	-99.152916	-110.44493
-98.194511	-103.62601	-97.18856	-107.49833	-100.87247	-101.16281	-101.23753	-102.07471
-110.27553	-105.72593	-101.10618	-105.76342	-103.29992	-108.98019	-115.09106	-106.10166
-99.358589	-101.33521	-116.61764	-106.61058	-101.11262	-101.54933	-98.958405	-103.03268
-101.77189	-102.76115	-105.18481	-98.10154	-102.93835	-102.29603	-110.39371	-110.68377
-99.713547	-97.622498	-102.97508	-106.05495	-104.13368	-102.67743	-95.5037	-96.739204
-100.57452	-100.98705	-107.17759	-101.41815	-103.82973	-104.17952	-97.876907	-98.433144
-103.69702	-98.849113	-91.284286	-111.9967	-101.98824	-99.284195	-102.10089	-105.71286
-103.88514	-111.4715	-103.76029	-103.67867	-104.29973	-106.81196	-103.53032	-101.58183
-105.74473	-95.000366	-104.59737	-99.962837	-95.654739	-115.17236	-107.1237	-95.218033
-99.443764	-96.884338	-100.32914	-106.23323	-101.71171	-98.132942	-99.842155	-102.78998
-101.94733	-103.70447	-110.5191	-100.20081	-107.04989	-103.86827	-100.65098	-94.28434
-106.82462	-99.688942	-98.243004	-107.52656	-100.27287	-97.842018	-97.973114	-108.82946
-106.00792	-98.833015	-97.685158	-105.42448	-102.09461	-95.771912	-112.38319	-101.80374
-99.643059	-96.003441	-112.8146	-99.907799	-100.7069	-101.08461	-100.14649	-106.7867
-100.72421	-97.872856	-100.55796	-101.40225	-98.856506	-99.529152	-96.382385	-100.76316
-99.576607	-107.74888	-101.28279	-97.117554	-98.230186	-97.482292	-100.85888	-111.73411
-107.1114	-95.818733	-101.85058	-102.47872	-100.56763	-104.81191	-105.12728	-114.70826
-101.0363	-106.74191	-115.25544	-107.60699	-97.685509	-104.68672	-106.19746	-106.79115
-107.42084	-113.7758	-96.484528	-110.41703	-106.66257	-104.14362	-113.4552	-108.42477
-101.55653	-104.91401	-102.79453	-113.05219	-106.03795	-103.55046	-112.08241	-105.03509
-102.06583	-107.29904	-106.00089	-107.03971	-103.74668	-105.19102	-112.6459	-96.38224
-105.8066	-104.25122	-107.96242	-106.03123	-100.85609	-109.98471	-102.14955	-94.01458
-103.33926	-103.14799	-95.665352	-102.88305	-98.23185	-102.58662	-112.1828	-98.845749
-101.94527	-107.31505	-111.32198	-107.6431	-93.958138	-94.836266	-98.517914	-104.76929
-101.15161	-99.364777	-101.21166	-106.07638	-121.30737	-104.48267	-94.865334	-98.191261
-108.53007	-98.123238	-116.94233	-101.6043	-98.945793	-96.085854	-104.64941	-96.549263
-94.614708	-102.1352	-93.279953	-97.282547	-96.618507	-104.43166	-93.346558	-104.61275
-96.214401	-98.979744	-100.08072	-98.882744	-98.096184	-98.910934	-109.52292	-97.328873
-106.52563	-96.698486	-105.62579	-116.93169	-100.28843	-105.0845	-109.26546	-115.65341
-107.5042	-108.57973	-101.19931	-94.595284	-99.919014	-100.44042	-102.04384	-104.90452
-91.751747	-100.3928	-110.50358	-105.50502	-111.9594	-101.33035	-112.53963	-120.13275
-104.73997	-103.63531	-104.40814	-103.99616	-97.805328	-107.0607	-111.00581	-103.30061
-100.24855	-92.591553	-95.639755	-100.17885	-100.32543	-97.846085	-100.33797	-102.15652
-103.2736	-99.131897	-103.95858	-104.72651	-94.296371	-99.469101	-101.97075	-102.51942
-102.66069	-102.66673	-119.61079	-99.607361	-96.058182	-116.11184	-98.858185	-105.36031
-101.73582	-96.577347	-98.669762	-102.63084	-98.204521	-103.16904	-100.90571	-103.69144

-99.530632	-101.58149	-106.41456	-102.13551	-102.47058	-111.50601	-108.92026	-98.203369
-101.60531	-111.58134	-97.817192	-101.39691	-107.79449	-106.57273	-101.67077	-103.7772
-98.167038	-103.66684	-98.238358	-103.9255	-99.138588	-97.474342	-111.47862	-95.678848
-97.152946	-102.37724	-101.47527	-97.3144	-100.16492	-95.068069	-96.006401	-96.486084
-98.958855	-93.992554	-105.53615	-93.3573	-99.099945	-104.20736	-99.383698	-100.64407
-98.643547	-100.17034	-103.00807	-100.11436	-99.965538	-98.561729	-95.12883	-108.61758
-98.701599	-93.798531	-97.268723	-108.63995	-100.42014	-98.110214	-96.787903	-108.94634
-97.550278	-109.50909	-102.37695	-100.62139	-105.47964	-97.86116	-93.803703	-95.839165
-97.576035	-101.3834	-94.343193	-115.3604	-113.01928	-98.907379	-101.41735	-106.07648
-95.467949	-93.835121	-93.059608	-110.7341	-102.29203	-106.63467	-122.13348	-100.69413
-107.9778	-92.945564	-100.01685	-104.76974	-99.104813	-102.80139	-96.460785	-99.79509
-97.115784	-99.507027	-101.69781	-94.346153	-103.32988	-97.23867	-101.83607	-100.35925
-95.845131	-100.4156	-100.73553	-99.651207	-96.492043	-95.869667	-99.606857	-99.856483
-103.49268	-103.01036	-96.750946	-107.56438	-103.41388	-94.916573	-97.618637	-107.23203
-104.5564	-107.29027	-95.762222	-100.71019	-97.587685	-95.950386	-124.38825	-101.03185
-101.49422	-98.834389	-101.86096	-102.08546	-103.00431	-101.69733	-96.870361	-101.51714
-100.64526	-109.10871	-103.52265	-96.010071	-111.78617	-95.657494	-100.64544	-104.82715
-113.98915	-99.735001	-104.10533	-111.59546	-99.298096	-106.71345	-100.8327	-107.94424
-109.97856	-97.464897	-101.07067	-98.129944	-95.645546	-96.783386	-97.20282	-99.55732
-105.17009	-105.63498	-101.67902	-94.214081	-104.30704	-98.601463	-114.94576	-99.963524
-102.924	-115.12101	-115.18106	-113.1674	-96.23735	-104.07511	-100.04599	-94.246437
-109.30561	-108.97626	-98.488922	-116.18214	-100.90434	-93.86982	-100.74447	-102.98572
-95.636726	-109.1221	-93.077248	-104.69592	-99.483101	-98.023605	-99.67131	-105.70719
-101.2075	-101.18831	-100.46487	-102.19803	-99.941078	-96.843781	-96.029221	-109.85368
-102.77055	-96.88076	-99.428856	-105.69042	-97.0037	-99.754906	-100.95921	-102.63381
-99.5606	-95.326355	-102.3946	-103.63531	-103.87973	-99.974724	-93.04673	-97.353508
-97.972336	-108.74445	-100.46702	-97.412468	-98.110321	-108.22739	-101.57636	-109.21359
-109.57698	-98.728493	-111.68063	-118.98403	-100.86189	-113.45782	-98.30999	-125.62461
-100.12769	-99.056839	-96.568451	-105.37067	-98.048607	-100.28497	-103.73611	-105.60063
-102.57538	-101.28701	-110.2977	-95.84993	-103.70241	-102.87176	-96.205658	-100.27437
-97.881683	-99.529045	-98.980553	-104.80448	-104.81638	-93.981224	-98.526047	-105.38299
-98.24807	-100.79973	-97.580688	-93.654114	-101.65176	-100.05553	-98.129234	-106.18311
-102.47998	-98.460884	-96.25045	-99.844223	-96.6063	-104.08887	-93.431664	-100.47984
-96.76461	-96.820305	-96.317978	-104.00661	-101.58521	-96.161163	-103.81311	-110.71992
-97.279861	-109.90499	-97.541077	-98.471817	-102.21223	-102.27233	-98.958527	-109.58315
-94.55278	-104.48167	-109.82314	-95.225746	-103.53851	-93.531723	-104.73193	-102.11926
-97.514412	-100.32903	-95.04377	-115.35512	-98.520073	-96.882011	-98.574059	-103.92337
-99.747841	-116.95632	-97.678589	-96.085922	-99.15358	-99.645927	-96.24118	-99.942619
-105.22796	-104.03704	-94.583557	-102.3876	-98.497459	-91.350754	-100.08072	-117.66636
-109.81665	-104.75997	-99.448738	-109.27501	-111.04061	-109.66051	-97.234749	-93.876144
-98.097023	-107.09643	-101.73027	-106.60485	-109.81371	-100.27605	-117.56126	-103.20575
-101.12601	-109.22272	-96.811211	-100.37796	-102.08105	-97.056908	-97.68232	-105.24528
-104.86116	-99.130165	-106.18292	-107.30887	-111.4918	-97.863853	-102.95306	-95.553299
-96.373962	-96.521843	-99.11335	-101.14355	-99.076843	-102.52929	-102.53624	-98.220337
-96.146408	-103.06989	-97.429306	-107.90908	-101.72116	-100.32788	-96.492668	-102.11792
-101.28586	-102.22427	-108.70928	-100.55405	-99.776741	-105.25018	-93.155823	-108.28146
-107.96533	-97.898186	-104.89651	-97.845543	-105.53743	-99.987465	-118.15427	-99.401878
-100.05442	-109.76669	-107.75222	-99.307693	-99.46727	-93.192818	-107.07914	-101.45705
-103.674	-93.499115	-109.79494	-97.974831	-105.79049	-102.98917	-102.18871	-100.35092
-116.06915	-99.962578	-93.803741	-98.956512	-102.4872	-99.813202	-102.27885	-101.34011
-110.25224	-100.86874	-97.819435	-102.35106	-96.484184	-92.736473	-98.663353	-105.43657
-101.15192	-96.860794	-101.35556	-100.10917	-97.650833	-97.44986	-100.56934	-93.076714
-104.33692	-98.253403	-97.989868	-97.79023	-99.84227	-106.45062	-97.983887	-103.71862
-93.659866	-100.56346	-96.845718	-103.6854	-99.201218	-95.204742	-94.787758	-101.48844

J3-J7	J3-J8	J4-J5	J4-J6	J4-J7	J4-J8	J5-J6	J5-J7
-102.26768	-93.782326	-93.148109	-99.210342	-97.664917	-104.46559	-96.313843	-104.46131
-104.50521	-110.43089	-94.143684	-103.2964	-109.75143	-114.82825	-96.397285	-108.58104
-117.2991	-117.37358	-95.45816	-106.43414	-115.92075	-109.80458	-94.360565	-103.22048
-116.47601	-110.69997	-93.680138	-109.59958	-109.50626	-114.36588	-92.662476	-105.19215
-111.46739	-120.53325	-96.814812	-108.2566	-103.6737	-119.95452	-93.724686	-107.75143
-114.11465	-106.20416	-96.272087	-108.24418	-106.83342	-110.23994	-93.512192	-107.34929
-112.32451	-123.56859	-95.864128	-110.66139	-106.62733	-120.40667	-95.632683	-104.13382
-110.09654	-105.28883	-99.247818	-112.5415	-103.7507	-115.14299	-96.58709	-134.54233
-115.36669	-117.73296	-100.87228	-107.87209	-109.14621	-126.04836	-99.406952	-111.4658
-108.63766	-118.1082	-98.314819	-110.4492	-114.01089	-111.13707	-102.10491	-109.25172
-123.60969	-115.47972	-105.63852	-120.39815	-110.54503	-113.11844	-101.70958	-112.94239
-114.55307	-108.43624	-107.22136	-110.90726	-115.99312	-108.96478	-105.69756	-112.49245
-114.12958	-113.96181	-108.65686	-121.82934	-117.59819	-116.73511	-104.5494	-116.28269
-114.46846	-125.86214	-127.17016	-118.69039	-119.06671	-108.41513	-103.20194	-111.40199
-116.46211	-110.60184	-116.54083	-109.72287	-111.08659	-107.35766	-108.39356	-105.75455
-117.4903	-108.56915	-110.1659	-108.98631	-108.47533	-126.6311	-108.73785	-110.67744
-115.3328	-122.93581	-115.58009	-110.59937	-114.0919	-123.23435	-102.7073	-108.51704
-115.54092	-113.96742	-110.53655	-108.73186	-114.33389	-113.36954	-106.04205	-121.41143
-111.25154	-109.75529	-106.88924	-106.1889	-111.02451	-111.76544	-103.9722	-107.88893
-111.25365	-110.30386	-109.86766	-106.52668	-120.38029	-117.48678	-107.88012	-116.64444
-111.2401	-107.27235	-110.41045	-112.24165	-106.36842	-112.26318	-113.11776	-112.6915
-104.94932	-110.74954	-115.20371	-115.58107	-109.9976	-108.73064	-113.38976	-118.12322
-107.13417	-105.80048	-106.08445	-110.86047	-114.29837	-108.19328	-114.21639	-113.84492
-127.20027	-112.35801	-105.12266	-112.91885	-113.79631	-116.76753	-111.72981	-119.64797
-110.1437	-115.42974	-117.53682	-108.34367	-115.12342	-104.96848	-105.53802	-105.90179
-118.57285	-105.88144	-121.99465	-109.65277	-104.63499	-104.91123	-111.28291	-105.59039
-112.08732	-108.91611	-106.01241	-110.37565	-111.02655	-118.44577	-116.0854	-113.01735
-112.01884	-111.80479	-110.18922	-116.63973	-105.61774	-110.8299	-115.57594	-127.16071
-108.55698	-110.27974	-113.46255	-115.904	-111.30029	-116.05588	-108.75105	-111.98851
-127.48264	-110.17611	-115.12434	-110.48164	-110.59543	-108.6222	-122.77087	-120.14837
-111.04816	-110.36283	-116.17633	-117.64412	-109.75864	-106.93346	-116.36175	-114.65067
-117.9548	-112.91361	-122.3031	-113.21195	-116.7122	-127.04838	-130.77171	-110.82465
-122.06258	-109.0517	-116.1627	-109.94556	-109.25865	-121.83834	-110.22301	-110.43287
-113.67091	-112.69411	-111.96609	-120.28212	-114.33092	-110.15466	-107.44261	-113.39749
-110.28267	-121.20894	-115.79271	-114.80501	-116.18573	-117.94802	-111.85195	-113.56946
-110.45934	-109.47509	-115.00848	-113.59352	-116.34808	-136.13637	-110.91183	-107.89912
-117.26975	-118.90181	-125.59288	-111.47014	-111.14386	-108.34725	-114.95149	-106.9799
-114.19118	-122.76063	-111.81867	-113.57886	-116.53631	-113.84541	-126.16225	-115.37202
-113.02615	-110.72291	-105.13073	-124.70997	-113.2744	-118.57549	-105.30013	-114.01064
-118.11505	-113.85261	-120.21645	-117.90572	-114.43636	-116.48724	-121.55958	-111.14909

-115.3562	-116.47787	-105.65779	-109.31226	-106.24296	-123.34106	-104.25316	-113.69238
-113.08987	-113.88648	-111.9274	-114.23788	-113.1955	-106.98148	-111.41748	-116.0042
-103.04092	-115.43185	-110.1371	-112.35303	-120.09372	-113.48524	-123.67125	-108.282
-120.70406	-110.50786	-108.06198	-116.63454	-118.96335	-119.24582	-124.89883	-115.21011
-116.8261	-108.88363	-105.09556	-106.18193	-106.12312	-140.44194	-117.56297	-119.68505
-116.06525	-111.76838	-111.84834	-120.89039	-118.81784	-116.78637	-110.86749	-115.10135
-119.84039	-110.82914	-111.50243	-108.43029	-113.45813	-116.02243	-117.50994	-110.81977
-118.25166	-122.9455	-118.20258	-109.48122	-113.9675	-113.15511	-122.19281	-111.43102
-107.13892	-115.27483	-118.54305	-108.57893	-123.62778	-120.1853	-109.50904	-110.15124
-109.70809	-121.75542	-115.98847	-107.83412	-113.97649	-121.01225	-112.01908	-109.13463
-108.04135	-113.20815	-113.48937	-110.9393	-107.79131	-117.60424	-126.53484	-115.00871
-117.42333	-117.04603	-120.75627	-120.01474	-107.50033	-118.42901	-110.87349	-113.06028
-106.32859	-116.61826	-107.34076	-111.3108	-112.63	-108.81515	-122.34114	-109.43088
-111.63598	-109.99409	-115.31555	-115.62302	-111.95078	-112.44743	-111.971	-121.72465
-108.13692	-111.63784	-116.69843	-113.14877	-113.17066	-109.19501	-109.54179	-111.0154
-114.70657	-114.75388	-110.83221	-110.64559	-110.0099	-123.6749	-116.10832	-120.50891
-114.47564	-112.91085	-110.01575	-119.09075	-115.16924	-111.97935	-117.60118	-115.81704
-116.95705	-121.30235	-111.34299	-114.58122	-114.10851	-113.77203	-108.01207	-119.39322
-104.95943	-110.62549	-105.26318	-110.37947	-113.26005	-124.39161	-108.43491	-113.75592
-130.16449	-107.01862	-106.98194	-113.61899	-112.72848	-118.47018	-115.59143	-118.29331
-119.66637	-107.52038	-119.95235	-111.68245	-111.68882	-140.17319	-118.25801	-118.37572
-112.22809	-108.43238	-125.7972	-110.02171	-108.27721	-108.63975	-118.11026	-125.87731
-109.84557	-118.07548	-113.06085	-115.42152	-110.04092	-119.62061	-108.58385	-108.54013
-116.35696	-117.14791	-109.73058	-110.36829	-115.77693	-115.09158	-114.17884	-112.26382
-116.33378	-114.82918	-108.74982	-121.96387	-110.30447	-128.89119	-116.83507	-114.42184
-110.32612	-108.79871	-120.76255	-111.14178	-114.57188	-115.74837	-106.17933	-108.83202
-113.75015	-110.32066	-109.56331	-115.81478	-109.11954	-115.02503	-119.35144	-120.5391
-110.07437	-114.69138	-122.70461	-110.03397	-114.74377	-114.60741	-120.73705	-112.23988
-111.69937	-126.55734	-111.02712	-108.98061	-113.04717	-112.41057	-112.16701	-115.35045
-109.74966	-108.80493	-108.10109	-111.40491	-116.49046	-108.63966	-119.41129	-110.24592
-118.05649	-115.17737	-114.64609	-116.39427	-106.51787	-118.98544	-112.84991	-117.48538
-114.44622	-117.19133	-110.39249	-112.46107	-113.07066	-115.77663	-117.8046	-110.75459
-117.38266	-127.47347	-115.57457	-107.29063	-106.97623	-116.85303	-124.05353	-118.58784
-117.96906	-119.00775	-121.36227	-116.01604	-118.25411	-110.34694	-113.79884	-113.12136
-114.42752	-104.53593	-113.41648	-113.76427	-106.12548	-119.86415	-109.9745	-125.50639
-106.39399	-111.07243	-115.1039	-111.67988	-119.04292	-108.65874	-108.14788	-113.61487
-116.92737	-111.91631	-112.80083	-107.62549	-110.56227	-116.45177	-122.41381	-116.05289
-112.64693	-107.53461	-107.86982	-116.07106	-116.16892	-112.76088	-108.80801	-110.15407
-111.4498	-116.42953	-115.07314	-116.33437	-106.5791	-115.6628	-105.10576	-117.6198
-111.90077	-107.94668	-112.64737	-106.7343	-121.1811	-107.83689	-117.62496	-108.4713
-114.20055	-110.46867	-110.77022	-118.79245	-109.53387	-105.97351	-115.02732	-106.15555
-123.48414	-109.66609	-107.13384	-118.07592	-117.16929	-108.53304	-114.0221	-112.43358
-108.09242	-109.18803	-128.04442	-112.51754	-118.55897	-128.43718	-111.52406	-109.66289
-114.77219	-112.59096	-110.55168	-120.07653	-113.16676	-112.5505	-108.64718	-108.64912
-116.7265	-117.83496	-114.94898	-107.02037	-130.11794	-124.08989	-106.83376	-113.79961
-110.76199	-120.07886	-111.60869	-122.41727	-107.66737	-116.66419	-126.94495	-121.34487
-107.04818	-114.726	-107.39265	-109.6199	-122.55083	-116.89135	-106.73219	-112.25164
-111.01051	-115.90028	-107.80746	-129.1803	-104.61871	-106.15752	-109.9897	-112.54814
-109.69662	-118.55814	-114.73351	-114.86049	-118.07112	-121.07201	-116.3707	-112.90647
-114.65598	-119.94686	-109.3308	-113.24783	-111.78177	-110.43069	-105.95042	-115.07607
-116.9606	-111.14114	-114.1729	-116.90234	-118.27957	-115.66008	-111.35145	-113.63973
-108.7802	-117.59313	-117.51872	-115.16645	-112.75332	-120.84388	-126.08254	-124.40862

-116.42208	-115.24274	-120.5201	-104.01295	-119.48833	-117.63118	-109.74815	-111.77762
-114.27982	-111.32717	-110.29955	-120.79759	-108.90892	-108.422	-112.33173	-105.68682
-124.88312	-110.54049	-118.01075	-110.98441	-112.60607	-114.35007	-110.49353	-108.71052
-122.21175	-108.85612	-109.7004	-111.4566	-106.53821	-111.65948	-113.1827	-116.76102
-105.49814	-113.19064	-106.837	-122.99635	-115.70226	-111.73926	-107.50675	-118.37411
-109.22642	-110.95926	-116.1655	-107.27122	-110.34064	-104.31055	-112.81079	-120.26263
-115.34646	-113.17374	-119.33926	-117.52628	-104.84511	-107.02545	-109.51505	-110.24097
-108.99398	-112.01289	-107.77655	-116.4041	-114.66536	-110.49178	-102.9062	-113.16946
-108.21447	-108.1922	-111.42536	-107.69232	-112.39326	-111.20954	-116.76904	-122.49529
-111.05695	-139.25179	-107.65585	-116.22843	-109.623	-108.11441	-111.41344	-114.25739
-107.85239	-104.53094	-115.74457	-109.09069	-118.52558	-113.74591	-114.89046	-110.23668
-121.58987	-105.48018	-109.19915	-108.38721	-124.3342	-108.9699	-114.25742	-109.88615
-106.93914	-110.61797	-107.38537	-109.27338	-111.50762	-109.4249	-107.92755	-110.80895
-100.76057	-100.31512	-111.6708	-106.25201	-105.85521	-102.90261	-101.95562	-113.75645
-101.10213	-106.30978	-105.87821	-100.04308	-111.0055	-101.95207	-105.57088	-98.138138
-103.60693	-99.512352	-103.06852	-105.38781	-101.25616	-99.164619	-102.48456	-97.943993
-107.83432	-101.20797	-102.37305	-120.11386	-100.70954	-102.89619	-101.49686	-112.35317
-108.64838	-105.95583	-103.49063	-109.73228	-104.73393	-107.03617	-104.13999	-107.32021
-100.81803	-110.04549	-94.088799	-97.907768	-107.83909	-97.965462	-113.2803	-113.1862
-108.44697	-99.630035	-103.22108	-98.770096	-140.47609	-107.28797	-102.49796	-104.27242
-97.869972	-100.47414	-106.98179	-98.368767	-98.727692	-105.71457	-107.58907	-100.25905
-102.22335	-100.01711	-101.43009	-99.646973	-99.375893	-110.09398	-102.09408	-97.870041
-102.45954	-93.563278	-98.121979	-99.395653	-102.85325	-101.2428	-101.33154	-99.36644
-100.61617	-100.2623	-98.040321	-100.74697	-102.9258	-102.50936	-100.51881	-97.167831
-99.974205	-104.56704	-103.08336	-101.14115	-103.40343	-99.556007	-106.0965	-101.82198
-106.57925	-101.42664	-119.35424	-116.0611	-100.87962	-102.96603	-114.84254	-105.61935
-106.35406	-98.716095	-104.19273	-105.97712	-98.955994	-98.939659	-115.74158	-103.18824
-101.04538	-101.02743	-108.14715	-101.62057	-105.57157	-116.44028	-98.417137	-104.00198
-104.20495	-102.25668	-100.91836	-107.69363	-102.35956	-100.89175	-98.421921	-101.81213
-96.405327	-100.88438	-98.293396	-100.22765	-99.996391	-97.610291	-96.150009	-108.1588
-107.06458	-94.208336	-103.19905	-104.00416	-101.71456	-102.53796	-107.62796	-102.6984
-97.014412	-104.16006	-102.4228	-97.666351	-101.55852	-101.6079	-102.60633	-100.60997
-101.16897	-98.616798	-103.02351	-102.04414	-103.59759	-99.231934	-101.66077	-110.59957
-104.74801	-98.355103	-97.48732	-99.387489	-100.72906	-110.4142	-103.39037	-121.54561
-107.76617	-107.00844	-104.48823	-102.38434	-95.332962	-103.76721	-108.04018	-100.2958
-107.4163	-97.313133	-102.0659	-101.00822	-107.8596	-101.78654	-97.791618	-108.10456
-95.530785	-111.45055	-102.60475	-102.1724	-100.37881	-106.8399	-111.18346	-136.14603
-107.29301	-104.22798	-121.64371	-105.60075	-101.21659	-98.364342	-96.758186	-95.479431
-109.88091	-102.97176	-95.587631	-98.646561	-105.30032	-99.973312	-104.02424	-99.743103
-114.96207	-101.1372	-97.071785	-107.23965	-98.931496	-98.856239	-102.74574	-98.154419
-101.25808	-101.19752	-101.0945	-94.74691	-98.311554	-111.3981	-107.83324	-98.055336
-103.50131	-100.37406	-104.24246	-104.9298	-111.52141	-98.32769	-102.76759	-104.8875
-97.947868	-97.636475	-100.72681	-97.854736	-105.82461	-96.795044	-99.696541	-106.4154
-109.90366	-97.631401	-96.769524	-98.524864	-100.11512	-99.709717	-98.514114	-100.64336
-103.44037	-96.659981	-102.58312	-112.90806	-102.21313	-102.96359	-101.63535	-102.31272
-109.72986	-107.99532	-104.88711	-108.88847	-115.93173	-107.55521	-96.219833	-111.68104
-109.99876	-95.894417	-99.464249	-121.4895	-97.712646	-103.09802	-101.62675	-97.230125
-103.77506	-100.56596	-99.019104	-107.38914	-99.023384	-102.22372	-109.34002	-110.09527
-106.99136	-106.91245	-95.771255	-105.65662	-97.328339	-97.758934	-110.0621	-104.22602
-99.721153	-101.4912	-100.90938	-105.90779	-99.693443	-97.943695	-97.02919	-106.6596
-109.38725	-103.88501	-94.266518	-103.90195	-101.2839	-95.655914	-100.98388	-101.70177
-97.130455	-98.102211	-94.934502	-95.198235	-107.77309	-103.09998	-104.23826	-100.3112
-109.11156	-98.236916	-88.388351	-107.93792	-98.609871	-105.10045	-95.389702	-95.249771
-108.88456	-94.055222	-90.688263	-96.423378	-100.92321	-118.90111	-102.02898	-111.84535
-97.595268	-95.10968	-93.723419	-106.11611	-108.80801	-106.32568	-119.58662	-105.47498

-101.22929	-114.11218	-95.739861	-113.29253	-94.511276	-96.766838	-106.95512	-99.908028
-99.637039	-101.09245	-95.121872	-104.9421	-100.61163	-104.30276	-102.75186	-107.09576
-98.021675	-108.13427	-92.364815	-97.401443	-97.674019	-103.99704	-101.87595	-101.9776
-101.1326	-103.97065	-91.306419	-94.50943	-113.62513	-102.58415	-109.73923	-100.04532
-104.82065	-94.089828	-91.046745	-101.44276	-100.502	-100.74259	-97.286392	-108.319
-97.240547	-111.48316	-96.841454	-104.93105	-105.21192	-102.09508	-104.94389	-96.880783
-95.915825	-100.05023	-94.211823	-98.601601	-97.923126	-98.734818	-100.15784	-114.64804
-99.198662	-97.00528	-92.402466	-108.94229	-98.50515	-100.00637	-104.23521	-98.394363
-99.799362	-112.50436	-92.625343	-97.36834	-105.73852	-101.76725	-108.53011	-106.56506
-101.84516	-96.732132	-93.469185	-109.50453	-113.90948	-100.33154	-94.521187	-92.503204
-99.359688	-99.414955	-98.264404	-93.710007	-98.533089	-96.06691	-101.00137	-103.10729
-94.744598	-103.40961	-99.747047	-102.96012	-109.18158	-103.13139	-95.679016	-92.206184
-100.82188	-100.30805	-109.80151	-102.33169	-117.16476	-101.36099	-95.489082	-103.77351
-91.163879	-99.321541	-94.834862	-96.482841	-94.305519	-94.880104	-103.73849	-96.411362
-97.36882	-95.397247	-120.40829	-95.039917	-96.883224	-103.41901	-101.01764	-99.349854
-96.839226	-93.806633	-100.46693	-108.66792	-99.230606	-100.76753	-115.01212	-101.1612
-93.214836	-101.27942	-104.72976	-98.254181	-103.12133	-105.69662	-105.08774	-101.76855
-102.13681	-113.26353	-110.61591	-105.71678	-101.3933	-104.62437	-93.222725	-107.35196
-110.66532	-97.871376	-100.69453	-108.132	-96.876312	-99.161301	-99.076874	-126.27747
-100.35312	-103.7102	-94.861893	-95.703606	-101.72305	-109.62645	-99.338943	-99.697563
-102.28145	-113.61695	-90.717316	-101.09566	-96.05748	-112.75602	-102.59365	-104.00083
-105.76317	-118.21395	-100.20996	-101.2356	-92.828735	-99.597404	-103.44379	-100.87111
-111.14095	-109.66489	-94.86657	-94.857727	-109.0015	-97.522568	-94.333786	-99.594162
-113.97183	-93.769333	-95.73558	-97.942337	-97.671303	-116.80719	-101.49996	-107.88583
-100.66719	-98.103348	-104.72958	-99.594734	-102.22482	-106.72954	-111.47833	-94.386528
-105.03141	-99.176743	-104.37396	-98.65448	-99.850655	-96.631798	-104.13828	-107.49567
-103.74929	-110.99576	-101.44427	-99.545807	-119.71678	-112.5909	-102.37622	-97.216469
-103.75832	-107.80345	-112.05734	-98.518333	-101.66923	-112.31345	-93.090347	-96.049454
-99.024696	-102.01563	-105.50714	-95.348244	-96.465912	-98.276497	-90.424118	-97.973686
-94.88633	-98.199577	-99.989006	-105.97771	-100.33363	-103.07118	-101.52087	-102.5356
-102.27406	-96.329071	-106.12435	-114.83913	-105.18899	-98.067497	-112.21934	-106.61053
-104.89769	-94.237541	-103.80582	-99.405769	-103.45943	-105.84961	-99.084457	-104.74321
-97.363449	-110.43145	-104.16487	-105.28188	-104.86083	-98.253708	-97.176537	-97.348755
-96.238327	-94.313377	-98.905502	-95.551743	-133.58076	-97.451935	-106.1068	-99.691185
-100.28094	-104.23207	-98.066597	-95.36113	-100.58746	-97.012474	-102.96551	-99.794243
-102.30122	-98.46051	-98.613205	-99.752075	-112.36282	-107.7482	-96.93084	-94.278198
-94.329475	-95.924911	-114.93525	-99.986282	-91.667297	-105.24998	-106.39587	-99.008095
-94.462601	-104.66052	-103.39277	-103.4654	-96.649345	-94.359207	-108.84183	-98.356422
-101.89842	-102.10795	-109.91099	-96.547935	-108.15331	-99.090714	-96.868401	-95.345299
-91.825676	-98.727509	-94.143394	-103.56933	-115.83125	-106.18624	-97.779564	-96.45208
-109.52199	-112.08112	-110.6654	-98.709038	-92.514763	-95.37886	-100.98246	-101.6126
-96.746017	-103.54736	-99.519691	-103.79002	-102.02589	-99.993271	-97.256775	-108.42265
-102.55906	-98.29158	-100.31425	-102.74443	-99.218529	-102.95776	-102.12983	-110.19885
-109.03057	-106.63165	-106.12339	-97.664146	-102.3168	-100.62159	-99.924835	-99.740189
-107.65615	-98.542542	-96.528168	-97.628349	-103.10319	-100.74902	-98.756668	-92.409393
-104.09295	-103.15569	-102.40396	-99.146133	-104.9593	-105.10376	-105.50881	-99.073738
-98.285103	-94.882339	-99.322922	-110.74692	-99.721069	-104.99702	-95.276039	-97.106392
-98.588966	-99.720337	-103.93649	-94.822075	-105.88499	-97.349373	-96.796852	-98.109558
-103.25341	-118.9147	-99.354095	-95.885818	-104.7173	-106.0134	-94.924965	-97.211479
-109.54142	-104.01691	-102.91817	-115.22643	-99.89267	-108.20682	-120.86264	-99.284866
-99.306351	-104.85062	-100.79476	-100.92866	-122.85022	-100.57903	-100.73645	-101.39298
-94.09687	-107.76549	-114.09762	-94.602119	-99.413773	-98.166122	-99.770477	-100.36943
-98.147415	-98.161758	-106.66117	-96.588524	-117.43206	-97.230522	-100.57329	-100.47983
-101.8433	-109.33798	-99.776421	-96.350319	-107.36092	-109.68511	-95.058937	-98.739822

J5-J8	J6-J7	J6-J8	J7-J8	Max	Min	Max	Min
-97.244942	-92.057274	-98.047562	-94.323013	-4.5	-60	2	-0.5
-96.444191	-101.09325	-101.49994	-96.230492	-4.5	-60	2	-0.5
-105.11723	-94.219818	-105.46712	-92.254807	-4.5	-60	2	-0.5
-109.27032	-92.28302	-108.59481	-94.092171	-4.5	-60	2	-0.5
-109.50625	-94.139015	-104.60245	-96.177185	-4.5	-60	2	-0.5
-112.52002	-94.531906	-105.44991	-94.60936	-4.5	-60	2	-0.5
-116.32029	-95.632263	-109.17392	-95.959053	-4.5	-60	2	-0.5
-113.94203	-102.07752	-103.89109	-97.992363	-4.5	-60	2	-0.5
-116.88663	-98.206886	-109.27362	-98.205833	-4.5	-60	2	-0.5
-125.01176	-99.602112	-113.07681	-106.28265	-4.5	-60	2	-0.5
-111.74722	-100.05413	-106.82884	-104.10328	-4.5	-60	2	-0.5
-125.48269	-104.8369	-111.1487	-105.60302	-4.5	-60	2	-0.5
-114.28038	-111.41385	-113.40553	-105.84712	-4.5	-60	2	-0.5
-115.20927	-111.99235	-109.5682	-106.53413	-4.5	-60	2	-0.5
-107.58743	-109.2001	-112.81761	-107.41674	-4.5	-60	2	-0.5
-112.48373	-107.46564	-105.59088	-122.55834	-4.5	-60	2	-0.5
-110.47056	-117.12858	-122.19233	-106.59795	-4.5	-60	2	-0.5
-107.42182	-114.42986	-106.73577	-113.02235	-4.5	-60	2	-0.5
-115.02182	-108.18468	-117.1265	-113.25498	-4.5	-60	2	-0.5
-112.48998	-109.31864	-110.06212	-106.89804	-4.5	-60	2	-0.5
-117.15611	-122.46997	-114.40499	-112.81184	-4.5	-60	2	-0.5
-106.00697	-111.88548	-112.14167	-111.78561	-4.5	-60	2	-0.5
-117.67865	-106.49354	-115.16442	-111.20478	-4.5	-60	2	-0.5
-109.84801	-110.80647	-116.78431	-109.90728	-4.5	-60	2	-0.5
-106.74127	-112.37344	-111.09889	-111.32077	-4.5	-60	2	-0.5
-114.98174	-117.98099	-105.03156	-116.45814	-4.5	-60	2	-0.5
-118.8653	-113.52518	-107.92331	-111.70273	-4.5	-60	2	-0.5
-104.2834	-112.57821	-121.73148	-121.26802	-4.5	-60	2	-0.5
-112.50335	-116.84216	-111.34128	-113.44191	-4.5	-60	2	-0.5
-114.67282	-108.8806	-113.22291	-118.90118	-4.5	-60	2	-0.5
-111.81472	-117.90939	-111.14558	-110.28134	-4.5	-60	2	-0.5
-117.61417	-114.07553	-110.29162	-122.69471	-4.5	-60	2	-0.5
-116.87984	-123.96992	-108.87691	-108.83076	-4.5	-60	2	-0.5
-107.98126	-106.93353	-114.07713	-118.34429	-4.5	-60	2	-0.5
-108.16003	-118.0682	-115.91897	-116.56783	-4.5	-60	2	-0.5
-108.7187	-115.60908	-112.82896	-107.83468	-4.5	-60	2	-0.5
-121.91269	-107.42133	-110.61656	-119.63702	-4.5	-60	2	-0.5
-107.16367	-110.55866	-124.69662	-109.32792	-4.5	-60	2	-0.5
-107.82101	-109.87833	-110.13516	-118.60577	-4.5	-60	2	-0.5
-113.28245	-106.25227	-106.53983	-113.7601	-4.5	-60	2	-0.5

-109.00851	-109.98763	-111.55603	-109.40461	-4.5	-60	2	-0.5
-118.20849	-112.09588	-133.68042	-117.94424	-4.5	-60	2	-0.5
-111.50076	-123.33553	-112.29678	-120.33975	-4.5	-60	2	-0.5
-107.40039	-122.62289	-120.23787	-117.12857	-4.5	-60	2	-0.5
-128.37132	-108.02179	-106.85213	-107.18798	-4.5	-60	2	-0.5
-109.21641	-108.17809	-111.54838	-115.6898	-4.5	-60	2	-0.5
-109.4184	-113.94806	-110.30127	-113.10306	-4.5	-60	2	-0.5
-116.5603	-109.76607	-110.30952	-105.68266	-4.5	-60	2	-0.5
-108.6147	-114.79745	-109.63097	-116.14962	-4.5	-60	2	-0.5
-111.39497	-114.02434	-109.41279	-109.88345	-4.5	-60	2	-0.5
-120.22795	-110.30834	-107.70824	-126.5553	-4.5	-60	2	-0.5
-111.12566	-111.46539	-107.73533	-113.16436	-4.5	-60	2	-0.5
-121.11914	-113.03259	-115.48855	-111.21408	-4.5	-60	2	-0.5
-113.38255	-116.06334	-111.61997	-111.91268	-4.5	-60	2	-0.5
-121.45449	-105.64243	-124.41673	-107.4743	-4.5	-60	2	-0.5
-115.88711	-107.44937	-108.57516	-119.69968	-4.5	-60	2	-0.5
-115.51054	-115.64317	-127.36913	-111.1446	-4.5	-60	2	-0.5
-117.54606	-107.6603	-117.13242	-120.77782	-4.5	-60	2	-0.5
-113.65326	-110.48508	-119.6212	-111.58947	-4.5	-60	2	-0.5
-126.65121	-124.94598	-125.66638	-123.61459	-4.5	-60	2	-0.5
-114.81919	-108.16557	-118.71948	-112.52975	-4.5	-60	2	-0.5
-110.65491	-105.12204	-116.61842	-107.8755	-4.5	-60	2	-0.5
-110.47179	-105.77151	-106.17056	-109.64241	-4.5	-60	2	-0.5
-109.94491	-110.20097	-114.27361	-113.27332	-4.5	-60	2	-0.5
-119.3528	-116.94481	-110.95187	-123.00282	-4.5	-60	2	-0.5
-117.99126	-120.46053	-112.51704	-107.74957	-4.5	-60	2	-0.5
-113.02443	-122.80189	-105.5809	-111.51778	-4.5	-60	2	-0.5
-105.89767	-118.40195	-111.42622	-108.68878	-4.5	-60	2	-0.5
-115.32357	-120.82496	-118.84038	-111.52909	-4.5	-60	2	-0.5
-110.1816	-122.13889	-112.41174	-110.45544	-4.5	-60	2	-0.5
-109.95498	-109.24224	-114.03593	-114.49706	-4.5	-60	2	-0.5
-118.07898	-114.26487	-130.1481	-120.44125	-4.5	-60	2	-0.5
-113.81365	-117.3511	-111.71085	-115.34618	-4.5	-60	2	-0.5
-110.39935	-113.10413	-112.78582	-109.27354	-4.5	-60	2	-0.5
-121.61202	-111.33488	-126.95147	-112.95937	-4.5	-60	2	-0.5
-116.62757	-103.85468	-116.83239	-110.0471	-4.5	-60	2	-0.5
-116.18101	-115.20868	-116.4893	-121.48589	-4.5	-60	2	-0.5
-109.21774	-113.31821	-112.80186	-110.66738	-4.5	-60	2	-0.5
-108.86061	-114.29239	-118.60669	-121.93251	-4.5	-60	2	-0.5
-109.17677	-106.34197	-110.56719	-104.2893	-4.5	-60	2	-0.5
-113.33864	-114.05373	-129.8548	-120.55124	-4.5	-60	2	-0.5
-111.51759	-107.42976	-111.80522	-107.79396	-4.5	-60	2	-0.5
-111.59477	-114.23888	-110.11932	-117.40176	-4.5	-60	2	-0.5
-108.42862	-114.7058	-118.21451	-116.52235	-4.5	-60	2	-0.5
-124.25195	-116.0805	-106.99287	-110.7689	-4.5	-60	2	-0.5
-108.789	-121.80149	-113.13934	-112.49535	-4.5	-60	2	-0.5
-108.4494	-127.85713	-108.11363	-109.74397	-4.5	-60	2	-0.5
-109.62287	-112.79865	-115.07082	-107.46306	-4.5	-60	2	-0.5
-119.51331	-114.08436	-109.90698	-120.21501	-4.5	-60	2	-0.5
-115.69498	-117.68123	-132.16354	-119.69156	-4.5	-60	2	-0.5
-144.04573	-118.70541	-110.86394	-108.42687	-4.5	-60	2	-0.5
-129.11493	-110.08698	-112.75379	-108.79351	-4.5	-60	2	-0.5

-110.79333	-108.2928	-119.77973	-120.40295	-4.5	-60	2	-0.5
-121.96231	-107.13737	-114.11342	-111.93807	-4.5	-60	2	-0.5
-117.07684	-117.2133	-108.69672	-120.42331	-4.5	-60	2	-0.5
-115.76367	-104.96359	-120.3355	-104.68108	-4.5	-60	2	-0.5
-115.9222	-126.69852	-110.31099	-109.38768	-4.5	-60	2	-0.5
-106.42744	-109.54613	-111.86659	-110.21938	-4.5	-60	2	-0.5
-110.11149	-108.3133	-110.71761	-106.13699	-4.5	-60	2	-0.5
-123.79251	-114.59225	-111.31718	-104.48786	-4.5	-60	2	-0.5
-116.19141	-106.71221	-129.43916	-115.06176	-4.5	-60	2	-0.5
-118.25162	-109.80218	-109.097	-109.98954	-4.5	-60	2	-0.5
-116.8875	-116.5023	-111.462	-108.9529	-4.5	-60	2	-0.5
-115.63524	-110.43594	-107.9342	-108.66943	-4.5	-60	2	-0.5
-108.81698	-108.88582	-109.72629	-108.85927	-4.5	-60	2	-0.5
-106.61647	-130.93391	-99.851677	-103.49984	-4.5	-60	2	-0.5
-122.56015	-94.48436	-101.58289	-103.84908	-4.5	-60	2	-0.5
-97.03196	-101.99213	-103.7219	-107.87402	-4.5	-60	2	-0.5
-106.3253	-100.51245	-110.46841	-119.28141	-4.5	-60	2	-0.5
-110.54075	-100.67693	-102.7661	-100.3365	-4.5	-60	2	-0.5
-100.62505	-95.54435	-98.087486	-97.941238	-4.5	-60	2	-0.5
-96.891121	-105.22045	-105.35773	-99.472015	-4.5	-60	2	-0.5
-103.17252	-103.23614	-105.38657	-103.64789	-4.5	-60	2	-0.5
-113.80531	-110.84502	-98.428673	-118.18443	-4.5	-60	2	-0.5
-103.15132	-105.41026	-113.42208	-98.721375	-4.5	-60	2	-0.5
-104.78048	-95.91803	-104.77701	-101.11279	-4.5	-60	2	-0.5
-102.4321	-104.21624	-98.262672	-105.67015	-4.5	-60	2	-0.5
-98.807915	-101.3862	-107.33396	-107.84832	-4.5	-60	2	-0.5
-102.45777	-103.41489	-107.40791	-92.735382	-4.5	-60	2	-0.5
-100.68568	-101.4364	-105.53408	-113.06503	-4.5	-60	2	-0.5
-98.593925	-114.21712	-97.291374	-108.3249	-4.5	-60	2	-0.5
-107.08563	-107.92099	-98.191002	-107.62277	-4.5	-60	2	-0.5
-99.743118	-115.0996	-105.0919	-97.0252	-4.5	-60	2	-0.5
-108.34525	-107.74685	-108.74329	-97.672287	-4.5	-60	2	-0.5
-95.096848	-100.16002	-104.18768	-94.926666	-4.5	-60	2	-0.5
-97.960365	-96.008018	-97.861496	-99.308617	-4.5	-60	2	-0.5
-101.14504	-111.99143	-100.06567	-109.89012	-4.5	-60	2	-0.5
-103.30769	-94.815277	-97.258995	-109.11297	-4.5	-60	2	-0.5
-99.358589	-102.18104	-102.74767	-97.47567	-4.5	-60	2	-0.5
-96.492668	-100.7087	-98.209091	-104.21207	-4.5	-60	2	-0.5
-106.52422	-96.119606	-111.0904	-107.28961	-4.5	-60	2	-0.5
-108.87839	-96.584511	-99.695831	-108.68606	-4.5	-60	2	-0.5
-103.5211	-100.07991	-110.53262	-97.842415	-4.5	-60	2	-0.5
-109.19666	-110.56554	-97.810471	-96.699188	-4.5	-60	2	-0.5
-104.52113	-98.241211	-102.48965	-103.39281	-4.5	-60	2	-0.5
-94.712456	-98.86692	-105.7231	-102.16399	-4.5	-60	2	-0.5
-98.170616	-102.34551	-100.83088	-95.27211	-4.5	-60	2	-0.5
-104.39613	-95.360733	-105.98714	-117.64169	-4.5	-60	2	-0.5
-104.26989	-99.083519	-92.04834	-102.50685	-4.5	-60	2	-0.5
-93.270088	-98.092751	-98.530388	-92.436478	-4.5	-60	2	-0.5
-95.761818	-103.11236	-105.19566	-100.69307	-4.5	-60	2	-0.5
-101.77875	-105.28009	-102.50484	-104.44252	-4.5	-60	2	-0.5
-100.99463	-98.570618	-96.655212	-96.397331	-4.5	-60	2	-0.5
-98.219742	-108.17639	-98.906738	-98.095589	-4.5	-60	2	-0.5
-102.67211	-102.47945	-107.18472	-104.35527	-4.5	-60	2	-0.5
-113.27898	-117.00807	-99.390396	-104.02183	-4.5	-60	2	-0.5
-99.147026	-104.35268	-101.91628	-107.45274	-4.5	-60	2	-0.5

-97.929031	-104.61064	-102.98862	-107.29729	-4.5	-60	2	-0.5
-98.358109	-115.34733	-101.79259	-105.31163	-4.5	-60	2	-0.5
-105.05869	-102.0658	-103.44001	-100.03645	-4.5	-60	2	-0.5
-92.54686	-104.03854	-105.95565	-99.324348	-4.5	-60	2	-0.5
-99.515114	-101.28542	-95.959518	-119.31809	-4.5	-60	2	-0.5
-101.09102	-95.824318	-97.215813	-108.61252	-4.5	-60	2	-0.5
-98.06118	-94.586365	-104.57622	-100.15898	-4.5	-60	2	-0.5
-100.57617	-96.185242	-103.1102	-97.209267	-4.5	-60	2	-0.5
-102.93864	-96.055954	-105.51765	-103.92749	-4.5	-60	2	-0.5
-101.2244	-98.168526	-97.489197	-107.35645	-4.5	-60	2	-0.5
-99.866768	-99.802368	-97.489143	-101.93205	-4.5	-60	2	-0.5
-100.28317	-99.242638	-98.515823	-97.380783	-4.5	-60	2	-0.5
-96.509109	-100.92175	-100.44841	-93.351334	-4.5	-60	2	-0.5
-97.092476	-100.21845	-105.70296	-98.276939	-4.5	-60	2	-0.5
-105.44972	-103.96339	-95.988815	-96.285202	-4.5	-60	2	-0.5
-94.521675	-103.24249	-102.08825	-108.56609	-4.5	-60	2	-0.5
-103.55847	-98.543686	-112.49606	-100.8922	-4.5	-60	2	-0.5
-96.896255	-95.615807	-116.56457	-92.208771	-4.5	-60	2	-0.5
-105.50658	-98.77636	-97.865509	-100.20135	-4.5	-60	2	-0.5
-108.30445	-103.73999	-101.8826	-95.317055	-4.5	-60	2	-0.5
-104.95798	-96.498718	-96.732346	-98.501213	-4.5	-60	2	-0.5
-104.72798	-99.063148	-98.550316	-105.05965	-4.5	-60	2	-0.5
-104.17007	-99.08268	-97.126221	-100.76892	-4.5	-60	2	-0.5
-106.70092	-100.94242	-97.624451	-100.66257	-4.5	-60	2	-0.5
-105.01708	-111.95246	-106.93177	-121.90144	-4.5	-60	2	-0.5
-108.04577	-110.09628	-99.531654	-103.72816	-4.5	-60	2	-0.5
-105.78313	-103.07055	-106.5479	-102.62843	-4.5	-60	2	-0.5
-99.325089	-107.10452	-101.42428	-99.765617	-4.5	-60	2	-0.5
-100.43429	-97.06736	-103.19574	-98.405357	-4.5	-60	2	-0.5
-106.98607	-100.72582	-101.2312	-100.11093	-4.5	-60	2	-0.5
-93.69249	-103.87315	-115.37816	-97.072548	-4.5	-60	2	-0.5
-100.90813	-93.170509	-103.81509	-93.806335	-4.5	-60	2	-0.5
-97.782539	-101.79983	-97.124275	-101.11612	-4.5	-60	2	-0.5
-96.243217	-97.803452	-114.62049	-95.014885	-4.5	-60	2	-0.5
-103.08362	-96.550552	-99.766907	-100.41032	-4.5	-60	2	-0.5
-103.41442	-95.993065	-105.60339	-98.453171	-4.5	-60	2	-0.5
-99.844528	-99.459427	-114.21991	-93.255287	-4.5	-60	2	-0.5
-102.38921	-94.587433	-100.3651	-105.41124	-4.5	-60	2	-0.5
-101.35625	-110.82107	-101.92278	-105.54449	-4.5	-60	2	-0.5
-109.33418	-100.29773	-117.57333	-96.650124	-4.5	-60	2	-0.5
-109.06748	-122.45654	-99.083458	-97.742058	-4.5	-60	2	-0.5
-106.86115	-101.78845	-101.57327	-104.0346	-4.5	-60	2	-0.5
-105.83755	-100.95913	-102.76359	-106.04263	-4.5	-60	2	-0.5
-99.345749	-106.06821	-96.340149	-94.516991	-4.5	-60	2	-0.5
-104.08197	-97.265259	-97.789207	-97.656631	-4.5	-60	2	-0.5
-104.45856	-96.65213	-98.281342	-102.86007	-4.5	-60	2	-0.5
-129.3365	-97.159767	-99.466347	-100.82483	-4.5	-60	2	-0.5
-90.456604	-101.98988	-95.376396	-98.734711	-4.5	-60	2	-0.5
-101.20193	-103.52473	-104.84884	-94.119949	-4.5	-60	2	-0.5
-100.10651	-106.14168	-99.528534	-104.79396	-4.5	-60	2	-0.5
-97.366928	-108.63011	-100.59101	-99.986198	-4.5	-60	2	-0.5
-107.40255	-91.021881	-95.016136	-111.10207	-4.5	-60	2	-0.5
-98.15686	-92.209923	-110.06431	-94.607857	-4.5	-60	2	-0.5
-105.6151	-99.752335	-99.550156	-98.746017	-4.5	-60	2	-0.5

0.2 to 19 -5.09087

2 to 6 -2.03878

6 to 12 -3.0398

12 to 18 -4.2647

Insertion Loss

Max	Freq	J0-J1	J0-J2	J0-J3	J0-J4	J0-J5	J0-J6
0.5	0.1000	-4.76126	-3.25946	-3.08128	-3.35181	-3.23308	-3.23114
0.5	0.1995	-1.21372	-1.07178	-1.10924	-1.07723	-1.08423	-1.04979
0.5	0.2990	-0.90178	-0.80763	-0.84187	-0.80813	-0.83717	-0.79242
0.5	0.3985	-0.82452	-0.7507	-0.78198	-0.75816	-0.77474	-0.73937
0.5	0.4980	-0.82116	-0.75486	-0.77398	-0.74545	-0.7638	-0.72573
0.5	0.5975	-0.83839	-0.76973	-0.77828	-0.75603	-0.78161	-0.73173
0.5	0.6970	-0.84522	-0.76682	-0.794	-0.76778	-0.79408	-0.75052
0.5	0.7965	-0.85591	-0.78028	-0.81616	-0.77973	-0.82785	-0.77839
0.5	0.8960	-0.87916	-0.81848	-0.83353	-0.80998	-0.85165	-0.80622
0.5	0.9955	-0.89984	-0.83776	-0.85659	-0.82603	-0.86275	-0.82331
0.5	1.0950	-0.91764	-0.85092	-0.87693	-0.83769	-0.89801	-0.85623
0.5	1.1945	-0.9443	-0.87222	-0.90924	-0.87204	-0.91074	-0.86951
0.5	1.2940	-0.96531	-0.91355	-0.92113	-0.87979	-0.9386	-0.89733
0.5	1.3935	-0.99452	-0.95094	-0.97527	-0.9332	-0.9645	-0.928
0.5	1.4930	-1.02162	-0.96733	-0.99151	-0.9496	-0.99115	-0.95571
0.5	1.5925	-1.03326	-0.99427	-1.02383	-0.97545	-1.02391	-0.98794
0.5	1.6920	-1.06192	-1.00957	-1.04894	-0.99481	-1.04943	-0.9965
0.5	1.7915	-1.09365	-1.03272	-1.06096	-1.02346	-1.06116	-1.02139
0.5	1.8910	-1.10442	-1.0649	-1.09621	-1.04573	-1.09496	-1.03568
0.5	1.9905	-1.1302	-1.09605	-1.12214	-1.06916	-1.11205	-1.05102
0.5	2.0900	-1.16869	-1.13124	-1.17115	-1.09165	-1.14546	-1.09579
0.5	2.1895	-1.19343	-1.14072	-1.18801	-1.12357	-1.16796	-1.11015
0.5	2.2890	-1.21985	-1.18256	-1.21495	-1.14947	-1.20553	-1.13856
0.5	2.3885	-1.23522	-1.19788	-1.22411	-1.15802	-1.20134	-1.15011
0.5	2.4880	-1.26001	-1.19267	-1.24447	-1.20294	-1.23743	-1.16542
0.5	2.5875	-1.3097	-1.2635	-1.31874	-1.2296	-1.28292	-1.22072
0.5	2.6870	-1.3453	-1.2939	-1.34752	-1.26974	-1.32246	-1.24805
0.5	2.7865	-1.39406	-1.34485	-1.38813	-1.31112	-1.37985	-1.29461
0.5	2.8860	-1.44451	-1.40617	-1.47115	-1.37719	-1.42219	-1.36489
0.5	2.9855	-1.52705	-1.46505	-1.55162	-1.43922	-1.49401	-1.43833
0.5	3.0850	-1.57592	-1.51488	-1.59398	-1.51526	-1.54903	-1.48978
0.5	3.1845	-1.61936	-1.54329	-1.63733	-1.55165	-1.56714	-1.53003
0.5	3.2840	-1.6435	-1.5654	-1.6382	-1.57802	-1.60072	-1.54481
0.5	3.3835	-1.65144	-1.55326	-1.62119	-1.59502	-1.56759	-1.53852
0.5	3.4830	-1.65634	-1.57264	-1.62119	-1.60843	-1.56981	-1.54611
0.5	3.5825	-1.61447	-1.5458	-1.59345	-1.58073	-1.57823	-1.53969
0.5	3.6820	-1.58827	-1.52324	-1.5773	-1.55595	-1.56457	-1.52361
0.5	3.7815	-1.63107	-1.55676	-1.59217	-1.57796	-1.58507	-1.54669
0.5	3.8810	-1.60414	-1.57911	-1.61306	-1.59901	-1.57904	-1.57524
0.5	3.9805	-1.64504	-1.5961	-1.61859	-1.5954	-1.63103	-1.61811

0.5	4.0800	-1.62114	-1.56869	-1.6234	-1.61757	-1.63459	-1.62893
0.5	4.1795	-1.65622	-1.64199	-1.67902	-1.66204	-1.68477	-1.69056
0.5	4.2790	-1.68441	-1.66769	-1.72027	-1.70216	-1.73462	-1.75031
0.5	4.3785	-1.71248	-1.72228	-1.75856	-1.74308	-1.74868	-1.78381
0.5	4.4780	-1.7222	-1.71727	-1.77855	-1.76931	-1.80728	-1.80271
0.5	4.5775	-1.77225	-1.77671	-1.80387	-1.82307	-1.84303	-1.88885
0.5	4.6770	-1.77498	-1.79722	-1.83809	-1.84887	-1.87423	-1.91407
0.5	4.7765	-1.81545	-1.84011	-1.87083	-1.89597	-1.90694	-1.95609
0.5	4.8760	-1.84189	-1.83467	-1.85583	-1.92533	-1.89943	-1.98548
0.5	4.9755	-1.82471	-1.81336	-1.85275	-1.91851	-1.96389	-1.98259
0.5	5.0750	-1.81149	-1.83691	-1.87683	-1.9147	-1.93404	-2.00256
0.5	5.1745	-1.80313	-1.84397	-1.87272	-1.93256	-1.93819	-2.00871
0.5	5.2740	-1.77006	-1.82715	-1.85969	-1.90831	-1.92558	-1.98236
0.5	5.3735	-1.74269	-1.83224	-1.8509	-1.90527	-1.91208	-1.97552
0.5	5.4730	-1.74746	-1.85052	-1.88417	-1.91092	-1.92299	-1.97848
0.5	5.5725	-1.75358	-1.81332	-1.84948	-1.89834	-1.92025	-2.00839
0.5	5.6720	-1.74056	-1.79008	-1.88059	-1.89308	-1.93229	-1.98499
0.5	5.7715	-1.75554	-1.82625	-1.90747	-1.89996	-1.94851	-2.01412
0.5	5.8710	-1.73512	-1.8218	-1.89836	-1.91131	-1.94869	-2.01762
0.5	5.9705	-1.7602	-1.80159	-1.91717	-1.88737	-1.94847	-2.0204
0.5	6.0700	-1.75858	-1.82154	-1.96439	-1.91553	-1.9687	-2.03878
0.5	6.1695	-1.7775	-1.84269	-1.96559	-1.93257	-1.99025	-2.03539
0.5	6.2690	-1.78031	-1.85908	-1.99849	-1.93835	-1.99926	-2.03122
0.5	6.3685	-1.80397	-1.85031	-1.9891	-1.94577	-1.99595	-2.02232
0.5	6.4680	-1.80827	-1.87633	-2.00952	-1.96327	-2.02379	-2.03346
0.5	6.5675	-1.83745	-1.89645	-2.03046	-1.99794	-2.04598	-2.06717
0.5	6.6670	-1.85563	-1.89466	-2.03997	-1.97174	-2.02104	-2.05666
0.5	6.7665	-1.87466	-1.91544	-2.07527	-1.99827	-2.05519	-2.07822
0.5	6.8660	-1.91263	-1.93247	-2.07828	-2.02587	-2.06039	-2.07073
0.5	6.9655	-1.93898	-1.95461	-2.12615	-2.01807	-2.05989	-2.09486
0.5	7.0650	-1.92642	-1.95301	-2.08764	-2.04669	-2.08321	-2.07866
0.5	7.1645	-1.9856	-2.02138	-2.12975	-2.05505	-2.08982	-2.1053
0.5	7.2640	-1.99464	-2.00507	-2.13072	-2.04645	-2.08935	-2.11208
0.5	7.3635	-2.01001	-2.01506	-2.12937	-2.04817	-2.1068	-2.09405
0.5	7.4630	-2.03765	-2.02677	-2.15836	-2.07786	-2.14644	-2.08924
0.5	7.5625	-2.04925	-2.10528	-2.16457	-2.07283	-2.1156	-2.10797
0.5	7.6620	-2.08656	-2.07888	-2.18883	-2.10833	-2.1699	-2.12439
0.5	7.7615	-2.1298	-2.10037	-2.20963	-2.11687	-2.16225	-2.15026
0.5	7.8610	-2.17103	-2.1445	-2.22613	-2.14273	-2.20251	-2.16485
0.5	7.9605	-2.19472	-2.13468	-2.23632	-2.15364	-2.21213	-2.1659
0.5	8.0600	-2.25177	-2.15691	-2.23202	-2.1736	-2.21445	-2.19204
0.5	8.1595	-2.28002	-2.16913	-2.27392	-2.18334	-2.24954	-2.17785
0.5	8.2590	-2.30456	-2.17736	-2.28943	-2.17394	-2.27322	-2.19918
0.5	8.3585	-2.35844	-2.23665	-2.3498	-2.21187	-2.29927	-2.2194
0.5	8.4580	-2.41135	-2.24182	-2.36176	-2.2244	-2.34614	-2.21452
0.5	8.5575	-2.44199	-2.29395	-2.43204	-2.22556	-2.34468	-2.2281
0.5	8.6570	-2.45632	-2.30695	-2.41478	-2.31051	-2.42823	-2.24034
0.5	8.7565	-2.49946	-2.29722	-2.415	-2.28529	-2.37567	-2.24032
0.5	8.8560	-2.56318	-2.35557	-2.47987	-2.3294	-2.4187	-2.2845
0.5	8.9555	-2.59035	-2.35333	-2.50587	-2.33053	-2.45234	-2.28635
0.5	9.0550	-2.57238	-2.38023	-2.52134	-2.32269	-2.40871	-2.29907
0.5	9.1545	-2.61232	-2.34122	-2.48029	-2.37059	-2.48283	-2.29137

0.5	9.2540	-2.61158	-2.2663	-2.49485	-2.37504	-2.4099	-2.23485
0.5	9.3535	-2.62895	-2.35935	-2.50441	-2.33648	-2.46077	-2.27568
0.5	9.4530	-2.66192	-2.36844	-2.5163	-2.38217	-2.48068	-2.30197
0.5	9.5525	-2.65885	-2.38783	-2.49142	-2.41838	-2.49095	-2.29089
0.5	9.6520	-2.69729	-2.40535	-2.5285	-2.40703	-2.55785	-2.30729
0.5	9.7515	-2.68916	-2.3816	-2.53208	-2.41429	-2.48963	-2.33441
0.5	9.8510	-2.75163	-2.4304	-2.58418	-2.45301	-2.55205	-2.3749
0.5	9.9505	-2.70261	-2.33561	-2.49282	-2.39915	-2.47155	-2.30085
0.5	10.0500	-2.78663	-2.40424	-2.55122	-2.52387	-2.51361	-2.37505
0.5	10.1495	-2.79317	-2.42156	-2.62159	-2.4559	-2.5259	-2.35789
0.5	10.2490	-2.78301	-2.40997	-2.56506	-2.52146	-2.57189	-2.3969
0.5	10.3485	-2.84544	-2.45679	-2.60672	-2.53913	-2.59998	-2.42399
0.5	10.4480	-2.80254	-2.43788	-2.57742	-2.51857	-2.56427	-2.43063
0.5	10.5475	-2.83739	-2.42697	-2.55776	-2.48458	-2.54278	-2.45043
0.5	10.6470	-2.79661	-2.41609	-2.56607	-2.50758	-2.55616	-2.4149
0.5	10.7465	-2.85724	-2.48723	-2.54864	-2.48221	-2.55953	-2.4584
0.5	10.8460	-2.90715	-2.52191	-2.65108	-2.5834	-2.56275	-2.48014
0.5	10.9455	-2.93797	-2.5019	-2.62011	-2.55025	-2.57453	-2.45906
0.5	11.0450	-2.94963	-2.54993	-2.63988	-2.60517	-2.62548	-2.53038
0.5	11.1445	-2.95557	-2.53055	-2.59154	-2.58757	-2.64551	-2.52094
0.5	11.2440	-2.90439	-2.44768	-2.55408	-2.51238	-2.51671	-2.51256
0.5	11.3435	-2.9224	-2.50676	-2.62556	-2.62087	-2.58628	-2.55858
0.5	11.4430	-2.9604	-2.49934	-2.61859	-2.5977	-2.549	-2.48938
0.5	11.5425	-2.99709	-2.53678	-2.62712	-2.58253	-2.58064	-2.56018
0.5	11.6420	-2.95531	-2.49214	-2.69507	-2.54208	-2.55573	-2.49647
0.5	11.7415	-2.95751	-2.53321	-2.65081	-2.58528	-2.54883	-2.49651
0.5	11.8410	-3.03984	-2.54086	-2.64251	-2.61341	-2.56257	-2.55623
0.5	11.9405	-3.00316	-2.50154	-2.64729	-2.57962	-2.63061	-2.55183
0.5	12.0400	-3.02888	-2.54409	-2.67272	-2.59349	-2.60026	-2.50639
0.5	12.1395	-3.0597	-2.55841	-2.65488	-2.56024	-2.63295	-2.53713
0.5	12.2390	-3.06067	-2.60018	-2.64909	-2.57957	-2.60597	-2.5163
0.5	12.3385	-3.02078	-2.58116	-2.68796	-2.6009	-2.62958	-2.49647
0.5	12.4380	-3.02202	-2.60009	-2.6703	-2.54517	-2.63885	-2.51711
0.5	12.5375	-3.04104	-2.57154	-2.68797	-2.57035	-2.6555	-2.55413
0.5	12.6370	-3.06956	-2.61826	-2.69202	-2.58355	-2.65633	-2.52411
0.5	12.7365	-3.10341	-2.56932	-2.70856	-2.55949	-2.70589	-2.5396
0.5	12.8360	-3.16665	-2.63261	-2.64865	-2.55963	-2.65961	-2.52175
0.5	12.9355	-3.1089	-2.65873	-2.71501	-2.62885	-2.7444	-2.58045
0.5	13.0350	-3.11615	-2.64397	-2.66436	-2.5843	-2.71627	-2.59142
0.5	13.1345	-3.09638	-2.60296	-2.65182	-2.58337	-2.74439	-2.52466
0.5	13.2340	-3.19332	-2.77908	-2.71961	-2.67123	-2.84734	-2.67566
0.5	13.3335	-3.17156	-2.77804	-2.68374	-2.64246	-2.85024	-2.59896
0.5	13.4330	-3.22856	-2.7513	-2.82347	-2.70478	-2.87063	-2.6483
0.5	13.5325	-3.20373	-2.76335	-2.796	-2.6495	-2.87625	-2.70737
0.5	13.6320	-3.24402	-2.81699	-2.83731	-2.71248	-2.94734	-2.67454
0.5	13.7315	-3.2981	-2.82172	-2.79942	-2.75967	-3.00604	-2.70386
0.5	13.8310	-3.28957	-2.78255	-2.78525	-2.7316	-2.941	-2.7109
0.5	13.9305	-3.31786	-2.86962	-2.8467	-2.77145	-3.00216	-2.77545
0.5	14.0300	-3.30412	-2.90282	-2.82362	-2.73911	-3.0429	-2.70146
0.5	14.1295	-3.34597	-2.87717	-2.87407	-2.78549	-3.07514	-2.7486
0.5	14.2290	-3.31526	-2.93498	-2.90566	-2.79377	-3.11743	-2.8212
0.5	14.3285	-3.44055	-2.94222	-2.92069	-2.79726	-3.15297	-2.78338
0.5	14.4280	-3.42004	-3.06536	-2.91416	-2.77511	-3.21044	-2.85955
0.5	14.5275	-3.42425	-3.05689	-3.00948	-2.7821	-3.14291	-2.8714
0.5	14.6270	-3.44694	-2.98295	-2.89381	-2.86557	-3.1816	-2.85782

0.5	14.7265	-3.4229	-3.03915	-2.92464	-2.84531	-3.2282	-2.80333
0.5	14.8260	-3.41196	-2.91977	-2.90355	-2.76889	-3.23332	-2.79853
0.5	14.9255	-3.61599	-3.19643	-3.10153	-2.95458	-3.34938	-2.92232
0.5	15.0250	-3.59839	-3.04025	-2.94174	-2.89725	-3.24719	-2.91941
0.5	15.1245	-3.52023	-3.07269	-2.97221	-2.89646	-3.29404	-2.90801
0.5	15.2240	-3.48622	-3.09107	-2.93777	-2.89602	-3.2342	-2.85185
0.5	15.3235	-3.62193	-3.20178	-3.00986	-2.92572	-3.37272	-2.99568
0.5	15.4230	-3.59669	-3.19363	-2.97627	-2.96925	-3.39972	-2.96394
0.5	15.5225	-3.6694	-3.16674	-2.96019	-3.07301	-3.25676	-2.99755
0.5	15.6220	-3.54944	-3.15134	-2.97643	-3.0474	-3.36461	-3.0343
0.5	15.7215	-3.53874	-3.2067	-3.0933	-3.06918	-3.33353	-3.00991
0.5	15.8210	-3.52141	-3.23945	-3.03936	-3.13969	-3.35266	-3.10921
0.5	15.9205	-3.59415	-3.29351	-3.14597	-3.14216	-3.39781	-3.17636
0.5	16.0200	-3.60622	-3.2502	-3.12946	-3.18144	-3.38404	-3.16289
0.5	16.1195	-3.58548	-3.261	-3.11122	-3.21356	-3.3642	-3.18069
0.5	16.2190	-3.58396	-3.32576	-3.19592	-3.3249	-3.36448	-3.20373
0.5	16.3185	-3.58675	-3.28279	-3.1918	-3.24691	-3.3109	-3.16603
0.5	16.4180	-3.61013	-3.24808	-3.30338	-3.40778	-3.28646	-3.23741
0.5	16.5175	-3.71573	-3.47425	-3.26583	-3.47021	-3.49293	-3.31061
0.5	16.6170	-3.61588	-3.44384	-3.38463	-3.49314	-3.4764	-3.41603
0.5	16.7165	-3.7088	-3.45199	-3.39278	-3.50029	-3.44372	-3.4362
0.5	16.8160	-3.69637	-3.40748	-3.44525	-3.45205	-3.41323	-3.42952
0.5	16.9155	-3.64806	-3.32783	-3.41593	-3.41805	-3.39888	-3.40089
0.5	17.0150	-3.8217	-3.44761	-3.585	-3.43125	-3.49654	-3.51295
0.5	17.1145	-3.72233	-3.47394	-3.49906	-3.40983	-3.45909	-3.42276
0.5	17.2140	-3.77813	-3.42717	-3.55462	-3.32141	-3.4289	-3.45119
0.5	17.3135	-3.79517	-3.49081	-3.64155	-3.49295	-3.50689	-3.5472
0.5	17.4130	-3.85067	-3.49737	-3.72654	-3.54796	-3.59322	-3.58905
0.5	17.5125	-3.94055	-3.55653	-3.81389	-3.54871	-3.56464	-3.62928
0.5	17.6120	-3.87057	-3.52809	-3.78144	-3.61155	-3.6229	-3.59715
0.5	17.7115	-3.87218	-3.47742	-3.83234	-3.53185	-3.73543	-3.56983
0.5	17.8110	-4.0279	-3.63712	-3.74061	-3.58732	-3.70183	-3.61555
0.5	17.9105	-4.08264	-3.6111	-3.8117	-3.60885	-3.71877	-3.69762
0.5	18.0100	-4.11967	-3.71771	-3.92856	-3.72961	-3.78777	-3.67789
0.5	18.1095	-4.16724	-3.68596	-3.86607	-3.61693	-3.75727	-3.74185
0.5	18.2090	-4.23159	-3.73619	-3.88118	-3.7683	-3.82113	-3.72961
0.5	18.3085	-4.30108	-3.82365	-3.8893	-3.78387	-3.81423	-3.72424
0.5	18.4080	-4.46327	-3.91039	-4.07109	-3.89998	-4.02808	-3.83583
0.5	18.5075	-4.53832	-3.85597	-4.08543	-3.88364	-3.97503	-3.90314
0.5	18.6070	-4.55863	-4.00928	-4.12977	-3.87841	-3.99128	-3.85805
0.5	18.7065	-4.65798	-3.98496	-4.15853	-3.97932	-4.13129	-3.87594
0.5	18.8060	-4.93566	-4.15481	-4.37837	-4.23831	-4.19192	-4.18841
0.5	18.9055	-4.93301	-4.17467	-4.37995	-4.16149	-4.18431	-4.04736
0.5	19.0050	-5.09087	-4.21569	-4.46233	-4.25283	-4.23264	-4.12486
0.5	19.1045	-5.22024	-4.18895	-4.67485	-4.34828	-4.37048	-4.23972
0.5	19.2040	-5.45116	-4.29008	-4.8751	-4.53436	-4.48553	-4.52442
0.5	19.3035	-5.66528	-4.3828	-4.78885	-4.65764	-4.52394	-4.37865
0.5	19.4030	-5.73968	-4.54463	-4.9643	-4.78909	-4.65322	-4.62189
0.5	19.5025	-5.73229	-4.3767	-4.93764	-4.64364	-4.53616	-4.41553
0.5	19.6020	-5.92737	-4.57428	-5.06509	-4.76942	-4.75508	-4.5797
0.5	19.7015	-6.16462	-4.68557	-5.2997	-5.01295	-4.95749	-4.7552
0.5	19.8010	-6.15152	-4.73427	-5.34379	-4.97951	-4.93766	-4.76946
0.5	19.9005	-6.47952	-4.82348	-5.38295	-5.06288	-4.92554	-4.83687
0.5	20.0000	-6.60761	-4.92555	-5.53416	-5.15997	-5.18818	-4.95996

-3.88815 -3.02839 -3.35266 -3.12581 -3.16682 -3.02788

		Flatness Peak Max-Peak Min /2						
J0-J7	J0-J8	Freq	Flatness J1	Flatness J2	Flatness J3	Flatness J4	Flatness J5	Flatness J6
-3.4672	-3.49073	0.1	-0.87311	-0.23106	0.271378	-0.226	-0.06626	-0.20326
-1.13037	-1.09898	0.1995	2.67443	1.956611	2.243416	2.048575	2.082589	1.978085
-0.84547	-0.81038	0.299	2.986365	2.220759	2.510782	2.317677	2.329653	2.235456
-0.79036	-0.75824	0.3985	3.063627	2.277692	2.570672	2.367647	2.392086	2.288502
-0.78484	-0.75841	0.498	3.066984	2.273529	2.578672	2.380361	2.403019	2.302142
-0.80045	-0.7617	0.5975	3.04976	2.258658	2.574375	2.369776	2.385209	2.296145
-0.8046	-0.77527	0.697	3.042926	2.261571	2.558659	2.358032	2.372739	2.277359
-0.81617	-0.80764	0.7965	3.03224	2.24811	2.536501	2.34608	2.338971	2.249481
-0.84666	-0.83317	0.896	3.008987	2.209912	2.519123	2.315833	2.315167	2.22165
-0.87234	-0.85458	0.9955	2.988307	2.190631	2.496067	2.299782	2.304068	2.204567
-0.89655	-0.89479	1.095	2.970504	2.177469	2.475729	2.288121	2.268813	2.171649
-0.92386	-0.9132	1.1945	2.943846	2.156169	2.443413	2.25377	2.256082	2.158364
-0.93653	-0.95466	1.294	2.922833	2.114846	2.431529	2.246019	2.228226	2.130541
-0.9861	-0.99569	1.3935	2.893629	2.07745	2.377385	2.192613	2.20232	2.099875
-1.01577	-1.01674	1.493	2.866523	2.061058	2.361143	2.176205	2.175675	2.072166
-1.04941	-1.05931	1.5925	2.854885	2.034124	2.328831	2.150356	2.142907	2.039932
-1.05996	-1.07974	1.692	2.826229	2.018821	2.303713	2.130995	2.117389	2.031372
-1.0992	-1.10992	1.7915	2.794496	1.995671	2.2917	2.10235	2.105666	2.00649
-1.12671	-1.14745	1.891	2.783731	1.963489	2.256449	2.080078	2.071858	1.992198
-1.14602	-1.18434	1.9905	2.757948	1.932337	2.230513	2.056653	2.054773	1.976853
-1.18854	-1.21639	2.09	2.71946	1.897156	2.181509	2.034161	2.021362	1.932086
-1.2116	-1.24816	2.1895	2.694714	1.887674	2.164649	2.002242	1.998862	1.917725
-1.24276	-1.28024	2.289	2.668296	1.845828	2.137703	1.976343	1.961295	1.889315
-1.24977	-1.29735	2.3885	2.65293	1.830508	2.128545	1.967786	1.965478	1.877769
-1.2797	-1.31373	2.488	2.628136	1.835721	2.108185	1.922873	1.929389	1.862452
-1.33874	-1.38361	2.5875	2.578445	1.764894	2.033919	1.896206	1.883902	1.807158
-1.3638	-1.41287	2.687	2.542842	1.734496	2.005138	1.856074	1.844364	1.779825
-1.41879	-1.46335	2.7865	2.494081	1.683541	1.964524	1.814684	1.786968	1.733262
-1.47628	-1.53801	2.886	2.443638	1.622216	1.881503	1.74862	1.744632	1.662983
-1.55452	-1.58973	2.9855	2.361092	1.563339	1.801035	1.686588	1.672814	1.589545
-1.62694	-1.67886	3.085	2.312231	1.513508	1.758676	1.610549	1.617788	1.538097
-1.65538	-1.72444	3.1845	2.268786	1.485099	1.715329	1.574161	1.599683	1.497842
-1.69293	-1.7445	3.284	2.244645	1.462989	1.714452	1.547791	1.566097	1.483069
-1.67436	-1.72624	3.3835	2.236704	1.475134	1.731467	1.530793	1.599228	1.489351
-1.68575	-1.73803	3.483	2.231804	1.455748	1.731463	1.517383	1.597013	1.481768
-1.66564	-1.70384	3.5825	2.273675	1.482591	1.759204	1.545082	1.588593	1.488188
-1.63651	-1.68807	3.682	2.299875	1.505148	1.775359	1.569863	1.602255	1.504268
-1.61565	-1.69077	3.7815	2.257078	1.471633	1.760488	1.547848	1.581748	1.481186
-1.64924	-1.69286	3.881	2.284002	1.449283	1.739597	1.526801	1.58778	1.452637
-1.65853	-1.70703	3.9805	2.243102	1.432291	1.734067	1.53041	1.535793	1.409762

-1.66101	-1.70088	4.08	2.267006	1.459701	1.72926	1.508243	1.532227	1.398948
-1.69864	-1.73586	4.1795	2.231926	1.386404	1.673635	1.463765	1.482048	1.337316
-1.72605	-1.7799	4.279	2.203739	1.360699	1.632386	1.42365	1.432197	1.277562
-1.76726	-1.79573	4.3785	2.175661	1.306108	1.594099	1.382729	1.418145	1.244068
-1.79893	-1.82156	4.478	2.165947	1.311118	1.574108	1.356497	1.359541	1.225164
-1.85003	-1.86214	4.5775	2.115891	1.251681	1.548788	1.302738	1.323795	1.139028
-1.87219	-1.89565	4.677	2.11317	1.231167	1.514565	1.276943	1.292587	1.113804
-1.90214	-1.95772	4.7765	2.072695	1.188277	1.481821	1.22984	1.259884	1.071783
-1.89196	-1.95958	4.876	2.04626	1.193718	1.496822	1.200481	1.267392	1.042398
-1.90089	-1.95016	4.9755	2.063438	1.215026	1.499902	1.207297	1.20293	1.045282
-1.89917	-1.96061	5.075	2.076658	1.191484	1.475826	1.211113	1.232778	1.025312
-1.91987	-1.95227	5.1745	2.08502	1.184423	1.479932	1.193248	1.228634	1.019161
-1.88076	-1.90288	5.274	2.118084	1.20124	1.492971	1.217499	1.241244	1.045519
-1.88037	-1.89583	5.3735	2.145455	1.196147	1.501752	1.220536	1.254741	1.052351
-1.87871	-1.89396	5.473	2.140681	1.177869	1.468489	1.214887	1.243833	1.049394
-1.86936	-1.87736	5.5725	2.134562	1.215071	1.503174	1.227466	1.246573	1.019489
-1.88365	-1.88682	5.672	2.147582	1.238314	1.472062	1.232725	1.234536	1.042882
-1.88647	-1.91487	5.7715	2.132607	1.20214	1.445183	1.225845	1.218309	1.013758
-1.87107	-1.91149	5.871	2.153022	1.206596	1.454298	1.214494	1.218127	1.010253
-1.88311	-1.90334	5.9705	2.127951	1.226796	1.435482	1.238442	1.218355	1.007477
-1.90292	-1.91905	6.07	2.129569	1.206848	1.388271	1.210281	1.19812	0.989099
-1.92386	-1.93708	6.1695	2.110649	1.185697	1.38707	1.193234	1.176572	0.992487
-1.93179	-1.95675	6.269	2.107835	1.169308	1.354165	1.187455	1.167563	0.996652
-1.92718	-1.97561	6.3685	2.084176	1.178082	1.363559	1.180035	1.170871	1.005553
-1.93945	-1.9994	6.468	2.079881	1.152059	1.343136	1.162542	1.143027	0.994411
-1.96111	-2.04032	6.5675	2.050697	1.131939	1.3222	1.127871	1.120839	0.960702
-1.97083	-2.04162	6.667	2.03252	1.133734	1.312689	1.154067	1.14578	0.971216
-1.99755	-2.08285	6.7665	2.01349	1.112955	1.277387	1.127543	1.111632	0.949651
-2.00228	-2.11085	6.866	1.97552	1.095917	1.274379	1.099939	1.106437	0.957149
-2.05593	-2.14672	6.9655	1.949166	1.073779	1.226502	1.107739	1.106929	0.933013
-1.99977	-2.13706	7.065	1.961728	1.07538	1.265016	1.079122	1.083609	0.949218
-2.03577	-2.19732	7.1645	1.90255	1.007015	1.222908	1.070761	1.077002	0.92258
-2.05365	-2.21119	7.264	1.893508	1.02332	1.221932	1.079361	1.077468	0.915797
-2.06364	-2.22068	7.3635	1.878136	1.013332	1.223289	1.077639	1.060023	0.933822
-2.07483	-2.25864	7.463	1.850492	1.001626	1.194299	1.047952	1.020378	0.938639
-2.07368	-2.29361	7.5625	1.838897	0.923113	1.188083	1.052976	1.051222	0.91991
-2.09331	-2.33532	7.662	1.801582	0.949507	1.163825	1.017476	0.996922	0.903488
-2.1416	-2.33838	7.7615	1.758347	0.928021	1.143031	1.008943	1.004572	0.877617
-2.14425	-2.39609	7.861	1.717112	0.883896	1.126529	0.983081	0.964307	0.863021
-2.15839	-2.41066	7.9605	1.693421	0.893708	1.116339	0.972165	0.95469	0.861972
-2.16778	-2.43395	8.06	1.636377	0.871486	1.120638	0.952205	0.952372	0.835836
-2.20544	-2.42277	8.1595	1.608129	0.859257	1.078736	0.942464	0.917284	0.850026
-2.21588	-2.46992	8.259	1.58359	0.851026	1.063228	0.95187	0.893602	0.828693
-2.23202	-2.52667	8.3585	1.529709	0.79174	1.002853	0.913935	0.867553	0.808476
-2.26374	-2.55267	8.458	1.476792	0.786574	0.990898	0.901408	0.820686	0.813354
-2.26759	-2.55892	8.5575	1.446152	0.734445	0.920612	0.900246	0.822142	0.799772
-2.25801	-2.59109	8.657	1.431827	0.721444	0.937881	0.815299	0.738593	0.787539
-2.28913	-2.59756	8.7565	1.388685	0.731168	0.937658	0.840514	0.791154	0.787553
-2.33712	-2.62656	8.856	1.324968	0.672821	0.872788	0.796406	0.748126	0.743372
-2.35793	-2.64724	8.9555	1.297798	0.675057	0.846782	0.795275	0.714484	0.741521
-2.32221	-2.63438	9.055	1.315765	0.648165	0.831311	0.803118	0.75811	0.728801
-2.42313	-2.62258	9.1545	1.275824	0.687171	0.872369	0.755215	0.683993	0.736507

-2.3576	-2.58266	9.254	1.276562	0.762092	0.857803	0.750767	0.756917	0.793022
-2.37861	-2.60913	9.3535	1.259197	0.669042	0.84825	0.789324	0.706048	0.75219
-2.41609	-2.63826	9.453	1.226229	0.65995	0.836359	0.743635	0.686146	0.725903
-2.47233	-2.63226	9.5525	1.229294	0.640564	0.861233	0.707427	0.675873	0.73699
-2.47743	-2.62177	9.652	1.190858	0.623041	0.824152	0.718781	0.608971	0.720589
-2.45108	-2.62199	9.7515	1.198985	0.646792	0.820572	0.711518	0.677194	0.693461
-2.54658	-2.67388	9.851	1.136516	0.597993	0.768473	0.672798	0.614767	0.652979
-2.49115	-2.57131	9.9505	1.18554	0.692781	0.859837	0.726655	0.69527	0.727025
-2.58869	-2.61699	10.05	1.10152	0.624149	0.801434	0.601937	0.653211	0.652823
-2.57404	-2.62391	10.1495	1.09498	0.606827	0.731063	0.669909	0.640926	0.669987
-2.6006	-2.66739	10.249	1.105135	0.618419	0.787601	0.604344	0.594927	0.630971
-2.70455	-2.68794	10.3485	1.042703	0.571599	0.74594	0.586676	0.566842	0.603889
-2.6781	-2.66011	10.448	1.085608	0.590508	0.775237	0.607236	0.60255	0.597242
-2.70997	-2.65826	10.5475	1.050758	0.601417	0.794899	0.641233	0.624044	0.577448
-2.69148	-2.6833	10.647	1.091538	0.612301	0.786585	0.618226	0.610662	0.61297
-2.806	-2.68391	10.7465	1.030906	0.541162	0.804014	0.643602	0.607287	0.569475
-2.85873	-2.68494	10.846	0.981001	0.50648	0.701574	0.542406	0.604069	0.547733
-2.77609	-2.73643	10.9455	0.950173	0.526492	0.732545	0.575558	0.592288	0.568814
-2.87863	-2.75619	11.045	0.938513	0.478458	0.712776	0.520643	0.541337	0.497498
-2.89368	-2.77966	11.1445	0.932578	0.497843	0.761115	0.538238	0.521312	0.506931
-2.84071	-2.76643	11.244	0.983755	0.580714	0.798573	0.613428	0.650109	0.515317
-2.94532	-2.84065	11.3435	0.965747	0.521627	0.727101	0.504943	0.580542	0.469293
-2.90844	-2.75513	11.443	0.927749	0.529053	0.734071	0.528106	0.617822	0.538492
-2.92259	-2.84382	11.5425	0.891052	0.49161	0.725532	0.54328	0.586184	0.467694
-2.92931	-2.79896	11.642	0.932832	0.536251	0.657586	0.583727	0.611095	0.531403
-2.89903	-2.84968	11.7415	0.930634	0.495183	0.70185	0.54053	0.617993	0.531367
-2.96742	-2.93941	11.841	0.848304	0.48753	0.710144	0.512397	0.604252	0.471646
-2.89539	-2.90501	11.9405	0.884989	0.52685	0.705371	0.546193	0.536213	0.47605
-2.93623	-2.90718	12.04	0.859263	0.484302	0.679933	0.532315	0.566559	0.521483
-2.94487	-2.96757	12.1395	0.828444	0.469985	0.697776	0.565564	0.533871	0.490749
-2.91094	-2.99659	12.239	0.827478	0.428212	0.703567	0.546235	0.560851	0.511577
-3.0061	-3.01552	12.3385	0.867362	0.447232	0.664693	0.524907	0.537245	0.531403
-2.93878	-2.98081	12.438	0.866123	0.4283	0.682361	0.580636	0.527973	0.510764
-2.94644	-3.01687	12.5375	0.847103	0.45685	0.664683	0.555461	0.511317	0.473743
-2.9627	-3.03324	12.637	0.818587	0.410135	0.660636	0.542255	0.510492	0.503769
-2.98189	-3.04705	12.7365	0.784737	0.459076	0.644094	0.566315	0.460929	0.48828
-3.04269	-3.08839	12.836	0.721496	0.395777	0.704004	0.566179	0.507214	0.506121
-2.9874	-3.06197	12.9355	0.779248	0.369666	0.637651	0.496959	0.422422	0.447425
-2.97191	-3.08294	13.035	0.771996	0.384417	0.688292	0.541513	0.450556	0.436455
-2.99874	-3.08255	13.1345	0.791763	0.425434	0.700839	0.542439	0.422435	0.503217
-3.06927	-3.20164	13.234	0.694829	0.249306	0.633043	0.454578	0.319478	0.352212
-2.94944	-3.1528	13.3335	0.716589	0.250353	0.668912	0.483347	0.31658	0.428913
-3.06745	-3.17758	13.433	0.659589	0.277096	0.529191	0.421031	0.296192	0.37958
-3.03066	-3.2442	13.5325	0.68442	0.265038	0.556655	0.476308	0.290576	0.320506
-3.1282	-3.23719	13.632	0.644128	0.211404	0.515345	0.413333	0.219482	0.35334
-3.12156	-3.34329	13.7315	0.590044	0.206669	0.553236	0.366142	0.160777	0.324012
-3.06401	-3.27467	13.831	0.598577	0.245845	0.567411	0.394205	0.225819	0.316971
-3.177	-3.36493	13.9305	0.570287	0.15877	0.505958	0.354355	0.164663	0.252421
-3.03356	-3.31753	14.03	0.584028	0.125573	0.529034	0.386699	0.123918	0.326412
-3.18525	-3.38368	14.1295	0.542174	0.15122	0.478586	0.340318	0.091681	0.279273
-3.16764	-3.38008	14.229	0.572888	0.093413	0.446998	0.332038	0.049394	0.206672
-3.17893	-3.3911	14.3285	0.447595	0.086175	0.431964	0.328548	0.013853	0.244498
-3.22597	-3.43589	14.428	0.468105	-0.03697	0.4385	0.350701	-0.04362	0.168324
-3.19735	-3.46004	14.5275	0.463897	-0.0285	0.343174	0.343712	0.023915	0.156475
-3.20706	-3.45999	14.627	0.44121	0.045438	0.458847	0.260243	-0.01477	0.170054

-3.18062	-3.47352	14.7265	0.465242	-0.01076	0.428011	0.280501	-0.06138	0.224541
-3.10797	-3.38936	14.826	0.476187	0.108618	0.449103	0.356918	-0.0665	0.229344
-3.27821	-3.58646	14.9255	0.272156	-0.16804	0.251123	0.171225	-0.18256	0.10555
-3.16049	-3.48957	15.025	0.289756	-0.01186	0.410917	0.228557	-0.08037	0.108466
-3.20586	-3.4126	15.1245	0.367913	-0.0443	0.380441	0.229351	-0.12721	0.119868
-3.21275	-3.50415	15.224	0.401925	-0.06268	0.414882	0.229789	-0.06738	0.176028
-3.28525	-3.61249	15.3235	0.266215	-0.17339	0.342792	0.200092	-0.20589	0.032199
-3.28751	-3.52519	15.423	0.291459	-0.16523	0.376384	0.156563	-0.23289	0.063935
-3.2244	-3.55547	15.5225	0.218746	-0.13835	0.392466	0.052799	-0.08994	0.030322
-3.26906	-3.59099	15.622	0.338706	-0.12295	0.376224	0.078413	-0.19779	-0.00643
-3.28	-3.60046	15.7215	0.349409	-0.17831	0.25936	0.056629	-0.16671	0.017961
-3.35846	-3.62854	15.821	0.366737	-0.21106	0.313293	-0.01389	-0.18583	-0.08133
-3.37159	-3.66058	15.9205	0.293994	-0.26512	0.206687	-0.01635	-0.23099	-0.14849
-3.41936	-3.5822	16.02	0.281927	-0.22181	0.2232	-0.05564	-0.21722	-0.13501
-3.31381	-3.62565	16.1195	0.302662	-0.23261	0.241439	-0.08775	-0.19738	-0.15281
-3.43216	-3.68565	16.219	0.304188	-0.29737	0.156733	-0.19909	-0.19765	-0.17586
-3.37473	-3.59138	16.3185	0.301392	-0.2544	0.160861	-0.1211	-0.14408	-0.13815
-3.39512	-3.71366	16.418	0.27802	-0.21969	0.049281	-0.28197	-0.11964	-0.20954
-3.47608	-3.80956	16.5175	0.172411	-0.44586	0.086828	-0.3444	-0.32611	-0.28273
-3.46879	-3.72665	16.617	0.272265	-0.41545	-0.03197	-0.36733	-0.30958	-0.38816
-3.51488	-3.79038	16.7165	0.179348	-0.42359	-0.04012	-0.37448	-0.2769	-0.40832
-3.50041	-3.76788	16.816	0.191775	-0.37908	-0.0926	-0.32624	-0.24641	-0.40165
-3.46159	-3.78236	16.9155	0.240088	-0.29944	-0.06327	-0.29224	-0.23206	-0.37302
-3.56234	-3.87255	17.015	0.066448	-0.41922	-0.23235	-0.30544	-0.32972	-0.48507
-3.48943	-3.8672	17.1145	0.165816	-0.44555	-0.1464	-0.28402	-0.29227	-0.39488
-3.52564	-3.91927	17.214	0.110016	-0.39878	-0.20197	-0.1956	-0.26208	-0.42332
-3.55192	-3.9603	17.3135	0.092971	-0.46242	-0.28889	-0.36714	-0.34007	-0.51933
-3.55742	-4.02198	17.413	0.037478	-0.46898	-0.37389	-0.42215	-0.4264	-0.56117
-3.57951	-4.05349	17.5125	-0.05241	-0.52814	-0.46123	-0.4229	-0.39782	-0.6014
-3.55818	-4.08933	17.612	0.017571	-0.4997	-0.42879	-0.48574	-0.45608	-0.56927
-3.60459	-4.03745	17.7115	0.015968	-0.44903	-0.47969	-0.40604	-0.56861	-0.54196
-3.65481	-4.10016	17.811	-0.13975	-0.60873	-0.38795	-0.46152	-0.53501	-0.58767
-3.65101	-4.14468	17.9105	-0.19449	-0.58271	-0.45905	-0.48304	-0.55195	-0.66974
-3.77304	-4.2647	18.01	-0.23152	-0.68932	-0.57591	-0.6038	-0.62095	-0.65002
-3.77781	-4.27915	18.1095	-0.27909	-0.65757	-0.51342	-0.49112	-0.59045	-0.71397
-3.77714	-4.32146	18.209	-0.34345	-0.7078	-0.52852	-0.64249	-0.65431	-0.70173
-3.93353	-4.27289	18.3085	-0.41293	-0.79526	-0.53664	-0.65806	-0.64741	-0.69637
-4.06156	-4.48599	18.408	-0.57512	-0.882	-0.71844	-0.77417	-0.86126	-0.80795
-4.17837	-4.56237	18.5075	-0.65017	-0.82758	-0.73277	-0.75783	-0.80821	-0.87526
-4.22551	-4.63128	18.607	-0.67049	-0.98089	-0.77712	-0.7526	-0.82446	-0.83017
-4.361	-4.65083	18.7065	-0.76984	-0.95657	-0.80587	-0.85351	-0.96447	-0.84807
-4.66149	-4.88485	18.806	-1.04752	-1.12642	-1.02572	-1.1125	-1.0251	-1.16053
-4.75248	-4.90851	18.9055	-1.04486	-1.14628	-1.0273	-1.03568	-1.01748	-1.01949
-4.79545	-4.97294	19.005	-1.20273	-1.1873	-1.10967	-1.12702	-1.06582	-1.09699
-5.06456	-5.12081	19.1045	-1.3321	-1.16056	-1.32219	-1.22247	-1.20366	-1.21184
-5.31186	-5.31984	19.204	-1.56302	-1.26169	-1.52245	-1.40855	-1.31871	-1.49655
-5.34271	-5.28262	19.3035	-1.77714	-1.35441	-1.43619	-1.53183	-1.35711	-1.35078
-5.71151	-5.56544	19.403	-1.85153	-1.51624	-1.61165	-1.66328	-1.4864	-1.59402
-5.66527	-5.41413	19.5025	-1.84414	-1.3483	-1.58498	-1.51784	-1.36934	-1.38765
-5.84512	-5.67793	19.602	-2.03923	-1.54589	-1.71244	-1.64361	-1.58825	-1.55182
-6.05922	-5.81661	19.7015	-2.27648	-1.65717	-1.94704	-1.88714	-1.79067	-1.72733
-6.17744	-6.03818	19.801	-2.26337	-1.70588	-1.99113	-1.8537	-1.77084	-1.74158
-6.23536	-6.10006	19.9005	-2.59138	-1.79509	-2.03029	-1.93708	-1.75872	-1.80899
-6.53557	-6.31969	20	-2.71946	-1.89716	-2.18151	-2.03416	-2.02136	-1.93209

J2 $y = -0.1688558642x - 0.9449888744$
J7 $y = -0.1342263222x - 1.0362263641$
J8 $y = -0.1496723326x - 1.0329323727$
J9 $y = -0.1684833605x - 0.9862689726$

-3.86206 -3.76804

		Ideal Line						
Flatness J7	Flatness J8	IDEAL J1	IDEAL J2	IDEAL J3	IDEAL J4	IDEAL J5	IDEAL J6	IDEAL J7
0.39486	0.277315	-0.96187	-0.98435	-1.08552	-1.038106	-1.02989	-1.04965	-1.0479
2.731685	2.669066	-0.97868	-0.99851	-1.0993	-1.051631	-1.04433	-1.063	-1.062792
3.016583	2.957656	-0.99548	-1.01268	-1.11309	-1.065156	-1.05876	-1.07636	-1.077684
3.071697	3.009801	-1.01228	-1.02685	-1.12688	-1.078682	-1.0732	-1.08972	-1.092577
3.077219	3.009636	-1.02908	-1.04101	-1.14066	-1.092207	-1.08764	-1.10307	-1.107469
3.061607	3.006342	-1.04588	-1.05518	-1.15445	-1.105733	-1.10207	-1.11643	-1.122362
3.057454	2.99277	-1.06268	-1.06935	-1.16823	-1.119258	-1.11651	-1.12978	-1.137254
3.045888	2.960404	-1.07948	-1.08351	-1.18202	-1.132784	-1.13094	-1.14314	-1.152146
3.015401	2.934871	-1.09628	-1.09768	-1.19581	-1.146309	-1.14538	-1.15649	-1.167039
2.98972	2.913463	-1.11308	-1.11185	-1.20959	-1.159835	-1.15981	-1.16985	-1.181931
2.965509	2.873255	-1.12989	-1.12601	-1.22338	-1.17336	-1.17425	-1.1832	-1.196824
2.938193	2.854844	-1.14669	-1.14018	-1.23717	-1.186886	-1.18869	-1.19656	-1.211716
2.925521	2.813385	-1.16349	-1.15435	-1.25095	-1.200411	-1.20312	-1.20992	-1.226608
2.875952	2.77235	-1.18029	-1.16851	-1.26474	-1.213937	-1.21756	-1.22327	-1.241501
2.846282	2.751304	-1.19709	-1.18268	-1.27852	-1.227462	-1.23199	-1.23663	-1.256393
2.81265	2.708726	-1.21389	-1.19685	-1.29231	-1.240987	-1.24643	-1.24998	-1.271286
2.802095	2.688304	-1.23069	-1.21101	-1.3061	-1.254513	-1.26087	-1.26334	-1.286178
2.762854	2.65812	-1.24749	-1.22518	-1.31988	-1.268038	-1.2753	-1.27669	-1.30107
2.735344	2.620595	-1.2643	-1.23935	-1.33367	-1.281564	-1.28974	-1.29005	-1.315963
2.716035	2.583704	-1.2811	-1.25352	-1.34746	-1.295089	-1.30417	-1.3034	-1.330855
2.673517	2.551652	-1.2979	-1.26768	-1.36124	-1.308615	-1.31861	-1.31676	-1.345748
2.650454	2.519883	-1.3147	-1.28185	-1.37503	-1.32214	-1.33305	-1.33011	-1.36064
2.619301	2.487797	-1.3315	-1.29602	-1.38881	-1.335666	-1.34748	-1.34347	-1.375532
2.612285	2.47069	-1.3483	-1.31018	-1.4026	-1.349191	-1.36192	-1.35683	-1.390425
2.582359	2.454315	-1.3651	-1.32435	-1.41639	-1.362717	-1.37635	-1.37018	-1.405317
2.523318	2.384436	-1.3819	-1.33852	-1.43017	-1.376242	-1.39079	-1.38354	-1.42021
2.498257	2.355171	-1.3987	-1.35268	-1.44396	-1.389768	-1.40523	-1.39689	-1.435102
2.443269	2.304695	-1.41551	-1.36685	-1.45775	-1.403293	-1.41966	-1.41025	-1.449994
2.385773	2.230035	-1.43231	-1.38102	-1.47153	-1.416819	-1.4341	-1.4236	-1.464887
2.307538	2.178313	-1.44911	-1.39518	-1.48532	-1.430344	-1.44853	-1.43696	-1.479779
2.235112	2.089178	-1.46591	-1.40935	-1.4991	-1.443869	-1.46297	-1.45031	-1.494672
2.206677	2.043605	-1.48271	-1.42352	-1.51289	-1.457395	-1.47741	-1.46367	-1.509564
2.169131	2.023543	-1.49951	-1.43768	-1.52668	-1.47092	-1.49184	-1.47703	-1.524456
2.187695	2.041804	-1.51631	-1.45185	-1.54046	-1.484446	-1.50628	-1.49038	-1.539349
2.176301	2.030007	-1.53311	-1.46602	-1.55425	-1.497971	-1.52071	-1.50374	-1.554241
2.196418	2.064198	-1.54992	-1.48018	-1.56804	-1.511497	-1.53515	-1.51709	-1.569134
2.225544	2.079969	-1.56672	-1.49435	-1.58182	-1.525022	-1.54959	-1.53045	-1.584026
2.246402	2.077271	-1.58352	-1.50852	-1.59561	-1.538548	-1.56402	-1.5438	-1.598918
2.21282	2.07518	-1.60032	-1.52268	-1.6094	-1.552073	-1.57846	-1.55716	-1.613811
2.20353	2.061007	-1.61712	-1.53685	-1.62318	-1.565599	-1.59289	-1.57051	-1.628703

2.201044	2.067164	-1.63392	-1.55102	-1.63697	-1.579124	-1.60733	-1.58387	-1.643595
2.163413	2.032178	-1.65072	-1.56518	-1.65075	-1.59265	-1.62176	-1.59723	-1.658488
2.136006	1.988144	-1.66752	-1.57935	-1.66454	-1.606175	-1.6362	-1.61058	-1.67338
2.094793	1.972313	-1.68432	-1.59352	-1.67833	-1.6197	-1.65064	-1.62394	-1.688273
2.063127	1.946486	-1.70113	-1.60768	-1.69211	-1.633226	-1.66507	-1.63729	-1.703165
2.012025	1.905898	-1.71793	-1.62185	-1.7059	-1.646751	-1.67951	-1.65065	-1.718057
1.989864	1.872387	-1.73473	-1.63602	-1.71969	-1.660277	-1.69394	-1.664	-1.73295
1.959911	1.810326	-1.75153	-1.65018	-1.73347	-1.673802	-1.70838	-1.67736	-1.747842
1.970099	1.808456	-1.76833	-1.66435	-1.74726	-1.687328	-1.72282	-1.69071	-1.762735
1.961162	1.81788	-1.78513	-1.67852	-1.76104	-1.700853	-1.73725	-1.70407	-1.777627
1.96289	1.807429	-1.80193	-1.69268	-1.77483	-1.714379	-1.75169	-1.71742	-1.792519
1.942189	1.815773	-1.81873	-1.70685	-1.78862	-1.727904	-1.76612	-1.73078	-1.807412
1.981292	1.865158	-1.83553	-1.72102	-1.8024	-1.74143	-1.78056	-1.74414	-1.822304
1.981684	1.872212	-1.85234	-1.73518	-1.81619	-1.754955	-1.795	-1.75749	-1.837197
1.983344	1.87408	-1.86914	-1.74935	-1.82998	-1.768481	-1.80943	-1.77085	-1.852089
1.9927	1.890677	-1.88594	-1.76352	-1.84376	-1.782006	-1.82387	-1.7842	-1.866981
1.978402	1.881216	-1.90274	-1.77769	-1.85755	-1.795532	-1.8383	-1.79756	-1.881874
1.975587	1.853167	-1.91954	-1.79185	-1.87133	-1.809057	-1.85274	-1.81091	-1.896766
1.990983	1.85655	-1.93634	-1.80602	-1.88512	-1.822582	-1.86718	-1.82427	-1.911659
1.978948	1.864699	-1.95314	-1.82019	-1.89891	-1.836108	-1.88161	-1.83762	-1.926551
1.959139	1.84899	-1.96994	-1.83435	-1.91269	-1.849633	-1.89605	-1.85098	-1.941443
1.938197	1.830959	-1.98675	-1.84852	-1.92648	-1.863159	-1.91048	-1.86434	-1.956336
1.930268	1.811292	-2.00355	-1.86269	-1.94027	-1.876684	-1.92492	-1.87769	-1.971228
1.934879	1.792428	-2.02035	-1.87685	-1.95405	-1.89021	-1.93936	-1.89105	-1.986121
1.922602	1.768646	-2.03715	-1.89102	-1.96784	-1.903735	-1.95379	-1.9044	-2.001013
1.900941	1.72772	-2.05395	-1.90519	-1.98162	-1.917261	-1.96823	-1.91776	-2.015905
1.891224	1.726423	-2.07075	-1.91935	-1.99541	-1.930786	-1.98266	-1.93111	-2.030798
1.86451	1.685187	-2.08755	-1.93352	-2.0092	-1.944312	-1.9971	-1.94447	-2.04569
1.859773	1.657193	-2.10435	-1.94769	-2.02298	-1.957837	-2.01154	-1.95782	-2.060583
1.806126	1.621325	-2.12115	-1.96185	-2.03677	-1.971363	-2.02597	-1.97118	-2.075475
1.862284	1.630981	-2.13796	-1.97602	-2.05056	-1.984888	-2.04041	-1.98454	-2.090367
1.826283	1.570717	-2.15476	-1.99019	-2.06434	-1.998413	-2.05484	-1.99789	-2.10526
1.808409	1.556855	-2.17156	-2.00435	-2.07813	-2.011939	-2.06928	-2.01125	-2.120152
1.798414	1.54736	-2.18836	-2.01852	-2.09191	-2.025464	-2.08372	-2.0246	-2.135045
1.787228	1.509398	-2.20516	-2.03269	-2.1057	-2.03899	-2.09815	-2.03796	-2.149937
1.788373	1.47443	-2.22196	-2.04685	-2.11949	-2.052515	-2.11259	-2.05131	-2.164829
1.768742	1.432716	-2.23876	-2.06102	-2.13327	-2.066041	-2.12702	-2.06467	-2.179722
1.720454	1.429664	-2.25556	-2.07519	-2.14706	-2.079566	-2.14146	-2.07802	-2.194614
1.717809	1.371953	-2.27236	-2.08935	-2.16085	-2.093092	-2.15589	-2.09138	-2.209507
1.703665	1.357376	-2.28917	-2.10352	-2.17463	-2.106617	-2.17033	-2.10474	-2.224399
1.694273	1.334087	-2.30597	-2.11769	-2.18842	-2.120143	-2.18477	-2.11809	-2.239291
1.656611	1.345276	-2.32277	-2.13185	-2.2022	-2.133668	-2.1992	-2.13145	-2.254184
1.646176	1.298124	-2.33957	-2.14602	-2.21599	-2.147194	-2.21364	-2.1448	-2.269076
1.630033	1.241367	-2.35637	-2.16019	-2.22978	-2.160719	-2.22807	-2.15816	-2.283969
1.598319	1.215372	-2.37317	-2.17435	-2.24356	-2.174245	-2.24251	-2.17151	-2.298861
1.59447	1.209117	-2.38997	-2.18852	-2.25735	-2.18777	-2.25695	-2.18487	-2.313753
1.604046	1.176956	-2.40677	-2.20269	-2.27114	-2.201295	-2.27138	-2.19822	-2.328646
1.572926	1.170485	-2.42358	-2.21685	-2.28492	-2.214821	-2.28582	-2.21158	-2.343538
1.524932	1.141478	-2.44038	-2.23102	-2.29871	-2.228346	-2.30025	-2.22493	-2.358431
1.504124	1.120804	-2.45718	-2.24519	-2.3125	-2.241872	-2.31469	-2.23829	-2.373323
1.539843	1.133662	-2.47398	-2.25935	-2.32628	-2.255397	-2.32913	-2.25165	-2.388215
1.438926	1.145465	-2.49078	-2.27352	-2.34007	-2.268923	-2.34356	-2.265	-2.403108

1.504457	1.185377	-2.50758	-2.28769	-2.35385	-2.282448	-2.358	-2.27836	-2.418
1.483442	1.158914	-2.52438	-2.30185	-2.36764	-2.295974	-2.37243	-2.29171	-2.432893
1.445968	1.129785	-2.54118	-2.31602	-2.38143	-2.309499	-2.38687	-2.30507	-2.447785
1.38973	1.135778	-2.55798	-2.33019	-2.39521	-2.323025	-2.40131	-2.31842	-2.462677
1.384628	1.146272	-2.57479	-2.34436	-2.409	-2.33655	-2.41574	-2.33178	-2.47757
1.410972	1.146053	-2.59159	-2.35852	-2.42279	-2.350076	-2.43018	-2.34513	-2.492462
1.315474	1.094158	-2.60839	-2.37269	-2.43657	-2.363601	-2.44461	-2.35849	-2.507355
1.370901	1.196727	-2.62519	-2.38686	-2.45036	-2.377126	-2.45905	-2.37185	-2.522247
1.27337	1.151052	-2.64199	-2.40102	-2.46414	-2.390652	-2.47349	-2.3852	-2.537139
1.288015	1.144128	-2.65879	-2.41519	-2.47793	-2.404177	-2.48792	-2.39856	-2.552032
1.26146	1.100651	-2.67559	-2.42936	-2.49172	-2.417703	-2.50236	-2.41191	-2.566924
1.157505	1.080102	-2.69239	-2.44352	-2.5055	-2.431228	-2.51679	-2.42527	-2.581817
1.183959	1.10793	-2.70919	-2.45769	-2.51929	-2.444754	-2.53123	-2.43862	-2.596709
1.152082	1.109781	-2.726	-2.47186	-2.53308	-2.458279	-2.54567	-2.45198	-2.611601
1.170581	1.084737	-2.7428	-2.48602	-2.54686	-2.471805	-2.5601	-2.46533	-2.626494
1.056056	1.084131	-2.7596	-2.50019	-2.56065	-2.48533	-2.57454	-2.47869	-2.641386
1.003328	1.083098	-2.7764	-2.51436	-2.57443	-2.498856	-2.58897	-2.49205	-2.656278
1.08597	1.031608	-2.7932	-2.52852	-2.58822	-2.512381	-2.60341	-2.5054	-2.671171
0.983424	1.01185	-2.81	-2.54269	-2.60201	-2.525907	-2.61784	-2.51876	-2.686063
0.968377	0.988379	-2.8268	-2.55686	-2.61579	-2.539432	-2.63228	-2.53211	-2.700956
1.021347	1.001608	-2.8436	-2.57102	-2.62958	-2.552958	-2.64672	-2.54547	-2.715848
0.916734	0.927392	-2.86041	-2.58519	-2.64337	-2.566483	-2.66115	-2.55882	-2.73074
0.953616	1.012915	-2.87721	-2.59936	-2.65715	-2.580008	-2.67559	-2.57218	-2.745633
0.939467	0.924216	-2.89401	-2.61352	-2.67094	-2.593534	-2.69002	-2.58553	-2.760525
0.932743	0.969084	-2.91081	-2.62769	-2.68472	-2.607059	-2.70446	-2.59889	-2.775418
0.963022	0.91836	-2.92761	-2.64186	-2.69851	-2.620585	-2.7189	-2.61224	-2.79031
0.894638	0.828629	-2.94441	-2.65602	-2.7123	-2.63411	-2.73333	-2.6256	-2.805202
0.966664	0.86303	-2.96121	-2.67019	-2.72608	-2.647636	-2.74777	-2.63896	-2.820095
0.925823	0.860865	-2.97801	-2.68436	-2.73987	-2.661161	-2.7622	-2.65231	-2.834987
0.917185	0.800475	-2.99481	-2.69852	-2.75366	-2.674687	-2.77664	-2.66567	-2.84988
0.951119	0.771446	-3.01162	-2.71269	-2.76744	-2.688212	-2.79108	-2.67902	-2.864772
0.855952	0.752526	-3.02842	-2.72686	-2.78123	-2.701738	-2.80551	-2.69238	-2.879664
0.923272	0.787228	-3.04522	-2.74102	-2.79501	-2.715263	-2.81995	-2.70573	-2.894557
0.915618	0.751173	-3.06202	-2.75519	-2.8088	-2.728789	-2.83438	-2.71909	-2.909449
0.899355	0.734805	-3.07882	-2.76936	-2.82259	-2.742314	-2.84882	-2.73244	-2.924342
0.880169	0.720992	-3.09562	-2.78352	-2.83637	-2.755839	-2.86326	-2.7458	-2.939234
0.819364	0.679656	-3.11242	-2.79769	-2.85016	-2.769365	-2.87769	-2.75916	-2.954126
0.87466	0.706068	-3.12922	-2.81186	-2.86395	-2.78289	-2.89213	-2.77251	-2.969019
0.890151	0.685097	-3.14603	-2.82602	-2.87773	-2.796416	-2.90656	-2.78587	-2.983911
0.86332	0.685492	-3.16283	-2.84019	-2.89152	-2.809941	-2.921	-2.79922	-2.998804
0.792789	0.566405	-3.17963	-2.85436	-2.90531	-2.823467	-2.93544	-2.81258	-3.013696
0.912613	0.615237	-3.19643	-2.86853	-2.91909	-2.836992	-2.94987	-2.82593	-3.028588
0.79461	0.590457	-3.21323	-2.88269	-2.93288	-2.850518	-2.96431	-2.83929	-3.043481
0.831393	0.523836	-3.23003	-2.89686	-2.94666	-2.864043	-2.97874	-2.85264	-3.058373
0.733861	0.530852	-3.24683	-2.91103	-2.96045	-2.877569	-2.99318	-2.866	-3.073266
0.740497	0.424753	-3.26363	-2.92519	-2.97424	-2.891094	-3.00762	-2.87936	-3.088158
0.798049	0.493372	-3.28043	-2.93936	-2.98802	-2.90462	-3.02205	-2.89271	-3.10305
0.685058	0.40311	-3.29724	-2.95353	-3.00181	-2.918145	-3.03649	-2.90607	-3.117943
0.8285	0.450515	-3.31404	-2.96769	-3.0156	-2.931671	-3.05092	-2.91942	-3.132835
0.676803	0.384366	-3.33084	-2.98186	-3.02938	-2.945196	-3.06536	-2.93278	-3.147728
0.694415	0.387963	-3.34764	-2.99603	-3.04317	-2.958721	-3.0798	-2.94613	-3.16262
0.683131	0.376939	-3.36444	-3.01019	-3.05695	-2.972247	-3.09423	-2.95949	-3.177512
0.636082	0.332152	-3.38124	-3.02436	-3.07074	-2.985772	-3.10867	-2.97284	-3.192405
0.664709	0.308	-3.39804	-3.03853	-3.08453	-2.999298	-3.1231	-2.9862	-3.207297
0.654998	0.308049	-3.41484	-3.05269	-3.09831	-3.012823	-3.13754	-2.99955	-3.22219

0.68144	0.29452	-3.43164	-3.06686	-3.1121	-3.026349	-3.15197	-3.01291	-3.237082
0.754083	0.378681	-3.44845	-3.08103	-3.12589	-3.039874	-3.16641	-3.02627	-3.251974
0.583844	0.18158	-3.46525	-3.09519	-3.13967	-3.0534	-3.18085	-3.03962	-3.266867
0.701569	0.278471	-3.48205	-3.10936	-3.15346	-3.066925	-3.19528	-3.05298	-3.281759
0.656194	0.355441	-3.49885	-3.12353	-3.16724	-3.080451	-3.20972	-3.06633	-3.296652
0.649304	0.263893	-3.51565	-3.13769	-3.18103	-3.093976	-3.22415	-3.07969	-3.311544
0.576805	0.155547	-3.53245	-3.15186	-3.19482	-3.107502	-3.23859	-3.09304	-3.326436
0.574545	0.242854	-3.54925	-3.16603	-3.2086	-3.121027	-3.25303	-3.1064	-3.341329
0.637657	0.212571	-3.56605	-3.18019	-3.22239	-3.134552	-3.26746	-3.11975	-3.356221
0.592993	0.177052	-3.58286	-3.19436	-3.23618	-3.148078	-3.2819	-3.13311	-3.371114
0.582061	0.167582	-3.59966	-3.20853	-3.24996	-3.161603	-3.29633	-3.14647	-3.386006
0.503598	0.139505	-3.61646	-3.22269	-3.26375	-3.175129	-3.31077	-3.15982	-3.400898
0.490463	0.107464	-3.63326	-3.23686	-3.27753	-3.188654	-3.32521	-3.17318	-3.415791
0.442701	0.185845	-3.65006	-3.25103	-3.29132	-3.20218	-3.33964	-3.18653	-3.430683
0.548246	0.142394	-3.66686	-3.26519	-3.30511	-3.215705	-3.35408	-3.19989	-3.445576
0.429899	0.082394	-3.68366	-3.27936	-3.31889	-3.229231	-3.36851	-3.21324	-3.460468
0.487322	0.176658	-3.70046	-3.29353	-3.33268	-3.242756	-3.38295	-3.2266	-3.47536
0.466937	0.054378	-3.71726	-3.30769	-3.34647	-3.256282	-3.39739	-3.23995	-3.490253
0.385977	-0.04151	-3.73407	-3.32186	-3.36025	-3.269807	-3.41182	-3.25331	-3.505145
0.393271	0.041394	-3.75087	-3.33603	-3.37404	-3.283333	-3.42626	-3.26667	-3.520038
0.347175	-0.02234	-3.76767	-3.35019	-3.38782	-3.296858	-3.44069	-3.28002	-3.53493
0.361651	0.000159	-3.78447	-3.36436	-3.40161	-3.310384	-3.45513	-3.29338	-3.549822
0.40047	-0.01432	-3.80127	-3.37853	-3.4154	-3.323909	-3.46957	-3.30673	-3.564715
0.299719	-0.10451	-3.81807	-3.3927	-3.42918	-3.337434	-3.484	-3.32009	-3.579607
0.372631	-0.09916	-3.83487	-3.40686	-3.44297	-3.35096	-3.49844	-3.33344	-3.594499
0.336412	-0.15123	-3.85167	-3.42103	-3.45676	-3.364485	-3.51287	-3.3468	-3.609392
0.310139	-0.19226	-3.86847	-3.4352	-3.47054	-3.378011	-3.52731	-3.36015	-3.624284
0.304636	-0.25394	-3.88528	-3.44936	-3.48433	-3.391536	-3.54175	-3.37351	-3.639177
0.28255	-0.28545	-3.90208	-3.46353	-3.49812	-3.405062	-3.55618	-3.38686	-3.654069
0.303879	-0.32129	-3.91888	-3.4777	-3.5119	-3.418587	-3.57062	-3.40022	-3.668961
0.257462	-0.26941	-3.93568	-3.49186	-3.52569	-3.432113	-3.58505	-3.41358	-3.683854
0.207242	-0.33212	-3.95248	-3.50603	-3.53947	-3.445638	-3.59949	-3.42693	-3.698746
0.211042	-0.37664	-3.96928	-3.5202	-3.55326	-3.459164	-3.61392	-3.44029	-3.713639
0.089015	-0.49666	-3.98608	-3.53436	-3.56705	-3.472689	-3.62836	-3.45364	-3.728531
0.084246	-0.51111	-4.00288	-3.54853	-3.58083	-3.486215	-3.6428	-3.467	-3.743423
0.084914	-0.55342	-4.01969	-3.5627	-3.59462	-3.49974	-3.65723	-3.48035	-3.758316
-0.07147	-0.50484	-4.03649	-3.57686	-3.60841	-3.513265	-3.67167	-3.49371	-3.773208
-0.1995	-0.71795	-4.05329	-3.59103	-3.62219	-3.526791	-3.6861	-3.50706	-3.788101
-0.31632	-0.79433	-4.07009	-3.6052	-3.63598	-3.540316	-3.70054	-3.52042	-3.802993
-0.36346	-0.86323	-4.08689	-3.61936	-3.64976	-3.553842	-3.71498	-3.53378	-3.817885
-0.49895	-0.88279	-4.10369	-3.63353	-3.66355	-3.567367	-3.72941	-3.54713	-3.832778
-0.79943	-1.11681	-4.12049	-3.6477	-3.67734	-3.580893	-3.74385	-3.56049	-3.84767
-0.89042	-1.14047	-4.13729	-3.66186	-3.69112	-3.594418	-3.75828	-3.57384	-3.862563
-0.93339	-1.20489	-4.15409	-3.67603	-3.70491	-3.607944	-3.77272	-3.5872	-3.877455
-1.20251	-1.35277	-4.1709	-3.6902	-3.7187	-3.621469	-3.78716	-3.60055	-3.892347
-1.44981	-1.5518	-4.1877	-3.70436	-3.73248	-3.634995	-3.80159	-3.61391	-3.90724
-1.48065	-1.51458	-4.2045	-3.71853	-3.74627	-3.64852	-3.81603	-3.62726	-3.922132
-1.84945	-1.7974	-4.2213	-3.7327	-3.76005	-3.662046	-3.83046	-3.64062	-3.937025
-1.80322	-1.64609	-4.2381	-3.74686	-3.77384	-3.675571	-3.8449	-3.65398	-3.951917
-1.98306	-1.90988	-4.2549	-3.76103	-3.78763	-3.689097	-3.85934	-3.66733	-3.966809
-2.19716	-2.04857	-4.2717	-3.7752	-3.80141	-3.702622	-3.87377	-3.68069	-3.981702
-2.31539	-2.27014	-4.2885	-3.78936	-3.8152	-3.716147	-3.88821	-3.69404	-3.996594
-2.37331	-2.33202	-4.3053	-3.80353	-3.82899	-3.729673	-3.90264	-3.7074	-4.011487
-2.67352	-2.55165	-4.32211	-3.8177	-3.84277	-3.743198	-3.91708	-3.72075	-4.026379

2 to 18 GHz		0.2 to 19						
0.636079	0.274563	1.321473	0.384696					
	-0.36152		-0.93678					
max	0.31804		0.660736					
	0.228883	0.237235	0.262199	0.270983	0.218084	0.274563	0.184834	0.159132

Flatness By Independent Port								
IDEAL J8	Flatness J1	Flatness J2	Flatness J3	Flatness J4	Flatness J5	Flatness J6	Flatness J7	Flatness J8
-1.003118	-3.79939	-2.27511	-1.99576	-2.3137	-2.20319	-2.18149	-2.4193	-2.48761
-1.019882	-0.23504	-0.07327	-0.00994	-0.0256	-0.03991	0.013215	-0.06758	-0.07909
-1.036646	0.093696	0.205048	0.271215	0.257025	0.221595	0.283941	0.232211	0.226262
-1.053411	0.18776	0.276148	0.344891	0.320521	0.298464	0.350343	0.302218	0.295171
-1.070175	0.207918	0.286152	0.366678	0.34676	0.323832	0.377337	0.322632	0.31177
-1.08694	0.207494	0.285448	0.376167	0.3497	0.320459	0.384696	0.321913	0.325241
-1.103704	0.217462	0.302527	0.374237	0.351482	0.322425	0.379266	0.332652	0.328433
-1.120468	0.223577	0.303233	0.365865	0.353055	0.303093	0.364744	0.335979	0.312831
-1.137233	0.217125	0.279202	0.362273	0.336333	0.293725	0.350268	0.320383	0.304063
-1.153997	0.213246	0.274088	0.353004	0.333808	0.297061	0.346541	0.309595	0.299419
-1.170762	0.212244	0.275093	0.346452	0.335673	0.276242	0.326978	0.300277	0.275976
-1.187526	0.202387	0.267959	0.327923	0.314847	0.277947	0.327049	0.287853	0.274329
-1.20429	0.198175	0.240803	0.329825	0.320622	0.264527	0.312581	0.290073	0.249635
-1.221055	0.185773	0.217574	0.289467	0.28074	0.253057	0.29527	0.255396	0.225364
-1.237819	0.175468	0.215349	0.287011	0.277859	0.240848	0.280917	0.240619	0.221082
-1.254584	0.180631	0.202582	0.268485	0.265535	0.222516	0.262038	0.221879	0.195269
-1.271348	0.168776	0.201445	0.257154	0.2597	0.211433	0.266834	0.226217	0.191611
-1.288112	0.153845	0.192462	0.258927	0.244579	0.214147	0.255308	0.201868	0.178191
-1.304877	0.15988	0.174446	0.237462	0.235833	0.194774	0.254371	0.189251	0.157431
-1.321641	0.150899	0.157461	0.225313	0.225934	0.192125	0.252381	0.184834	0.137305
-1.338405	0.129212	0.136447	0.190095	0.216967	0.17315	0.22097	0.157209	0.122017
-1.35517	0.121267	0.141132	0.187021	0.198574	0.165087	0.219964	0.149038	0.107012
-1.371934	0.11165	0.113452	0.173862	0.1862	0.141955	0.20491	0.132777	0.09169
-1.388699	0.113085	0.112299	0.17849	0.191169	0.160574	0.20672	0.140654	0.091347
-1.405463	0.105093	0.131679	0.171916	0.159781	0.138921	0.204758	0.12562	0.091737
-1.422227	0.072203	0.075018	0.111437	0.146639	0.10787	0.16282	0.081471	0.038622
-1.438992	0.053401	0.058787	0.096442	0.120033	0.082768	0.148842	0.071303	0.026122
-1.455756	0.021441	0.021999	0.069614	0.092168	0.039808	0.115635	0.031207	-0.00759
-1.472521	-0.0122	-0.02516	0.000379	0.03963	0.011908	0.058711	-0.0114	-0.06548
-1.489285	-0.07795	-0.06987	-0.0663	-0.00888	-0.04547	-0.00137	-0.07474	-0.10044
-1.506049	-0.11001	-0.10553	-0.09488	-0.07139	-0.08606	-0.03946	-0.13227	-0.17281
-1.522814	-0.13665	-0.11978	-0.12444	-0.09425	-0.08973	-0.06636	-0.14582	-0.20162
-1.539578	-0.14399	-0.12772	-0.11153	-0.1071	-0.10888	-0.06778	-0.16847	-0.20492
-1.556343	-0.13513	-0.10141	-0.08073	-0.11057	-0.06132	-0.04814	-0.13501	-0.16989
-1.573107	-0.12323	-0.10663	-0.06694	-0.11045	-0.0491	-0.04237	-0.13151	-0.16493
-1.589871	-0.06456	-0.06562	-0.02542	-0.06923	-0.04308	-0.02259	-0.0965	-0.11397
-1.606636	-0.02155	-0.02889	0.004526	-0.03092	-0.01498	0.00684	-0.05249	-0.08144
-1.6234	-0.04755	-0.04824	0.00344	-0.03941	-0.02105	-0.00289	-0.01674	-0.06737
-1.640165	-0.00382	-0.05642	-0.00366	-0.04693	-0.00058	-0.01808	-0.03543	-0.0527
-1.656929	-0.02792	-0.05925	0.004593	-0.0298	-0.03814	-0.0476	-0.02982	-0.0501

-1.673693	0.012781	-0.01767	0.013572	-0.03844	-0.02727	-0.04506	-0.01742	-0.02718
-1.690458	-0.0055	-0.0768	-0.02827	-0.06939	-0.06301	-0.09333	-0.04016	-0.04541
-1.707222	-0.01688	-0.08834	-0.05573	-0.09598	-0.09842	-0.13973	-0.05267	-0.07267
-1.723987	-0.02816	-0.12877	-0.08023	-0.12338	-0.09804	-0.15987	-0.07899	-0.07174
-1.740751	-0.02107	-0.10959	-0.08644	-0.13609	-0.14221	-0.16542	-0.09576	-0.0808
-1.757515	-0.05433	-0.15486	-0.09797	-0.17632	-0.16352	-0.2382	-0.13197	-0.10463
-1.77428	-0.04025	-0.16121	-0.11841	-0.18859	-0.18029	-0.25007	-0.13924	-0.12137
-1.791044	-0.06392	-0.18993	-0.13736	-0.22217	-0.19856	-0.27873	-0.1543	-0.16667
-1.807808	-0.07356	-0.17032	-0.10858	-0.238	-0.17661	-0.29476	-0.12922	-0.15178
-1.824573	-0.03958	-0.13485	-0.09171	-0.21766	-0.22664	-0.27852	-0.12327	-0.12559
-1.841337	-0.00956	-0.14422	-0.102	-0.20032	-0.18235	-0.28514	-0.10665	-0.11927
-1.858102	0.015608	-0.13712	-0.08411	-0.20466	-0.17206	-0.27793	-0.11246	-0.09417
-1.874866	0.065472	-0.10613	-0.05728	-0.16688	-0.14502	-0.23822	-0.05846	-0.02802
-1.89163	0.109645	-0.09706	-0.03471	-0.15032	-0.11708	-0.21803	-0.04318	-0.0042
-1.908395	0.121672	-0.10117	-0.05419	-0.14244	-0.11356	-0.20763	-0.02662	0.014434
-1.925159	0.132354	-0.0498	-0.00572	-0.11634	-0.09638	-0.22418	-0.00238	0.047795
-1.941924	0.162175	-0.01239	-0.02305	-0.09755	-0.09398	-0.18743	-0.00178	0.055099
-1.958688	0.164001	-0.0344	-0.03614	-0.09091	-0.09577	-0.2032	0.010297	0.043814
-1.975452	0.201218	-0.01578	-0.01324	-0.08873	-0.08152	-0.19335	0.040586	0.063961
-1.992217	0.192948	0.01859	-0.01827	-0.05126	-0.06685	-0.18277	0.043443	0.088875
-2.008981	0.211367	0.012809	-0.05169	-0.06589	-0.07265	-0.1878	0.038526	0.089931
-2.025746	0.209248	0.005824	-0.03911	-0.06942	-0.07977	-0.17105	0.032476	0.088663
-2.04251	0.223235	0.003602	-0.05823	-0.06167	-0.07434	-0.15353	0.03944	0.085761
-2.059274	0.216377	0.026544	-0.03505	-0.05556	-0.05659	-0.13128	0.058944	0.083661
-2.076039	0.228883	0.014687	-0.04168	-0.05953	-0.07	-0.12906	0.061559	0.076643
-2.092803	0.216501	0.008734	-0.04883	-0.08068	-0.07776	-0.14942	0.054791	0.052483
-2.109568	0.215125	0.024695	-0.04456	-0.04096	-0.03838	-0.12555	0.059965	0.067949
-2.126332	0.212896	0.018083	-0.06607	-0.05395	-0.05809	-0.13376	0.048144	0.043478
-2.143096	0.191727	0.015212	-0.05529	-0.06803	-0.04885	-0.1129	0.0583	0.032248
-2.159861	0.182174	0.007241	-0.08938	-0.04671	-0.03392	-0.12368	0.019545	0.013145
-2.176625	0.211538	0.023008	-0.03708	-0.0618	-0.04281	-0.09412	0.090596	0.039565
-2.19339	0.169161	-0.03119	-0.06541	-0.05663	-0.03498	-0.1074	0.069486	-0.00393
-2.210154	0.17692	-0.00072	-0.0526	-0.03451	-0.02007	-0.10083	0.066505	-0.00103
-2.226918	0.178349	0.003461	-0.03745	-0.02271	-0.02308	-0.06945	0.071402	0.006237
-2.243683	0.167506	0.005921	-0.05266	-0.03887	-0.04829	-0.05128	0.075109	-0.01496
-2.260447	0.172713	-0.05843	-0.04509	-0.02032	-0.00301	-0.05665	0.091147	-0.03316
-2.277211	0.152198	-0.01786	-0.05556	-0.04229	-0.04288	-0.05972	0.086407	-0.05811
-2.293976	0.125765	-0.02518	-0.06257	-0.0373	-0.02079	-0.07223	0.053012	-0.0444
-2.31074	0.101331	-0.05514	-0.06528	-0.04964	-0.04662	-0.07347	0.065259	-0.08535
-2.327505	0.094441	-0.03116	-0.06168	-0.04703	-0.0418	-0.06117	0.066008	-0.08316
-2.344269	0.054199	-0.03922	-0.0436	-0.05346	-0.02968	-0.07395	0.071509	-0.08968
-2.361033	0.042751	-0.03728	-0.07172	-0.04968	-0.05033	-0.0464	0.048739	-0.06173
-2.377798	0.035014	-0.03134	-0.07344	-0.02675	-0.05958	-0.05438	0.053196	-0.09212
-2.394562	-0.00207	-0.07646	-0.12003	-0.05115	-0.07119	-0.06124	0.051945	-0.13211
-2.411327	-0.03818	-0.06746	-0.11819	-0.05016	-0.10363	-0.04301	0.035124	-0.14134
-2.428091	-0.05202	-0.10542	-0.17469	-0.03779	-0.08773	-0.04324	0.046167	-0.13083
-2.444855	-0.04954	-0.10426	-0.14364	-0.10921	-0.15685	-0.04211	0.070636	-0.14623
-2.46162	-0.07589	-0.08037	-0.13008	-0.07047	-0.08985	-0.02874	0.054407	-0.13594
-2.478384	-0.1228	-0.12455	-0.18116	-0.10106	-0.11844	-0.05957	0.021306	-0.14818
-2.495149	-0.13317	-0.10815	-0.19338	-0.08866	-0.13765	-0.04806	0.01539	-0.15209
-2.511913	-0.0984	-0.12087	-0.19506	-0.06729	-0.07959	-0.04743	0.066002	-0.12247
-2.528677	-0.12154	-0.0677	-0.14022	-0.10167	-0.13927	-0.02637	-0.02002	-0.0939

-2.545442	-0.104	0.021389	-0.141	-0.09259	-0.05191	0.043503	0.0604	-0.03722
-2.562206	-0.10457	-0.05749	-0.13677	-0.04051	-0.08834	0.016027	0.054278	-0.04692
-2.578971	-0.12073	-0.05242	-0.13487	-0.07267	-0.09381	0.003096	0.031697	-0.05929
-2.595735	-0.10087	-0.05764	-0.09621	-0.09536	-0.08964	0.027538	-0.00965	-0.03653
-2.612499	-0.1225	-0.06099	-0.11951	-0.07048	-0.14211	0.024493	0.000142	-0.00927
-2.629264	-0.09757	-0.02308	-0.1093	-0.06421	-0.05945	0.01072	0.041378	0.007276
-2.646028	-0.14324	-0.05771	-0.14761	-0.08941	-0.10744	-0.01641	-0.03923	-0.02785
-2.662793	-0.07742	0.051246	-0.04246	-0.02203	-0.0125	0.070995	0.031092	0.091479
-2.679557	-0.14464	-0.00322	-0.08708	-0.13322	-0.04013	0.010148	-0.05155	0.062568
-2.696321	-0.13437	-0.00637	-0.14366	-0.05172	-0.03797	0.040668	-0.02201	0.072408
-2.713086	-0.10742	0.019384	-0.07334	-0.10376	-0.06954	0.015008	-0.03367	0.045696
-2.72985	-0.15305	-0.01327	-0.10121	-0.1079	-0.08319	0.001281	-0.12273	0.041911
-2.746614	-0.09334	0.019806	-0.05813	-0.07382	-0.03304	0.00799	-0.08139	0.086503
-2.763379	-0.11139	0.044882	-0.02468	-0.0263	0.002887	0.001552	-0.09837	0.105119
-2.780143	-0.05381	0.069933	-0.01921	-0.03578	0.003942	0.050429	-0.06498	0.096839
-2.796908	-0.09764	0.01296	0.012006	0.003124	0.015003	0.020289	-0.16461	0.112998
-2.813672	-0.13075	-0.00756	-0.07665	-0.08455	0.026221	0.011903	-0.20245	0.128729
-2.830436	-0.14477	0.026624	-0.03189	-0.03787	0.028876	0.046339	-0.10492	0.094004
-2.847201	-0.13963	-0.00724	-0.03787	-0.07926	-0.00764	-0.01162	-0.19257	0.09101
-2.863965	-0.12877	0.026309	0.024252	-0.04814	-0.01323	0.011168	-0.19272	0.084303
-2.88073	-0.06079	0.123346	0.075497	0.040577	0.130005	0.032909	-0.12486	0.114297
-2.897494	-0.06199	0.078426	0.017811	-0.05438	0.074873	0.00024	-0.21458	0.056845
-2.914258	-0.08319	0.100019	0.038567	-0.01769	0.126589	0.082795	-0.16281	0.159132
-2.931023	-0.10309	0.076743	0.043814	0.011005	0.109387	0.025353	-0.16206	0.087198
-2.947787	-0.0445	0.13555	-0.01035	0.064977	0.148734	0.102417	-0.1539	0.14883
-2.964552	-0.0299	0.108649	0.047705	0.035306	0.170068	0.115737	-0.10872	0.114871
-2.981316	-0.09543	0.115162	0.069785	0.020699	0.170763	0.069371	-0.16222	0.041904
-2.99808	-0.04194	0.16865	0.078798	0.06802	0.11716	0.08713	-0.0753	0.09307
-3.014845	-0.05087	0.140268	0.067147	0.067668	0.161942	0.145919	-0.10125	0.107669
-3.031609	-0.06489	0.140118	0.098776	0.114442	0.14369	0.128541	-0.09499	0.064043
-3.048374	-0.04905	0.112512	0.118353	0.108638	0.185106	0.162724	-0.04616	0.051779
-3.065138	0.007634	0.145698	0.093266	0.100836	0.175936	0.195905	-0.12644	0.049623
-3.081902	0.023195	0.140933	0.12472	0.170091	0.1811	0.188623	-0.04423	0.101089
-3.098667	0.020977	0.18365	0.120828	0.158441	0.17888	0.164957	-0.03699	0.081799
-3.115431	0.009262	0.151102	0.130567	0.15876	0.19249	0.208339	-0.03836	0.082195
-3.132196	-0.00779	0.21421	0.127812	0.196346	0.157364	0.206204	-0.04265	0.085146
-3.14896	-0.05423	0.165077	0.201508	0.209736	0.218084	0.237402	-0.08857	0.060575
-3.165724	0.020326	0.153133	0.148941	0.154041	0.147728	0.192061	-0.01838	0.103752
-3.182489	0.029875	0.182051	0.213368	0.212121	0.190298	0.194446	0.012006	0.099544
-3.199253	0.066443	0.237235	0.239702	0.226572	0.176613	0.274563	6.77E-05	0.116704
-3.216017	-0.01369	0.075274	0.185692	0.152236	0.088092	0.136914	-0.05557	0.014382
-3.232782	0.024871	0.090487	0.235347	0.194531	0.09963	0.226971	0.079146	0.079978
-3.249546	-0.01533	0.131397	0.109412	0.14574	0.093678	0.190993	-0.02397	0.071962
-3.266311	0.026305	0.133505	0.150663	0.214543	0.102498	0.145275	0.02771	0.022106
-3.283075	0.002814	0.094038	0.12314	0.165093	0.045839	0.191464	-0.05493	0.045886
-3.299839	-0.03447	0.103471	0.174816	0.131427	0.001571	0.175492	-0.0334	-0.04345
-3.316604	-0.00913	0.156813	0.202778	0.173016	0.081048	0.181807	0.039043	0.041935
-3.333368	-0.02062	0.083904	0.155111	0.146691	0.034328	0.130612	-0.05906	-0.03156
-3.350133	0.009918	0.064874	0.191973	0.192561	0.008019	0.217959	0.099279	0.032606
-3.366897	-0.01513	0.104688	0.155312	0.159705	-0.00978	0.184175	-0.03753	-0.01678
-3.383661	0.032381	0.061048	0.13751	0.164951	-0.03763	0.124929	-0.00502	0.003584
-3.400426	-0.07611	0.067977	0.136262	0.174986	-0.05874	0.176111	-0.00141	0.009323
-3.41719	-0.0388	-0.041	0.156585	0.210665	-0.10177	0.113293	-0.03357	-0.0187
-3.433955	-0.02621	-0.01836	0.075044	0.217201	-0.0198	0.114799	0.00995	-0.02609
-3.450719	-0.03209	0.06974	0.204504	0.147258	-0.04406	0.141733	0.015131	-0.00927

-3.467483	0.008741	0.027713	0.187454	0.181041	-0.07623	0.209576	0.056466	-0.00604
-3.484248	0.036487	0.161254	0.222333	0.270983	-0.06691	0.227735	0.144001	0.094888
-3.501012	-0.15074	-0.10123	0.038139	0.098816	-0.16853	0.117296	-0.01135	-0.08545
-3.517777	-0.11634	0.069106	0.211719	0.169673	-0.05191	0.133568	0.121272	0.028207
-3.534541	-0.02138	0.05084	0.19503	0.183993	-0.08432	0.158325	0.09079	0.121941
-3.551305	0.02943	0.046624	0.243257	0.197957	-0.01004	0.227841	0.098792	0.047157
-3.56807	-0.08948	-0.04992	0.184953	0.181785	-0.13413	0.097367	0.041185	-0.04442
-3.584834	-0.04743	-0.0276	0.232331	0.151782	-0.14669	0.142458	0.053817	0.059647
-3.601599	-0.10335	0.013451	0.262199	0.061542	0.010703	0.122201	0.131822	0.046129
-3.618363	0.033415	0.043017	0.259744	0.100683	-0.08271	0.098808	0.10205	0.027373
-3.635127	0.06092	0.001823	0.156667	0.092424	-0.0372	0.136551	0.106011	0.034668
-3.651892	0.095048	-0.01675	0.224385	0.035434	-0.04189	0.050616	0.04244	0.023356
-3.668656	0.039106	-0.05665	0.131566	0.046497	-0.0726	-0.00319	0.044197	0.008079
-3.68542	0.043841	0.000827	0.161865	0.020735	-0.0444	0.023646	0.011328	0.103225
-3.702185	0.081377	0.004195	0.19389	0.002144	-0.01013	0.019201	0.131765	0.076538
-3.718949	0.099704	-0.0464	0.12297	-0.09567	0.004038	0.00951	0.028311	0.033302
-3.735714	0.11371	0.01074	0.140885	-0.00415	0.072048	0.060571	0.100626	0.144331
-3.752478	0.107138	0.059618	0.043091	-0.15149	0.110924	0.002539	0.095134	0.038815
-3.769242	0.018331	-0.15239	0.094424	-0.2004	-0.08111	-0.0573	0.029066	-0.04031
-3.786007	0.134986	-0.10781	-0.01059	-0.20981	-0.05014	-0.14937	0.051252	0.05936
-3.802771	0.05887	-0.10179	-0.00495	-0.20343	-0.00303	-0.15618	0.020049	0.012392
-3.819536	0.088098	-0.04311	-0.04364	-0.14166	0.041901	-0.13615	0.049417	0.051654
-3.8363	0.153212	0.0507	-0.00053	-0.09414	0.070686	-0.09416	0.103129	0.053944
-3.853064	-0.00363	-0.05491	-0.15582	-0.09381	-0.01254	-0.19286	0.01727	-0.01949
-3.869829	0.112543	-0.06708	-0.05609	-0.05887	0.03935	-0.08931	0.105074	0.002626
-3.886593	0.073544	-0.00614	-0.09787	0.043075	0.083971	-0.10439	0.083748	-0.03267
-3.903358	0.0733	-0.05561	-0.171	-0.11494	0.020422	-0.18705	0.072367	-0.05694
-3.920122	0.034608	-0.04801	-0.24222	-0.15642	-0.05147	-0.21554	0.081757	-0.10186
-3.936886	-0.03847	-0.093	-0.31577	-0.14365	-0.00846	-0.24241	0.074563	-0.1166
-3.953651	0.048304	-0.0504	-0.26954	-0.19296	-0.05228	-0.19693	0.110784	-0.13568
-3.970415	0.063502	0.014443	-0.30666	-0.09973	-0.15038	-0.15625	0.079259	-0.06703
-3.98718	-0.07542	-0.13109	-0.20113	-0.14169	-0.10234	-0.18861	0.043932	-0.11298
-4.003944	-0.11335	-0.09091	-0.25844	-0.14969	-0.10485	-0.25733	0.062624	-0.14073
-4.020708	-0.13358	-0.18335	-0.36152	-0.25692	-0.15941	-0.22425	-0.04451	-0.24399
-4.037473	-0.16435	-0.13743	-0.28524	-0.13072	-0.11448	-0.27485	-0.03439	-0.24168
-4.054237	-0.21191	-0.17349	-0.28656	-0.26856	-0.1639	-0.24926	-0.01883	-0.26722
-4.071002	-0.26459	-0.24678	-0.28089	-0.27061	-0.14257	-0.23053	-0.16032	-0.20188
-4.087766	-0.40998	-0.31936	-0.4489	-0.37319	-0.34197	-0.32876	-0.27345	-0.39823
-4.10453	-0.46823	-0.25077	-0.44945	-0.34332	-0.27449	-0.38272	-0.37538	-0.45784
-4.121295	-0.47174	-0.38992	-0.48001	-0.32456	-0.27631	-0.32427	-0.40763	-0.50998
-4.138059	-0.55429	-0.35143	-0.49498	-0.41195	-0.40188	-0.32881	-0.52823	-0.51277
-4.154823	-0.81517	-0.50711	-0.70104	-0.65741	-0.44807	-0.62792	-0.81382	-0.73003
-4.171588	-0.79571	-0.5128	-0.68883	-0.56707	-0.42602	-0.47352	-0.88992	-0.73692
-4.188352	-0.93678	-0.53966	-0.75742	-0.64489	-0.45992	-0.53767	-0.91799	-0.78458
-4.205117	-1.04935	-0.49876	-0.95615	-0.72681	-0.58332	-0.63916	-1.17222	-0.9157
-4.221881	-1.26347	-0.58572	-1.14262	-0.89936	-0.68393	-0.91052	-1.40462	-1.09796
-4.238645	-1.46079	-0.66427	-1.04258	-1.00912	-0.70791	-0.75139	-1.42058	-1.04397
-4.25541	-1.51838	-0.81193	-1.20425	-1.12705	-0.82276	-0.98127	-1.77448	-1.31003
-4.272174	-1.49419	-0.62983	-1.1638	-0.96807	-0.69126	-0.76155	-1.71335	-1.14196
-4.288939	-1.67247	-0.81325	-1.27747	-1.08032	-0.89574	-0.91237	-1.87831	-1.38899
-4.305703	-1.89292	-0.91037	-1.49828	-1.31033	-1.08372	-1.07452	-2.07752	-1.51091
-4.322467	-1.86302	-0.94491	-1.52859	-1.26336	-1.04945	-1.07542	-2.18085	-1.71571
-4.339232	-2.17422	-1.01995	-1.55396	-1.33321	-1.02289	-1.12947	-2.22388	-1.76082
-4.355996	-2.2855	-1.10785	-1.69139	-1.41677	-1.2711	-1.23921	-2.50919	-1.9637

Amplitude Balance (Ref J1-J2)

J0-J1	J0-J2	J0-J3	J0-J4	J0-J5	J0-J6	J0-J7	J0-J8
0	1.501805	1.679982	1.409453	1.528177	1.530123	1.294064	1.270534
0	0.141935	0.104475	0.136482	0.129482	0.163926	0.083344	0.11474
0	0.094149	0.059907	0.093649	0.064612	0.109362	0.056308	0.091396
0	0.073819	0.042534	0.066357	0.049783	0.085145	0.034159	0.066279
0	0.0663	0.047178	0.075714	0.057359	0.095428	0.036325	0.062756
0	0.068653	0.060105	0.082353	0.056774	0.106655	0.037937	0.076688
0	0.078399	0.051223	0.077443	0.051137	0.094703	0.040618	0.069949
0	0.075624	0.039751	0.076177	0.028056	0.077512	0.039738	0.048268
0	0.06068	0.045625	0.069183	0.027504	0.072934	0.032503	0.045989
0	0.062079	0.04325	0.073812	0.037085	0.076531	0.027503	0.045261
0	0.066721	0.040715	0.079955	0.019634	0.061416	0.021096	0.022856
0	0.072078	0.035057	0.072261	0.03356	0.074789	0.020437	0.031103
0	0.051768	0.044186	0.085524	0.026717	0.067979	0.028778	0.010657
0	0.043576	0.019246	0.06132	0.030015	0.066516	0.008412	-0.00117
0	0.05429	0.03011	0.07202	0.030476	0.065914	0.005849	0.004886
0	0.038994	0.009435	0.057808	0.009346	0.045317	-0.01615	-0.02605
0	0.052346	0.012973	0.067103	0.012483	0.065413	0.001955	-0.01782
0	0.060929	0.032693	0.07019	0.032494	0.072265	-0.00555	-0.01627
0	0.039513	0.008208	0.058684	0.009451	0.068738	-0.0223	-0.04303
0	0.034143	0.008054	0.061042	0.018149	0.079175	-0.01582	-0.05414
0	0.03745	-0.00246	0.077038	0.023226	0.072897	-0.01985	-0.0477
0	0.052715	0.005424	0.069865	0.025472	0.083281	-0.01817	-0.05473
0	0.037286	0.004897	0.070384	0.014323	0.081289	-0.02291	-0.06039
0	0.037332	0.011105	0.077193	0.033872	0.085109	-0.01456	-0.06214
0	0.067339	0.015539	0.057074	0.022577	0.094586	-0.01969	-0.05372
0	0.046204	-0.00904	0.080098	0.026781	0.088984	-0.02904	-0.0739
0	0.051409	-0.00221	0.075569	0.022847	0.097253	-0.01849	-0.06757
0	0.049215	0.005933	0.08294	0.014212	0.099452	-0.02472	-0.06928
0	0.038334	-0.02664	0.067319	0.022319	0.079616	-0.03177	-0.0935
0	0.062002	-0.02457	0.087833	0.033046	0.088723	-0.02746	-0.06267
0	0.061032	-0.01807	0.060656	0.026882	0.086137	-0.05103	-0.10295
0	0.076067	-0.01797	0.067712	0.052221	0.089327	-0.03602	-0.10508
0	0.078099	0.005297	0.065483	0.042776	0.098695	-0.04942	-0.101
0	0.098185	0.030253	0.056426	0.083849	0.112918	-0.02292	-0.07479
0	0.083698	0.035149	0.047916	0.086533	0.110235	-0.02941	-0.08169
0	0.068671	0.021019	0.033744	0.036242	0.074784	-0.05117	-0.08937
0	0.065029	0.010974	0.032325	0.023705	0.064664	-0.04824	-0.0998
0	0.074309	0.038899	0.053107	0.045994	0.084378	0.015413	-0.0597
0	0.025035	-0.00892	0.005136	0.025101	0.028905	-0.04509	-0.08872
0	0.048943	0.026455	0.049645	0.014015	0.026931	-0.01348	-0.06199

0	0.05245	-0.00226	0.003573	-0.01346	-0.00779	-0.03987	-0.07974
0	0.014232	-0.0228	-0.00582	-0.02855	-0.03434	-0.04242	-0.07964
0	0.016714	-0.03586	-0.01775	-0.05022	-0.06591	-0.04164	-0.09549
0	-0.0098	-0.04607	-0.0306	-0.03619	-0.07132	-0.05478	-0.08324
0	0.004926	-0.05635	-0.04711	-0.08508	-0.08051	-0.07673	-0.09936
0	-0.00446	-0.03161	-0.05082	-0.07077	-0.11659	-0.07778	-0.08989
0	-0.02225	-0.06312	-0.07389	-0.09926	-0.1391	-0.09722	-0.12068
0	-0.02466	-0.05538	-0.08052	-0.09149	-0.14064	-0.08669	-0.14226
0	0.007213	-0.01395	-0.08344	-0.05754	-0.14359	-0.05007	-0.1177
0	0.011343	-0.02805	-0.0938	-0.13918	-0.15789	-0.07619	-0.12545
0	-0.02542	-0.06534	-0.10321	-0.12255	-0.19108	-0.08768	-0.14912
0	-0.04084	-0.0696	-0.12944	-0.13506	-0.20559	-0.11674	-0.14914
0	-0.05709	-0.08962	-0.13825	-0.15551	-0.21229	-0.1107	-0.13282
0	-0.08955	-0.10821	-0.16258	-0.16939	-0.23283	-0.13768	-0.15314
0	-0.10306	-0.1367	-0.16346	-0.17552	-0.23102	-0.13125	-0.1465
0	-0.05974	-0.0959	-0.14476	-0.16666	-0.2548	-0.11577	-0.12378
0	-0.04951	-0.14003	-0.15252	-0.19172	-0.24443	-0.14309	-0.14626
0	-0.07071	-0.15193	-0.14442	-0.19297	-0.25858	-0.13093	-0.15934
0	-0.08667	-0.16323	-0.17619	-0.21357	-0.2825	-0.13595	-0.17637
0	-0.0414	-0.15698	-0.12717	-0.18827	-0.2602	-0.12291	-0.14315
0	-0.06297	-0.20581	-0.15695	-0.21012	-0.2802	-0.14434	-0.16047
0	-0.0652	-0.18809	-0.15508	-0.21275	-0.25789	-0.14636	-0.15959
0	-0.07877	-0.21818	-0.15804	-0.21895	-0.25091	-0.15148	-0.17644
0	-0.04634	-0.18513	-0.1418	-0.19198	-0.21835	-0.12321	-0.17164
0	-0.06807	-0.20125	-0.155	-0.21553	-0.2252	-0.13119	-0.19113
0	-0.059	-0.19301	-0.16049	-0.20853	-0.22972	-0.12367	-0.20287
0	-0.03903	-0.18434	-0.11612	-0.16542	-0.20103	-0.11521	-0.18599
0	-0.04078	-0.20061	-0.12361	-0.18053	-0.20357	-0.12289	-0.2082
0	-0.01985	-0.16565	-0.11324	-0.14776	-0.1581	-0.08966	-0.19822
0	-0.01563	-0.18717	-0.07909	-0.12091	-0.15588	-0.11695	-0.20774
0	-0.02659	-0.16122	-0.12027	-0.1568	-0.15224	-0.07335	-0.21064
0	-0.03578	-0.14415	-0.06945	-0.10422	-0.1197	-0.05018	-0.21173
0	-0.01043	-0.13609	-0.05181	-0.09472	-0.11744	-0.05901	-0.21655
0	-0.00505	-0.11936	-0.03816	-0.09679	-0.08404	-0.05363	-0.21067
0	0.010889	-0.1207	-0.0402	-0.10879	-0.05158	-0.03717	-0.22099
0	-0.05603	-0.11532	-0.02358	-0.06635	-0.05872	-0.02443	-0.24436
0	0.00768	-0.10227	-0.02177	-0.08334	-0.03782	-0.00675	-0.24876
0	0.029428	-0.07983	0.012933	-0.03245	-0.02046	-0.0118	-0.20858
0	0.026538	-0.05509	0.028305	-0.03148	0.006179	0.026786	-0.22505
0	0.060042	-0.04159	0.041081	-0.01741	0.028821	0.036334	-0.21594
0	0.094863	0.01975	0.078165	0.037319	0.059729	0.083986	-0.18218
0	0.110883	0.006097	0.096672	0.03048	0.102168	0.074572	-0.14275
0	0.127191	0.015128	0.130617	0.031336	0.105373	0.088675	-0.16536
0	0.121786	0.008634	0.146564	0.059169	0.139038	0.126413	-0.16824
0	0.169537	0.049596	0.186953	0.065219	0.196833	0.147617	-0.14131
0	0.148048	0.00995	0.216431	0.097315	0.21389	0.174408	-0.11693
0	0.149372	0.041544	0.145809	0.02809	0.215982	0.198309	-0.13477
0	0.202238	0.084462	0.214166	0.123793	0.259138	0.21033	-0.09809
0	0.207608	0.08331	0.233775	0.144482	0.278675	0.226054	-0.06338
0	0.237014	0.084475	0.259815	0.138011	0.303994	0.232416	-0.05689
0	0.192154	0.051036	0.24969	0.163669	0.273306	0.250167	-0.062
0	0.271103	0.132036	0.241729	0.129494	0.320954	0.189192	-0.01025

0	0.345285	0.116731	0.236542	0.20168	0.376731	0.253985	0.02892
0	0.2696	0.124543	0.292464	0.168176	0.353264	0.250334	0.019822
0	0.293476	0.14562	0.279743	0.181242	0.359945	0.245829	0.023661
0	0.271025	0.167429	0.24047	0.167903	0.367966	0.186525	0.026589
0	0.291938	0.168783	0.29026	0.139437	0.390001	0.21986	0.075518
0	0.307562	0.157077	0.27487	0.199533	0.354746	0.238076	0.067173
0	0.321232	0.167446	0.298619	0.199575	0.376734	0.205047	0.077747
0	0.366996	0.209787	0.303452	0.231054	0.401756	0.211451	0.131292
0	0.382383	0.235403	0.262754	0.273014	0.411573	0.19794	0.169637
0	0.371602	0.171572	0.337266	0.26727	0.435277	0.219124	0.169252
0	0.373038	0.217955	0.261546	0.211116	0.386107	0.182414	0.115621
0	0.38865	0.238726	0.30631	0.245463	0.421456	0.140892	0.157503
0	0.364655	0.225119	0.283966	0.238267	0.371905	0.124441	0.142427
0	0.410415	0.279631	0.352813	0.294611	0.386962	0.127414	0.179128
0	0.380518	0.230537	0.289025	0.240448	0.381703	0.105132	0.113304
0	0.37001	0.308598	0.375033	0.297705	0.398839	0.051239	0.17333
0	0.385234	0.256063	0.323743	0.344393	0.427003	0.048417	0.222203
0	0.436074	0.317862	0.387723	0.36344	0.478912	0.161887	0.201541
0	0.3997	0.309753	0.344467	0.324148	0.419256	0.071001	0.193442
0	0.425021	0.364027	0.367997	0.310059	0.434624	0.061889	0.175906
0	0.456714	0.350308	0.39201	0.387679	0.391833	0.063682	0.137958
0	0.415635	0.296844	0.301533	0.336119	0.363816	-0.02292	0.081749
0	0.461059	0.341812	0.362694	0.411397	0.471014	0.051957	0.205271
0	0.460314	0.36997	0.414565	0.416457	0.436913	0.074505	0.15327
0	0.463174	0.260244	0.413232	0.399587	0.458842	0.026	0.156357
0	0.424304	0.306706	0.372233	0.408684	0.461004	0.058478	0.107831
0	0.498981	0.39733	0.426431	0.477272	0.483613	0.072424	0.10043
0	0.501616	0.355871	0.423541	0.372548	0.451331	0.107764	0.098146
0	0.484794	0.35616	0.435389	0.428621	0.522491	0.09265	0.121707
0	0.501296	0.404821	0.499457	0.426752	0.522576	0.114831	0.092136
0	0.460489	0.411579	0.481094	0.454697	0.54437	0.149731	0.064073
0	0.439624	0.332821	0.419882	0.391207	0.524311	0.014679	0.005268
0	0.421932	0.351728	0.476851	0.383175	0.504912	0.083239	0.04121
0	0.469502	0.353069	0.470695	0.385538	0.486911	0.094604	0.024175
0	0.451303	0.377538	0.486005	0.413229	0.545453	0.106858	0.036323
0	0.534094	0.394847	0.543916	0.397517	0.563814	0.121522	0.05636
0	0.534036	0.517998	0.607021	0.507042	0.644896	0.123957	0.078265
0	0.450172	0.393892	0.480048	0.364498	0.528447	0.121502	0.046925
0	0.472176	0.451786	0.531855	0.399885	0.52473	0.144245	0.033206
0	0.493427	0.444566	0.513014	0.351996	0.571725	0.097647	0.013835
0	0.414232	0.473703	0.522086	0.345973	0.517653	0.124049	-0.00832
0	0.393519	0.487813	0.529096	0.321316	0.572595	0.222114	0.018753
0	0.477262	0.405091	0.523779	0.357927	0.580261	0.16111	0.050972
0	0.440372	0.407724	0.554225	0.32748	0.496357	0.173062	-0.04048
0	0.42703	0.406707	0.531543	0.296678	0.569483	0.115823	0.006829
0	0.47638	0.498681	0.538435	0.292057	0.594238	0.176542	-0.04519
0	0.507022	0.504323	0.557965	0.348566	0.578665	0.225561	0.014899
0	0.448237	0.47116	0.546405	0.3157	0.542404	0.140861	-0.04707
0	0.4013	0.480496	0.565008	0.261214	0.602655	0.270562	-0.01341
0	0.468801	0.471902	0.560481	0.270832	0.59737	0.160719	-0.0377
0	0.38028	0.409599	0.521487	0.19783	0.494054	0.147616	-0.06482
0	0.498335	0.519859	0.64329	0.287582	0.657173	0.261626	0.049448
0	0.354681	0.505885	0.644933	0.209604	0.56049	0.194067	-0.01585
0	0.36736	0.414767	0.642153	0.281342	0.552849	0.226902	-0.03579
0	0.463983	0.553127	0.58137	0.265339	0.589114	0.239878	-0.01306

0	0.383756	0.498259	0.577596	0.194699	0.61957	0.242287	-0.05062
0	0.492186	0.508406	0.643068	0.178642	0.613428	0.303985	0.022599
0	0.419562	0.514457	0.661406	0.26661	0.693665	0.337778	0.029528
0	0.558137	0.656651	0.701139	0.351201	0.678982	0.437903	0.10882
0	0.447547	0.548018	0.623776	0.226198	0.612226	0.314371	0.107634
0	0.395151	0.548447	0.590201	0.252024	0.634374	0.273469	-0.01793
0	0.420154	0.612066	0.696214	0.249214	0.626254	0.336679	0.009437
0	0.403061	0.620414	0.627441	0.19697	0.632746	0.309175	0.071499
0	0.502657	0.70921	0.59639	0.412641	0.671846	0.445001	0.11393
0	0.398096	0.573007	0.502045	0.184833	0.515138	0.280376	-0.04155
0	0.332033	0.445441	0.469558	0.205204	0.528822	0.258741	-0.06172
0	0.281961	0.482046	0.381714	0.168754	0.412204	0.162951	-0.10713
0	0.300641	0.448184	0.451995	0.196345	0.417787	0.222559	-0.06642
0	0.356018	0.476762	0.424774	0.222177	0.443333	0.186863	0.024023
0	0.324485	0.474267	0.371924	0.221281	0.404798	0.271674	-0.04016
0	0.2582	0.388035	0.259057	0.219482	0.380225	0.151801	-0.10169
0	0.303966	0.394958	0.339845	0.275852	0.420726	0.212019	-0.00463
0	0.362049	0.306751	0.202349	0.323665	0.372711	0.215007	-0.10354
0	0.241484	0.449907	0.245523	0.222804	0.405127	0.239655	-0.09382
0	0.172039	0.23125	0.12274	0.139482	0.199848	0.147095	-0.11077
0	0.256813	0.316023	0.208508	0.265078	0.2726	0.193917	-0.08158
0	0.288896	0.251118	0.244324	0.283143	0.266847	0.195966	-0.07151
0	0.32023	0.232131	0.230009	0.249179	0.247165	0.186472	-0.1343
0	0.374091	0.236695	0.390448	0.325155	0.30875	0.25936	-0.05086
0	0.248385	0.223271	0.312497	0.263242	0.299574	0.232904	-0.14487
0	0.350959	0.223509	0.45672	0.349228	0.326938	0.252486	-0.14114
0	0.304366	0.153628	0.302221	0.288287	0.247972	0.243258	-0.16513
0	0.353298	0.124124	0.302711	0.257451	0.261622	0.293248	-0.17131
0	0.384023	0.126664	0.391843	0.375909	0.311273	0.361045	-0.11294
0	0.34248	0.089131	0.25903	0.247675	0.273428	0.312398	-0.21876
0	0.394759	0.039833	0.340331	0.136744	0.302348	0.267583	-0.16527
0	0.390779	0.287291	0.440575	0.326072	0.412354	0.373086	-0.07226
0	0.471533	0.270934	0.473784	0.363862	0.38502	0.431621	-0.06204
0	0.401959	0.191104	0.390058	0.331892	0.441773	0.346625	-0.14503
0	0.481272	0.301161	0.550304	0.409962	0.425388	0.389426	-0.11192
0	0.495408	0.350416	0.463297	0.410466	0.501984	0.454452	-0.08987
0	0.477428	0.411779	0.517204	0.486842	0.576836	0.367548	0.02819
0	0.552875	0.392173	0.563288	0.435188	0.627438	0.40171	-0.02273
0	0.682349	0.452891	0.654682	0.563289	0.63518	0.359946	-0.02405
0	0.549351	0.428862	0.680227	0.567352	0.700589	0.33312	-0.07264
0	0.673026	0.499454	0.67866	0.526689	0.78204	0.296979	0.00715
0	0.780854	0.557287	0.697356	0.743743	0.747253	0.274175	0.050811
0	0.758339	0.553052	0.771517	0.7487	0.885641	0.180527	0.024494
0	0.875182	0.628546	0.838041	0.858229	0.966007	0.295422	0.117936
0	1.03129	0.545394	0.871969	0.849768	0.98053	0.155681	0.099432
0	1.16108	0.576059	0.916806	0.965637	0.926739	0.1393	0.131325
0	1.282485	0.876439	1.007642	1.141348	1.286632	0.322576	0.382668
0	1.195048	0.775373	0.950586	1.086454	1.117787	0.028172	0.174235
0	1.355595	0.794653	1.088646	1.196131	1.316761	0.067019	0.318157
0	1.353092	0.862281	1.157955	1.172299	1.347678	0.082255	0.249449
0	1.479057	0.864925	1.151673	1.20713	1.409419	0.105402	0.348009
0	1.417246	0.80773	1.17201	1.213857	1.382062	-0.02592	0.113343
0	1.656042	1.096578	1.416639	1.553986	1.642654	0.244159	0.379467
0	1.682059	1.073441	1.447636	1.419423	1.647645	0.072032	0.287913

Phase Balance (Ref J1-J2)

J0-J1-Ref	J0-J2	J0-J3	J0-J4	J0-J5	J0-J6	J0-J7	J0-J8	
-0.02494	-3.10667	-3.79946	-0.82412	-1.84815	-2.08491	-1.88407	-2.3041	
0.013765	-0.23794	0.234266	0.481939	-0.35244	0.282895	-0.01814	0.291805	
-0.01971	-0.19737	0.121952	0.257967	-0.32766	0.047633	-0.21134	0.225308	
-0.0161	-0.19976	0.03847	0.138429	-0.34423	-0.10169	-0.38804	0.184903	
-0.00571	-0.20352	-0.02906	0.064656	-0.37187	-0.21963	-0.54952	0.159987	
0.020656	-0.21667	-0.1012	-0.00642	-0.42257	-0.3265	-0.71179	0.140715	
-0.00413	-0.23934	-0.16579	-0.05855	-0.47654	-0.41599	-0.86617	0.122374	
-0.01721	-0.25586	-0.21675	-0.11347	-0.52812	-0.50087	-1.01677	0.113416	
-0.00878	-0.27794	-0.28119	-0.16349	-0.58565	-0.59842	-1.1745	0.088085	
0.018583	-0.29855	-0.3409	-0.20563	-0.63754	-0.66962	-1.3288	0.094038	
0.011072	-0.31921	-0.41219	-0.25954	-0.70482	-0.75442	-1.49248	0.084147	
-0.00758	-0.34306	-0.46949	-0.3091	-0.75764	-0.84206	-1.64098	0.080927	
0.003719	-0.37396	-0.54145	-0.36969	-0.82708	-0.93048	-1.80872	0.066854	
0.008946	-0.40055	-0.61199	-0.42118	-0.89717	-1.02001	-1.96495	0.067401	
0.009903	-0.42342	-0.68104	-0.47928	-0.96944	-1.10687	-2.11288	0.067013	
-0.00227	-0.4577	-0.74956	-0.54875	-1.04283	-1.20098	-2.27273	0.071702	
0.004632	-0.48947	-0.82652	-0.60871	-1.12218	-1.30094	-2.42715	0.068218	
0.026769	-0.53242	-0.90097	-0.69209	-1.21296	-1.40629	-2.58274	0.075001	
-0.03558	-0.56448	-0.9672	-0.76051	-1.29514	-1.51041	-2.7337	0.087715	
0.011619	-0.60886	-1.04261	-0.85148	-1.39328	-1.63361	-2.8898	0.096862	
-0.00464	-0.64481	-1.11438	-0.94293	-1.4847	-1.75782	-3.04073	0.112344	
0.018611	-0.68486	-1.18528	-1.02179	-1.57916	-1.87872	-3.18384	0.129991	
-0.00606	-0.73297	-1.25907	-1.12337	-1.67335	-2.00121	-3.33519	0.15839	
0.012598	-0.78501	-1.34116	-1.21562	-1.77073	-2.13274	-3.47481	0.177913	
-0.01057	-0.84871	-1.43024	-1.33156	-1.88806	-2.28241	-3.65138	0.180467	
-0.00805	-0.92547	-1.55074	-1.46336	-2.01283	-2.45098	-3.8465	0.168986	
0.009334	-1.07511	-1.76861	-1.69769	-2.23638	-2.71918	-4.14693	0.05991	
0.038796	-1.32409	-2.13136	-2.07503	-2.58544	-3.12717	-4.5989	-0.16449	-2
0.018585	-1.64759	-2.60937	-2.55561	-3.02711	-3.62123	-5.15538	-0.4965	-1
0.007283	-1.91129	-3.04357	-3.01047	-3.42042	-4.06651	-5.68215	-0.7961	0
0.009425	-2.07601	-3.3301	-3.28423	-3.68298	-4.36626	-6.04291	-0.97319	1
0.004576	-2.12949	-3.42249	-3.35258	-3.80132	-4.48698	-6.21281	-1.00416	2
-0.01247	-2.14645	-3.40358	-3.30537	-3.85797	-4.53248	-6.26217	-0.94286	3
0.019771	-2.16644	-3.37793	-3.26587	-3.91978	-4.57131	-6.30213	-0.86045	4
0.028647	-2.1934	-3.37862	-3.24493	-3.98472	-4.6488	-6.36345	-0.79009	5
0.00858	-2.24173	-3.42124	-3.27877	-4.06498	-4.75328	-6.47397	-0.75005	6
-0.0175	-2.28947	-3.48587	-3.32942	-4.14747	-4.86094	-6.60846	-0.73423	7
0.009409	-2.36153	-3.592	-3.43424	-4.26542	-5.01064	-6.79066	-0.74271	8
-0.02291	-2.42392	-3.6913	-3.51646	-4.36678	-5.13427	-6.96681	-0.74946	
-0.01412	-2.47238	-3.79049	-3.61398	-4.46353	-5.25883	-7.1513	-0.77705	

-2.94E-06	-2.54829	-3.93012	-3.74399	-4.59482	-5.41606	-7.37837	-0.82991	
0.0246	-2.65275	-4.1046	-3.9033	-4.75108	-5.59003	-7.63454	-0.9257	
-0.00145	-2.78797	-4.30393	-4.10905	-4.93645	-5.80026	-7.9426	-1.06575	
-0.0183	-2.98026	-4.5522	-4.3647	-5.18335	-6.0438	-8.30765	-1.25672	
-0.01717	-3.15445	-4.79806	-4.6009	-5.41679	-6.28437	-8.65603	-1.43668	
-0.02157	-3.30062	-4.99745	-4.80713	-5.62836	-6.4918	-8.97937	-1.60726	
0.033488	-3.39059	-5.14879	-4.92277	-5.76577	-6.61823	-9.21699	-1.69822	
-0.01334	-3.42056	-5.23829	-4.95792	-5.84499	-6.6671	-9.37702	-1.74261	
0.008636	-3.39225	-5.27284	-4.92927	-5.86707	-6.67087	-9.46941	-1.7321	
-0.04594	-3.35961	-5.28067	-4.86804	-5.83984	-6.64822	-9.52467	-1.68881	
-0.00472	-3.30336	-5.30556	-4.81171	-5.8234	-6.60315	-9.59842	-1.66008	
-0.00116	-3.22507	-5.2973	-4.74172	-5.77491	-6.55131	-9.64277	-1.62162	
0.009796	-3.16075	-5.30113	-4.66805	-5.72202	-6.49204	-9.7032	-1.58536	
5.66E-05	-3.0992	-5.30558	-4.62461	-5.67826	-6.44544	-9.7707	-1.55124	
0.040796	-3.00286	-5.27385	-4.54802	-5.60027	-6.35727	-9.80904	-1.50538	
-0.00057	-2.92696	-5.25873	-4.50007	-5.53105	-6.2801	-9.88578	-1.47229	
0.009364	-2.84233	-5.22278	-4.41765	-5.46147	-6.19005	-9.93312	-1.42348	
0.002936	-2.7563	-5.17477	-4.35523	-5.38175	-6.09211	-9.97982	-1.37319	
-0.00123	-2.66537	-5.13214	-4.28446	-5.31415	-5.99653	-10.0344	-1.32649	-49.18
-0.00492	-2.58782	-5.07815	-4.21464	-5.23487	-5.9053	-10.0808	-1.28544	-47.97
0.003642	-2.53171	-5.01407	-4.14514	-5.17096	-5.82362	-10.134	-1.24842	-46.78
-0.00187	-2.46494	-4.95324	-4.09535	-5.11184	-5.74896	-10.2027	-1.21657	-45.61
0.007592	-2.42485	-4.91649	-4.0396	-5.07272	-5.70336	-10.291	-1.19618	-44.49
0.026837	-2.36361	-4.84964	-3.98769	-5.03136	-5.64256	-10.363	-1.17724	-43.4
-0.03804	-2.34914	-4.8205	-3.9714	-5.01806	-5.64536	-10.4846	-1.17699	-42.32
0.030351	-2.30165	-4.74547	-3.90149	-4.99017	-5.58629	-10.5669	-1.15408	-41.26
0.022877	-2.27723	-4.68947	-3.87562	-4.9637	-5.57361	-10.6539	-1.13004	-40.21
0.00148	-2.22492	-4.63551	-3.81153	-4.9276	-5.52275	-10.7341	-1.11276	-39.18
0.007876	-2.15566	-4.55323	-3.73585	-4.8641	-5.46477	-10.7835	-1.05285	-38.16
-0.0086	-2.10579	-4.4735	-3.65397	-4.80877	-5.41052	-10.825	-1.03868	-37.11
-0.00142	-2.02572	-4.41024	-3.60503	-4.76936	-5.37019	-10.8886	-1.01226	-36.09
-0.01004	-1.94915	-4.33568	-3.51765	-4.71796	-5.32714	-10.9228	-0.96003	-35.06
0.003336	-1.87025	-4.2842	-3.46001	-4.69585	-5.32011	-10.996	-0.92768	-34.04
0.004868	-1.79692	-4.23694	-3.40776	-4.68017	-5.30572	-11.0598	-0.89615	-33.03
0.00504	-1.7202	-4.20777	-3.3605	-4.66666	-5.29577	-11.1258	-0.86043	
0.017469	-1.66203	-4.19664	-3.3417	-4.68653	-5.3107	-11.2272	-0.86518	
0.011596	-1.64463	-4.19506	-3.32554	-4.68873	-5.32391	-11.3184	-0.84461	
-0.0051	-1.61888	-4.20576	-3.32776	-4.71477	-5.34308	-11.4405	-0.83961	
-0.00937	-1.60888	-4.23893	-3.35079	-4.76514	-5.39724	-11.5948	-0.85485	
0.020148	-1.64211	-4.29996	-3.40683	-4.8458	-5.48825	-11.7892	-0.8851	
0.017167	-1.64685	-4.35291	-3.4743	-4.94628	-5.57821	-12.0094	-0.9096	
0.012335	-1.72972	-4.46571	-3.58138	-5.05129	-5.73626	-12.2521	-0.94332	
-0.01079	-1.79845	-4.54592	-3.68614	-5.19633	-5.90356	-12.5402	-0.99398	
-0.0014	-1.87475	-4.63727	-3.81083	-5.34284	-6.06991	-12.8381	-1.03272	
0.006182	-1.94904	-4.71862	-3.92419	-5.47474	-6.23586	-13.131	-1.07476	
0.015557	-2.02562	-4.8244	-4.05795	-5.61457	-6.4367	-13.4361	-1.12005	
0.023818	-2.12062	-4.88319	-4.20054	-5.76932	-6.63058	-13.7896	-1.17434	
0.005048	-2.19274	-4.97283	-4.34179	-5.88531	-6.80369	-14.1286	-1.21129	
0.011512	-2.26066	-5.03578	-4.46467	-5.97803	-6.97636	-14.4614	-1.26081	
-0.01878	-2.32687	-5.09823	-4.59142	-6.06405	-7.14615	-14.7944	-1.3107	
-0.02846	-2.3781	-5.15483	-4.72786	-6.15726	-7.28928	-15.1045	-1.35042	
-0.0199	-2.44913	-5.20822	-4.85158	-6.23949	-7.47451	-15.4199	-1.4018	

0.003183	-2.48576	-5.24578	-4.98238	-6.31687	-7.61117	-15.7365	-1.42993
0.010887	-2.53725	-5.28973	-5.08197	-6.402	-7.75782	-16.0565	-1.48618
-0.0213	-2.56885	-5.3116	-5.18608	-6.48397	-7.87905	-16.3434	-1.50694
0.034157	-2.58877	-5.32814	-5.25629	-6.53106	-7.98695	-16.6137	-1.53307
0.018976	-2.59105	-5.33053	-5.32708	-6.5386	-8.05172	-16.8525	-1.53544
0.002211	-2.60766	-5.33687	-5.35894	-6.52934	-8.06314	-17.0558	-1.53451
-0.00785	-2.5818	-5.28916	-5.33633	-6.48124	-8.06381	-17.2124	-1.49994
-0.01854	-2.56148	-5.27055	-5.33744	-6.44417	-8.06432	-17.3899	-1.47649
0.049248	-2.52215	-5.23467	-5.31245	-6.40475	-8.05372	-17.5458	-1.46381
-0.00676	-2.46104	-5.15873	-5.217	-6.32684	-7.97788	-17.5797	-1.43296
-0.04011	-2.38623	-5.08989	-5.13947	-6.25005	-7.90149	-17.645	-1.3823
0.003711	-2.32002	-5.0152	-5.03336	-6.16607	-7.80948	-17.6848	-1.33239
0.009498	-2.21242	-4.91903	-4.88509	-6.04387	-7.6929	-17.6667	-1.26234
0.034199	-2.13143	-4.86354	-4.76089	-5.9862	-7.62617	-17.7175	-1.21591
-0.06674	-1.9889	-4.7354	-4.59942	-5.85671	-7.48383	-17.6557	-1.15454
0.038364	-1.88619	-4.58376	-4.40925	-5.74929	-7.37542	-17.6149	-1.10044
0.078185	-1.73897	-4.44041	-4.2234	-5.65883	-7.26479	-17.547	-1.00154
-0.01724	-1.61796	-4.32293	-4.04515	-5.55902	-7.15193	-17.4934	-0.94747
-0.02355	-1.49458	-4.19173	-3.89557	-5.46005	-7.0366	-17.4259	-0.88512
0.032517	-1.33309	-4.05934	-3.65591	-5.28951	-6.86297	-17.2472	-0.80839
-0.01738	-1.27962	-3.95924	-3.51651	-5.24316	-6.79136	-17.1824	-0.75488
-0.06371	-1.13642	-3.83042	-3.31432	-5.09209	-6.60848	-17.0251	-0.65115
0.020202	-1.00373	-3.68912	-3.14917	-5.04087	-6.55971	-16.9277	-0.54113
-0.05758	-0.90709	-3.58815	-3.0163	-4.9922	-6.51205	-16.852	-0.49621
0.016847	-0.77351	-3.47453	-2.83088	-4.96693	-6.47857	-16.802	-0.39634
-0.05669	-0.70299	-3.35178	-2.74521	-4.9425	-6.45807	-16.8202	-0.31263
0.05326	-0.61733	-3.27061	-2.5771	-4.87326	-6.38714	-16.7402	-0.24636
-0.02444	-0.49842	-3.13491	-2.42106	-4.78099	-6.30994	-16.6213	-0.15625
0.046906	-0.44789	-3.03777	-2.30439	-4.75812	-6.24953	-16.598	-0.05439
-0.03984	-0.34126	-2.93055	-2.17983	-4.72651	-6.22949	-16.5526	0.013397
-0.10637	-0.27363	-2.83211	-2.08268	-4.67111	-6.22059	-16.5252	0.11426
-0.01643	-0.23018	-2.73823	-2.03905	-4.67876	-6.26193	-16.4937	0.125592
-0.00418	-0.18562	-2.66756	-1.9952	-4.66333	-6.30607	-16.5202	0.191152
-0.03819	-0.11788	-2.56406	-1.92936	-4.62918	-6.30222	-16.5044	0.233608
-0.05934	-0.05322	-2.46096	-1.86923	-4.58602	-6.288	-16.4966	0.322418
0.007372	0.000461	-2.38666	-1.82421	-4.55322	-6.30582	-16.5223	0.381855
-0.08151	0.06569	-2.26698	-1.80432	-4.48333	-6.3346	-16.5461	0.381139
0.021348	0.110833	-2.20355	-1.79631	-4.50614	-6.39203	-16.6196	0.438244
0.027542	0.204624	-2.1217	-1.7657	-4.46788	-6.41648	-16.6631	0.492239
-0.00036	0.240764	-2.07503	-1.74473	-4.45238	-6.46529	-16.7373	0.553553
0.065734	0.30948	-1.98604	-1.75183	-4.41542	-6.49844	-16.7502	0.60224
-0.0289	0.378376	-1.93517	-1.74098	-4.35645	-6.46236	-16.7632	0.5871
-0.07322	0.429826	-1.889	-1.69926	-4.31774	-6.52525	-16.8262	0.655066
0.007802	0.47176	-1.85738	-1.7024	-4.30243	-6.58124	-16.9248	0.682521
0.07279	0.583784	-1.78107	-1.65394	-4.24623	-6.56922	-16.945	0.756481
-0.07904	0.627792	-1.7722	-1.69548	-4.27388	-6.67976	-17.1093	0.767092
0.125936	0.669801	-1.79431	-1.68665	-4.27782	-6.72884	-17.2313	0.787802
-0.02684	0.754827	-1.73834	-1.67852	-4.20361	-6.76788	-17.3338	0.811123
-0.02415	0.770047	-1.73692	-1.68746	-4.3034	-6.85377	-17.4775	0.852582
-0.02462	0.834233	-1.76018	-1.73202	-4.26982	-6.92466	-17.5542	0.887956
0.019865	0.883024	-1.7594	-1.72474	-4.2468	-6.96812	-17.7114	0.907393
0.018566	0.942676	-1.77634	-1.73351	-4.21821	-7.01125	-17.7959	0.927491
0.030603	0.968044	-1.83038	-1.79378	-4.26476	-7.12982	-17.9892	0.940357
-0.01497	0.976272	-1.86608	-1.80241	-4.27032	-7.22593	-18.1672	0.94578
0.051775	0.997722	-1.93992	-1.92561	-4.29316	-7.321	-18.3959	0.918727

0.049008	1.042727	-1.97043	-1.98737	-4.30783	-7.39953	-18.5712	0.921791
0.023521	1.059603	-2.04058	-2.0321	-4.34006	-7.49049	-18.8017	0.892751
0.019621	1.12703	-2.09058	-2.11534	-4.31722	-7.56678	-19.0436	0.880889
0.025302	1.224586	-2.12719	-2.14027	-4.32048	-7.66165	-19.2789	0.873153
-0.04605	1.270848	-2.1884	-2.24488	-4.31582	-7.72302	-19.4653	0.84526
-0.03168	1.35948	-2.24048	-2.28935	-4.29425	-7.76698	-19.6801	0.834556
0.01814	1.473405	-2.27713	-2.35552	-4.24031	-7.76699	-19.8604	0.862966
-0.09906	1.572474	-2.29068	-2.34257	-4.13385	-7.67549	-20.0121	0.825103
-0.08861	1.734705	-2.2937	-2.34528	-4.01006	-7.65034	-20.155	0.810559
-0.0031	1.839381	-2.32678	-2.37682	-3.9905	-7.57698	-20.3359	0.764905
0.036705	2.033268	-2.26358	-2.33306	-3.82202	-7.39331	-20.4536	0.823467
0.01787	2.196138	-2.2474	-2.32163	-3.73118	-7.32136	-20.598	0.799045
0.004949	2.419936	-2.15456	-2.13932	-3.5288	-7.0574	-20.6243	0.874703
-0.01485	2.62457	-1.97008	-1.95916	-3.29169	-6.79767	-20.6605	0.953814
0.046491	2.880199	-1.84404	-1.77964	-3.11537	-6.51833	-20.6858	1.0048
0.049143	3.071307	-1.76541	-1.61108	-2.86633	-6.26397	-20.6876	1.002307
0.008109	3.313534	-1.59294	-1.37547	-2.64715	-5.95668	-20.6865	1.052101
0.050727	3.525868	-1.36644	-1.11183	-2.37851	-5.59058	-20.6428	1.141412
-0.16017	3.805872	-1.09005	-0.7323	-2.06969	-5.17187	-20.5176	1.263126
0.029765	4.042337	-0.83156	-0.4241	-1.82397	-4.78123	-20.4402	1.308574
0.080792	4.283179	-0.53292	-0.07314	-1.52971	-4.39416	-20.3121	1.404494
0.052133	4.537673	-0.2512	0.285242	-1.24566	-4.0094	-20.2329	1.507772
0.070671	4.779695	0.08519	0.666067	-0.92027	-3.60282	-20.1181	1.628104
0.115086	5.08472	0.387244	1.046185	-0.66818	-3.18588	-20.0256	1.733697
-0.0743	5.324869	0.730255	1.464802	-0.32799	-2.86584	-19.9525	1.870261
-0.02918	5.560342	1.037565	1.806032	-0.03568	-2.50928	-19.8503	2.0179
0.036208	5.819112	1.433191	2.205571	0.309619	-2.1577	-19.8303	2.13261
0.053654	6.114566	1.814266	2.604852	0.690263	-1.76892	-19.7276	2.268591
0.018197	6.378937	2.181832	3.001704	1.075866	-1.42999	-19.7219	2.421497
-0.00097	6.716843	2.537745	3.316426	1.468137	-1.14482	-19.712	2.587494
0.100188	7.03436	2.89571	3.660299	1.864714	-0.82637	-19.7874	2.759105
-0.01354	7.389923	3.290911	4.035753	2.290847	-0.54787	-19.8271	2.900971
-0.0538	7.772649	3.635452	4.392706	2.733811	-0.27392	-20.0075	3.054357
-0.05261	8.17431	3.987409	4.739666	3.218121	0.028234	-20.1161	3.243384
-0.02756	8.59793	4.32161	5.088276	3.688031	0.300156	-20.2501	3.386089
0.074398	8.992889	4.603691	5.446748	4.166705	0.555984	-20.4973	3.566047
-0.06276	9.555085	5.06066	5.829082	4.700145	0.904074	-20.6168	3.815426
0.02546	10.09023	5.400154	6.232851	5.231341	1.221078	-20.8133	4.012456
0.004803	10.61544	5.733301	6.640059	5.711386	1.543732	-20.9667	4.223432
0.079959	11.17617	6.076468	7.075005	6.270178	1.940562	-21.0864	4.487346
-0.02661	11.62336	6.443985	7.511263	6.722724	2.336785	-21.2742	4.683511
-0.04351	12.23518	6.811363	8.056739	7.321342	2.761802	-21.36	4.956199
0.030951	12.841	7.261752	8.539165	7.763274	3.23594	-21.4168	5.133593
0.010675	13.35419	7.628042	9.067275	8.197231	3.666484	-21.5639	5.328836
0.062525	13.89109	8.043941	9.646698	8.62976	4.102036	-21.5803	5.564794
0.127177	14.45172	8.539105	10.29117	9.035392	4.671453	-21.5505	5.805646
-0.07279	14.93252	9.046251	10.74798	9.333059	5.05012	-21.4749	5.949297
0.031556	15.32051	9.41329	11.31773	9.688519	5.395122	-21.4242	6.048706
0.060647	15.88558	9.967913	12.02193	10.00638	5.881381	-21.2391	6.249207
-0.0418	16.26335	10.53879	12.66326	10.25097	6.282663	-21.0118	6.351584
0.047652	16.69942	11.22629	13.35898	10.47173	6.717364	-20.7408	6.4683
0.185727	17.03858	11.75777	14.02317	10.6757	7.012318	-20.4008	6.541636
0.017228	17.35642	12.49667	14.74684	10.87688	7.439148	-19.9927	6.537302
-0.00055	17.70089	13.08747	15.3792	11.10616	7.822541	-19.526	6.701891

Input Power Data							
2 GHz			8 GHz			12 GHz	
Power In	Power Out	Loss	Power In	Power Out	Loss	Power In	Power Out
0	-1.319	1.319	0	-2.390	2.390	0	-2.651
1	-0.311	1.311	1	-1.390	2.390	1	-1.645
2	0.701	1.299	2	-0.391	2.391	2	-0.639
3	1.670	1.330	3	0.659	2.341	3	0.395
4	2.679	1.321	4	1.661	2.340	4	1.404
5	3.687	1.313	5	2.660	2.340	5	2.411
6	4.697	1.303	6	3.658	2.342	6	3.418
7	5.708	1.292	7	4.658	2.342	7	4.426
8	6.717	1.283	8	5.659	2.341	8	5.435
9	7.724	1.276	9	6.659	2.341	9	6.445
10	8.737	1.263	10	7.661	2.339	10	7.447
11	9.735	1.265	11	8.658	2.342	11	8.455
12	10.747	1.253	12	9.651	2.349	12	9.457
13	11.747	1.253	13	10.651	2.349	13	10.469
14	12.737	1.263	14	11.657	2.343	14	11.482
15	13.722	1.278	15	12.654	2.346	15	12.490
16	14.705	1.295	16	13.654	2.346	16	13.500
17	15.675	1.325	17	14.661	2.339	17	14.515
18	16.640	1.360	18	15.668	2.332	18	15.534
19	17.603	1.397	19	16.679	2.321	19	16.557
20	18.560	1.440	20	17.702	2.298	20	17.588

0	2	18
-1	2	18
-2	2	18
-3	2	18
-4	2	18
-5	2	18
-6	2	18
-7	2	18
-8	2	18
-9	2	18
-10	2	18

2GHz (J2)		
Pin(dBm)	Pout(dBm)	Loss
0	-1.343	1.343
1	-0.339	1.339
2	0.671	1.329
3	1.598	1.402
4	2.605	1.395
5	3.612	1.388
6	4.619	1.381
7	5.629	1.372
8	6.637	1.363
9	7.642	1.358
10	8.652	1.348
11	9.647	1.353
12	10.655	1.345
13	11.657	1.343
14	12.647	1.353
15	13.630	1.370
16	14.612	1.388
17	15.584	1.416
18	16.549	1.451
19	17.512	1.488
20	18.469	1.531
21	19.49	1.510
22	20.55	1.450
23	21.56	1.440
24	22.56	1.440
25	23.55	1.450
26	24.52	1.480
27	25.49	1.510
28	26.45	1.550
29	27.36	1.640
30	28.18	1.820

-40.55
 -39.47
 -38.4
 -37.35
 -36.28
 -35.2
 -34.03
 -32.94
 -31.89
 -30.82
 -29.78
 -28.73
 -27.71
 -26.67
 -25.62
 -24.53

18GHz (J2)		
Pin(dBm)	Pout(dBm)	Loss
0	-3.919	3.919
1	-2.932	3.932
2	-1.940	3.940
3	-0.921	3.921
4	0.066	3.934
5	1.060	3.940
6	2.056	3.944
7	3.053	3.948
8	4.053	3.948
9	5.053	3.947
10	6.055	3.945
11	7.057	3.943
12	8.055	3.945
13	9.058	3.942
14	10.063	3.937
15	11.083	3.917
16	12.102	3.898
17	13.125	3.875
18	14.156	3.844
19	15.197	3.803
20	15.935	4.065
21	16.78	4.220
22	17.82	4.180
23	18.82	4.180
24	19.83	4.170
25	20.88	4.120
26	21.9	4.100
27	22.91	4.090
28	23.91	4.090
29	24.91	4.090
30	25.93	4.070

-49.18
 -47.97
 -46.78
 -45.61
 -44.49
 -43.4
 -42.32
 -41.26
 -40.21
 -39.18
 -38.16
 -37.11
 -36.09
 -35.06
 -34.04
 -33.03

2GHz (J2)			
Pin(dBm)	Pout(dBm)	Loss	Compression
0	-1.343	1.343	0.000
1	-0.339	1.339	-0.004
2	0.671	1.329	-0.014
3	1.598	1.402	0.059
4	2.605	1.395	0.052
5	3.612	1.388	0.045
6	4.619	1.381	0.038
7	5.629	1.372	0.029
8	6.637	1.363	0.020
9	7.642	1.358	0.015

10	8.652	1.348	0.005
11	9.647	1.353	0.010
12	10.655	1.345	0.002
13	11.657	1.343	0.000
14	12.647	1.353	0.010
15	13.630	1.370	0.027
16	14.612	1.388	0.045
17	15.584	1.416	0.073
18	16.549	1.451	0.108
19	17.512	1.488	0.145
20	18.469	1.531	0.188
21	19.49	1.510	0.167
22	20.55	1.450	0.107
23	21.56	1.440	0.097
24	22.56	1.440	0.097
25	23.55	1.450	0.107
26	24.52	1.480	0.137
27	25.49	1.510	0.167
28	26.45	1.550	0.207
29	27.36	1.640	0.297
30	28.18	1.820	0.477

	18 GHz		
Loss	Power In	Power Out	Loss
2.651	0	-4.076	4.076
2.645	1	-3.086	4.086
2.639	2	-2.091	4.091
2.605	3	-0.968	3.968
2.596	4	0.022	3.978
2.589	5	1.019	3.981
2.582	6	2.018	3.982
2.574	7	3.017	3.983
2.565	8	4.019	3.981
2.555	9	5.021	3.979
2.553	10	6.025	3.975
2.545	11	7.029	3.971
2.543	12	8.038	3.962
2.531	13	9.035	3.965
2.518	14	10.042	3.958
2.510	15	11.061	3.939
2.500	16	12.082	3.918
2.485	17	13.108	3.892
2.466	18	14.141	3.859
2.443	19	15.150	3.850
2.412	20	16.144	3.856

2GHz (J4)		
Pin(dBm)	Pout(dBm)	Loss
0	-1.292	1.292
1	-0.287	1.287
2	0.724	1.277
3	1.662	1.338
4	2.668	1.332
5	3.674	1.326
6	4.682	1.319
7	5.690	1.310
8	6.698	1.302
9	7.705	1.295
10	8.712	1.288
11	9.711	1.289
12	10.712	1.288
13	11.717	1.283
14	12.707	1.293
15	13.691	1.309
16	14.669	1.331
17	15.639	1.361
18	16.602	1.398
19	17.565	1.435
20	18.518	1.482
21	19.41	1.590
22	20.43	1.570
23	21.42	1.580
24	22.39	1.610
25	23.37	1.630
26	24.32	1.680
27	25.28	1.720
28	26.23	1.770
29	27.14	1.860
30	27.98	2.020

18GHz (J4)		
Pin(dBm)	Pout(dBm)	Loss
0	-3.780	3.780
1	-2.793	3.793
2	-1.802	3.802
3	-0.752	3.752
4	0.237	3.763
5	1.232	3.768
6	2.230	3.770
7	3.227	3.773
8	4.228	3.773
9	5.229	3.772
10	6.230	3.770
11	7.226	3.774
12	8.228	3.773
13	9.238	3.762
14	10.241	3.759
15	11.259	3.741
16	12.281	3.719
17	13.300	3.700
18	14.328	3.672
19	15.363	3.637
20	15.920	4.080
21	16.9	4.100
22	17.94	4.060
23	18.95	4.050
24	19.97	4.030
25	21.01	3.990
26	22.03	3.970
27	23.04	3.960
28	24.04	3.960
29	25.03	3.970
30	26.07	3.930

-40.55
 -39.47
 -38.4
 -37.35
 -36.28
 -35.2
 -34.03
 -32.94
 -31.89
 -30.82
 -29.78
 -28.73
 -27.71
 -26.67
 -25.62
 -24.53

-49.18
 -47.97
 -46.78
 -45.61
 -44.49
 -43.4
 -42.32
 -41.26
 -40.21
 -39.18
 -38.16
 -37.11
 -36.09
 -35.06
 -34.04
 -33.03

Pin(dBm)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

2GHz (J6)	
Pout(dBm)	Loss
-1.290	1.290
-0.286	1.286
0.726	1.275
1.673	1.327
2.678	1.322
3.685	1.315
4.693	1.308
5.703	1.297
6.711	1.290
7.718	1.282
8.727	1.273
9.723	1.277
10.728	1.272
11.727	1.273
12.719	1.281
13.703	1.297
14.683	1.317
15.656	1.344
16.619	1.381
17.582	1.418
18.535	1.465
19.36	1.640
20.39	1.610
21.38	1.620
22.36	1.640
23.54	1.460
24.29	1.710
25.25	1.750
26.22	1.780
27.16	1.840
28.03	1.970

18GHz (J6)		
Pin(dBm)	Pout(dBm)	Loss
0	-4.155	4.155
1	-3.167	4.167
2	-2.177	4.177
3	-1.151	4.151
4	-0.161	4.161
5	0.831	4.169
6	1.829	4.171
7	2.827	4.173
8	3.825	4.175
9	4.825	4.175
10	5.827	4.174
11	6.829	4.172
12	7.822	4.178
13	8.832	4.168
14	9.837	4.163
15	10.855	4.145
16	11.872	4.128
17	12.895	4.105
18	13.921	4.079
19	14.960	4.040
20	15.757	4.243
21	16.25	4.750
22	17.29	4.710
23	18.3	4.700
24	19.33	4.670
25	20.37	4.630
26	21.39	4.610
27	22.4	4.600
28	23.41	4.590
29	24.43	4.570
30	25.48	4.520

-40.55	-49.18
-39.47	-47.97
-38.4	-46.78
-37.35	-45.61
-36.28	-44.49
-35.2	-43.4
-34.03	-42.32
-32.94	-41.26
-31.89	-40.21
-30.82	-39.18
-29.78	-38.16
-28.73	-37.11
-27.71	-36.09
-26.67	-35.06
-25.62	-34.04
-24.53	-33.03

2GHz (J8)		
Pin(dBm)	Pout(dBm)	Loss
0	-1.411	1.411
1	-0.406	1.406
2	0.603	1.397
3	1.479	1.521
4	2.486	1.514
5	3.492	1.508
6	4.501	1.499
7	5.511	1.489
8	6.518	1.482
9	7.532	1.468
10	8.529	1.472
11	9.533	1.467
12	10.539	1.461
13	11.538	1.462
14	12.530	1.470
15	13.516	1.484
16	14.495	1.505
17	15.465	1.535
18	16.431	1.569
19	17.392	1.608
20	18.349	1.651
21	19.47	1.530
22	20.49	1.510
23	21.47	1.530
24	22.45	1.550
25	23.46	1.540
26	24.41	1.590
27	25.39	1.610
28	26.34	1.660
29	27.24	1.760
30	28.06	1.940

18GHz (J8)		
Pin(dBm)	Pout(dBm)	Loss
0	-4.417	4.417
1	-3.431	4.431
2	-2.439	4.439
3	-1.506	4.506
4	-0.516	4.516
5	0.476	4.525
6	1.475	4.525
7	2.476	4.524
8	3.478	4.522
9	4.482	4.518
10	5.487	4.513
11	6.493	4.507
12	7.499	4.501
13	8.507	4.493
14	9.518	4.482
-40.55	15	10.538
-39.47	16	11.569
-38.4	17	12.597
-37.35	18	13.638
-36.28	19	14.685
-35.2	20	15.669
-34.03	21	16.6
-32.94	22	17.7
-31.89	23	18.58
-30.82	24	19.5
-29.78	25	20.48
-28.73	26	21.02
-27.71	27	22.05
-26.67	28	23.07
-25.62	29	24.08
-24.53	30	25.12
-23	31	26.1
-21.92	32	26.73
-20.84	33	27.6
-19.81	34	28.44
-18.85	35	Fail
-17.67	36	36.000

!Agilent Technologies,N5230A,US43500312,A.07.50.67

!Agilent N5230A: A.07.50.67

!Date: Thursday, May 19, 2016

!Correction S11(Full 2 Port(1,2))

!S21(Full 2 Port(1,2))

!S12(Full 2 Port(1,2))

!S22(Full 2 Port(1,2))

!S2P File: Measurem S11, S21,
Hz S dB R

J1

Frequency

(Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-7.78575	-4.94565	-4.95202	-4.78994
2E+08	-15.5137	-1.24013	-1.21545	-18.0377
2.99E+08	-20.6514	-0.91465	-0.92174	-22.7157
3.99E+08	-22.4804	-0.85549	-0.83971	-21.0332
4.98E+08	-22.8811	-0.83712	-0.84811	-20.0413
5.98E+08	-22.4705	-0.85299	-0.84793	-19.6314
6.97E+08	-21.956	-0.87022	-0.86194	-19.4271
7.97E+08	-21.682	-0.86789	-0.87926	-19.5974
8.96E+08	-21.0243	-0.9041	-0.8884	-19.6539
9.96E+08	-20.3763	-0.92071	-0.91635	-19.8285
1.1E+09	-20.1631	-0.93911	-0.94127	-20.23
1.19E+09	-19.5556	-0.96668	-0.9484	-20.3866
1.29E+09	-19.2991	-0.97739	-0.98624	-20.9367
1.39E+09	-18.9835	-1.00855	-1.00979	-20.8712
1.49E+09	-18.6158	-1.02539	-1.03075	-21.2449
1.59E+09	-18.1427	-1.06366	-1.05891	-21.3003
1.69E+09	-17.9428	-1.07633	-1.06101	-21.4299
1.79E+09	-17.753	-1.09429	-1.09805	-21.6108
1.89E+09	-17.4797	-1.13205	-1.11391	-21.3207
1.99E+09	-17.2626	-1.16336	-1.12684	-21.4724
2.09E+09	-16.9541	-1.19925	-1.17263	-21.1116
2.19E+09	-16.6985	-1.20535	-1.19932	-20.7717
2.29E+09	-16.6626	-1.23527	-1.23355	-20.5542
2.39E+09	-16.4121	-1.24728	-1.26896	-20.2401
2.49E+09	-16.4087	-1.28522	-1.27753	-20.0549
2.59E+09	-16.2324	-1.326	-1.3096	-19.8396
2.69E+09	-16.2238	-1.34732	-1.37194	-19.6411
2.79E+09	-16.2052	-1.40993	-1.4208	-19.446
2.89E+09	-16.1351	-1.46527	-1.48791	-19.0797
2.99E+09	-16.1438	-1.52805	-1.53675	-18.9621
3.09E+09	-16.0206	-1.59815	-1.57964	-18.604
3.18E+09	-15.9464	-1.64484	-1.61885	-18.2557
3.28E+09	-15.6731	-1.67131	-1.65935	-17.9393
3.38E+09	-15.5372	-1.65352	-1.6624	-17.8593
3.48E+09	-15.2797	-1.6683	-1.62802	-17.8329
3.58E+09	-15.258	-1.63716	-1.62902	-17.9066
3.68E+09	-15.1551	-1.62976	-1.62718	-18.035
3.78E+09	-15.261	-1.65279	-1.62679	-18.2161
3.88E+09	-15.1389	-1.63532	-1.62173	-18.4952
3.98E+09	-15.2753	-1.62813	-1.62213	-18.8239
4.08E+09	-15.387	-1.64379	-1.64114	-19.2545

J2

Frequency

(Hz)	S11 (dB)	S21 (dB)	S12 (dB)
1E+08	-9.55428	-3.23926	-3.26987
2E+08	-15.547	-1.0661	-1.04604
2.99E+08	-20.0778	-0.81363	-0.82628
3.99E+08	-23.8867	-0.7687	-0.75554
4.98E+08	-26.3699	-0.76127	-0.76429
5.98E+08	-27.3307	-0.77945	-0.76419
6.97E+08	-27.1886	-0.79264	-0.79297
7.97E+08	-26.1414	-0.8165	-0.80794
8.96E+08	-24.8155	-0.84224	-0.81735
9.96E+08	-23.4423	-0.86278	-0.85499
1.1E+09	-23.0653	-0.89381	-0.87469
1.19E+09	-22.1841	-0.90678	-0.9115
1.29E+09	-21.5648	-0.94096	-0.94874
1.39E+09	-21.1606	-0.9773	-0.97757
1.49E+09	-20.7043	-0.9926	-0.98629
1.59E+09	-20.0642	-1.02184	-1.02757
1.69E+09	-19.8862	-1.04049	-1.0391
1.79E+09	-19.6979	-1.07633	-1.07601
1.89E+09	-19.4021	-1.09901	-1.09464
1.99E+09	-19.2804	-1.12016	-1.10933
2.09E+09	-19.0576	-1.1685	-1.13488
2.19E+09	-18.8901	-1.19519	-1.17402
2.29E+09	-19.0201	-1.21491	-1.21171
2.39E+09	-18.9444	-1.23627	-1.25206
2.49E+09	-19.1176	-1.25754	-1.26463
2.59E+09	-19.1006	-1.31324	-1.28407
2.69E+09	-19.2697	-1.35612	-1.33658
2.79E+09	-19.4207	-1.39549	-1.3933
2.89E+09	-19.4511	-1.45175	-1.46365
2.99E+09	-19.4517	-1.52782	-1.52672
3.09E+09	-19.0738	-1.56766	-1.55653
3.18E+09	-18.8774	-1.59696	-1.59321
3.28E+09	-18.407	-1.59722	-1.60212
3.38E+09	-18.3147	-1.59313	-1.58868
3.48E+09	-17.9727	-1.60511	-1.5722
3.58E+09	-17.9426	-1.57697	-1.57725
3.68E+09	-17.6627	-1.57274	-1.57268
3.78E+09	-17.6147	-1.60556	-1.58546
3.88E+09	-17.2726	-1.60865	-1.58481
3.98E+09	-17.1247	-1.6237	-1.60489
4.08E+09	-16.8097	-1.64976	-1.65083

4.18E+09	-15.569	-1.67532	-1.65352	-19.7655	4.18E+09	-16.5151	-1.69711	-1.67154
4.28E+09	-15.7842	-1.70127	-1.69299	-20.4418	4.28E+09	-16.2655	-1.72776	-1.7277
4.38E+09	-15.9246	-1.73847	-1.72825	-21.2312	4.38E+09	-15.8707	-1.75471	-1.76111
4.48E+09	-16.0157	-1.76315	-1.7532	-21.9043	4.48E+09	-15.5623	-1.80051	-1.7937
4.58E+09	-16.0724	-1.79549	-1.79323	-22.5892	4.58E+09	-15.1999	-1.82676	-1.82233
4.68E+09	-16.1746	-1.82085	-1.8428	-23.4936	4.68E+09	-14.9727	-1.85416	-1.85822
4.78E+09	-16.0797	-1.84376	-1.8741	-24.4698	4.78E+09	-14.6689	-1.87548	-1.88885
4.88E+09	-16.2997	-1.82578	-1.85211	-24.9481	4.88E+09	-14.6261	-1.85942	-1.88368
4.98E+09	-16.537	-1.78707	-1.83414	-26.8451	4.98E+09	-14.5132	-1.87334	-1.87693
5.08E+09	-16.8436	-1.82247	-1.80573	-27.9405	5.08E+09	-14.4819	-1.88237	-1.8391
5.17E+09	-17.2348	-1.82026	-1.77699	-29.5653	5.17E+09	-14.4616	-1.88294	-1.84591
5.27E+09	-17.727	-1.78376	-1.79683	-32.0522	5.27E+09	-14.4734	-1.84752	-1.86532
5.37E+09	-18.1232	-1.76281	-1.79286	-33.2602	5.37E+09	-14.4568	-1.87389	-1.89055
5.47E+09	-18.6961	-1.75818	-1.7658	-35.3501	5.47E+09	-14.4884	-1.86634	-1.84676
5.57E+09	-19.2297	-1.7491	-1.74174	-33.1547	5.57E+09	-14.5801	-1.8498	-1.83367
5.67E+09	-19.6632	-1.75916	-1.7376	-30.758	5.67E+09	-14.6295	-1.85607	-1.84368
5.77E+09	-20.0911	-1.76727	-1.74015	-28.9343	5.77E+09	-14.679	-1.87921	-1.87684
5.87E+09	-20.497	-1.75455	-1.78552	-26.994	5.87E+09	-14.795	-1.863	-1.90094
5.97E+09	-20.6638	-1.7743	-1.76	-25.7148	5.97E+09	-14.8392	-1.88726	-1.87034
6.07E+09	-21.3425	-1.79957	-1.78058	-24.3588	6.07E+09	-15.1236	-1.90485	-1.89026
6.17E+09	-21.4766	-1.79555	-1.80737	-23.4884	6.17E+09	-15.2168	-1.90794	-1.90579
6.27E+09	-21.7484	-1.80204	-1.80737	-22.8917	6.27E+09	-15.454	-1.92343	-1.91295
6.37E+09	-21.9287	-1.80227	-1.83478	-22.3851	6.37E+09	-15.6635	-1.93501	-1.97341
6.47E+09	-21.9031	-1.85798	-1.84079	-21.9785	6.47E+09	-15.7587	-1.94597	-1.93742
6.57E+09	-22.3558	-1.86306	-1.8615	-22.0076	6.57E+09	-16.1345	-1.98397	-1.95201
6.67E+09	-22.3823	-1.86354	-1.87062	-21.7682	6.67E+09	-16.3322	-1.97348	-1.96746
6.77E+09	-22.547	-1.89935	-1.911	-20.9998	6.77E+09	-16.6753	-1.99914	-2.00791
6.87E+09	-22.4321	-1.93866	-1.92215	-20.7908	6.87E+09	-16.7966	-2.01103	-2.02729
6.97E+09	-22.5873	-1.96589	-1.91881	-20.7878	6.97E+09	-17.033	-2.01181	-1.9617
7.07E+09	-22.4245	-1.92955	-1.97295	-20.3534	7.07E+09	-17.2723	-2.04961	-2.01911
7.16E+09	-21.9495	-1.99139	-1.98472	-20.0781	7.16E+09	-17.3438	-2.06737	-2.05034
7.26E+09	-21.3951	-2.01073	-1.99165	-19.7758	7.26E+09	-17.3299	-2.06294	-2.05626
7.36E+09	-21.021	-2.03739	-2.02564	-19.5886	7.36E+09	-17.3669	-2.07475	-2.06851
7.46E+09	-20.2613	-2.01536	-2.07041	-19.1692	7.46E+09	-17.1637	-2.10522	-2.07746
7.56E+09	-19.5595	-2.06079	-2.07185	-18.4942	7.56E+09	-16.9353	-2.09283	-2.07139
7.66E+09	-18.8014	-2.10931	-2.09414	-17.9679	7.66E+09	-16.7256	-2.14753	-2.1257
7.76E+09	-18.1661	-2.15105	-2.11972	-17.4597	7.76E+09	-16.404	-2.1643	-2.14365
7.86E+09	-17.1511	-2.16849	-2.1676	-16.7505	7.86E+09	-15.8346	-2.16531	-2.16998
7.96E+09	-16.9075	-2.20916	-2.17494	-16.7281	7.96E+09	-15.8931	-2.20086	-2.20035
8.06E+09	-16.1546	-2.23432	-2.20668	-16.2129	8.06E+09	-15.4533	-2.18525	-2.20834
8.16E+09	-15.6795	-2.30397	-2.2708	-15.894	8.16E+09	-15.2194	-2.24016	-2.2254
8.26E+09	-15.1644	-2.30448	-2.32127	-15.4841	8.26E+09	-14.9043	-2.22111	-2.25931
8.36E+09	-14.6806	-2.36835	-2.33559	-15.2009	8.36E+09	-14.6193	-2.26648	-2.26047
8.46E+09	-14.429	-2.39465	-2.37882	-14.8967	8.46E+09	-14.6133	-2.30103	-2.31312
8.56E+09	-13.9	-2.46138	-2.47747	-14.5127	8.56E+09	-14.1912	-2.30637	-2.33835
8.66E+09	-13.7236	-2.46879	-2.50645	-14.2769	8.66E+09	-14.1227	-2.37327	-2.32441
8.76E+09	-13.3219	-2.51593	-2.53166	-14.0874	8.76E+09	-13.8465	-2.3441	-2.35749
8.86E+09	-13.1766	-2.57831	-2.51503	-13.9016	8.86E+09	-13.8182	-2.38674	-2.34201
8.96E+09	-12.9962	-2.61498	-2.5861	-13.7599	8.96E+09	-13.6901	-2.39133	-2.3885
9.06E+09	-12.8391	-2.59864	-2.6172	-13.6689	9.06E+09	-13.6684	-2.33527	-2.46855
9.15E+09	-12.7749	-2.61571	-2.70025	-13.6152	9.15E+09	-13.675	-2.39374	-2.39268
9.25E+09	-12.7119	-2.62534	-2.64702	-13.4612	9.25E+09	-13.7625	-2.39314	-2.39706
9.35E+09	-12.5553	-2.66079	-2.65134	-13.569	9.35E+09	-13.7079	-2.37038	-2.3518
9.45E+09	-12.4056	-2.69665	-2.68944	-13.3439	9.45E+09	-13.4578	-2.40671	-2.40871
9.55E+09	-12.5252	-2.73022	-2.70435	-13.3131	9.55E+09	-13.6538	-2.36769	-2.40133

9.65E+09	-12.4287	-2.72144	-2.70025	-13.1544	9.65E+09	-13.6589	-2.44505	-2.41361
9.75E+09	-12.2803	-2.73241	-2.79035	-13.059	9.75E+09	-13.5085	-2.4639	-2.43011
9.85E+09	-12.2394	-2.79794	-2.75432	-13.0136	9.85E+09	-13.4868	-2.45724	-2.37262
9.95E+09	-12.135	-2.72832	-2.79303	-13.031	9.95E+09	-13.386	-2.39516	-2.45695
1.01E+10	-12.0907	-2.84497	-2.75356	-13.0173	1.01E+10	-13.4406	-2.4601	-2.43062
1.01E+10	-12.0457	-2.82008	-2.83949	-13.0083	1.01E+10	-13.4551	-2.46483	-2.45979
1.02E+10	-11.9966	-2.82787	-2.75691	-12.9965	1.02E+10	-13.5015	-2.41822	-2.49117
1.03E+10	-11.8783	-2.88487	-2.82569	-12.8984	1.03E+10	-13.432	-2.53002	-2.50136
1.04E+10	-11.8355	-2.84633	-2.86766	-12.8796	1.04E+10	-13.4709	-2.49156	-2.48466
1.05E+10	-11.7619	-2.85332	-2.87355	-12.8508	1.05E+10	-13.4078	-2.48764	-2.52347
1.06E+10	-11.6211	-2.86109	-2.87057	-12.9219	1.06E+10	-13.3991	-2.51099	-2.51923
1.07E+10	-11.664	-2.92856	-2.91487	-12.7087	1.07E+10	-13.4963	-2.50903	-2.52487
1.08E+10	-11.4889	-2.92039	-2.93597	-12.8007	1.08E+10	-13.3662	-2.51846	-2.55085
1.09E+10	-11.6266	-2.91012	-2.92341	-12.984	1.09E+10	-13.6967	-2.5347	-2.56018
1.1E+10	-11.646	-2.96055	-2.96078	-12.8026	1.1E+10	-13.841	-2.62773	-2.58087
1.11E+10	-11.7554	-3.0263	-2.9302	-12.9262	1.11E+10	-14.1156	-2.65847	-2.54216
1.12E+10	-11.7818	-2.90453	-2.97081	-13.2444	1.12E+10	-14.2838	-2.52662	-2.63129
1.13E+10	-11.8572	-3.0034	-2.94613	-13.2556	1.13E+10	-14.5012	-2.55949	-2.58925
1.14E+10	-11.9942	-2.99597	-3.01979	-13.3118	1.14E+10	-14.6207	-2.55726	-2.5177
1.15E+10	-11.9667	-3.03203	-2.97815	-13.4717	1.15E+10	-14.9334	-2.60165	-2.60367
1.16E+10	-11.9797	-3.01249	-2.99643	-13.6481	1.16E+10	-15.1316	-2.59462	-2.59625
1.17E+10	-12.3524	-3.02708	-3.02533	-13.8616	1.17E+10	-15.662	-2.5611	-2.6208
1.18E+10	-12.1636	-3.02398	-3.01976	-13.987	1.18E+10	-15.6803	-2.64191	-2.63758
1.19E+10	-12.2273	-3.0176	-3.03681	-14.3986	1.19E+10	-15.9908	-2.5969	-2.59215
1.2E+10	-12.5393	-3.01563	-3.09489	-14.3686	1.2E+10	-16.7551	-2.6455	-2.59817
1.21E+10	-12.4568	-3.06903	-3.02052	-14.7368	1.21E+10	-16.7043	-2.67009	-2.59812
1.22E+10	-12.773	-3.07007	-3.05329	-14.9379	1.22E+10	-17.4279	-2.61599	-2.6402
1.23E+10	-12.4783	-3.02554	-3.03812	-15.3975	1.23E+10	-17.1917	-2.60598	-2.62635
1.24E+10	-12.8371	-3.03329	-3.02143	-15.4435	1.24E+10	-18.0352	-2.65567	-2.65231
1.25E+10	-12.8848	-3.08663	-2.96446	-15.7289	1.25E+10	-18.6236	-2.66078	-2.71168
1.26E+10	-12.7676	-3.03394	-3.08505	-15.9498	1.26E+10	-18.387	-2.62647	-2.67344
1.27E+10	-12.6917	-3.10289	-3.11556	-16.0242	1.27E+10	-18.4577	-2.75129	-2.74573
1.28E+10	-12.7991	-3.12592	-3.12795	-16.2717	1.28E+10	-18.9627	-2.67665	-2.71248
1.29E+10	-12.6708	-3.14865	-3.00821	-16.4666	1.29E+10	-18.9246	-2.78239	-2.74111
1.3E+10	-12.7287	-3.12516	-3.14246	-16.4036	1.3E+10	-19.1735	-2.69755	-2.75805
1.31E+10	-12.6032	-3.113	-3.15142	-16.8005	1.31E+10	-19.0017	-2.71492	-2.83835
1.32E+10	-12.5597	-3.17131	-3.21252	-17.1063	1.32E+10	-19.1498	-2.84089	-2.75147
1.33E+10	-12.3129	-3.20256	-3.19433	-16.6835	1.33E+10	-18.5738	-2.78546	-2.85223
1.34E+10	-12.2754	-3.2451	-3.18601	-16.9798	1.34E+10	-18.5777	-2.84584	-2.80927
1.35E+10	-12.17	-3.21346	-3.19283	-17.8097	1.35E+10	-18.708	-2.85776	-2.86798
1.36E+10	-12.2049	-3.26652	-3.21683	-17.0558	1.36E+10	-18.6901	-2.90067	-2.88192
1.37E+10	-11.9801	-3.25602	-3.36183	-17.218	1.37E+10	-18.123	-2.82864	-2.93099
1.38E+10	-12.0068	-3.30225	-3.29802	-17.0262	1.38E+10	-18.0645	-2.90589	-2.89898
1.39E+10	-11.716	-3.28772	-3.31164	-16.8716	1.39E+10	-17.5808	-2.96102	-2.92799
1.4E+10	-11.5704	-3.29378	-3.31869	-16.7731	1.4E+10	-17.3654	-2.96298	-2.91882
1.41E+10	-11.4961	-3.38778	-3.29482	-16.4497	1.41E+10	-16.9827	-2.98914	-2.95065
1.42E+10	-11.6561	-3.35373	-3.44755	-15.8157	1.42E+10	-17.3711	-2.9999	-3.03367
1.43E+10	-11.3041	-3.35902	-3.37854	-15.9317	1.43E+10	-16.6891	-3.05207	-3.05356
1.44E+10	-11.277	-3.4445	-3.37452	-15.6582	1.44E+10	-16.4669	-3.0789	-3.00157
1.45E+10	-11.1747	-3.4028	-3.41482	-15.4559	1.45E+10	-16.2198	-3.09114	-3.06691
1.46E+10	-11.2138	-3.45386	-3.40789	-15.296	1.46E+10	-15.9737	-3.07943	-3.05914
1.47E+10	-10.9838	-3.43477	-3.37715	-14.7447	1.47E+10	-15.5189	-3.09384	-3.10156
1.48E+10	-10.9723	-3.36851	-3.48135	-14.3117	1.48E+10	-15.4367	-3.07536	-3.16206
1.49E+10	-10.9969	-3.60876	-3.47224	-14.2009	1.49E+10	-15.0391	-3.25297	-3.19989
1.5E+10	-10.8778	-3.5032	-3.48165	-13.9083	1.5E+10	-14.8441	-3.13918	-3.08921

1.51E+10	-10.9835	-3.48652	-3.52215	-13.5891	1.51E+10	-15.0602	-3.13772	-3.19563
1.52E+10	-11.068	-3.47954	-3.60819	-13.3237	1.52E+10	-14.8981	-3.15874	-3.27274
1.53E+10	-11.0483	-3.6233	-3.56114	-13.3017	1.53E+10	-14.5524	-3.28662	-3.28735
1.54E+10	-11.1993	-3.55907	-3.5213	-13.0567	1.54E+10	-14.7866	-3.23339	-3.33014
1.55E+10	-11.3031	-3.63523	-3.56733	-13.0192	1.55E+10	-14.7078	-3.31731	-3.32027
1.56E+10	-11.6084	-3.54203	-3.53576	-13.1989	1.56E+10	-15.2025	-3.22911	-3.26215
1.57E+10	-11.9122	-3.55057	-3.58871	-12.9752	1.57E+10	-15.3426	-3.32301	-3.35818
1.58E+10	-11.9079	-3.58205	-3.54499	-12.7645	1.58E+10	-15.4876	-3.33963	-3.34585
1.59E+10	-12.1353	-3.56078	-3.58761	-13.0086	1.59E+10	-15.6127	-3.42628	-3.31555
1.6E+10	-12.3127	-3.63663	-3.64983	-12.8415	1.6E+10	-15.4667	-3.32754	-3.44192
1.61E+10	-12.6559	-3.63232	-3.65829	-12.7302	1.61E+10	-15.8641	-3.3693	-3.47344
1.62E+10	-13.1359	-3.61174	-3.68586	-13.0252	1.62E+10	-16.4943	-3.39836	-3.43443
1.63E+10	-13.4521	-3.52004	-3.64603	-13.1798	1.63E+10	-16.8103	-3.3284	-3.42534
1.64E+10	-13.8328	-3.65214	-3.6398	-13.1303	1.64E+10	-17.167	-3.41404	-3.361
1.65E+10	-14.0986	-3.74659	-3.67461	-13.4757	1.65E+10	-17.4351	-3.4625	-3.49206
1.66E+10	-14.7531	-3.77463	-3.69758	-13.7342	1.66E+10	-18.3215	-3.47684	-3.45186
1.67E+10	-15.3066	-3.69423	-3.68299	-13.6859	1.67E+10	-19.132	-3.51247	-3.49105
1.68E+10	-16.0125	-3.71064	-3.68646	-14.0471	1.68E+10	-19.8012	-3.48855	-3.48789
1.69E+10	-16.8181	-3.62006	-3.70233	-14.3832	1.69E+10	-20.6634	-3.41212	-3.47454
1.7E+10	-17.2892	-3.81181	-3.71854	-15.0255	1.7E+10	-20.4494	-3.52764	-3.40192
1.71E+10	-18.1782	-3.62966	-3.79343	-15.259	1.71E+10	-21.0516	-3.52984	-3.45974
1.72E+10	-19.2953	-3.7164	-3.80752	-15.9292	1.72E+10	-21.8437	-3.47927	-3.5489
1.73E+10	-20.8554	-3.81776	-3.78078	-16.4902	1.73E+10	-21.6321	-3.55553	-3.58798
1.74E+10	-21.7952	-3.87285	-3.88085	-17.1494	1.74E+10	-21.0347	-3.53522	-3.56829
1.75E+10	-24.094	-3.90528	-3.90921	-17.6575	1.75E+10	-20.4269	-3.57348	-3.58434
1.76E+10	-26.6614	-3.9195	-3.834	-18.8727	1.76E+10	-19.4335	-3.65559	-3.59429
1.77E+10	-30.3565	-4.03098	-3.86273	-19.1751	1.77E+10	-18.2856	-3.55824	-3.63717
1.78E+10	-34.612	-3.95904	-3.98605	-19.905	1.78E+10	-17.3202	-3.63769	-3.57301
1.79E+10	-34.2536	-4.08443	-4.06232	-20.6182	1.79E+10	-16.6896	-3.66414	-3.69251
1.8E+10	-30.2115	-4.15262	-4.10999	-21.2032	1.8E+10	-16.2075	-3.8416	-3.71072
1.81E+10	-26.1742	-4.13285	-4.1407	-21.4027	1.81E+10	-15.1446	-3.69434	-3.73087
1.82E+10	-22.8214	-4.16244	-4.17423	-21.5259	1.82E+10	-14.8328	-3.85625	-3.82181
1.83E+10	-20.952	-4.33192	-4.26967	-21.2014	1.83E+10	-14.3895	-3.83881	-3.76364
1.84E+10	-18.5813	-4.45627	-4.42157	-21.5838	1.84E+10	-13.7119	-3.93987	-3.94999
1.85E+10	-17.1703	-4.55839	-4.49089	-21.0008	1.85E+10	-13.3522	-3.98102	-3.9868
1.86E+10	-15.7717	-4.51184	-4.56519	-20.3196	1.86E+10	-13.0943	-3.9501	-4.05479
1.87E+10	-14.4267	-4.73742	-4.69914	-19.8851	1.87E+10	-12.5405	-4.01398	-4.05234
1.88E+10	-13.6411	-4.84665	-4.83025	-19.8303	1.88E+10	-12.4344	-4.25056	-4.1646
1.89E+10	-12.5085	-4.87275	-4.96244	-19.3683	1.89E+10	-12.121	-4.1748	-4.11573
1.9E+10	-11.5863	-5.06615	-4.94897	-18.7199	1.9E+10	-11.575	-4.22823	-4.0451
1.91E+10	-10.8227	-5.22277	-5.14529	-18.078	1.91E+10	-11.3392	-4.2787	-4.20404
1.92E+10	-10.1486	-5.40665	-5.2435	-18.4376	1.92E+10	-10.9364	-4.47633	-4.30813
1.93E+10	-9.59896	-5.43325	-5.40602	-17.7859	1.93E+10	-10.773	-4.43433	-4.40823
1.94E+10	-9.18628	-5.70173	-5.52885	-18.131	1.94E+10	-10.6594	-4.54233	-4.37017
1.95E+10	-8.33348	-5.6452	-5.72613	-17.8928	1.95E+10	-10.0864	-4.45158	-4.4721
1.96E+10	-8.04109	-5.88675	-5.99951	-18.0323	1.96E+10	-9.96603	-4.59403	-4.68187
1.97E+10	-7.60733	-6.07821	-5.96501	-18.5884	1.97E+10	-9.67549	-4.75876	-4.61661
1.98E+10	-7.33506	-6.23628	-6.23272	-18.2759	1.98E+10	-9.54722	-4.75561	-4.73722
1.99E+10	-7.02695	-6.49035	-6.38321	-18.3901	1.99E+10	-9.23314	-4.76076	-4.80636
2E+10	-6.57875	-6.64106	-6.63713	-18.143	2E+10	-8.90908	-4.94313	-4.81752

J3

S22 (dB)	Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	Frequency (Hz)	S11 (dB)
-9.57527	1E+08	-10.026	-3.14973	-3.19011	-10.6896	1E+08	-8.5935
-17.5036	2E+08	-15.3827	-1.11435	-1.09653	-18.0716	2E+08	-15.3699
-21.5613	2.99E+08	-20.11	-0.83652	-0.85454	-21.9208	2.99E+08	-20.083
-23.585	3.99E+08	-23.698	-0.77323	-0.78031	-23.6923	3.99E+08	-23.9137
-24.8495	4.98E+08	-25.9043	-0.76189	-0.77789	-24.809	4.98E+08	-26.4543
-25.311	5.98E+08	-26.3459	-0.7716	-0.77548	-25.2501	5.98E+08	-27.2186
-25.6603	6.97E+08	-26.1012	-0.78487	-0.78408	-25.701	6.97E+08	-27.1389
-26.0379	7.97E+08	-24.9724	-0.79364	-0.8098	-26.2411	7.97E+08	-26.0608
-26.0557	8.96E+08	-23.7008	-0.82243	-0.81242	-26.5483	8.96E+08	-24.7476
-25.8391	9.96E+08	-22.4435	-0.8426	-0.85226	-26.5073	9.96E+08	-23.4259
-26.0027	1.1E+09	-22.0334	-0.87705	-0.85689	-26.7302	1.1E+09	-23.1349
-25.7208	1.19E+09	-21.2927	-0.90125	-0.88503	-26.3865	1.19E+09	-22.3898
-25.8686	1.29E+09	-20.5973	-0.90828	-0.93799	-26.552	1.29E+09	-21.7874
-25.1599	1.39E+09	-20.2126	-0.95938	-0.95656	-25.6759	1.39E+09	-21.478
-25.2569	1.49E+09	-19.6987	-0.97398	-0.97459	-25.3728	1.49E+09	-21.1465
-24.8352	1.59E+09	-19.1129	-1.00826	-1.01107	-24.6088	1.59E+09	-20.597
-24.7564	1.69E+09	-18.8941	-1.00623	-1.0257	-24.2606	1.69E+09	-20.4481
-24.7695	1.79E+09	-18.726	-1.04286	-1.0519	-23.9981	1.79E+09	-20.4412
-24.3294	1.89E+09	-18.4253	-1.09731	-1.06583	-23.3452	1.89E+09	-20.2352
-24.6546	1.99E+09	-18.2585	-1.09958	-1.0947	-23.2335	1.99E+09	-20.2333
-24.2816	2.09E+09	-18.0285	-1.14428	-1.11818	-22.7068	2.09E+09	-20.0284
-24.0455	2.19E+09	-17.8691	-1.16916	-1.15604	-22.3256	2.19E+09	-19.8883
-24.1284	2.29E+09	-17.9026	-1.18699	-1.1831	-22.1875	2.29E+09	-20.0783
-24.1581	2.39E+09	-17.8728	-1.21453	-1.21864	-22.0116	2.39E+09	-20.1198
-24.2607	2.49E+09	-18.018	-1.23007	-1.24115	-22.0475	2.49E+09	-20.2633
-24.4601	2.59E+09	-17.9108	-1.28222	-1.27369	-22.0924	2.59E+09	-20.1468
-24.6552	2.69E+09	-18.146	-1.31046	-1.3305	-22.2733	2.69E+09	-20.3157
-24.8147	2.79E+09	-18.2879	-1.37671	-1.3759	-22.4573	2.79E+09	-20.383
-24.6265	2.89E+09	-18.4135	-1.44785	-1.44991	-22.4513	2.89E+09	-20.3601
-24.9464	2.99E+09	-18.4812	-1.50736	-1.5144	-22.681	2.99E+09	-20.2397
-24.8401	3.09E+09	-18.2879	-1.5853	-1.56431	-22.584	3.09E+09	-19.7917
-24.6285	3.18E+09	-18.1411	-1.61335	-1.61053	-22.5123	3.18E+09	-19.4683
-24.3799	3.28E+09	-17.8184	-1.62481	-1.63292	-22.4565	3.28E+09	-18.8078
-24.413	3.38E+09	-17.882	-1.61004	-1.62234	-22.8975	3.38E+09	-18.561
-24.2639	3.48E+09	-17.7889	-1.60828	-1.57976	-23.5067	3.48E+09	-18.013
-24.3339	3.58E+09	-18.0678	-1.5838	-1.56292	-24.3688	3.58E+09	-17.8311
-24.4652	3.68E+09	-18.1717	-1.54972	-1.56933	-25.6513	3.68E+09	-17.5126
-24.0493	3.78E+09	-18.5474	-1.57282	-1.5547	-27.0532	3.78E+09	-17.363
-24.1201	3.88E+09	-18.6236	-1.55587	-1.55788	-29.1469	3.88E+09	-17.0453
-24.0186	3.98E+09	-18.8733	-1.58701	-1.56049	-31.7728	3.98E+09	-16.7651
-23.6225	4.08E+09	-18.8987	-1.58334	-1.58613	-35.1357	4.08E+09	-16.3753

-23.194	4.18E+09	-18.9216	-1.62269	-1.61613	-36.9428	4.18E+09	-15.9833
-22.979	4.28E+09	-18.8479	-1.65159	-1.65165	-34.6255	4.28E+09	-15.6763
-22.6274	4.38E+09	-18.4834	-1.70597	-1.6894	-30.737	4.38E+09	-15.1992
-22.1645	4.48E+09	-18.1547	-1.72065	-1.73142	-27.9499	4.48E+09	-14.855
-21.8481	4.58E+09	-17.7177	-1.78879	-1.7501	-26.1055	4.58E+09	-14.4479
-21.318	4.68E+09	-17.3399	-1.81335	-1.80853	-24.3961	4.68E+09	-14.0932
-20.8503	4.78E+09	-16.968	-1.83663	-1.87109	-23.0441	4.78E+09	-13.7568
-20.2583	4.88E+09	-16.8259	-1.84777	-1.87045	-22.2091	4.88E+09	-13.6311
-19.5151	4.98E+09	-16.5778	-1.87664	-1.86395	-20.6744	4.98E+09	-13.4925
-19.0136	5.08E+09	-16.3751	-1.84316	-1.83402	-19.8797	5.08E+09	-13.3972
-18.505	5.17E+09	-16.198	-1.86594	-1.85493	-18.9882	5.17E+09	-13.3397
-17.8834	5.27E+09	-15.8948	-1.83637	-1.81847	-17.9289	5.27E+09	-13.2738
-17.4586	5.37E+09	-15.6547	-1.83297	-1.869	-17.251	5.37E+09	-13.2269
-17.0918	5.47E+09	-15.3491	-1.85586	-1.84286	-16.3719	5.47E+09	-13.1871
-16.7111	5.57E+09	-15.1563	-1.83388	-1.83963	-15.8194	5.57E+09	-13.2232
-16.4424	5.67E+09	-15.0082	-1.86413	-1.83279	-15.3454	5.67E+09	-13.3003
-16.2304	5.77E+09	-14.7309	-1.87255	-1.85184	-14.9886	5.77E+09	-13.317
-15.9784	5.87E+09	-14.5772	-1.85594	-1.88427	-14.5621	5.87E+09	-13.4104
-15.8193	5.97E+09	-14.433	-1.9038	-1.90034	-14.2871	5.97E+09	-13.451
-15.6553	6.07E+09	-14.3685	-1.90739	-1.91118	-13.9511	6.07E+09	-13.6759
-15.5762	6.17E+09	-14.3226	-1.90823	-1.94261	-13.8045	6.17E+09	-13.8258
-15.5629	6.27E+09	-14.3057	-1.93073	-1.95248	-13.6711	6.27E+09	-14.0493
-15.5506	6.37E+09	-14.4708	-1.96046	-1.98698	-13.6417	6.37E+09	-14.3043
-15.554	6.47E+09	-14.4691	-1.96083	-1.95379	-13.5894	6.47E+09	-14.4805
-15.7241	6.57E+09	-14.6884	-2.01049	-1.97907	-13.7527	6.57E+09	-14.8231
-15.7864	6.67E+09	-14.9093	-1.97724	-1.99046	-13.8206	6.67E+09	-15.1931
-15.5799	6.77E+09	-15.1804	-2.02786	-2.02984	-13.6834	6.77E+09	-15.6015
-15.6563	6.87E+09	-15.3113	-2.02953	-2.04385	-13.7286	6.87E+09	-15.859
-15.7895	6.97E+09	-15.647	-2.06258	-2.01129	-13.8768	6.97E+09	-16.2612
-15.6789	7.07E+09	-15.8941	-2.04129	-2.06183	-13.8618	7.07E+09	-16.6291
-15.7009	7.16E+09	-16.2389	-2.09531	-2.07085	-13.9634	7.16E+09	-16.8764
-15.6816	7.26E+09	-16.4653	-2.0694	-2.08047	-14.0492	7.26E+09	-17.09
-15.6579	7.36E+09	-16.5772	-2.07234	-2.06441	-14.2178	7.36E+09	-17.2408
-15.626	7.46E+09	-16.526	-2.08304	-2.11206	-14.2554	7.46E+09	-17.1736
-15.3685	7.56E+09	-16.5361	-2.09813	-2.1098	-14.127	7.56E+09	-17.1335
-15.2294	7.66E+09	-16.5168	-2.14408	-2.14028	-14.1066	7.66E+09	-17.0842
-15.0829	7.76E+09	-16.2143	-2.17275	-2.16173	-13.9623	7.76E+09	-16.8226
-14.7494	7.86E+09	-15.7533	-2.1843	-2.18618	-13.7047	7.86E+09	-16.4037
-14.8694	7.96E+09	-15.7715	-2.1994	-2.18554	-13.9395	7.96E+09	-16.4962
-14.736	8.06E+09	-15.2877	-2.19534	-2.21001	-13.7547	8.06E+09	-16.0956
-14.6989	8.16E+09	-15.0635	-2.26431	-2.21871	-13.7685	8.16E+09	-15.9502
-14.5023	8.26E+09	-14.5588	-2.2525	-2.27618	-13.6921	8.26E+09	-15.6133
-14.536	8.36E+09	-14.2603	-2.31501	-2.28936	-13.6743	8.36E+09	-15.3905
-14.4848	8.46E+09	-14.2197	-2.34181	-2.31907	-13.6541	8.46E+09	-15.59
-14.3378	8.56E+09	-13.7228	-2.3631	-2.34304	-13.4414	8.56E+09	-15.0523
-14.321	8.66E+09	-13.5579	-2.40463	-2.36678	-13.4183	8.66E+09	-14.9967
-14.4396	8.76E+09	-13.2761	-2.40724	-2.4069	-13.4383	8.76E+09	-14.7792
-14.5502	8.86E+09	-13.1021	-2.44733	-2.39307	-13.4738	8.86E+09	-14.7072
-14.5894	8.96E+09	-12.8222	-2.4557	-2.4574	-13.5416	8.96E+09	-14.5043
-14.8205	9.06E+09	-12.772	-2.46876	-2.43486	-13.6316	9.06E+09	-14.5148
-15.0604	9.15E+09	-12.7235	-2.49195	-2.44834	-13.8042	9.15E+09	-14.4572
-15.199	9.25E+09	-12.7035	-2.48844	-2.43862	-13.9198	9.25E+09	-14.4355
-15.5438	9.35E+09	-12.665	-2.47585	-2.4546	-14.2727	9.35E+09	-14.3291
-15.6261	9.45E+09	-12.4364	-2.51493	-2.48685	-14.2991	9.45E+09	-14.0012
-15.9225	9.55E+09	-12.4777	-2.48589	-2.47146	-14.5091	9.55E+09	-13.9833

-15.9577	9.65E+09	-12.5297	-2.52286	-2.51746	-14.545	9.65E+09	-13.9925
-16.1336	9.75E+09	-12.3367	-2.54164	-2.51691	-14.6541	9.75E+09	-13.5867
-16.2802	9.85E+09	-12.2799	-2.56524	-2.42398	-14.795	9.85E+09	-13.4736
-16.4829	9.95E+09	-12.2202	-2.47441	-2.53798	-14.9474	9.95E+09	-13.2156
-16.6362	1.01E+10	-12.3143	-2.55677	-2.52348	-15.0566	1.01E+10	-13.1105
-16.6334	1.01E+10	-12.2645	-2.54083	-2.55672	-15.1025	1.01E+10	-12.9394
-16.7042	1.02E+10	-12.3854	-2.52226	-2.502	-15.1899	1.02E+10	-12.9815
-16.5975	1.03E+10	-12.3522	-2.60672	-2.5878	-15.1753	1.03E+10	-12.797
-16.6012	1.04E+10	-12.3984	-2.55791	-2.54726	-15.1971	1.04E+10	-12.7535
-16.5235	1.05E+10	-12.3797	-2.61129	-2.57248	-15.1911	1.05E+10	-12.5984
-16.6273	1.06E+10	-12.3971	-2.52882	-2.58964	-15.3274	1.06E+10	-12.5049
-16.2987	1.07E+10	-12.6248	-2.55598	-2.58658	-15.0853	1.07E+10	-12.6607
-16.3998	1.08E+10	-12.5232	-2.63877	-2.66131	-15.3099	1.08E+10	-12.5551
-16.5937	1.09E+10	-12.7638	-2.57235	-2.57194	-15.3285	1.09E+10	-12.6178
-16.2625	1.1E+10	-12.8856	-2.61587	-2.6254	-15.068	1.1E+10	-12.8573
-16.4916	1.11E+10	-13.1787	-2.59834	-2.58706	-15.3107	1.11E+10	-13.102
-16.9443	1.12E+10	-13.3722	-2.56639	-2.62249	-15.4652	1.12E+10	-13.3378
-16.8561	1.13E+10	-13.7229	-2.62907	-2.62762	-15.3649	1.13E+10	-13.5804
-16.9802	1.14E+10	-13.841	-2.62025	-2.54006	-15.5988	1.14E+10	-13.7334
-17.3826	1.15E+10	-14.1467	-2.60398	-2.65099	-15.7721	1.15E+10	-14.1297
-17.6921	1.16E+10	-14.3163	-2.57831	-2.57975	-15.8966	1.16E+10	-14.346
-17.8309	1.17E+10	-14.8177	-2.45927	-2.58646	-16.0269	1.17E+10	-14.8615
-18.125	1.18E+10	-14.9362	-2.64807	-2.64306	-16.2151	1.18E+10	-15.0761
-18.7233	1.19E+10	-15.4525	-2.55291	-2.59264	-16.5033	1.19E+10	-15.6341
-18.5509	1.2E+10	-16.0354	-2.62008	-2.58912	-16.299	1.2E+10	-16.2969
-19.0282	1.21E+10	-15.8843	-2.55824	-2.57642	-16.5129	1.21E+10	-16.3536
-19.4159	1.22E+10	-16.6902	-2.62033	-2.56169	-16.8921	1.22E+10	-17.3076
-20.0588	1.23E+10	-16.4943	-2.59256	-2.54548	-17.1188	1.23E+10	-17.1884
-20.2595	1.24E+10	-17.4237	-2.61572	-2.6448	-17.3196	1.24E+10	-18.0957
-20.5378	1.25E+10	-17.967	-2.61035	-2.66446	-17.5558	1.25E+10	-18.8291
-21.0435	1.26E+10	-17.9699	-2.62609	-2.59943	-17.851	1.26E+10	-18.9661
-21.2468	1.27E+10	-18.0716	-2.57232	-2.65649	-18.1409	1.27E+10	-18.9953
-21.2538	1.28E+10	-18.6167	-2.62105	-2.60459	-18.2424	1.28E+10	-19.5332
-21.5403	1.29E+10	-18.8032	-2.66718	-2.59269	-18.3365	1.29E+10	-19.6314
-21.3443	1.3E+10	-19.0739	-2.64674	-2.6613	-18.4405	1.3E+10	-19.951
-21.9437	1.31E+10	-18.9885	-2.60468	-2.6306	-19.0154	1.31E+10	-19.8157
-21.9436	1.32E+10	-19.045	-2.67652	-2.66799	-19.282	1.32E+10	-19.9562
-21.5055	1.33E+10	-18.49	-2.6521	-2.7322	-19.0533	1.33E+10	-19.2908
-21.5344	1.34E+10	-18.631	-2.72785	-2.69464	-19.3716	1.34E+10	-19.3698
-22.69	1.35E+10	-18.6846	-2.75797	-2.72163	-20.5202	1.35E+10	-19.3195
-20.9321	1.36E+10	-18.712	-2.74834	-2.7017	-19.6634	1.36E+10	-19.4901
-21.2693	1.37E+10	-18.1608	-2.79512	-2.80068	-20.1788	1.37E+10	-19.1258
-20.8123	1.38E+10	-18.1116	-2.82519	-2.76667	-20.0884	1.38E+10	-19.2151
-19.833	1.39E+10	-17.7001	-2.85778	-2.77009	-19.7451	1.39E+10	-18.8597
-19.3379	1.4E+10	-17.4659	-2.73955	-2.77707	-19.5985	1.4E+10	-19.0162
-18.9171	1.41E+10	-17.0769	-2.80534	-2.71123	-19.7109	1.41E+10	-19.0347
-17.9154	1.42E+10	-17.7803	-2.8008	-2.82406	-18.8149	1.42E+10	-20.2756
-17.6175	1.43E+10	-17.0515	-2.80393	-2.83124	-18.8671	1.43E+10	-19.9011
-17.2811	1.44E+10	-16.9782	-2.79931	-2.80972	-19.0221	1.44E+10	-19.9973
-16.8525	1.45E+10	-17.0705	-2.86617	-2.84612	-18.7885	1.45E+10	-20.9219
-16.4668	1.46E+10	-17.1143	-2.84648	-2.84122	-18.8055	1.46E+10	-22.0111
-15.5946	1.47E+10	-16.9819	-2.86394	-2.7992	-17.9462	1.47E+10	-22.5073
-15.1752	1.48E+10	-17.291	-2.81995	-2.91638	-17.7949	1.48E+10	-23.3177
-14.87	1.49E+10	-17.2061	-2.92259	-2.86825	-17.7773	1.49E+10	-23.7686
-14.4191	1.5E+10	-17.2827	-2.94573	-2.89666	-17.46	1.5E+10	-25.1281

-14.2137	1.51E+10	-18.1665	-2.87719	-2.88764	-17.1307	1.51E+10	-27.263
-13.8355	1.52E+10	-18.395	-2.87905	-2.98388	-16.6661	1.52E+10	-27.6026
-13.9257	1.53E+10	-18.3898	-3.01926	-3.00211	-16.9862	1.53E+10	-26.1827
-13.6058	1.54E+10	-19.066	-2.93323	-2.97666	-16.5552	1.54E+10	-25.5446
-13.738	1.55E+10	-19.3136	-2.91365	-2.94525	-16.6371	1.55E+10	-23.9765
-13.9533	1.56E+10	-20.2739	-2.95546	-3.00769	-16.8688	1.56E+10	-22.4628
-13.8106	1.57E+10	-20.369	-3.00444	-3.02967	-16.5141	1.57E+10	-20.9119
-13.6238	1.58E+10	-20.3093	-3.01276	-3.03226	-16.3272	1.58E+10	-19.6863
-14.0811	1.59E+10	-20.5744	-3.08761	-3.00188	-16.3759	1.59E+10	-18.5494
-14.0417	1.6E+10	-19.8029	-3.06131	-3.01574	-16.2392	1.6E+10	-17.5937
-14.2122	1.61E+10	-19.3122	-3.04662	-3.09222	-16.036	1.61E+10	-16.6147
-14.7562	1.62E+10	-19.1112	-3.1381	-3.14382	-16.236	1.62E+10	-15.996
-15.2556	1.63E+10	-18.4345	-3.10335	-3.17881	-16.3585	1.63E+10	-15.3005
-15.6072	1.64E+10	-17.7869	-3.19553	-3.1963	-16.2768	1.64E+10	-14.8391
-16.3793	1.65E+10	-17.0902	-3.2217	-3.2811	-16.6067	1.65E+10	-14.2886
-17.2227	1.66E+10	-16.8607	-3.33621	-3.4006	-16.8188	1.66E+10	-14.2686
-17.6988	1.67E+10	-16.4391	-3.36147	-3.38399	-16.9717	1.67E+10	-14.109
-18.9365	1.68E+10	-15.9654	-3.38473	-3.40479	-17.8198	1.68E+10	-13.8357
-19.7535	1.69E+10	-15.504	-3.35691	-3.44338	-18.5184	1.69E+10	-13.7017
-21.5223	1.7E+10	-14.9911	-3.55785	-3.47786	-19.7282	1.7E+10	-13.3134
-22.7417	1.71E+10	-14.7906	-3.51052	-3.55893	-20.3417	1.71E+10	-13.4407
-25.5991	1.72E+10	-14.7459	-3.5125	-3.55785	-21.8941	1.72E+10	-13.6258
-27.9699	1.73E+10	-14.4653	-3.57396	-3.67473	-23.453	1.73E+10	-13.6115
-30.9865	1.74E+10	-14.62	-3.6232	-3.67706	-25.0577	1.74E+10	-13.8823
-29.3863	1.75E+10	-14.5639	-3.72463	-3.65454	-27.9282	1.75E+10	-13.847
-25.9168	1.76E+10	-14.3762	-3.7109	-3.76228	-35.1689	1.76E+10	-13.621
-24.2531	1.77E+10	-14.0607	-3.7279	-3.76027	-42.9912	1.77E+10	-13.3564
-22.1893	1.78E+10	-13.9079	-3.74384	-3.71794	-33.8324	1.78E+10	-13.2559
-20.8974	1.79E+10	-13.7894	-3.80014	-3.78029	-28.291	1.79E+10	-13.0291
-19.6404	1.8E+10	-13.5065	-3.91452	-3.8241	-24.0882	1.8E+10	-12.7564
-18.792	1.81E+10	-12.9637	-3.79033	-3.83046	-21.8097	1.81E+10	-12.2158
-17.9133	1.82E+10	-12.6597	-3.9472	-3.93016	-19.4659	1.82E+10	-11.7995
-17.3807	1.83E+10	-12.1671	-3.93759	-3.88336	-17.9638	1.83E+10	-11.411
-16.9597	1.84E+10	-11.4966	-4.06556	-4.06578	-16.7127	1.84E+10	-10.88
-16.1856	1.85E+10	-11.1386	-4.10276	-4.09375	-15.2705	1.85E+10	-10.5692
-15.9543	1.86E+10	-10.6725	-4.09548	-4.18799	-14.0942	1.86E+10	-10.2668
-15.6712	1.87E+10	-10.0301	-4.17848	-4.22775	-13.1835	1.87E+10	-9.65922
-15.4284	1.88E+10	-9.85011	-4.43749	-4.27279	-12.3286	1.88E+10	-9.50037
-15.765	1.89E+10	-9.29384	-4.46752	-4.45315	-11.917	1.89E+10	-8.91858
-15.6921	1.9E+10	-8.67913	-4.4613	-4.47355	-11.3385	1.9E+10	-8.48482
-15.1222	1.91E+10	-8.52147	-4.65402	-4.67201	-10.5078	1.91E+10	-8.40468
-15.1363	1.92E+10	-8.10425	-4.88319	-4.67827	-10.1373	1.92E+10	-8.03425
-15.0964	1.93E+10	-7.9103	-4.90854	-4.8235	-9.65383	1.93E+10	-7.77961
-15.3979	1.94E+10	-7.69991	-5.00655	-4.97514	-9.35446	1.94E+10	-7.67172
-15.6294	1.95E+10	-7.11979	-4.97186	-4.97088	-9.00636	1.95E+10	-7.172
-15.8037	1.96E+10	-7.0492	-5.08982	-5.29957	-8.72001	1.96E+10	-7.19382
-16.1464	1.97E+10	-6.96334	-5.31546	-5.23864	-8.63108	1.97E+10	-6.99395
-17.0882	1.98E+10	-6.82523	-5.29436	-5.29399	-8.3827	1.98E+10	-6.83224
-17.1811	1.99E+10	-6.64944	-5.51085	-5.44607	-8.03223	1.99E+10	-6.75034
-18.3699	2E+10	-6.41428	-5.51994	-5.50914	-8.17065	2E+10	-6.55179

J4

S21 (dB)	S12 (dB)	S22 (dB)
-3.38631	-3.37823	-9.43333
-1.08964	-1.07648	-17.9884
-0.81668	-0.82284	-21.951
-0.74402	-0.74804	-23.8024
-0.74874	-0.73583	-24.875
-0.73757	-0.74476	-25.2947
-0.76159	-0.75468	-25.5402
-0.77254	-0.77331	-25.9993
-0.79887	-0.77262	-26.1303
-0.81651	-0.82484	-26.1158
-0.84312	-0.82951	-26.471
-0.85809	-0.85826	-26.4538
-0.88909	-0.89609	-26.9399
-0.91714	-0.91283	-26.5005
-0.94676	-0.93666	-27.0197
-0.97135	-0.95798	-26.8506
-0.99069	-0.98682	-27.0525
-1.01307	-1.01218	-27.4583
-1.04043	-1.01734	-27.1077
-1.05631	-1.05037	-27.7684
-1.08643	-1.05669	-27.4263
-1.11095	-1.08765	-27.1299
-1.12635	-1.12315	-27.2004
-1.15952	-1.1611	-27.0624
-1.16197	-1.16579	-27.2641
-1.20487	-1.20742	-27.2587
-1.24063	-1.23724	-27.4543
-1.29308	-1.28359	-27.65
-1.3594	-1.35165	-27.1727
-1.42473	-1.4137	-27.6267
-1.49571	-1.47679	-28.0849
-1.53524	-1.53534	-27.4953
-1.57999	-1.5775	-26.6178
-1.58029	-1.586	-25.94
-1.58574	-1.56266	-24.9159
-1.55277	-1.57832	-24.3062
-1.54583	-1.56604	-23.8937
-1.57728	-1.55983	-23.0046
-1.56605	-1.5541	-22.6538
-1.58999	-1.56323	-22.1436
-1.58488	-1.60065	-21.4272

J5

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-8.97166	-3.25395	-3.30407	-9.89527
2E+08	-15.8149	-1.08598	-1.0802	-18.6185
2.99E+08	-20.6373	-0.82989	-0.85161	-22.3752
3.99E+08	-24.5635	-0.77613	-0.76702	-23.6106
4.98E+08	-26.8542	-0.76711	-0.76093	-24.2475
5.98E+08	-27.1734	-0.77453	-0.76844	-24.3166
6.97E+08	-26.5619	-0.7843	-0.7861	-24.2778
7.97E+08	-25.4234	-0.80918	-0.80746	-24.4098
8.96E+08	-24.1089	-0.82486	-0.83257	-24.3841
9.96E+08	-22.878	-0.8404	-0.86022	-24.1832
1.1E+09	-22.5329	-0.88113	-0.86695	-24.3804
1.19E+09	-21.7631	-0.88865	-0.89866	-24.2989
1.29E+09	-21.225	-0.91695	-0.93239	-24.5767
1.39E+09	-20.9465	-0.94357	-0.95518	-24.2055
1.49E+09	-20.5703	-0.972	-0.98131	-24.5996
1.59E+09	-20.0655	-0.99244	-0.99015	-24.615
1.69E+09	-19.9956	-1.00263	-1.01985	-24.8324
1.79E+09	-19.9618	-1.04367	-1.04803	-25.4224
1.89E+09	-19.8096	-1.0725	-1.06426	-25.3967
1.99E+09	-19.8229	-1.0754	-1.07599	-26.3992
2.09E+09	-19.7572	-1.12107	-1.12185	-26.4638
2.19E+09	-19.7712	-1.1434	-1.12209	-26.6089
2.29E+09	-20.1275	-1.16641	-1.15993	-27.2948
2.39E+09	-20.1543	-1.17781	-1.20361	-27.6615
2.49E+09	-20.4808	-1.2133	-1.2162	-28.3033
2.59E+09	-20.523	-1.24219	-1.23852	-28.8273
2.69E+09	-20.91	-1.28715	-1.27702	-29.4131
2.79E+09	-21.165	-1.32156	-1.33972	-29.9826
2.89E+09	-21.3783	-1.39406	-1.40883	-29.7939
2.99E+09	-21.5769	-1.46147	-1.47631	-30.4531
3.09E+09	-21.2384	-1.52135	-1.50617	-30.8687
3.18E+09	-21.0334	-1.55607	-1.56626	-30.3068
3.28E+09	-20.3702	-1.5474	-1.56929	-29.4412
3.38E+09	-20.2257	-1.56558	-1.56512	-28.6263
3.48E+09	-19.6847	-1.57145	-1.55469	-27.3706
3.58E+09	-19.4308	-1.54552	-1.54024	-26.4637
3.68E+09	-19.0212	-1.52805	-1.55707	-25.5896
3.78E+09	-18.7037	-1.5641	-1.55624	-24.1927
3.88E+09	-18.241	-1.56543	-1.55657	-23.3285
3.98E+09	-17.8317	-1.60343	-1.55877	-22.518
4.08E+09	-17.2749	-1.60063	-1.61635	-21.6318

-1.63212	-1.61701	-20.785	4.18E+09	-16.8192	-1.66408	-1.64202	-20.9019
-1.6677	-1.66216	-20.2462	4.28E+09	-16.3639	-1.70208	-1.66586	-20.2883
-1.68779	-1.70619	-19.6913	4.38E+09	-15.7884	-1.72954	-1.73905	-19.722
-1.75127	-1.74752	-19.204	4.48E+09	-15.323	-1.7669	-1.77156	-19.2032
-1.79271	-1.78736	-18.8144	4.58E+09	-14.8021	-1.82676	-1.82067	-18.8177
-1.83144	-1.84016	-18.3918	4.68E+09	-14.3525	-1.85118	-1.88056	-18.2739
-1.89	-1.88732	-18.0356	4.78E+09	-14.0101	-1.89686	-1.917	-17.8158
-1.88651	-1.91628	-17.7925	4.88E+09	-13.8255	-1.91338	-1.91513	-17.4011
-1.95431	-1.92491	-17.2181	4.98E+09	-13.5817	-1.91469	-1.92099	-16.7226
-1.92904	-1.90488	-16.866	5.08E+09	-13.4247	-1.90246	-1.90683	-16.3625
-1.93608	-1.90716	-16.4048	5.17E+09	-13.3126	-1.92432	-1.89476	-15.8882
-1.8905	-1.8797	-15.8339	5.27E+09	-13.236	-1.89794	-1.96187	-15.4332
-1.87113	-1.93228	-15.467	5.37E+09	-13.181	-1.91292	-1.93076	-15.0347
-1.9021	-1.88197	-15.0316	5.47E+09	-13.1215	-1.94855	-1.90211	-14.6299
-1.85803	-1.8578	-14.6718	5.57E+09	-13.1002	-1.88136	-1.89949	-14.371
-1.87371	-1.8572	-14.4087	5.67E+09	-13.1584	-1.898	-1.89529	-14.164
-1.87918	-1.87354	-14.2202	5.77E+09	-13.1736	-1.90164	-1.91575	-14.0603
-1.87987	-1.89457	-13.9959	5.87E+09	-13.2736	-1.90368	-1.93451	-13.8961
-1.89155	-1.89621	-13.902	5.97E+09	-13.2992	-1.90449	-1.91991	-13.8051
-1.87554	-1.88652	-13.7183	6.07E+09	-13.4972	-1.92327	-1.92687	-13.6477
-1.88865	-1.90697	-13.6796	6.17E+09	-13.6366	-1.92979	-1.95552	-13.6084
-1.90135	-1.89491	-13.6753	6.27E+09	-13.7876	-1.93815	-1.94398	-13.5849
-1.88579	-1.9693	-13.7724	6.37E+09	-14.0279	-1.92135	-1.98445	-13.6511
-1.90635	-1.92492	-13.8364	6.47E+09	-14.2106	-1.96239	-1.98146	-13.7567
-1.9173	-1.91893	-14.0241	6.57E+09	-14.5561	-1.96588	-1.97018	-14.0402
-1.90944	-1.9323	-14.1735	6.67E+09	-14.9387	-1.96273	-1.96663	-14.2415
-1.95752	-1.94624	-14.0845	6.77E+09	-15.3043	-1.99055	-1.99994	-14.2374
-1.96273	-1.96328	-14.2554	6.87E+09	-15.5565	-2.00546	-2.00457	-14.4047
-1.9757	-1.95512	-14.4979	6.97E+09	-15.9317	-1.99587	-1.97315	-14.639
-1.94976	-1.96699	-14.5272	7.07E+09	-16.251	-2.00763	-2.018	-14.6073
-2.00038	-1.99357	-14.6507	7.16E+09	-16.5038	-2.05017	-2.04558	-14.6292
-2.0021	-2.00396	-14.835	7.26E+09	-16.6907	-2.04514	-2.04649	-14.675
-2.01335	-2.02108	-15.0197	7.36E+09	-16.8403	-2.04438	-2.07065	-14.8677
-2.00839	-2.02143	-15.083	7.46E+09	-16.7868	-2.07468	-2.11	-14.9802
-2.021	-2.03321	-14.9968	7.56E+09	-16.8544	-2.10252	-2.06726	-14.9739
-2.06293	-2.03002	-15.0015	7.66E+09	-16.8592	-2.13734	-2.0708	-14.9924
-2.06495	-2.05885	-14.9634	7.76E+09	-16.6291	-2.11003	-2.12072	-14.9865
-2.09559	-2.06942	-14.7285	7.86E+09	-16.2161	-2.15447	-2.13785	-14.817
-2.0915	-2.08345	-15.0357	7.96E+09	-16.2717	-2.17441	-2.15929	-14.9829
-2.12499	-2.10779	-15.0126	8.06E+09	-15.7622	-2.1861	-2.16515	-14.8263
-2.15459	-2.1193	-15.1263	8.16E+09	-15.5265	-2.21269	-2.19051	-14.8274
-2.14839	-2.14357	-15.1193	8.26E+09	-15.1008	-2.18866	-2.23605	-14.7203
-2.17127	-2.15274	-15.2292	8.36E+09	-14.7812	-2.2712	-2.24616	-14.7814
-2.20705	-2.18518	-15.3673	8.46E+09	-14.908	-2.29748	-2.26682	-14.8221
-2.2375	-2.24026	-15.2129	8.56E+09	-14.4079	-2.2838	-2.29169	-14.7525
-2.24584	-2.2241	-15.2855	8.66E+09	-14.3112	-2.31661	-2.31576	-14.8439
-2.2514	-2.25667	-15.3934	8.76E+09	-14.1052	-2.33627	-2.31945	-15.0223
-2.29427	-2.23849	-15.4642	8.86E+09	-13.9544	-2.40729	-2.34977	-15.086
-2.32656	-2.30607	-15.5426	8.96E+09	-13.6475	-2.43023	-2.40514	-15.0754
-2.35877	-2.3275	-15.793	9.06E+09	-13.5881	-2.42958	-2.42036	-15.2232
-2.33767	-2.29587	-15.8749	9.15E+09	-13.5057	-2.44879	-2.42799	-15.1951
-2.30263	-2.34624	-15.947	9.25E+09	-13.4408	-2.39888	-2.41973	-15.1453
-2.31924	-2.28342	-16.2123	9.35E+09	-13.2765	-2.42892	-2.39493	-15.3437
-2.35409	-2.34467	-16.0089	9.45E+09	-13.0015	-2.44698	-2.45285	-15.2184
-2.36448	-2.3432	-15.9666	9.55E+09	-13.0135	-2.48783	-2.43528	-15.2124

-2.35079	-2.33779	-15.6473	9.65E+09	-13.1077	-2.42322	-2.48573	-15.2508
-2.36293	-2.3493	-15.4964	9.75E+09	-12.8897	-2.47982	-2.48369	-15.3201
-2.42636	-2.38146	-15.208	9.85E+09	-12.826	-2.52324	-2.43061	-15.3994
-2.3757	-2.44408	-15.0556	9.95E+09	-12.7439	-2.44575	-2.49693	-15.5869
-2.45746	-2.42638	-14.796	1.01E+10	-12.7403	-2.50292	-2.48998	-15.5615
-2.49426	-2.41485	-14.5777	1.01E+10	-12.742	-2.53291	-2.50013	-15.5552
-2.46059	-2.47678	-14.4075	1.02E+10	-12.8312	-2.49841	-2.52429	-15.533
-2.50622	-2.48659	-14.0749	1.03E+10	-12.778	-2.52593	-2.46798	-15.2944
-2.50073	-2.48959	-13.8911	1.04E+10	-12.8188	-2.52898	-2.53595	-15.2608
-2.53284	-2.54188	-13.7338	1.05E+10	-12.8182	-2.50946	-2.57208	-15.2326
-2.46533	-2.51981	-13.7689	1.06E+10	-12.8943	-2.51594	-2.5596	-15.3694
-2.52128	-2.52612	-13.4732	1.07E+10	-13.0386	-2.51245	-2.54495	-15.1722
-2.5865	-2.54392	-13.4462	1.08E+10	-13.0851	-2.56354	-2.57099	-15.3488
-2.51699	-2.58752	-13.5797	1.09E+10	-13.4909	-2.53401	-2.54293	-15.8381
-2.58929	-2.54924	-13.2939	1.1E+10	-13.6574	-2.56171	-2.53982	-15.639
-2.56655	-2.51378	-13.4443	1.11E+10	-14.0125	-2.61158	-2.49472	-16.0508
-2.55692	-2.61654	-13.7775	1.12E+10	-14.3662	-2.50757	-2.58076	-16.3406
-2.60602	-2.57754	-13.6643	1.13E+10	-14.6254	-2.59203	-2.55423	-16.2237
-2.54286	-2.57286	-13.8634	1.14E+10	-14.8822	-2.52277	-2.60386	-16.3805
-2.57208	-2.5177	-14.1276	1.15E+10	-15.4817	-2.58951	-2.57039	-16.6212
-2.55526	-2.49686	-14.524	1.16E+10	-15.6112	-2.56167	-2.52684	-16.7321
-2.55323	-2.59995	-14.7523	1.17E+10	-16.2963	-2.56165	-2.57799	-17.0406
-2.5766	-2.53304	-14.9502	1.18E+10	-16.5648	-2.55934	-2.54961	-17.5195
-2.54021	-2.4549	-15.4236	1.19E+10	-17.4806	-2.53054	-2.55997	-18.4396
-2.5386	-2.4928	-15.4623	1.2E+10	-18.5523	-2.53595	-2.56252	-18.7429
-2.53136	-2.46517	-15.9118	1.21E+10	-18.5944	-2.53625	-2.48961	-19.2878
-2.49393	-2.52966	-16.4247	1.22E+10	-19.8807	-2.56623	-2.54995	-19.9896
-2.51538	-2.41288	-17.1572	1.23E+10	-19.8056	-2.56478	-2.53839	-20.567
-2.46357	-2.52327	-17.6057	1.24E+10	-21.1735	-2.52516	-2.60551	-20.5424
-2.50476	-2.48558	-18.1951	1.25E+10	-22.2195	-2.59827	-2.67135	-20.1243
-2.52647	-2.48358	-18.9428	1.26E+10	-22.8336	-2.61737	-2.67155	-20.253
-2.505	-2.56451	-19.4812	1.27E+10	-23.6008	-2.62278	-2.65347	-20.2607
-2.46476	-2.50162	-20.1196	1.28E+10	-24.7389	-2.67203	-2.62301	-19.909
-2.48073	-2.46557	-20.9692	1.29E+10	-26.1069	-2.63072	-2.5914	-19.7182
-2.5195	-2.61326	-21.3392	1.3E+10	-27.7093	-2.65507	-2.72043	-19.9526
-2.51232	-2.58356	-22.8568	1.31E+10	-27.782	-2.63865	-2.7101	-20.0526
-2.61803	-2.60639	-23.918	1.32E+10	-28.5953	-2.7701	-2.79781	-19.893
-2.56358	-2.62478	-24.173	1.33E+10	-27.4054	-2.72094	-2.78572	-19.5456
-2.6229	-2.60075	-25.4224	1.34E+10	-27.3059	-2.79189	-2.73483	-18.8661
-2.6383	-2.62711	-28.7276	1.35E+10	-28.2269	-2.83764	-2.79949	-18.8933
-2.61025	-2.60684	-29.277	1.36E+10	-27.6585	-2.87924	-2.89146	-17.6654
-2.65918	-2.69535	-30.3059	1.37E+10	-26.7218	-2.87733	-2.98403	-17.3681
-2.66613	-2.65598	-32.9031	1.38E+10	-26.1889	-2.90516	-2.90194	-16.8622
-2.74955	-2.64148	-35.437	1.39E+10	-25.7902	-2.97551	-2.95505	-16.297
-2.68566	-2.64122	-37.3921	1.4E+10	-24.7246	-2.88598	-2.89861	-15.9989
-2.68951	-2.70238	-38.4621	1.41E+10	-23.5602	-2.99224	-2.96339	-15.9771
-2.6685	-2.75921	-34.3367	1.42E+10	-23.4123	-3.07347	-3.08817	-15.459
-2.75789	-2.65227	-32.8835	1.43E+10	-21.7536	-3.08532	-3.06195	-15.2237
-2.73117	-2.66694	-31.7196	1.44E+10	-21.1203	-3.22338	-3.07439	-14.9426
-2.77621	-2.75346	-29.7134	1.45E+10	-20.2358	-3.12566	-3.10103	-14.5907
-2.77719	-2.77118	-27.0411	1.46E+10	-19.4329	-3.13384	-3.11982	-14.1706
-2.74275	-2.77591	-24.0675	1.47E+10	-18.3383	-3.13449	-3.23718	-13.4422
-2.69547	-2.82033	-23.6177	1.48E+10	-17.9775	-3.15727	-3.26327	-13.189
-2.85719	-2.744	-22.7401	1.49E+10	-17.358	-3.25021	-3.18927	-12.9867
-2.65734	-2.76495	-21.0949	1.5E+10	-16.8054	-3.27153	-3.17904	-12.8112

-2.84102	-2.8287	-20.2261	1.51E+10	-16.9222	-3.24749	-3.24214	-12.4505
-2.80525	-2.85785	-18.9143	1.52E+10	-16.4007	-3.25318	-3.31804	-12.4204
-2.87808	-2.87988	-18.8724	1.53E+10	-15.6575	-3.28887	-3.34352	-12.5373
-2.8872	-2.91563	-17.8798	1.54E+10	-15.5091	-3.39456	-3.34517	-12.2021
-2.86768	-3.01528	-17.4132	1.55E+10	-15.1196	-3.34734	-3.37098	-12.3248
-2.92601	-3.02693	-16.8885	1.56E+10	-15.1504	-3.32855	-3.32976	-12.0602
-3.03999	-3.08812	-16.2006	1.57E+10	-15.0918	-3.28327	-3.38718	-11.9761
-3.0518	-3.10629	-15.7449	1.58E+10	-14.8522	-3.31416	-3.36075	-11.8593
-3.15581	-3.05223	-15.476	1.59E+10	-15.1265	-3.34184	-3.42022	-12.0575
-3.17594	-3.13703	-15.2875	1.6E+10	-14.9685	-3.37745	-3.44166	-12.1028
-3.13898	-3.26478	-14.6877	1.61E+10	-14.8928	-3.34205	-3.40083	-12.3028
-3.24315	-3.22339	-14.7158	1.62E+10	-15.3287	-3.37747	-3.3807	-12.8945
-3.24518	-3.29997	-14.6037	1.63E+10	-15.49	-3.2646	-3.37937	-13.2628
-3.33713	-3.28001	-14.4795	1.64E+10	-15.5601	-3.34938	-3.35101	-13.5723
-3.26955	-3.41247	-14.622	1.65E+10	-15.4625	-3.29004	-3.42395	-14.1868
-3.41428	-3.43856	-14.6378	1.66E+10	-15.7206	-3.36312	-3.36123	-14.5602
-3.47046	-3.42341	-14.8007	1.67E+10	-15.9984	-3.44166	-3.39991	-15.0588
-3.42742	-3.42482	-15.4534	1.68E+10	-16.0156	-3.42184	-3.4001	-15.9706
-3.35652	-3.36912	-15.8928	1.69E+10	-15.905	-3.35826	-3.41505	-16.6601
-3.44328	-3.43432	-16.711	1.7E+10	-15.3736	-3.46635	-3.48331	-18.2772
-3.41301	-3.50967	-17.2549	1.71E+10	-15.4161	-3.43969	-3.38899	-19.2189
-3.40618	-3.50208	-18.6241	1.72E+10	-15.3742	-3.43122	-3.54527	-21.6422
-3.45263	-3.49605	-19.7561	1.73E+10	-15.2302	-3.52767	-3.47187	-23.9551
-3.495	-3.52408	-21.5121	1.74E+10	-15.0837	-3.58172	-3.61672	-27.2089
-3.55307	-3.48425	-23.6217	1.75E+10	-14.9244	-3.60164	-3.54729	-30.6063
-3.55541	-3.52855	-27.6523	1.76E+10	-14.5922	-3.49331	-3.64824	-34.6857
-3.57514	-3.50111	-34.0566	1.77E+10	-14.1722	-3.6571	-3.60694	-30.5874
-3.5474	-3.54747	-36.4671	1.78E+10	-13.8876	-3.70855	-3.57662	-27.378
-3.58045	-3.55228	-29.0447	1.79E+10	-13.8529	-3.72203	-3.72629	-24.1381
-3.66329	-3.58371	-24.036	1.8E+10	-13.3552	-3.80034	-3.7599	-21.4449
-3.6262	-3.59301	-21.4081	1.81E+10	-12.9507	-3.72673	-3.85691	-19.9061
-3.60597	-3.7435	-18.8849	1.82E+10	-12.7626	-3.92633	-3.82647	-18.167
-3.67987	-3.65715	-17.1503	1.83E+10	-12.5259	-3.91979	-3.88673	-17.0602
-3.8775	-3.84087	-15.8451	1.84E+10	-12.1072	-4.0734	-3.94782	-16.2149
-3.92616	-3.90457	-14.2989	1.85E+10	-11.9765	-4.0253	-3.99607	-15.0828
-3.94777	-4.05147	-13.3165	1.86E+10	-11.7875	-4.06043	-4.10002	-14.5733
-4.05552	-4.01148	-12.4982	1.87E+10	-11.3863	-4.15002	-4.16718	-14.1966
-4.25406	-4.25659	-11.6781	1.88E+10	-11.4149	-4.22141	-4.1693	-13.8366
-4.18324	-4.32337	-11.2985	1.89E+10	-11.0805	-4.23218	-4.20805	-14.0597
-4.27083	-4.13804	-10.7587	1.9E+10	-10.599	-4.29232	-4.12392	-13.9201
-4.49212	-4.27867	-9.94727	1.91E+10	-10.4781	-4.36846	-4.2904	-13.2505
-4.61124	-4.4098	-9.74826	1.92E+10	-10.1459	-4.47988	-4.32187	-13.1863
-4.60793	-4.56982	-9.27329	1.93E+10	-9.93015	-4.49982	-4.50785	-12.9522
-4.68249	-4.67843	-9.2035	1.94E+10	-9.81787	-4.70003	-4.55965	-13.1197
-4.60525	-4.71649	-8.96107	1.95E+10	-9.04119	-4.56554	-4.63307	-12.9606
-4.81298	-4.90133	-8.86819	1.96E+10	-8.95642	-4.71387	-4.85635	-12.9403
-4.96452	-4.88596	-8.771	1.97E+10	-8.75005	-4.90265	-4.84478	-13.0221
-5.04991	-4.99647	-8.778	1.98E+10	-8.31996	-4.89271	-4.90207	-13.2813
-5.16787	-5.03953	-8.56524	1.99E+10	-8.10983	-5.10696	-5.05359	-13.0448
-5.18646	-4.95719	-8.68417	2E+10	-7.6032	-5.14722	-5.01322	-13.2612

J6

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-8.94732	-3.26279	-3.29502	-9.79682
2E+08	-15.6662	-1.06151	-1.05448	-18.4733
2.99E+08	-20.8812	-0.79979	-0.81074	-22.8737
3.99E+08	-25.2185	-0.73061	-0.73796	-24.5555
4.98E+08	-27.9749	-0.73098	-0.72439	-25.0257
5.98E+08	-27.6505	-0.72526	-0.73573	-24.7119
6.97E+08	-26.573	-0.74928	-0.75972	-24.157
7.97E+08	-25.2387	-0.76828	-0.77167	-23.7959
8.96E+08	-23.6406	-0.80749	-0.78247	-23.3444
9.96E+08	-22.3756	-0.81599	-0.82586	-22.7553
1.1E+09	-21.9859	-0.83451	-0.83219	-22.6545
1.19E+09	-21.2115	-0.86193	-0.86986	-22.3656
1.29E+09	-20.8248	-0.88759	-0.90662	-22.4538
1.39E+09	-20.5279	-0.92593	-0.9365	-22.0695
1.49E+09	-20.2183	-0.94123	-0.94623	-22.3315
1.59E+09	-19.8818	-0.95522	-0.96521	-22.4663
1.69E+09	-19.902	-0.9746	-0.98321	-22.6478
1.79E+09	-19.9985	-0.98489	-1.0091	-23.2603
1.89E+09	-20.1486	-1.02444	-1.02124	-23.4719
1.99E+09	-20.3397	-1.05299	-1.04097	-24.7008
2.09E+09	-20.4864	-1.07632	-1.06612	-25.0809
2.19E+09	-20.7297	-1.08973	-1.08635	-26.0673
2.29E+09	-21.4215	-1.11275	-1.09485	-27.2773
2.39E+09	-21.7482	-1.12287	-1.158	-28.5103
2.49E+09	-22.5698	-1.13911	-1.17553	-30.2178
2.59E+09	-23.0923	-1.17718	-1.18552	-32.6609
2.69E+09	-24.0162	-1.21315	-1.23119	-35.7557
2.79E+09	-24.8207	-1.26926	-1.2896	-39.3666
2.89E+09	-25.3179	-1.32484	-1.36012	-43.1746
2.99E+09	-25.4013	-1.41007	-1.42927	-37.3024
3.09E+09	-24.4739	-1.48606	-1.45955	-34.733
3.18E+09	-23.7833	-1.50931	-1.52183	-32.3377
3.28E+09	-22.4757	-1.53789	-1.5482	-30.5057
3.38E+09	-21.926	-1.54542	-1.54274	-27.8969
3.48E+09	-20.8557	-1.54221	-1.52098	-25.4875
3.58E+09	-20.2375	-1.52998	-1.51079	-23.6844
3.68E+09	-19.3288	-1.50859	-1.53689	-22.1708
3.78E+09	-18.554	-1.54729	-1.54315	-20.5661
3.88E+09	-17.7525	-1.54527	-1.55644	-19.4859
3.98E+09	-16.9802	-1.6032	-1.56738	-18.4946
4.08E+09	-16.1296	-1.60107	-1.61002	-17.5454

J7

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)
1E+08	-8.71595	-3.50879	-3.52127
2E+08	-15.3017	-1.14001	-1.12833
2.99E+08	-20.1161	-0.86444	-0.86823
3.99E+08	-23.8798	-0.79809	-0.79251
4.98E+08	-26.1845	-0.77822	-0.77506
5.98E+08	-26.3426	-0.7902	-0.78234
6.97E+08	-25.7507	-0.8049	-0.79496
7.97E+08	-24.4121	-0.81355	-0.81202
8.96E+08	-23.1035	-0.847	-0.83205
9.96E+08	-21.7574	-0.85745	-0.85838
1.1E+09	-21.2671	-0.88314	-0.87828
1.19E+09	-20.4643	-0.91579	-0.89978
1.29E+09	-19.8332	-0.95931	-0.9468
1.39E+09	-19.363	-0.98301	-0.9854
1.49E+09	-18.8664	-0.99731	-1.00668
1.59E+09	-18.3199	-1.02819	-1.02545
1.69E+09	-18.0547	-1.06206	-1.04425
1.79E+09	-17.8556	-1.07349	-1.07037
1.89E+09	-17.5776	-1.12298	-1.08608
1.99E+09	-17.4661	-1.14288	-1.12848
2.09E+09	-17.1917	-1.18108	-1.14525
2.19E+09	-16.9797	-1.18982	-1.18548
2.29E+09	-17.097	-1.23037	-1.21191
2.39E+09	-17.0256	-1.23054	-1.25068
2.49E+09	-17.0963	-1.25613	-1.27867
2.59E+09	-17.0519	-1.31298	-1.28658
2.69E+09	-17.2554	-1.33551	-1.34509
2.79E+09	-17.42	-1.38445	-1.38273
2.89E+09	-17.5494	-1.44745	-1.47702
2.99E+09	-17.7386	-1.52747	-1.53199
3.09E+09	-17.6429	-1.58572	-1.57845
3.18E+09	-17.6807	-1.64267	-1.63751
3.28E+09	-17.374	-1.67288	-1.66727
3.38E+09	-17.4181	-1.64875	-1.66694
3.48E+09	-17.218	-1.66891	-1.64147
3.58E+09	-17.4313	-1.6391	-1.62449
3.68E+09	-17.4714	-1.60906	-1.60883
3.78E+09	-17.7578	-1.62341	-1.6062
3.88E+09	-17.8326	-1.61454	-1.5842
3.98E+09	-18.0625	-1.61759	-1.59257
4.08E+09	-18.1365	-1.63035	-1.63656

4.18E+09	-15.3791	-1.66668	-1.65849	-16.8121	4.18E+09	-18.1435	-1.65579	-1.63016
4.28E+09	-14.7586	-1.7119	-1.70774	-16.2225	4.28E+09	-18.182	-1.69201	-1.68925
4.38E+09	-14.0766	-1.77337	-1.77179	-15.6969	4.38E+09	-17.896	-1.71719	-1.71655
4.48E+09	-13.5482	-1.8074	-1.80817	-15.2366	4.48E+09	-17.6303	-1.74708	-1.75354
4.58E+09	-13.033	-1.8664	-1.86764	-14.8959	4.58E+09	-17.2342	-1.80655	-1.79026
4.68E+09	-12.6058	-1.91801	-1.93277	-14.5369	4.68E+09	-16.8933	-1.84377	-1.87746
4.78E+09	-12.2324	-1.95463	-1.96726	-14.1972	4.78E+09	-16.5208	-1.87278	-1.92726
4.88E+09	-12.0091	-1.9689	-1.97724	-13.9296	4.88E+09	-16.4638	-1.89083	-1.91563
4.98E+09	-11.7889	-2.0023	-1.99461	-13.5126	4.98E+09	-16.2909	-1.92256	-1.90693
5.08E+09	-11.6525	-2.02012	-1.96304	-13.2214	5.08E+09	-16.281	-1.90444	-1.88594
5.17E+09	-11.5121	-2.01705	-1.97191	-12.8803	5.17E+09	-16.1967	-1.90654	-1.88395
5.27E+09	-11.403	-1.97716	-1.96944	-12.508	5.27E+09	-16.1765	-1.86189	-1.89238
5.37E+09	-11.3418	-1.96667	-2.00549	-12.2756	5.37E+09	-16.1327	-1.86419	-1.87933
5.47E+09	-11.2879	-1.99203	-1.98102	-12.0568	5.47E+09	-16.0758	-1.85886	-1.84436
5.57E+09	-11.3332	-1.96922	-1.97435	-11.8958	5.57E+09	-16.1795	-1.85398	-1.8354
5.67E+09	-11.4011	-1.97386	-1.97213	-11.8041	5.67E+09	-16.2212	-1.83706	-1.82617
5.77E+09	-11.4755	-1.9882	-1.97596	-11.7497	5.77E+09	-16.2453	-1.85311	-1.85659
5.87E+09	-11.5809	-1.97388	-2.00566	-11.6708	5.87E+09	-16.3542	-1.84677	-1.88666
5.97E+09	-11.6731	-1.98783	-1.97352	-11.6664	5.97E+09	-16.4103	-1.84803	-1.85962
6.07E+09	-11.9263	-1.99736	-2.00081	-11.6198	6.07E+09	-16.6826	-1.87442	-1.8634
6.17E+09	-12.0936	-1.98255	-2.0223	-11.62	6.17E+09	-16.8852	-1.87621	-1.88662
6.27E+09	-12.3124	-1.9894	-2.02656	-11.6788	6.27E+09	-17.1728	-1.88984	-1.90439
6.37E+09	-12.6153	-1.97714	-2.02117	-11.7536	6.37E+09	-17.6316	-1.889	-1.90251
6.47E+09	-12.8179	-1.97211	-2.01655	-11.9052	6.47E+09	-17.9055	-1.90011	-1.91777
6.57E+09	-13.2142	-1.9761	-1.99222	-12.1869	6.57E+09	-18.5471	-1.93518	-1.89982
6.67E+09	-13.5699	-1.99513	-1.99661	-12.4002	6.67E+09	-19.133	-1.89871	-1.92932
6.77E+09	-13.948	-2.01325	-2.01505	-12.4313	6.77E+09	-19.7888	-1.94641	-1.95739
6.87E+09	-14.1864	-2.04395	-2.01288	-12.6115	6.87E+09	-20.2343	-1.9716	-1.965
6.97E+09	-14.503	-2.03029	-1.96373	-12.7585	6.97E+09	-20.83	-1.99804	-1.9273
7.07E+09	-14.7292	-2.03941	-2.04261	-12.7605	7.07E+09	-21.2585	-1.97516	-2.00858
7.16E+09	-14.8526	-2.08589	-2.06744	-12.7851	7.16E+09	-21.4325	-2.02437	-2.01445
7.26E+09	-14.932	-2.0539	-2.06073	-12.9115	7.26E+09	-21.4988	-2.02213	-2.01781
7.36E+09	-15.0319	-2.04462	-2.05545	-13.0295	7.36E+09	-21.4822	-2.01618	-2.00634
7.46E+09	-14.9911	-2.05575	-2.07181	-13.1886	7.46E+09	-21.0392	-2.02412	-2.06479
7.56E+09	-14.9682	-2.06983	-2.10694	-13.2906	7.56E+09	-20.7405	-2.07111	-2.02467
7.66E+09	-14.857	-2.10167	-2.08251	-13.2693	7.66E+09	-20.2677	-2.06807	-2.07515
7.76E+09	-14.7622	-2.09582	-2.09039	-13.3322	7.76E+09	-19.886	-2.1184	-2.07681
7.86E+09	-14.4076	-2.14203	-2.11052	-13.2617	7.86E+09	-19.2349	-2.11654	-2.08147
7.96E+09	-14.544	-2.12333	-2.13473	-13.4801	7.96E+09	-19.394	-2.12769	-2.10172
8.06E+09	-14.2795	-2.14804	-2.14858	-13.5241	8.06E+09	-18.9223	-2.13585	-2.14254
8.16E+09	-14.2326	-2.15931	-2.11296	-13.6899	8.16E+09	-18.8267	-2.13544	-2.15251
8.26E+09	-14.1069	-2.14794	-2.18216	-13.7509	8.26E+09	-18.6259	-2.1704	-2.17408
8.36E+09	-14.0359	-2.1947	-2.17083	-14.1006	8.36E+09	-18.4517	-2.2014	-2.17929
8.46E+09	-14.2364	-2.18091	-2.17322	-14.3565	8.46E+09	-18.9704	-2.22863	-2.18604
8.56E+09	-14.0626	-2.20643	-2.23629	-14.6352	8.56E+09	-18.6127	-2.20624	-2.20875
8.66E+09	-14.2163	-2.20316	-2.22101	-14.9714	8.66E+09	-18.8676	-2.24567	-2.24669
8.76E+09	-14.2123	-2.16894	-2.24324	-15.4733	8.76E+09	-18.9634	-2.28539	-2.25134
8.86E+09	-14.3629	-2.24898	-2.20191	-15.8779	8.86E+09	-19.0697	-2.30878	-2.2471
8.96E+09	-14.3063	-2.25136	-2.24048	-16.3097	8.96E+09	-18.8032	-2.32925	-2.30611
9.06E+09	-14.4252	-2.22796	-2.23385	-16.7443	9.06E+09	-18.8711	-2.3235	-2.31881
9.15E+09	-14.5255	-2.24891	-2.25783	-17.021	9.15E+09	-18.7694	-2.34929	-2.32927
9.25E+09	-14.6384	-2.22814	-2.23675	-17.2406	9.25E+09	-18.5611	-2.32394	-2.36202
9.35E+09	-14.5772	-2.23029	-2.20202	-17.5867	9.35E+09	-18.0973	-2.36766	-2.39662
9.45E+09	-14.4419	-2.2785	-2.26487	-17.5575	9.45E+09	-17.538	-2.39766	-2.36233
9.55E+09	-14.4152	-2.29303	-2.24602	-17.563	9.55E+09	-16.8508	-2.44332	-2.42057

9.65E+09	-14.509	-2.31221	-2.27321	-17.431	9.65E+09	-16.6921	-2.45745	-2.44142
9.75E+09	-14.1317	-2.30395	-2.28489	-17.3675	9.75E+09	-15.8587	-2.49303	-2.40906
9.85E+09	-14.1226	-2.36982	-2.28727	-17.2325	9.85E+09	-15.4199	-2.51035	-2.51687
9.95E+09	-13.9024	-2.2866	-2.34749	-17.2215	9.95E+09	-14.7802	-2.49683	-2.56579
1.01E+10	-13.7889	-2.3629	-2.31811	-16.793	1.01E+10	-14.3931	-2.61653	-2.553
1.01E+10	-13.638	-2.39844	-2.35591	-16.4797	1.01E+10	-13.9004	-2.61437	-2.60953
1.02E+10	-13.6362	-2.38396	-2.40008	-16.1976	1.02E+10	-13.7397	-2.63849	-2.63407
1.03E+10	-13.438	-2.40716	-2.39369	-15.5928	1.03E+10	-13.44	-2.67121	-2.65517
1.04E+10	-13.3354	-2.41578	-2.41924	-15.2224	1.04E+10	-13.0518	-2.69423	-2.67926
1.05E+10	-13.1824	-2.4103	-2.45808	-14.8248	1.05E+10	-12.7364	-2.75121	-2.77568
1.06E+10	-13.0517	-2.41245	-2.41722	-14.7458	1.06E+10	-12.6324	-2.77971	-2.75971
1.07E+10	-13.1584	-2.43126	-2.49206	-14.4239	1.07E+10	-12.5185	-2.74898	-2.80935
1.08E+10	-13.0175	-2.49804	-2.48928	-14.344	1.08E+10	-12.2879	-2.81976	-2.83838
1.09E+10	-13.2801	-2.4607	-2.48883	-14.4886	1.09E+10	-12.2422	-2.83609	-2.86211
1.1E+10	-13.314	-2.47583	-2.48713	-14.3278	1.1E+10	-12.1646	-2.89654	-2.94038
1.11E+10	-13.5549	-2.49518	-2.43396	-14.4545	1.11E+10	-12.3114	-2.90683	-2.83559
1.12E+10	-13.7453	-2.46504	-2.52453	-14.6173	1.12E+10	-12.3513	-2.83355	-2.9249
1.13E+10	-13.8719	-2.53386	-2.44924	-14.2616	1.13E+10	-12.3131	-2.84042	-2.92487
1.14E+10	-14.0098	-2.50437	-2.48614	-14.259	1.14E+10	-12.3257	-2.88526	-2.9846
1.15E+10	-14.3122	-2.52445	-2.44679	-14.4461	1.15E+10	-12.6539	-2.92915	-2.90764
1.16E+10	-14.4431	-2.50702	-2.49042	-14.49	1.16E+10	-12.7019	-2.918	-2.88188
1.17E+10	-14.9249	-2.50547	-2.52344	-14.7432	1.17E+10	-12.7749	-2.88897	-2.94483
1.18E+10	-15.0692	-2.54534	-2.50816	-15.134	1.18E+10	-12.9699	-2.92299	-2.91862
1.19E+10	-15.746	-2.45206	-2.47351	-15.845	1.19E+10	-13.4443	-2.90013	-2.86098
1.2E+10	-16.3995	-2.45507	-2.47643	-16.0395	1.2E+10	-13.7036	-2.92434	-2.91426
1.21E+10	-16.518	-2.48073	-2.50636	-16.6416	1.21E+10	-13.6327	-2.92332	-2.89873
1.22E+10	-17.2405	-2.53237	-2.4719	-16.9933	1.22E+10	-14.1233	-2.93997	-2.88388
1.23E+10	-17.0919	-2.48406	-2.44928	-17.7524	1.23E+10	-14.1	-2.94431	-2.87609
1.24E+10	-18.003	-2.48505	-2.47106	-17.7722	1.24E+10	-14.4747	-2.88341	-2.92195
1.25E+10	-18.5543	-2.51857	-2.46321	-18.0424	1.25E+10	-14.8511	-2.95582	-2.97728
1.26E+10	-18.5511	-2.48537	-2.45632	-18.5304	1.26E+10	-15.0277	-2.88959	-2.90851
1.27E+10	-18.7591	-2.44444	-2.53085	-19.1719	1.27E+10	-15.4495	-2.92829	-2.9539
1.28E+10	-19.6229	-2.57669	-2.50983	-19.6418	1.28E+10	-15.4767	-2.95384	-2.95306
1.29E+10	-19.9492	-2.49041	-2.50134	-20.4458	1.29E+10	-15.6198	-2.92367	-2.90706
1.3E+10	-20.3832	-2.47963	-2.49963	-20.8385	1.3E+10	-15.9616	-2.94717	-2.97392
1.31E+10	-20.2818	-2.48745	-2.4788	-22.0827	1.31E+10	-15.9278	-2.94263	-2.94136
1.32E+10	-20.2731	-2.55454	-2.56953	-22.5271	1.32E+10	-16.0641	-3.00381	-2.99463
1.33E+10	-19.8388	-2.51901	-2.60161	-22.1159	1.33E+10	-15.8336	-2.97379	-2.99522
1.34E+10	-19.8716	-2.6451	-2.53368	-21.8143	1.34E+10	-15.6352	-3.03478	-2.98445
1.35E+10	-19.8	-2.57083	-2.59674	-23.254	1.35E+10	-15.7308	-3.0303	-3.00087
1.36E+10	-19.9124	-2.63651	-2.59789	-21.4206	1.36E+10	-15.6159	-3.0765	-3.10437
1.37E+10	-19.5323	-2.66394	-2.62207	-21.2997	1.37E+10	-15.3638	-3.07037	-3.08131
1.38E+10	-19.6358	-2.67255	-2.67744	-20.9982	1.38E+10	-15.1527	-3.1333	-3.04439
1.39E+10	-19.4594	-2.6531	-2.65251	-20.3293	1.39E+10	-15.1011	-3.09718	-3.10504
1.4E+10	-19.3392	-2.71034	-2.61264	-19.9497	1.4E+10	-14.8175	-3.02213	-3.07501
1.41E+10	-19.1059	-2.67693	-2.72451	-20.1805	1.41E+10	-14.473	-3.12325	-3.14631
1.42E+10	-19.7326	-2.70573	-2.72071	-19.1907	1.42E+10	-14.5564	-3.1298	-3.15108
1.43E+10	-18.8492	-2.78837	-2.7557	-18.939	1.43E+10	-14.1834	-3.20798	-3.11298
1.44E+10	-18.7555	-2.85584	-2.69985	-18.6559	1.44E+10	-14.1796	-3.1504	-3.14202
1.45E+10	-18.748	-2.77765	-2.7526	-17.9344	1.45E+10	-14.0323	-3.21012	-3.11636
1.46E+10	-18.5623	-2.78445	-2.81499	-17.3809	1.46E+10	-13.7926	-3.17709	-3.14595
1.47E+10	-18.3028	-2.80135	-2.72022	-16.25	1.47E+10	-13.7182	-3.17516	-3.21247
1.48E+10	-18.2497	-2.75491	-2.80605	-15.792	1.48E+10	-13.7347	-3.09091	-3.21698
1.49E+10	-18.1765	-2.87934	-2.84986	-15.4812	1.49E+10	-13.7453	-3.16128	-3.19432
1.5E+10	-18.0942	-2.8449	-2.75337	-15.0663	1.5E+10	-13.673	-3.19786	-3.21056

1.51E+10	-18.7423	-2.8448	-2.82794	-14.617	1.51E+10	-14.1436	-3.14253	-3.16871
1.52E+10	-18.3052	-2.87475	-2.92327	-14.3047	1.52E+10	-13.8995	-3.1166	-3.24994
1.53E+10	-17.7863	-2.91808	-2.96955	-14.446	1.53E+10	-13.9212	-3.26592	-3.27404
1.54E+10	-17.8547	-2.9037	-2.96367	-14.0066	1.54E+10	-14.0839	-3.28542	-3.19981
1.55E+10	-17.5695	-2.98924	-2.89333	-13.9843	1.55E+10	-13.9817	-3.23802	-3.28433
1.56E+10	-17.6397	-2.96351	-2.98482	-13.736	1.56E+10	-14.0509	-3.23974	-3.26759
1.57E+10	-17.4116	-2.98559	-3.0501	-13.5124	1.57E+10	-14.2481	-3.25597	-3.28182
1.58E+10	-17.2068	-3.05615	-3.02121	-13.1103	1.58E+10	-14.1063	-3.3054	-3.28613
1.59E+10	-16.8618	-3.05174	-2.98788	-13.3381	1.59E+10	-14.1955	-3.3265	-3.20956
1.6E+10	-16.6146	-3.16492	-3.12476	-13.2622	1.6E+10	-14.2282	-3.37545	-3.32569
1.61E+10	-16.3003	-3.06004	-3.13353	-13.4107	1.61E+10	-14.1897	-3.2974	-3.38193
1.62E+10	-16.5365	-3.13118	-3.15944	-13.828	1.62E+10	-14.3526	-3.413	-3.41979
1.63E+10	-16.1982	-3.14951	-3.18401	-14.1712	1.63E+10	-14.352	-3.3135	-3.39656
1.64E+10	-16.0841	-3.17208	-3.20333	-14.4491	1.64E+10	-14.4418	-3.40202	-3.40861
1.65E+10	-15.8031	-3.28268	-3.36793	-14.9202	1.65E+10	-14.6088	-3.42305	-3.48404
1.66E+10	-15.9292	-3.30011	-3.28668	-15.3234	1.66E+10	-14.9145	-3.47411	-3.41214
1.67E+10	-15.8793	-3.33965	-3.38118	-15.5733	1.67E+10	-15.4884	-3.55664	-3.48746
1.68E+10	-15.7388	-3.35966	-3.33022	-16.1676	1.68E+10	-15.5483	-3.46238	-3.46749
1.69E+10	-15.6453	-3.33349	-3.39785	-16.7843	1.69E+10	-15.8689	-3.38453	-3.47257
1.7E+10	-15.2991	-3.43121	-3.3769	-18.1641	1.7E+10	-16.3473	-3.52685	-3.45074
1.71E+10	-15.4711	-3.4405	-3.52567	-19.1222	1.71E+10	-17.2498	-3.46701	-3.48481
1.72E+10	-15.6696	-3.41109	-3.48875	-20.8164	1.72E+10	-18.3841	-3.51802	-3.51475
1.73E+10	-15.7967	-3.49559	-3.5297	-22.7028	1.73E+10	-19.8281	-3.58638	-3.47594
1.74E+10	-15.9912	-3.5664	-3.60674	-24.5366	1.74E+10	-22.0901	-3.49481	-3.56856
1.75E+10	-16.3452	-3.6119	-3.56811	-25.1219	1.75E+10	-24.4578	-3.58131	-3.50497
1.76E+10	-16.2148	-3.5934	-3.55966	-26.6536	1.76E+10	-26.9301	-3.60956	-3.59493
1.77E+10	-16.0462	-3.6377	-3.60627	-25.1133	1.77E+10	-28.8974	-3.61165	-3.59328
1.78E+10	-15.8783	-3.62598	-3.58955	-23.5681	1.78E+10	-26.7925	-3.65285	-3.63718
1.79E+10	-15.7513	-3.68522	-3.66418	-22.0158	1.79E+10	-22.7511	-3.65402	-3.60513
1.8E+10	-15.4368	-3.76293	-3.6516	-20.0782	1.8E+10	-19.8983	-3.76836	-3.71197
1.81E+10	-14.7183	-3.62906	-3.68523	-18.6675	1.81E+10	-17.4759	-3.77357	-3.7762
1.82E+10	-14.2828	-3.83324	-3.85839	-17.3507	1.82E+10	-15.4419	-3.87243	-3.85065
1.83E+10	-13.6192	-3.66994	-3.78608	-16.0684	1.83E+10	-13.8662	-3.92482	-3.95055
1.84E+10	-12.8388	-3.86131	-3.87241	-15.2768	1.84E+10	-12.5415	-4.02119	-4.05099
1.85E+10	-12.4093	-3.88055	-3.85911	-14.2174	1.85E+10	-11.5799	-4.15884	-4.16045
1.86E+10	-11.9526	-3.88583	-3.94743	-13.5877	1.86E+10	-10.64	-4.22741	-4.30994
1.87E+10	-11.2498	-3.99615	-3.99344	-13.2216	1.87E+10	-9.67877	-4.43558	-4.41268
1.88E+10	-11.0916	-4.06115	-4.13634	-12.804	1.88E+10	-9.21401	-4.78174	-4.54957
1.89E+10	-10.5369	-4.03681	-4.20805	-13.0045	1.89E+10	-8.29965	-4.77094	-4.66005
1.9E+10	-10.0121	-4.16739	-3.97802	-12.8335	1.9E+10	-7.66286	-4.85281	-4.66696
1.91E+10	-9.7716	-4.30946	-4.21198	-12.2153	1.91E+10	-7.2878	-5.09444	-5.0361
1.92E+10	-9.46312	-4.42846	-4.26811	-12.351	1.92E+10	-6.91711	-5.29174	-5.15347
1.93E+10	-9.29233	-4.45598	-4.43114	-12.032	1.93E+10	-6.69632	-5.40467	-5.31749
1.94E+10	-9.05304	-4.54328	-4.33983	-12.0304	1.94E+10	-6.46719	-5.53824	-5.43254
1.95E+10	-8.38968	-4.43958	-4.50143	-12.1416	1.95E+10	-5.72815	-5.50001	-5.6595
1.96E+10	-8.42048	-4.54978	-4.62295	-12.1399	1.96E+10	-5.64956	-5.79879	-6.03086
1.97E+10	-8.21547	-4.74743	-4.59651	-12.383	1.97E+10	-5.529	-6.02025	-5.8283
1.98E+10	-7.93166	-4.826	-4.7413	-12.4852	1.98E+10	-5.34525	-6.12195	-6.11082
1.99E+10	-7.70679	-4.72569	-4.82594	-12.6237	1.99E+10	-5.20092	-6.13568	-6.25106
2E+10	-7.39133	-5.03008	-4.78027	-13.1458	2E+10	-4.97803	-6.46739	-6.28657

J8

S22 (dB)	Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-9.44048	1E+08	-8.90446	-3.55919	-3.58895	-9.48614	-9.01526
-17.9624	2E+08	-15.3704	-1.11437	-1.1039	-18.0322	-15.4023
-21.977	2.99E+08	-20.543	-0.81761	-0.82661	-22.8549	-20.2211
-23.7559	3.99E+08	-25.0157	-0.76691	-0.74595	-25.0527	-23.7805
-24.7862	4.98E+08	-27.2519	-0.74092	-0.7545	-25.7035	-25.7813
-25.2019	5.98E+08	-26.4333	-0.75604	-0.75141	-25.3364	-25.8727
-25.536	6.97E+08	-24.7905	-0.77556	-0.75712	-24.5557	-24.9924
-25.7043	7.97E+08	-23.249	-0.80243	-0.79441	-23.9996	-23.8657
-25.6454	8.96E+08	-21.6419	-0.81449	-0.8072	-23.0994	-22.8448
-25.313	9.96E+08	-20.3143	-0.84373	-0.83781	-22.3534	-22.0061
-25.2088	1.1E+09	-19.7084	-0.87868	-0.86082	-21.844	-21.2654
-24.6604	1.19E+09	-18.8311	-0.89938	-0.89633	-21.1722	-20.6876
-24.6	1.29E+09	-18.2558	-0.94531	-0.95391	-20.9958	-20.3046
-23.7759	1.39E+09	-17.7847	-0.97713	-0.99164	-20.3077	-19.9955
-23.4686	1.49E+09	-17.2877	-1.00159	-0.99877	-20.0494	-19.6878
-22.8039	1.59E+09	-16.7527	-1.03236	-1.02792	-19.5836	-19.4406
-22.474	1.69E+09	-16.5253	-1.06302	-1.04084	-19.3421	-19.3383
-22.2745	1.79E+09	-16.3342	-1.09084	-1.09007	-19.2404	-19.1845
-21.7051	1.89E+09	-16.0643	-1.13442	-1.12206	-18.902	-19.1502
-21.7466	1.99E+09	-15.8662	-1.14986	-1.13392	-18.951	-19.091
-21.2978	2.09E+09	-15.6516	-1.19863	-1.17665	-18.6965	-19.0845
-20.9801	2.19E+09	-15.5116	-1.22744	-1.20178	-18.5151	-19.1095
-20.8958	2.29E+09	-15.5472	-1.24935	-1.22743	-18.4754	-19.0843
-20.7867	2.39E+09	-15.4152	-1.25723	-1.29267	-18.4101	-19.1311
-20.8383	2.49E+09	-15.5008	-1.28902	-1.30038	-18.4598	-19.1498
-20.8996	2.59E+09	-15.515	-1.33857	-1.32515	-18.5805	-19.2029
-21.0625	2.69E+09	-15.646	-1.38252	-1.35623	-18.6569	-19.2803
-21.2149	2.79E+09	-15.7791	-1.41463	-1.42011	-18.766	-19.3474
-21.3333	2.89E+09	-15.8484	-1.47196	-1.50814	-18.8319	-19.3272
-21.693	2.99E+09	-16.0082	-1.56125	-1.56685	-18.9445	-19.1915
-21.6351	3.09E+09	-15.9397	-1.62974	-1.61113	-18.7553	-18.8753
-21.6056	3.18E+09	-15.8935	-1.67606	-1.67764	-18.6964	-18.4905
-21.5208	3.28E+09	-15.6971	-1.71627	-1.71521	-18.61	-18.1093
-21.8625	3.38E+09	-15.6799	-1.69646	-1.71783	-18.7863	-17.8009
-22.4729	3.48E+09	-15.4876	-1.69779	-1.67714	-19.1063	-17.6085
-23.2321	3.58E+09	-15.6253	-1.67797	-1.66044	-19.5338	-17.4381
-24.3393	3.68E+09	-15.6434	-1.64228	-1.64983	-20.0755	-17.2712
-25.7526	3.78E+09	-15.885	-1.64694	-1.65241	-20.744	-17.1714
-27.6877	3.88E+09	-15.8827	-1.661	-1.6228	-21.5223	-17.0095
-30.2679	3.98E+09	-16.1247	-1.66792	-1.63637	-22.5185	-16.8451
-33.5963	4.08E+09	-16.2815	-1.64985	-1.65767	-23.712	-16.631

-37.8572	4.18E+09	-16.509	-1.6779	-1.67986	-25.1863	-16.3757
-37.6431	4.28E+09	-16.6738	-1.73225	-1.69334	-27.1908	-16.0881
-33.1333	4.38E+09	-16.7113	-1.74712	-1.74112	-29.6054	-15.7092
-29.7856	4.48E+09	-16.7098	-1.77951	-1.76826	-32.709	-15.3079
-27.7683	4.58E+09	-16.5436	-1.8173	-1.83906	-36.3726	-14.9126
-25.8784	4.68E+09	-16.397	-1.85528	-1.85485	-42.3139	-14.5847
-24.5947	4.78E+09	-16.1265	-1.87577	-1.88793	-43.9606	-14.3257
-23.9602	4.88E+09	-16.0851	-1.91736	-1.91449	-39.2985	-14.1039
-22.5384	4.98E+09	-16.082	-1.91792	-1.92395	-34.1702	-13.9613
-21.8733	5.08E+09	-16.1093	-1.91699	-1.90836	-31.8709	-13.8838
-21.0195	5.17E+09	-16.251	-1.92787	-1.91089	-29.0495	-13.8571
-20.0241	5.27E+09	-16.3857	-1.87817	-1.89316	-26.6588	-13.8556
-19.4053	5.37E+09	-16.4887	-1.87638	-1.85663	-25.1683	-13.8714
-18.5825	5.47E+09	-16.6979	-1.89767	-1.85731	-23.7547	-13.8882
-18.1007	5.57E+09	-16.8992	-1.84556	-1.84239	-22.7598	-13.9406
-17.7517	5.67E+09	-17.013	-1.84365	-1.83669	-21.8927	-14.0282
-17.5278	5.77E+09	-17.1069	-1.86442	-1.84506	-21.2222	-14.1703
-17.2752	5.87E+09	-17.2618	-1.84673	-1.87968	-20.474	-14.3127
-17.1351	5.97E+09	-17.2769	-1.85651	-1.85596	-20.0146	-14.4768
-16.8736	6.07E+09	-17.6899	-1.8838	-1.87184	-19.4954	-14.6765
-16.8214	6.17E+09	-17.7888	-1.8857	-1.90003	-19.0815	-14.9278
-16.8881	6.27E+09	-17.9515	-1.91106	-1.87667	-18.8107	-15.2096
-17.0099	6.37E+09	-18.0921	-1.89909	-1.96012	-18.6539	-15.5192
-17.2397	6.47E+09	-18.1094	-1.93337	-1.95994	-18.528	-15.8072
-17.7455	6.57E+09	-18.309	-1.96381	-1.96296	-18.5408	-16.148
-18.1283	6.67E+09	-18.2092	-1.9897	-1.97691	-18.3723	-16.4225
-18.1524	6.77E+09	-18.1198	-2.02185	-2.02853	-17.9039	-16.7915
-18.5579	6.87E+09	-17.8939	-2.02853	-2.04766	-17.7352	-17.0622
-18.983	6.97E+09	-17.6574	-2.07326	-2.03512	-17.5453	-17.2607
-19.0286	7.07E+09	-17.3475	-2.09837	-2.11594	-17.1126	-17.3613
-19.228	7.16E+09	-16.7772	-2.13973	-2.14268	-16.7813	-17.3925
-19.4948	7.26E+09	-16.2391	-2.16878	-2.16656	-16.567	-17.2559
-19.7419	7.36E+09	-15.8508	-2.18785	-2.19714	-16.1252	-17.1285
-19.9852	7.46E+09	-15.3538	-2.19328	-2.24796	-15.7665	-16.7965
-20.0162	7.56E+09	-14.8872	-2.24809	-2.23238	-15.3761	-16.4684
-19.7996	7.66E+09	-14.3495	-2.28004	-2.27099	-14.8749	-16.1588
-19.7921	7.76E+09	-13.9561	-2.31306	-2.30088	-14.5605	-15.7418
-19.5436	7.86E+09	-13.4521	-2.35995	-2.33752	-14.1251	-15.3822
-19.8782	7.96E+09	-13.3439	-2.3711	-2.39644	-14.0104	-15.0239
-20.022	8.06E+09	-12.931	-2.39351	-2.38438	-13.8683	-14.6779
-20.3495	8.16E+09	-12.6753	-2.4468	-2.39685	-13.723	-14.3936
-20.49	8.26E+09	-12.4721	-2.45427	-2.45962	-13.5428	-14.1203
-21.3037	8.36E+09	-12.3016	-2.48999	-2.4536	-13.5498	-13.9316
-21.837	8.46E+09	-12.2097	-2.53073	-2.48234	-13.4649	-13.7389
-22.331	8.56E+09	-12.0511	-2.52605	-2.49606	-13.4202	-13.6217
-23.2951	8.66E+09	-12.0657	-2.59843	-2.5317	-13.5246	-13.5392
-24.3364	8.76E+09	-11.9403	-2.53737	-2.54034	-13.6446	-13.4717
-25.4265	8.86E+09	-12.0571	-2.60316	-2.54046	-13.8127	-13.4933
-25.8857	8.96E+09	-12.0732	-2.61705	-2.5914	-14.0356	-13.4578
-26.1217	9.06E+09	-12.1773	-2.61158	-2.5928	-14.38	-13.5575
-25.5003	9.15E+09	-12.2964	-2.61105	-2.57855	-14.6678	-13.5947
-24.2742	9.25E+09	-12.4768	-2.56749	-2.60442	-14.9598	-13.6636
-23.3868	9.35E+09	-12.5373	-2.58708	-2.57363	-15.3045	-13.7024
-21.5319	9.45E+09	-12.6392	-2.59736	-2.57834	-15.5631	-13.8079
-19.9376	9.55E+09	-12.9183	-2.57305	-2.56282	-16.0236	-13.8452

-18.8651	9.65E+09	-12.9848	-2.60402	-2.58505	-16.1635	-13.8789
-17.7037	9.75E+09	-13.0663	-2.59183	-2.57835	-16.6287	-13.8219
-16.7143	9.85E+09	-13.1624	-2.61326	-2.5537	-17.092	-13.7612
-16.0145	9.95E+09	-13.311	-2.53275	-2.62361	-17.5395	-13.6754
-15.0765	1.01E+10	-13.3827	-2.6351	-2.53387	-17.9593	-13.6007
-14.6634	1.01E+10	-13.5783	-2.65301	-2.59121	-18.0532	-13.4908
-14.0947	1.02E+10	-13.6659	-2.52964	-2.6259	-18.3167	-13.3663
-13.4372	1.03E+10	-13.6947	-2.63948	-2.60144	-18.419	-13.3176
-12.9109	1.04E+10	-13.8559	-2.6068	-2.60998	-18.5876	-13.2652
-12.5671	1.05E+10	-13.877	-2.64215	-2.65386	-18.5569	-13.1333
-12.3412	1.06E+10	-13.825	-2.61392	-2.66388	-18.7774	-13.0888
-11.8715	1.07E+10	-13.8845	-2.62254	-2.60662	-18.3739	-13.1217
-11.7249	1.08E+10	-13.85	-2.73016	-2.66729	-18.4198	-13.1115
-11.5547	1.09E+10	-14.035	-2.66238	-2.6284	-18.4987	-13.2375
-11.3738	1.1E+10	-13.9985	-2.73364	-2.73632	-18.0557	-13.4098
-11.2617	1.11E+10	-14.2578	-2.77667	-2.66011	-18.0548	-13.5243
-11.2097	1.12E+10	-14.3761	-2.71282	-2.78552	-18.2826	-13.718
-10.96	1.13E+10	-14.4463	-2.77893	-2.74418	-17.9761	-13.9188
-11.0548	1.14E+10	-14.3607	-2.72294	-2.77836	-17.7939	-14.2078
-10.9598	1.15E+10	-14.415	-2.79912	-2.82932	-17.9047	-14.5933
-11.0067	1.16E+10	-14.3843	-2.78368	-2.78245	-18.078	-14.9315
-11.114	1.17E+10	-14.8227	-2.8364	-2.86539	-18.0707	-15.3676
-11.0891	1.18E+10	-14.5113	-2.79797	-2.82205	-17.9294	-15.8021
-11.2582	1.19E+10	-14.4449	-2.86689	-2.80301	-18.3452	-16.2143
-11.3093	1.2E+10	-14.7912	-2.83089	-2.83608	-18.0329	-16.8681
-11.3595	1.21E+10	-14.5495	-2.85202	-2.80359	-18.2562	-17.3134
-11.5224	1.22E+10	-14.7671	-2.8647	-2.8729	-18.3245	-17.8885
-11.7205	1.23E+10	-14.3825	-2.94811	-2.87291	-19.0797	-18.1887
-11.8364	1.24E+10	-14.6127	-2.9172	-2.91471	-18.8579	-18.7948
-11.8878	1.25E+10	-14.7723	-2.93906	-2.95637	-19.0492	-19.32
-12.0014	1.26E+10	-14.343	-2.95667	-2.89961	-19.4728	-19.7649
-12.1779	1.27E+10	-14.1162	-2.96366	-2.98729	-19.488	-20.195
-12.2095	1.28E+10	-14.328	-3.00046	-2.98096	-19.6652	-20.4716
-12.3939	1.29E+10	-14.0588	-3.01731	-2.94598	-20.1328	-20.5679
-12.4369	1.3E+10	-14.0101	-3.02364	-3.02822	-19.6984	-20.6685
-12.6914	1.31E+10	-13.8498	-2.99496	-3.11635	-20.4126	-20.6875
-12.7743	1.32E+10	-13.7398	-3.08467	-3.05694	-20.5307	-20.6569
-12.7614	1.33E+10	-13.3292	-3.08839	-3.17049	-20.2566	-20.1787
-12.886	1.34E+10	-13.2176	-3.09961	-3.12262	-20.6792	-19.7646
-13.3347	1.35E+10	-13.1823	-3.18713	-3.19074	-21.7145	-19.3047
-13.0092	1.36E+10	-13.0816	-3.14721	-3.20372	-21.0801	-18.772
-12.9716	1.37E+10	-12.815	-3.22526	-3.26176	-21.1167	-18.3219
-13.082	1.38E+10	-12.6541	-3.21022	-3.23978	-20.9364	-17.6584
-13.0255	1.39E+10	-12.3956	-3.24643	-3.25511	-20.9734	-16.9485
-13.0676	1.4E+10	-12.2011	-3.19889	-3.22403	-20.7066	-16.2762
-13.2125	1.41E+10	-12.1404	-3.33446	-3.23111	-20.5094	-15.7322
-12.8484	1.42E+10	-12.388	-3.31316	-3.33467	-19.8545	-15.4028
-13.0082	1.43E+10	-11.9966	-3.35843	-3.35437	-20.0229	-14.9067
-13.2165	1.44E+10	-11.9265	-3.40716	-3.35771	-19.9903	-14.5518
-13.1607	1.45E+10	-11.8807	-3.40807	-3.36275	-19.7232	-14.2562
-13.2898	1.46E+10	-11.896	-3.38154	-3.32428	-19.6017	-14.073
-13.2121	1.47E+10	-11.7781	-3.39375	-3.35298	-19.1392	-13.9689
-13.0567	1.48E+10	-11.8643	-3.31972	-3.57588	-18.8266	-14.0003
-13.1778	1.49E+10	-11.9221	-3.49912	-3.38761	-18.4947	-14.2114
-13.3323	1.5E+10	-11.9671	-3.43252	-3.39059	-18.1381	-14.179

-13.1832	1.51E+10	-12.3176	-3.40599	-3.46123	-17.7665	-14.6067
-13.3446	1.52E+10	-12.4862	-3.42096	-3.49226	-17.5335	-14.9828
-13.5748	1.53E+10	-12.5442	-3.52066	-3.5607	-17.6416	-15.6079
-13.5254	1.54E+10	-12.957	-3.44833	-3.52852	-17.2762	-15.927
-13.755	1.55E+10	-13.0412	-3.46757	-3.52057	-17.352	-16.3303
-13.9786	1.56E+10	-13.7129	-3.45187	-3.47786	-17.377	-16.5932
-13.9724	1.57E+10	-14.0975	-3.49867	-3.51616	-17.0881	-16.7397
-13.8131	1.58E+10	-14.4206	-3.53503	-3.55264	-16.7094	-16.4474
-14.1354	1.59E+10	-14.9363	-3.55939	-3.5249	-17.0096	-16.3513
-14.2077	1.6E+10	-15.135	-3.54539	-3.51449	-16.736	-15.9384
-14.3438	1.61E+10	-15.5704	-3.56267	-3.67098	-16.582	-15.7821
-14.7032	1.62E+10	-16.4959	-3.6017	-3.60461	-16.9957	-15.7222
-15.0072	1.63E+10	-16.8278	-3.52842	-3.62499	-17.0978	-15.6988
-15.0966	1.64E+10	-17.3975	-3.63532	-3.69415	-17.0912	-15.8761
-15.3976	1.65E+10	-17.7267	-3.71518	-3.61946	-17.4867	-16.2957
-15.6833	1.66E+10	-18.5299	-3.72402	-3.70288	-17.7215	-16.7589
-15.7952	1.67E+10	-19.5827	-3.75082	-3.75467	-17.9142	-17.5793
-16.1962	1.68E+10	-20.0696	-3.73653	-3.75711	-18.5123	-18.3818
-16.481	1.69E+10	-21.1991	-3.72807	-3.75835	-18.7948	-19.2862
-17.2659	1.7E+10	-21.0117	-3.77541	-3.80959	-19.8567	-20.0948
-17.6516	1.71E+10	-22.2336	-3.85672	-3.87373	-20.3035	-20.8068
-18.4697	1.72E+10	-23.2066	-3.80897	-3.86842	-21.3849	-21.4004
-19.2449	1.73E+10	-23.9984	-3.88275	-3.91268	-22.5269	-21.6742
-20.3972	1.74E+10	-24.7699	-3.97329	-3.93299	-23.3515	-20.8497
-20.8546	1.75E+10	-25.7262	-4.01669	-3.96003	-24.8349	-20.0013
-22.6455	1.76E+10	-25.197	-4.02362	-4.05373	-27.3847	-18.729
-22.5721	1.77E+10	-24.0218	-4.11475	-4.02759	-29.2946	-17.6304
-22.412	1.78E+10	-23.4079	-4.06172	-4.10903	-31.0006	-16.4261
-21.7328	1.79E+10	-22.1755	-4.18317	-4.17448	-31.369	-15.5103
-20.267	1.8E+10	-20.771	-4.23902	-4.21633	-30.7262	-14.6194
-19.0455	1.81E+10	-19.4518	-4.36336	-4.2712	-29.2454	-13.6766
-17.5575	1.82E+10	-18.0369	-4.2788	-4.38615	-27.7986	-13.0225
-16.3264	1.83E+10	-17.1348	-4.28675	-4.3727	-26.9005	-12.3345
-15.4303	1.84E+10	-15.7833	-4.49191	-4.45191	-25.7202	-11.8563
-14.3476	1.85E+10	-15.0791	-4.53789	-4.57007	-24.4284	-11.4522
-13.488	1.86E+10	-14.2333	-4.5522	-4.64172	-23.9337	-11.13
-12.8032	1.87E+10	-13.2599	-4.7071	-4.75748	-23.6714	-10.7323
-12.2584	1.88E+10	-12.903	-4.82419	-4.86227	-23.2379	-10.6612
-11.8929	1.89E+10	-11.8873	-4.90025	-4.88967	-24.3737	-10.3142
-11.2739	1.9E+10	-11.2008	-4.98568	-4.9484	-25.5141	-9.95522
-10.7482	1.91E+10	-10.6438	-5.13359	-5.06895	-24.8829	-9.96775
-10.5188	1.92E+10	-10.2614	-5.3891	-5.13374	-25.8978	-9.90807
-9.86045	1.93E+10	-9.87651	-5.44057	-5.32096	-27.0646	-9.92613
-9.63279	1.94E+10	-9.3854	-5.56764	-5.42739	-29.5834	-9.84471
-9.43514	1.95E+10	-8.67801	-5.41831	-5.48865	-32.665	-9.47659
-9.24425	1.96E+10	-8.42744	-5.72734	-5.75814	-37.4219	-9.51463
-9.06202	1.97E+10	-8.1919	-5.88679	-5.84198	-42.732	-9.45895
-8.91925	1.98E+10	-7.7807	-5.91424	-5.96877	-40.627	-9.24197
-8.67261	1.99E+10	-7.51757	-6.17462	-6.16077	-36.3213	-9.0117
-8.58282	2E+10	-6.97551	-6.28412	-6.22062	-30.0743	-8.67974

J0-J1

S21 (dB)	S12 (dB)	S22 (dB)
-86.9295	-82.9244	-6.99309
-85.4617	-84.3654	-13.1729
-82.3285	-82.6896	-16.2971
-81.0427	-80.8833	-18.3861
-80.4012	-79.9091	-19.8505
-80.1686	-80.3684	-20.8854
-80.365	-79.897	-21.6064
-80.5978	-80.3317	-22.2065
-80.2587	-80.4356	-22.664
-81.0028	-80.8492	-23.0145
-81.4903	-80.9858	-23.3266
-81.7167	-81.1477	-23.4888
-81.9397	-82.3139	-23.7701
-82.2978	-82.7586	-23.9682
-82.6023	-82.5867	-24.2273
-83.1711	-82.692	-24.4511
-83.3905	-83.331	-24.6173
-83.5264	-83.1752	-24.8518
-83.5422	-84.007	-25.0801
-83.7796	-83.7575	-25.2769
-83.6443	-84.4271	-25.5259
-84.2319	-84.2163	-25.7885
-84.2823	-85.2479	-26.1242
-85.6228	-85.4339	-26.5291
-84.7529	-85.1493	-26.7902
-85.4132	-85.5127	-27.2032
-85.1278	-85.3419	-27.555
-85.6411	-85.7159	-28.2073
-85.0667	-84.6997	-29.0383
-85.4633	-85.6955	-29.8141
-85.9191	-85.882	-30.5042
-85.6724	-85.6488	-30.723
-86.0594	-86.6073	-30.311
-85.9731	-85.9227	-29.9461
-86.1708	-85.9307	-29.8491
-86.121	-86.2857	-29.8701
-86.2034	-85.8228	-30.4464
-85.6604	-85.9351	-30.9477
-86.0143	-86.3492	-31.6931
-85.9474	-85.9724	-32.1515
-85.6018	-85.6877	-32.7277

J0-J2

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-9.98047	-92.259	-93.3987	-17.9132
-15.1506	-101.47	-106.052	-28.6553
-19.7284	-100.177	-109.527	-28.8059
-23.0023	-101.313	-100.035	-28.5077
-24.9618	-95.7731	-96.2718	-28.1637
-25.3947	-97.1579	-97.4329	-27.9039
-24.9041	-96.1362	-95.1599	-27.7059
-24.0291	-98.6325	-94.9685	-27.6393
-23.1462	-95.4296	-95.9305	-27.6699
-22.3619	-98.8626	-96.4356	-27.6144
-21.6189	-97.6511	-94.7856	-27.6164
-21.0047	-95.895	-98.4923	-27.4624
-20.582	-95.4967	-94.5987	-27.528
-20.2062	-96.0223	-96.8889	-27.5097
-19.8165	-95.7664	-95.0207	-27.6104
-19.4737	-95.0433	-95.383	-27.6503
-19.2545	-94.0589	-97.3077	-27.6221
-18.9971	-95.1797	-95.5984	-27.6923
-18.8468	-95.6763	-99.9692	-27.7456
-18.6647	-94.6735	-96.2267	-27.7494
-18.5358	-98.106	-96.2291	-27.7806
-18.4405	-97.2091	-98.0975	-27.8162
-18.3204	-96.0382	-97.5008	-27.9621
-18.2757	-95.7108	-95.4012	-28.1394
-18.2257	-96.0771	-96.6486	-28.1604
-18.2272	-95.3852	-96.4582	-28.3418
-18.2765	-94.8222	-95.3064	-28.4181
-18.3438	-96.579	-95.3784	-28.7125
-18.3603	-95.1258	-96.1804	-29.2543
-18.2966	-95.7015	-97.7636	-29.7628
-18.0929	-95.8283	-95.3775	-30.2485
-17.8444	-94.9996	-95.5105	-30.3121
-17.6327	-93.9148	-96.0033	-29.8759
-17.5294	-96.1165	-96.3701	-29.4504
-17.5893	-96.2773	-95.9855	-28.9704
-17.7313	-93.1488	-96.473	-28.6827
-17.928	-95.5037	-94.3457	-28.5517
-18.231	-94.9629	-94.148	-28.4468
-18.5119	-96.3449	-94.859	-28.6098
-18.8057	-94.8499	-93.87	-28.583
-19.0134	-94.202	-93.9242	-28.5305

-85.5855	-85.4291	-33.1686	-19.1009	-94.6546	-95.8568	-28.4172
-85.5099	-86.095	-33.9295	-19.048	-94.1121	-96.1351	-28.2978
-85.7557	-85.48	-34.8284	-18.7475	-93.7043	-94.7259	-28.2544
-85.7139	-85.6803	-35.4303	-18.3209	-92.7118	-93.0537	-28.1511
-85.1509	-85.8824	-36.0569	-17.8381	-92.8687	-93.5844	-28.1719
-85.305	-85.1603	-36.2829	-17.4138	-93.5207	-91.8089	-28.1586
-85.0425	-85.0545	-35.7814	-17.0619	-93.4395	-94.0433	-28.1903
-84.9323	-85.9323	-35.5608	-16.7365	-94.6081	-93.3775	-27.9397
-85.3557	-86.0198	-35.169	-16.4776	-93.9587	-91.6396	-27.7907
-85.3585	-85.4254	-35.5979	-16.2685	-93.2104	-93.4505	-27.2952
-85.2667	-85.8383	-35.7918	-16.0444	-92.4165	-93.0607	-27.0461
-85.2791	-85.0624	-36.7671	-15.8265	-92.9072	-93.1998	-26.5585
-84.8384	-84.926	-37.4608	-15.5685	-91.4695	-92.0599	-26.1865
-85.0736	-84.5689	-38.8873	-15.2993	-91.5465	-91.7493	-25.9174
-85.0994	-85.0929	-40.8486	-15.0446	-92.0859	-91.4462	-25.517
-84.7158	-84.2495	-43.0972	-14.8436	-92.2045	-91.4239	-25.0674
-84.5652	-84.6648	-46.1424	-14.68	-92.6559	-91.9114	-24.7549
-84.6728	-85.002	-52.42	-14.5264	-91.7868	-91.7261	-24.4244
-84.57	-84.3294	-68.118	-14.4076	-91.7788	-91.4834	-24.112
-83.9908	-84.2868	-51.1888	-14.329	-92.2776	-91.1921	-23.9721
-84.2153	-84.1867	-47.4236	-14.3192	-91.6111	-91.4615	-23.6008
-84.2682	-83.7645	-45.1627	-14.3634	-92.0628	-91.3367	-23.3093
-83.6156	-83.7177	-41.7225	-14.4539	-90.7273	-90.6149	-22.9326
-83.3192	-83.6635	-39.3447	-14.5482	-90.6735	-91.0707	-22.5705
-83.9389	-83.8026	-37.9305	-14.7118	-90.4946	-89.8806	-22.235
-83.8503	-84.1093	-36.2983	-14.8829	-89.9766	-91.2313	-21.9227
-83.5276	-83.5621	-35.4075	-15.1884	-90.4856	-89.7512	-21.6903
-83.6219	-83.3224	-34.42	-15.4395	-89.3519	-90.3314	-21.4396
-83.0109	-83.1448	-34.0768	-15.6979	-89.9158	-90.2545	-21.2752
-83.0578	-83.1484	-33.545	-15.952	-90.7135	-90.117	-21.043
-83.2765	-82.9406	-32.8678	-16.2217	-90.3697	-88.7359	-20.7759
-82.8237	-83.326	-32.228	-16.3294	-89.551	-88.7266	-20.492
-82.8682	-82.7588	-31.4326	-16.4778	-89.2393	-88.9983	-20.1958
-83.3755	-83.1752	-30.8001	-16.4577	-88.894	-88.8258	-19.9622
-83.2007	-82.6612	-30.1153	-16.4159	-89.0567	-88.7546	-19.7033
-82.7139	-82.8017	-29.7149	-16.3311	-87.8082	-87.8256	-19.5551
-82.451	-83.1135	-29.48	-16.0702	-89.5929	-88.8265	-19.4187
-82.5524	-82.4703	-29.3192	-15.7884	-89.2996	-90.133	-19.3111
-82.7133	-82.2554	-29.0063	-15.4468	-88.413	-87.5007	-19.1147
-82.846	-82.404	-28.7872	-15.1299	-88.6678	-87.8804	-18.9546
-82.5679	-82.5389	-28.4705	-14.8071	-88.9555	-88.8747	-18.7642
-82.3534	-82.487	-27.9646	-14.4661	-88.3888	-88.7782	-18.497
-82.4755	-82.3168	-27.5582	-14.2247	-88.3861	-87.8702	-18.2762
-82.4996	-82.031	-27.1406	-13.9433	-87.9645	-88.6511	-18.0794
-82.0356	-82.6021	-27.1183	-13.7268	-87.9676	-86.937	-17.98
-82.2366	-82.5173	-27.0006	-13.5361	-87.9091	-88.6224	-17.8438
-82.5906	-82.3336	-27.1143	-13.347	-88.3838	-86.8925	-17.7917
-82.2263	-81.9792	-27.1909	-13.2446	-87.8662	-87.5827	-17.6955
-82.2489	-82.4796	-27.0424	-13.0995	-87.3722	-87.5071	-17.5751
-81.8014	-82.2334	-26.8165	-13.0642	-86.9051	-87.2937	-17.3989
-81.718	-82.064	-26.3629	-12.9759	-87.2012	-87.7489	-17.1692
-81.7933	-81.4437	-26.1963	-12.9146	-86.393	-86.9989	-17.0429
-81.8252	-81.815	-25.8332	-12.8462	-86.6275	-85.9326	-16.8529
-81.7795	-82.0596	-25.7237	-12.8386	-86.251	-86.6739	-16.7442
-81.4999	-81.8842	-25.6462	-12.78	-86.0452	-86.8661	-16.6702

-81.2761	-81.1098	-25.607	-12.737	-86.6938	-86.0912	-16.6134
-81.4659	-81.4356	-25.482	-12.6269	-85.7738	-85.4253	-16.5129
-81.8042	-81.2899	-25.4338	-12.5482	-85.8076	-85.9547	-16.4887
-81.36	-81.367	-25.4921	-12.4388	-86.3927	-85.7604	-16.5062
-80.9483	-81.014	-25.1171	-12.3661	-85.1305	-85.8867	-16.3475
-80.689	-80.988	-24.9315	-12.2934	-85.6108	-85.6496	-16.2996
-80.4959	-80.4078	-24.8725	-12.203	-84.6267	-85.4355	-16.271
-80.7669	-80.3535	-24.6132	-12.1864	-85.3871	-85.1835	-16.153
-80.4459	-80.4137	-24.6699	-12.1749	-84.699	-85.0293	-16.1659
-81.4163	-80.9969	-24.5906	-12.0984	-83.877	-84.548	-16.1455
-79.2634	-82.6111	-24.7397	-12.1029	-83.5356	-84.5438	-16.2029
-79.7594	-80.3633	-24.9646	-12.1825	-84.3456	-83.3061	-16.2785
-79.7158	-80.268	-25.0053	-12.2188	-84.3343	-82.8043	-16.3888
-79.5057	-80.0376	-24.8819	-12.3835	-84.3431	-84.5608	-16.3753
-79.3961	-78.8409	-25.2126	-12.586	-84.0877	-83.2216	-16.5558
-79.6145	-80.0902	-25.1931	-12.7447	-83.7176	-82.7105	-16.5774
-79.061	-79.256	-25.1762	-12.9641	-82.9156	-82.7771	-16.5603
-78.5257	-79.1581	-25.3328	-13.1911	-83.014	-83.4604	-16.6379
-78.8566	-80.1201	-25.6912	-13.5229	-82.2051	-82.0053	-16.7918
-78.4455	-78.9606	-25.9123	-13.9338	-82.7247	-83.2371	-16.9021
-78.8329	-79.2513	-26.3054	-14.3228	-84.8132	-82.096	-17.0662
-78.2607	-77.7056	-26.3695	-14.7759	-83.8811	-81.7908	-17.1557
-78.3682	-78.6265	-26.4567	-15.2358	-81.144	-83.2823	-17.253
-77.4347	-78.3095	-26.5462	-15.7058	-82.6179	-83.366	-17.3253
-78.0869	-77.8122	-26.2944	-16.3639	-82.9792	-83.3628	-17.3305
-78.7716	-78.4604	-26.0488	-16.8357	-81.6797	-80.7625	-17.2491
-80.1852	-78.5968	-25.8044	-17.4725	-81.9472	-80.5528	-17.1911
-78.3155	-78.3768	-26.2503	-17.8355	-81.8712	-84.4571	-17.3704
-78.207	-78.1924	-26.3533	-18.468	-80.9285	-82.1799	-17.4873
-78.7674	-77.5518	-26.1027	-18.9991	-81.9099	-80.1339	-17.44
-78.5845	-77.9616	-26.3952	-19.5265	-81.5227	-80.4643	-17.5535
-78.2664	-78.3507	-26.7476	-19.8422	-80.5725	-80.7833	-17.7684
-77.6746	-77.7924	-26.3699	-20.1805	-81.1696	-79.753	-17.6467
-78.8182	-76.9354	-26.0227	-20.2393	-80.4211	-80.2397	-17.5762
-77.9766	-77.6815	-25.8128	-20.3011	-80.9224	-80.4476	-17.4976
-77.8621	-77.4091	-25.8321	-20.2838	-80.8055	-81.1562	-17.4437
-77.7953	-77.4804	-25.5131	-20.2084	-80.5285	-80.6673	-17.2876
-77.4211	-77.6853	-25.8015	-19.7421	-81.0539	-80.8036	-17.3805
-78.3568	-77.2642	-25.6585	-19.3565	-79.9243	-79.6235	-17.2319
-77.5985	-77.8475	-25.7544	-18.9676	-80.8655	-79.4749	-17.2446
-77.2967	-76.4746	-25.1019	-18.5077	-80.3554	-80.1453	-16.919
-77.097	-76.1239	-25.1536	-18.1612	-80.2269	-79.2469	-16.8224
-77.2123	-77.3408	-24.6419	-17.6066	-79.4192	-77.9315	-16.5735
-77.9168	-76.982	-24.2378	-17.0206	-78.6481	-79.1158	-16.3073
-76.2907	-77.0385	-23.5989	-16.4819	-79.5775	-79.4809	-15.9655
-77.1048	-77.6355	-23.0891	-16.0758	-79.509	-79.511	-15.6552
-76.8163	-76.7812	-22.6707	-15.9037	-78.6263	-79.2495	-15.3164
-76.915	-75.8032	-22.4232	-15.5717	-78.2976	-79.2191	-15.1237
-76.9022	-77.0776	-22.2808	-15.3911	-79.3935	-78.6627	-14.9661
-76.9432	-76.9082	-21.9987	-15.2897	-78.0851	-79.0664	-14.7352
-76.5031	-75.8644	-21.7557	-15.336	-78.8602	-78.0481	-14.5282
-76.3854	-76.4017	-21.4067	-15.4803	-77.6617	-79.1993	-14.2929
-75.7968	-76.1605	-21.0329	-15.8075	-78.8081	-78.419	-13.9926
-75.9679	-75.7095	-20.4809	-16.4362	-78.4093	-77.9114	-13.745
-76.2627	-76.1653	-20.3045	-16.796	-77.6452	-77.3636	-13.497

-76.2609	-75.9505	-20.1142	-17.8354	-78.5073	-77.5624	-13.3093
-75.8981	-76.2593	-19.9285	-18.9443	-77.6751	-78.6113	-13.1394
-75.562	-76.5556	-19.6779	-20.6282	-77.1244	-77.2892	-12.9695
-75.8153	-76.4316	-19.4725	-21.9531	-77.7401	-78.3457	-12.7435
-75.7873	-75.9517	-19.2691	-23.281	-77.6996	-78.1812	-12.6159
-75.7465	-74.8003	-19.378	-23.6507	-76.7801	-76.7509	-12.596
-75.5348	-75.3473	-19.0462	-22.8666	-77.5989	-77.7581	-12.3313
-75.8895	-75.4265	-18.8376	-21.1627	-78.1443	-77.2503	-12.1703
-75.6629	-75.6744	-18.7487	-19.8325	-77.945	-76.9602	-12.0826
-75.7885	-76.2673	-18.3826	-18.4999	-77.5601	-77.5324	-11.8493
-75.5629	-75.4388	-18.3579	-17.6479	-76.8522	-77.1367	-11.7874
-75.5275	-75.3748	-18.286	-16.9571	-76.4248	-77.0776	-11.7195
-74.9188	-74.4854	-17.9975	-16.5174	-76.2434	-76.7305	-11.5203
-75.143	-74.4474	-17.8196	-16.225	-76.6637	-77.1067	-11.4195
-74.466	-74.2861	-17.676	-16.0647	-76.1944	-76.1802	-11.3429
-74.4416	-73.9985	-17.5045	-16.0316	-76.8136	-76.2031	-11.2508
-74.6722	-74.6476	-17.3509	-15.9318	-76.6685	-76.5829	-11.2178
-74.4297	-73.4565	-17.092	-16.0232	-76.1979	-76.5165	-11.0708
-73.9314	-73.6154	-16.8835	-15.8519	-76.2001	-76.1319	-10.9582
-74.2602	-74.4192	-16.5692	-15.6938	-76.2081	-75.8197	-10.7978
-73.7697	-74.8756	-16.3317	-15.4883	-76.5189	-77.2378	-10.6689
-74.0304	-74.054	-16.1965	-15.4858	-76.6871	-77.7685	-10.6326
-74.2591	-74.6388	-16.0725	-15.504	-76.1849	-76.094	-10.6135
-73.6543	-73.5093	-16.194	-15.2385	-76.0525	-77.0358	-10.6853
-73.8394	-74.4158	-15.8912	-15.1576	-75.5588	-76.536	-10.5535
-73.6535	-73.92	-15.5952	-14.8811	-75.8698	-75.8994	-10.4031
-74.1567	-73.7851	-15.4743	-14.6817	-75.7416	-75.3624	-10.3557
-74.497	-73.4401	-15.2635	-14.2535	-76.4176	-76.1655	-10.2147
-73.6811	-73.5052	-15.1398	-13.9561	-75.5594	-75.6585	-10.1935
-74.1246	-74.4115	-15.1439	-13.4523	-75.3566	-75.9285	-10.2053
-73.7358	-73.4833	-14.9947	-12.8028	-75.929	-75.9266	-10.1169
-73.9795	-73.3393	-14.8893	-12.2671	-75.5051	-76.204	-10.0793
-73.0481	-73.229	-14.7549	-11.6142	-75.0253	-75.4855	-10.0046
-73.9917	-73.7958	-14.7201	-11.1175	-76.4639	-75.7521	-10.0352
-73.4633	-73.405	-14.477	-10.6256	-76.3442	-74.9097	-9.89527
-72.8906	-73.8501	-14.3299	-10.1991	-74.9859	-75.4617	-9.82184
-73.1992	-73.2143	-14.2172	-9.6758	-74.919	-75.127	-9.77985
-73.4625	-73.414	-14.0256	-9.45079	-75.1425	-74.8728	-9.68245
-73.2229	-73.5725	-13.9943	-8.95104	-74.9887	-74.947	-9.70145
-72.9977	-73.4154	-13.8689	-8.46333	-75.4416	-74.8195	-9.63516
-73.1097	-72.8016	-13.5785	-8.33439	-74.676	-73.9877	-9.45306
-73.0632	-72.9309	-13.3386	-8.13554	-74.4169	-74.7151	-9.36563
-72.5528	-72.3838	-13.1828	-8.01987	-74.6743	-74.7338	-9.26225
-72.6518	-72.1226	-13.0043	-7.81928	-74.3155	-74.4896	-9.19508
-72.4712	-72.7685	-12.7118	-7.38145	-74.0257	-74.2013	-9.00023
-72.1391	-71.9875	-12.4764	-7.35797	-73.9934	-73.9192	-8.88021
-72.1159	-72.3025	-12.3649	-7.27171	-74.0883	-74.248	-8.83072
-72.261	-71.8281	-12.2292	-7.06173	-73.695	-74.0588	-8.74385
-72.2863	-72.1075	-12.1182	-6.89811	-73.6298	-73.9607	-8.70266
-71.7243	-71.9116	-11.8843	-6.67417	-73.172	-73.8975	-8.53927

J0-J3

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-8.5897	-87.1581	-89.5983	-17.7037
-15.0984	-104.282	-105.438	-29.0936
-19.7425	-99.3276	-100.618	-29.7351
-23.1988	-96.4499	-95.8281	-29.5079
-25.4584	-93.6978	-97.1885	-29.062
-26.1465	-94.363	-94.0535	-28.7309
-25.7651	-93.9007	-91.8023	-28.4567
-24.9121	-92.6345	-93.2755	-28.3023
-24.0449	-93.4468	-93.0762	-28.3779
-23.2961	-92.2092	-93.0593	-28.316
-22.6038	-92.4933	-91.3343	-28.3274
-22.0615	-92.2149	-91.1992	-28.2201
-21.7345	-92.3903	-92.8766	-28.3063
-21.4715	-92.4034	-92.9132	-28.3578
-21.1947	-91.9291	-92.4649	-28.5925
-20.9737	-91.5876	-93.3707	-28.719
-20.9016	-91.995	-92.1609	-28.8464
-20.7663	-92.2118	-94.1096	-29.0513
-20.7609	-94.734	-91.7654	-29.3288
-20.6985	-92.0785	-94.191	-29.5678
-20.6785	-92.0829	-92.3245	-29.9914
-20.6726	-91.1981	-92.9418	-30.2806
-20.6027	-92.7919	-92.2592	-30.6524
-20.5881	-92.859	-94.389	-31.3239
-20.526	-92.2692	-93.1578	-31.77
-20.4712	-92.2172	-93.3764	-32.4898
-20.3986	-93.8333	-92.4356	-33.1254
-20.3144	-92.8611	-94.8116	-34.2558
-20.1344	-92.6497	-94.0832	-34.7732
-19.866	-93.6326	-95.1481	-34.3999
-19.4598	-93.3425	-94.7817	-33.1824
-19.02	-93.5237	-93.4432	-32.0768
-18.5529	-94.256	-93.6005	-31.2838
-18.1373	-93.7776	-93.8808	-30.8239
-17.8441	-93.6948	-92.4567	-30.9682
-17.588	-91.6466	-92.3678	-31.0991
-17.3563	-91.6894	-92.5754	-31.7929
-17.2096	-93.2222	-92.5324	-32.3143
-16.996	-92.3668	-94.603	-32.6062
-16.7734	-92.7519	-94.4113	-32.8684
-16.5059	-93.0874	-95.5202	-33.1454

J0-J4

S11 (dB)	S21 (dB)	S12 (dB)
-8.89788	-86.7902	-86.605
-15.5004	-95.4151	-101.18
-20.2235	-98.1228	-98.4594
-23.6657	-94.2509	-95.695
-25.6859	-90.9159	-90.7445
-25.9881	-90.215	-90.7848
-25.3218	-89.3802	-89.6457
-24.3286	-89.3087	-89.0406
-23.3982	-89.2243	-89.2801
-22.6292	-88.6053	-89.0874
-21.943	-89.04	-88.5517
-21.4139	-89.3992	-88.9577
-21.087	-89.0669	-88.3904
-20.834	-88.4834	-89.5315
-20.582	-89.0366	-87.8571
-20.3912	-89.4271	-88.352
-20.3622	-89.2583	-90.3552
-20.2723	-89.6287	-90.5193
-20.3205	-91.0543	-90.0637
-20.3399	-91.5643	-90.6127
-20.4173	-89.2298	-90.0515
-20.5338	-90.1367	-89.9556
-20.5884	-89.9931	-90.4766
-20.7325	-91.4376	-89.8556
-20.844	-90.8531	-90.1743
-21	-91.1832	-90.8899
-21.1816	-90.9659	-90.5952
-21.3516	-90.6141	-91.8551
-21.4032	-91.5211	-90.6215
-21.2943	-91.1743	-92.1515
-20.9389	-91.3391	-91.5701
-20.4943	-90.6744	-91.0416
-20.0338	-91.444	-90.8607
-19.6475	-91.383	-92.372
-19.3756	-91.7539	-91.8944
-19.1011	-90.5711	-91.5873
-18.8013	-90.4301	-92.0994
-18.567	-90.0025	-90.4206
-18.2342	-92.618	-91.7344
-17.8736	-91.3957	-90.2268
-17.463	-91.124	-90.8652

-16.1907	-94.9996	-93.1492	-33.2249	-16.9992	-91.5183	-90.5436
-15.8437	-92.2816	-92.6191	-33.3232	-16.5108	-91.1493	-91.4145
-15.4132	-91.911	-94.2705	-33.153	-15.9488	-91.6301	-91.6462
-14.9734	-93.5007	-91.7135	-32.9523	-15.404	-92.2127	-90.4804
-14.5377	-91.7503	-92.0022	-32.6051	-14.8802	-90.6341	-91.7199
-14.1678	-91.2861	-92.6786	-32.3846	-14.4463	-90.2272	-90.7197
-13.8696	-92.2032	-92.6275	-32.0959	-14.1013	-91.3654	-89.3522
-13.6016	-92.2812	-90.6977	-32.2951	-13.7864	-91.0318	-92.0572
-13.4231	-92.4395	-92.5257	-32.3327	-13.5608	-91.0893	-91.8022
-13.314	-91.4957	-91.7752	-33.0209	-13.4041	-91.2256	-90.4242
-13.2485	-91.5721	-91.9215	-33.3493	-13.2859	-91.161	-89.9215
-13.2141	-91.6548	-92.4298	-34.2064	-13.2053	-90.6707	-90.9992
-13.1849	-91.4981	-91.3461	-35.0606	-13.1351	-90.8439	-92.2424
-13.1553	-90.8798	-91.5453	-35.1032	-13.0749	-90.9614	-90.6846
-13.1518	-92.0838	-91.3966	-35.1374	-13.0415	-90.6793	-90.6214
-13.1853	-91.9195	-90.2055	-35.2261	-13.0601	-89.9168	-90.6057
-13.2638	-90.2843	-90.699	-34.5644	-13.1226	-90.6744	-90.4399
-13.347	-92.1802	-90.5682	-33.7864	-13.1932	-91.3007	-90.2283
-13.4506	-92.1577	-91.5282	-32.8571	-13.285	-89.8716	-91.3187
-13.5954	-90.8416	-91.3672	-32.0145	-13.4142	-89.7379	-89.9608
-13.7933	-90.249	-90.93	-31.5942	-13.5948	-89.6214	-91.0083
-14.0317	-89.3245	-90.5211	-31.1376	-13.8153	-90.2722	-90.2653
-14.3086	-90.4451	-90.857	-30.2191	-14.0689	-90.1943	-89.5795
-14.5788	-89.3422	-89.6535	-29.4327	-14.3146	-90.161	-89.4847
-14.9104	-90.2077	-91.0993	-28.8968	-14.6153	-89.6404	-89.6494
-15.2248	-90.8079	-89.8014	-28.1402	-14.9057	-89.3752	-88.9592
-15.6602	-89.9035	-89.9398	-27.6637	-15.3159	-89.3884	-89.7025
-16.0318	-90.1344	-89.8749	-27.0882	-15.6626	-88.581	-88.9454
-16.385	-90.2713	-89.6891	-26.7718	-15.9972	-88.7036	-88.6485
-16.6939	-89.5927	-88.599	-26.4	-16.2999	-89.9013	-88.8355
-16.983	-88.9488	-88.7423	-25.9102	-16.5968	-88.5616	-88.4813
-17.1029	-89.3387	-87.8112	-25.5093	-16.7288	-88.7545	-88.3173
-17.2497	-89.4153	-89.0847	-25.0436	-16.8913	-88.7798	-89.1489
-17.1786	-88.9047	-88.179	-24.6476	-16.8569	-88.5572	-88.2744
-17.0916	-89.5131	-89.2809	-24.1177	-16.802	-88.1172	-88.0493
-16.9865	-89.1409	-88.2891	-23.7994	-16.7193	-88.4382	-88.3079
-16.7125	-89.0795	-88.9484	-23.5484	-16.4606	-88.3228	-88.3969
-16.4617	-88.8867	-87.4632	-23.273	-16.2003	-88.3804	-88.1104
-16.1831	-88.8591	-88.2284	-23.0206	-15.8985	-88.0592	-88.6812
-15.9101	-88.6182	-87.6328	-22.7796	-15.6082	-87.6799	-88.9153
-15.6737	-87.866	-88.5766	-22.5251	-15.3299	-88.5064	-87.7433
-15.4298	-87.7719	-88.4252	-22.1773	-15.034	-88.3545	-87.5101
-15.2777	-89.1335	-88.1464	-21.862	-14.8274	-86.8799	-87.745
-15.1003	-87.6459	-87.6599	-21.565	-14.5866	-87.7717	-88.0667
-14.9966	-87.6387	-86.7508	-21.3698	-14.406	-87.4106	-87.5893
-14.921	-87.6052	-86.9535	-21.1162	-14.2481	-87.677	-87.2888
-14.8478	-87.2544	-87.9446	-20.9902	-14.0912	-87.4954	-87.7371
-14.8468	-87.4927	-87.1332	-20.8561	-14.0043	-87.1946	-86.9739
-14.7715	-87.5531	-86.7312	-20.6456	-13.8611	-86.9861	-87.0385
-14.8157	-86.3545	-86.1885	-20.4585	-13.8355	-87.1255	-87.1932
-14.7615	-86.4981	-86.7285	-20.1493	-13.7375	-86.5075	-87.1968
-14.7098	-86.8684	-86.6709	-19.9308	-13.6616	-86.7101	-86.978
-14.604	-86.4559	-86.7352	-19.6276	-13.565	-85.9861	-86.2391
-14.5304	-86.5317	-85.7114	-19.4528	-13.5279	-86.0835	-85.4332
-14.3647	-86.2463	-86.3758	-19.27	-13.4295	-86.2493	-85.9003

-14.1798	-85.9209	-86.078	-19.1455	-13.3415	-86.3745	-85.0643
-13.9054	-86.5436	-85.6815	-19.0101	-13.1848	-86.1727	-85.6444
-13.6602	-85.4673	-85.5202	-18.9218	-13.0603	-86.1188	-85.1846
-13.376	-85.7607	-85.8253	-18.9464	-12.9118	-85.2337	-85.221
-13.1395	-85.3815	-85.8586	-18.7024	-12.8042	-84.8749	-85.6656
-12.9176	-85.0525	-85.2725	-18.6191	-12.7062	-84.9418	-84.991
-12.6877	-85.999	-84.8091	-18.5191	-12.6008	-84.8035	-85.3185
-12.5477	-85.1487	-84.5423	-18.3226	-12.5781	-84.9216	-84.7476
-12.4307	-85.0185	-84.4181	-18.2827	-12.5717	-84.571	-85.0715
-12.2653	-84.8383	-83.8461	-18.174	-12.5082	-83.1109	-84.0478
-12.1968	-84.1662	-84.9246	-18.1944	-12.5375	-84.7439	-83.4408
-12.2158	-84.3944	-84.3477	-18.2107	-12.6506	-84.4767	-86.2338
-12.2024	-85.1113	-84.9138	-18.2693	-12.7337	-83.5151	-82.8717
-12.3373	-82.9264	-83.6709	-18.202	-12.9659	-84.4671	-84.2042
-12.5132	-82.8344	-86.1914	-18.3402	-13.2426	-83.1818	-83.7467
-12.6577	-84.8425	-82.8886	-18.2939	-13.4876	-83.5982	-83.575
-12.8753	-82.8361	-82.7847	-18.1653	-13.8087	-84.2504	-82.9777
-13.1062	-83.5525	-83.749	-18.1629	-14.1497	-81.0373	-83.3255
-13.4528	-82.1522	-81.9905	-18.2345	-14.6379	-82.5739	-81.845
-13.8865	-82.483	-81.8278	-18.2529	-15.2293	-83.5486	-82.4374
-14.308	-81.2575	-84.0485	-18.3522	-15.8156	-82.4639	-82.6787
-14.8058	-80.9869	-82.955	-18.379	-16.501	-80.7138	-83.2488
-15.3248	-81.8549	-81.7102	-18.4053	-17.2347	-83.9698	-81.817
-15.854	-80.2007	-80.8928	-18.4243	-18.0282	-81.9233	-81.4188
-16.6087	-80.1457	-80.825	-18.4291	-19.0898	-82.7986	-82.1318
-17.1824	-80.9978	-82.1854	-18.269	-19.9832	-83.1948	-84.693
-17.9141	-81.6296	-81.5971	-18.1741	-21.147	-82.9229	-82.1207
-18.3672	-81.4675	-80.4686	-18.3094	-22.0082	-81.9653	-81.7747
-19.1307	-82.1665	-80.4834	-18.408	-23.3182	-82.5343	-81.8355
-19.81	-80.9527	-80.9763	-18.3233	-24.5186	-81.061	-82.0754
-20.4089	-80.5754	-81.5262	-18.4218	-26.003	-81.9233	-81.2557
-20.9725	-81.5376	-81.904	-18.6778	-26.7616	-81.3059	-81.0738
-21.3586	-81.3905	-81.042	-18.5864	-27.9407	-81.3522	-80.3219
-21.5399	-81.3842	-80.8818	-18.5853	-28.4146	-81.5782	-80.9707
-21.7195	-80.9227	-80.4708	-18.5851	-28.6809	-81.3365	-79.28
-21.8233	-80.6887	-79.74	-18.6155	-28.7398	-80.4289	-81.3781
-21.906	-79.4678	-79.0468	-18.5378	-28.4613	-80.0948	-80.6317
-21.5502	-79.8115	-79.8291	-18.7486	-27.5362	-79.6303	-79.7636
-21.2878	-81.2464	-80.2806	-18.7004	-26.6898	-80.1005	-81.1549
-20.9385	-80.1983	-79.4223	-18.8735	-26.0664	-80.9175	-81.236
-20.627	-80.1868	-79.2575	-18.6857	-25.0193	-78.707	-78.8732
-20.3668	-79.5064	-79.9026	-18.8099	-24.2716	-78.97	-79.245
-19.7887	-79.9918	-79.2072	-18.7292	-23.4288	-78.5458	-79.8284
-19.2889	-78.4773	-78.4602	-18.6705	-22.2807	-79.2582	-78.722
-18.8367	-78.7219	-78.7903	-18.4787	-21.2873	-77.5057	-78.935
-18.51	-78.8217	-79.6676	-18.3184	-20.4558	-77.37	-77.898
-18.4633	-78.0848	-79.3927	-18.1637	-19.9277	-77.2756	-77.6448
-18.25	-77.7055	-77.694	-18.1577	-19.2379	-76.0904	-75.4976
-18.2238	-78.8289	-77.6706	-18.1955	-18.7279	-76.4317	-75.8075
-18.3249	-78.164	-77.4131	-18.1646	-18.3229	-76.8523	-76.7457
-18.6704	-78.1624	-79.0252	-18.1807	-18.0359	-78.3917	-76.9521
-19.1476	-79.9325	-77.8321	-18.1186	-17.8813	-78.2221	-78.6727
-19.9379	-79.4133	-78.5919	-18.0008	-17.853	-79.4462	-80.1779
-21.4522	-78.1416	-79.7466	-17.8834	-17.8948	-81.8756	-81.5837
-22.7568	-77.6129	-78.7915	-17.8321	-17.6558	-85.7179	-84.3646

-25.7228	-78.6042	-78.3371	-17.8024	-17.8585	-80.9743	-78.664
-30.2923	-78.2755	-78.3462	-17.8593	-17.8399	-76.1365	-77.4507
-40.9801	-77.6538	-77.4996	-17.8494	-17.797	-76.5933	-76.0441
-32.4468	-78.2119	-77.0747	-17.8215	-17.4209	-75.989	-75.0613
-26.1039	-77.0563	-78.3473	-17.8335	-16.9613	-76.5194	-76.3873
-22.6951	-76.8497	-77.8278	-18.1628	-16.4823	-75.4924	-75.6534
-20.241	-77.097	-76.7366	-17.9989	-15.9881	-76.1979	-75.458
-18.4184	-77.1505	-76.9818	-17.9762	-15.3415	-75.923	-76.0948
-17.0753	-76.2404	-77.0397	-18.0764	-14.9706	-75.7772	-76.2882
-16.0716	-77.6639	-77.2687	-17.8895	-14.5544	-76.652	-76.0001
-15.3425	-76.3409	-76.4531	-17.987	-14.3807	-75.8088	-74.742
-14.7343	-76.6538	-75.8133	-18.0185	-14.2832	-75.3175	-75.5302
-14.3251	-76.0335	-76.0184	-17.8759	-14.2701	-75.3543	-74.75
-14.0194	-75.8126	-75.3011	-17.8493	-14.3759	-75.187	-75.2517
-13.8034	-75.659	-74.1052	-17.7957	-14.5837	-74.8369	-75.2839
-13.7495	-75.5312	-75.1497	-17.7439	-14.8369	-75.2213	-75.6565
-13.6233	-75.3886	-75.4811	-17.7224	-15.1162	-75.4599	-75.0414
-13.7583	-75.2127	-75.089	-17.617	-15.4737	-75.0008	-74.7588
-13.7208	-74.7486	-74.6773	-17.4472	-15.6434	-75.3329	-74.1278
-13.7778	-74.1184	-75.1578	-17.2894	-15.7597	-74.7561	-74.189
-13.8042	-74.6641	-74.9908	-17.0345	-15.7725	-75.1574	-74.6588
-14.0393	-73.5408	-74.3442	-17.036	-15.8949	-75.1543	-74.8151
-14.2874	-73.7113	-73.9338	-16.9842	-15.9944	-74.812	-74.1878
-14.2854	-73.9836	-74.152	-17.0224	-15.7274	-75.4816	-74.9803
-14.3867	-73.9133	-73.2658	-16.8766	-15.5638	-74.234	-74.3391
-14.2582	-73.8643	-73.8373	-16.6474	-15.1812	-74.2474	-74.3478
-14.1407	-73.8802	-73.4024	-16.5141	-14.8825	-73.9633	-74.1194
-13.7473	-73.1747	-73.171	-16.3714	-14.3745	-73.964	-73.5253
-13.4416	-73.8797	-73.4868	-16.293	-14.0722	-73.6166	-73.9997
-12.9102	-73.2735	-73.0912	-16.2919	-13.5801	-74.1098	-73.6255
-12.2314	-73.0111	-72.7837	-16.0621	-13.0361	-73.6866	-72.8906
-11.6824	-73.3789	-72.8539	-15.9474	-12.6361	-73.8234	-73.8202
-11.024	-73.0657	-73.0424	-15.7823	-12.1238	-73.518	-72.6681
-10.5463	-72.8646	-72.5872	-15.7482	-11.8219	-73.1622	-72.8215
-10.0773	-72.9089	-73.6104	-15.4542	-11.5228	-72.9734	-72.5591
-9.67812	-72.3634	-72.9923	-15.2358	-11.2845	-73.0608	-72.8645
-9.20269	-72.952	-72.574	-15.006	-10.9334	-72.6588	-73.118
-9.01861	-73.0731	-72.4525	-14.8697	-10.8794	-72.3805	-72.6893
-8.56424	-72.3286	-72.5125	-14.7543	-10.5304	-72.26	-72.0387
-8.13277	-72.527	-72.0957	-14.5677	-10.1538	-72.3174	-72.315
-8.0725	-72.6576	-72.3516	-14.1725	-10.1421	-71.8654	-71.6166
-7.92526	-72.5946	-72.4102	-14.0525	-10.0251	-72.3969	-72.1275
-7.87032	-72.5085	-71.9434	-13.7749	-9.96395	-71.6807	-71.9642
-7.72956	-72.1018	-71.5068	-13.6946	-9.78595	-71.7402	-71.4232
-7.35768	-72.1947	-72.2589	-13.3605	-9.31377	-71.1699	-70.8314
-7.38447	-71.8006	-71.6729	-13.1199	-9.23376	-70.7568	-71.1863
-7.3549	-71.5311	-71.2362	-13.028	-9.07054	-70.5571	-70.5605
-7.19342	-71.26	-71.0529	-12.931	-8.73178	-70.6217	-70.2184
-7.06322	-71.4539	-71.2135	-12.7734	-8.40331	-70.5387	-70.2606
-6.88622	-70.8747	-70.7139	-12.5781	-7.98497	-69.4937	-69.7197

J0-J5

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.7198	-8.90044	-90.1778	-89.3087	-18.3101	-8.67147
-28.8962	-15.4154	-107.789	-106.72	-27.8042	-15.048
-29.0778	-20.42	-98.0951	-97.0876	-27.2522	-19.7089
-28.703	-24.2972	-94.1655	-94.7142	-26.8735	-23.1171
-28.2963	-26.5226	-91.7799	-92.8813	-26.5552	-25.0986
-27.9815	-26.4676	-91.8268	-91.2134	-26.3393	-25.343
-27.6848	-25.3433	-90.6895	-89.8463	-26.1302	-24.61
-27.5582	-24.0612	-89.6251	-90.9172	-25.9964	-23.5545
-27.5673	-22.9606	-90.7364	-90.6438	-25.9746	-22.5513
-27.5178	-22.1015	-89.7287	-89.698	-25.8768	-21.6903
-27.5059	-21.394	-89.6874	-90.1303	-25.8483	-20.9018
-27.342	-20.8791	-89.441	-90.014	-25.6923	-20.2575
-27.3875	-20.5679	-89.4093	-89.3496	-25.7207	-19.7973
-27.3538	-20.3654	-90.4981	-89.6598	-25.7191	-19.3952
-27.4485	-20.1866	-90.3846	-89.846	-25.7928	-18.9884
-27.4725	-20.0982	-90.8023	-90.4791	-25.8234	-18.6312
-27.4902	-20.2054	-90.9157	-89.3442	-25.851	-18.3989
-27.6145	-20.2605	-91.0544	-90.2571	-25.929	-18.1309
-27.7474	-20.4872	-90.4306	-91.0377	-26.0227	-17.966
-27.8164	-20.7432	-91.7478	-91.1489	-25.9936	-17.7804
-27.9274	-21.1075	-91.6822	-90.2503	-25.9855	-17.6502
-27.9854	-21.5682	-92.161	-92.1179	-25.9675	-17.5546
-28.1648	-21.9847	-91.9069	-91.7469	-26.0825	-17.435
-28.4427	-22.5627	-91.7054	-90.4908	-26.2731	-17.3894
-28.5344	-23.1315	-91.5884	-91.7108	-26.4011	-17.3415
-28.8661	-23.8	-91.6465	-91.8293	-26.7236	-17.3483
-29.0722	-24.5016	-92.8268	-91.8516	-26.9048	-17.4124
-29.5375	-25.0584	-91.0925	-91.498	-27.1823	-17.5003
-30.2907	-25.2105	-91.8042	-91.952	-27.5694	-17.5673
-31.1627	-24.8237	-91.6149	-93.1623	-27.8833	-17.6008
-32.2737	-23.9059	-92.7396	-92.567	-28.2294	-17.5341
-33.2865	-22.9073	-91.3837	-91.1903	-28.4688	-17.391
-33.7777	-21.978	-91.4757	-93.4871	-28.4381	-17.2117
-33.9457	-21.213	-91.9618	-93.5434	-28.5055	-17.0711
-33.6286	-20.5859	-92.268	-92.3448	-28.3418	-17.0561
-33.3105	-19.9233	-91.0854	-91.4145	-28.2247	-17.1239
-33.2427	-19.2137	-92.1059	-90.9924	-27.9877	-17.259
-33.0705	-18.567	-92.3267	-91.1501	-27.7194	-17.5012
-33.3434	-17.8196	-92.0907	-90.7145	-27.6041	-17.7395
-33.3591	-17.0751	-91.8165	-92.1628	-27.4624	-18.0076
-33.3833	-16.3416	-92.962	-91.0168	-27.3487	-18.2061

-33.457	-15.6192	-91.6941	-92.6826	-27.3773	-18.3216
-33.4106	-14.9367	-92.2693	-91.0294	-27.3466	-18.3331
-33.491	-14.2593	-92.652	-91.6929	-27.4117	-18.1307
-33.3916	-13.6531	-92.3139	-92.2985	-27.4052	-17.7926
-33.4927	-13.1055	-91.4704	-92.2074	-27.3979	-17.3873
-33.4589	-12.6627	-91.573	-91.2783	-27.3068	-17.0166
-33.7061	-12.3186	-91.1202	-92.3477	-27.2873	-16.7001
-33.611	-12.0021	-91.5991	-91.9885	-27.0683	-16.4372
-33.7273	-11.7713	-91.771	-92.2374	-26.9372	-16.264
-33.1119	-11.6003	-92.2679	-91.7209	-26.4582	-16.1782
-32.7983	-11.4699	-92.1478	-91.3658	-26.2208	-16.1315
-31.8497	-11.3767	-91.8327	-92.2847	-25.7174	-16.1047
-30.9155	-11.3089	-91.5338	-92.9762	-25.3865	-16.0652
-30.1597	-11.2556	-92.2166	-92.7453	-25.0937	-16.0157
-29.2123	-11.2403	-91.3293	-90.2644	-24.7928	-15.997
-28.3497	-11.2769	-91.2743	-90.7465	-24.4968	-16.0222
-27.7412	-11.3708	-91.1593	-91.9144	-24.2399	-16.1036
-27.183	-11.4833	-91.2627	-90.7526	-23.8848	-16.1962
-26.6308	-11.616	-91.4053	-91.6827	-23.4617	-16.3374
-26.2518	-11.8011	-90.592	-91.3767	-23.1291	-16.5283
-25.6828	-12.0338	-90.3495	-90.8329	-22.7061	-16.8111
-25.2132	-12.2986	-90.8915	-91.3096	-22.4482	-17.166
-24.6584	-12.6015	-91.2069	-89.8762	-22.2587	-17.5874
-24.1473	-12.8967	-89.7175	-89.8588	-22.0595	-18.0217
-23.762	-13.2374	-90.8524	-90.5945	-21.9801	-18.5751
-23.3729	-13.5483	-90.0878	-91.5012	-21.7354	-19.1038
-23.1043	-13.947	-90.5532	-89.9508	-21.5374	-19.8022
-22.7597	-14.2744	-90.3629	-90.512	-21.1646	-20.4312
-22.5559	-14.561	-89.8879	-88.9681	-20.9059	-20.9946
-22.2561	-14.7899	-89.7831	-90.275	-20.6589	-21.4047
-21.8865	-14.9803	-89.8906	-89.4262	-20.4395	-21.6679
-21.5475	-15.043	-89.69	-90.4832	-20.3474	-21.6373
-21.2	-15.1115	-89.9678	-89.2381	-20.2551	-21.5765
-20.9258	-15.0238	-89.0769	-89.525	-20.1915	-21.1359
-20.5826	-14.9297	-90.0311	-89.6526	-20.0787	-20.7034
-20.3845	-14.8449	-90.361	-90.7532	-19.9417	-20.2986
-20.1958	-14.6601	-88.573	-89.3654	-19.7332	-19.7737
-20.0298	-14.515	-89.7966	-90.0659	-19.5665	-19.376
-19.7666	-14.3658	-89.1689	-90.1472	-19.4227	-19.0518
-19.606	-14.2136	-89.1504	-88.2063	-19.2976	-18.7196
-19.4151	-14.1206	-89.2551	-88.3181	-19.201	-18.5391
-19.1547	-14.0325	-88.8033	-88.9523	-19.1229	-18.3926
-18.9542	-14.018	-88.5784	-88.5849	-19.1233	-18.3668
-18.7639	-13.9937	-88.7292	-88.8332	-19.1154	-18.3684
-18.6728	-14.0484	-88.8353	-88.2684	-19.1223	-18.505
-18.5406	-14.1318	-87.2643	-89.0578	-19.0616	-18.6995
-18.4936	-14.2229	-87.8964	-87.4995	-18.9689	-18.9085
-18.4067	-14.3902	-88.1824	-88.5365	-18.8731	-19.1855
-18.2936	-14.4778	-87.5861	-88.2557	-18.7745	-19.2609
-18.1291	-14.6903	-87.3511	-87.175	-18.7134	-19.4548
-17.9268	-14.8003	-87.4239	-87.4609	-18.6621	-19.3431
-17.7856	-14.9042	-87.398	-87.9772	-18.7556	-19.098
-17.5816	-14.9277	-86.8404	-87.7931	-18.8056	-18.6382
-17.4645	-14.9751	-87.124	-86.7185	-18.8862	-18.1195
-17.369	-14.9041	-86.6182	-87.4592	-18.9491	-17.4473

-17.2911	-14.7822	-86.5203	-88.1035	-18.8408	-16.7429
-17.1667	-14.5417	-87.1619	-87.048	-18.6816	-15.9896
-17.1344	-14.2969	-86.7237	-86.0017	-18.5769	-15.3351
-17.1321	-14.0114	-85.9164	-86.9439	-18.5968	-14.6836
-16.9677	-13.7539	-86.2366	-86.0448	-18.5647	-14.1328
-16.8721	-13.506	-86.5813	-85.036	-18.7637	-13.6813
-16.8356	-13.2443	-85.8704	-85.8268	-18.9636	-13.2399
-16.711	-13.0792	-85.0135	-85.6128	-19.0152	-12.9122
-16.7185	-12.9385	-85.2668	-86.0609	-19.1334	-12.6488
-16.6897	-12.742	-85.5013	-87.5193	-19.0285	-12.3615
-16.7246	-12.6531	-85.1799	-83.1315	-18.9605	-12.1854
-16.7957	-12.6545	-83.7365	-84.4835	-18.8909	-12.1048
-16.8727	-12.6286	-84.3396	-84.3455	-18.8776	-11.9994
-16.8072	-12.7497	-82.7962	-83.833	-18.9364	-12.0408
-16.9515	-12.9204	-85.6437	-84.3772	-19.2771	-12.1143
-16.9594	-13.0535	-83.3553	-84.7077	-19.5787	-12.1738
-16.9698	-13.2635	-83.5517	-82.689	-19.7263	-12.2736
-17.0585	-13.4889	-82.1396	-83.9195	-19.9797	-12.382
-17.1989	-13.827	-83.5428	-82.9967	-20.1934	-12.6074
-17.3439	-14.2576	-83.698	-85.2962	-20.1394	-12.8794
-17.4657	-14.6639	-82.9834	-81.698	-20.128	-13.1426
-17.5383	-15.1533	-83.622	-82.0104	-20.0328	-13.425
-17.6456	-15.6599	-80.8026	-81.8675	-20.0336	-13.7045
-17.7953	-16.1698	-81.9106	-83.1854	-20.1711	-13.9917
-17.7725	-16.9031	-84.2678	-82.3728	-20.4957	-14.3879
-17.8402	-17.4431	-82.9569	-82.7251	-20.5626	-14.61
-17.8563	-18.142	-83.2704	-81.7997	-20.7392	-14.9728
-18.1644	-18.5512	-82.4451	-83.0562	-20.9949	-15.1049
-18.3439	-19.2778	-81.6595	-82.3131	-21.0172	-15.4046
-18.4095	-19.9074	-82.111	-81.4701	-20.6266	-15.6162
-18.7083	-20.502	-82.1451	-80.6356	-20.3351	-15.8565
-18.9475	-20.9673	-81.5864	-82.1323	-20.2805	-15.874
-19.0071	-21.3614	-81.073	-82.3482	-19.8863	-15.9956
-19.065	-21.5111	-80.2238	-81.7099	-19.8105	-15.9009
-19.2014	-21.6408	-80.6904	-81.6997	-19.8453	-15.8715
-19.4838	-21.6906	-81.288	-80.1422	-19.8671	-15.7805
-19.7006	-21.6819	-80.6228	-81.4871	-19.7509	-15.6875
-19.9449	-21.2075	-81.2821	-80.4532	-19.9267	-15.3681
-20.2057	-20.8201	-81.5005	-81.2184	-19.4857	-15.1215
-20.568	-20.4079	-80.6809	-80.6483	-19.1666	-14.8949
-20.6865	-19.9399	-80.3829	-81.3831	-18.5511	-14.6301
-21.0673	-19.5767	-79.6106	-79.983	-18.1619	-14.4741
-21.0778	-18.9719	-79.4882	-79.8986	-17.9346	-14.1709
-21.2419	-18.344	-79.3756	-80.9255	-17.7534	-13.8383
-21.2728	-17.7801	-80.07	-80.2476	-17.5644	-13.5234
-21.1528	-17.3429	-79.9126	-79.6785	-17.5605	-13.3343
-21.3508	-17.1755	-79.5429	-78.9641	-17.3109	-13.3295
-21.585	-16.8306	-79.3625	-79.5661	-17.0852	-13.1814
-21.5575	-16.6626	-79.9023	-79.7829	-16.9508	-13.168
-21.8259	-16.5858	-79.3338	-79.3556	-16.5003	-13.1998
-21.9085	-16.6676	-80.153	-79.5142	-16.2158	-13.3487
-21.8211	-16.8572	-78.8802	-80.0186	-15.9833	-13.5691
-21.7749	-17.2437	-79.2509	-79.5056	-15.7643	-13.9118
-21.4388	-17.9337	-79.6046	-80.6946	-15.7126	-14.4058
-21.484	-18.2665	-79.2855	-80.5539	-15.7502	-14.5922

-21.4775	-19.2443	-79.6828	-79.9107	-15.5643	-15.1187
-21.5205	-20.0405	-79.3438	-78.4878	-15.4934	-15.4398
-21.3871	-20.9095	-79.0326	-78.9543	-15.3446	-15.7524
-21.31	-20.8768	-78.7876	-78.4494	-15.1328	-15.5624
-21.2354	-20.368	-78.9168	-79.0238	-14.8827	-15.2892
-21.5857	-19.4706	-79.7659	-79.117	-14.902	-14.9085
-21.3858	-18.4215	-79.1021	-78.5751	-14.5208	-14.5233
-21.1541	-17.2232	-78.3913	-78.6182	-14.5099	-13.9829
-21.2049	-16.4462	-78.8243	-79.1335	-14.55	-13.7286
-20.7888	-15.6731	-78.9448	-78.7208	-14.4028	-13.4076
-20.8134	-15.2457	-78.1594	-77.964	-14.421	-13.3133
-20.6839	-14.9471	-78.526	-78.0645	-14.3272	-13.3355
-20.343	-14.7766	-78.6007	-77.6787	-14.078	-13.3559
-20.1183	-14.7459	-77.4749	-77.7375	-13.8549	-13.5332
-19.8594	-14.8469	-77.5872	-76.3515	-13.717	-13.8617
-19.6078	-15.0155	-77.9405	-77.257	-13.5557	-14.1715
-19.3262	-15.2339	-77.4392	-77.2471	-13.5457	-14.7426
-18.9745	-15.5538	-77.2397	-76.4964	-13.4805	-15.2668
-18.5306	-15.7348	-76.9135	-77.2844	-13.4538	-15.9396
-18.1493	-15.918	-75.9842	-76.4475	-13.2812	-16.7803
-17.6609	-16.071	-76.2911	-75.3715	-13.1858	-17.7666
-17.4007	-16.3955	-76.3325	-76.6324	-13.0597	-19.1157
-17.1461	-16.7755	-75.8127	-76.1542	-13.0188	-20.9458
-16.9699	-16.8424	-76.3294	-75.9433	-12.9688	-23.4416
-16.5584	-17.0188	-76.3823	-76.0395	-12.7337	-26.8074
-16.1316	-16.8825	-76.4375	-75.1419	-12.5452	-30.2592
-15.8379	-16.7918	-76.3767	-75.3831	-12.5499	-29.5188
-15.4662	-16.2979	-76.0995	-75.7534	-12.4698	-24.8694
-15.2203	-15.945	-75.4955	-75.5097	-12.4962	-21.2783
-15.0605	-15.2787	-75.0507	-74.6475	-12.4981	-18.8251
-14.6843	-14.4609	-75.1017	-74.9051	-12.3193	-16.5001
-14.4234	-13.7924	-74.6683	-74.8172	-12.1907	-14.9329
-14.1271	-13.021	-74.7456	-74.2976	-12.0572	-13.5543
-13.9531	-12.44	-73.684	-73.9884	-12.0293	-12.3784
-13.5708	-11.9154	-74.3356	-73.123	-11.8929	-11.4219
-13.2863	-11.4686	-73.6873	-74.4257	-11.8595	-10.5908
-13.0318	-10.9325	-73.9743	-74.0728	-11.8916	-9.77221
-12.7676	-10.7289	-74.5446	-73.5406	-11.9025	-9.28129
-12.6212	-10.2601	-73.8026	-74.3488	-11.9736	-8.59063
-12.3951	-9.78777	-73.5149	-73.5811	-11.9473	-7.90915
-12.0167	-9.68243	-73.4489	-73.291	-11.7382	-7.58633
-11.795	-9.50593	-73.1801	-73.1702	-11.6776	-7.21181
-11.5488	-9.41737	-73.7247	-72.7789	-11.6312	-6.93419
-11.3808	-9.2329	-73.2036	-73.5708	-11.7119	-6.60384
-11.0625	-8.77623	-72.193	-72.6345	-11.6354	-6.07299
-10.8111	-8.72394	-72.7291	-72.2849	-11.6657	-5.93179
-10.6804	-8.59653	-71.9236	-72.4962	-11.7924	-5.71897
-10.5018	-8.32758	-72.0882	-71.7521	-11.8539	-5.47449
-10.3499	-8.0676	-72.4326	-71.647	-11.8854	-5.26762
-10.0993	-7.72129	-71.428	-71.7826	-11.746	-4.99977

J0-J6

S21 (dB)	S12 (dB)	S22 (dB)
-92.4135	-92.0174	-18.0523
-98.0689	-103.164	-27.701
-103.009	-100.55	-27.6602
-101.995	-97.4851	-27.3712
-95.7417	-97.4994	-26.9916
-99.4396	-95.853	-26.6547
-96.3132	-95.8525	-26.3107
-96.2756	-97.4259	-26.0186
-94.5765	-93.3283	-25.7948
-94.7022	-93.0768	-25.5335
-94.221	-93.4006	-25.3113
-95.0069	-94.1534	-24.9803
-93.6488	-92.8798	-24.8256
-94.4572	-94.1625	-24.6232
-93.3623	-93.3021	-24.4665
-92.6128	-93.624	-24.3169
-93.8397	-92.3932	-24.144
-93.4693	-94.6008	-24.0215
-94.5021	-92.6869	-23.8817
-92.5155	-92.3465	-23.6312
-93.4063	-95.1261	-23.3762
-93.8323	-94.457	-23.1682
-92.6274	-93.7321	-23.0318
-92.9358	-92.3546	-22.9288
-92.7749	-92.8328	-22.7984
-92.7055	-92.6484	-22.7755
-92.5036	-92.5286	-22.702
-93.4643	-91.7297	-22.6487
-92.6868	-92.8809	-22.6912
-92.3608	-91.5078	-22.7044
-91.6852	-93.0146	-22.7678
-92.0024	-92.971	-22.8006
-93.1039	-93.0403	-22.7117
-93.8839	-91.6619	-22.6332
-92.3354	-91.0726	-22.3851
-91.8664	-92.3144	-22.1792
-91.4134	-91.6401	-21.8485
-91.8758	-91.4734	-21.5301
-92.0697	-90.3445	-21.275
-90.447	-91.7249	-21.0188
-90.4296	-91.9539	-20.7924

J0-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-8.87209	-93.0604	-89.9741	-18.0688
-15.0646	-109.201	-99.6984	-29.1064
-20.1368	-99.7308	-100.512	-28.5402
-24.0178	-98.3325	-96.3676	-28.0256
-25.8619	-94.3578	-94.5549	-27.6387
-25.2337	-94.2064	-93.3562	-27.4645
-23.77	-93.0357	-92.9462	-27.3542
-22.3111	-92.2224	-92.6914	-27.2886
-21.0822	-92.5005	-93.7096	-27.4712
-20.097	-91.4535	-91.4262	-27.5241
-19.2555	-91.6188	-91.574	-27.6405
-18.583	-92.1334	-91.6908	-27.6594
-18.082	-91.7217	-91.9547	-27.8583
-17.6632	-91.5798	-91.9391	-28.0208
-17.2602	-91.6461	-91.9661	-28.3541
-16.9156	-92.8718	-92.4777	-28.6195
-16.6944	-92.9704	-93.1234	-28.8483
-16.4437	-92.6916	-92.3874	-29.1254
-16.2866	-91.9744	-92.5481	-29.4456
-16.1276	-92.2331	-91.9999	-29.6842
-16.0206	-92.6953	-92.4928	-30.135
-15.9476	-94.1444	-93.1959	-30.58
-15.8486	-92.2724	-91.2134	-31.2333
-15.8142	-92.4776	-93.8483	-32.2155
-15.7735	-93.0524	-92.8451	-32.9582
-15.7801	-92.7674	-91.1433	-34.1232
-15.8457	-92.9225	-92.9285	-35.1397
-15.92	-92.8848	-92.9584	-36.9393
-15.9769	-93.1416	-92.5698	-39.4804
-16.0076	-93.6667	-92.8715	-42.9087
-15.9531	-93.4246	-91.9097	-47.3918
-15.8208	-93.6143	-92.9134	-46.4269
-15.6532	-93.0291	-92.5991	-43.1944
-15.494	-93.7301	-93.7393	-41.3216
-15.4211	-93.084	-93.4795	-41.6228
-15.4145	-91.707	-92.3724	-42.0241
-15.4707	-92.7376	-92.5504	-45.0528
-15.623	-93.6285	-93.2372	-48.8415
-15.8057	-92.8878	-92.8338	-49.8327
-16.0522	-92.8966	-91.2271	-48.005
-16.2855	-92.9696	-91.0802	-44.839

-91.2114	-91.3655	-20.6161	-16.5262	-92.8813	-91.5833	-42.2063
-90.7889	-91.1282	-20.4379	-16.7441	-91.8475	-92.2541	-39.6375
-90.2896	-89.9348	-20.3075	-16.8393	-92.0815	-92.1446	-37.5221
-90.9712	-91.303	-20.1656	-16.8037	-91.9294	-92.1441	-36.089
-91.6318	-92.1762	-20.0519	-16.69	-91.4847	-91.3584	-34.7972
-90.9835	-90.6728	-19.9399	-16.5498	-91.2447	-91.2072	-33.9871
-90.6353	-91.1482	-19.8606	-16.3904	-90.8478	-91.4039	-33.7297
-91.3952	-90.3863	-19.6949	-16.2686	-91.2262	-91.4677	-33.7586
-89.9048	-90.1958	-19.5443	-16.2064	-91.8376	-90.9838	-33.8611
-90.8606	-89.8121	-19.2203	-16.2219	-90.593	-91.3647	-33.6542
-90.4969	-90.0026	-18.9928	-16.3195	-90.9414	-90.8577	-33.1089
-89.3482	-90.5202	-18.6547	-16.4263	-90.4268	-90.944	-32.1727
-90.1618	-90.28	-18.4237	-16.5453	-91.2693	-91.4214	-31.3668
-90.0315	-89.8312	-18.1956	-16.6363	-90.0379	-91.3098	-30.3764
-89.5302	-89.8988	-17.98	-16.7514	-89.5467	-89.8242	-29.6126
-89.9776	-90.0985	-17.7705	-16.8578	-90.4447	-90.345	-29.0402
-89.8948	-89.9084	-17.5684	-17.0115	-89.6736	-89.129	-28.3843
-89.5307	-89.778	-17.2994	-17.1432	-89.6218	-89.6015	-27.5495
-89.7507	-87.7962	-16.9933	-17.2779	-90.7	-89.9534	-26.6287
-90.3168	-89.4874	-16.7658	-17.4379	-89.2528	-90.5931	-25.833
-88.6947	-88.9557	-16.5009	-17.6263	-89.4889	-90.0783	-25.1324
-89.4793	-89.4151	-16.3344	-17.8163	-88.9029	-88.7588	-24.6547
-89.5746	-88.2848	-16.2145	-17.9969	-90.0713	-89.9304	-24.2359
-88.775	-89.3066	-16.0913	-18.1114	-89.0423	-88.6891	-23.8334
-88.425	-88.4218	-15.9956	-18.2295	-89.4402	-89.7013	-23.5736
-89.143	-88.5521	-15.8173	-18.1965	-89.5997	-88.891	-23.1085
-88.5859	-88.73	-15.6561	-18.1728	-88.9158	-88.9271	-22.7281
-88.6925	-89.138	-15.4245	-18.0109	-88.1273	-89.6616	-22.2026
-88.8649	-88.6208	-15.2572	-17.7356	-88.0488	-88.8887	-21.8489
-88.2373	-87.9488	-15.1017	-17.3461	-88.8773	-89.2645	-21.5073
-88.2568	-88.1209	-14.9876	-16.9021	-88.3033	-89.0064	-21.2041
-88.0943	-88.6371	-14.9072	-16.4102	-87.3312	-88.4852	-20.9504
-88.1834	-88.7371	-14.8176	-15.9352	-88.2458	-87.7916	-20.6654
-87.741	-88.2336	-14.7255	-15.3802	-88.1175	-88.2362	-20.3633
-88.3692	-88.0859	-14.6286	-14.8616	-88.282	-87.5685	-20.0617
-88.6181	-87.3753	-14.5194	-14.4144	-88.0205	-87.5966	-19.7557
-88.0696	-88.6892	-14.3566	-13.9482	-87.6231	-87.8671	-19.4191
-87.5859	-87.5097	-14.2467	-13.5619	-87.9016	-87.6366	-19.1603
-87.655	-87.9872	-14.1826	-13.2077	-87.3002	-87.9488	-18.9592
-87.5371	-87.3061	-14.0809	-12.8611	-87.4165	-86.6037	-18.6888
-88.0714	-87.0091	-14.0197	-12.5991	-86.9688	-87.6618	-18.4489
-87.3994	-86.9351	-13.9433	-12.3678	-86.7082	-86.7841	-18.1778
-87.2004	-87.3512	-13.9159	-12.1919	-87.6333	-86.6401	-17.9692
-86.978	-87.4426	-13.9022	-12.0439	-87.4109	-86.3264	-17.7668
-87.5615	-87.5681	-13.8925	-11.9757	-86.4094	-87.2644	-17.6408
-87.8985	-86.6674	-13.8466	-11.943	-86.3182	-87.2744	-17.4746
-86.5982	-86.772	-13.7941	-11.9396	-86.5989	-86.3974	-17.3174
-86.2602	-86.528	-13.7302	-12.019	-86.0723	-86.2637	-17.1534
-86.3943	-86.553	-13.6896	-12.0678	-86.3491	-86.5138	-16.9803
-86.1103	-86.7016	-13.6339	-12.2359	-86.7518	-86.0902	-16.7783
-86.2978	-86.182	-13.6065	-12.3709	-86.0943	-85.6548	-16.5807
-86.117	-86.7749	-13.6583	-12.5461	-85.4189	-85.6273	-16.4757
-86.3784	-86.1908	-13.6976	-12.7026	-85.7278	-85.1173	-16.3509
-85.779	-85.3497	-13.7356	-12.9469	-85.3102	-85.557	-16.2373
-85.0348	-85.2273	-13.7931	-13.1325	-84.566	-85.4051	-16.1524

-85.2747	-85.658	-13.734	-13.3344	-85.3518	-84.9882	-15.9585
-85.7006	-85.3853	-13.6234	-13.4518	-85.0912	-85.2894	-15.7199
-84.7661	-85.3285	-13.5804	-13.5463	-85.1709	-84.6415	-15.5513
-84.9387	-84.5707	-13.6028	-13.6273	-84.0979	-84.4855	-15.4521
-85.4168	-84.4288	-13.602	-13.7026	-84.3375	-84.3163	-15.2876
-84.4913	-84.38	-13.7671	-13.6977	-84.1683	-83.7439	-15.3053
-84.1013	-84.7344	-13.9047	-13.6704	-83.315	-83.7575	-15.262
-84.1204	-84.1427	-13.9303	-13.7074	-83.2991	-83.834	-15.1123
-84.493	-84.4166	-13.9989	-13.7035	-83.355	-83.4087	-15.0262
-83.8896	-84.197	-13.9491	-13.5958	-84.6677	-85.1395	-14.8357
-84.0977	-83.3929	-13.905	-13.5443	-83.3367	-83.0791	-14.6943
-84.0028	-84.8426	-13.8713	-13.5497	-82.0983	-82.3776	-14.5742
-83.6542	-82.6619	-13.9384	-13.504	-82.1117	-82.9218	-14.5399
-84.2515	-84.1718	-14.013	-13.5573	-82.9464	-83.7313	-14.4667
-82.9831	-82.7873	-14.2797	-13.6489	-82.0087	-82.985	-14.5792
-82.317	-82.9691	-14.5007	-13.6308	-83.5961	-81.7136	-14.5938
-82.5551	-82.7657	-14.6326	-13.7138	-81.4535	-84.307	-14.5301
-83.1674	-84.4745	-14.8037	-13.7692	-82.1735	-82.3985	-14.5144
-82.6213	-82.7689	-14.9578	-13.8397	-82.008	-81.471	-14.5143
-82.2845	-83.5814	-14.9962	-13.9817	-81.4896	-80.7267	-14.459
-83.0641	-81.937	-15.039	-14.0497	-81.1956	-81.9051	-14.4086
-82.6668	-82.6567	-15.1047	-14.2056	-80.4292	-81.4061	-14.3876
-83.3612	-82.8722	-15.2468	-14.3367	-81.3575	-81.6874	-14.4109
-81.8092	-82.8696	-15.4683	-14.3772	-81.9236	-81.6426	-14.4725
-81.7005	-81.5057	-15.7778	-14.6457	-81.221	-80.4121	-14.5224
-81.3228	-82.8946	-15.9659	-14.7032	-80.8811	-80.5124	-14.5274
-80.499	-81.2411	-16.1594	-14.8347	-80.5456	-81.055	-14.4957
-81.7955	-80.6737	-16.4628	-14.7559	-81.0838	-80.3182	-14.6304
-81.43	-80.2892	-16.5573	-14.8998	-79.7243	-80.1113	-14.5965
-79.9702	-80.5409	-16.4599	-15.0085	-80.6193	-80.5228	-14.4802
-80.8488	-79.7417	-16.4769	-14.9926	-79.9657	-80.6158	-14.5071
-81.0062	-81.0396	-16.643	-15.0868	-79.0549	-80.1516	-14.6026
-80.8513	-80.4142	-16.5704	-15.0255	-79.6143	-80.5879	-14.5335
-80.1317	-79.95	-16.6955	-14.8775	-79.6523	-79.8165	-14.5522
-79.598	-79.3	-16.8842	-14.8152	-79.3961	-80.1395	-14.6015
-79.6079	-79.2634	-17.075	-14.6955	-78.5071	-79.2789	-14.6911
-79.5862	-80.3316	-17.1351	-14.5957	-79.113	-78.5312	-14.6954
-79.529	-79.8724	-17.3291	-14.2608	-78.6774	-81.1845	-14.7268
-79.7533	-79.2901	-17.1488	-13.982	-79.4637	-79.2109	-14.6588
-79.1059	-79.8842	-16.9922	-13.6685	-78.095	-79.7335	-14.6053
-78.7679	-80.0997	-16.6698	-13.3748	-79.3169	-78.1575	-14.4785
-79.0952	-78.7366	-16.4671	-13.1405	-80.1263	-79.5063	-14.4954
-79.4119	-79.7675	-16.3919	-12.7044	-78.0396	-78.4642	-14.4367
-78.1537	-80.2127	-16.3596	-12.3139	-78.272	-78.2925	-14.4735
-78.6136	-78.4441	-16.2601	-11.9135	-78.7655	-77.5827	-14.398
-78.6667	-78.183	-16.3427	-11.6337	-77.7719	-78.3	-14.3431
-79.4186	-77.5478	-16.2005	-11.5135	-77.5789	-77.5615	-14.2952
-77.6506	-77.7912	-16.0377	-11.2372	-77.817	-77.3396	-14.1987
-78.0759	-78.4579	-15.9652	-11.0759	-77.6492	-77.7882	-14.0819
-77.7768	-78.2075	-15.5974	-10.9536	-77.7797	-77.5001	-14.0234
-77.4478	-78.6838	-15.3785	-10.9313	-77.1894	-77.831	-13.9482
-77.0512	-77.9559	-15.207	-10.9515	-77.5023	-76.3987	-13.9268
-77.596	-77.5214	-15.028	-11.0959	-76.6678	-77.0721	-13.8897
-78.3346	-77.5842	-14.9825	-11.4312	-76.4	-77.5249	-13.8816
-76.9106	-76.7488	-15.0695	-11.5427	-76.255	-76.9483	-13.928

-77.4711	-76.8334	-14.8596	-12.0347	-76.751	-76.1161	-13.8952
-76.6009	-77.0241	-14.8182	-12.5553	-76.1146	-76.9891	-13.8141
-77.3226	-76.5443	-14.6257	-13.3087	-76.3135	-77.0682	-13.5896
-77.0599	-76.8245	-14.3965	-13.7903	-76.2373	-76.2685	-13.5979
-77.6679	-76.5404	-14.2075	-14.4206	-76.6821	-75.7176	-13.5371
-76.5372	-78.511	-14.1163	-14.9476	-76.7433	-75.6269	-13.6473
-77.0187	-76.6513	-13.7138	-15.4472	-76.032	-76.5614	-13.5578
-76.7311	-76.2238	-13.6932	-15.57	-76.1517	-76.2708	-13.6092
-76.9298	-76.3687	-13.673	-15.8945	-75.8535	-75.7933	-13.6525
-75.9148	-75.4136	-13.5196	-15.8365	-75.4893	-75.4223	-13.5354
-76.3368	-77.2148	-13.4886	-15.9663	-75.062	-76.4326	-13.5867
-76.1924	-75.5676	-13.3879	-16.1821	-75.1527	-74.6261	-13.6329
-75.0216	-75.9333	-13.1189	-16.2743	-74.5552	-75.2956	-13.5097
-75.6354	-74.8645	-12.8968	-16.5575	-75.5323	-75.0871	-13.4384
-75.2453	-75.1727	-12.7304	-17.0593	-74.7374	-74.7492	-13.4835
-75.2645	-74.9612	-12.517	-17.443	-74.678	-74.0788	-13.5072
-74.8691	-75.1843	-12.4428	-18.3095	-75.1568	-73.9887	-13.5654
-74.5358	-74.3109	-12.3501	-18.9206	-73.9942	-74.1663	-13.508
-74.2438	-74.9925	-12.2433	-19.814	-73.5798	-74.396	-13.5619
-73.9765	-74.9149	-12.0412	-20.7535	-73.7283	-73.8233	-13.4793
-73.6989	-74.3369	-11.9172	-21.8031	-73.839	-73.1791	-13.4082
-73.9934	-73.774	-11.7531	-23.1084	-73.7111	-73.6396	-13.4755
-73.7684	-73.7191	-11.6523	-24.7878	-73.1691	-72.6926	-13.5416
-73.8794	-73.6312	-11.5303	-26.2907	-73.3272	-73.1873	-13.744
-73.7054	-73.1324	-11.2638	-27.449	-72.589	-72.5252	-13.5824
-74.0048	-73.7123	-11.0392	-26.9894	-72.4075	-72.2398	-13.4813
-72.7192	-72.9107	-10.9438	-25.919	-72.8787	-71.7401	-13.5741
-72.3861	-72.7547	-10.793	-23.7385	-72.3948	-72.6501	-13.5066
-72.5231	-73.0781	-10.7616	-21.9386	-72.1004	-72.5765	-13.54
-73.3702	-72.1936	-10.6798	-20.3249	-71.5005	-71.5335	-13.5936
-72.1678	-72.5969	-10.461	-18.5765	-72.043	-71.2647	-13.5014
-72.0166	-72.4902	-10.3161	-17.3924	-71.7532	-71.7854	-13.4543
-71.8572	-72.0699	-10.1422	-16.2715	-71.7332	-71.2262	-13.3955
-72.6214	-72.4439	-10.076	-15.2916	-71.0769	-71.082	-13.4309
-72.296	-72.4143	-9.88992	-14.5264	-71.3187	-71.0642	-13.3497
-71.9619	-71.8003	-9.7744	-13.818	-71.1574	-70.8595	-13.322
-71.5676	-71.9056	-9.72662	-13.06	-70.493	-70.4257	-13.3279
-72.4138	-71.6553	-9.70338	-12.6593	-70.8252	-70.8495	-13.2741
-71.6842	-71.3994	-9.73265	-12.037	-70.479	-70.8799	-13.3093
-71.7568	-71.8057	-9.65946	-11.3224	-70.4712	-70.263	-13.3184
-71.7413	-71.3849	-9.45485	-10.9441	-70.5257	-70.1851	-13.1776
-71.2897	-70.9334	-9.3995	-10.5379	-70.5178	-70.0616	-13.0702
-71.071	-71.5907	-9.28018	-10.1873	-70.041	-69.4785	-13.0988
-71.6841	-71.4249	-9.30553	-9.77777	-69.73	-69.5148	-13.1435
-71.303	-71.4678	-9.14745	-9.10491	-69.3421	-69.9064	-13.0742
-70.6078	-71.2022	-9.11603	-8.81284	-69.0146	-68.9599	-13.0492
-70.689	-71.2997	-9.16762	-8.44912	-69.2915	-68.9273	-13.0802
-71.1957	-70.8987	-9.17696	-8.05646	-68.9909	-68.9766	-13.0626
-71.006	-70.6229	-9.14249	-7.65742	-68.8527	-68.3762	-13.0649
-70.3959	-70.3221	-8.98736	-7.1732	-68.5586	-68.3125	-12.8745

J0-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-8.67237	-89.4895	-89.0782	-17.62
-15.0636	-88.2283	-85.8758	-28.5228
-19.7342	-85.0899	-83.9602	-29.0004
-23.1366	-82.6931	-83.1359	-28.8653
-25.1033	-82.844	-82.3865	-28.4978
-25.3343	-82.4469	-81.885	-28.2525
-24.5919	-82.2869	-82.2371	-28.0769
-23.528	-82.5977	-82.2953	-27.9239
-22.5208	-82.6041	-82.4199	-27.983
-21.664	-82.9785	-82.4139	-27.942
-20.8803	-82.9776	-83.1458	-27.9344
-20.2387	-83.9531	-83.7188	-27.8192
-19.7775	-83.6155	-83.8362	-27.9158
-19.376	-83.808	-84.4073	-27.9345
-18.9714	-84.8619	-85.3527	-28.0907
-18.6164	-84.7906	-84.4797	-28.223
-18.3863	-85.4307	-85.8821	-28.2946
-18.1207	-84.8329	-85.3709	-28.4347
-17.9592	-85.6135	-85.9337	-28.5925
-17.7766	-85.9443	-86.2094	-28.6695
-17.6484	-86.6562	-86.5504	-28.8348
-17.5542	-86.3044	-86.6389	-29.0272
-17.4354	-86.7676	-86.8205	-29.329
-17.3909	-86.9607	-87.2057	-29.762
-17.3446	-86.6384	-86.7406	-29.9808
-17.3528	-86.8807	-87.4745	-30.4083
-17.4196	-86.7	-87.4865	-30.7294
-17.5081	-86.608	-86.7479	-31.311
-17.5771	-87.3984	-86.7384	-32.3416
-17.6126	-86.8526	-87.8281	-33.6731
-17.548	-87.4613	-86.6431	-35.7187
-17.4062	-86.7896	-87.786	-38.1481
-17.2263	-87.3878	-87.4792	-40.0144
-17.0825	-87.0314	-87.5534	-40.894
-17.0658	-87.1849	-87.6627	-39.9497
-17.1321	-87.5537	-86.9771	-39.2849
-17.2631	-87.6779	-87.0319	-38.4421
-17.5031	-86.9522	-87.4944	-37.6695
-17.7395	-87.2602	-86.5872	-37.3955
-18.0014	-86.5265	-87.9971	-36.7754
-18.1966	-87.3864	-87.539	-35.9512

J1-J2

S11 (dB)	S21 (dB)	S12 (dB)
-5.20424	-88.2557	-94.1455
-19.3407	-82.9417	-84.5121
-22.7198	-80.0549	-80.0716
-20.4007	-78.7252	-79.0183
-19.364	-78.1126	-78.0706
-18.9215	-77.9385	-78.1213
-18.7997	-77.9734	-77.929
-18.8353	-78.0847	-78.552
-18.9909	-78.4759	-78.4062
-19.2358	-78.7547	-79.1952
-19.4651	-79.4707	-79.616
-19.7395	-79.8203	-79.7827
-20.1343	-80.2094	-80.1639
-20.4995	-81.0086	-80.9123
-20.7616	-81.0625	-81.2339
-20.968	-81.5036	-82.115
-21.2237	-82.1841	-81.7264
-21.3	-82.4432	-82.8618
-21.4035	-82.7991	-82.8898
-21.3784	-83.2758	-83.3186
-21.3292	-83.6753	-83.5708
-21.2512	-83.5855	-84.6109
-21.0082	-84.3896	-84.8203
-20.8144	-84.52	-84.9884
-20.5352	-84.8645	-84.5757
-20.2923	-85.1393	-85.626
-20.1177	-84.878	-85.2201
-19.8709	-85.7917	-86.4821
-19.6012	-87.2069	-85.6264
-19.3386	-86.3202	-85.6764
-19.0595	-87.1372	-87.1141
-18.697	-86.9206	-86.4454
-18.3769	-86.9184	-87.5971
-18.1313	-86.7694	-86.9091
-18.0156	-87.8055	-87.6326
-18.0487	-87.1512	-86.8641
-18.1887	-87.7218	-87.4729
-18.3988	-87.9096	-87.8682
-18.7366	-88.1742	-88.2359
-19.2036	-89.0134	-88.4484
-19.7262	-87.9985	-87.3638

-18.3098	-87.5727	-87.2338	-35.0255	-20.4167	-88.7694	-88.4606
-18.319	-86.8941	-86.8669	-33.9089	-21.2116	-88.7469	-88.0637
-18.1169	-87.1798	-86.78	-32.8964	-22.1796	-87.9683	-88.1181
-17.7773	-86.6694	-86.6089	-32.0419	-23.1647	-89.581	-88.7685
-17.3701	-86.3463	-87.3674	-31.3904	-24.2761	-89.3039	-88.6742
-16.9981	-86.459	-86.7487	-30.9931	-25.4106	-88.2649	-89.9368
-16.6798	-86.6405	-87.3099	-31.0309	-26.5431	-89.5762	-89.8588
-16.415	-86.256	-86.3334	-31.0639	-27.8669	-89.5866	-89.177
-16.2413	-86.0633	-87.0463	-31.2201	-29.341	-89.5547	-88.7477
-16.1537	-86.1089	-86.163	-30.8078	-30.6736	-90.1164	-90.2506
-16.1103	-86.273	-85.6235	-30.3945	-31.9315	-90.0728	-90.3525
-16.0863	-86.2198	-85.4415	-29.609	-32.1723	-89.3741	-89.7369
-16.0494	-85.8518	-85.9258	-28.9947	-31.3943	-89.367	-90.8245
-16.0037	-85.7069	-85.1181	-28.2613	-29.9102	-90.5218	-89.6503
-15.987	-85.5556	-85.346	-27.572	-28.2103	-90.3401	-89.9986
-16.0158	-84.8212	-85.1441	-26.9627	-26.8727	-90.1857	-90.0634
-16.0995	-85.0493	-85.6108	-26.3586	-25.6363	-91.2112	-89.2697
-16.1961	-84.8349	-85.5542	-25.6622	-24.6083	-90.8909	-90.4224
-16.3397	-84.5537	-84.5935	-24.9487	-23.776	-90.7136	-89.5967
-16.5334	-84.818	-85.3836	-24.4003	-23.0259	-90.5878	-90.9413
-16.8182	-84.8523	-84.6396	-23.8631	-22.4464	-90.3809	-91.2104
-17.1752	-84.4188	-84.7077	-23.4743	-21.972	-91.1008	-91.9543
-17.5971	-84.3207	-84.557	-23.071	-21.5827	-91.5574	-90.5102
-18.03	-84.2776	-84.2295	-22.6795	-21.2462	-91.2807	-92.3905
-18.5842	-84.1077	-84.8285	-22.3912	-20.924	-91.1722	-90.5682
-19.1099	-84.2002	-84.1878	-21.9854	-20.7423	-91.7514	-91.0273
-19.8083	-84.4894	-83.9067	-21.7041	-20.572	-91.2141	-90.8828
-20.4317	-83.6593	-83.5683	-21.3535	-20.3315	-91.4754	-91.1181
-20.9906	-84.1601	-83.8636	-21.1657	-20.1152	-90.1225	-91.0955
-21.3907	-83.9683	-83.3992	-20.9589	-19.9446	-91.3575	-90.7921
-21.6426	-83.5388	-83.632	-20.7509	-19.779	-92.3641	-91.7094
-21.6044	-83.7448	-83.0388	-20.5345	-19.5656	-90.7061	-91.4317
-21.5315	-83.4325	-83.7968	-20.2638	-19.2089	-91.4451	-92.5684
-21.0865	-83.2516	-83.6237	-19.9846	-19.0483	-91.0451	-91.1201
-20.6443	-83.4844	-82.7682	-19.7038	-18.7282	-91.6026	-90.9402
-20.2335	-82.9765	-82.9719	-19.4716	-18.3561	-91.4155	-90.9295
-19.7052	-83.1901	-83.2816	-19.2493	-18.0935	-92.0232	-91.6124
-19.3085	-83.1858	-83.5101	-19.0996	-17.7366	-90.2856	-92.4872
-18.9883	-82.8173	-82.8119	-18.9757	-17.3745	-92.4781	-90.5545
-18.6527	-82.9931	-82.765	-18.7779	-17.0245	-91.9226	-89.7179
-18.4744	-83.096	-82.8831	-18.5897	-16.675	-92.8544	-92.4155
-18.3303	-82.4828	-82.8924	-18.3293	-16.3381	-91.1176	-89.6969
-18.3058	-82.9222	-82.5682	-18.1126	-15.9783	-90.9485	-91.1409
-18.3197	-82.9989	-82.933	-17.923	-15.6568	-90.7796	-92.9811
-18.4524	-82.8236	-82.7994	-17.8463	-15.3442	-91.5717	-91.0514
-18.6536	-82.6218	-82.459	-17.7434	-15.0283	-91.7734	-91.7512
-18.8745	-82.6368	-82.6466	-17.7014	-14.7186	-91.4298	-92.013
-19.1604	-82.8585	-82.4823	-17.6521	-14.4303	-90.4006	-91.825
-19.2464	-82.2574	-82.5641	-17.5655	-14.1805	-91.9877	-91.7857
-19.4515	-82.0337	-82.5889	-17.4169	-13.8615	-92.5066	-92.4823
-19.3516	-82.0394	-81.8268	-17.2292	-13.605	-91.1381	-92.365
-19.1146	-82.2677	-82.12	-17.1324	-13.3152	-92.0707	-91.3528
-18.6669	-81.6268	-81.5693	-16.9983	-13.0872	-91.9825	-90.8767
-18.1494	-81.5125	-82.0916	-16.9208	-12.8351	-92.2307	-92.0413
-17.4746	-82.0525	-81.9571	-16.8881	-12.6333	-91.1172	-93.461

-16.7726	-81.6168	-81.394	-16.796	-12.4373	-91.9529	-93.3022
-16.0137	-81.495	-81.2256	-16.671	-12.3016	-92.9832	-94.0987
-15.3532	-81.282	-81.3297	-16.5946	-12.1799	-93.563	-92.4704
-14.6986	-80.947	-81.3777	-16.5708	-12.0887	-94.1956	-93.9708
-14.1418	-80.7823	-80.9629	-16.4088	-12.0029	-95.2365	-91.8735
-13.6888	-80.5934	-80.7819	-16.4191	-12.0026	-94.0554	-93.0029
-13.2434	-80.4332	-80.4084	-16.3734	-12.0276	-92.7345	-95.2594
-12.9141	-80.2266	-80.3319	-16.243	-12.0699	-96.294	-94.6301
-12.6462	-80.0642	-80.6732	-16.2246	-12.1431	-94.1985	-92.9414
-12.3557	-79.836	-79.4149	-16.1284	-12.2951	-94.0284	-94.3353
-12.1757	-80.1157	-80.7146	-16.1091	-12.4559	-94.6048	-98.5217
-12.0959	-79.499	-79.33	-16.1107	-12.666	-90.9173	-90.9132
-11.9898	-79.142	-80.1345	-16.1542	-12.8919	-94.9449	-92.5892
-12.0291	-79.0007	-78.898	-16.1277	-13.1205	-93.2185	-91.6622
-12.1045	-78.9736	-79.1672	-16.2724	-13.3716	-91.4401	-90.2156
-12.1668	-78.9635	-79.4116	-16.2882	-13.7051	-94.4012	-91.0429
-12.2679	-78.6971	-78.557	-16.2247	-14.0413	-91.795	-90.093
-12.375	-79.219	-78.9514	-16.2545	-14.31	-89.2794	-92.3624
-12.6055	-78.882	-77.5219	-16.3399	-14.5981	-91.0826	-88.9955
-12.878	-78.0948	-78.8234	-16.3802	-14.8356	-90.0645	-95.0537
-13.1475	-79.0546	-78.2496	-16.4531	-15.1286	-101.437	-91.9849
-13.4303	-78.7174	-78.0717	-16.5069	-15.304	-86.766	-89.6624
-13.7161	-78.0207	-77.9176	-16.5679	-15.4847	-89.9385	-93.0723
-14.0035	-78.2935	-77.3609	-16.6127	-15.5749	-88.8801	-90.6566
-14.4043	-78.7899	-76.7795	-16.6383	-15.6131	-89.5116	-86.9525
-14.6282	-77.6497	-77.6988	-16.5614	-15.6232	-89.6649	-91.1983
-14.9943	-77.2966	-78.243	-16.4986	-15.6495	-90.5769	-89.0966
-15.1267	-78.1473	-77.3735	-16.673	-15.7634	-88.6216	-86.9266
-15.4341	-77.5764	-77.5338	-16.7218	-15.6713	-86.28	-91.2107
-15.6467	-77.069	-77.487	-16.6489	-15.6909	-93.3018	-92.2883
-15.8904	-78.2477	-77.2525	-16.7488	-15.5534	-89.3018	-88.1043
-15.9103	-77.1236	-77.455	-16.9264	-15.592	-91.3525	-89.1216
-16.0356	-77.4551	-77.8069	-16.8065	-15.5294	-88.2674	-88.9637
-15.9431	-78.4062	-77.7459	-16.76	-15.4921	-91.4275	-89.8209
-15.9157	-75.9466	-76.5991	-16.7324	-15.5028	-88.0417	-86.1839
-15.8293	-76.6639	-77.1323	-16.7507	-15.4961	-88.2364	-87.7747
-15.7395	-76.9157	-77.7219	-16.7073	-15.4935	-88.8289	-87.0033
-15.4216	-76.8611	-75.8613	-16.8428	-15.5667	-87.3566	-87.6057
-15.1765	-76.6429	-76.7432	-16.7938	-15.6327	-89.6862	-88.6058
-14.9498	-76.9341	-75.959	-16.8142	-15.6953	-86.5694	-88.2478
-14.6853	-76.9956	-76.1741	-16.6486	-15.7637	-87.6938	-88.8469
-14.5323	-76.7458	-76.3395	-16.6282	-15.8508	-86.9926	-85.5714
-14.2263	-76.6213	-76.3697	-16.497	-15.9002	-88.3123	-84.6774
-13.8913	-76.0061	-76.4563	-16.4168	-16.1626	-85.5638	-88.3028
-13.5674	-76.3096	-77.0628	-16.198	-16.2508	-84.729	-88.1013
-13.372	-76.6484	-76.8251	-16.0947	-16.4164	-87.7759	-86.5174
-13.3606	-76.3578	-76.6126	-15.9334	-16.417	-84.8456	-86.151
-13.1893	-76.2307	-77.1539	-15.8462	-16.4566	-89.936	-84.8254
-13.1602	-76.1041	-76.5331	-15.8127	-16.4009	-84.6448	-89.1028
-13.1795	-76.6461	-77.6337	-15.6821	-16.205	-85.2024	-87.4476
-13.3009	-75.8597	-76.5184	-15.5858	-15.9859	-84.7951	-85.4488
-13.4988	-77.4097	-75.8297	-15.4748	-15.6304	-86.2087	-85.9729
-13.8177	-76.9694	-76.6508	-15.3112	-15.241	-84.2872	-85.3616
-14.2897	-75.9555	-76.9373	-15.1706	-14.8336	-86.302	-86.2685
-14.4657	-76.6933	-76.2873	-15.119	-14.5726	-84.3611	-85.2035

-14.9976	-76.0439	-75.9803	-14.949	-14.1413	-85.8348	-85.1976
-15.3622	-75.624	-76.5905	-14.9007	-13.801	-84.2463	-83.4146
-15.7526	-76.8857	-76.3172	-14.6829	-13.4084	-85.1906	-85.4912
-15.6445	-76.2372	-75.6832	-14.5928	-13.0867	-85.2733	-84.1187
-15.4358	-75.9627	-76.6421	-14.5296	-12.7709	-83.7504	-84.8747
-15.0854	-76.1344	-74.8678	-14.5774	-12.6068	-83.4926	-83.9795
-14.6849	-75.6094	-75.5213	-14.2887	-12.4315	-84.3734	-84.1613
-14.089	-75.462	-75.858	-14.2456	-12.2933	-82.7356	-83.6516
-13.7823	-75.8172	-75.1996	-14.1794	-12.0964	-82.5539	-82.121
-13.3899	-76.1676	-75.2459	-13.9319	-12.086	-83.5346	-83.115
-13.2418	-75.1147	-75.2265	-13.8792	-12.0105	-83.1564	-82.2461
-13.2292	-75.5452	-75.0707	-13.8287	-11.9191	-81.9844	-82.5634
-13.2307	-74.6729	-75.2528	-13.6027	-11.9332	-83.612	-81.8079
-13.4161	-74.7359	-74.9326	-13.4577	-11.9802	-81.3835	-81.1701
-13.7731	-74.7503	-74.562	-13.3715	-12.0226	-81.42	-81.4947
-14.1252	-75.1056	-73.8337	-13.2374	-12.2527	-81.3802	-80.3869
-14.7519	-74.8727	-74.786	-13.1426	-12.2682	-80.9437	-80.6792
-15.3282	-74.6371	-74.1023	-12.9578	-12.644	-81.619	-80.0239
-16.0558	-73.8906	-73.4696	-12.7947	-12.8305	-80.1226	-80.9464
-16.9373	-74.1289	-74.6059	-12.541	-13.1635	-80.1605	-79.3944
-17.9518	-74.2528	-73.2062	-12.3396	-13.4798	-79.2202	-80.4541
-19.331	-73.9767	-73.4326	-12.2108	-14.0914	-79.6371	-79.6524
-21.181	-73.8795	-72.9802	-12.1489	-14.7857	-80.708	-80.638
-23.6472	-73.6331	-73.3071	-12.163	-15.3282	-79.2643	-80.274
-26.9014	-73.5606	-73.5015	-11.9117	-16.1195	-79.6774	-79.2626
-29.9196	-73.611	-73.5881	-11.6799	-16.7805	-79.1117	-80.3862
-29.0049	-72.6709	-73.4233	-11.5692	-17.7296	-78.7329	-80.8439
-24.6556	-72.5705	-73.1835	-11.3407	-18.3181	-78.6645	-78.4283
-21.1903	-73.658	-72.8201	-11.2414	-19.3282	-80.1663	-79.7144
-18.7912	-73.8625	-72.4897	-11.1519	-19.6899	-79.2671	-76.9939
-16.4938	-72.681	-73.1285	-10.9482	-19.9082	-79.5807	-78.9633
-14.9326	-72.8358	-72.7738	-10.8268	-19.936	-78.7088	-79.9638
-13.5551	-72.8294	-73.9557	-10.6789	-19.6047	-79.3766	-78.7851
-12.3744	-73.2204	-72.6284	-10.644	-19.4691	-78.8876	-78.66
-11.4197	-73.0709	-73.2023	-10.4468	-19.3793	-80.0943	-79.6083
-10.5808	-73.3057	-73.6453	-10.3053	-19.2884	-79.421	-78.2989
-9.75531	-73.5986	-72.7915	-10.1836	-19.0143	-78.9346	-79.7476
-9.25513	-73.2238	-73.782	-10.0559	-19.3077	-80.8457	-78.8161
-8.56756	-73.0578	-72.9873	-10.0061	-19.1967	-81.0959	-80.3091
-7.88496	-73.0723	-73.0335	-9.91064	-19.0273	-79.6077	-79.1942
-7.55584	-72.8521	-73.5138	-9.69635	-19.5883	-79.4582	-79.1546
-7.18549	-74.1541	-74.1543	-9.59766	-19.9822	-78.857	-77.8218
-6.911	-73.551	-73.1235	-9.49297	-20.5441	-78.6703	-78.4978
-6.58075	-73.5129	-73.5019	-9.45508	-20.622	-78.5759	-78.9049
-6.05034	-72.957	-74.3617	-9.25455	-20.4218	-79.7091	-78.5473
-5.91143	-74.0887	-73.9598	-9.12592	-20.5813	-78.4149	-78.7743
-5.71062	-74.2321	-73.7867	-9.06455	-20.4428	-78.3713	-78.2683
-5.46309	-73.9346	-73.5278	-8.97248	-19.5509	-79.7277	-78.7807
-5.26031	-74.1433	-73.7303	-8.91164	-18.8466	-79.5374	-79.805
-4.99472	-73.9233	-73.6944	-8.73031	-18.5811	-80.42	-79.2432

J1-J3

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.7877	-5.18822	-91.776	-105.671	-17.6196	-5.18191
-28.3402	-19.3087	-89.385	-88.7665	-28.9714	-19.2945
-28.5783	-22.7179	-87.8579	-87.3349	-29.589	-22.717
-28.2884	-20.4027	-85.9266	-85.9922	-29.3591	-20.4028
-27.999	-19.3673	-85.0531	-85.5106	-28.982	-19.3691
-27.7111	-18.9246	-84.61	-85.5358	-28.5994	-18.9268
-27.5265	-18.8046	-85.4482	-86.0282	-28.3611	-18.8066
-27.4565	-18.8399	-85.7468	-85.1704	-28.2164	-18.8418
-27.4977	-18.9971	-86.8096	-86.2892	-28.293	-18.9978
-27.4452	-19.2422	-86.0122	-87.006	-28.2418	-19.2439
-27.4476	-19.4726	-87.2688	-87.0656	-28.2576	-19.4755
-27.2839	-19.7472	-88.159	-86.9582	-28.148	-19.75
-27.3441	-20.1422	-87.8937	-88.4381	-28.2342	-20.1434
-27.3169	-20.5081	-88.3702	-88.3578	-28.2836	-20.5094
-27.4346	-20.7708	-88.717	-89.2029	-28.5422	-20.7716
-27.4882	-20.9767	-90.3182	-90.2519	-28.6863	-20.9777
-27.4576	-21.233	-90.9324	-89.4383	-28.77	-21.2352
-27.5164	-21.308	-91.2735	-91.4444	-28.9458	-21.3091
-27.558	-21.4102	-90.9732	-91.7443	-29.1683	-21.4112
-27.551	-21.3842	-92.1916	-91.7919	-29.4155	-21.3852
-27.5478	-21.3317	-92.5584	-93.6269	-29.8271	-21.3326
-27.5871	-21.2519	-93.5434	-92.2147	-30.1805	-21.2522
-27.7142	-21.0076	-93.7824	-92.9859	-30.5956	-21.0068
-27.8902	-20.812	-93.3342	-93.1884	-31.2861	-20.8113
-27.8996	-20.5301	-95.0546	-94.5901	-31.724	-20.528
-28.0531	-20.2871	-94.7001	-94.4175	-32.365	-20.2851
-28.0913	-20.1113	-93.9163	-96.3715	-32.9659	-20.1102
-28.3406	-19.8638	-94.3056	-94.4599	-34.0598	-19.8615
-28.8182	-19.595	-93.5109	-96.651	-34.6474	-19.5926
-29.2544	-19.3319	-97.1507	-96.748	-34.3807	-19.3294
-29.7027	-19.0532	-97.7985	-96.1237	-33.2255	-19.0509
-29.7715	-18.6901	-95.7986	-95.671	-32.0557	-18.6874
-29.3518	-18.3709	-94.7039	-97.6492	-31.1812	-18.3687
-28.9401	-18.1267	-98.638	-96.0321	-30.6973	-18.1243
-28.4793	-18.0124	-99.5201	-96.73	-30.8682	-18.0106
-28.2102	-18.0469	-97.56	-99.1775	-31.025	-18.0454
-28.0922	-18.1874	-97.3224	-96.2524	-31.7536	-18.1874
-28.0313	-18.3985	-97.8241	-97.8019	-32.2423	-18.4015
-28.2214	-18.7381	-102.895	-99.6801	-32.4541	-18.7416
-28.2205	-19.2072	-97.6163	-99.5131	-32.5956	-19.2095
-28.1878	-19.7311	-99.3178	-98.2005	-32.7917	-19.7342

-28.0543	-20.4223	-107.679	-100.432	-32.9471	-20.4247
-27.9211	-21.2193	-101.376	-98.7996	-33.1819	-21.2221
-27.8442	-22.1906	-100.775	-99.0687	-33.2116	-22.1924
-27.7406	-23.1779	-99.8126	-97.68	-33.1012	-23.182
-27.7492	-24.2895	-100.262	-103.034	-32.7489	-24.2948
-27.7409	-25.4263	-100.569	-102.396	-32.4378	-25.4311
-27.7846	-26.5598	-103.143	-103.406	-32.0957	-26.5637
-27.5508	-27.8908	-102.459	-101.415	-32.2877	-27.8942
-27.4026	-29.3738	-101.152	-101.191	-32.3742	-29.3741
-26.9184	-30.72	-101.44	-103.362	-33.1553	-30.7283
-26.6745	-31.9967	-101.75	-105.544	-33.5667	-32.0119
-26.2142	-32.2463	-105.447	-110.173	-34.4073	-32.2735
-25.9032	-31.4607	-103.921	-101.584	-35.1016	-31.4826
-25.6766	-29.9662	-104.047	-105.166	-35.0193	-29.9826
-25.3231	-28.2552	-104.086	-104.254	-34.9725	-28.268
-24.9185	-26.9099	-106.68	-105.312	-35.09	-26.9214
-24.6044	-25.6689	-104.585	-108.653	-34.5341	-25.6769
-24.2628	-24.636	-104.296	-103.669	-33.7141	-24.6439
-23.9458	-23.7978	-104.258	-112.874	-32.6373	-23.805
-23.814	-23.0459	-103.743	-101.303	-31.6436	-23.0481
-23.4421	-22.4643	-106.707	-104.24	-31.1188	-22.4669
-23.1564	-21.9869	-103.288	-105.625	-30.6833	-21.9922
-22.8038	-21.5992	-102.447	-104.878	-29.846	-21.6064
-22.4512	-21.2609	-101.883	-106.044	-29.1502	-21.2687
-22.1209	-20.9379	-104.414	-107.767	-28.6747	-20.9473
-21.7979	-20.7584	-106.961	-106.809	-27.9084	-20.7686
-21.5612	-20.5892	-112.481	-104.77	-27.4085	-20.5984
-21.3202	-20.3489	-111.434	-115.549	-26.8185	-20.3572
-21.1655	-20.1316	-111.963	-112.772	-26.4982	-20.1428
-20.9502	-19.9642	-108.221	-107.031	-26.1487	-19.9742
-20.7096	-19.796	-108.555	-102.99	-25.7265	-19.8055
-20.4429	-19.585	-109.639	-110.823	-25.3525	-19.5978
-20.156	-19.2339	-102.971	-106.758	-24.8978	-19.2427
-19.9231	-19.0715	-105.733	-116.745	-24.4821	-19.0808
-19.6773	-18.7523	-103.554	-109.251	-23.9546	-18.7618
-19.5286	-18.3804	-103.243	-109.066	-23.6269	-18.3872
-19.3865	-18.1176	-101.473	-108.543	-23.3858	-18.1245
-19.278	-17.7612	-107.679	-105.705	-23.1444	-17.7663
-19.0789	-17.398	-104.862	-108.489	-22.9423	-17.4027
-18.9122	-17.048	-101.331	-103.129	-22.6983	-17.0533
-18.7102	-16.698	-107.335	-98.8829	-22.4398	-16.7051
-18.4404	-16.3609	-100.77	-109.936	-22.0705	-16.3682
-18.2081	-16	-107.041	-102.842	-21.7286	-16.0051
-18.0022	-15.6782	-102.559	-101.577	-21.4182	-15.684
-17.9061	-15.3643	-105.323	-103.317	-21.232	-15.3707
-17.7713	-15.047	-101.564	-103.206	-20.9944	-15.0532
-17.7163	-14.7365	-105.766	-99.3773	-20.8893	-14.7422
-17.6196	-14.448	-106.591	-104.889	-20.7698	-14.4562
-17.4971	-14.1971	-103.41	-104.388	-20.5629	-14.2014
-17.3235	-13.877	-102.605	-108.293	-20.3708	-13.883
-17.1027	-13.6202	-102.569	-108.681	-20.042	-13.6251
-16.9815	-13.3298	-104.871	-99.4683	-19.8331	-13.3341
-16.7935	-13.1006	-103.389	-102.828	-19.5506	-13.1033
-16.6947	-12.8471	-103.443	-100.261	-19.3863	-12.8509
-16.6285	-12.6451	-103.209	-103.456	-19.2196	-12.6463

-16.5693	-12.4475	-101.032	-101.53	-19.1155	-12.4487
-16.4636	-12.3119	-104.328	-103.891	-18.9881	-12.3143
-16.4273	-12.1869	-101.667	-103.49	-18.904	-12.1901
-16.4393	-12.0984	-100.73	-103.946	-18.927	-12.1018
-16.2917	-12.013	-99.5754	-100.193	-18.6918	-12.0151
-16.2486	-12.0108	-98.978	-99.4569	-18.6237	-12.0142
-16.2259	-12.0363	-100.582	-103.361	-18.5478	-12.0384
-16.1083	-12.0791	-100.151	-105.53	-18.3685	-12.0786
-16.129	-12.1432	-98.6199	-99.3402	-18.3461	-12.1482
-16.1084	-12.3083	-93.6581	-104.078	-18.2487	-12.3075
-16.173	-12.4663	-98.9417	-119.607	-18.2853	-12.4643
-16.2496	-12.6754	-98.4621	-97.3535	-18.3183	-12.6759
-16.3599	-12.8998	-97.1853	-96.0586	-18.3911	-12.9022
-16.3682	-13.128	-95.9823	-92.0817	-18.3515	-13.1297
-16.5624	-13.3786	-95.843	-99.8786	-18.5017	-13.3819
-16.5972	-13.7138	-97.8838	-92.6978	-18.4621	-13.7129
-16.5797	-14.0486	-101.073	-97.0294	-18.3219	-14.048
-16.6618	-14.316	-102.509	-92.0795	-18.3075	-14.316
-16.8149	-14.6035	-91.8239	-92.8498	-18.3745	-14.6063
-16.9188	-14.8411	-92.2284	-93.4443	-18.3742	-14.8403
-17.0889	-15.1362	-91.6787	-94.0629	-18.4769	-15.135
-17.1809	-15.3103	-93.163	-97.3485	-18.4983	-15.3123
-17.2732	-15.4897	-96.0564	-91.8309	-18.5166	-15.4906
-17.3356	-15.5792	-96.6984	-98.2516	-18.5033	-15.5788
-17.3362	-15.6178	-90.2259	-89.9945	-18.4748	-15.6171
-17.249	-15.6278	-93.6773	-92.5325	-18.2739	-15.6281
-17.1834	-15.6565	-93.8368	-93.4944	-18.1377	-15.6545
-17.3521	-15.7674	-94.8904	-90.4642	-18.2477	-15.7674
-17.4552	-15.6738	-90.7508	-91.978	-18.3369	-15.6757
-17.3991	-15.6934	-94.9662	-94.9722	-18.2401	-15.6919
-17.5142	-15.5532	-92.6771	-99.78	-18.3472	-15.5549
-17.7323	-15.5917	-90.7436	-91.9232	-18.5992	-15.5929
-17.5993	-15.529	-94.6105	-90.2574	-18.4778	-15.5259
-17.526	-15.4906	-89.798	-91.8022	-18.4408	-15.487
-17.4486	-15.4974	-90.2806	-89.9866	-18.4154	-15.496
-17.4078	-15.4921	-90.4733	-92.2349	-18.4359	-15.4901
-17.2656	-15.4895	-90.9052	-91.8605	-18.3645	-15.4899
-17.3768	-15.5651	-89.6255	-88.1601	-18.5985	-15.5651
-17.2475	-15.6289	-91.3532	-91.797	-18.5911	-15.6288
-17.2624	-15.69	-92.7371	-93.5467	-18.7861	-15.6908
-16.9513	-15.7583	-87.1263	-91.1113	-18.6025	-15.7575
-16.8632	-15.8519	-91.0589	-88.1519	-18.7277	-15.852
-16.621	-15.8898	-89.6211	-89.8531	-18.6275	-15.8928
-16.3568	-16.1501	-89.8288	-91.8884	-18.5659	-16.1492
-16.0052	-16.2446	-87.6636	-86.2743	-18.3763	-16.2431
-15.7264	-16.4103	-90.8102	-88.6907	-18.2447	-16.4103
-15.3873	-16.4133	-87.7216	-93.7078	-18.1313	-16.4124
-15.1959	-16.4554	-91.58	-89.5397	-18.1694	-16.4552
-15.0605	-16.4023	-88.8237	-85.2151	-18.2341	-16.4014
-14.8147	-16.2077	-86.5934	-91.249	-18.2311	-16.2061
-14.6091	-15.9954	-87.5482	-87.456	-18.2318	-15.9948
-14.3828	-15.6355	-88.8587	-88.1578	-18.1747	-15.634
-14.0618	-15.2548	-87.5582	-98.0706	-18.0696	-15.2544
-13.8083	-14.8516	-90.416	-93.3391	-17.9231	-14.853
-13.5717	-14.5869	-88.1076	-86.2101	-17.9025	-14.5929

-13.3879	-14.1552	-87.4182	-87.1843	-17.9037	-14.1541
-13.2047	-13.8142	-89.6987	-88.8161	-17.972	-13.8141
-13.0102	-13.4231	-89.247	-87.1907	-17.9602	-13.4226
-12.8007	-13.0967	-86.6575	-88.1275	-17.9181	-13.0973
-12.6561	-12.7824	-85.8728	-90.1492	-17.9518	-12.7833
-12.6198	-12.6219	-85.7923	-86.3155	-18.259	-12.619
-12.3472	-12.443	-87.595	-89.2464	-18.0573	-12.4427
-12.1914	-12.3085	-87.3875	-88.2022	-18.0575	-12.311
-12.0885	-12.1149	-86.3837	-86.087	-18.1497	-12.1157
-11.8527	-12.109	-86.9101	-87.8964	-17.9624	-12.1084
-11.7856	-12.0313	-85.7789	-83.2357	-18.062	-12.0348
-11.7143	-11.9408	-83.1434	-84.0625	-18.1089	-11.9451
-11.5162	-11.9572	-85.5337	-83.8229	-17.9485	-11.9601
-11.4053	-12.0046	-83.908	-83.2196	-17.9115	-12.0073
-11.323	-12.0483	-83.7591	-85.0631	-17.8584	-12.049
-11.2205	-12.2805	-83.4411	-84.0263	-17.7782	-12.2822
-11.1784	-12.2957	-82.9192	-84.6787	-17.7287	-12.2939
-11.0273	-12.6751	-83.5289	-82.075	-17.5945	-12.6776
-10.9159	-12.8622	-82.9488	-83.5595	-17.4088	-12.8665
-10.7432	-13.1927	-82.8914	-84.3862	-17.2311	-13.1949
-10.633	-13.5063	-83.4128	-82.5309	-16.9657	-13.5167
-10.6046	-14.1161	-81.8771	-83.2143	-16.9752	-14.1159
-10.5742	-14.811	-81.116	-83.0119	-16.9554	-14.8146
-10.6717	-15.3489	-80.6519	-82.2487	-17.0063	-15.3608
-10.5165	-16.144	-81.5246	-81.6014	-16.8739	-16.1509
-10.3724	-16.8024	-81.7275	-79.3794	-16.65	-16.814
-10.332	-17.7524	-80.2241	-82.6821	-16.5039	-17.7625
-10.1949	-18.3358	-79.4195	-80.9169	-16.3703	-18.3462
-10.1768	-19.3387	-80.0086	-78.616	-16.2981	-19.3513
-10.1906	-19.7062	-79.5152	-79.9497	-16.3064	-19.7114
-10.106	-19.9141	-79.8202	-79.1424	-16.0821	-19.9178
-10.0763	-19.9313	-78.6623	-79.6807	-15.9628	-19.933
-10.0031	-19.6111	-80.0002	-79.6069	-15.8202	-19.6192
-10.0497	-19.4613	-79.619	-80.3594	-15.7896	-19.4694
-9.91163	-19.3691	-79.3155	-80.1888	-15.4842	-19.3795
-9.84306	-19.2722	-78.3771	-79.2497	-15.2536	-19.2904
-9.80439	-19.0073	-79.532	-79.3261	-15.0049	-19.0183
-9.7206	-19.2943	-79.4275	-78.6192	-14.8442	-19.308
-9.73092	-19.1861	-79.379	-79.0625	-14.7076	-19.1921
-9.67223	-19.0148	-78.2791	-77.2939	-14.5071	-19.0235
-9.49435	-19.5798	-78.9165	-78.5304	-14.104	-19.585
-9.40584	-19.9731	-78.3608	-78.0502	-13.9702	-19.9815
-9.30498	-20.5372	-77.6953	-78.534	-13.6686	-20.538
-9.23496	-20.6038	-77.7802	-78.7289	-13.5739	-20.6038
-9.0483	-20.4003	-76.8326	-77.9187	-13.2281	-20.4087
-8.9302	-20.5685	-76.5603	-76.8908	-12.9914	-20.5584
-8.88703	-20.4373	-78.2071	-77.924	-12.8834	-20.4133
-8.80625	-19.5312	-78.1252	-78.155	-12.7842	-19.5283
-8.75885	-18.8386	-77.4323	-76.9523	-12.6516	-18.83
-8.60244	-18.573	-77.1715	-77.694	-12.4702	-18.5489

J1-J4

S21 (dB)	S12 (dB)	S22 (dB)
-90.2254	-88.193	-17.6603
-94.2343	-92.533	-28.8
-89.944	-89.9624	-28.9683
-88.5273	-89.0326	-28.6202
-87.2214	-87.3097	-28.2198
-88.2495	-86.95	-27.8692
-87.377	-87.9761	-27.6207
-87.0568	-88.9631	-27.5033
-88.1125	-88.0574	-27.51
-88.5208	-88.5875	-27.465
-89.5837	-88.8822	-27.4487
-90.4035	-90.592	-27.2803
-90.6541	-90.49	-27.3293
-91.4697	-90.9249	-27.2926
-91.731	-91.5028	-27.3987
-91.5527	-92.2788	-27.431
-93.9964	-93.717	-27.4299
-95.0143	-92.4037	-27.5483
-94.098	-92.054	-27.6674
-97.7427	-93.8194	-27.7288
-94.3348	-97.1723	-27.8086
-96.649	-95.5072	-27.8679
-96.132	-96.7041	-28.0342
-96.6871	-99.0792	-28.3179
-97.9418	-98.2479	-28.4285
-97.2143	-100.325	-28.7481
-98.7757	-97.9481	-28.9352
-98.022	-103.433	-29.3782
-98.1067	-97.8918	-30.0818
-98.8844	-101.024	-30.8872
-100.713	-100.213	-31.9631
-98.3272	-101.629	-32.9353
-101.88	-100.795	-33.4118
-99.9153	-100.385	-33.5688
-99.4342	-99.6702	-33.2974
-100.968	-100.477	-33.032
-104.587	-109.495	-33.0423
-100.607	-113.873	-32.975
-102.663	-103.277	-33.3428
-103.498	-109.44	-33.4337
-98.5511	-104.716	-33.5404

J1-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-5.17551	-92.4699	-105.211	-18.2321
-19.2809	-95.939	-90.4626	-27.675
-22.7075	-91.3807	-89.2217	-27.2437
-20.3967	-88.8175	-89.0125	-26.8398
-19.3633	-88.0843	-88.5847	-26.5168
-18.9266	-88.4174	-88.1799	-26.243
-18.8085	-88.0361	-88.8097	-26.009
-18.8408	-88.3012	-88.3158	-25.9124
-18.9948	-89.1637	-88.5623	-25.913
-19.2421	-89.7852	-89.4148	-25.8872
-19.4757	-90.611	-90.0855	-25.8742
-19.7514	-91.2764	-92.4944	-25.7313
-20.142	-89.86	-90.4309	-25.7691
-20.503	-93.4938	-93.0321	-25.7268
-20.7652	-94.216	-91.8758	-25.7879
-20.9732	-93.5921	-92.4248	-25.7903
-21.2334	-92.8802	-93.1164	-25.7811
-21.3114	-94.3765	-93.3574	-25.87
-21.4154	-94.3408	-96.8292	-25.9451
-21.3897	-95.1996	-96.5767	-25.9706
-21.3376	-97.389	-97.0803	-25.9947
-21.2564	-96.304	-97.0066	-26.0033
-21.0088	-95.827	-97.4713	-26.1156
-20.8127	-97.2568	-97.1245	-26.2888
-20.5279	-100.358	-97.9391	-26.3285
-20.2834	-98.3227	-98.6451	-26.5491
-20.1098	-102.283	-99.8689	-26.6641
-19.8607	-98.2604	-100.659	-26.9267
-19.5937	-97.478	-99.3119	-27.3889
-19.3298	-105.623	-102.528	-27.8524
-19.0511	-102.685	-104.178	-28.3357
-18.6871	-106.923	-100.961	-28.5596
-18.369	-101.722	-105.662	-28.4619
-18.1233	-102.851	-103.828	-28.3219
-18.0134	-103.412	-102.246	-28.0047
-18.0508	-97.8513	-101.265	-27.8001
-18.1933	-102.152	-103.362	-27.6373
-18.4083	-103.354	-107.405	-27.4805
-18.7477	-98.0317	-106.867	-27.5547
-19.2121	-101.993	-107.377	-27.5346
-19.7319	-107.279	-101.797	-27.4974

-104.415	-102.36	-33.6156	-20.4184	-105.923	-112.877	-27.5219
-116.746	-107.583	-33.6006	-21.2154	-108.915	-103.783	-27.4515
-102.993	-104.526	-33.6327	-22.1914	-112.923	-105.046	-27.4533
-104.504	-100.06	-33.4961	-23.1776	-103.621	-102.442	-27.3816
-106.151	-100.466	-33.5113	-24.2947	-108.483	-102.155	-27.3916
-110.574	-107.95	-33.4462	-25.4334	-110.388	-103.293	-27.3162
-113.503	-104.832	-33.6739	-26.5687	-105.509	-104.569	-27.3268
-109.691	-108.239	-33.5561	-27.8983	-104.952	-106.455	-27.1384
-105.281	-102.876	-33.6788	-29.3766	-105.427	-109.297	-27.0323
-105.95	-103.093	-33.0467	-30.7435	-108.376	-119.478	-26.6243
-124.527	-103.685	-32.7189	-32.0246	-105.602	-116.108	-26.4113
-109.545	-112.864	-31.7574	-32.2748	-104.915	-110.309	-25.9417
-111.279	-122.395	-30.8773	-31.4752	-111.574	-107.756	-25.5002
-105.608	-110.374	-30.1298	-29.9757	-107.598	-113.154	-25.1505
-104.562	-113.088	-29.1955	-28.2711	-105.277	-110.729	-24.6866
-108.172	-116.076	-28.3424	-26.9221	-109.899	-105.928	-24.265
-104.198	-107.243	-27.7126	-25.6839	-110.488	-115.06	-23.9681
-118.555	-109.729	-27.1214	-24.647	-111.58	-109.264	-23.6845
-124.701	-108.617	-26.5438	-23.807	-116.546	-111.517	-23.3844
-111.855	-109.974	-26.1596	-23.0508	-111.604	-107.949	-23.1955
-110.881	-112.108	-25.5723	-22.4691	-109.628	-117.72	-22.8841
-115.607	-111.162	-25.0879	-21.9981	-107.674	-108.598	-22.6345
-109.654	-108.309	-24.5221	-21.6113	-116.127	-106.63	-22.3017
-104.76	-112.971	-24.0133	-21.28	-109.276	-102.213	-21.9922
-108.375	-108.763	-23.6196	-20.9551	-129.883	-108.207	-21.7746
-106.612	-107.507	-23.23	-20.7714	-137.578	-118.807	-21.5206
-110.071	-108.934	-22.9494	-20.5993	-115.946	-120.888	-21.3604
-112.829	-105.789	-22.6143	-20.3554	-106.008	-108.601	-21.1272
-106.482	-110.267	-22.4009	-20.1395	-107.21	-109.66	-21.0147
-117.069	-108.824	-22.104	-19.9712	-109.829	-115.001	-20.838
-119.526	-107.299	-21.7469	-19.8051	-106.779	-105.49	-20.6028
-104.44	-104.758	-21.4226	-19.5999	-103.579	-119.121	-20.4088
-106.938	-103.454	-21.0942	-19.2486	-105.246	-106.858	-20.2052
-108.628	-103.996	-20.8302	-19.0836	-106.084	-101.06	-20.064
-103.778	-114.774	-20.5179	-18.7648	-111.108	-107.063	-19.8367
-105.12	-106.963	-20.3288	-18.3927	-108.943	-110.293	-19.7519
-103.962	-111.204	-20.1438	-18.1317	-105.549	-108.907	-19.6749
-127.085	-116.042	-19.9855	-17.7781	-113.683	-106.24	-19.6043
-103.647	-111.944	-19.7316	-17.4149	-107.867	-104.422	-19.4909
-107.176	-105.573	-19.5687	-17.0696	-112.785	-98.2128	-19.4389
-105.691	-110.779	-19.3822	-16.7216	-104.943	-98.9549	-19.3654
-102.913	-105.063	-19.1291	-16.3839	-104.063	-106.416	-19.2169
-105.856	-114.384	-18.9263	-16.019	-102.323	-103.96	-19.1041
-102.007	-103.084	-18.7311	-15.6929	-104.478	-106.366	-19.0122
-104.516	-107.6	-18.6406	-15.3761	-107.516	-101.377	-18.9877
-101.898	-103.84	-18.4979	-15.056	-102.618	-104.006	-18.9153
-101.56	-105.39	-18.4445	-14.7418	-102.737	-99.832	-18.9382
-102.434	-100.567	-18.3483	-14.4536	-104.875	-102.069	-18.9405
-106.106	-103.501	-18.2361	-14.2011	-103.381	-104.538	-18.8924
-103.715	-103.288	-18.0686	-13.8822	-104.376	-99.8314	-18.8497
-101.459	-100.509	-17.863	-13.6241	-103.73	-102.606	-18.727
-102.121	-105.561	-17.7368	-13.3323	-107.985	-102.732	-18.6663
-102.427	-100.158	-17.5316	-13.1011	-103.304	-102.983	-18.5378
-100.853	-105.401	-17.4175	-12.8447	-101.314	-99.7687	-18.5126
-98.492	-102.356	-17.3254	-12.6423	-102.84	-98.3786	-18.491

-102.426	-99.6826	-17.2523	-12.4451	-102.281	-102.054	-18.5097
-98.912	-99.5284	-17.1297	-12.3103	-98.4642	-99.508	-18.5059
-100.007	-98.2002	-17.1011	-12.1892	-105.848	-100.261	-18.5674
-103.401	-104.347	-17.1052	-12.0981	-97.1872	-103.277	-18.7192
-98.395	-101.14	-16.9552	-12.013	-110.155	-101.337	-18.6391
-106.288	-101.121	-16.8737	-12.0165	-98.9664	-99.2459	-18.6925
-102.119	-101.15	-16.8442	-12.0378	-98.381	-106.164	-18.758
-100.487	-99.4709	-16.7257	-12.0818	-105.655	-102.64	-18.717
-99.8973	-99.3944	-16.7373	-12.1447	-99.7039	-100.774	-18.825
-92.5683	-103.434	-16.7177	-12.3047	-94.3913	-96.4277	-18.8602
-101.954	-98.3527	-16.758	-12.4682	-96.197	-101.199	-19.0214
-97.8222	-97.9455	-16.838	-12.6759	-100.795	-94.9591	-19.1838
-96.6659	-100.847	-16.9254	-12.9009	-103.879	-104.307	-19.3913
-98.0144	-96.5685	-16.8769	-13.1293	-94.6459	-93.0364	-19.4421
-103.794	-102.123	-17.0406	-13.3797	-98.1368	-102.076	-19.7354
-100.37	-89.4495	-17.052	-13.7126	-96.2228	-95.9081	-19.8027
-92.1865	-94.9406	-17.0761	-14.0494	-96.2477	-103.175	-19.7759
-99.8258	-99.1592	-17.1716	-14.3172	-98.4459	-92.2634	-19.8706
-109.836	-90.1694	-17.3259	-14.6084	-93.3316	-99.8406	-20.0452
-94.4565	-95.29	-17.4732	-14.8402	-93.0487	-96.0256	-20.1325
-96.1089	-90.7304	-17.6075	-15.1338	-95.926	-95.7896	-20.3223
-92.9959	-93.6196	-17.6785	-15.3136	-95.2829	-93.1444	-20.4089
-99.1016	-91.3675	-17.7938	-15.4915	-102.043	-90.6462	-20.486
-96.4486	-94.2339	-17.9308	-15.578	-95.4961	-94.8872	-20.5505
-90.0885	-99.0892	-17.8994	-15.614	-89.3809	-92.2116	-20.6239
-91.6738	-95.0754	-17.9443	-15.6279	-95.3386	-94.0103	-20.4111
-90.3199	-93.9155	-17.9563	-15.6597	-94.6184	-92.7487	-20.2688
-96.2229	-103.169	-18.2396	-15.7721	-94.2472	-94.8471	-20.3714
-97.0515	-93.7001	-18.3963	-15.6804	-93.1294	-92.4353	-20.4507
-92.4096	-93.1735	-18.443	-15.6991	-93.0498	-97.4253	-20.2344
-93.218	-93.1928	-18.7023	-15.5583	-93.453	-98.6217	-20.2177
-94.6312	-93.9705	-18.9352	-15.5958	-93.4902	-85.4961	-20.4097
-98.8612	-91.362	-18.9686	-15.5267	-94.162	-94.9168	-20.1655
-90.5288	-97.5289	-19.0089	-15.486	-92.2778	-91.0356	-20.0542
-92.2152	-99.8067	-19.1285	-15.497	-96.2873	-95.3276	-19.9169
-93.757	-89.4601	-19.3953	-15.4907	-92.3032	-92.141	-19.7122
-89.1114	-90.6823	-19.587	-15.4925	-92.9719	-90.5128	-19.3898
-90.6229	-89.8778	-19.8273	-15.5668	-90.4096	-101.77	-19.4517
-87.5644	-90.5901	-20.0871	-15.6365	-90.2517	-89.0573	-19.1408
-91.3168	-87.6879	-20.4272	-15.6966	-95.693	-93.3553	-19.0944
-90.9967	-90.8772	-20.5361	-15.7639	-90.6947	-88.517	-18.6887
-92.4999	-90.079	-20.9149	-15.8536	-94.1099	-93.0922	-18.5695
-91.5668	-92.4292	-20.9125	-15.8906	-86.4449	-93.6604	-18.3573
-90.6486	-92.8746	-21.0729	-16.1399	-90.875	-86.9809	-18.1233
-88.63	-88.3521	-21.1083	-16.2352	-92.734	-88.2648	-17.7787
-86.9693	-88.3637	-21.0194	-16.4037	-86.2632	-90.3573	-17.5076
-91.8958	-88.0281	-21.2332	-16.4116	-89.727	-93.0208	-17.1272
-89.367	-93.8365	-21.4902	-16.4574	-86.9323	-93.5231	-16.9263
-86.9241	-86.7236	-21.4808	-16.4043	-88.6648	-90.2525	-16.8456
-87.8621	-86.5909	-21.7466	-16.2151	-89.9369	-89.3406	-16.6012
-87.827	-85.4541	-21.8498	-16.0058	-87.6857	-86.1499	-16.4531
-85.4259	-86.3615	-21.7987	-15.6481	-90.0451	-89.6303	-16.262
-88.3959	-86.321	-21.8018	-15.2629	-86.3336	-91.5157	-15.9721
-88.2445	-88.7956	-21.49	-14.8521	-87.1554	-91.8767	-15.8307
-90.6713	-86.8422	-21.5281	-14.5942	-88.6616	-90.2596	-15.6355

-87.1379	-90.4061	-21.5905	-14.1514	-87.7914	-86.2226	-15.4064
-87.5327	-85.0717	-21.6328	-13.8081	-88.5011	-87.4563	-15.3057
-88.4141	-87.0584	-21.5383	-13.42	-93.5437	-88.5998	-15.1565
-86.3364	-88.5754	-21.4979	-13.0898	-90.2656	-90.7299	-14.9971
-88.3666	-85.7548	-21.4403	-12.781	-89.0925	-90.4056	-14.8854
-87.7591	-86.3037	-21.7877	-12.6166	-86.5809	-84.8747	-15.0065
-88.6704	-88.7275	-21.5905	-12.443	-87.9807	-90.1951	-14.7376
-93.9337	-84.6782	-21.3734	-12.3105	-89.1414	-91.1767	-14.5985
-85.0181	-84.6941	-21.4022	-12.1142	-87.897	-91.6705	-14.5514
-86.8719	-86.1932	-20.9916	-12.1087	-88.9685	-90.0311	-14.3081
-86.0601	-85.8569	-20.9994	-12.0347	-87.0018	-84.6283	-14.2644
-85.9402	-84.9226	-20.8692	-11.9485	-93.5936	-86.247	-14.181
-85.5328	-85.6078	-20.484	-11.9618	-84.8542	-89.9115	-13.9777
-84.7191	-83.5622	-20.2267	-12.0134	-87.5527	-85.7069	-13.873
-84.9246	-84.4128	-19.9406	-12.0593	-86.6995	-86.9457	-13.775
-85.9201	-84.0034	-19.6722	-12.2933	-87.2884	-85.8006	-13.6619
-84.4213	-85.8654	-19.3769	-12.3187	-87.2204	-86.016	-13.5962
-83.1475	-83.1654	-19.0042	-12.6944	-87.055	-89.7648	-13.4406
-82.033	-84.3161	-18.5582	-12.8831	-83.2373	-84.5478	-13.2537
-82.139	-86.8697	-18.1321	-13.2139	-85.1647	-85.228	-13.1113
-84.1533	-82.4092	-17.6461	-13.524	-86.4481	-86.629	-12.9368
-83.2661	-84.499	-17.3895	-14.123	-85.0179	-84.2881	-12.8732
-81.7285	-82.3276	-17.1313	-14.817	-84.835	-84.0123	-12.8638
-82.6557	-82.0437	-16.979	-15.3703	-83.6875	-84.8413	-12.932
-81.7246	-82.4503	-16.5653	-16.1504	-84.0512	-81.8206	-12.7462
-82.074	-81.9262	-16.1303	-16.8228	-82.8802	-83.9197	-12.6174
-82.3358	-82.4244	-15.8229	-17.7596	-83.8198	-82.0623	-12.59
-80.7767	-79.7811	-15.4754	-18.3572	-82.3229	-81.3692	-12.4614
-80.4749	-80.4101	-15.2252	-19.3568	-79.7618	-81.575	-12.4598
-79.7893	-79.2835	-15.0656	-19.7012	-80.0504	-80.9896	-12.5058
-79.6452	-80.7336	-14.7006	-19.8987	-83.628	-81.1339	-12.41
-78.1039	-79.4281	-14.4502	-19.9283	-81.2332	-80.2172	-12.3881
-79.2214	-78.7639	-14.1573	-19.599	-81.9006	-78.5932	-12.331
-78.2622	-76.8276	-13.9979	-19.4587	-79.9995	-79.725	-12.3742
-78.6527	-77.5515	-13.6107	-19.3748	-80.558	-80.2738	-12.244
-77.52	-78.0351	-13.3271	-19.2894	-80.0037	-80.0089	-12.1984
-77.6149	-77.3738	-13.0692	-19.0222	-78.8548	-79.1065	-12.1874
-77.5854	-77.8671	-12.8088	-19.3073	-79.8155	-78.7404	-12.0958
-77.858	-76.7134	-12.6529	-19.198	-77.5029	-78.2369	-12.1695
-77.5172	-76.9449	-12.4154	-19.03	-78.4512	-79.0557	-12.1256
-77.3505	-76.7659	-12.0195	-19.5918	-78.3369	-77.9145	-11.9454
-76.8854	-76.8375	-11.7848	-19.9942	-77.7778	-78.9078	-11.8649
-76.5839	-76.2094	-11.5204	-20.5406	-78.0479	-78.076	-11.8172
-76.3198	-75.2892	-11.3406	-20.626	-77.4399	-75.97	-11.7866
-76.1602	-75.9566	-11.0008	-20.4317	-77.6106	-78.2073	-11.6377
-75.9211	-76.1133	-10.7401	-20.5778	-77.0186	-77.895	-11.5491
-76.029	-74.8599	-10.6078	-20.4434	-76.9738	-75.665	-11.5708
-75.4863	-75.2048	-10.4216	-19.5556	-76.2076	-77.7179	-11.5408
-75.448	-76.2886	-10.2674	-18.8497	-76.3021	-77.0605	-11.5483
-75.7356	-76.0745	-10.0221	-18.5472	-76.9844	-77.2415	-11.4469

J1-J6

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-5.17018	-98.0885	-93.3376	-17.9991
-19.2681	-89.8877	-88.6029	-27.5778
-22.7065	-86.5348	-87.5701	-27.6166
-20.3973	-85.2214	-85.2162	-27.3208
-19.3633	-84.1125	-84.603	-26.9665
-18.9252	-83.6544	-83.8462	-26.6238
-18.8063	-84.1942	-83.5978	-26.2199
-18.8403	-84.305	-84.1336	-25.9396
-18.9948	-84.7325	-84.2853	-25.7322
-19.2425	-84.5959	-84.541	-25.5177
-19.476	-85.2885	-85.2533	-25.3111
-19.7503	-85.5558	-85.7394	-24.996
-20.1416	-86.6568	-85.7378	-24.8464
-20.5033	-86.079	-86.5099	-24.6279
-20.7654	-87.0398	-87.0957	-24.4418
-20.973	-87.1029	-87.6159	-24.2329
-21.2331	-88.4977	-87.7412	-24.0326
-21.3111	-88.5279	-88.4351	-23.9047
-21.4148	-89.208	-90.1663	-23.7813
-21.3895	-90.127	-88.9361	-23.5943
-21.3373	-90.5809	-90.3924	-23.385
-21.2561	-89.7469	-90.903	-23.1766
-21.0097	-90.7351	-90.9012	-23.0523
-20.8125	-91.6432	-92.3676	-22.9337
-20.5279	-90.9968	-91.3611	-22.7584
-20.2838	-92.7648	-91.361	-22.704
-20.11	-94.2536	-93.2621	-22.5783
-19.861	-92.7964	-92.4067	-22.5186
-19.5935	-93.5417	-93.7322	-22.5931
-19.3288	-93.2502	-95.3602	-22.6831
-19.0495	-93.8904	-94.1293	-22.8141
-18.6853	-96.1323	-95.1125	-22.8544
-18.3668	-93.7348	-94.8905	-22.7576
-18.1223	-93.2404	-94.0303	-22.6336
-18.0117	-96.5052	-94.5667	-22.3355
-18.0497	-94.7531	-95.5893	-22.0744
-18.1943	-96.4771	-95.2591	-21.7527
-18.4085	-95.8823	-95.916	-21.4594
-18.749	-96.5222	-99.375	-21.2667
-19.215	-95.4363	-98.0024	-21.0765
-19.7368	-96.7658	-96.3197	-20.8751

J1-J7

S11 (dB)	S21 (dB)	S12 (dB)
-5.16652	-91.6956	-92.4965
-19.2609	-93.9765	-94.0228
-22.6982	-93.8487	-96.2281
-20.3956	-92.2907	-93.7472
-19.3616	-92.3857	-91.4147
-18.9272	-93.8931	-92.1337
-18.8082	-92.9435	-92.7718
-18.8411	-93.675	-93.4582
-18.9946	-95.6688	-95.5107
-19.2421	-94.5884	-95.1387
-19.4761	-97.0511	-96.4251
-19.752	-96.2829	-97.6993
-20.1427	-99.751	-97.5859
-20.504	-99.2186	-100.935
-20.7674	-97.7371	-98.9412
-20.9785	-104.33	-101.465
-21.2362	-104.224	-99.9725
-21.3129	-102.217	-98.4543
-21.4181	-100.164	-101.14
-21.3932	-108.481	-111.888
-21.3397	-110.132	-105.801
-21.2582	-103.009	-107.417
-21.0113	-103.537	-101.107
-20.815	-110.641	-103.58
-20.5282	-104.92	-106.806
-20.2833	-120.393	-105.332
-20.1085	-104.545	-106.209
-19.856	-113.792	-105.887
-19.591	-111.505	-107.426
-19.3272	-108.667	-110.124
-19.0501	-105.235	-114.739
-18.6842	-106.122	-109.674
-18.365	-111.289	-119.367
-18.1206	-105.474	-110.388
-18.0106	-115.122	-107.068
-18.0498	-109.693	-107.175
-18.193	-114.258	-111.67
-18.4081	-109.896	-109.144
-18.7457	-128.53	-106.131
-19.2107	-112.554	-111.137
-19.7306	-105.838	-108.396

-20.4232	-98.1859	-100.095	-20.7455	-20.4178	-106.963	-106.808
-21.2213	-98.6805	-96.5715	-20.5497	-21.215	-108.079	-109.12
-22.1951	-96.7984	-98.605	-20.409	-22.1917	-109.813	-117.444
-23.1823	-97.0056	-102.14	-20.2495	-23.1782	-103.761	-105.534
-24.2989	-97.3976	-101.088	-20.1369	-24.2919	-120.564	-111.175
-25.435	-99.9487	-98.0372	-20.0035	-25.4303	-107.518	-118.295
-26.5671	-98.6486	-98.2635	-19.9093	-26.5591	-109.129	-113.544
-27.897	-99.5179	-103.427	-19.7389	-27.8969	-119.353	-103.63
-29.3731	-97.2537	-100.268	-19.5849	-29.381	-109.948	-107.801
-30.7352	-104.958	-101.904	-19.2856	-30.7529	-104.006	-105.492
-32.0183	-97.6825	-99.5729	-19.0685	-32.0525	-121.585	-105.589
-32.2749	-105.251	-103.403	-18.7233	-32.2865	-102.463	-105.697
-31.4872	-100.16	-104.425	-18.4243	-31.4837	-106.025	-109.352
-29.9929	-101.528	-110.044	-18.16	-29.9873	-103.774	-105.79
-28.2779	-103.388	-99.9702	-17.8756	-28.2764	-101.852	-104.062
-26.9309	-99.4012	-104.979	-17.6114	-26.9304	-108.95	-122.032
-25.6856	-105.251	-106.623	-17.4015	-25.6833	-110.303	-109.688
-24.6487	-103.551	-106.806	-17.179	-24.6471	-109.381	-110.883
-23.8095	-100.387	-102.906	-16.9352	-23.8058	-100.712	-103.974
-23.0535	-103.906	-101.773	-16.7452	-23.0483	-109.054	-104.285
-22.4725	-103.349	-100.784	-16.5069	-22.4726	-108.015	-104.689
-21.9977	-104.924	-101.767	-16.3165	-22.0002	-113.883	-100.634
-21.6168	-103.743	-107.446	-16.1345	-21.6137	-100.792	-105.596
-21.2818	-107.889	-100.432	-15.952	-21.2818	-102.42	-106.285
-20.9597	-105.179	-109.341	-15.8189	-20.9527	-109.992	-111.601
-20.7767	-104.992	-102.671	-15.6413	-20.7754	-109.907	-101.534
-20.6043	-106.787	-104.666	-15.5059	-20.5978	-103.579	-101.444
-20.362	-104.51	-105.519	-15.3294	-20.3549	-100.793	-101.551
-20.1467	-103.977	-104.096	-15.2026	-20.1448	-99.3379	-105.626
-19.9757	-102.828	-107.435	-15.07	-19.972	-103.597	-107.399
-19.8105	-107.287	-107.59	-14.9231	-19.8081	-99.1704	-99.7929
-19.6079	-106.243	-103.385	-14.8089	-19.6037	-100.461	-101.818
-19.2533	-115.818	-104.428	-14.6759	-19.2463	-100.457	-104.25
-19.0898	-104.167	-108.72	-14.567	-19.0899	-100.036	-106.898
-18.7666	-116.21	-104.095	-14.4208	-18.7666	-100.96	-103.828
-18.3919	-112.886	-106.01	-14.3342	-18.3945	-99.0536	-96.5898
-18.1307	-105.27	-105.41	-14.2335	-18.1378	-100.176	-96.3482
-17.775	-103.024	-107.558	-14.1765	-17.7838	-100.235	-96.9325
-17.4111	-104.043	-113.94	-14.1103	-17.419	-99.668	-99.1578
-17.0646	-113.573	-115.986	-14.0654	-17.0736	-97.768	-99.5317
-16.7169	-105.606	-110.395	-14.0084	-16.7256	-102.179	-99.0154
-16.3799	-105.359	-110.875	-13.9161	-16.3882	-99.6304	-98.6245
-16.0177	-113.094	-104.126	-13.8533	-16.0221	-98.8258	-96.4476
-15.6926	-104.473	-106.383	-13.8259	-15.6959	-96.3647	-97.8175
-15.3766	-109.3	-107.706	-13.7987	-15.3798	-98.7129	-97.198
-15.0577	-104.239	-119.725	-13.7616	-15.0565	-97.6177	-99.0504
-14.7468	-105.142	-111.99	-13.7597	-14.7466	-96.3414	-97.104
-14.4588	-106.354	-111.798	-13.7404	-14.4544	-98.186	-96.1753
-14.2053	-118.721	-112.353	-13.7222	-14.2031	-97.5306	-96.3863
-13.8884	-105.817	-112.05	-13.68	-13.8855	-99.0451	-97.2062
-13.6292	-111.607	-108.351	-13.6249	-13.6223	-100.38	-99.0622
-13.3381	-104.728	-106.259	-13.6172	-13.3361	-97.8069	-97.9594
-13.1036	-102.788	-100.225	-13.5643	-13.102	-96.3407	-95.4728
-12.851	-110.789	-105.923	-13.5635	-12.8452	-96.4469	-95.6974
-12.6447	-105.181	-102.508	-13.5886	-12.6415	-96.2625	-97.3393

-12.4476	-104.292	-100.129	-13.5985	-12.4472	-97.7518	-94.9129
-12.3141	-102.704	-109.752	-13.5754	-12.3146	-97.8791	-95.2598
-12.191	-105.866	-112.957	-13.6316	-12.1913	-96.5565	-95.6653
-12.0965	-104.091	-101.486	-13.7108	-12.0978	-94.1414	-96.9729
-12.0152	-102.126	-103.445	-13.7062	-12.0193	-96.2814	-99.2537
-12.0168	-100.494	-101.908	-13.7922	-12.0171	-96.5439	-97.5068
-12.0394	-103.474	-111.024	-13.8811	-12.0429	-94.5807	-96.1408
-12.0825	-102.423	-103.692	-13.8799	-12.0844	-94.9434	-94.3318
-12.1458	-100.718	-100.515	-13.9584	-12.1459	-95.3113	-94.5295
-12.3076	-96.2237	-119.088	-13.9996	-12.3098	-95.1132	-89.7745
-12.4691	-101.273	-101.986	-14.0789	-12.4667	-93.2307	-98.3257
-12.6783	-103.021	-95.9772	-14.1716	-12.6796	-93.7098	-93.4312
-12.902	-102.608	-99.3592	-14.3396	-12.9035	-96.2007	-91.7931
-13.1307	-99.0868	-97.9256	-14.4024	-13.1303	-94.1567	-94.439
-13.3819	-97.1299	-91.8595	-14.6366	-13.3824	-96.0964	-93.5192
-13.7147	-103.447	-98.2025	-14.7513	-13.7125	-94.3296	-95.5293
-14.0498	-94.5978	-97.2461	-14.7997	-14.051	-91.0332	-91.1655
-14.3187	-96.2502	-94.9479	-14.9308	-14.3167	-90.1252	-90.374
-14.6104	-95.2628	-111.201	-15.0865	-14.6036	-91.5076	-93.8417
-14.8494	-95.847	-101.014	-15.2073	-14.842	-92.013	-89.1019
-15.14	-108.037	-96.2478	-15.3438	-15.1384	-93.9766	-90.9144
-15.3149	-93.8034	-100.409	-15.463	-15.3095	-101.908	-86.8807
-15.4956	-100.968	-97.6336	-15.5956	-15.4921	-90.4679	-89.0805
-15.5832	-96.4589	-101.349	-15.7565	-15.5729	-91.2118	-86.4159
-15.6216	-89.8495	-94.0471	-15.8868	-15.6154	-90.1399	-91.6118
-15.6299	-94.5313	-93.9828	-15.9131	-15.6284	-91.7609	-89.5934
-15.6575	-97.2396	-93.29	-15.9499	-15.6545	-91.8716	-88.2997
-15.7746	-99.1119	-123.999	-16.1529	-15.773	-87.776	-89.313
-15.6802	-100.166	-107.79	-16.2984	-15.677	-89.3236	-89.5079
-15.6981	-100.415	-96.1213	-16.2598	-15.6989	-90.0672	-90.0187
-15.5573	-92.8745	-98.1659	-16.369	-15.5607	-89.7733	-91.8977
-15.5931	-96.8372	-92.8769	-16.5824	-15.5951	-91.1143	-90.9546
-15.5236	-103.4	-110.038	-16.5355	-15.5274	-92.6202	-92.372
-15.4823	-94.0479	-88.6375	-16.5855	-15.4853	-88.877	-87.6687
-15.4926	-92.2928	-96.389	-16.6526	-15.4974	-86.9094	-87.2338
-15.4896	-93.4852	-93.1524	-16.7005	-15.4885	-89.9307	-87.8025
-15.4884	-96.2051	-88.8723	-16.6549	-15.4879	-87.4744	-87.3438
-15.5667	-95.1714	-89.2764	-16.807	-15.5663	-88.9006	-86.1763
-15.6342	-95.1278	-90.6199	-16.701	-15.6354	-87.0411	-89.4953
-15.6967	-93.6808	-92.6949	-16.7557	-15.693	-87.7574	-88.569
-15.7651	-89.8358	-88.5587	-16.5644	-15.7653	-86.2144	-87.5171
-15.8562	-88.5972	-91.9251	-16.5871	-15.852	-87.1418	-86.9383
-15.8949	-89.2157	-90.3667	-16.5255	-15.8845	-88.6818	-85.8653
-16.1426	-90.3864	-89.651	-16.4738	-16.1359	-85.6478	-86.6685
-16.2336	-90.086	-87.2959	-16.3028	-16.2277	-83.5658	-85.8335
-16.4049	-92.0277	-94.7991	-16.1727	-16.4037	-83.8298	-85.7326
-16.4122	-89.436	-90.0601	-15.9745	-16.4074	-86.3141	-83.4259
-16.459	-94.6346	-88.7329	-15.8648	-16.4567	-84.2956	-84.1798
-16.4078	-90.2873	-88.9808	-15.8399	-16.4048	-85.8599	-86.8855
-16.217	-89.777	-92.911	-15.6559	-16.2175	-86.567	-83.6981
-16.0084	-94.4794	-89.5856	-15.5547	-16.0077	-85.72	-85.648
-15.6445	-87.5615	-95.8877	-15.4289	-15.6478	-85.8977	-83.4054
-15.2671	-90.0793	-96.5616	-15.2316	-15.2732	-86.7257	-83.2849
-14.8547	-90.0716	-88.1273	-15.1639	-14.856	-85.9982	-85.0697
-14.5917	-91.6423	-86.5601	-15.0549	-14.6	-85.3224	-85.0866

-14.1541	-87.6112	-88.7098	-14.8321	-14.1567	-84.3539	-85.3024
-13.8106	-89.6398	-90.2979	-14.7184	-13.8146	-85.0815	-84.9902
-13.425	-90.6683	-88.369	-14.5954	-13.4269	-86.0692	-84.035
-13.0965	-87.4904	-90.0508	-14.4428	-13.0952	-86.7049	-86.1312
-12.7864	-87.0289	-87.2753	-14.2872	-12.7921	-84.6272	-84.5097
-12.6195	-85.7987	-88.3969	-14.3871	-12.6246	-85.0405	-83.4714
-12.4465	-91.2547	-85.2473	-14.0731	-12.4514	-84.2215	-85.6644
-12.3156	-90.2835	-91.3314	-13.9579	-12.3166	-84.6652	-84.0474
-12.1189	-88.6321	-86.9679	-13.8935	-12.1241	-83.5811	-83.5326
-12.1136	-88.1644	-88.7197	-13.6381	-12.1205	-83.5302	-84.112
-12.0356	-88.8807	-87.079	-13.547	-12.0351	-84.9267	-85.2072
-11.9487	-88.2453	-84.4588	-13.3933	-11.9566	-83.091	-85.1125
-11.9641	-87.1798	-85.6126	-13.1488	-11.971	-84.548	-83.726
-12.0155	-85.917	-86.5472	-12.9687	-12.0215	-83.8305	-83.9318
-12.0636	-84.4744	-86.1056	-12.8213	-12.0763	-84.0416	-83.3163
-12.2999	-85.8218	-86.5576	-12.6528	-12.3111	-84.2513	-83.2237
-12.3184	-83.2613	-84.0387	-12.5775	-12.337	-82.8074	-82.6509
-12.6978	-86.275	-89.3842	-12.4051	-12.7056	-81.2401	-84.1999
-12.884	-83.6719	-87.7784	-12.1851	-12.8964	-82.4383	-83.1202
-13.209	-84.4713	-85.3724	-11.9773	-13.2246	-80.9008	-83.0089
-13.531	-83.143	-85.3159	-11.7537	-13.5443	-80.1956	-82.2515
-14.1239	-85.5003	-87.5748	-11.6251	-14.1386	-81.1544	-79.3122
-14.8227	-88.5001	-86.4079	-11.547	-14.8345	-80.5719	-80.1484
-15.3692	-83.6298	-84.5938	-11.5165	-15.3797	-79.7454	-79.7072
-16.1557	-82.4207	-84.318	-11.2935	-16.1669	-80.276	-81.1463
-16.8214	-82.0227	-83.4096	-11.0837	-16.8316	-79.0273	-78.3474
-17.764	-81.6834	-82.0592	-11.0027	-17.7718	-79.1148	-79.2124
-18.3573	-81.6205	-81.8993	-10.8093	-18.3717	-79.9551	-78.2435
-19.3541	-82.3233	-80.0871	-10.7495	-19.3577	-77.9253	-78.8504
-19.702	-81.1016	-82.7449	-10.6729	-19.7169	-78.1085	-78.1602
-19.9005	-82.5632	-81.3293	-10.4765	-19.8978	-77.0781	-78.4235
-19.9234	-82.4652	-81.3812	-10.3608	-19.933	-77.4534	-77.9459
-19.6025	-80.4204	-80.9585	-10.2347	-19.614	-76.251	-77.8506
-19.4632	-80.0736	-81.797	-10.2053	-19.4614	-76.2417	-76.1834
-19.3787	-80.099	-79.1326	-10.0163	-19.3823	-76.3521	-76.3138
-19.2875	-80.2222	-79.2475	-9.88472	-19.2982	-75.102	-75.738
-19.0179	-79.698	-79.9103	-9.80363	-19.0175	-76.0096	-76.1869
-19.31	-78.9783	-79.6468	-9.69791	-19.3097	-75.2701	-75.8363
-19.1936	-79.0285	-79.2389	-9.6938	-19.1939	-75.946	-76.2897
-19.0316	-79.2194	-77.5952	-9.58979	-19.0381	-74.9496	-74.9671
-19.5962	-77.9635	-78.7153	-9.36844	-19.6029	-74.79	-74.6073
-19.9923	-78.0831	-78.7609	-9.32563	-19.9888	-74.3206	-74.9674
-20.5416	-79.1468	-78.3546	-9.21515	-20.5563	-74.7411	-75.1456
-20.6091	-77.6465	-77.2453	-9.21035	-20.6309	-74.4946	-74.6032
-20.42	-77.6972	-78.5031	-9.04097	-20.4402	-74.1125	-74.4953
-20.5739	-77.3589	-77.9235	-8.94144	-20.6063	-73.663	-73.4205
-20.4378	-76.5058	-76.9719	-8.94007	-20.4607	-74.0694	-72.8429
-19.546	-77.3586	-76.4701	-8.88464	-19.5691	-73.633	-73.5946
-18.8537	-76.9327	-77.2976	-8.84129	-18.8638	-73.6325	-73.9924
-18.5519	-77.4024	-77.0122	-8.71248	-18.5633	-73.2451	-73.1618

J1-J8

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-18.0229	-17.8002	-95.3687	-96.677	-17.6188	-17.7705
-28.9489	-28.3608	-111.512	-102.853	-28.5491	-28.2007
-28.4725	-28.7016	-105.852	-104.528	-29.1097	-28.5725
-27.9787	-28.2964	-111.651	-110.086	-28.9461	-28.1942
-27.6541	-27.9535	-115.912	-109.561	-28.6719	-27.8499
-27.5047	-27.6571	-117.288	-112.328	-28.4779	-27.5482
-27.3811	-27.4777	-116.987	-124.415	-28.2709	-27.3581
-27.3117	-27.3083	-120.3	-104.811	-28.1139	-27.1862
-27.4774	-27.2785	-110.695	-117.344	-28.1444	-27.1576
-27.5114	-27.275	-106.101	-112.196	-28.0505	-27.1509
-27.6287	-27.1382	-119.052	-118.04	-28.0455	-27.0168
-27.6256	-27.0153	-108.406	-111.732	-27.9128	-26.8973
-27.8203	-27.0613	-105.982	-110.903	-27.9978	-26.9367
-27.9951	-27.0213	-108.045	-104.257	-28.0521	-26.8928
-28.3303	-27.0493	-112.133	-111.439	-28.2328	-26.9112
-28.5777	-27.0619	-112.431	-117.233	-28.3484	-26.9248
-28.8412	-26.9037	-110.986	-138.426	-28.4502	-26.769
-29.1455	-27.1176	-110.607	-111.018	-28.6165	-26.9855
-29.5185	-27.1547	-110.991	-105.472	-28.8027	-27.0228
-29.7481	-27.1964	-114.401	-108.712	-28.8034	-27.0592
-30.148	-27.2258	-116.705	-113.331	-28.8844	-27.0757
-30.5119	-27.1832	-103.769	-109.085	-28.9752	-27.0278
-31.1006	-27.4521	-110.614	-101.666	-29.2473	-27.285
-32.0649	-27.5573	-127.622	-105.372	-29.7092	-27.3867
-32.8596	-27.8664	-106.147	-106.798	-30.0621	-27.6888
-34.114	-28.1177	-109.1	-113.273	-30.6826	-27.9338
-35.1344	-28.3475	-112.045	-119.454	-31.1622	-28.1569
-36.8786	-28.8128	-118.762	-108.129	-31.8151	-28.6024
-39.2457	-29.4324	-114.231	-113.602	-32.806	-29.1935
-42.421	-30.0077	-119.117	-122.668	-33.9721	-29.7437
-46.7435	-30.316	-121.887	-120.723	-35.6717	-30.0418
-47.5677	-30.3552	-128.96	-114.745	-37.681	-30.0834
-44.449	-30.2337	-106.238	-110.136	-39.4534	-29.97
-41.9878	-29.9889	-124.077	-112.315	-41.4038	-29.7373
-41.6655	-29.7222	-113.137	-109.288	-41.5647	-29.4705
-41.4828	-29.5712	-120.075	-108.279	-41.3116	-29.3205
-43.8782	-29.5469	-115.244	-113.755	-39.9951	-29.2943
-47.504	-29.5718	-116.152	-109.346	-38.592	-29.3195
-52.3541	-29.6341	-130.72	-117.673	-37.6368	-29.3815
-51.3882	-29.5889	-111.322	-116.823	-36.4469	-29.343
-45.4719	-29.6148	-114.469	-104.837	-35.3463	-29.3826

-41.8357	-29.6127	-109.282	-124.125	-34.485	-29.3968
-39.1822	-29.471	-114.964	-112.336	-33.6048	-29.2699
-37.2299	-29.4712	-112.492	-118.011	-32.8899	-29.277
-36.0769	-29.5785	-115.959	-108.633	-32.3584	-29.3934
-34.936	-29.5444	-108.27	-111.614	-31.8405	-29.3573
-34.1716	-29.3244	-113.735	-111.472	-31.4787	-29.1591
-33.7669	-29.2009	-115.168	-116.664	-31.4378	-29.044
-33.7141	-28.7036	-115.746	-109.502	-31.398	-28.569
-33.6581	-28.3288	-107.78	-111.838	-31.4006	-28.2034
-33.4524	-27.8623	-109.673	-112.583	-30.9346	-27.7401
-32.9159	-27.2274	-117.163	-110.465	-30.4434	-27.1115
-32.0242	-26.6979	-117.259	-117.487	-29.5857	-26.5809
-31.1547	-26.1675	-115.156	-113.755	-28.9099	-26.0551
-30.1266	-25.6815	-118.419	-108.245	-28.1566	-25.5719
-29.3418	-25.1407	-113.009	-114.756	-27.5918	-25.0365
-28.7763	-24.6952	-112.888	-113.066	-27.1384	-24.5988
-28.1976	-24.2314	-112.625	-107.567	-26.6485	-24.1396
-27.4638	-23.8463	-114.681	-111.413	-25.9817	-23.7534
-26.5986	-23.4448	-107.731	-119.675	-25.201	-23.3435
-25.7871	-23.1073	-108.139	-109.353	-24.4842	-23.0014
-25.009	-22.7399	-116.565	-112.837	-23.7829	-22.6309
-24.4527	-22.3663	-112.223	-121.886	-23.3239	-22.2556
-24.0142	-22.0305	-110.828	-115.128	-23.0181	-21.9207
-23.625	-21.7606	-113.722	-117.351	-22.7372	-21.6551
-23.4406	-21.4013	-117.655	-113.706	-22.6469	-21.2966
-23.03	-21.1975	-106.197	-118.842	-22.3291	-21.0912
-22.6759	-20.8663	-111.203	-115.884	-22.0499	-20.7572
-22.1261	-20.5552	-111.978	-110.666	-21.5527	-20.45
-21.7227	-20.2872	-110.924	-114.526	-21.1976	-20.1741
-21.3291	-20.0488	-114.682	-114.724	-20.8542	-19.936
-21.001	-19.7895	-106.779	-119.824	-20.5967	-19.6808
-20.7831	-19.6564	-125.146	-107.052	-20.4476	-19.5475
-20.5636	-19.384	-116.421	-126.08	-20.3074	-19.2842
-20.3278	-19.2259	-117.433	-114.127	-20.1436	-19.1311
-20.0508	-18.9806	-110.191	-116.122	-19.9674	-18.8858
-19.7302	-18.7848	-105.702	-109.539	-19.6813	-18.6862
-19.362	-18.6242	-113.908	-108.448	-19.3201	-18.5309
-19.0595	-18.4915	-108.768	-108.281	-19.033	-18.4069
-18.8072	-18.3785	-109.993	-115.343	-18.8215	-18.3156
-18.5646	-18.1805	-110.318	-104.885	-18.59	-18.1238
-18.3465	-18.0839	-116.954	-108.16	-18.4143	-18.0356
-18.1276	-17.971	-109.521	-122.238	-18.2571	-17.9267
-17.9681	-17.8489	-112.808	-110.41	-18.1777	-17.8097
-17.7967	-17.7095	-108.139	-111.798	-18.0766	-17.6761
-17.6568	-17.6375	-124.588	-111.442	-18.0157	-17.6095
-17.4675	-17.5622	-113.88	-117.393	-17.8787	-17.5403
-17.2651	-17.475	-110.762	-122.476	-17.7101	-17.4609
-17.0731	-17.47	-105.95	-117.976	-17.5441	-17.4498
-16.8808	-17.314	-106.098	-122.528	-17.3993	-17.2974
-16.6922	-17.3461	-106.963	-133.825	-17.2642	-17.3351
-16.5241	-17.2632	-114.262	-107.749	-17.1638	-17.2565
-16.4479	-17.2249	-112.538	-117.139	-17.1853	-17.2233
-16.3387	-17.1514	-122.004	-104.594	-17.1894	-17.1446
-16.235	-17.1862	-112.225	-106.823	-17.1802	-17.1828
-16.1395	-17.1738	-110.092	-123.303	-17.1703	-17.1676

-15.9295	-17.1768	-116.867	-114.868	-16.9651	-17.1735
-15.6718	-17.1088	-109.894	-104.587	-16.7	-17.1051
-15.4968	-17.0935	-111.857	-109.652	-16.5061	-17.0827
-15.403	-17.0851	-109.555	-117.937	-16.4213	-17.0705
-15.2718	-17.1141	-108.514	-112.811	-16.3335	-17.0969
-15.302	-17.1058	-114.264	-114.926	-16.4694	-17.0986
-15.32	-17.1094	-109.561	-106.47	-16.5793	-17.092
-15.1968	-17.1804	-113.401	-103.87	-16.529	-17.1616
-15.1278	-17.2632	-111.02	-121.769	-16.5202	-17.2415
-14.932	-17.1802	-97.6683	-104.542	-16.3112	-17.1568
-14.7658	-17.2159	-106.004	-114.761	-16.1237	-17.1857
-14.6283	-17.2891	-103.815	-100.451	-15.9506	-17.258
-14.583	-17.2274	-99.0114	-101.781	-15.8856	-17.2044
-14.5274	-17.3419	-109.801	-95.6835	-15.8728	-17.3257
-14.6756	-17.4113	-102.457	-102.587	-16.1192	-17.3969
-14.7474	-17.4077	-97.2418	-103.77	-16.3122	-17.3909
-14.7171	-17.3446	-106.431	-101.775	-16.383	-17.3294
-14.7203	-17.2361	-100.242	-94.3662	-16.473	-17.2168
-14.6926	-17.306	-98.1495	-112.009	-16.5048	-17.2927
-14.6003	-17.3618	-100.219	-97.4408	-16.3932	-17.3495
-14.4973	-17.3712	-100.171	-96.854	-16.2744	-17.3664
-14.4314	-17.3096	-103.517	-99.3496	-16.1966	-17.305
-14.4443	-17.2219	-112.08	-100.728	-16.2362	-17.2328
-14.5361	-17.2021	-95.4804	-102.703	-16.4032	-17.222
-14.6146	-17.1623	-99.7831	-96.4603	-16.6561	-17.1835
-14.65	-17.0051	-115.161	-107.891	-16.7892	-17.0184
-14.6284	-17.039	-113.764	-110.216	-16.8818	-17.0459
-14.7318	-16.9523	-101.844	-102.46	-17.0839	-16.9574
-14.6385	-16.8868	-106.271	-94.3675	-16.9928	-16.8852
-14.4485	-16.7979	-107.23	-109.808	-16.7339	-16.7951
-14.4123	-16.8216	-96.5677	-98.3588	-16.6279	-16.8109
-14.4867	-16.567	-100.158	-91.7007	-16.6927	-16.557
-14.4277	-16.5818	-102.277	-103.662	-16.5754	-16.5622
-14.4879	-16.4445	-118.06	-102.815	-16.6655	-16.417
-14.579	-16.3765	-105.88	-97.6613	-16.8411	-16.344
-14.6879	-16.2718	-97.1295	-99.3838	-17.0191	-16.2343
-14.6844	-16.1399	-103.279	-96.9336	-17.0355	-16.0992
-14.6636	-16.0424	-100.135	-97.0729	-17.0911	-16.0033
-14.5459	-15.9294	-98.4348	-104.654	-16.8392	-15.8905
-14.433	-15.8709	-95.5189	-93.0677	-16.5929	-15.8297
-14.2992	-15.7132	-103.283	-91.4755	-16.2787	-15.6665
-14.3329	-15.5897	-111.828	-111.779	-16.1616	-15.5522
-14.3374	-15.4761	-97.595	-93.1183	-16.1219	-15.4346
-14.4418	-15.4424	-105.995	-105.303	-16.2043	-15.4121
-14.4192	-15.2778	-100.625	-95.654	-16.1685	-15.2487
-14.3706	-15.1986	-108.345	-93.7018	-16.2449	-15.1867
-14.3038	-15.0148	-119.74	-100.188	-16.159	-15.0077
-14.1846	-14.9192	-104.857	-117.011	-15.9458	-14.9208
-14.0177	-14.7921	-101.551	-99.2003	-15.7838	-14.8069
-13.9384	-14.6382	-96.0304	-94.5298	-15.4627	-14.6518
-13.8892	-14.5334	-102.27	-98.4422	-15.2744	-14.5443
-13.8831	-14.3573	-112.171	-93.7101	-15.1697	-14.3721
-13.8966	-14.2075	-98.4952	-101.405	-15.1234	-14.2314
-13.9549	-14.0675	-97.7878	-102.101	-15.1904	-14.0783
-14.0068	-14.0576	-112.184	-106.201	-15.3617	-14.0779

-13.9899	-13.8413	-99.0389	-99.1706	-15.203	-13.8842
-13.8613	-13.7713	-98.9488	-110.289	-15.1161	-13.7925
-13.6387	-13.6052	-107.36	-97.841	-14.814	-13.6266
-13.6117	-13.4181	-110.665	-99.3906	-14.6287	-13.4364
-13.5035	-13.2431	-101.594	-100.956	-14.3936	-13.2506
-13.6728	-13.1174	-111.258	-99.9622	-14.4126	-13.1237
-13.6407	-12.9619	-91.8281	-109.148	-14.096	-12.9696
-13.6993	-12.8465	-112.188	-98.7198	-14.1457	-12.8574
-13.7873	-12.6124	-104.186	-97.5499	-14.1956	-12.618
-13.6725	-12.6192	-105.778	-101.838	-14.049	-12.623
-13.7063	-12.4113	-114.363	-109.249	-14.0223	-12.4078
-13.7078	-12.2635	-95.8877	-104.31	-13.9162	-12.2558
-13.5495	-12.093	-100.998	-97.6291	-13.5977	-12.0797
-13.4464	-12.0067	-96.8201	-100.713	-13.3279	-12.0025
-13.4893	-11.8696	-101.97	-95.3765	-13.1873	-11.856
-13.5386	-11.8256	-104.754	-93.041	-13.0464	-11.8145
-13.6385	-11.4694	-107.336	-104.227	-13.0159	-11.4624
-13.615	-11.393	-111.901	-99.2761	-12.9424	-11.3884
-13.6748	-11.1733	-105.461	-107.736	-12.909	-11.1655
-13.5652	-11.2038	-101.074	-112.17	-12.6929	-11.2011
-13.4659	-10.964	-108.66	-92.072	-12.5181	-10.9733
-13.4575	-10.9571	-100.687	-101.373	-12.3561	-10.9571
-13.5102	-10.8031	-100.398	-102.518	-12.215	-10.8176
-13.678	-10.5594	-99.7119	-99.2868	-12.1211	-10.5789
-13.5101	-10.5148	-104.233	-94.1034	-11.8065	-10.5394
-13.456	-10.3822	-103.669	-102.86	-11.568	-10.4141
-13.6054	-10.1504	-98.4878	-99.6933	-11.5254	-10.1646
-13.5566	-10.1118	-101.04	-96.0661	-11.3734	-10.1318
-13.6282	-9.8711	-98.1631	-97.9304	-11.3298	-9.88501
-13.6472	-9.84212	-103.101	-92.2269	-11.2225	-9.86309
-13.5524	-9.57213	-98.1021	-95.8137	-10.9593	-9.59372
-13.4718	-9.50811	-98.2157	-111.596	-10.7552	-9.52888
-13.3995	-9.43186	-102.633	-111.324	-10.5315	-9.45304
-13.4133	-9.29635	-96.7887	-101.765	-10.4284	-9.30728
-13.3416	-9.16798	-94.4537	-113.484	-10.2193	-9.18095
-13.3568	-9.05826	-96.5474	-107.811	-10.1028	-9.06822
-13.4182	-8.92102	-92.2898	-100.856	-10.046	-8.92942
-13.3695	-8.92679	-100.316	-95.2051	-9.98116	-8.9295
-13.4055	-8.8171	-99.6575	-99.2637	-9.9526	-8.82082
-13.3658	-8.64791	-106.913	-98.3626	-9.84589	-8.65353
-13.1765	-8.59867	-108.771	-96.1201	-9.60312	-8.59883
-13.0418	-8.53771	-103.528	-98.0388	-9.48404	-8.53831
-13.0454	-8.49686	-111.394	-94.2154	-9.3596	-8.48752
-13.0729	-8.48484	-105.133	-100.574	-9.35654	-8.48844
-13.0137	-8.3273	-103.853	-103.561	-9.21661	-8.3161
-12.9953	-8.3485	-98.8569	-112.551	-9.17807	-8.33733
-13.0429	-8.24634	-101.738	-97.8953	-9.20767	-8.2415
-13.0036	-8.32273	-96.196	-100.552	-9.18236	-8.32319
-12.9808	-8.29464	-101.272	-96.7385	-9.13315	-8.29912
-12.7358	-8.19466	-101.467	-104.043	-8.91526	-8.20607

J2-J3

S21 (dB)	S12 (dB)	S22 (dB)
-96.7288	-103.817	-17.6057
-96.2725	-94.2426	-28.9151
-92.7074	-93.7784	-29.5279
-93.3955	-92.735	-29.2575
-93.3642	-93.0389	-28.9029
-93.1084	-93.154	-28.5833
-95.215	-96.2451	-28.3116
-94.4815	-93.9331	-28.1775
-98.3826	-97.1115	-28.2551
-99.6907	-99.5264	-28.1586
-102.585	-98.8574	-28.175
-100.134	-102.781	-28.0731
-106.747	-99.1009	-28.1382
-106.089	-109.852	-28.2082
-108.427	-106.765	-28.455
-105.976	-102.812	-28.5899
-109.186	-115.107	-28.6944
-103.456	-113.752	-28.8681
-109.794	-107.728	-29.1064
-119.172	-103.04	-29.359
-100.898	-108.496	-29.7746
-105.125	-111.152	-30.1435
-110.746	-116.173	-30.588
-115.844	-108.405	-31.2721
-115.125	-117.286	-31.7139
-116.792	-104.142	-32.3578
-112.941	-122.684	-32.9785
-110.567	-108.029	-34.1553
-126.15	-113.483	-34.8456
-105.829	-111.649	-34.6369
-135.986	-114.745	-33.4862
-115.604	-117.403	-32.2663
-109.1	-112.541	-31.3429
-116.135	-113.06	-30.8472
-115.759	-108.748	-31.0219
-107.871	-114.204	-31.1803
-117.858	-117.875	-31.9468
-106.198	-114.44	-32.4539
-113.663	-106.957	-32.6869
-115.522	-114.593	-32.8479
-137.804	-120.593	-33.0852

J2-J4

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.7669	-96.6197	-93.6731	-17.621
-28.2333	-109.189	-108.111	-28.7911
-28.6118	-111.327	-102.445	-28.8972
-28.2268	-98.7079	-106.935	-28.5222
-27.8879	-112.347	-102.557	-28.1577
-27.5881	-103.281	-105.732	-27.8477
-27.4014	-105.714	-112.334	-27.5781
-27.2334	-105.365	-103.44	-27.4749
-27.2076	-107.788	-114.438	-27.481
-27.2049	-107.677	-108.425	-27.3968
-27.0732	-118.857	-105.152	-27.3883
-26.954	-112.991	-111.015	-27.2308
-26.997	-109.216	-111.033	-27.2761
-26.9535	-117.68	-110.819	-27.2595
-26.9759	-110.637	-115.295	-27.3741
-26.9887	-124.614	-107.435	-27.4144
-26.8343	-121.898	-121.821	-27.4017
-27.0523	-116.931	-124.66	-27.4923
-27.0907	-111.173	-112.969	-27.5659
-27.1294	-107.385	-110.8	-27.6108
-27.1496	-110.546	-127.36	-27.6873
-27.1021	-105.089	-101.968	-27.7873
-27.3621	-109.502	-107.793	-28.0114
-27.4652	-122.296	-115.629	-28.2932
-27.771	-117.556	-108.637	-28.3964
-28.0183	-124.866	-115.951	-28.6662
-28.2467	-108.854	-105.911	-28.8173
-28.6969	-109.31	-113.843	-29.2279
-29.2989	-114.577	-117.958	-29.9163
-29.8569	-110.822	-121.252	-30.7059
-30.1594	-114.513	-111.26	-31.8076
-30.1971	-106.709	-106.143	-32.8233
-30.087	-116.336	-105.791	-33.2088
-29.851	-124.326	-110.934	-33.2404
-29.5806	-117.673	-117.355	-32.9048
-29.4321	-111.217	-116.639	-32.6792
-29.4056	-107.479	-113.161	-32.7646
-29.4316	-112.362	-106.927	-32.8401
-29.4917	-110.778	-116.227	-33.3461
-29.4516	-120.164	-122.635	-33.491
-29.4886	-116.652	-110.694	-33.5811

-108.508	-101.818	-33.3156	-29.4998	-109.406	-119.696	-33.4941
-109.273	-111.367	-33.6161	-29.3682	-111.205	-103.542	-33.3514
-113.686	-111.332	-33.7059	-29.3761	-113.694	-110.401	-33.2688
-117.098	-111.101	-33.597	-29.4901	-124.08	-122.601	-33.098
-114.978	-105.096	-33.2441	-29.4542	-110.48	-122.494	-33.1306
-121.602	-115.217	-32.901	-29.247	-119.317	-109.032	-33.2043
-109.768	-111.026	-32.5155	-29.1302	-112.678	-117.705	-33.5697
-111	-111.427	-32.7353	-28.6441	-113.784	-114.169	-33.5259
-108.997	-117.355	-32.8281	-28.2739	-110.032	-129.437	-33.6621
-121.618	-110.408	-33.7093	-27.8074	-106.12	-113.585	-32.9275
-119.014	-109.211	-34.1717	-27.1745	-113.718	-119.962	-32.5366
-123.158	-108.196	-35.0719	-26.6419	-114.891	-113.382	-31.5734
-114.673	-115.023	-35.6556	-26.1146	-113.629	-110.448	-30.8418
-114.284	-111.305	-35.5018	-25.6278	-111.697	-105.341	-30.1655
-110.908	-107.794	-35.397	-25.0913	-110.721	-110.295	-29.3356
-116.364	-113.279	-35.4419	-24.6507	-112.658	-107.898	-28.5066
-107.391	-108.964	-34.9065	-24.1903	-117.214	-113.11	-27.8452
-108.62	-105.729	-34.029	-23.8025	-123.378	-111.272	-27.1517
-106.005	-108.848	-32.8486	-23.3944	-108.461	-112.129	-26.5025
-109.276	-113.011	-31.7386	-23.0522	-113.463	-111.044	-26.1216
-124.874	-107.261	-31.1292	-22.6806	-112.614	-108.912	-25.5559
-118.388	-114.148	-30.6642	-22.3032	-104.877	-104.033	-25.1284
-110.647	-108.341	-29.8493	-21.9695	-108.094	-107.92	-24.5945
-118.331	-109.532	-29.159	-21.7026	-112.715	-109.894	-24.0993
-113.492	-112.612	-28.7122	-21.343	-114.587	-108.384	-23.6674
-113.861	-113.078	-27.935	-21.1378	-107.923	-109.192	-23.226
-114.42	-109.336	-27.4037	-20.8036	-109.185	-114.124	-22.9059
-109.869	-113.477	-26.7962	-20.4955	-118.74	-110.41	-22.5735
-118	-106.87	-26.4737	-20.2216	-109.31	-118.034	-22.379
-113.163	-121.023	-26.1272	-19.9826	-106.623	-109.863	-22.1162
-115.119	-106.11	-25.7372	-19.7274	-110.308	-115.559	-21.8161
-110.05	-115.342	-25.3995	-19.5915	-114.534	-108.925	-21.4941
-108.98	-104.726	-24.9325	-19.3248	-119.628	-107.709	-21.1398
-108.982	-108.986	-24.4921	-19.1705	-124.428	-112.771	-20.8426
-108.468	-121.165	-23.9764	-18.9236	-109.182	-107.361	-20.5251
-111.351	-118.443	-23.5938	-18.7241	-112.66	-117.115	-20.3266
-110.33	-109.164	-23.3011	-18.5683	-120.979	-109.94	-20.1502
-106.085	-113.889	-23.0525	-18.4407	-117.066	-108.777	-20.024
-103.818	-108.388	-22.8606	-18.3454	-109.166	-110.619	-19.8005
-115.608	-115.958	-22.5935	-18.1551	-113.216	-105.521	-19.6188
-120.142	-108.806	-22.3227	-18.0612	-115.943	-109.945	-19.3994
-106.776	-106.233	-21.9368	-17.9507	-113.1	-116.238	-19.1002
-110.969	-104.524	-21.583	-17.8326	-110.619	-118.651	-18.8675
-123.39	-110.244	-21.2543	-17.6981	-108.992	-120.145	-18.6618
-111.997	-104.902	-21.0694	-17.6312	-124.273	-110.408	-18.5769
-108.052	-117.903	-20.8424	-17.5565	-108.612	-110.999	-18.4516
-117.817	-108.115	-20.7414	-17.4753	-114.367	-108.923	-18.4142
-112.201	-106.561	-20.6411	-17.4651	-113.328	-106.722	-18.3186
-106.781	-115.944	-20.4401	-17.3114	-130.218	-102.947	-18.2029
-135.354	-122.261	-20.2383	-17.3481	-112.075	-111.023	-18.0147
-126.061	-106.355	-19.9152	-17.2662	-116.686	-128.371	-17.7817
-108.87	-118.376	-19.7086	-17.2322	-122.926	-111.822	-17.6649
-117.948	-106.334	-19.4369	-17.1536	-106.556	-117.282	-17.4829
-105.579	-110.285	-19.287	-17.1913	-117.345	-108.663	-17.378
-106.969	-111.697	-19.1489	-17.176	-108.909	-109.771	-17.3054

-113.568	-112.028	-19.0347	-17.1816	-113.899	-111.512	-17.2408
-114.33	-110.881	-18.9028	-17.1137	-113.069	-102.533	-17.1054
-105.774	-103.064	-18.7978	-17.0926	-106.887	-112.639	-17.0718
-117.295	-110.92	-18.802	-17.0784	-110.431	-114.833	-17.0569
-111.405	-118.149	-18.5723	-17.1059	-104.336	-104.699	-16.8962
-115.741	-106.957	-18.4994	-17.1086	-108.387	-116.168	-16.8355
-110.519	-106.55	-18.4272	-17.1039	-115.471	-113.95	-16.7984
-105.522	-104.242	-18.2494	-17.1737	-110.859	-112.721	-16.6703
-115.089	-112.598	-18.2261	-17.2533	-115.519	-114.939	-16.6714
-96.5503	-100.26	-18.1233	-17.169	-120.186	-99.4542	-16.6442
-100.954	-108.621	-18.1503	-17.202	-105.602	-98.5387	-16.6804
-100.084	-100.183	-18.1784	-17.2732	-103.639	-99.7904	-16.7533
-109.245	-98.8712	-18.2516	-17.2209	-102.809	-100.523	-16.8352
-102.176	-101.333	-18.2213	-17.3336	-98.8481	-107.448	-16.7911
-106.408	-108.571	-18.3998	-17.4058	-107.258	-92.8568	-16.9549
-104.51	-99.1744	-18.369	-17.3989	-99.2085	-96.1523	-16.9631
-98.8285	-94.5149	-18.2386	-17.3405	-100.824	-98.4598	-16.9772
-103.215	-102.137	-18.2321	-17.227	-109.772	-100.536	-17.0683
-107.947	-94.9513	-18.3147	-17.3046	-102.149	-110.828	-17.2305
-103.732	-96.1844	-18.3153	-17.3568	-102.849	-96.5426	-17.3837
-109.002	-95.8368	-18.4358	-17.3754	-97.1735	-99.8516	-17.5451
-98.2795	-93.9051	-18.4709	-17.3147	-101.256	-108.645	-17.64
-102.962	-95.884	-18.5035	-17.2363	-103.014	-105.716	-17.7614
-118.444	-107.991	-18.5039	-17.2264	-98.6615	-97.479	-17.881
-109.306	-96.6277	-18.4972	-17.1861	-99.5587	-99.142	-17.845
-98.6654	-112.806	-18.3162	-17.0268	-95.9368	-100.252	-17.885
-98.6971	-100.732	-18.197	-17.0512	-104.271	-101.106	-17.9026
-110.647	-92.278	-18.3221	-16.9601	-98.9865	-105.213	-18.2195
-98.1056	-116.61	-18.4116	-16.8948	-100.925	-109.239	-18.4008
-98.4081	-99.0723	-18.3243	-16.8053	-111.568	-98.7881	-18.4728
-98.0373	-105.152	-18.4479	-16.8228	-106.917	-114.925	-18.7515
-98.3595	-112.35	-18.7158	-16.5674	-101.822	-98.7022	-18.9866
-99.1146	-100.536	-18.5957	-16.5745	-107.951	-97.0324	-19.0094
-101.968	-101.739	-18.5544	-16.4319	-116.877	-103.517	-19.0243
-103.797	-114.242	-18.5223	-16.3601	-102.727	-98.928	-19.1483
-97.6706	-100.038	-18.5382	-16.2501	-103.121	-105.986	-19.4348
-102.083	-111.244	-18.471	-16.1146	-115.417	-105.271	-19.6639
-100.784	-98.0701	-18.7133	-16.0169	-104.859	-101.058	-19.9654
-107.895	-103.118	-18.7023	-15.905	-99.4936	-93.965	-20.2866
-106.852	-97.0946	-18.8722	-15.8423	-99.093	-105.345	-20.6104
-107.56	-104.846	-18.6777	-15.6827	-99.6762	-100.806	-20.6951
-101.901	-97.6678	-18.7841	-15.567	-104.286	-94.4258	-21.048
-93.1185	-105.252	-18.6816	-15.4504	-102.851	-93.3053	-20.9822
-97.8855	-96.9963	-18.5973	-15.4326	-104.254	-102.783	-21.1513
-98.8478	-104.962	-18.3895	-15.2616	-94.6805	-100.191	-21.1699
-96.17	-108.196	-18.2756	-15.1953	-100.375	-99.8573	-21.1218
-98.3464	-93.8451	-18.1451	-15.0134	-103.632	-92.8253	-21.3865
-97.1327	-102.633	-18.1586	-14.9252	-99.7239	-99.6393	-21.6064
-97.8717	-97.3245	-18.2444	-14.8072	-104.608	-100.372	-21.6168
-98.5314	-119.048	-18.1968	-14.6523	-95.9529	-97.7631	-21.8561
-103.158	-116.683	-18.1954	-14.5478	-99.39	-104.531	-21.8791
-104.378	-97.6598	-18.1407	-14.3749	-101.709	-107.276	-21.806
-96.7163	-106.438	-18.0026	-14.225	-99.5174	-108.499	-21.806
-103.633	-96.4691	-17.8475	-14.0864	-103.117	-98.3118	-21.4637
-110.707	-96.6784	-17.8595	-14.0771	-105.306	-109.471	-21.6041

-108.996	-99.1735	-17.8483	-13.8814	-96.8469	-107.439	-21.6154
-108.525	-95.0146	-17.8732	-13.7933	-103.199	-98.2843	-21.6186
-105.342	-94.4595	-17.8433	-13.6243	-107.048	-95.3584	-21.5422
-108.719	-92.4623	-17.8161	-13.4316	-102.216	-100.1	-21.4383
-99.6262	-107.821	-17.8238	-13.2488	-97.9378	-96.5028	-21.3779
-98.3056	-95.3547	-18.0918	-13.1239	-94.8139	-99.7112	-21.6505
-94.8482	-93.6723	-17.8683	-12.9696	-100.039	-97.8008	-21.3361
-93.6904	-100.914	-17.8856	-12.8576	-94.9862	-99.0011	-21.1846
-106.427	-99.3573	-17.964	-12.6207	-90.6835	-103.784	-21.1871
-98.6421	-97.3329	-17.7716	-12.624	-103.691	-98.9405	-20.7734
-96.2127	-97.5923	-17.8616	-12.4115	-100.014	-103.32	-20.7721
-99.6014	-98.1502	-17.9322	-12.2586	-107.096	-99.1486	-20.6891
-102.353	-100.202	-17.7721	-12.0864	-93.9499	-95.6292	-20.3017
-99.5901	-102.354	-17.7403	-11.9961	-97.7674	-115.063	-20.0706
-114.093	-100.068	-17.7067	-11.8656	-98.8576	-95.8696	-19.8278
-100.888	-92.4982	-17.6247	-11.8174	-112.521	-103.682	-19.5468
-105.431	-104.307	-17.597	-11.4635	-99.2764	-93.5587	-19.2726
-115.211	-103.991	-17.5101	-11.3891	-95.2091	-92.5162	-18.9275
-100.794	-97.2019	-17.3597	-11.17	-96.8782	-93.7823	-18.5266
-107.623	-100.733	-17.1769	-11.2037	-99.198	-93.0104	-18.0895
-98.7063	-110.753	-16.9528	-10.9742	-103.857	-95.9183	-17.6231
-101.148	-98.8558	-16.9794	-10.9591	-99.2306	-94.8228	-17.4013
-110.695	-110.139	-16.9338	-10.8131	-103.471	-101.908	-17.1539
-109.759	-99.4974	-17.0256	-10.576	-112.353	-101.601	-17.011
-93.657	-97.9864	-16.893	-10.5344	-95.8296	-96.2194	-16.637
-96.107	-92.1994	-16.6621	-10.4074	-104.121	-108.525	-16.1916
-111.044	-105.977	-16.5117	-10.1664	-105.705	-101.7	-15.8504
-108.515	-92.576	-16.3932	-10.126	-95.2028	-92.7112	-15.5163
-96.2922	-96.5938	-16.3223	-9.89058	-100.051	-96.2633	-15.2587
-106.803	-91.865	-16.3048	-9.86124	-100.003	-92.5295	-15.085
-101.04	-108.556	-16.0838	-9.58868	-102.62	-111.884	-14.736
-105.1	-100.65	-15.9707	-9.52569	-101.464	-106.876	-14.4806
-108.316	-108.392	-15.8169	-9.44781	-101.225	-94.6361	-14.1994
-99.4311	-98.8601	-15.7795	-9.30479	-100.851	-102.081	-14.0344
-97.1981	-96.5856	-15.4859	-9.17589	-100.69	-95.5708	-13.6581
-98.0987	-100.247	-15.2612	-9.06525	-96.5183	-101.961	-13.3676
-95.3757	-110.166	-15.0165	-8.9234	-102.819	-98.2157	-13.0986
-91.5501	-101.5	-14.8593	-8.92591	-102.465	-101.045	-12.8376
-96.6453	-95.7807	-14.7343	-8.82078	-114.054	-100.592	-12.6802
-99.6058	-115.668	-14.5326	-8.65084	-101.746	-98.2255	-12.4506
-105.369	-105.451	-14.1348	-8.59798	-99.5805	-93.1325	-12.0669
-102.011	-90.1902	-13.9981	-8.53636	-111.835	-98.2152	-11.8362
-99.971	-100.255	-13.7039	-8.49435	-97.7228	-100.462	-11.5642
-92.4907	-95.0626	-13.6067	-8.48107	-99.0422	-97.2577	-11.384
-100.061	-94.5096	-13.2631	-8.32127	-107.478	-98.6448	-11.0452
-99.7972	-100.731	-13.0271	-8.33919	-109.391	-100.69	-10.7724
-102.247	-93.8083	-12.9055	-8.24029	-122.528	-90.0894	-10.6254
-99.4057	-100.397	-12.8302	-8.31439	-104.372	-103.491	-10.4561
-103.816	-98.8326	-12.6642	-8.29692	-101.197	-95.6288	-10.2963
-91.0949	-95.6485	-12.4739	-8.19912	-111.729	-93.05	-10.0478

Isolation

J2-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.7735	-103.274	-96.8969	-18.1932
-28.2732	-101.245	-99.1999	-27.6435
-28.6434	-108.044	-119.602	-27.1765
-28.2531	-109.226	-101.301	-26.8016
-27.9158	-104.623	-110.721	-26.4653
-27.6149	-108.96	-116.136	-26.2145
-27.4317	-109.405	-107.446	-25.9893
-27.2633	-112.997	-118.697	-25.9028
-27.2385	-121.69	-107.763	-25.8961
-27.239	-112.855	-134.038	-25.842
-27.1058	-108.835	-111.132	-25.8366
-26.985	-106.181	-109.453	-25.6892
-27.0293	-120.066	-113.758	-25.7278
-26.9879	-112	-110.502	-25.6961
-27.0117	-112.424	-117.404	-25.7576
-27.025	-108.315	-111.468	-25.7598
-26.8661	-109.873	-111.909	-25.7431
-27.0859	-112.657	-106.671	-25.8336
-27.1237	-123.888	-107.191	-25.906
-27.1629	-116.042	-109.775	-25.9284
-27.1847	-109.606	-109.976	-25.9456
-27.1381	-125.201	-113.784	-25.9671
-27.4029	-119.358	-115.798	-26.0844
-27.5064	-107.108	-116.495	-26.2507
-27.812	-111.482	-113.937	-26.2964
-28.0626	-113.745	-109.28	-26.5069
-28.2907	-133.276	-109.786	-26.6167
-28.7463	-115.124	-141.111	-26.8783
-29.3568	-117.372	-108.245	-27.3418
-29.9206	-112.504	-115.13	-27.7932
-30.2269	-113.802	-107.427	-28.283
-30.2663	-111.925	-117.506	-28.5142
-30.1542	-113.489	-106.245	-28.4079
-29.9125	-120.583	-114.476	-28.2607
-29.6431	-111.639	-111.758	-27.951
-29.4937	-114.672	-114.653	-27.7627
-29.4657	-123.275	-117.88	-27.5986
-29.4938	-110.507	-116.124	-27.4634
-29.554	-115.161	-121.88	-27.5517
-29.5117	-110.787	-112.157	-27.5199
-29.5417	-106.41	-110.852	-27.4901

J2-J6

S11 (dB)	S21 (dB)	S12 (dB)
-17.7727	-97.7246	-98.7504
-28.2781	-109.362	-97.7152
-28.6434	-116.29	-102.446
-28.2493	-104.946	-113.373
-27.9153	-105.599	-108.986
-27.6201	-111.199	-114.153
-27.4399	-110.921	-116.036
-27.2716	-103.367	-109.757
-27.2438	-112.26	-106.912
-27.2439	-113.67	-113.269
-27.1103	-109.621	-106.192
-26.9881	-112.827	-106.975
-27.0337	-122.782	-114.248
-26.9918	-104.901	-111.43
-27.0188	-115.475	-112.388
-27.0337	-118.39	-116.683
-26.8735	-140.646	-111.696
-27.0892	-114.525	-103.94
-27.1236	-118.939	-112.719
-27.164	-106.987	-107.484
-27.1914	-106.381	-113.845
-27.1459	-113.834	-113.068
-27.4116	-113.418	-106.345
-27.5173	-118.547	-110.086
-27.823	-109.618	-107.796
-28.0756	-112.126	-108.43
-28.3017	-114.433	-107.728
-28.7627	-113.921	-118.486
-29.3761	-122.412	-108.781
-29.9452	-105.485	-109.136
-30.2529	-114.368	-106.172
-30.2936	-118.045	-113.372
-30.1729	-117.123	-113.295
-29.9312	-109.139	-112.158
-29.6622	-115.026	-109.748
-29.5076	-107.83	-109.342
-29.4813	-111.532	-119.639
-29.5068	-112.37	-123.344
-29.5681	-109.608	-111.633
-29.527	-112.912	-107.446
-29.5566	-107.68	-108.3

-29.5484	-105.474	-117.909	-27.4849	-29.5611	-118.902	-106.243
-29.412	-111.798	-106.215	-27.4122	-29.4246	-103.146	-117.63
-29.4178	-110.896	-112.348	-27.4009	-29.4245	-112.751	-111.251
-29.527	-113.349	-114.899	-27.32	-29.5375	-127.808	-109.121
-29.4905	-115.541	-111.431	-27.3087	-29.5024	-115.691	-116.402
-29.2813	-114.883	-112.53	-27.2298	-29.2895	-116.779	-108.781
-29.1645	-120.93	-115.044	-27.2409	-29.1745	-117.574	-124.684
-28.6759	-119.26	-109.7	-27.0446	-28.6837	-124.632	-117.241
-28.2989	-117.045	-110.012	-26.953	-28.3111	-122.712	-107.273
-27.8325	-113.708	-119.832	-26.5436	-27.8434	-114.39	-109.373
-27.198	-113.652	-116.818	-26.3437	-27.2049	-107.55	-119.319
-26.6673	-105.813	-108.236	-25.8716	-26.6763	-119.527	-116.384
-26.1385	-109.024	-108.962	-25.4767	-26.1437	-119.469	-113.237
-25.6519	-115.119	-109.031	-25.1339	-25.6552	-117.984	-108.094
-25.1157	-110.737	-118.834	-24.676	-25.1187	-115.62	-105.418
-24.6684	-113.138	-120.309	-24.2594	-24.6727	-120.413	-112.745
-24.2099	-106.947	-104.554	-23.9635	-24.2134	-112.167	-107.364
-23.8201	-115.722	-105.808	-23.6651	-23.823	-109.096	-118.433
-23.4148	-108.077	-108.194	-23.3687	-23.419	-116.02	-115.374
-23.0731	-117.838	-122.395	-23.1971	-23.0802	-111.502	-106.149
-22.7036	-129.386	-114.241	-22.8775	-22.7127	-119.174	-112.693
-22.3272	-112.356	-113.349	-22.6262	-22.3381	-117.932	-110.49
-21.9931	-119.197	-122.445	-22.2829	-22.0027	-110.139	-114.678
-21.7242	-118.715	-117.022	-21.967	-21.7357	-109.261	-112.065
-21.3667	-116.807	-124.258	-21.7376	-21.3786	-108.294	-107.971
-21.162	-109.378	-111.433	-21.4798	-21.1721	-113.041	-113.594
-20.8292	-111.813	-112.182	-21.3123	-20.8384	-110.896	-110.786
-20.5203	-115.664	-113.005	-21.0914	-20.5303	-113.576	-119.147
-20.2495	-118.638	-109.238	-20.9809	-20.2587	-120.626	-113.271
-20.0138	-113.141	-113.784	-20.8084	-20.0231	-107.427	-111.604
-19.7558	-109.916	-112.702	-20.5861	-19.7664	-114.319	-110.162
-19.6217	-109.283	-114.869	-20.3993	-19.6305	-116.38	-107.4
-19.3523	-124.093	-108.465	-20.1901	-19.3597	-112.011	-114.469
-19.1964	-119.338	-107.342	-20.0387	-19.2006	-119.47	-119.748
-18.9523	-114.731	-106.752	-19.8376	-18.9559	-126.693	-106.384
-18.7515	-112.776	-117.397	-19.7414	-18.7587	-106.862	-107.837
-18.5946	-110.825	-124.217	-19.6605	-18.6003	-116.512	-104.857
-18.4657	-107.939	-108.871	-19.6004	-18.4717	-123.749	-115.707
-18.3627	-116.828	-113.678	-19.5027	-18.3677	-109.291	-108.198
-18.1678	-109.861	-108.363	-19.4342	-18.1722	-107.712	-116.913
-18.0732	-115.776	-109.825	-19.349	-18.0765	-115.119	-107.865
-17.9611	-115.306	-113.348	-19.194	-17.9635	-107.503	-113.115
-17.8416	-106.162	-120.419	-19.0774	-17.8439	-115.078	-121.391
-17.7074	-116.52	-106.301	-18.9715	-17.7112	-112.922	-107.394
-17.6349	-114.61	-119.194	-18.9489	-17.6347	-125.557	-110.602
-17.5581	-108.447	-114.631	-18.8735	-17.5622	-110.246	-108.849
-17.478	-112.567	-113.271	-18.9022	-17.4809	-122.949	-110.316
-17.4684	-115.736	-115.977	-18.9049	-17.473	-109.156	-117.429
-17.3151	-119.533	-114.445	-18.8684	-17.318	-119.63	-110.465
-17.3487	-108.31	-106.866	-18.8271	-17.3489	-118.112	-103.805
-17.2673	-110.855	-108.401	-18.695	-17.2666	-113.365	-110.507
-17.2336	-111.557	-109.492	-18.6454	-17.234	-118.421	-116.019
-17.1585	-115.767	-113.566	-18.5235	-17.1523	-111.887	-106.278
-17.1931	-107.355	-108.952	-18.5094	-17.1915	-117.853	-114.581
-17.1755	-112.465	-107.159	-18.496	-17.174	-119.938	-117.367

-17.1838	-110.313	-107.827	-18.5094	-17.1814	-113.244	-123.001
-17.1154	-115.199	-112.461	-18.5129	-17.1121	-113.446	-106.957
-17.0964	-113.448	-106.978	-18.5615	-17.0926	-112.279	-119.879
-17.0836	-114.769	-111.918	-18.7075	-17.079	-110.608	-106.867
-17.1114	-119.346	-110.582	-18.6265	-17.1097	-108.309	-105.094
-17.1093	-113.874	-108.914	-18.6779	-17.1018	-109.008	-104.88
-17.1086	-112	-107.867	-18.7205	-17.1036	-108.862	-111.279
-17.1773	-119.186	-106.051	-18.6622	-17.1759	-105.957	-124.864
-17.2587	-111.773	-110.758	-18.761	-17.2549	-117.319	-112.795
-17.1742	-110.744	-98.3171	-18.7765	-17.1725	-99.639	-109.885
-17.2063	-112.341	-101.88	-18.9347	-17.2063	-100.304	-100.544
-17.2762	-100.234	-113.551	-19.0862	-17.2768	-99.6913	-102.646
-17.2253	-99.9975	-99.0274	-19.2677	-17.2186	-109.676	-103.947
-17.3427	-99.4435	-97.2696	-19.3275	-17.3378	-107.73	-101.606
-17.411	-110.697	-102.533	-19.623	-17.4116	-98.8581	-97.5829
-17.4061	-97.4098	-101.321	-19.6903	-17.4024	-103.214	-103.254
-17.3461	-110.66	-99.8877	-19.6651	-17.3421	-111.71	-102.408
-17.2332	-103.073	-96.0709	-19.7709	-17.2291	-97.3557	-96.2712
-17.3097	-110.245	-111.384	-19.9624	-17.3049	-105.136	-96.8428
-17.362	-107.924	-99.1962	-20.0618	-17.3584	-98.6592	-101.747
-17.3781	-106.068	-105.037	-20.2716	-17.373	-103.24	-96.0309
-17.3138	-97.0593	-101.516	-20.3697	-17.3085	-96.3589	-95.7688
-17.2342	-105.463	-102.266	-20.464	-17.2298	-101.142	-92.7139
-17.2209	-99.6304	-98.2267	-20.5377	-17.2143	-98.4479	-107.713
-17.1824	-99.6388	-93.4071	-20.6207	-17.1729	-104.025	-99.0546
-17.0221	-101.793	-100.193	-20.4095	-17.0141	-96.7089	-97.7101
-17.05	-99.7625	-100.208	-20.2849	-17.0413	-99.1236	-92.7032
-16.9616	-106.281	-99.2746	-20.3899	-16.9542	-96.146	-100.066
-16.8962	-103.601	-99.6424	-20.465	-16.891	-104.369	-92.7385
-16.8077	-108.312	-100.261	-20.2747	-16.8042	-103.512	-101.657
-16.8288	-101.654	-98.2028	-20.2623	-16.8266	-110.922	-95.508
-16.5714	-111.327	-123.777	-20.475	-16.5695	-103.913	-103.713
-16.5823	-103.779	-94.8536	-20.2311	-16.5833	-102.978	-102.317
-16.4419	-110.728	-95.4319	-20.1216	-16.4447	-99.3506	-97.0852
-16.3712	-106.263	-102.032	-19.9627	-16.3699	-100.346	-107.548
-16.2626	-99.3276	-95.324	-19.7563	-16.2656	-96.4107	-100.678
-16.1295	-105.778	-99.5386	-19.4339	-16.1334	-102.383	-100.92
-16.0327	-99.2585	-100.283	-19.4963	-16.0357	-95.4681	-98.586
-15.9216	-111.403	-99.3217	-19.1801	-15.9254	-97.5696	-110.549
-15.8563	-107.646	-97.9479	-19.1353	-15.8613	-113.312	-97.3547
-15.6993	-104.709	-101.411	-18.7184	-15.7029	-109.159	-98.4206
-15.5814	-94.8409	-100.331	-18.5815	-15.5823	-97.5457	-100.334
-15.4654	-97.9442	-96.2458	-18.3751	-15.4617	-111.133	-108.032
-15.4357	-103.548	-98.9332	-18.1236	-15.4344	-102.168	-109.702
-15.2748	-118.652	-101.914	-17.761	-15.276	-112.701	-95.3351
-15.1988	-100.979	-100.684	-17.5046	-15.1935	-100.996	-99.1061
-15.0149	-103.924	-98.0509	-17.1075	-15.0132	-108.333	-112.09
-14.9217	-101.595	-100.667	-16.9056	-14.922	-101.434	-92.3295
-14.8008	-103.184	-100.104	-16.8353	-14.7977	-101.41	-100.119
-14.6454	-105.857	-96.7977	-16.5714	-14.6451	-106.087	-101.059
-14.54	-103.336	-105.652	-16.4274	-14.5409	-104.419	-100.61
-14.3644	-107.848	-105.187	-16.2419	-14.3658	-104.557	-94.4481
-14.2193	-101.58	-97.522	-15.9696	-14.2237	-99.2023	-104.542
-14.0756	-101.8	-102.388	-15.8217	-14.0702	-102.73	-102.263
-14.0686	-105.886	-94.8042	-15.6076	-14.0718	-96.0958	-107.223

-13.8659	-111.952	-120.509	-15.3895	-13.8581	-102.947	-98.9684
-13.7842	-101.217	-96.6937	-15.287	-13.7768	-111.747	-111.313
-13.6149	-101.403	-104.036	-15.1615	-13.6078	-108.053	-96.1988
-13.4283	-109.327	-103.086	-14.9884	-13.4186	-106.475	-96.0296
-13.2473	-115.42	-98.1271	-14.8841	-13.2439	-103.234	-102.381
-13.1217	-95.7879	-96.8748	-14.9769	-13.1189	-102.21	-96.3005
-12.9653	-106.19	-99.5135	-14.6952	-12.9619	-118.11	-102.295
-12.8523	-98.5886	-96.4232	-14.5682	-12.8496	-100.331	-104.634
-12.624	-123.457	-94.1486	-14.5111	-12.6121	-96.6067	-99.2721
-12.6256	-96.5255	-105.3	-14.266	-12.62	-106.273	-99.2474
-12.4134	-97.0744	-104.258	-14.2154	-12.4088	-104.477	-114.302
-12.2596	-100.041	-126.409	-14.1423	-12.2609	-99.7517	-98.8026
-12.0909	-99.6076	-97.4065	-13.9378	-12.0893	-98.9194	-104.131
-12.011	-97.3603	-106.54	-13.8254	-12.0026	-103.857	-95.3632
-11.8684	-99.2818	-106.78	-13.7327	-11.8688	-94.4779	-98.9779
-11.824	-110.275	-116.862	-13.6228	-11.8255	-98.9809	-111.217
-11.4681	-104.394	-97.8563	-13.567	-11.4698	-97.3936	-102.56
-11.3914	-101.446	-91.4965	-13.4183	-11.3911	-94.6559	-95.7092
-11.1659	-103.62	-110.571	-13.2657	-11.1656	-118.436	-94.7747
-11.2012	-101.499	-104.607	-13.092	-11.2043	-105.38	-96.7858
-10.9688	-98.7431	-93.7201	-12.9165	-10.9669	-118.718	-103.943
-10.958	-103.33	-96.3708	-12.8786	-10.9577	-99.0351	-99.576
-10.8093	-99.9135	-101.436	-12.8466	-10.8053	-108.734	-96.5826
-10.5668	-103.336	-102.157	-12.9176	-10.5628	-97.787	-98.0628
-10.5291	-100.121	-92.7517	-12.7509	-10.5252	-99.6081	-95.4755
-10.3991	-102.341	-92.991	-12.5977	-10.3905	-111.926	-98.5554
-10.1538	-98.0407	-99.0131	-12.5597	-10.1521	-97.5938	-94.5763
-10.1259	-110.765	-103.542	-12.4432	-10.1227	-95.0762	-101.391
-9.87559	-100.326	-90.0041	-12.4297	-9.87532	-102.992	-97.1271
-9.85559	-118.693	-96.8236	-12.4658	-9.8512	-101.344	-92.6123
-9.5818	-103.582	-101.853	-12.3673	-9.57553	-98.2385	-92.6185
-9.51759	-96.6839	-98.9077	-12.3487	-9.51462	-101.432	-99.5588
-9.44323	-103.842	-104.893	-12.2837	-9.43875	-105.821	-96.6884
-9.29623	-95.7602	-98.0301	-12.3331	-9.29856	-98.9397	-117.552
-9.17416	-94.8187	-101.263	-12.1989	-9.17345	-96.797	-98.9352
-9.06113	-102.173	-101.99	-12.1503	-9.06	-93.6894	-94.0432
-8.92549	-99.1813	-105.196	-12.1326	-8.92698	-111.032	-92.1493
-8.927	-102.045	-97.6601	-12.0647	-8.92876	-101.327	-101.434
-8.81769	-97.4835	-106.133	-12.1293	-8.81442	-103.415	-101.512
-8.64596	-99.7663	-96.4064	-12.096	-8.65013	-94.2661	-98.0297
-8.59898	-93.6393	-101.839	-11.9319	-8.59858	-104.591	-99.2828
-8.53666	-98.3987	-103.206	-11.8668	-8.54166	-100.517	-103.821
-8.49498	-103.14	-96.8178	-11.8243	-8.49985	-101.23	-109.825
-8.48591	-96.9058	-98.0164	-11.8117	-8.49009	-97.4627	-101.35
-8.31822	-100.376	-95.2621	-11.6569	-8.31873	-95.9114	-104.315
-8.34282	-97.7488	-96.871	-11.5732	-8.34348	-108.895	-96.7052
-8.24313	-102.57	-108.459	-11.6026	-8.24143	-100.468	-97.7187
-8.32036	-108.543	-93.0419	-11.5766	-8.31908	-101.422	-94.3852
-8.29456	-94.3708	-93.9349	-11.5827	-8.29388	-97.3029	-94.4409
-8.1991	-99.1865	-92.4059	-11.4819	-8.19934	-96.5229	-98.3184

J2-J7

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.9611	-17.7783	-107.307	-96.0833	-17.9775	-17.92
-27.5215	-28.298	-115.563	-106.268	-28.8626	-31.4296
-27.5959	-28.6423	-111.781	-109.802	-28.4652	-31.9553
-27.2901	-28.251	-111.892	-106.013	-27.9606	-30.8857
-26.9214	-27.9166	-106.175	-109.237	-27.6438	-30.2556
-26.5488	-27.6318	-108.082	-122.082	-27.4533	-29.8127
-26.1588	-27.4591	-107.357	-111.863	-27.2744	-29.5577
-25.9117	-27.2906	-105.887	-117.5	-27.2521	-29.3442
-25.7081	-27.255	-112.092	-106.673	-27.4159	-29.3581
-25.4979	-27.2544	-114.12	-105.83	-27.4984	-29.3883
-25.3035	-27.119	-108	-120.09	-27.6364	-29.3033
-24.9867	-26.9985	-108.267	-122.581	-27.6379	-29.2289
-24.8316	-27.0476	-118.372	-110.729	-27.8448	-29.3095
-24.6025	-27.0089	-118.206	-111.161	-27.9822	-29.2969
-24.4301	-27.0343	-126.753	-111.289	-28.2938	-29.4027
-24.2233	-27.0453	-113.237	-107.992	-28.4886	-29.5129
-24.0141	-26.8852	-107.962	-112.42	-28.7215	-29.3787
-23.8931	-27.0977	-104.629	-115.108	-29.0339	-29.7312
-23.746	-27.1336	-122.927	-106.836	-29.4486	-29.8271
-23.5559	-27.1748	-105.995	-118.725	-29.7953	-29.972
-23.3437	-27.2031	-110.718	-106.545	-30.2575	-30.0626
-23.1455	-27.1596	-111.409	-109.18	-30.6097	-30.0669
-23.0336	-27.4304	-115.231	-112.113	-31.129	-30.5116
-22.9186	-27.5321	-108.926	-111.508	-31.9329	-30.7227
-22.7332	-27.8402	-114.533	-116.702	-32.5454	-31.2434
-22.6596	-28.0897	-121.946	-108.214	-33.6933	-31.7143
-22.5317	-28.3184	-120.427	-110.584	-34.6644	-32.2192
-22.4718	-28.7877	-112.839	-118.726	-36.5449	-32.9558
-22.5557	-29.4001	-105.464	-110.327	-39.3587	-33.8508
-22.6542	-29.9678	-122.233	-104.42	-43.4967	-34.5082
-22.8012	-30.2673	-107.474	-118.054	-48.1109	-34.6275
-22.8398	-30.3039	-124.955	-104.278	-46.5884	-34.2545
-22.7364	-30.1813	-115.474	-114.862	-43.4	-33.9759
-22.581	-29.9428	-111.755	-109.007	-41.5164	-33.6896
-22.2629	-29.6747	-109.034	-107.988	-41.8589	-33.4459
-21.9966	-29.5184	-112.714	-114.218	-42.4465	-33.538
-21.6835	-29.4977	-118.189	-117.499	-45.7588	-33.8079
-21.4	-29.5183	-114.474	-112.568	-50.6406	-34.0107
-21.221	-29.5843	-108.601	-108.348	-54.306	-34.4341
-21.0217	-29.553	-112.111	-110.391	-51.3321	-34.7232
-20.8251	-29.5864	-108.537	-109.652	-46.2328	-35.0837

-20.6774	-29.6005	-121.791	-125.224	-42.9022	-35.4796
-20.4885	-29.4659	-106.661	-109.706	-40.135	-35.5217
-20.354	-29.4605	-109.483	-107.609	-38.0046	-35.8472
-20.1953	-29.5737	-113.404	-107.3	-36.6274	-36.2646
-20.0885	-29.5344	-112.728	-118.457	-35.4697	-36.3608
-19.9547	-29.3177	-114.866	-107.411	-34.4507	-35.9522
-19.8553	-29.2025	-108.254	-110.922	-33.889	-35.6246
-19.6792	-28.7045	-126.708	-105.627	-33.6578	-34.7151
-19.5272	-28.3302	-114.427	-109.198	-33.5533	-34.0504
-19.2469	-27.8586	-110.514	-107.861	-33.2538	-33.2269
-19.0529	-27.2141	-113.762	-108.133	-32.8792	-32.155
-18.7343	-26.6787	-118.028	-109.291	-32.1396	-31.2581
-18.4394	-26.1405	-109.853	-123.393	-31.2945	-30.4289
-18.1747	-25.6543	-121.248	-105.565	-30.2447	-29.6763
-17.8563	-25.1182	-114.907	-107.827	-29.2466	-28.8643
-17.5704	-24.6699	-119.359	-106.437	-28.4799	-28.2137
-17.3513	-24.2131	-113.608	-124.412	-27.7652	-27.5542
-17.1402	-23.8271	-117.683	-111.615	-27.0908	-27.0081
-16.9268	-23.4236	-108.078	-107.872	-26.3895	-26.4662
-16.7741	-23.0881	-110.869	-109.048	-25.8115	-26.0096
-16.5558	-22.7182	-112.266	-104.807	-25.2234	-25.4979
-16.3696	-22.3472	-126.794	-105.502	-24.737	-24.9949
-16.1549	-22.014	-111.442	-111.346	-24.1793	-24.5551
-15.9536	-21.7474	-108.812	-114.134	-23.6639	-24.217
-15.7993	-21.3879	-111.411	-103.888	-23.314	-23.7611
-15.6338	-21.1792	-121.702	-107.06	-22.8611	-23.4971
-15.5177	-20.8435	-116.565	-112.818	-22.5433	-23.0633
-15.3679	-20.5321	-117.634	-114.057	-22.1151	-22.6678
-15.2704	-20.2597	-119.294	-105.911	-21.8376	-22.3178
-15.1363	-20.0226	-110.559	-114.318	-21.5217	-21.9894
-14.9806	-19.7627	-109.239	-111.011	-21.14	-21.6372
-14.8387	-19.6246	-111.411	-110.721	-20.8261	-21.4517
-14.684	-19.3532	-113.012	-113.322	-20.4785	-21.1185
-14.5718	-19.1935	-116.985	-114.134	-20.1825	-20.8927
-14.4286	-18.9476	-116.052	-109.008	-19.804	-20.5813
-14.3593	-18.753	-116.007	-109.923	-19.5324	-20.3169
-14.2759	-18.5942	-114.051	-125.063	-19.2646	-20.0974
-14.2213	-18.4697	-121.085	-107.684	-19.0521	-19.9258
-14.1481	-18.3664	-115.011	-106.689	-18.8138	-19.7769
-14.0916	-18.1732	-112.718	-120.632	-18.6262	-19.5442
-14.0388	-18.0791	-109.78	-113.392	-18.4097	-19.4209
-13.9332	-17.9664	-119.447	-113.454	-18.1389	-19.2823
-13.86	-17.8496	-110.66	-103.224	-17.9187	-19.1381
-13.8263	-17.7179	-114.725	-108.794	-17.7193	-18.9791
-13.7995	-17.6469	-115.768	-107.009	-17.5747	-18.8566
-13.756	-17.5727	-109.665	-115.76	-17.3996	-18.7527
-13.7728	-17.489	-115.19	-113.776	-17.2894	-18.6274
-13.7559	-17.4832	-105.264	-106.934	-17.1546	-18.5891
-13.7435	-17.3269	-111.629	-110.736	-16.9959	-18.3964
-13.7015	-17.3569	-117.383	-111.705	-16.8129	-18.4086
-13.634	-17.2704	-120.096	-122.07	-16.5891	-18.29
-13.6007	-17.238	-114.919	-117.504	-16.4192	-18.2171
-13.5397	-17.1573	-117.276	-108.509	-16.1993	-18.1038
-13.5198	-17.1916	-111.13	-104.254	-16.0482	-18.1042
-13.5405	-17.1746	-110.986	-109.457	-15.9231	-18.0425

-13.5571	-17.1769	-117.988	-107.47	-15.791	-18.0205
-13.5431	-17.1104	-116.019	-113.326	-15.6207	-17.9109
-13.6058	-17.0875	-116.751	-103.517	-15.5314	-17.8717
-13.6951	-17.0785	-138.413	-113.606	-15.474	-17.8239
-13.6705	-17.1037	-116.636	-113.79	-15.2999	-17.825
-13.7271	-17.0977	-118.636	-109.936	-15.2227	-17.789
-13.7836	-17.1051	-127.791	-110.077	-15.1555	-17.7592
-13.7661	-17.1745	-105.789	-111.596	-14.9947	-17.7906
-13.8462	-17.254	-122.723	-105.769	-14.9365	-17.8548
-13.8969	-17.1737	-107.271	-99.8802	-14.8293	-17.7422
-13.9982	-17.2057	-104.804	-103.196	-14.7782	-17.758
-14.1074	-17.2757	-111.136	-98.1708	-14.7415	-17.8131
-14.2806	-17.2207	-102.658	-99.7654	-14.7569	-17.7125
-14.3331	-17.3344	-106.401	-97.2197	-14.6619	-17.8072
-14.5518	-17.4075	-106.972	-101.839	-14.7314	-17.8438
-14.6313	-17.4005	-101.434	-105.145	-14.6853	-17.8092
-14.6765	-17.334	-111.622	-102.446	-14.5911	-17.7157
-14.7991	-17.2293	-98.0488	-93.5813	-14.5773	-17.5744
-14.9686	-17.3007	-108.72	-101.712	-14.5903	-17.635
-15.1159	-17.3545	-107.941	-97.2544	-14.5926	-17.6612
-15.2786	-17.369	-108.335	-98.7753	-14.5841	-17.6518
-15.4193	-17.3045	-110.482	-108.811	-14.5698	-17.5524
-15.5614	-17.2276	-101.09	-111.362	-14.5739	-17.4526
-15.7152	-17.2099	-100.761	-100.711	-14.6041	-17.4106
-15.8275	-17.1686	-103.997	-102.035	-14.5647	-17.3601
-15.8446	-17.0168	-103.37	-104.498	-14.504	-17.1767
-15.8779	-17.0461	-103.496	-120.453	-14.4268	-17.1883
-16.0906	-16.9639	-101.779	-104.202	-14.5347	-17.0967
-16.2762	-16.897	-109.262	-95.6349	-14.5615	-17.0071
-16.287	-16.8134	-94.9434	-104.131	-14.4763	-16.9112
-16.4432	-16.8352	-100.314	-99.4681	-14.5419	-16.9087
-16.6938	-16.5795	-98.5333	-97.5768	-14.6265	-16.6409
-16.6668	-16.5912	-97.893	-99.8543	-14.542	-16.6456
-16.7013	-16.4535	-107.445	-98.406	-14.4989	-16.5055
-16.7402	-16.3767	-101.294	-112.146	-14.4746	-16.4299
-16.764	-16.27	-110.781	-99.1705	-14.5022	-16.3114
-16.7029	-16.1345	-106.067	-103.466	-14.4868	-16.1741
-16.8619	-16.0344	-106.918	-93.7154	-14.513	-16.0678
-16.7939	-15.9224	-94.612	-112.675	-14.48	-15.9548
-16.8955	-15.856	-95.5936	-101.13	-14.5279	-15.8814
-16.7137	-15.7025	-102.922	-114.528	-14.4525	-15.7305
-16.7381	-15.5798	-96.9933	-97.0602	-14.5024	-15.6102
-16.6564	-15.4603	-106.346	-99.2601	-14.442	-15.493
-16.5636	-15.4315	-91.249	-94.5212	-14.4208	-15.4884
-16.3597	-15.2716	-97.5601	-104.733	-14.3268	-15.3342
-16.2004	-15.1968	-102.803	-103.171	-14.2001	-15.2759
-15.9695	-15.0105	-103.015	-96.768	-14.1499	-15.0969
-15.8779	-14.9197	-97.539	-105.058	-14.162	-15.0281
-15.8422	-14.7934	-100.335	-97.1891	-14.0816	-14.916
-15.6952	-14.6446	-97.4114	-109.29	-14.1239	-14.7844
-15.6017	-14.5359	-100.696	-98.645	-14.0984	-14.6966
-15.4531	-14.361	-93.3081	-106.906	-14.0293	-14.5333
-15.2194	-14.2237	-99.04	-99.4732	-13.9398	-14.4009
-15.101	-14.0747	-111.792	-104.604	-13.8671	-14.2841
-14.9504	-14.0741	-97.4368	-103.547	-13.8458	-14.284

-14.7241	-13.854	-112.114	-101.07	-13.8319	-14.0949
-14.6218	-13.7794	-117.561	-101.476	-13.7511	-14.0492
-14.4857	-13.6145	-97.9277	-95.8505	-13.6642	-13.8857
-14.3225	-13.4216	-97.7853	-98.824	-13.6146	-13.7064
-14.1956	-13.2499	-98.6793	-102.471	-13.6281	-13.5391
-14.2772	-13.1228	-96.2388	-97.3896	-13.7338	-13.4116
-13.9837	-12.9613	-100.888	-98.9514	-13.7118	-13.2569
-13.8299	-12.8496	-102.669	-109.924	-13.6252	-13.1346
-13.7502	-12.6124	-103.615	-92.6795	-13.6802	-12.9023
-13.4985	-12.6197	-98.4234	-97.7127	-13.5384	-12.8985
-13.4041	-12.4067	-105.003	-93.4954	-13.6169	-12.6784
-13.2771	-12.2561	-104.059	-98.4738	-13.6805	-12.5317
-13.0476	-12.0868	-102.964	-99.6593	-13.5882	-12.3513
-12.9014	-12.0053	-99.6558	-92.5592	-13.5754	-12.2613
-12.7728	-11.8684	-97.4741	-95.2014	-13.5986	-12.1129
-12.6066	-11.8252	-98.5578	-99.5703	-13.6437	-12.0449
-12.5118	-11.4717	-101.265	-104.972	-13.677	-11.6869
-12.3312	-11.3946	-103.283	-97.9446	-13.5698	-11.5843
-12.1075	-11.1686	-102.268	-108.457	-13.5527	-11.3584
-11.927	-11.2062	-96.4686	-99.7637	-13.4224	-11.409
-11.6957	-10.9684	-106.721	-101.791	-13.3923	-11.1476
-11.5991	-10.9624	-101.393	-102.147	-13.3652	-11.158
-11.5036	-10.7987	-95.5398	-101.506	-13.4986	-10.9675
-11.4814	-10.5674	-95.8212	-105.343	-13.673	-10.7305
-11.2891	-10.5258	-96.2036	-104.915	-13.4847	-10.6979
-11.0952	-10.3912	-98.2522	-97.1455	-13.4345	-10.5576
-10.9954	-10.1556	-95.6627	-95.8227	-13.5115	-10.3071
-10.8081	-10.1144	-96.0435	-95.0635	-13.4367	-10.274
-10.7528	-9.87614	-96.7853	-102.645	-13.4716	-10.027
-10.6997	-9.84479	-106.2	-98.4332	-13.5549	-10.0067
-10.5273	-9.57342	-94.3615	-95.7285	-13.5334	-9.73657
-10.4278	-9.51163	-95.3134	-96.1481	-13.5287	-9.66983
-10.3031	-9.43626	-103.884	-94.6053	-13.5066	-9.5973
-10.2812	-9.29133	-103.35	-98.8628	-13.54	-9.44942
-10.0833	-9.16939	-104.066	-103.507	-13.4592	-9.31642
-9.95441	-9.05765	-101.879	-99.883	-13.4461	-9.2025
-9.85997	-8.91948	-107.086	-97.1617	-13.4727	-9.07476
-9.75695	-8.92722	-93.0751	-101.244	-13.3541	-9.06293
-9.75007	-8.8094	-100.83	-91.6547	-13.4408	-8.95927
-9.64122	-8.64202	-106.169	-109.065	-13.4334	-8.80261
-9.43928	-8.59313	-94.8167	-94.9647	-13.3075	-8.74104
-9.3843	-8.53825	-94.911	-101.931	-13.1983	-8.67577
-9.26343	-8.49296	-102.85	-102.651	-13.2118	-8.61946
-9.23339	-8.48564	-98.5917	-103.258	-13.1704	-8.62565
-9.05771	-8.32291	-96.427	-94.6924	-13.0535	-8.47422
-8.95222	-8.33731	-98.376	-92.2005	-12.9645	-8.48485
-8.93628	-8.23734	-109.696	-105.017	-12.9601	-8.38143
-8.87869	-8.31319	-98.2046	-99.6928	-12.8763	-8.47012
-8.83778	-8.29269	-95.0815	-104.032	-12.8568	-8.44177
-8.70784	-8.18945	-99.7294	-97.6511	-12.6809	-8.35984

J2-J8

S21 (dB)	S12 (dB)	S22 (dB)
-100.315	-99.1694	-17.6841
-123.597	-96.9477	-31.6148
-100.934	-106.79	-32.6545
-101.109	-105.074	-31.7186
-108.978	-104.767	-30.9376
-109.073	-110.394	-30.5159
-126.263	-112.452	-30.2436
-103.524	-113.147	-30.0968
-109.768	-105.294	-30.2419
-114.338	-108.429	-30.2856
-121.022	-112.078	-30.3946
-109.225	-109.751	-30.3164
-114.903	-109.345	-30.5207
-116.408	-105.53	-30.6286
-124.132	-110.738	-30.979
-109.14	-115.466	-31.1891
-117.046	-114.27	-31.4223
-122.193	-107.839	-31.7558
-113.053	-104.742	-32.2504
-118.571	-120.666	-32.5917
-111.193	-107.396	-33.0159
-111.523	-105.57	-33.2337
-117.129	-105.032	-33.7485
-110.616	-113.079	-34.6708
-105.993	-108.888	-35.3658
-123.916	-115.583	-36.7742
-112.031	-121.499	-37.926
-103.604	-118.837	-40.0349
-109.833	-107.307	-43.7146
-113.612	-111.637	-48.6765
-118.981	-116.901	-49.5017
-113.178	-114.338	-45.6053
-111.257	-121.73	-44.1654
-126.045	-116.168	-42.7391
-104.674	-113.76	-43.0944
-113.626	-121.053	-43.5527
-110.042	-112.116	-45.3905
-114.079	-106.538	-47.4059
-119.178	-107.977	-46.595
-118.544	-109.275	-44.922
-113.249	-110.646	-42.4349

J3-J4

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.4889	-124.164	-109.233	-17.5773
-28.5038	-95.4952	-98.2507	-28.5762
-29.4222	-93.744	-92.2566	-28.7348
-29.1709	-94.4241	-93.7306	-28.3837
-28.8411	-90.964	-93.4981	-28.0404
-28.4831	-93.0735	-92.7842	-27.7506
-28.2335	-93.6216	-93.6	-27.4967
-28.0307	-95.6349	-95.3942	-27.3827
-27.9973	-97.6265	-96.9655	-27.3774
-27.9856	-95.9371	-96.341	-27.2599
-27.9013	-97.9604	-95.8149	-27.2482
-27.8509	-97.9723	-99.9247	-27.0855
-27.8917	-104.292	-103.955	-27.1189
-27.8805	-101.17	-109.158	-27.1114
-28.0222	-104.468	-103.55	-27.2247
-28.1724	-107.599	-102.503	-27.268
-28.1148	-106.377	-108.791	-27.2666
-28.4803	-101.946	-104.945	-27.3577
-28.5602	-104.48	-107.121	-27.4406
-28.8047	-114.459	-119.26	-27.4916
-29.042	-108.367	-142.26	-27.592
-29.2601	-107.75	-109.618	-27.7106
-29.7896	-106.011	-112.063	-27.929
-30.1665	-111.499	-116.159	-28.1881
-30.7743	-108.178	-105.476	-28.2563
-31.4078	-106.213	-110.424	-28.488
-32.2233	-117.342	-105.898	-28.6205
-32.8215	-124.141	-106.035	-29.0184
-33.1897	-109.024	-106.604	-29.6766
-32.9357	-109.041	-121.062	-30.4289
-32.2839	-119.012	-112.25	-31.492
-31.2285	-109.6	-114.641	-32.4801
-30.5631	-110.494	-113.95	-32.849
-30.2032	-107.54	-107.669	-32.8771
-30.1194	-107.714	-117.115	-32.5681
-30.4228	-113.127	-110.123	-32.3612
-30.8576	-120.84	-121.771	-32.4229
-31.1314	-114.08	-108.151	-32.5043
-31.5661	-112.938	-109.843	-32.9958
-32.0674	-110.482	-114.483	-33.1028
-32.296	-108.923	-108.898	-33.1395

-111.477	-121.687	-40.2241	-32.488	-120.8	-107.982	-32.9918
-119.249	-104.078	-38.2503	-32.6352	-110.473	-109.087	-32.8311
-109.023	-110.394	-36.6374	-32.4441	-119.639	-114.272	-32.725
-114.998	-110.709	-35.6223	-31.9228	-108.358	-109.05	-32.5675
-118.293	-113.613	-34.7707	-31.5518	-116.139	-121.508	-32.5682
-113.402	-117.285	-34.0403	-31.4411	-105.34	-108.346	-32.6208
-121.608	-107.006	-33.5862	-31.3419	-119.611	-130.776	-32.9855
-121.831	-108.448	-33.4889	-31.6279	-111.726	-112.772	-32.9459
-108.468	-110.541	-33.4398	-31.8846	-118.15	-107.008	-33.1036
-112.038	-111.956	-33.5351	-32.3963	-113.209	-107.631	-32.4361
-120.081	-112.367	-33.4866	-33.0478	-116.252	-109.053	-32.1124
-112.697	-122.168	-33.3141	-33.6628	-111.678	-108.197	-31.2353
-118.871	-131.183	-32.8587	-33.9074	-111.803	-110.293	-30.6015
-113.573	-113.304	-31.9109	-33.8338	-108.22	-119.97	-29.9723
-111.294	-114.355	-31.0392	-33.4882	-115.415	-121.336	-29.1955
-112.171	-106.975	-30.3197	-33.1934	-108.81	-112.233	-28.4043
-115.959	-105.101	-29.5917	-32.5102	-107.21	-109.047	-27.7505
-107.834	-114.033	-28.9534	-31.6537	-113.655	-117.729	-27.0653
-113.323	-107.653	-28.3051	-30.9649	-117.282	-113.14	-26.4301
-110.815	-122.033	-27.7084	-30.1035	-116.105	-114.433	-26.0558
-123.381	-114.409	-27.1004	-29.4809	-118.414	-106.223	-25.4662
-112.784	-120.326	-26.5636	-28.8871	-105.832	-108.604	-25.0387
-111.397	-110.423	-25.9403	-28.3237	-118.417	-113.618	-24.4954
-113.731	-107.642	-25.3851	-27.7946	-113.084	-114.307	-23.9829
-114.159	-108.757	-25.0726	-27.1878	-117.691	-115.585	-23.555
-111.338	-111.632	-24.6428	-26.8694	-110.761	-108.896	-23.1108
-108.97	-110.557	-24.4012	-26.3942	-129.308	-112.194	-22.7991
-112.565	-108.696	-23.9667	-25.8834	-116.912	-120.591	-22.4881
-116.76	-108.741	-23.7001	-25.4479	-128.229	-113.865	-22.3012
-108.728	-117.453	-23.3596	-25.097	-109.851	-111.737	-22.0481
-111.282	-114.172	-22.9097	-24.7156	-106.842	-128.877	-21.7716
-116.398	-111.456	-22.5761	-24.4814	-126.692	-113.645	-21.464
-112.567	-112.169	-22.2378	-23.9685	-105.418	-122.68	-21.1129
-113.328	-106.449	-21.9434	-23.8037	-123.721	-113.706	-20.8208
-112.06	-117.937	-21.5751	-23.4283	-114.083	-109.567	-20.523
-107.788	-108.029	-21.2883	-23.0554	-106.715	-105.191	-20.315
-111.19	-119.895	-20.9644	-22.8528	-131.195	-110.768	-20.1334
-116.853	-116.63	-20.6883	-22.6294	-112.706	-118.883	-20.0056
-113.438	-109.594	-20.3961	-22.456	-115.051	-117.507	-19.7799
-105.358	-111.08	-20.1705	-22.1698	-118.189	-111.072	-19.5951
-112.49	-117.602	-19.9458	-22.0094	-117.392	-107.404	-19.3679
-107.711	-111.44	-19.6971	-21.8591	-111.033	-105.95	-19.0671
-105.683	-107.983	-19.513	-21.6284	-114.11	-102.425	-18.8349
-111.772	-103.079	-19.3015	-21.423	-106.864	-109.914	-18.6183
-119.24	-117.103	-19.1464	-21.2971	-108.694	-113.347	-18.5196
-111.95	-110.398	-18.9549	-21.1528	-118.563	-105.657	-18.4015
-111.393	-112.741	-18.8274	-21.0135	-114.283	-132.644	-18.3656
-116.747	-106.297	-18.6968	-20.9623	-109.167	-107.259	-18.2811
-113.321	-109.09	-18.555	-20.678	-110.658	-110.319	-18.1645
-127.068	-106.696	-18.4123	-20.6669	-113.039	-106.066	-17.9816
-116.772	-106.139	-18.2394	-20.4956	-105.531	-122.362	-17.7504
-120.445	-118.094	-18.1073	-20.3896	-107.485	-117.581	-17.6297
-151.485	-116.016	-17.8868	-20.2015	-117.938	-120.519	-17.4391
-121.741	-109.449	-17.7459	-20.1624	-118.04	-120.51	-17.3419
-122.883	-105.644	-17.6531	-20.0675	-105.836	-116.264	-17.2771

-116.355	-109.328	-17.5389	-19.9935	-112.285	-103.657	-17.2145
-108.876	-105.049	-17.3921	-19.8373	-111.986	-109.488	-17.0853
-118.074	-110.362	-17.358	-19.7114	-106.638	-108.342	-17.0401
-112.217	-106.827	-17.3627	-19.6316	-114.422	-106.419	-17.0158
-106.419	-114.215	-17.2207	-19.586	-108.087	-118.707	-16.8482
-110.14	-115.331	-17.188	-19.4271	-108.001	-119.652	-16.7699
-112.998	-111.783	-17.1491	-19.3301	-105.985	-111.569	-16.7332
-112.264	-114.316	-17.0159	-19.3319	-117.046	-108.811	-16.6004
-116.615	-109.275	-17.0184	-19.3289	-106.706	-109.792	-16.6021
-103.691	-99.1229	-16.9286	-19.121	-102.34	-104.888	-16.5732
-110.262	-105.933	-16.9349	-19.0449	-102.078	-101.743	-16.6072
-104.487	-101.406	-16.9539	-19.0222	-100.042	-100.02	-16.6725
-114.33	-98.2796	-17.0049	-18.861	-103.912	-98.553	-16.7489
-106.647	-97.365	-16.9453	-18.8866	-101.153	-97.5197	-16.7041
-102.761	-101.511	-17.0779	-18.8873	-107.115	-104.709	-16.871
-100.872	-103.293	-17.0779	-18.7599	-101.505	-100.563	-16.8922
-103.3	-106.903	-16.9998	-18.623	-98.5316	-109.587	-16.9083
-101.113	-104.396	-17.0124	-18.4337	-112.956	-101.912	-17.0053
-102.938	-99.628	-17.0694	-18.4178	-100.142	-104.953	-17.1711
-104.134	-105.122	-17.0694	-18.4212	-97.486	-92.5877	-17.3229
-103.83	-103.607	-17.0733	-18.3462	-115.617	-110.997	-17.4906
-101.988	-99.3949	-17.0437	-18.2384	-101.691	-105.197	-17.59
-104.3	-98.9894	-17.0423	-18.1004	-120.609	-98.5083	-17.7097
-95.6547	-109.745	-17.0844	-18.038	-95.2069	-95.2251	-17.8297
-101.712	-101.265	-17.0747	-17.9974	-97.9045	-96.4667	-17.7945
-107.05	-101.882	-16.9766	-17.8097	-96.7689	-98.8178	-17.8403
-100.273	-98.7087	-16.8655	-17.8387	-97.5534	-103.552	-17.8672
-102.095	-98.1072	-16.9703	-17.7231	-106.393	-104.812	-18.1907
-100.707	-115.952	-16.9444	-17.6859	-99.5717	-101.33	-18.3707
-98.8565	-94.1834	-16.7668	-17.611	-98.7123	-96.0315	-18.4404
-98.2302	-101.644	-16.7834	-17.685	-104.223	-106.349	-18.7318
-100.568	-106.378	-16.8524	-17.4515	-103.122	-102.054	-18.9824
-97.6855	-105.22	-16.6875	-17.5339	-95.084	-99.9117	-19.0222
-106.663	-98.9195	-16.606	-17.4572	-118.85	-101.879	-19.0602
-106.038	-101.12	-16.538	-17.4664	-108.061	-99.8175	-19.1962
-103.747	-100.238	-16.5039	-17.4436	-101.338	-97.2746	-19.4929
-100.856	-102.793	-16.3792	-17.3938	-102.38	-102.799	-19.7478
-98.2319	-99.2796	-16.3936	-17.4063	-98.1492	-98.3043	-20.0796
-93.9581	-102.133	-16.2562	-17.401	-104.094	-95.0511	-20.4283
-121.307	-118.845	-16.2471	-17.4674	-103.05	-95.0405	-20.7617
-98.9458	-96.5831	-16.1018	-17.4335	-99.2261	-99.1073	-20.8591
-96.6185	-99.0897	-16.1445	-17.4443	-99.9928	-95.7045	-21.2277
-98.0962	-103.829	-16.0666	-17.4773	-107.258	-96.8517	-21.1829
-100.288	-95.8596	-16.0386	-17.6354	-106.874	-107.714	-21.3407
-99.919	-94.8689	-15.8912	-17.6557	-98.8455	-98.8908	-21.3536
-111.959	-92.9475	-15.7464	-17.7817	-99.6254	-95.0531	-21.3133
-97.8053	-113.154	-15.661	-17.7703	-100.513	-104.783	-21.5432
-100.325	-95.7276	-15.6224	-17.9019	-100.68	-104.062	-21.7356
-94.2964	-104.549	-15.5857	-18.0037	-104.787	-93.6327	-21.7433
-96.0582	-94.3449	-15.5719	-18.088	-95.9026	-105.78	-21.9464
-98.2045	-96.948	-15.5241	-18.237	-96.1245	-101.556	-21.9699
-102.471	-94.4696	-15.4383	-18.299	-99.3304	-96.323	-21.8726
-107.794	-103.186	-15.3221	-18.3956	-94.3756	-99.217	-21.8387
-99.1386	-98.8936	-15.2367	-18.5131	-118.559	-94.3174	-21.4304
-100.165	-97.3562	-15.1978	-18.8907	-105.401	-113.882	-21.5403

-99.0999	-99.3025	-15.0742	-18.8597	-97.5866	-102.824	-21.5796
-99.9655	-100.032	-14.9635	-19.1084	-106.066	-95.4974	-21.5315
-100.42	-94.4439	-14.8359	-19.1374	-106.218	-99.2549	-21.4491
-105.48	-100.397	-14.7537	-19.2326	-95.4552	-94.3179	-21.3586
-113.019	-94.7283	-14.657	-19.2625	-100.011	-100.711	-21.2513
-102.292	-109.211	-14.8059	-19.3429	-96.3005	-93.1838	-21.5045
-99.1048	-89.4024	-14.6097	-19.3318	-95.7414	-112.998	-21.2061
-103.33	-100.248	-14.4825	-19.5099	-92.7137	-93.3154	-21.0501
-96.492	-97.9105	-14.4494	-19.252	-105.886	-94.6461	-21.0382
-103.414	-99.7912	-14.201	-19.5211	-103.547	-99.2591	-20.627
-97.5877	-92.6383	-14.1816	-19.3063	-96.6886	-100.549	-20.6244
-103.004	-95.7868	-14.118	-19.1208	-109.204	-95.0749	-20.5426
-111.786	-99.0509	-13.8928	-18.9921	-97.3293	-103.195	-20.1856
-99.2981	-94.3885	-13.7388	-18.8886	-94.6333	-103.56	-19.9651
-95.6455	-100.092	-13.6275	-18.6168	-97.1423	-106.512	-19.704
-104.307	-106.985	-13.5011	-18.5902	-101.575	-95.717	-19.4329
-96.2374	-119.985	-13.4023	-17.9236	-102.383	-97.6358	-19.1685
-100.904	-111.27	-13.2053	-17.9024	-104.53	-97.6479	-18.8377
-99.4831	-102.015	-13.0222	-17.4748	-103.967	-96.8746	-18.474
-99.9411	-98.5864	-12.7588	-17.3286	-99.8092	-95.5559	-18.0207
-97.0037	-96.0891	-12.5493	-16.953	-97.1476	-106.126	-17.5625
-103.88	-102.814	-12.3907	-16.8596	-98.8747	-95.468	-17.3517
-98.1103	-97.795	-12.3656	-16.6208	-100.076	-102.46	-17.0742
-100.862	-99.7251	-12.3316	-16.1752	-95.7626	-100.906	-16.9752
-98.0486	-95.5324	-12.0173	-16.0517	-109.669	-94.8456	-16.5914
-103.702	-98.9921	-11.8007	-15.8009	-107.598	-97.3247	-16.1457
-104.816	-93.1007	-11.7228	-15.5225	-94.4417	-100.123	-15.817
-101.652	-90.7455	-11.5145	-15.3557	-98.7853	-96.2314	-15.4862
-96.6063	-95.6199	-11.412	-15.0694	-102.57	-103.566	-15.2263
-101.585	-97.3337	-11.328	-15.0029	-96.2582	-95.2234	-15.0621
-102.212	-99.7324	-11.133	-14.6082	-101.996	-95.8948	-14.7094
-103.539	-97.0079	-10.9984	-14.5211	-102.36	-103.223	-14.4542
-98.5201	-101.424	-10.849	-14.389	-105.046	-108.73	-14.1825
-99.1536	-106.982	-10.7796	-14.213	-108.061	-112.532	-14.0271
-98.4975	-96.3158	-10.5716	-14.122	-104.906	-97.5638	-13.6528
-111.041	-91.7852	-10.4435	-14.034	-99.1889	-95.606	-13.3635
-109.814	-103.765	-10.3548	-13.8366	-98.6697	-95.2231	-13.1021
-102.081	-94.3194	-10.1866	-13.9447	-106.998	-98.3078	-12.8411
-111.492	-96.987	-10.1329	-13.8301	-107.343	-98.5911	-12.6815
-99.0768	-92.4804	-10.0264	-13.5447	-100.838	-106.992	-12.4487
-101.721	-93.3734	-9.79948	-13.5469	-97.6804	-101.852	-12.0603
-99.7767	-99.5564	-9.6908	-13.5508	-96.5604	-97.976	-11.8341
-105.537	-99.8341	-9.57938	-13.6034	-99.7238	-98.4026	-11.5623
-99.4673	-99.1668	-9.5225	-13.6259	-98.6744	-105.876	-11.3837
-105.79	-98.5105	-9.33964	-13.3477	-96.0709	-112.181	-11.0395
-102.487	-100.578	-9.23117	-13.4503	-97.5108	-103.354	-10.7677
-96.4842	-97.0285	-9.18502	-13.4771	-98.8749	-104.419	-10.6157
-97.6508	-97.1888	-9.07734	-13.5077	-97.9429	-92.742	-10.4483
-99.8423	-106.458	-9.01883	-13.463	-98.6702	-96.2574	-10.2846
-99.2012	-102.362	-8.83668	-13.2363	-94.9588	-94.3943	-10.0319

J3-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.4551	-105.628	-91.021	-18.0829
-28.5433	-109.57	-98.8398	-27.4952
-29.4933	-105.15	-103.339	-27.0433
-29.2332	-103.54	-113.875	-26.6898
-28.8992	-103.283	-111.6	-26.3911
-28.5459	-103.666	-101.645	-26.1409
-28.3057	-105.711	-102.054	-25.9307
-28.12	-110.967	-103.602	-25.8378
-28.1016	-118.867	-110.548	-25.8297
-28.1002	-110.807	-111.195	-25.76
-28.0183	-114.622	-119.621	-25.7532
-27.9692	-110.576	-107.235	-25.6056
-28.0043	-120.241	-113.776	-25.6368
-27.9877	-114.463	-111.559	-25.6134
-28.1283	-111.259	-116.321	-25.6845
-28.2881	-109.149	-103.844	-25.7117
-28.2331	-108.617	-116.621	-25.6976
-28.6085	-106.662	-108.294	-25.773
-28.6839	-103.307	-108.623	-25.8156
-28.925	-105.269	-111.068	-25.827
-29.151	-119.285	-129.205	-25.8506
-29.3706	-111.48	-105.39	-25.8949
-29.9128	-107.776	-116.667	-26.0543
-30.3043	-104.252	-106.756	-26.225
-30.9217	-109.226	-110.057	-26.2655
-31.5528	-111.909	-118.761	-26.4471
-32.3531	-108.928	-112.433	-26.5253
-32.8948	-111.497	-108.824	-26.7729
-33.1969	-111.054	-109.861	-27.224
-32.8916	-118.096	-108.835	-27.6812
-32.2217	-119.009	-110.185	-28.2056
-31.1645	-116.047	-107.697	-28.491
-30.4921	-113.464	-110.564	-28.3795
-30.12	-106.883	-118.584	-28.1823
-30.024	-111.88	-104.74	-27.8181
-30.3055	-109.441	-118.474	-27.624
-30.7188	-111.028	-108.664	-27.4844
-30.978	-120.126	-113.657	-27.4041
-31.39	-113.657	-105.981	-27.5618
-31.8571	-123.071	-112.35	-27.5836
-32.0312	-117.496	-119.173	-27.5529

J3-J6

S11 (dB)	S21 (dB)	S12 (dB)
-17.4621	-100.146	-93.4687
-28.5728	-95.9104	-118.05
-29.5103	-113.98	-106.555
-29.2426	-107.649	-112.264
-28.9061	-109.88	-103.753
-28.5505	-110.677	-108.555
-28.3129	-109.964	-110.05
-28.1229	-106.528	-105.45
-28.106	-108.9	-110.669
-28.1068	-124.734	-105.793
-28.0231	-108.315	-103.18
-27.9718	-111.508	-106.951
-28.0088	-113.125	-113.845
-27.9898	-111.525	-118.666
-28.133	-114.299	-112.37
-28.2948	-107.416	-110.023
-28.2371	-111.766	-107.99
-28.6111	-109.689	-111.884
-28.6847	-117.55	-105.907
-28.9245	-115.467	-103.909
-29.1522	-106.644	-103.234
-29.372	-109.776	-103.662
-29.913	-117.588	-116.868
-30.3054	-112.435	-116.922
-30.9219	-113.586	-105.807
-31.5526	-126.419	-113.616
-32.3449	-132.014	-114.542
-32.886	-112.412	-119.584
-33.1895	-108.466	-109.969
-32.8816	-112.712	-118.823
-32.2094	-117.05	-107.482
-31.1514	-114.647	-119.735
-30.4812	-117.932	-107.164
-30.1105	-113.488	-109.41
-30.0186	-110.132	-110.495
-30.2993	-109.715	-113.967
-30.7163	-109.973	-109.977
-30.9764	-111.087	-105.601
-31.3843	-110.625	-105.036
-31.8492	-115.987	-113.739
-32.015	-110.37	-124.027

-32.1902	-111.464	-110.68	-27.4636	-32.1736	-111.042	-111.333
-32.3205	-108.562	-114.914	-27.3054	-32.3053	-102.677	-106.482
-32.1496	-106.878	-108.301	-27.1967	-32.1373	-124.778	-113.359
-31.6596	-116.165	-109.023	-27.0719	-31.6501	-120.106	-116.758
-31.316	-112.934	-106.016	-27.0478	-31.3056	-119.24	-114.485
-31.2123	-111.144	-111.993	-27.0226	-31.1997	-124.892	-118.946
-31.1101	-115.404	-106.653	-27.1021	-31.0938	-110.435	-120.584
-31.3726	-112.517	-108.455	-26.9402	-31.3522	-130.337	-108.642
-31.6216	-113.557	-108.631	-26.8576	-31.6032	-118.695	-110.247
-32.1288	-122.299	-113.938	-26.4208	-32.1095	-114.524	-107.04
-32.7874	-116.21	-119.088	-26.1972	-32.769	-116.18	-113.698
-33.4245	-107.578	-107.385	-25.7312	-33.3968	-116.675	-112.913
-33.677	-108.998	-110.267	-25.4034	-33.6522	-114.529	-108.467
-33.6293	-110.139	-106.132	-25.1113	-33.6133	-114.088	-104.822
-33.321	-108.743	-108.055	-24.7154	-33.3079	-108.121	-110.791
-33.0685	-111.094	-107.876	-24.3226	-33.0591	-111.93	-110.85
-32.4521	-111.954	-111.023	-24.0085	-32.4461	-110.459	-103.867
-31.6503	-113.285	-116.237	-23.6568	-31.6509	-114.429	-110.617
-30.9844	-130.891	-106.977	-23.3074	-30.983	-123.712	-111.844
-30.1216	-129.063	-113.029	-23.1215	-30.1201	-111.492	-109.484
-29.4819	-115.53	-117.004	-22.8086	-29.4799	-108.979	-111.837
-28.8864	-117.693	-121.278	-22.5881	-28.8894	-116.505	-107.784
-28.3302	-104.603	-119.598	-22.2518	-28.3356	-115.01	-128.384
-27.819	-123.124	-119.948	-21.9488	-27.8224	-117.054	-111.963
-27.2287	-116.174	-114.957	-21.6902	-27.2415	-107.236	-110.959
-26.9254	-117.211	-121.118	-21.3936	-26.9343	-109.886	-124.999
-26.4583	-117.936	-106.355	-21.1935	-26.4686	-116.401	-113.384
-25.9438	-117.44	-114.188	-20.9796	-25.9527	-106.736	-110.276
-25.4967	-112.255	-113.671	-20.8786	-25.5035	-107.203	-128.908
-25.1472	-109.515	-113.792	-20.7324	-25.1584	-117.359	-106.897
-24.772	-108.652	-107.786	-20.5581	-24.7839	-110.658	-115.706
-24.5446	-121.325	-114.556	-20.3832	-24.5472	-113.518	-118.715
-24.0407	-112.46	-109.593	-20.1757	-24.0505	-116.982	-111.261
-23.8811	-117.6	-108.755	-20.014	-23.889	-102.339	-118.164
-23.4936	-110.093	-104.219	-19.79	-23.5028	-114.777	-115.565
-23.112	-109.057	-115.099	-19.6965	-23.1178	-110.793	-106.596
-22.914	-108.435	-106.828	-19.6337	-22.9218	-115.051	-108.286
-22.7059	-116.145	-110.174	-19.6027	-22.7131	-124.316	-114.393
-22.5627	-112.219	-108.924	-19.5161	-22.5731	-107.643	-107.973
-22.2669	-117.256	-106.958	-19.4548	-22.2717	-109.354	-108.088
-22.1176	-106.727	-103.419	-19.3612	-22.1241	-110.081	-103.184
-21.9619	-110.272	-108.169	-19.17	-21.969	-118.792	-109.622
-21.7261	-117.592	-122.386	-19.0167	-21.7308	-116.391	-115.192
-21.5164	-105.683	-119.543	-18.9006	-21.5202	-109.336	-110.532
-21.3886	-118.669	-116.136	-18.8811	-21.3929	-114.92	-105.445
-21.2439	-118.6	-103.565	-18.8259	-21.2531	-117.101	-113.962
-21.1104	-112.588	-114.98	-18.8836	-21.119	-117.592	-114.37
-21.0365	-112.509	-107.776	-18.9079	-21.0435	-116.399	-103.203
-20.7591	-106.943	-114.101	-18.8682	-20.7689	-106.618	-111.511
-20.7469	-118.284	-111.118	-18.8135	-20.753	-109.51	-123.44
-20.5708	-122.286	-107.279	-18.6601	-20.5756	-106.334	-114.153
-20.4617	-111.898	-107.341	-18.6098	-20.4664	-111.311	-108.888
-20.2651	-107.25	-107.654	-18.4836	-20.2634	-113.132	-108.591
-20.2226	-110.883	-104.55	-18.4691	-20.2306	-110.018	-116.346
-20.1272	-109.213	-120.496	-18.4555	-20.1333	-118.311	-107.657

-20.054	-112.33	-114.108	-18.4894
-19.8902	-114.217	-123.208	-18.4859
-19.7416	-111.078	-118.104	-18.5351
-19.6496	-107.695	-114.621	-18.6702
-19.5983	-119.28	-103.829	-18.5558
-19.4506	-113.93	-108.113	-18.5898
-19.3375	-107.076	-125.406	-18.638
-19.3391	-110.708	-114.3	-18.5773
-19.3331	-113.711	-113.186	-18.6707
-19.1236	-109.337	-105.385	-18.6989
-19.0425	-103.456	-100.005	-18.8595
-19.0141	-102.453	-105.587	-19.0217
-18.8628	-106.208	-105.747	-19.2267
-18.9043	-107.74	-97.3504	-19.2889
-18.9096	-107.106	-97.3829	-19.59
-18.7834	-110.907	-101.341	-19.6668
-18.6479	-110.708	-94.2656	-19.6225
-18.4566	-106.76	-105.023	-19.718
-18.4558	-100.686	-106.21	-19.9065
-18.4602	-102.329	-92.6381	-19.9983
-18.398	-102.563	-105.878	-20.237
-18.2965	-96.0401	-99.2066	-20.3562
-18.1762	-106.869	-108.901	-20.4607
-18.1252	-114.623	-104.305	-20.508
-18.0828	-104.86	-93.4976	-20.5494
-17.8904	-110.891	-98.5472	-20.3214
-17.9136	-101.971	-102.754	-20.1769
-17.7978	-101.283	-100.753	-20.2796
-17.7524	-93.9541	-102.865	-20.3751
-17.6726	-99.0936	-110.411	-20.2316
-17.7461	-95.312	-109.543	-20.2785
-17.5084	-104.039	-95.4326	-20.5628
-17.5797	-99.373	-96.0051	-20.3351
-17.4917	-111.38	-105.481	-20.2212
-17.4898	-110.169	-104.54	-20.0543
-17.4586	-108.892	-103.757	-19.8511
-17.4042	-105.914	-113.567	-19.5338
-17.4131	-101.398	-94.9466	-19.6312
-17.4115	-106.592	-105.303	-19.3481
-17.4701	-98.6139	-105.43	-19.3333
-17.4254	-113.991	-97.7446	-18.8798
-17.4366	-108.594	-101.932	-18.7488
-17.4695	-117.321	-101.501	-18.4861
-17.6273	-100.353	-96.586	-18.1625
-17.6459	-103.262	-99.8084	-17.7594
-17.7893	-99.3657	-94.2409	-17.45
-17.7817	-109.149	-101.611	-17.0538
-17.924	-105.54	-96.8566	-16.8512
-18.0488	-91.0016	-97.9875	-16.7676
-18.1264	-104.439	-99.6312	-16.5206
-18.2731	-93.8794	-97.3875	-16.3548
-18.3408	-97.5742	-104.414	-16.1558
-18.443	-100.603	-98.2258	-15.8553
-18.547	-97.2677	-97.0606	-15.6613
-18.9092	-94.1889	-98.9571	-15.4479

-20.0554	-110.36	-109.293
-19.893	-115.298	-113.667
-19.7447	-111.293	-111.588
-19.648	-107.634	-103.894
-19.5993	-110.934	-107.48
-19.4481	-103.144	-103.418
-19.3374	-111.995	-111.795
-19.3383	-106.131	-113.531
-19.3323	-119.961	-106.725
-19.1236	-114.729	-97.0458
-19.0422	-95.0963	-108.294
-19.0158	-108.521	-103.403
-18.8639	-112.937	-92.9709
-18.903	-115.431	-97.8813
-18.9087	-107.275	-108.617
-18.7841	-97.9425	-102.519
-18.6553	-108.924	-112.751
-18.4592	-101.314	-102.266
-18.461	-107.912	-103.415
-18.4602	-103.381	-103.995
-18.4022	-104.09	-106.598
-18.3003	-100.338	-97.5435
-18.1814	-98.4574	-101.624
-18.1315	-99.3242	-102.808
-18.0894	-118.102	-105.528
-17.8934	-103.875	-96.7581
-17.9148	-90.7809	-100.374
-17.8015	-105.795	-104.901
-17.7476	-100.632	-100.906
-17.6758	-99.6264	-104.82
-17.7505	-98.1265	-108.604
-17.5108	-102.157	-100.553
-17.5831	-116.166	-95.5403
-17.4946	-103.064	-105.039
-17.4898	-107.615	-99.0942
-17.4586	-97.6947	-106.409
-17.4059	-110.487	-102.456
-17.4144	-106.22	-97.1968
-17.4136	-103.264	-94.8807
-17.4713	-97.9426	-92.2658
-17.4295	-102.984	-105.21
-17.4403	-99.6448	-100.721
-17.4655	-96.9962	-102.83
-17.6299	-97.0781	-105.31
-17.6498	-99.1499	-102.46
-17.7891	-96.6881	-101.53
-17.7843	-98.8526	-95.9789
-17.9231	-100.535	-103.547
-18.0499	-101.493	-91.3445
-18.127	-108.119	-101.176
-18.2732	-103.038	-96.7738
-18.3442	-104.879	-99.8528
-18.4449	-103.555	-97.9709
-18.5488	-96.4268	-101.661
-18.9111	-106.663	-95.0183

-18.9348	-97.0738	-104.598	-15.2831	-18.9375	-97.2153	-97.8905
-19.1361	-109.381	-99.1846	-15.1764	-19.1331	-106.87	-98.6137
-19.1662	-98.81	-102.907	-15.0579	-19.1617	-117.235	-114.152
-19.248	-100.56	-99.3855	-14.8758	-19.25	-102.509	-98.9885
-19.2819	-96.4848	-96.3024	-14.778	-19.2772	-98.0407	-96.7018
-19.3493	-103.78	-95.4767	-14.8569	-19.3489	-105.647	-95.1409
-19.3452	-100.082	-98.4905	-14.5827	-19.3478	-100.03	-93.9532
-19.5243	-99.0996	-102.548	-14.467	-19.5249	-93.7532	-102.481
-19.2589	-104.112	-100.162	-14.4207	-19.2559	-107.3	-105.085
-19.5336	-99.4244	-96.9798	-14.1956	-19.5279	-104.834	-103.557
-19.3038	-134.205	-98.0134	-14.155	-19.3003	-95.9883	-98.4279
-19.1115	-97.167	-97.9856	-14.1042	-19.1095	-110.086	-102.526
-18.9923	-95.8352	-99.4407	-13.8993	-18.9911	-110.423	-103.996
-18.9084	-95.2234	-99.684	-13.798	-18.9006	-101.731	-106.041
-18.632	-107.319	-97.927	-13.7125	-18.6267	-109.7	-98.266
-18.6207	-101.045	-99.1468	-13.5902	-18.6194	-101.612	-101.168
-17.9608	-102.98	-93.167	-13.5366	-17.9604	-103.158	-94.2854
-17.9386	-99.1068	-109.134	-13.3755	-17.9356	-95.4155	-105.668
-17.5071	-98.1377	-94.9977	-13.2155	-17.5089	-104.55	-93.0367
-17.3824	-101.007	-103.295	-13.0361	-17.3808	-100.147	-103.634
-17.0199	-94.686	-102.206	-12.8576	-17.0164	-97.7073	-103.811
-16.9095	-97.0551	-106.852	-12.8217	-16.907	-99.007	-107.789
-16.7066	-115.669	-106.97	-12.8013	-16.7054	-98.6193	-94.6711
-16.2592	-98.8174	-96.3489	-12.8955	-16.2626	-103.56	-102.507
-16.1475	-98.3033	-102.891	-12.7454	-16.1522	-101.257	-111.037
-15.9009	-100.356	-100.269	-12.584	-15.9069	-114.242	-99.9961
-15.5887	-100.627	-95.257	-12.5172	-15.5901	-98.2324	-97.1765
-15.428	-103.655	-97.049	-12.3976	-15.4271	-102.436	-96.8387
-15.1166	-103.779	-108.933	-12.3763	-15.1244	-96.1684	-98.3628
-15.0546	-99.0162	-99.0514	-12.424	-15.0567	-103.15	-92.0784
-14.6544	-98.6525	-95.1953	-12.3501	-14.6544	-102.754	-102.118
-14.5589	-102.192	-97.2641	-12.3332	-14.5608	-117.041	-105.204
-14.4208	-98.321	-95.8279	-12.2892	-14.421	-105.11	-104.844
-14.2282	-97.507	-93.1963	-12.3533	-14.2297	-93.0795	-107.957
-14.1314	-102.05	-97.573	-12.2271	-14.1326	-103.867	-94.2529
-14.0317	-103.601	-98.8231	-12.1787	-14.0353	-98.0295	-95.8672
-13.8301	-103.612	-107.228	-12.163	-13.8327	-99.7487	-103.164
-13.9313	-97.3789	-92.4727	-12.0923	-13.9314	-98.2349	-109.45
-13.8209	-97.1928	-95.4018	-12.1723	-13.819	-96.7296	-96.8938
-13.5351	-104.047	-99.2753	-12.1463	-13.5422	-107.496	-98.4136
-13.5349	-96.6162	-100.709	-11.9863	-13.5388	-100.007	-103.244
-13.5426	-103.548	-106.008	-11.9102	-13.5431	-116.893	-97.422
-13.5866	-97.6222	-99.2091	-11.8487	-13.5929	-110.817	-97.868
-13.63	-116.379	-95.5642	-11.8065	-13.629	-99.9453	-96.9968
-13.3456	-100.492	-95.4627	-11.6461	-13.3375	-102.992	-93.674
-13.443	-101.859	-97.0759	-11.5318	-13.4614	-104.432	-98.3107
-13.4705	-100.792	-98.7089	-11.5383	-13.4782	-99.9889	-102.809
-13.5219	-94.9926	-104.253	-11.5234	-13.5266	-99.9497	-95.8816
-13.4992	-103.716	-92.3335	-11.5385	-13.4979	-97.0329	-97.0001
-13.272	-93.1875	-90.6186	-11.4402	-13.2778	-94.1417	-102.24

J3-J7

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.9043	-17.4629	-97.9633	-97.7802	-17.9092	-17.4817
-27.3913	-28.5796	-111.322	-105.134	-28.6688	-28.6392
-27.4524	-29.5062	-105.404	-107.309	-28.3377	-29.5505
-27.2181	-29.2367	-109.851	-108.336	-27.8772	-29.2699
-26.8596	-28.8998	-107.037	-114.846	-27.565	-28.9238
-26.4801	-28.5513	-109.419	-105.218	-27.3369	-28.5697
-26.1136	-28.3167	-116.425	-120.395	-27.1803	-28.3329
-25.8738	-28.1302	-116.431	-105.422	-27.1816	-28.1444
-25.666	-28.1106	-115.837	-107.216	-27.3334	-28.124
-25.4417	-28.1111	-117.176	-116.2	-27.422	-28.1262
-25.2585	-28.0264	-107.268	-122.267	-27.5667	-28.0422
-24.9378	-27.9737	-109.705	-112.703	-27.5667	-27.9916
-24.7879	-28.0127	-112.676	-108.627	-27.7621	-28.0264
-24.5695	-27.9942	-115.268	-111.16	-27.8969	-28.0068
-24.4058	-28.1406	-114.631	-105.951	-28.195	-28.1523
-24.2143	-28.3014	-117.381	-108.331	-28.4062	-28.3169
-24.005	-28.2422	-114.069	-109.328	-28.6382	-28.2577
-23.89	-28.6149	-113.248	-108.95	-28.954	-28.6312
-23.7388	-28.685	-121.671	-117.834	-29.3288	-28.701
-23.5508	-28.9226	-114.656	-106.801	-29.6778	-28.941
-23.3405	-29.151	-114.249	-105.241	-30.1458	-29.1649
-23.1513	-29.3718	-106.667	-112.813	-30.518	-29.3865
-23.0398	-29.9164	-111.13	-107.638	-31.0616	-29.9288
-22.9174	-30.3119	-124.482	-111.725	-31.8624	-30.3249
-22.7298	-30.9244	-113.428	-104.105	-32.4458	-30.9386
-22.6486	-31.5543	-108.333	-109.334	-33.5047	-31.5673
-22.5083	-32.3429	-112.892	-105.908	-34.432	-32.3514
-22.4386	-32.8822	-114.256	-113.69	-36.2396	-32.8816
-22.5204	-33.1887	-107.313	-113.834	-39.0107	-33.1709
-22.6134	-32.8846	-124.519	-104.009	-43.0494	-32.8558
-22.7639	-32.2101	-131.069	-115.154	-47.937	-32.1793
-22.8109	-31.1537	-107.464	-125.625	-46.6349	-31.1204
-22.7084	-30.4792	-113.905	-110.737	-43.342	-30.454
-22.5378	-30.1078	-119.961	-104.976	-41.5425	-30.0841
-22.2041	-30.0204	-117.324	-110.323	-42.0833	-29.999
-21.9308	-30.3016	-121.563	-114.346	-42.8144	-30.2801
-21.6082	-30.7188	-104.476	-112.753	-46.6144	-30.6942
-21.3276	-30.9805	-111.43	-104.66	-52.335	-30.9502
-21.1582	-31.3835	-113.77	-108.881	-56.0742	-31.3522
-20.965	-31.8377	-112.592	-111.09	-51.8304	-31.8019
-20.7692	-31.9954	-103.846	-107.159	-46.5685	-31.9551

-20.6083	-32.1469	-120.724	-123.877	-43.4057	-32.1056
-20.4139	-32.2768	-113.251	-105.127	-40.5456	-32.2294
-20.2618	-32.1181	-105.733	-117.858	-38.2538	-32.0727
-20.0976	-31.6363	-105.182	-106.516	-36.7716	-31.594
-19.9841	-31.287	-108.074	-112.83	-35.5578	-31.2484
-19.8596	-31.182	-106.081	-114.902	-34.511	-31.1441
-19.7732	-31.0697	-116.621	-110.823	-33.9941	-31.0331
-19.6006	-31.3251	-111.809	-108.767	-33.7494	-31.2848
-19.454	-31.5668	-105.489	-122.347	-33.6541	-31.53
-19.1717	-32.0669	-114.634	-120.85	-33.307	-32.0243
-18.9772	-32.733	-112.261	-110.775	-32.9569	-32.6885
-18.6565	-33.3589	-111.08	-110.52	-32.1927	-33.3235
-18.3809	-33.624	-120.916	-116.282	-31.383	-33.5829
-18.1291	-33.5982	-112.19	-111.424	-30.3831	-33.5584
-17.8235	-33.2916	-106.97	-109.974	-29.3329	-33.269
-17.5451	-33.0502	-122.629	-107.547	-28.5047	-33.0322
-17.3272	-32.4448	-117.89	-105.076	-27.7485	-32.435
-17.1118	-31.6464	-113.135	-122.469	-27.0489	-31.6432
-16.8956	-30.9779	-112.184	-122.443	-26.3363	-30.9807
-16.7494	-30.1143	-106.34	-114.494	-25.817	-30.123
-16.5334	-29.4739	-109.47	-118.773	-25.2664	-29.4859
-16.3483	-28.8886	-120.393	-107.149	-24.7933	-28.8997
-16.1275	-28.3342	-113.562	-112.472	-24.1924	-28.3491
-15.9296	-27.8272	-109.831	-123.759	-23.6564	-27.8434
-15.7658	-27.2424	-111.358	-107.936	-23.2518	-27.2608
-15.5933	-26.9303	-111.479	-126.248	-22.7866	-26.9512
-15.4665	-26.4649	-122.025	-109.207	-22.4609	-26.487
-15.3232	-25.9467	-112.515	-115.487	-22.0679	-25.9691
-15.2251	-25.4928	-118.281	-108.433	-21.8203	-25.5193
-15.0966	-25.1491	-108.057	-119.206	-21.5125	-25.1725
-14.9523	-24.7716	-115.465	-114.771	-21.1338	-24.7955
-14.8113	-24.5348	-118.44	-114.183	-20.8021	-24.5632
-14.6617	-24.0417	-114.239	-111.276	-20.4355	-24.0649
-14.5535	-23.8739	-110.185	-108.484	-20.1318	-23.8992
-14.41	-23.4895	-128.924	-110.02	-19.7307	-23.5103
-14.344	-23.1078	-113.43	-110.222	-19.4917	-23.1276
-14.2733	-22.9139	-109.749	-115.377	-19.2693	-22.9306
-14.2304	-22.7105	-109.732	-112.784	-19.0679	-22.7278
-14.1532	-22.5757	-110.56	-112.64	-18.8099	-22.5908
-14.1021	-22.2776	-107.664	-128.687	-18.6266	-22.2902
-14.0451	-22.1333	-111.022	-115.372	-18.4152	-22.144
-13.9388	-21.9747	-112.221	-113.702	-18.1315	-21.9878
-13.8576	-21.7363	-123.974	-110.216	-17.8915	-21.7499
-13.818	-21.5303	-108.818	-110.361	-17.6905	-21.5385
-13.793	-21.4	-111.78	-111.474	-17.5419	-21.4109
-13.747	-21.2607	-113.204	-109.759	-17.3674	-21.2706
-13.7704	-21.1308	-113.123	-110.681	-17.2753	-21.1374
-13.7565	-21.055	-109.526	-108.814	-17.1497	-21.0625
-13.7453	-20.7813	-111.888	-113.658	-16.9856	-20.7865
-13.6972	-20.7591	-117.237	-105.768	-16.7945	-20.7679
-13.6239	-20.5784	-113.089	-118.41	-16.5588	-20.5892
-13.5969	-20.4693	-108.358	-115.639	-16.3683	-20.4799
-13.5244	-20.2658	-106.859	-111.761	-16.1318	-20.2819
-13.515	-20.2305	-109.167	-108.831	-15.9723	-20.2375
-13.5196	-20.1338	-113.504	-113.406	-15.826	-20.142

-13.5518	-20.0549	-112.825	-115.65	-15.7128	-20.0647
-13.5378	-19.8909	-110.603	-106.031	-15.5513	-19.899
-13.6009	-19.7374	-122.284	-102.529	-15.4753	-19.7479
-13.6986	-19.6433	-109.705	-112.53	-15.4314	-19.6523
-13.6662	-19.5946	-105.043	-103.229	-15.2462	-19.6009
-13.7044	-19.4398	-107.865	-109.876	-15.1278	-19.4518
-13.7636	-19.3351	-113.964	-109.234	-15.0565	-19.3411
-13.7443	-19.3358	-112.56	-111.266	-14.8986	-19.341
-13.8169	-19.3288	-115.889	-113.758	-14.8437	-19.335
-13.8749	-19.1219	-106.219	-109.842	-14.7711	-19.1256
-13.9818	-19.039	-107.919	-96.7792	-14.7411	-19.0452
-14.0972	-19.014	-109.805	-98.571	-14.7313	-19.0212
-14.2688	-18.8678	-105.123	-100.637	-14.7634	-18.874
-14.3318	-18.8969	-114.53	-100.293	-14.6641	-18.9048
-14.5391	-18.9073	-102.077	-99.1341	-14.7364	-18.9106
-14.6268	-18.7803	-98.7011	-117.312	-14.6721	-18.7911
-14.6726	-18.6516	-97.9317	-99.9561	-14.585	-18.6567
-14.8018	-18.4567	-97.9394	-110.211	-14.5714	-18.4609
-14.9659	-18.4556	-105.746	-103.553	-14.5955	-18.4611
-15.116	-18.4589	-110.739	-102.287	-14.6104	-18.4658
-15.2913	-18.4022	-96.8215	-102.452	-14.6252	-18.406
-15.4303	-18.2977	-121.185	-104.626	-14.6094	-18.307
-15.5731	-18.1852	-101.192	-121.211	-14.6093	-18.1878
-15.7092	-18.1313	-95.6317	-101.671	-14.6176	-18.1384
-15.8008	-18.0887	-109.727	-97.4983	-14.5281	-18.0929
-15.8034	-17.8948	-100.891	-107.063	-14.452	-17.8973
-15.8289	-17.9153	-98.993	-100.417	-14.3619	-17.9177
-16.0385	-17.8054	-98.1731	-108.94	-14.4645	-17.8039
-16.2184	-17.7538	-100.745	-99.7835	-14.5122	-17.7569
-16.2257	-17.6802	-99.1303	-101.023	-14.4381	-17.684
-16.3908	-17.756	-104.801	-98.6156	-14.5149	-17.7548
-16.6606	-17.5157	-109.846	-96.3819	-14.6023	-17.5173
-16.6444	-17.5862	-107.552	-98.4579	-14.5164	-17.5886
-16.6971	-17.4987	-102.561	-101.12	-14.4655	-17.4977
-16.7462	-17.4908	-105.436	-98.8064	-14.4353	-17.4927
-16.791	-17.46	-103.782	-100.512	-14.475	-17.4608
-16.7555	-17.4041	-110.029	-98.1525	-14.477	-17.4063
-16.9369	-17.4099	-107.432	-107.922	-14.5397	-17.4148
-16.8915	-17.4118	-100.657	-95.5412	-14.5454	-17.4128
-17.0245	-17.4717	-110.436	-97.2444	-14.647	-17.4734
-16.8225	-17.4256	-93.9935	-98.0759	-14.5683	-17.4291
-16.872	-17.4341	-101.711	-99.2939	-14.6264	-17.4422
-16.7629	-17.4727	-103.395	-101.822	-14.5431	-17.4688
-16.6451	-17.6231	-99.9101	-106.941	-14.4949	-17.6266
-16.4288	-17.645	-96.9003	-103.677	-14.421	-17.6426
-16.2262	-17.7839	-106.08	-98.8964	-14.2811	-17.789
-15.9802	-17.7817	-95.3594	-99.6781	-14.2335	-17.7841
-15.8749	-17.9245	-95.4882	-97.5732	-14.2899	-17.9272
-15.8225	-18.05	-107.99	-96.7189	-14.1833	-18.0552
-15.6651	-18.1315	-95.9663	-97.8546	-14.2355	-18.1341
-15.566	-18.2806	-103.057	-93.7591	-14.2049	-18.2825
-15.4231	-18.344	-101.921	-103.881	-14.1207	-18.3574
-15.1756	-18.4561	-107.378	-93.7105	-13.9948	-18.4519
-15.043	-18.5559	-98.5089	-103.017	-13.873	-18.5523
-14.8481	-18.9157	-97.8569	-92.6189	-13.7969	-18.9146

-14.6796	-18.9425	-103.771	-96.9311	-13.7952	-18.9402
-14.5856	-19.1301	-103.839	-98.8708	-13.7437	-19.1289
-14.4631	-19.1681	-96.121	-95.9654	-13.6829	-19.1621
-14.2804	-19.2488	-96.4853	-99.9006	-13.5971	-19.249
-14.1622	-19.2837	-99.598	-102.304	-13.605	-19.2764
-14.2378	-19.3517	-100.552	-101.302	-13.6522	-19.3471
-13.9617	-19.3444	-107.976	-105.598	-13.6793	-19.3453
-13.8149	-19.5234	-99.6557	-99.3422	-13.5563	-19.5187
-13.7351	-19.2511	-98.8713	-104.668	-13.6103	-19.2516
-13.4879	-19.5193	-100.078	-92.0707	-13.4928	-19.5185
-13.3942	-19.2926	-94.7223	-102.063	-13.5914	-19.2915
-13.2708	-19.1062	-97.627	-111.881	-13.6651	-19.1032
-13.0371	-18.9879	-110.103	-103.043	-13.5841	-18.9912
-12.8881	-18.9003	-103.924	-95.9221	-13.5683	-18.9103
-12.75	-18.6403	-94.5863	-104.329	-13.5914	-18.6394
-12.5817	-18.6288	-96.5634	-96.5971	-13.616	-18.6306
-12.4865	-17.9724	-105.96	-101.606	-13.6528	-17.972
-12.2902	-17.944	-105.376	-101.236	-13.5352	-17.949
-12.0738	-17.5134	-115.426	-92.9214	-13.4933	-17.5177
-11.8822	-17.3867	-102.809	-97.7389	-13.3778	-17.3979
-11.6416	-17.0274	-95.9052	-95.3168	-13.3973	-17.0292
-11.5582	-16.9145	-100.39	-99.4475	-13.3196	-16.9235
-11.459	-16.7138	-100.731	-98.4734	-13.458	-16.7228
-11.448	-16.2789	-106.766	-103.553	-13.6261	-16.2855
-11.2739	-16.1617	-107.494	-95.7096	-13.4347	-16.1735
-11.0746	-15.9177	-92.8207	-95.3727	-13.4029	-15.9273
-10.9585	-15.6026	-92.2027	-99.619	-13.4741	-15.6069
-10.7881	-15.4367	-100.649	-99.9378	-13.3944	-15.4395
-10.7312	-15.13	-100.34	-87.7462	-13.4193	-15.1324
-10.6826	-15.0497	-105.547	-113.615	-13.5363	-15.0701
-10.5193	-14.6507	-93.6978	-100.158	-13.5599	-14.6615
-10.4353	-14.5642	-103.759	-93.429	-13.598	-14.5691
-10.3112	-14.4219	-97.012	-97.4942	-13.5951	-14.4288
-10.2995	-14.2322	-99.4991	-110.561	-13.6508	-14.2378
-10.1058	-14.138	-98.7199	-96.2323	-13.6039	-14.1371
-9.9863	-14.0327	-108.344	-100.332	-13.6178	-14.0369
-9.89474	-13.8336	-97.436	-94.8373	-13.6975	-13.8334
-9.8002	-13.9259	-92.5983	-99.756	-13.5697	-13.9314
-9.78658	-13.8148	-102.821	-97.2794	-13.6902	-13.8197
-9.68696	-13.5347	-106.229	-101.072	-13.6774	-13.5366
-9.47014	-13.5335	-108.602	-100.739	-13.5504	-13.5359
-9.41013	-13.539	-113.756	-109.195	-13.4085	-13.5419
-9.27089	-13.5827	-98.0613	-94.0588	-13.3721	-13.5876
-9.23047	-13.6306	-94.4806	-98.4365	-13.263	-13.6276
-9.03483	-13.3383	-94.3512	-96.2013	-13.0979	-13.3379
-8.91175	-13.4486	-96.9079	-94.7617	-12.9551	-13.4497
-8.88934	-13.4719	-100.516	-91.7721	-12.9167	-13.4749
-8.82407	-13.523	-97.9622	-95.9631	-12.8048	-13.5273
-8.78403	-13.4922	-95.7267	-96.2158	-12.7474	-13.5051
-8.6559	-13.2783	-100.983	-101.369	-12.5602	-13.2795

J3-J8

S21 (dB)	S12 (dB)	S22 (dB)
-103.999	-93.3161	-17.5423
-102.323	-110.847	-28.3375
-104.138	-103.935	-29.0053
-116.207	-114.181	-28.8488
-109.158	-107.194	-28.5879
-107.958	-112.31	-28.3756
-108.019	-116.661	-28.1129
-117.058	-116.826	-27.9894
-108.407	-102.834	-28.0282
-110.281	-108.28	-28.0051
-111.135	-108.711	-28.0271
-118.157	-123.338	-27.8983
-114.891	-107.743	-27.9918
-108.317	-109.276	-28.0164
-102.689	-114.638	-28.1624
-111.909	-114.452	-28.2258
-115.043	-110.862	-28.3271
-120.184	-105.93	-28.4898
-109.853	-106.83	-28.7141
-110.693	-114.301	-28.8183
-104.083	-112.095	-28.9627
-113.806	-113.541	-29.0457
-112.483	-112.677	-29.3079
-109.539	-107.308	-29.6879
-118.886	-116.084	-29.9305
-115.173	-110.177	-30.4843
-116.815	-109.14	-30.8666
-110.032	-106.22	-31.5216
-110.487	-108.54	-32.5974
-115.931	-111.281	-33.9404
-121.957	-109.277	-35.8335
-110.912	-105.187	-37.9328
-120.467	-114.179	-39.6556
-112.653	-117.051	-41.0297
-118.82	-111.94	-40.5838
-110.978	-108.793	-39.9822
-118.717	-106.911	-38.8999
-122.234	-113.474	-37.7848
-113.707	-109.21	-37.154
-106.534	-114.931	-36.3148
-113.101	-104.615	-35.3072

J4-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.5351	-99.0958	-89.2553	-18.1425
-28.5555	-97.3394	-92.6327	-27.6543
-28.9026	-92.4099	-92.6534	-27.1425
-28.4827	-92.0826	-93.4091	-26.7371
-28.108	-92.8614	-92.6575	-26.4299
-27.7532	-93.72	-93.6494	-26.2024
-27.5233	-94.9253	-95.1104	-25.9914
-27.3299	-94.8998	-98.115	-25.8886
-27.2953	-96.2571	-96.8378	-25.898
-27.2779	-97.8801	-99.2666	-25.8229
-27.141	-100.155	-99.1093	-25.8147
-27.0202	-102.416	-103.111	-25.6681
-27.0609	-102.332	-105.706	-25.6997
-27.0184	-107.41	-106.849	-25.6804
-27.0505	-108.997	-102.54	-25.76
-27.0879	-102.067	-106.795	-25.798
-26.9526	-104.454	-113.084	-25.7896
-27.2102	-111.551	-116.767	-25.8669
-27.2716	-109.868	-107.431	-25.9175
-27.351	-105.317	-98.512	-25.9255
-27.4102	-114.181	-110.073	-25.9469
-27.4111	-102.564	-113.706	-25.9987
-27.7367	-109.945	-105.894	-26.1441
-27.9011	-114.509	-124.334	-26.3098
-28.2835	-115.642	-109.189	-26.3418
-28.6109	-112.871	-109.29	-26.5071
-28.9298	-109.566	-115.297	-26.5678
-29.4651	-117.414	-107.814	-26.7952
-30.2314	-104.392	-104.54	-27.2246
-31.1301	-108.958	-108.735	-27.6497
-32.0829	-113.889	-112.828	-28.1649
-33.0856	-125.274	-116.22	-28.4502
-33.9089	-121.28	-113.385	-28.3338
-34.1958	-114.553	-110.478	-28.1459
-34.0555	-108.661	-112.856	-27.8015
-34.0155	-116.6	-110.267	-27.6353
-34.1915	-111.921	-100.106	-27.508
-34.3801	-112.954	-105.071	-27.4707
-34.7248	-119.36	-101.603	-27.6552
-34.864	-111.658	-112.068	-27.6897
-35.1036	-118.003	-112.574	-27.6637

-112.504	-118.367	-34.6312	-35.2021	-107.696	-107.893	-27.5609
-110.102	-109.468	-33.6674	-34.9312	-120.278	-115.37	-27.4072
-115.986	-109.668	-32.931	-34.7747	-115.245	-114.648	-27.2926
-106.339	-112.204	-32.3269	-34.8032	-112.682	-109.447	-27.1708
-114.855	-111.668	-31.8375	-34.515	-105.44	-107.275	-27.1358
-116.018	-113.537	-31.3719	-34.1106	-110.661	-110.825	-27.1142
-109.167	-116.373	-31.2438	-34.031	-132.99	-111.962	-27.2121
-116.799	-115.832	-31.1306	-33.4101	-111.017	-111.037	-27.0576
-114.557	-118.839	-31.1122	-33.031	-123.29	-110.406	-26.986
-110.064	-120.534	-30.7253	-32.6349	-110.175	-108.38	-26.549
-116.996	-109.225	-30.3592	-31.708	-106.458	-117.905	-26.3284
-109.642	-111.816	-29.6197	-30.9539	-107.182	-109.081	-25.8619
-131.134	-106.66	-28.895	-30.0188	-114.475	-113.973	-25.5594
-107.06	-107.578	-28.1263	-29.1635	-104.555	-109.617	-25.2823
-115.297	-109.697	-27.3805	-28.2549	-111.67	-122.285	-24.8993
-117.992	-113.219	-26.7487	-27.5633	-112.99	-102.615	-24.5149
-110.592	-113.275	-26.1926	-26.8218	-121.007	-122.011	-24.1848
-109.315	-115.258	-25.6003	-26.1888	-109.412	-109.838	-23.8108
-108.617	-125.471	-24.9674	-25.5836	-131.016	-110.208	-23.4323
-113.328	-118.956	-24.4336	-25.0448	-106.186	-130.961	-23.2287
-107.582	-111.661	-23.864	-24.5202	-113.798	-111.459	-22.8904
-110.183	-110.858	-23.4346	-24.0162	-118.162	-115.895	-22.6654
-118.16	-112.371	-23.0088	-23.5753	-121.091	-117.148	-22.3284
-109.676	-117.596	-22.6209	-23.2314	-114.575	-110.336	-22.0196
-105.006	-109.07	-22.3905	-22.7983	-107.745	-124.518	-21.7649
-111.756	-114.219	-22.0395	-22.5613	-115.781	-120.215	-21.456
-115.008	-116.845	-21.7862	-22.1789	-122.993	-110.913	-21.2452
-120.582	-110.402	-21.4098	-21.8276	-118.305	-106.634	-21.0283
-112.019	-115.868	-21.1597	-21.5126	-115.293	-104.416	-20.9191
-111.941	-110.391	-20.8859	-21.2542	-109.029	-120.131	-20.7731
-132.338	-107.717	-20.5845	-20.9604	-115.286	-131.68	-20.6118
-111.063	-113.512	-20.3824	-20.8038	-122.636	-107.414	-20.4467
-112.121	-113.949	-20.147	-20.4858	-113.867	-118.588	-20.2386
-113.671	-116.48	-19.9496	-20.3056	-108.54	-118.462	-20.0787
-110.803	-112.51	-19.6733	-20.0076	-107.765	-108.825	-19.8607
-116.954	-110.765	-19.4561	-19.7522	-110.147	-123.358	-19.7507
-119.948	-117.048	-19.217	-19.5568	-109.846	-110.557	-19.6769
-115.15	-128.845	-19.0243	-19.3987	-110.534	-110.259	-19.634
-116.737	-114.116	-18.813	-19.286	-111.176	-109.58	-19.5378
-112.878	-112.873	-18.6585	-19.044	-112.103	-106.533	-19.4687
-109.026	-116.071	-18.496	-18.933	-112.582	-106.191	-19.3648
-110.616	-110.34	-18.3044	-18.7939	-110.073	-115.035	-19.1683
-104.183	-109.817	-18.1688	-18.6466	-112.362	-109.088	-19.0096
-108.667	-104.347	-18.0447	-18.4926	-123.776	-108.279	-18.8824
-120.145	-110.315	-17.9503	-18.4054	-122.361	-103.99	-18.8553
-107.862	-112.636	-17.8261	-18.3147	-118.084	-104.802	-18.7968
-124.059	-111.555	-17.7352	-18.2235	-113.589	-108.688	-18.839
-114.169	-110.673	-17.636	-18.1922	-113.032	-111.533	-18.8602
-116.457	-113.401	-17.5212	-18.0173	-112.781	-110.561	-18.8095
-112.119	-110.983	-17.4069	-18.0493	-111.618	-105.964	-18.741
-117.264	-114.169	-17.2666	-17.9417	-113.214	-113.725	-18.5875
-115.722	-108.486	-17.2054	-17.8894	-116.473	-108.335	-18.5428
-124.077	-116.727	-17.069	-17.7817	-126.916	-116.823	-18.4151
-117.996	-117.432	-16.9873	-17.7839	-105.095	-109.433	-18.4145
-111.3	-103.824	-16.9138	-17.733	-112.398	-107.273	-18.4091

-113.134	-108.629	-16.8019	-17.7005	-117.043	-103.38	-18.4432
-120.168	-107.083	-16.6517	-17.5923	-109.684	-102.315	-18.4368
-106.816	-112.755	-16.5851	-17.5383	-107.325	-110.823	-18.4761
-117.588	-118.783	-16.5786	-17.4802	-107.786	-127.376	-18.6127
-111.192	-105.838	-16.4614	-17.4729	-107.362	-127.267	-18.5085
-106.463	-105.593	-16.4656	-17.479	-110.935	-108.81	-18.5445
-121.684	-111.233	-16.4825	-17.4434	-112.982	-108.792	-18.6236
-108.174	-113.729	-16.3766	-17.4794	-109.235	-110.083	-18.5789
-119.229	-109.31	-16.3574	-17.5385	-105.144	-106.542	-18.6922
-104.514	-100.912	-16.2676	-17.4448	-101.966	-99.0076	-18.7365
-105.961	-99.7308	-16.2264	-17.4823	-112.25	-109.808	-18.9103
-110.762	-113.402	-16.2082	-17.5456	-101.817	-98.8685	-19.0922
-109.83	-101.374	-16.2414	-17.4961	-95.9942	-97.1546	-19.2973
-95.5284	-101.884	-16.2082	-17.6261	-104.309	-104.515	-19.3858
-98.6653	-100.896	-16.3754	-17.6879	-102.697	-96.9945	-19.7259
-109.528	-97.8196	-16.4308	-17.735	-99.7585	-103.371	-19.8286
-106.477	-100.238	-16.3968	-17.6864	-110.81	-105.651	-19.8047
-108.728	-101.79	-16.4446	-17.5926	-110.2	-94.6377	-19.9121
-102.321	-101.683	-16.5002	-17.7407	-107.324	-103.882	-20.1066
-99.2292	-105.084	-16.4937	-17.8345	-106.803	-97.0769	-20.1853
-95.4812	-95.7325	-16.4973	-17.9594	-107.491	-104.481	-20.4176
-118.072	-100.337	-16.4815	-17.9444	-102.474	-108.558	-20.5082
-100.157	-107.544	-16.5126	-17.9548	-96.5494	-103.405	-20.5898
-101.709	-104.624	-16.5949	-18.0599	-101.528	-96.6098	-20.6134
-113.481	-96.675	-16.6475	-18.0563	-104.61	-99.3796	-20.6403
-102.008	-98.8314	-16.6191	-18.0104	-92.7936	-101.484	-20.4002
-122.384	-106.667	-16.5773	-18.1489	-93.9777	-97.9207	-20.234
-104.249	-97.6174	-16.7152	-18.2917	-105.86	-98.5843	-20.3216
-104.941	-96.6587	-16.7331	-18.3015	-113.489	-101.927	-20.3935
-103.413	-104.109	-16.5675	-18.3558	-104.497	-112.349	-20.2248
-107.169	-107.67	-16.5872	-18.4678	-105.97	-100.629	-20.256
-100.601	-102.82	-16.7017	-18.4195	-102.807	-113.46	-20.523
-103.298	-101.71	-16.6028	-18.5519	-100.68	-97.4319	-20.2917
-117.773	-104.031	-16.6092	-18.6037	-99.3401	-107.204	-20.1743
-99.644	-98.9083	-16.6501	-18.7123	-110.349	-98.8	-20.0099
-106.871	-103.005	-16.7166	-18.7684	-103.568	-108.622	-19.8219
-115.461	-101.661	-16.661	-18.7976	-96.9993	-99.6041	-19.5278
-107.632	-106.808	-16.7398	-18.9609	-102.19	-100.33	-19.6381
-98.3822	-97.3571	-16.6219	-19.0706	-106.331	-95.7951	-19.3608
-102.082	-95.5376	-16.6094	-19.1586	-103.936	-99.1019	-19.3373
-109.591	-98.0736	-16.4118	-19.2345	-112.183	-106.759	-18.8898
-103.608	-97.2786	-16.4379	-19.2992	-114.138	-105.983	-18.7686
-99.903	-96.3529	-16.3612	-19.3064	-93.3884	-107.055	-18.5096
-99.0454	-97.4683	-16.3424	-19.6016	-98.3982	-99.5519	-18.1922
-99.4981	-98.4531	-16.2088	-19.7182	-100.828	-94.0729	-17.7934
-117.416	-96.6594	-16.0707	-19.9542	-98.2885	-95.4892	-17.4895
-106.892	-103.274	-15.936	-20.0501	-99.3447	-90.4099	-17.1071
-99.2015	-100.829	-15.8382	-20.2821	-92.1225	-95.1041	-16.9001
-107.74	-106.042	-15.7385	-20.5105	-88.1985	-87.4935	-16.8309
-100.157	-102.008	-15.6211	-20.6758	-91.239	-88.8763	-16.5738
-116.724	-99.739	-15.5259	-20.9648	-90.2303	-89.0637	-16.415
-100.828	-97.784	-15.4036	-21.0958	-89.3833	-86.8238	-16.2203
-103.432	-106.034	-15.281	-21.2362	-88.3123	-91.2561	-15.8991
-106.08	-95.9161	-15.1994	-21.5855	-87.4213	-87.135	-15.7026
-103.07	-100.605	-15.1493	-21.9658	-87.712	-86.0473	-15.4947

-98.9038	-103.156	-15.0136	-22.116	-87.3101	-84.2368	-15.3578
-100.619	-95.3087	-14.9071	-22.4481	-89.8042	-93.148	-15.2436
-100.192	-101.174	-14.7637	-22.6166	-94.1035	-92.3271	-15.1064
-101.769	-105.076	-14.6542	-22.7455	-91.4136	-102.582	-14.9337
-103.642	-103.268	-14.4988	-22.8606	-101.12	-95.7866	-14.8236
-105.995	-94.0289	-14.6201	-22.8729	-95.8837	-93.262	-14.8998
-102.969	-94.4164	-14.382	-22.8594	-95.9114	-91.8863	-14.6255
-102.826	-100.77	-14.2913	-23.0979	-94.0077	-90.0799	-14.5152
-103.5	-102.594	-14.2906	-22.6877	-104.177	-96.2674	-14.4577
-99.4141	-102.905	-14.0439	-22.9759	-103.153	-97.1758	-14.2301
-109.954	-94.3947	-14.0158	-22.5149	-96.2001	-97.6579	-14.1948
-100.197	-98.8913	-13.9198	-22.1418	-96.2286	-100.891	-14.1331
-101.411	-98.1117	-13.6799	-21.7882	-109.756	-95.7514	-13.9338
-102.568	-100.199	-13.5058	-21.514	-99.91	-93.7027	-13.8214
-105.329	-104.01	-13.3703	-20.9733	-97.4616	-91.9703	-13.723
-98.116	-102.952	-13.2295	-20.7333	-98.3887	-96.8131	-13.5996
-100.745	-116.242	-13.1539	-19.7677	-99.4467	-96.2295	-13.5374
-98.566	-101.894	-12.969	-19.5177	-105.537	-113.627	-13.3714
-100.792	-106.14	-12.8017	-18.8505	-99.2152	-97.9034	-13.2217
-104.11	-103.849	-12.5478	-18.5276	-106.147	-92.5507	-13.0372
-107.494	-103.905	-12.354	-17.9503	-99.0036	-94.3512	-12.8678
-103.772	-96.8252	-12.1877	-17.6119	-106.654	-104.173	-12.836
-105.104	-91.7047	-12.1429	-17.1848	-104.537	-101.17	-12.8032
-123.525	-104.316	-12.1078	-16.5324	-100.542	-102.253	-12.928
-99.8014	-100.17	-11.8344	-16.2319	-97.6863	-103.022	-12.7729
-91.2409	-95.5558	-11.6063	-15.817	-95.5948	-98.5908	-12.6116
-107.143	-96.2904	-11.5255	-15.2908	-97.0894	-94.0408	-12.5669
-100.174	-108.301	-11.3164	-14.9905	-98.4906	-103.015	-12.4496
-94.2764	-94.2963	-11.2266	-14.4825	-93.6784	-100.439	-12.4407
-105.153	-99.3136	-11.1465	-14.268	-97.6838	-110.636	-12.4957
-98.1121	-102.27	-10.9356	-13.7195	-101.686	-98.5816	-12.4287
-105.001	-102.832	-10.7843	-13.4844	-100.29	-95.2715	-12.4238
-102.45	-102.282	-10.6301	-13.2235	-95.7288	-98.1205	-12.3908
-105.612	-97.3982	-10.5686	-12.8855	-112.622	-94.3124	-12.4664
-102.098	-103.783	-10.3683	-12.6212	-103.949	-118.108	-12.3411
-106.423	-104.288	-10.2379	-12.3719	-103.33	-106.377	-12.3021
-110.859	-101.851	-10.1487	-12.0684	-102.079	-116.208	-12.2911
-98.6462	-96.7724	-10.0113	-11.9924	-99.1962	-92.3709	-12.2174
-97.2229	-100.925	-9.9703	-11.7658	-101.749	-97.6339	-12.2736
-101.612	-105.028	-9.86067	-11.4316	-95.9054	-106.944	-12.2409
-103.738	-111.264	-9.62437	-11.2789	-99.9889	-103.005	-12.0545
-100.983	-103.891	-9.52904	-11.1401	-97.9621	-93.8908	-11.9629
-112.386	-103.225	-9.41065	-11.0231	-97.6515	-104.093	-11.8893
-98.716	-92.0134	-9.3677	-10.9409	-99.0192	-95.4468	-11.8242
-99.4263	-114.309	-9.18946	-10.6387	-96.4301	-101.65	-11.6504
-96.5768	-94.1073	-9.08052	-10.5917	-99.9791	-115.996	-11.5219
-96.1243	-99.5061	-9.04867	-10.4411	-97.8689	-97.5548	-11.5189
-110.722	-96.1028	-8.95249	-10.4423	-96.8801	-97.3946	-11.4913
-112.695	-102.974	-8.89346	-10.3498	-100.428	-111.325	-11.4833
-98.296	-102.975	-8.70017	-10.1333	-96.5226	-98.0365	-11.3707

J4-J6

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.5263	-97.3789	-105.591	-17.9157
-28.5425	-105.099	-122.673	-27.528
-28.8986	-104.99	-100.4	-27.5129
-28.4792	-104.274	-102.141	-27.2344
-28.1062	-104.741	-101.768	-26.8684
-27.749	-109.654	-109.532	-26.5024
-27.5175	-104.618	-103.916	-26.1278
-27.3221	-109.038	-105.814	-25.8811
-27.2875	-103.182	-101.773	-25.6862
-27.2685	-109.355	-103.965	-25.4665
-27.1331	-111.253	-110.696	-25.284
-27.0109	-108.561	-107.283	-24.9655
-27.0521	-111.327	-106.474	-24.8229
-27.0087	-113.172	-107.699	-24.6102
-27.039	-106.054	-108.511	-24.4584
-27.0758	-106.088	-105.267	-24.289
-26.939	-113.036	-108.431	-24.081
-27.1975	-111.603	-113.715	-23.9546
-27.2603	-117.362	-104.486	-23.7818
-27.3372	-110.107	-105.432	-23.5698
-27.3974	-105.997	-108.441	-23.3444
-27.3974	-114.745	-106.214	-23.1599
-27.7213	-116.07	-107.547	-23.068
-27.8848	-116.06	-109.499	-22.9566
-28.2663	-107.549	-109.127	-22.7824
-28.5949	-118.244	-108.213	-22.7009
-28.9145	-121.661	-112.396	-22.5486
-29.4502	-109.491	-127.817	-22.4688
-30.2176	-118.878	-115.935	-22.5413
-31.1157	-109.918	-115.957	-22.6314
-32.0727	-111.36	-106.665	-22.793
-33.0749	-104.948	-128.467	-22.8709
-33.8997	-111.423	-125.759	-22.7766
-34.1881	-107.485	-111.136	-22.5989
-34.0426	-108.803	-109.093	-22.2439
-34.006	-111.111	-112.496	-21.9715
-34.1763	-113.247	-106.838	-21.6595
-34.3661	-111.651	-106.486	-21.4096
-34.7032	-106.424	-105.362	-21.2765
-34.8458	-107.75	-115.965	-21.1148
-35.0804	-107.078	-118.386	-20.9316

J4-J7

S11 (dB)	S21 (dB)	S12 (dB)
-17.5189	-100.389	-99.1785
-28.5196	-109.654	-104.518
-28.8807	-107.752	-103.428
-28.4631	-115.319	-107.62
-28.0973	-108.696	-110.393
-27.7382	-105.247	-109.551
-27.5068	-109.87	-111.333
-27.3115	-112.209	-105.013
-27.2728	-114.501	-118.741
-27.2546	-107.554	-121.776
-27.1176	-112.687	-120.605
-26.998	-109.166	-115.875
-27.0385	-108.704	-114.75
-26.9955	-112.36	-105.873
-27.0268	-117.72	-107.97
-27.0612	-117.04	-121.506
-26.9266	-114.279	-107.201
-27.1834	-115.137	-111.208
-27.2462	-111.841	-125.766
-27.3255	-105.833	-110.382
-27.3854	-107.361	-116.662
-27.3869	-114.625	-120.332
-27.7111	-109.471	-106.175
-27.8731	-120.129	-119.798
-28.2533	-114.363	-105.552
-28.5804	-112.511	-111.438
-28.9013	-113.819	-111.936
-29.4393	-114.008	-110.266
-30.2114	-137.941	-108.411
-31.1112	-116.709	-118.394
-32.0644	-106.626	-109.572
-33.0661	-110.176	-115.688
-33.8907	-112.571	-117.183
-34.1822	-109.572	-107.773
-34.0402	-107.428	-112.749
-33.9989	-108.849	-108.933
-34.1719	-115.222	-108.023
-34.3565	-121.844	-112.303
-34.6911	-116.512	-117.492
-34.8266	-107.905	-115.611
-35.0485	-110.645	-110.052

-35.1723	-123.519	-112.757	-20.7477	-35.1444	-127.482	-117.665
-34.9041	-129.776	-104.267	-20.5176	-34.872	-108.826	-118.782
-34.7433	-116.287	-110.277	-20.3265	-34.7117	-113.548	-126.229
-34.7715	-123.828	-113.412	-20.1381	-34.7345	-119.69	-109.733
-34.482	-113.801	-111.567	-20.0174	-34.4516	-135.404	-109.358
-34.0814	-114.336	-103.828	-19.9076	-34.0523	-107.827	-113.134
-33.9939	-110.835	-106.685	-19.844	-33.9741	-111.37	-116.597
-33.3772	-110.868	-123.434	-19.6815	-33.3598	-114.4	-112.737
-32.9931	-114.992	-117.789	-19.5345	-32.9766	-113.838	-115.418
-32.5963	-111.566	-111.549	-19.2314	-32.576	-108.592	-119.615
-31.6662	-112.91	-109.257	-19.0179	-31.6481	-110.302	-105.629
-30.9167	-115.021	-113.915	-18.691	-30.8996	-114.144	-109.481
-29.9841	-112.316	-114.618	-18.4339	-29.9685	-121.635	-107.104
-29.1299	-117.363	-111.506	-18.1936	-29.1198	-110.848	-117.879
-28.2277	-113.56	-107.202	-17.9084	-28.2186	-111.254	-103.821
-27.5364	-117.65	-106.612	-17.6319	-27.5282	-120.601	-105.75
-26.799	-125.195	-111.791	-17.3971	-26.7912	-108.316	-109.618
-26.1681	-114.525	-109.207	-17.1539	-26.1596	-121.438	-113.689
-25.5656	-111.085	-110.925	-16.9072	-25.5595	-116.414	-108.693
-25.0273	-109.616	-108.029	-16.7535	-25.0205	-116.301	-106.708
-24.5058	-107.197	-115.073	-16.5403	-24.4996	-113.875	-122.404
-24.0027	-112.488	-108.738	-16.3708	-23.9996	-115.475	-115.023
-23.5645	-110.179	-107.842	-16.1565	-23.5653	-109.292	-108.251
-23.2224	-106.405	-104.84	-15.9618	-23.2204	-115.013	-109.583
-22.7896	-116.189	-109.951	-15.7841	-22.7866	-116.303	-106.19
-22.5537	-107.044	-110.317	-15.5929	-22.5506	-120.455	-115.323
-22.1728	-113.479	-108.037	-15.447	-22.168	-109.73	-115.56
-21.8216	-111.533	-111.309	-15.3035	-21.817	-112.991	-109.69
-21.5101	-112.872	-105.359	-15.2053	-21.5059	-112.79	-109.826
-21.248	-110.915	-119.652	-15.0863	-21.2442	-115.901	-112.316
-20.9594	-107.364	-112.232	-14.96	-20.9568	-110.426	-118.582
-20.8021	-112.355	-109.026	-14.8214	-20.7977	-111.136	-108.253
-20.4841	-118.607	-112.459	-14.6705	-20.4815	-127.448	-106.888
-20.3056	-115.425	-122.566	-14.5537	-20.2995	-112.209	-106.131
-20.0078	-111.524	-126.762	-14.4092	-20.004	-113.729	-110.856
-19.7529	-109.105	-112.21	-14.343	-19.7495	-103.803	-110.939
-19.5587	-125.372	-108.447	-14.2841	-19.5541	-109.644	-105.008
-19.3994	-108.348	-109.179	-14.2538	-19.3939	-104.592	-105.497
-19.2898	-127.007	-108.13	-14.1883	-19.28	-122.579	-108.377
-19.0478	-119.831	-106.062	-14.132	-19.0374	-120.282	-113.11
-18.9339	-112.21	-115.79	-14.0657	-18.9234	-114.854	-116.447
-18.7962	-113.979	-118.536	-13.944	-18.7874	-118.016	-111.713
-18.6539	-106.794	-111.009	-13.8538	-18.6422	-114.041	-110.008
-18.4967	-110.134	-123.776	-13.8095	-18.4887	-112.983	-112.338
-18.4054	-112.738	-113.071	-13.7891	-18.3961	-122.015	-116.58
-18.3153	-120.241	-104.064	-13.7526	-18.3042	-108.766	-115.515
-18.2238	-114.586	-116.542	-13.7809	-18.2119	-120.81	-105.754
-18.1936	-109.942	-113.198	-13.7655	-18.1831	-116.948	-114.331
-18.0152	-113.656	-115.551	-13.7435	-18.0053	-117.023	-109.887
-18.0484	-110.324	-118.109	-13.6867	-18.0354	-120.724	-113.163
-17.9419	-109.487	-115.859	-13.5999	-17.9287	-103.869	-109.295
-17.8849	-114.744	-103.304	-13.578	-17.8722	-112.988	-123.409
-17.7782	-119.324	-112.21	-13.5123	-17.765	-106.551	-107.009
-17.7799	-104.712	-106.554	-13.5074	-17.7637	-109.225	-107.561
-17.7276	-118.887	-109.655	-13.5198	-17.7182	-110.664	-113.096

-17.6968	-113.501	-111.234	-13.552	-17.6854	-116.017	-105.496
-17.5883	-124.835	-104.977	-13.5378	-17.576	-112.928	-105.618
-17.5366	-114.424	-111.859	-13.5979	-17.5256	-111.835	-106.125
-17.476	-116.222	-109.867	-13.6889	-17.4679	-116.423	-107.082
-17.4709	-109.284	-116.43	-13.653	-17.4598	-111.876	-124.742
-17.4729	-120.899	-108.245	-13.7081	-17.4642	-111.539	-110.597
-17.4378	-112.781	-105.571	-13.7752	-17.4323	-112.843	-110.6
-17.4731	-119.147	-115.469	-13.7593	-17.4692	-114.177	-105.461
-17.5337	-112.211	-107.586	-13.8433	-17.5297	-115.956	-117.404
-17.4402	-96.5149	-98.7789	-13.9079	-17.4363	-108.653	-106.862
-17.4774	-113.641	-101.374	-14.0158	-17.4731	-97.5167	-106.472
-17.5459	-106.623	-103.43	-14.1357	-17.5403	-115.96	-96.119
-17.4906	-102.224	-96.9388	-14.3269	-17.488	-107.753	-99.2188
-17.6257	-108.989	-114.768	-14.394	-17.6212	-94.9284	-106.847
-17.6857	-95.1567	-97.796	-14.6241	-17.6869	-97.7196	-99.6923
-17.7323	-108.456	-101.801	-14.7146	-17.7325	-94.7773	-107.684
-17.6841	-101.788	-118.022	-14.7599	-17.6877	-102.009	-100.883
-17.5896	-102.674	-101.67	-14.8831	-17.592	-100.363	-97.1698
-17.7428	-110.476	-99.4325	-15.0502	-17.7417	-108.401	-98.616
-17.8326	-107.16	-97.2732	-15.1935	-17.8313	-97.5659	-106.644
-17.9597	-106.409	-104.49	-15.3762	-17.9575	-108.383	-94.5546
-17.9411	-102.785	-106.936	-15.5141	-17.9371	-106.115	-98.6251
-17.9515	-98.7533	-96.1203	-15.6533	-17.9526	-109.371	-100.105
-18.0606	-97.4105	-93.9871	-15.7635	-18.0576	-99.3773	-98.8509
-18.0585	-106.755	-98.2239	-15.8299	-18.0496	-99.2906	-95.5206
-18.0101	-100.274	-104.549	-15.8081	-18.0052	-95.8312	-99.6342
-18.1465	-110.756	-106.069	-15.8084	-18.1457	-101.827	-98.6877
-18.2945	-113.061	-103.669	-16.0078	-18.2868	-107.733	-104.139
-18.3092	-105.738	-108.634	-16.1788	-18.2968	-117.104	-113.318
-18.3656	-97.3536	-104.703	-16.1924	-18.3558	-110.905	-93.0031
-18.4783	-103.461	-95.9998	-16.3535	-18.4714	-102.378	-107.664
-18.4322	-97.9931	-104.259	-16.6251	-18.4221	-104.195	-100.29
-18.5655	-105.492	-101.733	-16.5954	-18.5573	-118.07	-99.9922
-18.6184	-96.5788	-105.356	-16.6256	-18.6081	-102.897	-101.429
-18.729	-114.608	-99.828	-16.6571	-18.7189	-100.715	-106.012
-18.7836	-105.818	-107.895	-16.7048	-18.7798	-103.563	-101.828
-18.8138	-100.706	-100.981	-16.6834	-18.8091	-107.255	-96.4345
-18.9795	-96.8272	-102.933	-16.8918	-18.9749	-105.332	-95.3545
-19.0907	-97.852	-106.289	-16.8766	-19.0888	-102.853	-98.8055
-19.1771	-100.943	-97.1491	-17.0288	-19.1782	-101.879	-97.8131
-19.26	-106.924	-105.489	-16.8329	-19.2592	-103.779	-102.092
-19.3241	-101.029	-109.054	-16.8779	-19.3213	-117.648	-96.8401
-19.3319	-110.046	-92.7898	-16.7541	-19.3338	-102.208	-98.7805
-19.6292	-93.9053	-94.7344	-16.6176	-19.631	-99.3338	-96.4566
-19.752	-97.5179	-94.6502	-16.4012	-19.7509	-96.5268	-107.505
-19.9748	-99.0582	-103.199	-16.2052	-19.9807	-103.817	-96.7294
-20.069	-98.4699	-105.177	-15.9895	-20.0773	-103.539	-97.9542
-20.2991	-102.816	-103.861	-15.9093	-20.3012	-99.317	-101.57
-20.524	-97.7932	-111.945	-15.8692	-20.5195	-101.164	-100.149
-20.6707	-95.7425	-93.8177	-15.7271	-20.6715	-106.523	-103.552
-20.9695	-99.0809	-95.2265	-15.6159	-20.9651	-98.9509	-98.0705
-21.0862	-98.6529	-111.679	-15.4612	-21.099	-106.04	-101.806
-21.237	-93.7549	-99.6919	-15.2121	-21.2284	-99.8154	-103.465
-21.5858	-104.523	-98.4508	-15.0497	-21.5786	-102.554	-120.935
-21.9645	-94.1828	-105.495	-14.8672	-21.9733	-105.493	-96.0875

-22.1091	-96.3722	-102.986	-14.7437	-22.1039	-112.515	-101.882
-22.4422	-122.228	-103.045	-14.6548	-22.4377	-98.2226	-100.328
-22.608	-101.917	-105.011	-14.5338	-22.6109	-106.076	-108.589
-22.7384	-101.308	-99.465	-14.3397	-22.7282	-100.528	-106.435
-22.8508	-96.8399	-94.1019	-14.237	-22.8468	-101.411	-114.117
-22.8606	-97.3317	-103.522	-14.2917	-22.8605	-102.655	-92.9391
-22.851	-103.227	-94.4477	-13.9963	-22.8483	-100.867	-95.6966
-23.0854	-100.984	-94.2675	-13.8629	-23.0865	-123.804	-113.907
-22.6778	-97.1786	-93.9761	-13.7787	-22.6822	-106.382	-92.496
-22.9652	-100.14	-114.007	-13.5341	-22.9702	-105.557	-98.2657
-22.5071	-101.123	-99.5544	-13.4433	-22.5109	-96.6999	-98.8362
-22.1306	-97.7054	-116.479	-13.3315	-22.1359	-103.106	-98.5607
-21.7851	-104.342	-105.345	-13.0914	-21.7897	-108.906	-102.758
-21.5026	-99.0255	-99.3846	-12.9401	-21.5069	-107.457	-101.154
-20.9667	-99.5694	-105.795	-12.794	-20.9641	-99.3353	-96.3146
-20.7234	-92.9131	-95.8647	-12.6155	-20.734	-111.848	-96.2971
-19.7587	-102.762	-103.094	-12.5106	-19.7646	-108.502	-97.1986
-19.5111	-106.43	-105.34	-12.3036	-19.5198	-97.2577	-110.584
-18.8449	-106.886	-93.4023	-12.0821	-18.8444	-103.559	-97.0669
-18.5155	-100.025	-112.678	-11.8764	-18.5255	-105.68	-103.662
-17.9426	-109.309	-102.687	-11.627	-17.9359	-94.7891	-94.3177
-17.6016	-94.5136	-99.8783	-11.5552	-17.6016	-114.282	-96.2791
-17.1714	-96.8592	-97.5894	-11.4703	-17.1629	-109.907	-103.411
-16.5216	-103.649	-100.283	-11.4642	-16.5174	-100.659	-108.798
-16.2193	-93.17	-97.0385	-11.3	-16.2138	-98.4303	-99.4787
-15.8029	-97.8828	-99.0986	-11.1098	-15.7981	-98.1619	-104.206
-15.2791	-104.761	-95.403	-10.9776	-15.2818	-109.378	-106.969
-14.9736	-103.422	-97.3618	-10.8083	-14.9773	-101.989	-94.9576
-14.4666	-102.355	-101.149	-10.75	-14.4681	-101.938	-102.068
-14.2676	-97.2159	-100.625	-10.7208	-14.2603	-103.709	-125.129
-13.718	-108.36	-97.9954	-10.5629	-13.7087	-102.883	-100.57
-13.4754	-97.9851	-94.343	-10.4799	-13.4757	-108.473	-97.326
-13.2163	-105.819	-94.3295	-10.3618	-13.2173	-98.0928	-100.53
-12.879	-98.7344	-118.214	-10.3615	-12.8811	-100.855	-101.581
-12.6151	-109.916	-99.4251	-10.1723	-12.6172	-100.458	-100.845
-12.369	-110.405	-103.04	-10.0453	-12.3712	-93.9648	-93.2195
-12.0654	-100.311	-95.4147	-9.94574	-12.0656	-106.003	-113.507
-11.9917	-93.139	-92.4965	-9.84165	-11.995	-112.789	-107.179
-11.771	-100.078	-99.1384	-9.82705	-11.7741	-100.93	-92.6593
-11.4327	-95.7349	-98.0342	-9.7088	-11.4334	-101.851	-95.6346
-11.2845	-105.529	-93.3537	-9.48465	-11.2827	-106.589	-106.039
-11.1389	-98.9884	-98.5095	-9.41147	-11.1429	-97.6307	-100.977
-11.0265	-98.4941	-98.7502	-9.25713	-11.0279	-95.6644	-98.5182
-10.9375	-100.684	-100.01	-9.19626	-10.9472	-93.5099	-94.0204
-10.6384	-104.131	-102.401	-8.99341	-10.6354	-120.099	-98.6786
-10.5963	-102.564	-94.8897	-8.86176	-10.5945	-102.436	-93.1874
-10.4423	-98.1421	-96.3337	-8.82418	-10.4415	-99.9997	-99.2307
-10.4451	-113.921	-96.4859	-8.75352	-10.4425	-106.974	-108.983
-10.3551	-95.3345	-105.783	-8.71387	-10.3522	-93.7169	-95.0222
-10.1326	-110.404	-91.7443	-8.57595	-10.1328	-117.594	-102.978

J4-J8

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.9357	-17.5152	-118.366	-104.072	-17.5238	-18.0451
-28.8149	-28.5039	-103.985	-106.314	-28.3576	-27.4822
-28.3943	-28.8604	-108.154	-110.61	-29.049	-27.1821
-27.9285	-28.4401	-109.729	-114.273	-28.8816	-26.7485
-27.5657	-28.0749	-110.571	-110.228	-28.5932	-26.4185
-27.3562	-27.7298	-118.624	-117.499	-28.3152	-26.1129
-27.2301	-27.5059	-107.701	-116.997	-28.0603	-25.9122
-27.2294	-27.309	-105.14	-115.115	-27.971	-25.7426
-27.4219	-27.2666	-110.955	-118.321	-28.038	-25.7092
-27.5207	-27.2492	-112.081	-109.396	-28.0494	-25.6873
-27.672	-27.1116	-111.084	-109.267	-28.0801	-25.559
-27.6842	-26.9875	-114.008	-109.685	-27.9515	-25.439
-27.9035	-27.0248	-122.041	-107.182	-28.0376	-25.4716
-28.0739	-26.9822	-108.024	-113.766	-28.0523	-25.4377
-28.4166	-27.0228	-108.841	-108.962	-28.2142	-25.4527
-28.67	-27.0602	-115.062	-109.759	-28.2827	-25.461
-28.9193	-26.9193	-120.216	-106.514	-28.3702	-25.3374
-29.2984	-27.1715	-123.359	-113.165	-28.5665	-25.5247
-29.7134	-27.2283	-118.476	-104.951	-28.7692	-25.5767
-30.0919	-27.3102	-109.969	-104.462	-28.9021	-25.6301
-30.6024	-27.3712	-111.745	-107.71	-29.071	-25.6618
-31.0387	-27.374	-110.598	-112.258	-29.1767	-25.6373
-31.6371	-27.7004	-107.852	-105.867	-29.4447	-25.8815
-32.5889	-27.8631	-117.756	-110.685	-29.8448	-25.9936
-33.2924	-28.2462	-112.676	-106.386	-30.0487	-26.27
-34.463	-28.5726	-110.091	-114.155	-30.5434	-26.4962
-35.5452	-28.8867	-117.293	-108.603	-30.8858	-26.6935
-37.6224	-29.4319	-110.08	-126.581	-31.5372	-27.0814
-40.8739	-30.2063	-109.689	-116.725	-32.659	-27.6206
-45.892	-31.117	-109.74	-109.441	-34.1033	-28.1532
-51.5615	-32.0771	-110.488	-106.05	-36.1934	-28.5418
-47.0233	-33.0801	-113.225	-112.083	-38.4396	-28.8161
-43.6724	-33.9017	-118.08	-114.444	-40.3202	-28.9213
-42.0278	-34.1834	-111.689	-114.998	-41.4111	-28.8322
-42.7654	-34.0417	-119.784	-107.182	-40.636	-28.6652
-43.6055	-33.9965	-108.817	-108.376	-39.8816	-28.5347
-47.6381	-34.1641	-131.361	-108.111	-38.8206	-28.4683
-52.6839	-34.3433	-114.162	-107.497	-37.7729	-28.4868
-50.3186	-34.6914	-124.892	-107.923	-37.2876	-28.4689
-47.1867	-34.8362	-113.779	-106.388	-36.5062	-28.3376
-43.6118	-35.064	-112.624	-106.255	-35.5386	-28.2961

-41.2575	-35.1464	-109.452	-105.941	-34.8284	-28.2144
-38.917	-34.8697	-122.769	-124.378	-33.8316	-28.0395
-37.0136	-34.6977	-110.546	-107.906	-33.0196	-27.9398
-35.7992	-34.7143	-112.926	-105.161	-32.3381	-27.9598
-34.7347	-34.4337	-111.905	-110.492	-31.8293	-27.8555
-33.8582	-34.0284	-120.028	-106.876	-31.308	-27.6501
-33.4496	-33.9568	-108.269	-117.414	-31.1482	-27.5357
-33.227	-33.3453	-109.095	-111.231	-30.9573	-27.095
-33.1623	-32.9701	-121.81	-111.854	-30.9366	-26.763
-32.8489	-32.5713	-112.226	-108.724	-30.5431	-26.4197
-32.5829	-31.6309	-119.106	-113.835	-30.2738	-25.8859
-31.8838	-30.8777	-106.357	-118.056	-29.5971	-25.4705
-31.1757	-29.9446	-122.981	-121.361	-28.8943	-24.9964
-30.2279	-29.1026	-113.814	-120.481	-28.1281	-24.5567
-29.2037	-28.2025	-111.263	-102.348	-27.2629	-24.0664
-28.3723	-27.5084	-115.445	-115.094	-26.5476	-23.7029
-27.6333	-26.7709	-115.077	-109.642	-25.9291	-23.3104
-26.9482	-26.1439	-119.332	-104.579	-25.3649	-22.9731
-26.2677	-25.542	-108.545	-118.19	-24.7947	-22.6484
-25.7725	-25.0054	-111.65	-118.192	-24.3758	-22.3504
-25.2173	-24.4861	-114.395	-111.15	-23.8946	-22.0509
-24.7467	-23.9926	-112.027	-109.374	-23.4884	-21.7514
-24.1306	-23.56	-122.113	-109.83	-22.9808	-21.4934
-23.6003	-23.2152	-117.799	-121.234	-22.5344	-21.2873
-23.2053	-22.782	-111.218	-107.311	-22.2122	-21.0083
-22.7638	-22.5398	-113.779	-113.435	-21.857	-20.8904
-22.4495	-22.1575	-111.402	-110.153	-21.6251	-20.6531
-22.087	-21.8051	-113.677	-106.752	-21.3367	-20.4198
-21.8466	-21.4979	-116.23	-110.498	-21.166	-20.2251
-21.5436	-21.237	-116.89	-110.564	-20.9319	-20.0751
-21.1739	-20.9522	-118.07	-110.349	-20.6312	-19.8998
-20.845	-20.7928	-119.043	-108.094	-20.3691	-19.8454
-20.4962	-20.4712	-115.135	-101.178	-20.078	-19.634
-20.2138	-20.2853	-111.011	-114.498	-19.8545	-19.5922
-19.8487	-19.9879	-111.785	-114.442	-19.5381	-19.4346
-19.6146	-19.7375	-116.468	-129.57	-19.3625	-19.2949
-19.3968	-19.5429	-113.874	-112.176	-19.1927	-19.231
-19.1906	-19.3816	-108.775	-109.35	-19.0382	-19.176
-18.9243	-19.2629	-122.051	-114.408	-18.8235	-19.151
-18.7281	-19.0224	-114.543	-112.292	-18.6859	-19.0301
-18.5136	-18.9116	-111.783	-108.95	-18.5285	-19.0257
-18.2347	-18.7712	-109.329	-107.502	-18.3067	-19.0122
-17.9959	-18.6228	-116.025	-109.686	-18.1326	-18.9575
-17.7833	-18.4716	-112.421	-117.711	-17.9854	-18.9031
-17.6336	-18.3819	-112.457	-114.316	-17.8993	-18.9177
-17.4424	-18.2933	-117.12	-104.16	-17.7799	-18.9191
-17.3364	-18.2002	-112.917	-126.713	-17.7388	-18.9231
-17.1972	-18.1748	-108.284	-110.392	-17.6693	-19.0043
-17.0315	-17.9972	-114.136	-106.184	-17.5714	-18.9127
-16.8431	-18.0227	-114.883	-110.251	-17.4536	-19.0517
-16.6004	-17.9159	-107.237	-116.255	-17.2806	-19.0461
-16.4251	-17.8578	-131.442	-114.883	-17.1607	-19.0977
-16.1811	-17.7566	-110.66	-107.19	-16.9793	-19.0659
-16.025	-17.7635	-107.913	-110.687	-16.8753	-19.179
-15.8745	-17.7108	-105.87	-108.032	-16.7882	-19.2345

-15.7585	-17.6784	-112.486	-111.828	-16.7214	-19.3192
-15.5935	-17.5724	-112.275	-110.193	-16.6209	-19.3186
-15.51	-17.5195	-110.858	-110.748	-16.5952	-19.3468
-15.4723	-17.4618	-115.311	-104.298	-16.623	-19.4072
-15.281	-17.4546	-116.906	-108.479	-16.4709	-19.5072
-15.1667	-17.4511	-131.533	-113.807	-16.4132	-19.521
-15.0864	-17.4263	-113.395	-120.838	-16.3888	-19.5586
-14.9194	-17.4629	-111.164	-105.626	-16.2676	-19.7031
-14.8608	-17.5249	-112.377	-116.846	-16.2724	-19.8484
-14.7796	-17.4337	-99.8931	-107.147	-16.237	-19.7729
-14.747	-17.4736	-103.843	-89.5692	-16.2694	-19.8286
-14.726	-17.5411	-103.88	-104.652	-16.3173	-19.9372
-14.7556	-17.4895	-99.2894	-103.835	-16.4025	-19.8906
-14.6529	-17.6238	-105.117	-99.1913	-16.3513	-20.0448
-14.726	-17.6857	-100.11	-100.356	-16.5002	-20.158
-14.6636	-17.7308	-103.289	-103.162	-16.4779	-20.1293
-14.5817	-17.6827	-105.197	-103.755	-16.4222	-20.0713
-14.5676	-17.5902	-94.8514	-112.62	-16.4481	-19.9419
-14.5916	-17.7399	-103.554	-104.444	-16.5241	-20.0104
-14.6098	-17.8328	-106.963	-101.475	-16.574	-20.0879
-14.6227	-17.9531	-99.7836	-97.4375	-16.6351	-20.057
-14.6048	-17.9391	-96.1798	-109.12	-16.6524	-19.9874
-14.6034	-17.9502	-97.5285	-99.404	-16.6763	-19.8632
-14.6059	-18.0463	-109.037	-96.5454	-16.7126	-19.8244
-14.5248	-18.0395	-99.7951	-97.8726	-16.6702	-19.8133
-14.4477	-17.9958	-104.562	-99.9103	-16.5678	-19.6048
-14.3624	-18.137	-96.4088	-98.8296	-16.4774	-19.6321
-14.4588	-18.2833	-94.7722	-95.2461	-16.5971	-19.4489
-14.4958	-18.2957	-101.255	-103.526	-16.6703	-19.3931
-14.4153	-18.3527	-98.0365	-96.9572	-16.5685	-19.2761
-14.4823	-18.4673	-115.978	-100.888	-16.6534	-19.3499
-14.5762	-18.417	-95.6977	-102.447	-16.7901	-19.0016
-14.4937	-18.5529	-105.604	-101.219	-16.6825	-19.0394
-14.4513	-18.6035	-99.0415	-98.1046	-16.6289	-18.8796
-14.4266	-18.7159	-110.672	-98.5414	-16.6	-18.8007
-14.4672	-18.7759	-104.26	-99.6823	-16.6135	-18.7013
-14.4812	-18.809	-105.091	-104.752	-16.5498	-18.5641
-14.5459	-18.9864	-101.108	-94.8073	-16.6523	-18.4206
-14.5571	-19.1022	-99.3715	-95.4828	-16.5984	-18.2917
-14.6604	-19.189	-101.526	-103.275	-16.6987	-18.2619
-14.5866	-19.2797	-95.9213	-95.4472	-16.5295	-18.067
-14.6529	-19.3448	-104.099	-107.325	-16.5937	-17.9477
-14.5725	-19.3495	-95.1272	-96.1659	-16.478	-17.8907
-14.5365	-19.6451	-105.258	-104.898	-16.3993	-17.85
-14.4547	-19.7592	-101.707	-97.8348	-16.2379	-17.6817
-14.3279	-19.9943	-102.939	-111.557	-16.0442	-17.6093
-14.2804	-20.0883	-101.497	-99.5104	-15.912	-17.3937
-14.3345	-20.3226	-99.1889	-98.9997	-15.8956	-17.2992
-14.2314	-20.5371	-98.031	-100.138	-15.8139	-17.1821
-14.2702	-20.6927	-105.027	-104.47	-15.7756	-17.0319
-14.2407	-20.9835	-94.556	-94.5724	-15.7067	-16.9129
-14.1636	-21.1023	-104.661	-108.509	-15.574	-16.7557
-14.0664	-21.2446	-101.707	-95.274	-15.3837	-16.6304
-13.9255	-21.5844	-101.39	-95.7546	-15.2267	-16.4562
-13.8413	-21.9859	-101.054	-91.525	-15.101	-16.5259

-13.8574	-22.1007	-107.174	-99.4418	-15.0004	-16.303
-13.7943	-22.4336	-95.706	-92.5224	-14.9171	-16.259
-13.7405	-22.6261	-103.048	-110.528	-14.7875	-16.0461
-13.6707	-22.7475	-102.652	-104.425	-14.6473	-15.9165
-13.67	-22.8569	-104.127	-100.356	-14.5522	-15.7363
-13.7171	-22.8687	-99.3106	-93.4148	-14.6486	-15.6421
-13.7307	-22.8589	-105.514	-97.7894	-14.4763	-15.4736
-13.618	-23.0838	-95.6004	-90.3555	-14.2897	-15.4123
-13.6584	-22.6706	-102.263	-101.215	-14.265	-15.1193
-13.5459	-22.9563	-104.404	-98.4338	-14.0158	-15.1698
-13.6358	-22.5048	-98.5671	-98.1285	-13.9857	-14.9307
-13.7028	-22.1438	-101.459	-99.1992	-13.9087	-14.734
-13.6127	-21.7904	-97.0329	-97.7385	-13.69	-14.5648
-13.5903	-21.5069	-103.181	-94.5973	-13.5451	-14.4683
-13.6077	-20.9833	-102.028	-106.307	-13.4212	-14.2801
-13.6058	-20.7569	-98.0588	-92.4182	-13.2801	-14.2311
-13.6364	-19.7804	-104.692	-98.3559	-13.1664	-13.7785
-13.5169	-19.5162	-97.56	-96.3654	-12.94	-13.7035
-13.4884	-18.8426	-101.222	-92.2794	-12.7121	-13.4238
-13.3651	-18.5325	-105.217	-96.2974	-12.4927	-13.4347
-13.3617	-17.9277	-95.4539	-94.9134	-12.2779	-13.1668
-13.3078	-17.6109	-99.9904	-96.9986	-12.1405	-13.1432
-13.4038	-17.1465	-98.3846	-96.496	-12.0653	-12.9634
-13.5915	-16.5166	-118.584	-97.2799	-12.0497	-12.6763
-13.4044	-16.2086	-91.6521	-96.6475	-11.7916	-12.6445
-13.3532	-15.7801	-121.349	-96.293	-11.585	-12.5111
-13.4279	-15.2681	-104.361	-96.599	-11.4783	-12.2705
-13.343	-14.9589	-109.804	-89.7702	-11.2667	-12.2449
-13.3762	-14.4531	-98.6891	-97.4763	-11.1822	-11.9942
-13.486	-14.2478	-96.9912	-100.66	-11.1182	-12.0074
-13.5221	-13.6942	-96.2927	-90.9488	-10.9657	-11.7242
-13.5623	-13.4614	-102.201	-92.9909	-10.8583	-11.6908
-13.5627	-13.2034	-105.649	-124.266	-10.7107	-11.6497
-13.645	-12.8728	-99.472	-97.1959	-10.6709	-11.5231
-13.5975	-12.614	-94.5768	-111.296	-10.4683	-11.4332
-13.6302	-12.3625	-104.811	-113.122	-10.3388	-11.3574
-13.7358	-12.0596	-106.784	-99.9219	-10.2465	-11.2501
-13.6352	-11.9879	-107.029	-98.0109	-10.0867	-11.3172
-13.7607	-11.7588	-101.071	-101.497	-10.0622	-11.2679
-13.7528	-11.4222	-97.992	-107.159	-9.93944	-11.1248
-13.6497	-11.277	-98.6507	-99.6195	-9.7129	-11.1049
-13.4984	-11.1395	-102.803	-93.705	-9.5891	-11.1068
-13.4756	-11.0219	-93.5405	-102.467	-9.45392	-11.1178
-13.3674	-10.9383	-101.888	-94.9506	-9.35771	-11.1964
-13.2038	-10.6447	-99.1827	-97.3052	-9.15221	-11.0811
-13.0494	-10.5918	-102.693	-95.7899	-9.01229	-11.156
-12.9966	-10.4412	-100.925	-95.2742	-8.96299	-11.1279
-12.8753	-10.4419	-98.0059	-101.912	-8.84733	-11.3118
-12.7983	-10.3496	-99.6731	-90.8641	-8.78466	-11.3814
-12.6017	-10.1249	-107.26	-101.926	-8.60087	-11.3266

J5-J6

S21 (dB)	S12 (dB)	S22 (dB)
-98.4257	-92.8211	-17.9128
-97.8327	-96.6654	-27.524
-93.0028	-95.7855	-27.4973
-92.8295	-93.0463	-27.2536
-92.1494	-92.3631	-26.8744
-93.3559	-93.2457	-26.5005
-93.1514	-93.9954	-26.169
-94.3006	-94.9102	-25.9026
-94.9715	-97.2533	-25.6868
-95.4512	-96.5945	-25.466
-97.302	-98.1231	-25.2732
-100.908	-102.38	-24.931
-103.698	-100.663	-24.7781
-97.89	-103.519	-24.5764
-108.723	-104.278	-24.4262
-105.876	-103.923	-24.2593
-106.957	-112.777	-24.0435
-106.307	-102.808	-23.9207
-103.329	-117.698	-23.7685
-105.491	-114.019	-23.5699
-111.308	-111.301	-23.3539
-104.273	-107.095	-23.179
-112.646	-108.603	-23.0613
-124.13	-104.819	-22.9354
-109.077	-113.443	-22.7501
-111.505	-107.359	-22.6512
-111.96	-114.063	-22.4978
-116.649	-114.263	-22.4213
-108.338	-119.338	-22.4943
-108.894	-113.395	-22.591
-121.706	-111.317	-22.7558
-108.361	-107.965	-22.8248
-110.68	-111.99	-22.7353
-117.963	-116.368	-22.5666
-103.278	-107.061	-22.2441
-106.007	-115.41	-21.9895
-116.084	-110.127	-21.6746
-117.56	-107.089	-21.4271
-108.849	-109.488	-21.2724
-129.928	-110.927	-21.0817
-108.762	-108.068	-20.8789

J5-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.0446	-101.653	-93.0026	-17.9478
-27.4836	-108.61	-104.612	-28.8651
-27.1827	-107.594	-105.267	-28.3773
-26.7475	-114.378	-114.704	-27.9496
-26.4212	-100.561	-106.341	-27.5796
-26.1131	-108.22	-105.092	-27.3528
-25.9133	-109.07	-104.426	-27.2536
-25.7422	-106.721	-107.199	-27.2261
-25.705	-105.657	-103.612	-27.3879
-25.6838	-109.793	-109.006	-27.4708
-25.5547	-105.621	-117.475	-27.5947
-25.4341	-118.63	-112.698	-27.5803
-25.4653	-108.026	-118.87	-27.7793
-25.4319	-109.628	-114.956	-27.9448
-25.4475	-124.15	-106.287	-28.2513
-25.4547	-124.604	-108.802	-28.4732
-25.3283	-106.633	-110.607	-28.6789
-25.5142	-112.536	-109.097	-29.0032
-25.5681	-128.875	-114.456	-29.3686
-25.6198	-113.972	-139.893	-29.7136
-25.654	-115.283	-108.123	-30.1867
-25.6303	-113.532	-110.859	-30.6024
-25.8767	-109.352	-107.679	-31.1633
-25.9873	-104.975	-113.274	-31.9979
-26.2634	-113.965	-110.889	-32.6167
-26.4878	-105.557	-105.456	-33.6157
-26.686	-121.394	-118.057	-34.5824
-27.0738	-111.525	-116.328	-36.4339
-27.6135	-108.904	-115.898	-39.2212
-28.1462	-123.331	-124.427	-43.2015
-28.5347	-116.881	-107.904	-47.6935
-28.809	-109.565	-112.309	-45.9044
-28.9125	-111.7	-111.359	-42.76
-28.8259	-110.597	-113.36	-41.1243
-28.6622	-111.432	-107.963	-41.6602
-28.5325	-110.321	-114.8	-42.2926
-28.4667	-109.712	-107.026	-45.9086
-28.4881	-110.802	-108.263	-50.3831
-28.4697	-105.802	-113.999	-51.6986
-28.3403	-130.517	-109.185	-49.6111
-28.298	-111.886	-104.652	-45.5992

-109.261	-108.181	-20.6846	-28.2119	-115.255	-106.351	-42.8455
-112.636	-123.145	-20.4659	-28.0341	-112.115	-104.54	-40.0491
-114.086	-106.827	-20.2844	-27.9343	-114.582	-106.969	-37.7783
-120.692	-107.209	-20.1065	-27.9507	-108.851	-109.205	-36.3364
-112.471	-105.453	-19.9775	-27.8482	-111.94	-114.698	-35.08
-117.451	-111.55	-19.8605	-27.6386	-112.581	-116.974	-34.2041
-115.79	-107.852	-19.787	-27.5232	-110.283	-110.993	-33.8112
-111.283	-114.071	-19.6225	-27.081	-120.259	-112.959	-33.6544
-114.073	-111.516	-19.4793	-26.7479	-108.931	-106.784	-33.619
-114.872	-114.089	-19.1881	-26.4049	-146.819	-111.677	-33.2806
-107.911	-122.198	-18.9879	-25.8717	-111.64	-105.364	-32.9455
-119.167	-114.709	-18.668	-25.4596	-107.176	-110.666	-32.1561
-112.597	-111.43	-18.4283	-24.9878	-117.212	-109.397	-31.4378
-108.175	-113.822	-18.1853	-24.5502	-112.813	-103.118	-30.4496
-106.916	-109.381	-17.9055	-24.063	-113.13	-119.956	-29.4666
-114.648	-112.292	-17.6371	-23.6968	-110.889	-124.862	-28.6491
-101.691	-101.314	-17.4056	-23.3085	-115.962	-118.022	-27.8771
-118.868	-106.905	-17.1619	-22.9702	-106.189	-114.581	-27.1104
-111.713	-111.152	-16.916	-22.6483	-113.469	-111.618	-26.356
-115.893	-108.746	-16.7553	-22.352	-104.267	-110.668	-25.7868
-115.935	-109.402	-16.5217	-22.0539	-116.419	-107.874	-25.196
-113.015	-122.157	-16.3408	-21.756	-113.464	-106.487	-24.7303
-105.588	-111.028	-16.1243	-21.4975	-115.69	-116.262	-24.1229
-111.731	-109.515	-15.9245	-21.2896	-115.219	-108.294	-23.5957
-107.11	-106.836	-15.7549	-21.011	-114.709	-113.269	-23.1925
-107.479	-111.88	-15.568	-20.8907	-120.903	-111.392	-22.7173
-110.496	-110.326	-15.4295	-20.6558	-111.627	-108.777	-22.3786
-122.85	-110.827	-15.2832	-20.4206	-110.476	-111.226	-21.988
-121.301	-113.28	-15.1851	-20.2283	-118.307	-105.511	-21.7393
-108.299	-116.144	-15.0649	-20.0716	-112.811	-107.57	-21.4428
-112.065	-111.985	-14.946	-19.8986	-108.985	-114.402	-21.1104
-116.22	-105.846	-14.82	-19.8419	-125.48	-112.729	-20.7968
-115.473	-122.992	-14.6739	-19.6347	-107.323	-114.65	-20.4463
-113.452	-119.103	-14.5627	-19.5899	-111.252	-108.987	-20.1484
-113.243	-109.925	-14.428	-19.4346	-113.094	-106.289	-19.7875
-107.574	-106.053	-14.356	-19.2959	-111.713	-109.929	-19.5387
-114.958	-117.856	-14.2794	-19.2308	-114.019	-122.506	-19.3026
-118.123	-112.47	-14.2319	-19.173	-112.75	-123.607	-19.0971
-110.882	-106.329	-14.1682	-19.1442	-114.314	-118.903	-18.8584
-106.106	-111.474	-14.1035	-19.0236	-111.72	-105.376	-18.6515
-114.965	-112.853	-14.0356	-19.0155	-114.695	-121.803	-18.4237
-110.411	-117.265	-13.9233	-19.0025	-112.48	-107.542	-18.1312
-118.161	-108.778	-13.834	-18.9463	-131.845	-117.979	-17.8851
-107.931	-117.449	-13.7821	-18.8967	-110.466	-109.612	-17.6602
-127.135	-108.146	-13.7633	-18.9033	-114.697	-115.302	-17.521
-115.362	-128.955	-13.7223	-18.9073	-113.755	-105.085	-17.3408
-110.747	-115.377	-13.7421	-18.9072	-113.399	-107.292	-17.2411
-113.444	-118.3	-13.7348	-18.9922	-112.875	-109.894	-17.111
-116.696	-121.15	-13.7221	-18.9	-114.4	-112.009	-16.9557
-112.861	-103.761	-13.6692	-19.0369	-127.844	-121.355	-16.7656
-112.377	-111.467	-13.5976	-19.0303	-107.571	-117.318	-16.528
-106.501	-105.671	-13.5805	-19.0831	-115.253	-118.169	-16.37
-112.709	-108.536	-13.5198	-19.053	-105.479	-107.242	-16.1506
-107.632	-102.631	-13.5235	-19.1632	-107.634	-124.858	-16.0082
-106.078	-110.764	-13.5458	-19.2203	-115.549	-112.139	-15.8863

-110.347	-105.765	-13.5732	-19.3057	-115.165	-118.988	-15.7674
-125.618	-107.053	-13.5597	-19.3088	-111.812	-114.812	-15.6025
-108.75	-107.134	-13.6071	-19.3398	-105.045	-109.717	-15.512
-109.713	-110.908	-13.6925	-19.4055	-119.236	-117.055	-15.4646
-118.117	-112.681	-13.6592	-19.509	-104.432	-117.511	-15.275
-108.387	-109.495	-13.7096	-19.5208	-118.177	-105.385	-15.1847
-123.821	-119.234	-13.7744	-19.5627	-115.464	-116.859	-15.1018
-112.711	-107.992	-13.7589	-19.7086	-108.556	-107.467	-14.9312
-113.506	-106.968	-13.8367	-19.8557	-113.458	-114.62	-14.8714
-101.256	-94.8636	-13.8912	-19.7787	-111.377	-109.435	-14.775
-101.382	-94.2309	-13.9877	-19.8374	-103.106	-99.5081	-14.7272
-95.513	-108.076	-14.0935	-19.9477	-101.218	-109.061	-14.696
-109.683	-108.772	-14.2708	-19.9002	-104.999	-98.8938	-14.7165
-97.9914	-94.914	-14.3465	-20.0563	-97.1245	-99.5439	-14.6349
-99.7147	-100.028	-14.5759	-20.1631	-106.547	-99.2005	-14.7113
-119.544	-101.12	-14.6785	-20.1254	-116.523	-97.9868	-14.6596
-106.568	-96.9125	-14.7342	-20.0724	-101.461	-106.961	-14.5766
-96.7124	-103.481	-14.8595	-19.9441	-99.2966	-102.504	-14.5623
-97.6622	-98.8852	-15.0314	-20.0102	-109.14	-96.443	-14.5924
-106.278	-105.373	-15.167	-20.0813	-105.251	-102.312	-14.6018
-102.267	-98.9852	-15.343	-20.0535	-109.392	-100.28	-14.6207
-102.562	-96.5064	-15.4762	-19.9818	-106.639	-102.11	-14.6077
-96.9584	-100.048	-15.6147	-19.8545	-102.937	-119.632	-14.6128
-105.141	-96.1794	-15.7419	-19.8089	-102.046	-98.4801	-14.6225
-97.4386	-109.076	-15.8345	-19.8022	-103.308	-103.925	-14.5538
-99.7126	-93.4826	-15.8392	-19.5938	-104.133	-100.276	-14.4793
-97.4378	-98.7123	-15.8619	-19.6219	-105.536	-97.7086	-14.3966
-110.337	-103.418	-16.063	-19.4417	-96.4349	-98.933	-14.4959
-124.648	-103.092	-16.2169	-19.3867	-97.5557	-105.202	-14.526
-109.645	-93.7357	-16.2254	-19.2714	-100.522	-95.7283	-14.4441
-104.948	-98.5752	-16.3814	-19.3467	-101.058	-100.408	-14.5151
-104.699	-105.59	-16.6521	-18.9953	-105.975	-100.925	-14.6133
-100.407	-95.2974	-16.6277	-19.0381	-101.958	-98.037	-14.526
-101.32	-104.753	-16.671	-18.8784	-104.262	-99.1538	-14.4807
-100.433	-97.1665	-16.7101	-18.7994	-113.579	-105.557	-14.4549
-111.701	-106.825	-16.7552	-18.7032	-97.7608	-105.342	-14.4908
-101.047	-101.219	-16.7356	-18.5651	-95.11	-96.9221	-14.4999
-101.838	-99.5432	-16.9299	-18.42	-96.7393	-112.642	-14.5706
-101.442	-100.069	-16.8805	-18.2945	-99.6982	-95.4044	-14.5784
-113.227	-99.5304	-17.0054	-18.2611	-96.83	-97.5637	-14.657
-102.003	-107.918	-16.791	-18.0678	-95.1387	-107.202	-14.5708
-110.758	-104.749	-16.8136	-17.944	-106.483	-104.53	-14.6255
-108.533	-97.8838	-16.7098	-17.8842	-102.324	-95.2747	-14.5262
-107.474	-103.533	-16.5811	-17.845	-96.6161	-95.0358	-14.498
-100.477	-100.918	-16.3634	-17.6835	-96.4911	-103.601	-14.3936
-104.554	-95.2126	-16.2017	-17.5977	-104.332	-105.319	-14.274
-106.275	-102.104	-15.9484	-17.3881	-104.237	-98.0667	-14.2256
-93.9565	-101.314	-15.8625	-17.2855	-104.324	-99.7791	-14.251
-103.116	-109.795	-15.8357	-17.167	-98.8401	-118.547	-14.148
-108.601	-96.3506	-15.6555	-17.0166	-111.328	-98.8326	-14.1757
-104.319	-94.0628	-15.5677	-16.9022	-97.5761	-96.6507	-14.1312
-102.307	-117.735	-15.4275	-16.7408	-116.033	-112.539	-14.0594
-98.2666	-95.5538	-15.1691	-16.6153	-99.8513	-96.6395	-13.9762
-125.108	-112.393	-15.0315	-16.4419	-106.988	-105.698	-13.8531
-105.012	-97.2525	-14.8699	-16.5197	-101.73	-96.601	-13.7934

-96.6107	-95.2198	-14.7273	-16.2831	-96.3387	-107.326	-13.8069
-95.6425	-107.633	-14.6328	-16.25	-99.7143	-103.9	-13.7447
-101.526	-107.73	-14.486	-16.0376	-97.4513	-100.949	-13.6869
-104.711	-97.5926	-14.3047	-15.9113	-94.5915	-104.494	-13.6211
-94.6211	-112.612	-14.1894	-15.7311	-100.009	-101.282	-13.6175
-101.615	-100.078	-14.2345	-15.6383	-100.921	-98.6238	-13.6754
-96.373	-93.7796	-13.9409	-15.4698	-105.54	-96.8557	-13.6752
-94.8005	-93.8226	-13.8157	-15.404	-100.241	-98.1826	-13.5836
-96.1949	-103.789	-13.7222	-15.1171	-96.8039	-99.986	-13.6196
-91.1405	-92.2677	-13.4828	-15.1665	-107.383	-97.9321	-13.5057
-109.575	-96.9248	-13.3884	-14.9315	-94.4726	-101.987	-13.5882
-94.3765	-95.1714	-13.2739	-14.7367	-101.57	-92.9667	-13.6623
-105.881	-94.247	-13.0363	-14.5663	-99.4305	-99.7235	-13.5721
-99.6784	-104.849	-12.8894	-14.4668	-111.679	-111.48	-13.5472
-96.6148	-97.2769	-12.7393	-14.2786	-94.6008	-95.27	-13.5808
-91.9645	-102.532	-12.569	-14.2307	-94.9384	-95.7545	-13.5926
-101.835	-122.436	-12.4786	-13.7764	-100.374	-90.7786	-13.6247
-97.3425	-93.944	-12.2871	-13.7028	-106.176	-99.4593	-13.5176
-96.2095	-101.771	-12.0937	-13.4232	-107.222	-101.362	-13.5099
-108.08	-96.5125	-11.8867	-13.4269	-96.5827	-105.687	-13.3929
-96.6786	-101.178	-11.6509	-13.1599	-104.739	-98.9741	-13.3907
-92.7309	-95.8053	-11.5577	-13.1382	-105.647	-99.7701	-13.3697
-101.113	-95.4358	-11.4554	-12.957	-102.913	-97.2777	-13.4299
-108.731	-96.6977	-11.4681	-12.6696	-99.5841	-105.37	-13.6638
-94.552	-100.554	-11.275	-12.6307	-100.015	-104.989	-13.4687
-105.573	-95.8953	-11.0735	-12.4962	-98.5613	-92.4982	-13.3939
-109.392	-93.9522	-10.9696	-12.2638	-104.828	-98.5328	-13.4693
-92.7381	-91.9203	-10.7955	-12.2394	-95.4514	-94.4373	-13.3822
-97.5003	-101.415	-10.7239	-11.9933	-104.342	-98.4896	-13.4079
-107.474	-97.0797	-10.6718	-11.9939	-100.868	-92.6032	-13.5087
-101.484	-98.5848	-10.5037	-11.7146	-111.231	-105.593	-13.5116
-106.964	-103.78	-10.4243	-11.6818	-100.295	-94.9681	-13.5355
-99.1093	-104.742	-10.3065	-11.6411	-104.004	-97.8393	-13.5217
-99.7781	-96.1732	-10.2971	-11.5187	-107.378	-100.995	-13.5851
-109.262	-99.673	-10.1057	-11.4275	-106.395	-97.7115	-13.5232
-98.2087	-98.7826	-9.98838	-11.353	-103.349	-104.988	-13.5345
-103.234	-100.881	-9.8921	-11.2487	-101.123	-94.8096	-13.6071
-97.2585	-96.9801	-9.79721	-11.3151	-110.483	-95.7251	-13.5118
-100.95	-91.3906	-9.78399	-11.2652	-103.586	-100.253	-13.6171
-100.748	-96.656	-9.66904	-11.1227	-95.4372	-112.543	-13.6103
-99.9638	-93.982	-9.45323	-11.1087	-105.668	-106.84	-13.5054
-99.296	-102.354	-9.39191	-11.11	-110.78	-96.473	-13.3588
-96.6522	-93.3301	-9.25796	-11.1221	-105.672	-95.4074	-13.3564
-96.4252	-102.629	-9.22456	-11.2104	-102.491	-93.204	-13.2668
-96.0874	-94.0954	-9.02659	-11.0768	-92.7062	-92.4114	-13.1116
-108.36	-95.0701	-8.91256	-11.1635	-106.169	-103.037	-12.9832
-106.986	-96.6812	-8.89439	-11.1325	-104.668	-91.3312	-12.9431
-97.7362	-96.7155	-8.82392	-11.3114	-102.746	-94.5302	-12.8456
-109.272	-95.3893	-8.78448	-11.382	-94.553	-100.814	-12.7844
-92.5069	-90.9648	-8.64843	-11.3285	-93.0216	-95.3724	-12.5924

J5-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.0376	-96.3313	-97.3317	-17.5617
-27.4736	-107.742	-107.599	-28.492
-27.1669	-103.725	-122.625	-29.0807
-26.7301	-105.69	-104.743	-28.936
-26.4202	-108.287	-103.776	-28.6289
-26.1209	-108.345	-119.209	-28.3509
-25.9217	-118.972	-112.529	-28.1257
-25.7527	-106.805	-104.567	-28.0378
-25.7076	-124.616	-139.099	-28.0751
-25.6893	-102.349	-110.612	-28.0686
-25.562	-106.643	-109.93	-28.1075
-25.4388	-115.298	-109.1	-27.9633
-25.4745	-125.618	-118.34	-28.0517
-25.4421	-129.252	-108.742	-28.0829
-25.4587	-115.896	-109.109	-28.2341
-25.463	-109.388	-109.224	-28.305
-25.3396	-113.177	-107.17	-28.3692
-25.5249	-116.517	-112.459	-28.5487
-25.5772	-111.965	-117.291	-28.7199
-25.6288	-119.852	-107.803	-28.8494
-25.6645	-130.356	-112.667	-29.0081
-25.6482	-110.269	-109.629	-29.131
-25.8907	-107.765	-115.473	-29.4138
-26.0012	-109.165	-108.681	-29.8001
-26.2781	-124.937	-108.188	-30.0055
-26.5005	-119.436	-119.803	-30.4842
-26.6934	-113.866	-110.729	-30.836
-27.0941	-118.192	-106.898	-31.4888
-27.6349	-118.528	-110.933	-32.6253
-28.1744	-113.211	-112.386	-34.0816
-28.5626	-116.073	-111.981	-36.1966
-28.844	-120.163	-117.864	-38.4889
-28.9504	-113.705	-115.644	-40.3263
-28.867	-112.054	-114.004	-41.2417
-28.7037	-112.373	-111.151	-40.4037
-28.5596	-111.459	-112.887	-39.7099
-28.4903	-109.982	-104.137	-38.7413
-28.5052	-107.123	-111.712	-37.7815
-28.4835	-112.101	-124.861	-37.4089
-28.354	-109.557	-115.342	-36.6524
-28.3052	-111.141	-119.163	-35.748

J6-J7

S11 (dB)	S21 (dB)	S12 (dB)
-17.8362	-110.893	-104.627
-27.3864	-95.4914	-93.8958
-27.5735	-91.091	-93.1066
-27.2343	-92.6193	-91.023
-26.8489	-92.1097	-92.2822
-26.4209	-92.4215	-93.5743
-26.0798	-92.6065	-93.4043
-25.7479	-93.5618	-95.3476
-25.5387	-96.6143	-98.4978
-25.3444	-97.4528	-96.396
-25.0296	-101.961	-96.403
-24.7313	-100.906	-99.0704
-24.6122	-101.854	-101.472
-24.421	-102.931	-105.828
-24.2439	-107.007	-111.051
-24.0466	-101.769	-104.816
-23.7666	-114.928	-108.986
-23.7195	-107.893	-106.447
-23.6006	-108.574	-102.421
-23.4399	-109.604	-112.69
-23.2774	-103.119	-102.367
-23.0638	-112.965	-115.205
-23.0345	-105.906	-106.73
-22.913	-110.777	-113.191
-22.8829	-103.19	-117.689
-22.8092	-115.729	-109.684
-22.6983	-105.952	-115.663
-22.7452	-115.764	-108.065
-22.8786	-119.763	-111.51
-23.0208	-112.944	-115.213
-23.0914	-111.844	-112.267
-23.1589	-107.795	-124.317
-23.1176	-113.722	-115.578
-22.9394	-108.894	-115.339
-22.6964	-110.321	-109.335
-22.3955	-104.634	-132.154
-22.0992	-111.938	-120.869
-21.8916	-110.261	-116.73
-21.634	-115.24	-105.721
-21.3465	-112.761	-109.398
-21.1195	-115.576	-108.875

-28.2152	-114.859	-109.048	-35.0097	-20.8988	-113.224	-123.109
-28.0316	-111.677	-113.557	-34.0178	-20.6626	-106.976	-105.57
-27.9206	-112.037	-108.748	-33.1778	-20.473	-111.121	-110.23
-27.9388	-106.964	-111.642	-32.4884	-20.361	-109.056	-104.3
-27.832	-112.154	-110.415	-31.9727	-20.2089	-106.039	-108.865
-27.6263	-106.745	-104.274	-31.5049	-20.0306	-106.711	-110.132
-27.5208	-114.135	-107.078	-31.3958	-19.9053	-112.054	-115.037
-27.0795	-120.969	-113.93	-31.2449	-19.6117	-112.883	-109.585
-26.7481	-110.567	-115.741	-31.241	-19.3855	-113.237	-113.56
-26.3996	-110.634	-106.667	-30.8062	-19.1345	-117.664	-112.166
-25.8584	-112.913	-110.968	-30.5192	-18.8045	-114.659	-113.843
-25.4421	-108.477	-111.9	-29.8076	-18.5212	-107.178	-103.258
-24.967	-106.647	-109.748	-29.13	-18.2166	-108.769	-110.363
-24.5313	-109.554	-112.895	-28.3695	-17.9201	-109.711	-106.209
-24.0483	-106.876	-108.647	-27.5268	-17.5971	-111.677	-113.66
-23.6856	-109.828	-101.889	-26.8102	-17.3351	-120.925	-110.039
-23.2952	-108.162	-112.42	-26.1785	-17.0706	-107.977	-114.615
-22.956	-116.557	-106.124	-25.5768	-16.8366	-106.557	-117.943
-22.6274	-110.484	-141.755	-24.9778	-16.6019	-132.47	-106.48
-22.3277	-110.354	-109.084	-24.5439	-16.3998	-108.516	-114.803
-22.0283	-116.123	-109.226	-24.0505	-16.1885	-112.447	-110.104
-21.7377	-111.419	-102.503	-23.6501	-15.977	-115.686	-110.636
-21.4825	-112.65	-114.608	-23.1479	-15.7908	-109.989	-106.038
-21.2766	-109.323	-108.703	-22.7044	-15.6324	-113.954	-111.651
-20.9972	-114.1	-114.445	-22.3759	-15.4369	-111.501	-115.986
-20.8762	-124.719	-106.915	-22.0062	-15.3363	-108.215	-126.164
-20.6381	-117.397	-110.726	-21.7553	-15.1752	-117.951	-116.327
-20.4031	-115.652	-112.708	-21.4466	-15.0107	-114.587	-113.515
-20.2132	-107.412	-105.419	-21.2715	-14.8698	-113.218	-112.931
-20.0598	-119.213	-113.559	-21.0346	-14.7415	-112.261	-111.309
-19.8881	-111.872	-113.714	-20.7412	-14.6143	-116.492	-111.049
-19.8357	-110.773	-118.382	-20.4793	-14.5433	-113.794	-120.873
-19.6238	-115.38	-105.903	-20.1905	-14.393	-110.873	-108.033
-19.5774	-106.73	-108.351	-19.9506	-14.3298	-106.27	-109.715
-19.4175	-135.839	-107.614	-19.6397	-14.2014	-111.785	-110.712
-19.2783	-113.987	-110.91	-19.4509	-14.1068	-113.637	-113.985
-19.2115	-119.712	-112.966	-19.2706	-14.0358	-114.183	-111.779
-19.1537	-113.983	-109.038	-19.115	-13.9758	-121.994	-109.992
-19.122	-110.344	-127.201	-18.9134	-13.9258	-102.729	-128.185
-19.0093	-110.504	-111.81	-18.7607	-13.8333	-104.69	-108.713
-18.9939	-123.174	-107.54	-18.5888	-13.8056	-115.038	-106.809
-18.977	-111.862	-110.924	-18.3563	-13.7782	-115.485	-120.689
-18.9213	-131.388	-106.621	-18.1728	-13.7362	-110.159	-111.399
-18.8662	-112.657	-115.213	-18.0101	-13.6933	-117.047	-115.108
-18.8763	-109.223	-108.886	-17.9295	-13.695	-113.873	-105.114
-18.8845	-110.337	-107.703	-17.7984	-13.6877	-105.991	-109.818
-18.8895	-113.708	-106.809	-17.7624	-13.6694	-110.021	-127.5
-18.9782	-107.908	-106.584	-17.6895	-13.7199	-113.48	-119.068
-18.8804	-120.005	-109.458	-17.5877	-13.6725	-114.149	-106.82
-19.0169	-113.117	-104.237	-17.4637	-13.7502	-122.1	-107.019
-19.0083	-113.652	-117.42	-17.2794	-13.7483	-129.073	-111.202
-19.0596	-129.986	-109.773	-17.1684	-13.7769	-109.698	-104.74
-19.0409	-113.6	-109.124	-16.9905	-13.7711	-119.01	-117.102
-19.1516	-119.833	-117.267	-16.8945	-13.8546	-112.529	-102.538
-19.2144	-118.754	-119.188	-16.8107	-13.8954	-108.426	-102.749

-19.2947	-124.714	-108.711	-16.745	-13.9679	-117.24	-105.286
-19.2917	-115.934	-113.556	-16.6289	-13.9833	-110.065	-110.798
-19.3275	-113.712	-113.751	-16.5874	-14.0305	-112.795	-111.459
-19.3899	-124.833	-131.95	-16.6061	-14.0817	-109.641	-107.894
-19.4923	-119.531	-107.111	-16.4522	-14.1696	-113.092	-127.092
-19.5047	-124.065	-113.535	-16.4063	-14.2211	-105.427	-106.612
-19.5524	-107.392	-113.196	-16.3743	-14.2831	-108.135	-118.501
-19.7016	-109.392	-104.985	-16.2501	-14.4144	-110.497	-110.136
-19.8526	-104.635	-106.313	-16.2426	-14.5388	-114.765	-114.303
-19.7714	-112.679	-99.9195	-16.1853	-14.5455	-103.621	-97.4779
-19.8298	-96.1778	-99.0041	-16.2037	-14.6285	-106.491	-93.2522
-19.9436	-106.021	-94.7146	-16.233	-14.7604	-100.419	-103.208
-19.8939	-98.6858	-96.993	-16.3091	-14.7804	-99.7057	-103.61
-20.0513	-106.944	-111.787	-16.2549	-14.9279	-106.418	-99.0557
-20.1751	-109.781	-104.703	-16.4055	-15.0593	-101.954	-98.1712
-20.1412	-110.244	-99.5955	-16.3874	-15.1104	-127.02	-103.224
-20.0816	-98.317	-97.6567	-16.3323	-15.1398	-100.873	-94.6134
-19.9528	-99.2346	-99.1081	-16.3611	-15.1251	-116.335	-98.1504
-20.0178	-98.2878	-101.13	-16.4347	-15.2315	-99.5701	-101.373
-20.0903	-100.677	-102.314	-16.4827	-15.342	-103.802	-95.3043
-20.0611	-98.4991	-97.8061	-16.5521	-15.4097	-110.552	-102.793
-19.9961	-107.364	-101.005	-16.5705	-15.4348	-101.816	-96.6652
-19.8729	-100.077	-96.5644	-16.6088	-15.4325	-100.143	-105.14
-19.828	-98.4423	-101.999	-16.6528	-15.4799	-113.148	-96.2019
-19.8195	-94.9456	-96.8045	-16.6262	-15.5462	-105.135	-103.874
-19.6165	-103.881	-108.904	-16.5368	-15.4891	-114.765	-95.3978
-19.6457	-96.7333	-92.582	-16.4548	-15.6018	-101.401	-100.895
-19.4574	-101.265	-103.069	-16.5854	-15.6033	-105.638	-93.575
-19.4165	-103.547	-98.1013	-16.6537	-15.6437	-121.146	-99.1841
-19.3039	-103.9	-101.981	-16.5634	-15.6785	-99.4943	-100.691
-19.3743	-98.6967	-97.0677	-16.6475	-15.7978	-104.221	-107.95
-19.0281	-106.029	-107.84	-16.7956	-15.6765	-108.259	-103.567
-19.0754	-97.8242	-100.166	-16.6863	-15.8017	-103.484	-96.1326
-18.9156	-103.401	-96.8	-16.6374	-15.7926	-118.882	-101.759
-18.839	-99.3332	-103.579	-16.6121	-15.852	-104.501	-104.07
-18.7389	-99.1196	-98.9341	-16.626	-15.8837	-101.383	-102.645
-18.602	-99.0375	-100.45	-16.57	-15.8837	-95.8069	-105.703
-18.4652	-106.806	-107.745	-16.6821	-15.9057	-95.5915	-103.132
-18.3346	-104.535	-107.132	-16.6326	-15.9172	-98.6416	-99.6857
-18.3032	-98.2079	-100.472	-16.7255	-15.992	-108.453	-120.298
-18.1088	-102.693	-99.3105	-16.5506	-15.9607	-101.409	-96.0267
-17.9784	-104.135	-99.9925	-16.6008	-15.9612	-100.015	-94.6363
-17.9218	-112.88	-95.966	-16.4741	-15.9822	-99.5487	-111.101
-17.8756	-99.0963	-96.9392	-16.3858	-16.0886	-100.077	-101.362
-17.7128	-104.362	-99.6129	-16.2115	-16.052	-95.7701	-94.876
-17.6304	-98.4782	-94.666	-16.0347	-16.0816	-99.2369	-92.5335
-17.4223	-98.4675	-99.9089	-15.8938	-15.9951	-100.789	-94.4221
-17.3226	-101.255	-96.2041	-15.8601	-16.003	-94.7469	-103.477
-17.1963	-95.7909	-97.2374	-15.7751	-15.9818	-120.887	-97.5939
-17.0441	-99.6031	-98.8549	-15.7091	-15.9316	-97.2348	-97.4351
-16.9253	-100.311	-111.026	-15.6345	-15.9111	-101.562	-97.811
-16.7617	-107.489	-102.371	-15.4954	-15.8235	-99.0185	-93.8407
-16.6411	-95.8423	-100.858	-15.325	-15.757	-106.378	-96.8981
-16.4662	-99.1799	-108.47	-15.1578	-15.661	-97.6832	-112.458
-16.5431	-101.274	-98.6094	-15.0369	-15.7571	-96.8252	-105.07

-16.3064	-99.6095	-93.7366	-14.9302	-15.5661	-98.6096	-102.751
-16.2737	-103.09	-96.7094	-14.8483	-15.5658	-101.741	-97.6782
-16.0614	-97.4113	-92.4053	-14.7433	-15.3582	-98.9155	-100.72
-15.9322	-118.747	-108.048	-14.5869	-15.2302	-101.455	-104.763
-15.7434	-103.222	-106.418	-14.5044	-15.0352	-100.78	-105.435
-15.6532	-100.111	-92.7861	-14.5761	-14.9384	-111.914	-96.1267
-15.4889	-99.0285	-96.3434	-14.3821	-14.7486	-97.9609	-108.088
-15.4256	-107.604	-95.2394	-14.2212	-14.6382	-101.545	-94.4127
-15.1425	-98.5712	-99.6093	-14.1806	-14.3318	-102.173	-102.635
-15.191	-111.178	-103.221	-13.9452	-14.3126	-112.898	-111.125
-14.9521	-110.345	-96.0424	-13.9102	-14.0434	-102.468	-94.8538
-14.757	-99.9681	-101.253	-13.8441	-13.786	-95.3598	-97.3724
-14.5752	-96.4468	-104.431	-13.6252	-13.5714	-94.6162	-92.0499
-14.4773	-94.198	-105.656	-13.4856	-13.3973	-99.4306	-92.9649
-14.2877	-102.038	-102.586	-13.3627	-13.1472	-101.537	-96.5031
-14.2416	-95.7204	-99.3758	-13.2268	-13.0525	-100.467	-97.8229
-13.7921	-99.4317	-92.1354	-13.1273	-12.5571	-106.504	-101.222
-13.7187	-103.442	-110.085	-12.9081	-12.4453	-103.903	-107.239
-13.4336	-103.331	-100.756	-12.7078	-12.1118	-98.0112	-111.383
-13.437	-103.338	-111.983	-12.4925	-12.0228	-94.023	-102.645
-13.1537	-108.249	-96.3033	-12.2781	-11.6877	-106.159	-100.066
-13.1427	-105.479	-102.095	-12.1577	-11.6316	-99.9883	-102.692
-12.9485	-100.729	-117.058	-12.0745	-11.4132	-100.127	-94.2426
-12.6647	-96.9457	-95.0779	-12.0765	-11.0875	-106.678	-111.784
-12.6294	-100.663	-102.75	-11.83	-10.9999	-102.698	-95.2759
-12.4914	-108.888	-100.204	-11.6119	-10.8126	-102.092	-97.2106
-12.2543	-115.734	-106.735	-11.5065	-10.5721	-100.604	-91.566
-12.227	-95.65	-92.9075	-11.3025	-10.4657	-98.4438	-97.0586
-11.9772	-101.143	-101.328	-11.1997	-10.2422	-100.89	-85.3678
-11.9896	-93.1752	-91.5501	-11.1484	-10.1883	-96.8092	-94.2411
-11.7056	-102.364	-98.1976	-10.9889	-9.89486	-97.5601	-93.0369
-11.6747	-101.937	-100.228	-10.8747	-9.8211	-98.2747	-96.0247
-11.6353	-104.889	-102.437	-10.7257	-9.70238	-97.3279	-91.8008
-11.509	-98.9043	-100.006	-10.6906	-9.57784	-99.5864	-97.822
-11.4202	-100.526	-102.987	-10.4821	-9.47052	-92.343	-103.795
-11.3468	-100.89	-99.3853	-10.3516	-9.37896	-95.8263	-107.354
-11.2344	-100.48	-111.849	-10.2551	-9.23228	-93.527	-93.5706
-11.3094	-96.8542	-105.274	-10.1128	-9.28923	-93.1659	-94.4813
-11.2584	-102.385	-94.1384	-10.0683	-9.16349	-96.9212	-97.3833
-11.1147	-101.368	-99.5625	-9.96474	-8.97126	-101.873	-94.6607
-11.1033	-100.577	-97.0395	-9.73899	-8.97427	-98.6018	-106.941
-11.1071	-106.57	-91.6562	-9.62038	-8.94093	-101.619	-98.0975
-11.1118	-98.1528	-109.665	-9.48696	-8.9455	-100.168	-100.019
-11.1974	-94.4245	-98.1192	-9.40561	-8.95832	-91.5891	-94.8187
-11.0641	-98.5882	-92.2401	-9.19643	-8.76078	-91.2052	-98.7901
-11.1553	-92.074	-95.9992	-9.0664	-8.83874	-95.6371	-101.823
-11.1252	-103.352	-97.7378	-9.00554	-8.78119	-96.7075	-91.4173
-11.3048	-106.83	-94.1594	-8.89242	-8.86148	-110.204	-93.569
-11.381	-106.531	-96.3469	-8.82338	-8.85393	-94.8485	-93.2288
-11.3233	-105.587	-99.9662	-8.63885	-8.73786	-93.7125	-92.8363

J6-J8

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.9426	-17.8251	-95.4251	-97.4657	-17.5573	-17.8557
-28.8556	-27.3678	-98.7468	-101.018	-28.5174	-28.7178
-28.3816	-27.559	-109.014	-103.517	-29.0612	-28.4944
-27.9353	-27.2197	-102.96	-101.783	-28.9456	-27.9619
-27.557	-26.8433	-104.654	-102.519	-28.6366	-27.6197
-27.3895	-26.416	-101.597	-104.482	-28.3828	-27.3466
-27.3001	-26.0745	-107.982	-109.169	-28.1971	-27.205
-27.27	-25.7444	-107.61	-100.733	-28.1041	-27.1141
-27.4254	-25.5298	-106.847	-108.757	-28.1442	-27.2322
-27.4751	-25.3367	-109.875	-112.738	-28.1228	-27.3735
-27.5916	-25.0219	-106.111	-116.148	-28.1565	-27.4107
-27.5703	-24.7228	-107.671	-112.518	-28.0158	-27.4344
-27.7667	-24.6031	-110.061	-110.692	-28.1251	-27.5738
-27.951	-24.4132	-118.125	-117.907	-28.1856	-27.6654
-28.254	-24.2359	-111.001	-104.955	-28.3545	-27.8991
-28.4782	-24.0384	-111.685	-112.282	-28.4418	-28.1424
-28.6897	-23.7606	-115.486	-109.862	-28.5047	-28.1885
-29.0204	-23.7112	-112.598	-110.493	-28.6966	-28.6493
-29.4057	-23.5938	-121.424	-105.628	-28.8842	-28.8721
-29.7754	-23.4352	-111.647	-109.857	-29.0333	-29.2132
-30.2756	-23.2731	-106.956	-109.649	-29.2066	-29.5478
-30.7449	-23.06	-116.59	-116.415	-29.3622	-29.8302
-31.3073	-23.0315	-111.983	-112.847	-29.6479	-30.5474
-32.1271	-22.9093	-111.8	-116.42	-30.0321	-31.1015
-32.6892	-22.8781	-116.681	-103.59	-30.2352	-32.0411
-33.6225	-22.8031	-107.969	-105.705	-30.6871	-33.0451
-34.536	-22.6918	-108.445	-107.589	-31.0392	-34.3407
-36.3551	-22.7392	-122.527	-110.539	-31.6875	-35.9385
-39.1551	-22.8698	-129.075	-111.121	-32.8195	-38.4459
-43.1762	-23.0118	-113.924	-110.542	-34.2618	-41.4145
-47.8222	-23.0827	-125.515	-108.671	-36.3711	-43.4308
-45.6492	-23.1507	-113.57	-113.453	-38.6552	-41.6942
-42.3372	-23.1088	-112.36	-110.419	-40.5609	-39.926
-40.7704	-22.9327	-110.125	-106.996	-41.5423	-39.0183
-41.2712	-22.6897	-106.005	-104.326	-40.6026	-38.8981
-41.9973	-22.3904	-112.881	-105.829	-39.8101	-39.8726
-45.6988	-22.0951	-116.929	-113.382	-38.6088	-41.4005
-49.818	-21.8892	-108.205	-112.633	-37.576	-42.5646
-49.9255	-21.6314	-114.669	-112.918	-37.0752	-43.6928
-48.0363	-21.3456	-117.533	-113.153	-36.2681	-43.6737
-44.7065	-21.1181	-115.556	-106.698	-35.3496	-41.7957

-42.2933	-20.8964	-119.4	-124.323	-34.5556	-39.4906
-39.661	-20.6588	-112.888	-107.532	-33.5742	-37.6842
-37.4308	-20.4691	-113.375	-109.055	-32.7227	-35.746
-36.0121	-20.3563	-118.324	-104.791	-32.0525	-34.4064
-34.759	-20.2012	-116.998	-112.406	-31.5246	-33.3317
-33.999	-20.0231	-116.64	-112.118	-31.1206	-32.6531
-33.7659	-19.8975	-116.005	-120.402	-31.0675	-32.245
-33.7474	-19.6036	-108.133	-122.731	-30.9592	-31.7462
-33.837	-19.3749	-107.615	-122.549	-30.9909	-31.3981
-33.5444	-19.1239	-112.044	-108.488	-30.5715	-31.3461
-33.1498	-18.7941	-108.126	-105.607	-30.307	-30.8375
-32.2666	-18.5111	-110.976	-110.974	-29.6005	-30.4558
-31.5347	-18.2076	-116.808	-130.396	-28.9946	-29.6549
-30.5279	-17.914	-106.406	-111.823	-28.2674	-28.8287
-29.598	-17.5935	-118.043	-116.174	-27.4863	-27.9012
-28.8024	-17.3315	-112.678	-108.441	-26.791	-27.2318
-28.0267	-17.0688	-104.49	-110.618	-26.1789	-26.4783
-27.2039	-16.8349	-117.942	-110.948	-25.563	-25.7843
-26.3777	-16.6017	-109.71	-104.479	-24.9617	-25.1963
-25.7589	-16.4002	-110.438	-110.317	-24.5305	-24.623
-25.1262	-16.1896	-122.058	-118.295	-24.0218	-24.1087
-24.6631	-15.9769	-108.513	-107.683	-23.6308	-23.6097
-24.0884	-15.792	-109.739	-103.307	-23.1347	-23.16
-23.5772	-15.6335	-109.409	-118.718	-22.6959	-22.7643
-23.1881	-15.4371	-107.074	-119.987	-22.3692	-22.3344
-22.7027	-15.3354	-123.805	-111.69	-21.9974	-22.0979
-22.3467	-15.1722	-108.481	-108.914	-21.7474	-21.7453
-21.9545	-15.0078	-109.32	-114.666	-21.4494	-21.3908
-21.7105	-14.8659	-112.804	-124.737	-21.2811	-21.0794
-21.4479	-14.7365	-106.036	-112.127	-21.0587	-20.8035
-21.1478	-14.6096	-115.437	-118.472	-20.7965	-20.4955
-20.8706	-14.5391	-117.579	-108.787	-20.5463	-20.2918
-20.5207	-14.3894	-112.054	-107.676	-20.2602	-19.9268
-20.206	-14.3243	-112.718	-102.909	-20.0195	-19.7355
-19.8387	-14.1989	-119.188	-112.723	-19.7236	-19.4261
-19.5604	-14.1016	-114.869	-107.128	-19.523	-19.1353
-19.3086	-14.0339	-110.075	-108.262	-19.3341	-18.9083
-19.101	-13.9739	-120.569	-110.233	-19.1773	-18.6864
-18.8781	-13.925	-106.592	-112.138	-18.9885	-18.4843
-18.6669	-13.8318	-109.786	-108.539	-18.8255	-18.2168
-18.4322	-13.8023	-112.084	-111.841	-18.6469	-18.0485
-18.1285	-13.7742	-113.073	-108.446	-18.403	-17.8953
-17.867	-13.7346	-128.837	-116.616	-18.2129	-17.7153
-17.6275	-13.6909	-107.231	-115.5	-18.0354	-17.5318
-17.4923	-13.6886	-114.661	-118.353	-17.953	-17.4086
-17.3218	-13.6802	-110.28	-120.797	-17.8335	-17.2719
-17.2315	-13.6637	-105.208	-110.316	-17.7973	-17.131
-17.1206	-13.7142	-109.121	-111.935	-17.734	-17.0749
-16.9666	-13.6662	-124.407	-109.12	-17.6393	-16.8796
-16.7682	-13.7423	-112.072	-109.355	-17.5144	-16.8638
-16.5282	-13.7396	-118.959	-109.528	-17.3258	-16.7258
-16.3672	-13.7695	-107.04	-109.939	-17.2218	-16.6296
-16.1493	-13.7636	-111.763	-104.855	-17.048	-16.4691
-16.0231	-13.8441	-110.581	-123.717	-16.9608	-16.417
-15.9135	-13.8863	-115.658	-108.86	-16.8864	-16.3154

-15.7927	-13.9624	-114.672	-110.323	-16.8167	-16.2438
-15.6274	-13.9771	-117.196	-110.52	-16.6987	-16.1168
-15.5186	-14.0257	-109.178	-114.226	-16.6452	-16.02
-15.4558	-14.077	-112.235	-110.172	-16.6542	-15.9254
-15.265	-14.1688	-120.072	-104.665	-16.4914	-15.864
-15.1727	-14.2197	-113.564	-108.64	-16.4437	-15.7658
-15.0922	-14.2825	-113	-109.62	-16.3954	-15.6753
-14.9235	-14.4167	-115.903	-104.075	-16.2539	-15.6608
-14.8559	-14.5414	-112.032	-104.616	-16.2344	-15.6532
-14.7588	-14.5461	-105.622	-97.0437	-16.1665	-15.5136
-14.7025	-14.631	-101.055	-107.53	-16.1636	-15.4618
-14.6646	-14.7609	-102.992	-98.7719	-16.1814	-15.4554
-14.6878	-14.7845	-102.134	-99.2675	-16.2427	-15.3323
-14.6062	-14.9339	-103.454	-100.404	-16.1894	-15.3439
-14.693	-15.0593	-100.091	-102.144	-16.3362	-15.3223
-14.6464	-15.1105	-98.5451	-99.605	-16.3292	-15.2481
-14.5626	-15.1398	-105.943	-108.108	-16.2707	-15.1446
-14.5472	-15.1204	-96.5578	-101.861	-16.2994	-14.9969
-14.5771	-15.2277	-107.853	-100.836	-16.3848	-14.9872
-14.5832	-15.3366	-107.305	-109.66	-16.4273	-14.9629
-14.6023	-15.4047	-94.3838	-97.891	-16.506	-14.9157
-14.5957	-15.4306	-100.592	-101.699	-16.533	-14.8084
-14.5994	-15.4239	-96.1875	-97.4637	-16.5746	-14.6905
-14.611	-15.4742	-101.696	-97.1205	-16.6217	-14.6329
-14.5418	-15.5385	-93.0905	-91.3136	-16.6084	-14.563
-14.4716	-15.485	-104.285	-96.578	-16.5257	-14.4075
-14.3913	-15.6018	-97.7003	-109.144	-16.4521	-14.4109
-14.4918	-15.599	-102.795	-98.9317	-16.5867	-14.3592
-14.5076	-15.6454	-101.801	-108.097	-16.6513	-14.2792
-14.4359	-15.6723	-99.9008	-94.8787	-16.5675	-14.2239
-14.5095	-15.7953	-96.2113	-98.794	-16.6575	-14.2085
-14.6113	-15.6743	-105.578	-104.346	-16.8237	-14.0565
-14.5301	-15.8002	-103.976	-99.5712	-16.722	-14.0729
-14.4877	-15.7931	-105.939	-100.449	-16.6792	-14.0032
-14.4658	-15.8518	-106.747	-98.305	-16.6597	-13.9799
-14.4975	-15.8839	-101.667	-99.9479	-16.6779	-13.9336
-14.5163	-15.8848	-99.9905	-102.214	-16.6294	-13.8747
-14.5923	-15.9079	-107.164	-99.7145	-16.7489	-13.8517
-14.5999	-15.9193	-102.487	-96.3581	-16.7034	-13.8219
-14.6843	-15.9931	-107.796	-98.2938	-16.7889	-13.8223
-14.5937	-15.9618	-98.8286	-96.8068	-16.6129	-13.7701
-14.6418	-15.9631	-98.1037	-94.8091	-16.6531	-13.7497
-14.5434	-15.9853	-102.846	-93.239	-16.5217	-13.6613
-14.5161	-16.0773	-109.179	-98.3077	-16.4256	-13.7352
-14.4171	-16.0521	-99.7904	-96.0476	-16.2285	-13.6778
-14.3083	-16.0782	-108.535	-99.7589	-16.0619	-13.6945
-14.2396	-15.9941	-97.9044	-107.417	-15.8967	-13.636
-14.2573	-16.0008	-106.656	-101.963	-15.8452	-13.6516
-14.1569	-15.9763	-96.4088	-104.095	-15.7654	-13.6526
-14.1667	-15.9256	-95.6139	-97.2977	-15.6829	-13.6455
-14.1312	-15.908	-104.308	-99.7596	-15.6011	-13.7083
-14.0638	-15.818	-98.6993	-96.8563	-15.4753	-13.6491
-13.9717	-15.7536	-101.803	-100.301	-15.298	-13.6311
-13.8509	-15.6563	-103.735	-94.5458	-15.1422	-13.7295
-13.7903	-15.7542	-105.049	-104.812	-15.0271	-13.7839

-13.8175	-15.5538	-94.8096	-110.656	-14.9125	-13.7608
-13.7313	-15.5617	-97.8294	-99.3343	-14.8293	-13.8737
-13.6581	-15.355	-98.5069	-92.349	-14.7146	-13.9742
-13.6038	-15.2272	-94.9304	-106.155	-14.569	-13.9172
-13.5778	-15.039	-105.378	-91.9881	-14.4833	-13.9665
-13.6433	-14.9352	-104.09	-106.391	-14.5407	-13.9599
-13.6425	-14.7471	-95.4847	-93.8119	-14.3341	-14.0032
-13.5619	-14.6395	-99.2947	-99.316	-14.1875	-14.0614
-13.5929	-14.3304	-103.547	-92.9743	-14.1339	-14.0946
-13.4632	-14.3149	-94.9871	-114.95	-13.897	-14.2943
-13.5371	-14.0435	-102.148	-99.5027	-13.859	-14.2587
-13.6073	-13.7872	-108.501	-100.882	-13.7988	-14.3819
-13.5224	-13.5729	-101.158	-96.4812	-13.5786	-14.3146
-13.4975	-13.3949	-95.3664	-97.0466	-13.4279	-14.4234
-13.541	-13.148	-100.045	-103.578	-13.3262	-14.4818
-13.562	-13.049	-104.025	-94.5038	-13.1887	-14.5029
-13.5895	-12.5572	-101.998	-99.7039	-13.0939	-14.352
-13.4847	-12.4442	-101.012	-95.6887	-12.8902	-14.2742
-13.4848	-12.1078	-102.881	-101.248	-12.7205	-14.1893
-13.3887	-12.0207	-97.8155	-102.664	-12.4814	-14.4144
-13.3522	-11.6822	-118.056	-100.296	-12.2761	-14.304
-13.3439	-11.6277	-99.8937	-96.4286	-12.1602	-14.3179
-13.4183	-11.4049	-109.209	-100.446	-12.062	-14.1475
-13.6333	-11.0801	-105.977	-110.086	-12.0797	-13.9899
-13.4474	-10.9872	-97.7108	-90.1934	-11.8257	-13.9972
-13.3916	-10.8038	-103.447	-91.9402	-11.604	-13.9262
-13.4726	-10.5679	-99.1756	-101.193	-11.5019	-13.6943
-13.3694	-10.4643	-106.069	-104.277	-11.2888	-13.7729
-13.3928	-10.2401	-104.372	-99.3835	-11.1936	-13.4639
-13.4789	-10.1867	-100.196	-94.2954	-11.1395	-13.4816
-13.477	-9.88758	-111.85	-98.0988	-10.9541	-13.2074
-13.5104	-9.81638	-101.058	-97.2142	-10.8429	-13.1552
-13.495	-9.70113	-108.098	-99.79	-10.6947	-13.1569
-13.5686	-9.57275	-107.134	-102.697	-10.6595	-13.0018
-13.4968	-9.46695	-112.627	-97.3557	-10.4515	-12.8369
-13.4978	-9.37689	-100.059	-93.887	-10.3267	-12.712
-13.5589	-9.23086	-99.9807	-99.3529	-10.235	-12.5933
-13.466	-9.28669	-94.0177	-105.768	-10.0967	-12.5743
-13.5584	-9.15845	-97.647	-102.277	-10.0712	-12.5467
-13.5695	-8.96941	-104.778	-96.2956	-9.95663	-12.4225
-13.4626	-8.97356	-101.383	-103.166	-9.74255	-12.3133
-13.3203	-8.94296	-107.505	-100.635	-9.635	-12.2659
-13.3277	-8.95033	-91.5956	-108.594	-9.51191	-12.1876
-13.2469	-8.96442	-102.089	-97.379	-9.43797	-12.2676
-13.099	-8.7671	-92.0608	-100.753	-9.23939	-12.1511
-12.9797	-8.83844	-99.1638	-111.698	-9.10635	-12.1656
-12.9346	-8.78426	-96.824	-92.0155	-9.05248	-12.0391
-12.8493	-8.86157	-104.032	-103.501	-8.94576	-12.1891
-12.7974	-8.84629	-110.208	-96.6089	-8.87761	-12.2188
-12.6093	-8.7333	-99.9563	-91.0939	-8.6911	-12.1227

		0.2 TO 19
max	1.800465	2.249958
Max	1.895453	1.984155
max	1.895453	2.249958

J7-J8

S21 (dB)	S12 (dB)	S22 (dB)	Frequency (GHz)	J1 In	J1 Out	J2 In	J2 Out
-97.0817	-93.8239	-17.5534	0.1	2.378658	3.718168	1.997956	1.994349
-93.3569	-96.6829	-28.5119	0.1995	1.402736	1.286623	1.400885	1.307594
-94.2418	-92.5386	-29.0515	0.299	1.204525	1.157847	1.220022	1.182328
-91.1177	-91.7972	-28.942	0.3985	1.162534	1.194872	1.136578	1.141749
-91.4318	-92.2737	-28.6313	0.498	1.15464	1.22105	1.100905	1.12138
-93.6528	-92.8494	-28.3779	0.5975	1.162734	1.232978	1.089863	1.114737
-94.0927	-94.3549	-28.1909	0.697	1.173527	1.239186	1.091414	1.109966
-94.0328	-95.4819	-28.0893	0.7965	1.179586	1.233998	1.103734	1.105043
-97.7467	-98.8397	-28.1209	0.896	1.195092	1.232304	1.121884	1.104817
-97.6663	-99.0232	-28.0904	0.9955	1.211803	1.227158	1.144266	1.107606
-98.2034	-101.964	-28.1152	1.095	1.217639	1.215787	1.15115	1.105492
-103.398	-101.238	-27.9693	1.1945	1.235259	1.211526	1.168649	1.109161
-105.472	-104.391	-28.0734	1.294	1.243168	1.197264	1.182248	1.107221
-106.923	-104.8	-28.138	1.3935	1.253307	1.198906	1.191762	1.116869
-114.219	-112.721	-28.3159	1.493	1.265716	1.189735	1.203157	1.115496
-112.497	-106.88	-28.4162	1.5925	1.28269	1.188415	1.220406	1.121591
-108.463	-103.311	-28.4948	1.692	1.290228	1.185365	1.225483	1.122768
-111.706	-107.831	-28.7018	1.7915	1.297594	1.1812	1.230996	1.122571
-109.204	-113.615	-28.9075	1.891	1.308573	1.187931	1.239958	1.129354
-108.775	-110.239	-29.0644	1.9905	1.317625	1.184377	1.243756	1.124304
-107.547	-111.557	-29.2468	2.09	1.331006	1.192951	1.250884	1.130114
-114.786	-121.968	-29.4036	2.1895	1.342585	1.201427	1.256395	1.133939
-103.354	-121.987	-29.6779	2.289	1.344252	1.207065	1.252105	1.132582
-121.273	-117.642	-30.042	2.3885	1.356118	1.215512	1.254595	1.132099
-124.215	-112.848	-30.2251	2.488	1.356279	1.220667	1.248943	1.130448
-102.671	-110.158	-30.6513	2.5875	1.364918	1.226834	1.249491	1.127298
-112.494	-111.376	-30.9847	2.687	1.365348	1.232688	1.244092	1.124295
-108.112	-110.864	-31.6239	2.7865	1.366273	1.238604	1.239382	1.121895
-104.798	-110.533	-32.76	2.886	1.36979	1.250165	1.238448	1.124732
-113.16	-117.897	-34.2392	2.9855	1.36935	1.254009	1.238429	1.119951
-112.928	-105.954	-36.4125	3.085	1.375621	1.266123	1.250358	1.121518
-108.576	-107.812	-38.8132	3.1845	1.379454	1.278529	1.256817	1.124701
-113.546	-112.315	-40.8059	3.284	1.393972	1.290363	1.273061	1.128555
-107.44	-109.219	-41.8544	3.3835	1.401432	1.293444	1.276383	1.128035
-110.214	-115.364	-40.989	3.483	1.416024	1.294467	1.289086	1.130396
-111.764	-114.841	-40.2593	3.5825	1.417278	1.291616	1.290237	1.129281
-112.264	-111.923	-39.0497	3.682	1.423307	1.286723	1.30117	1.127219
-111.811	-107.813	-37.9649	3.7815	1.417106	1.27998	1.303094	1.133876
-112.313	-116.058	-37.3641	3.881	1.424261	1.26993	1.317199	1.132718
-110.748	-105.974	-36.426	3.9805	1.416276	1.258611	1.323531	1.134382
-109.422	-111.907	-35.3768	4.08	1.409867	1.244573	1.337492	1.141094

-115.008	-109.423	-34.4876	4.1795	1.399672	1.228998	1.351183	1.14876
-108.409	-107.955	-33.4443	4.279	1.387991	1.210044	1.36328	1.152774
-112.736	-107.037	-32.5639	4.3785	1.380585	1.190062	1.383413	1.159589
-107.288	-119.27	-31.8935	4.478	1.375868	1.174653	1.400042	1.169062
-113.898	-107.995	-31.3761	4.5775	1.372969	1.160348	1.42067	1.175886
-116.71	-126.172	-30.9978	4.677	1.367802	1.143355	1.434238	1.187994
-110.88	-112.34	-30.9829	4.7765	1.372598	1.127147	1.453194	1.199433
-111.591	-107.924	-30.9041	4.876	1.361595	1.119926	1.455944	1.215012
-107.913	-101.733	-30.9729	4.9755	1.35014	1.095277	1.463291	1.23649
-108.314	-120.147	-30.5895	5.075	1.335959	1.083516	1.465357	1.25232
-115.11	-113.701	-30.3531	5.1745	1.318805	1.068778	1.466695	1.269585
-115.52	-109.477	-29.6628	5.274	1.298619	1.051215	1.465916	1.29251
-117.784	-102.855	-29.0704	5.3735	1.283418	1.044418	1.467019	1.30944
-114.835	-110.05	-28.3358	5.473	1.262946	1.034754	1.464923	1.324958
-114.648	-110.409	-27.5349	5.5725	1.245358	1.044973	1.458925	1.342005
-115.255	-106.947	-26.8195	5.672	1.232029	1.05969	1.455727	1.354654
-108.14	-115.967	-26.1872	5.7715	1.21965	1.074152	1.452549	1.36502
-117.114	-107.416	-25.5526	5.871	1.208575	1.093581	1.445213	1.377794
-115.03	-117.239	-24.9361	5.9705	1.204202	1.109241	1.442452	1.386125
-111.869	-107.866	-24.4945	6.07	1.187415	1.128888	1.425167	1.39494
-105.366	-118.644	-23.9737	6.1695	1.18428	1.143448	1.419677	1.399272
-110.527	-118.327	-23.5748	6.269	1.178098	1.154436	1.406081	1.400009
-112.739	-105.803	-23.0796	6.3685	1.17412	1.164473	1.394491	1.400689
-106.542	-109.963	-22.6422	6.468	1.174678	1.173038	1.389353	1.4005
-110.769	-107.668	-22.3236	6.5675	1.165075	1.172409	1.369821	1.391214
-117.095	-108.917	-21.9627	6.667	1.164532	1.177655	1.360001	1.387874
-122.856	-109.486	-21.7234	6.7665	1.161193	1.195696	1.343661	1.39907
-114.11	-111.609	-21.4337	6.866	1.163513	1.200942	1.33809	1.394881
-108.306	-119.079	-21.2735	6.9655	1.160386	1.201018	1.327523	1.387708
-109.183	-135.088	-21.0605	7.065	1.16367	1.212422	1.317215	1.393653
-110.873	-115.314	-20.8017	7.1645	1.173667	1.220014	1.314203	1.392466
-117.648	-111.033	-20.5597	7.264	1.186178	1.228698	1.314785	1.393512
-117.303	-113.222	-20.2753	7.3635	1.195174	1.234264	1.313237	1.394795
-111.101	-111.781	-20.0354	7.463	1.214928	1.247285	1.321847	1.396539
-111.805	-110.09	-19.7423	7.5625	1.235141	1.269966	1.331843	1.410923
-108.642	-113.06	-19.5422	7.662	1.25937	1.289269	1.341339	1.418942
-109.138	-105.349	-19.3454	7.7615	1.281822	1.309394	1.356509	1.427594
-113.329	-126.634	-19.186	7.861	1.322387	1.340192	1.385314	1.448082
-114.96	-121.699	-18.9957	7.9605	1.333083	1.341221	1.382232	1.44058
-115.146	-115.001	-18.827	8.06	1.368807	1.365887	1.406116	1.448928
-110.86	-105.355	-18.6458	8.1595	1.393622	1.382186	1.41953	1.451285
-114.982	-105.759	-18.4025	8.259	1.422754	1.404391	1.438424	1.464013
-111.485	-110.066	-18.2113	8.3585	1.452449	1.420612	1.456382	1.461801
-109.986	-112.058	-18.0324	8.458	1.468862	1.438893	1.456775	1.465166
-115.642	-111.898	-17.9541	8.5575	1.505755	1.463326	1.485031	1.474989
-112.005	-104.104	-17.8327	8.657	1.51882	1.479134	1.489813	1.476128
-109.71	-111.3	-17.801	8.7565	1.550135	1.4923	1.509673	1.468159
-108.739	-105.83	-17.7444	8.856	1.562022	1.505637	1.511762	1.460871
-118.463	-104.191	-17.6541	8.9555	1.57722	1.516098	1.521351	1.458322
-113.441	-118.141	-17.5314	9.055	1.590869	1.522959	1.522991	1.443615
-116.078	-120.887	-17.3465	9.1545	1.59656	1.527056	1.52249	1.428938
-108.159	-107.267	-17.242	9.254	1.602207	1.539024	1.515904	1.420721
-117.051	-104.998	-17.0676	9.3535	1.616546	1.530609	1.520004	1.401061
-115.376	-108.248	-16.9795	9.453	1.630638	1.54836	1.539294	1.396532
-111.88	-109.221	-16.9114	9.5525	1.619346	1.550847	1.524104	1.380695

-108.96	-106.023	-16.8357	9.652	1.628439	1.563868	1.523719	1.378867
-110.466	-111.088	-16.7175	9.7515	1.642747	1.571876	1.535313	1.369867
-110.373	-121.817	-16.6582	9.851	1.64676	1.575731	1.537011	1.362555
-117.706	-107.812	-16.6599	9.9505	1.657157	1.574251	1.544989	1.352716
-109.899	-110.28	-16.4971	10.05	1.661621	1.575418	1.54065	1.345481
-111.523	-113.861	-16.4407	10.1495	1.666203	1.576188	1.539505	1.345611
-107.459	-108.777	-16.3875	10.249	1.671255	1.577197	1.535856	1.342322
-118.069	-109.916	-16.2427	10.3485	1.683598	1.585668	1.541327	1.347288
-112.115	-109.347	-16.2181	10.448	1.688139	1.587313	1.538258	1.347118
-100.029	-115.647	-16.1479	10.5475	1.696035	1.589841	1.543251	1.350783
-101.627	-99.7284	-16.1445	10.647	1.71145	1.583629	1.543943	1.345895
-107.995	-96.8885	-16.156	10.7465	1.706708	1.6025	1.536262	1.361641
-100.447	-110.054	-16.2118	10.846	1.726327	1.594262	1.546573	1.356709
-107.308	-109.592	-16.1617	10.9455	1.710839	1.57827	1.520846	1.347466
-107.746	-106.892	-16.308	11.045	1.708692	1.594099	1.51008	1.363425
-105.065	-101.556	-16.2948	11.1445	1.696739	1.583252	1.490311	1.352299
-119.896	-97.5181	-16.2402	11.244	1.693888	1.556437	1.478663	1.331444
-97.2964	-111.412	-16.2653	11.3435	1.685835	1.55552	1.464083	1.335395
-98.4157	-100.857	-16.3528	11.443	1.671498	1.550947	1.456295	1.32985
-96.4798	-102.383	-16.3949	11.5425	1.674349	1.538194	1.43664	1.312583
-106.227	-104.301	-16.4717	11.642	1.673002	1.524537	1.424692	1.300003
-95.6723	-101.251	-16.4987	11.7415	1.635746	1.508566	1.394575	1.294545
-97.2455	-100.339	-16.5413	11.841	1.65429	1.499457	1.393581	1.283349
-96.0223	-98.1623	-16.5909	11.9405	1.647955	1.470898	1.377153	1.262019
-94.7864	-98.3979	-16.5768	12.04	1.618027	1.472908	1.339982	1.267975
-94.7248	-95.6524	-16.5047	12.1395	1.625773	1.448877	1.342317	1.251843
-101.849	-98.2908	-16.4358	12.239	1.596724	1.43636	1.310708	1.239533
-99.8389	-104.034	-16.5787	12.3385	1.623744	1.409273	1.320642	1.220558
-100.896	-95.428	-16.6413	12.438	1.591048	1.406672	1.286717	1.214978
-109.685	-102.81	-16.5675	12.5375	1.586856	1.390955	1.265445	1.207497
-92.9197	-102.581	-16.6596	12.637	1.597213	1.379274	1.273778	1.194618
-103.794	-100.711	-16.8341	12.7365	1.604032	1.375434	1.271256	1.18969
-105.488	-99.4116	-16.7409	12.836	1.594409	1.362973	1.253991	1.189522
-100.72	-96.3707	-16.7	12.9355	1.605932	1.353495	1.255249	1.18281
-101.628	-97.6062	-16.6828	13.035	1.600699	1.356527	1.247147	1.187374
-96.4265	-99.2648	-16.7036	13.1345	1.612115	1.33791	1.252709	1.173794
-114.232	-97.1543	-16.658	13.234	1.616138	1.324324	1.247907	1.173796
-97.8903	-102.649	-16.7774	13.3335	1.639566	1.343281	1.267175	1.183611
-103.93	-96.1411	-16.7394	13.433	1.643229	1.32987	1.267037	1.182946
-101.716	-113.616	-16.8216	13.5325	1.653644	1.295372	1.262541	1.158352
-92.5403	-101.2	-16.632	13.632	1.650172	1.326526	1.263152	1.19738
-105.106	-100.233	-16.6682	13.7315	1.67296	1.319519	1.283425	1.189153
-106.823	-100.111	-16.5387	13.831	1.670198	1.327825	1.285612	1.200394
-100.353	-108.093	-16.4388	13.9305	1.701016	1.334697	1.304459	1.227026
-97.3625	-94.0293	-16.2402	14.03	1.717118	1.339161	1.313301	1.241952
-107.406	-100.236	-16.0722	14.1295	1.725513	1.354306	1.329741	1.255498
-113.882	-93.5824	-15.901	14.229	1.707578	1.386314	1.313065	1.291277
-92.2668	-101.631	-15.8457	14.3285	1.747787	1.380218	1.34302	1.302979
-120.253	-97.6153	-15.7673	14.428	1.751006	1.394782	1.353481	1.31684
-98.9941	-101.3	-15.6755	14.5275	1.763295	1.405972	1.365544	1.335557
-105.956	-102.658	-15.5975	14.627	1.758572	1.41508	1.378036	1.353486
-103.694	-96.3017	-15.4713	14.7265	1.786934	1.448377	1.402448	1.398262
-103.469	-101.663	-15.2928	14.826	1.788382	1.476762	1.407055	1.42212
-101.594	-99.406	-15.1246	14.9255	1.785276	1.484362	1.430222	1.440541
-97.4094	-100.418	-15.0026	15.025	1.800465	1.505148	1.442144	1.469528

-98.4467	-95.1781	-14.8902	15.1245	1.786963	1.529058	1.428954	1.483476
-95.9297	-100.93	-14.7996	15.224	1.776387	1.549992	1.438805	1.510487
-97.4078	-99.2355	-14.6875	15.3235	1.778838	1.55177	1.460726	1.503881
-99.6809	-102.092	-14.5359	15.423	1.760317	1.572064	1.44574	1.527774
-103.85	-102.813	-14.4413	15.5225	1.747905	1.575259	1.450719	1.51774
-106.1	-100.631	-14.5015	15.622	1.712866	1.560181	1.420517	1.501883
-103.339	-98.4457	-14.296	15.7215	1.680029	1.579024	1.412398	1.512323
-103.556	-94.4929	-14.1496	15.821	1.680486	1.597484	1.404191	1.526393
-97.0467	-99.2805	-14.1038	15.9205	1.657125	1.576163	1.397263	1.492746
-114.353	-98.0062	-13.8676	16.02	1.639594	1.590659	1.405366	1.495541
-97.7952	-94.1227	-13.8335	16.1195	1.607289	1.600557	1.38376	1.483582
-103.523	-98.3978	-13.7796	16.219	1.56541	1.574746	1.352172	1.44765
-107.397	-101.348	-13.5549	16.3185	1.539739	1.561757	1.337467	1.417418
-99.4368	-96.9127	-13.4277	16.418	1.510687	1.565875	1.321704	1.397568
-94.8048	-94.4308	-13.3156	16.5175	1.491509	1.53788	1.310408	1.357703
-101.364	-98.9712	-13.1842	16.617	1.447844	1.518026	1.276138	1.319318
-106.429	-97.0027	-13.097	16.7165	1.414467	1.521664	1.24848	1.299735
-100.675	-96.3705	-12.8897	16.816	1.376036	1.495159	1.227953	1.254856
-93.2306	-96.7325	-12.7211	16.9155	1.337113	1.471931	1.204214	1.229351
-100.69	-96.9943	-12.4896	17.015	1.3165	1.431042	1.209841	1.183223
-99.3985	-102.441	-12.2796	17.1145	1.281375	1.417219	1.19442	1.157338
-108.865	-91.3443	-12.1656	17.214	1.243287	1.380346	1.175983	1.110788
-99.3801	-94.521	-12.0627	17.3135	1.199303	1.352366	1.180714	1.083223
-96.4577	-94.6733	-12.0813	17.413	1.177055	1.32246	1.194835	1.058095
-97.7053	-93.4367	-11.8214	17.5125	1.133144	1.30138	1.210444	1.070261
-104.086	-102.566	-11.5981	17.612	1.097413	1.256976	1.238987	1.106596
-98.9711	-101.99	-11.4954	17.7115	1.062603	1.247098	1.277437	1.130568
-103.368	-100.041	-11.278	17.811	1.037895	1.22494	1.315193	1.16854
-102.204	-103.582	-11.1936	17.9105	1.039523	1.205387	1.342997	1.198248
-104.247	-92.1091	-11.1251	18.01	1.06369	1.190734	1.366158	1.232707
-89.5812	-102.233	-10.9377	18.1095	1.103323	1.186	1.423926	1.259685
-95.268	-106.259	-10.8256	18.209	1.155789	1.183142	1.442849	1.291358
-106.254	-98.1279	-10.6779	18.3085	1.196882	1.190779	1.471502	1.312665
-96.2766	-96.797	-10.6412	18.408	1.266913	1.181813	1.519704	1.330762
-94.2189	-95.0272	-10.4401	18.5075	1.321564	1.195672	1.547693	1.367253
-95.7289	-95.3468	-10.3101	18.607	1.388657	1.213338	1.568896	1.379044
-94.6298	-103.04	-10.2171	18.7065	1.469014	1.225515	1.617916	1.394073
-93.8161	-95.7015	-10.0882	18.806	1.525075	1.227103	1.627901	1.407521
-95.5809	-101.52	-10.0616	18.9055	1.620905	1.241005	1.658564	1.389016
-93.4938	-100.536	-9.94975	19.005	1.715332	1.262135	1.716596	1.392943
-97.5391	-101.364	-9.73487	19.1045	1.807611	1.285105	1.743654	1.425253
-102.733	-91.62	-9.62893	19.204	1.902189	1.271969	1.792946	1.424416
-98.2845	-101.854	-9.5105	19.3035	1.9903	1.296303	1.814134	1.426785
-98.4013	-99.7092	-9.44266	19.403	2.064124	1.283125	1.829286	1.409248
-96.4934	-97.351	-9.24195	19.5025	2.24208	1.292147	1.911626	1.396352
-94.7273	-107.989	-9.1111	19.602	2.31251	1.286827	1.930261	1.386953
-97.9938	-93.5886	-9.05897	19.7015	2.427695	1.266665	1.977368	1.369222
-94.4041	-120.816	-8.95577	19.801	2.507424	1.277792	1.999173	1.325112
-100.815	-90.5155	-8.88814	19.9005	2.60555	1.273667	2.055378	1.321097
-97.4424	-100.366	-8.70015	20	2.765633	1.28268	2.117921	1.274392

VSWR/IN - OUT

J3 In	J3 Out	J4 In	J4 Out	J5 In	J5 Out	J6 In	J6 Out	J7 In	J7 Out
1.920912	1.825221	2.183767	2.01908	2.105459	1.941452	2.110284	1.957321	2.157604	2.017813
1.410114	1.285346	1.410842	1.28849	1.386361	1.265621	1.394343	1.270705	1.41475	1.28948
1.219121	1.174292	1.219876	1.173635	1.20489	1.164677	1.198655	1.154781	1.21895	1.173071
1.139789	1.139887	1.136126	1.138003	1.125697	1.141303	1.116037	1.125821	1.136695	1.138795
1.106757	1.121981	1.09988	1.121001	1.095172	1.130659	1.083172	1.118796	1.103194	1.122321
1.101198	1.115591	1.091084	1.114966	1.091581	1.129556	1.086474	1.123436	1.101239	1.116273
1.10424	1.109424	1.091962	1.111583	1.09859	1.130174	1.098458	1.132118	1.108767	1.11164
1.119571	1.10249	1.104752	1.105536	1.113179	1.128085	1.115752	1.138113	1.12805	1.10938
1.13974	1.098752	1.122899	1.103873	1.132901	1.128489	1.14078	1.14602	1.150437	1.110166
1.163282	1.099242	1.144559	1.104056	1.154698	1.131693	1.164669	1.157072	1.177897	1.11471
1.171854	1.096607	1.149853	1.099679	1.161476	1.128548	1.172879	1.159051	1.189204	1.116174
1.188595	1.100702	1.164378	1.099886	1.17777	1.129838	1.190534	1.164875	1.209445	1.124217
1.205935	1.098707	1.177229	1.094193	1.19021	1.125494	1.200078	1.163072	1.227021	1.125138
1.216267	1.109758	1.184248	1.099324	1.197019	1.131333	1.207757	1.17108	1.241172	1.138453
1.230973	1.113878	1.192104	1.093292	1.206641	1.125144	1.216112	1.165576	1.257187	1.143798
1.249094	1.125003	1.205942	1.095214	1.22037	1.124908	1.225611	1.162818	1.276193	1.156128
1.256261	1.130449	1.209875	1.092924	1.222349	1.121633	1.225028	1.159185	1.285982	1.162663
1.261924	1.134721	1.210061	1.088495	1.22331	1.113193	1.222264	1.147546	1.293587	1.166757
1.272409	1.146007	1.215647	1.092308	1.227708	1.113548	1.218043	1.143739	1.30459	1.179068
1.278425	1.148037	1.215697	1.085259	1.227319	1.100547	1.212791	1.123604	1.30913	1.178137
1.28697	1.158021	1.221418	1.088836	1.229242	1.099766	1.208857	1.118	1.320645	1.188475
1.293063	1.165699	1.225422	1.092062	1.228831	1.098032	1.202502	1.104669	1.329874	1.196184
1.291771	1.168578	1.22001	1.091284	1.218631	1.090253	1.18556	1.090443	1.324731	1.198286
1.292919	1.172324	1.218845	1.092814	1.217882	1.08636	1.178101	1.078007	1.327848	1.201045
1.287367	1.171551	1.214874	1.090586	1.209005	1.079963	1.160735	1.063642	1.32476	1.199736
1.291454	1.170591	1.218092	1.090646	1.207887	1.075106	1.150645	1.047666	1.326699	1.198191
1.28257	1.166783	1.213445	1.088537	1.197931	1.070036	1.134422	1.033142	1.31793	1.194151
1.277354	1.163001	1.211623	1.08648	1.191655	1.065446	1.121807	1.021747	1.311034	1.190454
1.272829	1.163123	1.212241	1.091589	1.186573	1.066932	1.114642	1.013974	1.305729	1.187632
1.270425	1.158529	1.215522	1.086722	1.181971	1.061889	1.113483	1.027662	1.298161	1.179338
1.277355	1.160452	1.228233	1.082083	1.18989	1.058912	1.127083	1.037361	1.301963	1.180647
1.28275	1.16189	1.237918	1.088103	1.194867	1.062973	1.138329	1.049519	1.300456	1.181318
1.295031	1.163018	1.259154	1.097927	1.211967	1.069802	1.162629	1.061504	1.312941	1.18326
1.292563	1.154325	1.26762	1.106297	1.215906	1.076932	1.174178	1.083954	1.31111	1.175569
1.296184	1.143123	1.287554	1.120399	1.231389	1.089433	1.199295	1.1123	1.31952	1.162686
1.28549	1.12873	1.294536	1.129722	1.239073	1.099766	1.215583	1.140023	1.310564	1.14806
1.281616	1.110087	1.307226	1.136461	1.252071	1.110915	1.242238	1.168929	1.308916	1.129197
1.268098	1.092916	1.313401	1.15229	1.262688	1.13154	1.267865	1.206751	1.297404	1.108741
1.265444	1.072295	1.326985	1.159066	1.279066	1.146307	1.297613	1.23738	1.294478	1.086089
1.256956	1.052934	1.339526	1.169504	1.294515	1.161776	1.329851	1.269953	1.285688	1.063264
1.25611	1.035638	1.357898	1.185428	1.317104	1.180722	1.370067	1.305891	1.282921	1.042696

1.25535	1.028847	1.37754	1.20109	1.337065	1.198133	1.410316	1.337386	1.282662	1.025928
1.257805	1.037835	1.393797	1.215342	1.358452	1.214191	1.447498	1.365413	1.281237	1.026583
1.270347	1.059839	1.42071	1.231192	1.387769	1.230282	1.493065	1.392683	1.292023	1.045086
1.282244	1.083423	1.441467	1.246176	1.413525	1.2462	1.532223	1.418525	1.302466	1.066998
1.298988	1.104186	1.467608	1.258929	1.444766	1.258819	1.574082	1.438943	1.31883	1.08526
1.314365	1.1283	1.491891	1.273607	1.473993	1.277864	1.611874	1.461742	1.33372	1.107094
1.33039	1.151547	1.51633	1.286701	1.497796	1.295132	1.647453	1.48462	1.35091	1.125219
1.336758	1.168123	1.525835	1.296045	1.511225	1.311816	1.669965	1.503596	1.353629	1.13535
1.348215	1.203928	1.536565	1.319517	1.529627	1.341476	1.693126	1.534991	1.362027	1.161364
1.357908	1.225671	1.544091	1.33495	1.54191	1.358523	1.707974	1.558322	1.362513	1.175331
1.366631	1.253151	1.548698	1.356468	1.550888	1.382492	1.72369	1.587247	1.366696	1.195209
1.382144	1.29076	1.554033	1.385353	1.557121	1.407251	1.736204	1.620952	1.367708	1.221537
1.394972	1.318115	1.557868	1.405347	1.561655	1.430487	1.743341	1.643204	1.369913	1.239859
1.412028	1.358066	1.561148	1.430673	1.566611	1.455702	1.749709	1.665077	1.372795	1.266872
1.423233	1.386118	1.558175	1.453014	1.568397	1.472748	1.744354	1.681752	1.367557	1.284257
1.432086	1.41224	1.551883	1.47022	1.563532	1.486925	1.736426	1.691492	1.365477	1.297643
1.449248	1.433271	1.550528	1.48303	1.562268	1.494216	1.727857	1.697355	1.36428	1.306607
1.459108	1.460095	1.543039	1.498812	1.554052	1.506041	1.715931	1.705959	1.358926	1.317089
1.468596	1.478434	1.539829	1.505604	1.551969	1.51273	1.705714	1.706446	1.356204	1.323078
1.472917	1.50204	1.522427	1.519217	1.536198	1.524569	1.678553	1.711597	1.343321	1.334607
1.476022	1.512776	1.5112	1.522143	1.525417	1.527575	1.661335	1.711578	1.334087	1.336963
1.477164	1.522791	1.495004	1.52247	1.514037	1.529379	1.639623	1.705088	1.321453	1.333957
1.466092	1.525026	1.477259	1.515168	1.496522	1.524313	1.610997	1.696934	1.302415	1.328541
1.4662	1.529038	1.465448	1.510416	1.483693	1.516338	1.592742	1.680765	1.291658	1.318594
1.451952	1.516634	1.443457	1.496798	1.460487	1.495648	1.558918	1.651962	1.268108	1.297889
1.438114	1.511587	1.421071	1.486264	1.436312	1.481561	1.530544	1.631153	1.248447	1.283225
1.421811	1.521858	1.397878	1.492507	1.414601	1.481841	1.502265	1.62819	1.228317	1.28233
1.414199	1.518442	1.384027	1.480603	1.400363	1.470485	1.48537	1.611346	1.215671	1.267728
1.395393	1.50745	1.363491	1.4643	1.380219	1.455115	1.463965	1.598024	1.199946	1.253324
1.382179	1.50855	1.345809	1.462372	1.363996	1.457157	1.449355	1.597848	1.189409	1.25183
1.364595	1.501156	1.334482	1.454365	1.351721	1.455746	1.441617	1.595653	1.185304	1.245412
1.353557	1.495007	1.325035	1.442711	1.342948	1.452805	1.436721	1.584533	1.183766	1.237109
1.348243	1.483191	1.318549	1.431392	1.336105	1.440681	1.430655	1.574375	1.18415	1.229695
1.350664	1.480607	1.321422	1.427587	1.338538	1.433783	1.43312	1.561029	1.194723	1.222643
1.350184	1.489511	1.323147	1.432774	1.335471	1.434166	1.43451	1.552668	1.202225	1.221761
1.3511	1.490945	1.325285	1.432491	1.335255	1.433041	1.441343	1.554404	1.214752	1.228001
1.365818	1.501235	1.336909	1.434808	1.345809	1.433398	1.447273	1.549299	1.225489	1.228219
1.389642	1.520243	1.356522	1.449402	1.365729	1.443834	1.470294	1.555019	1.245194	1.235625
1.38867	1.502881	1.352078	1.430425	1.362973	1.433616	1.461273	1.537537	1.24021	1.225714
1.415556	1.51649	1.37179	1.431817	1.389167	1.443255	1.478956	1.534096	1.255325	1.221599
1.428752	1.515458	1.379256	1.425008	1.402024	1.443187	1.482175	1.521367	1.258516	1.212528
1.460306	1.521198	1.397233	1.425422	1.426524	1.449924	1.490926	1.516775	1.265365	1.208761
1.480267	1.522544	1.409667	1.418957	1.446079	1.446067	1.495951	1.491366	1.271469	1.188335
1.48306	1.524077	1.398513	1.41099	1.438199	1.44352	1.481908	1.473726	1.253737	1.176131
1.518877	1.540583	1.429425	1.419908	1.470273	1.447885	1.494055	1.45536	1.265824	1.165587
1.531472	1.542411	1.432778	1.415688	1.476795	1.442158	1.483298	1.434316	1.257145	1.146912
1.553843	1.54083	1.446201	1.409501	1.491043	1.431235	1.483573	1.404995	1.253968	1.129243
1.568236	1.538028	1.450755	1.405503	1.501802	1.427411	1.473294	1.383032	1.25049	1.113136
1.592363	1.532729	1.463879	1.401132	1.524584	1.428041	1.477127	1.3611	1.259306	1.106999
1.596819	1.5258	1.46319	1.387523	1.529139	1.419305	1.46912	1.340476	1.257029	1.103981
1.601167	1.512796	1.46699	1.383191	1.535527	1.42095	1.462485	1.328052	1.260451	1.112126
1.602963	1.504312	1.46843	1.379423	1.540634	1.423885	1.455153	1.318558	1.267619	1.130231
1.606458	1.479416	1.475575	1.365921	1.553817	1.412338	1.459109	1.30422	1.284382	1.145258
1.627703	1.477615	1.498436	1.376218	1.576769	1.419584	1.468004	1.305403	1.306194	1.183003
1.623797	1.463561	1.49972	1.378403	1.575743	1.419938	1.469788	1.305178	1.335634	1.224003

1.618928	1.461209	1.49906	1.395375	1.567765	1.417695	1.463568	1.310576	1.342881	1.25723
1.637261	1.454147	1.529244	1.403704	1.586431	1.413689	1.489184	1.313212	1.384042	1.299541
1.642788	1.445209	1.538046	1.420192	1.592026	1.40916	1.489821	1.318904	1.408004	1.341859
1.648654	1.435783	1.558804	1.429225	1.599327	1.398681	1.505578	1.319369	1.446139	1.375931
1.639435	1.429171	1.567536	1.445146	1.599651	1.400084	1.51394	1.338255	1.471261	1.427976
1.644295	1.426421	1.582107	1.459078	1.599499	1.400431	1.525307	1.352871	1.505727	1.45355
1.632576	1.421256	1.578479	1.470298	1.591564	1.401665	1.525444	1.366655	1.517611	1.491788
1.635765	1.422117	1.594592	1.493182	1.596278	1.415171	1.540856	1.398361	1.540697	1.540918
1.631331	1.420834	1.598473	1.5064	1.592656	1.417114	1.549048	1.419354	1.572482	1.584585
1.633117	1.421183	1.612555	1.518055	1.592709	1.418757	1.561537	1.443351	1.600006	1.615449
1.631448	1.413271	1.621244	1.515429	1.586024	1.41087	1.572487	1.448309	1.609433	1.636829
1.610131	1.427447	1.606846	1.538074	1.573605	1.422297	1.563529	1.469207	1.619968	1.684323
1.619536	1.414279	1.616563	1.540208	1.569666	1.412047	1.575404	1.47457	1.642007	1.700047
1.597549	1.413207	1.610769	1.529785	1.536691	1.385129	1.553524	1.464911	1.646482	1.718872
1.586785	1.428482	1.589269	1.552403	1.523832	1.395828	1.550769	1.475668	1.654189	1.739596
1.561851	1.414234	1.568248	1.540359	1.497627	1.374072	1.531699	1.467171	1.639716	1.752829
1.546092	1.405447	1.548854	1.514786	1.473075	1.359587	1.51719	1.456512	1.635854	1.759066
1.518871	1.411129	1.529727	1.523302	1.455994	1.365352	1.507806	1.48018	1.639549	1.789936
1.510081	1.39803	1.518085	1.508429	1.439783	1.357647	1.497816	1.480357	1.638328	1.778036
1.488131	1.388637	1.48932	1.489473	1.404523	1.346181	1.476725	1.467728	1.607466	1.78997
1.476448	1.382051	1.474437	1.462583	1.397347	1.34104	1.467925	1.464818	1.603112	1.784045
1.443793	1.375297	1.441069	1.447896	1.361759	1.327192	1.437159	1.448474	1.596555	1.770714
1.436466	1.365779	1.428001	1.435612	1.348826	1.306947	1.428411	1.424555	1.579478	1.77378
1.40616	1.351742	1.396097	1.407794	1.308535	1.271899	1.390038	1.384766	1.540358	1.753246
1.37486	1.361626	1.36173	1.405611	1.267924	1.261351	1.356724	1.37465	1.520332	1.747175
1.382698	1.351287	1.358956	1.381255	1.266459	1.243522	1.351043	1.345228	1.525712	1.741276
1.34297	1.333776	1.315725	1.355508	1.225642	1.222517	1.318563	1.329273	1.48977	1.722519
1.352172	1.323785	1.320786	1.322125	1.227825	1.206727	1.324951	1.297616	1.491409	1.700525
1.31088	1.315219	1.284445	1.303454	1.19145	1.207374	1.287935	1.296839	1.465833	1.688049
1.289303	1.305471	1.258435	1.280753	1.167906	1.218721	1.267856	1.286444	1.44171	1.682598
1.289193	1.293764	1.253879	1.254647	1.155552	1.215158	1.267968	1.268691	1.430908	1.670758
1.285348	1.282757	1.252917	1.237525	1.141472	1.214945	1.260798	1.247198	1.40633	1.652861
1.265683	1.279016	1.23594	1.218849	1.123029	1.224825	1.233232	1.232667	1.404804	1.649719
1.259308	1.275595	1.232979	1.196454	1.104168	1.230393	1.223671	1.209938	1.396874	1.631759
1.250355	1.271867	1.223619	1.187494	1.085866	1.223575	1.211617	1.19973	1.378664	1.627662
1.253143	1.252259	1.227529	1.155106	1.08512	1.220731	1.214368	1.170799	1.380421	1.604057
1.251295	1.243706	1.223472	1.136054	1.077218	1.225286	1.214605	1.161592	1.37339	1.596614
1.270116	1.251023	1.243428	1.131859	1.089059	1.235564	1.226858	1.170092	1.385368	1.597766
1.265188	1.240903	1.240958	1.113193	1.090132	1.257196	1.225905	1.176632	1.396032	1.586756
1.263342	1.207961	1.24253	1.076006	1.080698	1.25629	1.22799	1.147661	1.390853	1.549102
1.262402	1.232022	1.237253	1.071182	1.086392	1.301062	1.224728	1.185582	1.39709	1.57611
1.282021	1.217202	1.248677	1.06298	1.096704	1.313189	1.235967	1.188429	1.411186	1.57933
1.283849	1.219725	1.24582	1.046326	1.103139	1.33512	1.232847	1.195735	1.423446	1.569931
1.299684	1.2296	1.257411	1.034402	1.108245	1.361726	1.238193	1.213073	1.426509	1.574715
1.309141	1.233966	1.252235	1.027373	1.123245	1.376736	1.241911	1.223657	1.443804	1.571147
1.325603	1.23061	1.25163	1.024162	1.142182	1.377861	1.249319	1.217156	1.465944	1.559052
1.296523	1.258912	1.214538	1.039139	1.144801	1.405796	1.229969	1.246598	1.460465	1.590045
1.326716	1.257162	1.225055	1.046432	1.177982	1.419278	1.257761	1.254774	1.485577	1.576198
1.32994	1.252041	1.222299	1.053268	1.192741	1.436074	1.260923	1.264329	1.485843	1.558728
1.325885	1.259805	1.197633	1.067576	1.215628	1.458237	1.261178	1.290548	1.496212	1.563344
1.323977	1.259229	1.172334	1.093052	1.239008	1.486466	1.267575	1.312655	1.513658	1.552737
1.329776	1.290099	1.16199	1.133578	1.275529	1.540522	1.276814	1.364047	1.51923	1.559089
1.316423	1.29595	1.146504	1.141178	1.288902	1.560994	1.278747	1.387578	1.517985	1.57207
1.320029	1.29664	1.138578	1.15737	1.313612	1.578033	1.281437	1.404553	1.517195	1.56192
1.316773	1.309383	1.117322	1.19336	1.337688	1.593336	1.284501	1.428585	1.522644	1.549296

1.281808	1.323269	1.090599	1.215895	1.33243	1.626366	1.261372	1.456535	1.488352	1.561478
1.273492	1.344089	1.086974	1.255592	1.356669	1.62923	1.276727	1.477237	1.505787	1.548301
1.273676	1.329584	1.103217	1.256987	1.394818	1.618214	1.296287	1.467734	1.50421	1.530159
1.250611	1.34928	1.111523	1.292649	1.402994	1.650456	1.293619	1.498048	1.492546	1.533991
1.242713	1.345439	1.13508	1.311315	1.425405	1.638412	1.304914	1.499645	1.499837	1.516469
1.214584	1.334821	1.16289	1.333936	1.423581	1.664723	1.302091	1.517891	1.494887	1.500056
1.211999	1.351229	1.197884	1.3665	1.427064	1.673374	1.311381	1.535007	1.481107	1.500501
1.213619	1.360242	1.23134	1.390096	1.441646	1.685615	1.319998	1.567547	1.490966	1.512142
1.206535	1.357872	1.268025	1.404846	1.424997	1.665003	1.335136	1.548825	1.484738	1.488928
1.227905	1.36458	1.303938	1.415569	1.434496	1.660398	1.346489	1.554981	1.482474	1.483889
1.242758	1.374826	1.346483	1.451999	1.439131	1.640557	1.361566	1.543018	1.485137	1.47458
1.249149	1.364739	1.376882	1.45021	1.413198	1.586012	1.350165	1.511042	1.473985	1.451006
1.27208	1.358714	1.41482	1.457393	1.404057	1.554934	1.366623	1.486426	1.474031	1.432146
1.296262	1.362722	1.44246	1.465514	1.400159	1.530353	1.372375	1.467525	1.468009	1.426774
1.325028	1.346859	1.47833	1.456213	1.405602	1.48534	1.386988	1.437446	1.457062	1.409265
1.335188	1.337079	1.479701	1.455193	1.391403	1.46022	1.380345	1.4135	1.437797	1.393418
1.354813	1.330228	1.490781	1.444854	1.37676	1.429036	1.382961	1.39943	1.404148	1.387407
1.378465	1.294976	1.510472	1.406115	1.375874	1.378198	1.390423	1.368156	1.400816	1.366724
1.403277	1.269116	1.520473	1.382248	1.381612	1.344364	1.395482	1.338648	1.383504	1.352808
1.433121	1.230099	1.550817	1.342009	1.41063	1.277744	1.4149	1.281899	1.35926	1.317486
1.445488	1.212739	1.54064	1.317951	1.408214	1.2457	1.405119	1.248793	1.318168	1.301613
1.448304	1.174876	1.52624	1.265428	1.410595	1.180486	1.39416	1.200291	1.273881	1.270833
1.466456	1.144075	1.527339	1.229277	1.418895	1.135435	1.387324	1.1581	1.227168	1.244878
1.45634	1.118334	1.507049	1.183459	1.427548	1.09119	1.377132	1.126112	1.170641	1.211239
1.459978	1.083639	1.509638	1.141109	1.437191	1.060774	1.359364	1.117411	1.127335	1.199323
1.472401	1.0355	1.526607	1.086456	1.458135	1.037569	1.365795	1.097504	1.094305	1.15923
1.494189	1.014274	1.547355	1.040448	1.486355	1.06091	1.374308	1.117535	1.07448	1.160689
1.505174	1.041528	1.555496	1.030496	1.506657	1.089353	1.383012	1.142044	1.095883	1.163923
1.513902	1.080082	1.574412	1.073181	1.509206	1.132425	1.389752	1.172233	1.157154	1.178445
1.535464	1.133238	1.598212	1.134095	1.54745	1.185016	1.407049	1.220011	1.225133	1.214772
1.580011	1.176733	1.649093	1.185874	1.581134	1.22491	1.45005	1.263928	1.308727	1.251277
1.606941	1.237992	1.691988	1.25657	1.59766	1.28179	1.478729	1.313917	1.40676	1.305401
1.653937	1.289425	1.735282	1.322425	1.619277	1.326334	1.526747	1.373173	1.508229	1.360284
1.725446	1.341932	1.80018	1.384762	1.659951	1.365787	1.590898	1.416189	1.61783	1.407416
1.767689	1.416555	1.841591	1.477631	1.673329	1.427599	1.630283	1.48322	1.716054	1.474326
1.827531	1.49182	1.884592	1.550572	1.693275	1.459364	1.675808	1.529167	1.831922	1.536915
1.920279	1.561449	1.980098	1.621873	1.73815	1.484659	1.754242	1.558307	1.976819	1.59404
1.948688	1.638044	2.007298	1.705164	1.734827	1.510402	1.773466	1.593973	2.058937	1.644896
2.044191	1.679532	2.116016	1.748448	1.774843	1.494259	1.84605	1.57651	2.249958	1.682058
2.165388	1.743737	2.207672	1.816022	1.837506	1.504292	1.923064	1.591359	2.412175	1.751375
2.199536	1.850101	2.225726	1.933211	1.854255	1.555938	1.961442	1.649147	2.521906	1.81741
2.296835	1.903895	2.314223	1.965277	1.902591	1.56122	2.013821	1.635882	2.642766	1.848568
2.345823	1.981004	2.380306	2.047959	1.935913	1.581002	2.044467	1.667612	2.721464	1.947024
2.401948	2.033176	2.40972	2.060899	1.953899	1.566758	2.089534	1.667771	2.809102	1.984555
2.575038	2.098632	2.558247	2.107555	2.091834	1.580277	2.229148	1.656488	3.141828	2.018759
2.59816	2.156751	2.551305	2.126166	2.108477	1.582032	2.222137	1.65666	3.182541	2.053319
2.626953	2.175652	2.616604	2.1461	2.150459	1.575007	2.26986	1.632798	3.24732	2.087796
2.674865	2.230742	2.672385	2.144648	2.24522	1.553422	2.340302	1.623096	3.35187	2.115883
2.73888	2.31473	2.701709	2.18992	2.295464	1.573077	2.400063	1.610227	3.439342	2.166773
2.830273	2.280635	2.775995	2.164318	2.42886	1.55506	2.490434	1.564579	3.584687	2.186088

VSWR - TERM

J8 In	J8 Out	Frequency (GHz)	J1 TERM	J2 TERM	J3 TERM	J4 TERM	J5 TERM
2.118849	2.009784	0.1	2.616893	1.291361	1.299542	1.298903	1.276549
1.410812	1.286829	0.1995	1.562331	1.076666	1.072756	1.074491	1.084893
1.207359	1.155142	0.299	1.36172	1.075299	1.067401	1.072893	1.090717
1.118942	1.118406	0.3985	1.273809	1.078031	1.06925	1.07623	1.094951
1.09072	1.109391	0.498	1.226516	1.081312	1.073031	1.080031	1.09867
1.100134	1.114384	0.5975	1.198548	1.083884	1.075976	1.083107	1.101279
1.122257	1.125817	0.697	1.181298	1.085901	1.078509	1.086119	1.103874
1.147753	1.134696	0.7965	1.168177	1.086591	1.079973	1.087439	1.105572
1.180494	1.150513	0.896	1.158865	1.086273	1.079252	1.087343	1.105851
1.213482	1.165125	0.9955	1.152104	1.08685	1.079841	1.087864	1.107115
1.230685	1.175976	1.095	1.146342	1.08683	1.079733	1.08799	1.107486
1.258369	1.191483	1.1945	1.143441	1.088452	1.080764	1.089741	1.10954
1.278523	1.195796	1.294	1.138553	1.087757	1.079935	1.089251	1.109163
1.296349	1.213662	1.3935	1.135218	1.08795	1.079444	1.089614	1.109184
1.316562	1.220822	1.493	1.130983	1.086892	1.077244	1.088599	1.108212
1.340092	1.234414	1.5925	1.127439	1.086476	1.076084	1.088344	1.10781
1.350697	1.241823	1.692	1.124873	1.08677	1.074935	1.088156	1.10745
1.359899	1.245019	1.7915	1.121345	1.086042	1.073124	1.08685	1.106438
1.373383	1.256001	1.891	1.118011	1.085492	1.070743	1.085474	1.105236
1.383648	1.254375	1.9905	1.115215	1.085453	1.068758	1.084769	1.105608
1.395142	1.262932	2.09	1.111777	1.085134	1.065378	1.083648	1.105712
1.402855	1.269232	2.1895	1.108268	1.084771	1.063169	1.083068	1.105943
1.400873	1.270629	2.289	1.103951	1.0833	1.060442	1.0813	1.104476
1.408265	1.272953	2.3885	1.098981	1.081549	1.05582	1.07864	1.102093
1.403457	1.271184	2.488	1.09591	1.081344	1.052952	1.077782	1.100525
1.402667	1.266939	2.5875	1.091253	1.079596	1.048638	1.074759	1.096684
1.395445	1.264293	2.687	1.087472	1.078872	1.045128	1.072942	1.094594
1.388267	1.260567	2.7865	1.080888	1.076143	1.039513	1.069006	1.091482
1.384587	1.258343	2.886	1.073238	1.071375	1.037185	1.063093	1.087321
1.376257	1.25459	2.9855	1.066771	1.06718	1.03885	1.056895	1.084091
1.379798	1.260928	3.085	1.061514	1.06341	1.044826	1.049894	1.080674
1.382214	1.262938	3.1845	1.059939	1.062933	1.051067	1.044281	1.078395
1.392669	1.265917	3.284	1.062942	1.066282	1.056085	1.041795	1.078683
1.393604	1.259877	3.3835	1.065731	1.069726	1.059226	1.040978	1.078052
1.404192	1.249305	3.483	1.066494	1.073834	1.058222	1.042534	1.079595
1.396573	1.23592	3.5825	1.066328	1.076416	1.057326	1.044156	1.08072
1.395584	1.220087	3.682	1.061938	1.077621	1.052808	1.04451	1.083045
1.382661	1.202138	3.7815	1.058363	1.078602	1.049655	1.045421	1.085762
1.382782	1.183224	3.881	1.053435	1.077084	1.047975	1.043985	1.086958
1.370316	1.161764	3.9805	1.050619	1.077332	1.046515	1.043904	1.088451
1.362487	1.139547	4.08	1.047293	1.077819	1.045022	1.043779	1.089669

1.35147	1.116493	4.1795	1.0449	1.07888	1.044603	1.043401	1.089361
1.343731	1.091389	4.279	1.041056	1.080016	1.04409	1.043639	1.089691
1.341995	1.06845	4.3785	1.036945	1.080433	1.044982	1.043228	1.088992
1.342066	1.047397	4.478	1.034429	1.081435	1.046058	1.043737	1.089062
1.34983	1.030835	4.5775	1.031995	1.081232	1.047981	1.04322	1.08914
1.356845	1.015441	4.677	1.03116	1.081361	1.049245	1.043392	1.090123
1.370225	1.012757	4.7765	1.033043	1.081053	1.050952	1.042148	1.090334
1.372324	1.02192	4.876	1.033907	1.083524	1.049768	1.042623	1.092747
1.372481	1.039912	4.9755	1.035499	1.085032	1.049547	1.042044	1.094224
1.371093	1.052324	5.075	1.03376	1.090248	1.045687	1.0452	1.099833
1.363994	1.07314	5.1745	1.033002	1.092996	1.043955	1.046901	1.102742
1.357394	1.097442	5.274	1.029446	1.09863	1.039743	1.052455	1.109207
1.352438	1.116749	5.3735	1.027155	1.103168	1.035953	1.058586	1.113688
1.342615	1.138815	5.473	1.022995	1.106588	1.035774	1.064083	1.117816
1.333458	1.156984	5.5725	1.018304	1.111899	1.035631	1.071733	1.122223
1.328403	1.174905	5.672	1.0141	1.118195	1.035263	1.07952	1.126727
1.324301	1.190279	5.7715	1.00991	1.12279	1.038107	1.085537	1.13078
1.317659	1.209187	5.871	1.004798	1.127856	1.041752	1.091475	1.136611
1.31702	1.221806	5.9705	1.000786	1.132849	1.046577	1.097773	1.143921
1.300089	1.237091	6.07	1.005531	1.135153	1.051444	1.102357	1.14996
1.296187	1.250108	6.1695	1.008545	1.141472	1.054064	1.109666	1.158035
1.289896	1.259056	6.269	1.011099	1.146654	1.057065	1.116112	1.163186
1.284579	1.264397	6.3685	1.016538	1.153655	1.063632	1.124246	1.167087
1.283932	1.268777	6.468	1.021802	1.160721	1.069873	1.132275	1.171294
1.276587	1.268329	6.5675	1.025707	1.167581	1.074485	1.138691	1.173004
1.280231	1.274306	6.667	1.031104	1.17425	1.081541	1.145507	1.178387
1.283543	1.29172	6.7665	1.034521	1.179399	1.086338	1.15042	1.182876
1.292104	1.298293	6.866	1.038759	1.185139	1.092525	1.156987	1.191665
1.301382	1.305896	6.9655	1.040352	1.189013	1.096123	1.161014	1.198034
1.314049	1.324052	7.065	1.042955	1.19463	1.100538	1.16714	1.204331
1.338975	1.338786	7.1645	1.046518	1.201321	1.106681	1.175043	1.210105
1.364587	1.348726	7.264	1.050164	1.208707	1.112002	1.182646	1.212584
1.384457	1.370291	7.3635	1.055107	1.216733	1.118537	1.190812	1.215099
1.411762	1.388937	7.463	1.059393	1.2233	1.12441	1.197535	1.216851
1.439476	1.410489	7.5625	1.064422	1.230837	1.132756	1.206318	1.219996
1.474196	1.440236	7.662	1.067564	1.235276	1.138054	1.211582	1.223887
1.501681	1.460198	7.7615	1.06948	1.239443	1.142389	1.216731	1.229951
1.539743	1.48965	7.861	1.070824	1.242793	1.147314	1.221378	1.234929
1.54836	1.497776	7.9605	1.073518	1.249034	1.151988	1.228969	1.239321
1.582838	1.508073	8.06	1.075467	1.254257	1.156599	1.233741	1.243217
1.60552	1.518864	8.1595	1.078379	1.260626	1.161631	1.239556	1.246272
1.624325	1.532636	8.259	1.083276	1.269867	1.168793	1.247751	1.248772
1.64067	1.532098	8.3585	1.087439	1.27778	1.17558	1.254272	1.24876
1.649701	1.538728	8.458	1.091944	1.285055	1.182244	1.260637	1.249011
1.665655	1.542268	8.5575	1.092191	1.28881	1.186773	1.263748	1.24879
1.664168	1.534055	8.657	1.093507	1.294043	1.19284	1.268337	1.250754
1.677089	1.524801	8.7565	1.092234	1.296073	1.195934	1.269988	1.253785
1.665047	1.512166	8.856	1.091388	1.299867	1.199285	1.273074	1.256963
1.663399	1.495978	8.9555	1.093037	1.304688	1.204675	1.277149	1.260278
1.652914	1.472142	9.055	1.095606	1.311906	1.209597	1.283197	1.262357
1.641176	1.453269	9.1545	1.10099	1.321609	1.218023	1.290842	1.264114
1.623888	1.435023	9.254	1.103046	1.327093	1.224198	1.296312	1.26092
1.618218	1.414592	9.3535	1.107683	1.335536	1.233093	1.304426	1.259227
1.608808	1.399995	9.453	1.109123	1.340484	1.238394	1.309196	1.256524
1.583939	1.375464	9.5525	1.110155	1.343897	1.244085	1.313153	1.254437

1.5782	1.36836	9.652	1.110681	1.346543	1.248046	1.316417	1.258045
1.571257	1.345829	9.7515	1.112376	1.351288	1.252435	1.321717	1.263443
1.5632	1.324946	9.851	1.113037	1.352439	1.255343	1.32311	1.267066
1.551013	1.306133	9.9505	1.112237	1.351606	1.254527	1.32321	1.266374
1.545251	1.289597	10.05	1.11748	1.359251	1.262731	1.330405	1.26749
1.529893	1.286037	10.1495	1.12017	1.361596	1.2656	1.334672	1.260642
1.523183	1.27631	10.249	1.121039	1.363005	1.269089	1.336321	1.253962
1.520997	1.272632	10.3485	1.124936	1.368889	1.276095	1.34201	1.252266
1.508981	1.266694	10.448	1.124072	1.36824	1.277543	1.341665	1.248435
1.507434	1.267765	10.5475	1.125281	1.369264	1.281532	1.342994	1.251832
1.511261	1.260178	10.647	1.123018	1.366388	1.280776	1.341385	1.254063
1.506888	1.274248	10.7465	1.119685	1.362637	1.280179	1.338129	1.256367
1.509415	1.272605	10.846	1.119093	1.357242	1.27803	1.334648	1.256812
1.496018	1.269807	10.9455	1.1209	1.357899	1.280498	1.337606	1.254858
1.49863	1.285944	11.045	1.116121	1.349254	1.275462	1.331126	1.243859
1.480442	1.285977	11.1445	1.116397	1.348235	1.277138	1.330773	1.234562
1.472405	1.277549	11.244	1.116638	1.34904	1.281855	1.330312	1.230154
1.46771	1.288957	11.3435	1.114434	1.345399	1.281944	1.326409	1.2228
1.473441	1.295987	11.443	1.109554	1.338306	1.279305	1.320335	1.216798
1.4698	1.291691	11.5425	1.106655	1.333329	1.278632	1.3142	1.218298
1.471853	1.285107	11.642	1.101695	1.326073	1.275028	1.309149	1.218617
1.443477	1.285378	11.7415	1.100909	1.32219	1.274066	1.306183	1.221292
1.463418	1.290741	11.841	1.099851	1.318033	1.273122	1.301856	1.221271
1.467804	1.275279	11.9405	1.098778	1.314979	1.272445	1.295934	1.217415
1.445452	1.286802	12.04	1.10183	1.314761	1.272275	1.296828	1.208608
1.460919	1.278512	12.1395	1.104904	1.318197	1.278044	1.294185	1.206844
1.446962	1.276027	12.239	1.108059	1.320672	1.281526	1.293559	1.20226
1.471975	1.250168	12.3385	1.102376	1.313092	1.276574	1.281887	1.195817
1.456808	1.257471	12.438	1.101107	1.308261	1.273027	1.275327	1.195266
1.446639	1.251158	12.5375	1.104221	1.310206	1.276071	1.272972	1.205168
1.474634	1.237782	12.637	1.100597	1.305564	1.272534	1.262532	1.212916
1.490271	1.237316	12.7365	1.096404	1.296987	1.263574	1.254492	1.214404
1.475651	1.231969	12.836	1.100905	1.301812	1.266735	1.252532	1.225482
1.494323	1.218481	12.9355	1.105236	1.304646	1.266775	1.250644	1.227682
1.497798	1.230981	13.035	1.10795	1.30784	1.26678	1.246258	1.226668
1.509431	1.210827	13.1345	1.107697	1.310052	1.265724	1.237444	1.226035
1.517606	1.207684	13.234	1.111951	1.316567	1.268432	1.230915	1.22943
1.549544	1.215057	13.3335	1.108097	1.312671	1.261156	1.223796	1.224316
1.558639	1.203805	13.433	1.10999	1.318926	1.262801	1.216458	1.237388
1.561553	1.178856	13.5325	1.108717	1.318387	1.256947	1.206701	1.247369
1.569962	1.193722	13.632	1.117698	1.332572	1.263306	1.203617	1.267966
1.592999	1.192828	13.7315	1.116959	1.336915	1.25908	1.194033	1.281978
1.607455	1.197272	13.831	1.124498	1.348419	1.261815	1.193778	1.290541
1.631593	1.19635	13.9305	1.130814	1.36122	1.263828	1.189806	1.297579
1.650554	1.203098	14.03	1.141505	1.378463	1.270512	1.189068	1.305121
1.656607	1.208246	14.1295	1.150705	1.394946	1.27625	1.191951	1.305279
1.632321	1.226402	14.229	1.158731	1.413905	1.281914	1.187219	1.315584
1.671251	1.221574	14.3285	1.163695	1.425165	1.282136	1.181787	1.325244
1.678534	1.222498	14.428	1.166626	1.434639	1.280738	1.182416	1.331157
1.683345	1.230245	14.5275	1.172601	1.448978	1.281881	1.176375	1.351887
1.681735	1.233868	14.627	1.177935	1.462308	1.281284	1.174562	1.365746
1.694283	1.248246	14.7265	1.185908	1.478041	1.28359	1.176482	1.377542
1.685081	1.258522	14.826	1.194878	1.499055	1.288017	1.177507	1.389056
1.678998	1.269948	14.9255	1.209001	1.517217	1.292511	1.185159	1.391834
1.674308	1.282864	15.025	1.213748	1.536214	1.2945	1.184108	1.389809

1.639109	1.297063	15.1245	1.219003	1.551152	1.295658	1.184259	1.399931
1.623003	1.306378	15.224	1.224266	1.565117	1.293443	1.183267	1.403869
1.617577	1.302015	15.3235	1.231589	1.579511	1.293828	1.186367	1.412288
1.580589	1.317046	15.423	1.237791	1.599367	1.29491	1.188185	1.424625
1.573384	1.313861	15.5225	1.244112	1.610943	1.294443	1.189963	1.439757
1.519627	1.312818	15.622	1.240706	1.61278	1.281946	1.181771	1.438564
1.491588	1.325119	15.7215	1.251255	1.637787	1.288088	1.186397	1.462797
1.469426	1.342085	15.821	1.258152	1.653614	1.288953	1.191921	1.463512
1.436459	1.328552	15.9205	1.261154	1.662452	1.285166	1.190694	1.460883
1.424494	1.340861	16.02	1.273937	1.686672	1.292277	1.200991	1.470617
1.399595	1.348016	16.1195	1.274822	1.693287	1.288541	1.200366	1.4694
1.352096	1.329166	16.219	1.277422	1.700637	1.287346	1.203683	1.475705
1.336673	1.324695	16.3185	1.288142	1.722762	1.292799	1.212703	1.492968
1.311964	1.324983	16.418	1.294985	1.7343	1.293831	1.218888	1.509059
1.29863	1.308286	16.5175	1.30064	1.743212	1.295917	1.226259	1.519315
1.268712	1.298835	16.617	1.30756	1.754131	1.29795	1.233686	1.531639
1.234441	1.291324	16.7165	1.313906	1.758084	1.298801	1.24232	1.532411
1.220252	1.269328	16.816	1.324945	1.77605	1.303002	1.253602	1.537505
1.190835	1.259593	16.9155	1.334162	1.790172	1.309911	1.268687	1.539607
1.195401	1.226337	17.015	1.348622	1.810873	1.31649	1.282445	1.553431
1.167611	1.213775	17.1145	1.360024	1.828016	1.32746	1.301244	1.561256
1.148529	1.186419	17.214	1.366708	1.832917	1.327392	1.311833	1.57181
1.134716	1.161595	17.3135	1.372963	1.835519	1.329672	1.322604	1.575291
1.122564	1.145893	17.413	1.366835	1.825801	1.327988	1.330309	1.57957
1.10909	1.121595	17.5125	1.382336	1.843758	1.334471	1.349128	1.600245
1.116341	1.089282	17.612	1.398228	1.864865	1.344959	1.369965	1.61748
1.13433	1.071033	17.7115	1.40494	1.871665	1.351228	1.38514	1.617044
1.14488	1.057998	17.811	1.41696	1.892298	1.358088	1.405391	1.624545
1.16883	1.055523	17.9105	1.424207	1.895453	1.361922	1.419475	1.622059
1.201446	1.059916	18.01	1.423965	1.893689	1.361978	1.428937	1.62188
1.238427	1.071451	18.1095	1.432901	1.906976	1.373496	1.452216	1.638946
1.286652	1.084951	18.209	1.439348	1.91271	1.379401	1.469236	1.651582
1.323093	1.094642	18.3085	1.447735	1.92424	1.388095	1.489504	1.665032
1.388038	1.109169	18.408	1.449937	1.919495	1.38992	1.501894	1.667882
1.427822	1.127793	18.5075	1.465676	1.941453	1.406069	1.530473	1.68206
1.482126	1.135792	18.607	1.475525	1.953254	1.418573	1.553015	1.68559
1.555171	1.140246	18.7065	1.483232	1.960092	1.432216	1.574185	1.682195
1.585267	1.147956	18.806	1.496689	1.976203	1.440562	1.597207	1.681048
1.68265	1.128653	18.9055	1.49893	1.973031	1.447772	1.61046	1.673634
1.760138	1.111938	19.005	1.508025	1.984155	1.459727	1.631647	1.676367
1.831407	1.120885	19.1045	1.529875	2.015593	1.486333	1.669181	1.698605
1.885397	1.106841	19.204	1.548783	2.031165	1.494776	1.692471	1.705219
1.944448	1.092789	19.3035	1.561506	2.049993	1.514976	1.719536	1.71033
2.027617	1.06863	19.403	1.576525	2.062474	1.521005	1.738784	1.701462
2.165625	1.047644	19.5025	1.602221	2.099832	1.547027	1.777073	1.709869
2.22056	1.027278	19.602	1.623921	2.123735	1.566745	1.80913	1.706526
2.275509	1.01471	19.7015	1.63454	2.133794	1.574506	1.826458	1.692751
2.380013	1.018782	19.801	1.647773	2.151755	1.582833	1.850937	1.686181
2.453303	1.031021	19.9005	1.658842	2.160405	1.596695	1.872495	1.682853
2.622826	1.064736	20	1.682973	2.195614	1.614425	1.909648	1.69775

0.2 to 19	-65.6184
Max	-67.7321

J6 TERM	J7 TERM	J8 TERM	J0-J1	J0-J2	J0-J3	J0-J4	J0-J5
1.28607	1.285452	1.302879	-81.9839	-89.0198	-84.0084	-83.4039	-86.9238
1.085951	1.072645	1.07789	-84.2216	-100.404	-103.168	-94.3254	-106.703
1.086374	1.077728	1.07357	-81.4138	-99.3637	-98.4911	-97.3061	-97.2652
1.089426	1.082668	1.074766	-80.1872	-100.545	-95.6767	-93.5069	-93.3893
1.093609	1.086597	1.078123	-79.5641	-95.0119	-92.9359	-90.1672	-91.0128
1.097491	1.088429	1.080451	-79.3156	-96.3785	-93.5914	-89.4774	-91.0523
1.10163	1.08961	1.082162	-79.4948	-95.3435	-93.1158	-88.6186	-89.9052
1.105289	1.090319	1.083683	-79.7299	-97.816	-91.8409	-88.5362	-88.8159
1.108185	1.088358	1.083092	-79.3546	-94.5873	-92.6244	-88.4255	-89.9115
1.111674	1.087798	1.083501	-80.0821	-97.9998	-91.3666	-87.7887	-88.8883
1.114734	1.086579	1.083578	-80.5512	-96.7573	-91.6163	-88.1969	-88.8062
1.119456	1.086382	1.084741	-80.75	-94.9882	-91.3136	-88.5411	-88.5523
1.121733	1.084344	1.083764	-80.9623	-94.5557	-91.482	-88.1778	-88.4923
1.124782	1.082716	1.083576	-81.2892	-95.045	-91.444	-87.5663	-89.5546
1.127199	1.079478	1.082026	-81.5769	-94.7738	-90.9551	-88.0899	-89.4126
1.129551	1.076994	1.080736	-82.1075	-94.0214	-90.5793	-88.4557	-89.8098
1.132329	1.074918	1.080047	-82.3141	-93.0184	-90.9888	-88.2677	-89.9131
1.134334	1.07248	1.078716	-82.4321	-94.1034	-91.1689	-88.6156	-90.0107
1.136663	1.069766	1.077244	-82.4101	-94.5773	-93.6367	-90.0139	-89.3581
1.140943	1.067811	1.076536	-82.6163	-93.5534	-90.9789	-90.508	-90.6724
1.145448	1.064272	1.075039	-82.4451	-96.9375	-90.9386	-88.1434	-90.5611
1.149236	1.060963	1.073335	-83.0266	-96.0139	-90.0289	-89.0257	-91.0176
1.151777	1.056422	1.070741	-83.047	-94.8233	-91.6049	-88.8667	-90.7405
1.153728	1.050237	1.067186	-84.3756	-94.4746	-91.6445	-90.2781	-90.5276
1.156234	1.046026	1.06546	-83.4677	-94.8196	-91.0392	-89.6912	-90.3751
1.15668	1.040133	1.062219	-84.0872	-94.0719	-90.935	-89.9783	-90.4043
1.158115	1.035622	1.059893	-83.7805	-93.4661	-92.5228	-89.7253	-91.5396
1.159167	1.028859	1.055905	-84.2312	-95.1835	-91.4844	-89.3211	-89.7709
1.158327	1.021461	1.049495	-83.6014	-93.674	-91.2019	-90.1617	-90.4101
1.158068	1.014412	1.042313	-83.9353	-94.1736	-92.1252	-89.7496	-90.1535
1.156829	1.008576	1.033286	-84.321	-94.2606	-91.7572	-89.8433	-91.2183
1.156192	1.009589	1.025063	-84.0276	-93.4027	-91.9103	-89.1392	-89.8277
1.157925	1.013942	1.020168	-84.3881	-92.3176	-92.6312	-89.864	-89.9283
1.159474	1.017326	1.018208	-84.3196	-94.5233	-92.1676	-89.8027	-90.3962
1.164475	1.01673	1.02032	-84.5025	-94.6722	-92.0865	-90.1681	-90.6965
1.168752	1.015969	1.021955	-84.4838	-91.5719	-90.0628	-89.0183	-89.5399
1.175877	1.011241	1.024219	-84.5737	-93.931	-90.1396	-88.8843	-90.5779
1.183044	1.007253	1.026502	-84.0076	-93.3574	-91.6494	-88.4252	-90.7626
1.189017	1.006468	1.027363	-84.3789	-94.7362	-90.8109	-91.052	-90.5253
1.195226	1.007989	1.029417	-84.3193	-93.2262	-91.1649	-89.8057	-90.2131
1.200901	1.011523	1.032393	-83.9581	-92.5522	-91.5041	-89.5391	-91.3613

1.205442	1.015635	1.036102	-83.9102	-92.9575	-93.3769	-89.8862	-90.03
1.210148	1.021072	1.041156	-83.8086	-92.3844	-90.63	-89.4816	-90.5673
1.213668	1.026961	1.046362	-84.0172	-91.9496	-90.2051	-89.9423	-90.9225
1.217568	1.031875	1.051278	-83.9508	-90.9113	-91.7801	-90.4614	-90.547
1.220753	1.037081	1.055383	-83.3554	-91.0419	-89.9615	-88.8414	-89.6436
1.223938	1.04078	1.05805	-83.4841	-91.6665	-89.4728	-88.3957	-89.7219
1.226225	1.042032	1.05779	-83.1988	-91.564	-90.3665	-89.4754	-89.2234
1.231085	1.041889	1.057565	-83.1065	-92.7487	-90.4335	-89.1452	-89.6857
1.235602	1.041387	1.05651	-83.5686	-92.0854	-90.5628	-89.135	-89.8563
1.245657	1.042407	1.059338	-83.536	-91.328	-89.6525	-89.2965	-90.3655
1.253	1.045216	1.06232	-83.4464	-90.5335	-89.7062	-89.2249	-90.2234
1.264371	1.050492	1.068421	-83.4954	-91.0596	-89.8185	-88.7802	-89.9348
1.272466	1.055538	1.073619	-83.0756	-89.5956	-89.6652	-88.9728	-89.6209
1.280734	1.062454	1.080367	-83.3154	-89.6802	-89.024	-89.0593	-90.2681
1.288808	1.068392	1.087294	-83.3503	-90.2361	-90.2499	-88.8212	-89.4479
1.296904	1.073221	1.093935	-82.9566	-90.3484	-90.0554	-88.0431	-89.3763
1.304962	1.079192	1.101043	-82.798	-90.7767	-88.4117	-88.7952	-89.2576
1.316071	1.08753	1.109942	-82.9183	-89.9238	-90.3243	-89.4208	-89.359
1.329273	1.097798	1.119917	-82.7957	-89.8915	-90.2539	-87.98	-89.5008
1.339492	1.107685	1.128234	-82.1912	-90.3728	-88.9342	-87.8623	-88.6687
1.351855	1.117261	1.136976	-82.4197	-89.7031	-88.3408	-87.7328	-88.4197
1.359892	1.124303	1.143698	-82.4662	-90.1394	-87.3938	-88.3709	-88.9534
1.36581	1.130846	1.151042	-81.8134	-88.7923	-88.4846	-88.3085	-89.2856
1.372008	1.137478	1.158558	-81.4612	-88.7276	-87.3813	-88.2546	-87.7551
1.376905	1.141947	1.164349	-82.0758	-88.5107	-88.1972	-87.7231	-88.8866
1.386233	1.150342	1.17289	-81.9868	-88.0031	-88.8307	-87.4657	-88.1251
1.394893	1.157604	1.17909	-81.6283	-88.4865	-87.8757	-87.4308	-88.5626
1.407739	1.168261	1.187157	-81.6833	-87.3409	-88.1048	-86.6182	-88.3574
1.417326	1.175867	1.191639	-81.045	-87.904	-88.2087	-86.7279	-87.8921
1.426474	1.18357	1.196712	-81.1283	-88.6639	-87.5514	-87.9516	-87.7754
1.433333	1.190714	1.20196	-81.2851	-88.3024	-86.8535	-86.5612	-87.8404
1.438247	1.196922	1.207583	-80.813	-87.4881	-87.2693	-86.7524	-87.6448
1.443795	1.204161	1.21486	-80.8308	-87.1646	-87.343	-86.7665	-87.9234
1.449594	1.212153	1.222661	-81.3602	-86.7888	-86.8217	-86.5488	-87.0022
1.455785	1.220475	1.230822	-81.14	-86.9639	-87.415	-86.0962	-87.9286
1.462886	1.229288	1.237817	-80.6046	-85.6606	-86.9968	-86.3753	-88.2236
1.473717	1.239431	1.244737	-80.2999	-87.4286	-86.9067	-86.2578	-86.463
1.481202	1.247571	1.249523	-80.3839	-87.1342	-86.7024	-86.2848	-87.6421
1.48563	1.254106	1.253564	-80.5042	-86.2121	-86.6597	-85.9677	-86.9945
1.492757	1.263197	1.260163	-80.6116	-86.4826	-86.4229	-85.5549	-86.9643
1.497108	1.271569	1.26662	-80.2639	-86.7153	-85.6017	-86.3518	-87.0425
1.502605	1.28139	1.275853	-80.0489	-86.1677	-85.5194	-86.2061	-86.6146
1.504594	1.28922	1.283812	-80.1072	-86.1196	-86.8185	-84.7086	-86.3072
1.50559	1.297052	1.290987	-80.1049	-85.6635	-85.3041	-85.5647	-86.4317
1.506304	1.302046	1.293947	-79.5742	-85.6612	-85.2756	-85.1731	-86.5515
1.509669	1.308783	1.297971	-79.7678	-85.5358	-85.2005	-85.4312	-84.9477
1.513546	1.315312	1.299632	-80.0746	-86.0397	-84.8472	-85.244	-85.5601
1.518323	1.322292	1.301596	-79.648	-85.4795	-85.0454	-84.9003	-85.7751
1.521388	1.329847	1.305076	-79.6339	-84.9809	-85.0974	-84.6595	-85.1559
1.525619	1.338923	1.311163	-79.2027	-84.5698	-83.8857	-84.7667	-84.9215
1.527724	1.34808	1.319043	-79.1023	-84.8075	-84.0061	-84.1698	-84.9751
1.52376	1.353061	1.323195	-79.168	-83.9999	-84.3799	-84.4074	-84.9991
1.520783	1.359084	1.329053	-79.1644	-84.2571	-83.98	-83.6668	-84.4115
1.51792	1.364675	1.332491	-79.0828	-83.8443	-84.0168	-83.7294	-84.677
1.513621	1.36892	1.333954	-78.7697	-83.6775	-83.7604	-83.8848	-84.1304

1.518035	1.378824	1.338118	-78.5546	-84.2487	-83.398	-84.0237	-84.0971
1.526422	1.391439	1.343861	-78.7335	-83.3099	-84.002	-83.8098	-84.6821
1.529731	1.400647	1.347423	-79.0062	-83.3504	-82.902	-83.6925	-84.2004
1.528002	1.406186	1.348544	-78.6316	-83.9976	-83.2863	-82.858	-83.4706
1.528067	1.415563	1.356276	-78.1033	-82.6704	-82.8247	-82.4174	-83.7337
1.51556	1.414545	1.35578	-77.8689	-83.1459	-82.5117	-82.4475	-84.0484
1.505407	1.417049	1.35799	-77.668	-82.2085	-83.4768	-82.3429	-83.372
1.50355	1.425843	1.364395	-77.882	-82.8571	-82.542	-82.4154	-82.4876
1.498601	1.430998	1.365308	-77.5995	-82.2074	-82.4606	-82.0703	-82.7379
1.502188	1.44267	1.370126	-78.563	-81.3893	-82.227	-80.5781	-82.9919
1.505385	1.451573	1.371105	-76.4023	-81.0246	-81.6374	-82.2786	-82.6639
1.507851	1.459305	1.371022	-76.8309	-81.8366	-81.8384	-81.9554	-81.224
1.502961	1.461541	1.368829	-76.7954	-81.8159	-82.4725	-80.9286	-81.776
1.497589	1.466358	1.370165	-76.5956	-81.8084	-80.354	-81.9501	-80.2622
1.478937	1.458983	1.362937	-76.4356	-81.46	-80.2185	-80.5925	-83.082
1.464113	1.458033	1.362158	-76.5882	-81.0591	-82.2442	-81.0317	-80.7437
1.455528	1.462188	1.365304	-76.1564	-80.389	-80.2697	-81.6934	-81.0441
1.444668	1.463215	1.363824	-75.5223	-80.4545	-80.9234	-78.4313	-79.5476
1.435146	1.463219	1.359623	-75.8606	-79.6479	-79.532	-80.0311	-81.02
1.432811	1.466868	1.357658	-75.4135	-80.1231	-79.879	-80.9766	-81.1085
1.430224	1.470226	1.354144	-75.8204	-82.2186	-78.6792	-79.9087	-80.4217
1.426293	1.471635	1.35157	-75.2336	-81.32	-78.5276	-78.1606	-81.0604
1.417932	1.470071	1.348681	-75.3442	-78.5021	-79.2068	-81.3932	-78.2432
1.405276	1.465978	1.346576	-74.4171	-80.021	-77.6478	-79.3831	-79.3801
1.388333	1.462686	1.345379	-75.0712	-80.3337	-77.5257	-80.26	-81.7318
1.378441	1.462362	1.348987	-75.7025	-79.0096	-78.4395	-80.6634	-80.4207
1.368565	1.464448	1.351967	-77.1152	-79.3312	-79.0093	-80.429	-80.7042
1.353677	1.455667	1.343766	-75.29	-79.2652	-78.8749	-79.4499	-79.8803
1.349182	1.457858	1.341514	-75.1737	-78.2728	-79.5507	-80.0708	-79.1344
1.353815	1.465466	1.344888	-75.6808	-79.2492	-78.3424	-78.5563	-79.5128
1.353002	1.463695	1.340271	-75.5506	-78.8963	-77.9493	-79.3968	-79.5277
1.345164	1.457464	1.33224	-75.1635	-77.8212	-78.9653	-78.8009	-78.9636
1.348563	1.461962	1.337639	-74.5486	-78.4929	-78.7694	-78.8874	-78.401
1.342727	1.460738	1.33976	-75.6695	-77.6387	-78.717	-79.0974	-77.593
1.334131	1.457538	1.341026	-74.8515	-78.2249	-78.2759	-78.817	-78.0353
1.325687	1.451776	1.340185	-74.7491	-78.0906	-78.084	-77.9166	-78.6494
1.323081	1.451507	1.342183	-74.6239	-77.6877	-76.7912	-77.4768	-77.8527
1.314821	1.449511	1.335994	-74.2185	-78.2685	-77.1594	-77.0667	-78.5611
1.322489	1.453843	1.338216	-75.1117	-77.0784	-78.5186	-77.4776	-78.7086
1.329321	1.457291	1.337287	-74.3851	-78.0077	-77.4403	-78.2792	-77.8433
1.343915	1.465581	1.3449	-74.0302	-77.4547	-77.4385	-76.0968	-77.5037
1.35347	1.464463	1.34585	-73.841	-77.3983	-76.7113	-76.3109	-76.7333
1.357096	1.468354	1.352042	-73.91	-76.5134	-77.1666	-75.8796	-76.583
1.358663	1.465908	1.355892	-74.6291	-75.687	-75.6195	-76.5087	-76.4001
1.363546	1.470936	1.366634	-72.997	-76.6145	-75.9824	-74.8201	-77.184
1.359486	1.474631	1.371834	-73.717	-76.5198	-76.0164	-74.6805	-76.9203
1.366508	1.477882	1.380129	-73.4625	-75.6263	-75.284	-74.6071	-76.4694
1.374741	1.484512	1.3847	-73.556	-75.2455	-74.9016	-73.3325	-76.2772
1.378474	1.492689	1.386478	-73.4577	-76.3146	-76.0296	-73.7005	-76.679
1.398107	1.496845	1.393481	-73.5404	-74.9939	-75.2978	-74.0761	-76.2081
1.410349	1.502248	1.398744	-73.0492	-75.7808	-75.3159	-75.6145	-77.0191
1.420256	1.503804	1.40491	-72.9507	-74.5679	-77.0686	-75.4793	-75.7457
1.430887	1.506503	1.414203	-72.4282	-75.7327	-76.5934	-76.7508	-76.0936
1.433644	1.507096	1.422389	-72.3592	-75.1564	-75.219	-79.0184	-76.3544
1.428393	1.503714	1.425444	-72.7595	-74.5061	-74.6672	-83.0606	-76.0139

1.441186	1.506105	1.435682	-72.7744	-75.3695	-75.727	-78.1333	-76.4353
1.443759	1.512067	1.438646	-72.4186	-74.5164	-75.3964	-73.3312	-76.0906
1.455974	1.529018	1.4523	-71.9387	-73.8378	-74.6345	-73.7153	-75.7437
1.471036	1.528379	1.458102	-72.2563	-74.5067	-75.2787	-73.1018	-75.393
1.483903	1.533086	1.462217	-72.1521	-74.3823	-74.1427	-73.6517	-75.5695
1.490267	1.524601	1.459096	-72.2045	-73.551	-73.8943	-72.5664	-76.4374
1.519561	1.53148	1.478327	-71.9842	-74.2759	-74.0926	-73.1579	-75.8188
1.521112	1.527512	1.481278	-72.3075	-74.8046	-74.1377	-72.8712	-75.0772
1.522644	1.524205	1.485853	-72.1021	-74.5187	-73.1528	-72.6214	-75.4825
1.534442	1.533212	1.503435	-72.1519	-74.2325	-74.6025	-73.4761	-75.5673
1.536865	1.529245	1.507275	-71.9305	-73.4828	-73.2943	-72.6698	-74.8174
1.544837	1.5257	1.510986	-71.9158	-73.0264	-73.5157	-72.0743	-75.1485
1.56683	1.535221	1.528013	-71.3987	-72.915	-72.9302	-72.1092	-75.3361
1.585809	1.540822	1.539299	-71.4909	-73.2496	-72.6171	-71.8498	-74.1255
1.60054	1.537272	1.546147	-70.7194	-72.7319	-72.4373	-71.5674	-74.2972
1.620112	1.535414	1.557009	-70.667	-73.3368	-72.195	-71.807	-74.5774
1.627101	1.530889	1.564849	-70.978	-73.1561	-72.0272	-71.9895	-73.9975
1.63597	1.535347	1.580521	-70.7191	-72.7094	-71.828	-71.5733	-73.8178
1.646377	1.531158	1.594798	-70.3114	-72.788	-71.3917	-71.9764	-73.5552
1.666672	1.537596	1.617869	-70.4484	-72.6805	-70.5605	-71.3129	-72.5179
1.679511	1.543221	1.636986	-70.14	-72.989	-71.1536	-71.7444	-72.8515
1.696987	1.5379	1.649591	-70.314	-73.2078	-70.0283	-71.7481	-72.9013
1.708002	1.532734	1.65576	-70.4413	-72.6294	-70.1374	-71.3594	-72.285
1.721624	1.517291	1.654343	-69.7814	-72.5172	-70.3604	-71.9866	-72.7476
1.752572	1.529573	1.680086	-69.9341	-71.9854	-70.1887	-70.6809	-72.7807
1.779977	1.537444	1.704966	-69.734	-72.2142	-70.1534	-70.692	-72.9442
1.792004	1.530214	1.717246	-70.1257	-72.1834	-70.1523	-70.3882	-72.7197
1.811495	1.535456	1.743477	-70.538	-72.7799	-69.4308	-70.4166	-72.391
1.815632	1.532857	1.755255	-69.5966	-71.8953	-70.0795	-70.0361	-71.7735
1.826539	1.528714	1.766063	-69.972	-71.515	-69.359	-70.4466	-71.2503
1.856664	1.535863	1.791447	-69.6029	-72.2347	-69.2208	-70.0604	-71.375
1.877393	1.539566	1.807081	-69.8171	-71.6489	-69.4317	-70.2174	-70.7419
1.903145	1.544226	1.826664	-68.7162	-71.1865	-69.1281	-69.8381	-70.8258
1.913216	1.541414	1.831378	-69.5355	-72.524	-68.799	-69.2847	-69.6106
1.942305	1.547894	1.85867	-68.9049	-72.3632	-68.8061	-69.0472	-70.3103
1.960985	1.550127	1.878971	-68.3788	-71.0358	-68.268	-69.113	-69.6269
1.968852	1.549646	1.896922	-68.4618	-70.905	-68.7735	-68.6033	-69.8243
1.972711	1.554008	1.916296	-68.6158	-70.8919	-68.6356	-68.1264	-70.3232
1.967854	1.551148	1.924006	-68.3502	-70.814	-67.8611	-68.0768	-69.5704
1.980057	1.550416	1.939006	-67.9316	-71.2134	-68.0657	-68.0465	-69.2226
2.015277	1.561936	1.973881	-67.887	-70.3973	-68.0036	-67.3732	-69.0804
2.025094	1.570923	1.990522	-67.6565	-69.9405	-67.7114	-67.7857	-68.7002
2.046695	1.568514	2.00859	-67.1195	-70.24	-67.5999	-67.0728	-69.2249
2.042054	1.564772	2.015238	-66.9501	-69.7732	-67.0953	-67.0577	-68.5036
2.071446	1.570589	2.051414	-66.8259	-69.5741	-67.2229	-66.5646	-67.6274
2.077422	1.572706	2.075536	-66.2524	-69.3994	-66.7108	-65.9439	-68.0153
2.067635	1.570086	2.087308	-66.0377	-69.3296	-66.2157	-65.5925	-67.021
2.065875	1.571571	2.105297	-66.0247	-68.9394	-65.9657	-65.5717	-67.1955
2.072387	1.57137	2.117408	-65.7959	-68.8691	-65.9431	-65.3709	-67.3256
2.102362	1.587754	2.154588	-65.0833	-68.2289	-65.3548	-64.3072	-66.2807

J0-J6	J0-J7	J0-J8	J1-J2	J1-J3	J1-J4	J1-J5	J1-J6	J1-J7	J1-J8
-89.1508	-89.5516	-85.9303	-88.2557	-91.776	-90.2254	-92.4699	-98.0885	-91.6956	-95.3687
-97.0074	-108.061	-87.1139	-82.9417	-89.385	-94.2343	-95.939	-89.8877	-93.9765	-111.512
-102.209	-98.8664	-84.2723	-80.0549	-87.8579	-89.944	-91.3807	-86.5348	-93.8487	-105.852
-101.264	-97.5344	-81.9262	-78.7252	-85.9266	-88.5273	-88.8175	-85.2214	-92.2907	-111.651
-95.0107	-93.5796	-82.1031	-78.1126	-85.0531	-87.2214	-88.0843	-84.1125	-92.3857	-115.912
-98.7144	-93.4162	-81.6908	-77.9385	-84.61	-88.2495	-88.4174	-83.6544	-93.8931	-117.288
-95.5639	-92.2308	-81.5113	-77.9734	-85.4482	-87.377	-88.0361	-84.1942	-92.9435	-116.987
-95.5073	-91.4088	-81.7953	-78.0847	-85.7468	-87.0568	-88.3012	-84.305	-93.675	-120.3
-93.769	-91.6535	-81.7896	-78.4759	-86.8096	-88.1125	-89.1637	-84.7325	-95.6688	-110.695
-93.8862	-90.596	-82.1347	-78.7547	-86.0122	-88.5208	-89.7852	-84.5959	-94.5884	-106.101
-93.3864	-90.7357	-82.099	-79.4707	-87.2688	-89.5837	-90.611	-85.2885	-97.0511	-119.052
-94.1449	-91.2176	-83.0537	-79.8203	-88.159	-90.4035	-91.2764	-85.5558	-96.2829	-108.406
-92.7613	-90.7624	-82.6702	-80.2094	-87.8937	-90.6541	-89.86	-86.6568	-99.751	-105.982
-93.5313	-90.5968	-82.8309	-81.0086	-88.3702	-91.4697	-93.4938	-86.079	-99.2186	-108.045
-92.4211	-90.6488	-83.8603	-81.0625	-88.717	-91.731	-94.216	-87.0398	-97.7371	-112.133
-91.6576	-91.8436	-83.7583	-81.5036	-90.3182	-91.5527	-93.5921	-87.1029	-104.33	-112.431
-92.8651	-91.9083	-84.3677	-82.1841	-90.9324	-93.9964	-92.8802	-88.4977	-104.224	-110.986
-92.4844	-91.6181	-83.742	-82.4432	-91.2735	-95.0143	-94.3765	-88.5279	-102.217	-110.607
-93.4777	-90.8514	-84.4791	-82.7991	-90.9732	-94.098	-94.3408	-89.208	-100.164	-110.991
-91.4625	-91.0902	-84.7944	-83.2758	-92.1916	-97.7427	-95.1996	-90.127	-108.481	-114.401
-92.3299	-91.5142	-85.4576	-83.6753	-92.5584	-94.3348	-97.389	-90.5809	-110.132	-116.705
-92.7426	-92.9546	-85.0769	-83.5855	-93.5434	-96.649	-96.304	-89.7469	-103.009	-103.769
-91.5146	-91.042	-85.5182	-84.3896	-93.7824	-96.132	-95.827	-90.7351	-103.537	-110.614
-91.8129	-91.2471	-85.7034	-84.52	-93.3342	-96.6871	-97.2568	-91.6432	-110.641	-127.622
-91.6358	-91.7963	-85.3494	-84.8645	-95.0546	-97.9418	-100.358	-90.9968	-104.92	-106.147
-91.5284	-91.4545	-85.5422	-85.1393	-94.7001	-97.2143	-98.3227	-92.7648	-120.393	-109.1
-91.2905	-91.587	-85.3175	-84.878	-93.9163	-98.7757	-102.283	-94.2536	-104.545	-112.045
-92.195	-91.5003	-85.1934	-85.7917	-94.3056	-98.022	-98.2604	-92.7964	-113.792	-118.762
-91.3619	-91.6941	-85.9264	-87.2069	-93.5109	-98.1067	-97.478	-93.5417	-111.505	-114.231
-90.9508	-92.1393	-85.2913	-86.3202	-97.1507	-98.8844	-105.623	-93.2502	-108.667	-119.117
-90.1991	-91.8389	-85.8316	-87.1372	-97.7985	-100.713	-102.685	-93.8904	-105.235	-121.887
-90.4931	-91.9716	-85.1135	-86.9206	-95.7986	-98.3272	-106.923	-96.1323	-106.122	-128.96
-91.566	-91.3563	-85.6715	-86.9184	-94.7039	-101.88	-101.722	-93.7348	-111.289	-106.238
-92.3385	-92.0813	-85.3349	-86.7694	-98.638	-99.9153	-102.851	-93.2404	-105.474	-124.077
-90.7932	-91.4151	-85.4871	-87.8055	-99.5201	-99.4342	-103.412	-96.5052	-115.122	-113.137
-90.3364	-90.0679	-85.8757	-87.1512	-97.56	-100.968	-97.8513	-94.7531	-109.693	-120.075
-89.9048	-91.1286	-86.0356	-87.7218	-97.3224	-104.587	-102.152	-96.4771	-114.258	-115.244
-90.3285	-92.0051	-85.3052	-87.9096	-97.8241	-100.607	-103.354	-95.8823	-109.896	-116.152
-90.5245	-91.2733	-85.5992	-88.1742	-102.895	-102.663	-98.0317	-96.5222	-128.53	-130.72
-88.8438	-91.279	-84.8586	-89.0134	-97.6163	-103.498	-101.993	-95.4363	-112.554	-111.322
-88.8285	-91.3393	-85.7366	-87.9985	-99.3178	-98.5511	-107.279	-96.7658	-105.838	-114.469

-89.5447	-91.2255	-85.8948	-88.7694	-107.679	-104.415	-105.923	-98.1859	-106.963	-109.282
-89.077	-90.1555	-85.1618	-88.7469	-101.376	-116.746	-108.915	-98.6805	-108.079	-114.964
-88.5162	-90.3643	-85.4327	-87.9683	-100.775	-102.993	-112.923	-96.7984	-109.813	-112.492
-89.1638	-90.1823	-84.8899	-89.581	-99.8126	-104.504	-103.621	-97.0056	-103.761	-115.959
-89.7654	-89.6782	-84.529	-89.3039	-100.262	-106.151	-108.483	-97.3976	-120.564	-108.27
-89.0655	-89.4009	-84.6037	-88.2649	-100.569	-110.574	-110.388	-99.9487	-107.518	-113.735
-88.6806	-88.975	-84.7648	-89.5762	-103.143	-113.503	-105.509	-98.6486	-109.129	-115.168
-89.4263	-89.3353	-84.3387	-89.5866	-102.459	-109.691	-104.952	-99.5179	-119.353	-115.746
-87.9025	-89.915	-84.1454	-89.5547	-101.152	-105.281	-105.427	-97.2537	-109.948	-107.78
-88.8405	-88.6885	-84.1919	-90.1164	-101.44	-105.95	-108.376	-104.958	-104.006	-109.673
-88.4799	-89.0348	-84.3451	-90.0728	-101.75	-124.527	-105.602	-97.6825	-121.585	-117.163
-87.371	-88.565	-84.3416	-89.3741	-105.447	-109.545	-104.915	-105.251	-102.463	-117.259
-88.1952	-89.4051	-83.9754	-89.367	-103.921	-111.279	-111.574	-100.16	-106.025	-115.156
-88.0395	-88.1791	-83.8092	-90.5218	-104.047	-105.608	-107.598	-101.528	-103.774	-118.419
-87.561	-87.6927	-83.71	-90.3401	-104.086	-104.562	-105.277	-103.388	-101.852	-113.009
-88.0037	-88.6076	-82.9776	-90.1857	-106.68	-108.172	-109.899	-99.4012	-108.95	-112.888
-87.9066	-87.8205	-83.1849	-91.2112	-104.585	-104.198	-110.488	-105.251	-110.303	-112.625
-87.5568	-87.775	-82.9882	-90.8909	-104.296	-118.555	-111.58	-103.551	-109.381	-114.681
-87.7628	-88.8519	-82.6972	-90.7136	-104.258	-124.701	-116.546	-100.387	-100.712	-107.731
-88.3194	-87.3783	-82.9342	-90.5878	-103.743	-111.855	-111.604	-103.906	-109.054	-108.139
-86.7122	-87.6126	-82.9666	-90.3809	-106.707	-110.881	-109.628	-103.349	-108.015	-116.565
-87.4899	-87.013	-82.5077	-91.1008	-103.288	-115.607	-107.674	-104.924	-113.883	-112.223
-87.5974	-88.1823	-82.4217	-91.5574	-102.447	-109.654	-116.127	-103.743	-100.792	-110.828
-86.8029	-87.1422	-82.3443	-91.2807	-101.883	-104.76	-109.276	-107.889	-102.42	-113.722
-86.4489	-87.505	-82.1439	-91.1722	-104.414	-108.375	-129.883	-105.179	-109.992	-117.655
-87.1479	-87.701	-82.2105	-91.7514	-106.961	-106.612	-137.578	-104.992	-109.907	-106.197
-86.5727	-86.9693	-82.4676	-91.2141	-112.481	-110.071	-115.946	-106.787	-103.579	-111.203
-86.6486	-86.1557	-81.6308	-91.4754	-111.434	-112.829	-106.008	-104.51	-100.793	-111.978
-86.8346	-86.0508	-82.0868	-90.1225	-111.963	-106.482	-107.21	-103.977	-99.3379	-110.924
-86.1979	-86.9021	-81.8699	-91.3575	-108.221	-117.069	-109.829	-102.828	-103.597	-114.682
-86.1709	-86.2789	-81.3991	-92.3641	-108.555	-119.526	-106.779	-107.287	-99.1704	-106.779
-86.0404	-85.3091	-81.576	-90.7061	-109.639	-104.44	-103.579	-106.243	-100.461	-125.146
-86.1387	-86.2297	-81.2446	-91.4451	-102.971	-106.938	-105.246	-115.818	-100.457	-116.421
-85.6852	-86.0933	-81.0583	-91.0451	-105.733	-108.628	-106.084	-104.167	-100.036	-117.433
-86.2994	-86.2108	-81.2364	-91.6026	-103.554	-103.778	-111.108	-116.21	-100.96	-110.191
-86.5164	-85.9525	-80.6964	-91.4155	-103.243	-105.12	-108.943	-112.886	-99.0536	-105.702
-85.9738	-85.5047	-80.877	-92.0232	-101.473	-103.962	-105.549	-105.27	-100.176	-113.908
-85.4439	-85.7851	-80.8259	-90.2856	-107.679	-127.085	-113.683	-103.024	-100.235	-108.768
-85.5317	-85.1725	-80.4462	-92.4781	-104.862	-103.647	-107.867	-104.043	-99.668	-109.993
-85.3891	-85.2807	-80.5995	-91.9226	-101.331	-107.176	-112.785	-113.573	-97.768	-110.318
-85.9121	-84.8333	-80.6492	-92.8544	-107.335	-105.691	-104.943	-105.606	-102.179	-116.954
-85.2515	-84.5378	-80.0285	-91.1176	-100.77	-102.913	-104.063	-105.359	-99.6304	-109.521
-85.0057	-85.4319	-80.4322	-90.9485	-107.041	-105.856	-102.323	-113.094	-98.8258	-112.808
-84.7971	-85.1823	-80.4681	-90.7796	-102.559	-102.007	-104.478	-104.473	-96.3647	-108.139
-85.3551	-84.2032	-80.2975	-91.5717	-105.323	-104.516	-107.516	-109.3	-98.7129	-124.588
-85.6954	-84.0725	-80.0234	-91.7734	-101.564	-101.898	-102.618	-104.239	-97.6177	-113.88
-84.4293	-84.3135	-80.0994	-91.4298	-105.766	-101.56	-102.737	-105.142	-96.3414	-110.762
-84.0112	-83.7635	-80.2554	-90.4006	-106.591	-102.434	-104.875	-106.354	-98.186	-105.95
-84.143	-84.0198	-79.6403	-91.9877	-103.41	-106.106	-103.381	-118.721	-97.5306	-106.098
-83.8823	-84.4283	-79.4221	-92.5066	-102.605	-103.715	-104.376	-105.817	-99.0451	-106.963
-84.0489	-83.745	-79.4284	-91.1381	-102.569	-101.459	-103.73	-111.607	-100.38	-114.262
-83.8888	-83.095	-79.7002	-92.0707	-104.871	-102.121	-107.985	-104.728	-97.8069	-112.538
-84.1481	-83.3602	-79.0397	-91.9825	-103.389	-102.427	-103.304	-102.788	-96.3407	-122.004
-83.5005	-82.9125	-78.9151	-92.2307	-103.443	-100.853	-101.314	-110.789	-96.4469	-112.225
-82.7418	-82.1227	-79.4795	-91.1172	-103.209	-98.492	-102.84	-105.181	-96.2625	-110.092

-82.9625	-82.8943	-79.0128	-91.9529	-101.032	-102.426	-102.281	-104.292	-97.7518	-116.867
-83.3966	-82.5981	-78.9031	-92.9832	-104.328	-98.912	-98.4642	-102.704	-97.8791	-109.894
-82.3963	-82.6605	-78.6688	-93.563	-101.667	-100.007	-105.848	-105.866	-96.5565	-111.857
-82.6521	-81.6011	-78.4142	-94.1956	-100.73	-103.401	-97.1872	-104.091	-94.1414	-109.555
-83.0539	-81.721	-78.1472	-95.2365	-99.5754	-98.395	-110.155	-102.126	-96.2814	-108.514
-82.0928	-81.5539	-77.9404	-94.0554	-98.978	-106.288	-98.9664	-100.494	-96.5439	-114.264
-81.7173	-80.6766	-77.9035	-92.7345	-100.582	-102.119	-98.381	-103.474	-94.5807	-109.561
-81.7133	-80.6279	-77.5872	-96.294	-100.151	-100.487	-105.655	-102.423	-94.9434	-113.401
-82.0772	-80.6608	-77.4574	-94.1985	-98.6199	-99.8973	-99.7039	-100.718	-95.3113	-111.02
-81.4793	-81.9165	-77.1938	-94.0284	-93.6581	-92.5683	-94.3913	-96.2237	-95.1132	-97.6683
-81.6852	-80.557	-77.5018	-94.6048	-98.9417	-101.954	-96.197	-101.273	-93.2307	-106.004
-81.5716	-79.3493	-76.8764	-90.9173	-98.4621	-97.8222	-100.795	-103.021	-93.7098	-103.815
-81.1562	-79.292	-76.4118	-94.9449	-97.1853	-96.6659	-103.879	-102.608	-96.2007	-99.0114
-81.7908	-80.1103	-76.3383	-93.2185	-95.9823	-98.0144	-94.6459	-99.0868	-94.1567	-109.801
-80.5072	-79.1122	-76.2399	-91.4401	-95.843	-103.794	-98.1368	-97.1299	-96.0964	-102.457
-79.8218	-80.6892	-76.1868	-94.4012	-97.8838	-100.37	-96.2228	-103.447	-94.3296	-97.2418
-80.09	-78.6199	-75.9843	-91.795	-101.073	-92.1865	-96.2477	-94.5978	-91.0332	-106.431
-80.6335	-79.3331	-76.44	-89.2794	-102.509	-99.8258	-98.4459	-96.2502	-90.1252	-100.242
-80.1169	-79.1228	-76.1591	-91.0826	-91.8239	-109.836	-93.3316	-95.2628	-91.5076	-98.1495
-79.7601	-78.5605	-75.2957	-90.0645	-92.2284	-94.4565	-93.0487	-95.847	-92.013	-100.219
-80.5571	-78.2776	-76.2709	-101.437	-91.6787	-96.1089	-95.926	-108.037	-93.9766	-100.171
-80.1613	-77.5402	-75.881	-86.766	-93.163	-92.9959	-95.2829	-93.8034	-101.908	-103.517
-80.8159	-78.4345	-75.2228	-89.9385	-96.0564	-99.1016	-102.043	-100.968	-90.4679	-112.08
-79.3572	-79.0235	-75.4266	-88.8801	-96.6984	-96.4486	-95.4961	-96.4589	-91.2118	-95.4804
-79.2454	-78.2966	-75.9591	-89.5116	-90.2259	-90.0885	-89.3809	-89.8495	-90.1399	-99.7831
-78.8421	-77.9578	-74.7977	-89.6649	-93.6773	-91.6738	-95.3386	-94.5313	-91.7609	-115.161
-77.9666	-77.6056	-74.4319	-90.5769	-93.8368	-90.3199	-94.6184	-97.2396	-91.8716	-113.764
-79.3114	-78.1395	-75.1991	-88.6216	-94.8904	-96.2229	-94.2472	-99.1119	-87.776	-101.844
-78.9449	-76.8409	-74.6592	-86.28	-90.7508	-97.0515	-93.1294	-100.166	-89.3236	-106.271
-77.4517	-77.6634	-74.1299	-93.3018	-94.9662	-92.4096	-93.0498	-100.415	-90.0672	-107.23
-78.3635	-77.0761	-75.291	-89.3018	-92.6771	-93.218	-93.453	-92.8745	-89.7733	-96.5677
-78.5618	-76.1266	-74.1599	-91.3525	-90.7436	-94.6312	-93.4902	-96.8372	-91.1143	-100.158
-78.2746	-76.6604	-74.4547	-88.2674	-94.6105	-98.8612	-94.162	-103.4	-92.6202	-102.277
-77.6413	-76.7287	-75.3889	-91.4275	-89.798	-90.5288	-92.2778	-94.0479	-88.877	-118.06
-77.1184	-76.4489	-72.923	-88.0417	-90.2806	-92.2152	-96.2873	-92.2928	-86.9094	-105.88
-77.1205	-75.5645	-73.669	-88.2364	-90.4733	-93.757	-92.3032	-93.4852	-89.9307	-97.1295
-77.0317	-76.1092	-73.831	-88.8289	-90.9052	-89.1114	-92.9719	-96.2051	-87.4744	-103.279
-77.01	-75.7036	-73.7727	-87.3566	-89.6255	-90.6229	-90.4096	-95.1714	-88.9006	-100.135
-77.1082	-76.4289	-73.5433	-89.6862	-91.3532	-87.5644	-90.2517	-95.1278	-87.0411	-98.4348
-76.5351	-75.0647	-73.747	-86.5694	-92.7371	-91.3168	-95.693	-93.6808	-87.7574	-95.5189
-76.1314	-76.2405	-73.8484	-87.6938	-87.1263	-90.9967	-90.6947	-89.8358	-86.2144	-103.283
-76.4313	-77.0559	-73.5205	-86.9926	-91.0589	-92.4999	-94.1099	-88.5972	-87.1418	-111.828
-76.7394	-74.9063	-73.4111	-88.3123	-89.6211	-91.5668	-86.4449	-89.2157	-88.6818	-97.595
-75.5006	-75.1748	-72.7597	-85.5638	-89.8288	-90.6486	-90.875	-90.3864	-85.6478	-105.995
-75.9032	-75.7434	-73.1107	-84.729	-87.6636	-88.63	-92.734	-90.086	-83.5658	-100.625
-75.9897	-74.6486	-73.3139	-87.7759	-90.8102	-86.9693	-86.2632	-92.0277	-83.8298	-108.345
-76.7128	-74.4491	-73.0447	-84.8456	-87.7216	-91.8958	-89.727	-89.436	-86.3141	-119.74
-74.8622	-74.609	-72.8722	-89.936	-91.58	-89.367	-86.9323	-94.6346	-84.2956	-104.857
-75.22	-74.4988	-72.697	-84.6448	-88.8237	-86.9241	-88.6648	-90.2873	-85.8599	-101.551
-74.9991	-74.5695	-73.238	-85.2024	-86.5934	-87.8621	-89.9369	-89.777	-86.567	-96.0304
-74.6633	-74.0123	-72.4782	-84.7951	-87.5482	-87.827	-87.6857	-94.4794	-85.72	-102.27
-74.2499	-74.3271	-74.0159	-86.2087	-88.8587	-85.4259	-90.0451	-87.5615	-85.8977	-112.171
-74.8411	-73.5769	-73.6497	-84.2872	-87.5582	-88.3959	-86.3336	-90.0793	-86.7257	-98.4952
-75.4553	-73.2387	-72.4563	-86.302	-90.416	-88.2445	-87.1554	-90.0716	-85.9982	-97.7878
-74.0657	-73.0571	-73.2608	-84.3611	-88.1076	-90.6713	-88.6616	-91.6423	-85.3224	-112.184

-74.6263	-73.6085	-72.6379	-85.8348	-87.4182	-87.1379	-87.7914	-87.6112	-84.3539	-99.0389
-73.7262	-72.998	-72.203	-84.2463	-89.6987	-87.5327	-88.5011	-89.6398	-85.0815	-98.9488
-74.4045	-73.0476	-73.3651	-85.1906	-89.247	-88.4141	-93.5437	-90.6683	-86.0692	-107.36
-74.1562	-72.9518	-72.7888	-85.2733	-86.6575	-86.3364	-90.2656	-87.4904	-86.7049	-110.665
-74.6787	-73.4441	-72.4952	-83.7504	-85.8728	-88.3666	-89.0925	-87.0289	-84.6272	-101.594
-73.5737	-73.5036	-72.6826	-83.4926	-85.7923	-87.7591	-86.5809	-85.7987	-85.0405	-111.258
-74.0332	-72.776	-72.1107	-84.3734	-87.595	-88.6704	-87.9807	-91.2547	-84.2215	-91.8281
-73.6749	-72.8463	-71.927	-82.7356	-87.3875	-93.9337	-89.1414	-90.2835	-84.6652	-112.188
-73.8781	-72.527	-72.2578	-82.5539	-86.3837	-85.0181	-87.897	-88.6321	-83.5811	-104.186
-72.7499	-72.1138	-72.6222	-83.5346	-86.9101	-86.8719	-88.9685	-88.1644	-83.5302	-105.778
-73.2768	-71.7645	-71.5521	-83.1564	-85.7789	-86.0601	-87.0018	-88.8807	-84.9267	-114.363
-73.0612	-71.7397	-71.9435	-81.9844	-83.1434	-85.9402	-93.5936	-88.2453	-83.091	-95.8877
-71.8721	-71.2417	-71.1445	-83.612	-85.5337	-85.5328	-84.8542	-87.1798	-84.548	-100.998
-72.4633	-72.1303	-71.1006	-81.3835	-83.908	-84.7191	-87.5527	-85.917	-83.8305	-96.8201
-71.9626	-71.3144	-71.0352	-81.42	-83.7591	-84.9246	-86.6995	-84.4744	-84.0416	-101.97
-71.9644	-71.2039	-71.3816	-81.3802	-83.4411	-85.9201	-87.2884	-85.8218	-84.2513	-104.754
-71.5295	-71.6002	-71.1219	-80.9437	-82.9192	-84.4213	-87.2204	-83.2613	-82.8074	-107.336
-71.1762	-70.5319	-70.9006	-81.619	-83.5289	-83.1475	-87.055	-86.275	-81.2401	-111.901
-70.9103	-70.1953	-70.1625	-80.1226	-82.9488	-82.033	-83.2373	-83.6719	-82.4383	-105.461
-70.5453	-70.2015	-70.3535	-80.1605	-82.8914	-82.139	-85.1647	-84.4713	-80.9008	-101.074
-70.2584	-70.3719	-70.3961	-79.2202	-83.4128	-84.1533	-86.4481	-83.143	-80.1956	-108.66
-70.5824	-70.1931	-70.1677	-79.6371	-81.8771	-83.2661	-85.0179	-85.5003	-81.1544	-100.687
-70.2728	-69.5827	-69.9967	-80.708	-81.116	-81.7285	-84.835	-88.5001	-80.5719	-100.398
-70.313	-69.8324	-69.6598	-79.2643	-80.6519	-82.6557	-83.6875	-83.6298	-79.7454	-99.7119
-70.0935	-69.0077	-69.544	-79.6774	-81.5246	-81.7246	-84.0512	-82.4207	-80.276	-104.233
-70.4114	-68.7979	-69.5874	-79.1117	-81.7275	-82.074	-82.8802	-82.0227	-79.0273	-103.669
-69.0815	-69.267	-68.5561	-78.7329	-80.2241	-82.3358	-83.8198	-81.6834	-79.1148	-98.4878
-68.7601	-68.7419	-68.5088	-78.6645	-79.4195	-80.7767	-82.3229	-81.6205	-79.9551	-101.04
-68.8379	-68.4464	-69.4748	-80.1663	-80.0086	-80.4749	-79.7618	-82.3233	-77.9253	-98.1631
-69.6072	-67.7321	-69.6235	-79.2671	-79.5152	-79.7893	-80.0504	-81.1016	-78.1085	-103.101
-68.5388	-68.2695	-68.3177	-79.5807	-79.8202	-79.6452	-83.628	-82.5632	-77.0781	-98.1021
-68.1834	-67.8808	-68.557	-78.7088	-78.6623	-78.1039	-81.2332	-82.4652	-77.4534	-98.2157
-68.1873	-67.8084	-68.5426	-79.3766	-80.0002	-79.2214	-81.9006	-80.4204	-76.251	-102.633
-68.7601	-67.0557	-68.7285	-78.8876	-79.619	-78.2622	-79.9995	-80.0736	-76.2417	-96.7887
-68.4155	-67.1599	-68.533	-80.0943	-79.3155	-78.6527	-80.558	-80.099	-76.3521	-94.4537
-68.0761	-66.93	-68.7535	-79.421	-78.3771	-77.52	-80.0037	-80.2222	-75.102	-96.5474
-67.5715	-66.0574	-68.8915	-78.9346	-79.532	-77.6149	-78.8548	-79.698	-76.0096	-92.2898
-68.3526	-66.0435	-68.3997	-80.8457	-79.4275	-77.5854	-79.8155	-78.9783	-75.2701	-100.316
-67.6474	-65.7081	-68.1576	-81.0959	-79.379	-77.858	-77.5029	-79.0285	-75.946	-99.6575
-67.5894	-65.6184	-68.0866	-79.6077	-78.2791	-77.5172	-78.4512	-79.2194	-74.9496	-106.913
-67.4319	-65.4312	-67.7185	-79.4582	-78.9165	-77.3505	-78.3369	-77.9635	-74.79	-108.771
-66.8612	-65.2261	-68.765	-78.857	-78.3608	-76.8854	-77.7778	-78.0831	-74.3206	-103.528
-66.615	-64.6364	-68.1104	-78.6703	-77.6953	-76.5839	-78.0479	-79.1468	-74.7411	-111.394
-67.1408	-64.1917	-67.9453	-78.5759	-77.7802	-76.3198	-77.4399	-77.6465	-74.4946	-105.133
-66.8635	-63.8421	-67.5386	-79.7091	-76.8326	-76.1602	-77.6106	-77.6972	-74.1125	-103.853
-66.058	-63.2158	-68.3614	-78.4149	-76.5603	-75.9211	-77.0186	-77.3589	-73.663	-98.8569
-65.9416	-63.2712	-68.3453	-78.3713	-78.2071	-76.029	-76.9738	-76.5058	-74.0694	-101.738
-66.3697	-62.869	-68.0204	-79.7277	-78.1252	-75.4863	-76.2076	-77.3586	-73.633	-96.196
-66.2803	-62.717	-67.9687	-79.5374	-77.4323	-75.448	-76.3021	-76.9327	-73.6325	-101.272
-65.3658	-62.0912	-67.6392	-80.42	-77.1715	-75.7356	-76.9844	-77.4024	-73.2451	-101.467

Isolation

J2-J3	J2-J4	J2-J5	J2-J6	J2-J7	J2-J8	J3-J4	J3-J5	J3-J6	J3-J7
-96.7288	-96.6197	-103.274	-97.7246	-107.307	-100.315	-124.164	-105.628	-100.146	-97.9633
-96.2725	-109.189	-101.245	-109.362	-115.563	-123.597	-95.4952	-109.57	-95.9104	-111.322
-92.7074	-111.327	-108.044	-116.29	-111.781	-100.934	-93.744	-105.15	-113.98	-105.404
-93.3955	-98.7079	-109.226	-104.946	-111.892	-101.109	-94.4241	-103.54	-107.649	-109.851
-93.3642	-112.347	-104.623	-105.599	-106.175	-108.978	-90.964	-103.283	-109.88	-107.037
-93.1084	-103.281	-108.96	-111.199	-108.082	-109.073	-93.0735	-103.666	-110.677	-109.419
-95.215	-105.714	-109.405	-110.921	-107.357	-126.263	-93.6216	-105.711	-109.964	-116.425
-94.4815	-105.365	-112.997	-103.367	-105.887	-103.524	-95.6349	-110.967	-106.528	-116.431
-98.3826	-107.788	-121.69	-112.26	-112.092	-109.768	-97.6265	-118.867	-108.9	-115.837
-99.6907	-107.677	-112.855	-113.67	-114.12	-114.338	-95.9371	-110.807	-124.734	-117.176
-102.585	-118.857	-108.835	-109.621	-108	-121.022	-97.9604	-114.622	-108.315	-107.268
-100.134	-112.991	-106.181	-112.827	-108.267	-109.225	-97.9723	-110.576	-111.508	-109.705
-106.747	-109.216	-120.066	-122.782	-118.372	-114.903	-104.292	-120.241	-113.125	-112.676
-106.089	-117.68	-112	-104.901	-118.206	-116.408	-101.17	-114.463	-111.525	-115.268
-108.427	-110.637	-112.424	-115.475	-126.753	-124.132	-104.468	-111.259	-114.299	-114.631
-105.976	-124.614	-108.315	-118.39	-113.237	-109.14	-107.599	-109.149	-107.416	-117.381
-109.186	-121.898	-109.873	-140.646	-107.962	-117.046	-106.377	-108.617	-111.766	-114.069
-103.456	-116.931	-112.657	-114.525	-104.629	-122.193	-101.946	-106.662	-109.689	-113.248
-109.794	-111.173	-123.888	-118.939	-122.927	-113.053	-104.48	-103.307	-117.55	-121.671
-119.172	-107.385	-116.042	-106.987	-105.995	-118.571	-114.459	-105.269	-115.467	-114.656
-100.898	-110.546	-109.606	-106.381	-110.718	-111.193	-108.367	-119.285	-106.644	-114.249
-105.125	-105.089	-125.201	-113.834	-111.409	-111.523	-107.75	-111.48	-109.776	-106.667
-110.746	-109.502	-119.358	-113.418	-115.231	-117.129	-106.011	-107.776	-117.588	-111.13
-115.844	-122.296	-107.108	-118.547	-108.926	-110.616	-111.499	-104.252	-112.435	-124.482
-115.125	-117.556	-111.482	-109.618	-114.533	-105.993	-108.178	-109.226	-113.586	-113.428
-116.792	-124.866	-113.745	-112.126	-121.946	-123.916	-106.213	-111.909	-126.419	-108.333
-112.941	-108.854	-133.276	-114.433	-120.427	-112.031	-117.342	-108.928	-132.014	-112.892
-110.567	-109.31	-115.124	-113.921	-112.839	-103.604	-124.141	-111.497	-112.412	-114.256
-126.15	-114.577	-117.372	-122.412	-105.464	-109.833	-109.024	-111.054	-108.466	-107.313
-105.829	-110.822	-112.504	-105.485	-122.233	-113.612	-109.041	-118.096	-112.712	-124.519
-135.986	-114.513	-113.802	-114.368	-107.474	-118.981	-119.012	-119.009	-117.05	-131.069
-115.604	-106.709	-111.925	-118.045	-124.955	-113.178	-109.6	-116.047	-114.647	-107.464
-109.1	-116.336	-113.489	-117.123	-115.474	-111.257	-110.494	-113.464	-117.932	-113.905
-116.135	-124.326	-120.583	-109.139	-111.755	-126.045	-107.54	-106.883	-113.488	-119.961
-115.759	-117.673	-111.639	-115.026	-109.034	-104.674	-107.714	-111.88	-110.132	-117.324
-107.871	-111.217	-114.672	-107.83	-112.714	-113.626	-113.127	-109.441	-109.715	-121.563
-117.858	-107.479	-123.275	-111.532	-118.189	-110.042	-120.84	-111.028	-109.973	-104.476
-106.198	-112.362	-110.507	-112.37	-114.474	-114.079	-114.08	-120.126	-111.087	-111.43
-113.663	-110.778	-115.161	-109.608	-108.601	-119.178	-112.938	-113.657	-110.625	-113.77
-115.522	-120.164	-110.787	-112.912	-112.111	-118.544	-110.482	-123.071	-115.987	-112.592
-137.804	-116.652	-106.41	-107.68	-108.537	-113.249	-108.923	-117.496	-110.37	-103.846

-108.508	-109.406	-105.474	-118.902	-121.791	-111.477	-120.8	-111.464	-111.042	-120.724
-109.273	-111.205	-111.798	-103.146	-106.661	-119.249	-110.473	-108.562	-102.677	-113.251
-113.686	-113.694	-110.896	-112.751	-109.483	-109.023	-119.639	-106.878	-124.778	-105.733
-117.098	-124.08	-113.349	-127.808	-113.404	-114.998	-108.358	-116.165	-120.106	-105.182
-114.978	-110.48	-115.541	-115.691	-112.728	-118.293	-116.139	-112.934	-119.24	-108.074
-121.602	-119.317	-114.883	-116.779	-114.866	-113.402	-105.34	-111.144	-124.892	-106.081
-109.768	-112.678	-120.93	-117.574	-108.254	-121.608	-119.611	-115.404	-110.435	-116.621
-111	-113.784	-119.26	-124.632	-126.708	-121.831	-111.726	-112.517	-130.337	-111.809
-108.997	-110.032	-117.045	-122.712	-114.427	-108.468	-118.15	-113.557	-118.695	-105.489
-121.618	-106.12	-113.708	-114.39	-110.514	-112.038	-113.209	-122.299	-114.524	-114.634
-119.014	-113.718	-113.652	-107.55	-113.762	-120.081	-116.252	-116.21	-116.18	-112.261
-123.158	-114.891	-105.813	-119.527	-118.028	-112.697	-111.678	-107.578	-116.675	-111.08
-114.673	-113.629	-109.024	-119.469	-109.853	-118.871	-111.803	-108.998	-114.529	-120.916
-114.284	-111.697	-115.119	-117.984	-121.248	-113.573	-108.22	-110.139	-114.088	-112.19
-110.908	-110.721	-110.737	-115.62	-114.907	-111.294	-115.415	-108.743	-108.121	-106.97
-116.364	-112.658	-113.138	-120.413	-119.359	-112.171	-108.81	-111.094	-111.93	-122.629
-107.391	-117.214	-106.947	-112.167	-113.608	-115.959	-107.21	-111.954	-110.459	-117.89
-108.62	-123.378	-115.722	-109.096	-117.683	-107.834	-113.655	-113.285	-114.429	-113.135
-106.005	-108.461	-108.077	-116.02	-108.078	-113.323	-117.282	-130.891	-123.712	-112.184
-109.276	-113.463	-117.838	-111.502	-110.869	-110.815	-116.105	-129.063	-111.492	-106.34
-124.874	-112.614	-129.386	-119.174	-112.266	-123.381	-118.414	-115.53	-108.979	-109.47
-118.388	-104.877	-112.356	-117.932	-126.794	-112.784	-105.832	-117.693	-116.505	-120.393
-110.647	-108.094	-119.197	-110.139	-111.442	-111.397	-118.417	-104.603	-115.01	-113.562
-118.331	-112.715	-118.715	-109.261	-108.812	-113.731	-113.084	-123.124	-117.054	-109.831
-113.492	-114.587	-116.807	-108.294	-111.411	-114.159	-117.691	-116.174	-107.236	-111.358
-113.861	-107.923	-109.378	-113.041	-121.702	-111.338	-110.761	-117.211	-109.886	-111.479
-114.42	-109.185	-111.813	-110.896	-116.565	-108.97	-129.308	-117.936	-116.401	-122.025
-109.869	-118.74	-115.664	-113.576	-117.634	-112.565	-116.912	-117.44	-106.736	-112.515
-118	-109.31	-118.638	-120.626	-119.294	-116.76	-128.229	-112.255	-107.203	-118.281
-113.163	-106.623	-113.141	-107.427	-110.559	-108.728	-109.851	-109.515	-117.359	-108.057
-115.119	-110.308	-109.916	-114.319	-109.239	-111.282	-106.842	-108.652	-110.658	-115.465
-110.05	-114.534	-109.283	-116.38	-111.411	-116.398	-126.692	-121.325	-113.518	-118.44
-108.98	-119.628	-124.093	-112.011	-113.012	-112.567	-105.418	-112.46	-116.982	-114.239
-108.982	-124.428	-119.338	-119.47	-116.985	-113.328	-123.721	-117.6	-102.339	-110.185
-108.468	-109.182	-114.731	-126.693	-116.052	-112.06	-114.083	-110.093	-114.777	-128.924
-111.351	-112.66	-112.776	-106.862	-116.007	-107.788	-106.715	-109.057	-110.793	-113.43
-110.33	-120.979	-110.825	-116.512	-114.051	-111.19	-131.195	-108.435	-115.051	-109.749
-106.085	-117.066	-107.939	-123.749	-121.085	-116.853	-112.706	-116.145	-124.316	-109.732
-103.818	-109.166	-116.828	-109.291	-115.011	-113.438	-115.051	-112.219	-107.643	-110.56
-115.608	-113.216	-109.861	-107.712	-112.718	-105.358	-118.189	-117.256	-109.354	-107.664
-120.142	-115.943	-115.776	-115.119	-109.78	-112.49	-117.392	-106.727	-110.081	-111.022
-106.776	-113.1	-115.306	-107.503	-119.447	-107.711	-111.033	-110.272	-118.792	-112.221
-110.969	-110.619	-106.162	-115.078	-110.66	-105.683	-114.11	-117.592	-116.391	-123.974
-123.39	-108.992	-116.52	-112.922	-114.725	-111.772	-106.864	-105.683	-109.336	-108.818
-111.997	-124.273	-114.61	-125.557	-115.768	-119.24	-108.694	-118.669	-114.92	-111.78
-108.052	-108.612	-108.447	-110.246	-109.665	-111.95	-118.563	-118.6	-117.101	-113.204
-117.817	-114.367	-112.567	-122.949	-115.19	-111.393	-114.283	-112.588	-117.592	-113.123
-112.201	-113.328	-115.736	-109.156	-105.264	-116.747	-109.167	-112.509	-116.399	-109.526
-106.781	-130.218	-119.533	-119.63	-111.629	-113.321	-110.658	-106.943	-106.618	-111.888
-135.354	-112.075	-108.31	-118.112	-117.383	-127.068	-113.039	-118.284	-109.51	-117.237
-126.061	-116.686	-110.855	-113.365	-120.096	-116.772	-105.531	-122.286	-106.334	-113.089
-108.87	-122.926	-111.557	-118.421	-114.919	-120.445	-107.485	-111.898	-111.311	-108.358
-117.948	-106.556	-115.767	-111.887	-117.276	-151.485	-117.938	-107.25	-113.132	-106.859
-105.579	-117.345	-107.355	-117.853	-111.13	-121.741	-118.04	-110.883	-110.018	-109.167
-106.969	-108.909	-112.465	-119.938	-110.986	-122.883	-105.836	-109.213	-118.311	-113.504

-113.568	-113.899	-110.313	-113.244	-117.988	-116.355	-112.285	-112.33	-110.36	-112.825
-114.33	-113.069	-115.199	-113.446	-116.019	-108.876	-111.986	-114.217	-115.298	-110.603
-105.774	-106.887	-113.448	-112.279	-116.751	-118.074	-106.638	-111.078	-111.293	-122.284
-117.295	-110.431	-114.769	-110.608	-138.413	-112.217	-114.422	-107.695	-107.634	-109.705
-111.405	-104.336	-119.346	-108.309	-116.636	-106.419	-108.087	-119.28	-110.934	-105.043
-115.741	-108.387	-113.874	-109.008	-118.636	-110.14	-108.001	-113.93	-103.144	-107.865
-110.519	-115.471	-112	-108.862	-127.791	-112.998	-105.985	-107.076	-111.995	-113.964
-105.522	-110.859	-119.186	-105.957	-105.789	-112.264	-117.046	-110.708	-106.131	-112.56
-115.089	-115.519	-111.773	-117.319	-122.723	-116.615	-106.706	-113.711	-119.961	-115.889
-96.5503	-120.186	-110.744	-99.639	-107.271	-103.691	-102.34	-109.337	-114.729	-106.219
-100.954	-105.602	-112.341	-100.304	-104.804	-110.262	-102.078	-103.456	-95.0963	-107.919
-100.084	-103.639	-100.234	-99.6913	-111.136	-104.487	-100.042	-102.453	-108.521	-109.805
-109.245	-102.809	-99.9975	-109.676	-102.658	-114.33	-103.912	-106.208	-112.937	-105.123
-102.176	-98.8481	-99.4435	-107.73	-106.401	-106.647	-101.153	-107.74	-115.431	-114.53
-106.408	-107.258	-110.697	-98.8581	-106.972	-102.761	-107.115	-107.106	-107.275	-102.077
-104.51	-99.2085	-97.4098	-103.214	-101.434	-100.872	-101.505	-110.907	-97.9425	-98.7011
-98.8285	-100.824	-110.66	-111.71	-111.622	-103.3	-98.5316	-110.708	-108.924	-97.9317
-103.215	-109.772	-103.073	-97.3557	-98.0488	-101.113	-112.956	-106.76	-101.314	-97.9394
-107.947	-102.149	-110.245	-105.136	-108.72	-102.938	-100.142	-100.686	-107.912	-105.746
-103.732	-102.849	-107.924	-98.6592	-107.941	-104.134	-97.486	-102.329	-103.381	-110.739
-109.002	-97.1735	-106.068	-103.24	-108.335	-103.83	-115.617	-102.563	-104.09	-96.8215
-98.2795	-101.256	-97.0593	-96.3589	-110.482	-101.988	-101.691	-96.0401	-100.338	-121.185
-102.962	-103.014	-105.463	-101.142	-101.09	-104.3	-120.609	-106.869	-98.4574	-101.192
-118.444	-98.6615	-99.6304	-98.4479	-100.761	-95.6547	-95.2069	-114.623	-99.3242	-95.6317
-109.306	-99.5587	-99.6388	-104.025	-103.997	-101.712	-97.9045	-104.86	-118.102	-109.727
-98.6654	-95.9368	-101.793	-96.7089	-103.37	-107.05	-96.7689	-110.891	-103.875	-100.891
-98.6971	-104.271	-99.7625	-99.1236	-103.496	-100.273	-97.5534	-101.971	-90.7809	-98.993
-110.647	-98.9865	-106.281	-96.146	-101.779	-102.095	-106.393	-101.283	-105.795	-98.1731
-98.1056	-100.925	-103.601	-104.369	-109.262	-100.707	-99.5717	-93.9541	-100.632	-100.745
-98.4081	-111.568	-108.312	-103.512	-94.9434	-98.8565	-98.7123	-99.0936	-99.6264	-99.1303
-98.0373	-106.917	-101.654	-110.922	-100.314	-98.2302	-104.223	-95.312	-98.1265	-104.801
-98.3595	-101.822	-111.327	-103.913	-98.5333	-100.568	-103.122	-104.039	-102.157	-109.846
-99.1146	-107.951	-103.779	-102.978	-97.893	-97.6855	-95.084	-99.373	-116.166	-107.552
-101.968	-116.877	-110.728	-99.3506	-107.445	-106.663	-118.85	-111.38	-103.064	-102.561
-103.797	-102.727	-106.263	-100.346	-101.294	-106.038	-108.061	-110.169	-107.615	-105.436
-97.6706	-103.121	-99.3276	-96.4107	-110.781	-103.747	-101.338	-108.892	-97.6947	-103.782
-102.083	-115.417	-105.778	-102.383	-106.067	-100.856	-102.38	-105.914	-110.487	-110.029
-100.784	-104.859	-99.2585	-95.4681	-106.918	-98.2319	-98.1492	-101.398	-106.22	-107.432
-107.895	-99.4936	-111.403	-97.5696	-94.612	-93.9581	-104.094	-106.592	-103.264	-100.657
-106.852	-99.093	-107.646	-113.312	-95.5936	-121.307	-103.05	-98.6139	-97.9426	-110.436
-107.56	-99.6762	-104.709	-109.159	-102.922	-98.9458	-99.2261	-113.991	-102.984	-93.9935
-101.901	-104.286	-94.8409	-97.5457	-96.9933	-96.6185	-99.9928	-108.594	-99.6448	-101.711
-93.1185	-102.851	-97.9442	-111.133	-106.346	-98.0962	-107.258	-117.321	-96.9962	-103.395
-97.8855	-104.254	-103.548	-102.168	-91.249	-100.288	-106.874	-100.353	-97.0781	-99.9101
-98.8478	-94.6805	-118.652	-112.701	-97.5601	-99.919	-98.8455	-103.262	-99.1499	-96.9003
-96.17	-100.375	-100.979	-100.996	-102.803	-111.959	-99.6254	-99.3657	-96.6881	-106.08
-98.3464	-103.632	-103.924	-108.333	-103.015	-97.8053	-100.513	-109.149	-98.8526	-95.3594
-97.1327	-99.7239	-101.595	-101.434	-97.539	-100.325	-100.68	-105.54	-100.535	-95.4882
-97.8717	-104.608	-103.184	-101.41	-100.335	-94.2964	-104.787	-91.0016	-101.493	-107.99
-98.5314	-95.9529	-105.857	-106.087	-97.4114	-96.0582	-95.9026	-104.439	-108.119	-95.9663
-103.158	-99.39	-103.336	-104.419	-100.696	-98.2045	-96.1245	-93.8794	-103.038	-103.057
-104.378	-101.709	-107.848	-104.557	-93.3081	-102.471	-99.3304	-97.5742	-104.879	-101.921
-96.7163	-99.5174	-101.58	-99.2023	-99.04	-107.794	-94.3756	-100.603	-103.555	-107.378
-103.633	-103.117	-101.8	-102.73	-111.792	-99.1386	-118.559	-97.2677	-96.4268	-98.5089
-110.707	-105.306	-105.886	-96.0958	-97.4368	-100.165	-105.401	-94.1889	-106.663	-97.8569

-108.996	-96.8469	-111.952	-102.947	-112.114	-99.0999	-97.5866	-97.0738	-97.2153	-103.771
-108.525	-103.199	-101.217	-111.747	-117.561	-99.9655	-106.066	-109.381	-106.87	-103.839
-105.342	-107.048	-101.403	-108.053	-97.9277	-100.42	-106.218	-98.81	-117.235	-96.121
-108.719	-102.216	-109.327	-106.475	-97.7853	-105.48	-95.4552	-100.56	-102.509	-96.4853
-99.6262	-97.9378	-115.42	-103.234	-98.6793	-113.019	-100.011	-96.4848	-98.0407	-99.598
-98.3056	-94.8139	-95.7879	-102.21	-96.2388	-102.292	-96.3005	-103.78	-105.647	-100.552
-94.8482	-100.039	-106.19	-118.11	-100.888	-99.1048	-95.7414	-100.082	-100.03	-107.976
-93.6904	-94.9862	-98.5886	-100.331	-102.669	-103.33	-92.7137	-99.0996	-93.7532	-99.6557
-106.427	-90.6835	-123.457	-96.6067	-103.615	-96.492	-105.886	-104.112	-107.3	-98.8713
-98.6421	-103.691	-96.5255	-106.273	-98.4234	-103.414	-103.547	-99.4244	-104.834	-100.078
-96.2127	-100.014	-97.0744	-104.477	-105.003	-97.5877	-96.6886	-134.205	-95.9883	-94.7223
-99.6014	-107.096	-100.041	-99.7517	-104.059	-103.004	-109.204	-97.167	-110.086	-97.627
-102.353	-93.9499	-99.6076	-98.9194	-102.964	-111.786	-97.3293	-95.8352	-110.423	-110.103
-99.5901	-97.7674	-97.3603	-103.857	-99.6558	-99.2981	-94.6333	-95.2234	-101.731	-103.924
-114.093	-98.8576	-99.2818	-94.4779	-97.4741	-95.6455	-97.1423	-107.319	-109.7	-94.5863
-100.888	-112.521	-110.275	-98.9809	-98.5578	-104.307	-101.575	-101.045	-101.612	-96.5634
-105.431	-99.2764	-104.394	-97.3936	-101.265	-96.2374	-102.383	-102.98	-103.158	-105.96
-115.211	-95.2091	-101.446	-94.6559	-103.283	-100.904	-104.53	-99.1068	-95.4155	-105.376
-100.794	-96.8782	-103.62	-118.436	-102.268	-99.4831	-103.967	-98.1377	-104.55	-115.426
-107.623	-99.198	-101.499	-105.38	-96.4686	-99.9411	-99.8092	-101.007	-100.147	-102.809
-98.7063	-103.857	-98.7431	-118.718	-106.721	-97.0037	-97.1476	-94.686	-97.7073	-95.9052
-101.148	-99.2306	-103.33	-99.0351	-101.393	-103.88	-98.8747	-97.0551	-99.007	-100.39
-110.695	-103.471	-99.9135	-108.734	-95.5398	-98.1103	-100.076	-115.669	-98.6193	-100.731
-109.759	-112.353	-103.336	-97.787	-95.8212	-100.862	-95.7626	-98.8174	-103.56	-106.766
-93.657	-95.8296	-100.121	-99.6081	-96.2036	-98.0486	-109.669	-98.3033	-101.257	-107.494
-96.107	-104.121	-102.341	-111.926	-98.2522	-103.702	-107.598	-100.356	-114.242	-92.8207
-111.044	-105.705	-98.0407	-97.5938	-95.6627	-104.816	-94.4417	-100.627	-98.2324	-92.2027
-108.515	-95.2028	-110.765	-95.0762	-96.0435	-101.652	-98.7853	-103.655	-102.436	-100.649
-96.2922	-100.051	-100.326	-102.992	-96.7853	-96.6063	-102.57	-103.779	-96.1684	-100.34
-106.803	-100.003	-118.693	-101.344	-106.2	-101.585	-96.2582	-99.0162	-103.15	-105.547
-101.04	-102.62	-103.582	-98.2385	-94.3615	-102.212	-101.996	-98.6525	-102.754	-93.6978
-105.1	-101.464	-96.6839	-101.432	-95.3134	-103.539	-102.36	-102.192	-117.041	-103.759
-108.316	-101.225	-103.842	-105.821	-103.884	-98.5201	-105.046	-98.321	-105.11	-97.012
-99.4311	-100.851	-95.7602	-98.9397	-103.35	-99.1536	-108.061	-97.507	-93.0795	-99.4991
-97.1981	-100.69	-94.8187	-96.797	-104.066	-98.4975	-104.906	-102.05	-103.867	-98.7199
-98.0987	-96.5183	-102.173	-93.6894	-101.879	-111.041	-99.1889	-103.601	-98.0295	-108.344
-95.3757	-102.819	-99.1813	-111.032	-107.086	-109.814	-98.6697	-103.612	-99.7487	-97.436
-91.5501	-102.465	-102.045	-101.327	-93.0751	-102.081	-106.998	-97.3789	-98.2349	-92.5983
-96.6453	-114.054	-97.4835	-103.415	-100.83	-111.492	-107.343	-97.1928	-96.7296	-102.821
-99.6058	-101.746	-99.7663	-94.2661	-106.169	-99.0768	-100.838	-104.047	-107.496	-106.229
-105.369	-99.5805	-93.6393	-104.591	-94.8167	-101.721	-97.6804	-96.6162	-100.007	-108.602
-102.011	-111.835	-98.3987	-100.517	-94.911	-99.7767	-96.5604	-103.548	-116.893	-113.756
-99.971	-97.7228	-103.14	-101.23	-102.85	-105.537	-99.7238	-97.6222	-110.817	-98.0613
-92.4907	-99.0422	-96.9058	-97.4627	-98.5917	-99.4673	-98.6744	-116.379	-99.9453	-94.4806
-100.061	-107.478	-100.376	-95.9114	-96.427	-105.79	-96.0709	-100.492	-102.992	-94.3512
-99.7972	-109.391	-97.7488	-108.895	-98.376	-102.487	-97.5108	-101.859	-104.432	-96.9079
-102.247	-122.528	-102.57	-100.468	-109.696	-96.4842	-98.8749	-100.792	-99.9889	-100.516
-99.4057	-104.372	-108.543	-101.422	-98.2046	-97.6508	-97.9429	-94.9926	-99.9497	-97.9622
-103.816	-101.197	-94.3708	-97.3029	-95.0815	-99.8423	-98.6702	-103.716	-97.0329	-95.7267
-91.0949	-111.729	-99.1865	-96.5229	-99.7294	-99.2012	-94.9588	-93.1875	-94.1417	-100.983

J3-J8	J4-J5	J4-J6	J4-J7	J4-J8	J5-J6	J5-J7	J5-J8	J6-J7	J6-J8
-103.999	-99.0958	-97.3789	-100.389	-118.366	-98.4257	-101.653	-96.3313	-110.893	-95.4251
-102.323	-97.3394	-105.099	-109.654	-103.985	-97.8327	-108.61	-107.742	-95.4914	-98.7468
-104.138	-92.4099	-104.99	-107.752	-108.154	-93.0028	-107.594	-103.725	-91.091	-109.014
-116.207	-92.0826	-104.274	-115.319	-109.729	-92.8295	-114.378	-105.69	-92.6193	-102.96
-109.158	-92.8614	-104.741	-108.696	-110.571	-92.1494	-100.561	-108.287	-92.1097	-104.654
-107.958	-93.72	-109.654	-105.247	-118.624	-93.3559	-108.22	-108.345	-92.4215	-101.597
-108.019	-94.9253	-104.618	-109.87	-107.701	-93.1514	-109.07	-118.972	-92.6065	-107.982
-117.058	-94.8998	-109.038	-112.209	-105.14	-94.3006	-106.721	-106.805	-93.5618	-107.61
-108.407	-96.2571	-103.182	-114.501	-110.955	-94.9715	-105.657	-124.616	-96.6143	-106.847
-110.281	-97.8801	-109.355	-107.554	-112.081	-95.4512	-109.793	-102.349	-97.4528	-109.875
-111.135	-100.155	-111.253	-112.687	-111.084	-97.302	-105.621	-106.643	-101.961	-106.111
-118.157	-102.416	-108.561	-109.166	-114.008	-100.908	-118.63	-115.298	-100.906	-107.671
-114.891	-102.332	-111.327	-108.704	-122.041	-103.698	-108.026	-125.618	-101.854	-110.061
-108.317	-107.41	-113.172	-112.36	-108.024	-97.89	-109.628	-129.252	-102.931	-118.125
-102.689	-108.997	-106.054	-117.72	-108.841	-108.723	-124.15	-115.896	-107.007	-111.001
-111.909	-102.067	-106.088	-117.04	-115.062	-105.876	-124.604	-109.388	-101.769	-111.685
-115.043	-104.454	-113.036	-114.279	-120.216	-106.957	-106.633	-113.177	-114.928	-115.486
-120.184	-111.551	-111.603	-115.137	-123.359	-106.307	-112.536	-116.517	-107.893	-112.598
-109.853	-109.868	-117.362	-111.841	-118.476	-103.329	-128.875	-111.965	-108.574	-121.424
-110.693	-105.317	-110.107	-105.833	-109.969	-105.491	-113.972	-119.852	-109.604	-111.647
-104.083	-114.181	-105.997	-107.361	-111.745	-111.308	-115.283	-130.356	-103.119	-106.956
-113.806	-102.564	-114.745	-114.625	-110.598	-104.273	-113.532	-110.269	-112.965	-116.59
-112.483	-109.945	-116.07	-109.471	-107.852	-112.646	-109.352	-107.765	-105.906	-111.983
-109.539	-114.509	-116.06	-120.129	-117.756	-124.13	-104.975	-109.165	-110.777	-111.8
-118.886	-115.642	-107.549	-114.363	-112.676	-109.077	-113.965	-124.937	-103.19	-116.681
-115.173	-112.871	-118.244	-112.511	-110.091	-111.505	-105.557	-119.436	-115.729	-107.969
-116.815	-109.566	-121.661	-113.819	-117.293	-111.96	-121.394	-113.866	-105.952	-108.445
-110.032	-117.414	-109.491	-114.008	-110.08	-116.649	-111.525	-118.192	-115.764	-122.527
-110.487	-104.392	-118.878	-137.941	-109.689	-108.338	-108.904	-118.528	-119.763	-129.075
-115.931	-108.958	-109.918	-116.709	-109.74	-108.894	-123.331	-113.211	-112.944	-113.924
-121.957	-113.889	-111.36	-106.626	-110.488	-121.706	-116.881	-116.073	-111.844	-125.515
-110.912	-125.274	-104.948	-110.176	-113.225	-108.361	-109.565	-120.163	-107.795	-113.57
-120.467	-121.28	-111.423	-112.571	-118.08	-110.68	-111.7	-113.705	-113.722	-112.36
-112.653	-114.553	-107.485	-109.572	-111.689	-117.963	-110.597	-112.054	-108.894	-110.125
-118.82	-108.661	-108.803	-107.428	-119.784	-103.278	-111.432	-112.373	-110.321	-106.005
-110.978	-116.6	-111.111	-108.849	-108.817	-106.007	-110.321	-111.459	-104.634	-112.881
-118.717	-111.921	-113.247	-115.222	-131.361	-116.084	-109.712	-109.982	-111.938	-116.929
-122.234	-112.954	-111.651	-121.844	-114.162	-117.56	-110.802	-107.123	-110.261	-108.205
-113.707	-119.36	-106.424	-116.512	-124.892	-108.849	-105.802	-112.101	-115.24	-114.669
-106.534	-111.658	-107.75	-107.905	-113.779	-129.928	-130.517	-109.557	-112.761	-117.533
-113.101	-118.003	-107.078	-110.645	-112.624	-108.762	-111.886	-111.141	-115.576	-115.556

-112.504	-107.696	-123.519	-127.482	-109.452	-109.261	-115.255	-114.859	-113.224	-119.4
-110.102	-120.278	-129.776	-108.826	-122.769	-112.636	-112.115	-111.677	-106.976	-112.888
-115.986	-115.245	-116.287	-113.548	-110.546	-114.086	-114.582	-112.037	-111.121	-113.375
-106.339	-112.682	-123.828	-119.69	-112.926	-120.692	-108.851	-106.964	-109.056	-118.324
-114.855	-105.44	-113.801	-135.404	-111.905	-112.471	-111.94	-112.154	-106.039	-116.998
-116.018	-110.661	-114.336	-107.827	-120.028	-117.451	-112.581	-106.745	-106.711	-116.64
-109.167	-132.99	-110.835	-111.37	-108.269	-115.79	-110.283	-114.135	-112.054	-116.005
-116.799	-111.017	-110.868	-114.4	-109.095	-111.283	-120.259	-120.969	-112.883	-108.133
-114.557	-123.29	-114.992	-113.838	-121.81	-114.073	-108.931	-110.567	-113.237	-107.615
-110.064	-110.175	-111.566	-108.592	-112.226	-114.872	-146.819	-110.634	-117.664	-112.044
-116.996	-106.458	-112.91	-110.302	-119.106	-107.911	-111.64	-112.913	-114.659	-108.126
-109.642	-107.182	-115.021	-114.144	-106.357	-119.167	-107.176	-108.477	-107.178	-110.976
-131.134	-114.475	-112.316	-121.635	-122.981	-112.597	-117.212	-106.647	-108.769	-116.808
-107.06	-104.555	-117.363	-110.848	-113.814	-108.175	-112.813	-109.554	-109.711	-106.406
-115.297	-111.67	-113.56	-111.254	-111.263	-106.916	-113.13	-106.876	-111.677	-118.043
-117.992	-112.99	-117.65	-120.601	-115.445	-114.648	-110.889	-109.828	-120.925	-112.678
-110.592	-121.007	-125.195	-108.316	-115.077	-101.691	-115.962	-108.162	-107.977	-104.49
-109.315	-109.412	-114.525	-121.438	-119.332	-118.868	-106.189	-116.557	-106.557	-117.942
-108.617	-131.016	-111.085	-116.414	-108.545	-111.713	-113.469	-110.484	-132.47	-109.71
-113.328	-106.186	-109.616	-116.301	-111.65	-115.893	-104.267	-110.354	-108.516	-110.438
-107.582	-113.798	-107.197	-113.875	-114.395	-115.935	-116.419	-116.123	-112.447	-122.058
-110.183	-118.162	-112.488	-115.475	-112.027	-113.015	-113.464	-111.419	-115.686	-108.513
-118.16	-121.091	-110.179	-109.292	-122.113	-105.588	-115.69	-112.65	-109.989	-109.739
-109.676	-114.575	-106.405	-115.013	-117.799	-111.731	-115.219	-109.323	-113.954	-109.409
-105.006	-107.745	-116.189	-116.303	-111.218	-107.11	-114.709	-114.1	-111.501	-107.074
-111.756	-115.781	-107.044	-120.455	-113.779	-107.479	-120.903	-124.719	-108.215	-123.805
-115.008	-122.993	-113.479	-109.73	-111.402	-110.496	-111.627	-117.397	-117.951	-108.481
-120.582	-118.305	-111.533	-112.991	-113.677	-122.85	-110.476	-115.652	-114.587	-109.32
-112.019	-115.293	-112.872	-112.79	-116.23	-121.301	-118.307	-107.412	-113.218	-112.804
-111.941	-109.029	-110.915	-115.901	-116.89	-108.299	-112.811	-119.213	-112.261	-106.036
-132.338	-115.286	-107.364	-110.426	-118.07	-112.065	-108.985	-111.872	-116.492	-115.437
-111.063	-122.636	-112.355	-111.136	-119.043	-116.22	-125.48	-110.773	-113.794	-117.579
-112.121	-113.867	-118.607	-127.448	-115.135	-115.473	-107.323	-115.38	-110.873	-112.054
-113.671	-108.54	-115.425	-112.209	-111.011	-113.452	-111.252	-106.73	-106.27	-112.718
-110.803	-107.765	-111.524	-113.729	-111.785	-113.243	-113.094	-135.839	-111.785	-119.188
-116.954	-110.147	-109.105	-103.803	-116.468	-107.574	-111.713	-113.987	-113.637	-114.869
-119.948	-109.846	-125.372	-109.644	-113.874	-114.958	-114.019	-119.712	-114.183	-110.075
-115.15	-110.534	-108.348	-104.592	-108.775	-118.123	-112.75	-113.983	-121.994	-120.569
-116.737	-111.176	-127.007	-122.579	-122.051	-110.882	-114.314	-110.344	-102.729	-106.592
-112.878	-112.103	-119.831	-120.282	-114.543	-106.106	-111.72	-110.504	-104.69	-109.786
-109.026	-112.582	-112.21	-114.854	-111.783	-114.965	-114.695	-123.174	-115.038	-112.084
-110.616	-110.073	-113.979	-118.016	-109.329	-110.411	-112.48	-111.862	-115.485	-113.073
-104.183	-112.362	-106.794	-114.041	-116.025	-118.161	-131.845	-131.388	-110.159	-128.837
-108.667	-123.776	-110.134	-112.983	-112.421	-107.931	-110.466	-112.657	-117.047	-107.231
-120.145	-122.361	-112.738	-122.015	-112.457	-127.135	-114.697	-109.223	-113.873	-114.661
-107.862	-118.084	-120.241	-108.766	-117.12	-115.362	-113.755	-110.337	-105.991	-110.28
-124.059	-113.589	-114.586	-120.81	-112.917	-110.747	-113.399	-113.708	-110.021	-105.208
-114.169	-113.032	-109.942	-116.948	-108.284	-113.444	-112.875	-107.908	-113.48	-109.121
-116.457	-112.781	-113.656	-117.023	-114.136	-116.696	-114.4	-120.005	-114.149	-124.407
-112.119	-111.618	-110.324	-120.724	-114.883	-112.861	-127.844	-113.117	-122.1	-112.072
-117.264	-113.214	-109.487	-103.869	-107.237	-112.377	-107.571	-113.652	-129.073	-118.959
-115.722	-116.473	-114.744	-112.988	-131.442	-106.501	-115.253	-129.986	-109.698	-107.04
-124.077	-126.916	-119.324	-106.551	-110.66	-112.709	-105.479	-113.6	-119.01	-111.763
-117.996	-105.095	-104.712	-109.225	-107.913	-107.632	-107.634	-119.833	-112.529	-110.581
-111.3	-112.398	-118.887	-110.664	-105.87	-106.078	-115.549	-118.754	-108.426	-115.658

-113.134	-117.043	-113.501	-116.017	-112.486	-110.347	-115.165	-124.714	-117.24	-114.672
-120.168	-109.684	-124.835	-112.928	-112.275	-125.618	-111.812	-115.934	-110.065	-117.196
-106.816	-107.325	-114.424	-111.835	-110.858	-108.75	-105.045	-113.712	-112.795	-109.178
-117.588	-107.786	-116.222	-116.423	-115.311	-109.713	-119.236	-124.833	-109.641	-112.235
-111.192	-107.362	-109.284	-111.876	-116.906	-118.117	-104.432	-119.531	-113.092	-120.072
-106.463	-110.935	-120.899	-111.539	-131.533	-108.387	-118.177	-124.065	-105.427	-113.564
-121.684	-112.982	-112.781	-112.843	-113.395	-123.821	-115.464	-107.392	-108.135	-113
-108.174	-109.235	-119.147	-114.177	-111.164	-112.711	-108.556	-109.392	-110.497	-115.903
-119.229	-105.144	-112.211	-115.956	-112.377	-113.506	-113.458	-104.635	-114.765	-112.032
-104.514	-101.966	-96.5149	-108.653	-99.8931	-101.256	-111.377	-112.679	-103.621	-105.622
-105.961	-112.25	-113.641	-97.5167	-103.843	-101.382	-103.106	-96.1778	-106.491	-101.055
-110.762	-101.817	-106.623	-115.96	-103.88	-95.513	-101.218	-106.021	-100.419	-102.992
-109.83	-95.9942	-102.224	-107.753	-99.2894	-109.683	-104.999	-98.6858	-99.7057	-102.134
-95.5284	-104.309	-108.989	-94.9284	-105.117	-97.9914	-97.1245	-106.944	-106.418	-103.454
-98.6653	-102.697	-95.1567	-97.7196	-100.11	-99.7147	-106.547	-109.781	-101.954	-100.091
-109.528	-99.7585	-108.456	-94.7773	-103.289	-119.544	-116.523	-110.244	-127.02	-98.5451
-106.477	-110.81	-101.788	-102.009	-105.197	-106.568	-101.461	-98.317	-100.873	-105.943
-108.728	-110.2	-102.674	-100.363	-94.8514	-96.7124	-99.2966	-99.2346	-116.335	-96.5578
-102.321	-107.324	-110.476	-108.401	-103.554	-97.6622	-109.14	-98.2878	-99.5701	-107.853
-99.2292	-106.803	-107.16	-97.5659	-106.963	-106.278	-105.251	-100.677	-103.802	-107.305
-95.4812	-107.491	-106.409	-108.383	-99.7836	-102.267	-109.392	-98.4991	-110.552	-94.3838
-118.072	-102.474	-102.785	-106.115	-96.1798	-102.562	-106.639	-107.364	-101.816	-100.592
-100.157	-96.5494	-98.7533	-109.371	-97.5285	-96.9584	-102.937	-100.077	-100.143	-96.1875
-101.709	-101.528	-97.4105	-99.3773	-109.037	-105.141	-102.046	-98.4423	-113.148	-101.696
-113.481	-104.61	-106.755	-99.2906	-99.7951	-97.4386	-103.308	-94.9456	-105.135	-93.0905
-102.008	-92.7936	-100.274	-95.8312	-104.562	-99.7126	-104.133	-103.881	-114.765	-104.285
-122.384	-93.9777	-110.756	-101.827	-96.4088	-97.4378	-105.536	-96.7333	-101.401	-97.7003
-104.249	-105.86	-113.061	-107.733	-94.7722	-110.337	-96.4349	-101.265	-105.638	-102.795
-104.941	-113.489	-105.738	-117.104	-101.255	-124.648	-97.5557	-103.547	-121.146	-101.801
-103.413	-104.497	-97.3536	-110.905	-98.0365	-109.645	-100.522	-103.9	-99.4943	-99.9008
-107.169	-105.97	-103.461	-102.378	-115.978	-104.948	-101.058	-98.6967	-104.221	-96.2113
-100.601	-102.807	-97.9931	-104.195	-95.6977	-104.699	-105.975	-106.029	-108.259	-105.578
-103.298	-100.68	-105.492	-118.07	-105.604	-100.407	-101.958	-97.8242	-103.484	-103.976
-117.773	-99.3401	-96.5788	-102.897	-99.0415	-101.32	-104.262	-103.401	-118.882	-105.939
-99.644	-110.349	-114.608	-100.715	-110.672	-100.433	-113.579	-99.3332	-104.501	-106.747
-106.871	-103.568	-105.818	-103.563	-104.26	-111.701	-97.7608	-99.1196	-101.383	-101.667
-115.461	-96.9993	-100.706	-107.255	-105.091	-101.047	-95.11	-99.0375	-95.8069	-99.9905
-107.632	-102.19	-96.8272	-105.332	-101.108	-101.838	-96.7393	-106.806	-95.5915	-107.164
-98.3822	-106.331	-97.852	-102.853	-99.3715	-101.442	-99.6982	-104.535	-98.6416	-102.487
-102.082	-103.936	-100.943	-101.879	-101.526	-113.227	-96.83	-98.2079	-108.453	-107.796
-109.591	-112.183	-106.924	-103.779	-95.9213	-102.003	-95.1387	-102.693	-101.409	-98.8286
-103.608	-114.138	-101.029	-117.648	-104.099	-110.758	-106.483	-104.135	-100.015	-98.1037
-99.903	-93.3884	-110.046	-102.208	-95.1272	-108.533	-102.324	-112.88	-99.5487	-102.846
-99.0454	-98.3982	-93.9053	-99.3338	-105.258	-107.474	-96.6161	-99.0963	-100.077	-109.179
-99.4981	-100.828	-97.5179	-96.5268	-101.707	-100.477	-96.4911	-104.362	-95.7701	-99.7904
-117.416	-98.2885	-99.0582	-103.817	-102.939	-104.554	-104.332	-98.4782	-99.2369	-108.535
-106.892	-99.3447	-98.4699	-103.539	-101.497	-106.275	-104.237	-98.4675	-100.789	-97.9044
-99.2015	-92.1225	-102.816	-99.317	-99.1889	-93.9565	-104.324	-101.255	-94.7469	-106.656
-107.74	-88.1985	-97.7932	-101.164	-98.031	-103.116	-98.8401	-95.7909	-120.887	-96.4088
-100.157	-91.239	-95.7425	-106.523	-105.027	-108.601	-111.328	-99.6031	-97.2348	-95.6139
-116.724	-90.2303	-99.0809	-98.9509	-94.556	-104.319	-97.5761	-100.311	-101.562	-104.308
-100.828	-89.3833	-98.6529	-106.04	-104.661	-102.307	-116.033	-107.489	-99.0185	-98.6993
-103.432	-88.3123	-93.7549	-99.8154	-101.707	-98.2666	-99.8513	-95.8423	-106.378	-101.803
-106.08	-87.4213	-104.523	-102.554	-101.39	-125.108	-106.988	-99.1799	-97.6832	-103.735
-103.07	-87.712	-94.1828	-105.493	-101.054	-105.012	-101.73	-101.274	-96.8252	-105.049

-98.9038	-87.3101	-96.3722	-112.515	-107.174	-96.6107	-96.3387	-99.6095	-98.6096	-94.8096
-100.619	-89.8042	-122.228	-98.2226	-95.706	-95.6425	-99.7143	-103.09	-101.741	-97.8294
-100.192	-94.1035	-101.917	-106.076	-103.048	-101.526	-97.4513	-97.4113	-98.9155	-98.5069
-101.769	-91.4136	-101.308	-100.528	-102.652	-104.711	-94.5915	-118.747	-101.455	-94.9304
-103.642	-101.12	-96.8399	-101.411	-104.127	-94.6211	-100.009	-103.222	-100.78	-105.378
-105.995	-95.8837	-97.3317	-102.655	-99.3106	-101.615	-100.921	-100.111	-111.914	-104.09
-102.969	-95.9114	-103.227	-100.867	-105.514	-96.373	-105.54	-99.0285	-97.9609	-95.4847
-102.826	-94.0077	-100.984	-123.804	-95.6004	-94.8005	-100.241	-107.604	-101.545	-99.2947
-103.5	-104.177	-97.1786	-106.382	-102.263	-96.1949	-96.8039	-98.5712	-102.173	-103.547
-99.4141	-103.153	-100.14	-105.557	-104.404	-91.1405	-107.383	-111.178	-112.898	-94.9871
-109.954	-96.2001	-101.123	-96.6999	-98.5671	-109.575	-94.4726	-110.345	-102.468	-102.148
-100.197	-96.2286	-97.7054	-103.106	-101.459	-94.3765	-101.57	-99.9681	-95.3598	-108.501
-101.411	-109.756	-104.342	-108.906	-97.0329	-105.881	-99.4305	-96.4468	-94.6162	-101.158
-102.568	-99.91	-99.0255	-107.457	-103.181	-99.6784	-111.679	-94.198	-99.4306	-95.3664
-105.329	-97.4616	-99.5694	-99.3353	-102.028	-96.6148	-94.6008	-102.038	-101.537	-100.045
-98.116	-98.3887	-92.9131	-111.848	-98.0588	-91.9645	-94.9384	-95.7204	-100.467	-104.025
-100.745	-99.4467	-102.762	-108.502	-104.692	-101.835	-100.374	-99.4317	-106.504	-101.998
-98.566	-105.537	-106.43	-97.2577	-97.56	-97.3425	-106.176	-103.442	-103.903	-101.012
-100.792	-99.2152	-106.886	-103.559	-101.222	-96.2095	-107.222	-103.331	-98.0112	-102.881
-104.11	-106.147	-100.025	-105.68	-105.217	-108.08	-96.5827	-103.338	-94.023	-97.8155
-107.494	-99.0036	-109.309	-94.7891	-95.4539	-96.6786	-104.739	-108.249	-106.159	-118.056
-103.772	-106.654	-94.5136	-114.282	-99.9904	-92.7309	-105.647	-105.479	-99.9883	-99.8937
-105.104	-104.537	-96.8592	-109.907	-98.3846	-101.113	-102.913	-100.729	-100.127	-109.209
-123.525	-100.542	-103.649	-100.659	-118.584	-108.731	-99.5841	-96.9457	-106.678	-105.977
-99.8014	-97.6863	-93.17	-98.4303	-91.6521	-94.552	-100.015	-100.663	-102.698	-97.7108
-91.2409	-95.5948	-97.8828	-98.1619	-121.349	-105.573	-98.5613	-108.888	-102.092	-103.447
-107.143	-97.0894	-104.761	-109.378	-104.361	-109.392	-104.828	-115.734	-100.604	-99.1756
-100.174	-98.4906	-103.422	-101.989	-109.804	-92.7381	-95.4514	-95.65	-98.4438	-106.069
-94.2764	-93.6784	-102.355	-101.938	-98.6891	-97.5003	-104.342	-101.143	-100.89	-104.372
-105.153	-97.6838	-97.2159	-103.709	-96.9912	-107.474	-100.868	-93.1752	-96.8092	-100.196
-98.1121	-101.686	-108.36	-102.883	-96.2927	-101.484	-111.231	-102.364	-97.5601	-111.85
-105.001	-100.29	-97.9851	-108.473	-102.201	-106.964	-100.295	-101.937	-98.2747	-101.058
-102.45	-95.7288	-105.819	-98.0928	-105.649	-99.1093	-104.004	-104.889	-97.3279	-108.098
-105.612	-112.622	-98.7344	-100.855	-99.472	-99.7781	-107.378	-98.9043	-99.5864	-107.134
-102.098	-103.949	-109.916	-100.458	-94.5768	-109.262	-106.395	-100.526	-92.343	-112.627
-106.423	-103.33	-110.405	-93.9648	-104.811	-98.2087	-103.349	-100.89	-95.8263	-100.059
-110.859	-102.079	-100.311	-106.003	-106.784	-103.234	-101.123	-100.48	-93.527	-99.9807
-98.6462	-99.1962	-93.139	-112.789	-107.029	-97.2585	-110.483	-96.8542	-93.1659	-94.0177
-97.2229	-101.749	-100.078	-100.93	-101.071	-100.95	-103.586	-102.385	-96.9212	-97.647
-101.612	-95.9054	-95.7349	-101.851	-97.992	-100.748	-95.4372	-101.368	-101.873	-104.778
-103.738	-99.9889	-105.529	-106.589	-98.6507	-99.9638	-105.668	-100.577	-98.6018	-101.383
-100.983	-97.9621	-98.9884	-97.6307	-102.803	-99.296	-110.78	-106.57	-101.619	-107.505
-112.386	-97.6515	-98.4941	-95.6644	-93.5405	-96.6522	-105.672	-98.1528	-100.168	-91.5956
-98.716	-99.0192	-100.684	-93.5099	-101.888	-96.4252	-102.491	-94.4245	-91.5891	-102.089
-99.4263	-96.4301	-104.131	-120.099	-99.1827	-96.0874	-92.7062	-98.5882	-91.2052	-92.0608
-96.5768	-99.9791	-102.564	-102.436	-102.693	-108.36	-106.169	-92.074	-95.6371	-99.1638
-96.1243	-97.8689	-98.1421	-99.9997	-100.925	-106.986	-104.668	-103.352	-96.7075	-96.824
-110.722	-96.8801	-113.921	-106.974	-98.0059	-97.7362	-102.746	-106.83	-110.204	-104.032
-112.695	-100.428	-95.3345	-93.7169	-99.6731	-109.272	-94.553	-106.531	-94.8485	-110.208
-98.296	-96.5226	-110.404	-117.594	-107.26	-92.5069	-93.0216	-105.587	-93.7125	-99.9563

0.2 to 19

2 to 6

6 to 12

12 to 18

J7-J8	Max	Min	Max	Min	Max	Freq
-97.0817	-4.5	-60	2	-0.5	0.5	0.1000
-93.3569	-4.5	-60	2	-0.5	0.5	0.1995
-94.2418	-4.5	-60	2	-0.5	0.5	0.2990
-91.1177	-4.5	-60	2	-0.5	0.5	0.3985
-91.4318	-4.5	-60	2	-0.5	0.5	0.4980
-93.6528	-4.5	-60	2	-0.5	0.5	0.5975
-94.0927	-4.5	-60	2	-0.5	0.5	0.6970
-94.0328	-4.5	-60	2	-0.5	0.5	0.7965
-97.7467	-4.5	-60	2	-0.5	0.5	0.8960
-97.6663	-4.5	-60	2	-0.5	0.5	0.9955
-98.2034	-4.5	-60	2	-0.5	0.5	1.0950
-103.398	-4.5	-60	2	-0.5	0.5	1.1945
-105.472	-4.5	-60	2	-0.5	0.5	1.2940
-106.923	-4.5	-60	2	-0.5	0.5	1.3935
-114.219	-4.5	-60	2	-0.5	0.5	1.4930
-112.497	-4.5	-60	2	-0.5	0.5	1.5925
-108.463	-4.5	-60	2	-0.5	0.5	1.6920
-111.706	-4.5	-60	2	-0.5	0.5	1.7915
-109.204	-4.5	-60	2	-0.5	0.5	1.8910
-108.775	-4.5	-60	2	-0.5	0.5	1.9905
-107.547	-4.5	-60	2	-0.5	0.5	2.0900
-114.786	-4.5	-60	2	-0.5	0.5	2.1895
-103.354	-4.5	-60	2	-0.5	0.5	2.2890
-121.273	-4.5	-60	2	-0.5	0.5	2.3885
-124.215	-4.5	-60	2	-0.5	0.5	2.4880
-102.671	-4.5	-60	2	-0.5	0.5	2.5875
-112.494	-4.5	-60	2	-0.5	0.5	2.6870
-108.112	-4.5	-60	2	-0.5	0.5	2.7865
-104.798	-4.5	-60	2	-0.5	0.5	2.8860
-113.16	-4.5	-60	2	-0.5	0.5	2.9855
-112.928	-4.5	-60	2	-0.5	0.5	3.0850
-108.576	-4.5	-60	2	-0.5	0.5	3.1845
-113.546	-4.5	-60	2	-0.5	0.5	3.2840
-107.44	-4.5	-60	2	-0.5	0.5	3.3835
-110.214	-4.5	-60	2	-0.5	0.5	3.4830
-111.764	-4.5	-60	2	-0.5	0.5	3.5825
-112.264	-4.5	-60	2	-0.5	0.5	3.6820
-111.811	-4.5	-60	2	-0.5	0.5	3.7815
-112.313	-4.5	-60	2	-0.5	0.5	3.8810
-110.748	-4.5	-60	2	-0.5	0.5	3.9805
-109.422	-4.5	-60	2	-0.5	0.5	4.0800

-115.008	-4.5	-60	2	-0.5	0.5	4.1795
-108.409	-4.5	-60	2	-0.5	0.5	4.2790
-112.736	-4.5	-60	2	-0.5	0.5	4.3785
-107.288	-4.5	-60	2	-0.5	0.5	4.4780
-113.898	-4.5	-60	2	-0.5	0.5	4.5775
-116.71	-4.5	-60	2	-0.5	0.5	4.6770
-110.88	-4.5	-60	2	-0.5	0.5	4.7765
-111.591	-4.5	-60	2	-0.5	0.5	4.8760
-107.913	-4.5	-60	2	-0.5	0.5	4.9755
-108.314	-4.5	-60	2	-0.5	0.5	5.0750
-115.11	-4.5	-60	2	-0.5	0.5	5.1745
-115.52	-4.5	-60	2	-0.5	0.5	5.2740
-117.784	-4.5	-60	2	-0.5	0.5	5.3735
-114.835	-4.5	-60	2	-0.5	0.5	5.4730
-114.648	-4.5	-60	2	-0.5	0.5	5.5725
-115.255	-4.5	-60	2	-0.5	0.5	5.6720
-108.14	-4.5	-60	2	-0.5	0.5	5.7715
-117.114	-4.5	-60	2	-0.5	0.5	5.8710
-115.03	-4.5	-60	2	-0.5	0.5	5.9705
-111.869	-4.5	-60	2	-0.5	0.5	6.0700
-105.366	-4.5	-60	2	-0.5	0.5	6.1695
-110.527	-4.5	-60	2	-0.5	0.5	6.2690
-112.739	-4.5	-60	2	-0.5	0.5	6.3685
-106.542	-4.5	-60	2	-0.5	0.5	6.4680
-110.769	-4.5	-60	2	-0.5	0.5	6.5675
-117.095	-4.5	-60	2	-0.5	0.5	6.6670
-122.856	-4.5	-60	2	-0.5	0.5	6.7665
-114.11	-4.5	-60	2	-0.5	0.5	6.8660
-108.306	-4.5	-60	2	-0.5	0.5	6.9655
-109.183	-4.5	-60	2	-0.5	0.5	7.0650
-110.873	-4.5	-60	2	-0.5	0.5	7.1645
-117.648	-4.5	-60	2	-0.5	0.5	7.2640
-117.303	-4.5	-60	2	-0.5	0.5	7.3635
-111.101	-4.5	-60	2	-0.5	0.5	7.4630
-111.805	-4.5	-60	2	-0.5	0.5	7.5625
-108.642	-4.5	-60	2	-0.5	0.5	7.6620
-109.138	-4.5	-60	2	-0.5	0.5	7.7615
-113.329	-4.5	-60	2	-0.5	0.5	7.8610
-114.96	-4.5	-60	2	-0.5	0.5	7.9605
-115.146	-4.5	-60	2	-0.5	0.5	8.0600
-110.86	-4.5	-60	2	-0.5	0.5	8.1595
-114.982	-4.5	-60	2	-0.5	0.5	8.2590
-111.485	-4.5	-60	2	-0.5	0.5	8.3585
-109.986	-4.5	-60	2	-0.5	0.5	8.4580
-115.642	-4.5	-60	2	-0.5	0.5	8.5575
-112.005	-4.5	-60	2	-0.5	0.5	8.6570
-109.71	-4.5	-60	2	-0.5	0.5	8.7565
-108.739	-4.5	-60	2	-0.5	0.5	8.8560
-118.463	-4.5	-60	2	-0.5	0.5	8.9555
-113.441	-4.5	-60	2	-0.5	0.5	9.0550
-116.078	-4.5	-60	2	-0.5	0.5	9.1545
-108.159	-4.5	-60	2	-0.5	0.5	9.2540
-117.051	-4.5	-60	2	-0.5	0.5	9.3535
-115.376	-4.5	-60	2	-0.5	0.5	9.4530
-111.88	-4.5	-60	2	-0.5	0.5	9.5525

-108.96	-4.5	-60	2	-0.5	0.5	9.6520
-110.466	-4.5	-60	2	-0.5	0.5	9.7515
-110.373	-4.5	-60	2	-0.5	0.5	9.8510
-117.706	-4.5	-60	2	-0.5	0.5	9.9505
-109.899	-4.5	-60	2	-0.5	0.5	10.0500
-111.523	-4.5	-60	2	-0.5	0.5	10.1495
-107.459	-4.5	-60	2	-0.5	0.5	10.2490
-118.069	-4.5	-60	2	-0.5	0.5	10.3485
-112.115	-4.5	-60	2	-0.5	0.5	10.4480
-100.029	-4.5	-60	2	-0.5	0.5	10.5475
-101.627	-4.5	-60	2	-0.5	0.5	10.6470
-107.995	-4.5	-60	2	-0.5	0.5	10.7465
-100.447	-4.5	-60	2	-0.5	0.5	10.8460
-107.308	-4.5	-60	2	-0.5	0.5	10.9455
-107.746	-4.5	-60	2	-0.5	0.5	11.0450
-105.065	-4.5	-60	2	-0.5	0.5	11.1445
-119.896	-4.5	-60	2	-0.5	0.5	11.2440
-97.2964	-4.5	-60	2	-0.5	0.5	11.3435
-98.4157	-4.5	-60	2	-0.5	0.5	11.4430
-96.4798	-4.5	-60	2	-0.5	0.5	11.5425
-106.227	-4.5	-60	2	-0.5	0.5	11.6420
-95.6723	-4.5	-60	2	-0.5	0.5	11.7415
-97.2455	-4.5	-60	2	-0.5	0.5	11.8410
-96.0223	-4.5	-60	2	-0.5	0.5	11.9405
-94.7864	-4.5	-60	2	-0.5	0.5	12.0400
-94.7248	-4.5	-60	2	-0.5	0.5	12.1395
-101.849	-4.5	-60	2	-0.5	0.5	12.2390
-99.8389	-4.5	-60	2	-0.5	0.5	12.3385
-100.896	-4.5	-60	2	-0.5	0.5	12.4380
-109.685	-4.5	-60	2	-0.5	0.5	12.5375
-92.9197	-4.5	-60	2	-0.5	0.5	12.6370
-103.794	-4.5	-60	2	-0.5	0.5	12.7365
-105.488	-4.5	-60	2	-0.5	0.5	12.8360
-100.72	-4.5	-60	2	-0.5	0.5	12.9355
-101.628	-4.5	-60	2	-0.5	0.5	13.0350
-96.4265	-4.5	-60	2	-0.5	0.5	13.1345
-114.232	-4.5	-60	2	-0.5	0.5	13.2340
-97.8903	-4.5	-60	2	-0.5	0.5	13.3335
-103.93	-4.5	-60	2	-0.5	0.5	13.4330
-101.716	-4.5	-60	2	-0.5	0.5	13.5325
-92.5403	-4.5	-60	2	-0.5	0.5	13.6320
-105.106	-4.5	-60	2	-0.5	0.5	13.7315
-106.823	-4.5	-60	2	-0.5	0.5	13.8310
-100.353	-4.5	-60	2	-0.5	0.5	13.9305
-97.3625	-4.5	-60	2	-0.5	0.5	14.0300
-107.406	-4.5	-60	2	-0.5	0.5	14.1295
-113.882	-4.5	-60	2	-0.5	0.5	14.2290
-92.2668	-4.5	-60	2	-0.5	0.5	14.3285
-120.253	-4.5	-60	2	-0.5	0.5	14.4280
-98.9941	-4.5	-60	2	-0.5	0.5	14.5275
-105.956	-4.5	-60	2	-0.5	0.5	14.6270
-103.694	-4.5	-60	2	-0.5	0.5	14.7265
-103.469	-4.5	-60	2	-0.5	0.5	14.8260
-101.594	-4.5	-60	2	-0.5	0.5	14.9255
-97.4094	-4.5	-60	2	-0.5	0.5	15.0250

-98.4467	-4.5	-60	2	-0.5	0.5	15.1245
-95.9297	-4.5	-60	2	-0.5	0.5	15.2240
-97.4078	-4.5	-60	2	-0.5	0.5	15.3235
-99.6809	-4.5	-60	2	-0.5	0.5	15.4230
-103.85	-4.5	-60	2	-0.5	0.5	15.5225
-106.1	-4.5	-60	2	-0.5	0.5	15.6220
-103.339	-4.5	-60	2	-0.5	0.5	15.7215
-103.556	-4.5	-60	2	-0.5	0.5	15.8210
-97.0467	-4.5	-60	2	-0.5	0.5	15.9205
-114.353	-4.5	-60	2	-0.5	0.5	16.0200
-97.7952	-4.5	-60	2	-0.5	0.5	16.1195
-103.523	-4.5	-60	2	-0.5	0.5	16.2190
-107.397	-4.5	-60	2	-0.5	0.5	16.3185
-99.4368	-4.5	-60	2	-0.5	0.5	16.4180
-94.8048	-4.5	-60	2	-0.5	0.5	16.5175
-101.364	-4.5	-60	2	-0.5	0.5	16.6170
-106.429	-4.5	-60	2	-0.5	0.5	16.7165
-100.675	-4.5	-60	2	-0.5	0.5	16.8160
-93.2306	-4.5	-60	2	-0.5	0.5	16.9155
-100.69	-4.5	-60	2	-0.5	0.5	17.0150
-99.3985	-4.5	-60	2	-0.5	0.5	17.1145
-108.865	-4.5	-60	2	-0.5	0.5	17.2140
-99.3801	-4.5	-60	2	-0.5	0.5	17.3135
-96.4577	-4.5	-60	2	-0.5	0.5	17.4130
-97.7053	-4.5	-60	2	-0.5	0.5	17.5125
-104.086	-4.5	-60	2	-0.5	0.5	17.6120
-98.9711	-4.5	-60	2	-0.5	0.5	17.7115
-103.368	-4.5	-60	2	-0.5	0.5	17.8110
-102.204	-4.5	-60	2	-0.5	0.5	17.9105
-104.247	-4.5	-60	2	-0.5	0.5	18.0100
-89.5812	-4.5	-60	2	-0.5	0.5	18.1095
-95.268	-4.5	-60	2	-0.5	0.5	18.2090
-106.254	-4.5	-60	2	-0.5	0.5	18.3085
-96.2766	-4.5	-60	2	-0.5	0.5	18.4080
-94.2189	-4.5	-60	2	-0.5	0.5	18.5075
-95.7289	-4.5	-60	2	-0.5	0.5	18.6070
-94.6298	-4.5	-60	2	-0.5	0.5	18.7065
-93.8161	-4.5	-60	2	-0.5	0.5	18.8060
-95.5809	-4.5	-60	2	-0.5	0.5	18.9055
-93.4938	-4.5	-60	2	-0.5	0.5	19.0050
-97.5391	-4.5	-60	2	-0.5	0.5	19.1045
-102.733	-4.5	-60	2	-0.5	0.5	19.2040
-98.2845	-4.5	-60	2	-0.5	0.5	19.3035
-98.4013	-4.5	-60	2	-0.5	0.5	19.4030
-96.4934	-4.5	-60	2	-0.5	0.5	19.5025
-94.7273	-4.5	-60	2	-0.5	0.5	19.6020
-97.9938	-4.5	-60	2	-0.5	0.5	19.7015
-94.4041	-4.5	-60	2	-0.5	0.5	19.8010
-100.815	-4.5	-60	2	-0.5	0.5	19.9005
-97.4424	-4.5	-60	2	-0.5	0.5	20.0000

-5.06615

-2.02012

-3.0320

-4.23902

Insertion Loss

J0-J1	J0-J2	J0-J3	J0-J4	J0-J5	J0-J6	J0-J7	J0-J8	Freq
-4.94565	-3.23926	-3.14973	-3.38631	-3.25395	-3.26279	-3.50879	-3.55919	0.1
-1.24013	-1.0661	-1.11435	-1.08964	-1.08598	-1.06151	-1.14001	-1.11437	0.1995
-0.91465	-0.81363	-0.83652	-0.81668	-0.82989	-0.79979	-0.86444	-0.81761	0.299
-0.85549	-0.7687	-0.77323	-0.74402	-0.77613	-0.73061	-0.79809	-0.76691	0.3985
-0.83712	-0.76127	-0.76189	-0.74874	-0.76711	-0.73098	-0.77822	-0.74092	0.498
-0.85299	-0.77945	-0.7716	-0.73757	-0.77453	-0.72526	-0.7902	-0.75604	0.5975
-0.87022	-0.79264	-0.78487	-0.76159	-0.7843	-0.74928	-0.8049	-0.77556	0.697
-0.86789	-0.8165	-0.79364	-0.77254	-0.80918	-0.76828	-0.81355	-0.80243	0.7965
-0.9041	-0.84224	-0.82243	-0.79887	-0.82486	-0.80749	-0.847	-0.81449	0.896
-0.92071	-0.86278	-0.8426	-0.81651	-0.8404	-0.81599	-0.85745	-0.84373	0.9955
-0.93911	-0.89381	-0.87705	-0.84312	-0.88113	-0.83451	-0.88314	-0.87868	1.095
-0.96668	-0.90678	-0.90125	-0.85809	-0.88865	-0.86193	-0.91579	-0.89938	1.1945
-0.97739	-0.94096	-0.90828	-0.88909	-0.91695	-0.88759	-0.95931	-0.94531	1.294
-1.00855	-0.9773	-0.95938	-0.91714	-0.94357	-0.92593	-0.98301	-0.97713	1.3935
-1.02539	-0.9926	-0.97398	-0.94676	-0.972	-0.94123	-0.99731	-1.00159	1.493
-1.06366	-1.02184	-1.00826	-0.97135	-0.99244	-0.95522	-1.02819	-1.03236	1.5925
-1.07633	-1.04049	-1.00623	-0.99069	-1.00263	-0.9746	-1.06206	-1.06302	1.692
-1.09429	-1.07633	-1.04286	-1.01307	-1.04367	-0.98489	-1.07349	-1.09084	1.7915
-1.13205	-1.09901	-1.09731	-1.04043	-1.0725	-1.02444	-1.12298	-1.13442	1.891
-1.16336	-1.12016	-1.09958	-1.05631	-1.0754	-1.05299	-1.14288	-1.14986	1.9905
-1.19925	-1.1685	-1.14428	-1.08643	-1.12107	-1.07632	-1.18108	-1.19863	2.09
-1.20535	-1.19519	-1.16916	-1.11095	-1.1434	-1.08973	-1.18982	-1.22744	2.1895
-1.23527	-1.21491	-1.18699	-1.12635	-1.16641	-1.11275	-1.23037	-1.24935	2.289
-1.24728	-1.23627	-1.21453	-1.15952	-1.17781	-1.12287	-1.23054	-1.25723	2.3885
-1.28522	-1.25754	-1.23007	-1.16197	-1.2133	-1.13911	-1.25613	-1.28902	2.488
-1.326	-1.31324	-1.28222	-1.20487	-1.24219	-1.17718	-1.31298	-1.33857	2.5875
-1.34732	-1.35612	-1.31046	-1.24063	-1.28715	-1.21315	-1.33551	-1.38252	2.687
-1.40993	-1.39549	-1.37671	-1.29308	-1.32156	-1.26926	-1.38445	-1.41463	2.7865
-1.46527	-1.45175	-1.44785	-1.3594	-1.39406	-1.32484	-1.44745	-1.47196	2.886
-1.52805	-1.52782	-1.50736	-1.42473	-1.46147	-1.41007	-1.52747	-1.56125	2.9855
-1.59815	-1.56766	-1.5853	-1.49571	-1.52135	-1.48606	-1.58572	-1.62974	3.085
-1.64484	-1.59696	-1.61335	-1.53524	-1.55607	-1.50931	-1.64267	-1.67606	3.1845
-1.67131	-1.59722	-1.62481	-1.57999	-1.5474	-1.53789	-1.67288	-1.71627	3.284
-1.65352	-1.59313	-1.61004	-1.58029	-1.56558	-1.54542	-1.64875	-1.69646	3.3835
-1.6683	-1.60511	-1.60828	-1.58574	-1.57145	-1.54221	-1.66891	-1.69779	3.483
-1.63716	-1.57697	-1.5838	-1.55277	-1.54552	-1.52998	-1.6391	-1.67797	3.5825
-1.62976	-1.57274	-1.54972	-1.54583	-1.52805	-1.50859	-1.60906	-1.64228	3.682
-1.65279	-1.60556	-1.57282	-1.57728	-1.5641	-1.54729	-1.62341	-1.64694	3.7815
-1.63532	-1.60865	-1.55587	-1.56605	-1.56543	-1.54527	-1.61454	-1.661	3.881
-1.62813	-1.6237	-1.58701	-1.58999	-1.60343	-1.6032	-1.61759	-1.66792	3.9805
-1.64379	-1.64976	-1.58334	-1.58488	-1.60063	-1.60107	-1.63035	-1.64985	4.08

-1.67532	-1.69711	-1.62269	-1.63212	-1.66408	-1.66668	-1.65579	-1.6779	4.1795
-1.70127	-1.72776	-1.65159	-1.6677	-1.70208	-1.7119	-1.69201	-1.73225	4.279
-1.73847	-1.75471	-1.70597	-1.68779	-1.72954	-1.77337	-1.71719	-1.74712	4.3785
-1.76315	-1.80051	-1.72065	-1.75127	-1.7669	-1.8074	-1.74708	-1.77951	4.478
-1.79549	-1.82676	-1.78879	-1.79271	-1.82676	-1.8664	-1.80655	-1.8173	4.5775
-1.82085	-1.85416	-1.81335	-1.83144	-1.85118	-1.91801	-1.84377	-1.85528	4.677
-1.84376	-1.87548	-1.83663	-1.89	-1.89686	-1.95463	-1.87278	-1.87577	4.7765
-1.82578	-1.85942	-1.84777	-1.88651	-1.91338	-1.9689	-1.89083	-1.91736	4.876
-1.78707	-1.87334	-1.87664	-1.95431	-1.91469	-2.0023	-1.92256	-1.91792	4.9755
-1.82247	-1.88237	-1.84316	-1.92904	-1.90246	-2.02012	-1.90444	-1.91699	5.075
-1.82026	-1.88294	-1.86594	-1.93608	-1.92432	-2.01705	-1.90654	-1.92787	5.1745
-1.78376	-1.84752	-1.83637	-1.8905	-1.89794	-1.97716	-1.86189	-1.87817	5.274
-1.76281	-1.87389	-1.83297	-1.87113	-1.91292	-1.96667	-1.86419	-1.87638	5.3735
-1.75818	-1.86634	-1.85586	-1.9021	-1.94855	-1.99203	-1.85886	-1.89767	5.473
-1.7491	-1.8498	-1.83388	-1.85803	-1.88136	-1.96922	-1.85398	-1.84556	5.5725
-1.75916	-1.85607	-1.86413	-1.87371	-1.898	-1.97386	-1.83706	-1.84365	5.672
-1.76727	-1.87921	-1.87255	-1.87918	-1.90164	-1.9882	-1.85311	-1.86442	5.7715
-1.75455	-1.863	-1.85594	-1.87987	-1.90368	-1.97388	-1.84677	-1.84673	5.871
-1.7743	-1.88726	-1.9038	-1.89155	-1.90449	-1.98783	-1.84803	-1.85651	5.9705
-1.79957	-1.90485	-1.90739	-1.87554	-1.92327	-1.99736	-1.87442	-1.8838	6.07
-1.79555	-1.90794	-1.90823	-1.88865	-1.92979	-1.98255	-1.87621	-1.8857	6.1695
-1.80204	-1.92343	-1.93073	-1.90135	-1.93815	-1.9894	-1.88984	-1.91106	6.269
-1.80227	-1.93501	-1.96046	-1.88579	-1.92135	-1.97714	-1.889	-1.89909	6.3685
-1.85798	-1.94597	-1.96083	-1.90635	-1.96239	-1.97211	-1.90011	-1.93337	6.468
-1.86306	-1.98397	-2.01049	-1.9173	-1.96588	-1.9761	-1.93518	-1.96381	6.5675
-1.86354	-1.97348	-1.97724	-1.90944	-1.96273	-1.99513	-1.89871	-1.9897	6.667
-1.89935	-1.99914	-2.02786	-1.95752	-1.99055	-2.01325	-1.94641	-2.02185	6.7665
-1.93866	-2.01103	-2.02953	-1.96273	-2.00546	-2.04395	-1.9716	-2.02853	6.866
-1.96589	-2.01181	-2.06258	-1.9757	-1.99587	-2.03029	-1.99804	-2.07326	6.9655
-1.92955	-2.04961	-2.04129	-1.94976	-2.00763	-2.03941	-1.97516	-2.09837	7.065
-1.99139	-2.06737	-2.09531	-2.00038	-2.05017	-2.08589	-2.02437	-2.13973	7.1645
-2.01073	-2.06294	-2.0694	-2.0021	-2.04514	-2.0539	-2.02213	-2.16878	7.264
-2.03739	-2.07475	-2.07234	-2.01335	-2.04438	-2.04462	-2.01618	-2.18785	7.3635
-2.01536	-2.10522	-2.08304	-2.00839	-2.07468	-2.05575	-2.02412	-2.19328	7.463
-2.06079	-2.09283	-2.09813	-2.021	-2.10252	-2.06983	-2.07111	-2.24809	7.5625
-2.10931	-2.14753	-2.14408	-2.06293	-2.13734	-2.10167	-2.06807	-2.28004	7.662
-2.15105	-2.1643	-2.17275	-2.06495	-2.11003	-2.09582	-2.1184	-2.31306	7.7615
-2.16849	-2.16531	-2.1843	-2.09559	-2.15447	-2.14203	-2.11654	-2.35995	7.861
-2.20916	-2.20086	-2.1994	-2.0915	-2.17441	-2.12333	-2.12769	-2.3711	7.9605
-2.23432	-2.18525	-2.19534	-2.12499	-2.1861	-2.14804	-2.13585	-2.39351	8.06
-2.30397	-2.24016	-2.26431	-2.15459	-2.21269	-2.15931	-2.13544	-2.4468	8.1595
-2.30448	-2.22111	-2.2525	-2.14839	-2.18866	-2.14794	-2.1704	-2.45427	8.259
-2.36835	-2.26648	-2.31501	-2.17127	-2.2712	-2.1947	-2.2014	-2.48999	8.3585
-2.39465	-2.30103	-2.34181	-2.20705	-2.29748	-2.18091	-2.22863	-2.53073	8.458
-2.46138	-2.30637	-2.3631	-2.2375	-2.2838	-2.20643	-2.20624	-2.52605	8.5575
-2.46879	-2.37327	-2.40463	-2.24584	-2.31661	-2.20316	-2.24567	-2.59843	8.657
-2.51593	-2.3441	-2.40724	-2.2514	-2.33627	-2.16894	-2.28539	-2.53737	8.7565
-2.57831	-2.38674	-2.44733	-2.29427	-2.40729	-2.24898	-2.30878	-2.60316	8.856
-2.61498	-2.39133	-2.4557	-2.32656	-2.43023	-2.25136	-2.32925	-2.61705	8.9555
-2.59864	-2.33527	-2.46876	-2.35877	-2.42958	-2.22796	-2.3235	-2.61158	9.055
-2.61571	-2.39374	-2.49195	-2.33767	-2.44879	-2.24891	-2.34929	-2.61105	9.1545
-2.62534	-2.39314	-2.48844	-2.30263	-2.39888	-2.22814	-2.32394	-2.56749	9.254
-2.66079	-2.37038	-2.47585	-2.31924	-2.42892	-2.23029	-2.36766	-2.58708	9.3535
-2.69665	-2.40671	-2.51493	-2.35409	-2.44698	-2.2785	-2.39766	-2.59736	9.453
-2.73022	-2.36769	-2.48589	-2.36448	-2.48783	-2.29303	-2.44332	-2.57305	9.5525

-2.72144	-2.44505	-2.52286	-2.35079	-2.42322	-2.31221	-2.45745	-2.60402	9.652
-2.73241	-2.4639	-2.54164	-2.36293	-2.47982	-2.30395	-2.49303	-2.59183	9.7515
-2.79794	-2.45724	-2.56524	-2.42636	-2.52324	-2.36982	-2.51035	-2.61326	9.851
-2.72832	-2.39516	-2.47441	-2.3757	-2.44575	-2.2866	-2.49683	-2.53275	9.9505
-2.84497	-2.4601	-2.55677	-2.45746	-2.50292	-2.3629	-2.61653	-2.6351	10.05
-2.82008	-2.46483	-2.54083	-2.49426	-2.53291	-2.39844	-2.61437	-2.65301	10.1495
-2.82787	-2.41822	-2.52226	-2.46059	-2.49841	-2.38396	-2.63849	-2.52964	10.249
-2.88487	-2.53002	-2.60672	-2.50622	-2.52593	-2.40716	-2.67121	-2.63948	10.3485
-2.84633	-2.49156	-2.55791	-2.50073	-2.52898	-2.41578	-2.69423	-2.6068	10.448
-2.85332	-2.48764	-2.61129	-2.53284	-2.50946	-2.4103	-2.75121	-2.64215	10.5475
-2.86109	-2.51099	-2.52882	-2.46533	-2.51594	-2.41245	-2.77971	-2.61392	10.647
-2.92856	-2.50903	-2.55598	-2.52128	-2.51245	-2.43126	-2.74898	-2.62254	10.7465
-2.92039	-2.51846	-2.63877	-2.5865	-2.56354	-2.49804	-2.81976	-2.73016	10.846
-2.91012	-2.5347	-2.57235	-2.51699	-2.53401	-2.4607	-2.83609	-2.66238	10.9455
-2.96055	-2.62773	-2.61587	-2.58929	-2.56171	-2.47583	-2.89654	-2.73364	11.045
-3.0263	-2.65847	-2.59834	-2.56655	-2.61158	-2.49518	-2.90683	-2.77667	11.1445
-2.90453	-2.52662	-2.56639	-2.55692	-2.50757	-2.46504	-2.83355	-2.71282	11.244
-3.0034	-2.55949	-2.62907	-2.60602	-2.59203	-2.53386	-2.84042	-2.77893	11.3435
-2.99597	-2.55726	-2.62025	-2.54286	-2.52277	-2.50437	-2.88526	-2.72294	11.443
-3.03203	-2.60165	-2.60398	-2.57208	-2.58951	-2.52445	-2.92915	-2.79912	11.5425
-3.01249	-2.59462	-2.57831	-2.55526	-2.56167	-2.50702	-2.918	-2.78368	11.642
-3.02708	-2.5611	-2.45927	-2.55323	-2.56165	-2.50547	-2.88897	-2.8364	11.7415
-3.02398	-2.64191	-2.64807	-2.5766	-2.55934	-2.54534	-2.92299	-2.79797	11.841
-3.0176	-2.5969	-2.55291	-2.54021	-2.53054	-2.45206	-2.90013	-2.86689	11.9405
-3.01563	-2.6455	-2.62008	-2.5386	-2.53595	-2.45507	-2.92434	-2.83089	12.04
-3.06903	-2.67009	-2.55824	-2.53136	-2.53625	-2.48073	-2.92332	-2.85202	12.1395
-3.07007	-2.61599	-2.62033	-2.49393	-2.56623	-2.53237	-2.93997	-2.8647	12.239
-3.02554	-2.60598	-2.59256	-2.51538	-2.56478	-2.48406	-2.94431	-2.94811	12.3385
-3.03329	-2.65567	-2.61572	-2.46357	-2.52516	-2.48505	-2.88341	-2.9172	12.438
-3.08663	-2.66078	-2.61035	-2.50476	-2.59827	-2.51857	-2.95582	-2.93906	12.5375
-3.03394	-2.62647	-2.62609	-2.52647	-2.61737	-2.48537	-2.88959	-2.95667	12.637
-3.10289	-2.75129	-2.57232	-2.505	-2.62278	-2.44444	-2.92829	-2.96366	12.7365
-3.12592	-2.67665	-2.62105	-2.46476	-2.67203	-2.57669	-2.95384	-3.00046	12.836
-3.14865	-2.78239	-2.66718	-2.48073	-2.63072	-2.49041	-2.92367	-3.01731	12.9355
-3.12516	-2.69755	-2.64674	-2.5195	-2.65507	-2.47963	-2.94717	-3.02364	13.035
-3.113	-2.71492	-2.60468	-2.51232	-2.63865	-2.48745	-2.94263	-2.99496	13.1345
-3.17131	-2.84089	-2.67652	-2.61803	-2.7701	-2.55454	-3.00381	-3.08467	13.234
-3.20256	-2.78546	-2.6521	-2.56358	-2.72094	-2.51901	-2.97379	-3.08839	13.3335
-3.2451	-2.84584	-2.72785	-2.6229	-2.79189	-2.6451	-3.03478	-3.09961	13.433
-3.21346	-2.85776	-2.75797	-2.6383	-2.83764	-2.57083	-3.0303	-3.18713	13.5325
-3.26652	-2.90067	-2.74834	-2.61025	-2.87924	-2.63651	-3.0765	-3.14721	13.632
-3.25602	-2.82864	-2.79512	-2.65918	-2.87733	-2.66394	-3.07037	-3.22526	13.7315
-3.30225	-2.90589	-2.82519	-2.66613	-2.90516	-2.67255	-3.1333	-3.21022	13.831
-3.28772	-2.96102	-2.85778	-2.74955	-2.97551	-2.6531	-3.09718	-3.24643	13.9305
-3.29378	-2.96298	-2.73955	-2.68566	-2.88598	-2.71034	-3.02213	-3.19889	14.03
-3.38778	-2.98914	-2.80534	-2.68951	-2.99224	-2.67693	-3.12325	-3.33446	14.1295
-3.35373	-2.9999	-2.8008	-2.6685	-3.07347	-2.70573	-3.1298	-3.31316	14.229
-3.35902	-3.05207	-2.80393	-2.75789	-3.08532	-2.78837	-3.20798	-3.35843	14.3285
-3.4445	-3.0789	-2.79931	-2.73117	-3.22338	-2.85584	-3.1504	-3.40716	14.428
-3.4028	-3.09114	-2.86617	-2.77621	-3.12566	-2.77765	-3.21012	-3.40807	14.5275
-3.45386	-3.07943	-2.84648	-2.77719	-3.13384	-2.78445	-3.17709	-3.38154	14.627
-3.43477	-3.09384	-2.86394	-2.74275	-3.13449	-2.80135	-3.17516	-3.39375	14.7265
-3.36851	-3.07536	-2.81995	-2.69547	-3.15727	-2.75491	-3.09091	-3.31972	14.826
-3.60876	-3.25297	-2.92259	-2.85719	-3.25021	-2.87934	-3.16128	-3.49912	14.9255
-3.5032	-3.13918	-2.94573	-2.65734	-3.27153	-2.8449	-3.19786	-3.43252	15.025

-3.48652	-3.13772	-2.87719	-2.84102	-3.24749	-2.8448	-3.14253	-3.40599	15.1245
-3.47954	-3.15874	-2.87905	-2.80525	-3.25318	-2.87475	-3.1166	-3.42096	15.224
-3.6233	-3.28662	-3.01926	-2.87808	-3.28887	-2.91808	-3.26592	-3.52066	15.3235
-3.55907	-3.23339	-2.93323	-2.8872	-3.39456	-2.9037	-3.28542	-3.44833	15.423
-3.63523	-3.31731	-2.91365	-2.86768	-3.34734	-2.98924	-3.23802	-3.46757	15.5225
-3.54203	-3.22911	-2.95546	-2.92601	-3.32855	-2.96351	-3.23974	-3.45187	15.622
-3.55057	-3.32301	-3.00444	-3.03999	-3.28327	-2.98559	-3.25597	-3.49867	15.7215
-3.58205	-3.33963	-3.01276	-3.0518	-3.31416	-3.05615	-3.3054	-3.53503	15.821
-3.56078	-3.42628	-3.08761	-3.15581	-3.34184	-3.05174	-3.3265	-3.55939	15.9205
-3.63663	-3.32754	-3.06131	-3.17594	-3.37745	-3.16492	-3.37545	-3.54539	16.02
-3.63232	-3.3693	-3.04662	-3.13898	-3.34205	-3.06004	-3.2974	-3.56267	16.1195
-3.61174	-3.39836	-3.1381	-3.24315	-3.37747	-3.13118	-3.413	-3.6017	16.219
-3.52004	-3.3284	-3.10335	-3.24518	-3.2646	-3.14951	-3.3135	-3.52842	16.3185
-3.65214	-3.41404	-3.19553	-3.33713	-3.34938	-3.17208	-3.40202	-3.63532	16.418
-3.74659	-3.4625	-3.2217	-3.26955	-3.29004	-3.28268	-3.42305	-3.71518	16.5175
-3.77463	-3.47684	-3.33621	-3.41428	-3.36312	-3.30011	-3.47411	-3.72402	16.617
-3.69423	-3.51247	-3.36147	-3.47046	-3.44166	-3.33965	-3.55664	-3.75082	16.7165
-3.71064	-3.48855	-3.38473	-3.42742	-3.42184	-3.35966	-3.46238	-3.73653	16.816
-3.62006	-3.41212	-3.35691	-3.35652	-3.35826	-3.33349	-3.38453	-3.72807	16.9155
-3.81181	-3.52764	-3.55785	-3.44328	-3.46635	-3.43121	-3.52685	-3.77541	17.015
-3.62966	-3.52984	-3.51052	-3.41301	-3.43969	-3.4405	-3.46701	-3.85672	17.1145
-3.7164	-3.47927	-3.5125	-3.40618	-3.43122	-3.41109	-3.51802	-3.80897	17.214
-3.81776	-3.55553	-3.57396	-3.45263	-3.52767	-3.49559	-3.58638	-3.88275	17.3135
-3.87285	-3.53522	-3.6232	-3.495	-3.58172	-3.5664	-3.49481	-3.97329	17.413
-3.90528	-3.57348	-3.72463	-3.55307	-3.60164	-3.6119	-3.58131	-4.01669	17.5125
-3.9195	-3.65559	-3.7109	-3.55541	-3.49331	-3.5934	-3.60956	-4.02362	17.612
-4.03098	-3.55824	-3.7279	-3.57514	-3.6571	-3.6377	-3.61165	-4.11475	17.7115
-3.95904	-3.63769	-3.74384	-3.5474	-3.70855	-3.62598	-3.65285	-4.06172	17.811
-4.08443	-3.66414	-3.80014	-3.58045	-3.72203	-3.68522	-3.65402	-4.18317	17.9105
-4.15262	-3.8416	-3.91452	-3.66329	-3.80034	-3.76293	-3.76836	-4.23902	18.01
-4.13285	-3.69434	-3.79033	-3.6262	-3.72673	-3.62906	-3.77357	-4.36336	18.1095
-4.16244	-3.85625	-3.9472	-3.60597	-3.92633	-3.83324	-3.87243	-4.2788	18.209
-4.33192	-3.83881	-3.93759	-3.67987	-3.91979	-3.66994	-3.92482	-4.28675	18.3085
-4.45627	-3.93987	-4.06556	-3.8775	-4.0734	-3.86131	-4.02119	-4.49191	18.408
-4.55839	-3.98102	-4.10276	-3.92616	-4.0253	-3.88055	-4.15884	-4.53789	18.5075
-4.51184	-3.9501	-4.09548	-3.94777	-4.06043	-3.88583	-4.22741	-4.5522	18.607
-4.73742	-4.01398	-4.17848	-4.05552	-4.15002	-3.99615	-4.43558	-4.7071	18.7065
-4.84665	-4.25056	-4.43749	-4.25406	-4.22141	-4.06115	-4.78174	-4.82419	18.806
-4.87275	-4.1748	-4.46752	-4.18324	-4.23218	-4.03681	-4.77094	-4.90025	18.9055
-5.06615	-4.22823	-4.4613	-4.27083	-4.29232	-4.16739	-4.85281	-4.98568	19.005
-5.22277	-4.2787	-4.65402	-4.49212	-4.36846	-4.30946	-5.09444	-5.13359	19.1045
-5.40665	-4.47633	-4.88319	-4.61124	-4.47988	-4.42846	-5.29174	-5.3891	19.204
-5.43325	-4.43433	-4.90854	-4.60793	-4.49982	-4.45598	-5.40467	-5.44057	19.3035
-5.70173	-4.54233	-5.00655	-4.68249	-4.70003	-4.54328	-5.53824	-5.56764	19.403
-5.6452	-4.45158	-4.97186	-4.60525	-4.56554	-4.43958	-5.50001	-5.41831	19.5025
-5.88675	-4.59403	-5.08982	-4.81298	-4.71387	-4.54978	-5.79879	-5.72734	19.602
-6.07821	-4.75876	-5.31546	-4.96452	-4.90265	-4.74743	-6.02025	-5.88679	19.7015
-6.23628	-4.75561	-5.29436	-5.04991	-4.89271	-4.826	-6.12195	-5.91424	19.801
-6.49035	-4.76076	-5.51085	-5.16787	-5.10696	-4.72569	-6.13568	-6.17462	19.9005
-6.64106	-4.94313	-5.51994	-5.18646	-5.14722	-5.03008	-6.46739	-6.28412	20

1 y =
2 y =
3 y = .
4 y =
5 y = .
6 y = .
7 y = .
8 y = .

-3.92015 -3.05582 -3.33211 -3.13645 -3.13414 -3.0532 -3.82423 -3.74138

Flatness Peak Max-Peak Min /2								IDEAL J1
Flatness J1	Flatness J2	Flatness J3	Flatness J4	Flatness J5	Flatness J6	Flatness J7	Flatness J8	
-1.02549	-0.18344	0.18238	-0.24986	-0.1198	-0.20959	0.315444	0.182189	-0.79534
2.680026	1.989715	2.21776	2.046811	2.048165	1.991687	2.684222	2.627008	-0.81496
3.005503	2.242185	2.495583	2.319767	2.304252	2.253406	2.959796	2.923768	-0.83458
3.064664	2.287117	2.558879	2.392431	2.358012	2.322584	3.026146	2.974467	-0.8542
3.083037	2.294541	2.570221	2.387708	2.367031	2.322213	3.046015	3.000455	-0.87382
3.067168	2.27637	2.560509	2.398878	2.359611	2.327932	3.034038	2.985332	-0.89344
3.049931	2.263171	2.547238	2.374854	2.349844	2.303915	3.019336	2.965818	-0.91306
3.052266	2.239316	2.538468	2.363906	2.324966	2.284915	3.01068	2.938948	-0.93268
3.016059	2.213579	2.50968	2.337576	2.309287	2.245702	2.977237	2.926885	-0.9523
2.999447	2.193038	2.489509	2.31994	2.293748	2.237205	2.966784	2.897644	-0.97193
2.981042	2.162006	2.455061	2.29333	2.253013	2.218683	2.941092	2.862693	-0.99155
2.953469	2.149039	2.430855	2.278361	2.245493	2.191264	2.908442	2.841997	-1.01117
2.942765	2.11486	2.42383	2.247352	2.217195	2.165609	2.864923	2.796061	-1.03079
2.911602	2.078518	2.372726	2.219302	2.190579	2.127265	2.84122	2.764245	-1.05041
2.894763	2.063218	2.358128	2.189689	2.162141	2.111962	2.82692	2.739783	-1.07003
2.856491	2.033975	2.323847	2.165095	2.141704	2.097981	2.796043	2.709019	-1.08965
2.843821	2.015322	2.325877	2.145759	2.131513	2.078593	2.762175	2.678359	-1.10927
2.825868	1.979488	2.289248	2.123379	2.090475	2.068305	2.75074	2.650531	-1.12889
2.788103	1.956805	2.234798	2.09602	2.061642	2.028756	2.701258	2.606952	-1.14851
2.75679	1.935655	2.23253	2.08014	2.05874	2.000211	2.681355	2.591517	-1.16813
2.720905	1.887313	2.18783	2.050017	2.013074	1.97688	2.643158	2.542743	-1.18775
2.714805	1.86063	2.162946	2.025497	1.990747	1.963464	2.634415	2.513937	-1.20737
2.684889	1.840905	2.145116	2.010098	1.967737	1.940448	2.593862	2.492025	-1.22699
2.672872	1.819543	2.117572	1.976922	1.95633	1.930329	2.593698	2.484144	-1.24661
2.634935	1.798277	2.102039	1.974474	1.92084	1.91409	2.568104	2.452356	-1.26624
2.594155	1.742576	2.049884	1.931581	1.891956	1.876017	2.511258	2.402805	-1.28586
2.572838	1.699696	2.021644	1.895821	1.846992	1.840044	2.488719	2.35886	-1.30548
2.510225	1.660327	1.955395	1.843366	1.81259	1.783935	2.439785	2.326749	-1.3251
2.454887	1.604066	1.884256	1.777049	1.740086	1.72836	2.376788	2.269411	-1.34472
2.392105	1.527996	1.824751	1.711721	1.672678	1.643124	2.296765	2.180126	-1.36434
2.322009	1.488153	1.746809	1.640734	1.6128	1.567133	2.238509	2.111634	-1.38396
2.275311	1.458857	1.718761	1.601208	1.578079	1.543882	2.181565	2.065314	-1.40358
2.248847	1.458592	1.707301	1.556461	1.586745	1.515302	2.151352	2.025109	-1.4232
2.266636	1.46269	1.72207	1.55616	1.568564	1.507779	2.175481	2.044914	-1.44282
2.251859	1.450702	1.723824	1.55071	1.562693	1.510989	2.155325	2.043582	-1.46244
2.282992	1.478849	1.748311	1.583673	1.588626	1.523219	2.185134	2.063403	-1.48206
2.290396	1.483071	1.782385	1.590621	1.60609	1.544602	2.215173	2.099098	-1.50168
2.267361	1.450256	1.759283	1.559164	1.570044	1.505903	2.200825	2.094434	-1.5213
2.284835	1.447163	1.776233	1.570396	1.568715	1.507924	2.209696	2.080372	-1.54093
2.292029	1.432119	1.745095	1.546453	1.530714	1.450001	2.206642	2.07346	-1.56055
2.276367	1.406054	1.748771	1.551569	1.533516	1.452123	2.193886	2.091523	-1.58017

2.244835	1.358708	1.709412	1.504328	1.470069	1.386515	2.168444	2.063472	-1.59979
2.218883	1.328051	1.680513	1.468742	1.432065	1.341297	2.132224	2.009129	-1.61941
2.181685	1.301102	1.626138	1.448661	1.404604	1.279826	2.107046	1.994253	-1.63903
2.157001	1.255307	1.611454	1.385177	1.36725	1.245792	2.077156	1.961869	-1.65865
2.124664	1.229059	1.543318	1.343736	1.307388	1.186795	2.017684	1.924073	-1.67827
2.099301	1.201653	1.518759	1.305003	1.282967	1.135184	1.980467	1.886095	-1.69789
2.076393	1.180333	1.495478	1.246447	1.237282	1.098568	1.951454	1.865608	-1.71751
2.094373	1.196398	1.484341	1.249934	1.220767	1.084292	1.933409	1.824012	-1.73713
2.133083	1.182475	1.455472	1.182134	1.21945	1.0509	1.901676	1.823452	-1.75675
2.097688	1.17345	1.488949	1.207407	1.231685	1.033075	1.919792	1.824383	-1.77637
2.099891	1.172877	1.466163	1.200365	1.209827	1.036148	1.917698	1.813504	-1.79599
2.136399	1.2083	1.495738	1.245943	1.236205	1.07604	1.962346	1.863204	-1.81561
2.157348	1.181924	1.499135	1.265321	1.221223	1.086525	1.960048	1.864996	-1.83524
2.161979	1.189472	1.476243	1.234351	1.185595	1.061163	1.965376	1.843707	-1.85486
2.171055	1.206018	1.49823	1.278421	1.252788	1.083974	1.97025	1.895813	-1.87448
2.16099	1.199741	1.467976	1.262735	1.236141	1.07934	1.987178	1.897729	-1.8941
2.152879	1.176605	1.459558	1.257262	1.232505	1.064998	1.971129	1.876953	-1.91372
2.165608	1.19282	1.476162	1.256576	1.230464	1.079321	1.977468	1.89465	-1.93334
2.145857	1.168553	1.428308	1.244892	1.22965	1.065367	1.9762	1.88487	-1.95296
2.120585	1.150965	1.424718	1.260911	1.210876	1.055835	1.949811	1.857571	-1.97258
2.1246	1.147875	1.423873	1.247801	1.204355	1.070642	1.948019	1.855671	-1.9922
2.118118	1.132386	1.401375	1.235092	1.195996	1.063793	1.934397	1.830313	-2.01182
2.117885	1.120807	1.371646	1.250657	1.212796	1.076056	1.935235	1.842287	-2.03144
2.062176	1.109847	1.371281	1.230094	1.171756	1.081089	1.924125	1.808006	-2.05106
2.057095	1.071841	1.321614	1.219146	1.168269	1.077099	1.889058	1.777561	-2.07068
2.056611	1.082331	1.354862	1.227003	1.171417	1.058065	1.925526	1.751671	-2.0903
2.020803	1.056676	1.30425	1.178923	1.143592	1.03995	1.877827	1.719529	-2.10992
1.981498	1.044784	1.302578	1.173714	1.128684	1.009245	1.85263	1.712849	-2.12955
1.95426	1.044001	1.269531	1.160744	1.138277	1.022906	1.82619	1.668114	-2.14917
1.990603	1.006206	1.290817	1.18669	1.12652	1.013782	1.849069	1.643002	-2.16879
1.928767	0.988444	1.236795	1.13607	1.083974	0.967306	1.799864	1.601642	-2.18841
1.909426	0.992876	1.262712	1.13435	1.089003	0.999296	1.802106	1.572592	-2.20803
1.882762	0.981065	1.259769	1.123099	1.089761	1.008576	1.808052	1.553521	-2.22765
1.904798	0.950594	1.249066	1.128057	1.059466	0.997448	1.800119	1.548092	-2.24727
1.859361	0.962988	1.233972	1.115448	1.031624	0.983368	1.753127	1.493288	-2.26689
1.810846	0.908286	1.188029	1.073514	0.996809	0.95153	1.756166	1.461333	-2.28651
1.769101	0.89152	1.159358	1.071499	1.024116	0.957378	1.705837	1.428312	-2.30613
1.75166	0.890502	1.147807	1.040857	0.979676	0.911164	1.707695	1.381427	-2.32575
1.710991	0.854954	1.132703	1.044946	0.959731	0.929862	1.69654	1.370275	-2.34537
1.685837	0.870569	1.136768	1.011455	0.948048	0.905159	1.688387	1.347862	-2.36499
1.616182	0.815655	1.067799	0.981857	0.921456	0.893887	1.688793	1.294572	-2.38461
1.61567	0.834709	1.079602	0.98806	0.945489	0.905259	1.653829	1.287104	-2.40423
1.551799	0.789339	1.0171	0.965175	0.862941	0.8585	1.622835	1.251381	-2.42386
1.525504	0.754783	0.990298	0.929392	0.836666	0.872289	1.595606	1.210648	-2.44348
1.458774	0.749444	0.969003	0.898946	0.85034	0.846766	1.61799	1.215324	-2.4631
1.451368	0.682546	0.927475	0.890603	0.817539	0.850038	1.578568	1.142945	-2.48272
1.404227	0.711712	0.924862	0.885043	0.797876	0.884257	1.538847	1.204009	-2.50234
1.341844	0.669076	0.884773	0.842174	0.726858	0.80422	1.515456	1.13821	-2.52196
1.305173	0.664488	0.87641	0.809884	0.703915	0.80184	1.494982	1.124328	-2.54158
1.321512	0.720546	0.863345	0.777676	0.704567	0.825234	1.500733	1.129794	-2.5612
1.30444	0.662071	0.840155	0.798772	0.68535	0.804284	1.474945	1.130325	-2.58082
1.294812	0.662674	0.843672	0.833821	0.735265	0.825057	1.500293	1.173886	-2.60044
1.259361	0.685437	0.856258	0.817206	0.705226	0.822909	1.456571	1.154298	-2.62006
1.223504	0.649103	0.817177	0.782352	0.687164	0.774693	1.426575	1.14401	-2.63968
1.189937	0.688126	0.846217	0.771967	0.646318	0.760171	1.380919	1.168327	-2.6593

1.19871	0.610768	0.80925	0.785656	0.710929	0.74099	1.366784	1.137358	-2.67892
1.18774	0.591914	0.790469	0.773521	0.654323	0.749244	1.331201	1.149547	-2.69855
1.122218	0.598574	0.766864	0.71009	0.610902	0.683378	1.313884	1.128113	-2.71817
1.191836	0.660659	0.857692	0.760745	0.688392	0.766594	1.327401	1.20863	-2.73779
1.075184	0.595715	0.775342	0.678988	0.631222	0.690295	1.207708	1.106275	-2.75741
1.100072	0.590986	0.791281	0.64219	0.601238	0.654756	1.209866	1.088368	-2.77703
1.092281	0.637594	0.809852	0.675856	0.635738	0.669236	1.185749	1.211735	-2.79665
1.035287	0.525793	0.725388	0.630224	0.608213	0.646039	1.153021	1.101894	-2.81627
1.073822	0.564257	0.774199	0.635716	0.60516	0.637418	1.13	1.134576	-2.83589
1.06683	0.568175	0.72082	0.603611	0.624684	0.642895	1.073021	1.099226	-2.85551
1.059061	0.544823	0.803282	0.671116	0.618206	0.640746	1.044527	1.127453	-2.87513
0.991598	0.546787	0.776129	0.61517	0.621699	0.621937	1.07525	1.118836	-2.89475
0.999761	0.537356	0.693337	0.549946	0.570607	0.555157	1.004475	1.011211	-2.91437
1.010038	0.521116	0.759754	0.619455	0.600137	0.592493	0.988142	1.078996	-2.93399
0.959608	0.428085	0.716236	0.547153	0.572435	0.577368	0.927696	1.007737	-2.95361
0.893851	0.397341	0.733767	0.569892	0.522561	0.558012	0.917408	0.964708	-2.97323
1.015623	0.529194	0.765717	0.579529	0.626572	0.588154	0.99068	1.028557	-2.99286
0.916757	0.496325	0.703039	0.530428	0.542117	0.519332	0.983813	0.962442	-3.01248
0.924185	0.49856	0.711861	0.593589	0.611371	0.548825	0.938973	1.018436	-3.0321
0.888124	0.454164	0.728129	0.564364	0.544638	0.528745	0.895084	0.942253	-3.05172
0.907663	0.461196	0.753794	0.581184	0.572478	0.546176	0.906233	0.957692	-3.07134
0.893079	0.494711	0.872841	0.583216	0.572495	0.547731	0.935263	0.904973	-3.09096
0.896179	0.41391	0.68404	0.559847	0.574804	0.507859	0.901241	0.943408	-3.11058
0.902551	0.45892	0.779196	0.596237	0.603604	0.60114	0.9241	0.874489	-3.1302
0.904524	0.410314	0.712025	0.597843	0.598198	0.598124	0.89989	0.910488	-3.14982
0.851122	0.385726	0.773864	0.605085	0.597899	0.572471	0.900912	0.889353	-3.16944
0.850088	0.439823	0.711782	0.642515	0.567912	0.520823	0.884259	0.876675	-3.18906
0.894613	0.449839	0.739546	0.621066	0.569363	0.569134	0.879926	0.793261	-3.20868
0.886867	0.400145	0.716392	0.672872	0.608986	0.568151	0.94082	0.824171	-3.2283
0.833528	0.395034	0.721758	0.631687	0.535876	0.534626	0.868409	0.802314	-3.24792
0.886214	0.429348	0.706019	0.609978	0.516774	0.567824	0.934641	0.784706	-3.26754
0.817265	0.304522	0.759786	0.631444	0.511368	0.608754	0.895945	0.777718	-3.28717
0.794235	0.379168	0.711059	0.671686	0.462117	0.47651	0.870398	0.740916	-3.30679
0.7715	0.273427	0.664925	0.655716	0.503429	0.562782	0.900568	0.72406	-3.32641
0.794992	0.358266	0.685363	0.616947	0.479079	0.573565	0.877061	0.717733	-3.34603
0.807155	0.340899	0.727423	0.62413	0.495493	0.565744	0.881601	0.746411	-3.36565
0.748847	0.214925	0.655589	0.518413	0.364048	0.498661	0.820428	0.656708	-3.38527
0.717594	0.27036	0.68001	0.572862	0.413203	0.534185	0.850439	0.652988	-3.40489
0.675054	0.209978	0.604261	0.51355	0.342253	0.408094	0.789456	0.641764	-3.42451
0.706695	0.198058	0.574142	0.498149	0.296504	0.482363	0.793937	0.554241	-3.44413
0.653638	0.155142	0.583769	0.526194	0.254903	0.416683	0.747737	0.594165	-3.46375
0.664135	0.227176	0.536992	0.477268	0.256818	0.389259	0.753868	0.516117	-3.48337
0.617905	0.149927	0.506913	0.47032	0.228985	0.380644	0.690936	0.531155	-3.50299
0.632438	0.094799	0.474331	0.386897	0.158634	0.400097	0.727056	0.494947	-3.52261
0.626372	0.092839	0.59256	0.450783	0.248168	0.342853	0.802101	0.542485	-3.54223
0.532375	0.066675	0.526771	0.446939	0.1419	0.376267	0.700979	0.406916	-3.56185
0.566425	0.055913	0.531305	0.467947	0.060677	0.347471	0.694435	0.428214	-3.58148
0.56113	0.003741	0.528179	0.378561	0.04883	0.264828	0.616254	0.382948	-3.6011
0.475652	-0.02309	0.532801	0.405279	-0.08923	0.19736	0.67383	0.334217	-3.62072
0.517356	-0.03532	0.465938	0.360234	0.008489	0.275548	0.614116	0.333305	-3.64034
0.466298	-0.02362	0.48563	0.359258	0.000304	0.26875	0.647145	0.359831	-3.65996
0.485385	-0.03802	0.468163	0.393695	-0.00035	0.251846	0.649075	0.34763	-3.67958
0.551645	-0.01954	0.51216	0.44098	-0.02312	0.298285	0.733325	0.421654	-3.6992
0.311394	-0.19715	0.409513	0.279253	-0.11607	0.173852	0.662952	0.242258	-3.71882
0.416949	-0.08336	0.386374	0.479108	-0.13739	0.208301	0.62637	0.308854	-3.73844

0.433638	-0.08191	0.454914	0.295427	-0.11335	0.208396	0.681709	0.335387	-3.75806
0.440614	-0.10293	0.453054	0.331192	-0.11904	0.178445	0.707634	0.320415	-3.77768
0.296852	-0.2308	0.31285	0.258363	-0.15472	0.135113	0.55831	0.220712	-3.7973
0.361082	-0.17758	0.398879	0.24925	-0.26041	0.149496	0.538809	0.293042	-3.81692
0.284922	-0.26149	0.418459	0.268768	-0.2132	0.063956	0.586216	0.273801	-3.83654
0.378122	-0.17329	0.376644	0.210432	-0.1944	0.08969	0.584499	0.289504	-3.85617
0.369587	-0.26719	0.327664	0.096461	-0.14913	0.067611	0.568268	0.242703	-3.87579
0.338102	-0.28381	0.319348	0.084651	-0.18001	-0.00295	0.518836	0.206346	-3.89541
0.359379	-0.37047	0.244501	-0.01937	-0.20769	0.001461	0.497731	0.181988	-3.91503
0.283521	-0.27173	0.270792	-0.03949	-0.24331	-0.11172	0.448785	0.19598	-3.93465
0.287837	-0.31349	0.285489	-0.00253	-0.20791	-0.00684	0.526831	0.178708	-3.95427
0.308418	-0.34254	0.194011	-0.10671	-0.24333	-0.07798	0.411232	0.139671	-3.97389
0.400118	-0.27258	0.228756	-0.10873	-0.13046	-0.09632	0.510729	0.212957	-3.99351
0.268015	-0.35822	0.136574	-0.20068	-0.21524	-0.11888	0.422213	0.106059	-4.01313
0.17356	-0.40668	0.110403	-0.1331	-0.1559	-0.22948	0.40118	0.026192	-4.03275
0.145523	-0.42103	-0.0041	-0.27783	-0.22898	-0.24691	0.350128	0.017355	-4.05237
0.225926	-0.45666	-0.02937	-0.33401	-0.30752	-0.28645	0.267592	-0.00945	-4.07199
0.209512	-0.43273	-0.05262	-0.29097	-0.28769	-0.30646	0.361852	0.004848	-4.09161
0.300097	-0.3563	-0.0248	-0.22008	-0.22411	-0.28029	0.439702	0.013301	-4.11123
0.108349	-0.47182	-0.22574	-0.30683	-0.33221	-0.37801	0.297388	-0.03404	-4.13085
0.290495	-0.47402	-0.17841	-0.27656	-0.30554	-0.38731	0.357222	-0.11535	-4.15048
0.203759	-0.42345	-0.18039	-0.26973	-0.29708	-0.35789	0.306217	-0.06759	-4.1701
0.102391	-0.49971	-0.24186	-0.31618	-0.39353	-0.44239	0.237853	-0.14138	-4.18972
0.047303	-0.4794	-0.2911	-0.35855	-0.44757	-0.5132	0.329422	-0.23191	-4.20934
0.014871	-0.51766	-0.39253	-0.41662	-0.46749	-0.55871	0.242925	-0.27531	-4.22896
0.00065	-0.59978	-0.3788	-0.41896	-0.35917	-0.5402	0.214669	-0.28224	-4.24858
-0.11083	-0.50242	-0.39579	-0.43869	-0.52295	-0.58451	0.212589	-0.37338	-4.2682
-0.03889	-0.58188	-0.41174	-0.41095	-0.5744	-0.57279	0.171382	-0.32034	-4.28782
-0.16428	-0.60832	-0.46804	-0.444	-0.58789	-0.63202	0.170214	-0.4418	-4.30744
-0.23247	-0.78578	-0.58241	-0.52685	-0.66619	-0.70973	0.05587	-0.49764	-4.32706
-0.2127	-0.63853	-0.45822	-0.48975	-0.59258	-0.57587	0.050662	-0.62198	-4.34668
-0.24228	-0.80043	-0.61509	-0.46953	-0.79218	-0.78005	-0.04819	-0.53743	-4.3663
-0.41177	-0.78299	-0.60548	-0.54342	-0.78565	-0.61674	-0.10058	-0.54537	-4.38592
-0.53612	-0.88405	-0.73345	-0.74105	-0.93925	-0.80811	-0.19696	-0.75053	-4.40554
-0.63824	-0.9252	-0.77066	-0.78971	-0.89116	-0.82735	-0.33461	-0.79651	-4.42516
-0.59169	-0.89429	-0.76337	-0.81132	-0.92629	-0.83263	-0.40318	-0.81083	-4.44479
-0.81726	-0.95816	-0.84638	-0.91907	-1.01588	-0.94295	-0.61135	-0.96573	-4.46441
-0.9265	-1.19474	-1.10538	-1.11762	-1.08727	-1.00796	-0.95751	-1.08281	-4.48403
-0.95259	-1.11898	-1.13541	-1.04679	-1.09804	-0.98361	-0.94671	-1.15888	-4.50365
-1.14599	-1.17241	-1.12919	-1.13439	-1.15818	-1.11419	-1.02857	-1.2443	-4.52327
-1.30262	-1.22289	-1.32192	-1.35567	-1.23431	-1.25626	-1.27021	-1.39222	-4.54289
-1.48649	-1.42052	-1.55108	-1.47479	-1.34574	-1.37526	-1.46751	-1.64773	-4.56251
-1.5131	-1.37852	-1.57643	-1.47148	-1.36568	-1.40279	-1.58044	-1.6992	-4.58213
-1.78157	-1.48651	-1.67444	-1.54604	-1.56588	-1.49009	-1.71401	-1.82626	-4.60175
-1.72505	-1.39577	-1.63975	-1.46881	-1.43139	-1.38638	-1.67578	-1.67694	-4.62137
-1.9666	-1.53822	-1.75771	-1.67654	-1.57973	-1.49658	-1.97456	-1.98596	-4.64099
-2.15805	-1.70295	-1.98335	-1.82807	-1.7685	-1.69424	-2.19601	-2.14542	-4.66061
-2.31613	-1.69979	-1.96225	-1.91347	-1.75856	-1.77281	-2.29772	-2.17286	-4.68023
-2.5702	-1.70494	-2.17874	-2.03142	-1.97281	-1.6725	-2.31145	-2.43325	-4.69985
-2.72091	-1.88731	-2.18783	-2.05002	-2.01307	-1.97688	-2.64316	-2.54274	-4.71947

J3
J4
J5
J6
J7
J8
J9

: -0.1971927411x - 0.7756201071
 : -0.1599958005x - 0.8949007024
 -0.1645997782x - 0.8473192378
 : -0.1566776061x - 0.8508558995
 -0.1635148167x - 0.8612046521
 -0.1524328573x - 0.8791246740
 -0.1824810769x - 0.7860287442
 -0.1942860090x - 0.7710782926

2 to 18GHz
 0.914999 0.547599
 -0.3674
 max 0.457499
 0.520816 0.2903

Ideal Line

IDEAL J2	IDEAL J3	IDEAL J4	IDEAL J5	IDEAL J6	IDEAL J7	IDEAL J8	Flatness J1	Flatness J2
-0.9109	-0.86378	-0.86652	-0.87756	-0.89437	-0.80428	-0.79051	-4.15031	-2.32836
-0.92682	-0.88016	-0.88211	-0.89383	-0.90954	-0.82243	-0.80984	-0.42517	-0.13928
-0.94274	-0.89653	-0.8977	-0.9101	-0.9247	-0.84059	-0.82917	-0.08007	0.129109
-0.95866	-0.91291	-0.91329	-0.92637	-0.93987	-0.85875	-0.8485	-0.00129	0.189961
-0.97458	-0.92929	-0.92888	-0.94263	-0.95504	-0.8769	-0.86783	0.036705	0.213304
-0.9905	-0.94567	-0.94447	-0.9589	-0.9702	-0.89506	-0.88716	0.040456	0.211053
-1.00642	-0.96205	-0.96006	-0.97517	-0.98537	-0.91322	-0.9065	0.042841	0.213773
-1.02234	-0.97842	-0.97565	-0.99144	-1.00054	-0.93137	-0.92583	0.064796	0.205838
-1.03826	-0.9948	-0.99124	-1.00771	-1.0157	-0.94953	-0.94516	0.048209	0.196021
-1.05418	-1.01118	-1.00683	-1.02398	-1.03087	-0.96769	-0.96449	0.051218	0.1914
-1.0701	-1.02756	-1.02242	-1.04025	-1.04604	-0.98585	-0.98382	0.052434	0.176286
-1.08602	-1.04393	-1.03801	-1.05652	-1.06121	-1.004	-1.00315	0.044482	0.179239
-1.10194	-1.06031	-1.0536	-1.07279	-1.07637	-1.02216	-1.02248	0.053399	0.16098
-1.11785	-1.07669	-1.06919	-1.08906	-1.09154	-1.04032	-1.04182	0.041856	0.140558
-1.13377	-1.09307	-1.08478	-1.10533	-1.10671	-1.05847	-1.06115	0.044638	0.141177
-1.14969	-1.10944	-1.10036	-1.1216	-1.12187	-1.07663	-1.08048	0.025986	0.127853
-1.16561	-1.12582	-1.11595	-1.13787	-1.13704	-1.09479	-1.09981	0.032937	0.125121
-1.18153	-1.1422	-1.13154	-1.15414	-1.15221	-1.11294	-1.11914	0.034604	0.105206
-1.19745	-1.15858	-1.14713	-1.17041	-1.16738	-1.1311	-1.13847	0.01646	0.098443
-1.21337	-1.17496	-1.16272	-1.18668	-1.18254	-1.14926	-1.1578	0.004768	0.093212
-1.22929	-1.19133	-1.17831	-1.20295	-1.19771	-1.16741	-1.17714	-0.0115	0.06079
-1.24521	-1.20771	-1.1939	-1.21922	-1.21288	-1.18557	-1.19647	0.002024	0.050026
-1.26113	-1.22409	-1.20949	-1.23549	-1.22804	-1.20373	-1.2158	-0.00827	0.04622
-1.27705	-1.24047	-1.22508	-1.25176	-1.24321	-1.22188	-1.23513	-0.00067	0.040778
-1.29297	-1.25684	-1.24067	-1.26803	-1.25838	-1.24004	-1.25446	-0.01898	0.035432
-1.30889	-1.27322	-1.25626	-1.2843	-1.27354	-1.2582	-1.27379	-0.04014	-0.00435
-1.32481	-1.2896	-1.27185	-1.30057	-1.28871	-1.27636	-1.29312	-0.04184	-0.03131
-1.34073	-1.30598	-1.28744	-1.31684	-1.30388	-1.29451	-1.31246	-0.08483	-0.05476
-1.35665	-1.32235	-1.30303	-1.33311	-1.31905	-1.31267	-1.33179	-0.12055	-0.0951
-1.37257	-1.33873	-1.31862	-1.34938	-1.33421	-1.33083	-1.35112	-0.16371	-0.15525
-1.38849	-1.35511	-1.33421	-1.36565	-1.34938	-1.34898	-1.37045	-0.21419	-0.17917
-1.40441	-1.37149	-1.3498	-1.38192	-1.36455	-1.36714	-1.38978	-0.24126	-0.19255
-1.42033	-1.38786	-1.36539	-1.39819	-1.37971	-1.3853	-1.40911	-0.24811	-0.1769
-1.43625	-1.40424	-1.38097	-1.41446	-1.39488	-1.40345	-1.42845	-0.2107	-0.15688
-1.45217	-1.42062	-1.39656	-1.43073	-1.41005	-1.42161	-1.44778	-0.20585	-0.15295
-1.46809	-1.437	-1.41215	-1.447	-1.42522	-1.43977	-1.46711	-0.1551	-0.10888
-1.48401	-1.45338	-1.42774	-1.46327	-1.44038	-1.45792	-1.48644	-0.12807	-0.08874
-1.49992	-1.46975	-1.44333	-1.47954	-1.45555	-1.47608	-1.50577	-0.13149	-0.10563
-1.51584	-1.48613	-1.45892	-1.49581	-1.47072	-1.49424	-1.5251	-0.09439	-0.09281
-1.53176	-1.50251	-1.47451	-1.51208	-1.48588	-1.51239	-1.54443	-0.06758	-0.09193
-1.54768	-1.51889	-1.4901	-1.52835	-1.50105	-1.53055	-1.56377	-0.06362	-0.10208

-1.5636	-1.53526	-1.50569	-1.54461	-1.51622	-1.54871	-1.5831	-0.07553	-0.1335
-1.57952	-1.55164	-1.52128	-1.56088	-1.53138	-1.56687	-1.60243	-0.08186	-0.14824
-1.59544	-1.56802	-1.53687	-1.57715	-1.54655	-1.58502	-1.62176	-0.09944	-0.15927
-1.61136	-1.5844	-1.55246	-1.59342	-1.56172	-1.60318	-1.64109	-0.1045	-0.18915
-1.62728	-1.60077	-1.56805	-1.60969	-1.57689	-1.62134	-1.66042	-0.11722	-0.19948
-1.6432	-1.61715	-1.58364	-1.62596	-1.59205	-1.63949	-1.67975	-0.12296	-0.21096
-1.65912	-1.63353	-1.59923	-1.64223	-1.60722	-1.65765	-1.69909	-0.12625	-0.21636
-1.67504	-1.64991	-1.61482	-1.6585	-1.62239	-1.67581	-1.71842	-0.08865	-0.18438
-1.69096	-1.66629	-1.63041	-1.67477	-1.63755	-1.69396	-1.73775	-0.03032	-0.18238
-1.70688	-1.68266	-1.64599	-1.69104	-1.65272	-1.71212	-1.75708	-0.04609	-0.17549
-1.7228	-1.69904	-1.66158	-1.70731	-1.66789	-1.73028	-1.77641	-0.02427	-0.16014
-1.73872	-1.71542	-1.67717	-1.72358	-1.68306	-1.74843	-1.79574	0.031859	-0.1088
-1.75464	-1.7318	-1.69276	-1.73985	-1.69822	-1.76659	-1.81507	0.072429	-0.11925
-1.77056	-1.74817	-1.70835	-1.75612	-1.71339	-1.78475	-1.83441	0.096681	-0.09579
-1.78648	-1.76455	-1.72394	-1.77239	-1.72856	-1.8029	-1.85374	0.125378	-0.06332
-1.8024	-1.78093	-1.73953	-1.78866	-1.74372	-1.82106	-1.87307	0.134933	-0.05368
-1.81832	-1.79731	-1.75512	-1.80493	-1.75889	-1.83922	-1.8924	0.146443	-0.06089
-1.83424	-1.81368	-1.77071	-1.8212	-1.77406	-1.85738	-1.91173	0.178793	-0.02876
-1.85016	-1.83006	-1.7863	-1.83747	-1.78923	-1.87553	-1.93106	0.178663	-0.03711
-1.86608	-1.84644	-1.80189	-1.85374	-1.80439	-1.89369	-1.95039	0.173011	-0.03877
-1.88199	-1.86282	-1.81748	-1.87001	-1.81956	-1.91185	-1.96973	0.196647	-0.02595
-1.89791	-1.8792	-1.83307	-1.88628	-1.83473	-1.93	-1.98906	0.209785	-0.02551
-1.91383	-1.89557	-1.84866	-1.90255	-1.84989	-1.94816	-2.00839	0.229173	-0.02117
-1.92975	-1.91195	-1.86425	-1.91882	-1.86506	-1.96632	-2.02772	0.193084	-0.01621
-1.94567	-1.92833	-1.87984	-1.93509	-1.88023	-1.98447	-2.04705	0.207624	-0.0383
-1.96159	-1.94471	-1.89543	-1.95136	-1.89539	-2.00263	-2.06638	0.226761	-0.01189
-1.97751	-1.96108	-1.91101	-1.96763	-1.91056	-2.02079	-2.08571	0.210573	-0.02163
-1.99343	-1.97746	-1.9266	-1.9839	-1.92573	-2.03894	-2.10505	0.190889	-0.0176
-2.00935	-1.99384	-1.94219	-2.00017	-1.9409	-2.0571	-2.12438	0.183272	-0.00246
-2.02527	-2.01022	-1.95778	-2.01644	-1.95606	-2.07526	-2.14371	0.239235	-0.02434
-2.04119	-2.02659	-1.97337	-2.03271	-1.97123	-2.09341	-2.16304	0.19702	-0.02618
-2.05711	-2.04297	-1.98896	-2.04898	-1.9864	-2.11157	-2.18237	0.1973	-0.00583
-2.07303	-2.05935	-2.00455	-2.06525	-2.00156	-2.12973	-2.2017	0.190256	-0.00172
-2.08895	-2.07573	-2.02014	-2.08152	-2.01673	-2.14789	-2.22103	0.231914	-0.01627
-2.10487	-2.09211	-2.03573	-2.09779	-2.0319	-2.16604	-2.24037	0.206097	0.012042
-2.12079	-2.10848	-2.05132	-2.11406	-2.04707	-2.1842	-2.2597	0.177202	-0.02674
-2.13671	-2.12486	-2.06691	-2.13032	-2.06223	-2.20236	-2.27903	0.155078	-0.02759
-2.15263	-2.14124	-2.0825	-2.14659	-2.0774	-2.22051	-2.29836	0.157258	-0.01269
-2.16855	-2.15762	-2.09809	-2.16286	-2.09257	-2.23867	-2.31769	0.13621	-0.03231
-2.18447	-2.17399	-2.11368	-2.17913	-2.10773	-2.25683	-2.33702	0.130677	-0.00078
-2.20039	-2.19037	-2.12927	-2.1954	-2.1229	-2.27498	-2.35635	0.080642	-0.03977
-2.21631	-2.20675	-2.14486	-2.21167	-2.13807	-2.29314	-2.37569	0.099751	-0.0048
-2.23223	-2.22313	-2.16045	-2.22794	-2.15323	-2.3113	-2.39502	0.055501	-0.03425
-2.24815	-2.2395	-2.17604	-2.24421	-2.1684	-2.32945	-2.41435	0.048826	-0.05289
-2.26406	-2.25588	-2.19162	-2.26048	-2.18357	-2.34761	-2.43368	0.001717	-0.04231
-2.27998	-2.27226	-2.20721	-2.27675	-2.19874	-2.36577	-2.45301	0.013931	-0.09328
-2.2959	-2.28864	-2.2228	-2.29302	-2.2139	-2.38392	-2.47234	-0.01359	-0.0482
-2.31182	-2.30501	-2.23839	-2.30929	-2.22907	-2.40208	-2.49168	-0.05635	-0.07492
-2.32774	-2.32139	-2.25398	-2.32556	-2.24424	-2.42024	-2.51101	-0.0734	-0.06358
-2.34366	-2.33777	-2.26957	-2.34183	-2.2594	-2.43839	-2.53034	-0.03744	0.008393
-2.35958	-2.35415	-2.28516	-2.3581	-2.27457	-2.45655	-2.54967	-0.03489	-0.03416
-2.3755	-2.37053	-2.30075	-2.37437	-2.28974	-2.47471	-2.569	-0.0249	-0.01764
-2.39142	-2.3869	-2.31634	-2.39064	-2.30491	-2.49287	-2.58833	-0.04073	0.021043
-2.40734	-2.40328	-2.33193	-2.40691	-2.32007	-2.51102	-2.60766	-0.05697	0.000629
-2.42326	-2.41966	-2.34752	-2.42318	-2.33524	-2.52918	-2.627	-0.07091	0.055571

-2.43918	-2.43604	-2.36311	-2.43945	-2.35041	-2.54734	-2.64633	-0.04252	-0.00587
-2.4551	-2.45241	-2.3787	-2.45572	-2.36557	-2.56549	-2.66566	-0.03387	-0.0088
-2.47102	-2.46879	-2.39429	-2.47199	-2.38074	-2.58365	-2.68499	-0.07977	0.013778
-2.48694	-2.48517	-2.40988	-2.48826	-2.39591	-2.60181	-2.70432	0.009468	0.091782
-2.50286	-2.50155	-2.42547	-2.50453	-2.41107	-2.61996	-2.72365	-0.08756	0.042758
-2.51878	-2.51792	-2.44106	-2.5208	-2.42624	-2.63812	-2.74298	-0.04305	0.053948
-2.5347	-2.5343	-2.45664	-2.53707	-2.44141	-2.65628	-2.76232	-0.03122	0.116477
-2.55062	-2.55068	-2.47223	-2.55334	-2.45658	-2.67443	-2.78165	-0.0686	0.020595
-2.56654	-2.56706	-2.48782	-2.56961	-2.47174	-2.69259	-2.80098	-0.01044	0.074979
-2.58246	-2.58344	-2.50341	-2.58588	-2.48691	-2.71075	-2.82031	0.002187	0.094816
-2.59838	-2.59981	-2.519	-2.60215	-2.50208	-2.7289	-2.83964	0.014038	0.087383
-2.6143	-2.61619	-2.53459	-2.61842	-2.51724	-2.74706	-2.85897	-0.0338	0.105267
-2.63022	-2.63257	-2.55018	-2.63469	-2.53241	-2.76522	-2.8783	-0.00602	0.111756
-2.64613	-2.64895	-2.56577	-2.65096	-2.54758	-2.78338	-2.89764	0.023877	0.111436
-2.66205	-2.66532	-2.58136	-2.66723	-2.56275	-2.80153	-2.91697	-0.00693	0.034324
-2.67797	-2.6817	-2.59695	-2.6835	-2.57791	-2.81969	-2.9363	-0.05307	0.0195
-2.69389	-2.69808	-2.61254	-2.69977	-2.59308	-2.83785	-2.95563	0.088324	0.167272
-2.70981	-2.71446	-2.62813	-2.71603	-2.60825	-2.856	-2.97496	0.009078	0.150323
-2.72573	-2.73083	-2.64372	-2.7323	-2.62341	-2.87416	-2.99429	0.036128	0.168478
-2.74165	-2.74721	-2.65931	-2.74857	-2.63858	-2.89232	-3.01362	0.019687	0.140001
-2.75757	-2.76359	-2.6749	-2.76484	-2.65375	-2.91047	-3.03296	0.058847	0.162952
-2.77349	-2.77997	-2.69049	-2.78111	-2.66892	-2.92863	-3.05229	0.063883	0.212387
-2.78941	-2.79635	-2.70608	-2.79738	-2.68408	-2.94679	-3.07162	0.086604	0.147506
-2.80533	-2.81272	-2.72166	-2.81365	-2.69925	-2.96494	-3.09095	0.112597	0.208435
-2.82125	-2.8291	-2.73725	-2.82992	-2.71442	-2.9831	-3.11028	0.134191	0.175749
-2.83717	-2.84548	-2.75284	-2.84619	-2.72958	-3.00126	-3.12961	0.100409	0.16708
-2.85309	-2.86186	-2.76843	-2.86246	-2.74475	-3.01941	-3.14894	0.118996	0.237097
-2.86901	-2.87823	-2.78402	-2.87873	-2.75992	-3.03757	-3.16828	0.183141	0.263032
-2.88493	-2.89461	-2.79961	-2.895	-2.77508	-3.05573	-3.18761	0.195016	0.229258
-2.90085	-2.91099	-2.8152	-2.91127	-2.79025	-3.07389	-3.20694	0.161298	0.240067
-2.91677	-2.92737	-2.83079	-2.92754	-2.80542	-3.09204	-3.22627	0.233605	0.2903
-2.93269	-2.94374	-2.84638	-2.94381	-2.82059	-3.1102	-3.2456	0.184276	0.181394
-2.94861	-2.96012	-2.86197	-2.96008	-2.83575	-3.12836	-3.26493	0.180867	0.271959
-2.96453	-2.9765	-2.87756	-2.97635	-2.85092	-3.14651	-3.28426	0.177753	0.182138
-2.98045	-2.99288	-2.89315	-2.99262	-2.86609	-3.16467	-3.3036	0.220866	0.282897
-2.99637	-3.00926	-2.90874	-3.00889	-2.88125	-3.18283	-3.32293	0.252649	0.281449
-3.01229	-3.02563	-2.92433	-3.02516	-2.89642	-3.20098	-3.34226	0.213962	0.171395
-3.0282	-3.04201	-2.93992	-3.04143	-2.91159	-3.21914	-3.36159	0.202329	0.242749
-3.04412	-3.05839	-2.95551	-3.0577	-2.92676	-3.2373	-3.38092	0.17941	0.198286
-3.06004	-3.07477	-2.9711	-3.07397	-2.94192	-3.25545	-3.40025	0.230671	0.202286
-3.07596	-3.09114	-2.98669	-3.09024	-2.95709	-3.27361	-3.41959	0.197236	0.17529
-3.09188	-3.10752	-3.00227	-3.10651	-2.97226	-3.29177	-3.43892	0.227353	0.263244
-3.1078	-3.1239	-3.01786	-3.12278	-2.98742	-3.30992	-3.45825	0.200744	0.201914
-3.12372	-3.14028	-3.03345	-3.13905	-3.00259	-3.32808	-3.47758	0.234897	0.162706
-3.13964	-3.15665	-3.04904	-3.15532	-3.01776	-3.34624	-3.49691	0.248452	0.176666
-3.15556	-3.17303	-3.06463	-3.17159	-3.03292	-3.3644	-3.51624	0.174076	0.166421
-3.17148	-3.18941	-3.08022	-3.18786	-3.04809	-3.38255	-3.53557	0.227746	0.171578
-3.1874	-3.20579	-3.09581	-3.20413	-3.06326	-3.40071	-3.55491	0.242072	0.135326
-3.20332	-3.22216	-3.1114	-3.2204	-3.07843	-3.41887	-3.57424	0.176215	0.124419
-3.21924	-3.23854	-3.12699	-3.23667	-3.09359	-3.43702	-3.59357	0.23754	0.128105
-3.23516	-3.25492	-3.14258	-3.25294	-3.10876	-3.45518	-3.6129	0.206102	0.155728
-3.25108	-3.2713	-3.15817	-3.26921	-3.12393	-3.47334	-3.63223	0.24481	0.157241
-3.267	-3.28768	-3.17376	-3.28548	-3.13909	-3.49149	-3.65156	0.33069	0.19164
-3.28292	-3.30405	-3.18935	-3.30175	-3.15426	-3.50965	-3.67089	0.11006	0.029951
-3.29884	-3.32043	-3.20494	-3.31801	-3.16943	-3.52781	-3.69023	0.235236	0.159662

-3.31476	-3.33681	-3.22053	-3.33428	-3.1846	-3.54596	-3.70956	0.271546	0.177034
-3.33068	-3.35319	-3.23612	-3.35055	-3.19976	-3.56412	-3.72889	0.298142	0.171934
-3.3466	-3.36956	-3.25171	-3.36682	-3.21493	-3.58228	-3.74822	0.174001	0.059977
-3.36252	-3.38594	-3.26729	-3.38309	-3.2301	-3.60043	-3.76755	0.257852	0.129123
-3.37844	-3.40232	-3.28288	-3.39936	-3.24526	-3.61859	-3.78688	0.201312	0.061125
-3.39436	-3.4187	-3.29847	-3.41563	-3.26043	-3.63675	-3.80621	0.314133	0.16525
-3.41027	-3.43507	-3.31406	-3.4319	-3.2756	-3.6549	-3.82555	0.325218	0.087268
-3.42619	-3.45145	-3.32965	-3.44817	-3.29076	-3.67306	-3.84488	0.313354	0.086568
-3.44211	-3.46783	-3.34524	-3.46444	-3.30593	-3.69122	-3.86421	0.354252	0.01583
-3.45803	-3.48421	-3.36083	-3.48071	-3.3211	-3.70938	-3.88354	0.298015	0.130489
-3.47395	-3.50059	-3.37642	-3.49698	-3.33627	-3.72753	-3.90287	0.321951	0.104649
-3.48987	-3.51696	-3.39201	-3.51325	-3.35143	-3.74569	-3.9222	0.362153	0.091514
-3.50579	-3.53334	-3.4076	-3.52952	-3.3666	-3.76385	-3.94153	0.473473	0.177392
-3.52171	-3.54972	-3.42319	-3.54579	-3.38177	-3.782	-3.96087	0.360992	0.107675
-3.53763	-3.5661	-3.43878	-3.56206	-3.39693	-3.80016	-3.9802	0.286157	0.075133
-3.55355	-3.58247	-3.45437	-3.57833	-3.4121	-3.81832	-3.99953	0.277741	0.076707
-3.56947	-3.59885	-3.46996	-3.5946	-3.42727	-3.83647	-4.01886	0.377764	0.056999
-3.58539	-3.61523	-3.48555	-3.61087	-3.44244	-3.85463	-4.03819	0.380971	0.096844
-3.60131	-3.63161	-3.50114	-3.62714	-3.4576	-3.87279	-4.05752	0.491177	0.18919
-3.61723	-3.64798	-3.51673	-3.64341	-3.47277	-3.89094	-4.07685	0.319049	0.089592
-3.63315	-3.66436	-3.53231	-3.65968	-3.48794	-3.9091	-4.09619	0.520816	0.10331
-3.64907	-3.68074	-3.5479	-3.67595	-3.5031	-3.92726	-4.11552	0.4537	0.1698
-3.66499	-3.69712	-3.56349	-3.69222	-3.51827	-3.94541	-4.13485	0.371954	0.109461
-3.68091	-3.7135	-3.57908	-3.70849	-3.53344	-3.96357	-4.15418	0.336486	0.145691
-3.69683	-3.72987	-3.59467	-3.72476	-3.54861	-3.98173	-4.17351	0.323675	0.12335
-3.71275	-3.74625	-3.61026	-3.74103	-3.56377	-3.99989	-4.19284	0.329075	0.057154
-3.72867	-3.76263	-3.62585	-3.7573	-3.57894	-4.01804	-4.21217	0.237219	0.170426
-3.74459	-3.77901	-3.64144	-3.77357	-3.59411	-4.0362	-4.23151	0.328781	0.106894
-3.76051	-3.79538	-3.65703	-3.78984	-3.60927	-4.05436	-4.25084	0.22301	0.096367
-3.77643	-3.81176	-3.67262	-3.80611	-3.62444	-4.07251	-4.27017	0.17444	-0.06517
-3.79234	-3.82814	-3.68821	-3.82238	-3.63961	-4.09067	-4.2895	0.213831	0.098004
-3.80826	-3.84452	-3.7038	-3.83865	-3.65477	-4.10883	-4.30883	0.203867	-0.04799
-3.82418	-3.86089	-3.71939	-3.85492	-3.66994	-4.12698	-4.32816	0.054003	-0.01462
-3.8401	-3.87727	-3.73498	-3.87119	-3.68511	-4.14514	-4.3475	-0.05073	-0.09977
-3.85602	-3.89365	-3.75057	-3.88746	-3.70028	-4.1633	-4.36683	-0.13323	-0.125
-3.87194	-3.91003	-3.76616	-3.90372	-3.71544	-4.18145	-4.38616	-0.06706	-0.07816
-3.88786	-3.9264	-3.78175	-3.91999	-3.73061	-4.19961	-4.40549	-0.27301	-0.12611
-3.90378	-3.94278	-3.79733	-3.93626	-3.74578	-4.21777	-4.42482	-0.36262	-0.34678
-3.9197	-3.95916	-3.81292	-3.95253	-3.76094	-4.23592	-4.44415	-0.3691	-0.25509
-3.93562	-3.97554	-3.82851	-3.9688	-3.77611	-4.25408	-4.46348	-0.54288	-0.2926
-3.95154	-3.99192	-3.8441	-3.98507	-3.79128	-4.27224	-4.48282	-0.67988	-0.32716
-3.96746	-4.00829	-3.85969	-4.00134	-3.80645	-4.2904	-4.50215	-0.84414	-0.50887
-3.98338	-4.02467	-3.87528	-4.01761	-3.82161	-4.30855	-4.52148	-0.85112	-0.45095
-3.9993	-4.04105	-3.89087	-4.03388	-3.83678	-4.32671	-4.54081	-1.09998	-0.54303
-4.01522	-4.05743	-3.90646	-4.05015	-3.85195	-4.34487	-4.56014	-1.02383	-0.43636
-4.03114	-4.0738	-3.92205	-4.06642	-3.86711	-4.36302	-4.57947	-1.24576	-0.56289
-4.04706	-4.09018	-3.93764	-4.08269	-3.88228	-4.38118	-4.5988	-1.4176	-0.71171
-4.06298	-4.10656	-3.95323	-4.09896	-3.89745	-4.39934	-4.61814	-1.55605	-0.69263
-4.0789	-4.12294	-3.96882	-4.11523	-3.91261	-4.41749	-4.63747	-1.7905	-0.68186
-4.09482	-4.13931	-3.98441	-4.1315	-3.92778	-4.43565	-4.6568	-1.92158	-0.84831

$$y = -0.1688558642x - 0.9449888744$$

$$y = -0.1423794370x - 0.9701088840$$

$$y = -0.1385555597x - 1.0716609001$$

$$y = -0.1359343130x - 1.0245120986$$

$$y = -0.1450848443x - 1.0153827696$$

$$y = -0.1342263222x - 1.0362263641$$

$$y = -0.1496723326x - 1.0329323727$$

$$y = -0.1684833605x - 0.9862689726$$

0.2 to 19

1.146324 0.547599
-0.59873
0.573162

0.488672 0.547599 0.370239 0.393801 0.488256 0.413116

Flatness By Independent Port

Amplitude

Flatness	Flatness	Flatness	Flatness	Flatness	Flatness	J0-J1	J0-J2	J0-J3
J3	J4	J5	J6	J7	J8			
-2.28595	-2.51978	-2.37639	-2.36842	-2.70451	-2.76868	0	1.706387	1.795918
-0.23419	-0.20752	-0.19215	-0.15197	-0.31758	-0.30453	0	0.174027	0.125782
0.06001	0.081023	0.080203	0.124912	-0.02385	0.011563	0	0.101021	0.078127
0.139684	0.169276	0.150232	0.209257	0.06066	0.081593	0	0.086793	0.082263
0.167404	0.180143	0.175521	0.224053	0.098685	0.126912	0	0.075842	0.075231
0.17407	0.206902	0.184371	0.244939	0.104866	0.131121	0	0.073541	0.081389
0.177176	0.198468	0.190874	0.236088	0.10832	0.130939	0	0.077578	0.085353
0.184784	0.203109	0.182265	0.232255	0.117821	0.1234	0	0.051389	0.074249
0.172373	0.192369	0.182856	0.20821	0.102535	0.130669	0	0.061859	0.081668
0.168581	0.190322	0.183587	0.21488	0.110238	0.120759	0	0.05793	0.07811
0.15051	0.179301	0.159121	0.211525	0.102704	0.105139	0	0.045302	0.062066
0.142681	0.179922	0.167872	0.199273	0.088211	0.103775	0	0.059908	0.065433
0.152034	0.164502	0.155842	0.188785	0.062848	0.077171	0	0.036433	0.069112
0.117308	0.152042	0.145496	0.165609	0.057302	0.064686	0	0.031255	0.049172
0.119088	0.138018	0.133328	0.165472	0.061159	0.059555	0	0.032794	0.051412
0.101184	0.129014	0.129161	0.166659	0.048439	0.048123	0	0.041822	0.055403
0.119592	0.125267	0.13524	0.162438	0.032728	0.036794	0	0.035841	0.070104
0.099341	0.118476	0.110471	0.167317	0.039449	0.028298	0	0.01796	0.051428
0.061268	0.106707	0.097909	0.142935	0.008125	0.00405	0	0.033041	0.034742
0.075378	0.106417	0.111276	0.129557	0.006379	0.007946	0	0.043204	0.063787
0.047055	0.091883	0.08188	0.121393	-0.01366	-0.0215	0	0.030747	0.054972
0.038549	0.082952	0.075822	0.123143	-0.00425	-0.03097	0	0.010164	0.036188
0.037097	0.083143	0.069082	0.115294	-0.02664	-0.03355	0	0.020355	0.048275
0.025931	0.065556	0.073945	0.120343	-0.00865	-0.0221	0	0.01101	0.032748
0.026775	0.078697	0.054725	0.119271	-0.01609	-0.03456	0	0.027681	0.055151
-0.009	0.051394	0.042111	0.096365	-0.05478	-0.06478	0	0.012759	0.043776
-0.02086	0.031223	0.013416	0.075559	-0.05916	-0.08939	0	-0.0088	0.036853
-0.07074	-0.00564	-0.00472	0.034617	-0.08994	-0.10217	0	0.014441	0.033217
-0.1255	-0.05637	-0.06095	-0.00579	-0.13478	-0.14018	0	0.013518	0.017416
-0.16862	-0.10611	-0.11209	-0.07586	-0.19664	-0.21013	0	0.00023	0.020693
-0.23019	-0.16151	-0.1557	-0.13668	-0.23674	-0.25929	0	0.030483	0.012847
-0.24186	-0.18544	-0.17415	-0.14477	-0.27553	-0.28628	0	0.047885	0.031498
-0.23694	-0.2146	-0.14921	-0.15818	-0.28758	-0.30715	0	0.074083	0.046501
-0.20579	-0.19931	-0.15112	-0.15054	-0.2453	-0.26802	0	0.060393	0.043481
-0.18766	-0.18917	-0.14073	-0.13216	-0.2473	-0.25002	0	0.063182	0.060012
-0.1468	-0.14062	-0.09852	-0.10476	-0.19933	-0.21086	0	0.060196	0.053366
-0.09635	-0.11808	-0.06479	-0.06821	-0.15114	-0.15584	0	0.057014	0.080036
-0.10307	-0.13395	-0.08456	-0.09174	-0.14733	-0.14117	0	0.047234	0.07997
-0.06974	-0.10713	-0.06962	-0.07456	-0.1203	-0.1359	0	0.026667	0.079446
-0.0845	-0.11548	-0.09136	-0.11731	-0.1052	-0.12348	0	0.004429	0.041113
-0.06445	-0.09478	-0.07228	-0.10002	-0.0998	-0.08609	0	-0.00598	0.060451

-0.08743	-0.12643	-0.11946	-0.15046	-0.10708	-0.09481	0	-0.02179	0.052625
-0.09995	-0.14643	-0.1412	-0.18051	-0.12514	-0.12982	0	-0.02649	0.049677
-0.13795	-0.15092	-0.15239	-0.22682	-0.13217	-0.12536	0	-0.01624	0.032501
-0.13626	-0.19881	-0.17347	-0.24569	-0.1439	-0.13842	0	-0.03736	0.042501
-0.18801	-0.22466	-0.21706	-0.28952	-0.18521	-0.15688	0	-0.03127	0.006701
-0.1962	-0.24781	-0.22521	-0.32596	-0.20427	-0.17553	0	-0.03331	0.007505
-0.2031	-0.29077	-0.25463	-0.34741	-0.21513	-0.17668	0	-0.03172	0.007132
-0.19786	-0.2717	-0.25487	-0.34652	-0.21502	-0.19895	0	-0.03364	-0.02198
-0.21035	-0.32391	-0.23992	-0.36474	-0.22859	-0.18017	0	-0.08627	-0.08956
-0.1605	-0.28304	-0.21142	-0.3674	-0.19232	-0.15991	0	-0.0599	-0.02069
-0.1669	-0.2745	-0.21701	-0.34916	-0.17626	-0.15146	0	-0.06268	-0.04568
-0.12095	-0.21333	-0.17436	-0.2941	-0.11345	-0.08243	0	-0.06376	-0.05261
-0.10118	-0.17836	-0.17307	-0.26845	-0.0976	-0.0613	0	-0.11109	-0.07017
-0.10769	-0.19374	-0.19243	-0.27864	-0.07411	-0.06326	0	-0.10817	-0.09769
-0.06933	-0.13408	-0.10897	-0.24067	-0.05108	0.008175	0	-0.1007	-0.08478
-0.0832	-0.13418	-0.10934	-0.23013	-0.01599	0.029423	0	-0.09691	-0.10497
-0.07524	-0.12406	-0.09671	-0.22931	-0.01389	0.027978	0	-0.11194	-0.10527
-0.04226	-0.10916	-0.08248	-0.19982	0.010609	0.065006	0	-0.10845	-0.1014
-0.07374	-0.10525	-0.06702	-0.1986	0.027498	0.074558	0	-0.11297	-0.1295
-0.06095	-0.07365	-0.06953	-0.19297	0.019266	0.06659	0	-0.10528	-0.10782
-0.04542	-0.07117	-0.05978	-0.163	0.035631	0.084021	0	-0.11239	-0.11268
-0.05154	-0.06829	-0.05187	-0.15468	0.040166	0.077995	0	-0.12139	-0.1287
-0.06489	-0.03713	-0.0188	-0.12725	0.059161	0.1093	0	-0.13274	-0.15819
-0.04888	-0.04211	-0.04357	-0.10705	0.066208	0.094351	0	-0.08799	-0.10285
-0.08216	-0.03746	-0.03079	-0.09587	0.049297	0.083237	0	-0.12092	-0.14743
-0.03254	-0.01402	-0.01137	-0.09974	0.103922	0.076679	0	-0.10994	-0.1137
-0.06677	-0.04651	-0.02293	-0.10268	0.07438	0.063869	0	-0.09979	-0.12851
-0.05207	-0.03613	-0.02156	-0.11822	0.06734	0.07652	0	-0.07237	-0.09087
-0.06874	-0.03351	0.004299	-0.0894	0.059056	0.051116	0	-0.04592	-0.09668
-0.03107	0.008027	0.008812	-0.08335	0.100093	0.045336	0	-0.12006	-0.11174
-0.06872	-0.027	-0.01746	-0.11466	0.069044	0.023307	0	-0.07598	-0.10392
-0.02642	-0.01313	0.003835	-0.0675	0.089443	0.013589	0	-0.05221	-0.05867
-0.01299	-0.0088	0.020862	-0.04306	0.113546	0.013849	0	-0.03736	-0.03495
-0.00731	0.011751	0.006837	-0.03902	0.12377	0.027752	0	-0.08987	-0.06769
-0.00603	0.014732	-0.00474	-0.03793	0.094935	-0.00772	0	-0.03203	-0.03734
-0.0356	-0.01161	-0.02328	-0.0546	0.116131	-0.02034	0	-0.03822	-0.03477
-0.04789	0.001962	0.020296	-0.03359	0.083959	-0.03403	0	-0.01324	-0.0217
-0.04306	-0.01309	-0.00787	-0.06463	0.103973	-0.06159	0	0.003181	-0.01581
-0.04179	0.006588	-0.01155	-0.03077	0.110975	-0.05341	0	0.008302	0.00976
-0.02135	-0.01131	-0.00696	-0.0403	0.120979	-0.05649	0	0.049071	0.038978
-0.07394	-0.02532	-0.01729	-0.03641	0.139542	-0.09045	0	0.063812	0.039665
-0.04576	-0.00353	0.023017	-0.00987	0.122735	-0.07859	0	0.083377	0.051979
-0.09188	-0.01083	-0.04326	-0.04146	0.109898	-0.09498	0	0.101879	0.053348
-0.1023	-0.03102	-0.05327	-0.01251	0.100826	-0.11638	0	0.093618	0.052842
-0.10722	-0.04588	-0.02332	-0.02286	0.141367	-0.09237	0	0.155009	0.098276
-0.13237	-0.03863	-0.03985	-0.00442	0.120102	-0.14542	0	0.095518	0.064154
-0.11861	-0.0286	-0.04325	0.044963	0.098537	-0.06502	0	0.171824	0.108683
-0.14232	-0.05588	-0.09799	-0.01991	0.093303	-0.11149	0	0.19157	0.130976
-0.1343	-0.07258	-0.10467	-0.00712	0.090986	-0.10604	0	0.223654	0.159284
-0.13099	-0.0892	-0.08775	0.031442	0.114894	-0.08124	0	0.263373	0.12988
-0.1378	-0.05251	-0.09069	0.025659	0.107263	-0.06138	0	0.22197	0.123762
-0.11791	-0.00187	-0.02451	0.061599	0.150767	0.001511	0	0.232201	0.136908
-0.08895	-0.0029	-0.03828	0.074618	0.125202	0.001255	0	0.290416	0.184945
-0.11165	-0.02217	-0.04007	0.041569	0.113364	0.010299	0	0.289938	0.18172
-0.06623	-0.01696	-0.06465	0.042214	0.085864	0.053947	0	0.362527	0.244327

-0.08682	0.012317	0.016234	0.0382	0.089886	0.04231	0	0.276397	0.198587
-0.08922	0.015772	-0.0241	0.061621	0.07246	0.07383	0	0.268512	0.190776
-0.09645	-0.03207	-0.05125	0.010922	0.0733	0.071728	0	0.340696	0.232694
0.010755	0.034175	0.042506	0.109305	0.104973	0.171576	0	0.333162	0.253904
-0.05522	-0.03199	0.001606	0.048173	0.003437	0.088553	0	0.384869	0.288205
-0.0229	-0.0532	-0.01211	0.027801	0.023753	0.089977	0	0.355253	0.279256
0.012047	-0.00395	0.038661	0.057448	0.017792	0.232676	0	0.409652	0.305618
-0.05604	-0.03399	0.027406	0.049418	0.003221	0.142166	0	0.354845	0.278148
0.00915	-0.01291	0.040623	0.055964	-0.00164	0.19418	0	0.354774	0.288424
-0.02785	-0.02942	0.076416	0.076609	-0.04046	0.178161	0	0.365683	0.242037
0.070988	0.053672	0.086208	0.089627	-0.0508	0.225719	0	0.350101	0.332268
0.060213	0.013315	0.10597	0.085985	-0.00192	0.236434	0	0.419529	0.372579
-0.0062	-0.03632	0.071149	0.034372	-0.05454	0.14814	0	0.401934	0.281623
0.076594	0.048779	0.116948	0.086874	-0.05272	0.235257	0	0.375417	0.337764
0.049452	-0.00793	0.105516	0.086917	-0.09501	0.183329	0	0.332816	0.344675
0.083361	0.030395	0.071912	0.082728	-0.08714	0.159632	0	0.367829	0.427963
0.131689	0.055621	0.192192	0.128037	0.004292	0.242812	0	0.37791	0.338142
0.085388	0.02211	0.124007	0.074382	0.015582	0.196028	0	0.443907	0.374329
0.110588	0.10086	0.209531	0.119042	-0.0111	0.271354	0	0.438714	0.375723
0.143234	0.087224	0.159067	0.114129	-0.03683	0.214503	0	0.430379	0.428052
0.185277	0.119634	0.203177	0.146727	-0.00753	0.249273	0	0.417872	0.434179
0.320701	0.137256	0.219464	0.16345	0.039659	0.215885	0	0.465971	0.567809
0.148278	0.129476	0.238043	0.138745	0.023794	0.273652	0	0.38207	0.375909
0.259812	0.181455	0.283113	0.247193	0.06481	0.224064	0	0.420708	0.464692
0.209018	0.198651	0.293977	0.259343	0.058757	0.279395	0	0.370129	0.395548
0.287236	0.221482	0.309947	0.248857	0.077935	0.277591	0	0.398943	0.51079
0.241531	0.274502	0.29623	0.212377	0.07944	0.284244	0	0.454074	0.449741
0.285672	0.268642	0.313951	0.275855	0.093264	0.220162	0	0.419565	0.43298
0.278896	0.336037	0.369843	0.290038	0.172315	0.270403	0	0.377617	0.417573
0.30064	0.310442	0.313003	0.271681	0.11806	0.267878	0	0.425845	0.476277
0.301279	0.304323	0.310171	0.320046	0.20245	0.269601	0	0.407472	0.407852
0.371423	0.341378	0.321034	0.376143	0.18191	0.281945	0	0.351596	0.530568
0.339074	0.397209	0.288052	0.259066	0.17452	0.264475	0	0.449272	0.504872
0.309318	0.396829	0.345634	0.360505	0.222847	0.26695	0	0.366266	0.481472
0.346133	0.373649	0.337554	0.386455	0.217496	0.279954	0	0.427613	0.478418
0.404571	0.396421	0.370239	0.393801	0.240194	0.327964	0	0.398083	0.508315
0.349115	0.306294	0.255063	0.341885	0.197177	0.257592	0	0.330416	0.494789
0.389914	0.376332	0.320488	0.392576	0.245345	0.273203	0	0.417105	0.550464
0.330542	0.33261	0.265807	0.281653	0.202519	0.281311	0	0.399263	0.517255
0.3168	0.332798	0.236328	0.371088	0.225157	0.213119	0	0.355702	0.455494
0.342805	0.376432	0.210997	0.320576	0.197113	0.272375	0	0.365843	0.518178
0.312406	0.343096	0.229181	0.308318	0.221401	0.213659	0	0.42738	0.460904
0.298704	0.351737	0.217619	0.314871	0.176626	0.248028	0	0.396361	0.477055
0.282501	0.283904	0.163537	0.349491	0.230904	0.231151	0	0.3267	0.429941
0.417107	0.36338	0.269341	0.307414	0.324105	0.298021	0	0.330806	0.554235
0.367696	0.375125	0.179343	0.355995	0.241141	0.181784	0	0.398639	0.582443
0.388608	0.411722	0.114389	0.342366	0.252753	0.222412	0	0.353827	0.552928
0.401859	0.337926	0.118811	0.27489	0.192729	0.196478	0	0.306949	0.555095
0.422859	0.380232	-0.00298	0.222589	0.268462	0.167079	0	0.365601	0.645196
0.372374	0.350777	0.111011	0.315944	0.226905	0.185498	0	0.311663	0.536629
0.408443	0.365391	0.119095	0.324313	0.278091	0.231356	0	0.374425	0.60738
0.407354	0.415417	0.134713	0.322576	0.298177	0.238486	0	0.340931	0.570825
0.467728	0.478292	0.128207	0.384183	0.400584	0.331842	0	0.293151	0.548562
0.38146	0.332154	0.051535	0.274916	0.348368	0.171777	0	0.355793	0.686167
0.374698	0.547599	0.046481	0.324533	0.329943	0.257705	0	0.364029	0.557472

0.459616	0.379507	0.08679	0.339795	0.403439	0.303569	0	0.348793	0.609323
0.474133	0.430861	0.097374	0.32501	0.44752	0.307928	0	0.320797	0.600487
0.350307	0.373622	0.077956	0.296845	0.316353	0.227556	0	0.336683	0.604046
0.452714	0.380098	-0.01146	0.326396	0.31501	0.319218	0	0.325679	0.625844
0.488672	0.415205	0.052021	0.256023	0.380573	0.319309	0	0.317922	0.721585
0.463234	0.372459	0.087083	0.296924	0.397013	0.354343	0	0.312926	0.586569
0.430632	0.274077	0.148631	0.290012	0.398939	0.326874	0	0.227561	0.546125
0.438693	0.277856	0.134013	0.234618	0.367664	0.309848	0	0.242426	0.569293
0.380224	0.189427	0.122606	0.254197	0.364716	0.304822	0	0.134492	0.473169
0.422893	0.184894	0.103259	0.15618	0.333926	0.338145	0	0.309088	0.575318
0.453968	0.237444	0.154931	0.276229	0.43013	0.340204	0	0.263014	0.5857
0.378867	0.148858	0.135781	0.220257	0.332687	0.320499	0	0.213378	0.47364
0.429989	0.162424	0.264918	0.217087	0.450341	0.413116	0	0.191637	0.416685
0.354186	0.086062	0.196408	0.209692	0.379982	0.32555	0	0.238102	0.456606
0.344392	0.169228	0.272016	0.114256	0.377106	0.265014	0	0.284096	0.524891
0.246269	0.040092	0.215206	0.111992	0.344211	0.275509	0	0.297787	0.438426
0.237378	-0.0005	0.152939	0.087619	0.279832	0.268039	0	0.181757	0.332755
0.230503	0.058131	0.189033	0.082775	0.392249	0.301664	0	0.222097	0.325916
0.274695	0.144612	0.268881	0.124113	0.488256	0.329449	0	0.207938	0.263146
0.090137	0.073449	0.177055	0.041559	0.364099	0.301441	0	0.284168	0.253958
0.153843	0.119307	0.219991	0.047434	0.442089	0.239464	0	0.09982	0.11914
0.168239	0.141723	0.244724	0.092015	0.409241	0.306549	0	0.237128	0.203894
0.123155	0.110868	0.164544	0.02268	0.359034	0.252095	0	0.262236	0.2438
0.090291	0.084087	0.126773	-0.03296	0.46876	0.180891	0	0.337634	0.249646
0.00524	0.041605	0.12312	-0.0633	0.400419	0.156827	0	0.331806	0.18065
0.035347	0.054856	0.247715	-0.02963	0.390321	0.169226	0	0.263911	0.2086
0.034728	0.050714	0.100202	-0.05876	0.406397	0.097421	0	0.47274	0.30308
0.035162	0.094039	0.065021	-0.03188	0.383347	0.169786	0	0.321347	0.215196
-0.00476	0.076582	0.067807	-0.07595	0.400336	0.067664	0	0.420292	0.284288
-0.10276	0.009326	0.005771	-0.13849	0.304149	0.031153	0	0.311026	0.238104
0.03781	0.062012	0.095649	0.010544	0.317098	-0.07386	0	0.43851	0.342522
-0.10268	0.097824	-0.08768	-0.17847	0.236399	0.030032	0	0.306185	0.215235
-0.0767	0.039523	-0.06488	2.64E-06	0.202166	0.041418	0	0.493112	0.39433
-0.18828	-0.14252	-0.20221	-0.1762	0.12395	-0.14441	0	0.516404	0.390718
-0.20911	-0.17559	-0.13785	-0.18027	0.004453	-0.17106	0	0.577376	0.455629
-0.18545	-0.18161	-0.15671	-0.17038	-0.04596	-0.16604	0	0.561739	0.416361
-0.25208	-0.27377	-0.23003	-0.26554	-0.23597	-0.30161	0	0.723442	0.558936
-0.49471	-0.45673	-0.28515	-0.31538	-0.56397	-0.39937	0	0.596091	0.40916
-0.50836	-0.37031	-0.27965	-0.27586	-0.53501	-0.4561	0	0.697952	0.405231
-0.48576	-0.44232	-0.32352	-0.39127	-0.59873	-0.52219	0	0.837923	0.604849
-0.66211	-0.64802	-0.38338	-0.51818	-0.8222	-0.65078	0	0.944069	0.568749
-0.87489	-0.75154	-0.47854	-0.62201	-1.00134	-0.88696	0	0.930311	0.523459
-0.88387	-0.73264	-0.48221	-0.63437	-1.09612	-0.91909	0	0.998919	0.524712
-0.9655	-0.79162	-0.66615	-0.7065	-1.21153	-1.02683	0	1.159398	0.695181
-0.91443	-0.69879	-0.51539	-0.58763	-1.15515	-0.85817	0	1.193621	0.673345
-1.01601	-0.89093	-0.64745	-0.68267	-1.43577	-1.14787	0	1.292723	0.796936
-1.22528	-1.02688	-0.81996	-0.86515	-1.63907	-1.28799	0	1.319444	0.762752
-1.1878	-1.09668	-0.79375	-0.92856	-1.72262	-1.2961	0	1.480675	0.941928
-1.38791	-1.19905	-0.99173	-0.81308	-1.71819	-1.53715	0	1.729594	0.979507
-1.38062	-1.20206	-1.01572	-1.10229	-2.03174	-1.62732	0	1.697931	1.121123

Altitude Balance (Ref J1-J2)

Phase Balance

J0-J4	J0-J5	J0-J6	J0-J7	J0-J8	J0-J1-Ref	J0-J2	J0-J3	J0-J4
1.55934	1.691698	1.682855	1.436856	1.386459	0.011889	-2.69392	-3.0809	-0.15351
0.150493	0.154149	0.178618	0.100117	0.125761	0.006801	-0.15631	0.417261	0.702238
0.097972	0.084759	0.114861	0.050213	0.097044	-0.00037	-0.15261	0.239732	0.409242
0.111475	0.079358	0.124878	0.057403	0.088582	0.001369	-0.1727	0.114054	0.245764
0.088378	0.070003	0.106133	0.058897	0.096197	0.005873	-0.20122	0.018918	0.141739
0.115418	0.078453	0.127722	0.062791	0.096944	0.002142	-0.23823	-0.06788	0.046567
0.10863	0.085922	0.120941	0.065325	0.094666	-0.0008	-0.27235	-0.15476	-0.02706
0.095347	0.058709	0.099606	0.054335	0.065461	0.002397	-0.30469	-0.2269	-0.09258
0.105225	0.079237	0.096601	0.057099	0.089606	-0.00342	-0.34392	-0.31327	-0.16476
0.104201	0.08031	0.104716	0.063257	0.076976	-0.00075	-0.36956	-0.38458	-0.22787
0.095996	0.05798	0.104599	0.05597	0.06043	-0.00389	-0.40661	-0.46927	-0.29596
0.108599	0.078033	0.104752	0.050893	0.067306	0.003137	-0.43073	-0.53582	-0.35406
0.088294	0.060439	0.089801	0.018078	0.032075	-0.00195	-0.47492	-0.62421	-0.42545
0.091408	0.064986	0.082621	0.025539	0.031422	0.002683	-0.51063	-0.69765	-0.48939
0.078634	0.053387	0.084156	0.028078	0.023799	-0.01079	-0.5576	-0.79675	-0.5773
0.092312	0.071222	0.108448	0.035472	0.031307	-0.00022	-0.58029	-0.862	-0.63946
0.085646	0.073701	0.10173	0.014275	0.013317	-0.00705	-0.62297	-0.94324	-0.73353
0.081219	0.050617	0.109395	0.020793	0.003443	-0.0076	-0.67293	-1.03442	-0.82726
0.091625	0.059549	0.107611	0.009076	-0.00237	-0.0075	-0.71717	-1.11235	-0.91056
0.107058	0.087959	0.110379	0.020485	0.013506	-0.00821	-0.76608	-1.19805	-1.00959
0.11282	0.078178	0.122932	0.018173	0.000617	-0.01426	-0.8162	-1.27724	-1.11468
0.0944	0.061951	0.115616	0.015531	-0.02209	-0.00454	-0.87017	-1.35819	-1.21759
0.108917	0.068857	0.122517	0.004894	-0.01408	-0.00774	-0.92751	-1.44163	-1.32747
0.087758	0.069467	0.124415	0.016747	-0.00995	-0.01138	-0.99325	-1.5238	-1.44041
0.123246	0.071914	0.146112	0.02909	-0.0038	-0.00287	-1.052	-1.61587	-1.55411
0.121134	0.08381	0.148819	0.013023	-0.01257	-0.00924	-1.14454	-1.742	-1.70138
0.10669	0.060163	0.134163	0.011802	-0.0352	-0.00795	-1.28811	-1.95689	-1.9414
0.116849	0.088374	0.140667	0.02548	-0.0047	-0.00626	-1.54498	-2.31157	-2.29909
0.10587	0.071208	0.14043	0.017821	-0.0067	-0.00841	-1.86813	-2.79753	-2.80242
0.103324	0.066582	0.117977	0.000581	-0.0332	-0.0035	-2.17581	-3.29028	-3.29398
0.102433	0.0768	0.112081	0.012421	-0.0316	-0.01355	-2.36802	-3.61755	-3.63942
0.109605	0.088777	0.135529	0.002174	-0.03122	-0.01099	-2.44306	-3.74492	-3.73315
0.091321	0.123907	0.133412	-0.00157	-0.04496	-0.00622	-2.45532	-3.72757	-3.6865
0.073231	0.087937	0.108101	0.004765	-0.04294	0.003222	-2.4828	-3.70207	-3.64575
0.082559	0.096844	0.126088	-0.00061	-0.0295	-0.0059	-2.52186	-3.71263	-3.62974
0.084389	0.091644	0.107184	-0.00194	-0.04081	-0.00529	-2.57983	-3.76163	-3.66345
0.083933	0.101704	0.121164	0.020698	-0.01252	-0.00559	-2.63191	-3.83164	-3.72672
0.075511	0.088693	0.1055	0.029385	0.005852	-0.00642	-2.71389	-3.94058	-3.83943
0.069269	0.069889	0.090047	0.020781	-0.02568	-0.01163	-2.77399	-4.05443	-3.92661
0.038132	0.024695	0.02493	0.010534	-0.03979	-0.00903	-2.84892	-4.17582	-4.03598
0.058909	0.043158	0.042713	0.013439	-0.00607	-0.01429	-2.93013	-4.3253	-4.18359

0.043201	0.011243	0.008638	0.01953	-0.00258	-0.01699	-3.03073	-4.49575	-4.34378
0.033566	-0.00081	-0.01063	0.009261	-0.03098	-0.00626	-3.16022	-4.69679	-4.54389
0.050684	0.008929	-0.0349	0.021281	-0.00865	-0.0156	-3.34385	-4.95264	-4.79494
0.011884	-0.00374	-0.04425	0.016075	-0.01635	-0.01648	-3.5491	-5.23308	-5.06648
0.00278	-0.03127	-0.07091	-0.01106	-0.02181	-0.00983	-3.71223	-5.44612	-5.29581
-0.01059	-0.03032	-0.09716	-0.02291	-0.03443	-0.01894	-3.80622	-5.61631	-5.43343
-0.04624	-0.0531	-0.11087	-0.02902	-0.03201	-0.01231	-3.84226	-5.70014	-5.46551
-0.06073	-0.0876	-0.14312	-0.06504	-0.09158	-0.01769	-3.83312	-5.75075	-5.45098
-0.16724	-0.12762	-0.21523	-0.13549	-0.13085	-0.01551	-3.79034	-5.76194	-5.38818
-0.10657	-0.07999	-0.19765	-0.08198	-0.09453	-0.01291	-3.73665	-5.78493	-5.32427
-0.11582	-0.10406	-0.19679	-0.08627	-0.10761	-0.01026	-3.67611	-5.7745	-5.2452
-0.10675	-0.11418	-0.1934	-0.07813	-0.09442	-0.01726	-3.61026	-5.7872	-5.18744
-0.10832	-0.15012	-0.20387	-0.10138	-0.11357	-0.01205	-3.55407	-5.8014	-5.13027
-0.14392	-0.19037	-0.23386	-0.10068	-0.13949	-0.01998	-3.46761	-5.77825	-5.07094
-0.10893	-0.13226	-0.22012	-0.10489	-0.09646	-0.01254	-3.39272	-5.74751	-5.01036
-0.11455	-0.13884	-0.21469	-0.07789	-0.08448	-0.02458	-3.31594	-5.72258	-4.94057
-0.11191	-0.13436	-0.22092	-0.08583	-0.09715	-0.01568	-3.238	-5.68246	-4.88303
-0.12532	-0.14914	-0.21933	-0.09222	-0.09218	-0.02248	-3.16014	-5.64615	-4.82637
-0.11726	-0.1302	-0.21353	-0.07374	-0.08221	-0.03267	-3.09004	-5.60524	-4.76821
-0.07597	-0.1237	-0.19779	-0.07485	-0.08424	-0.02333	-3.0298	-5.54457	-4.69716
-0.09309	-0.13424	-0.187	-0.08066	-0.09015	-0.02105	-2.98066	-5.51535	-4.66601
-0.09932	-0.13611	-0.18737	-0.0878	-0.10903	-0.02049	-2.94371	-5.4867	-4.62281
-0.08352	-0.11908	-0.17487	-0.08673	-0.09682	-0.03132	-2.92428	-5.45714	-4.60413
-0.04837	-0.10441	-0.11413	-0.04213	-0.07539	-0.03213	-2.90448	-5.42046	-4.58709
-0.05424	-0.10282	-0.11304	-0.07212	-0.10076	-0.03157	-2.88338	-5.38915	-4.56229
-0.0459	-0.09919	-0.13159	-0.03517	-0.12616	-0.02949	-2.85703	-5.36278	-4.54013
-0.05817	-0.0912	-0.11389	-0.04706	-0.12249	-0.01952	-2.82119	-5.31293	-4.49982
-0.02408	-0.0668	-0.10529	-0.03295	-0.08987	-0.03505	-2.79731	-5.27637	-4.4758
-0.00981	-0.02997	-0.0644	-0.03215	-0.10737	-0.02526	-2.7372	-5.23162	-4.40625
-0.0202	-0.07807	-0.10986	-0.04561	-0.16882	-0.0162	-2.66386	-5.16456	-4.34021
-0.00899	-0.05878	-0.0945	-0.03298	-0.14835	-0.03086	-2.60874	-5.1357	-4.30724
0.008631	-0.03441	-0.04317	-0.0114	-0.15805	-0.02766	-2.55205	-5.09024	-4.26322
0.024046	-0.00699	-0.00723	0.021211	-0.15046	-0.03022	-2.47999	-5.06059	-4.22968
0.006966	-0.05932	-0.04039	-0.00876	-0.17793	-0.03078	-2.43363	-5.04747	-4.20158
0.039795	-0.04173	-0.00903	-0.01031	-0.18729	-0.02965	-2.36633	-5.04041	-4.18268
0.046376	-0.02803	0.007643	0.041241	-0.17073	-0.04253	-2.35587	-5.06569	-4.20801
0.086106	0.041025	0.055235	0.032657	-0.16201	-0.03416	-2.33271	-5.07849	-4.20138
0.072905	0.014026	0.026462	0.051956	-0.19145	-0.0313	-2.33085	-5.14034	-4.25137
0.117663	0.03475	0.085829	0.081469	-0.16194	-0.03251	-2.35461	-5.20049	-4.30953
0.109325	0.04822	0.086279	0.09847	-0.1592	-0.03986	-2.39662	-5.28234	-4.40103
0.149383	0.091284	0.144662	0.168531	-0.14283	-0.04078	-2.45288	-5.38673	-4.51003
0.156098	0.115828	0.156546	0.134079	-0.14979	-0.02749	-2.5376	-5.4833	-4.63989
0.197083	0.097151	0.173658	0.166956	-0.12164	-0.03434	-2.62536	-5.59216	-4.78326
0.187596	0.097172	0.213743	0.166023	-0.13608	-0.035	-2.71577	-5.69714	-4.93112
0.223879	0.177575	0.254949	0.255137	-0.06467	-0.0278	-2.78919	-5.79815	-5.0734
0.222943	0.152181	0.265628	0.223121	-0.12964	-0.04268	-2.88884	-5.88339	-5.21479
0.264525	0.179659	0.346988	0.230541	-0.02144	-0.02236	-2.98713	-5.98435	-5.36229
0.284037	0.171023	0.329333	0.269532	-0.02485	-0.02843	-3.06498	-6.0457	-5.49739
0.288418	0.184751	0.363625	0.285729	-0.00207	-0.03461	-3.13651	-6.10961	-5.62341
0.239872	0.169065	0.37068	0.275142	-0.01294	-0.04167	-3.21867	-6.19809	-5.77414
0.27804	0.16692	0.366802	0.266426	0.004664	-0.03726	-3.27648	-6.25863	-5.91716
0.322717	0.226463	0.397203	0.301401	0.057853	-0.01007	-3.32512	-6.28333	-6.01785
0.341553	0.231874	0.430506	0.29313	0.073716	-0.03051	-3.38615	-6.33156	-6.13376
0.342556	0.24967	0.418147	0.298992	0.099286	-0.03753	-3.42145	-6.36133	-6.23085
0.365737	0.24239	0.437191	0.286902	0.157168	-0.04938	-3.45076	-6.37828	-6.30957

0.370653	0.298229	0.409238	0.263994	0.117427	-0.04257	-3.45411	-6.37869	-6.38064
0.369488	0.252592	0.428462	0.239381	0.140586	-0.03002	-3.48977	-6.39613	-6.39638
0.371581	0.274694	0.428118	0.287587	0.184675	-0.03521	-3.47475	-6.38613	-6.39787
0.352617	0.282566	0.441716	0.231485	0.195573	-0.02605	-3.47242	-6.36915	-6.39384
0.387512	0.342047	0.482069	0.228444	0.20987	-0.02199	-3.44302	-6.34308	-6.3549
0.325826	0.287176	0.421642	0.205715	0.167076	-0.02756	-3.37499	-6.2508	-6.28111
0.367282	0.329466	0.443913	0.189388	0.298233	-0.03349	-3.34578	-6.20936	-6.20767
0.378644	0.358936	0.477709	0.213654	0.245386	-0.04366	-3.24114	-6.12573	-6.07237
0.345601	0.317347	0.430553	0.152097	0.239533	-0.03424	-3.14622	-6.0217	-5.9408
0.320489	0.343863	0.443023	0.102111	0.211175	-0.03091	-3.0451	-5.92189	-5.80496
0.395762	0.345155	0.448642	0.081386	0.247171	-0.04997	-2.97195	-5.85172	-5.64721
0.40728	0.416111	0.497297	0.179573	0.306017	-0.00988	-2.84081	-5.69046	-5.49579
0.333892	0.356855	0.422353	0.100634	0.190229	-0.03753	-2.69442	-5.55887	-5.28789
0.393125	0.376108	0.449412	0.074024	0.247737	-0.05367	-2.56482	-5.40898	-5.12915
0.371252	0.398836	0.484718	0.064009	0.226908	-0.04395	-2.47258	-5.31505	-4.96874
0.459749	0.41472	0.531119	0.119478	0.249636	-0.02126	-2.31818	-5.16412	-4.76708
0.347614	0.396959	0.439489	0.070978	0.191713	-0.08254	-2.22402	-5.05513	-4.5847
0.39738	0.41137	0.469533	0.162977	0.224464	-0.03718	-2.09472	-4.94057	-4.40948
0.453111	0.473195	0.491597	0.110708	0.273029	-0.04247	-1.98217	-4.80197	-4.2648
0.459947	0.442523	0.507579	0.10288	0.232908	-0.0571	-1.88768	-4.7093	-4.12595
0.457229	0.450825	0.505471	0.094491	0.228808	-0.06641	-1.7688	-4.55846	-3.97323
0.473845	0.465426	0.52161	0.138104	0.190673	-0.04057	-1.66569	-4.4677	-3.82661
0.447376	0.464635	0.478638	0.100982	0.226008	-0.02861	-1.60772	-4.38925	-3.73223
0.477393	0.487063	0.565547	0.11747	0.150717	-0.0384	-1.51688	-4.2671	-3.56732
0.477027	0.479684	0.560557	0.091286	0.184743	-0.04508	-1.42899	-4.17777	-3.44965
0.537671	0.532786	0.588306	0.14571	0.217011	-0.0349	-1.36109	-4.09292	-3.36387
0.576135	0.503834	0.537693	0.130091	0.205366	-0.06986	-1.34604	-4.03678	-3.31152
0.510161	0.46076	0.541479	0.081234	0.077428	-0.05965	-1.25544	-3.91892	-3.21179
0.569713	0.508129	0.548241	0.149874	0.116083	-0.04482	-1.22708	-3.85629	-3.18117
0.581866	0.488357	0.568056	0.130801	0.147565	-0.04926	-1.1605	-3.78644	-3.13239
0.507472	0.416569	0.548568	0.144348	0.077271	-0.03745	-1.1088	-3.69643	-3.10313
0.597887	0.480113	0.658447	0.174601	0.139232	-0.05222	-1.11568	-3.63116	-3.08836
0.661159	0.453891	0.549232	0.172083	0.12546	-0.04223	-1.05605	-3.56106	-3.10485
0.667924	0.517938	0.65824	0.224988	0.131339	-0.0519	-1.00614	-3.52896	-3.08527
0.605662	0.470096	0.64553	0.177989	0.10152	-0.03323	-0.95369	-3.41832	-3.05571
0.600682	0.474348	0.625546	0.170366	0.118035	-0.05129	-0.90637	-3.36822	-3.07295
0.553273	0.40121	0.616771	0.1675	0.08664	-0.0151	-0.8624	-3.30388	-3.04455
0.638976	0.481619	0.683549	0.228766	0.114173	-0.07795	-0.81078	-3.27726	-3.08788
0.622204	0.453208	0.599998	0.210322	0.14549	-0.03488	-0.76432	-3.23875	-3.05153
0.575162	0.375819	0.642626	0.183163	0.026325	-0.05764	-0.7459	-3.24121	-3.08297
0.656263	0.387274	0.630003	0.190019	0.119306	-0.04656	-0.65014	-3.17839	-3.04899
0.596841	0.378692	0.592082	0.185653	0.030762	-0.05235	-0.62995	-3.18096	-3.10292
0.636122	0.39709	0.629697	0.168951	0.092029	-0.05281	-0.59057	-3.1943	-3.14331
0.538167	0.312205	0.634617	0.190539	0.041288	-0.07145	-0.52566	-3.1384	-3.10226
0.608119	0.407805	0.583438	0.271649	0.094892	-0.07413	-0.50817	-3.19738	-3.16046
0.698272	0.395535	0.71085	0.264525	0.05332	-0.07251	-0.46037	-3.22324	-3.20194
0.68523	0.280262	0.648004	0.223931	0.040568	-0.05966	-0.39393	-3.23533	-3.23491
0.601139	0.273709	0.570655	0.151044	0.000596	-0.0674	-0.3838	-3.23254	-3.26566
0.713334	0.221125	0.588665	0.294099	0.037344	-0.09435	-0.38301	-3.33332	-3.33503
0.626585	0.277143	0.625149	0.19268	-0.00527	-0.04529	-0.33545	-3.38107	-3.39022
0.676668	0.320015	0.66941	0.276768	0.072312	-0.03423	-0.29281	-3.42326	-3.4252
0.692017	0.300277	0.633418	0.25961	0.041024	-0.05473	-0.29089	-3.51704	-3.56311
0.673043	0.211241	0.613598	0.2776	0.048789	-0.04798	-0.25753	-3.58164	-3.63273
0.751566	0.35855	0.729415	0.447478	0.109643	-0.06046	-0.17583	-3.63687	-3.71995
0.845867	0.231671	0.658309	0.305341	0.070684	-0.08161	-0.13447	-3.72227	-3.80536

0.645496	0.239021	0.641716	0.343991	0.080528	-0.03069	-0.02144	-3.76152	-3.8863
0.674285	0.22636	0.604788	0.36294	0.05858	-0.06545	-0.00141	-3.84896	-3.98426
0.745219	0.334434	0.705218	0.357378	0.102639	-0.05604	0.116372	-3.90346	-4.07179
0.671876	0.164514	0.655372	0.273647	0.110739	-0.05304	0.219519	-3.87288	-4.01634
0.767554	0.28789	0.645992	0.397215	0.167659	-0.06893	0.336921	-3.94207	-4.13229
0.616017	0.213482	0.578525	0.302296	0.090161	-0.04406	0.525284	-3.93886	-4.09485
0.510582	0.267296	0.564982	0.294601	0.051896	-0.06791	0.66881	-3.92288	-4.06402
0.530256	0.267893	0.525905	0.276654	0.047023	-0.06986	0.812634	-3.94682	-4.06382
0.40496	0.218939	0.50904	0.234272	0.001388	-0.07739	1.020102	-3.78119	-3.84377
0.460696	0.25918	0.471714	0.261184	0.091238	-0.06253	1.224856	-3.72272	-3.71634
0.493341	0.290267	0.57228	0.334914	0.06965	-0.07088	1.402244	-3.60013	-3.54816
0.368584	0.234266	0.48056	0.198734	0.010032	-0.06685	1.655074	-3.438	-3.3502
0.274861	0.255434	0.370523	0.206532	-0.00838	-0.06238	1.878531	-3.274	-3.10594
0.315012	0.302756	0.480064	0.250118	0.016823	-0.02236	2.11062	-3.03793	-2.83049
0.477045	0.45655	0.463917	0.32354	0.031411	-0.07837	2.312199	-2.84394	-2.54066
0.360355	0.411507	0.474522	0.300525	0.050611	-0.04537	2.601216	-2.52232	-2.1243
0.223772	0.252567	0.354579	0.137586	-0.05659	-0.08733	2.806767	-2.3133	-1.79862
0.283228	0.288806	0.350982	0.248261	-0.02588	-0.05746	3.043593	-1.97762	-1.44388
0.263534	0.261799	0.286567	0.235526	-0.10802	-0.05734	3.324183	-1.63625	-1.04031
0.368529	0.345451	0.380595	0.28496	0.036391	-0.03979	3.573018	-1.30115	-0.6271
0.216651	0.189971	0.189156	0.162647	-0.22706	-0.04963	3.807461	-1.00066	-0.26725
0.310215	0.285171	0.305306	0.198379	-0.09257	-0.05586	3.977721	-0.62829	0.048032
0.365138	0.290089	0.322172	0.231382	-0.06499	-0.09153	4.269545	-0.30246	0.428021
0.377855	0.291136	0.306453	0.378039	-0.10044	-0.06656	4.594258	0.102298	0.863836
0.352215	0.303646	0.293381	0.323974	-0.1114	-0.08755	4.821984	0.440474	1.190978
0.364098	0.426191	0.326103	0.309939	-0.10411	-0.05212	5.180123	0.788015	1.579538
0.455844	0.373885	0.393278	0.419335	-0.08377	-0.07229	5.480206	1.105759	1.851215
0.411638	0.250493	0.333057	0.306187	-0.10268	-0.07602	5.853761	1.516138	2.254625
0.503983	0.362401	0.399211	0.43041	-0.09874	-0.0752	6.236518	1.83128	2.55983
0.489328	0.352286	0.389693	0.384258	-0.08639	-0.05643	6.640246	2.182569	2.918398
0.506654	0.406124	0.503788	0.359278	-0.23051	-0.05404	7.078163	2.565689	3.238968
0.556461	0.23611	0.329194	0.290008	-0.11637	-0.05762	7.561688	2.929706	3.663242
0.652055	0.412128	0.661981	0.407103	0.045175	-0.10811	7.975938	3.156907	3.932441
0.578776	0.382875	0.594964	0.435084	-0.03563	-0.06513	8.571944	3.572243	4.399095
0.632235	0.533091	0.677848	0.39955	0.020505	-0.05572	9.066542	3.878931	4.770447
0.564074	0.451409	0.626014	0.284432	-0.04036	-0.08247	9.58292	4.216447	5.19283
0.681901	0.587398	0.741271	0.301835	0.030315	-0.06587	10.14436	4.59689	5.728355
0.592588	0.625237	0.785497	0.06491	0.022462	-0.04967	10.63065	4.964871	6.147739
0.68951	0.640568	0.835941	0.101809	-0.02751	-0.06806	11.27693	5.377657	6.753304
0.795317	0.773825	0.898763	0.213341	0.080473	-0.08395	11.82538	5.807134	7.338665
0.730651	0.854314	0.913313	0.12833	0.089179	-0.0341	12.3944	6.281218	7.925488
0.79541	0.926761	0.978189	0.114905	0.017542	-0.07613	12.94353	6.696078	8.568811
0.825325	0.93343	0.977269	0.028581	-0.00732	-0.04636	13.42753	7.18626	9.094768
1.019236	1.001698	1.158443	0.163485	0.13409	-0.04127	13.89971	7.716556	9.721621
1.039951	1.079665	1.205628	0.145193	0.22689	-0.07611	14.41972	8.268214	10.40224
1.073772	1.172884	1.336976	0.087963	0.159416	-0.06057	14.79578	8.8014	10.9849
1.113688	1.17556	1.330776	0.057961	0.191414	-0.0848	15.22079	9.44343	11.67165
1.18637	1.343574	1.410279	0.114331	0.322047	-0.10491	15.51513	9.984716	12.25122
1.322486	1.383398	1.764662	0.35467	0.315733	-0.0553	15.88175	10.69466	12.97955
1.454596	1.493841	1.610983	0.173667	0.356941	-0.08226	16.20016	11.42652	13.67212

se (Ref J1-J2)

J0-J5	J0-J6	J0-J7	J0-J8
-1.10804	-1.24085	-1.07945	-1.44094
-0.09132	0.574612	0.287695	0.632266
-0.15272	0.2446	-0.00653	0.45193
-0.22407	0.039655	-0.24131	0.356625
-0.28714	-0.11123	-0.44105	0.292069
-0.36903	-0.24666	-0.63468	0.234114
-0.45307	-0.3659	-0.81962	0.189833
-0.51884	-0.47047	-0.99297	0.156266
-0.60085	-0.57518	-1.16864	0.130149
-0.67006	-0.66222	-1.33396	0.103877
-0.75536	-0.76763	-1.51207	0.080871
-0.81758	-0.85003	-1.67205	0.074848
-0.90164	-0.94721	-1.84883	0.050927
-0.98385	-1.04286	-2.01079	0.037094
-1.08187	-1.16113	-2.18408	0.025446
-1.14973	-1.2513	-2.35255	0.029198
-1.24713	-1.36416	-2.51224	0.016741
-1.3513	-1.48393	-2.68164	0.02382
-1.44618	-1.60286	-2.84188	0.029061
-1.5511	-1.73934	-3.00886	0.027273
-1.67022	-1.87536	-3.17244	0.041506
-1.77031	-2.01527	-3.32735	0.061974
-1.89406	-2.15831	-3.48389	0.086162
-2.00385	-2.30554	-3.64618	0.092697
-2.12433	-2.4572	-3.81398	0.111749
-2.26923	-2.64931	-4.02379	0.085414
-2.49778	-2.92105	-4.32759	-0.01893
-2.84773	-3.30867	-4.75939	-0.23714
-3.30079	-3.82198	-5.33775	-0.56962
-3.74074	-4.31524	-5.90801	-0.90233
-4.04962	-4.66946	-6.33471	-1.11653
-4.19162	-4.82227	-6.53517	-1.16326
-4.24536	-4.85148	-6.59345	-1.10427
-4.31436	-4.90713	-6.63763	-1.02823
-4.38701	-4.96916	-6.70357	-0.96074
-4.47835	-5.08271	-6.81621	-0.92802
-4.5748	-5.20214	-6.95916	-0.916
-4.7012	-5.36273	-7.14579	-0.92381
-4.80941	-5.48824	-7.33256	-0.945
-4.93115	-5.62803	-7.54427	-0.98408
-5.06846	-5.79741	-7.77364	-1.05042

-5.21871	-5.96921	-8.03625	-1.14456
-5.41248	-6.16889	-8.34522	-1.28723
-5.64952	-6.41283	-8.71668	-1.48317
-5.91925	-6.67113	-9.10248	-1.71655
-6.14054	-6.89342	-9.45468	-1.89067
-6.29642	-7.02625	-9.71474	-2.01369
-6.37033	-7.07965	-9.87907	-2.06141
-6.38958	-7.07542	-9.99037	-2.06039
-6.39058	-7.03826	-10.0478	-2.02258
-6.35781	-7.00022	-10.1101	-1.9818
-6.31409	-6.93286	-10.1568	-1.94058
-6.26586	-6.87596	-10.2205	-1.90407
-6.22574	-6.83368	-10.2929	-1.87305
-6.16687	-6.75594	-10.351	-1.83225
-6.10073	-6.66751	-10.4177	-1.7955
-6.03007	-6.59365	-10.4822	-1.76457
-5.96933	-6.51376	-10.5337	-1.71928
-5.90291	-6.43104	-10.5958	-1.68764
-5.85208	-6.35541	-10.6613	-1.65227
-5.78108	-6.27617	-10.7291	-1.61836
-5.74362	-6.21895	-10.8111	-1.58852
-5.7228	-6.18479	-10.9114	-1.58025
-5.71036	-6.1577	-11.0174	-1.57539
-5.73209	-6.16376	-11.1473	-1.59518
-5.70067	-6.13504	-11.2534	-1.58682
-5.71299	-6.12905	-11.3786	-1.59723
-5.691	-6.09865	-11.4719	-1.57893
-5.67297	-6.07861	-11.5623	-1.56626
-5.62691	-6.04002	-11.6229	-1.54787
-5.59084	-5.9989	-11.6698	-1.51062
-5.60164	-6.00373	-11.7769	-1.5132
-5.59211	-6.00848	-11.8483	-1.5002
-5.59235	-6.00828	-11.9316	-1.47724
-5.61154	-6.0246	-12.0145	-1.47024
-5.62026	-6.01986	-12.1088	-1.45912
-5.65983	-6.06358	-12.2245	-1.47352
-5.68689	-6.09692	-12.3563	-1.47699
-5.75759	-6.17211	-12.5251	-1.49087
-5.84519	-6.26404	-12.7263	-1.52864
-5.96853	-6.39507	-12.9596	-1.56057
-6.09555	-6.53573	-13.2125	-1.58932
-6.23105	-6.70168	-13.4969	-1.63414
-6.40121	-6.88793	-13.814	-1.67827
-6.5558	-7.06452	-14.1362	-1.71431
-6.71022	-7.26617	-14.461	-1.76708
-6.84379	-7.46632	-14.8297	-1.80797
-6.99944	-7.66176	-15.1905	-1.84876
-7.09363	-7.83244	-15.5248	-1.88159
-7.18213	-7.98734	-15.8623	-1.91834
-7.27363	-8.16199	-16.2258	-1.96245
-7.39148	-8.33786	-16.5593	-2.03105
-7.4408	-8.461	-16.8655	-2.03178
-7.52921	-8.61992	-17.1698	-2.07042
-7.59798	-8.73461	-17.4694	-2.1095
-7.64424	-8.86945	-17.7537	-2.10879

-7.64489	-8.90805	-17.9775	-2.12648
-7.67181	-8.95579	-18.186	-2.13045
-7.61518	-8.95196	-18.3574	-2.13155
-7.60403	-8.9634	-18.5368	-2.12434
-7.55939	-8.9276	-18.663	-2.12184
-7.47413	-8.85026	-18.7217	-2.06004
-7.40095	-8.7847	-18.7679	-2.04196
-7.29878	-8.68514	-18.7837	-2.00064
-7.19108	-8.55657	-18.7499	-1.95215
-7.07106	-8.4533	-18.7253	-1.89453
-6.99633	-8.35659	-18.6904	-1.85793
-6.90436	-8.23246	-18.6428	-1.79475
-6.81533	-8.12473	-18.587	-1.73435
-6.71201	-7.97415	-18.4613	-1.65433
-6.59302	-7.86828	-18.3957	-1.59765
-6.47075	-7.71814	-18.2349	-1.51055
-6.37189	-7.58458	-18.111	-1.41132
-6.2461	-7.46116	-17.9607	-1.37061
-6.20654	-7.36783	-17.8804	-1.28005
-6.16338	-7.32914	-17.7929	-1.23616
-6.12245	-7.29132	-17.7189	-1.14572
-6.11142	-7.27906	-17.7212	-1.03008
-6.09733	-7.24031	-17.6354	-0.98072
-6.03176	-7.15929	-17.5762	-0.91645
-5.99319	-7.14041	-17.5412	-0.84235
-5.97507	-7.15432	-17.5265	-0.77893
-6.01661	-7.21467	-17.5592	-0.73698
-6.00689	-7.19955	-17.5314	-0.65851
-5.98568	-7.25531	-17.5322	-0.62979
-5.97137	-7.2794	-17.5398	-0.56306
-5.974	-7.31007	-17.598	-0.51525
-5.94841	-7.34909	-17.6333	-0.47982
-5.93366	-7.3858	-17.702	-0.44759
-5.94339	-7.4711	-17.8069	-0.41767
-5.93731	-7.50075	-17.851	-0.36135
-5.94095	-7.55509	-17.9489	-0.32532
-5.8818	-7.59317	-17.9576	-0.27439
-5.84265	-7.63929	-18.0385	-0.28849
-5.86266	-7.7001	-18.1115	-0.20998
-5.824	-7.74301	-18.2221	-0.23267
-5.79299	-7.76108	-18.2896	-0.19664
-5.82883	-7.87151	-18.4515	-0.17027
-5.86443	-7.94695	-18.5836	-0.15307
-5.84449	-7.97953	-18.6837	-0.16347
-5.89671	-8.08765	-18.8585	-0.14053
-5.89381	-8.19153	-18.9877	-0.11229
-5.87995	-8.23494	-19.1316	-0.12815
-5.86395	-8.28972	-19.2421	-0.09236
-5.95975	-8.44449	-19.4557	-0.11044
-5.94461	-8.54182	-19.6386	-0.09819
-5.92573	-8.59753	-19.7857	-0.08923
-5.97305	-8.73502	-20.039	-0.13576
-6.05343	-8.83345	-20.2764	-0.12366
-6.03311	-8.90646	-20.4979	-0.14417
-6.09398	-9.04029	-20.7668	-0.20423

-6.05952	-9.08055	-20.9594	-0.21381
-6.05078	-9.14371	-21.1991	-0.26584
-5.98642	-9.15135	-21.3315	-0.24457
-5.91269	-9.06758	-21.4805	-0.28049
-5.81339	-9.01102	-21.7197	-0.31985
-5.75658	-8.97499	-21.8561	-0.33369
-5.59919	-8.78815	-21.9644	-0.30043
-5.53465	-8.7	-22.14	-0.33818
-5.33526	-8.44151	-22.1219	-0.26006
-5.17143	-8.18096	-22.22	-0.30095
-4.93976	-7.96437	-22.2375	-0.23138
-4.7478	-7.64667	-22.2184	-0.19199
-4.49134	-7.32336	-22.2181	-0.09727
-4.23309	-6.97492	-22.1384	-0.04062
-4.01567	-6.57649	-22.074	0.002877
-3.66955	-6.09608	-21.8694	0.148855
-3.41492	-5.77272	-21.8861	0.198663
-3.14573	-5.37863	-21.7618	0.300809
-2.83863	-4.98493	-21.6119	0.448645
-2.53597	-4.56708	-21.5097	0.586781
-2.28248	-4.23265	-21.4589	0.597651
-1.95331	-3.87495	-21.4156	0.784025
-1.61591	-3.53779	-21.3388	0.914608
-1.20489	-3.15708	-21.2514	1.071047
-0.88406	-2.84501	-21.2841	1.194847
-0.4681	-2.52871	-21.2785	1.349752
-0.11864	-2.21771	-21.3578	1.488993
0.322852	-1.9835	-21.4436	1.662993
0.746973	-1.71728	-21.5843	1.808054
1.252654	-1.39799	-21.7096	1.998675
1.734996	-1.08	-21.8454	2.181445
2.301448	-0.75062	-22.0247	2.379463
2.73593	-0.58529	-22.2666	2.551285
3.300096	-0.1915	-22.4688	2.766314
3.779362	0.119107	-22.5621	2.98371
4.29332	0.505793	-22.7181	3.187389
4.838338	0.952959	-22.8532	3.403863
5.295962	1.328224	-22.922	3.641327
5.85922	1.789712	-22.9679	3.888828
6.324955	2.264894	-23.0615	4.092285
6.800153	2.75554	-23.0426	4.342711
7.219618	3.26137	-23.0327	4.553794
7.559108	3.665542	-22.8756	4.740863
7.936361	4.135393	-22.722	4.967712
8.263957	4.669282	-22.5462	5.133485
8.475604	5.02548	-22.2518	5.265979
8.729952	5.447714	-21.954	5.397848
8.931788	5.769556	-21.5896	5.473639
9.090685	6.204559	-21.1737	5.614495
9.379535	6.649841	-20.6285	5.734031

!Agilent Technologies,N5230A,US43500312,A.07.50.67

!Agilent N5230A: A.07.50.67

!Date: Thursday, May 19, 2016

!Correction S11(Full 2 Port(1,2))

!S21(Full 2 Port(1,2))

!S12(Full 2 Port(1,2))

!S22(Full 2 Port(1,2))

!S2P File: Measurem S11, S21,
Hz S dB R
J1

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-7.65409	-4.63102	-4.67247	-5.25705
2E+08	-15.7273	-1.20535	-1.20236	-19.2654
2.99E+08	-21.0322	-0.89426	-0.90171	-23.5373
3.99E+08	-22.6819	-0.83908	-0.82135	-21.2948
4.98E+08	-22.7947	-0.81882	-0.82523	-20.2078
5.98E+08	-22.1756	-0.82456	-0.82024	-19.7269
6.97E+08	-21.494	-0.84767	-0.82564	-19.4476
7.97E+08	-21.0247	-0.85221	-0.86032	-19.563
8.96E+08	-20.275	-0.87792	-0.8705	-19.5894
9.96E+08	-19.5675	-0.89266	-0.88988	-19.6616
1.1E+09	-19.3029	-0.91167	-0.90531	-19.9731
1.19E+09	-18.7286	-0.93577	-0.93757	-20.1209
1.29E+09	-18.4487	-0.95878	-0.96456	-20.5104
1.39E+09	-18.1492	-0.99144	-0.99945	-20.417
1.49E+09	-17.7721	-1.00685	-1.00918	-20.7477
1.59E+09	-17.3513	-1.02376	-1.03585	-20.7524
1.69E+09	-17.212	-1.0549	-1.05354	-20.8464
1.79E+09	-17.0461	-1.09137	-1.06585	-21.0204
1.89E+09	-16.8372	-1.0949	-1.09905	-20.8083
1.99E+09	-16.6545	-1.11667	-1.1147	-20.9957
2.09E+09	-16.4288	-1.15579	-1.1311	-20.6388
2.19E+09	-16.2183	-1.17134	-1.16781	-20.3685
2.29E+09	-16.2488	-1.21811	-1.19098	-20.1969
2.39E+09	-16.0762	-1.22059	-1.25011	-20.0501
2.49E+09	-16.1026	-1.23987	-1.26296	-19.9147
2.59E+09	-15.9924	-1.28763	-1.27206	-19.7783
2.69E+09	-16.0244	-1.30831	-1.31464	-19.6379
2.79E+09	-16.0843	-1.3604	-1.36781	-19.5303
2.89E+09	-16.0756	-1.41212	-1.42518	-19.235
2.99E+09	-16.1548	-1.47547	-1.49158	-19.1832
3.09E+09	-16.0896	-1.5547	-1.53161	-18.89
3.18E+09	-16.03	-1.60177	-1.607	-18.5914
3.28E+09	-15.7909	-1.63303	-1.63337	-18.2376
3.38E+09	-15.6649	-1.6101	-1.64614	-18.1254
3.48E+09	-15.4344	-1.62697	-1.60528	-18.1153
3.58E+09	-15.4179	-1.60343	-1.59023	-18.1622
3.68E+09	-15.2968	-1.57064	-1.56882	-18.3753
3.78E+09	-15.4563	-1.58214	-1.58041	-18.5302
3.88E+09	-15.324	-1.58829	-1.56731	-18.8831
3.98E+09	-15.4853	-1.59405	-1.56706	-19.3051
4.08E+09	-15.6082	-1.57723	-1.57752	-19.7202

J2

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)
1E+08	-9.60208	-3.23989	-3.27574
2E+08	-15.4915	-1.06509	-1.04967
2.99E+08	-20.1311	-0.81883	-0.82386
3.99E+08	-23.8559	-0.77197	-0.76529
4.98E+08	-26.3931	-0.7612	-0.76137
5.98E+08	-27.2999	-0.78077	-0.77834
6.97E+08	-27.1898	-0.79045	-0.79094
7.97E+08	-26.1263	-0.80819	-0.81406
8.96E+08	-24.8544	-0.85193	-0.82592
9.96E+08	-23.4959	-0.8656	-0.86333
1.1E+09	-23.0378	-0.89189	-0.87247
1.19E+09	-22.2232	-0.91804	-0.91095
1.29E+09	-21.6159	-0.94377	-0.94311
1.39E+09	-21.1695	-0.97687	-0.96601
1.49E+09	-20.6821	-0.99588	-0.99294
1.59E+09	-20.054	-1.02893	-1.03191
1.69E+09	-19.8612	-1.0482	-1.03891
1.79E+09	-19.7414	-1.08809	-1.08135
1.89E+09	-19.474	-1.12766	-1.08877
1.99E+09	-19.2961	-1.13845	-1.10934
2.09E+09	-19.0377	-1.17058	-1.13924
2.19E+09	-18.8888	-1.18897	-1.16713
2.29E+09	-19.0186	-1.21265	-1.20172
2.39E+09	-18.9431	-1.22045	-1.24626
2.49E+09	-19.1126	-1.28104	-1.25531
2.59E+09	-19.0696	-1.30701	-1.29899
2.69E+09	-19.2482	-1.35147	-1.34271
2.79E+09	-19.3871	-1.39937	-1.39633
2.89E+09	-19.4235	-1.47667	-1.45948
2.99E+09	-19.4193	-1.528	-1.5156
3.09E+09	-19.0934	-1.57468	-1.55482
3.18E+09	-18.8888	-1.60604	-1.58385
3.28E+09	-18.4173	-1.61217	-1.60925
3.38E+09	-18.3108	-1.59128	-1.59306
3.48E+09	-17.9435	-1.60181	-1.5596
3.58E+09	-17.9185	-1.58855	-1.57175
3.68E+09	-17.6683	-1.58622	-1.58209
3.78E+09	-17.6204	-1.59671	-1.57763
3.88E+09	-17.2703	-1.6009	-1.58848
3.98E+09	-17.1376	-1.63675	-1.58827
4.08E+09	-16.8271	-1.65208	-1.63686

4.18E+09	-15.7933	-1.61635	-1.59336	-20.2713	4.18E+09	-16.5176	-1.69995	-1.67093
4.28E+09	-16.0249	-1.64079	-1.62168	-21.0592	4.28E+09	-16.2878	-1.73527	-1.71145
4.38E+09	-16.1387	-1.6633	-1.64862	-21.9349	4.38E+09	-15.8819	-1.76912	-1.75898
4.48E+09	-16.2583	-1.69284	-1.68121	-22.8795	4.48E+09	-15.5756	-1.79157	-1.79335
4.58E+09	-16.2916	-1.72065	-1.70795	-23.6651	4.58E+09	-15.2315	-1.84589	-1.82955
4.68E+09	-16.3133	-1.74616	-1.78217	-24.8818	4.68E+09	-14.9737	-1.84934	-1.84866
4.78E+09	-16.2057	-1.78695	-1.81696	-25.8937	4.78E+09	-14.683	-1.89579	-1.86864
4.88E+09	-16.3591	-1.80844	-1.7982	-26.2832	4.88E+09	-14.6512	-1.85904	-1.87907
4.98E+09	-16.4842	-1.81049	-1.79552	-28.2042	4.98E+09	-14.5333	-1.88521	-1.86536
5.08E+09	-16.7503	-1.80203	-1.759	-28.9989	5.08E+09	-14.5013	-1.88825	-1.86617
5.17E+09	-17.07	-1.79099	-1.7873	-30.171	5.17E+09	-14.4721	-1.88531	-1.87548
5.27E+09	-17.5052	-1.74995	-1.75835	-31.3967	5.27E+09	-14.4689	-1.8529	-1.83713
5.37E+09	-17.8593	-1.73514	-1.76657	-31.4721	5.37E+09	-14.4705	-1.85759	-1.88428
5.47E+09	-18.4038	-1.76203	-1.71571	-32.0325	5.47E+09	-14.5121	-1.89651	-1.85358
5.57E+09	-18.8728	-1.71904	-1.70062	-30.4131	5.57E+09	-14.5546	-1.82699	-1.84796
5.67E+09	-19.1923	-1.70471	-1.70126	-28.835	5.67E+09	-14.6003	-1.85388	-1.85306
5.77E+09	-19.6939	-1.72836	-1.71747	-27.5634	5.77E+09	-14.7136	-1.88368	-1.88491
5.87E+09	-20.06	-1.69068	-1.73983	-26.138	5.87E+09	-14.7973	-1.87645	-1.90081
5.97E+09	-20.243	-1.70108	-1.74603	-25.2025	5.97E+09	-14.8214	-1.89645	-1.88763
6.07E+09	-20.8984	-1.71824	-1.74197	-24.1494	6.07E+09	-15.117	-1.91174	-1.90173
6.17E+09	-21.1922	-1.74336	-1.75108	-23.476	6.17E+09	-15.2527	-1.91466	-1.92644
6.27E+09	-21.5176	-1.74918	-1.76819	-23.0538	6.27E+09	-15.4449	-1.92002	-1.94122
6.37E+09	-21.8226	-1.75902	-1.80742	-22.6401	6.37E+09	-15.6316	-1.91802	-1.96892
6.47E+09	-21.8937	-1.79813	-1.81383	-22.4422	6.47E+09	-15.7664	-1.95959	-1.96385
6.57E+09	-22.3568	-1.79913	-1.78705	-22.5168	6.57E+09	-16.1323	-1.98804	-1.94689
6.67E+09	-22.4899	-1.81028	-1.80841	-22.4157	6.67E+09	-16.3486	-1.97213	-1.96388
6.77E+09	-22.6555	-1.83889	-1.85258	-21.6601	6.77E+09	-16.6173	-2.00109	-2.00674
6.87E+09	-22.6183	-1.86692	-1.87272	-21.4452	6.87E+09	-16.7913	-2.00519	-2.02363
6.97E+09	-22.599	-1.9137	-1.87113	-21.5236	6.97E+09	-17.0611	-2.03978	-1.96815
7.07E+09	-22.3403	-1.88111	-1.91527	-20.9647	7.07E+09	-17.263	-2.02418	-2.03338
7.16E+09	-21.6933	-1.9389	-1.93375	-20.6079	7.16E+09	-17.3166	-2.06683	-2.05601
7.26E+09	-21.0184	-1.95264	-1.94949	-20.3374	7.26E+09	-17.335	-2.07248	-2.07143
7.36E+09	-20.5299	-1.9655	-1.95794	-20.0077	7.36E+09	-17.3546	-2.08926	-2.06245
7.46E+09	-19.7351	-1.98487	-2.00825	-19.5159	7.46E+09	-17.1463	-2.11138	-2.11406
7.56E+09	-18.9957	-2.03758	-2.0154	-18.8031	7.56E+09	-16.9451	-2.11674	-2.0904
7.66E+09	-18.2018	-2.07643	-2.05733	-18.1932	7.66E+09	-16.6781	-2.13855	-2.15445
7.76E+09	-17.5471	-2.07758	-2.0737	-17.5325	7.76E+09	-16.4081	-2.16268	-2.14192
7.86E+09	-16.7045	-2.12824	-2.11105	-16.8599	7.86E+09	-15.8968	-2.18065	-2.17114
7.96E+09	-16.3573	-2.1278	-2.15262	-16.7478	7.96E+09	-15.8692	-2.20214	-2.16702
8.06E+09	-15.7441	-2.2237	-2.2066	-16.2225	8.06E+09	-15.4793	-2.23907	-2.21545
8.16E+09	-15.2642	-2.21041	-2.20245	-15.9467	8.16E+09	-15.1993	-2.21443	-2.19616
8.26E+09	-14.7812	-2.24331	-2.26116	-15.5243	8.26E+09	-14.9064	-2.25034	-2.26516
8.36E+09	-14.3803	-2.30695	-2.26907	-15.2438	8.36E+09	-14.6468	-2.27538	-2.26784
8.46E+09	-14.1614	-2.35557	-2.30487	-14.9739	8.46E+09	-14.5601	-2.30618	-2.27416
8.56E+09	-13.6533	-2.37844	-2.41044	-14.5528	8.56E+09	-14.2123	-2.31519	-2.35103
8.66E+09	-13.4893	-2.46518	-2.41382	-14.2671	8.66E+09	-14.1543	-2.35104	-2.295
8.76E+09	-13.1154	-2.43988	-2.4287	-14.0861	8.76E+09	-13.8827	-2.35154	-2.35341
8.86E+09	-13.0158	-2.50198	-2.43949	-13.9483	8.86E+09	-13.8561	-2.41279	-2.34357
8.96E+09	-12.8143	-2.53416	-2.51714	-13.775	8.96E+09	-13.7272	-2.4217	-2.40667
9.06E+09	-12.6918	-2.51188	-2.55029	-13.7404	9.06E+09	-13.676	-2.38015	-2.36675
9.15E+09	-12.6426	-2.53666	-2.53864	-13.6183	9.15E+09	-13.6673	-2.4318	-2.36165
9.25E+09	-12.5798	-2.55408	-2.55563	-13.4965	9.25E+09	-13.6579	-2.40277	-2.422
9.35E+09	-12.4899	-2.56475	-2.56242	-13.5555	9.35E+09	-13.6352	-2.39011	-2.38536
9.45E+09	-12.3425	-2.61006	-2.60056	-13.3777	9.45E+09	-13.4653	-2.41198	-2.40342
9.55E+09	-12.4505	-2.60088	-2.58091	-13.2777	9.55E+09	-13.6652	-2.381	-2.39916

9.65E+09	-12.3787	-2.59966	-2.62067	-13.1508	9.65E+09	-13.6577	-2.43073	-2.42167
9.75E+09	-12.2499	-2.65575	-2.66115	-13.0691	9.75E+09	-13.5121	-2.42254	-2.45289
9.85E+09	-12.1514	-2.69969	-2.6347	-13.0012	9.85E+09	-13.5177	-2.48861	-2.37803
9.95E+09	-12.0984	-2.64004	-2.70594	-13.0896	9.95E+09	-13.4323	-2.40893	-2.47944
1.01E+10	-12.025	-2.6882	-2.66205	-13.0864	1.01E+10	-13.4852	-2.50923	-2.43758
1.01E+10	-12.0872	-2.7089	-2.66184	-13.0213	1.01E+10	-13.4669	-2.4928	-2.50083
1.02E+10	-12.0765	-2.74428	-2.76416	-13.1037	1.02E+10	-13.5134	-2.48495	-2.50699
1.03E+10	-11.9835	-2.80038	-2.71638	-13.0021	1.03E+10	-13.4263	-2.53264	-2.48788
1.04E+10	-12.0035	-2.75856	-2.76728	-13.0102	1.04E+10	-13.477	-2.50472	-2.50443
1.05E+10	-11.9002	-2.77304	-2.78764	-12.9582	1.05E+10	-13.4582	-2.53641	-2.55039
1.06E+10	-11.8032	-2.74983	-2.80447	-13.0175	1.06E+10	-13.3658	-2.50878	-2.48616
1.07E+10	-11.7827	-2.7892	-2.84736	-12.8792	1.07E+10	-13.463	-2.53077	-2.50789
1.08E+10	-11.7297	-2.84157	-2.84771	-12.9156	1.08E+10	-13.3597	-2.56986	-2.51048
1.09E+10	-11.8722	-2.8548	-2.85391	-13.0177	1.09E+10	-13.6304	-2.53321	-2.55561
1.1E+10	-11.8597	-2.90617	-2.89747	-12.9159	1.1E+10	-13.7679	-2.59397	-2.60689
1.11E+10	-11.9569	-2.97444	-2.86867	-13.0368	1.11E+10	-14.111	-2.64738	-2.52018
1.12E+10	-12.0505	-2.82326	-2.98606	-13.3536	1.12E+10	-14.2355	-2.54648	-2.65802
1.13E+10	-12.167	-2.86908	-2.89816	-13.2919	1.13E+10	-14.4131	-2.56031	-2.53793
1.14E+10	-12.2563	-2.90734	-2.947	-13.4121	1.14E+10	-14.6733	-2.58383	-2.66127
1.15E+10	-12.1418	-2.96151	-2.95478	-13.6443	1.15E+10	-14.9358	-2.6389	-2.5608
1.16E+10	-12.2722	-2.96435	-2.95215	-13.8338	1.16E+10	-15.1372	-2.61605	-2.56231
1.17E+10	-12.5071	-2.93534	-2.93655	-13.8802	1.17E+10	-15.8206	-2.5671	-2.6253
1.18E+10	-12.351	-2.94347	-2.99166	-14.1111	1.18E+10	-15.7823	-2.65253	-2.64051
1.19E+10	-12.4278	-3.00667	-2.92454	-14.3295	1.19E+10	-16.1387	-2.62519	-2.6347
1.2E+10	-12.7581	-3.01616	-3.06495	-14.3884	1.2E+10	-16.8653	-2.63513	-2.65444
1.21E+10	-12.6695	-2.98899	-2.94612	-14.6241	1.21E+10	-16.7783	-2.64545	-2.62333
1.22E+10	-12.8778	-2.97102	-3.01601	-14.8133	1.22E+10	-17.5019	-2.65984	-2.66829
1.23E+10	-12.5835	-3.02654	-2.96025	-15.3173	1.23E+10	-17.196	-2.63398	-2.61847
1.24E+10	-12.9143	-3.00994	-2.96961	-15.3198	1.24E+10	-18.168	-2.65587	-2.65207
1.25E+10	-13.0675	-3.04904	-3.04769	-15.5757	1.25E+10	-18.6646	-2.68726	-2.70229
1.26E+10	-12.837	-3.05876	-3.03505	-15.7889	1.26E+10	-18.3285	-2.6632	-2.67919
1.27E+10	-12.7096	-3.01781	-3.11089	-15.895	1.27E+10	-18.2852	-2.69317	-2.73699
1.28E+10	-12.785	-2.99783	-3.05547	-16.0563	1.28E+10	-18.8549	-2.70913	-2.677
1.29E+10	-12.6912	-3.08185	-3.04045	-16.3764	1.29E+10	-18.9723	-2.72641	-2.6511
1.3E+10	-12.7173	-3.05871	-3.11123	-16.2291	1.3E+10	-19.137	-2.72395	-2.79597
1.31E+10	-12.588	-3.02139	-3.17917	-16.7493	1.31E+10	-19.0797	-2.74923	-2.71085
1.32E+10	-12.5782	-3.14361	-3.12621	-16.8678	1.32E+10	-19.1153	-2.79389	-2.74134
1.33E+10	-12.3857	-3.20874	-3.19687	-16.6095	1.33E+10	-18.4929	-2.76405	-2.85642
1.34E+10	-12.1883	-3.15259	-3.16311	-16.9544	1.34E+10	-18.4362	-2.79002	-2.79753
1.35E+10	-12.1583	-3.18534	-3.16902	-17.62	1.35E+10	-18.4671	-2.87907	-2.85717
1.36E+10	-12.204	-3.26836	-3.26988	-16.9862	1.36E+10	-18.6359	-2.91595	-2.95777
1.37E+10	-11.9408	-3.24945	-3.28329	-17.1206	1.37E+10	-18.1542	-2.90237	-2.99962
1.38E+10	-11.7596	-3.21399	-3.34365	-17.0559	1.38E+10	-18.0398	-2.93561	-2.9802
1.39E+10	-11.5884	-3.27883	-3.25832	-16.6762	1.39E+10	-17.7146	-2.91688	-2.91155
1.4E+10	-11.4283	-3.27173	-3.28881	-16.5251	1.4E+10	-17.4671	-2.89743	-2.954
1.41E+10	-11.1974	-3.34904	-3.35646	-16.2603	1.41E+10	-16.9526	-3.01949	-3.0149
1.42E+10	-11.5132	-3.37922	-3.31483	-15.5853	1.42E+10	-17.3731	-3.03206	-3.09149
1.43E+10	-11.0779	-3.33525	-3.37524	-15.6497	1.43E+10	-16.8204	-3.10554	-3.05206
1.44E+10	-10.9954	-3.40435	-3.38159	-15.4081	1.44E+10	-16.4074	-3.10124	-3.00481
1.45E+10	-10.9887	-3.39982	-3.39509	-15.2195	1.45E+10	-16.3114	-3.11646	-3.06085
1.46E+10	-10.9342	-3.39362	-3.37013	-14.9463	1.46E+10	-15.9961	-3.11269	-3.09187
1.47E+10	-10.7986	-3.42451	-3.41202	-14.4572	1.47E+10	-15.4983	-3.11613	-3.07962
1.48E+10	-10.823	-3.39814	-3.42265	-14.0157	1.48E+10	-15.4104	-3.08165	-3.17281
1.49E+10	-10.7401	-3.52506	-3.48927	-13.8437	1.49E+10	-15.1187	-3.22418	-3.18902
1.5E+10	-10.693	-3.42352	-3.42305	-13.484	1.5E+10	-14.8438	-3.20158	-3.11288

1.51E+10	-10.8377	-3.41557	-3.47622	-13.2798	1.51E+10	-15.0828	-3.15927	-3.21166
1.52E+10	-10.9533	-3.44816	-3.53589	-13.0219	1.52E+10	-14.9126	-3.16167	-3.22742
1.53E+10	-10.9091	-3.54544	-3.47351	-12.9366	1.53E+10	-14.5677	-3.28517	-3.25834
1.54E+10	-11.2313	-3.54278	-3.41935	-12.6596	1.54E+10	-14.7553	-3.24135	-3.3047
1.55E+10	-11.188	-3.46673	-3.49912	-12.7561	1.55E+10	-14.6441	-3.26793	-3.27718
1.56E+10	-11.6768	-3.50824	-3.5038	-12.828	1.56E+10	-15.1334	-3.22478	-3.27087
1.57E+10	-11.91	-3.49398	-3.5072	-12.5562	1.57E+10	-15.2467	-3.29002	-3.36208
1.58E+10	-12.0138	-3.49884	-3.45262	-12.3231	1.58E+10	-15.3359	-3.32985	-3.35553
1.59E+10	-12.2105	-3.48676	-3.48567	-12.4953	1.59E+10	-15.5374	-3.38408	-3.3189
1.6E+10	-12.4214	-3.52545	-3.57498	-12.2997	1.6E+10	-15.448	-3.3718	-3.32207
1.61E+10	-12.8312	-3.53687	-3.60148	-12.2427	1.61E+10	-15.7204	-3.31665	-3.40685
1.62E+10	-13.3311	-3.56278	-3.55204	-12.4661	1.62E+10	-16.4819	-3.44321	-3.47107
1.63E+10	-13.7922	-3.53516	-3.57533	-12.55	1.63E+10	-17.0003	-3.36139	-3.40492
1.64E+10	-14.0168	-3.5305	-3.58091	-12.548	1.64E+10	-17.0995	-3.42039	-3.4996
1.65E+10	-14.3342	-3.59241	-3.54746	-12.7636	1.65E+10	-17.4627	-3.50433	-3.41642
1.66E+10	-14.9179	-3.65091	-3.52696	-12.9485	1.66E+10	-18.2395	-3.44248	-3.55092
1.67E+10	-15.5941	-3.66655	-3.64767	-13.1663	1.67E+10	-18.9979	-3.48057	-3.47286
1.68E+10	-16.319	-3.65254	-3.68165	-13.5415	1.68E+10	-19.7086	-3.4924	-3.51282
1.69E+10	-17.2287	-3.53809	-3.64059	-13.68	1.69E+10	-20.671	-3.40305	-3.42761
1.7E+10	-17.9121	-3.6819	-3.61056	-14.2637	1.7E+10	-20.3085	-3.51999	-3.44675
1.71E+10	-19.039	-3.62967	-3.84963	-14.4051	1.71E+10	-21.0175	-3.47736	-3.57706
1.72E+10	-20.3682	-3.67693	-3.75553	-15.1339	1.72E+10	-21.7193	-3.52336	-3.57485
1.73E+10	-22.3063	-3.72251	-3.74474	-15.7484	1.73E+10	-21.4871	-3.5429	-3.54976
1.74E+10	-23.4821	-3.8011	-3.86667	-16.3546	1.74E+10	-20.9687	-3.59138	-3.62621
1.75E+10	-27.0944	-3.86474	-3.82754	-16.8683	1.75E+10	-20.325	-3.61321	-3.49809
1.76E+10	-31.3356	-3.81417	-3.89568	-17.9813	1.76E+10	-19.3338	-3.70613	-3.60216
1.77E+10	-47.4074	-3.98825	-3.87268	-18.5246	1.77E+10	-18.3446	-3.69533	-3.70184
1.78E+10	-39.5576	-3.95207	-3.95092	-19.2736	1.78E+10	-17.35	-3.70139	-3.61254
1.79E+10	-28.5969	-4.04072	-3.98842	-20.0913	1.79E+10	-16.8864	-3.70215	-3.71567
1.8E+10	-24.7518	-4.10924	-4.06253	-20.6995	1.8E+10	-16.2033	-3.83976	-3.72141
1.81E+10	-22.0622	-4.1051	-4.15776	-20.5999	1.81E+10	-15.3433	-3.75311	-3.73828
1.82E+10	-19.5466	-4.17736	-4.17014	-20.6086	1.82E+10	-14.9145	-3.86113	-3.82874
1.83E+10	-18.0575	-4.25484	-4.16866	-20.4988	1.83E+10	-14.3214	-3.80375	-3.80268
1.84E+10	-16.2828	-4.4354	-4.41898	-20.9626	1.84E+10	-13.7108	-3.97659	-3.8825
1.85E+10	-15.1859	-4.48392	-4.462	-20.3329	1.85E+10	-13.3857	-3.96911	-3.92851
1.86E+10	-14.0034	-4.53973	-4.60647	-19.9641	1.86E+10	-13.1304	-4.04341	-4.05421
1.87E+10	-12.8881	-4.60256	-4.59	-19.5095	1.87E+10	-12.4558	-4.02266	-4.08371
1.88E+10	-12.2379	-4.94755	-4.76473	-19.2204	1.88E+10	-12.3964	-4.17658	-4.16174
1.89E+10	-11.2635	-4.86265	-5.02153	-19.1854	1.89E+10	-12.0895	-4.12995	-4.18177
1.9E+10	-10.4798	-5.04754	-4.95319	-18.5869	1.9E+10	-11.4262	-4.21592	-4.11558
1.91E+10	-9.94675	-5.26719	-5.20617	-18.082	1.91E+10	-11.4522	-4.30984	-4.2405
1.92E+10	-9.35707	-5.48706	-5.22507	-18.5571	1.92E+10	-11.0853	-4.45882	-4.28802
1.93E+10	-8.90677	-5.40111	-5.48469	-18.0709	1.93E+10	-10.8058	-4.42339	-4.40489
1.94E+10	-8.48359	-5.73795	-5.65363	-18.7714	1.94E+10	-10.659	-4.59481	-4.31438
1.95E+10	-7.79287	-5.66362	-5.74528	-18.4512	1.95E+10	-10.1052	-4.4732	-4.4785
1.96E+10	-7.55463	-5.91866	-6.04195	-18.4036	1.96E+10	-9.92367	-4.57023	-4.62994
1.97E+10	-7.2228	-6.2069	-5.99418	-18.7378	1.97E+10	-9.7519	-4.82371	-4.63431
1.98E+10	-6.9192	-6.25959	-6.2511	-18.4922	1.98E+10	-9.5395	-4.72511	-4.70626
1.99E+10	-6.66911	-6.44889	-6.51269	-18.4848	1.99E+10	-9.2685	-4.84982	-4.89458
2E+10	-6.18775	-6.57286	-6.4015	-18.0972	2E+10	-8.90049	-4.89633	-4.82017

J3

S22 (dB)	Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	Frequency (Hz)	S11 (dB)
-9.59337	1E+08	-10.3108	-2.95236	-2.96037	-10.3852	1E+08	-9.06985
-17.454	2E+08	-15.2631	-1.10948	-1.09405	-17.1065	2E+08	-15.2467
-21.4955	2.99E+08	-19.6067	-0.84875	-0.85536	-21.0573	2.99E+08	-19.5757
-23.6189	3.99E+08	-23.0092	-0.79488	-0.78678	-22.9947	3.99E+08	-23.1595
-24.7967	4.98E+08	-25.1738	-0.79055	-0.79203	-24.4566	4.98E+08	-25.5658
-25.321	5.98E+08	-26.2491	-0.80521	-0.79615	-25.2573	5.98E+08	-27.0397
-25.6596	6.97E+08	-26.5051	-0.81439	-0.81254	-26.1865	6.97E+08	-27.6198
-26.0415	7.97E+08	-25.7711	-0.83434	-0.84437	-27.0921	7.97E+08	-27.0511
-26.0927	8.96E+08	-24.7069	-0.86083	-0.84654	-27.9352	8.96E+08	-26.0107
-25.822	9.96E+08	-23.5629	-0.88221	-0.88738	-28.1285	9.96E+08	-24.7621
-25.96	1.1E+09	-23.2094	-0.91066	-0.90393	-28.7121	1.1E+09	-24.5208
-25.7133	1.19E+09	-22.3944	-0.93231	-0.93459	-28.5393	1.19E+09	-23.7293
-25.9195	1.29E+09	-21.6322	-0.96445	-0.97276	-28.6739	1.29E+09	-23.09
-25.1692	1.39E+09	-21.2453	-1.00349	-0.98417	-27.4713	1.39E+09	-22.7832
-25.3079	1.49E+09	-20.714	-1.02366	-1.02177	-27.0051	1.49E+09	-22.3661
-24.8848	1.59E+09	-20.0225	-1.05607	-1.05801	-25.93	1.59E+09	-21.6989
-24.7383	1.69E+09	-19.7578	-1.06359	-1.0743	-25.3516	1.69E+09	-21.4955
-24.7489	1.79E+09	-19.4652	-1.11092	-1.11028	-24.7645	1.79E+09	-21.322
-24.3706	1.89E+09	-19.0363	-1.13692	-1.13208	-23.8727	1.89E+09	-21.0357
-24.6468	1.99E+09	-18.8681	-1.15944	-1.14222	-23.6178	1.99E+09	-20.9499
-24.2676	2.09E+09	-18.5302	-1.19103	-1.18448	-22.9833	2.09E+09	-20.6559
-24.0503	2.19E+09	-18.327	-1.2114	-1.22248	-22.4797	2.19E+09	-20.4027
-24.1556	2.29E+09	-18.3492	-1.2392	-1.24791	-22.2207	2.29E+09	-20.599
-24.1059	2.39E+09	-18.2013	-1.26741	-1.3068	-21.9296	2.39E+09	-20.586
-24.231	2.49E+09	-18.2863	-1.29349	-1.31345	-21.8769	2.49E+09	-20.6212
-24.3664	2.59E+09	-18.1516	-1.35894	-1.33717	-21.8118	2.59E+09	-20.4674
-24.6753	2.69E+09	-18.2957	-1.39061	-1.39845	-21.8081	2.69E+09	-20.6257
-24.83	2.79E+09	-18.3616	-1.45439	-1.45996	-21.7893	2.79E+09	-20.6135
-24.7031	2.89E+09	-18.3436	-1.52036	-1.54313	-21.6384	2.89E+09	-20.58
-24.9572	2.99E+09	-18.3736	-1.58906	-1.5993	-21.6959	2.99E+09	-20.4621
-24.8748	3.09E+09	-18.1029	-1.64807	-1.62873	-21.513	3.09E+09	-20.0127
-24.6508	3.18E+09	-18.0064	-1.67142	-1.67332	-21.5128	3.18E+09	-19.759
-24.3666	3.28E+09	-17.7211	-1.66412	-1.68191	-21.5406	3.28E+09	-19.1455
-24.4152	3.38E+09	-17.7746	-1.63557	-1.66292	-21.9786	3.38E+09	-18.9166
-24.3035	3.48E+09	-17.7279	-1.65244	-1.62573	-22.529	3.48E+09	-18.4449
-24.272	3.58E+09	-18.0244	-1.62427	-1.63485	-23.3275	3.58E+09	-18.3348
-24.4735	3.68E+09	-18.1329	-1.60949	-1.65183	-24.387	3.68E+09	-18.0015
-24.044	3.78E+09	-18.531	-1.62878	-1.63178	-25.5614	3.78E+09	-17.8415
-24.1363	3.88E+09	-18.6209	-1.62483	-1.6342	-27.5041	3.88E+09	-17.5344
-23.9526	3.98E+09	-18.9348	-1.66445	-1.63014	-29.8395	3.98E+09	-17.2833
-23.6219	4.08E+09	-19.039	-1.65667	-1.67078	-33.4723	4.08E+09	-16.937

-23.1789	4.18E+09	-19.1308	-1.70905	-1.70743	-39.8907	4.18E+09	-16.604
-22.9826	4.28E+09	-19.2134	-1.75936	-1.73209	-49.2954	4.28E+09	-16.291
-22.6652	4.38E+09	-18.9552	-1.79307	-1.788	-36.8372	4.38E+09	-15.8219
-22.2722	4.48E+09	-18.7844	-1.80958	-1.82868	-32.2575	4.48E+09	-15.4772
-21.8962	4.58E+09	-18.422	-1.85494	-1.86165	-29.4412	4.58E+09	-15.0597
-21.3503	4.68E+09	-18.1498	-1.87495	-1.90269	-26.9283	4.68E+09	-14.7386
-20.8604	4.78E+09	-17.8554	-1.89809	-1.90924	-24.9773	4.78E+09	-14.4401
-20.2963	4.88E+09	-17.7822	-1.91158	-1.90666	-23.7068	4.88E+09	-14.3154
-19.5359	4.98E+09	-17.521	-1.8538	-1.899	-21.7353	4.98E+09	-14.1147
-19.1102	5.08E+09	-17.3728	-1.92216	-1.88068	-20.778	5.08E+09	-14.037
-18.5554	5.17E+09	-17.0772	-1.90476	-1.89267	-19.7187	5.17E+09	-13.9187
-17.874	5.27E+09	-16.7335	-1.87561	-1.91726	-18.5887	5.27E+09	-13.8476
-17.4831	5.37E+09	-16.3824	-1.88323	-1.9374	-17.8338	5.37E+09	-13.751
-17.1058	5.47E+09	-15.9888	-1.89343	-1.90055	-16.8512	5.47E+09	-13.6629
-16.7446	5.57E+09	-15.7131	-1.90297	-1.90236	-16.1875	5.57E+09	-13.6485
-16.4669	5.67E+09	-15.4506	-1.92249	-1.91048	-15.6261	5.67E+09	-13.6129
-16.2492	5.77E+09	-15.0991	-1.95921	-1.91946	-15.1932	5.77E+09	-13.6022
-15.9945	5.87E+09	-14.8735	-1.96695	-1.99527	-14.7438	5.87E+09	-13.6257
-15.8553	5.97E+09	-14.6483	-1.97681	-1.97142	-14.3718	5.97E+09	-13.6113
-15.6897	6.07E+09	-14.5603	-2.00521	-2.02077	-14.0418	6.07E+09	-13.8232
-15.5874	6.17E+09	-14.4573	-2.02678	-2.05531	-13.8554	6.17E+09	-13.9
-15.5874	6.27E+09	-14.4025	-2.04822	-2.04001	-13.6532	6.27E+09	-14.0698
-15.5398	6.37E+09	-14.4334	-2.05126	-2.06853	-13.5685	6.37E+09	-14.2989
-15.5795	6.47E+09	-14.3901	-2.07998	-2.07192	-13.4815	6.47E+09	-14.4132
-15.7586	6.57E+09	-14.4743	-2.09362	-2.09811	-13.6092	6.57E+09	-14.7145
-15.7944	6.67E+09	-14.7147	-2.09261	-2.09792	-13.5886	6.67E+09	-15.0268
-15.607	6.77E+09	-14.9008	-2.14057	-2.14667	-13.445	6.77E+09	-15.3782
-15.6494	6.87E+09	-15.0367	-2.1453	-2.15792	-13.4997	6.87E+09	-15.6461
-15.7879	6.97E+09	-15.3386	-2.18389	-2.16195	-13.677	6.97E+09	-16.0297
-15.7084	7.07E+09	-15.5391	-2.13224	-2.1608	-13.6463	7.07E+09	-16.3857
-15.6546	7.16E+09	-15.8855	-2.18512	-2.1873	-13.7518	7.16E+09	-16.731
-15.7216	7.26E+09	-16.1383	-2.18684	-2.19212	-13.8258	7.26E+09	-17.0154
-15.7139	7.36E+09	-16.3125	-2.19238	-2.17747	-13.9934	7.36E+09	-17.2752
-15.6616	7.46E+09	-16.3006	-2.20014	-2.1845	-14.0132	7.46E+09	-17.2837
-15.4072	7.56E+09	-16.3634	-2.20946	-2.20344	-13.9501	7.56E+09	-17.333
-15.2441	7.66E+09	-16.4755	-2.24146	-2.22791	-14.0017	7.66E+09	-17.4268
-15.0861	7.76E+09	-16.3141	-2.25104	-2.24467	-13.9248	7.76E+09	-17.3026
-14.7525	7.86E+09	-15.9623	-2.27862	-2.25749	-13.7469	7.86E+09	-16.9804
-14.903	7.96E+09	-15.9587	-2.28596	-2.2526	-14.012	7.96E+09	-17.1004
-14.7409	8.06E+09	-15.6008	-2.26849	-2.33034	-13.864	8.06E+09	-16.7608
-14.7256	8.16E+09	-15.4184	-2.31349	-2.32004	-13.8363	8.16E+09	-16.6392
-14.5066	8.26E+09	-15.0132	-2.32689	-2.35618	-13.7693	8.26E+09	-16.3077
-14.537	8.36E+09	-14.6657	-2.37603	-2.35744	-13.7599	8.36E+09	-16.1451
-14.4902	8.46E+09	-14.7158	-2.3995	-2.37098	-13.7438	8.46E+09	-16.2219
-14.359	8.56E+09	-14.1416	-2.44098	-2.47143	-13.6379	8.56E+09	-15.7189
-14.3564	8.66E+09	-13.9304	-2.42085	-2.45896	-13.6316	8.66E+09	-15.6255
-14.4487	8.76E+09	-13.6904	-2.45367	-2.45503	-13.6968	8.76E+09	-15.4183
-14.4886	8.86E+09	-13.4848	-2.50699	-2.4438	-13.6684	8.86E+09	-15.2796
-14.5303	8.96E+09	-13.1954	-2.54531	-2.50906	-13.7653	8.96E+09	-14.9741
-14.8189	9.06E+09	-13.1068	-2.53634	-2.49027	-13.843	9.06E+09	-14.9127
-15.0572	9.15E+09	-13.0246	-2.52392	-2.49678	-14.0114	9.15E+09	-14.8253
-15.2458	9.25E+09	-12.9623	-2.4835	-2.52506	-14.1429	9.25E+09	-14.749
-15.6226	9.35E+09	-12.8258	-2.51784	-2.49794	-14.4614	9.35E+09	-14.5336
-15.6702	9.45E+09	-12.6742	-2.5437	-2.53541	-14.5493	9.45E+09	-14.2638
-15.936	9.55E+09	-12.6776	-2.57365	-2.53238	-14.7635	9.55E+09	-14.2149

-15.992	9.65E+09	-12.7636	-2.59312	-2.57506	-14.8069	9.65E+09	-14.156
-16.1646	9.75E+09	-12.5195	-2.53328	-2.56453	-14.9811	9.75E+09	-13.7948
-16.2769	9.85E+09	-12.5178	-2.59648	-2.5528	-15.1226	9.85E+09	-13.6092
-16.5281	9.95E+09	-12.4428	-2.54942	-2.59655	-15.3229	9.95E+09	-13.3647
-16.6141	1.01E+10	-12.4802	-2.57839	-2.56806	-15.4673	1.01E+10	-13.286
-16.6529	1.01E+10	-12.4802	-2.55915	-2.59051	-15.5764	1.01E+10	-13.1278
-16.7211	1.02E+10	-12.6532	-2.64134	-2.61503	-15.7836	1.02E+10	-13.1071
-16.6121	1.03E+10	-12.6142	-2.65814	-2.61239	-15.7301	1.03E+10	-12.9785
-16.6055	1.04E+10	-12.6993	-2.60775	-2.61107	-15.8582	1.04E+10	-12.9567
-16.7052	1.05E+10	-12.7198	-2.60716	-2.66064	-15.9043	1.05E+10	-12.8342
-16.6327	1.06E+10	-12.7012	-2.64428	-2.56694	-16.0982	1.06E+10	-12.7816
-16.2968	1.07E+10	-12.8874	-2.65214	-2.66688	-15.8093	1.07E+10	-12.9902
-16.2938	1.08E+10	-12.7843	-2.64103	-2.69028	-16.0835	1.08E+10	-12.7951
-16.5601	1.09E+10	-13.0776	-2.64097	-2.61941	-16.331	1.09E+10	-13.0896
-16.3458	1.1E+10	-13.2693	-2.69387	-2.66396	-16.1093	1.1E+10	-13.1408
-16.5041	1.11E+10	-13.6139	-2.71966	-2.65233	-16.4219	1.11E+10	-13.4819
-16.9979	1.12E+10	-13.8284	-2.56439	-2.71288	-16.8811	1.12E+10	-13.6985
-16.8812	1.13E+10	-14.0575	-2.66368	-2.63497	-16.6524	1.13E+10	-13.9155
-17.0888	1.14E+10	-14.0583	-2.64221	-2.71711	-16.8919	1.14E+10	-14.0708
-17.3371	1.15E+10	-14.5196	-2.69079	-2.66424	-17.084	1.15E+10	-14.4238
-17.6817	1.16E+10	-14.6421	-2.67864	-2.66916	-17.2941	1.16E+10	-14.6282
-17.8743	1.17E+10	-15.1601	-2.66998	-2.71255	-17.2814	1.17E+10	-15.2741
-18.0873	1.18E+10	-15.2186	-2.70344	-2.68002	-17.4618	1.18E+10	-15.3395
-18.729	1.19E+10	-15.7349	-2.62203	-2.63314	-17.9009	1.19E+10	-16.0438
-18.5897	1.2E+10	-16.3528	-2.67279	-2.68344	-17.6746	1.2E+10	-16.6577
-19.0655	1.21E+10	-16.1788	-2.68154	-2.68379	-17.9414	1.21E+10	-16.6702
-19.4243	1.22E+10	-16.9508	-2.71421	-2.69315	-18.1052	1.22E+10	-17.666
-20.2245	1.23E+10	-16.7876	-2.73207	-2.63011	-18.2583	1.23E+10	-17.4592
-20.2018	1.24E+10	-17.5862	-2.7218	-2.66541	-18.3581	1.24E+10	-18.5133
-20.5522	1.25E+10	-18.1255	-2.73151	-2.71537	-18.4637	1.25E+10	-19.323
-20.9732	1.26E+10	-18.1209	-2.68722	-2.72693	-18.527	1.26E+10	-19.3031
-21.167	1.27E+10	-18.1177	-2.71853	-2.82087	-18.8479	1.27E+10	-19.3122
-21.342	1.28E+10	-18.7849	-2.74299	-2.75739	-18.8313	1.28E+10	-20.2079
-21.5158	1.29E+10	-18.9067	-2.76143	-2.73111	-19.0016	1.29E+10	-20.1389
-21.2845	1.3E+10	-19.3166	-2.78702	-2.77707	-18.9523	1.3E+10	-20.2966
-22.0116	1.31E+10	-19.018	-2.71711	-2.83703	-19.5331	1.31E+10	-20.4192
-22.0153	1.32E+10	-19.2824	-2.86844	-2.80257	-19.7381	1.32E+10	-20.5018
-21.4544	1.33E+10	-18.6686	-2.75393	-2.85826	-19.4541	1.33E+10	-19.7933
-21.4159	1.34E+10	-18.6643	-2.85155	-2.8247	-19.7225	1.34E+10	-19.8405
-22.6753	1.35E+10	-18.8679	-2.86121	-2.83723	-20.934	1.35E+10	-19.8527
-20.976	1.36E+10	-18.8547	-2.87667	-2.82775	-19.8203	1.36E+10	-20.1052
-21.2504	1.37E+10	-18.4854	-2.87339	-2.87735	-20.4912	1.37E+10	-19.7868
-20.6519	1.38E+10	-18.3136	-2.91232	-2.85645	-20.5899	1.38E+10	-19.8977
-19.8851	1.39E+10	-18.0522	-2.90562	-2.90292	-20.2636	1.39E+10	-19.4546
-19.3466	1.4E+10	-17.9056	-2.83668	-2.8596	-20.2918	1.4E+10	-19.4887
-18.9752	1.41E+10	-17.6245	-2.95305	-2.88666	-20.371	1.41E+10	-19.629
-17.9666	1.42E+10	-18.3328	-2.93269	-3.01964	-19.7872	1.42E+10	-20.83
-17.5691	1.43E+10	-17.6907	-2.96611	-2.93998	-19.8679	1.43E+10	-20.5467
-17.2947	1.44E+10	-17.6654	-2.94903	-2.91075	-20.136	1.44E+10	-20.8966
-16.8245	1.45E+10	-17.8834	-3.00969	-2.92876	-19.883	1.45E+10	-21.6283
-16.507	1.46E+10	-17.9468	-3.00448	-2.96569	-19.8249	1.46E+10	-22.7925
-15.6269	1.47E+10	-17.7993	-2.95633	-2.9503	-19.1358	1.47E+10	-23.2225
-15.2629	1.48E+10	-17.9886	-2.8925	-2.99336	-18.9162	1.48E+10	-24.4875
-14.8508	1.49E+10	-18.0315	-3.03279	-3.04405	-18.8539	1.49E+10	-25.1402
-14.4631	1.5E+10	-18.1398	-3.06455	-2.96209	-18.4577	1.5E+10	-26.4206

-14.2337	1.51E+10	-18.9622	-2.95712	-3.0368	-18.1085	1.51E+10	-29.2074
-13.8845	1.52E+10	-19.0837	-2.96944	-3.0887	-17.8629	1.52E+10	-30.5655
-14.0185	1.53E+10	-19.0567	-3.08692	-3.11603	-18.1835	1.53E+10	-27.9828
-13.6991	1.54E+10	-19.7111	-3.07495	-3.0958	-17.6687	1.54E+10	-26.856
-13.733	1.55E+10	-19.8773	-3.08261	-3.12663	-17.8954	1.55E+10	-25.2014
-14.0038	1.56E+10	-20.6886	-3.06806	-3.1561	-18.0708	1.56E+10	-23.7759
-13.7992	1.57E+10	-21.019	-3.10904	-3.14172	-17.484	1.57E+10	-21.8693
-13.7198	1.58E+10	-20.8844	-3.18666	-3.12308	-17.3702	1.58E+10	-20.4552
-14.0373	1.59E+10	-20.9052	-3.20158	-3.19442	-17.5136	1.59E+10	-19.4657
-14.0015	1.6E+10	-20.3727	-3.20312	-3.15999	-17.279	1.6E+10	-18.3836
-14.2044	1.61E+10	-19.9591	-3.21978	-3.27309	-17.0272	1.61E+10	-17.4222
-14.8017	1.62E+10	-19.6401	-3.26997	-3.28704	-17.4053	1.62E+10	-16.792
-15.2536	1.63E+10	-19.2358	-3.2663	-3.36925	-17.5818	1.63E+10	-16.1492
-15.7162	1.64E+10	-18.4472	-3.39508	-3.40491	-17.4874	1.64E+10	-15.4971
-16.2711	1.65E+10	-17.7036	-3.39872	-3.43566	-17.9553	1.65E+10	-15.1074
-17.2327	1.66E+10	-17.5013	-3.5128	-3.48457	-18.1532	1.66E+10	-14.9084
-17.6954	1.67E+10	-16.983	-3.4818	-3.494	-17.9923	1.67E+10	-14.8667
-18.9543	1.68E+10	-16.6238	-3.52373	-3.53362	-19.0636	1.68E+10	-14.5538
-19.8156	1.69E+10	-16.0073	-3.42709	-3.5685	-19.6887	1.69E+10	-14.3148
-21.7789	1.7E+10	-15.37	-3.60701	-3.56788	-20.8651	1.7E+10	-13.9734
-22.8815	1.71E+10	-15.2445	-3.56299	-3.67506	-21.4564	1.71E+10	-14.0498
-25.7671	1.72E+10	-15.4412	-3.69117	-3.76059	-22.8326	1.72E+10	-14.2922
-27.8455	1.73E+10	-15.1585	-3.69831	-3.7305	-24.5715	1.73E+10	-14.2797
-30.843	1.74E+10	-15.2387	-3.76148	-3.77296	-25.8986	1.74E+10	-14.2927
-29.4053	1.75E+10	-15.1774	-3.7877	-3.74951	-28.7504	1.75E+10	-14.4264
-25.5841	1.76E+10	-15.0503	-3.70765	-3.78894	-33.9475	1.76E+10	-14.3274
-24.0691	1.77E+10	-14.7629	-3.82494	-3.76153	-43.662	1.77E+10	-14.1623
-22.1671	1.78E+10	-14.6084	-3.85136	-3.84842	-40.8507	1.78E+10	-13.8498
-20.6077	1.79E+10	-14.6816	-3.83644	-3.82681	-32.3994	1.79E+10	-13.8215
-19.2489	1.8E+10	-14.5285	-3.95718	-3.85593	-27.0125	1.8E+10	-13.5347
-18.7251	1.81E+10	-14.0811	-3.92927	-3.86473	-24.1852	1.81E+10	-13.1501
-17.8496	1.82E+10	-13.7481	-3.95525	-3.96392	-21.8707	1.82E+10	-12.9102
-17.3002	1.83E+10	-13.1497	-3.89051	-3.9885	-19.8043	1.83E+10	-12.4422
-16.8708	1.84E+10	-12.7051	-4.11408	-4.09072	-18.3898	1.84E+10	-11.796
-16.1307	1.85E+10	-12.3213	-4.1174	-4.07142	-16.6157	1.85E+10	-11.5495
-15.9336	1.86E+10	-11.9254	-4.17096	-4.15959	-15.4188	1.86E+10	-11.2244
-15.7124	1.87E+10	-11.295	-4.2868	-4.23487	-14.3178	1.87E+10	-10.5762
-15.2804	1.88E+10	-10.9045	-4.33122	-4.33004	-13.4092	1.88E+10	-10.401
-15.7086	1.89E+10	-10.3868	-4.39154	-4.34995	-12.8466	1.89E+10	-9.87449
-15.8389	1.9E+10	-9.68782	-4.4739	-4.45306	-12.0924	1.9E+10	-9.2732
-15.1476	1.91E+10	-9.38371	-4.61119	-4.53633	-11.0202	1.91E+10	-9.09296
-15.1353	1.92E+10	-8.98589	-4.76198	-4.66925	-10.6879	1.92E+10	-8.75011
-15.0688	1.93E+10	-8.70059	-4.78787	-4.77427	-9.96271	1.93E+10	-8.48328
-15.3621	1.94E+10	-8.45574	-5.04606	-4.81193	-9.71305	1.94E+10	-8.3901
-15.674	1.95E+10	-7.86088	-4.97177	-4.9316	-9.31871	1.95E+10	-7.63295
-15.6223	1.96E+10	-7.72895	-5.059	-5.18722	-8.90792	1.96E+10	-7.80868
-16.1879	1.97E+10	-7.52814	-5.25957	-5.15362	-8.55801	1.97E+10	-7.36999
-17.1776	1.98E+10	-7.34242	-5.37384	-5.30688	-8.64015	1.98E+10	-7.28268
-17.203	1.99E+10	-7.11641	-5.31982	-5.50833	-8.15284	1.99E+10	-7.12904
-18.2745	2E+10	-6.90442	-5.56104	-5.28414	-8.13847	2E+10	-6.94859

J4

S21 (dB)	S12 (dB)	S22 (dB)
-3.36827	-3.41337	-9.02364
-1.0757	-1.06438	-17.0393
-0.81661	-0.82341	-21.0688
-0.75968	-0.76364	-23.1775
-0.74158	-0.75719	-24.5737
-0.7688	-0.76614	-25.2536
-0.77445	-0.78772	-25.9698
-0.80046	-0.80907	-26.7188
-0.83213	-0.82734	-27.4494
-0.85286	-0.83702	-27.6107
-0.87751	-0.86964	-28.4083
-0.88473	-0.90328	-28.5519
-0.9309	-0.93403	-29.192
-0.96433	-0.95649	-28.6279
-0.98518	-0.98164	-29.1851
-1.01111	-1.00701	-28.6396
-1.02303	-1.01481	-28.592
-1.05536	-1.06436	-28.6606
-1.0858	-1.06381	-27.9998
-1.09787	-1.08727	-28.1772
-1.13406	-1.12153	-27.6
-1.15088	-1.15768	-27.1349
-1.20028	-1.19061	-27.0334
-1.18773	-1.21363	-26.8972
-1.22537	-1.23815	-27.0226
-1.27966	-1.27683	-26.9384
-1.30171	-1.31894	-27.1615
-1.37292	-1.37468	-27.3942
-1.42984	-1.44599	-27.013
-1.49967	-1.51672	-27.3381
-1.55469	-1.55138	-27.476
-1.60018	-1.61832	-26.8714
-1.62553	-1.64236	-26.2654
-1.60191	-1.62809	-25.9077
-1.63339	-1.6205	-25.4242
-1.63246	-1.61301	-25.1329
-1.59889	-1.62406	-25.1111
-1.62476	-1.62647	-24.3338
-1.61074	-1.63809	-24.3011
-1.67098	-1.63215	-23.9641
-1.67121	-1.67227	-23.3497

J5

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-9.48139	-3.27006	-3.28655	-9.47904
2E+08	-15.6683	-1.07341	-1.06734	-17.586
2.99E+08	-20.0966	-0.83408	-0.84875	-21.3726
3.99E+08	-23.7276	-0.78809	-0.79279	-23.1202
4.98E+08	-26.0902	-0.7836	-0.79079	-24.1001
5.98E+08	-27.2733	-0.80889	-0.81065	-24.4581
6.97E+08	-27.5022	-0.80973	-0.82013	-24.7443
7.97E+08	-26.6015	-0.83093	-0.85455	-25.1898
8.96E+08	-25.5291	-0.86205	-0.85146	-25.4506
9.96E+08	-24.2171	-0.88213	-0.89807	-25.4761
1.1E+09	-23.8533	-0.91249	-0.92083	-25.8774
1.19E+09	-23.115	-0.93657	-0.9379	-25.8404
1.29E+09	-22.4977	-0.9698	-0.9849	-26.2003
1.39E+09	-22.1005	-1.00174	-1.01961	-25.7104
1.49E+09	-21.7236	-1.02579	-1.02311	-26.0305
1.59E+09	-21.1184	-1.05621	-1.05318	-25.9629
1.69E+09	-20.9312	-1.06774	-1.07247	-25.9656
1.79E+09	-20.8161	-1.09161	-1.11443	-26.2685
1.89E+09	-20.5985	-1.11846	-1.12767	-25.9002
1.99E+09	-20.4427	-1.13948	-1.15501	-26.5744
2.09E+09	-20.2891	-1.17278	-1.18429	-26.3999
2.19E+09	-20.2084	-1.19504	-1.20129	-26.3854
2.29E+09	-20.4617	-1.2374	-1.24426	-26.753
2.39E+09	-20.4722	-1.25216	-1.27196	-26.9008
2.49E+09	-20.768	-1.26669	-1.29241	-27.398
2.59E+09	-20.7685	-1.32176	-1.34525	-27.8154
2.69E+09	-21.118	-1.37519	-1.37412	-28.3691
2.79E+09	-21.3962	-1.41481	-1.43711	-28.8711
2.89E+09	-21.5687	-1.47616	-1.51396	-28.7935
2.99E+09	-21.6714	-1.55058	-1.56796	-29.3178
3.09E+09	-21.3459	-1.59878	-1.59155	-29.7482
3.18E+09	-21.2091	-1.60775	-1.62211	-29.8167
3.28E+09	-20.677	-1.61267	-1.63708	-29.5286
3.38E+09	-20.5798	-1.6093	-1.62314	-29.4355
3.48E+09	-20.0968	-1.62971	-1.6256	-28.7941
3.58E+09	-19.9933	-1.61091	-1.61343	-28.2307
3.68E+09	-19.6151	-1.61561	-1.62291	-27.7792
3.78E+09	-19.3999	-1.64272	-1.62921	-26.5247
3.88E+09	-18.9569	-1.64112	-1.65292	-25.8776
3.98E+09	-18.58	-1.68179	-1.66029	-25.0862
4.08E+09	-18.0498	-1.69652	-1.70585	-24.1184

-1.7216	-1.71125	-22.8276	4.18E+09	-17.528	-1.7482	-1.73257	-23.2787
-1.75421	-1.74738	-22.3585	4.28E+09	-17.0795	-1.79977	-1.78973	-22.5626
-1.79732	-1.79255	-21.776	4.38E+09	-16.4905	-1.83615	-1.84435	-21.8883
-1.82966	-1.83988	-21.2696	4.48E+09	-16.0647	-1.87067	-1.87477	-21.2129
-1.86491	-1.89701	-20.8492	4.58E+09	-15.5792	-1.89036	-1.90174	-20.709
-1.89596	-1.90759	-20.1555	4.68E+09	-15.182	-1.91863	-1.93709	-19.981
-1.95039	-1.95237	-19.5677	4.78E+09	-14.8275	-1.94443	-1.97385	-19.2641
-1.9495	-1.96354	-19.0749	4.88E+09	-14.6469	-1.95389	-1.97692	-18.7547
-1.94062	-1.96283	-18.2194	4.98E+09	-14.377	-1.93372	-1.97663	-17.8549
-1.94048	-1.93872	-17.7202	5.08E+09	-14.271	-1.97281	-1.94769	-17.376
-1.95478	-1.93262	-17.1514	5.17E+09	-14.0614	-1.96353	-1.9591	-16.8618
-1.93775	-1.96941	-16.5109	5.27E+09	-13.9446	-1.95766	-1.96354	-16.2328
-1.93621	-1.93679	-15.9863	5.37E+09	-13.8317	-1.97822	-2.01126	-15.8145
-1.96029	-1.9299	-15.4869	5.47E+09	-13.696	-1.97379	-1.98976	-15.3596
-1.92712	-1.94433	-15.0921	5.57E+09	-13.6572	-1.98165	-1.977	-14.9888
-1.93387	-1.94111	-14.7482	5.67E+09	-13.6141	-1.96628	-1.98603	-14.7259
-1.95822	-1.9484	-14.5188	5.77E+09	-13.5791	-2.01562	-2.00051	-14.5437
-1.95119	-2.00471	-14.262	5.87E+09	-13.5994	-2.00388	-2.02544	-14.3102
-1.96507	-1.9789	-14.0815	5.97E+09	-13.5667	-2.01569	-2.02728	-14.2007
-2.00248	-1.9983	-13.895	6.07E+09	-13.7302	-2.04468	-2.05151	-14.0565
-1.99626	-2.02073	-13.8223	6.17E+09	-13.7965	-2.04686	-2.07006	-14.0068
-2.01457	-2.04169	-13.8183	6.27E+09	-13.9109	-2.05629	-2.11162	-14.0204
-2.0328	-2.04199	-13.77	6.37E+09	-14.118	-2.06614	-2.11592	-14.0113
-2.0584	-2.06665	-13.8431	6.47E+09	-14.1828	-2.08064	-2.09958	-14.0608
-2.06306	-2.05289	-14.0102	6.57E+09	-14.4458	-2.10141	-2.09593	-14.2703
-2.04166	-2.04515	-14.1099	6.67E+09	-14.7727	-2.10559	-2.08759	-14.3691
-2.08393	-2.08873	-14.0444	6.77E+09	-15.068	-2.12385	-2.11412	-14.2578
-2.09387	-2.07961	-14.1756	6.87E+09	-15.2854	-2.14281	-2.16971	-14.4567
-2.10967	-2.07208	-14.4331	6.97E+09	-15.6609	-2.1428	-2.12782	-14.6563
-2.09723	-2.10688	-14.508	7.07E+09	-16.0004	-2.16057	-2.15187	-14.6801
-2.13499	-2.10914	-14.6236	7.16E+09	-16.3207	-2.18445	-2.17619	-14.8115
-2.11857	-2.10944	-14.7776	7.26E+09	-16.6042	-2.16968	-2.1732	-14.9322
-2.10846	-2.08761	-14.974	7.36E+09	-16.8464	-2.16775	-2.151	-15.1552
-2.11586	-2.16164	-15.1788	7.46E+09	-16.8655	-2.16153	-2.17782	-15.2464
-2.16267	-2.13173	-15.11	7.56E+09	-16.9433	-2.20346	-2.1927	-15.2259
-2.15136	-2.14359	-15.1725	7.66E+09	-17.0647	-2.20503	-2.17654	-15.2598
-2.15583	-2.15947	-15.209	7.76E+09	-16.9011	-2.22271	-2.22403	-15.246
-2.18196	-2.1559	-15.0322	7.86E+09	-16.5859	-2.24875	-2.23587	-15.0362
-2.18172	-2.1366	-15.4087	7.96E+09	-16.668	-2.26229	-2.2477	-15.3332
-2.21272	-2.1834	-15.3293	8.06E+09	-16.2858	-2.27954	-2.25842	-15.2405
-2.21664	-2.21618	-15.4732	8.16E+09	-16.1236	-2.30147	-2.27117	-15.3018
-2.22536	-2.24922	-15.4555	8.26E+09	-15.7465	-2.30523	-2.33437	-15.2784
-2.27931	-2.26016	-15.634	8.36E+09	-15.4896	-2.36625	-2.3317	-15.2995
-2.26812	-2.28888	-15.6987	8.46E+09	-15.5899	-2.36866	-2.35088	-15.3826
-2.30705	-2.32782	-15.6478	8.56E+09	-15.031	-2.38303	-2.42234	-15.2398
-2.32402	-2.32772	-15.7286	8.66E+09	-14.8711	-2.46141	-2.37927	-15.2562
-2.30383	-2.34817	-15.8611	8.76E+09	-14.5832	-2.40669	-2.42727	-15.2553
-2.3724	-2.31423	-15.9583	8.86E+09	-14.4474	-2.46684	-2.41942	-15.319
-2.38189	-2.37542	-16.1149	8.96E+09	-14.1258	-2.52941	-2.47381	-15.3635
-2.37398	-2.38962	-16.3018	9.06E+09	-14.0362	-2.50128	-2.48217	-15.5325
-2.45507	-2.37798	-16.3952	9.15E+09	-13.9416	-2.45971	-2.44739	-15.6795
-2.4068	-2.42389	-16.4838	9.25E+09	-13.8135	-2.44901	-2.52424	-15.739
-2.39424	-2.3967	-16.8155	9.35E+09	-13.7493	-2.48854	-2.49031	-16.1009
-2.44396	-2.42178	-16.624	9.45E+09	-13.4307	-2.54207	-2.52333	-16.0372
-2.45538	-2.41277	-16.5564	9.55E+09	-13.4277	-2.54494	-2.52477	-16.1499

-2.46415	-2.4184	-16.3255	9.65E+09	-13.4432	-2.55121	-2.53188	-16.0838
-2.44979	-2.46971	-16.1613	9.75E+09	-13.1581	-2.56135	-2.5083	-16.1295
-2.5172	-2.47701	-15.8888	9.85E+09	-13.1108	-2.61012	-2.51059	-16.069
-2.46788	-2.53912	-15.7637	9.95E+09	-12.9614	-2.54373	-2.58722	-16.1923
-2.57227	-2.496	-15.4282	1.01E+10	-12.9282	-2.56833	-2.56172	-16.1173
-2.56011	-2.53648	-15.2585	1.01E+10	-12.8892	-2.6377	-2.6202	-16.1336
-2.52139	-2.541	-15.0597	1.02E+10	-13.0114	-2.60818	-2.58794	-16.1378
-2.59885	-2.57399	-14.7822	1.03E+10	-12.9538	-2.67558	-2.57072	-15.9771
-2.5944	-2.60514	-14.6161	1.04E+10	-12.9823	-2.64218	-2.62789	-16.0178
-2.59521	-2.60781	-14.4366	1.05E+10	-13.0037	-2.64131	-2.6406	-16.0241
-2.60997	-2.57267	-14.4407	1.06E+10	-13.0186	-2.61944	-2.64077	-16.1633
-2.67145	-2.61062	-14.0165	1.07E+10	-13.1917	-2.58284	-2.65235	-16.115
-2.67545	-2.67097	-14.211	1.08E+10	-13.1256	-2.65365	-2.6488	-16.2651
-2.63404	-2.63757	-14.3002	1.09E+10	-13.4813	-2.64533	-2.62041	-16.5869
-2.66875	-2.70031	-14.1764	1.1E+10	-13.7056	-2.70598	-2.69711	-16.5658
-2.72684	-2.60935	-14.3335	1.11E+10	-14.215	-2.64783	-2.62768	-16.9481
-2.63716	-2.66734	-14.7245	1.12E+10	-14.4751	-2.562	-2.70679	-17.5006
-2.65218	-2.64878	-14.5277	1.13E+10	-14.7741	-2.68838	-2.70119	-17.4335
-2.63638	-2.69378	-14.9146	1.14E+10	-14.9904	-2.63807	-2.68614	-17.9269
-2.66795	-2.67235	-15.1755	1.15E+10	-15.6194	-2.69518	-2.66306	-18.2619
-2.64571	-2.61196	-15.3582	1.16E+10	-15.9789	-2.64724	-2.68905	-18.803
-2.64102	-2.68608	-15.6147	1.17E+10	-16.5182	-2.60388	-2.70769	-19.1546
-2.66903	-2.65304	-15.9013	1.18E+10	-16.8485	-2.69301	-2.73177	-19.4825
-2.67213	-2.62204	-16.4705	1.19E+10	-17.6503	-2.73166	-2.70258	-20.1122
-2.68109	-2.64477	-16.6041	1.2E+10	-18.4572	-2.71198	-2.68338	-19.9652
-2.63201	-2.63059	-17.0081	1.21E+10	-18.6034	-2.70316	-2.67421	-20.2981
-2.61433	-2.60406	-17.4001	1.22E+10	-19.7671	-2.68492	-2.72341	-20.645
-2.67087	-2.60565	-18.2787	1.23E+10	-19.6613	-2.70437	-2.6374	-20.5971
-2.64931	-2.63278	-18.4274	1.24E+10	-21.0329	-2.72851	-2.75038	-20.8106
-2.67727	-2.65487	-19.0038	1.25E+10	-22.0175	-2.79485	-2.69567	-20.4705
-2.6594	-2.61705	-19.7644	1.26E+10	-22.3733	-2.78963	-2.76793	-20.3168
-2.63853	-2.72902	-20.3742	1.27E+10	-23.1007	-2.78954	-2.83949	-20.4654
-2.69232	-2.67073	-20.8491	1.28E+10	-23.8751	-2.86644	-2.86681	-20.0087
-2.74879	-2.67088	-21.789	1.29E+10	-24.7373	-2.90112	-2.76681	-19.5533
-2.68046	-2.80111	-21.9998	1.3E+10	-25.7504	-2.8612	-2.86524	-19.502
-2.69301	-2.75398	-23.4281	1.31E+10	-25.8476	-2.83671	-2.92193	-19.3634
-2.79355	-2.7256	-24.2245	1.32E+10	-26.3336	-2.91126	-2.90871	-18.884
-2.6965	-2.76772	-24.1194	1.33E+10	-25.7972	-2.92094	-3.01627	-18.6267
-2.74583	-2.7488	-25.6128	1.34E+10	-25.3641	-2.9972	-2.97435	-18.0135
-2.80933	-2.78648	-29.2251	1.35E+10	-26.2855	-3.00853	-2.97429	-18.3192
-2.82314	-2.75178	-28.8316	1.36E+10	-25.9814	-3.04034	-3.00641	-17.3674
-2.86169	-2.8369	-31.0447	1.37E+10	-25.5875	-3.05684	-3.11558	-17.4821
-2.74482	-2.86294	-32.5714	1.38E+10	-25.0469	-3.12866	-3.10791	-17.0632
-2.80599	-2.81671	-35.3879	1.39E+10	-24.8827	-3.10544	-3.06029	-16.5574
-2.83198	-2.84922	-40.6995	1.4E+10	-23.8405	-3.10381	-3.13885	-16.3391
-2.89199	-2.84155	-44.2847	1.41E+10	-22.9714	-3.16531	-3.14343	-16.0285
-2.90004	-2.88761	-41.8275	1.42E+10	-22.5885	-3.1725	-3.24659	-15.5667
-2.87641	-2.89107	-37.9933	1.43E+10	-21.5644	-3.25123	-3.24421	-15.1517
-2.9498	-2.89087	-35.626	1.44E+10	-20.9906	-3.26379	-3.26146	-15.002
-2.96881	-2.91103	-31.401	1.45E+10	-20.4704	-3.29462	-3.24639	-14.6856
-2.93248	-2.93148	-28.209	1.46E+10	-19.5063	-3.303	-3.3011	-14.3491
-2.9145	-2.96447	-25.5386	1.47E+10	-18.5693	-3.28754	-3.34255	-13.7503
-2.90174	-2.96336	-25.09	1.48E+10	-18.1259	-3.30035	-3.34865	-13.5245
-3.02892	-2.99501	-24.1864	1.49E+10	-17.5638	-3.39678	-3.35628	-13.4134
-2.95133	-2.96161	-22.5835	1.5E+10	-16.9598	-3.35252	-3.3637	-13.0565

-3.02968	-2.98064	-21.2173	1.51E+10	-16.8997	-3.3734	-3.36756	-12.6893
-2.96942	-3.13654	-20.2695	1.52E+10	-16.1866	-3.39877	-3.45412	-12.4986
-3.07316	-3.1572	-19.984	1.53E+10	-15.7319	-3.49804	-3.5261	-12.5588
-3.10482	-3.16073	-18.8734	1.54E+10	-15.384	-3.42661	-3.43167	-12.3522
-3.0364	-3.16212	-18.5459	1.55E+10	-15.2771	-3.41484	-3.48286	-12.3623
-3.1392	-3.20993	-17.7377	1.56E+10	-15.2729	-3.36892	-3.47697	-12.4768
-3.18677	-3.24361	-17.0688	1.57E+10	-15.4298	-3.42778	-3.49549	-12.3947
-3.23193	-3.21122	-16.6171	1.58E+10	-15.1948	-3.40186	-3.46395	-12.2506
-3.31499	-3.27119	-16.2382	1.59E+10	-15.3091	-3.43783	-3.4498	-12.5811
-3.23743	-3.2751	-16.1023	1.6E+10	-15.1575	-3.44648	-3.50509	-12.6677
-3.32801	-3.39976	-15.4495	1.61E+10	-15.2138	-3.43691	-3.48331	-12.7043
-3.39484	-3.39193	-15.4399	1.62E+10	-15.6125	-3.41986	-3.50278	-13.2018
-3.36633	-3.42619	-15.2254	1.63E+10	-15.7834	-3.39565	-3.49646	-13.5884
-3.37064	-3.47328	-15.2015	1.64E+10	-15.9367	-3.54025	-3.4517	-13.8457
-3.50529	-3.47491	-15.3477	1.65E+10	-15.7832	-3.50444	-3.5001	-14.3786
-3.49245	-3.51109	-15.2801	1.66E+10	-16.3065	-3.48293	-3.51457	-15.0528
-3.58366	-3.48764	-15.41	1.67E+10	-16.496	-3.57412	-3.51383	-15.5696
-3.5101	-3.53171	-15.9104	1.68E+10	-16.6344	-3.50603	-3.4936	-16.5905
-3.4249	-3.49945	-16.4533	1.69E+10	-16.6979	-3.4299	-3.47557	-17.3785
-3.56258	-3.52451	-17.316	1.7E+10	-16.2875	-3.55578	-3.52361	-19.0208
-3.52553	-3.62769	-17.6439	1.71E+10	-16.4979	-3.57037	-3.53906	-20.115
-3.49653	-3.53208	-19.081	1.72E+10	-16.5269	-3.5411	-3.61788	-22.687
-3.57456	-3.52957	-20.2308	1.73E+10	-16.2687	-3.58887	-3.61547	-24.728
-3.63052	-3.63686	-21.3535	1.74E+10	-16.3117	-3.65088	-3.68246	-28.2844
-3.67879	-3.5708	-23.8518	1.75E+10	-16.1008	-3.73981	-3.68861	-31.9139
-3.63417	-3.54115	-27.5862	1.76E+10	-15.8491	-3.68276	-3.78246	-34.7922
-3.62169	-3.69973	-32.9751	1.77E+10	-15.385	-3.77702	-3.63696	-31.8056
-3.63811	-3.62764	-39.1932	1.78E+10	-15.0658	-3.74241	-3.75797	-27.7625
-3.70948	-3.71013	-31.9422	1.79E+10	-14.9084	-3.8576	-3.83108	-24.9391
-3.73384	-3.68789	-25.785	1.8E+10	-14.6549	-3.9309	-3.85136	-22.8039
-3.67875	-3.63947	-22.4625	1.81E+10	-14.3401	-3.92202	-3.83683	-21.2124
-3.85976	-3.82105	-20.1037	1.82E+10	-13.9536	-3.89977	-3.89217	-19.8204
-3.79318	-3.69236	-18.3251	1.83E+10	-13.6977	-3.92018	-3.90667	-18.9417
-3.91061	-3.90623	-16.8951	1.84E+10	-13.3569	-4.0387	-4.05473	-18.3391
-3.95287	-3.9341	-15.2202	1.85E+10	-13.2123	-4.07369	-4.04899	-17.0344
-3.98909	-4.00352	-14.1879	1.86E+10	-13.1161	-4.15431	-4.14242	-16.3697
-4.08626	-4.06075	-13.2049	1.87E+10	-12.5143	-4.0982	-4.16739	-15.8352
-4.3488	-4.22337	-12.3624	1.88E+10	-12.438	-4.29535	-4.16626	-15.1264
-4.28317	-4.22688	-11.9983	1.89E+10	-12.1177	-4.23787	-4.26534	-15.3137
-4.3084	-4.09604	-11.3593	1.9E+10	-11.4563	-4.35034	-4.21515	-14.939
-4.42356	-4.40771	-10.5447	1.91E+10	-11.236	-4.42976	-4.37531	-13.9322
-4.66296	-4.44357	-10.1235	1.92E+10	-10.8353	-4.62245	-4.37178	-13.8471
-4.61089	-4.67834	-9.59064	1.93E+10	-10.5929	-4.64656	-4.64064	-13.323
-4.81638	-4.64143	-9.52808	1.94E+10	-10.363	-4.7695	-4.73593	-13.2752
-4.64867	-4.73415	-9.16535	1.95E+10	-9.77396	-4.64008	-4.74474	-13.0982
-4.85854	-4.81591	-8.91495	1.96E+10	-9.52046	-4.77823	-4.85064	-12.9544
-4.94414	-4.90018	-8.93529	1.97E+10	-9.32993	-5.03695	-4.872	-12.7375
-5.05155	-4.99895	-8.94929	1.98E+10	-8.61857	-5.01346	-5.03381	-12.9498
-5.12976	-5.1129	-8.78429	1.99E+10	-8.49257	-5.11306	-5.16718	-12.7479
-5.16782	-5.02072	-8.7942	2E+10	-7.99082	-5.37115	-5.23606	-12.768

J6

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
1E+08	-9.45945	-3.20529	-3.21409	-9.48919
2E+08	-15.5362	-1.05181	-1.04711	-17.4595
2.99E+08	-20.3056	-0.79301	-0.81304	-21.8734
3.99E+08	-24.3151	-0.74978	-0.7464	-23.9523
4.98E+08	-27.3343	-0.74456	-0.75179	-25.0046
5.98E+08	-28.3435	-0.76094	-0.76594	-25.1258
6.97E+08	-28.0804	-0.77312	-0.77944	-24.9741
7.97E+08	-26.8533	-0.79167	-0.81691	-24.8257
8.96E+08	-25.5011	-0.83363	-0.83027	-24.5355
9.96E+08	-23.9863	-0.85696	-0.85968	-24.0571
1.1E+09	-23.6238	-0.88103	-0.88283	-23.9736
1.19E+09	-22.8183	-0.91219	-0.90722	-23.6858
1.29E+09	-22.2179	-0.92407	-0.94065	-23.6994
1.39E+09	-21.805	-0.96446	-0.9585	-23.2515
1.49E+09	-21.431	-0.98444	-0.98909	-23.4465
1.59E+09	-20.9329	-1.01618	-1.02979	-23.4944
1.69E+09	-20.9291	-1.03142	-1.03649	-23.6145
1.79E+09	-20.9345	-1.05647	-1.07095	-24.1106
1.89E+09	-20.8394	-1.07667	-1.06469	-24.1003
1.99E+09	-20.9563	-1.10854	-1.10348	-25.1575
2.09E+09	-20.9633	-1.13786	-1.12498	-25.4789
2.19E+09	-21.1323	-1.15573	-1.15863	-26.0511
2.29E+09	-21.6521	-1.17524	-1.18852	-27.0137
2.39E+09	-21.8289	-1.18223	-1.21035	-27.8076
2.49E+09	-22.5812	-1.22318	-1.2413	-29.0136
2.59E+09	-23.0258	-1.26442	-1.26367	-30.7164
2.69E+09	-23.8294	-1.30674	-1.31787	-32.4245
2.79E+09	-24.5469	-1.36516	-1.39015	-34.916
2.89E+09	-25.0644	-1.4216	-1.45742	-39.9203
2.99E+09	-25.4429	-1.50118	-1.48758	-42.6605
3.09E+09	-24.7873	-1.54988	-1.53636	-41.8713
3.18E+09	-24.3519	-1.58062	-1.58374	-38.9166
3.28E+09	-23.2112	-1.57293	-1.59267	-34.959
3.38E+09	-22.8522	-1.57669	-1.5979	-31.045
3.48E+09	-21.806	-1.58456	-1.58292	-27.7618
3.58E+09	-21.2376	-1.57503	-1.59545	-25.6642
3.68E+09	-20.2763	-1.56605	-1.59673	-23.9087
3.78E+09	-19.4967	-1.60734	-1.61271	-22.1492
3.88E+09	-18.6555	-1.62433	-1.61985	-20.9703
3.98E+09	-17.841	-1.67858	-1.63393	-19.9157
4.08E+09	-16.939	-1.67865	-1.69311	-18.9381

J7

Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)
1E+08	-9.25553	-3.5079	-3.49202
2E+08	-15.1742	-1.13631	-1.13759
2.99E+08	-19.5871	-0.87889	-0.87998
3.99E+08	-23.0779	-0.82081	-0.81855
4.98E+08	-25.3084	-0.81188	-0.81561
5.98E+08	-26.2128	-0.82419	-0.82143
6.97E+08	-26.1593	-0.83942	-0.83684
7.97E+08	-25.2493	-0.8566	-0.85781
8.96E+08	-24.1395	-0.89531	-0.88132
9.96E+08	-22.8416	-0.91357	-0.91686
1.1E+09	-22.4224	-0.93394	-0.93761
1.19E+09	-21.5404	-0.96155	-0.97156
1.29E+09	-20.8206	-0.99932	-0.99185
1.39E+09	-20.3427	-1.03507	-1.05388
1.49E+09	-19.8006	-1.06817	-1.058
1.59E+09	-19.097	-1.08968	-1.08327
1.69E+09	-18.7821	-1.11502	-1.10102
1.79E+09	-18.5497	-1.15398	-1.15618
1.89E+09	-18.1709	-1.17944	-1.18508
1.99E+09	-17.9979	-1.21612	-1.19925
2.09E+09	-17.6785	-1.25207	-1.23882
2.19E+09	-17.4338	-1.2852	-1.27123
2.29E+09	-17.4407	-1.30406	-1.29674
2.39E+09	-17.3307	-1.33109	-1.34645
2.49E+09	-17.3576	-1.35405	-1.36236
2.59E+09	-17.249	-1.42098	-1.39634
2.69E+09	-17.3277	-1.43861	-1.43532
2.79E+09	-17.4334	-1.50223	-1.4926
2.89E+09	-17.517	-1.55898	-1.57481
2.99E+09	-17.6215	-1.64025	-1.64492
3.09E+09	-17.4747	-1.69578	-1.67341
3.18E+09	-17.4719	-1.73451	-1.72808
3.28E+09	-17.2145	-1.74325	-1.7564
3.38E+09	-17.2519	-1.74514	-1.76001
3.48E+09	-17.0954	-1.73333	-1.71553
3.58E+09	-17.3187	-1.7209	-1.73269
3.68E+09	-17.3113	-1.69603	-1.70696
3.78E+09	-17.6752	-1.72511	-1.71479
3.88E+09	-17.7722	-1.72894	-1.69436
3.98E+09	-18.0562	-1.73195	-1.70499
4.08E+09	-18.1876	-1.74687	-1.73665

4.18E+09	-16.1593	-1.7444	-1.7343	-18.1754	4.18E+09	-18.3069	-1.7812	-1.78146
4.28E+09	-15.5092	-1.78086	-1.79449	-17.5478	4.28E+09	-18.3993	-1.82263	-1.80788
4.38E+09	-14.798	-1.8557	-1.85406	-16.9958	4.38E+09	-18.2616	-1.85965	-1.86129
4.48E+09	-14.284	-1.88597	-1.89744	-16.4953	4.48E+09	-18.0703	-1.88828	-1.87895
4.58E+09	-13.7467	-1.91157	-1.94457	-16.0947	4.58E+09	-17.8026	-1.91839	-1.92704
4.68E+09	-13.332	-1.9712	-1.98878	-15.6061	4.68E+09	-17.5817	-1.93554	-1.96965
4.78E+09	-12.9495	-1.9822	-2.01294	-15.1325	4.78E+09	-17.2969	-1.98202	-1.98535
4.88E+09	-12.7195	-2.01255	-1.98985	-14.7394	4.88E+09	-17.3212	-1.97975	-1.97915
4.98E+09	-12.4348	-2.03258	-2.02407	-14.1889	4.98E+09	-17.2237	-1.99275	-1.97308
5.08E+09	-12.2292	-2.01905	-2.01918	-13.8613	5.08E+09	-17.1782	-1.98209	-1.95479
5.17E+09	-12.0525	-2.04517	-2.01161	-13.4216	5.17E+09	-17.0532	-1.96879	-1.9703
5.27E+09	-11.8965	-2.01126	-2.05486	-13.0436	5.27E+09	-16.9251	-1.94694	-1.93101
5.37E+09	-11.796	-2.04914	-2.07399	-12.7474	5.37E+09	-16.8512	-1.96476	-1.96111
5.47E+09	-11.7096	-2.05837	-2.04515	-12.4822	5.47E+09	-16.7038	-1.9698	-1.94231
5.57E+09	-11.7147	-2.05469	-2.04321	-12.3042	5.57E+09	-16.6905	-1.93624	-1.9428
5.67E+09	-11.7154	-2.03885	-2.03643	-12.153	5.67E+09	-16.6806	-1.94273	-1.93545
5.77E+09	-11.7461	-2.07022	-2.06411	-12.113	5.77E+09	-16.5854	-1.96956	-1.94433
5.87E+09	-11.843	-2.08418	-2.08292	-12.0288	5.87E+09	-16.6128	-1.96428	-1.97576
5.97E+09	-11.8754	-2.07134	-2.07594	-11.9823	5.97E+09	-16.6037	-1.98454	-1.9695
6.07E+09	-12.0931	-2.09337	-2.0818	-11.9045	6.07E+09	-16.7484	-2.00574	-1.99727
6.17E+09	-12.2332	-2.10001	-2.10864	-11.8808	6.17E+09	-16.8697	-2.00269	-2.0134
6.27E+09	-12.4146	-2.10569	-2.11549	-11.9237	6.27E+09	-17.0509	-2.02049	-2.02694
6.37E+09	-12.6757	-2.09945	-2.12931	-12.0099	6.37E+09	-17.383	-2.01004	-2.05372
6.47E+09	-12.8371	-2.11716	-2.1418	-12.1627	6.47E+09	-17.6465	-2.08245	-2.05658
6.57E+09	-13.2162	-2.10434	-2.10423	-12.4141	6.57E+09	-18.0955	-2.04444	-2.06378
6.67E+09	-13.5707	-2.11251	-2.10495	-12.6235	6.67E+09	-18.7184	-2.04688	-2.05265
6.77E+09	-13.964	-2.14096	-2.13808	-12.6532	6.77E+09	-19.3517	-2.0994	-2.09284
6.87E+09	-14.1628	-2.13154	-2.11861	-12.8188	6.87E+09	-19.7909	-2.1107	-2.11445
6.97E+09	-14.4719	-2.13544	-2.1389	-13.0214	6.97E+09	-20.4193	-2.09978	-2.05098
7.07E+09	-14.7391	-2.11141	-2.16491	-12.9962	7.07E+09	-20.9347	-2.11446	-2.13039
7.16E+09	-14.9476	-2.17841	-2.16112	-13.0521	7.16E+09	-21.346	-2.17731	-2.13712
7.26E+09	-15.0928	-2.15624	-2.16758	-13.2012	7.26E+09	-21.6299	-2.1446	-2.13982
7.36E+09	-15.3183	-2.14049	-2.16124	-13.3868	7.36E+09	-21.8836	-2.12815	-2.13281
7.46E+09	-15.3276	-2.12786	-2.21137	-13.5659	7.46E+09	-21.6424	-2.15525	-2.18844
7.56E+09	-15.3823	-2.1902	-2.15437	-13.6682	7.56E+09	-21.5974	-2.17082	-2.16553
7.66E+09	-15.3442	-2.22148	-2.16999	-13.7103	7.66E+09	-21.3926	-2.16576	-2.17374
7.76E+09	-15.2754	-2.18962	-2.17997	-13.7919	7.76E+09	-21.0266	-2.21586	-2.1972
7.86E+09	-14.9957	-2.22307	-2.19916	-13.7199	7.86E+09	-20.3117	-2.20023	-2.18827
7.96E+09	-15.2232	-2.21704	-2.21565	-13.9534	7.96E+09	-20.5856	-2.23049	-2.24249
8.06E+09	-14.9647	-2.22475	-2.23882	-13.9975	8.06E+09	-20.0288	-2.24478	-2.26878
8.16E+09	-14.9168	-2.2512	-2.23322	-14.1458	8.16E+09	-19.9544	-2.26696	-2.27411
8.26E+09	-14.797	-2.23273	-2.25425	-14.2172	8.26E+09	-19.6272	-2.24464	-2.2903
8.36E+09	-14.7037	-2.26587	-2.24726	-14.5435	8.36E+09	-19.5249	-2.30717	-2.27959
8.46E+09	-14.905	-2.27708	-2.27348	-14.8138	8.46E+09	-19.9465	-2.31243	-2.29563
8.56E+09	-14.7281	-2.31173	-2.28387	-14.9879	8.56E+09	-19.466	-2.32522	-2.35886
8.66E+09	-14.846	-2.33569	-2.27802	-15.3597	8.66E+09	-19.6957	-2.38859	-2.32617
8.76E+09	-14.7615	-2.30024	-2.28134	-15.7654	8.76E+09	-19.6301	-2.33245	-2.37186
8.86E+09	-14.8292	-2.32942	-2.26889	-16.1046	8.86E+09	-19.7151	-2.41074	-2.337
8.96E+09	-14.7638	-2.33937	-2.32394	-16.4172	8.96E+09	-19.3691	-2.425	-2.38455
9.06E+09	-14.7869	-2.31506	-2.32347	-16.9881	9.06E+09	-19.3931	-2.39861	-2.40795
9.15E+09	-14.8522	-2.32838	-2.30558	-17.2799	9.15E+09	-19.2483	-2.42388	-2.38801
9.25E+09	-14.9143	-2.29283	-2.3075	-17.4965	9.25E+09	-19.044	-2.47196	-2.4145
9.35E+09	-14.8092	-2.30583	-2.31602	-17.9404	9.35E+09	-18.4577	-2.42403	-2.44406
9.45E+09	-14.5062	-2.34911	-2.34482	-17.854	9.45E+09	-17.9482	-2.47106	-2.46813
9.55E+09	-14.6352	-2.37524	-2.3212	-18.0203	9.55E+09	-17.3308	-2.54486	-2.48695

9.65E+09	-14.6115	-2.43548	-2.39694	-17.9429	9.65E+09	-17.2469	-2.5403	-2.50531
9.75E+09	-14.3072	-2.33929	-2.40183	-17.9546	9.75E+09	-16.3835	-2.51346	-2.54296
9.85E+09	-14.2717	-2.42314	-2.35494	-17.9175	9.85E+09	-16.0258	-2.61392	-2.5143
9.95E+09	-14.0618	-2.35922	-2.43634	-17.8416	9.95E+09	-15.4395	-2.56777	-2.6154
1.01E+10	-13.9332	-2.45304	-2.4115	-17.5017	1.01E+10	-15.0768	-2.63771	-2.62911
1.01E+10	-13.7636	-2.45589	-2.45188	-17.199	1.01E+10	-14.5937	-2.60742	-2.69278
1.02E+10	-13.7799	-2.4477	-2.44337	-16.8589	1.02E+10	-14.4042	-2.71456	-2.67641
1.03E+10	-13.5988	-2.52412	-2.46168	-16.2931	1.03E+10	-14.0334	-2.73811	-2.74633
1.04E+10	-13.4849	-2.48916	-2.52498	-15.9217	1.04E+10	-13.7022	-2.76037	-2.75419
1.05E+10	-13.3888	-2.4853	-2.53686	-15.5833	1.05E+10	-13.2901	-2.78893	-2.81017
1.06E+10	-13.2895	-2.42584	-2.50053	-15.5089	1.06E+10	-13.1915	-2.81721	-2.80785
1.07E+10	-13.4325	-2.53232	-2.50306	-15.1652	1.07E+10	-13.1129	-2.84172	-2.81528
1.08E+10	-13.303	-2.58148	-2.52968	-15.3346	1.08E+10	-12.7684	-2.84302	-2.86273
1.09E+10	-13.532	-2.54875	-2.48112	-15.4758	1.09E+10	-12.9351	-2.89878	-2.89581
1.1E+10	-13.6192	-2.60378	-2.5696	-15.347	1.1E+10	-12.808	-2.9367	-2.95884
1.11E+10	-13.9299	-2.59129	-2.53849	-15.5803	1.11E+10	-12.8584	-2.97196	-2.89629
1.12E+10	-14.1132	-2.54867	-2.59735	-15.7696	1.12E+10	-12.7954	-2.86959	-2.99797
1.13E+10	-14.2211	-2.62194	-2.55445	-15.4169	1.13E+10	-12.8546	-2.96115	-2.93128
1.14E+10	-14.2846	-2.5949	-2.56106	-15.5129	1.14E+10	-12.774	-2.96916	-3.01355
1.15E+10	-14.6811	-2.62504	-2.54484	-15.6507	1.15E+10	-13.0885	-3.0061	-3.00108
1.16E+10	-14.7356	-2.56332	-2.579	-15.7881	1.16E+10	-12.9583	-2.99946	-2.96869
1.17E+10	-15.2348	-2.59265	-2.64434	-16.141	1.17E+10	-13.116	-2.99629	-3.02389
1.18E+10	-15.4054	-2.56779	-2.64532	-16.4632	1.18E+10	-13.2087	-3.04245	-3.04401
1.19E+10	-16.0068	-2.55686	-2.53834	-17.1141	1.19E+10	-13.4903	-2.94861	-2.95714
1.2E+10	-16.6672	-2.60412	-2.6446	-17.2684	1.2E+10	-13.8545	-3.041	-3.05385
1.21E+10	-16.6764	-2.6153	-2.57713	-17.8191	1.21E+10	-13.7501	-3.03229	-3.03402
1.22E+10	-17.5301	-2.639	-2.58928	-18.2979	1.22E+10	-14.2993	-3.01065	-3.03254
1.23E+10	-17.1724	-2.62511	-2.56982	-18.7918	1.23E+10	-14.1436	-3.0563	-2.98176
1.24E+10	-18.0327	-2.63723	-2.58892	-18.8193	1.24E+10	-14.5082	-3.05819	-3.0978
1.25E+10	-18.6444	-2.66085	-2.55955	-18.8196	1.25E+10	-14.724	-3.12601	-3.08878
1.26E+10	-18.6152	-2.6746	-2.65534	-19.1747	1.26E+10	-14.8263	-3.05751	-3.04565
1.27E+10	-18.9071	-2.62237	-2.70933	-19.6277	1.27E+10	-15.0506	-3.06627	-3.13363
1.28E+10	-19.4401	-2.69569	-2.67086	-19.9362	1.28E+10	-15.0829	-3.15339	-3.10413
1.29E+10	-19.8394	-2.667	-2.65663	-20.4539	1.29E+10	-15.319	-3.11694	-3.03132
1.3E+10	-20.1307	-2.66549	-2.76677	-20.9599	1.3E+10	-15.5937	-3.11404	-3.17108
1.31E+10	-20.2205	-2.68088	-2.64898	-22.0383	1.31E+10	-15.4891	-3.08417	-3.15287
1.32E+10	-20.3203	-2.75083	-2.70364	-22.4556	1.32E+10	-15.66	-3.20357	-3.11335
1.33E+10	-19.7509	-2.70927	-2.74831	-21.988	1.33E+10	-15.4865	-3.14111	-3.2188
1.34E+10	-19.5555	-2.73076	-2.69728	-21.7627	1.34E+10	-15.2491	-3.17605	-3.13195
1.35E+10	-19.6147	-2.77792	-2.69266	-23.0519	1.35E+10	-15.4359	-3.18479	-3.13653
1.36E+10	-19.8689	-2.80081	-2.72404	-21.32	1.36E+10	-15.3245	-3.22173	-3.13939
1.37E+10	-19.6486	-2.81648	-2.84159	-21.5929	1.37E+10	-15.1974	-3.20978	-3.23769
1.38E+10	-19.7473	-2.75902	-2.7949	-21.4061	1.38E+10	-15.1246	-3.27514	-3.21046
1.39E+10	-19.6567	-2.81318	-2.79104	-21.0751	1.39E+10	-15.063	-3.25426	-3.19774
1.4E+10	-19.5049	-2.78191	-2.79264	-20.9511	1.4E+10	-14.7993	-3.22111	-3.19564
1.41E+10	-19.2052	-2.85442	-2.84828	-21.2464	1.41E+10	-14.7166	-3.25354	-3.22084
1.42E+10	-19.9267	-2.87106	-2.91617	-20.6381	1.42E+10	-14.8413	-3.2763	-3.28774
1.43E+10	-19.1949	-2.88844	-2.86496	-20.1595	1.43E+10	-14.3986	-3.27212	-3.17591
1.44E+10	-19.3766	-2.9418	-2.8764	-20.141	1.44E+10	-14.5737	-3.30427	-3.22693
1.45E+10	-19.3088	-2.92224	-2.89857	-19.1828	1.45E+10	-14.3638	-3.23108	-3.23882
1.46E+10	-19.5142	-2.98352	-2.91421	-18.6017	1.46E+10	-14.1832	-3.24601	-3.22451
1.47E+10	-18.9145	-2.91123	-2.90535	-17.4814	1.47E+10	-14.0474	-3.27749	-3.23576
1.48E+10	-19.2595	-2.87296	-2.94492	-17.0115	1.48E+10	-14.1338	-3.23787	-3.3056
1.49E+10	-19.1969	-3.02115	-3.00828	-16.7707	1.49E+10	-14.2208	-3.29063	-3.31813
1.5E+10	-19.1409	-2.94385	-2.95797	-16.4275	1.5E+10	-14.0594	-3.34589	-3.25063

1.51E+10	-19.7569	-2.96626	-2.97253	-15.8272	1.51E+10	-14.5499	-3.27371	-3.29759
1.52E+10	-19.3977	-2.97662	-3.06475	-15.6896	1.52E+10	-14.3997	-3.31902	-3.36198
1.53E+10	-18.7847	-3.07411	-3.01076	-15.9123	1.53E+10	-14.2556	-3.35291	-3.34264
1.54E+10	-18.7656	-3.04329	-3.05541	-15.1732	1.54E+10	-14.2609	-3.35888	-3.41583
1.55E+10	-18.5361	-3.10317	-3.14467	-15.2832	1.55E+10	-14.3453	-3.34377	-3.29155
1.56E+10	-18.4786	-3.09813	-3.13159	-14.8662	1.56E+10	-14.2999	-3.35881	-3.38337
1.57E+10	-18.0957	-3.16647	-3.20704	-14.4288	1.57E+10	-14.5126	-3.39432	-3.44676
1.58E+10	-17.9482	-3.2198	-3.19036	-14.1522	1.58E+10	-14.2841	-3.42664	-3.40966
1.59E+10	-17.7343	-3.27799	-3.16928	-14.3269	1.59E+10	-14.4737	-3.42344	-3.39898
1.6E+10	-17.2226	-3.20776	-3.27279	-14.3484	1.6E+10	-14.3101	-3.39962	-3.44717
1.61E+10	-16.9227	-3.26113	-3.36092	-14.2649	1.61E+10	-14.3327	-3.44153	-3.54065
1.62E+10	-17.078	-3.26615	-3.3211	-14.7787	1.62E+10	-14.6732	-3.56143	-3.5342
1.63E+10	-16.7914	-3.25264	-3.38117	-15.1619	1.63E+10	-14.5483	-3.41532	-3.55325
1.64E+10	-16.6172	-3.41482	-3.3185	-15.3085	1.64E+10	-14.6931	-3.53616	-3.52238
1.65E+10	-16.2287	-3.43456	-3.38861	-15.6498	1.65E+10	-14.7433	-3.54692	-3.56348
1.66E+10	-16.2613	-3.51473	-3.4675	-16.0456	1.66E+10	-15.0318	-3.56377	-3.6223
1.67E+10	-16.2519	-3.53314	-3.55721	-16.2632	1.67E+10	-15.5909	-3.63616	-3.54757
1.68E+10	-16.0928	-3.52844	-3.4835	-16.8135	1.68E+10	-15.635	-3.54287	-3.56689
1.69E+10	-16.0102	-3.50775	-3.49714	-17.3374	1.69E+10	-16.0011	-3.53505	-3.56324
1.7E+10	-15.5338	-3.58533	-3.55703	-18.776	1.7E+10	-16.3801	-3.7076	-3.59958
1.71E+10	-15.8781	-3.58337	-3.52165	-19.5867	1.71E+10	-16.9924	-3.54643	-3.66522
1.72E+10	-16.2449	-3.54324	-3.61809	-21.1883	1.72E+10	-18.2381	-3.46951	-3.57597
1.73E+10	-16.1871	-3.62773	-3.62407	-22.4884	1.73E+10	-19.5017	-3.65453	-3.61611
1.74E+10	-16.579	-3.64307	-3.70598	-24.3184	1.74E+10	-21.4	-3.65052	-3.71292
1.75E+10	-16.9629	-3.69535	-3.70591	-25.4885	1.75E+10	-23.8604	-3.66395	-3.6523
1.76E+10	-17.0769	-3.69674	-3.74196	-27.404	1.76E+10	-27.6172	-3.65337	-3.69945
1.77E+10	-17.004	-3.73769	-3.74035	-26.2589	1.77E+10	-33.6662	-3.78605	-3.77528
1.78E+10	-17.0511	-3.72403	-3.67539	-25.4676	1.78E+10	-36.6182	-3.67422	-3.78563
1.79E+10	-17.2042	-3.71223	-3.73748	-23.985	1.79E+10	-27.4822	-3.77167	-3.84242
1.8E+10	-16.7812	-3.80474	-3.73382	-22.446	1.8E+10	-23.3654	-3.91278	-3.79746
1.81E+10	-16.2558	-3.80716	-3.75495	-20.6705	1.81E+10	-19.9201	-3.82179	-3.88926
1.82E+10	-15.5807	-3.70291	-3.83636	-19.0452	1.82E+10	-17.5969	-3.97231	-3.96249
1.83E+10	-15.105	-3.76502	-3.77558	-17.6846	1.83E+10	-15.553	-3.89633	-4.01692
1.84E+10	-14.3367	-3.92713	-3.78182	-16.7487	1.84E+10	-13.9695	-4.19312	-4.15843
1.85E+10	-13.8434	-3.92629	-3.90772	-15.5254	1.85E+10	-12.7408	-4.26486	-4.29019
1.86E+10	-13.4354	-3.90636	-3.97899	-14.91	1.86E+10	-11.6175	-4.29436	-4.37373
1.87E+10	-12.6305	-3.96633	-4.02213	-14.3925	1.87E+10	-10.5264	-4.50457	-4.48467
1.88E+10	-12.3581	-4.21866	-4.09982	-13.9261	1.88E+10	-10.0164	-4.77953	-4.68361
1.89E+10	-11.6765	-4.00618	-4.16875	-13.9243	1.89E+10	-9.03625	-4.7836	-4.84682
1.9E+10	-11.1592	-4.18222	-4.0571	-13.7096	1.9E+10	-8.27891	-4.94217	-4.70251
1.91E+10	-10.7878	-4.30754	-4.24632	-12.9807	1.91E+10	-7.80381	-5.17551	-5.10388
1.92E+10	-10.4072	-4.32269	-4.26664	-12.8126	1.92E+10	-7.51478	-5.36034	-5.23444
1.93E+10	-10.167	-4.27486	-4.35162	-12.4893	1.93E+10	-7.17478	-5.47013	-5.50318
1.94E+10	-9.81239	-4.75015	-4.4281	-12.4982	1.94E+10	-6.81464	-5.71036	-5.56429
1.95E+10	-9.084	-4.44641	-4.46568	-12.3773	1.95E+10	-6.22476	-5.73774	-5.82821
1.96E+10	-8.98381	-4.5943	-4.57942	-12.162	1.96E+10	-6.25641	-5.94942	-6.07554
1.97E+10	-8.81026	-4.70026	-4.64706	-12.378	1.97E+10	-5.90985	-6.13947	-6.00626
1.98E+10	-8.51014	-4.71201	-4.79047	-12.7021	1.98E+10	-5.67249	-6.25618	-6.2533
1.99E+10	-8.34107	-4.97635	-4.94497	-12.596	1.99E+10	-5.53455	-6.35476	-6.47782
2E+10	-7.93043	-4.96248	-4.90857	-13.1282	2E+10	-5.29904	-6.55553	-6.4962

J8

S22 (dB)	Frequency (Hz)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-9.1192	1E+08	-9.55175	-3.41378	-3.43336	-9.26254	-9.57973
-16.9594	2E+08	-15.2017	-1.1008	-1.08607	-16.9893	-15.2557
-20.9804	2.99E+08	-20.0736	-0.82091	-0.83491	-21.758	-19.7408
-23.079	3.99E+08	-24.2451	-0.7762	-0.7603	-24.3997	-23.1193
-24.4325	4.98E+08	-26.9605	-0.76572	-0.75955	-25.746	-25.4371
-25.255	5.98E+08	-27.2557	-0.78697	-0.76574	-25.9519	-26.2543
-26.0633	6.97E+08	-26.0627	-0.79355	-0.79204	-25.6903	-25.9753
-26.8178	7.97E+08	-24.7032	-0.83357	-0.82857	-25.3983	-25.1673
-27.2344	8.96E+08	-22.9659	-0.86722	-0.84592	-24.5392	-24.2869
-27.154	9.96E+08	-21.5606	-0.87521	-0.87724	-23.8303	-23.4796
-27.25	1.1E+09	-20.9454	-0.93126	-0.90279	-23.2288	-22.7005
-26.6072	1.19E+09	-19.9839	-0.95258	-0.9346	-22.4865	-22.0659
-26.4427	1.29E+09	-19.2522	-0.98486	-0.98372	-22.2053	-21.6352
-25.2211	1.39E+09	-18.7486	-1.02407	-1.01964	-21.3381	-21.2631
-24.7074	1.49E+09	-18.2014	-1.05533	-1.05021	-20.9509	-20.8705
-23.7244	1.59E+09	-17.5206	-1.0849	-1.08148	-20.3486	-20.5239
-23.2094	1.69E+09	-17.2076	-1.11626	-1.10465	-19.985	-20.3278
-22.7935	1.79E+09	-16.9247	-1.15097	-1.15415	-19.7474	-20.0707
-22.0119	1.89E+09	-16.5941	-1.18288	-1.17317	-19.2641	-19.9413
-21.8774	1.99E+09	-16.372	-1.22678	-1.20436	-19.1925	-19.7839
-21.4214	2.09E+09	-16.0281	-1.25654	-1.24456	-18.8639	-19.6846
-20.9552	2.19E+09	-15.7982	-1.28515	-1.27593	-18.5342	-19.6214
-20.7811	2.29E+09	-15.8081	-1.32424	-1.32665	-18.4155	-19.506
-20.4984	2.39E+09	-15.6087	-1.34371	-1.37744	-18.2487	-19.4733
-20.3615	2.49E+09	-15.6524	-1.38437	-1.37543	-18.2005	-19.4089
-20.2931	2.59E+09	-15.5866	-1.43128	-1.41587	-18.199	-19.393
-20.2942	2.69E+09	-15.6364	-1.46574	-1.45815	-18.1471	-19.4152
-20.3311	2.79E+09	-15.7329	-1.51854	-1.51929	-18.1567	-19.4262
-20.3426	2.89E+09	-15.7024	-1.59533	-1.60981	-18.1044	-19.3509
-20.5333	2.99E+09	-15.7947	-1.66127	-1.67084	-18.1378	-19.17
-20.4297	3.09E+09	-15.6822	-1.72651	-1.71233	-17.9379	-18.8456
-20.4716	3.18E+09	-15.6072	-1.76694	-1.76329	-17.8687	-18.4906
-20.5016	3.28E+09	-15.4144	-1.77389	-1.77988	-17.8358	-18.1576
-20.8648	3.38E+09	-15.3753	-1.75557	-1.76307	-18.028	-17.9
-21.4231	3.48E+09	-15.296	-1.77531	-1.76151	-18.4019	-17.7485
-22.0858	3.58E+09	-15.3864	-1.74724	-1.7334	-18.789	-17.619
-23.0405	3.68E+09	-15.4455	-1.73349	-1.7391	-19.268	-17.494
-24.3025	3.78E+09	-15.6718	-1.744	-1.72794	-19.8765	-17.432
-25.9101	3.88E+09	-15.658	-1.7441	-1.72223	-20.5457	-17.3119
-28.1098	3.98E+09	-15.9133	-1.76121	-1.74481	-21.3701	-17.1875
-30.8881	4.08E+09	-16.0565	-1.76229	-1.76431	-22.3291	-17.0022

-35.4153	4.18E+09	-16.263	-1.80087	-1.81259	-23.5236	-16.768
-41.4416	4.28E+09	-16.4801	-1.84537	-1.80858	-24.8646	-16.4973
-39.8557	4.38E+09	-16.5312	-1.86752	-1.85444	-26.4902	-16.1325
-34.7555	4.48E+09	-16.5299	-1.88563	-1.90287	-28.2785	-15.7517
-31.6259	4.58E+09	-16.4691	-1.93148	-1.92878	-30.0016	-15.3867
-29.0215	4.68E+09	-16.4573	-1.96236	-1.97824	-32.8576	-15.0994
-27.1278	4.78E+09	-16.2519	-1.97537	-1.99862	-36.3966	-14.8743
-26.0523	4.88E+09	-16.3641	-1.99716	-2.00817	-40.9206	-14.6756
-24.0299	4.98E+09	-16.4598	-1.98223	-1.9825	-49.4242	-14.5349
-23.0786	5.08E+09	-16.5563	-1.98505	-1.96723	-38.8173	-14.4496
-21.9697	5.17E+09	-16.7571	-1.9871	-1.9477	-33.156	-14.4009
-20.7227	5.27E+09	-16.9081	-1.95038	-1.96165	-29.2014	-14.3747
-19.9447	5.37E+09	-17.0753	-1.95467	-1.95972	-27.0211	-14.3597
-19.0344	5.47E+09	-17.2522	-1.93273	-1.94044	-25.1721	-14.3436
-18.4927	5.57E+09	-17.4413	-1.93734	-1.92502	-23.8756	-14.3636
-18.1311	5.67E+09	-17.5163	-1.94303	-1.92434	-22.8844	-14.4178
-17.8792	5.77E+09	-17.6155	-1.96348	-1.95853	-22.0935	-14.5249
-17.5452	5.87E+09	-17.7163	-1.94852	-1.97742	-21.254	-14.6335
-17.3776	5.97E+09	-17.6599	-1.97042	-1.9615	-20.7197	-14.7591
-17.0682	6.07E+09	-18.0693	-2.01282	-1.98965	-20.0284	-14.9205
-16.9766	6.17E+09	-18.0892	-2.00808	-2.01906	-19.6207	-15.1339
-16.9016	6.27E+09	-18.2015	-2.02297	-2.06011	-19.3711	-15.3773
-17.0191	6.37E+09	-18.3079	-2.04143	-2.08514	-19.1218	-15.6514
-17.1628	6.47E+09	-18.2953	-2.05052	-2.06275	-18.948	-15.9014
-17.6908	6.57E+09	-18.537	-2.08975	-2.0921	-19.056	-16.2093
-18.0793	6.67E+09	-18.425	-2.11051	-2.11332	-18.907	-16.4687
-18.1541	6.77E+09	-18.4494	-2.15089	-2.15428	-18.4438	-16.8379
-18.5722	6.87E+09	-18.2972	-2.17783	-2.16567	-18.2871	-17.129
-19.0091	6.97E+09	-18.1304	-2.17841	-2.16966	-18.186	-17.3724
-19.138	7.07E+09	-17.8795	-2.19357	-2.22534	-17.7381	-17.5437
-19.3514	7.16E+09	-17.4093	-2.26806	-2.23975	-17.4372	-17.6779
-19.6774	7.26E+09	-16.9327	-2.26118	-2.26456	-17.1881	-17.6338
-20.0459	7.36E+09	-16.6159	-2.26359	-2.30264	-16.8725	-17.618
-20.4534	7.46E+09	-16.1347	-2.28581	-2.29828	-16.5212	-17.3786
-20.5633	7.56E+09	-15.6895	-2.34747	-2.307	-16.1166	-17.1382
-20.5787	7.66E+09	-15.1522	-2.34521	-2.34747	-15.6226	-16.896
-20.735	7.76E+09	-14.78	-2.37818	-2.38582	-15.2739	-16.5171
-20.4369	7.86E+09	-14.2615	-2.43067	-2.42913	-14.799	-16.1752
-20.9294	7.96E+09	-14.0863	-2.4413	-2.41976	-14.7357	-15.8176
-20.9585	8.06E+09	-13.6837	-2.45638	-2.4446	-14.5258	-15.4691
-21.2063	8.16E+09	-13.423	-2.48087	-2.47163	-14.3914	-15.1659
-21.2277	8.26E+09	-13.2081	-2.50919	-2.53188	-14.0781	-14.8597
-21.8835	8.36E+09	-13.026	-2.55708	-2.52336	-14.1217	-14.6351
-22.4155	8.46E+09	-12.8452	-2.53295	-2.57218	-13.9907	-14.3977
-22.9635	8.56E+09	-12.6645	-2.59593	-2.59103	-13.8849	-14.2271
-23.9227	8.66E+09	-12.6938	-2.64758	-2.58952	-13.858	-14.0873
-25.1281	8.76E+09	-12.5067	-2.62298	-2.63606	-14.0146	-13.9541
-26.1829	8.86E+09	-12.5291	-2.67133	-2.61193	-14.1337	-13.9091
-27.065	8.96E+09	-12.535	-2.68307	-2.6658	-14.2429	-13.8061
-27.6953	9.06E+09	-12.5354	-2.67841	-2.65624	-14.5779	-13.8361
-27.5506	9.15E+09	-12.5789	-2.69319	-2.65299	-14.7618	-13.8105
-26.365	9.25E+09	-12.6892	-2.62016	-2.6515	-14.9556	-13.8151
-25.479	9.35E+09	-12.6649	-2.65911	-2.65993	-15.2887	-13.798
-23.4281	9.45E+09	-12.6474	-2.67464	-2.66967	-15.4471	-13.8632
-21.5081	9.55E+09	-12.8867	-2.71513	-2.63318	-15.8197	-13.8672

-20.3258	9.65E+09	-12.8431	-2.67019	-2.69332	-15.9959	-13.8872
-19.1256	9.75E+09	-12.8836	-2.69718	-2.66757	-16.2818	-13.8259
-17.9776	9.85E+09	-12.9114	-2.71101	-2.66655	-16.6656	-13.776
-17.3424	9.95E+09	-12.9833	-2.64939	-2.72269	-17.036	-13.7007
-16.443	1.01E+10	-13.0127	-2.71381	-2.66554	-17.4368	-13.6469
-16.0589	1.01E+10	-13.134	-2.72076	-2.68187	-17.5173	-13.5602
-15.4691	1.02E+10	-13.2179	-2.69595	-2.74215	-17.7867	-13.4576
-14.7541	1.03E+10	-13.2129	-2.75782	-2.6713	-17.8642	-13.4286
-14.1548	1.04E+10	-13.3629	-2.7391	-2.75262	-18.0729	-13.3946
-13.7027	1.05E+10	-13.4192	-2.77049	-2.75025	-18.0686	-13.2711
-13.3067	1.06E+10	-13.3475	-2.74856	-2.74578	-18.2802	-13.2313
-12.7653	1.07E+10	-13.44	-2.78303	-2.82716	-18.0951	-13.2634
-12.6821	1.08E+10	-13.3769	-2.82833	-2.76856	-18.1735	-13.246
-12.5706	1.09E+10	-13.6855	-2.79927	-2.79341	-18.4298	-13.3603
-12.3912	1.1E+10	-13.6848	-2.83087	-2.8665	-18.0454	-13.5145
-12.3973	1.11E+10	-13.9337	-2.88745	-2.80444	-18.1195	-13.6028
-12.3509	1.12E+10	-14.0065	-2.82497	-2.89523	-18.5769	-13.7706
-11.9932	1.13E+10	-14.0392	-2.88722	-2.83445	-18.4019	-13.9343
-12.0291	1.14E+10	-14.1691	-2.85863	-2.98799	-18.4543	-14.1856
-11.8815	1.15E+10	-14.1153	-2.94442	-2.89132	-18.5666	-14.5235
-11.8235	1.16E+10	-14.2275	-2.94722	-2.91503	-18.7101	-14.8175
-11.6888	1.17E+10	-14.5074	-2.87701	-2.98045	-18.8152	-15.1987
-11.7323	1.18E+10	-14.3408	-2.98648	-2.95163	-18.9837	-15.5883
-11.8708	1.19E+10	-14.3745	-2.94795	-3.01461	-19.4647	-15.9553
-11.9296	1.2E+10	-14.7991	-3.01381	-2.95809	-19.146	-16.5649
-12.0346	1.21E+10	-14.5553	-3.03366	-2.97228	-19.5061	-16.9659
-12.101	1.22E+10	-14.8268	-3.02803	-3.03497	-19.5645	-17.5153
-12.2501	1.23E+10	-14.4223	-3.07768	-3.00361	-20.2152	-17.8031
-12.2884	1.24E+10	-14.6819	-3.09444	-3.03073	-20.0663	-18.3929
-12.1663	1.25E+10	-14.8483	-3.06761	-3.06365	-20.2647	-18.9091
-12.135	1.26E+10	-14.4209	-3.06215	-3.13569	-20.5018	-19.3832
-12.2216	1.27E+10	-14.2423	-3.09807	-3.17923	-20.449	-19.7838
-12.1056	1.28E+10	-14.4433	-3.1266	-3.14029	-20.5565	-20.1241
-12.2727	1.29E+10	-14.1889	-3.1445	-3.10228	-20.7269	-20.2575
-12.4467	1.3E+10	-14.1279	-3.16093	-3.18106	-20.296	-20.4027
-12.7783	1.31E+10	-13.9984	-3.17726	-3.25194	-20.8302	-20.4802
-12.9534	1.32E+10	-13.8138	-3.27269	-3.23213	-20.9149	-20.5079
-12.9482	1.33E+10	-13.4414	-3.23501	-3.28271	-20.3674	-20.0997
-12.793	1.34E+10	-13.3021	-3.29779	-3.2526	-20.526	-19.7592
-13.3748	1.35E+10	-13.1715	-3.30446	-3.30296	-21.377	-19.397
-12.9809	1.36E+10	-13.1065	-3.34576	-3.37656	-20.9251	-18.9316
-13.0393	1.37E+10	-12.946	-3.43403	-3.40538	-20.9879	-18.5519
-13.2447	1.38E+10	-12.8226	-3.39174	-3.36141	-20.7713	-17.9775
-13.2436	1.39E+10	-12.5675	-3.40833	-3.40018	-20.9407	-17.3056
-13.4199	1.4E+10	-12.3673	-3.40477	-3.40996	-20.8059	-16.6727
-13.699	1.41E+10	-12.1832	-3.44623	-3.42241	-20.6865	-16.1595
-13.6511	1.42E+10	-12.5838	-3.49379	-3.46107	-20.0705	-15.8457
-13.7854	1.43E+10	-12.1665	-3.46904	-3.5083	-20.5069	-15.3565
-14.0084	1.44E+10	-12.1622	-3.57376	-3.50314	-20.6759	-15.0023
-13.9231	1.45E+10	-12.1424	-3.52041	-3.50362	-20.5058	-14.6929
-14.0176	1.46E+10	-12.1747	-3.52106	-3.53877	-20.884	-14.4902
-13.806	1.47E+10	-12.1047	-3.5195	-3.58005	-20.332	-14.3691
-13.6736	1.48E+10	-12.1102	-3.3985	-3.61536	-19.8564	-14.3621
-13.8863	1.49E+10	-12.2443	-3.68549	-3.59179	-19.8391	-14.5256
-14.0316	1.5E+10	-12.2183	-3.54017	-3.57297	-19.6802	-14.432

-13.951	1.51E+10	-12.5558	-3.58415	-3.59192	-19.0926	-14.7985
-14.1715	1.52E+10	-12.7663	-3.56543	-3.58076	-18.9471	-15.1377
-14.5602	1.53E+10	-12.8865	-3.70185	-3.59583	-18.8956	-15.7394
-14.402	1.54E+10	-13.0497	-3.54172	-3.54752	-18.5925	-16.0762
-14.7303	1.55E+10	-13.379	-3.66217	-3.63358	-18.5445	-16.5505
-14.8641	1.56E+10	-14.0323	-3.61928	-3.67374	-18.8577	-16.9547
-14.7238	1.57E+10	-14.3668	-3.65455	-3.68346	-18.3072	-17.2732
-14.4948	1.58E+10	-14.5118	-3.67377	-3.60936	-17.9468	-17.1107
-14.8778	1.59E+10	-15.0242	-3.70162	-3.62616	-18.2795	-17.0922
-14.8233	1.6E+10	-14.9997	-3.62857	-3.65063	-17.9497	-16.6212
-14.9249	1.61E+10	-15.5744	-3.66389	-3.7298	-17.8455	-16.3464
-15.3866	1.62E+10	-16.3516	-3.70081	-3.80785	-18.2225	-16.1082
-15.8183	1.63E+10	-16.9038	-3.67833	-3.79303	-18.3602	-15.9014
-15.9008	1.64E+10	-17.1609	-3.74906	-3.72688	-18.4342	-15.8946
-16.2898	1.65E+10	-17.4388	-3.83874	-3.8536	-18.7345	-16.1554
-16.5686	1.66E+10	-18.2783	-3.75617	-3.78375	-18.968	-16.4981
-16.4968	1.67E+10	-18.9776	-3.87483	-3.8165	-19.0123	-17.2505
-16.834	1.68E+10	-19.3853	-3.86149	-3.86661	-20.0558	-18.0501
-16.8948	1.69E+10	-20.4243	-3.83177	-3.88157	-20.3879	-19.0345
-17.7748	1.7E+10	-20.3059	-3.9363	-3.89972	-21.4592	-20.1302
-17.9001	1.71E+10	-21.4836	-3.97512	-3.9631	-21.7774	-21.2967
-18.9398	1.72E+10	-22.1867	-3.87042	-4.02801	-23.1088	-22.4517
-19.8237	1.73E+10	-23.5589	-4.01034	-3.95112	-24.1891	-23.5243
-20.4492	1.74E+10	-24.0272	-4.06637	-4.12203	-24.464	-23.1353
-20.9191	1.75E+10	-25.5747	-4.15524	-4.02653	-26.1753	-22.3824
-22.244	1.76E+10	-26.8144	-4.05453	-4.19217	-28.3424	-20.9359
-21.9579	1.77E+10	-27.5374	-4.24036	-4.13902	-29.5012	-19.6711
-21.5705	1.78E+10	-27.7135	-4.14044	-4.14978	-29.9676	-18.265
-20.7445	1.79E+10	-27.1862	-4.22682	-4.22702	-30.5608	-17.2423
-19.8755	1.8E+10	-26.0638	-4.32286	-4.25733	-29.7829	-16.2469
-18.9851	1.81E+10	-24.1069	-4.34382	-4.31931	-30.0853	-15.2145
-17.7773	1.82E+10	-22.4093	-4.43477	-4.36942	-29.2476	-14.5124
-16.468	1.83E+10	-20.7376	-4.4656	-4.44536	-28.3323	-13.774
-15.6206	1.84E+10	-19.0285	-4.51433	-4.59125	-27.8974	-13.2493
-14.4536	1.85E+10	-17.9951	-4.58075	-4.5779	-26.4468	-12.82
-13.393	1.86E+10	-16.5807	-4.57514	-4.66514	-26.5065	-12.4702
-12.7031	1.87E+10	-15.3667	-4.65406	-4.74092	-26.2444	-12.043
-12.0405	1.88E+10	-14.8229	-4.82636	-4.90457	-25.9334	-11.9581
-11.686	1.89E+10	-13.5868	-4.79147	-4.91098	-27.4344	-11.6031
-10.9486	1.9E+10	-12.9547	-5.02929	-4.85966	-28.599	-11.209
-10.482	1.91E+10	-12.1094	-5.11074	-5.09523	-27.0716	-11.2023
-10.286	1.92E+10	-11.4262	-5.28242	-5.12685	-27.8978	-11.1208
-9.80788	1.93E+10	-10.8405	-5.20327	-5.31486	-28.694	-11.1157
-9.48135	1.94E+10	-10.4685	-5.61007	-5.42028	-31.0477	-10.9998
-9.15428	1.95E+10	-9.62761	-5.33774	-5.49893	-33.564	-10.5958
-8.86204	1.96E+10	-9.32322	-5.63385	-5.70894	-35.6622	-10.5958
-8.68859	1.97E+10	-8.9082	-5.88097	-5.72221	-43.3658	-10.4774
-8.44805	1.98E+10	-8.54035	-6.02979	-5.88964	-35.4886	-10.2005
-8.39813	1.99E+10	-8.2251	-6.08331	-6.12041	-35.6848	-9.89421
-8.3413	2E+10	-7.74891	-6.181	-6.05767	-29.7673	-9.47486

J0-J1

S21 (dB)	S12 (dB)	S22 (dB)
-87.1029	-87.5077	-6.30823
-89.0161	-89.477	-12.5158
-85.8417	-86.7194	-15.7809
-84.9224	-84.762	-17.9948
-84.2497	-84.1614	-19.6214
-85.1023	-84.4074	-20.8561
-85.0468	-84.6476	-21.8144
-84.7136	-85.1385	-22.6758
-85.0776	-85.0648	-23.3579
-86.0944	-85.4115	-23.9676
-85.6935	-86.9581	-24.5036
-86.5134	-86.2946	-24.8671
-87.335	-87.3508	-25.3496
-87.5179	-87.4246	-25.7454
-88.3089	-88.5823	-26.1992
-88.4896	-88.2375	-26.6134
-87.7541	-87.8621	-26.9385
-88.3454	-88.5451	-27.3212
-88.6763	-88.9387	-27.6886
-89.7908	-88.475	-28.0131
-89.8093	-89.8564	-28.4121
-88.9888	-89.6775	-28.8226
-89.6482	-89.4038	-29.3408
-90.0797	-89.9435	-29.9925
-89.4668	-92.237	-30.3985
-89.5433	-90.6161	-30.9795
-90.005	-90.014	-31.4543
-89.0596	-91.5389	-32.3419
-90.2652	-91.3044	-33.17
-90.3442	-89.4531	-33.4686
-90.22	-91.2162	-33.0885
-91.9039	-90.1848	-32.2869
-90.534	-90.138	-31.3092
-90.4173	-90.0049	-30.6388
-90.1827	-90.8761	-30.507
-90.2807	-90.8684	-30.3679
-90.0463	-90.3599	-30.7914
-89.6608	-89.3528	-30.9353
-90.1002	-89.1324	-30.928
-89.9291	-89.4787	-30.7146
-90.5973	-89.4922	-30.5763

J0-J2

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-10.2394	-93.1558	-88.6722	-17.6867
-15.0048	-100.483	-113.028	-32.2364
-19.2574	-100.272	-103.53	-32.8518
-22.3172	-97.6344	-97.4205	-31.719
-24.4057	-96.4174	-95.9288	-30.9312
-25.319	-94.3187	-95.3993	-30.4358
-25.3635	-94.5101	-94.6994	-30.1819
-24.8807	-94.9987	-95.6096	-30.114
-24.241	-96.039	-95.2794	-30.235
-23.572	-96.1678	-94.5123	-30.2675
-22.8462	-97.7464	-94.6349	-30.3356
-22.2132	-94.6975	-96.6681	-30.2638
-21.7727	-95.7588	-95.2897	-30.439
-21.3535	-95.3833	-97.2488	-30.5708
-20.8954	-96.4999	-96.2586	-30.8908
-20.4655	-95.8077	-98.3684	-31.105
-20.1622	-97.9527	-96.3611	-31.218
-19.8152	-97.037	-97.3228	-31.4253
-19.5832	-95.8051	-96.7711	-31.635
-19.3154	-96.0325	-98.3979	-31.8001
-19.1059	-96.881	-99.365	-32.0505
-18.9354	-97.0368	-95.8298	-32.2513
-18.7359	-94.9154	-96.2041	-32.6346
-18.6214	-95.164	-96.3036	-33.1671
-18.4957	-96.9204	-97.3432	-33.3653
-18.428	-98.2422	-96.0601	-33.8376
-18.4151	-97.1928	-96.4316	-34.1219
-18.412	-95.8604	-96.1713	-34.8249
-18.353	-97.5912	-97.3166	-35.8729
-18.2183	-96.246	-96.4581	-36.5805
-17.9791	-97.9496	-97.7258	-36.8284
-17.7355	-95.5322	-97.8129	-36.2633
-17.5511	-99.5543	-96.6665	-35.0889
-17.4789	-95.3261	-96.1106	-34.2429
-17.5576	-96.2749	-97.6077	-33.6892
-17.718	-97.0441	-99.1515	-33.4026
-17.94	-94.9283	-94.7763	-33.6225
-18.2673	-97.4168	-95.7411	-33.7953
-18.5921	-96.1367	-97.5683	-34.422
-18.9457	-95.3417	-95.1017	-34.6355
-19.2207	-95.0001	-94.6767	-34.8398

-89.6692	-88.8436	-30.371	-19.3904	-94.5132	-96.215	-34.7954
-89.6179	-88.8515	-30.3499	-19.4322	-94.9524	-96.218	-34.8443
-89.8607	-88.6455	-30.3038	-19.2363	-93.507	-93.9729	-35.0351
-88.965	-89.0482	-30.1261	-18.9188	-94.6656	-94.7593	-35.0243
-89.5846	-88.814	-29.908	-18.5558	-94.6924	-95.1547	-35.2328
-89.6888	-88.6961	-29.6635	-18.2475	-94.0594	-94.5878	-35.2575
-89.2431	-90.2387	-29.2388	-17.9781	-96.0145	-94.9353	-35.2523
-88.5629	-89.3575	-29.1498	-17.6945	-93.7093	-93.4565	-34.604
-89.0627	-88.2463	-28.9542	-17.4263	-94.4352	-93.7386	-34.1863
-88.3884	-88.2582	-29.2657	-17.1771	-94.0885	-92.6166	-33.2598
-88.2587	-89.6905	-29.3432	-16.8879	-93.8385	-95.4253	-32.7822
-87.3822	-88.5157	-29.8037	-16.5943	-93.3332	-92.6605	-31.9955
-87.6523	-88.0363	-30.0687	-16.2508	-93.971	-91.5475	-31.3798
-87.5609	-87.3824	-30.3234	-15.8964	-93.1509	-93.4069	-31.0806
-87.9446	-87.6067	-30.7465	-15.5622	-92.038	-92.6828	-30.4948
-87.9573	-87.0581	-31.2822	-15.2873	-92.9788	-91.6408	-29.7943
-87.2096	-87.1488	-31.7259	-15.0524	-92.4055	-91.9226	-29.3228
-87.3133	-87.5798	-32.2911	-14.834	-91.4779	-93.4818	-28.8264
-87.1201	-87.0933	-32.7847	-14.6549	-93.4475	-91.1507	-28.4107
-87.3863	-87.1382	-32.7645	-14.5172	-91.6068	-91.1035	-28.2857
-86.6081	-86.443	-33.4422	-14.4521	-90.7792	-91.1569	-27.7539
-86.4426	-86.0268	-33.9578	-14.4409	-90.6847	-91.206	-27.3458
-85.6076	-86.5293	-34.7514	-14.4783	-91.9559	-91.2271	-26.8284
-85.9504	-86.0879	-35.7501	-14.5188	-90.4181	-91.2611	-26.304
-85.543	-85.4199	-36.965	-14.6239	-90.2764	-89.9186	-25.7965
-85.6215	-85.9563	-37.7978	-14.7502	-90.9551	-90.62	-25.3394
-85.4636	-85.2351	-38.476	-15.0045	-90.5021	-90.657	-24.9678
-85.3789	-85.4744	-38.7562	-15.2092	-89.2016	-90.7279	-24.594
-85.1767	-85.402	-39.2438	-15.4273	-89.3814	-90.1026	-24.328
-85.0924	-84.9711	-40.2795	-15.6567	-89.8534	-89.374	-23.9616
-84.8536	-85.1659	-41.3682	-15.9226	-88.9037	-89.3013	-23.5443
-84.8048	-84.8066	-43.1105	-16.0426	-89.8124	-89.5639	-23.0919
-84.5102	-84.5711	-42.9276	-16.2155	-88.6384	-89.2491	-22.6455
-84.091	-84.4243	-41.6766	-16.2633	-89.966	-88.6115	-22.2888
-84.5775	-84.6005	-39.4176	-16.2968	-89.6409	-88.5267	-21.8997
-84.696	-84.6719	-38.4539	-16.2997	-89.0682	-88.6255	-21.6597
-84.0944	-83.7351	-38.0962	-16.138	-88.7838	-88.7113	-21.4668
-85.0996	-84.1495	-37.6902	-15.9348	-89.0278	-88.7414	-21.3132
-83.751	-83.5501	-37.6609	-15.6584	-88.7472	-88.1111	-20.9707
-84.2298	-83.9107	-37.4539	-15.4173	-89.0341	-88.2258	-20.7569
-83.7511	-83.4301	-36.9377	-15.1378	-88.1076	-88.7102	-20.4816
-83.8981	-83.7276	-35.8071	-14.8276	-87.7484	-87.7171	-20.1218
-83.3544	-84.0178	-34.8685	-14.6113	-87.8604	-87.8528	-19.8189
-83.8684	-84.4106	-33.9635	-14.3463	-87.4519	-88.2673	-19.5548
-83.699	-83.7053	-33.99	-14.126	-87.8203	-86.6406	-19.4214
-83.403	-83.2929	-33.7762	-13.9277	-87.7833	-87.7308	-19.2357
-83.7818	-83.4307	-33.9835	-13.7203	-87.7953	-88.0719	-19.1334
-83.2902	-83.1419	-34.0147	-13.5983	-87.2967	-87.1057	-18.9736
-83.0965	-83.5753	-33.4127	-13.4293	-86.9066	-87.0694	-18.7669
-83.2729	-83.0089	-32.567	-13.3741	-87.2176	-87.4252	-18.5089
-83.0738	-82.9865	-31.467	-13.2687	-86.8317	-86.7649	-18.2086
-83.4356	-83.2729	-30.9785	-13.1911	-86.8232	-86.5124	-18.0267
-83.1348	-82.4461	-30.1533	-13.1026	-86.7583	-87.2288	-17.7779
-82.678	-82.79	-29.7376	-13.0953	-87.0362	-86.1019	-17.6465
-82.5336	-82.0445	-29.3663	-13.0355	-86.1935	-86.9425	-17.5195

-82.5777	-82.9682	-29.0838	-12.9999	-86.2132	-85.9571	-17.4504
-82.331	-82.5218	-28.5022	-12.905	-86.5609	-85.2147	-17.3347
-81.9928	-81.746	-28.1975	-12.8372	-86.8004	-85.9015	-17.2994
-82.0775	-82.313	-27.7801	-12.7469	-85.7862	-85.8454	-17.3111
-82.1792	-81.5771	-27.2187	-12.6971	-85.819	-85.6695	-17.1553
-82.0126	-81.4978	-26.6209	-12.6404	-84.6397	-85.4504	-17.0802
-81.4013	-81.5452	-26.418	-12.5644	-84.6718	-84.7622	-17.0791
-81.4491	-81.324	-26.0281	-12.565	-84.6654	-84.1758	-16.9802
-81.3737	-81.592	-25.9277	-12.567	-84.209	-84.3203	-17.015
-80.8724	-82.2643	-25.8373	-12.4933	-82.996	-87.5891	-17.0282
-80.2767	-80.6129	-25.817	-12.4996	-83.3743	-84.5998	-17.1133
-81.1458	-79.9519	-25.9832	-12.5765	-84.8056	-84.0785	-17.2317
-81.0885	-81.4813	-25.9117	-12.606	-85.1452	-84.7099	-17.3599
-80.7295	-81.4903	-25.6708	-12.7667	-84.1281	-82.7672	-17.3433
-79.6923	-80.9139	-25.9105	-12.9563	-83.7853	-83.8629	-17.5403
-80.3564	-79.9592	-25.8915	-13.0951	-82.3344	-82.3585	-17.5449
-80.2793	-79.7275	-26.099	-13.2924	-83.0781	-82.8096	-17.5196
-80.1545	-80.0622	-26.343	-13.4871	-81.0218	-84.1341	-17.582
-80.4768	-80.5182	-26.7483	-13.7927	-83.3042	-83.1935	-17.7037
-80.1099	-80.0435	-27.0901	-14.168	-82.3713	-81.344	-17.7781
-79.1297	-78.5676	-27.4459	-14.5186	-83.0354	-83.0965	-17.9058
-79.8452	-79.643	-27.4135	-14.9281	-84.0753	-81.5745	-17.9191
-79.7654	-79.9782	-27.4331	-15.3456	-81.5371	-82.459	-17.9479
-78.6104	-78.8745	-27.4312	-15.7767	-82.1627	-82.7238	-17.938
-79.6768	-79.5159	-26.8513	-16.3934	-82.2507	-82.7738	-17.8183
-79.563	-79.2659	-26.5025	-16.8177	-82.7703	-82.1791	-17.6382
-78.8156	-78.371	-26.0617	-17.4194	-81.7811	-81.9511	-17.4812
-78.9559	-79.0796	-26.2856	-17.7549	-81.4348	-80.0519	-17.5643
-78.8172	-78.2915	-26.1548	-18.3512	-81.4423	-81.5406	-17.5957
-79.1075	-78.9995	-25.6893	-18.853	-81.2708	-82.0973	-17.4547
-78.4021	-78.773	-25.719	-19.3962	-80.7164	-81.7955	-17.4876
-78.4326	-78.4801	-25.6829	-19.6758	-81.2689	-81.6205	-17.6071
-78.7276	-78.5217	-25.0999	-20.05	-80.2943	-81.6236	-17.4041
-78.0444	-78.6103	-24.5557	-20.1495	-80.9697	-81.7863	-17.2635
-78.1081	-78.716	-24.2063	-20.2615	-81.4418	-80.989	-17.1429
-78.1437	-77.6751	-24.119	-20.3088	-80.8038	-79.0615	-17.0782
-78.1145	-77.8298	-23.8482	-20.3047	-80.7436	-80.9366	-16.9509
-78.0264	-78.5018	-23.9416	-19.9166	-79.5217	-79.9726	-17.0456
-78.4315	-78.5409	-23.8911	-19.6102	-79.2525	-81.5235	-16.9628
-78.1386	-78.2974	-23.9598	-19.327	-80.713	-80.139	-17.0533
-77.304	-77.3173	-23.5127	-18.9367	-79.5292	-79.3935	-16.802
-77.9996	-78.439	-23.6003	-18.663	-78.8893	-80.1289	-16.8137
-77.8133	-77.0522	-23.1449	-18.2033	-78.2535	-77.897	-16.6178
-77.6056	-76.5666	-22.8848	-17.6501	-79.3277	-78.1107	-16.4442
-77.087	-76.8072	-22.5032	-17.1467	-78.6527	-79.461	-16.1933
-76.2296	-76.7677	-22.0943	-16.7708	-79.465	-79.0976	-15.938
-76.6566	-76.175	-21.9509	-16.6146	-79.1733	-78.7698	-15.7113
-76.5995	-75.5469	-21.8951	-16.2818	-78.6894	-78.9127	-15.6161
-76.8553	-76.5567	-21.6722	-16.1012	-79.0576	-78.0538	-15.4687
-76.6858	-75.0056	-21.5732	-15.9985	-78.401	-77.6625	-15.2993
-76.5912	-76.0355	-21.3332	-16.0448	-78.642	-78.6673	-15.0986
-76.2312	-77.0623	-20.9962	-16.1866	-77.8488	-78.3906	-14.8596
-76.4028	-77.2969	-20.6612	-16.4978	-77.5696	-78.7725	-14.535
-76.1812	-76.8145	-20.085	-17.1115	-78.9944	-77.2097	-14.2502
-76.4531	-76.1878	-19.9127	-17.419	-78.3228	-77.5068	-14.0025

-76.2393	-75.7387	-19.8161	-18.4427	-78.0456	-76.7948	-13.8342
-76.5506	-76.4158	-19.6047	-19.5491	-77.6919	-79.0584	-13.6565
-76.0979	-76.2695	-19.3455	-21.2711	-77.5175	-77.9051	-13.4576
-76.1753	-76.3253	-19.1558	-22.676	-76.9738	-76.6732	-13.2209
-75.6828	-76.3177	-18.9142	-24.1718	-77.7586	-78.2183	-13.0578
-76.3123	-75.6902	-18.9207	-24.7068	-77.0615	-77.1072	-13.0167
-75.9898	-76.0513	-18.7296	-23.9701	-78.1432	-78.029	-12.7797
-76.1023	-76.2761	-18.4534	-22.1417	-77.3512	-77.7698	-12.5802
-76.2436	-75.5434	-18.3837	-20.705	-78.0068	-78.3185	-12.4834
-75.6312	-75.4135	-18.031	-19.2937	-76.7916	-76.8457	-12.2332
-75.8071	-75.3376	-18.0265	-18.36	-76.9652	-76.1098	-12.1632
-75.2233	-74.8426	-17.9546	-17.6019	-76.8543	-77.1449	-12.0831
-75.3918	-75.7374	-17.6722	-17.1289	-76.6905	-76.2703	-11.8589
-74.9551	-75.3036	-17.4856	-16.7806	-76.7611	-77.2381	-11.737
-74.7711	-74.1757	-17.3301	-16.5811	-76.5711	-76.8434	-11.6307
-74.8212	-75.2775	-17.1487	-16.5309	-76.8757	-77.3462	-11.5078
-74.2456	-74.8627	-16.9936	-16.4123	-76.8234	-76.0551	-11.4466
-74.3807	-74.1737	-16.7091	-16.5338	-76.586	-77.195	-11.2639
-74.2068	-74.2807	-16.4874	-16.3662	-76.7509	-76.0306	-11.1127
-74.4299	-74.6939	-16.18	-16.2414	-76.3608	-77.0013	-10.9328
-74.6419	-74.0353	-16.0396	-16.0625	-75.9402	-76.9893	-10.8078
-74.6086	-75.1066	-15.8572	-16.0959	-76.0472	-77.0723	-10.7321
-74.0312	-74.4859	-15.7722	-16.213	-76.023	-77.2814	-10.7085
-75.0673	-74.2887	-15.9448	-15.9873	-75.9521	-75.5143	-10.7958
-74.1453	-74.733	-15.604	-15.978	-75.9247	-75.7766	-10.6254
-74.1541	-74.5848	-15.3764	-15.7663	-75.8247	-75.4677	-10.4828
-74.3824	-73.6551	-15.3216	-15.6471	-75.9543	-75.5146	-10.4435
-73.4675	-74.471	-15.1281	-15.2684	-75.707	-74.8036	-10.301
-73.593	-73.3873	-15.0508	-15.0618	-75.4591	-75.4329	-10.2839
-74.3216	-73.4081	-15.0976	-14.5903	-76.888	-75.4289	-10.3182
-73.0894	-73.0244	-15.0398	-13.9823	-76.0968	-75.8395	-10.2648
-73.7904	-73.9715	-14.9962	-13.4793	-75.575	-75.8486	-10.2545
-73.6345	-73.6493	-14.9285	-12.8267	-74.7876	-75.7416	-10.1931
-73.7052	-74.4227	-14.9489	-12.3222	-74.851	-75.0285	-10.2488
-73.9706	-74.265	-14.7763	-11.8298	-75.2382	-74.8899	-10.139
-73.7653	-73.3258	-14.6996	-11.3719	-75.1021	-74.8471	-10.0896
-73.3998	-73.3698	-14.675	-10.8224	-75.1655	-74.7125	-10.086
-73.207	-72.7331	-14.4763	-10.5783	-74.2913	-74.7967	-9.98713
-73.3968	-73.5874	-14.4975	-10.056	-74.9322	-73.6853	-10.0108
-72.9827	-72.9562	-14.3847	-9.51928	-74.0857	-74.619	-9.94565
-73.22	-73.1395	-14.1115	-9.36102	-74.6524	-74.363	-9.76823
-72.7508	-73.246	-13.8088	-9.11891	-74.1172	-73.8196	-9.63776
-72.4769	-72.6605	-13.6412	-8.96582	-74.0761	-74.2706	-9.51798
-72.4706	-72.2385	-13.3821	-8.73644	-74.427	-73.48	-9.3938
-72.0654	-72.3012	-13.0657	-8.25671	-74.0783	-73.1354	-9.18724
-72.3941	-72.5911	-12.7744	-8.18417	-73.7172	-73.5829	-9.03185
-72.371	-71.6444	-12.6031	-8.04579	-73.1112	-73.464	-8.94232
-71.4279	-72.3118	-12.4067	-7.79652	-73.8444	-73.4038	-8.81495
-72.0175	-71.4252	-12.2515	-7.58111	-73.4177	-73.5253	-8.74048
-71.7995	-71.8183	-11.9805	-7.30436	-73.3542	-73.4584	-8.55248

J0-J3

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-9.06431	-90.2382	-91.6627	-17.5293
-14.9733	-105.957	-108.727	-33.1413
-19.2844	-101.719	-98.5123	-34.7633
-22.4908	-96.2458	-95.0217	-33.1275
-24.8322	-92.2993	-93.886	-31.8613
-26.0325	-94.9299	-92.3461	-31.0943
-26.2958	-92.423	-92.8967	-30.6483
-25.9336	-92.8341	-92.0585	-30.3161
-25.3701	-93.1037	-94.2896	-30.3792
-24.7645	-92.6395	-92.4448	-30.2353
-24.0942	-92.204	-92.8918	-30.1397
-23.5306	-90.9662	-91.4988	-29.9877
-23.1891	-92.1074	-91.8907	-29.976
-22.8793	-93.1394	-93.832	-29.9796
-22.5221	-94.0518	-93.0292	-30.1953
-22.1968	-92.6079	-93.578	-30.2784
-22.0239	-93.686	-92.699	-30.3402
-21.7784	-92.855	-92.9488	-30.4044
-21.6741	-93.4795	-94.0875	-30.5427
-21.5063	-93.1293	-94.6603	-30.6409
-21.3913	-92.8341	-94.3079	-30.9591
-21.3012	-93.7124	-94.0778	-31.0566
-21.1433	-94.014	-93.9616	-31.1212
-21.0612	-93.6065	-93.7077	-31.3796
-20.9304	-94.4234	-94.5113	-31.4357
-20.8224	-92.4298	-93.0957	-31.4445
-20.7203	-93.2963	-92.9154	-31.3305
-20.6128	-94.0908	-93.3451	-31.1979
-20.4202	-94.5291	-94.7332	-30.4234
-20.1477	-93.1787	-93.6869	-29.4875
-19.7502	-94.6223	-94.5315	-28.5099
-19.3285	-94.4934	-94.515	-27.8844
-18.8971	-94.3967	-93.5801	-27.5185
-18.5324	-93.7528	-95.0802	-27.2838
-18.2921	-93.6984	-94.4853	-27.3696
-18.0821	-96.296	-93.0401	-27.3669
-17.8893	-93.6014	-93.5648	-27.5965
-17.7736	-94.2182	-95.0833	-27.6869
-17.5884	-93.9668	-93.1476	-27.5496
-17.3875	-93.0242	-93.0179	-27.4459
-17.1284	-94.4568	-93.4091	-27.3567

J0-J4

S11 (dB)	S21 (dB)	S12 (dB)
-8.89788	-86.7902	-86.605
-15.5004	-95.4151	-101.18
-20.2235	-98.1228	-98.4594
-23.6657	-94.2509	-95.695
-25.6859	-90.9159	-90.7445
-25.9881	-90.215	-90.7848
-25.3218	-89.3802	-89.6457
-24.3286	-89.3087	-89.0406
-23.3982	-89.2243	-89.2801
-22.6292	-88.6053	-89.0874
-21.943	-89.04	-88.5517
-21.4139	-89.3992	-88.9577
-21.087	-89.0669	-88.3904
-20.834	-88.4834	-89.5315
-20.582	-89.0366	-87.8571
-20.3912	-89.4271	-88.352
-20.3622	-89.2583	-90.3552
-20.2723	-89.6287	-90.5193
-20.3205	-91.0543	-90.0637
-20.3399	-91.5643	-90.6127
-20.4173	-89.2298	-90.0515
-20.5338	-90.1367	-89.9556
-20.5884	-89.9931	-90.4766
-20.7325	-91.4376	-89.8556
-20.844	-90.8531	-90.1743
-21	-91.1832	-90.8899
-21.1816	-90.9659	-90.5952
-21.3516	-90.6141	-91.8551
-21.4032	-91.5211	-90.6215
-21.2943	-91.1743	-92.1515
-20.9389	-91.3391	-91.5701
-20.4943	-90.6744	-91.0416
-20.0338	-91.444	-90.8607
-19.6475	-91.383	-92.372
-19.3756	-91.7539	-91.8944
-19.1011	-90.5711	-91.5873
-18.8013	-90.4301	-92.0994
-18.567	-90.0025	-90.4206
-18.2342	-92.618	-91.7344
-17.8736	-91.3957	-90.2268
-17.463	-91.124	-90.8652

-16.8108	-92.9602	-92.5704	-27.1961	-16.9992	-91.5183	-90.5436
-16.4578	-93.5496	-92.8042	-27.0754	-16.5108	-91.1493	-91.4145
-16.0163	-93.0608	-92.5755	-26.8979	-15.9488	-91.6301	-91.6462
-15.571	-93.7125	-94.4119	-26.7537	-15.404	-92.2127	-90.4804
-15.1383	-93.8248	-94.1588	-26.5943	-14.8802	-90.6341	-91.7199
-14.7831	-92.725	-92.0213	-26.5544	-14.4463	-90.2272	-90.7197
-14.4982	-91.842	-93.1026	-26.4568	-14.1013	-91.3654	-89.3522
-14.2359	-91.8052	-93.3445	-26.6177	-13.7864	-91.0318	-92.0572
-14.0421	-92.4262	-91.5652	-26.6686	-13.5608	-91.0893	-91.8022
-13.9094	-92.5882	-93.2806	-27.038	-13.4041	-91.2256	-90.4242
-13.8071	-93.8894	-92.5953	-27.2246	-13.2859	-91.161	-89.9215
-13.7276	-92.645	-92.5443	-27.6909	-13.2053	-90.6707	-90.9992
-13.6499	-92.0735	-92.7375	-28.1743	-13.1351	-90.8439	-92.2424
-13.5718	-91.1489	-90.7826	-28.402	-13.0749	-90.9614	-90.6846
-13.5205	-91.5139	-92.3173	-28.8087	-13.0415	-90.6793	-90.6214
-13.5096	-91.3357	-91.4874	-29.3403	-13.0601	-89.9168	-90.6057
-13.5457	-92.2514	-90.3675	-29.5961	-13.1226	-90.6744	-90.4399
-13.5889	-92.8986	-92.0208	-29.8239	-13.1932	-91.3007	-90.2283
-13.6515	-90.9649	-91.7934	-29.9224	-13.285	-89.8716	-91.3187
-13.7532	-92.1949	-89.5236	-29.8464	-13.4142	-89.7379	-89.9608
-13.9101	-91.5741	-94.1649	-30.3183	-13.5948	-89.6214	-91.0083
-14.1054	-90.7959	-90.6231	-30.7115	-13.8153	-90.2722	-90.2653
-14.3397	-89.7553	-91.3342	-30.8112	-14.0689	-90.1943	-89.5795
-14.5673	-90.4188	-90.4595	-30.9621	-14.3146	-90.161	-89.4847
-14.857	-91.3852	-91.8851	-31.1738	-14.6153	-89.6404	-89.6494
-15.1382	-90.1201	-89.8924	-30.9245	-14.9057	-89.3752	-88.9592
-15.5465	-89.8628	-89.2944	-30.8526	-15.3159	-89.3884	-89.7025
-15.9023	-90.0084	-90.7571	-30.5884	-15.6626	-88.581	-88.9454
-16.2538	-89.9777	-89.4512	-30.5374	-15.9972	-88.7036	-88.6485
-16.5835	-89.68	-89.4619	-30.4911	-16.2999	-89.9013	-88.8355
-16.924	-89.4489	-89.6516	-30.1822	-16.5968	-88.5616	-88.4813
-17.1009	-90.0242	-89.3258	-29.9544	-16.7288	-88.7545	-88.3173
-17.3276	-88.6395	-89.7737	-29.4801	-16.8913	-88.7798	-89.1489
-17.3573	-88.9544	-89.2573	-28.9889	-16.8569	-88.5572	-88.2744
-17.3764	-89.2982	-89.0358	-28.1406	-16.802	-88.1172	-88.0493
-17.3704	-89.0388	-88.2122	-27.7049	-16.7193	-88.4382	-88.3079
-17.1827	-88.3141	-88.0239	-27.3378	-16.4606	-88.3228	-88.3969
-16.9952	-88.5169	-87.946	-26.8698	-16.2003	-88.3804	-88.1104
-16.7568	-88.1229	-88.4092	-26.4817	-15.8985	-88.0592	-88.6812
-16.5262	-88.8398	-88.4001	-26.123	-15.6082	-87.6799	-88.9153
-16.3033	-88.3264	-88.2509	-25.7327	-15.3299	-88.5064	-87.7433
-16.0543	-88.0802	-88.8072	-25.1966	-15.034	-88.3545	-87.5101
-15.9033	-88.6197	-88.4121	-24.6975	-14.8274	-86.8799	-87.745
-15.7128	-88.0049	-89.1885	-24.2213	-14.5866	-87.7717	-88.0667
-15.5765	-88.5965	-87.7684	-23.8817	-14.406	-87.4106	-87.5893
-15.4686	-87.4679	-87.2934	-23.4629	-14.2481	-87.677	-87.2888
-15.3515	-87.4678	-87.3363	-23.2002	-14.0912	-87.4954	-87.7371
-15.3089	-87.3922	-87.3447	-22.9565	-14.0043	-87.1946	-86.9739
-15.19	-86.758	-86.7879	-22.5844	-13.8611	-86.9861	-87.0385
-15.1944	-86.7722	-85.9173	-22.2801	-13.8355	-87.1255	-87.1932
-15.108	-87.1802	-86.7899	-21.8395	-13.7375	-86.5075	-87.1968
-15.0314	-86.8112	-86.6125	-21.5223	-13.6616	-86.7101	-86.978
-14.9064	-86.4461	-87.3925	-21.0928	-13.565	-85.9861	-86.2391
-14.834	-85.7954	-86.3057	-20.8564	-13.5279	-86.0835	-85.4332
-14.6744	-86.2658	-86.3631	-20.5928	-13.4295	-86.2493	-85.9003

-14.5095	-86.0691	-86.0331	-20.4453	-13.3415	-86.3745	-85.0643
-14.2565	-86.1492	-85.9093	-20.2808	-13.1848	-86.1727	-85.6444
-14.0271	-85.9915	-85.4176	-20.1748	-13.0603	-86.1188	-85.1846
-13.7658	-85.5814	-85.2788	-20.2073	-12.9118	-85.2337	-85.221
-13.5407	-85.3305	-84.8649	-19.937	-12.8042	-84.8749	-85.6656
-13.3281	-85.2027	-85.714	-19.8091	-12.7062	-84.9418	-84.991
-13.0997	-85.1646	-84.9153	-19.7446	-12.6008	-84.8035	-85.3185
-12.9573	-85.2402	-85.5112	-19.5583	-12.5781	-84.9216	-84.7476
-12.8389	-84.4193	-84.1162	-19.5416	-12.5717	-84.571	-85.0715
-12.6562	-84.146	-85.0664	-19.4567	-12.5082	-83.1109	-84.0478
-12.5745	-85.0463	-83.6944	-19.5082	-12.5375	-84.7439	-83.4408
-12.5736	-84.7929	-83.9918	-19.561	-12.6506	-84.4767	-86.2338
-12.5408	-84.482	-84.579	-19.6249	-12.7337	-83.5151	-82.8717
-12.6521	-83.5888	-83.1541	-19.5254	-12.9659	-84.4671	-84.2042
-12.8047	-83.4965	-83.1185	-19.6774	-13.2426	-83.1818	-83.7467
-12.9176	-83.6793	-82.2142	-19.5853	-13.4876	-83.5982	-83.575
-13.1003	-82.4505	-83.1399	-19.4054	-13.8087	-84.2504	-82.9777
-13.2935	-83.6492	-82.5535	-19.3498	-14.1497	-81.0373	-83.3255
-13.5989	-81.7615	-81.7188	-19.3627	-14.6379	-82.5739	-81.845
-13.9873	-82.0667	-81.7397	-19.3036	-15.2293	-83.5486	-82.4374
-14.3613	-82.2606	-82.8788	-19.3322	-15.8156	-82.4639	-82.6787
-14.8129	-81.4001	-81.9022	-19.248	-16.501	-80.7138	-83.2488
-15.2873	-81.7252	-80.8088	-19.1799	-17.2347	-83.9698	-81.817
-15.7727	-81.6361	-80.9373	-19.1056	-18.0282	-81.9233	-81.4188
-16.4838	-81.2245	-81.4693	-18.9814	-19.0898	-82.7986	-82.1318
-17.0123	-81.2369	-82.0314	-18.719	-19.9832	-83.1948	-84.693
-17.72	-81.2989	-80.5857	-18.5045	-21.147	-82.9229	-82.1207
-18.1702	-80.4366	-81.3766	-18.5553	-22.0082	-81.9653	-81.7747
-18.9312	-82.1035	-82.6574	-18.5698	-23.3182	-82.5343	-81.8355
-19.6248	-81.3942	-80.8141	-18.3733	-24.5186	-81.061	-82.0754
-20.2915	-81.1542	-80.8761	-18.3942	-26.003	-81.9233	-81.2557
-20.8762	-80.5633	-81.8284	-18.5394	-26.7616	-81.3059	-81.0738
-21.391	-80.2541	-79.936	-18.3618	-27.9407	-81.3522	-80.3219
-21.6849	-80.4144	-80.2818	-18.2767	-28.4146	-81.5782	-80.9707
-21.9873	-80.1583	-79.277	-18.2091	-28.6809	-81.3365	-79.28
-22.2222	-79.8726	-80.302	-18.2071	-28.7398	-80.4289	-81.3781
-22.4418	-79.4041	-81.9221	-18.1248	-28.4613	-80.0948	-80.6317
-22.1923	-81.0475	-79.0042	-18.2758	-27.5362	-79.6303	-79.7636
-22.0309	-80.0839	-79.3162	-18.2662	-26.6898	-80.1005	-81.1549
-21.8022	-79.5214	-78.9507	-18.4713	-26.0664	-80.9175	-81.236
-21.5755	-80.0473	-80.0262	-18.3327	-25.0193	-78.707	-78.8732
-21.397	-79.0298	-78.3189	-18.545	-24.2716	-78.97	-79.245
-20.8851	-78.4452	-79.8856	-18.5107	-23.4288	-78.5458	-79.8284
-20.3818	-79.1195	-78.5408	-18.5436	-22.2807	-79.2582	-78.722
-19.9399	-79.6321	-79.0646	-18.4671	-21.2873	-77.5057	-78.935
-19.6021	-78.1081	-79.1062	-18.3595	-20.4558	-77.37	-77.898
-19.5551	-78.5776	-80.4083	-18.346	-19.9277	-77.2756	-77.6448
-19.3043	-79.2128	-77.8706	-18.481	-19.2379	-76.0904	-75.4976
-19.2256	-78.6264	-78.6632	-18.5193	-18.7279	-76.4317	-75.8075
-19.2746	-78.8745	-78.8073	-18.6012	-18.3229	-76.8523	-76.7457
-19.5355	-77.7724	-78.9255	-18.6463	-18.0359	-78.3917	-76.9521
-19.9163	-79.0109	-77.9832	-18.5913	-17.8813	-78.2221	-78.6727
-20.5522	-77.6499	-78.005	-18.4666	-17.853	-79.4462	-80.1779
-21.8318	-78.5133	-78.6874	-18.2879	-17.8948	-81.8756	-81.5837
-22.735	-78.6687	-77.5904	-18.2139	-17.6558	-85.7179	-84.3646

-25.1002	-78.3431	-77.8583	-18.2332	-17.8585	-80.9743	-78.664
-28.5074	-78.4921	-77.9699	-18.2639	-17.8399	-76.1365	-77.4507
-36.9868	-77.8006	-77.2784	-18.1912	-17.797	-76.5933	-76.0441
-41.6703	-77.6538	-76.9409	-18.1416	-17.4209	-75.989	-75.0613
-29.7846	-78.1105	-77.2509	-18.1099	-16.9613	-76.5194	-76.3873
-25.0785	-77.8214	-77.0385	-18.3861	-16.4823	-75.4924	-75.6534
-21.9132	-77.7612	-77.0902	-18.3151	-15.9881	-76.1979	-75.458
-19.6704	-77.548	-76.58	-18.204	-15.3415	-75.923	-76.0948
-17.9603	-76.303	-76.9459	-18.3177	-14.9706	-75.7772	-76.2882
-16.7647	-77.0654	-77.5828	-18.1101	-14.5544	-76.652	-76.0001
-15.8623	-75.9423	-76.246	-18.2318	-14.3807	-75.8088	-74.742
-15.153	-76.3073	-76.7178	-18.2624	-14.2832	-75.3175	-75.5302
-14.7324	-76.463	-76.9641	-18.1086	-14.2701	-75.3543	-74.75
-14.4451	-75.7227	-75.5003	-18.058	-14.3759	-75.187	-75.2517
-14.2888	-75.2698	-75.352	-18.0085	-14.5837	-74.8369	-75.2839
-14.3213	-75.1346	-75.1467	-17.9695	-14.8369	-75.2213	-75.6565
-14.2926	-75.3318	-75.2972	-17.9311	-15.1162	-75.4599	-75.0414
-14.5314	-74.2007	-75.3736	-17.7902	-15.4737	-75.0008	-74.7588
-14.5545	-74.0258	-74.5973	-17.6177	-15.6434	-75.3329	-74.1278
-14.6562	-75.0122	-74.1328	-17.4703	-15.7597	-74.7561	-74.189
-14.6829	-74.4936	-74.5882	-17.3076	-15.7725	-75.1574	-74.6588
-14.892	-73.6676	-74.3148	-17.2912	-15.8949	-75.1543	-74.8151
-15.1425	-74.2437	-74.2457	-17.3405	-15.9944	-74.812	-74.1878
-15.0599	-73.661	-73.831	-17.5686	-15.7274	-75.4816	-74.9803
-15.1201	-73.706	-74.3061	-17.4241	-15.5638	-74.234	-74.3391
-14.9548	-73.1942	-72.955	-17.2971	-15.1812	-74.2474	-74.3478
-14.8326	-73.7997	-73.516	-17.2942	-14.8825	-73.9633	-74.1194
-14.4521	-74.396	-73.2836	-17.2527	-14.3745	-73.964	-73.5253
-14.2054	-73.201	-73.7265	-17.288	-14.0722	-73.6166	-73.9997
-13.7272	-72.9577	-72.9811	-17.4783	-13.5801	-74.1098	-73.6255
-13.1208	-73.5315	-72.9145	-17.4013	-13.0361	-73.6866	-72.8906
-12.6343	-73.2126	-72.8905	-17.4159	-12.6361	-73.8234	-73.8202
-12.0023	-73.0241	-72.4936	-17.3458	-12.1238	-73.518	-72.6681
-11.5463	-73.079	-73.2316	-17.3934	-11.8219	-73.1622	-72.8215
-11.0905	-72.554	-72.6369	-17.1173	-11.5228	-72.9734	-72.5591
-10.6878	-73.2123	-72.9769	-16.9363	-11.2845	-73.0608	-72.8645
-10.1964	-72.6448	-71.8705	-16.7092	-10.9334	-72.6588	-73.118
-9.99975	-72.1135	-72.3081	-16.4952	-10.8794	-72.3805	-72.6893
-9.52854	-72.2035	-72.0865	-16.3443	-10.5304	-72.26	-72.0387
-9.05302	-72.5541	-72.0472	-16.0903	-10.1538	-72.3174	-72.315
-8.95165	-72.0209	-72.0907	-15.5516	-10.1421	-71.8654	-71.6166
-8.77476	-72.1243	-71.7783	-15.2835	-10.0251	-72.3969	-72.1275
-8.68156	-72.073	-72.0905	-14.9212	-9.96395	-71.6807	-71.9642
-8.5013	-71.4705	-71.969	-14.706	-9.78595	-71.7402	-71.4232
-8.07575	-70.9286	-71.1489	-14.2863	-9.31377	-71.1699	-70.8314
-8.05662	-71.5886	-71.2848	-13.9456	-9.23376	-70.7568	-71.1863
-7.9916	-71.1972	-70.7669	-13.8091	-9.07054	-70.5571	-70.5605
-7.76686	-70.786	-71.0449	-13.6602	-8.73178	-70.6217	-70.2184
-7.59427	-70.8954	-70.6906	-13.506	-8.40331	-70.5387	-70.2606
-7.35482	-71.0704	-70.3583	-13.2865	-7.98497	-69.4937	-69.7197

J0-J5

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.7198	-9.43213	-96.5467	-88.2745	-18.1642	-9.19338
-28.8962	-15.2696	-99.6674	-92.2078	-31.8514	-14.9344
-29.0778	-19.9244	-91.7706	-95.0264	-30.6207	-19.2692
-28.703	-23.5766	-91.7087	-91.7143	-29.4875	-22.4361
-28.2963	-26.2081	-91.0431	-91.1407	-28.8125	-24.5697
-27.9815	-27.1099	-91.207	-90.5225	-28.4184	-25.3714
-27.6848	-26.6744	-91.164	-89.6427	-28.1487	-25.1974
-27.5582	-25.6674	-89.8888	-89.7308	-28.0676	-24.4898
-27.5673	-24.6535	-90.4303	-89.6174	-28.1956	-23.674
-27.5178	-23.7878	-91.2058	-90.1178	-28.2803	-22.8916
-27.5059	-23.0117	-90.9102	-91.011	-28.3911	-22.0967
-27.342	-22.4188	-91.0006	-90.1778	-28.3647	-21.4146
-27.3875	-22.0355	-90.5425	-92.0411	-28.5707	-20.9153
-27.3538	-21.7475	-91.8193	-91.8305	-28.6989	-20.4532
-27.4485	-21.4662	-92.1771	-90.8621	-28.9808	-19.9694
-27.4725	-21.259	-90.9014	-92.3096	-29.1409	-19.5217
-27.4902	-21.256	-92.3178	-91.4243	-29.3299	-19.2028
-27.6145	-21.1794	-90.3383	-92.1979	-29.5908	-18.8432
-27.7474	-21.2764	-93.1789	-91.9138	-29.9157	-18.595
-27.8164	-21.402	-92.071	-94.4589	-30.1016	-18.3262
-27.9274	-21.6323	-91.9413	-92.4031	-30.3113	-18.1164
-27.9854	-21.9599	-93.5357	-91.4239	-30.4166	-17.9462
-28.1648	-22.2281	-94.4639	-91.4176	-30.6883	-17.7486
-28.4427	-22.6663	-92.2256	-93.8721	-31.0973	-17.6351
-28.5344	-23.0859	-92.2309	-92.9009	-31.2776	-17.5139
-28.8661	-23.628	-93.3908	-93.8313	-31.7893	-17.4521
-29.0722	-24.2691	-94.3892	-93.5902	-32.0484	-17.4581
-29.5375	-24.821	-94.5147	-92.5984	-32.5857	-17.4826
-30.2907	-25.0907	-94.5074	-93.69	-33.4462	-17.4872
-31.1627	-24.9368	-92.9163	-94.0385	-34.2782	-17.4606
-32.2737	-24.301	-93.126	-93.7719	-35.0419	-17.3544
-33.2865	-23.5291	-92.8619	-92.982	-35.2426	-17.1942
-33.7777	-22.7646	-92.9765	-94.3787	-34.8366	-17.0292
-33.9457	-22.1124	-92.9576	-93.035	-34.5235	-16.9184
-33.6286	-21.5627	-94.0371	-92.0108	-33.9861	-16.9334
-33.3105	-20.9466	-93.4117	-94.6434	-33.6567	-17.0307
-33.2427	-20.2503	-93.3602	-93.3025	-33.435	-17.1955
-33.0705	-19.5946	-92.6418	-93.0586	-33.2573	-17.4635
-33.3434	-18.8183	-94.6896	-93.5527	-33.4909	-17.7403
-33.3591	-18.0283	-92.6822	-93.1009	-33.6142	-18.0524
-33.3833	-17.2429	-92.6453	-92.7538	-33.6534	-18.3009

-33.457	-16.4616	-91.7351	-94.1105	-33.9076	-18.4785
-33.4106	-15.7278	-92.7232	-92.7841	-33.8754	-18.5574
-33.491	-15.0054	-93.2494	-94.6812	-33.986	-18.4314
-33.3916	-14.369	-92.9889	-92.3075	-33.9344	-18.1702
-33.4927	-13.801	-93.4231	-91.4974	-33.9834	-17.8508
-33.4589	-13.3434	-92.7398	-92.6339	-33.7641	-17.572
-33.7061	-12.98	-93.2135	-92.1631	-33.7463	-17.3297
-33.611	-12.6338	-93.1169	-92.2802	-33.3032	-17.1242
-33.7273	-12.3637	-93.1015	-92.4124	-33.0666	-16.9715
-33.1119	-12.1499	-91.6567	-93.2302	-32.274	-16.8786
-32.7983	-11.9774	-91.891	-92.3713	-31.8868	-16.8019
-31.8497	-11.8445	-93.0137	-91.7977	-31.0547	-16.7312
-30.9155	-11.7367	-91.6489	-93.0971	-30.3382	-16.6346
-30.1597	-11.6471	-91.8658	-91.4852	-29.8438	-16.5252
-29.2123	-11.6001	-92.4014	-91.922	-29.2369	-16.4426
-28.3497	-11.6052	-91.0676	-93.0358	-28.7327	-16.4055
-27.7412	-11.6708	-92.1157	-91.6113	-28.4008	-16.4242
-27.183	-11.7561	-91.2431	-91.2252	-28.0459	-16.4552
-26.6308	-11.8626	-94.1784	-91.0294	-27.6207	-16.533
-26.2518	-12.0209	-91.3217	-91.1655	-27.3355	-16.6596
-25.6828	-12.2291	-91.9426	-91.152	-26.8967	-16.879
-25.2132	-12.4692	-91.411	-92.9085	-26.578	-17.1658
-24.6584	-12.7485	-92.2767	-91.1765	-26.1939	-17.5199
-24.1473	-13.0189	-90.4733	-90.8341	-25.8199	-17.8836
-23.762	-13.3411	-91.1824	-90.6822	-25.6014	-18.3605
-23.3729	-13.6392	-90.8648	-91.2485	-25.2378	-18.8374
-23.1043	-14.0425	-91.0383	-90.2453	-24.9865	-19.4974
-22.7597	-14.3834	-90.4723	-90.768	-24.596	-20.1184
-22.5559	-14.7014	-90.4152	-90.0928	-24.365	-20.7217
-22.2561	-14.9784	-90.9567	-90.8216	-24.0918	-21.2442
-21.8865	-15.2383	-90.3548	-90.6074	-23.7344	-21.715
-21.5475	-15.3708	-90.3865	-90.4383	-23.4882	-21.9028
-21.2	-15.5212	-89.6411	-90.5479	-23.2083	-22.112
-20.9258	-15.51	-90.3643	-90.3886	-22.9934	-21.8912
-20.5826	-15.4884	-89.9828	-90.0465	-22.6243	-21.6484
-20.3845	-15.4648	-89.7221	-90.7028	-22.4234	-21.3701
-20.1958	-15.3192	-90.8675	-90.1188	-22.2439	-20.8837
-20.0298	-15.2014	-89.6686	-88.9653	-22.0971	-20.4992
-19.7666	-15.0582	-88.9721	-88.986	-21.8725	-20.1509
-19.606	-14.9169	-88.7574	-88.5179	-21.7926	-19.7792
-19.4151	-14.8122	-89.3713	-89.3742	-21.6528	-19.5434
-19.1547	-14.6995	-88.6074	-87.3853	-21.4312	-19.3152
-18.9542	-14.6617	-89.7532	-88.8715	-21.2556	-19.2263
-18.7639	-14.6025	-89.0485	-88.5745	-21.0964	-19.1352
-18.6728	-14.6061	-88.336	-89.4152	-21.0182	-19.1623
-18.5406	-14.6337	-87.8511	-88.7358	-20.8849	-19.2537
-18.4936	-14.6652	-88.2156	-89.6014	-20.8251	-19.3554
-18.4067	-14.767	-88.0921	-87.5936	-20.7655	-19.5403
-18.2936	-14.7909	-88.0485	-88.1906	-20.6308	-19.5466
-18.1291	-14.9484	-87.676	-87.737	-20.5119	-19.725
-17.9268	-15.0117	-87.5535	-87.4057	-20.3328	-19.6636
-17.7856	-15.0851	-87.9099	-86.8477	-20.247	-19.5202
-17.5816	-15.0931	-86.8528	-88.1873	-20.0527	-19.1967
-17.4645	-15.1481	-87.0266	-87.3751	-20.005	-18.8255
-17.369	-15.1041	-87.3069	-86.6446	-19.9485	-18.2856

-17.2911	-15.0271	-86.9416	-86.9134	-19.9385	-17.6758
-17.1667	-14.8326	-86.4248	-86.5253	-19.9046	-16.9756
-17.1344	-14.6362	-86.9012	-86.568	-19.9498	-16.3387
-17.1321	-14.3934	-86.7128	-86.1678	-20.0971	-15.689
-16.9677	-14.1743	-85.6971	-86.8079	-20.0133	-15.1125
-16.8721	-13.9467	-86.1197	-87.6602	-20.0754	-14.6291
-16.8356	-13.7002	-85.9635	-84.962	-20.2098	-14.1436
-16.711	-13.5379	-85.5883	-85.7315	-20.2077	-13.7674
-16.7185	-13.3954	-85.4598	-85.0465	-20.3388	-13.4581
-16.6897	-13.1841	-85.4556	-85.268	-20.3848	-13.1122
-16.7246	-13.0744	-85.6672	-87.316	-20.553	-12.8872
-16.7957	-13.0504	-84.8613	-83.39	-20.7495	-12.7581
-16.8727	-12.9964	-84.7719	-85.5547	-20.9483	-12.5982
-16.8072	-13.0885	-84.2655	-84.453	-20.9919	-12.5901
-16.9515	-13.2244	-84.5646	-83.7887	-21.3472	-12.6218
-16.9594	-13.318	-84.0011	-83.7945	-21.4428	-12.629
-16.9698	-13.4829	-84.1349	-85.113	-21.3804	-12.6738
-17.0585	-13.6572	-83.137	-81.8002	-21.4513	-12.7238
-17.1989	-13.944	-83.0042	-83.502	-21.5736	-12.8984
-17.3439	-14.318	-83.1409	-84.6911	-21.5554	-13.1169
-17.4657	-14.6645	-83.1244	-84.9063	-21.6352	-13.3235
-17.5383	-15.0936	-84.0494	-83.0545	-21.5819	-13.5468
-17.6456	-15.5368	-82.3313	-82.4995	-21.5444	-13.7695
-17.7953	-15.9891	-82.9558	-82.5973	-21.5328	-14.0043
-17.7725	-16.6623	-82.4809	-82.7489	-21.5134	-14.3418
-17.8402	-17.1363	-84.3959	-81.9008	-21.2017	-14.5109
-17.8563	-17.7892	-82.1636	-81.9435	-20.9644	-14.8281
-18.1644	-18.1642	-81.55	-82.3618	-20.9818	-14.9277
-18.3439	-18.8466	-81.4845	-81.8218	-20.9711	-15.1935
-18.4095	-19.4366	-81.6958	-80.8527	-20.6077	-15.3738
-18.7083	-20.0458	-80.9574	-83.3604	-20.501	-15.6031
-18.9475	-20.4713	-80.27	-80.7865	-20.5882	-15.6021
-19.0071	-20.9215	-80.8839	-83.1191	-20.2839	-15.736
-19.065	-21.1174	-81.6851	-80.0855	-20.1437	-15.6614
-19.2014	-21.3111	-81.2293	-81.442	-20.035	-15.6538
-19.4838	-21.4424	-80.7957	-81.3798	-19.898	-15.6039
-19.7006	-21.5288	-80.7446	-79.7603	-19.6305	-15.5547
-19.9449	-21.164	-80.0926	-81.9578	-19.7222	-15.2975
-20.2057	-20.8861	-81.1654	-80.6917	-19.4645	-15.112
-20.568	-20.6128	-80.153	-80.3196	-19.4684	-14.9604
-20.6865	-20.2394	-81.5192	-80.2567	-19.1174	-14.757
-21.0673	-19.9773	-79.6825	-80.2634	-19.1461	-14.667
-21.0778	-19.4895	-80.9209	-81.9294	-18.991	-14.4446
-21.2419	-18.9064	-79.5733	-79.6982	-18.8813	-14.1678
-21.2728	-18.3802	-78.3872	-79.9475	-18.6244	-13.8916
-21.1528	-17.9777	-80.3173	-79.6404	-18.3741	-13.7443
-21.3508	-17.8243	-80.2499	-80.9078	-18.1075	-13.7523
-21.585	-17.4743	-80.0431	-79.3586	-17.9439	-13.6036
-21.5575	-17.2978	-79.3577	-78.3518	-17.8582	-13.5791
-21.8259	-17.2057	-79.8514	-80.1744	-17.6114	-13.6066
-21.9085	-17.261	-78.6558	-79.6409	-17.4277	-13.7235
-21.8211	-17.4308	-80.6317	-79.4416	-17.1985	-13.9142
-21.7749	-17.771	-78.6544	-79.1754	-16.8878	-14.2123
-21.4388	-18.4069	-80.2404	-79.2596	-16.7145	-14.6532
-21.484	-18.6721	-79.6992	-79.3878	-16.5203	-14.7951

-21.4775	-19.6386	-79.1808	-78.2531	-16.2536	-15.3083
-21.5205	-20.5332	-79.4641	-79.1426	-16.0944	-15.6826
-21.3871	-21.6677	-79.1952	-78.1732	-15.8753	-16.0931
-21.31	-22.0171	-79.4794	-79.4221	-15.6923	-16.0502
-21.2354	-21.8801	-80.3609	-80.4484	-15.4999	-15.8998
-21.5857	-21.119	-78.6635	-78.9335	-15.6199	-15.5782
-21.3858	-19.9813	-78.917	-79.1606	-15.334	-15.1824
-21.1541	-18.5695	-78.7483	-77.7262	-15.1534	-14.5461
-21.2049	-17.5436	-78.3959	-78.7401	-15.1043	-14.1836
-20.7888	-16.5624	-79.3121	-78.355	-14.8078	-13.7203
-20.8134	-15.9307	-77.8419	-78.1937	-14.7514	-13.4997
-20.6839	-15.4472	-78.1048	-78.6371	-14.6235	-13.4087
-20.343	-15.1616	-78.155	-77.9484	-14.3808	-13.3541
-20.1183	-15.0337	-78.117	-77.7367	-14.2133	-13.4759
-19.8594	-15.0748	-77.4882	-76.8922	-14.0802	-13.7794
-19.6078	-15.2361	-78.0103	-78.4205	-13.9601	-14.0852
-19.3262	-15.4703	-77.9567	-77.8683	-13.8791	-14.6636
-18.9745	-15.8415	-77.2524	-77.234	-13.6855	-15.1913
-18.5306	-16.0777	-77.0223	-77.1195	-13.4848	-15.8329
-18.1493	-16.3353	-76.4252	-76.4964	-13.2902	-16.623
-17.6609	-16.5696	-77.0231	-76.1478	-13.1228	-17.5112
-17.4007	-16.9479	-76.2872	-77.0571	-13.0072	-18.6288
-17.1461	-17.4728	-76.5918	-77.3438	-13.0312	-20.1501
-16.9699	-17.6499	-75.7039	-75.865	-13.1082	-22.2276
-16.5584	-17.9471	-76.565	-75.8143	-12.8986	-24.8813
-16.1316	-17.9638	-75.2678	-75.5463	-12.7817	-28.9532
-15.8379	-18.0443	-76.4407	-75.3825	-12.7927	-38.6535
-15.4662	-17.658	-75.7547	-74.7239	-12.677	-33.3315
-15.2203	-17.4482	-76.1986	-75.7495	-12.6897	-26.1219
-15.0605	-16.8117	-75.5484	-75.5457	-12.7694	-22.4906
-14.6843	-15.9993	-74.4642	-75.8981	-12.7135	-19.3026
-14.4234	-15.3325	-74.7045	-75.4503	-12.7154	-17.3012
-14.1271	-14.5274	-73.9839	-73.8179	-12.7072	-15.6086
-13.9531	-13.8956	-73.7128	-74.4771	-12.7821	-14.1209
-13.5708	-13.332	-73.387	-73.8859	-12.7112	-12.9376
-13.2863	-12.826	-73.4509	-73.6387	-12.7132	-11.9142
-13.0318	-12.2306	-73.4303	-73.0846	-12.7514	-10.9309
-12.7676	-11.9888	-73.4647	-73.6382	-12.6606	-10.3081
-12.6212	-11.4826	-73.7585	-73.2095	-12.7472	-9.517
-12.3951	-10.9438	-73.3312	-73.0138	-12.7308	-8.73385
-12.0167	-10.7869	-73.7144	-73.0401	-12.55	-8.30485
-11.795	-10.5691	-72.9578	-72.9841	-12.458	-7.85471
-11.5488	-10.4194	-72.6435	-72.4812	-12.4225	-7.50809
-11.3808	-10.1828	-73.2696	-72.8661	-12.3594	-7.13039
-11.0625	-9.6693	-72.7341	-72.5499	-12.2092	-6.5596
-10.8111	-9.55918	-72.2926	-72.5616	-12.1028	-6.36813
-10.6804	-9.363	-71.3753	-72.2878	-12.0956	-6.13167
-10.5018	-9.03779	-71.8268	-71.4183	-12.015	-5.86854
-10.3499	-8.70867	-72.155	-71.9804	-12.0092	-5.63516
-10.0993	-8.29439	-70.9558	-71.0554	-11.8657	-5.34001

J0-J6

S21 (dB)	S12 (dB)	S22 (dB)
-95.2334	-97.2758	-17.7756
-111.378	-109.529	-31.0628
-98.7815	-103.096	-31.3356
-94.8059	-95.1504	-30.3773
-94.0193	-93.8226	-29.6088
-93.2121	-92.6695	-29.1467
-92.0573	-92.2175	-28.786
-92.618	-92.5232	-28.5297
-93.4159	-93.9341	-28.3964
-91.9891	-92.9694	-28.2142
-92.5093	-91.4966	-28.0768
-91.1265	-91.8112	-27.7837
-92.9602	-93.2484	-27.7167
-92.1712	-91.9763	-27.5912
-93.6614	-91.5337	-27.529
-92.3115	-91.8508	-27.4108
-91.9455	-91.3319	-27.269
-93.2159	-92.162	-27.1795
-92.5545	-92.0301	-27.0806
-92.02	-93.1442	-26.8065
-96.211	-92.9715	-26.4832
-93.0394	-93.0442	-26.2097
-92.8888	-92.1453	-26.0402
-93.2492	-92.3178	-25.9355
-92.1019	-92.2074	-25.8026
-94.42	-93.7673	-25.8122
-94.362	-93.7876	-25.7543
-94.6517	-93.2897	-25.6922
-92.6436	-91.1899	-25.7689
-94.0127	-92.718	-25.7929
-92.9051	-92.4827	-25.8359
-93.0315	-93.0321	-25.7944
-92.1188	-93.0014	-25.6298
-92.7374	-93.0127	-25.548
-93.5978	-91.5682	-25.2718
-93.304	-92.0074	-25.0616
-93.7981	-93.7309	-24.6676
-92.6379	-93.9041	-24.292
-91.4606	-91.4098	-24.0177
-92.3727	-92.5467	-23.7494
-91.842	-93.4219	-23.5219

J0-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-9.48314	-89.3061	-90.5681	-17.7609
-14.9679	-93.2294	-93.2131	-33.2749
-19.7193	-94.6057	-97.8283	-32.2831
-23.4328	-93.8956	-93.6915	-30.8155
-25.804	-92.3982	-92.5574	-30.0091
-26.0394	-91.8405	-92.7563	-29.6662
-25.014	-91.1691	-91.5758	-29.5189
-23.6686	-92.0253	-91.9235	-29.4015
-22.4481	-93.0487	-92.2939	-29.6425
-21.4242	-93.3194	-93.3676	-29.679
-20.5098	-92.4799	-92.6322	-29.8085
-19.763	-91.4718	-92.3256	-29.8804
-19.1942	-93.2755	-92.8582	-30.1388
-18.6998	-91.5006	-91.8665	-30.399
-18.2131	-93.7824	-94.1495	-30.9122
-17.7761	-93.3453	-92.4343	-31.2876
-17.4673	-95.2153	-93.3926	-31.5933
-17.1243	-94.5992	-92.6517	-31.8514
-16.8813	-94.3296	-93.907	-32.1596
-16.6385	-94.9042	-94.0837	-32.4369
-16.4512	-93.632	-93.2189	-33.1512
-16.3013	-93.6706	-94.8682	-33.7885
-16.1207	-94.1212	-94.3703	-34.6607
-16.012	-94.7665	-94.3759	-36.0149
-15.8929	-95.7289	-92.9774	-36.7958
-15.8258	-94.0891	-95.5329	-37.4189
-15.825	-95.5603	-94.8308	-37.401
-15.8258	-95.4649	-93.8289	-37.4393
-15.8136	-95.4806	-94.485	-36.4928
-15.7758	-95.1013	-95.5588	-35.3713
-15.6698	-93.4881	-93.5674	-34.033
-15.5093	-94.9728	-95.5944	-32.9587
-15.3364	-95.6923	-94.409	-32.3767
-15.1891	-94.2649	-93.9953	-31.8573
-15.1303	-94.3809	-94.1264	-31.8893
-15.1433	-93.9585	-92.6329	-31.8554
-15.2137	-92.2077	-95.2896	-32.2686
-15.3775	-93.2873	-94.5589	-32.6767
-15.5724	-94.5808	-93.7261	-32.7352
-15.8283	-95.1882	-93.9986	-32.8362
-16.0696	-91.867	-92.1362	-32.7667

-92.7599	-93.0624	-23.3853	-16.3246	-91.9857	-95.7682	-32.5376
-92.517	-92.5963	-23.244	-16.5566	-94.2015	-92.8002	-32.1791
-91.7701	-92.3356	-23.1494	-16.684	-92.5781	-92.8108	-31.7168
-93.2497	-91.9384	-23.0251	-16.6926	-93.129	-91.8808	-31.4032
-92.11	-91.9655	-22.8949	-16.6412	-91.9811	-92.7238	-31.0009
-91.5387	-93.1735	-22.7147	-16.5878	-92.366	-92.1402	-30.7984
-92.1081	-91.5243	-22.5795	-16.5215	-91.9084	-91.6144	-30.6742
-91.1455	-91.0924	-22.318	-16.4964	-91.5398	-92.4712	-31.002
-91.492	-92.18	-22.1	-16.5113	-90.6118	-93.5183	-31.2454
-90.9389	-90.9507	-21.6696	-16.5827	-91.499	-90.4687	-32.0275
-91.0016	-91.6886	-21.3689	-16.7223	-92.1901	-90.6586	-32.3518
-91.1196	-91.3353	-20.9319	-16.8533	-91.5017	-91.3236	-32.7558
-90.9672	-91.2661	-20.6203	-16.9856	-90.5537	-91.4523	-32.8484
-91.262	-90.98	-20.3617	-17.076	-91.6061	-90.9132	-32.3724
-90.7727	-91.4428	-20.1132	-17.1841	-91.2346	-92.1857	-32.1842
-91.0195	-91.31	-19.8819	-17.2712	-92.2417	-92.1673	-32.4585
-90.1501	-91.5078	-19.6613	-17.4071	-90.1427	-90.4026	-32.5163
-90.8711	-90.8278	-19.373	-17.5125	-90.0917	-91.0362	-32.1792
-89.6667	-89.2347	-19.0242	-17.6265	-90.183	-90.2798	-31.3224
-90.9207	-91.3456	-18.7624	-17.7605	-90.675	-89.7672	-30.1773
-90.7757	-89.9362	-18.4418	-17.931	-89.6649	-90.3201	-29.3082
-90.3631	-89.5816	-18.2461	-18.1086	-90.4236	-90.2693	-28.6869
-90.8913	-90.4798	-18.1165	-18.286	-90.3594	-89.3346	-28.2003
-90.6702	-88.6925	-17.9833	-18.4031	-89.6427	-89.5043	-27.8437
-89.2397	-90.6343	-17.8872	-18.5499	-88.6392	-88.9304	-27.8128
-89.9622	-89.8256	-17.6737	-18.5633	-89.2248	-89.0373	-27.3276
-89.5854	-90.0061	-17.4574	-18.622	-88.4972	-89.1216	-26.8537
-89.4829	-89.3359	-17.1446	-18.557	-88.9931	-89.0521	-26.0128
-89.2934	-89.0738	-16.9035	-18.3777	-89.0357	-88.7516	-25.3835
-89.1043	-89.9187	-16.6768	-18.0826	-88.7288	-87.9499	-24.7694
-88.9396	-88.4088	-16.5089	-17.723	-88.6112	-87.2985	-24.2719
-89.0591	-88.4112	-16.3957	-17.2838	-88.2788	-87.6554	-23.9189
-89.6368	-88.9705	-16.2818	-16.8623	-88.0989	-88.4992	-23.5738
-88.8011	-88.3984	-16.1588	-16.3152	-87.7179	-88.208	-23.2068
-88.8115	-88.7974	-15.9967	-15.8056	-87.874	-87.5582	-22.7936
-88.3364	-88.7863	-15.8261	-15.3518	-87.5572	-88.177	-22.3361
-89.3321	-88.4793	-15.6035	-14.864	-87.1601	-87.5357	-21.8105
-88.8872	-89.6449	-15.4366	-14.4574	-86.7499	-87.2319	-21.3673
-88.1227	-86.961	-15.3022	-14.0864	-87.4081	-87.7571	-20.9933
-88.3264	-87.6201	-15.1918	-13.7079	-87.4947	-87.5807	-20.6199
-88.0953	-88.8139	-15.1077	-13.4148	-86.7096	-86.7261	-20.3159
-87.8768	-88.4984	-15.0166	-13.1422	-87.0896	-86.9459	-20.0067
-87.527	-87.7218	-14.9658	-12.9277	-87.0163	-87.6498	-19.787
-87.9131	-87.3769	-14.9185	-12.7314	-86.6413	-86.9657	-19.5427
-87.2809	-87.1194	-14.863	-12.6068	-85.7927	-86.5243	-19.3668
-87.3453	-86.5816	-14.7607	-12.515	-87.0395	-86.5692	-19.088
-87.255	-87.6947	-14.6474	-12.4413	-86.6318	-85.9315	-18.7833
-86.9959	-87.5041	-14.5337	-12.4496	-86.9739	-86.6235	-18.4799
-87.4046	-86.4307	-14.4444	-12.4185	-85.7024	-86.1827	-18.194
-86.4158	-86.6022	-14.3576	-12.5017	-86.5106	-86.2514	-17.9173
-86.6883	-86.6398	-14.3109	-12.5512	-85.9949	-85.4717	-17.6886
-86.7553	-86.6921	-14.3447	-12.6322	-85.4845	-85.7446	-17.5919
-86.4562	-86.5104	-14.3491	-12.6997	-85.412	-85.6063	-17.4595
-86.3112	-86.9368	-14.3606	-12.8512	-85.1212	-85.1668	-17.3205
-85.4063	-86.7313	-14.3782	-12.959	-84.6718	-84.8212	-17.1628

-85.8384	-86.1088	-14.3024	-13.0965	-85.1287	-84.9485	-16.8871
-84.9899	-85.6443	-14.1771	-13.1597	-84.3856	-84.5567	-16.5572
-85.341	-85.7673	-14.1388	-13.2172	-84.1187	-84.122	-16.3326
-85.3018	-85.1652	-14.1802	-13.2735	-84.7397	-84.3671	-16.2235
-84.8845	-85.514	-14.2078	-13.3336	-83.859	-84.0963	-16.0791
-85.1701	-84.9736	-14.3858	-13.3429	-84.355	-84.0417	-16.1573
-84.7677	-84.574	-14.5736	-13.3298	-83.4868	-83.7144	-16.1869
-84.4969	-84.0227	-14.6251	-13.3851	-83.4834	-83.3882	-16.0661
-84.6612	-84.8546	-14.7093	-13.3995	-83.1545	-82.7386	-15.9722
-85.2415	-84.0517	-14.6669	-13.3165	-82.8664	-83.421	-15.7351
-82.9586	-85.6092	-14.6316	-13.2809	-83.6353	-83.1505	-15.5275
-85.2112	-83.3565	-14.6197	-13.301	-82.6578	-82.3793	-15.3665
-83.7438	-84.65	-14.7166	-13.2638	-82.827	-82.4913	-15.3067
-83.6431	-83.9634	-14.8061	-13.3146	-81.8421	-82.0869	-15.2485
-83.5994	-83.7651	-15.1218	-13.4063	-81.6775	-81.4763	-15.4172
-82.723	-84.2884	-15.3714	-13.3857	-81.9128	-82.2032	-15.4897
-83.3469	-85.0892	-15.5085	-13.4558	-81.5319	-81.4864	-15.4482
-83.6693	-83.4471	-15.6662	-13.4991	-81.5063	-81.1674	-15.413
-82.6114	-82.5723	-15.7659	-13.5565	-81.1088	-81.1034	-15.3381
-84.0425	-82.4066	-15.7519	-13.6891	-81.5293	-81.3593	-15.1851
-83.3325	-82.6983	-15.7261	-13.7507	-80.4876	-81.1091	-15.0283
-81.6161	-82.2453	-15.7158	-13.9031	-80.9492	-80.479	-14.9225
-80.5851	-80.6338	-15.8014	-14.0361	-80.3581	-81.8208	-14.9096
-82.3701	-82.5676	-15.9849	-14.0901	-81.8937	-80.691	-14.9772
-82.472	-81.4025	-16.2211	-14.3722	-81.1144	-81.5061	-15.0329
-82.622	-82.3547	-16.3492	-14.4452	-80.797	-82.7186	-15.045
-82.0171	-83.2016	-16.447	-14.6149	-80.5899	-80.4001	-14.9733
-80.9153	-79.5589	-16.6491	-14.5611	-80.8421	-80.1255	-15.0337
-80.4391	-81.3322	-16.6226	-14.7407	-79.6361	-79.5956	-14.8666
-80.7656	-82.0169	-16.3903	-14.867	-80.7025	-79.8915	-14.6069
-80.8541	-80.5801	-16.3012	-14.9	-78.9537	-80.1667	-14.5069
-80.7166	-79.9595	-16.3756	-14.9896	-80.3818	-80.0454	-14.5089
-79.4689	-80.5695	-16.2663	-14.9657	-80.0867	-79.4889	-14.3987
-79.8375	-80.83	-16.3606	-14.8422	-79.5849	-80.0899	-14.4088
-79.6642	-80.2292	-16.5422	-14.7977	-79.3059	-79.8402	-14.4588
-79.484	-80.389	-16.7292	-14.6941	-78.4445	-79.373	-14.5375
-79.0001	-79.5233	-16.7923	-14.6261	-78.6907	-78.1983	-14.4968
-78.9142	-79.8398	-16.9224	-14.3118	-79.2496	-80.4032	-14.4144
-79.2728	-79.7804	-16.7554	-14.0692	-78.4222	-79.3052	-14.2449
-79.9926	-80.3797	-16.629	-13.8007	-78.7337	-78.7767	-14.1051
-79.6589	-79.1167	-16.374	-13.5389	-78.3232	-78.6541	-13.945
-77.6304	-80.1959	-16.3646	-13.347	-77.5562	-77.4436	-13.9887
-78.8866	-80.3533	-16.3922	-12.9565	-78.4646	-77.7683	-13.9896
-79.2362	-78.2224	-16.5335	-12.5888	-77.7708	-78.7814	-14.1257
-79.5568	-79.08	-16.5802	-12.2085	-77.8223	-78.2074	-14.1425
-77.5902	-78.0088	-16.6966	-11.9419	-77.8934	-77.8765	-14.1122
-78.918	-77.2416	-16.6647	-11.8328	-78.4472	-77.2826	-14.0802
-77.4769	-78.1041	-16.5404	-11.5525	-77.3974	-78.0754	-13.9737
-78.5157	-78.8232	-16.4342	-11.3907	-77.4177	-77.8654	-13.8031
-77.3777	-78.4181	-16.1231	-11.2535	-77.2891	-76.7238	-13.7669
-77.5072	-77.9425	-15.9329	-11.2052	-77.5078	-77.6868	-13.7265
-76.871	-77.3086	-15.7931	-11.1966	-77.4624	-76.9793	-13.7568
-77.4816	-78.6541	-15.6614	-11.2918	-77.1846	-76.6847	-13.7933
-77.5633	-77.0151	-15.6919	-11.5632	-76.6179	-76.9968	-13.8552
-77.1311	-77.2226	-15.787	-11.5976	-76.5535	-76.3384	-13.9189

-77.44	-76.5985	-15.6206	-12.0177	-76.997	-76.8401	-13.9241
-77.3194	-78.0106	-15.5628	-12.4768	-76.4057	-77.3577	-13.7639
-77.1791	-77.7207	-15.2503	-13.1793	-76.5736	-77.3027	-13.467
-77.2275	-76.6271	-15.0286	-13.6625	-76.0098	-77.001	-13.4318
-76.8923	-76.4939	-14.7576	-14.3459	-76.5636	-75.7389	-13.3339
-77.1136	-77.4074	-14.7284	-15.0142	-76.1848	-76.2375	-13.4338
-76.2553	-77.1182	-14.3966	-15.7201	-76.973	-76.8398	-13.4372
-76.5605	-77.0617	-14.364	-16.0362	-74.9576	-75.7042	-13.5213
-76.3569	-76.1275	-14.3885	-16.5054	-76.4597	-75.6831	-13.579
-76.244	-76.1723	-14.2151	-16.4213	-75.379	-75.7331	-13.4549
-75.9247	-75.5118	-14.1716	-16.4142	-75.0638	-75.1773	-13.4546
-76.0356	-75.1933	-14.0289	-16.3919	-75.316	-74.7592	-13.4342
-75.5218	-75.6071	-13.7133	-16.2215	-74.9807	-75.7127	-13.2429
-75.7834	-74.6534	-13.4201	-16.243	-74.393	-74.3793	-13.1166
-74.8996	-74.6373	-13.2144	-16.4988	-74.4645	-74.6145	-13.1305
-74.3321	-74.3577	-13.0216	-16.7004	-74.5387	-73.9163	-13.153
-74.3038	-74.3148	-12.9522	-17.3802	-73.7868	-74.2914	-13.2175
-74.2181	-73.9388	-12.8366	-17.8703	-74.0038	-74.5492	-13.1701
-74.2403	-74.2981	-12.7357	-18.642	-73.3897	-73.7832	-13.1949
-74.5267	-74.0055	-12.5384	-19.5174	-73.4386	-73.8206	-13.0898
-73.4711	-73.6029	-12.3774	-20.538	-73.2491	-72.7037	-12.9589
-74.174	-73.9058	-12.229	-21.6895	-72.8909	-72.5152	-12.9716
-73.6807	-73.3327	-12.1115	-23.2508	-73.1668	-72.3532	-12.9688
-73.0648	-73.1176	-12.0625	-25.2212	-73.0533	-72.2737	-13.1448
-72.9493	-72.8584	-11.7789	-27.2624	-72.4709	-72.2988	-12.9886
-73.2326	-72.4956	-11.5716	-29.28	-72.9039	-72.2232	-12.9393
-73.0072	-72.3437	-11.5431	-31.5947	-72.3689	-71.941	-13.0855
-72.7124	-71.9927	-11.418	-29.8563	-72.6283	-72.0487	-13.0442
-72.3737	-71.9324	-11.4173	-27.707	-72.232	-72.4257	-13.0948
-72.0012	-72.2697	-11.4022	-25.3015	-71.4707	-71.5919	-13.1432
-71.8073	-72.5935	-11.1929	-22.727	-71.5378	-71.4019	-13.0831
-71.4707	-72.0847	-11.0469	-21.1168	-71.2831	-71.6341	-13.0448
-72.2472	-72.43	-10.8734	-19.6538	-71.0649	-71.0851	-13.0159
-71.8257	-71.4371	-10.8174	-18.2876	-70.6058	-71.0311	-13.0927
-71.8025	-71.4244	-10.6263	-17.2639	-71.0824	-70.6134	-13.1036
-71.6495	-71.3293	-10.5297	-16.3126	-70.8823	-70.2154	-13.1669
-71.6062	-71.551	-10.4977	-15.3221	-70.2062	-70.6088	-13.2878
-71.1561	-71.5678	-10.436	-14.7543	-70.2519	-70.2971	-13.2865
-70.6184	-71.0206	-10.4287	-13.9823	-69.709	-69.7933	-13.3261
-70.7385	-70.9562	-10.3177	-13.0794	-69.6447	-69.4421	-13.3188
-71.0293	-70.9396	-10.0436	-12.5199	-69.7863	-69.4041	-13.1896
-70.9339	-70.7891	-9.90589	-11.9642	-69.7486	-69.3615	-13.0492
-70.9224	-70.9791	-9.74629	-11.4533	-69.2966	-68.9815	-13.0822
-70.9472	-70.8703	-9.68701	-10.93	-68.7628	-68.4621	-13.1082
-70.7632	-70.2359	-9.5021	-10.1514	-68.7394	-68.7176	-13.0881
-70.531	-70.8631	-9.41576	-9.75483	-68.3171	-68.8759	-13.0896
-70.4765	-70.2551	-9.42109	-9.28279	-68.0368	-67.949	-13.106
-70.0937	-70.3748	-9.37399	-8.82934	-68.2848	-68.3775	-13.0401
-70.3811	-70.3782	-9.31653	-8.3572	-68.1018	-67.932	-12.9989
-69.8856	-70.2018	-9.10541	-7.79713	-67.85	-67.4609	-12.7445

J0-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-9.1658	-92.7521	-94.4107	-17.4059
-14.9315	-88.8273	-89.6981	-32.0715
-19.2672	-87.4777	-86.3488	-33.4347
-22.4344	-86.4726	-85.7898	-32.367
-24.5672	-85.4987	-86.2594	-31.4057
-25.3683	-85.7939	-86.2926	-30.9259
-25.1937	-86.0185	-86.125	-30.7287
-24.485	-85.494	-86.3693	-30.5692
-23.6723	-86.8813	-86.3974	-30.7702
-22.8924	-87.0257	-87.3907	-30.7998
-22.0976	-87.0944	-87.4687	-30.8671
-21.4147	-87.8743	-87.9956	-30.8663
-20.9107	-88.3392	-88.1748	-31.1349
-20.447	-88.0992	-87.9579	-31.3044
-19.9608	-89.2141	-90.1683	-31.7488
-19.5149	-88.5672	-88.8374	-32.1221
-19.1987	-89.804	-89.6226	-32.4333
-18.8402	-90.3071	-89.9547	-32.8121
-18.5927	-88.7934	-90.2394	-33.2582
-18.3225	-89.9107	-89.3031	-33.6067
-18.115	-91.5752	-90.8913	-34.2451
-17.9458	-90.0039	-90.3117	-34.8683
-17.7508	-90.6561	-89.7175	-35.7537
-17.6329	-89.8855	-90.3054	-37.2268
-17.51	-90.6883	-89.2848	-38.2557
-17.4486	-90.2936	-90.3221	-40.1138
-17.4565	-90.3622	-89.6855	-42.0124
-17.482	-90.7561	-90.7543	-45.3167
-17.487	-91.4738	-91.0468	-50.1183
-17.4613	-90.5712	-89.8112	-47.9296
-17.3557	-91.6882	-90.291	-42.95
-17.1993	-90.7886	-91.8871	-40.26
-17.0317	-91.2004	-91.2961	-39.5611
-16.9182	-90.4657	-91.4596	-39.1471
-16.9302	-90.6532	-90.68	-40.014
-17.0261	-90.1017	-90.4111	-40.6514
-17.1885	-89.3515	-90.8073	-41.663
-17.4546	-89.8265	-90.111	-41.8814
-17.728	-89.9657	-89.6539	-40.3271
-18.0382	-90.054	-89.0685	-39.474
-18.2876	-89.1702	-89.8933	-38.638

J1-J2

S11 (dB)	S21 (dB)	S12 (dB)
-4.58484	-87.4062	-85.9927
-17.9936	-84.8937	-82.4398
-22.2141	-81.1776	-82.0636
-20.2853	-80.9395	-80.4653
-19.3165	-80.8631	-80.5449
-18.9244	-80.7727	-80.8268
-18.8649	-81.0816	-81.2008
-18.9736	-81.4192	-81.1924
-19.2214	-82.1382	-81.8845
-19.5731	-82.3887	-82.5002
-19.9032	-83.0999	-82.8767
-20.2772	-83.3057	-83.5731
-20.7748	-84.0911	-84.2358
-21.2319	-84.279	-84.2968
-21.564	-85.3074	-85.0779
-21.8042	-85.3724	-85.5082
-22.0601	-85.6727	-86.6266
-22.0878	-86.2635	-86.3396
-22.113	-86.9555	-87.6115
-21.9737	-86.3226	-86.8172
-21.7937	-88.6975	-87.4253
-21.5822	-87.3529	-88.5929
-21.1987	-88.1888	-88.4454
-20.8732	-88.3211	-88.7437
-20.4659	-88.7434	-89.18
-20.1151	-88.6009	-88.9308
-19.8433	-90.7064	-89.6496
-19.5078	-90.3799	-89.0011
-19.1574	-89.9032	-91.1669
-18.8166	-89.8169	-89.8764
-18.4882	-90.8513	-89.115
-18.1298	-89.8885	-89.6252
-17.8561	-91.2291	-90.9987
-17.6719	-90.6696	-91.667
-17.6096	-90.9581	-90.8183
-17.6775	-90.51	-91.0174
-17.8329	-91.032	-90.2312
-18.05	-92.2935	-91.1087
-18.3723	-92.1378	-90.3289
-18.8068	-91.9403	-92.0751
-19.2755	-91.7055	-93.3048

-18.4685	-90.7089	-89.9839	-38.0028	-19.8813	-90.5607	-90.5052
-18.5563	-89.4699	-88.9464	-37.0227	-20.5757	-92.5227	-90.9269
-18.438	-89.785	-89.7636	-35.797	-21.3815	-92.3966	-91.802
-18.1805	-89.7534	-89.8284	-34.7888	-22.1536	-93.6612	-91.1096
-17.8545	-89.3386	-88.8567	-33.6685	-23.0206	-92.7114	-92.1234
-17.5694	-88.2434	-88.1552	-32.9612	-23.9311	-93.8467	-92.4644
-17.3185	-89.1632	-89.0589	-32.6711	-24.9105	-92.3858	-92.0534
-17.1061	-88.7189	-89.1369	-32.8824	-26.1982	-91.8742	-91.4851
-16.9511	-88.9519	-88.2954	-33.179	-27.7802	-92.7667	-92.3772
-16.8577	-88.8266	-88.4028	-33.6407	-29.5601	-93.3713	-92.7711
-16.7867	-87.4906	-88.59	-33.6901	-31.9293	-92.6787	-91.7186
-16.7218	-88.5528	-87.7038	-33.4138	-33.8612	-92.9727	-93.0304
-16.6321	-88.019	-87.5782	-33.0767	-34.3773	-93.871	-93.0613
-16.5234	-88.2709	-87.6237	-32.2569	-32.6801	-94.9976	-93.3964
-16.4471	-87.0344	-87.4789	-31.6218	-30.2693	-94.0008	-93.8579
-16.4123	-87.0739	-87.2826	-31.2448	-28.3887	-92.8651	-91.4794
-16.433	-86.5241	-87.4837	-30.7216	-26.7426	-93.5493	-93.5326
-16.4648	-87.0649	-86.8667	-29.9736	-25.4134	-93.9544	-93.6569
-16.5445	-86.8278	-85.9345	-29.0893	-24.3688	-92.9253	-93.8551
-16.671	-86.6373	-86.9837	-28.3374	-23.4532	-93.7421	-93.7315
-16.889	-86.5261	-86.5784	-27.7173	-22.7551	-93.5885	-94.9577
-17.1755	-86.9589	-86.9001	-27.2816	-22.1992	-93.6686	-93.354
-17.5269	-85.8377	-86.7699	-26.8069	-21.7472	-94.6127	-92.5371
-17.8873	-85.4184	-86.0298	-26.3623	-21.3571	-92.8861	-93.6034
-18.3719	-85.9003	-85.6266	-26.0786	-20.9919	-93.3027	-93.4292
-18.8447	-85.8155	-85.8642	-25.5472	-20.7685	-93.2562	-93.4878
-19.5051	-85.2077	-85.8465	-25.1622	-20.5676	-93.1625	-94.0214
-20.1228	-85.4735	-85.4456	-24.6516	-20.3121	-93.2955	-94.8198
-20.723	-85.3883	-84.9994	-24.3725	-20.0923	-92.8654	-93.9864
-21.2433	-85.1489	-84.7778	-24.0652	-19.9304	-93.99	-94.6523
-21.7043	-84.8386	-84.732	-23.746	-19.7964	-93.432	-93.9886
-21.8835	-84.9775	-84.8788	-23.4209	-19.614	-93.4084	-92.5947
-22.0863	-85.0028	-84.1216	-23.0189	-19.3123	-94.1908	-93.8975
-21.8657	-84.355	-84.8026	-22.6021	-19.1864	-93.4197	-92.6978
-21.6226	-84.6129	-83.9444	-22.1712	-18.9193	-94.0036	-93.8559
-21.3386	-83.917	-83.8875	-21.8332	-18.5893	-94.2001	-94.6745
-20.8548	-84.017	-83.9975	-21.5195	-18.3542	-93.3269	-91.7764
-20.4681	-83.7807	-83.9631	-21.3004	-18.0157	-93.7717	-92.6569
-20.1214	-84.3089	-83.9849	-21.0802	-17.6555	-91.4073	-94.0756
-19.7516	-83.9701	-84.3827	-20.8263	-17.3158	-93.0408	-93.0315
-19.5141	-83.8046	-83.5447	-20.5646	-16.9535	-92.8553	-93.3165
-19.289	-83.9582	-83.7365	-20.2097	-16.5907	-94.0864	-92.5214
-19.2022	-83.9017	-83.5042	-19.9124	-16.1858	-93.1085	-93.0946
-19.1188	-83.6278	-83.9336	-19.6422	-15.8169	-92.2746	-91.6614
-19.1577	-83.2294	-83.3963	-19.5221	-15.4496	-92.1996	-92.1589
-19.2583	-83.3165	-83.1216	-19.3593	-15.0806	-92.9545	-93.3206
-19.3655	-83.3136	-83.647	-19.2579	-14.7274	-92.7728	-92.1357
-19.5565	-83.2946	-82.9027	-19.1422	-14.4004	-93.9527	-92.363
-19.5703	-82.8313	-82.7479	-18.9755	-14.1154	-93.4432	-91.9877
-19.7469	-83.4111	-82.7321	-18.7437	-13.7798	-91.6193	-90.9507
-19.6897	-82.9256	-82.9772	-18.4839	-13.5044	-92.1765	-93.4731
-19.5491	-82.6639	-82.4443	-18.3382	-13.2094	-92.6072	-92.9946
-19.2213	-82.3663	-82.3222	-18.1459	-12.977	-92.4133	-92.604
-18.8635	-82.2133	-82.587	-18.0337	-12.7317	-93.1513	-93.3379
-18.3141	-82.5084	-81.9198	-17.9616	-12.5421	-92.2007	-92.1097

-17.7078	-82.2058	-82.1788	-17.8582	-12.3666	-93.0397	-93.748
-16.9957	-81.8371	-81.6522	-17.7088	-12.2552	-91.9492	-91.5715
-16.3534	-81.7272	-81.7312	-17.6217	-12.1491	-94.1291	-93.0831
-15.6885	-81.1568	-81.6853	-17.6018	-12.0783	-92.4063	-93.133
-15.1101	-81.3543	-81.6462	-17.4293	-12.016	-92.3575	-93.2129
-14.6238	-81.3423	-80.9036	-17.4387	-12.029	-92.7672	-93.0597
-14.1376	-80.9367	-80.885	-17.4155	-12.0568	-94.5488	-93.3512
-13.7614	-80.6035	-80.9269	-17.29	-12.1058	-92.6132	-92.997
-13.4514	-80.6536	-80.3665	-17.28	-12.1682	-92.4437	-92.1534
-13.1044	-79.8664	-80.4848	-17.1889	-12.3272	-92.5755	-93.3219
-12.8845	-80.8236	-81.8186	-17.1795	-12.4772	-93.4354	-90.3373
-12.7546	-79.3979	-80.6202	-17.2024	-12.6764	-93.8617	-93.4979
-12.5938	-80.7202	-79.0584	-17.2555	-12.8977	-96.2647	-91.3044
-12.5939	-80.0176	-81.8363	-17.2093	-13.1068	-91.7602	-95.9444
-12.615	-79.8184	-79.903	-17.3673	-13.3405	-89.4316	-91.5128
-12.6229	-79.7684	-79.5177	-17.3615	-13.6531	-87.1699	-91.351
-12.6713	-78.837	-79.301	-17.2668	-13.9875	-90.4245	-90.1002
-12.7164	-78.6706	-79.6675	-17.2637	-14.2548	-88.2948	-91.9171
-12.8952	-78.8918	-79.4653	-17.3091	-14.5257	-94.2122	-90.8521
-13.1123	-78.4025	-78.3721	-17.3047	-14.7526	-91.6328	-89.1862
-13.3229	-77.6707	-79.886	-17.3287	-15.0357	-92.2231	-90.5779
-13.5482	-79.0737	-78.9997	-17.3169	-15.2184	-88.386	-88.5719
-13.7758	-79.1495	-78.8649	-17.309	-15.4084	-93.9253	-91.3143
-14.0098	-78.9725	-77.7013	-17.2839	-15.4909	-89.4896	-89.9043
-14.3532	-77.4093	-79.0696	-17.206	-15.5547	-89.9603	-87.944
-14.5173	-78.0885	-76.9536	-17.0346	-15.5817	-89.4604	-86.2898
-14.8352	-79.2029	-77.935	-16.8677	-15.629	-89.781	-87.9948
-14.9355	-77.8929	-77.3911	-16.9543	-15.7528	-88.6712	-91.481
-15.1988	-77.3165	-77.3112	-16.9024	-15.68	-89.0362	-86.8717
-15.3822	-78.1473	-77.588	-16.7383	-15.7129	-91.2964	-89.2636
-15.6146	-77.1922	-78.2614	-16.7427	-15.5739	-89.4991	-89.6413
-15.6176	-77.5924	-77.6079	-16.8092	-15.628	-86.8724	-86.6776
-15.7537	-77.4807	-77.9852	-16.6001	-15.5517	-89.3833	-88.8384
-15.6774	-78.1556	-76.4827	-16.4691	-15.5092	-88.7014	-87.0654
-15.6654	-77.6088	-77.6179	-16.3695	-15.5204	-87.728	-85.0949
-15.6069	-77.3173	-77.2664	-16.336	-15.5197	-86.0815	-87.2585
-15.559	-76.7884	-77.284	-16.2638	-15.5215	-86.6007	-87.0621
-15.2889	-77.2223	-76.4028	-16.3382	-15.6006	-88.8133	-86.0238
-15.0982	-76.9142	-76.938	-16.2796	-15.6572	-87.2365	-87.3934
-14.9514	-76.1279	-77.1093	-16.3088	-15.6944	-87.6856	-88.8394
-14.746	-76.5609	-76.2929	-16.1726	-15.7433	-86.3838	-87.2514
-14.6627	-77.5981	-76.649	-16.2077	-15.8135	-86.3497	-85.9184
-14.4476	-76.2975	-76.3988	-16.1039	-15.8063	-85.7963	-87.1794
-14.1723	-76.1655	-77.9766	-16.098	-16.0293	-84.8882	-87.5944
-13.9052	-76.3675	-76.5969	-15.9672	-16.1217	-85.6768	-84.7415
-13.7477	-77.0753	-75.9577	-15.8873	-16.3121	-84.6572	-83.7995
-13.7513	-76.4083	-76.0874	-15.838	-16.3759	-83.4223	-82.9412
-13.5978	-76.7947	-75.7097	-15.832	-16.5165	-84.1761	-85.0402
-13.5747	-75.9136	-76.4414	-15.8097	-16.5754	-84.9395	-83.6303
-13.5939	-76.0943	-76.8945	-15.7662	-16.5339	-83.0814	-85.1058
-13.7145	-77.7206	-77.0373	-15.7015	-16.4881	-83.5941	-84.114
-13.912	-76.6612	-76.739	-15.627	-16.2786	-83.7145	-84.2772
-14.2162	-76.4835	-75.9159	-15.4916	-16.0399	-83.693	-83.9451
-14.6668	-76.4576	-76.2785	-15.3662	-15.7786	-85.49	-84.3569
-14.8179	-76.1977	-76.8616	-15.3315	-15.6119	-85.1752	-85.6214

-15.3365	-76.161	-77.0262	-15.2299	-15.2036	-83.8835	-83.5517
-15.708	-75.9967	-76.3655	-15.1516	-14.8849	-84.9625	-86.1275
-16.1097	-76.2735	-76.6092	-14.9004	-14.4554	-82.8142	-81.1509
-16.0448	-76.5168	-76.3981	-14.8458	-14.0464	-83.6413	-83.824
-15.8858	-76.8029	-76.1552	-14.7591	-13.6323	-82.4443	-84.4133
-15.5644	-75.7998	-75.906	-14.8042	-13.3316	-83.8401	-82.9546
-15.1578	-75.7768	-76.0448	-14.5738	-13.0372	-84.1851	-84.139
-14.5427	-75.8096	-76.7806	-14.4989	-12.8201	-81.5948	-83.755
-14.1954	-75.7397	-75.7555	-14.4231	-12.5408	-81.7446	-82.2338
-13.7418	-75.907	-75.6156	-14.1553	-12.5207	-82.3224	-85.3613
-13.531	-74.5768	-75.5707	-14.0959	-12.4483	-82.1983	-81.0078
-13.4506	-75.5914	-75.4108	-14.0346	-12.4103	-81.4055	-82.1251
-13.3946	-75.0759	-74.7963	-13.7996	-12.5169	-82.1341	-80.9348
-13.5154	-75.3353	-74.3953	-13.6355	-12.685	-80.6668	-79.3678
-13.8172	-75.5111	-73.8463	-13.5237	-12.8572	-79.5723	-81.3756
-14.1218	-74.5965	-74.8159	-13.3781	-13.2245	-82.431	-80.2732
-14.6922	-75.2097	-74.2633	-13.2688	-13.3504	-79.4441	-79.0845
-15.2052	-74.1775	-74.5779	-13.0401	-13.8484	-80.9993	-80.362
-15.8422	-73.3176	-74.3271	-12.855	-14.0802	-80.4984	-79.8331
-16.6079	-73.6209	-74.3675	-12.6071	-14.4405	-79.8577	-79.4512
-17.4818	-73.2258	-73.828	-12.396	-14.7517	-80.6858	-80.2228
-18.5876	-73.5583	-73.4311	-12.2781	-15.3197	-81.156	-78.7222
-20.093	-73.7784	-74.0486	-12.2194	-15.9734	-79.7883	-79.4578
-22.1429	-73.7064	-73.0823	-12.2702	-16.3942	-79.2848	-79.8328
-24.7909	-73.7053	-73.3095	-12.0009	-17.084	-79.5238	-79.4086
-28.9245	-73.3275	-73.2505	-11.773	-17.6359	-78.4449	-78.4464
-39.1772	-72.8466	-73.5106	-11.6866	-18.429	-79.5013	-79.1985
-33.4487	-73.1417	-72.7533	-11.46	-18.8688	-79.5307	-78.9366
-26.0547	-73.3468	-72.7196	-11.3829	-19.7672	-79.9522	-77.8795
-22.4217	-73.3256	-73.0576	-11.3223	-20.0731	-79.8975	-77.9042
-19.2439	-73.0463	-71.9472	-11.1678	-20.3017	-78.3419	-78.657
-17.2586	-72.7794	-72.7773	-11.0748	-20.4491	-79.7799	-78.642
-15.5774	-73.1512	-72.4007	-10.9489	-20.2464	-78.9948	-77.3707
-14.0965	-73.1667	-73.0725	-10.9243	-20.224	-78.7873	-79.7552
-12.9215	-73.0056	-73.1168	-10.7442	-20.2587	-77.7274	-78.1154
-11.8996	-72.7913	-72.7278	-10.6219	-20.2419	-78.4529	-78.0561
-10.9128	-72.75	-73.1042	-10.5294	-19.9553	-78.6281	-78.8235
-10.2913	-73.242	-72.7269	-10.3886	-20.2397	-79.3999	-79.7972
-9.50297	-72.7139	-72.8777	-10.3386	-20.067	-77.9009	-77.8285
-8.72273	-73.2289	-72.7959	-10.2546	-19.7888	-77.715	-78.9892
-8.30145	-72.12	-72.4057	-10.0407	-20.257	-79.2221	-77.3897
-7.84524	-73.1553	-72.7505	-9.89945	-20.5525	-78.845	-79.5828
-7.49896	-72.8443	-73.4169	-9.78452	-20.9995	-77.9257	-77.3365
-7.13366	-73.4948	-73.3409	-9.69402	-20.9632	-78.1485	-77.825
-6.54395	-73.1791	-73.281	-9.47597	-20.6605	-79.1416	-78.6066
-6.38092	-73.8845	-72.7627	-9.31868	-20.737	-77.8865	-78.4195
-6.12803	-73.7662	-73.4159	-9.23013	-20.5855	-78.2374	-77.3193
-5.87441	-73.4464	-72.6803	-9.10608	-19.6344	-77.7655	-78.1384
-5.63804	-72.839	-72.8418	-9.03603	-18.9238	-77.8033	-77.141
-5.34843	-73.0538	-73.8537	-8.8355	-18.6016	-78.3377	-77.4476

J1-J3

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.7127	-4.5681	-95.8557	-98.3159	-17.5331	-4.55631
-32.1967	-17.9537	-92.8741	-90.0707	-33.1075	-17.9238
-32.7241	-22.1782	-90.2241	-90.046	-34.562	-22.1569
-31.5227	-20.2675	-88.5726	-90.3871	-32.8971	-20.2565
-30.7658	-19.3024	-88.9205	-88.0463	-31.741	-19.294
-30.3365	-18.9115	-89.5657	-88.8175	-31.009	-18.9049
-30.0911	-18.8536	-88.72	-89.0078	-30.5962	-18.8474
-30.0412	-18.9646	-89.1068	-89.1524	-30.3349	-18.9579
-30.2057	-19.2131	-91.2153	-89.1605	-30.4085	-19.207
-30.1719	-19.5648	-91.2981	-90.9072	-30.2207	-19.5599
-30.2431	-19.8954	-91.2711	-90.8676	-30.1419	-19.8909
-30.1687	-20.2704	-91.1865	-92.723	-30.0064	-20.2662
-30.3305	-20.7692	-93.4093	-93.2326	-29.9719	-20.7646
-30.437	-21.2268	-93.5089	-94.4975	-29.9878	-21.2231
-30.768	-21.5608	-94.1657	-92.846	-30.2165	-21.5592
-30.9845	-21.8027	-94.0938	-95.4674	-30.2874	-21.802
-31.1157	-22.0604	-95.4366	-95.6181	-30.3142	-22.062
-31.3249	-22.0898	-96.8296	-96.768	-30.3257	-22.0924
-31.5374	-22.1158	-96.7754	-96.9933	-30.4376	-22.1192
-31.6886	-21.9771	-96.4334	-95.572	-30.5898	-21.98
-31.9195	-21.7958	-96.2269	-97.4276	-30.9592	-21.7985
-32.1502	-21.5834	-99.4181	-98.4849	-31.1303	-21.5845
-32.5395	-21.1995	-97.7528	-97.1538	-31.2208	-21.1988
-33.0887	-20.874	-98.9709	-96.6184	-31.4645	-20.8732
-33.2764	-20.4658	-99.2198	-98.8611	-31.4788	-20.4648
-33.7338	-20.1141	-96.0862	-102.844	-31.4687	-20.1129
-34.0026	-19.8427	-99.7349	-99.5126	-31.3985	-19.8395
-34.7212	-19.5045	-98.5154	-100.413	-31.329	-19.5022
-35.7475	-19.1545	-100.786	-102.691	-30.6242	-19.1517
-36.4596	-18.8129	-99.5966	-101.464	-29.6969	-18.8104
-36.8329	-18.4841	-100.427	-101.454	-28.6697	-18.4815
-36.3569	-18.1247	-97.7192	-98.3757	-27.9528	-18.1237
-35.1701	-17.8516	-104.437	-101.682	-27.5349	-17.8502
-34.3095	-17.6676	-104.625	-105.156	-27.3044	-17.6667
-33.7254	-17.6066	-103.047	-104.14	-27.4441	-17.6056
-33.4095	-17.6757	-105.578	-100.758	-27.481	-17.6751
-33.5668	-17.8302	-113.81	-100.543	-27.7461	-17.8312
-33.7273	-18.0488	-108.986	-103.034	-27.8096	-18.0496
-34.3522	-18.3724	-103.75	-110.935	-27.6039	-18.3722
-34.5423	-18.8073	-101.522	-101.743	-27.4434	-18.8086
-34.7013	-19.2774	-102.746	-107.704	-27.3294	-19.2785

-34.6023	-19.8841	-102.001	-112.488	-27.2445	-19.8872
-34.6191	-20.5784	-110.785	-104.944	-27.2161	-20.5813
-34.7384	-21.3852	-104.958	-111.558	-27.1361	-21.3889
-34.6889	-22.1552	-113.279	-103.474	-27.0225	-22.1603
-34.8404	-23.0194	-106.911	-112.397	-26.8421	-23.0242
-34.8034	-23.9289	-104.598	-117.319	-26.7287	-23.9348
-34.7976	-24.907	-113.048	-105.458	-26.5534	-24.9139
-34.1333	-26.1966	-104.289	-107.665	-26.6899	-26.2016
-33.7128	-27.7799	-105.53	-109.524	-26.7456	-27.7867
-32.7237	-29.5656	-105.544	-107.903	-27.1809	-29.5775
-32.2196	-31.9499	-106.333	-106.224	-27.4194	-31.966
-31.4234	-33.9124	-113.164	-107.141	-27.9117	-33.9378
-30.8652	-34.4625	-118.422	-104.079	-28.3039	-34.502
-30.5703	-32.7671	-109.659	-108.268	-28.4937	-32.7996
-30.0463	-30.3323	-110.254	-102.517	-28.8413	-30.3627
-29.4064	-28.4372	-105.107	-105.89	-29.373	-28.4622
-28.9295	-26.784	-103.686	-109.768	-29.7411	-26.8049
-28.4331	-25.4462	-110.283	-103.825	-30.0982	-25.4626
-27.999	-24.3984	-127.911	-104.51	-30.2312	-24.4137
-27.8611	-23.4804	-107.834	-111.286	-30.022	-23.4924
-27.3264	-22.7792	-102.491	-103.475	-30.3754	-22.791
-26.94	-22.2225	-111.849	-101.038	-30.6567	-22.2334
-26.4514	-21.7694	-125.318	-106.183	-30.78	-21.7792
-25.9477	-21.372	-105.18	-115.122	-30.9935	-21.3782
-25.4575	-21.0037	-110.246	-112.685	-31.374	-21.006
-24.9992	-20.7761	-106.323	-113.978	-31.14	-20.7746
-24.6307	-20.572	-103.854	-106.495	-31.0158	-20.5681
-24.2861	-20.3135	-106.662	-115.336	-30.624	-20.3086
-24.028	-20.0922	-106.716	-103.788	-30.51	-20.0855
-23.6881	-19.9289	-105.005	-106.527	-30.4348	-19.919
-23.3254	-19.7948	-112.547	-107.841	-30.2259	-19.7869
-22.9181	-19.6125	-106.392	-104.52	-30.1075	-19.599
-22.496	-19.3046	-102.618	-103.71	-29.6289	-19.2954
-22.1648	-19.1795	-104.403	-101.079	-29.0422	-19.169
-21.8259	-18.9138	-107.546	-103.203	-28.171	-18.9039
-21.5931	-18.5843	-105.706	-102.716	-27.6379	-18.574
-21.4065	-18.3485	-102.054	-99.5776	-27.2371	-18.338
-21.2708	-18.0092	-100.688	-102.637	-26.8267	-17.9989
-20.9486	-17.6508	-107.212	-102.307	-26.5386	-17.6427
-20.7475	-17.312	-102.606	-100.612	-26.1642	-17.3061
-20.4823	-16.9494	-102.807	-101.225	-25.7615	-16.9447
-20.1351	-16.5889	-107.169	-102.558	-25.1553	-16.5845
-19.8485	-16.187	-106.067	-105.298	-24.5851	-16.1826
-19.5883	-15.818	-101.706	-100.957	-24.0725	-15.8153
-19.4598	-15.4518	-101.12	-113.071	-23.7546	-15.4494
-19.2847	-15.0845	-100.776	-100.848	-23.3738	-15.0834
-19.1928	-14.7343	-98.2369	-106.205	-23.1681	-14.7346
-19.0453	-14.4069	-99.2266	-101.649	-22.9582	-14.4085
-18.8555	-14.1236	-101.375	-100.317	-22.5982	-14.1226
-18.6088	-13.7856	-99.4089	-102.326	-22.279	-13.7887
-18.3291	-13.512	-101.619	-98.3251	-21.8082	-13.5144
-18.1772	-13.2175	-98.6709	-101.046	-21.493	-13.2211
-17.9423	-12.9858	-101.803	-99.6073	-21.0955	-12.9872
-17.8256	-12.7376	-98.6137	-97.4893	-20.8829	-12.743
-17.7348	-12.551	-98.5088	-101.17	-20.651	-12.5528

-17.6722	-12.3731	-100.328	-98.3746	-20.5059	-12.3747
-17.5535	-12.2614	-96.1266	-95.7028	-20.341	-12.263
-17.5157	-12.1517	-97.9666	-106.788	-20.2138	-12.1535
-17.516	-12.0838	-99.9042	-101.346	-20.2084	-12.0823
-17.361	-12.0188	-98.3085	-99.0055	-19.9194	-12.0181
-17.2906	-12.0311	-101.989	-99.1136	-19.8105	-12.0304
-17.2913	-12.0594	-98.5155	-98.4234	-19.7399	-12.0572
-17.1794	-12.1031	-100.834	-98.7436	-19.54	-12.1015
-17.2087	-12.1686	-98.3355	-98.6231	-19.515	-12.1655
-17.1942	-12.3257	-91.9789	-95.7074	-19.4084	-12.3252
-17.2643	-12.4779	-97.8087	-92.8298	-19.4425	-12.4754
-17.356	-12.6759	-100.935	-99.3751	-19.4839	-12.6723
-17.4775	-12.8987	-93.7349	-94.8176	-19.546	-12.8972
-17.4613	-13.1095	-96.6006	-93.8659	-19.4708	-13.1071
-17.6582	-13.3427	-93.3637	-96.8916	-19.6297	-13.3404
-17.6714	-13.6565	-97.3841	-95.5401	-19.5465	-13.6546
-17.6292	-13.9906	-93.2504	-95.4607	-19.362	-13.9905
-17.6758	-14.2586	-91.604	-95.0605	-19.3023	-14.2569
-17.7881	-14.5297	-93.7246	-100.774	-19.326	-14.5293
-17.8331	-14.7538	-91.0353	-90.8135	-19.2639	-14.7573
-17.9469	-15.0334	-100.806	-92.0176	-19.3251	-15.0376
-17.9455	-15.2213	-96.8235	-93.6548	-19.2714	-15.2252
-17.9482	-15.4137	-92.0168	-94.75	-19.2202	-15.4153
-17.9153	-15.4986	-94.6959	-91.2381	-19.1327	-15.5022
-17.7917	-15.5617	-93.4834	-88.2899	-18.9935	-15.563
-17.5857	-15.5855	-89.1883	-96.0315	-18.7098	-15.5919
-17.3978	-15.6333	-93.3172	-95.064	-18.4853	-15.6352
-17.4575	-15.7548	-90.5897	-94.3225	-18.5318	-15.7606
-17.452	-15.6813	-92.4013	-88.2994	-18.5483	-15.6848
-17.2765	-15.7112	-94.7402	-88.3952	-18.3751	-15.7137
-17.2948	-15.5741	-89.5766	-91.3542	-18.4138	-15.5772
-17.3984	-15.6268	-89.427	-90.4099	-18.5794	-15.628
-17.1856	-15.5489	-90.1364	-94.0559	-18.3857	-15.5507
-17.0441	-15.5044	-89.1301	-89.7584	-18.2713	-15.5076
-16.916	-15.5198	-93.5788	-91.2137	-18.1838	-15.5228
-16.8471	-15.5208	-90.4674	-92.6506	-18.1794	-15.5222
-16.7254	-15.5192	-87.1499	-90.1575	-18.1045	-15.5248
-16.8235	-15.5981	-88.4456	-90.3649	-18.3085	-15.605
-16.7493	-15.6568	-91.1479	-88.3218	-18.3419	-15.663
-16.8103	-15.6933	-93.5001	-91.2977	-18.5388	-15.7026
-16.5617	-15.7488	-88.686	-93.8987	-18.3886	-15.7607
-16.5629	-15.8132	-92.5868	-89.0237	-18.5651	-15.8352
-16.376	-15.8085	-87.6782	-87.5429	-18.4861	-15.8204
-16.2094	-16.035	-92.0731	-86.1873	-18.4755	-16.0483
-15.9634	-16.1242	-88.1591	-89.0769	-18.3677	-16.1353
-15.7432	-16.3105	-87.8822	-88.2772	-18.2737	-16.3237
-15.5274	-16.3738	-86.6556	-88.0123	-18.2789	-16.3819
-15.4308	-16.51	-88.7872	-87.3309	-18.4015	-16.5162
-15.3136	-16.5656	-88.6211	-85.6874	-18.4546	-16.5655
-15.1513	-16.5259	-87.9937	-87.6657	-18.5179	-16.5243
-14.9785	-16.4802	-87.3001	-84.8903	-18.5183	-16.4807
-14.7711	-16.2731	-85.2446	-86.1474	-18.4484	-16.2674
-14.4654	-16.0281	-86.9367	-86.4587	-18.336	-16.0341
-14.2136	-15.7637	-89.1275	-92.1889	-18.1467	-15.772
-14.0045	-15.6071	-86.3154	-83.922	-18.1456	-15.6176

-13.8717	-15.2004	-86.4108	-84.5719	-18.174	-15.2022
-13.6875	-14.8868	-85.639	-86.0621	-18.2016	-14.8922
-13.4897	-14.4582	-86.5465	-87.9285	-18.1631	-14.4654
-13.2832	-14.0515	-86.0176	-86.132	-18.106	-14.0544
-13.1303	-13.6356	-87.3343	-91.2713	-18.1003	-13.643
-13.0875	-13.3396	-86.6976	-84.5627	-18.3384	-13.3478
-12.8574	-13.0462	-84.0766	-83.0787	-18.224	-13.0504
-12.6766	-12.8269	-86.6843	-87.2048	-18.168	-12.8289
-12.5738	-12.5448	-87.2806	-87.0694	-18.2827	-12.5466
-12.3277	-12.525	-86.0415	-83.452	-18.0814	-12.5192
-12.2633	-12.4471	-86.9581	-85.8693	-18.2019	-12.443
-12.1852	-12.408	-84.1355	-85.0384	-18.2678	-12.4012
-11.9651	-12.5177	-82.8805	-84.8031	-18.1211	-12.5086
-11.8459	-12.6842	-83.1377	-83.838	-18.0774	-12.6779
-11.7468	-12.8558	-84.3485	-83.7373	-18.0457	-12.8527
-11.6156	-13.2301	-81.4154	-85.0593	-17.9924	-13.2256
-11.552	-13.353	-83.4692	-82.2962	-17.9569	-13.3519
-11.3742	-13.8558	-83.8168	-83.0993	-17.8377	-13.8589
-11.2259	-14.0888	-81.6078	-83.3444	-17.6888	-14.0978
-11.0424	-14.4493	-81.1998	-81.4807	-17.5071	-14.4613
-10.9182	-14.7619	-81.9699	-81.6603	-17.3553	-14.7735
-10.8464	-15.327	-80.3941	-81.4258	-17.3791	-15.3511
-10.8027	-15.9861	-82.5215	-81.064	-17.4103	-15.9946
-10.8914	-16.4083	-80.5785	-81.2621	-17.6489	-16.4314
-10.7027	-17.0936	-80.4013	-81.327	-17.5223	-17.1108
-10.5393	-17.6438	-80.5437	-79.5025	-17.3528	-17.6662
-10.4936	-18.4334	-79.7241	-79.9589	-17.2891	-18.4519
-10.3311	-18.8665	-80.3413	-79.3082	-17.2361	-18.8877
-10.3045	-19.7642	-80.7284	-79.0283	-17.2321	-19.7819
-10.3111	-20.0694	-78.9042	-78.5093	-17.3915	-20.0885
-10.2452	-20.2989	-79.6544	-79.5439	-17.3164	-20.323
-10.2081	-20.444	-78.7181	-78.7897	-17.3004	-20.4649
-10.1377	-20.2378	-77.9605	-77.4428	-17.2346	-20.2624
-10.1731	-20.2293	-80.1013	-79.0661	-17.2825	-20.2675
-10.0439	-20.2655	-78.1072	-78.3945	-17.0141	-20.2957
-9.97894	-20.2563	-77.1044	-78.4025	-16.8173	-20.2865
-9.95774	-19.9759	-78.2405	-77.8836	-16.5862	-20.015
-9.84413	-20.2568	-78.0314	-79.3699	-16.373	-20.3001
-9.86174	-20.0751	-77.7006	-78.4469	-16.2269	-20.112
-9.78901	-19.7983	-77.7564	-77.361	-15.9893	-19.8328
-9.59605	-20.2598	-76.966	-77.1973	-15.4788	-20.2946
-9.46149	-20.5371	-77.8368	-77.3665	-15.2317	-20.5668
-9.34175	-20.9703	-77.5771	-77.9435	-14.8686	-20.9819
-9.21321	-20.923	-76.851	-76.9852	-14.66	-20.9258
-9.01532	-20.6181	-77.1551	-76.6352	-14.2342	-20.6144
-8.85783	-20.6749	-75.9345	-77.986	-13.9007	-20.6738
-8.77205	-20.5299	-76.3325	-76.4714	-13.7539	-20.5195
-8.64853	-19.5934	-76.8043	-75.9985	-13.6129	-19.567
-8.58054	-18.8801	-76.7245	-76.7971	-13.46	-18.8818
-8.38881	-18.5676	-76.3433	-75.4142	-13.2467	-18.5562

J1-J4

S21 (dB)	S12 (dB)	S22 (dB)
-96.3613	-95.4629	-17.3899
-94.2099	-94.9312	-32.4471
-90.1423	-90.9518	-33.2467
-90.3269	-90.543	-31.9318
-92.143	-91.3603	-31.0116
-90.3782	-90.8513	-30.4657
-91.6602	-91.6508	-30.1671
-91.5118	-91.6371	-30.0905
-92.1783	-92.7445	-30.2098
-94.2476	-93.1737	-30.2074
-93.6725	-93.9296	-30.2867
-94.5001	-94.8477	-30.2094
-93.7678	-95.6737	-30.394
-94.8943	-98.9433	-30.51
-96.4587	-94.2917	-30.8602
-97.2442	-97.962	-31.0889
-97.4423	-98.4775	-31.2454
-99.6758	-97.0459	-31.4882
-98.7342	-101.522	-31.7491
-99.2247	-96.7978	-31.9853
-102.182	-101.245	-32.3469
-104.292	-98.8487	-32.6531
-104.599	-99.0378	-33.1537
-106.246	-107.82	-33.9055
-100.179	-107.587	-34.2797
-103.124	-104.147	-34.9855
-106.484	-100.566	-35.5276
-104.717	-101.514	-36.7712
-106.015	-105.517	-38.6378
-101.528	-106.426	-40.8721
-107.674	-106.238	-43.2617
-104.216	-105.427	-43.3817
-103.537	-109.32	-41.1936
-104.702	-109.815	-39.4418
-136.092	-103.72	-39.044
-105.555	-105.977	-38.7083
-104.859	-117.826	-39.9768
-100.705	-113.12	-40.9994
-109.573	-105.576	-42.2672
-104.838	-111.241	-42.8838
-108.2	-118.85	-44.1151

J1-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-4.54999	-94.5835	-109.735	-18.1246
-17.91	-93.4527	-93.4092	-31.7516
-22.1408	-94.7429	-92.31	-30.5523
-20.2479	-89.7396	-91.1081	-29.4518
-19.2886	-92.0881	-91.7711	-28.7505
-18.9016	-91.2542	-92.1687	-28.3589
-18.8454	-92.6056	-92.1791	-28.1187
-18.9561	-92.4166	-93.3028	-28.066
-19.205	-92.7885	-94.4916	-28.1714
-19.5579	-93.2344	-92.6065	-28.2111
-19.8895	-95.0748	-95.0141	-28.2989
-20.2656	-94.0876	-94.5117	-28.2448
-20.7642	-98.2173	-96.4889	-28.4274
-21.2223	-95.8135	-94.833	-28.5196
-21.5597	-97.4806	-97.284	-28.7566
-21.8036	-100.346	-97.7004	-28.9198
-22.0657	-98.4794	-97.4591	-29.0493
-22.0972	-101.988	-105.219	-29.2889
-22.1242	-100.757	-97.8383	-29.5464
-21.9852	-103.433	-96.0332	-29.7087
-21.801	-101.473	-107.197	-29.8712
-21.5876	-102.885	-100.706	-29.9905
-21.202	-104.966	-102.763	-30.2699
-20.8745	-101.585	-102.655	-30.6822
-20.4659	-106.025	-103.07	-30.8707
-20.1142	-103.31	-100.103	-31.3218
-19.8405	-105.406	-95.9921	-31.6118
-19.5025	-102.227	-105.466	-32.1508
-19.1516	-107.531	-105.639	-33.0394
-18.8099	-102.267	-107.685	-33.8814
-18.481	-106.365	-103.103	-34.673
-18.1225	-109.874	-120.282	-34.8859
-17.8494	-107.392	-112.477	-34.5004
-17.6666	-108.679	-115.098	-34.1791
-17.6061	-102.815	-101.677	-33.6941
-17.676	-105.712	-105.676	-33.4382
-17.8324	-111.792	-111.105	-33.3381
-18.051	-107.076	-105.185	-33.2413
-18.3749	-104.113	-108.841	-33.609
-18.81	-116.881	-107.501	-33.7421
-19.2816	-109.376	-109.306	-33.874

-108.054	-112.804	-45.1932	-19.8892	-119.512	-135.696	-34.076
-112.987	-114.385	-48.1544	-20.5853	-105.589	-117.598	-34.1097
-111.941	-112.143	-53.3633	-21.3935	-130.274	-105.223	-34.2301
-105.07	-111.298	-57.3302	-22.1642	-108.395	-109.778	-34.1708
-110.213	-119.99	-51.2181	-23.0279	-109.236	-108.436	-34.2188
-106.78	-104.184	-47.2924	-23.9355	-114.286	-113.578	-34.0121
-112.141	-110.666	-45.351	-24.9134	-111.532	-108.885	-33.9941
-119.991	-107.585	-45.8308	-26.2025	-109.385	-113.094	-33.5332
-113.998	-111.603	-46.4299	-27.7882	-112.414	-118.462	-33.3144
-106.624	-119.579	-48.8676	-29.5797	-115.021	-125.191	-32.508
-123.203	-111.258	-50.0325	-31.9692	-113.963	-107.513	-32.1331
-108.574	-108.477	-47.3755	-33.9594	-105.108	-130.855	-31.3117
-107.235	-130.224	-44.5323	-34.5406	-110.11	-109.724	-30.595
-115.477	-107.277	-41.9677	-32.8413	-107.311	-104.416	-30.0812
-110.541	-131.272	-39.3658	-30.3981	-115.56	-122.17	-29.3659
-109.282	-111.362	-37.3947	-28.4869	-107.786	-107.69	-28.7743
-109.175	-109.161	-35.9424	-26.8294	-115.81	-112.296	-28.3639
-113.485	-105.511	-34.5544	-25.4829	-116.773	-114.778	-27.9732
-110.908	-107.991	-33.3027	-24.431	-113.392	-105.928	-27.5524
-107.278	-107.132	-32.6249	-23.5072	-109.284	-111.462	-27.2983
-111.624	-111.256	-31.6801	-22.8058	-115.823	-123.025	-26.8669
-105.092	-124.094	-31.0216	-22.2493	-110.038	-113.727	-26.5455
-115.122	-104.112	-30.101	-21.7922	-108.356	-112.589	-26.0684
-104.705	-113.962	-29.3069	-21.3855	-111.049	-101.844	-25.6465
-107.828	-105.348	-28.6207	-21.0115	-108.545	-109.198	-25.3526
-112.432	-110.315	-27.9274	-20.7765	-123.37	-117.096	-24.9833
-118.292	-110.231	-27.4089	-20.5679	-106.771	-105.686	-24.741
-105.041	-111.879	-26.8581	-20.3042	-105.736	-107.322	-24.3874
-105.063	-121.546	-26.5233	-20.0819	-106.053	-109.472	-24.2047
-104.762	-108.716	-26.0642	-19.9161	-103.252	-103.825	-23.9306
-107.129	-107.383	-25.5141	-19.7794	-109.824	-105.526	-23.5729
-108.64	-100.007	-24.9438	-19.5948	-106.165	-114.823	-23.2796
-107.322	-100.589	-24.3702	-19.2838	-105.249	-100.061	-22.9663
-110.285	-106.663	-23.8981	-19.1585	-101.425	-105.633	-22.7387
-104.533	-102.343	-23.3684	-18.8945	-106.892	-101.771	-22.3814
-101.341	-99.7663	-23.0427	-18.5645	-108.262	-104.928	-22.2045
-105.272	-100.367	-22.774	-18.3255	-102.595	-106.834	-22.0552
-102.73	-107.304	-22.559	-17.9898	-104.804	-102.978	-21.9143
-108.471	-105.531	-22.1299	-17.6342	-98.1927	-102.726	-21.6835
-103	-102.192	-21.8615	-17.299	-100.928	-102.276	-21.5783
-103.953	-104.165	-21.5351	-16.9385	-105.061	-101.461	-21.4368
-101.35	-104.377	-21.1173	-16.5772	-98.7471	-107.175	-21.2115
-104.049	-107.317	-20.7858	-16.1784	-99.6772	-106.059	-21.0262
-100.527	-103.226	-20.5001	-15.8117	-106.258	-103.112	-20.8651
-102.932	-104.201	-20.3719	-15.4489	-102.099	-103.638	-20.7992
-101.6	-102.872	-20.1675	-15.0845	-101.214	-100.634	-20.6663
-103.849	-99.7031	-20.07	-14.7368	-99.8121	-101.872	-20.6497
-103.426	-102.482	-19.8864	-14.4124	-100.435	-103.569	-20.5985
-99.9226	-102.404	-19.661	-14.1263	-100.048	-103.182	-20.4911
-100.423	-100.83	-19.3718	-13.7905	-103.653	-99.8302	-20.3909
-100.93	-101.011	-19.047	-13.5177	-102.296	-101.518	-20.2062
-98.4431	-101.042	-18.8493	-13.2249	-99.3814	-100.157	-20.1131
-100.241	-102.861	-18.5731	-12.9905	-97.6398	-99.6662	-19.9311
-99.3499	-100.654	-18.4094	-12.7456	-98.5039	-98.8567	-19.8883
-99.5808	-99.9383	-18.2558	-12.5555	-100.101	-103.828	-19.8324

-104.579	-100.554	-18.1449	-12.3784	-100.813	-97.2033	-19.8398
-99.8713	-104.385	-17.9632	-12.2652	-103.07	-101.139	-19.8239
-101.407	-101.059	-17.8925	-12.1541	-101.197	-96.2482	-19.8695
-101.692	-99.4782	-17.8463	-12.0835	-101.029	-99.7347	-20.0414
-97.0385	-97.793	-17.6616	-12.018	-97.0983	-102.69	-19.9451
-99.7958	-99.3463	-17.5372	-12.0304	-96.8768	-97.0701	-19.984
-99.0537	-98.1902	-17.5038	-12.0539	-98.5617	-100.39	-20.0906
-98.5044	-95.4645	-17.3749	-12.1001	-98.3621	-98.8461	-20.0598
-97.2407	-97.306	-17.3833	-12.1613	-97.122	-96.0367	-20.2099
-103.269	-111.392	-17.3789	-12.3238	-100.607	-97.3306	-20.2661
-102.81	-98.1375	-17.4135	-12.4703	-94.8098	-94.7756	-20.4675
-91.983	-96.1248	-17.5096	-12.6694	-96.6584	-96.0923	-20.6846
-93.5738	-93.3367	-17.5972	-12.8938	-111.093	-90.8081	-20.9079
-92.1648	-93.1001	-17.5415	-13.1059	-102.318	-94.2519	-20.9522
-93.7037	-94.0707	-17.7017	-13.3415	-91.3475	-95.0077	-21.3091
-95.8871	-88.925	-17.7029	-13.656	-98.5579	-101.355	-21.3791
-92.8009	-96.8732	-17.738	-13.9925	-91.2762	-94.1666	-21.3389
-94.3141	-95.2061	-17.8281	-14.2599	-92.8495	-96.2425	-21.4071
-94.9626	-93.5043	-17.9633	-14.5319	-94.2173	-91.9175	-21.5635
-95.3027	-93.707	-18.1079	-14.7587	-91.1987	-98.6571	-21.5832
-91.8122	-87.4103	-18.2275	-15.0399	-92.8844	-98.6173	-21.7117
-91.2084	-94.8957	-18.2587	-15.2276	-91.7808	-93.0275	-21.6965
-92.3193	-89.9814	-18.3277	-15.4194	-89.8796	-94.5097	-21.672
-94.7775	-105.175	-18.3925	-15.509	-92.8369	-90.5788	-21.6538
-94.3298	-90.5498	-18.2477	-15.5671	-96.3185	-103.376	-21.6162
-96.3791	-93.5873	-18.2316	-15.5931	-94.1575	-95.1402	-21.2849
-90.1073	-92.2108	-18.1731	-15.6392	-99.5038	-95.6691	-21.027
-93.8246	-90.4907	-18.3911	-15.7581	-94.8121	-88.289	-21.0519
-91.7932	-94.3288	-18.4933	-15.6813	-91.5824	-96.2471	-21.034
-87.7484	-90.7283	-18.4708	-15.7047	-89.6844	-92.8713	-20.7092
-93.9909	-93.9079	-18.6419	-15.5709	-92.0543	-93.255	-20.6143
-91.617	-95.1171	-18.7293	-15.6223	-90.8094	-91.6215	-20.7333
-93.4256	-94.8742	-18.6282	-15.5442	-94.1906	-90.1661	-20.4221
-89.4324	-86.9461	-18.5412	-15.5057	-90.628	-92.5656	-20.2585
-93.2623	-95.1607	-18.5418	-15.5166	-94.1158	-91.8866	-20.0867
-94.3297	-91.342	-18.6977	-15.5202	-89.6151	-90.2494	-19.9012
-89.9165	-90.4071	-18.8451	-15.5203	-87.6045	-88.6086	-19.5963
-89.991	-89.5963	-18.9814	-15.5988	-92.6295	-90.7559	-19.6786
-90.7769	-98.2774	-19.161	-15.6612	-89.1276	-90.3484	-19.4049
-89.9056	-90.7784	-19.3993	-15.7023	-93.115	-90.5347	-19.4328
-88.7788	-89.6597	-19.446	-15.7602	-89.3385	-97.9158	-19.0562
-89.1967	-92.2325	-19.6756	-15.8338	-90.6926	-88.8979	-19.0442
-90.381	-87.768	-19.6373	-15.8248	-89.4693	-88.8376	-18.8689
-89.2372	-86.0498	-19.776	-16.0473	-90.8213	-92.906	-18.7049
-91.418	-89.8293	-19.9043	-16.1381	-88.7319	-90.46	-18.4078
-89.0377	-86.957	-19.9059	-16.3229	-89.5693	-92.7203	-18.1494
-86.9765	-88.579	-20.2427	-16.3811	-88.4726	-87.5286	-17.8428
-87.2879	-87.0766	-20.6132	-16.5119	-85.6276	-92.774	-17.6946
-85.6734	-88.0005	-20.5899	-16.5574	-89.0714	-88.039	-17.6001
-86.3392	-84.7742	-20.9809	-16.5215	-86.6053	-85.1949	-17.383
-85.7207	-86.0268	-21.1054	-16.4755	-87.031	-89.7236	-17.219
-88.0029	-87.4615	-21.1332	-16.2657	-90.1815	-89.6505	-16.9976
-87.9859	-84.964	-21.2234	-16.0266	-85.4544	-87.2258	-16.6838
-85.9159	-84.0219	-20.9831	-15.7685	-87.6806	-90.1109	-16.4863
-85.3352	-84.2362	-21.1447	-15.6155	-88.6428	-87.9263	-16.2684

-88.839	-87.085	-21.2977	-15.1946	-93.6359	-86.2573	-16.0365
-84.9962	-86.4327	-21.37	-14.8915	-87.1862	-87.4447	-15.9287
-85.2857	-84.6589	-21.3563	-14.4676	-88.2107	-86.4039	-15.7237
-83.9056	-84.9812	-21.2961	-14.0548	-87.5148	-88.0172	-15.5248
-86.547	-88.0709	-21.3213	-13.6462	-89.0292	-86.1968	-15.3863
-84.8351	-86.3631	-21.4614	-13.351	-88.0758	-85.37	-15.4746
-84.6331	-87.2026	-21.5478	-13.0531	-86.728	-85.0837	-15.2105
-83.1724	-85.9527	-21.3593	-12.8321	-89.2495	-86.5656	-15.027
-86.3101	-83.9912	-21.4786	-12.5486	-86.8621	-89.0416	-14.9762
-85.2282	-85.319	-21.1782	-12.5219	-87.172	-87.6023	-14.6899
-84.7375	-87.311	-21.3246	-12.4476	-89.8374	-85.5226	-14.6437
-82.919	-85.4231	-21.318	-12.402	-88.5902	-91.1673	-14.5475
-86.1159	-84.9706	-20.9947	-12.5091	-88.4159	-85.1456	-14.3198
-85.9871	-85.2574	-20.7942	-12.6752	-86.434	-85.9457	-14.1905
-82.4222	-83.7947	-20.5653	-12.8534	-86.3848	-85.0283	-14.074
-84.0453	-83.4753	-20.3131	-13.2197	-85.1908	-86.9287	-13.9514
-83.0558	-84.0852	-20.042	-13.3563	-86.6591	-86.428	-13.8641
-84.3149	-84.505	-19.5946	-13.8617	-83.4172	-84.4613	-13.6729
-81.8995	-83.9196	-19.154	-14.1038	-85.38	-85.9455	-13.4868
-81.7247	-82.1064	-18.7072	-14.466	-84.0044	-86.3247	-13.304
-80.8892	-81.5826	-18.2609	-14.79	-83.4852	-83.0066	-13.1322
-81.883	-82.7	-17.9665	-15.3521	-84.4724	-85.1605	-13.0515
-81.115	-80.8118	-17.7679	-16.0074	-83.1501	-85.8165	-13.0348
-80.8104	-81.6588	-17.7072	-16.4427	-81.6603	-83.14	-13.1341
-80.5672	-80.0171	-17.2718	-17.1253	-84.6562	-82.3128	-12.9344
-80.3467	-80.4712	-16.8564	-17.683	-82.3499	-83.0009	-12.808
-79.9532	-79.7104	-16.5526	-18.4656	-83.4456	-80.1474	-12.8024
-79.9122	-80.7135	-16.2279	-18.8988	-80.9139	-82.1373	-12.6869
-79.5922	-78.9625	-15.9877	-19.7938	-81.449	-79.8839	-12.6864
-79.1083	-79.6602	-15.9093	-20.1061	-81.371	-80.4023	-12.7682
-78.2384	-79.5022	-15.6331	-20.3398	-80.228	-82.3475	-12.7282
-78.4222	-78.137	-15.4208	-20.4781	-80.9249	-80.7439	-12.74
-79.1708	-77.5952	-15.1591	-20.2839	-80.6588	-80.3579	-12.7175
-78.0192	-78.1411	-15.0256	-20.2819	-80.2061	-80.0145	-12.79
-78.176	-77.4098	-14.6588	-20.312	-79.0652	-78.0961	-12.7019
-78.2567	-76.772	-14.3862	-20.3145	-77.94	-78.8716	-12.6985
-77.0361	-76.6684	-14.126	-20.0402	-79.5493	-79.6513	-12.7363
-76.6746	-76.9112	-13.8071	-20.3193	-78.0088	-77.4568	-12.6368
-77.6341	-77.1524	-13.6421	-20.1308	-77.8078	-77.6088	-12.7359
-75.9868	-77.0725	-13.3786	-19.8498	-77.9875	-77.4589	-12.7044
-76.1983	-76.2014	-12.9367	-20.3024	-77.4532	-76.7856	-12.5467
-75.7079	-75.6158	-12.6035	-20.5634	-76.6369	-77.0558	-12.4235
-75.6763	-75.2233	-12.2945	-20.9678	-76.5999	-76.4302	-12.3875
-75.3536	-76.1853	-12.0071	-20.9015	-77.1557	-76.6878	-12.3114
-75.4266	-75.6027	-11.6123	-20.5901	-76.9025	-76.6145	-12.1533
-74.6437	-75.2207	-11.2757	-20.6574	-76.5053	-76.2598	-12.0327
-75.3885	-74.4817	-11.0728	-20.4765	-76.6612	-75.8407	-12.0231
-75.1894	-74.8018	-10.84	-19.5461	-76.2166	-76.1526	-11.9495
-74.6242	-74.5031	-10.6465	-18.8459	-76.0343	-75.5374	-11.9277
-73.5349	-74.3405	-10.3627	-18.5378	-76.0099	-75.5113	-11.7957

J1-J6

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-4.54553	-105.088	-92.8797	-17.7716
-17.8999	-94.9329	-92.5434	-31.0631
-22.1327	-90.2245	-89.4614	-31.3602
-20.2434	-88.6324	-89.7057	-30.3911
-19.2856	-88.8971	-89.5629	-29.6349
-18.8997	-89.2389	-89.334	-29.1383
-18.8439	-88.7917	-89.1515	-28.7086
-18.9553	-90.1653	-89.2395	-28.5097
-19.2039	-89.9847	-90.3859	-28.4064
-19.5569	-91.121	-90.9047	-28.2667
-19.8882	-91.2388	-91.2674	-28.141
-20.2645	-91.7133	-93.4613	-27.884
-20.7639	-92.7877	-92.5142	-27.8414
-21.2211	-92.9227	-92.3649	-27.6843
-21.5593	-93.0398	-93.5232	-27.5659
-21.8044	-95.6845	-94.0506	-27.3928
-22.0678	-96.2518	-95.3964	-27.2127
-22.0989	-95.5409	-96.6464	-27.1072
-22.126	-95.9342	-95.7907	-27.0078
-21.9856	-97.708	-96.2006	-26.8141
-21.8007	-99.9147	-99.7198	-26.564
-21.5865	-96.8294	-100.953	-26.3115
-21.1995	-99.2116	-102.541	-26.1785
-20.8731	-98.6535	-100.676	-26.0361
-20.4648	-102.171	-100.791	-25.8174
-20.1134	-99.5005	-100.346	-25.7378
-19.8396	-98.8502	-100.547	-25.5811
-19.5009	-101.999	-99.0712	-25.4981
-19.1496	-103.875	-101.947	-25.6189
-18.8079	-101.871	-104.465	-25.7516
-18.4782	-102.351	-100.707	-25.914
-18.1202	-107.956	-100.383	-25.9172
-17.8471	-103.839	-100.131	-25.749
-17.6638	-103.171	-108.386	-25.5668
-17.6036	-104.962	-104.306	-25.1702
-17.6741	-102.704	-98.4186	-24.8542
-17.8306	-106.311	-104.266	-24.4575
-18.0504	-105.611	-102.418	-24.1238
-18.3741	-103.195	-105.593	-23.9306
-18.8092	-107.525	-104.816	-23.726
-19.2826	-114.478	-108.168	-23.5131

J1-J7

S11 (dB)	S21 (dB)	S12 (dB)
-4.54225	-104.813	-98.7686
-17.8894	-97.7815	-101.1
-22.1219	-100.437	-97.2986
-20.2371	-96.2902	-93.7197
-19.2827	-98.2901	-97.169
-18.9006	-100.072	-98.0524
-18.8468	-97.8663	-97.1102
-18.955	-98.9851	-98.8311
-19.2033	-97.3161	-98.7722
-19.556	-97.9639	-99.0226
-19.891	-104.378	-103.99
-20.2666	-101.833	-101.719
-20.7634	-105.858	-102.012
-21.219	-105.494	-104.641
-21.5576	-106.779	-107.737
-21.8051	-103.067	-103.004
-22.069	-107.498	-105.872
-22.1031	-109.518	-103.321
-22.1311	-110.493	-109.591
-21.9865	-114.081	-108.887
-21.8019	-110.867	-110.195
-21.587	-110.855	-100.386
-21.2022	-102.465	-113.111
-20.8755	-118.012	-115.714
-20.4667	-107.252	-108.17
-20.115	-116.188	-116.637
-19.8412	-112.415	-105.131
-19.5024	-104.041	-111.2
-19.1511	-106.204	-113.171
-18.8081	-122.816	-105.024
-18.4801	-111.415	-114.069
-18.1205	-120.611	-110.573
-17.8482	-118.404	-110.438
-17.6654	-114.676	-117.951
-17.6051	-114.811	-113.079
-17.6749	-109.708	-110.294
-17.8309	-111.255	-117.354
-18.05	-110.165	-127.253
-18.3722	-112.105	-108.491
-18.8075	-102.343	-112.45
-19.2801	-117.095	-113.362

-19.8915	-107.837	-118.139	-23.3913	-19.8885	-106.094	-110.859
-20.5888	-111.425	-124.746	-23.191	-20.5869	-108.965	-105.198
-21.3965	-107.935	-112.221	-23.059	-21.3947	-108.309	-101.265
-22.1678	-102.944	-107.317	-22.8974	-22.1657	-108.188	-111.374
-23.0297	-108.787	-113.332	-22.7784	-23.0272	-104.281	-111.618
-23.9377	-110.674	-111.03	-22.5963	-23.9333	-108.188	-115.118
-24.9141	-117.069	-110.355	-22.4609	-24.912	-106.27	-106.875
-26.2035	-104.779	-113.104	-22.2151	-26.2066	-111.667	-114.544
-27.787	-111.328	-115.709	-22.0101	-27.7957	-104.54	-117.897
-29.5767	-107.319	-108.338	-21.6411	-29.5993	-107.168	-104.522
-31.9667	-106.022	-112.27	-21.3917	-32.0065	-105.726	-103.904
-33.9697	-104.665	-106.45	-20.9908	-34.0203	-102.284	-102.567
-34.5597	-111.382	-110.029	-20.6313	-34.5934	-105.857	-109.105
-32.8737	-105.585	-112.691	-20.334	-32.8967	-101.737	-99.0466
-30.4251	-113.103	-113.382	-19.9969	-30.4335	-105.413	-104.754
-28.5084	-113.326	-109.232	-19.6928	-28.5097	-102.322	-102.221
-26.8464	-114.822	-123.443	-19.4608	-26.8411	-100.501	-108.493
-25.4979	-108.223	-104.604	-19.2245	-25.4938	-104.034	-105.331
-24.4455	-109.403	-120.521	-18.9694	-24.4445	-109.501	-104.319
-23.5202	-132.709	-106.512	-18.7757	-23.5201	-101.564	-99.8242
-22.8177	-107.279	-112.492	-18.5106	-22.8233	-99.8653	-102.423
-22.2611	-115.152	-106.833	-18.2933	-22.2681	-101.877	-104.458
-21.8033	-109.285	-110.598	-18.0684	-21.8087	-99.0516	-98.9857
-21.3957	-109.145	-110.413	-17.8449	-21.3995	-105.168	-102.546
-21.0167	-111.353	-111.691	-17.6794	-21.013	-99.1765	-102.012
-20.78	-104.445	-107.009	-17.465	-20.7727	-100.187	-104.1
-20.5676	-113.832	-109.131	-17.2947	-20.5576	-101.825	-103.043
-20.3041	-107.062	-107.636	-17.0785	-20.2968	-102.06	-103.997
-20.081	-112.79	-112.158	-16.9172	-20.0769	-98.8601	-103.817
-19.9142	-107.181	-106.849	-16.7328	-19.9094	-103.109	-97.2888
-19.777	-115.487	-111.319	-16.5257	-19.7721	-103.013	-102.843
-19.5908	-102.81	-106.403	-16.3466	-19.5883	-101.896	-100.925
-19.28	-106.337	-103.1	-16.1522	-19.2717	-99.1965	-101.538
-19.1524	-119.609	-111.491	-15.9943	-19.1453	-100.423	-100.985
-18.8892	-111.382	-107.333	-15.7894	-18.8835	-99.5136	-97.5921
-18.5588	-107.206	-106.851	-15.6525	-18.5576	-99.6242	-101.105
-18.3217	-114.602	-108.21	-15.5121	-18.326	-96.7435	-97.3172
-17.9836	-107.947	-107.014	-15.4136	-17.9916	-99.0263	-97.8691
-17.6283	-104.22	-102.765	-15.286	-17.6342	-96.9556	-98.3732
-17.2938	-102.297	-103.659	-15.2062	-17.3006	-96.5744	-95.9876
-16.9332	-102.378	-104.185	-15.1064	-16.9348	-97.3553	-99.1617
-16.5741	-104.651	-101.697	-14.9677	-16.5736	-97.7728	-96.9367
-16.1734	-105.02	-100.768	-14.8632	-16.1752	-96.6671	-99.4582
-15.8076	-101.489	-102.633	-14.79	-15.8089	-95.8126	-96.3612
-15.4471	-108.02	-103.446	-14.7308	-15.4502	-96.8656	-97.0804
-15.0844	-101.861	-102.456	-14.6546	-15.0862	-97.5596	-97.2016
-14.7369	-104.581	-106.219	-14.6226	-14.7394	-95.7292	-97.0849
-14.4134	-100.344	-100.67	-14.5675	-14.4119	-94.4489	-95.0653
-14.1281	-101.451	-103.896	-14.5131	-14.1232	-96.0447	-96.2695
-13.7947	-101.942	-101.771	-14.4345	-13.7908	-95.9128	-95.7062
-13.5218	-101.764	-102.348	-14.3445	-13.5164	-95.6659	-97.1424
-13.2289	-100.765	-100.751	-14.3039	-13.2263	-96.1002	-95.2856
-12.9941	-100.646	-101.391	-14.2155	-12.9941	-95.6224	-95.7312
-12.7464	-101.764	-101.724	-14.1903	-12.7464	-97.604	-98.861
-12.5592	-99.4598	-99.7507	-14.1901	-12.5589	-97.2405	-93.6744

-12.3811	-101.602	-97.4627	-14.1891	-12.3823	-97.2381	-96.4482
-12.2675	-102.16	-96.8248	-14.1602	-12.2669	-95.9279	-94.1302
-12.1555	-102.414	-98.9887	-14.2115	-12.1586	-96.2933	-95.3841
-12.0831	-103.41	-95.5561	-14.2928	-12.0792	-95.6789	-101.485
-12.0166	-96.7784	-103.21	-14.2738	-12.0161	-95.6288	-94.0457
-12.0287	-102.907	-101.398	-14.3362	-12.0277	-96.8252	-92.4584
-12.0526	-99.1854	-96.2333	-14.426	-12.0493	-92.3917	-92.4449
-12.0977	-97.6597	-101.791	-14.4236	-12.1002	-93.4006	-95.6067
-12.1592	-101.272	-104.501	-14.5134	-12.1586	-93.825	-93.7881
-12.3149	-94.3581	-101.191	-14.5702	-12.3173	-92.3912	-93.9856
-12.4681	-100.523	-104.652	-14.6638	-12.4663	-92.2972	-91.8301
-12.668	-94.398	-91.4917	-14.7819	-12.6636	-96.8134	-96.1902
-12.8919	-94.133	-93.3901	-14.9591	-12.8879	-89.6891	-92.3264
-13.1069	-97.8742	-96.2691	-15.0159	-13.1003	-88.4976	-89.1548
-13.3411	-92.3486	-99.2631	-15.2489	-13.3363	-92.1846	-92.6986
-13.6551	-91.4086	-92.4986	-15.3524	-13.6574	-94.4212	-93.1028
-13.9936	-96.8113	-94.8176	-15.3979	-13.9949	-92.7692	-90.9934
-14.26	-93.3436	-95.0823	-15.5141	-14.2594	-91.9709	-93.4493
-14.5325	-99.0413	-92.0985	-15.6568	-14.5353	-87.4559	-92.4168
-14.7594	-93.9166	-89.8771	-15.7626	-14.7553	-88.0834	-90.2622
-15.0429	-97.2269	-92.2674	-15.8767	-15.0351	-88.7969	-90.2423
-15.2288	-94.0436	-93.974	-15.9575	-15.2193	-91.137	-90.9361
-15.4218	-94.7735	-94.3363	-16.0561	-15.4177	-90.5178	-92.1962
-15.5095	-92.7064	-95.338	-16.1753	-15.5106	-93.784	-97.7698
-15.5649	-91.0946	-107.512	-16.2392	-15.5677	-88.374	-87.0514
-15.5954	-92.0018	-98.209	-16.2132	-15.5896	-89.0522	-89.0632
-15.641	-92.8125	-93.0956	-16.182	-15.6389	-86.9582	-91.3515
-15.7592	-104.88	-91.8157	-16.3384	-15.756	-89.5438	-91.4753
-15.6796	-90.2612	-89.5968	-16.4365	-15.6736	-91.6556	-88.2799
-15.7031	-90.6525	-91.3758	-16.3447	-15.6977	-89.0146	-88.7152
-15.569	-95.7454	-95.9841	-16.4139	-15.5641	-88.1753	-90.8386
-15.6156	-94.6271	-91.2121	-16.571	-15.6167	-88.3179	-87.6234
-15.5381	-93.213	-90.8326	-16.4736	-15.544	-87.6013	-93.2369
-15.4986	-91.2352	-92.6716	-16.4649	-15.5024	-89.9891	-89.5243
-15.5125	-89.4003	-90.5013	-16.4733	-15.5254	-87.6747	-92.7686
-15.517	-91.6467	-89.301	-16.4968	-15.5214	-88.357	-87.6828
-15.5149	-89.4995	-92.4102	-16.4367	-15.5209	-86.675	-90.5483
-15.5954	-89.9153	-90.348	-16.5597	-15.5974	-87.033	-88.5887
-15.6585	-91.2884	-87.1424	-16.4901	-15.6613	-85.8343	-87.9418
-15.7027	-91.714	-91.5954	-16.5877	-15.7031	-86.8604	-86.822
-15.7637	-90.3845	-90.7201	-16.4528	-15.7666	-87.951	-89.4539
-15.843	-90.3866	-87.1036	-16.5617	-15.8401	-86.4924	-88.1609
-15.8259	-92.8922	-93.4969	-16.5421	-15.8308	-87.0951	-89.8574
-16.0515	-88.1032	-87.4232	-16.5505	-16.0562	-86.7078	-86.9198
-16.1477	-91.9151	-89.0956	-16.4548	-16.1404	-84.7961	-88.182
-16.3283	-90.3946	-84.9025	-16.3454	-16.328	-84.2384	-86.04
-16.3815	-88.2791	-86.5633	-16.2498	-16.3779	-84.2855	-85.9139
-16.5135	-86.8269	-86.5855	-16.2354	-16.5091	-83.6294	-85.3572
-16.554	-86.1582	-83.5595	-16.2245	-16.5513	-83.5692	-89.7657
-16.5156	-88.6107	-88.4642	-16.1428	-16.5184	-85.2565	-86.474
-16.4728	-89.1907	-87.8864	-16.0788	-16.4752	-83.7677	-85.1289
-16.2507	-86.976	-86.2229	-15.9568	-16.2679	-85.2707	-85.353
-16.0244	-87.7216	-86.9254	-15.7674	-16.0413	-84.6638	-83.8936
-15.7669	-88.3857	-87.7396	-15.6675	-15.7729	-85.516	-86.262
-15.6175	-88.3495	-85.9386	-15.5691	-15.6188	-83.6673	-83.2589

-15.1885	-86.4029	-86.9746	-15.3777	-15.1835	-84.9965	-83.7863
-14.8894	-85.7124	-85.5359	-15.2614	-14.8876	-84.0305	-84.2468
-14.4631	-85.86	-87.3462	-15.0991	-14.4617	-83.8236	-85.4438
-14.0591	-90.7559	-89.8598	-14.9498	-14.0564	-84.0826	-82.5993
-13.6471	-85.5538	-85.2531	-14.8089	-13.654	-83.9176	-83.478
-13.354	-87.3042	-88.4155	-14.9254	-13.354	-82.0716	-84.944
-13.0539	-84.7219	-86.2543	-14.6516	-13.0565	-84.0807	-85.423
-12.8324	-83.8562	-86.9453	-14.5002	-12.832	-84.4065	-83.786
-12.5475	-84.2361	-87.0071	-14.4479	-12.5473	-83.7859	-82.9995
-12.5215	-85.7576	-87.5347	-14.1695	-12.5182	-82.9508	-82.6568
-12.443	-85.4	-87.8961	-14.0957	-12.4366	-82.8372	-82.4086
-12.3975	-86.837	-83.8896	-13.9568	-12.3962	-84.6272	-82.9624
-12.5041	-84.6286	-84.0078	-13.7076	-12.5007	-83.3394	-85.5605
-12.6679	-87.2124	-84.1559	-13.5328	-12.6716	-81.8591	-82.3804
-12.8473	-84.0865	-85.4171	-13.383	-12.8527	-81.6691	-80.377
-13.2134	-86.0701	-83.6601	-13.2326	-13.2207	-82.5305	-83.3354
-13.3501	-84.1201	-86.1646	-13.1269	-13.3568	-81.9469	-81.8888
-13.8552	-82.8718	-86.4707	-12.9271	-13.8548	-80.6785	-82.9966
-14.1011	-84.4976	-84.5447	-12.7016	-14.1021	-81.0557	-80.0806
-14.465	-83.817	-82.8038	-12.4853	-14.4678	-80.6792	-80.856
-14.791	-83.9669	-83.0429	-12.2576	-14.7822	-81.2359	-79.5359
-15.3576	-82.3812	-82.155	-12.1272	-15.3578	-80.9743	-79.5441
-16.0063	-80.6118	-83.6312	-12.0594	-16.0129	-79.5164	-81.3483
-16.4469	-82.117	-82.2393	-12.055	-16.4567	-78.6112	-81.5389
-17.1239	-81.7517	-79.3165	-11.8265	-17.1382	-78.9143	-78.6554
-17.6859	-80.3858	-80.7398	-11.6316	-17.6914	-79.4488	-78.7899
-18.4655	-79.9964	-82.381	-11.5597	-18.4678	-78.7352	-78.4967
-18.8975	-80.9839	-79.5613	-11.3828	-18.9042	-77.9783	-78.4216
-19.8032	-79.5831	-80.9872	-11.33	-19.7977	-77.7668	-77.3828
-20.1083	-80.0227	-79.4402	-11.2921	-20.1063	-76.8601	-77.7696
-20.3503	-80.7457	-79.2164	-11.1144	-20.3652	-76.9746	-76.0673
-20.5064	-78.5429	-79.2741	-11.023	-20.5151	-77.1707	-76.2029
-20.2971	-78.1239	-78.5805	-10.9134	-20.3151	-75.2985	-76.156
-20.2927	-79.6311	-78.2848	-10.8894	-20.3052	-75.3718	-76.1627
-20.3254	-78.6394	-77.8377	-10.7032	-20.3352	-75.8154	-75.3914
-20.3321	-78.5891	-77.75	-10.5812	-20.3414	-75.1418	-74.849
-20.0567	-77.8804	-77.5756	-10.4946	-20.0607	-74.8687	-75.644
-20.3369	-77.7097	-78.0468	-10.3603	-20.3405	-74.7912	-74.7366
-20.1422	-77.4912	-77.1079	-10.3381	-20.1533	-74.7193	-74.2317
-19.8614	-78.021	-77.2845	-10.221	-19.8758	-74.3224	-74.3444
-20.3046	-76.9767	-76.2011	-9.97542	-20.3194	-73.8464	-74.6181
-20.5646	-77.362	-76.434	-9.88142	-20.5617	-73.9915	-73.8507
-20.9504	-77.053	-75.913	-9.74826	-20.9469	-73.903	-73.6745
-20.8779	-76.396	-75.7352	-9.69052	-20.8698	-73.7268	-74.0415
-20.5611	-75.9235	-75.247	-9.48279	-20.5542	-73.2061	-73.3204
-20.5991	-75.8217	-76.3633	-9.34663	-20.5918	-73.1448	-73.0335
-20.4305	-75.2613	-75.2406	-9.30458	-20.4269	-72.8672	-72.3892
-19.5185	-75.6326	-75.7171	-9.20506	-19.4999	-72.8117	-73.5337
-18.8266	-74.9746	-75.531	-9.14671	-18.8068	-72.334	-72.5657
-18.5139	-74.7966	-74.2357	-8.97592	-18.5155	-73.0188	-72.9034

J1-J8

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.7312	-4.53794	-92.0867	-93.8958	-17.3844	-17.6468
-33.0353	-17.8811	-96.3777	-93.3632	-32.0412	-31.8377
-32.2453	-22.1153	-93.8386	-95.916	-33.5337	-32.7396
-30.8809	-20.2343	-90.6475	-91.8132	-32.441	-31.4803
-30.1038	-19.2806	-90.6503	-91.2	-31.5544	-30.7245
-29.7594	-18.8975	-90.396	-90.1418	-31.1219	-30.203
-29.5749	-18.8439	-89.9047	-90.2306	-30.8778	-29.9055
-29.4736	-18.9534	-90.322	-89.4365	-30.7174	-29.6726
-29.7297	-19.2033	-89.4842	-90.2954	-30.8969	-29.6809
-29.7446	-19.5548	-89.3137	-90.2451	-30.8588	-29.7146
-29.8815	-19.8878	-90.0379	-90.7998	-30.9559	-29.6077
-29.9255	-20.2636	-89.6687	-91.3274	-30.9615	-29.5164
-30.1574	-20.7624	-89.9222	-89.5001	-31.2262	-29.6229
-30.3926	-21.2218	-90.4123	-91.6172	-31.443	-29.6404
-30.8653	-21.5616	-90.4763	-90.2362	-31.9428	-29.8063
-31.1977	-21.8098	-91.5321	-89.7817	-32.3399	-29.9789
-31.5418	-22.0725	-89.7996	-91.8132	-32.6643	-29.8568
-31.8594	-22.1062	-90.7364	-92.1007	-32.9923	-30.2721
-32.3049	-22.135	-92.0998	-91.3231	-33.3846	-30.3876
-32.615	-21.9917	-93.7767	-92.2577	-33.6157	-30.5849
-33.2823	-21.8065	-92.6552	-92.7188	-34.1806	-30.7567
-33.7638	-21.5895	-91.9974	-92.2568	-34.7568	-30.8468
-34.4363	-21.202	-91.4414	-91.7062	-35.7264	-31.3935
-35.6024	-20.8744	-91.8323	-92.6397	-37.4219	-31.7177
-36.3933	-20.4665	-91.5773	-93.0337	-38.8648	-32.38
-37.2915	-20.1152	-90.8289	-91.9235	-41.417	-32.9811
-37.651	-19.8424	-93.2756	-92.3453	-44.0598	-33.6425
-38.1017	-19.5024	-92.6398	-94.0486	-49.1955	-34.4915
-37.0885	-19.1512	-91.8712	-93.6305	-56.5061	-35.5171
-35.6598	-18.8071	-93.9022	-93.3683	-48.2529	-36.1606
-34.1074	-18.4775	-93.0818	-94.1296	-42.8016	-36.2714
-32.9819	-18.1187	-92.8184	-93.494	-39.9885	-35.7574
-32.3709	-17.8465	-93.3918	-93.6579	-39.1548	-35.4406
-31.8495	-17.6646	-93.9158	-92.8841	-38.4311	-35.1859
-31.8994	-17.6037	-92.2755	-92.3149	-38.7342	-34.9779
-31.9311	-17.674	-92.5042	-91.6182	-38.9211	-35.2367
-32.4228	-17.8312	-93.7161	-91.5237	-39.7533	-35.7389
-32.8507	-18.0488	-93.5304	-93.4697	-40.5491	-36.0711
-32.9359	-18.3738	-92.8473	-91.7497	-40.068	-36.6731
-33.0147	-18.8092	-92.5479	-93.3505	-39.5908	-37.0426
-32.9398	-19.2846	-93.4769	-95.6848	-38.5875	-37.3936

-32.5915	-19.8935	-93.8445	-92.6544	-37.4403	-37.7334
-32.2548	-20.593	-93.0004	-94.5087	-36.1677	-37.6204
-31.7709	-21.4021	-92.0047	-91.2495	-34.9487	-37.9055
-31.4843	-22.1746	-92.4976	-94.3492	-34.1542	-38.2743
-31.1087	-23.035	-93.013	-91.9526	-33.3163	-38.2806
-30.9269	-23.9435	-93.3882	-92.5497	-32.8275	-37.6841
-30.7264	-24.9184	-92.2566	-92.3643	-32.6566	-37.2736
-31.0217	-26.2087	-93.5836	-93.3539	-32.8811	-36.1374
-31.1929	-27.7993	-92.5025	-92.4327	-33.1122	-35.2965
-31.9305	-29.5914	-92.9913	-92.9263	-33.4909	-34.3218
-32.2306	-31.9939	-92.0411	-92.4122	-33.4239	-33.109
-32.7916	-34.0042	-91.9663	-93.1962	-33.0965	-32.1338
-33.015	-34.6072	-92.0171	-90.2906	-32.6808	-31.2189
-32.5283	-32.9212	-91.031	-92.1772	-31.8789	-30.412
-32.2348	-30.4556	-91.74	-92.3995	-31.379	-29.5222
-32.3108	-28.5296	-92.0465	-91.2083	-31.1997	-28.8024
-32.1463	-26.8578	-91.614	-90.084	-30.8339	-28.0805
-31.7849	-25.5071	-92.2355	-91.7829	-30.1417	-27.4958
-31.0761	-24.4519	-91.6522	-90.6402	-29.1943	-26.9306
-30.1584	-23.5287	-91.829	-91.2543	-28.2695	-26.4631
-29.3751	-22.831	-91.9513	-92.2658	-27.492	-25.9631
-28.751	-22.2715	-90.1266	-91.1589	-27.002	-25.4603
-28.1393	-21.8154	-89.9886	-90.2145	-26.6295	-25.0173
-27.6313	-21.403	-90.3398	-90.9435	-26.3175	-24.6597
-27.4567	-21.0184	-90.7703	-91.3937	-26.2373	-24.1885
-26.9112	-20.7805	-89.9334	-90.5041	-25.8223	-23.9188
-26.4695	-20.5604	-91.4455	-89.936	-25.4513	-23.4673
-25.7378	-20.298	-90.9996	-90.0786	-24.802	-23.0751
-25.209	-20.0778	-90.6523	-90.2351	-24.3535	-22.733
-24.6765	-19.9085	-90.1318	-91.1676	-23.9077	-22.4156
-24.1623	-19.7721	-89.8932	-90.1173	-23.5515	-22.0645
-23.8072	-19.5839	-90.0774	-89.4931	-23.2982	-21.8769
-23.4154	-19.2698	-89.9751	-90.8718	-23.0197	-21.5225
-23.0211	-19.1441	-89.6844	-89.9921	-22.7191	-21.2751
-22.5473	-18.8782	-89.2038	-90.0682	-22.3919	-20.9527
-22.0888	-18.5489	-89.4472	-89.8003	-22.0125	-20.6968
-21.6233	-18.3129	-89.4594	-89.4519	-21.5702	-20.4777
-21.2393	-17.976	-90.106	-89.5998	-21.2255	-20.3044
-20.8671	-17.6224	-89.3746	-88.8301	-20.9546	-20.1533
-20.5677	-17.2872	-90.3461	-88.6599	-20.6489	-19.9093
-20.2593	-16.926	-90.2124	-87.5045	-20.3997	-19.7746
-19.9349	-16.569	-89.0643	-90.1	-20.1428	-19.6157
-19.6751	-16.1666	-88.6321	-88.6936	-19.9792	-19.4624
-19.4051	-15.8038	-89.2693	-88.2859	-19.7947	-19.291
-19.1877	-15.4435	-89.3087	-88.5328	-19.6903	-19.1901
-18.9273	-15.0835	-89.6966	-89.0741	-19.4984	-19.0868
-18.6677	-14.7382	-89.2887	-89.7261	-19.2854	-18.9618
-18.4203	-14.414	-89.7297	-88.1476	-19.0697	-18.9177
-18.1628	-14.1267	-88.4294	-89.8299	-18.864	-18.7009
-17.9071	-13.7968	-89.2521	-88.7455	-18.6615	-18.7019
-17.6607	-13.5212	-89.3334	-88.7725	-18.4882	-18.5626
-17.5063	-13.2322	-89.2502	-89.3751	-18.4604	-18.4787
-17.3019	-12.9963	-88.6497	-88.8137	-18.4027	-18.3608
-17.1369	-12.7518	-88.5438	-88.742	-18.3348	-18.3566
-16.988	-12.5618	-89.5283	-89.8063	-18.2653	-18.2926

-16.7726	-12.3819	-88.8034	-88.1883	-18.0542	-18.2523
-16.5134	-12.2717	-88.5702	-88.3107	-17.7728	-18.1304
-16.3548	-12.1531	-88.6426	-88.8775	-17.5862	-18.0692
-16.2659	-12.0785	-88.6986	-88.2354	-17.5311	-18.0035
-16.115	-12.0109	-88.0523	-88.7856	-17.4159	-17.9875
-16.093	-12.0245	-88.2814	-87.5708	-17.568	-17.9338
-16.0829	-12.0477	-87.6928	-87.745	-17.6501	-17.8946
-15.9259	-12.0923	-87.3031	-88.0551	-17.5716	-17.935
-15.8505	-12.1519	-88.0078	-87.8649	-17.5365	-17.9884
-15.6755	-12.3131	-89.3533	-87.1631	-17.3182	-17.8631
-15.5399	-12.4572	-85.997	-87.0562	-17.1527	-17.8703
-15.4454	-12.6607	-88.3072	-86.8496	-17.0192	-17.9157
-15.4195	-12.8869	-85.7122	-86.199	-16.9718	-17.8117
-15.3399	-13.0973	-87.4338	-86.2716	-16.9537	-17.9057
-15.4677	-13.3358	-86.3373	-86.4838	-17.1855	-17.9429
-15.482	-13.6518	-86.8567	-88.076	-17.3124	-17.9085
-15.4069	-13.9907	-88.2332	-86.0026	-17.3108	-17.8059
-15.3764	-14.2565	-87.1234	-85.6706	-17.3276	-17.6488
-15.3317	-14.53	-85.1507	-85.3579	-17.3196	-17.6991
-15.2448	-14.7536	-87.2342	-88.48	-17.1823	-17.7235
-15.1379	-15.0342	-85.8249	-82.919	-17.0505	-17.7061
-15.047	-15.221	-85.9586	-85.5104	-16.9514	-17.6088
-15.0209	-15.4176	-86.4862	-85.9688	-16.9445	-17.4902
-15.0585	-15.5084	-86.4074	-85.6346	-17.0321	-17.4473
-15.0381	-15.5639	-84.7718	-84.7426	-17.1564	-17.3745
-14.9913	-15.5884	-85.381	-84.4139	-17.1643	-17.1892
-14.8875	-15.6365	-88.0266	-86.5522	-17.1236	-17.2006
-14.9323	-15.7576	-85.1161	-84.5228	-17.241	-17.1061
-14.8165	-15.6735	-84.6148	-84.8811	-17.0941	-17.0307
-14.6019	-15.6971	-85.9093	-85.9019	-16.7942	-16.9443
-14.5435	-15.565	-84.4517	-84.1876	-16.6669	-16.9622
-14.5634	-15.6092	-82.5206	-85.1615	-16.6739	-16.7106
-14.4372	-15.5363	-83.4757	-86.0401	-16.4853	-16.722
-14.4028	-15.4929	-83.6102	-84.4492	-16.468	-16.586
-14.3844	-15.5095	-83.7374	-85.5456	-16.521	-16.5117
-14.4065	-15.5145	-84.1993	-85.8218	-16.6063	-16.4053
-14.3452	-15.5156	-84.0506	-84.3067	-16.5588	-16.2772
-14.2823	-15.5988	-85.0158	-86.054	-16.5604	-16.1934
-14.1697	-15.6629	-83.6574	-85.7822	-16.3582	-16.0894
-14.0903	-15.7089	-83.9706	-84.4868	-16.1853	-16.0286
-13.9837	-15.7756	-84.6028	-82.9231	-15.9452	-15.8787
-14.0207	-15.8507	-84.3386	-84.6147	-15.9248	-15.7495
-14.0123	-15.8409	-82.4203	-84.5493	-15.8944	-15.6135
-14.0719	-16.0697	-83.7932	-82.3543	-15.9983	-15.5755
-14.0413	-16.1551	-84.7895	-82.6498	-15.9726	-15.4129
-13.9556	-16.3412	-82.2651	-82.6736	-16.0128	-15.3395
-13.9114	-16.3917	-81.8246	-82.0893	-15.9774	-15.1622
-13.8747	-16.5196	-81.9397	-82.4161	-15.8439	-15.0857
-13.7431	-16.5572	-81.675	-82.916	-15.7158	-14.9696
-13.7529	-16.5195	-82.6159	-82.8718	-15.5421	-14.8292
-13.7347	-16.4788	-81.7892	-80.8237	-15.4165	-14.7366
-13.7273	-16.2568	-81.2318	-82.092	-15.3617	-14.5616
-13.707	-16.0287	-81.4964	-81.396	-15.3298	-14.4177
-13.7291	-15.7683	-82.2835	-81.2854	-15.3646	-14.2916
-13.7217	-15.6185	-81.556	-82.3112	-15.5039	-14.2971

-13.7369	-15.1838	-83.2644	-80.5446	-15.3814	-14.098
-13.5938	-14.8922	-82.2909	-83.2713	-15.2642	-14.0469
-13.4136	-14.4655	-81.469	-81.5868	-14.933	-13.9072
-13.3949	-14.0622	-81.6959	-81.8503	-14.7992	-13.7281
-13.3252	-13.6535	-82.6029	-81.7775	-14.6385	-13.5535
-13.4512	-13.3573	-82.0726	-81.6392	-14.6644	-13.421
-13.4623	-13.0597	-82.9253	-83.0799	-14.3981	-13.2651
-13.4365	-12.8338	-82.3773	-81.1118	-14.4379	-13.1463
-13.486	-12.5532	-82.0405	-82.8088	-14.4463	-12.9137
-13.3475	-12.517	-81.52	-81.5744	-14.2401	-12.9212
-13.3695	-12.4431	-81.3003	-82.9847	-14.1903	-12.7023
-13.3867	-12.3949	-81.7378	-81.9345	-14.0919	-12.5554
-13.2695	-12.4984	-81.928	-82.1766	-13.7902	-12.3735
-13.1835	-12.6652	-81.6628	-83.0749	-13.5536	-12.2878
-13.2151	-12.8423	-81.1534	-82.4424	-13.4165	-12.1522
-13.237	-13.212	-82.8527	-80.6462	-13.2739	-12.0931
-13.295	-13.352	-82.0364	-82.8726	-13.2101	-11.7324
-13.204	-13.8499	-80.5982	-81.0828	-13.0746	-11.6282
-13.2166	-14.1005	-82.5865	-82.1513	-12.988	-11.4066
-13.059	-14.4618	-81.5519	-81.0461	-12.7575	-11.454
-12.9857	-14.7918	-79.442	-80.6654	-12.5405	-11.2077
-12.9399	-15.3725	-80.0294	-80.0762	-12.4343	-11.2031
-13.0207	-16.0133	-80.0917	-81.1766	-12.3002	-11.0215
-13.1777	-16.4579	-81.724	-80.8204	-12.2739	-10.793
-13.0016	-17.1416	-80.6072	-79.9352	-11.9818	-10.7468
-12.9656	-17.7008	-79.2753	-78.5344	-11.7468	-10.608
-13.0936	-18.4851	-79.6047	-78.9929	-11.6983	-10.3603
-13.0212	-18.9183	-80.3839	-80.0606	-11.5347	-10.3329
-13.0779	-19.819	-79.0349	-78.6152	-11.4749	-10.0743
-13.113	-20.1375	-79.3935	-78.3059	-11.3905	-10.0439
-13.1061	-20.3764	-79.5375	-77.8718	-11.1609	-9.78038
-13.0881	-20.5382	-79.1032	-78.1417	-10.9868	-9.71835
-13.0712	-20.3403	-77.3632	-78.3123	-10.7963	-9.65357
-13.1336	-20.3269	-78.479	-78.9759	-10.7273	-9.51229
-13.1219	-20.3594	-78.155	-78.0253	-10.5454	-9.37533
-13.18	-20.3711	-78.1559	-78.434	-10.4364	-9.25067
-13.2732	-20.0944	-78.0999	-77.9117	-10.3737	-9.11119
-13.2356	-20.3823	-78.3895	-77.2347	-10.2797	-9.10155
-13.2992	-20.1732	-77.4384	-78.3379	-10.2346	-9.0001
-13.3111	-19.8984	-77.0739	-77.7341	-10.125	-8.83323
-13.21	-20.3332	-77.4124	-78.3575	-9.88078	-8.76666
-13.1007	-20.5641	-77.0836	-77.0615	-9.73577	-8.69724
-13.134	-20.9619	-76.596	-77.2391	-9.62114	-8.64648
-13.1281	-20.8592	-77.7138	-77.0936	-9.59157	-8.64281
-13.0728	-20.5561	-77.4703	-77.6048	-9.42898	-8.4835
-13.021	-20.5826	-76.3509	-78.0675	-9.35762	-8.49673
-13.0032	-20.4242	-77.2944	-77.2781	-9.33583	-8.38139
-12.8977	-19.4965	-76.468	-76.3709	-9.25862	-8.45856
-12.864	-18.8065	-75.9853	-76.9509	-9.19966	-8.44152
-12.6292	-18.5124	-78.4691	-77.2086	-8.96717	-8.35782

J2-J3

S21 (dB)	S12 (dB)	S22 (dB)
-95.5407	-95.637	-17.5269
-94.3919	-97.7536	-33.0744
-95.1634	-96.3966	-34.5277
-94.4852	-93.0296	-32.8933
-95.9273	-96.5256	-31.6838
-96.8968	-97.8164	-30.9902
-95.6255	-97.8216	-30.6107
-106.125	-107.226	-30.3178
-103.25	-99.8207	-30.401
-103.375	-108.287	-30.1998
-110.403	-109.968	-30.0968
-105.499	-104.258	-29.9622
-108.788	-106.137	-29.9332
-111.223	-103.506	-29.9414
-105.909	-107.556	-30.1601
-114.623	-112.818	-30.212
-107.254	-110.462	-30.2702
-112.301	-108.89	-30.3097
-107.841	-111.045	-30.4327
-113.595	-106.58	-30.5597
-104.019	-111.368	-30.8996
-109.558	-106.683	-31.0306
-120.501	-114.866	-31.1062
-112.029	-110.182	-31.3724
-106.727	-109.029	-31.4161
-116.492	-109.5	-31.4533
-111.183	-106.794	-31.4187
-108.759	-110.528	-31.3708
-105.21	-112.293	-30.6542
-107.213	-108.606	-29.721
-110.619	-105.206	-28.6809
-130.839	-118.665	-27.9579
-109.009	-114.311	-27.5448
-114.883	-110.273	-27.3141
-111.122	-117.615	-27.4312
-111.623	-108.041	-27.4419
-111.113	-106.052	-27.6966
-105.842	-105.529	-27.7478
-106.646	-119.733	-27.5774
-110.605	-110.13	-27.4582
-117.604	-112.862	-27.3707

J2-J4

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.6271	-107.089	-104.438	-17.3938
-31.8218	-105.208	-96.6286	-32.4358
-32.7711	-114.927	-102.016	-33.1515
-31.5164	-103.475	-104.449	-31.8547
-30.766	-112.967	-106.872	-30.9242
-30.2493	-107.141	-101.359	-30.4067
-29.9535	-110.996	-108.489	-30.1502
-29.7237	-107.239	-106.718	-30.0448
-29.7325	-107.863	-118.76	-30.1582
-29.7687	-117.765	-104.903	-30.1156
-29.6635	-112.508	-118.558	-30.1638
-29.5733	-103.411	-112.691	-30.0723
-29.6834	-116.754	-125.306	-30.2538
-29.7022	-114.216	-113.575	-30.3712
-29.8688	-118.634	-107.287	-30.7053
-30.0434	-121.432	-109.573	-30.9036
-29.919	-126.038	-109.527	-31.0502
-30.3361	-108.792	-116.78	-31.29
-30.451	-119.97	-106.593	-31.5641
-30.6477	-111.089	-106.161	-31.7927
-30.8196	-114.972	-109.224	-32.154
-30.9132	-116.578	-105.579	-32.4731
-31.4671	-111.56	-110.92	-32.9382
-31.7915	-110.038	-115.47	-33.6371
-32.4618	-114.669	-105.585	-33.9893
-33.0674	-115.223	-107.561	-34.6652
-33.7337	-108.438	-108.963	-35.2207
-34.5888	-116.439	-120.764	-36.5038
-35.6192	-111.425	-108.753	-38.3192
-36.2538	-121.586	-110.547	-40.4317
-36.351	-109.529	-114.472	-42.5858
-35.8192	-115.287	-111.323	-42.5686
-35.5021	-124.824	-114.979	-40.5121
-35.251	-118.765	-121.099	-38.8814
-35.0495	-110.533	-105.7	-38.4991
-35.323	-112.535	-113.055	-38.1549
-35.836	-111.625	-106.482	-39.3634
-36.1821	-112.184	-103.921	-40.2375
-36.8046	-109.669	-108.811	-41.4177
-37.1918	-117.89	-111.83	-42.0849
-37.5509	-112.008	-112.017	-43.3619

-114.993	-108.301	-27.2865	-37.9065	-112.128	-104.685	-44.5101
-120.351	-112.861	-27.2253	-37.7978	-114.226	-119.847	-47.2999
-111.692	-107.389	-27.1111	-38.0929	-105.468	-108.322	-51.095
-110.717	-109.448	-26.9752	-38.4778	-114.642	-109.367	-52.6606
-111.049	-112.884	-26.8143	-38.4808	-115.801	-110.845	-49.1937
-113.69	-107.001	-26.7292	-37.8768	-111.726	-125.136	-46.3974
-112.925	-116.642	-26.582	-37.4562	-111.658	-106.514	-44.6462
-121.184	-104.476	-26.7296	-36.3023	-107.527	-116.762	-45.0243
-109.48	-112.776	-26.7733	-35.4442	-114.034	-111.163	-45.2682
-113.937	-107.266	-27.2021	-34.4535	-107.928	-124.17	-47.6382
-105.506	-108.03	-27.4134	-33.2242	-108.352	-108.34	-48.8785
-110.915	-109.611	-27.9047	-32.2417	-129.717	-108.566	-47.6033
-122.704	-120.447	-28.2982	-31.3165	-115.71	-122.949	-45.3437
-112.01	-111.588	-28.5242	-30.4998	-108.163	-108.838	-42.4166
-106.701	-117.103	-28.8901	-29.605	-115.679	-109.571	-39.7736
-110.23	-106.98	-29.4061	-28.8751	-113.603	-105.051	-37.6954
-124.904	-108.253	-29.7291	-28.1506	-113.385	-109.933	-36.1545
-112.516	-113.996	-30.0178	-27.5598	-114.576	-112.584	-34.7243
-109.956	-118.223	-30.1323	-26.9902	-106.008	-107.713	-33.4681
-118.2	-109.344	-29.9387	-26.5206	-102.624	-110.657	-32.7511
-107.574	-108.165	-30.3405	-26.0196	-114.411	-104.338	-31.7548
-116.917	-117.903	-30.6739	-25.5144	-106.151	-121.653	-31.0475
-112.161	-103.897	-30.8	-25.0674	-121.222	-118.963	-30.0717
-109.521	-115.618	-30.9628	-24.7101	-111.556	-111.583	-29.2277
-131.038	-119.08	-31.2948	-24.2351	-114.116	-112.9	-28.5256
-108.323	-107.237	-31.0268	-23.9654	-113.61	-119.014	-27.8131
-111.191	-112.375	-30.9034	-23.5087	-112.681	-116.758	-27.3084
-124.367	-107.48	-30.541	-23.1151	-123.069	-118.749	-26.7685
-123.526	-117.893	-30.4625	-22.769	-113.854	-105.046	-26.4224
-116.608	-113.294	-30.3922	-22.4519	-126.203	-111.515	-25.9588
-116.051	-106.388	-30.1711	-22.0957	-111.598	-111.864	-25.4286
-115.524	-114.043	-30.0317	-21.9107	-111.817	-111.73	-24.8694
-105.688	-113.009	-29.5325	-21.553	-127.002	-111.63	-24.2913
-116.4	-106.428	-28.9618	-21.3028	-110.964	-113.814	-23.8117
-105.174	-113.091	-28.1639	-20.9771	-114.645	-112.358	-23.3171
-118.237	-115.032	-27.5992	-20.7231	-105.628	-106.194	-22.9827
-102.969	-105.969	-27.1728	-20.5007	-112.012	-109.965	-22.6888
-110.763	-112.377	-26.7548	-20.33	-107.578	-110.685	-22.4563
-123.941	-106.153	-26.4521	-20.1723	-108.641	-104.842	-22.0565
-113.229	-111.484	-26.0561	-19.9274	-111.364	-114.76	-21.774
-113.129	-110.741	-25.6499	-19.7908	-113.605	-117.372	-21.439
-112.838	-106.896	-25.0699	-19.6322	-115.763	-108.511	-21.0226
-107.756	-104.92	-24.5149	-19.4796	-107.982	-125.904	-20.685
-107.565	-112.475	-23.9862	-19.3059	-110.661	-109.976	-20.3762
-108.438	-114.472	-23.6612	-19.2055	-107.336	-109.955	-20.231
-109.953	-120.303	-23.279	-19.0977	-106.083	-107.428	-20.0307
-115.791	-112.228	-23.077	-18.9737	-113.036	-116.087	-19.9161
-124.145	-123.331	-22.8841	-18.9304	-106.951	-100.641	-19.7379
-110.749	-109.251	-22.5535	-18.7106	-109.338	-111.794	-19.5331
-111.825	-109.291	-22.2436	-18.7141	-109.156	-107.772	-19.2412
-108.913	-124.632	-21.7832	-18.5732	-119.768	-121.712	-18.9162
-111.215	-107.36	-21.4756	-18.4918	-115.629	-111.008	-18.7289
-115.781	-108.006	-21.0835	-18.3718	-114.469	-105.381	-18.467
-110.055	-110.565	-20.8807	-18.3673	-109.367	-107.99	-18.3054
-109.142	-116.816	-20.6758	-18.3016	-111.923	-109.528	-18.1857

-111.35	-113.217	-20.5357	-18.2621	-106.952	-120.158	-18.0823
-118.984	-123.191	-20.3824	-18.1363	-110.134	-108.797	-17.9076
-111.497	-107.821	-20.2551	-18.078	-115.84	-117.659	-17.8448
-103.358	-105.109	-20.242	-18.0114	-104.177	-115.853	-17.7868
-109.06	-109.417	-19.9567	-17.9944	-108.949	-109.285	-17.6029
-111.055	-110.516	-19.8288	-17.9424	-115.677	-105.553	-17.4922
-107.002	-107.167	-19.7513	-17.9023	-114.265	-115.632	-17.4528
-123.653	-103.228	-19.5401	-17.9447	-126.779	-110.355	-17.3173
-106.532	-111.322	-19.5123	-17.9968	-114.961	-121.657	-17.3192
-113.809	-96.6586	-19.394	-17.8716	-100.611	-97.8842	-17.306
-104.875	-102.905	-19.4274	-17.8783	-110.456	-93.5504	-17.3371
-96.0741	-105.089	-19.4578	-17.9237	-119.072	-110.732	-17.4181
-103.622	-98.8503	-19.4978	-17.8175	-96.4875	-103.258	-17.4872
-110.063	-94.6168	-19.4294	-17.9156	-113.557	-103.36	-17.4269
-106.818	-95.7882	-19.5857	-17.9518	-100.014	-98.836	-17.5867
-98.9621	-98.2198	-19.5088	-17.9135	-97.8468	-96.7955	-17.5858
-99.9559	-99.3391	-19.3282	-17.8133	-107.273	-105.514	-17.6124
-100.387	-103.637	-19.2794	-17.6558	-101.952	-110.488	-17.6999
-105.471	-97.1777	-19.3161	-17.7064	-99.6991	-103.409	-17.8509
-103.004	-106.622	-19.261	-17.7294	-99.0695	-100.116	-17.9896
-100.516	-97.1031	-19.3214	-17.7144	-101.331	-94.0388	-18.1177
-102.228	-105.185	-19.2634	-17.6153	-108.618	-111.679	-18.1588
-106.297	-98.661	-19.2048	-17.4986	-107.556	-99.7644	-18.2373
-101.499	-104.3	-19.1152	-17.456	-103.915	-103.583	-18.3109
-101.961	-102.863	-18.9954	-17.3792	-106.204	-100.372	-18.1929
-113.762	-105.09	-18.7142	-17.1929	-96.5472	-102.583	-18.1926
-105.503	-100.617	-18.4978	-17.2061	-105.002	-114.609	-18.1432
-105.803	-108.282	-18.5413	-17.1145	-105.039	-98.2042	-18.3886
-102.092	-99.7066	-18.5427	-17.0339	-99.4663	-109.995	-18.4825
-98.447	-99.529	-18.3637	-16.9518	-96.6643	-99.6231	-18.4611
-103.41	-94.7476	-18.4021	-16.9708	-99.7854	-106.429	-18.6413
-98.4065	-93.8588	-18.5751	-16.7202	-102.185	-104.78	-18.7534
-110.225	-95.6856	-18.3838	-16.7307	-104.838	-109.085	-18.6734
-98.3637	-104.179	-18.2763	-16.5958	-99.2963	-111.629	-18.5901
-97.3816	-98.4141	-18.1921	-16.5218	-102.75	-99.3167	-18.6012
-100.628	-100.267	-18.1847	-16.4161	-97.8352	-102.647	-18.7688
-99.129	-104.108	-18.1101	-16.2856	-106.134	-102.399	-18.9073
-95.6682	-97.4196	-18.3083	-16.2025	-104.151	-115.037	-19.0632
-102.344	-114.747	-18.3218	-16.0973	-113.141	-113.017	-19.2775
-104.49	-102.156	-18.5075	-16.0386	-105.289	-109.592	-19.4969
-101.921	-97.2901	-18.3498	-15.8865	-111.543	-102.268	-19.5579
-106.123	-103.424	-18.5247	-15.7588	-97.2421	-95.4576	-19.82
-99.0384	-106.13	-18.4567	-15.624	-99.1869	-107.657	-19.7742
-106.164	-114.592	-18.4339	-15.5869	-95.1393	-108.03	-19.9281
-106.011	-92.2525	-18.3159	-15.4272	-99.1441	-92.5357	-20.0265
-95.1755	-99.1809	-18.2263	-15.3463	-105.284	-97.6015	-20.025
-110.727	-101.425	-18.1945	-15.1671	-118.067	-115.021	-20.3537
-107.555	-96.3679	-18.2885	-15.0905	-101.655	-97.7237	-20.6764
-98.055	-99.3547	-18.3624	-14.9745	-104.659	-99.739	-20.6794
-105.784	-96.4191	-18.4064	-14.8317	-95.2522	-99.0888	-21.0612
-99.1159	-109.734	-18.4295	-14.7436	-109.028	-99.1892	-21.1549
-110.192	-100.757	-18.383	-14.565	-97.8509	-99.4589	-21.167
-97.3442	-98.1942	-18.2816	-14.4155	-102.374	-103.003	-21.3013
-107.262	-100.911	-18.0977	-14.2981	-102.924	-96.9956	-21.0326
-99.5587	-96.1535	-18.1199	-14.3009	-107.75	-91.1129	-21.2222

-100.623	-99.1343	-18.1749	-14.101	-118.404	-96.3511	-21.3998
-102.218	-98.2582	-18.1739	-14.0522	-101.599	-99.437	-21.4249
-108.092	-107.4	-18.1347	-13.9099	-98.848	-97.4504	-21.4039
-102.39	-101.195	-18.1184	-13.7263	-100.724	-102.763	-21.4052
-99.1134	-95.4227	-18.1123	-13.5545	-93.8586	-93.5115	-21.4177
-99.7331	-104.971	-18.3685	-13.4236	-100.658	-111.475	-21.6057
-100.754	-98.6535	-18.2319	-13.2692	-98.9799	-95.2179	-21.6095
-96.3844	-103.943	-18.191	-13.1496	-98.0133	-95.9395	-21.4398
-98.9077	-106.179	-18.268	-12.9182	-93.5258	-100.095	-21.5146
-97.0341	-94.4108	-18.0599	-12.9244	-100.058	-107.378	-21.17
-94.9567	-103.798	-18.1657	-12.7034	-108.392	-95.7326	-21.2763
-95.3887	-92.7727	-18.232	-12.5612	-108.605	-107.426	-21.2675
-98.4021	-104.084	-18.0803	-12.3759	-98.4222	-96.8507	-20.9339
-97.6102	-96.2096	-18.0457	-12.2902	-95.025	-99.4414	-20.7179
-97.4166	-98.2196	-18.0113	-12.1533	-111.018	-113.267	-20.4904
-97.3801	-98.9141	-17.9708	-12.0926	-105.001	-97.1099	-20.2412
-97.6504	-108.982	-17.9439	-11.7369	-113.194	-102.281	-19.9752
-97.9562	-103.305	-17.8198	-11.6322	-109.38	-97.9564	-19.5747
-99.4901	-104.913	-17.7161	-11.4098	-103.348	-97.4591	-19.1914
-100.51	-95.5218	-17.5288	-11.4514	-94.0871	-113.388	-18.704
-106.876	-101.531	-17.3736	-11.2082	-97.43	-95.4726	-18.2835
-109.336	-94.5957	-17.4225	-11.2043	-104.871	-98.9986	-18.0316
-93.1818	-97.0135	-17.4087	-11.0285	-101.753	-113.586	-17.7766
-103.149	-95.7887	-17.6496	-10.7924	-95.032	-103.974	-17.7567
-100.045	-105.143	-17.5183	-10.7463	-100.652	-99.667	-17.311
-97.2454	-101.221	-17.3208	-10.6067	-100.135	-97.8201	-16.863
-92.8377	-93.1179	-17.28	-10.3592	-122.707	-102.181	-16.569
-94.7521	-107.012	-17.213	-10.3333	-107.56	-94.0797	-16.2381
-108.209	-110.692	-17.2025	-10.0751	-100.979	-104.155	-15.9926
-102.099	-95.4663	-17.3386	-10.0431	-98.4414	-94.6207	-15.8934
-93.6298	-104.223	-17.2313	-9.78041	-104.561	-115.948	-15.5931
-96.5768	-120.663	-17.1958	-9.71577	-94.8441	-95.0383	-15.3535
-93.4389	-92.023	-17.1218	-9.65367	-111.439	-101.365	-15.0969
-100.318	-101.649	-17.1598	-9.51229	-105.042	-103.341	-14.943
-100.092	-90.8347	-16.8812	-9.37518	-94.9727	-107.288	-14.5644
-101.951	-99.2243	-16.6965	-9.24916	-101.973	-96.3018	-14.2855
-105.026	-102.089	-16.4767	-9.11096	-102.083	-101.727	-14.0321
-101.451	-120.383	-16.2775	-9.09356	-95.6834	-98.5106	-13.725
-102.596	-101.524	-16.1452	-8.9891	-100.148	-113.469	-13.57
-99.9341	-95.8671	-15.9212	-8.83198	-97.2005	-94.9147	-13.3
-103.481	-103.548	-15.4282	-8.76719	-99.3644	-102.311	-12.8722
-99.9118	-103.741	-15.1956	-8.70034	-98.6252	-99.0914	-12.5577
-109.094	-91.1452	-14.8568	-8.64523	-96.8738	-105.428	-12.2625
-99.8141	-97.532	-14.6759	-8.64436	-106.55	-111.802	-11.9998
-99.2618	-92.0941	-14.2612	-8.48565	-99.9497	-98.8702	-11.611
-96.8993	-92.0035	-13.9433	-8.4964	-124.65	-94.8251	-11.2863
-96.3151	-100.322	-13.7978	-8.38146	-114.062	-109.661	-11.0844
-96.5152	-93.1343	-13.6806	-8.4643	-102.739	-103.751	-10.8676
-100.389	-96.909	-13.5203	-8.44201	-102.277	-90.0397	-10.6812
-106.467	-96.8579	-13.3069	-8.35952	-93.6077	-98.0194	-10.3933

Isolation

J2-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.6114	-97.7789	-113.357	-18.1174
-31.8187	-104.831	-112.566	-31.7568
-32.8034	-114.164	-112.782	-30.5134
-31.5479	-114.269	-101.038	-29.4609
-30.7965	-108.676	-106.556	-28.7375
-30.2817	-110.46	-119.605	-28.3499
-29.9856	-112.043	-120.242	-28.1489
-29.7556	-111.3	-108.139	-28.0997
-29.7629	-110.294	-119.285	-28.1917
-29.7999	-109.86	-122.664	-28.1973
-29.6978	-110.75	-107.382	-28.2702
-29.6076	-108.268	-109.922	-28.2121
-29.72	-118.556	-111.868	-28.4065
-29.7377	-111.337	-110.166	-28.5072
-29.9063	-120.313	-103.484	-28.7458
-30.0791	-111.284	-109.43	-28.8906
-29.9579	-119.634	-104.572	-29.0116
-30.3748	-108.264	-107.437	-29.2473
-30.4888	-109.436	-111.324	-29.4793
-30.6877	-118.236	-124.694	-29.6392
-30.8618	-113.313	-110.301	-29.817
-30.9555	-114.546	-113.316	-29.9731
-31.5156	-121.09	-107.03	-30.26
-31.8416	-113.76	-114.096	-30.6518
-32.5136	-113.574	-103.67	-30.8231
-33.127	-111.293	-119.13	-31.2376
-33.7974	-112.967	-107.251	-31.5077
-34.6556	-119.845	-114.103	-32.0608
-35.6879	-124.338	-111.993	-32.9545
-36.3172	-127.049	-111.293	-33.8112
-36.4051	-112.696	-108.735	-34.6493
-35.8594	-114.049	-105.606	-34.8892
-35.5417	-108.373	-113.544	-34.4669
-35.2983	-108.145	-109.313	-34.0831
-35.0967	-115.731	-111.997	-33.5766
-35.3766	-117.267	-109.808	-33.3317
-35.9037	-104.896	-110.615	-33.254
-36.2528	-119.675	-116.392	-33.2074
-36.8814	-107.234	-105.77	-33.6032
-37.2771	-108.985	-117.342	-33.7485
-37.6452	-108.297	-111.065	-33.8817

J2-J6

S11 (dB)	S21 (dB)	S12 (dB)
-17.6062	-100.857	-104.266
-31.8155	-101.377	-112.167
-32.801	-105.645	-106.438
-31.5493	-107.413	-111.398
-30.8027	-113.291	-112.492
-30.2972	-109.571	-107.734
-30.0077	-115.217	-115.134
-29.7787	-104.381	-108.559
-29.7777	-124.505	-115.204
-29.8117	-111.81	-115.289
-29.7064	-106.801	-113.589
-29.623	-108.738	-109.26
-29.7351	-112.673	-115.268
-29.7585	-125.434	-133.401
-29.9223	-116.082	-106.456
-30.0923	-122.782	-117.901
-29.9687	-114.422	-112.774
-30.3851	-109.645	-110.078
-30.497	-110.043	-111.367
-30.7022	-107.513	-107.442
-30.8751	-110.387	-109.874
-30.9709	-116.414	-108.329
-31.5303	-103.314	-113.048
-31.8571	-106.131	-104.813
-32.5316	-113.326	-121.612
-33.143	-111.594	-129.437
-33.8073	-116.843	-116.427
-34.6818	-109.147	-121.529
-35.7185	-116.816	-116.756
-36.3478	-105.098	-114.451
-36.416	-110.724	-110.764
-35.8611	-126.488	-114.897
-35.5343	-121.298	-108.426
-35.2865	-104.426	-111.234
-35.1031	-109.145	-116.065
-35.3777	-107.547	-107.083
-35.9192	-110.043	-114.203
-36.2592	-120.903	-121.486
-36.8866	-108.188	-103.883
-37.2971	-110.467	-113.946
-37.6885	-111.455	-125.337

-38.0004	-109.766	-119.396	-34.0457	-38.0719	-113.338	-112.67
-37.896	-113.129	-110.549	-34.0742	-37.9837	-107.95	-108.372
-38.1966	-110.629	-119.579	-34.1741	-38.2957	-115.364	-109.253
-38.581	-115.272	-111.036	-34.1322	-38.6987	-133.213	-110.561
-38.5843	-111.608	-113.997	-34.1545	-38.7127	-110.618	-109.441
-37.9646	-118.017	-114.587	-33.9838	-38.0677	-108.141	-106.031
-37.5435	-109.667	-112.85	-33.9936	-37.6471	-118.656	-113.493
-36.3778	-112.025	-118.522	-33.529	-36.4649	-124.158	-105.887
-35.5111	-112.712	-107.615	-33.3202	-35.599	-113.733	-109.282
-34.5131	-111.02	-116.378	-32.4874	-34.5988	-109.207	-109.013
-33.2779	-119.167	-109.061	-32.1077	-33.3385	-113.117	-106.537
-32.2863	-111.906	-107.399	-31.2729	-32.3391	-116.931	-110.647
-31.3566	-119.09	-111.236	-30.6323	-31.3911	-114.947	-109.464
-30.5387	-116.103	-111.191	-30.1	-30.5688	-111.552	-117.563
-29.6396	-114.94	-104.939	-29.4082	-29.665	-108.936	-109.646
-28.9033	-106.386	-111.808	-28.7996	-28.9297	-113.079	-109.12
-28.1778	-106.265	-110.696	-28.3774	-28.201	-107.635	-108.172
-27.584	-123.494	-115.347	-27.9589	-27.6106	-121.412	-120.519
-27.0131	-111.872	-112.04	-27.5401	-27.0387	-118.846	-109.856
-26.5431	-110.079	-114.523	-27.3116	-26.5686	-119.581	-115.034
-26.0398	-122.746	-102.957	-26.8786	-26.0601	-114.345	-109.995
-25.533	-104.721	-118.524	-26.5575	-25.5565	-109.722	-118.508
-25.0863	-113.932	-112.061	-26.068	-25.1077	-120.094	-102.583
-24.7291	-117.634	-128.514	-25.6303	-24.7473	-118.586	-106.855
-24.2533	-125.414	-107.663	-25.3066	-24.2769	-112.02	-114.98
-23.9827	-111.397	-115.722	-24.927	-23.9977	-115.658	-114.119
-23.5253	-111.51	-116.559	-24.6736	-23.5437	-115.665	-124.652
-23.1311	-116.198	-111.383	-24.3343	-23.1436	-124.753	-115.666
-22.7842	-111.236	-121.837	-24.1597	-22.7941	-110.691	-111.553
-22.467	-123.461	-108.609	-23.8999	-22.4777	-111.678	-121.722
-22.1092	-122.18	-103.924	-23.5656	-22.1181	-112.38	-117.954
-21.9215	-106.546	-110.11	-23.2729	-21.9265	-117.084	-110.719
-21.5636	-135.487	-115.298	-22.9476	-21.5663	-110.147	-118.561
-21.3136	-119.762	-106.356	-22.6977	-21.3128	-109.749	-111.444
-20.9894	-106.793	-107.793	-22.3606	-20.9893	-114.761	-110.061
-20.7344	-113.153	-114.534	-22.1763	-20.7345	-115.241	-118.708
-20.5121	-109.161	-105.214	-22.0234	-20.5114	-113.916	-116.069
-20.3412	-112.036	-108.523	-21.9001	-20.3406	-109.992	-110.151
-20.188	-110.579	-105.21	-21.6989	-20.1893	-108.033	-118.363
-19.9393	-111.107	-107.792	-21.5843	-19.9419	-108.013	-110.482
-19.8038	-112.802	-107.715	-21.4352	-19.8071	-108.139	-109.942
-19.6445	-108.84	-128.174	-21.1921	-19.6495	-113.958	-112.487
-19.4889	-110.172	-108.803	-20.9992	-19.498	-111.993	-110.863
-19.3158	-129.444	-119.315	-20.8124	-19.325	-117.762	-115.007
-19.2144	-114.323	-110.534	-20.7484	-19.2249	-118.905	-107.756
-19.1077	-115.431	-124.016	-20.6257	-19.1191	-108.342	-111.823
-18.983	-115.004	-108.187	-20.6187	-18.9957	-110.727	-105.014
-18.9409	-120.736	-118.621	-20.5856	-18.9516	-109.306	-109.936
-18.7212	-116.89	-130.888	-20.4882	-18.731	-109.459	-109.005
-18.7241	-112.752	-104.21	-20.3837	-18.7336	-117.792	-117.723
-18.5837	-110.071	-107.237	-20.1794	-18.5938	-115.258	-121.365
-18.5015	-107.941	-135.708	-20.0902	-18.5077	-116.352	-113.553
-18.3776	-112.511	-112.314	-19.9075	-18.3845	-110.311	-110.376
-18.3737	-119.255	-106.99	-19.8725	-18.3769	-128.829	-109.142
-18.3098	-115.535	-112.685	-19.8331	-18.3136	-117.601	-110.712

-18.2682	-112.865	-107.889	-19.8603	-18.2702	-109.951	-112.962
-18.1412	-118.715	-107.561	-19.8466	-18.1443	-107.616	-118.162
-18.0817	-109.736	-111.222	-19.9024	-18.0831	-111.137	-109.19
-18.0161	-123.966	-128.449	-20.0649	-18.0145	-117.5	-117.864
-17.9954	-112.63	-110.538	-19.9613	-17.9982	-116.425	-120.693
-17.9476	-110.228	-106.999	-20.0059	-17.9451	-106.707	-112.1
-17.9076	-112.823	-110.365	-20.0898	-17.9099	-117.135	-118.212
-17.9493	-129.318	-119.447	-20.0548	-17.9488	-113.01	-113.547
-18.0027	-109.021	-104.67	-20.1979	-18.0021	-111.594	-113.254
-17.8756	-113.113	-100.881	-20.2501	-17.8768	-109.246	-109.303
-17.882	-105.96	-99.3719	-20.4564	-17.8851	-95.6726	-98.2456
-17.9313	-99.8111	-99.6174	-20.6728	-17.929	-96.9852	-101.629
-17.8272	-101.711	-101.998	-20.8714	-17.8297	-102.807	-102.855
-17.9248	-95.8574	-119.372	-20.9329	-17.9228	-104.478	-99.654
-17.9563	-111.966	-100.233	-21.2727	-17.9531	-99.744	-98.8591
-17.9209	-110.652	-103.95	-21.3317	-17.92	-103.442	-102.406
-17.8172	-103.456	-107.017	-21.2786	-17.8172	-101.477	-104.497
-17.6604	-102.581	-111.955	-21.3491	-17.6604	-108.28	-126.812
-17.7131	-100.051	-98.3306	-21.5177	-17.7097	-93.9625	-102.731
-17.7387	-99.1513	-108.684	-21.5459	-17.7394	-100.499	-102.377
-17.7221	-115.775	-102.409	-21.6997	-17.7187	-99.3372	-101.129
-17.6241	-112.601	-96.857	-21.6889	-17.6239	-99.153	-100.556
-17.5059	-97.0879	-94.1918	-21.6802	-17.505	-99.4036	-98.8993
-17.4634	-98.4675	-102.536	-21.6417	-17.4629	-108.03	-105.484
-17.3874	-98.4967	-99.6613	-21.5984	-17.3876	-97.2701	-106.793
-17.2048	-107.887	-100.284	-21.2484	-17.2035	-99.5343	-101.373
-17.2146	-96.2408	-98.6965	-20.9871	-17.2162	-102.35	-97.398
-17.1231	-99.58	-94.2829	-20.9937	-17.1227	-100.797	-96.51
-17.042	-96.2871	-97.2257	-20.9729	-17.0491	-108.639	-95.9863
-16.9595	-105.737	-97.8561	-20.6596	-16.9661	-117.14	-96.516
-16.9815	-98.6883	-108.294	-20.5773	-16.9864	-96.9647	-112.819
-16.7302	-100.28	-101.767	-20.7172	-16.7344	-98.3158	-97.6909
-16.7395	-99.6571	-99.428	-20.4003	-16.7428	-107.325	-98.0636
-16.6047	-106.291	-98.2531	-20.232	-16.6084	-98.0964	-106.307
-16.5289	-100.596	-96.8536	-20.0467	-16.5322	-107.419	-101.036
-16.4244	-109.942	-107.709	-19.8548	-16.4265	-112.555	-99.414
-16.293	-105.015	-99.9612	-19.5503	-16.2921	-109.309	-101.881
-16.2103	-95.7095	-103.391	-19.6365	-16.2043	-111.714	-109.986
-16.105	-107.61	-101.013	-19.3835	-16.1026	-101.442	-98.203
-16.0447	-99.3877	-102.599	-19.4162	-16.0419	-99.204	-105.114
-15.8929	-100.182	-110.726	-19.0461	-15.8851	-96.6298	-101.532
-15.7655	-96.3373	-102.362	-19.0344	-15.7572	-97.9302	-105.018
-15.6277	-99.1638	-117.444	-18.8635	-15.6132	-97.7443	-95.6994
-15.5818	-107.924	-95.6159	-18.6829	-15.585	-102.948	-101.558
-15.4302	-100.435	-93.8094	-18.3681	-15.424	-92.4475	-101.146
-15.3492	-96.0054	-99.4016	-18.1174	-15.3476	-100.045	-98.3508
-15.1693	-100.931	-94.5333	-17.8061	-15.1661	-94.079	-110.217
-15.0945	-99.9674	-101.783	-17.6555	-15.0912	-100.213	-110.695
-14.9741	-97.2005	-103.455	-17.5723	-14.9737	-98.7147	-94.6043
-14.8338	-109.078	-96.196	-17.346	-14.8325	-96.3785	-109.554
-14.7421	-96.4352	-104.488	-17.1951	-14.7464	-101.796	-96.7294
-14.5667	-101.524	-102.498	-16.9765	-14.5675	-94.803	-104.621
-14.4144	-102.12	-99.2933	-16.6788	-14.4224	-109.128	-92.3912
-14.2969	-99.718	-94.2465	-16.4764	-14.2965	-102.335	-104.911
-14.3029	-97.158	-102.838	-16.2422	-14.3055	-97.786	-110.775

-14.1029	-114.062	-100.272	-16.0417	-14.1046	-111.564	-103.461
-14.0512	-101.764	-97.8103	-15.9091	-14.0453	-109.872	-104.438
-13.9087	-97.0918	-97.5585	-15.7369	-13.9116	-107.592	-105.816
-13.7313	-99.4918	-95.8933	-15.5396	-13.7294	-101.689	-102.226
-13.556	-96.4082	-103.843	-15.4103	-13.5608	-98.1383	-105.006
-13.4256	-104.231	-97.4164	-15.4884	-13.4265	-95.8005	-100.856
-13.2683	-108.088	-94.7091	-15.2133	-13.2682	-108.464	-93.7771
-13.1466	-106.242	-90.7495	-15.0465	-13.1505	-108.511	-94.5306
-12.9195	-105.508	-104.184	-14.9745	-12.9147	-103.004	-90.3083
-12.9245	-96.2473	-97.534	-14.7004	-12.9206	-97.3145	-95.2573
-12.7054	-106.882	-99.0751	-14.6384	-12.7027	-97.8704	-95.1881
-12.5599	-111.211	-106.801	-14.5531	-12.5629	-100.319	-113.626
-12.3762	-101.305	-101.145	-14.3143	-12.3779	-96.0153	-100.821
-12.2904	-106.408	-97.6237	-14.1725	-12.296	-105.472	-95.92
-12.1565	-104.633	-97.1389	-14.0603	-12.1532	-100.764	-100.492
-12.0921	-95.523	-97.1385	-13.9379	-12.0952	-111.091	-95.0833
-11.7367	-107.285	-99.3083	-13.861	-11.7349	-96.2395	-104.874
-11.634	-94.2812	-100.437	-13.6738	-11.6295	-103.133	-119.877
-11.4028	-101.448	-103.046	-13.5055	-11.4081	-104.349	-97.2178
-11.4519	-104.658	-98.7884	-13.3011	-11.457	-106.757	-90.619
-11.2048	-94.7543	-98.6564	-13.1362	-11.209	-94.8167	-98.7666
-11.2038	-103.296	-97.1118	-13.0661	-11.2071	-102.808	-95.0073
-11.0221	-102.386	-96.327	-13.0376	-11.0242	-115.204	-97.3956
-10.7918	-112.03	-104.96	-13.149	-10.792	-99.754	-94.7629
-10.747	-104.392	-98.5916	-12.9553	-10.7526	-98.0675	-102.128
-10.608	-99.8886	-107.551	-12.8152	-10.6054	-92.4385	-112.983
-10.362	-97.3342	-95.1666	-12.8011	-10.3672	-101.066	-90.3921
-10.3387	-102.79	-96.0897	-12.69	-10.3325	-107.708	-103.235
-10.0741	-106.545	-105.847	-12.6899	-10.0709	-101.365	-93.4688
-10.0443	-104.287	-134.037	-12.7726	-10.0464	-109.305	-94.6335
-9.77793	-101.889	-98.758	-12.7236	-9.78084	-99.0042	-96.2383
-9.71339	-105.388	-101.288	-12.7283	-9.71699	-100.928	-100.177
-9.65108	-98.0548	-95.9854	-12.6997	-9.64988	-103.902	-98.3799
-9.51217	-99.9247	-102.363	-12.772	-9.51355	-98.0744	-94.4972
-9.37295	-101.033	-96.6386	-12.6798	-9.37388	-102.899	-101.368
-9.24953	-101.983	-102.435	-12.6729	-9.25216	-98.8318	-99.0726
-9.10732	-113.852	-103.02	-12.7118	-9.11442	-116.84	-97.8645
-9.10007	-94.7112	-97.5213	-12.6331	-9.10275	-102.372	-97.482
-8.99544	-101.729	-111.552	-12.7147	-8.99448	-95.1995	-103.649
-8.8355	-98.0948	-99.6928	-12.688	-8.8361	-101.123	-91.0523
-8.76885	-101.302	-97.435	-12.5391	-8.76756	-102.031	-95.2941
-8.70259	-97.2601	-102.616	-12.4246	-8.70025	-100.645	-105.243
-8.64388	-104.604	-96.4815	-12.3851	-8.65038	-98.9151	-90.8816
-8.64649	-100.893	-95.033	-12.3229	-8.64615	-96.2472	-94.2506
-8.48003	-106.377	-98.994	-12.1574	-8.48037	-102.265	-103.24
-8.49444	-96.7529	-95.2209	-12.0381	-8.4975	-100.643	-105.637
-8.38348	-116.322	-96.8462	-12.023	-8.37946	-108.732	-98.9747
-8.45831	-97.5089	-95.8291	-11.9549	-8.45735	-97.7401	-95.3744
-8.44113	-98.2268	-99.1043	-11.9371	-8.44211	-105.484	-101.963
-8.36045	-101.577	-97.0147	-11.8078	-8.35969	-95.9463	-94.3051

J2-J7

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.7508	-17.6038	-95.1151	-96.9389	-17.7207	-17.5862
-31.0649	-31.8105	-107.125	-101.652	-33.0405	-31.8067
-31.3621	-32.8064	-108.418	-107.993	-32.2884	-32.8413
-30.392	-31.5617	-116.429	-114.397	-30.8922	-31.5896
-29.6116	-30.8106	-113.479	-112.12	-30.1336	-30.8379
-29.0648	-30.306	-111.191	-113.361	-29.7401	-30.3354
-28.6623	-30.0178	-107.752	-112.041	-29.5173	-30.0478
-28.4982	-29.7873	-116.189	-106.953	-29.4594	-29.8166
-28.3705	-29.7885	-110.244	-111.014	-29.6783	-29.8168
-28.2253	-29.8208	-110.264	-111.401	-29.7381	-29.851
-28.1085	-29.7159	-109.484	-120.124	-29.9108	-29.7439
-27.8294	-29.6323	-115.858	-131.643	-29.9387	-29.6631
-27.7857	-29.7482	-120.532	-109.949	-30.2081	-29.778
-27.6187	-29.7702	-110.586	-117.037	-30.4026	-29.8022
-27.5183	-29.9342	-119.505	-120.791	-30.8609	-29.9659
-27.3515	-30.1041	-117.736	-117.177	-31.1639	-30.1415
-27.1712	-29.9823	-115.141	-117.478	-31.5208	-30.012
-27.0779	-30.4005	-106.918	-107.302	-31.8495	-30.4312
-26.9367	-30.5102	-113.944	-104.573	-32.3539	-30.5438
-26.7356	-30.7145	-112.412	-117.182	-32.7645	-30.7523
-26.4892	-30.8872	-111.674	-106.827	-33.4715	-30.924
-26.2686	-30.9819	-110.316	-106.469	-33.9596	-31.0178
-26.163	-31.5488	-106.123	-123.147	-34.4906	-31.5845
-26.0318	-31.8704	-113.681	-114.417	-35.5	-31.911
-25.8076	-32.5452	-113.1	-107.192	-36.2316	-32.5904
-25.708	-33.1567	-113.103	-108.526	-37.2473	-33.2087
-25.5449	-33.8199	-111.428	-110.268	-37.8465	-33.8732
-25.4556	-34.6987	-110.469	-111.35	-38.517	-34.7504
-25.5862	-35.7291	-111.22	-109.204	-37.3937	-35.776
-25.7362	-36.3541	-123.447	-122.306	-35.7185	-36.3955
-25.932	-36.4284	-107.592	-111.11	-33.9996	-36.4508
-25.9595	-35.8644	-114.172	-112.818	-32.853	-35.8739
-25.8026	-35.5436	-119.045	-110.868	-32.2685	-35.5479
-25.5843	-35.2946	-114.056	-112.877	-31.8612	-35.3014
-25.155	-35.1098	-115.588	-118.629	-32.0341	-35.1275
-24.8363	-35.3858	-109.108	-105.744	-32.1873	-35.4055
-24.4484	-35.9258	-107.411	-111.836	-32.6599	-35.9549
-24.1306	-36.2689	-110.482	-104.834	-33.0322	-36.3003
-23.9663	-36.9161	-123.455	-112.62	-32.9705	-36.9461
-23.7652	-37.3187	-123.668	-113.209	-32.9608	-37.3682
-23.5583	-37.7169	-108.075	-109.723	-32.924	-37.7758

-23.4126	-38.0999	-114.783	-110.774	-32.6231	-38.1916
-23.2031	-38.0127	-111.813	-117.207	-32.4076	-38.1138
-23.0567	-38.3325	-109.951	-111.122	-31.9588	-38.4529
-22.8817	-38.7271	-110.018	-118.998	-31.6617	-38.8672
-22.7609	-38.7494	-119.738	-108.337	-31.2615	-38.8986
-22.5807	-38.1077	-112.212	-114.739	-30.9934	-38.2385
-22.445	-37.6824	-111.246	-109.209	-30.7783	-37.8142
-22.1936	-36.4977	-121.971	-105.629	-31.029	-36.6256
-21.9851	-35.6333	-121.722	-115.41	-31.2176	-35.7567
-21.6196	-34.6221	-119.71	-110.343	-31.845	-34.7453
-21.3717	-33.3608	-115.686	-126.414	-32.1516	-33.4644
-20.9843	-32.3567	-135.282	-108.652	-32.7232	-32.4488
-20.6365	-31.4121	-111.678	-106.54	-33.099	-31.4917
-20.3412	-30.59	-110.857	-111.981	-32.728	-30.656
-19.9762	-29.6808	-112.685	-114.89	-32.4364	-29.743
-19.6498	-28.9494	-109.194	-114.054	-32.4213	-28.9984
-19.4002	-28.217	-109.685	-114.564	-32.0712	-28.2624
-19.161	-27.6236	-106.517	-123.554	-31.6192	-27.67
-18.9209	-27.0517	-108.458	-113.325	-30.9022	-27.0926
-18.7581	-26.5772	-111.87	-107.143	-30.1771	-26.6198
-18.5087	-26.0689	-107.813	-111.605	-29.5715	-26.1055
-18.2947	-25.5675	-113.093	-111.607	-29.0529	-25.5977
-18.042	-25.1144	-118.978	-106.55	-28.3608	-25.1449
-17.8042	-24.7591	-110.667	-123.417	-27.7642	-24.7857
-17.6097	-24.2859	-114.687	-120.264	-27.414	-24.3102
-17.4008	-24.0035	-107.456	-114.163	-26.8052	-24.0285
-17.2443	-23.5526	-106.937	-126.045	-26.3727	-23.5723
-17.052	-23.1473	-119.941	-109.236	-25.7298	-23.1677
-16.9193	-22.7994	-117.276	-122.975	-25.3087	-22.8164
-16.7402	-22.4806	-119.636	-114.177	-24.8529	-22.4945
-16.5337	-22.1208	-112.702	-112.193	-24.3161	-22.1307
-16.3326	-21.9294	-111.128	-110.929	-23.8927	-21.9358
-16.1221	-21.571	-113.14	-116.422	-23.402	-21.575
-15.9593	-21.3166	-113.917	-110.186	-22.9639	-21.3226
-15.7546	-20.9933	-109.677	-125.056	-22.4168	-20.9998
-15.6411	-20.7368	-116.583	-107.395	-21.9978	-20.7419
-15.5224	-20.5132	-113.226	-111.877	-21.5978	-20.5179
-15.4348	-20.3447	-112.819	-108.886	-21.2777	-20.3481
-15.3038	-20.1933	-107.718	-111.629	-20.9059	-20.2064
-15.2157	-19.9469	-118.966	-132.88	-20.6366	-19.9543
-15.119	-19.8114	-123.104	-114.281	-20.3154	-19.8227
-14.9723	-19.6489	-117.896	-113.781	-19.9473	-19.6623
-14.8576	-19.5034	-127.023	-107.534	-19.6384	-19.5136
-14.7838	-19.3311	-111.485	-107.965	-19.3494	-19.3432
-14.7345	-19.2238	-117.842	-109.278	-19.1326	-19.2403
-14.6592	-19.1203	-118.403	-114.837	-18.886	-19.1383
-14.65	-18.9971	-120.154	-116.419	-18.6905	-19.0173
-14.6027	-18.9531	-120.348	-107.469	-18.4755	-18.9708
-14.5549	-18.7348	-114.244	-121.291	-18.2357	-18.7521
-14.4724	-18.7331	-107.912	-117.856	-17.9727	-18.7524
-14.3722	-18.5954	-109.826	-122.402	-17.6875	-18.6133
-14.3146	-18.51	-107.16	-123.428	-17.4836	-18.5279
-14.2196	-18.3861	-116.869	-102.676	-17.2125	-18.4024
-14.1876	-18.3779	-113.172	-110.712	-17.0251	-18.3915
-14.1851	-18.318	-117.914	-108.074	-16.8555	-18.3271

-14.2049	-18.2718	-110.391	-114.66	-16.6841	-18.2792
-14.1799	-18.1478	-116.733	-103.969	-16.4794	-18.1546
-14.2369	-18.0792	-107.996	-113.453	-16.364	-18.09
-14.3268	-18.0186	-111.054	-108.188	-16.2905	-18.024
-14.2938	-17.9993	-109.047	-117.212	-16.1017	-18.0036
-14.3367	-17.9471	-129.813	-107.503	-16.0135	-17.951
-14.4076	-17.9128	-106.788	-102.536	-15.9556	-17.9118
-14.3995	-17.949	-115.036	-114.323	-15.7888	-17.9503
-14.4976	-18.0047	-115.93	-120.334	-15.7237	-18.0031
-14.5688	-17.878	-102.594	-102.235	-15.6083	-17.8771
-14.687	-17.8852	-98.4341	-113.59	-15.5427	-17.8855
-14.8189	-17.9313	-105.498	-97.3826	-15.5076	-17.9294
-15.0016	-17.828	-100.264	-100.677	-15.5156	-17.8289
-15.0495	-17.9224	-99.139	-106.114	-15.4145	-17.9184
-15.2792	-17.9619	-97.1098	-105.446	-15.4936	-17.9547
-15.3525	-17.9186	-100.822	-98.6053	-15.4447	-17.9189
-15.3948	-17.817	-114.17	-104.262	-15.3444	-17.8135
-15.5052	-17.6635	-101.719	-96.5993	-15.3124	-17.6597
-15.6527	-17.7102	-104.58	-102.583	-15.2978	-17.7124
-15.7731	-17.7349	-119.517	-100.034	-15.2616	-17.741
-15.901	-17.72	-101.755	-105.275	-15.2099	-17.7281
-15.9851	-17.623	-99.1111	-101.664	-15.1438	-17.631
-16.0776	-17.5081	-103.862	-97.7146	-15.1121	-17.5156
-16.1721	-17.4668	-102.613	-95.091	-15.1123	-17.4745
-16.193	-17.3912	-96.8911	-100.839	-15.0155	-17.4011
-16.144	-17.2055	-94.5989	-104.767	-14.9169	-17.2173
-16.0973	-17.2162	-105.53	-105.394	-14.7883	-17.2339
-16.2479	-17.1296	-96.7774	-103.716	-14.8328	-17.1458
-16.3575	-17.0538	-113.003	-101.495	-14.7869	-17.067
-16.2937	-16.965	-105.319	-96.6061	-14.6243	-16.9792
-16.3874	-16.9894	-98.1899	-98.3696	-14.622	-16.9997
-16.5599	-16.7362	-113.834	-100.281	-14.6422	-16.7491
-16.4692	-16.7458	-94.8471	-95.887	-14.5007	-16.7554
-16.4391	-16.6107	-114.013	-105.949	-14.4063	-16.6193
-16.425	-16.5315	-99.922	-101.855	-14.3302	-16.5409
-16.4382	-16.4259	-113	-115.653	-14.3133	-16.4329
-16.3872	-16.2929	-101.761	-95.9069	-14.2574	-16.2953
-16.5187	-16.2036	-101.502	-107.707	-14.2165	-16.2096
-16.4884	-16.1013	-96.0225	-105.078	-14.1508	-16.1017
-16.6366	-16.0403	-96.8248	-95.6973	-14.1539	-16.0383
-16.5112	-15.8835	-106.696	-100.883	-14.0661	-15.8834
-16.6298	-15.7612	-98.2256	-97.9125	-14.106	-15.7559
-16.5919	-15.6191	-94.4875	-91.0521	-14.0503	-15.6214
-16.574	-15.5846	-104.957	-103.516	-14.0491	-15.576
-16.4633	-15.4155	-100.95	-112.617	-13.9878	-15.4126
-16.3482	-15.3431	-101.612	-94.6144	-13.8741	-15.3439
-16.2499	-15.1673	-95.5244	-99.2261	-13.8474	-15.168
-16.267	-15.0934	-95.0659	-105.238	-13.8919	-15.0958
-16.2564	-14.9743	-99.9259	-101.044	-13.8049	-14.9814
-16.2087	-14.8349	-96.7973	-102.944	-13.8802	-14.8421
-16.1536	-14.7447	-111.662	-93.3583	-13.874	-14.7592
-16.0209	-14.5667	-102.894	-97.4991	-13.8154	-14.5766
-15.8044	-14.4208	-105.451	-98.985	-13.7521	-14.4348
-15.6649	-14.3031	-99.7623	-107.671	-13.6928	-14.3087
-15.5228	-14.3136	-99.5038	-101.123	-13.6531	-14.3122

-15.358	-14.1083	-113.99	-93.4061	-13.6721	-14.1145
-15.2537	-14.0465	-100.714	-93.1091	-13.5599	-14.0491
-15.0952	-13.9155	-100.704	-99.7334	-13.4573	-13.9191
-14.9227	-13.7269	-101.278	-107.212	-13.4102	-13.7349
-14.8047	-13.5592	-98.9472	-97.5548	-13.3984	-13.5658
-14.8938	-13.4267	-109.02	-94.2948	-13.4524	-13.4315
-14.6343	-13.2653	-100.269	-98.2504	-13.4686	-13.2736
-14.4573	-13.1487	-102.075	-101.07	-13.3744	-13.1511
-14.3891	-12.9178	-98.5507	-98.3868	-13.402	-12.9164
-14.1121	-12.9217	-100.565	-102.662	-13.259	-12.9176
-14.0309	-12.7044	-99.9768	-91.2692	-13.3142	-12.6999
-13.915	-12.5617	-103.529	-96.3792	-13.3648	-12.5584
-13.669	-12.3722	-104.06	-111.76	-13.2718	-12.3724
-13.5113	-12.289	-109.071	-104.558	-13.2334	-12.2919
-13.3743	-12.1497	-104.667	-101.029	-13.2534	-12.1552
-13.204	-12.0932	-98.6579	-95.7375	-13.2683	-12.09
-13.0894	-11.7376	-110.404	-93.0013	-13.2961	-11.7341
-12.8721	-11.6339	-102.601	-94.1176	-13.1665	-11.6251
-12.6361	-11.4085	-112.822	-99.4834	-13.144	-11.4048
-12.4408	-11.4526	-99.191	-98.2785	-12.983	-11.4555
-12.2039	-11.2083	-101.435	-102.283	-12.9616	-11.2079
-12.0977	-11.2065	-104.853	-100.079	-12.8871	-11.2097
-12.0056	-11.0186	-99.0624	-99.3529	-13.0165	-11.0284
-12.0131	-10.7962	-101.589	-104.317	-13.164	-10.8012
-11.7998	-10.752	-101.224	-100.717	-12.9736	-10.7598
-11.6158	-10.6102	-105.385	-92.4391	-12.9285	-10.6205
-11.5279	-10.3694	-93.007	-105.28	-13.0131	-10.3674
-11.3479	-10.3395	-104.415	-91.8616	-12.9297	-10.3489
-11.3013	-10.0788	-107.962	-93.5041	-12.9709	-10.0794
-11.2866	-10.0448	-95.1102	-94.4377	-13.0431	-10.0558
-11.1376	-9.78242	-94.717	-89.8409	-13.0793	-9.78853
-11.0544	-9.71719	-103.766	-108.491	-13.1044	-9.72339
-10.94	-9.65314	-97.172	-104.615	-13.1256	-9.66414
-10.9296	-9.51378	-101.272	-101.606	-13.1912	-9.51649
-10.7384	-9.37861	-106.146	-96.6094	-13.1821	-9.38089
-10.6169	-9.25209	-99.0113	-95.9457	-13.2316	-9.25872
-10.53	-9.11406	-96.303	-97.1629	-13.343	-9.11607
-10.3977	-9.10033	-96.5012	-100.286	-13.276	-9.10553
-10.3779	-8.99345	-95.2558	-101.012	-13.3854	-9.00323
-10.2504	-8.83693	-97.498	-102.657	-13.4117	-8.83965
-10.0071	-8.76819	-103.948	-100.547	-13.3523	-8.76716
-9.89455	-8.69613	-104.558	-96.7326	-13.2598	-8.70582
-9.74795	-8.65232	-101.863	-113.88	-13.2855	-8.65182
-9.66367	-8.65656	-102.959	-100.303	-13.2348	-8.6367
-9.44855	-8.48748	-95.0646	-96.5523	-13.1328	-8.49005
-9.29855	-8.49525	-116.049	-110.616	-13.0407	-8.48913
-9.24363	-8.38039	-111.995	-93.5241	-13.0023	-8.37945
-9.1418	-8.45677	-99.1078	-104.666	-12.8746	-8.46177
-9.08606	-8.44422	-92.3901	-95.8659	-12.8384	-8.43834
-8.92208	-8.36127	-98.2477	-96.977	-12.6412	-8.36009

J2-J8

S21 (dB)	S12 (dB)	S22 (dB)
-120.01	-97.3804	-17.3392
-104.329	-96.0773	-31.7912
-106.07	-108.607	-33.504
-105.084	-103.655	-32.5387
-109.636	-107.519	-31.6936
-114.674	-104.739	-31.2687
-118.776	-111.186	-31.001
-115.141	-116.07	-30.8275
-112.437	-109.818	-30.9783
-127.843	-110.427	-30.915
-110.52	-112.585	-31.0163
-112.594	-116.029	-30.9824
-115.22	-107.408	-31.2286
-114.711	-113.202	-31.4815
-108.054	-112.161	-31.9551
-110.652	-118.217	-32.2989
-106.187	-113.33	-32.6665
-110.438	-110.225	-33.0168
-115.849	-103.933	-33.4992
-106.195	-107.788	-33.7447
-116.111	-118.801	-34.2588
-126.434	-107.98	-34.7215
-106.631	-115.219	-35.5612
-117.365	-107.555	-37.0688
-108.848	-114.094	-38.3715
-122.486	-116.019	-40.7376
-113.736	-108.978	-42.9758
-111.627	-115.268	-47.0188
-116.495	-115.391	-53.7498
-113.873	-105.713	-49.6246
-111.586	-128.609	-43.9918
-113.694	-111.244	-40.9418
-114.671	-115.553	-39.9483
-118.894	-105.071	-38.9329
-114.511	-104.747	-39.0449
-116.328	-109.414	-39.1457
-111.354	-116.712	-40.2086
-113.278	-111.406	-41.3947
-113.835	-113.808	-41.4121
-117.052	-110.948	-41.0012
-120.206	-101.565	-39.6427

J3-J4

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.4177	-93.8162	-103.995	-17.3331
-32.6549	-103.628	-96.4473	-32.3441
-34.8092	-94.1987	-94.6435	-33.296
-33.0324	-95.4353	-94.7865	-31.9197
-31.9632	-94.5793	-95.3608	-31.0312
-31.209	-97.6271	-98.6737	-30.5683
-30.7015	-97.9727	-99.2956	-30.2703
-30.3304	-96.6503	-98.0984	-30.1648
-30.2131	-103.083	-103.754	-30.3059
-30.1048	-101.681	-104.07	-30.2269
-29.9546	-108.711	-108.772	-30.2804
-29.8521	-105.393	-107.163	-30.2064
-29.7331	-103.586	-104.239	-30.382
-29.6015	-123.678	-113.294	-30.5135
-29.6847	-106.249	-117.914	-30.8619
-29.7837	-112.56	-107.826	-31.0827
-29.6503	-118.637	-103.822	-31.2336
-29.8553	-105.318	-112.985	-31.4643
-29.7023	-116.314	-113.78	-31.7323
-29.827	-109.982	-114.015	-31.9727
-29.9075	-105.577	-109.102	-32.3612
-30.0051	-114.126	-109.628	-32.7243
-30.1425	-115.543	-109.999	-33.2238
-30.1783	-115.351	-105.973	-33.951
-30.1916	-111.224	-129.98	-34.2853
-30.1601	-107.716	-111.569	-34.9394
-30.2154	-103.731	-136.885	-35.4995
-29.7507	-115.843	-115.633	-36.8146
-29.0509	-111.424	-112.453	-38.695
-28.2381	-127.068	-106.757	-40.8469
-27.5613	-104.998	-119.308	-42.9971
-26.9197	-114.211	-110.791	-42.7314
-26.5818	-110.592	-121.835	-40.4494
-26.4293	-110.435	-123.04	-38.7654
-26.4193	-110.764	-114.324	-38.4085
-26.559	-111.129	-114.511	-38.1019
-26.6958	-108.935	-116.772	-39.348
-26.7234	-118.573	-109.897	-40.2545
-26.7763	-115.302	-113.612	-41.3308
-26.8593	-114.6	-116.753	-41.8544
-26.7945	-118.037	-116.901	-42.9249

-108.585	-107.258	-38.0417	-26.7443	-109.462	-121.663	-43.9742
-114.214	-120.781	-36.5536	-26.7296	-119.15	-113.752	-46.5088
-111.452	-113.796	-35.242	-26.5951	-114.627	-106.946	-49.4983
-112.311	-121.26	-34.5121	-26.3428	-111.824	-119.746	-49.9643
-112.555	-109.716	-33.7521	-26.1879	-109.377	-108.999	-46.996
-108.177	-108.416	-33.3012	-26.1838	-111.169	-113.796	-44.6774
-111.103	-109.85	-33.0555	-26.1846	-106.05	-107.818	-43.1521
-113.128	-108.99	-33.3024	-26.3909	-111.989	-114.124	-43.6391
-112.63	-117.463	-33.4383	-26.5887	-112.096	-102.869	-43.9171
-115.909	-111.061	-33.8829	-26.8806	-113.562	-145.669	-46.41
-119.237	-111.829	-33.8099	-27.3476	-118.9	-110.414	-47.6236
-117.052	-115.905	-33.5973	-27.785	-113.768	-109.333	-47.054
-115.015	-112.089	-33.14	-28.2254	-116.243	-114.705	-45.4247
-106.427	-112.849	-32.2556	-28.6049	-120.992	-114.073	-42.5981
-126.098	-110.437	-31.6916	-29.0675	-108.91	-114.982	-40.1111
-116.407	-116.252	-31.4702	-29.5436	-107.208	-109.972	-38.1442
-108.383	-117.933	-31.1118	-29.9955	-110.793	-110.559	-36.5705
-108.964	-111.768	-30.4954	-30.2554	-116.682	-107.9	-34.9797
-112.107	-105.582	-29.6056	-30.5495	-107.737	-112.19	-33.5761
-115.54	-117.129	-28.6729	-30.6001	-113.302	-116.553	-32.7996
-113.442	-109.653	-27.8031	-30.8393	-109.817	-107.665	-31.7604
-113.734	-107.524	-27.2172	-31.1239	-117.707	-107.968	-31.0803
-114.689	-106.2	-26.7791	-31.345	-111.629	-106.451	-30.1305
-111.024	-115.102	-26.4293	-31.3712	-107.811	-115.274	-29.2631
-111.17	-112.323	-26.3732	-31.3762	-112.069	-111.42	-28.563
-119.527	-118.171	-25.982	-31.4795	-113.571	-109.389	-27.8062
-108.266	-112.439	-25.6297	-31.487	-109.555	-105.734	-27.2464
-115.089	-122.217	-24.9588	-31.1941	-111.622	-122.009	-26.7004
-113.589	-105.2	-24.458	-30.8797	-112.008	-122.843	-26.3399
-121.195	-120.989	-23.9772	-30.6464	-113.881	-106.927	-25.8867
-112.741	-108.58	-23.574	-30.2998	-116.485	-112.782	-25.3908
-108.779	-114.473	-23.3385	-30.0587	-109.326	-106.814	-24.8517
-126.745	-107.67	-23.0942	-29.2777	-109.962	-115.202	-24.2715
-105.77	-114.792	-22.8316	-29.0644	-110.396	-107.865	-23.7891
-114.594	-119.428	-22.495	-28.4522	-118.123	-110.062	-23.2947
-118.493	-120.545	-22.087	-27.8031	-118.831	-106.629	-22.9406
-122.829	-110.992	-21.6171	-27.4697	-110.858	-120.369	-22.6548
-108.98	-110.597	-21.2343	-27.1036	-118.599	-107.8	-22.4309
-114.992	-121.48	-20.9013	-26.8187	-112.985	-114.572	-22.0195
-107.378	-107.775	-20.6251	-26.3135	-111.368	-103.584	-21.738
-116.437	-115.037	-20.3909	-26.0318	-110.471	-114.64	-21.3871
-128.827	-106.782	-20.1685	-25.7289	-123.629	-104.92	-20.966
-120.92	-117.257	-20.0256	-25.2967	-116.786	-114.434	-20.6216
-110.522	-110.595	-19.8452	-24.9231	-108.616	-109.072	-20.3094
-113.928	-112.099	-19.7061	-24.663	-117.589	-111.028	-20.1466
-110.934	-106.909	-19.482	-24.3896	-105.76	-111.645	-19.9471
-120.318	-108.155	-19.2336	-24.1247	-111.296	-112.47	-19.8308
-113.616	-112.932	-19.0038	-23.9432	-111.241	-113.344	-19.6524
-114.286	-115.216	-18.7883	-23.4654	-117.339	-105.336	-19.4283
-111.631	-111.882	-18.5957	-23.3598	-111.129	-107.058	-19.1344
-116.374	-109.68	-18.4397	-23.0282	-114.451	-114.398	-18.8165
-117.415	-104.659	-18.4014	-22.7962	-119.257	-111.419	-18.6298
-112.188	-107.705	-18.3219	-22.4532	-112.626	-112.893	-18.3621
-113.623	-111.233	-18.2373	-22.3285	-106.42	-108.604	-18.216
-105.286	-105.86	-18.1463	-22.1254	-109.311	-114.929	-18.0955

-111.567	-104.994	-17.927	-21.9551	-117.231	-107.686	-17.9923
-119.672	-115.281	-17.6502	-21.6823	-108.658	-113.558	-17.8249
-106.434	-105.489	-17.482	-21.4471	-113.902	-117.738	-17.7541
-109.656	-105.804	-17.4307	-21.2693	-110.812	-111.752	-17.6988
-115.529	-110.021	-17.3388	-21.1371	-113.532	-110.872	-17.5159
-106.271	-112.687	-17.4549	-20.8886	-120.092	-113.133	-17.3959
-111.648	-113.39	-17.5661	-20.7103	-115.1	-108.55	-17.3687
-105.867	-106.954	-17.4947	-20.6593	-126.552	-106.777	-17.2312
-110.69	-107.321	-17.473	-20.608	-108.476	-113.561	-17.2332
-101.551	-103.005	-17.2704	-20.3168	-114.434	-99.9633	-17.2194
-112.874	-97.843	-17.1079	-20.1843	-101.931	-120.713	-17.2494
-107.074	-105.353	-16.9843	-20.1032	-109.941	-108.799	-17.3309
-101.369	-111.699	-16.9565	-19.87	-103.728	-101.102	-17.4034
-109.186	-109.104	-16.944	-19.8536	-104.184	-106.903	-17.3626
-120.487	-101.162	-17.1923	-19.8007	-115.315	-100.93	-17.5214
-103.565	-106.257	-17.345	-19.6051	-102.143	-102.107	-17.5424
-98.7246	-104.961	-17.3679	-19.394	-97.613	-102.706	-17.5882
-108.214	-113.409	-17.4075	-19.1224	-112.222	-97.9388	-17.6912
-109.724	-109.029	-17.3896	-19.0633	-103.697	-101.633	-17.8474
-97.6791	-97.4091	-17.2414	-19.0131	-97.1708	-101.514	-17.9943
-104.983	-105.185	-17.0885	-18.8934	-104.653	-104.2	-18.1375
-95.3989	-102.329	-16.957	-18.7288	-100.677	-109.064	-18.1912
-103.843	-100.302	-16.9401	-18.5404	-115.017	-111.051	-18.2754
-100.053	-107.759	-17.0428	-18.4371	-106.682	-102.122	-18.3525
-102.346	-96.5381	-17.1646	-18.3392	-104.089	-111.916	-18.2234
-100.222	-98.7613	-17.1881	-18.0989	-110.86	-104.628	-18.2183
-98.4425	-99.2343	-17.1533	-18.0886	-100.309	-96.3169	-18.1641
-95.6913	-114.017	-17.2438	-17.9543	-109.168	-99.1079	-18.3915
-116.007	-98.8085	-17.0787	-17.882	-94.7746	-106.552	-18.4726
-96.706	-103.69	-16.734	-17.7988	-103.708	-103.794	-18.4333
-105.053	-105.94	-16.5791	-17.8577	-105.492	-104.33	-18.5986
-111.174	-103.69	-16.5763	-17.6126	-104.524	-100.833	-18.6948
-101.084	-97.5091	-16.4156	-17.6705	-105.613	-96.1302	-18.6048
-108.918	-101.336	-16.4275	-17.5794	-101.551	-98.2041	-18.5239
-99.452	-103.721	-16.5118	-17.5624	-118.452	-104.175	-18.534
-113.558	-98.8709	-16.6146	-17.5207	-103.15	-107.321	-18.703
-103.571	-122.824	-16.568	-17.4588	-117.928	-130.755	-18.853
-106.26	-91.4432	-16.5364	-17.4732	-105.055	-97.7579	-19.0305
-106.845	-100.781	-16.3154	-17.471	-96.2781	-100.161	-19.2497
-100.342	-98.5731	-16.1317	-17.5159	-98.6104	-103.493	-19.4674
-103.218	-109.16	-15.902	-17.4779	-97.8198	-98.9593	-19.5368
-99.3879	-96.003	-15.9102	-17.4629	-107.456	-95.0976	-19.7889
-101.476	-102.542	-15.9235	-17.455	-97.794	-107.688	-19.7661
-98.0409	-101.553	-16.0679	-17.5903	-108.162	-105.147	-19.9108
-98.8775	-106.433	-16.0739	-17.5883	-95.3147	-94.1485	-20.0506
-101.174	-95.3082	-16.0937	-17.7022	-108.505	-103.24	-20.0749
-114.119	-97.8886	-16.0433	-17.6949	-99.5955	-104.552	-20.3991
-103.393	-94.2409	-15.9022	-17.8345	-104.633	-98.5583	-20.735
-103.342	-103.525	-15.7424	-17.9424	-103.747	-95.1814	-20.7296
-111.277	-97.2548	-15.5651	-18.0184	-109.009	-98.2454	-21.1005
-98.4291	-99.9658	-15.455	-18.1686	-99.993	-100.755	-21.2108
-101.493	-111.216	-15.3974	-18.2054	-98.9168	-98.4647	-21.2134
-101.087	-99.3285	-15.3794	-18.2726	-100.924	-97.5518	-21.3749
-99.4768	-101.165	-15.4268	-18.4132	-100.922	-107.949	-21.0913
-95.3284	-97.6437	-15.5255	-18.751	-99.9696	-108.945	-21.2871

-98.3307	-102.604	-15.4195	-18.7741	-96.5285	-96.6331	-21.5013
-103.903	-108.295	-15.2729	-19.0353	-96.8846	-120.233	-21.5231
-100.376	-103.875	-14.9542	-19.1317	-97.5425	-102.607	-21.5346
-95.777	-96.0717	-14.8089	-19.2322	-97.9899	-99.9453	-21.555
-99.0142	-97.5897	-14.5889	-19.2919	-100.191	-99.8015	-21.5109
-103.472	-110.832	-14.6593	-19.3542	-96.296	-97.4795	-21.708
-95.7833	-96.6614	-14.4461	-19.3779	-99.1147	-102.121	-21.7663
-107.07	-102.648	-14.4398	-19.558	-96.866	-98.2474	-21.5767
-112.035	-100.119	-14.486	-19.36	-102.625	-102.209	-21.6762
-97.9703	-105.203	-14.2757	-19.6727	-97.6325	-93.9768	-21.3438
-98.567	-108.099	-14.2251	-19.4899	-99.9753	-100.395	-21.4504
-101.19	-99.434	-14.0947	-19.3989	-110.364	-105.061	-21.4474
-103.403	-92.5728	-13.7862	-19.3007	-105.789	-92.1638	-21.1176
-104.635	-98.2995	-13.5224	-19.2978	-100.835	-96.5757	-20.874
-101.746	-101.194	-13.3774	-19.1027	-95.9215	-95.7977	-20.6616
-104.785	-94.2966	-13.2484	-19.1152	-97.557	-101.157	-20.3901
-102.678	-101.633	-13.2111	-18.5256	-106.011	-100.731	-20.1134
-101.812	-98.2927	-13.0814	-18.4781	-98.5526	-97.8237	-19.6965
-108.132	-100.087	-12.9977	-18.135	-99.8369	-102.595	-19.3087
-100.44	-92.503	-12.7443	-18.1289	-104.792	-109.025	-18.8257
-101.633	-102.958	-12.5336	-17.7979	-123.018	-112.087	-18.4158
-97.6053	-98.251	-12.3749	-17.7849	-106.052	-97.4368	-18.1289
-104.737	-107.643	-12.2484	-17.5407	-95.9995	-104.128	-17.8714
-101.586	-100.849	-12.2123	-17.1525	-96.1696	-97.2691	-17.8841
-101.648	-100.024	-11.9139	-17.0864	-99.6977	-95.1566	-17.4027
-99.241	-98.7624	-11.7017	-16.8794	-95.6585	-100.124	-16.9445
-128.192	-94.0178	-11.685	-16.5639	-100.777	-95.9182	-16.6463
-102.069	-92.2048	-11.5301	-16.466	-117.717	-99.7079	-16.3025
-101.07	-95.8382	-11.4902	-16.1139	-96.9905	-101.6	-16.05
-113.639	-97.0363	-11.4145	-16.0805	-101.941	-97.8353	-15.9313
-99.3538	-101.205	-11.2014	-15.6729	-98.3561	-100.415	-15.6402
-112.735	-95.3295	-11.0311	-15.6185	-102.597	-103.044	-15.4173
-100.801	-98.6532	-10.8458	-15.5341	-98.2736	-99.0729	-15.1592
-102.27	-105.524	-10.7757	-15.3338	-94.9127	-95.141	-15.0171
-97.234	-96.0983	-10.5973	-15.2345	-94.1937	-99.5074	-14.6452
-104.124	-97.7452	-10.508	-15.1164	-101.64	-104.643	-14.3662
-97.2937	-97.5935	-10.4637	-14.9064	-92.437	-96.877	-14.1095
-101.722	-105.346	-10.3704	-15.0025	-119.324	-106.192	-13.793
-99.1888	-104.284	-10.3138	-14.9135	-90.4946	-102.717	-13.6263
-103.551	-103.056	-10.1987	-14.6181	-99.6748	-101.574	-13.347
-104.374	-108.186	-9.9378	-14.5809	-95.5739	-109.25	-12.8999
-97.5278	-96.8203	-9.78303	-14.573	-102.008	-97.7058	-12.5716
-96.8819	-97.0791	-9.65692	-14.6176	-98.051	-97.7058	-12.2598
-106.928	-110.906	-9.61172	-14.6946	-94.3145	-95.5504	-11.9723
-94.04	-92.7765	-9.44835	-14.4282	-113.8	-100.05	-11.5774
-101.299	-95.9664	-9.36586	-14.5287	-101.366	-105.935	-11.2307
-95.4215	-102.507	-9.33747	-14.5354	-105.394	-94.4272	-11.0232
-99.9729	-95.9424	-9.2402	-14.6383	-115.034	-96.8327	-10.7976
-105.752	-103.934	-9.16946	-14.6348	-103.26	-97.9225	-10.5938
-97.1351	-98.3854	-8.9186	-14.3992	-94.1721	-102.329	-10.2988

J3-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.4157	-95.3141	-95.5229	-18.0825
-32.6534	-108.139	-111.678	-31.8726
-34.8214	-103.882	-101.952	-30.5801
-33.0465	-108.727	-105.736	-29.4345
-31.9716	-103.498	-106.305	-28.7669
-31.2162	-106.814	-109.324	-28.4087
-30.7074	-109.052	-111.076	-28.1909
-30.3397	-117.995	-112.976	-28.1594
-30.2189	-113.489	-111.867	-28.2678
-30.1112	-115.133	-105.991	-28.2456
-29.9602	-120.311	-109.215	-28.3321
-29.8597	-120.384	-117.373	-28.2924
-29.7399	-118.58	-106.272	-28.4866
-29.6081	-108.37	-118.314	-28.6121
-29.6889	-117.388	-105.418	-28.8859
-29.7898	-106.334	-118.562	-29.0691
-29.6521	-119.267	-111.561	-29.1891
-29.8584	-108.276	-128.327	-29.3934
-29.7056	-109.128	-110.326	-29.5796
-29.8261	-111.203	-102.913	-29.7196
-29.9075	-116	-113.106	-29.8954
-30.0072	-104.468	-122.597	-30.0943
-30.1435	-118.44	-113.352	-30.4623
-30.1779	-109.03	-120.505	-30.8704
-30.1899	-108.532	-124.625	-31.0336
-30.156	-115.956	-116.368	-31.4153
-30.2097	-108.416	-120.986	-31.6377
-29.7409	-117.831	-115.237	-32.1397
-29.043	-117.588	-110.301	-32.9959
-28.2305	-106.357	-109.678	-33.8399
-27.5545	-138.904	-111.681	-34.737
-26.9125	-107.834	-105.11	-35.0572
-26.5749	-121.388	-119.804	-34.5617
-26.4219	-105.649	-114.72	-34.0447
-26.4105	-113.965	-110.318	-33.4501
-26.5509	-113.742	-113.872	-33.2232
-26.6855	-111.514	-115.12	-33.2024
-26.7124	-110.234	-108.966	-33.3013
-26.7626	-108.25	-110.353	-33.8881
-26.8454	-110.277	-107.536	-34.1722
-26.7792	-116.546	-110.172	-34.3664

J3-J6

S11 (dB)	S21 (dB)	S12 (dB)
-17.414	-102.051	-106.564
-32.649	-106.345	-115.328
-34.8064	-105.356	-103.614
-33.0406	-110.512	-109.384
-31.9648	-110.808	-107.751
-31.2196	-119.154	-111.915
-30.721	-115.61	-109.078
-30.3593	-108.991	-108.097
-30.2311	-106.8	-111.811
-30.1165	-112.264	-120.164
-29.9622	-124.618	-112.921
-29.8631	-116.938	-111.972
-29.7519	-112.854	-114.363
-29.6195	-117.913	-121.929
-29.6995	-108.67	-108.136
-29.7981	-114.831	-115.109
-29.6552	-125.445	-113.27
-29.8644	-122.216	-110.656
-29.7024	-116.641	-112.418
-29.8256	-116.541	-114.21
-29.9065	-106.806	-105.316
-30	-112.122	-104.797
-30.1473	-108.112	-106.736
-30.1801	-112.363	-101.952
-30.1845	-112.795	-106.092
-30.1509	-105.919	-111.02
-30.1937	-111.127	-108.246
-29.725	-114.904	-111.47
-29.0329	-109.723	-109.034
-28.2237	-110.199	-115.806
-27.5517	-112.522	-115.62
-26.9092	-108.265	-114.576
-26.5706	-111.897	-118.761
-26.4103	-115.508	-108.259
-26.4004	-111.661	-111.126
-26.5398	-116.391	-114.945
-26.6728	-103.426	-115.549
-26.7026	-114.413	-107.141
-26.7511	-119.558	-109.248
-26.8287	-107.34	-105.947
-26.7546	-108.912	-102.802

-26.727	-112.931	-108.059	-34.3912	-26.701	-110.261	-109.131
-26.7128	-111.681	-127.66	-34.2718	-26.6831	-117.087	-110.395
-26.5796	-115.75	-113.603	-34.2013	-26.5541	-108.265	-116.403
-26.3274	-105.319	-116.592	-34.0819	-26.3023	-114.479	-110.9
-26.1732	-116.718	-110.023	-34.0921	-26.1442	-112.618	-109.419
-26.1693	-113.133	-115.138	-34.0075	-26.145	-115.923	-110.131
-26.1701	-106.623	-111.797	-34.1678	-26.1429	-113.019	-121.311
-26.3738	-110.516	-108.047	-33.7582	-26.3438	-129.686	-111.303
-26.571	-115.634	-108.388	-33.5607	-26.5358	-118.606	-113.209
-26.8627	-111.2	-105.326	-32.6152	-26.8227	-122.736	-114.338
-27.3239	-115.047	-108.092	-32.1588	-27.288	-113.451	-105.174
-27.7638	-108.767	-107.968	-31.2789	-27.7339	-108.563	-105.928
-28.2043	-118.399	-111.068	-30.7183	-28.1691	-108.106	-108.76
-28.5824	-112.618	-107.686	-30.2542	-28.5541	-112.961	-107.204
-29.0435	-117.588	-119.98	-29.6235	-29.0182	-113.2	-108.011
-29.5203	-109.663	-107.5	-29.0376	-29.4885	-110.64	-120.949
-29.9697	-106.119	-108.327	-28.5862	-29.9394	-121.824	-111.327
-30.2324	-109.333	-108.342	-28.0719	-30.197	-117.094	-110.431
-30.5256	-118.201	-103.668	-27.5699	-30.4954	-113.798	-105.471
-30.5784	-110.496	-106.414	-27.3336	-30.542	-111.055	-108.532
-30.8182	-111.636	-107.48	-26.919	-30.7831	-115.422	-106.449
-31.1024	-114.515	-108.342	-26.6627	-31.076	-110.543	-112.466
-31.3208	-120.228	-112.964	-26.2045	-31.2979	-117.712	-119.414
-31.357	-108.811	-117.114	-25.7859	-31.334	-113.048	-122.114
-31.3614	-110.506	-111.401	-25.4276	-31.325	-117.729	-111.725
-31.4682	-119.262	-105.975	-24.9915	-31.4335	-112.371	-109.762
-31.4798	-119.494	-111.113	-24.6839	-31.4542	-116.665	-119.046
-31.1888	-128.205	-115.22	-24.3507	-31.1685	-125.048	-129.024
-30.8768	-120.147	-109.494	-24.1874	-30.8537	-128.174	-106.996
-30.6453	-116.008	-111.493	-23.9545	-30.6224	-120.813	-115.296
-30.3024	-118.057	-115.547	-23.6722	-30.2857	-110.432	-111.267
-30.0556	-121.672	-109.431	-23.3887	-30.0357	-113.902	-109.872
-29.279	-113.105	-115.746	-23.0497	-29.2435	-111.351	-114.521
-29.0631	-113.152	-109.718	-22.7717	-29.0377	-118.046	-109.14
-28.4496	-116.645	-112.854	-22.4139	-28.4257	-111.374	-107.231
-27.8033	-121.556	-111.446	-22.2284	-27.7869	-113.153	-103.518
-27.4705	-113.18	-121.049	-22.1101	-27.456	-111.419	-105.316
-27.1041	-108.079	-104.078	-22.0318	-27.0985	-115.496	-117.896
-26.8235	-112.229	-103.314	-21.8394	-26.8319	-116.15	-121.527
-26.3144	-113.179	-122.331	-21.7284	-26.3237	-112.402	-117.443
-26.0356	-115.121	-110.967	-21.5578	-26.0412	-116.311	-102.19
-25.7344	-108.885	-112.363	-21.269	-25.7389	-120.081	-106.654
-25.2988	-112.699	-107.728	-21.0299	-25.3168	-119.751	-110.954
-24.9255	-108.69	-111.107	-20.8332	-24.9445	-106.474	-113.608
-24.6679	-117.66	-111.257	-20.7784	-24.6751	-112.842	-105.74
-24.3928	-109.889	-122.047	-20.6718	-24.4031	-113.368	-107.135
-24.1297	-107.425	-116.621	-20.681	-24.1439	-112.817	-105.901
-23.9458	-110.255	-112.519	-20.6566	-23.9618	-111.301	-108.475
-23.4708	-114.392	-107.695	-20.5429	-23.4816	-120.365	-108.622
-23.3637	-112.822	-112.348	-20.4079	-23.3732	-125.058	-110.378
-23.0317	-116.536	-118.294	-20.1758	-23.0383	-111.711	-110.223
-22.7987	-110.958	-112.851	-20.0808	-22.8071	-111.081	-106.912
-22.4573	-111.886	-117.186	-19.8969	-22.4654	-123.904	-119.119
-22.3278	-115.525	-106.659	-19.8674	-22.328	-111.069	-108.326
-22.1257	-105.224	-110.988	-19.8323	-22.1273	-112.518	-112.26

-21.9555	-111.395	-106.724	-19.8691	-21.9536	-107.377	-105.582
-21.6834	-111.915	-103.539	-19.8651	-21.677	-103.955	-110.342
-21.4467	-109.159	-107.21	-19.927	-21.4339	-107.325	-111.767
-21.2685	-119.26	-104.624	-20.074	-21.2604	-114.229	-113.699
-21.1306	-110.669	-111.781	-19.9621	-21.1289	-112.113	-115.406
-20.8907	-107.096	-106.941	-19.992	-20.8817	-116.497	-102.749
-20.7087	-106.044	-106.159	-20.0955	-20.7013	-111.084	-121.286
-20.6588	-121.632	-103.706	-20.0635	-20.6515	-107.636	-106.796
-20.6075	-107.051	-111.891	-20.2182	-20.599	-117.747	-112.116
-20.3166	-113.639	-102.383	-20.2937	-20.3071	-96.5913	-98.6261
-20.1822	-98.6038	-100.716	-20.5134	-20.176	-104.392	-99.4762
-20.1042	-105.468	-95.9135	-20.7522	-20.0973	-113.674	-100.577
-19.8695	-113.936	-99.4494	-20.9825	-19.8695	-97.6446	-98.4149
-19.8605	-107.082	-104.478	-21.0549	-19.8517	-107.234	-110.478
-19.8019	-101.033	-97.511	-21.4221	-19.7983	-104.123	-108.761
-19.6056	-104.819	-100.588	-21.4879	-19.6088	-98.8028	-112.347
-19.3974	-97.0528	-104.633	-21.4277	-19.3963	-111.353	-102.715
-19.1231	-98.4416	-99.8784	-21.4982	-19.1232	-104.318	-109.143
-19.0707	-106.903	-102.959	-21.6617	-19.0703	-106.227	-96.6006
-19.0163	-101.513	-99.6569	-21.6772	-19.0212	-100.743	-103.846
-18.8981	-96.8753	-98.0789	-21.8611	-18.9026	-105.746	-95.3066
-18.7316	-101.094	-95.341	-21.8509	-18.7391	-100.272	-104.341
-18.5474	-96.4594	-94.7768	-21.8265	-18.5577	-123.38	-95.1655
-18.4441	-114.069	-97.5541	-21.7367	-18.4556	-100.408	-99.0947
-18.3459	-115.923	-109.041	-21.6169	-18.3558	-101.768	-104.148
-18.1069	-106.179	-101.056	-21.2082	-18.1173	-98.4259	-98.0415
-18.0926	-107.31	-98.7043	-20.8983	-18.1069	-97.0753	-106.773
-17.9648	-98.0395	-98.2845	-20.8815	-17.9767	-99.6769	-103.349
-17.8891	-103.606	-101.814	-20.8487	-17.9051	-98.2607	-107.683
-17.8063	-98.0206	-93.745	-20.5613	-17.8203	-100.875	-104.573
-17.866	-95.8766	-105.729	-20.4957	-17.8767	-113.222	-102.396
-17.6192	-105.205	-104.404	-20.6677	-17.635	-104.287	-95.2762
-17.6776	-97.5155	-107.896	-20.3521	-17.6897	-102.375	-99.3738
-17.584	-109.505	-98.4543	-20.1592	-17.5955	-100.518	-100.832
-17.5675	-96.9224	-103.625	-19.9579	-17.577	-106.807	-98.389
-17.5243	-102.951	-100.581	-19.7747	-17.5327	-101.721	-103.784
-17.4622	-100.786	-102.083	-19.4901	-17.4677	-105.131	-102.383
-17.4731	-103.199	-98.7699	-19.6203	-17.4789	-107.948	-103.042
-17.4753	-100.1	-93.9744	-19.4376	-17.4755	-110.6	-110.254
-17.5212	-106.148	-100.985	-19.5165	-17.5196	-99.8938	-98.0207
-17.4783	-98.0772	-100.593	-19.1469	-17.476	-105.984	-106.461
-17.4683	-103.373	-108.891	-19.1555	-17.4672	-104.22	-107.567
-17.4581	-96.8953	-101.246	-18.952	-17.4481	-100.126	-100.089
-17.5912	-100.038	-94.6212	-18.7252	-17.5833	-99.6625	-97.4648
-17.5904	-96.0161	-102.148	-18.3958	-17.5894	-108.248	-95.8937
-17.7103	-101.951	-98.9637	-18.1197	-17.7021	-100.983	-93.1986
-17.6969	-102.21	-102.753	-17.8384	-17.6955	-102.247	-100.067
-17.8385	-99.1592	-92.4143	-17.7129	-17.8386	-100.761	-99.1207
-17.9442	-97.1476	-99.8309	-17.6371	-17.9459	-98.0232	-105.467
-18.0208	-98.9857	-110.266	-17.4213	-18.0241	-107.556	-101.987
-18.1689	-101.118	-95.3187	-17.2515	-18.1793	-108.275	-100.066
-18.2044	-102.37	-102.788	-17.0197	-18.2071	-96.7477	-105.473
-18.2763	-101.11	-95.5193	-16.6863	-18.2799	-101.389	-107.172
-18.4183	-99.9585	-97.8961	-16.4354	-18.4257	-101.966	-105.403
-18.7502	-103.275	-94.3684	-16.2163	-18.7576	-102.209	-99.8919

-18.7823	-101.988	-97.1829	-16.0657	-18.7941	-102.621	-102.706
-19.0406	-105.18	-96.5925	-15.926	-19.0342	-103.193	-93.2557
-19.1362	-99.8268	-102.694	-15.7674	-19.1473	-102.681	-101.683
-19.2363	-109.092	-96.9109	-15.5645	-19.242	-94.9519	-98.6438
-19.2944	-118.743	-91.4861	-15.4318	-19.2999	-100.293	-100.458
-19.3539	-104.579	-99.0659	-15.486	-19.3605	-97.6464	-110.155
-19.3782	-95.5996	-96.2351	-15.2051	-19.3775	-97.0621	-104.625
-19.5581	-96.5782	-93.0663	-15.0338	-19.5578	-94.5379	-90.698
-19.3561	-101.456	-95.8606	-14.9682	-19.3511	-98.9366	-104.991
-19.6698	-118.826	-93.2541	-14.7007	-19.6565	-103.123	-97.4406
-19.4847	-96.6921	-95.8728	-14.6455	-19.4747	-104.954	-103.253
-19.3878	-99.6824	-98.5389	-14.5709	-19.3868	-106.306	-97.8254
-19.2934	-108.572	-107.116	-14.3345	-19.282	-96.3162	-106.011
-19.2903	-98.4435	-108.955	-14.1941	-19.2767	-99.5261	-102.508
-19.0959	-100.796	-96.1687	-14.0721	-19.0916	-106.149	-100.897
-19.1105	-96.0025	-98.3841	-13.9277	-19.1027	-101.006	-100.297
-18.5217	-96.8432	-103.822	-13.8469	-18.5154	-100.025	-96.9893
-18.4688	-97.0982	-111.252	-13.6466	-18.4653	-96.2814	-98.9402
-18.1369	-103.176	-97.5331	-13.4709	-18.1249	-103.375	-104.236
-18.1236	-99.0453	-95.8414	-13.2576	-18.135	-108.385	-100.955
-17.799	-106.514	-95.4351	-13.1029	-17.797	-98.8067	-98.9137
-17.7813	-93.9909	-97.2954	-13.0296	-17.7888	-106.973	-103.44
-17.5363	-98.992	-99.6686	-13.0138	-17.5394	-98.284	-91.4429
-17.1561	-98.2813	-107.845	-13.1432	-17.1665	-94.5534	-91.4539
-17.0944	-103.227	-102.985	-12.9586	-17.1027	-89.1236	-96.5343
-16.8885	-101.93	-93.9484	-12.8157	-16.8942	-108.755	-116.927
-16.5719	-115.39	-103.538	-12.7798	-16.5766	-96.4789	-106.663
-16.4724	-99.1543	-97.9153	-12.6687	-16.4758	-107.046	-110.588
-16.1152	-106.815	-99.618	-12.674	-16.108	-98.8825	-97.8181
-16.092	-103.666	-113.344	-12.7565	-16.0961	-110.684	-92.4283
-15.6792	-91.2145	-101.948	-12.7378	-15.6858	-99.9301	-96.0392
-15.6271	-102.181	-99.2225	-12.7615	-15.6282	-114.768	-93.0124
-15.5419	-103.722	-97.7148	-12.7511	-15.548	-100.945	-99.0303
-15.3391	-95.6726	-96.9739	-12.851	-15.3433	-104.663	-106.729
-15.2407	-105.792	-95.8914	-12.7728	-15.2431	-97.1985	-111.623
-15.1197	-100.25	-97.6847	-12.7665	-15.1202	-102.518	-98.9758
-14.9106	-92.6741	-97.1307	-12.8067	-14.9097	-95.115	-98.1231
-15.0035	-95.2701	-100.006	-12.7274	-15.0057	-103.484	-104.624
-14.9171	-107.483	-97.7709	-12.8246	-14.9126	-100.429	-98.4795
-14.627	-95.5223	-108.29	-12.8095	-14.6266	-100.399	-105.8
-14.5892	-97.3625	-109.512	-12.6517	-14.5829	-108.621	-97.4085
-14.5795	-98.3699	-103.049	-12.5239	-14.5802	-96.2094	-100.482
-14.6167	-101.218	-117.327	-12.451	-14.6182	-102.151	-99.5422
-14.7014	-107.427	-97.2289	-12.3527	-14.684	-111.115	-99.4975
-14.4256	-113.114	-100.116	-12.1716	-14.4249	-97.6548	-94.5689
-14.5295	-100.295	-107.381	-12.0106	-14.5262	-101.449	-96.1877
-14.5431	-103.785	-98.4936	-11.9702	-14.5418	-98.6374	-98.6308
-14.6423	-100.062	-92.8557	-11.8959	-14.6451	-92.3203	-96.4131
-14.6411	-104.989	-94.2838	-11.8606	-14.6399	-114.759	-102.122
-14.4075	-97.0409	-105.314	-11.7153	-14.4086	-102.889	-93.3137

J3-J7

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.712	-17.4141	-94.2535	-98.9589	-17.6845	-17.4138
-31.1293	-32.6443	-105.344	-102.827	-33.2279	-32.6455
-31.386	-34.803	-110.618	-104.604	-32.2991	-34.8088
-30.4227	-33.0369	-118.423	-108.28	-30.9295	-33.0356
-29.6461	-31.9639	-111.6	-107.929	-30.1929	-31.9598
-29.1239	-31.2186	-113.361	-112.025	-29.7462	-31.2183
-28.7216	-30.7238	-110.521	-115.739	-29.5609	-30.7271
-28.5352	-30.3619	-106.183	-113.715	-29.5211	-30.3662
-28.437	-30.2342	-112.269	-118.545	-29.7617	-30.2375
-28.2516	-30.1196	-123.152	-109.918	-29.806	-30.12
-28.1584	-29.9638	-112.78	-116.647	-30.0006	-29.9631
-27.8845	-29.8614	-108.622	-108.211	-30.0282	-29.8604
-27.8608	-29.7524	-115.28	-116.331	-30.3274	-29.7509
-27.7066	-29.6213	-109.645	-102.413	-30.5339	-29.6231
-27.6196	-29.701	-105.937	-108.328	-31.0103	-29.7035
-27.4825	-29.8035	-124.583	-120.007	-31.3652	-29.8035
-27.2857	-29.6585	-108.643	-107.78	-31.6394	-29.6578
-27.1829	-29.8664	-106.262	-118.528	-31.9558	-29.8626
-27.0007	-29.7049	-119.589	-109.634	-32.4087	-29.7024
-26.7653	-29.8266	-109.337	-111.449	-32.9034	-29.8254
-26.4878	-29.9075	-112.952	-110.863	-33.7403	-29.9067
-26.2784	-29.9991	-116.109	-108.535	-34.3678	-29.9997
-26.2041	-30.1447	-110.38	-114.668	-34.9517	-30.1432
-26.0724	-30.1796	-111.713	-111.357	-35.949	-30.1832
-25.8561	-30.1834	-111.78	-112.235	-36.5487	-30.184
-25.7533	-30.1501	-117.79	-107.593	-37.426	-30.1469
-25.5624	-30.1914	-109.097	-128.924	-38.1802	-30.1867
-25.455	-29.7232	-104.996	-116.689	-38.9688	-29.7159
-25.5668	-29.0319	-106.931	-110.953	-37.8868	-29.0292
-25.7081	-28.2229	-113.805	-111.143	-36.0982	-28.2199
-25.9228	-27.5501	-121.262	-107.999	-34.1831	-27.5488
-26	-26.9078	-114.472	-117.376	-32.8927	-26.9039
-25.8493	-26.5667	-113.054	-108.135	-32.3095	-26.5657
-25.609	-26.4047	-123.295	-113.783	-31.992	-26.4029
-25.1342	-26.3952	-111.861	-122.615	-32.3415	-26.395
-24.8042	-26.5337	-105.973	-112.301	-32.6126	-26.5316
-24.4256	-26.6658	-108.841	-115.829	-33.0958	-26.6638
-24.1505	-26.6949	-118.928	-108.728	-33.3339	-26.6945
-24.0436	-26.7438	-108.647	-109.101	-33.0216	-26.7391
-23.9026	-26.8199	-116.129	-120.741	-32.8403	-26.8133
-23.7321	-26.745	-107.779	-111.659	-32.7537	-26.7371

-23.5537	-26.689	-121.586	-107.117	-32.6831	-26.6799
-23.3199	-26.6719	-115.49	-110.665	-32.645	-26.6627
-23.1178	-26.5428	-115.9	-106.847	-32.3515	-26.5349
-22.9187	-26.2902	-113.445	-121.326	-32.0254	-26.2834
-22.7915	-26.1318	-137.266	-112.609	-31.5128	-26.1271
-22.6503	-26.1339	-107.894	-117.839	-31.0976	-26.1285
-22.554	-26.132	-122.11	-110.123	-30.8188	-26.1266
-22.3182	-26.3311	-114.665	-108.18	-31.0718	-26.3245
-22.1267	-26.5237	-125.082	-111.754	-31.2904	-26.5137
-21.7193	-26.8096	-111.154	-114.441	-31.9947	-26.8013
-21.452	-27.2773	-114.507	-109.482	-32.375	-27.2689
-21.0435	-27.7208	-120.543	-124.524	-32.8766	-27.7119
-20.7273	-28.1597	-110.507	-127.797	-33.2955	-28.153
-20.4431	-28.5454	-111.068	-111.968	-33.0302	-28.538
-20.1038	-29.0103	-116.32	-115.235	-32.8454	-29.0035
-19.7781	-29.4777	-105.721	-110.966	-32.9142	-29.473
-19.5193	-29.9286	-112.714	-105.674	-32.5819	-29.9251
-19.2421	-30.1835	-109.095	-110.553	-32.0403	-30.1722
-18.9689	-30.4836	-115.178	-110.942	-31.1164	-30.4753
-18.8099	-30.5332	-120.75	-105.816	-30.4104	-30.5205
-18.5691	-30.7708	-111.027	-116.973	-29.8732	-30.7658
-18.3832	-31.0665	-113.707	-121.874	-29.4848	-31.057
-18.1324	-31.2859	-115.999	-110.328	-28.7743	-31.2739
-17.9032	-31.3193	-117.561	-110.725	-28.2185	-31.3124
-17.6875	-31.3079	-109.239	-107.368	-27.7077	-31.297
-17.4546	-31.418	-107.084	-115.497	-27.013	-31.406
-17.2689	-31.4405	-118.304	-118.668	-26.5047	-31.4311
-17.0828	-31.1543	-113.078	-112.219	-25.8911	-31.1432
-16.9447	-30.8388	-112.36	-117.37	-25.5388	-30.8365
-16.7797	-30.6099	-126.496	-114.081	-25.1339	-30.6083
-16.5892	-30.2655	-115.06	-111.68	-24.6315	-30.251
-16.3831	-30.0192	-120.487	-107.961	-24.1516	-30.0084
-16.1709	-29.2352	-111.224	-119.791	-23.6022	-29.2245
-15.9932	-29.0244	-119.336	-107.895	-23.0835	-29.0133
-15.7761	-28.4159	-109.461	-118.226	-22.4556	-28.4057
-15.6579	-27.7802	-118.935	-125.505	-22.0677	-27.7756
-15.5633	-27.4506	-109.449	-113.016	-21.7429	-27.442
-15.4978	-27.0938	-109.647	-112.146	-21.4778	-27.0997
-15.3659	-26.8287	-111.489	-105.272	-21.1003	-26.8378
-15.2791	-26.3201	-108.353	-110.078	-20.828	-26.3262
-15.1692	-26.0462	-111.326	-114.354	-20.481	-26.0547
-15.0017	-25.7435	-113.167	-105.618	-20.0393	-25.7525
-14.8682	-25.3239	-128.264	-110.904	-19.6755	-25.3394
-14.7875	-24.9516	-110.609	-121.77	-19.3638	-24.9643
-14.7461	-24.6894	-113.124	-111.458	-19.1496	-24.6952
-14.6735	-24.4162	-115.997	-109.279	-18.9191	-24.4351
-14.6766	-24.1542	-109.796	-119.629	-18.7746	-24.1648
-14.628	-23.9682	-111.912	-115.938	-18.554	-23.9749
-14.5616	-23.4899	-117.355	-109.209	-18.3001	-23.5034
-14.4677	-23.3794	-115.076	-112.741	-18.0013	-23.3887
-14.3393	-23.0446	-119.592	-108.344	-17.646	-23.0571
-14.2798	-22.813	-109.477	-112.505	-17.4125	-22.8252
-14.1816	-22.4666	-121.326	-112.521	-17.1055	-22.4759
-14.1568	-22.3279	-110.214	-122.004	-16.9026	-22.3383
-14.1401	-22.1295	-106.6	-117.072	-16.7132	-22.1391

-14.1657	-21.9561	-109.403	-109.763	-16.5843	-21.9574
-14.1419	-21.6796	-111.322	-107.769	-16.3727	-21.6847
-14.204	-21.4343	-108.883	-115.999	-16.2819	-21.4376
-14.2873	-21.2567	-114.152	-109.038	-16.1954	-21.263
-14.2508	-21.1269	-105.63	-107.688	-15.9841	-21.1268
-14.2847	-20.8798	-118.014	-114.097	-15.8512	-20.8831
-14.3731	-20.6981	-116.715	-111.171	-15.7918	-20.7049
-14.371	-20.6493	-120.323	-104.781	-15.6312	-20.6496
-14.4804	-20.5958	-123.039	-109.202	-15.5849	-20.5958
-14.5635	-20.3055	-101.91	-99.8761	-15.5173	-20.3061
-14.6902	-20.1748	-103.214	-103.207	-15.4934	-20.1787
-14.8465	-20.0992	-103.31	-100.092	-15.4983	-20.0992
-15.0391	-19.8708	-110.304	-102.597	-15.5291	-19.8771
-15.1041	-19.848	-97.4047	-96.7243	-15.4337	-19.8611
-15.3352	-19.8019	-103.835	-100.434	-15.5004	-19.8053
-15.4216	-19.6057	-97.694	-101.137	-15.4347	-19.6096
-15.467	-19.3945	-105.198	-93.9073	-15.3384	-19.3973
-15.5846	-19.126	-106.689	-102.271	-15.3204	-19.1327
-15.7416	-19.0725	-104.212	-98.6149	-15.3299	-19.076
-15.8554	-19.0257	-102.85	-104.881	-15.3123	-19.0336
-16.0101	-18.9089	-109.837	-98.0591	-15.3173	-18.9159
-16.0949	-18.7422	-98.8965	-105.19	-15.2568	-18.7485
-16.1877	-18.5625	-101.95	-105.483	-15.2197	-18.5737
-16.253	-18.4622	-105.341	-119.144	-15.1761	-18.4701
-16.2372	-18.3656	-112.273	-103.402	-15.012	-18.37
-16.1447	-18.1267	-106.03	-105.688	-14.8665	-18.133
-16.0807	-18.1206	-96.662	-105.628	-14.7266	-18.1202
-16.22	-17.9878	-110.099	-98.8175	-14.7731	-17.9975
-16.3219	-17.9157	-107.49	-97.6424	-14.7602	-17.9258
-16.2662	-17.8323	-96.7203	-97.6704	-14.6412	-17.8414
-16.3609	-17.8876	-107.609	-102.801	-14.6612	-17.8961
-16.5319	-17.6425	-107.906	-107.665	-14.659	-17.648
-16.4257	-17.6968	-98.6088	-104.072	-14.4911	-17.7028
-16.3817	-17.6031	-94.9678	-100.369	-14.3586	-17.6086
-16.3482	-17.583	-106.02	-105.662	-14.2473	-17.5839
-16.3785	-17.5376	-103.687	-100.975	-14.2464	-17.5392
-16.3374	-17.4705	-103.7	-111.244	-14.2075	-17.4658
-16.505	-17.4799	-103.362	-120.942	-14.219	-17.4782
-16.5271	-17.4762	-98.5332	-117.516	-14.217	-17.4746
-16.7119	-17.5191	-108.131	-103.427	-14.263	-17.5129
-16.5738	-17.4748	-105.83	-95.8306	-14.162	-17.4676
-16.7108	-17.463	-98.263	-98.3091	-14.1948	-17.4605
-16.6393	-17.452	-98.173	-109.418	-14.0975	-17.443
-16.6046	-17.5868	-93.1704	-95.3027	-14.0637	-17.58
-16.4957	-17.5811	-97.1066	-96.3526	-14.0281	-17.5743
-16.3625	-17.7005	-101.386	-107.809	-13.9239	-17.7004
-16.2948	-17.6916	-104.679	-94.5033	-13.9325	-17.6912
-16.3265	-17.8394	-102.36	-106.688	-14.0422	-17.8379
-16.3084	-17.9468	-101.696	-95.8056	-13.938	-17.9472
-16.2603	-18.0236	-102.817	-103.921	-14.0355	-18.0276
-16.175	-18.1784	-100.249	-94.6237	-14.0015	-18.1798
-16.022	-18.2164	-104.302	-97.7051	-13.9072	-18.2202
-15.8052	-18.285	-94.7356	-96.191	-13.8408	-18.301
-15.6057	-18.4226	-103.01	-95.062	-13.7269	-18.4321
-15.4461	-18.7625	-97.6032	-107.713	-13.6489	-18.7649

-15.3613	-18.7984	-99.0922	-96.0535	-13.6759	-18.8012
-15.2399	-19.0361	-102.62	-92.6086	-13.604	-19.0381
-15.1108	-19.1471	-103.44	-102.899	-13.5297	-19.1568
-14.9229	-19.2454	-97.9784	-101.247	-13.4343	-19.2461
-14.8147	-19.3055	-105.828	-97.0252	-13.4392	-19.3126
-14.8717	-19.3655	-101.588	-104.052	-13.3768	-19.3699
-14.6273	-19.3767	-109.429	-101.149	-13.466	-19.38
-14.4594	-19.5614	-98.346	-102.229	-13.3304	-19.5602
-14.3963	-19.3519	-103.431	-110.031	-13.3638	-19.3431
-14.1352	-19.6555	-107.943	-91.7933	-13.2496	-19.6457
-14.0574	-19.4735	-106.373	-108.383	-13.3218	-19.4646
-13.9471	-19.3812	-100.084	-108.448	-13.3921	-19.375
-13.7005	-19.2849	-97.7163	-99.7274	-13.2959	-19.2751
-13.5424	-19.2701	-104.155	-94.6272	-13.2592	-19.2701
-13.3829	-19.0858	-107.121	-102.388	-13.2744	-19.0848
-13.2083	-19.1046	-100.595	-98.3375	-13.2428	-19.0972
-13.0964	-18.5137	-114.629	-99.5852	-13.2753	-18.5142
-12.8435	-18.4652	-99.1514	-101.847	-13.1403	-18.4636
-12.6142	-18.1193	-96.5078	-104.495	-13.0795	-18.109
-12.3989	-18.1338	-109.859	-95.5323	-12.9044	-18.1225
-12.1601	-17.7958	-106.011	-101.34	-12.9473	-17.7995
-12.0625	-17.7912	-102.405	-98.1773	-12.7985	-17.7944
-11.9956	-17.5373	-95.1499	-98.8727	-12.9146	-17.5387
-12.0072	-17.1693	-95.4521	-117.949	-13.0658	-17.1809
-11.8262	-17.1042	-96.7825	-104.468	-12.871	-17.1078
-11.6555	-16.8952	-91.3122	-99.3471	-12.8163	-16.9033
-11.5348	-16.5778	-99.7727	-90.2807	-12.8706	-16.5819
-11.3807	-16.4819	-101.593	-99.8722	-12.8173	-16.4802
-11.3352	-16.1167	-97.3345	-112.875	-12.8265	-16.1254
-11.3359	-16.0995	-98.5692	-98.0531	-12.9268	-16.1124
-11.2052	-15.6807	-99.78	-96.5709	-13.0247	-15.6879
-11.1416	-15.6277	-97.3689	-102.304	-13.0804	-15.6338
-11.0346	-15.5431	-99.9432	-99.176	-13.1332	-15.5483
-11.0424	-15.3389	-98.2792	-98.4381	-13.2411	-15.3418
-10.8643	-15.2386	-103.641	-99.9445	-13.2786	-15.2409
-10.7431	-15.1167	-99.6552	-96.1091	-13.354	-15.1146
-10.646	-14.9048	-101.838	-97.0107	-13.5264	-14.9066
-10.508	-14.9966	-99.9398	-98.1753	-13.4928	-14.9952
-10.4895	-14.9033	-97.5669	-96.1741	-13.6889	-14.9053
-10.3497	-14.6204	-106.268	-103.011	-13.7135	-14.622
-10.0918	-14.5723	-103.209	-103.899	-13.6996	-14.5701
-9.96112	-14.5753	-101.826	-96.4796	-13.571	-14.5748
-9.78324	-14.6136	-96.9628	-99.2867	-13.5677	-14.6078
-9.66423	-14.6951	-106.413	-103.333	-13.4539	-14.6776
-9.42697	-14.4147	-104.784	-95.6647	-13.3121	-14.4353
-9.23748	-14.5323	-95.5618	-92.9328	-13.1415	-14.5184
-9.16739	-14.5465	-100.255	-91.4035	-13.0688	-14.5382
-9.04972	-14.6437	-100.273	-102.243	-12.922	-14.6453
-8.97903	-14.6446	-96.6508	-106.297	-12.8176	-14.6448
-8.81274	-14.4131	-93.5394	-98.3326	-12.6136	-14.415

J3-J8

S21 (dB)	S12 (dB)	S22 (dB)
-94.3485	-112.257	-17.3132
-101.14	-98.4823	-31.8414
-108.134	-112.595	-33.7463
-108.416	-111.125	-32.6561
-114.282	-109.674	-31.8282
-123.178	-111.208	-31.2662
-113.589	-107.774	-30.9492
-103.763	-112.77	-30.8481
-106.965	-115.018	-31.0197
-122.512	-107.172	-31.0512
-119.261	-118.947	-31.1847
-106.533	-120.019	-31.1613
-111.046	-104.129	-31.4648
-110.245	-103.192	-31.6667
-110.979	-116.122	-32.1337
-111.596	-107.365	-32.4272
-112.351	-121.632	-32.7628
-107.59	-109.426	-33.1811
-114.543	-109.661	-33.7965
-111.013	-109.885	-34.2744
-110.137	-116.328	-34.9724
-107.43	-115.912	-35.4932
-116.82	-107.486	-36.3319
-111.052	-110.097	-37.6775
-106.055	-114.667	-38.664
-117.126	-107.483	-40.7738
-108.993	-108.95	-42.6557
-122.011	-114.577	-46.0615
-120.915	-111.328	-49.2799
-115.502	-109.081	-45.8677
-122.858	-108.285	-42.0687
-117.671	-111.286	-39.9498
-112.218	-110.979	-39.3871
-119.887	-113.701	-39.0035
-105.78	-111.958	-39.6334
-110.528	-112.779	-40.1664
-109.703	-115.072	-41.0047
-113.476	-111.522	-41.4515
-118.092	-112.527	-40.6379
-113.22	-104.127	-39.9996
-126.446	-115.525	-39.0983

J4-J5

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.2922	-95.7287	-105.143	-18.0637
-32.0252	-99.1952	-108.048	-31.8825
-33.3588	-96.4136	-96.7703	-30.6172
-31.9495	-95.6143	-96.5218	-29.45
-31.1104	-96.9323	-96.1483	-28.7831
-30.5072	-97.5925	-96.2822	-28.4296
-30.1515	-99.4738	-99.8847	-28.2174
-29.9068	-99.2379	-103.952	-28.1587
-29.9205	-103.736	-102.249	-28.3038
-29.9742	-103.276	-102.116	-28.2649
-29.9106	-107.648	-102.991	-28.3631
-29.8522	-114.77	-112.314	-28.3247
-29.9578	-107.566	-108.295	-28.524
-29.9767	-104.013	-105.83	-28.6482
-30.16	-110.01	-112.218	-28.9212
-30.3858	-106.106	-123.748	-29.1266
-30.3203	-117.222	-104.435	-29.2611
-30.816	-110.828	-110.674	-29.4625
-30.9617	-108.154	-124.287	-29.6505
-31.2377	-110.386	-114.447	-29.7827
-31.4675	-116.01	-108.858	-29.9539
-31.6445	-110.628	-119.146	-30.1693
-32.297	-109.108	-108.415	-30.5272
-32.7214	-111.631	-106.697	-30.9425
-33.5408	-115.155	-107.814	-31.1037
-34.3611	-105.321	-110.6	-31.4798
-35.3781	-105.514	-124.441	-31.6935
-36.5611	-110.345	-109.012	-32.1703
-38.1761	-133.682	-114.533	-33.0011
-39.6813	-118.426	-108.165	-33.7951
-40.6555	-115.259	-116.857	-34.6735
-39.7224	-108.82	-107.454	-35.009
-38.6279	-110.293	-106.554	-34.5117
-37.7541	-107.617	-113.53	-33.9836
-37.3131	-104.107	-115.007	-33.3884
-37.7439	-118.238	-121.557	-33.164
-38.6213	-113.308	-105.363	-33.1361
-39.1745	-113.623	-109.398	-33.2665
-40.4336	-105.591	-116.373	-33.8748
-42.1164	-107.556	-113.666	-34.1614
-43.1679	-116.766	-108.487	-34.3522

-111.19	-112.272	-37.9542	-44.1075	-111.428	-109.036	-34.3669
-112.474	-104.41	-36.7837	-44.7392	-110.784	-105.319	-34.2548
-110.745	-111.044	-35.478	-43.3952	-114.897	-115.962	-34.1758
-105.666	-108.867	-34.6477	-41.5568	-121.175	-109.832	-34.0685
-106.857	-113.098	-33.8274	-40.169	-109.76	-111.027	-34.0919
-112.32	-119.685	-33.2045	-39.5185	-109.352	-108.927	-34.0344
-110.646	-115.125	-32.8699	-38.9991	-113.796	-113.053	-34.238
-115.186	-114.152	-33.0066	-38.7765	-114.045	-132.18	-33.8443
-113.944	-109.873	-33.1352	-38.6576	-110.818	-107.176	-33.6531
-124.346	-108.967	-33.4393	-39.3647	-108.008	-117.116	-32.685
-118.737	-109.902	-33.4939	-39.3502	-119.339	-115.245	-32.1807
-103.435	-104.47	-33.4663	-39.4483	-113.524	-104.945	-31.2852
-112.967	-107.296	-33.2551	-38.1533	-108.632	-104.662	-30.7602
-120.026	-104.812	-32.5065	-36.7859	-109.721	-112.17	-30.3389
-116.885	-117.593	-31.7516	-35.1972	-113.698	-113.511	-29.7573
-110.577	-124.073	-31.2051	-34.1213	-107.177	-109.149	-29.1973
-115.824	-112.362	-30.5713	-32.8543	-107.723	-107.307	-28.7484
-112.027	-106.212	-29.9298	-31.792	-111.598	-103.749	-28.2173
-110.182	-111.853	-29.1878	-30.8887	-109.455	-116.849	-27.6658
-105.425	-113.315	-28.5968	-30.029	-120.195	-117.467	-27.4006
-110.883	-115.267	-28.0147	-29.2618	-110.983	-108.133	-26.9558
-107.041	-124.474	-27.5479	-28.5437	-113.74	-105.877	-26.7031
-110.958	-108.721	-26.931	-27.9189	-105.914	-119.876	-26.2594
-109.001	-105.586	-26.4006	-27.443	-105.951	-113.592	-25.86
-136.664	-118.536	-26.0714	-26.8329	-114.007	-107.336	-25.5201
-115.915	-133.205	-25.5896	-26.5175	-108.939	-113.435	-25.0663
-118.155	-111.167	-25.2751	-25.9599	-108.507	-112.742	-24.729
-108.725	-114.675	-24.8176	-25.4473	-121.24	-116.204	-24.3806
-119.038	-120.683	-24.5421	-24.9911	-117.563	-110.306	-24.1957
-110.396	-119.015	-24.1987	-24.5797	-124.999	-105.763	-23.9576
-110.845	-118.942	-23.7609	-24.1087	-108.217	-112.381	-23.6917
-113.628	-114.781	-23.4096	-23.8409	-109.702	-104.59	-23.432
-110.025	-107.045	-22.9924	-23.3584	-110.541	-111.404	-23.112
-113.062	-108.929	-22.653	-23.0401	-114.456	-116.638	-22.8446
-116.085	-108.478	-22.1882	-22.5989	-114.474	-118.159	-22.4833
-122.965	-108.851	-21.8793	-22.2187	-121.91	-108.292	-22.2925
-115.108	-114.34	-21.5782	-21.9	-115.149	-108.631	-22.1661
-115.124	-108.742	-21.3342	-21.6408	-113.354	-106.978	-22.0796
-112.416	-111.783	-21.0008	-21.4302	-120.58	-110.061	-21.8684
-111.382	-112.296	-20.7984	-21.0857	-113.49	-113.961	-21.756
-109.621	-106.192	-20.5505	-20.9089	-107.98	-110.213	-21.5867
-113.203	-105.372	-20.2403	-20.6967	-123.524	-108.352	-21.2985
-109.703	-113.776	-19.9931	-20.4951	-111.569	-113.979	-21.0566
-114.747	-110.426	-19.7635	-20.268	-106.697	-111.181	-20.8597
-111.373	-107.699	-19.6166	-20.1146	-108.539	-111.539	-20.7915
-125.171	-119.554	-19.4407	-19.961	-118.896	-112.479	-20.6747
-113.622	-109.458	-19.3138	-19.7991	-127.42	-104.704	-20.6691
-114.426	-112.081	-19.1856	-19.7087	-131.154	-123.953	-20.6315
-116.707	-106.806	-19.0043	-19.4517	-112.744	-109.247	-20.4989
-112.794	-110.626	-18.8093	-19.4416	-112.423	-108.161	-20.3555
-115.243	-113.558	-18.5766	-19.2683	-115.251	-109.28	-20.1308
-107.021	-111.357	-18.4186	-19.1495	-104.902	-103.718	-20.0505
-107.657	-114.346	-18.1852	-18.9759	-120.046	-104.555	-19.8655
-113.126	-104.182	-18.0421	-18.9147	-112.059	-107.565	-19.8537
-115.467	-109.632	-17.9206	-18.8093	-104.347	-110.237	-19.8138

-108.462	-112.245	-17.8214	-18.719	-117.218	-107.046	-19.8451
-104.157	-109.366	-17.6839	-18.5518	-110.474	-103.684	-19.831
-109.076	-110.732	-17.6403	-18.4589	-109.746	-111.428	-19.8822
-111.857	-105.698	-17.6368	-18.3445	-110.278	-111.991	-20.0318
-116.409	-108.553	-17.4862	-18.2825	-105.562	-113.732	-19.9307
-112.913	-115.665	-17.4234	-18.2494	-109.518	-105.504	-19.9615
-109.283	-104.331	-17.4301	-18.1686	-106.956	-115.775	-20.1053
-118.492	-110.861	-17.3143	-18.1608	-107.314	-105.143	-20.085
-118.205	-123.729	-17.325	-18.1919	-110.217	-106.401	-20.2387
-104.552	-98.6393	-17.278	-18.0666	-121.157	-101.402	-20.3166
-101.988	-110.163	-17.299	-18.0772	-97.6583	-102.433	-20.5337
-102.292	-97.2141	-17.3558	-18.1055	-104.019	-102.084	-20.785
-110.892	-98.7828	-17.4134	-18.0095	-103.675	-99.7398	-21.0205
-100.911	-96.0605	-17.3598	-18.1105	-112.144	-108.366	-21.1127
-101.466	-105.013	-17.5101	-18.1234	-102.447	-97.2631	-21.5128
-96.4899	-117.811	-17.5059	-18.1392	-99.4548	-112.648	-21.6044
-105.466	-98.8221	-17.4271	-18.0493	-99.3899	-118.916	-21.564
-95.3517	-101.992	-17.4356	-17.9126	-104.03	-110.342	-21.645
-102.954	-95.85	-17.4682	-18.0185	-105.52	-98.0712	-21.7925
-94.0042	-101.589	-17.4491	-18.0601	-99.7132	-109.148	-21.7927
-102.248	-100.176	-17.4425	-18.1263	-99.0626	-97.0662	-21.951
-98.3655	-103.396	-17.3769	-18.0502	-98.7241	-101.252	-21.913
-99.3558	-109.195	-17.3434	-18.005	-98.3286	-98.4644	-21.8585
-99.3866	-117.109	-17.3274	-18.0507	-101.885	-101.583	-21.7355
-98.2391	-96.9519	-17.2163	-17.9861	-98.4616	-100.792	-21.6069
-97.5556	-103.829	-17.0486	-17.8904	-99.8814	-100.807	-21.1952
-98.4122	-94.25	-16.8697	-17.9686	-113.849	-98.0089	-20.8724
-99.5646	-104.217	-16.9147	-18.0692	-98.3116	-96.1549	-20.8413
-97.7947	-102.694	-16.8735	-18.02	-107.912	-125.299	-20.7886
-108.128	-97.6536	-16.6603	-18.0376	-101.083	-95.4065	-20.4643
-97.4258	-104.558	-16.6375	-18.0919	-104.764	-97.6722	-20.3915
-103.64	-99.2815	-16.6775	-18.0292	-95.4344	-96.3851	-20.5505
-106.043	-96.0938	-16.4774	-18.1205	-100.554	-95.9665	-20.2391
-107.057	-91.7369	-16.3586	-18.1386	-93.4073	-97.146	-20.0647
-101.18	-96.7066	-16.2655	-18.221	-124.382	-106.108	-19.8833
-116.87	-104.118	-16.2236	-18.255	-97.5318	-99.3286	-19.742
-103.395	-98.9961	-16.1161	-18.2581	-106.734	-96.3363	-19.4986
-100.906	-111.315	-16.139	-18.3987	-98.0672	-97.986	-19.6448
-104.283	-92.6137	-16.0507	-18.487	-96.0529	-121.952	-19.4699
-105.53	-101.261	-16.0911	-18.5335	-104.521	-98.8608	-19.5532
-102.887	-93.8449	-15.9495	-18.5953	-101.239	-93.3161	-19.172
-99.5329	-100.496	-16.0259	-18.6526	-114.93	-96.5921	-19.1933
-100.151	-99.6449	-15.9601	-18.5994	-113.058	-98.6839	-18.9813
-100.809	-95.4946	-15.9432	-18.8448	-100.333	-95.0922	-18.7721
-95.5225	-99.4145	-15.8584	-18.9205	-102.048	-105.506	-18.4583
-97.803	-94.382	-15.7146	-19.0947	-101.894	-95.4704	-18.1834
-97.2958	-100.136	-15.6814	-19.184	-95.6093	-95.2719	-17.9068
-100.82	-105.695	-15.7235	-19.37	-92.1506	-90.0256	-17.77
-93.6197	-97.5823	-15.6673	-19.5488	-92.5089	-91.8113	-17.6845
-98.403	-96.3859	-15.7039	-19.6897	-95.121	-101.498	-17.465
-100.645	-90.6883	-15.671	-19.9474	-94.7054	-96.8673	-17.2947
-105.011	-95.0792	-15.5693	-20.0655	-92.0859	-96.4367	-17.063
-110.095	-102.809	-15.4379	-20.1804	-100.754	-94.4813	-16.7146
-99.5177	-107.187	-15.3219	-20.5783	-99.833	-94.4627	-16.4677
-103.274	-98.852	-15.2617	-20.8531	-96.298	-93.7733	-16.25

-95.1056	-105.581	-15.195	-21.0913	-95.1425	-96.6765	-16.1261
-103.132	-95.0002	-15.0856	-21.4784	-101.602	-96.9424	-15.9783
-93.0506	-98.9971	-14.9481	-21.8673	-101.581	-97.5277	-15.8044
-102.905	-103.325	-14.8538	-22.0492	-100.056	-102.242	-15.5961
-104.216	-98.3607	-14.7584	-22.3345	-98.3108	-92.6967	-15.4412
-100.791	-101.486	-14.8422	-22.4675	-99.1832	-99.4803	-15.4934
-96.1112	-95.7551	-14.7128	-22.6616	-105.143	-100.5	-15.2328
-122.496	-96.1171	-14.5579	-22.9981	-96.9194	-100.592	-15.0552
-99.1472	-106.698	-14.5406	-22.9239	-106.395	-101.97	-14.9911
-97.206	-103.71	-14.2839	-23.3574	-102.184	-104.757	-14.7214
-99.3715	-101.246	-14.2833	-23.1068	-96.806	-104.372	-14.6677
-100.614	-97.6732	-14.2079	-23.0012	-93.1465	-99.078	-14.5787
-103.376	-92.5354	-13.984	-22.7178	-99.6835	-100.797	-14.3518
-98.2084	-108.003	-13.8157	-22.5521	-99.2882	-97.4985	-14.1971
-116.239	-101.343	-13.7028	-22.1251	-101.116	-100.343	-14.064
-97.9506	-110.447	-13.5589	-21.8833	-98.1544	-108.535	-13.9169
-105.143	-102.4	-13.46	-20.938	-101.353	-93.9242	-13.8246
-98.2246	-97.2058	-13.2125	-20.5927	-98.1351	-95.5937	-13.6298
-103.864	-102.546	-13.0001	-19.9472	-105.405	-93.1024	-13.4437
-101.26	-94.0715	-12.7279	-19.7227	-107.852	-109.55	-13.236
-94.5975	-104.304	-12.5294	-19.1021	-97.7154	-101.854	-13.0887
-105.461	-100.665	-12.3301	-18.7754	-100.415	-94.3751	-13.011
-115.747	-99.7499	-12.2951	-18.2208	-101.873	-98.3071	-12.9991
-111.628	-106.778	-12.2789	-17.5517	-99.8796	-96.617	-13.1213
-107.735	-98.8015	-11.9998	-17.2372	-101.232	-100.417	-12.956
-100.63	-99.3958	-11.784	-16.8111	-100.544	-94.1137	-12.8056
-103.339	-100.016	-11.693	-16.2383	-99.8465	-108.491	-12.7741
-103.656	-93.95	-11.4841	-15.9467	-105.042	-99.5646	-12.6638
-98.4559	-114.633	-11.4055	-15.3595	-101.872	-97.0115	-12.6705
-98.0456	-97.1706	-11.3568	-15.1457	-106.475	-98.9162	-12.7702
-99.7392	-106.102	-11.2044	-14.5617	-101.423	-95.5498	-12.7572
-108.746	-98.2599	-11.1005	-14.3104	-96.9438	-111.145	-12.793
-102.881	-102.94	-10.967	-14.0645	-92.9491	-94.562	-12.7979
-97.0829	-96.451	-10.9331	-13.6909	-110.477	-96.8969	-12.9047
-101.197	-101.401	-10.7469	-13.3886	-106.098	-93.9181	-12.8419
-99.6988	-104.321	-10.6397	-13.1033	-122.87	-95.1693	-12.8511
-95.9608	-99.1359	-10.5673	-12.7848	-98.8344	-101.569	-12.9014
-101.419	-103.671	-10.391	-12.6774	-107.845	-104.274	-12.8351
-100.939	-93.7959	-10.3585	-12.4508	-95.9469	-107.507	-12.9421
-95.3823	-93.3531	-10.2406	-12.1094	-107.601	-117.731	-12.9069
-102.798	-98.5039	-10.0104	-11.9023	-92.3045	-92.955	-12.738
-96.1765	-100.016	-9.86544	-11.7327	-98.9652	-122.009	-12.602
-102.598	-94.2147	-9.7227	-11.5775	-94.4172	-96.9127	-12.5264
-94.2927	-96.7191	-9.6125	-11.4937	-97.8854	-100.733	-12.4018
-96.6444	-94.5466	-9.4056	-11.1856	-105.284	-97.0316	-12.2154
-105.669	-100.35	-9.25145	-11.1108	-102.816	-108.363	-12.0363
-94.7557	-102.302	-9.16584	-10.9248	-93.3801	-93.2956	-11.9838
-102.284	-101.106	-9.02174	-10.9278	-103.488	-92.9483	-11.8901
-102.08	-102.438	-8.94642	-10.8297	-95.3243	-100.989	-11.8407
-98.9286	-114.793	-8.73869	-10.6059	-91.8444	-101.505	-11.6754

J4-J6

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-17.2907	-108.977	-101.27	-17.6655
-32.0271	-104.488	-120.491	-33.2057
-33.349	-111.943	-112.76	-32.356
-31.9328	-105.454	-111.597	-30.9446
-31.0988	-115.121	-116.153	-30.178
-30.5072	-112.456	-110.141	-29.7267
-30.1633	-119.139	-111.059	-29.5399
-29.9214	-114.753	-115.688	-29.5188
-29.9291	-113.392	-106.157	-29.7667
-29.9813	-117.59	-107.741	-29.7983
-29.9133	-107.089	-110.735	-29.9949
-29.8549	-131.515	-102.671	-30.02
-29.9623	-118.357	-105	-30.2999
-29.984	-114.352	-113.454	-30.5197
-30.1735	-111.379	-121.456	-30.9821
-30.3997	-111.658	-107.194	-31.3252
-30.3261	-110.372	-121.396	-31.5876
-30.8228	-115.134	-111.776	-31.887
-30.9689	-119.792	-112.488	-32.3148
-31.2455	-114.407	-109.15	-32.797
-31.4746	-120.666	-110.936	-33.6027
-31.6513	-113.066	-106.829	-34.2557
-32.3044	-121.534	-115.794	-34.8593
-32.7352	-119.302	-108.54	-35.8526
-33.5546	-116.987	-103.472	-36.488
-34.3784	-108.743	-122.468	-37.2788
-35.3839	-128.368	-110.602	-37.9832
-36.5727	-121.709	-116.681	-38.7357
-38.2038	-121.138	-117.119	-37.7306
-39.7426	-110.935	-108.41	-36.0109
-40.7271	-115.328	-108.983	-34.1208
-39.7654	-112.901	-105.629	-32.8446
-38.6518	-132.329	-107.28	-32.2147
-37.7575	-107.405	-137.808	-31.9161
-37.3309	-114.157	-112.327	-32.2591
-37.7668	-111.475	-122.957	-32.4735
-38.6621	-108.008	-107.88	-32.9257
-39.2264	-115.781	-126.546	-33.127
-40.474	-114.594	-112.164	-32.7645
-42.131	-112.955	-110.66	-32.5994
-43.1405	-109.662	-108.55	-32.5236

J4-J7

S11 (dB)	S21 (dB)	S12 (dB)
-17.2943	-97.1913	-100.698
-32.0252	-98.6145	-99.9388
-33.3455	-112.188	-114.503
-31.929	-108.482	-105.463
-31.0971	-111.688	-113.804
-30.5056	-118.713	-118.01
-30.1605	-119.857	-111.969
-29.9192	-111.667	-115.624
-29.9286	-118.206	-107.079
-29.982	-105.805	-105.493
-29.9129	-108.48	-117.095
-29.8526	-110.939	-114.468
-29.9609	-111.743	-109.015
-29.9831	-110.347	-107.422
-30.1736	-111.271	-112.706
-30.4001	-137.523	-110.746
-30.3251	-117.114	-117.063
-30.8206	-113.855	-111.402
-30.968	-114.279	-103.029
-31.2456	-107.434	-115.477
-31.4711	-113.79	-106.698
-31.65	-120.581	-106.77
-32.3021	-109.425	-105.524
-32.7335	-124.466	-108.617
-33.5526	-109.947	-113.908
-34.3751	-108.905	-105.843
-35.38	-105.493	-106.791
-36.5649	-108.129	-107.866
-38.1947	-110.072	-120.258
-39.7284	-115.272	-108.847
-40.715	-105.795	-112.378
-39.7612	-111.476	-115.618
-38.6476	-114.687	-121.629
-37.7564	-118.353	-108.099
-37.3247	-108.232	-121.351
-37.7641	-124.585	-117.553
-38.6561	-110.067	-118.132
-39.2191	-116.283	-109.275
-40.4691	-119.158	-108.995
-42.1198	-111.255	-105.906
-43.117	-110.572	-110.777

-44.0488	-116.936	-105.519	-32.4809
-44.7135	-109.611	-112.719	-32.48
-43.4093	-113.779	-120.925	-32.1867
-41.5706	-109.478	-118.386	-31.8711
-40.1517	-114.257	-125.607	-31.3421
-39.4894	-108.775	-118.156	-30.9311
-38.957	-112.213	-118.489	-30.6394
-38.7061	-113.925	-108.332	-30.8984
-38.5991	-121.698	-116.264	-31.1256
-39.2867	-117.675	-112.111	-31.803
-39.2632	-111.124	-111.161	-32.1845
-39.3474	-112.573	-113.528	-32.6426
-38.041	-108.618	-107.431	-33.057
-36.6901	-117.37	-111.754	-32.8301
-35.1198	-115.547	-108.992	-32.6614
-34.0555	-120.257	-109.68	-32.7508
-32.7935	-119.28	-110.534	-32.4319
-31.7373	-110.885	-106.961	-31.8632
-30.8247	-106.856	-110.837	-30.9155
-29.9695	-107.456	-109.649	-30.2168
-29.203	-114.746	-119.997	-29.684
-28.4908	-110.753	-103.706	-29.314
-27.869	-113.852	-115.039	-28.6071
-27.3969	-119.653	-113.793	-28.059
-26.7872	-111.156	-104.912	-27.5807
-26.4658	-115.55	-111.411	-26.894
-25.9046	-128.306	-109.107	-26.3787
-25.3909	-113.505	-113.102	-25.7936
-24.9325	-107.817	-109.278	-25.439
-24.5219	-107.799	-107.15	-25.0336
-24.051	-113.023	-118.557	-24.5366
-23.7879	-125.523	-116.989	-24.0593
-23.3054	-112.463	-104.696	-23.52
-22.9826	-106.077	-122.582	-23.0316
-22.5391	-115.928	-115.042	-22.4027
-22.1607	-107.697	-115.72	-22.0381
-21.8452	-112.4	-111.668	-21.7368
-21.591	-119.142	-114.186	-21.4771
-21.3851	-107.664	-108.955	-21.0636
-21.0435	-109.284	-119.963	-20.7958
-20.8688	-107.716	-112.648	-20.463
-20.6575	-110.542	-115.183	-20.0339
-20.455	-112.621	-117.081	-19.6724
-20.2297	-110.831	-117.131	-19.3644
-20.0824	-109.576	-116.127	-19.1726
-19.9328	-110.289	-104.846	-18.9286
-19.7732	-105.493	-128.915	-18.7809
-19.683	-110.849	-112.776	-18.5756
-19.4247	-115.824	-124.062	-18.2941
-19.4114	-113.324	-125.191	-18.0097
-19.2374	-111.096	-113.201	-17.6572
-19.1219	-114.208	-117.129	-17.4258
-18.9522	-119.375	-120.348	-17.1245
-18.8927	-124.686	-107	-16.9272
-18.7826	-105.491	-114.663	-16.7281

-44.0282	-109.989	-115.743
-44.6987	-107.011	-109.455
-43.4015	-105.262	-113.457
-41.5699	-123.369	-110.729
-40.157	-119.689	-106.356
-39.4913	-112.345	-111.147
-38.9579	-111.775	-109.681
-38.7077	-110.363	-106.623
-38.595	-112.267	-115.739
-39.2812	-118.652	-111.728
-39.2616	-112.225	-112.74
-39.34	-108.307	-108.636
-38.0438	-118.495	-111.534
-36.6916	-138.063	-112.719
-35.1262	-113.837	-114.133
-34.0583	-107.708	-106.657
-32.798	-109.472	-114.385
-31.7395	-106.229	-105.373
-30.8269	-118.103	-111.937
-29.9687	-111.241	-114.234
-29.2024	-110.913	-107.378
-28.4904	-124.308	-121.616
-27.8698	-109.001	-104.937
-27.3984	-106.702	-119.698
-26.7875	-114.192	-106.602
-26.4662	-127.77	-113.093
-25.9045	-109.292	-114.309
-25.3907	-126.528	-125.922
-24.9328	-119.491	-111.32
-24.5221	-114.808	-110.798
-24.0565	-114.221	-112.388
-23.7882	-115.873	-115.388
-23.3061	-129.979	-110.181
-22.9826	-120.408	-115.67
-22.538	-121.578	-111.453
-22.159	-132.656	-109.194
-21.8452	-116.456	-106.659
-21.5918	-114.89	-114.185
-21.3885	-113.036	-109.298
-21.046	-115.384	-104.218
-20.869	-109.409	-109.066
-20.6583	-114.865	-109.261
-20.4572	-115.167	-104.906
-20.2311	-110.415	-100.404
-20.0843	-117.577	-110.283
-19.9331	-107.262	-119.297
-19.7744	-111.541	-109.046
-19.6838	-117.049	-111.564
-19.4286	-112.949	-111.734
-19.4125	-120.178	-110.908
-19.2414	-117.728	-112.369
-19.1195	-106.451	-118.154
-18.9504	-130.075	-113.051
-18.893	-112.252	-114.984
-18.7851	-106.89	-113.74

-18.691	-114.535	-102.94	-16.5873
-18.5211	-112.965	-105.154	-16.383
-18.4292	-113.312	-106.615	-16.286
-18.3127	-116.676	-116.271	-16.2137
-18.2487	-107.192	-105.537	-16.0102
-18.2183	-107.01	-112.396	-15.8692
-18.1395	-117.146	-110.151	-15.8244
-18.1319	-113.675	-106.617	-15.6677
-18.1618	-115.517	-101.711	-15.6224
-18.0349	-103.926	-102.368	-15.5671
-18.0509	-98.663	-104.276	-15.5423
-18.0791	-101.637	-102.417	-15.5618
-17.9812	-98.0446	-100.944	-15.605
-18.0798	-100.54	-104.545	-15.515
-18.0957	-104.745	-102.968	-15.594
-18.1125	-101.611	-101.628	-15.5222
-18.024	-97.2047	-94.5315	-15.4362
-17.8873	-98.961	-100.997	-15.4187
-17.9988	-104.181	-103.817	-15.421
-18.0391	-105.194	-96.9712	-15.4058
-18.1093	-96.3129	-97.6546	-15.4008
-18.0368	-103.459	-105.017	-15.3287
-17.9969	-104.575	-105.17	-15.2861
-18.0433	-97.0479	-100.416	-15.2287
-17.9804	-96.9771	-101.747	-15.0407
-17.8846	-98.8909	-129.84	-14.8907
-17.9713	-100.644	-99.496	-14.7332
-18.0737	-109.528	-109.059	-14.7586
-18.024	-112.15	-97.734	-14.7469
-18.0524	-123.104	-94.7232	-14.5995
-18.1052	-109.657	-107.331	-14.6038
-18.0498	-105.1	-96.8116	-14.5964
-18.1371	-110.479	-95.5814	-14.4176
-18.1544	-105.145	-100.946	-14.2905
-18.2372	-104.652	-104.218	-14.1817
-18.2716	-101.903	-96.2272	-14.1745
-18.2798	-97.7124	-103.213	-14.1476
-18.4208	-103.207	-102.852	-14.1663
-18.5124	-103.645	-98.4443	-14.1546
-18.5514	-102.746	-96.106	-14.222
-18.6172	-101.434	-102.27	-14.1156
-18.6747	-94.6123	-95.9816	-14.1474
-18.6117	-103.499	-97.4193	-14.0486
-18.8469	-107.153	-99.3023	-14.0095
-18.9306	-99.0932	-108.333	-14.001
-19.1148	-116.613	-100.419	-13.9064
-19.2082	-100.872	-97.2973	-13.9205
-19.4056	-108.877	-99.3547	-14.0409
-19.5935	-109.48	-91.5096	-13.9282
-19.7315	-97.7296	-93.9826	-14.0161
-20.0025	-111.772	-95.139	-13.9968
-20.107	-112.562	-96.9047	-13.9117
-20.2402	-96.9846	-98.2091	-13.8294
-20.6376	-99.5248	-103.8	-13.7151
-20.9148	-107.641	-108.244	-13.6349

-18.6931	-106.82	-119.485
-18.5236	-108.317	-106.263
-18.4316	-116.94	-105.156
-18.3154	-105.469	-110.175
-18.2506	-115.199	-111.376
-18.2202	-106.35	-104.673
-18.1402	-115.735	-103.458
-18.1335	-116.756	-101.492
-18.1635	-122.248	-104.546
-18.0363	-101.597	-98.8549
-18.0483	-97.5258	-99.7093
-18.0759	-103.399	-99.5244
-17.9851	-102.042	-95.7345
-18.0838	-111.432	-103.044
-18.096	-104.635	-97.3161
-18.1125	-104.494	-107.34
-18.0253	-95.3939	-97.9994
-17.8856	-101.554	-97.0281
-18.0011	-103.831	-110.151
-18.0394	-96.8722	-101.708
-18.1105	-101.343	-98.4729
-18.0385	-103.672	-98.5371
-17.9993	-116.701	-96.7755
-18.0476	-102.756	-104.805
-17.9814	-105.219	-99.214
-17.888	-109.694	-101.297
-17.9714	-97.4343	-112.676
-18.077	-104.703	-99.8593
-18.0272	-100.719	-99.7941
-18.0551	-102.496	-98.8342
-18.1055	-103.915	-101.607
-18.0506	-101.851	-96.7863
-18.1389	-101.091	-95.7117
-18.156	-101.275	-106.391
-18.2394	-102.234	-104.642
-18.2719	-110.329	-94.3953
-18.2774	-100.137	-95.8925
-18.424	-101.197	-105.242
-18.5124	-97.5276	-93.2403
-18.5542	-110.417	-105.522
-18.6172	-99.0066	-110.728
-18.6738	-101.889	-95.5138
-18.6087	-98.4691	-103.453
-18.8526	-96.2027	-95.1897
-18.9324	-108.261	-110.454
-19.1123	-97.582	-102.565
-19.2089	-110.785	-96.0842
-19.4063	-103.141	-100.997
-19.5893	-108.151	-98.6205
-19.7409	-107.036	-96.8037
-20.0073	-105.247	-104.46
-20.1041	-103.659	-97.4066
-20.2413	-97.7306	-101.129
-20.6324	-99.6294	-97.9045
-20.9164	-100.683	-105.686

-21.17	-101.301	-103.821	-13.6529	-21.1652	-95.2787	-98.6844
-21.5543	-93.0003	-96.528	-13.5933	-21.5531	-92.2874	-105.451
-21.9573	-97.1431	-100.062	-13.5418	-21.9561	-103.147	-97.4299
-22.1482	-101.197	-103.084	-13.4293	-22.1464	-111.281	-102.312
-22.4375	-98.9101	-107.007	-13.4324	-22.4402	-96.2467	-99.8678
-22.5758	-96.604	-100.475	-13.3544	-22.5806	-94.1029	-100.092
-22.7809	-97.379	-101.141	-13.4698	-22.7801	-98.8171	-96.0972
-23.1102	-102.388	-98.6601	-13.3239	-23.1079	-104.695	-94.5123
-23.0187	-93.2036	-95.1865	-13.3696	-23.0155	-101.426	-101.014
-23.4492	-99.8207	-98.0627	-13.2654	-23.4464	-96.589	-105.21
-23.1929	-96.472	-99.0785	-13.3429	-23.1895	-94.5179	-96.287
-23.0713	-102.195	-95.027	-13.42	-23.0749	-101.488	-103.618
-22.7866	-118.53	-97.0481	-13.3264	-22.7797	-119.739	-104.696
-22.6081	-98.9679	-103.055	-13.2848	-22.6108	-102.71	-99.808
-22.1775	-99.916	-101.922	-13.2929	-22.1676	-99.2487	-111.445
-21.925	-96.5165	-94.1668	-13.2489	-21.9227	-99.6051	-98.6958
-20.9824	-97.8835	-92.9411	-13.2931	-20.9688	-99.8744	-100.351
-20.6204	-112.505	-111.73	-13.1476	-20.6209	-103.489	-95.7301
-19.9684	-95.657	-102.8	-13.0839	-19.9666	-99.1385	-104.149
-19.7389	-102.002	-107.302	-12.9083	-19.7404	-109.608	-103.652
-19.1113	-100.259	-105.44	-12.9754	-19.1075	-105.214	-102.871
-18.7881	-106.554	-103.032	-12.7996	-18.7894	-109.391	-101.909
-18.2341	-121.452	-98.5462	-12.9178	-18.2343	-94.4621	-98.1314
-17.571	-95.2126	-97.1592	-13.0483	-17.5695	-102.758	-100.361
-17.2539	-116.479	-96.4147	-12.8468	-17.2538	-103.116	-99.0446
-16.8204	-101.826	-102.584	-12.7985	-16.8268	-102.105	-98.9201
-16.2354	-98.0946	-113.923	-12.8537	-16.2382	-97.8829	-99.9562
-15.9429	-116.998	-96.198	-12.7776	-15.9466	-100.98	-103.106
-15.3492	-108.397	-109.149	-12.7964	-15.3584	-96.9196	-101.543
-15.147	-95.6742	-102.446	-12.8868	-15.1467	-103.903	-105.439
-14.5544	-102.292	-100.971	-12.9974	-14.555	-100.451	-101.122
-14.3064	-97.6075	-100.884	-13.0802	-14.3085	-98.6141	-99.456
-14.0619	-95.3453	-94.9018	-13.1332	-14.062	-101.884	-98.3761
-13.689	-101.268	-98.9606	-13.2704	-13.6853	-97.0192	-97.7017
-13.3837	-106.277	-94.3913	-13.3173	-13.382	-103.702	-93.629
-13.0988	-106.534	-97.0755	-13.4224	-13.0994	-110.341	-107.448
-12.7773	-99.3596	-93.425	-13.6154	-12.777	-102.893	-101.678
-12.6681	-110.253	-105.642	-13.5839	-12.671	-98.0906	-98.7894
-12.4355	-98.5248	-96.333	-13.8003	-12.438	-100.967	-95.2168
-12.0913	-97.0212	-96.5532	-13.8316	-12.0918	-94.1397	-98.9863
-11.8894	-98.7663	-107.753	-13.8264	-11.8917	-108.676	-100.17
-11.7176	-96.4355	-104.877	-13.6825	-11.7173	-98.5038	-96.2551
-11.5617	-100.022	-97.314	-13.6698	-11.5584	-105.028	-93.0934
-11.4691	-101.839	-92.5894	-13.5136	-11.473	-93.455	-95.0842
-11.1763	-101.539	-89.3399	-13.3492	-11.1723	-107.976	-99.0086
-11.0954	-107.733	-100.116	-13.1459	-11.0967	-101.716	-92.6456
-10.9122	-96.5694	-93.0656	-13.0362	-10.9124	-98.9873	-104.346
-10.9162	-102.151	-106.43	-12.8543	-10.9186	-92.96	-99.7152
-10.8216	-103.773	-98.1815	-12.7195	-10.8185	-95.4266	-95.3099
-10.5983	-109.102	-99.3177	-12.4859	-10.6012	-102.805	-95.8479

J4-J8

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.6662	-17.2912	-95.2864	-99.1664	-17.2995	-18.06
-33.204	-32.0266	-104.678	-102.657	-31.864	-31.6418
-32.3537	-33.3426	-104.492	-104.438	-33.763	-30.6073
-30.9447	-31.9302	-117.709	-111.038	-32.6633	-29.4194
-30.1782	-31.0947	-111.796	-106.599	-31.8099	-28.7831
-29.7276	-30.5049	-108.338	-113.397	-31.2203	-28.3282
-29.5391	-30.1637	-126.201	-107.968	-30.8961	-28.0748
-29.5182	-29.9246	-113.602	-112.939	-30.8199	-27.9131
-29.766	-29.931	-111.275	-104.821	-31.0151	-27.9588
-29.7989	-29.9846	-109.04	-109.506	-31.0682	-28.0391
-29.9947	-29.9135	-116.033	-116.857	-31.1846	-28.0034
-30.0221	-29.8551	-119.578	-107.267	-31.1465	-27.9781
-30.3015	-29.9665	-124.567	-110.737	-31.4505	-28.1214
-30.5191	-29.9887	-118.372	-109.146	-31.6342	-28.1853
-30.9829	-30.1782	-110.723	-109.005	-32.1165	-28.3574
-31.327	-30.4015	-112.989	-109.012	-32.4269	-28.5448
-31.5907	-30.326	-111.871	-106.603	-32.7687	-28.514
-31.8912	-30.8209	-110.998	-114.083	-33.2018	-28.9386
-32.3195	-30.9727	-113.518	-109.772	-33.7662	-29.1388
-32.8013	-31.248	-109.114	-111.033	-34.2437	-29.3562
-33.6104	-31.4728	-105.922	-106.402	-34.906	-29.5348
-34.2636	-31.6508	-110.393	-115.381	-35.4273	-29.6458
-34.8688	-32.3074	-114.765	-108.772	-36.2767	-30.1778
-35.8642	-32.734	-106.395	-107.715	-37.6301	-30.5069
-36.4978	-33.5568	-106.268	-106.517	-38.6546	-31.1593
-37.2943	-34.3801	-113.937	-107.735	-40.6854	-31.7459
-38	-35.383	-107.662	-120.758	-42.4602	-32.3062
-38.7545	-36.5673	-109.864	-113.082	-45.6974	-33.1848
-37.756	-38.1948	-116.826	-110.005	-49.2531	-34.374
-36.032	-39.7285	-109.531	-113.874	-46.2687	-35.5156
-34.1339	-40.7141	-126.561	-106.526	-42.2808	-36.307
-32.8576	-39.7571	-113.412	-112.001	-40.133	-36.6851
-32.2292	-38.644	-108.645	-107.491	-39.4812	-36.8011
-31.9262	-37.7478	-112.407	-106.908	-39.081	-36.6304
-32.2714	-37.3218	-118.764	-115.954	-39.7653	-36.3277
-32.4839	-37.7607	-106.161	-113.645	-40.3169	-36.2153
-32.9383	-38.6518	-111.5	-112.794	-41.2067	-36.2308
-33.1425	-39.2155	-109.835	-116.326	-41.6628	-36.3003
-32.7776	-40.463	-119.216	-105.366	-40.6668	-36.2565
-32.6119	-42.097	-107.417	-111.258	-40.0056	-35.8742
-32.5371	-43.087	-114.749	-109.036	-39.1306	-35.7201

-32.4907	-44.0032	-110.836	-119.306	-38.1162	-35.4163
-32.4915	-44.6931	-114.943	-111.708	-36.9782	-34.9696
-32.1989	-43.4256	-121.328	-113.064	-35.6495	-34.6176
-31.8832	-41.5978	-113.752	-109.735	-34.8069	-34.596
-31.3513	-40.1818	-112.223	-116.954	-33.9319	-34.3183
-30.9392	-39.5181	-114.667	-120.487	-33.2452	-33.9096
-30.6448	-38.9723	-118.201	-104.903	-32.8672	-33.6506
-30.9037	-38.7213	-110.267	-109.115	-32.9667	-32.8035
-31.1291	-38.6115	-106.125	-109.524	-33.078	-32.1749
-31.8077	-39.2962	-109.061	-109.263	-33.3681	-31.6452
-32.1917	-39.2764	-131.668	-107.647	-33.4831	-30.7365
-32.6499	-39.3645	-119.402	-112.509	-33.4524	-30.1044
-33.0655	-38.0467	-110.891	-117.618	-33.311	-29.3395
-32.8383	-36.7009	-109.909	-107.94	-32.6014	-28.6721
-32.6679	-35.132	-110.708	-108.128	-31.8013	-27.9472
-32.757	-34.0644	-117.485	-120.752	-31.2193	-27.457
-32.438	-32.8029	-112.565	-108.026	-30.5511	-26.9053
-31.8704	-31.7414	-106.512	-108.254	-29.8929	-26.4461
-30.922	-30.8233	-111.219	-106.787	-29.1408	-26.0292
-30.2238	-29.9636	-126.172	-116.089	-28.6099	-25.6396
-29.6873	-29.1976	-113.464	-107.075	-28.0735	-25.2653
-29.3145	-28.4831	-115.2	-103.972	-27.6286	-24.9075
-28.6087	-27.8663	-116.294	-111.019	-26.9653	-24.6074
-28.0619	-27.3947	-115.394	-115.626	-26.4191	-24.3839
-27.5839	-26.7865	-112.541	-106.795	-26.0369	-24.0582
-26.8953	-26.4621	-118.131	-113.984	-25.5588	-23.9363
-26.3782	-25.896	-112.435	-112.978	-25.2377	-23.6401
-25.7932	-25.3824	-110.862	-124.314	-24.8268	-23.3519
-25.4376	-24.9224	-108.668	-114.211	-24.5882	-23.0987
-25.0328	-24.5117	-114.407	-139.1	-24.2503	-22.8957
-24.5363	-24.043	-112.783	-120.362	-23.8011	-22.6588
-24.0576	-23.7783	-118.449	-113.487	-23.4115	-22.5827
-23.5204	-23.2931	-113.875	-113.003	-22.9802	-22.2998
-23.03	-22.9704	-133.555	-117.359	-22.6433	-22.2168
-22.4005	-22.5255	-111.633	-108.74	-22.1462	-21.9825
-22.0348	-22.1455	-108.622	-112.782	-21.8728	-21.7755
-21.7345	-21.8305	-108.778	-115.389	-21.6187	-21.6647
-21.4749	-21.5802	-109.931	-117.397	-21.3919	-21.5864
-21.0591	-21.3801	-111.187	-110.959	-21.0174	-21.556
-20.7928	-21.0364	-113.854	-122.148	-20.8244	-21.3743
-20.4609	-20.8637	-107.69	-108.084	-20.5805	-21.3653
-20.0309	-20.6518	-109.28	-114.934	-20.2601	-21.3248
-19.6688	-20.4475	-107.094	-105.207	-20.0074	-21.2412
-19.3621	-20.2279	-114.13	-111.835	-19.7811	-21.1621
-19.1702	-20.0778	-115.652	-108.961	-19.6465	-21.1486
-18.9243	-19.9284	-113.902	-105.264	-19.4641	-21.1241
-18.7771	-19.7737	-107.811	-104.188	-19.3518	-21.1019
-18.5721	-19.6844	-110.903	-113.564	-19.2193	-21.1468
-18.2894	-19.4238	-111.127	-118.291	-19.0267	-20.9939
-18.0061	-19.4104	-112.806	-108.688	-18.8187	-21.132
-17.6536	-19.2376	-112.526	-112.556	-18.5743	-21.0733
-17.4224	-19.1201	-114.286	-111.968	-18.4002	-21.0867
-17.1177	-18.9519	-113.004	-104.799	-18.1354	-21.0008
-16.9248	-18.8921	-113.408	-126.014	-17.995	-21.0707
-16.7244	-18.7814	-120.972	-109.748	-17.8324	-21.0922

-16.5857	-18.6896	-118.467	-110.6	-17.7512	-21.1267
-16.3796	-18.5208	-117.722	-106.478	-17.6057	-21.0696
-16.2837	-18.4285	-114.997	-111.684	-17.5818	-21.046
-16.2105	-18.3078	-116.13	-108.352	-17.5881	-21.0529
-16.0108	-18.247	-106.463	-105.133	-17.44	-21.1166
-15.8673	-18.2188	-111.855	-119.304	-17.334	-21.1023
-15.8232	-18.1389	-114.693	-116.087	-17.3456	-21.0919
-15.6672	-18.1315	-125.618	-110.434	-17.2335	-21.2145
-15.622	-18.1593	-109.214	-112.65	-17.2552	-21.3496
-15.5691	-18.033	-99.6726	-100.365	-17.2476	-21.2199
-15.5438	-18.046	-112.005	-106.347	-17.3001	-21.2554
-15.5615	-18.0749	-101.614	-96.365	-17.39	-21.3348
-15.6045	-17.9805	-111.99	-103.57	-17.4931	-21.2418
-15.513	-18.0828	-101.069	-106.166	-17.4303	-21.4053
-15.5964	-18.0944	-99.9523	-105.425	-17.5789	-21.4807
-15.5271	-18.1113	-97.0299	-104.108	-17.5579	-21.4043
-15.441	-18.022	-109.447	-96.6652	-17.478	-21.2747
-15.4225	-17.8892	-101.479	-105.549	-17.496	-21.0686
-15.4244	-17.999	-106.511	-103.359	-17.5244	-21.1075
-15.4118	-18.0399	-102.902	-100.352	-17.5333	-21.1327
-15.4068	-18.1157	-113.111	-93.3889	-17.5351	-21.0546
-15.3383	-18.043	-97.9393	-96.757	-17.4623	-20.9144
-15.2931	-18.0041	-110.172	-92.6583	-17.4153	-20.7307
-15.2333	-18.054	-98.3754	-100.744	-17.3638	-20.6483
-15.0432	-17.9913	-102.379	-105.944	-17.2082	-20.5742
-14.8937	-17.8932	-95.2434	-94.6607	-17.0142	-20.2939
-14.7321	-17.9698	-103.299	-98.2229	-16.822	-20.2828
-14.7587	-18.0878	-94.9237	-106.325	-16.8562	-20.0674
-14.7461	-18.0436	-97.6742	-115.122	-16.8375	-19.9695
-14.5988	-18.0719	-106.536	-102.11	-16.638	-19.814
-14.6026	-18.1238	-98.3339	-97.3853	-16.6255	-19.8754
-14.595	-18.0716	-98.2301	-97.9429	-16.652	-19.4957
-14.4179	-18.1606	-101.686	-107.73	-16.4611	-19.5197
-14.2884	-18.1746	-100.767	-100.026	-16.3263	-19.34
-14.1783	-18.2556	-108.009	-98.6111	-16.2244	-19.2465
-14.1725	-18.2908	-100.563	-106.04	-16.1938	-19.1268
-14.1484	-18.2991	-102.252	-101.261	-16.102	-18.9671
-14.1618	-18.445	-98.5176	-91.3133	-16.142	-18.8332
-14.1534	-18.5329	-109.559	-97.8607	-16.0759	-18.6967
-14.2185	-18.5768	-107.967	-101.437	-16.1657	-18.6528
-14.1146	-18.642	-106.011	-98.3379	-16.0204	-18.4404
-14.1432	-18.6875	-95.3295	-111.39	-16.117	-18.3129
-14.0494	-18.6347	-118.531	-94.7272	-16.035	-18.2352
-14.0104	-18.8768	-111.149	-93.9263	-16.0061	-18.2123
-13.9993	-18.9542	-97.6118	-107.448	-15.9401	-18.0487
-13.906	-19.1406	-101.303	-100.725	-15.7906	-17.9935
-13.9178	-19.2381	-108.169	-95.3361	-15.7639	-17.7887
-14.0393	-19.4372	-103.302	-94.2327	-15.8509	-17.7261
-13.9288	-19.6267	-100.487	-108.991	-15.7815	-17.6373
-14.0186	-19.7745	-97.2266	-101.17	-15.8444	-17.4945
-13.9973	-20.0377	-96.9724	-102.466	-15.8162	-17.402
-13.9155	-20.1547	-92.7513	-94.6875	-15.7092	-17.2576
-13.8298	-20.2864	-98.7399	-94.9014	-15.5559	-17.1476
-13.7125	-20.678	-97.8621	-106.288	-15.3865	-17.0068
-13.6365	-20.9636	-100.325	-94.3963	-15.2732	-17.1082

-13.6569	-21.2234	-96.0564	-105.508	-15.2359	-16.9385
-13.5975	-21.6123	-99.7024	-99.2432	-15.1344	-16.8962
-13.5442	-22.0129	-95.6803	-104.699	-15.0132	-16.6935
-13.4354	-22.2075	-105.083	-110.197	-14.878	-16.5572
-13.4372	-22.4945	-96.6815	-96.1867	-14.7828	-16.3664
-13.3556	-22.634	-92.8642	-100.529	-14.8307	-16.2423
-13.4723	-22.8383	-100.732	-101.384	-14.7544	-16.0577
-13.3289	-23.1698	-99.2281	-96.2966	-14.5489	-15.9772
-13.3709	-23.0704	-100.587	-95.8674	-14.543	-15.66
-13.2683	-23.4961	-95.909	-101.972	-14.2955	-15.6977
-13.3494	-23.2277	-101.101	-98.2523	-14.2985	-15.4156
-13.4152	-23.1012	-114.685	-95.9019	-14.227	-15.2072
-13.3212	-22.8068	-109.279	-98.6048	-14.013	-14.9995
-13.286	-22.6332	-100.758	-97.1415	-13.8516	-14.8808
-13.2938	-22.1823	-98.9928	-96.7783	-13.7269	-14.6692
-13.2499	-21.9281	-101.084	-98.1612	-13.5691	-14.5889
-13.2892	-20.9799	-99.7937	-105.162	-13.4597	-14.1291
-13.1469	-20.6199	-97.4714	-103.178	-13.1857	-14.0097
-13.0824	-19.9643	-103.939	-102.946	-12.9362	-13.7255
-12.9056	-19.7305	-106.132	-112.23	-12.6787	-13.7549
-12.9752	-19.1079	-98.3984	-101.431	-12.487	-13.4864
-12.7984	-18.7797	-107.063	-99.6241	-12.2653	-13.4516
-12.9147	-18.2241	-102.325	-104.792	-12.2335	-13.2617
-13.0443	-17.5658	-99.4173	-109.728	-12.2111	-12.9807
-12.8427	-17.2514	-105.952	-95.6607	-11.9443	-12.9549
-12.7948	-16.8184	-93.4605	-101.114	-11.746	-12.8342
-12.8539	-16.2346	-97.8272	-107.826	-11.6426	-12.5667
-12.7778	-15.944	-93.8285	-98.6619	-11.4486	-12.5656
-12.7906	-15.343	-103.695	-106.345	-11.3684	-12.2889
-12.8809	-15.139	-102.571	-92.5118	-11.3436	-12.3061
-12.9941	-14.5529	-95.8334	-98.6616	-11.2296	-12.0363
-13.0792	-14.3017	-98.619	-96.3705	-11.1446	-12.0092
-13.1399	-14.0557	-98.9215	-95.2713	-11.0343	-11.9931
-13.2703	-13.6809	-99.333	-103.065	-11.0069	-11.8646
-13.3198	-13.3759	-111.018	-97.8188	-10.8449	-11.7574
-13.4232	-13.091	-97.5795	-99.617	-10.7516	-11.6759
-13.6243	-12.7673	-124.134	-97.8089	-10.684	-11.5809
-13.59	-12.6578	-96.7916	-96.432	-10.5134	-11.6281
-13.799	-12.431	-97.0272	-95.0382	-10.4952	-11.5947
-13.84	-12.0822	-109.378	-101.426	-10.3593	-11.4817
-13.8325	-11.8799	-101.672	-99.1398	-10.1235	-11.4355
-13.6815	-11.7126	-94.3383	-96.7925	-9.95423	-11.4272
-13.6829	-11.5445	-95.1976	-96.8671	-9.78993	-11.4147
-13.5185	-11.4631	-100.207	-109.057	-9.64299	-11.5042
-13.3546	-11.1671	-104.026	-107.25	-9.41163	-11.4187
-13.1502	-11.0877	-104.334	-105.565	-9.22833	-11.4856
-13.0383	-10.9002	-96.111	-92.708	-9.12686	-11.4521
-12.8565	-10.9037	-93.9202	-98.672	-8.96689	-11.6538
-12.7193	-10.8097	-100.544	-101.546	-8.87323	-11.7569
-12.486	-10.5928	-99.5517	-93.5159	-8.66237	-11.7426

J5-J6

S21 (dB)	S12 (dB)	S22 (dB)
-94.2475	-106.321	-17.6977
-96.582	-98.0599	-31.1127
-94.6745	-94.3443	-31.3734
-93.9989	-94.6299	-30.3452
-97.1473	-95.8743	-29.6079
-96.306	-98.0174	-29.1182
-99.4318	-97.1226	-28.7391
-97.8256	-97.9959	-28.5516
-106.497	-102.711	-28.4544
-102.314	-105.372	-28.2667
-103.294	-105.959	-28.1713
-104.44	-106.918	-27.8916
-107.231	-105.323	-27.8582
-103.805	-104.241	-27.7177
-106.537	-107.917	-27.6448
-108.329	-120.75	-27.5384
-110.145	-102.966	-27.3582
-109.994	-107.645	-27.2403
-105.961	-120.484	-27.061
-110.763	-108.494	-26.8186
-113.72	-101.464	-26.5354
-108.668	-122.568	-26.3382
-103.985	-107.113	-26.2485
-113.563	-113.993	-26.1209
-112.155	-114.467	-25.9022
-110.19	-109.337	-25.7882
-111.144	-101.575	-25.5903
-122.095	-116.811	-25.4633
-110.203	-113.721	-25.5573
-115.902	-108.49	-25.6863
-107.388	-111.429	-25.9076
-119.98	-114.823	-25.9946
-118.219	-105.723	-25.8574
-110.678	-108.184	-25.6135
-107.692	-113.837	-25.1452
-110.999	-114.797	-24.8232
-109.984	-107.736	-24.4401
-112.262	-105.026	-24.1803
-117.255	-113.6	-24.0814
-109.686	-114.81	-23.9451
-112.636	-101.52	-23.7681

J5-J7

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.058	-96.1671	-91.083	-17.6651
-31.6414	-116.304	-99.6947	-33.17
-30.602	-98.7782	-101.015	-32.3313
-29.4138	-105.671	-106.89	-30.8878
-28.7831	-121.091	-115.879	-30.1183
-28.3273	-107.361	-119.183	-29.7062
-28.0755	-111.668	-103.911	-29.5174
-27.9143	-122.54	-107.585	-29.4867
-27.9565	-125.883	-109.989	-29.7474
-28.0384	-110.361	-112.494	-29.7857
-28.0046	-108.421	-110.668	-29.9544
-27.9796	-117.074	-125.69	-29.9809
-28.1225	-117.241	-109.073	-30.2398
-28.1857	-108.548	-120.35	-30.4538
-28.3546	-114.638	-112.065	-30.9111
-28.5437	-106.091	-111.682	-31.2598
-28.5119	-120.013	-118.995	-31.5393
-28.9382	-110.091	-111.13	-31.8347
-29.1392	-111.453	-109.449	-32.2462
-29.3524	-107.957	-112.685	-32.7332
-29.5289	-113.446	-107.977	-33.5286
-29.6398	-105.984	-106.792	-34.1664
-30.1713	-121.921	-115.08	-34.7964
-30.4996	-107.803	-110.046	-35.7923
-31.1514	-111.117	-113.413	-36.4106
-31.7342	-108.182	-114.95	-37.1743
-32.2923	-114.844	-106.965	-37.8611
-33.1726	-110.182	-120.317	-38.6426
-34.3577	-115.674	-113.759	-37.6626
-35.4935	-111.913	-113.981	-35.96
-36.2733	-122.202	-108.194	-34.0651
-36.6506	-110.632	-106.584	-32.7801
-36.7636	-116.229	-114.541	-32.1472
-36.6004	-117.547	-112.351	-31.8331
-36.2981	-108.417	-116.599	-32.1632
-36.1812	-117.049	-108.664	-32.3618
-36.198	-109.685	-108.74	-32.8254
-36.2683	-114.286	-108.808	-32.9981
-36.2268	-108.924	-108.834	-32.6281
-35.8614	-109.013	-118.414	-32.4747
-35.7133	-111.071	-121.992	-32.377

-109.775	-108.838	-23.5767	-35.4189	-108.759	-112.554	-32.3728
-104.092	-108.698	-23.3257	-34.9784	-115.182	-111.322	-32.3719
-108.88	-120.063	-23.1006	-34.6193	-106.662	-110.226	-32.0932
-109.614	-125.439	-22.893	-34.5974	-117.145	-119.57	-31.7816
-109.714	-114.336	-22.748	-34.3212	-115.4	-106.506	-31.2701
-114.383	-108.731	-22.6073	-33.9099	-109.253	-112.266	-30.8774
-104.808	-105.709	-22.5327	-33.6608	-129.461	-112.259	-30.5978
-109.273	-134.944	-22.3019	-32.8163	-108.88	-108.682	-30.8758
-110.164	-113.298	-22.1057	-32.1901	-115.028	-111.691	-31.1083
-106.193	-113.12	-21.6963	-31.6549	-111.485	-104.173	-31.792
-116.927	-119.73	-21.4137	-30.7437	-112.756	-107.283	-32.1976
-118.123	-116.687	-21.0032	-30.1089	-117.738	-106.683	-32.6638
-108.458	-119.094	-20.709	-29.3435	-108.923	-107.145	-33.0534
-116.871	-105.06	-20.4524	-28.6731	-113.84	-114.1	-32.8124
-111.653	-110.411	-20.1343	-27.9522	-111.155	-107.888	-32.6405
-105.429	-128.987	-19.8271	-27.4628	-109.319	-121.837	-32.695
-121.96	-120.852	-19.5644	-26.9129	-121.989	-107.97	-32.3884
-109.132	-110.683	-19.2787	-26.4512	-118.417	-107.097	-31.7843
-111.198	-112.052	-18.9886	-26.0337	-119.536	-109.303	-30.8373
-111.029	-109.984	-18.823	-25.6389	-112.681	-114.349	-30.1326
-114.075	-107.159	-18.5723	-25.2649	-110.491	-121.672	-29.581
-117.159	-106.188	-18.3887	-24.9082	-107.094	-108.586	-29.2128
-125.228	-128.005	-18.1437	-24.6062	-106.526	-108.181	-28.5153
-109.487	-115.436	-17.9125	-24.3871	-117.39	-116.399	-27.9577
-138.84	-115.969	-17.6972	-24.0587	-109.791	-110.088	-27.4925
-107.188	-112.74	-17.4553	-23.9384	-117.284	-116.202	-26.8094
-109.942	-111.565	-17.2557	-23.6389	-120.217	-116.252	-26.287
-110.198	-113.432	-17.0688	-23.3493	-111.044	-118.495	-25.7252
-116.408	-125.977	-16.9332	-23.0973	-106.267	-108.521	-25.3866
-114.621	-110.792	-16.7722	-22.8936	-115.783	-111.228	-24.986
-110.882	-110.386	-16.6036	-22.6579	-114.318	-108.936	-24.5158
-113.137	-118.434	-16.4149	-22.5819	-116.697	-136.829	-24.0498
-108.008	-106.368	-16.2106	-22.2974	-117.54	-105.59	-23.5152
-113.188	-118.74	-16.0443	-22.2141	-110.819	-108.165	-23.0324
-114.954	-114.744	-15.8385	-21.9782	-119.442	-105.571	-22.4328
-126.062	-110.548	-15.724	-21.7703	-108.068	-107.456	-22.0659
-107.979	-107.817	-15.6323	-21.6605	-120.852	-110.474	-21.7691
-104.303	-113.223	-15.5715	-21.5838	-104.099	-118.369	-21.5108
-110.907	-110.656	-15.4334	-21.5547	-119.787	-106.393	-21.1011
-109.884	-106.985	-15.3461	-21.3802	-110.861	-109.847	-20.83
-116.985	-108.976	-15.234	-21.3663	-124.146	-108.058	-20.4937
-110.436	-115.709	-15.0638	-21.3249	-107.344	-112.004	-20.0585
-113.293	-113.376	-14.9246	-21.2409	-115.887	-115.065	-19.6931
-117.262	-105.652	-14.841	-21.155	-116.235	-116.509	-19.3798
-108.744	-115.892	-14.7872	-21.1478	-110.649	-112.538	-19.1916
-134.831	-116.013	-14.7154	-21.1234	-108.003	-108.106	-18.9458
-116.774	-110.154	-14.7055	-21.1019	-111.201	-112.281	-18.7954
-106.933	-106.677	-14.6519	-21.1502	-118.576	-120.462	-18.5906
-105.041	-123.852	-14.5811	-20.9939	-110.773	-120.267	-18.3167
-117.356	-114.179	-14.4724	-21.1308	-119.254	-112.06	-18.0198
-112.847	-108.194	-14.3518	-21.0705	-112.669	-115.348	-17.6815
-110.584	-111.816	-14.3058	-21.0847	-110.115	-118.648	-17.4554
-120.085	-113.733	-14.2038	-20.9935	-112.996	-113.776	-17.1525
-115.241	-114.61	-14.1853	-21.0722	-110.975	-104.85	-16.97
-110.807	-107.264	-14.1756	-21.0886	-107.858	-105.251	-16.7699

-112.313	-107.289	-14.1892	-21.1246	-117	-107.971	-16.6326
-109.874	-106.277	-14.1614	-21.0649	-106.811	-110.94	-16.4294
-116.996	-111.666	-14.2133	-21.0393	-109.412	-114.849	-16.3264
-107.656	-110.089	-14.2921	-21.0456	-113.238	-109.41	-16.2557
-109.974	-107.48	-14.2617	-21.1072	-106.095	-108.352	-16.0567
-114.501	-107.048	-14.2879	-21.0974	-114.572	-108.879	-15.9118
-112.453	-110.037	-14.379	-21.0874	-105.298	-117.97	-15.8554
-110.085	-109.123	-14.3693	-21.2113	-111.877	-112.936	-15.6947
-109.312	-115.216	-14.4585	-21.3475	-113.391	-107.584	-15.6395
-112.336	-106.508	-14.5425	-21.2162	-108.784	-98.4191	-15.5809
-107.361	-104.739	-14.6615	-21.2502	-109.195	-96.5095	-15.5516
-107.191	-104.25	-14.8091	-21.3291	-103.728	-94.8931	-15.5694
-105.019	-98.9453	-15.007	-21.2396	-102.728	-101.108	-15.6062
-98.7328	-93.9144	-15.0814	-21.3961	-101.968	-110.221	-15.5117
-103.87	-104.586	-15.3265	-21.4824	-102.826	-97.842	-15.5902
-107.049	-99.08	-15.422	-21.3957	-109.169	-101.708	-15.5249
-109.437	-104.276	-15.4755	-21.2751	-106.66	-104.134	-15.4397
-103.685	-95.1795	-15.6	-21.0633	-96.5182	-103.701	-15.4215
-98.6203	-102.23	-15.7492	-21.1017	-97.6075	-95.4043	-15.4269
-95.2242	-97.0212	-15.8719	-21.127	-104.959	-96.4268	-15.4161
-104.41	-102.12	-16.0301	-21.0506	-99.3046	-95.8626	-15.4169
-108.846	-109.164	-16.1115	-20.913	-95.2015	-98.6628	-15.3497
-97.3274	-98.4119	-16.2018	-20.73	-95.9772	-92.7174	-15.304
-107.634	-99.3465	-16.2498	-20.6473	-113.881	-112.904	-15.2331
-99.3031	-98.2924	-16.2205	-20.5738	-96.2999	-108.518	-15.0473
-97.965	-109.194	-16.127	-20.2959	-108.081	-101.759	-14.8912
-116.67	-96.3353	-16.0523	-20.281	-108.323	-98.3321	-14.7261
-98.8187	-96.8538	-16.1843	-20.0633	-102.834	-99.3305	-14.7533
-103.161	-99.6773	-16.2743	-19.9667	-113.068	-96.8895	-14.7305
-113.887	-100.626	-16.1988	-19.8197	-102.564	-101.449	-14.5839
-100.649	-108.758	-16.2855	-19.8761	-108.044	-105.628	-14.5786
-98.8808	-105.233	-16.462	-19.498	-108.517	-104.745	-14.5756
-95.0453	-97.3305	-16.3629	-19.5233	-107.764	-112.308	-14.3983
-103.605	-93.5947	-16.344	-19.3425	-108.746	-102.729	-14.2647
-100.527	-99.656	-16.3347	-19.247	-113.377	-101.029	-14.1696
-99.1419	-96.7769	-16.3868	-19.1261	-101.172	-113.138	-14.164
-102.592	-95.5449	-16.3903	-18.9672	-107.254	-105.648	-14.1481
-106.605	-104.748	-16.5879	-18.8315	-103.564	-97.5417	-14.173
-111.249	-95.9442	-16.6232	-18.694	-102.075	-100.204	-14.1673
-114.159	-98.7494	-16.8112	-18.649	-101.107	-99.5848	-14.2267
-100.29	-102.137	-16.6732	-18.4377	-100.286	-102.712	-14.1352
-109.774	-95.6386	-16.8115	-18.3121	-101.313	-99.6253	-14.1596
-96.7731	-97.3001	-16.7483	-18.2288	-96.0661	-103.619	-14.0645
-100.71	-96.9242	-16.71	-18.2104	-93.2221	-99.6846	-14.0325
-100.799	-112.728	-16.6005	-18.0412	-107.196	-94.5401	-14.0122
-100.805	-96.0763	-16.4623	-17.99	-100.422	-90.2111	-13.9194
-103.378	-101.818	-16.3729	-17.7879	-102.142	-110.462	-13.924
-102.376	-93.5433	-16.3918	-17.7265	-103.698	-98.0707	-14.0361
-103.313	-112.315	-16.3601	-17.6383	-95.1394	-99.0103	-13.9269
-108.442	-98.251	-16.2947	-17.4952	-96.3404	-108.352	-14.006
-108.781	-99.0594	-16.2113	-17.402	-102.195	-101.306	-13.9763
-101.308	-95.5853	-16.0701	-17.2655	-100.385	-103.595	-13.8929
-107.99	-97.3793	-15.8246	-17.1448	-104.122	-99.0298	-13.819
-105.616	-94.9899	-15.6315	-16.999	-110.898	-101.946	-13.6969
-99.5003	-99.9993	-15.464	-17.117	-97.6898	-94.937	-13.6088

-93.5707	-102.225	-15.4	-16.9425	-98.6304	-98.5522	-13.6366
-96.8143	-115.391	-15.2888	-16.8966	-103.915	-93.2594	-13.5733
-98.4211	-91.0246	-15.1381	-16.694	-109.036	-96.8196	-13.5288
-100.079	-106.142	-14.9553	-16.5543	-109.511	-93.2589	-13.4273
-102.564	-102.269	-14.8232	-16.3666	-99.1922	-94.0182	-13.4211
-97.4392	-90.8738	-14.8744	-16.2415	-98.7445	-97.7455	-13.3565
-117.7	-96.6169	-14.6384	-16.0556	-105.525	-95.4014	-13.4665
-98.4497	-105.958	-14.4689	-15.9783	-102.997	-96.8095	-13.3312
-90.6296	-96.2802	-14.3988	-15.6592	-98.1225	-102.939	-13.3614
-100.259	-104.142	-14.1289	-15.6981	-95.9679	-97.7106	-13.262
-96.8384	-104.633	-14.0565	-15.4141	-96.3901	-103.808	-13.3364
-93.6268	-102.945	-13.9397	-15.2056	-97.6611	-111.846	-13.4143
-101.344	-98.5567	-13.6922	-14.993	-105.509	-94.793	-13.325
-101.638	-94.6801	-13.521	-14.8711	-105.711	-99.1316	-13.2766
-96.8669	-107.082	-13.3627	-14.6627	-99.0056	-100.063	-13.2897
-96.3748	-109.474	-13.1863	-14.5846	-97.2887	-99.1909	-13.2518
-96.329	-105.692	-13.0596	-14.1263	-110.175	-96.7761	-13.2834
-103.632	-104.109	-12.8265	-14.0071	-108.608	-107.528	-13.1379
-97.4429	-94.7016	-12.5946	-13.7187	-109.256	-92.1139	-13.0925
-95.4975	-103.66	-12.3741	-13.7524	-98.2744	-108.806	-12.9279
-96.921	-114.58	-12.1471	-13.4836	-100.91	-116.343	-12.9883
-100.577	-97.1813	-12.0546	-13.4479	-106.377	-107.01	-12.8343
-95.0673	-99.594	-11.9731	-13.2597	-102.262	-100.626	-12.9328
-100.181	-93.4994	-12.0274	-12.9817	-97.2817	-101.348	-13.0919
-91.192	-107.226	-11.8364	-12.9515	-105.779	-95.4172	-12.8852
-110.958	-92.977	-11.6344	-12.8354	-105.256	-100.363	-12.8243
-100.456	-100.451	-11.537	-12.568	-94.2944	-104.082	-12.8952
-96.466	-94.7575	-11.3651	-12.5653	-105.704	-95.2439	-12.8109
-101.381	-99.5132	-11.3232	-12.2838	-105.909	-90.6783	-12.8195
-102.694	-98.3039	-11.3347	-12.3098	-102.96	-101.019	-12.9291
-105.941	-107.758	-11.2269	-12.035	-105.436	-94.8397	-13.0249
-98.4238	-94.3059	-11.1649	-12.0101	-105.442	-102.955	-13.1104
-99.9195	-97.1165	-11.0707	-11.9974	-106.347	-99.2132	-13.1666
-106.575	-107.051	-11.0925	-11.8658	-97.8677	-93.9791	-13.296
-102.022	-100.244	-10.9146	-11.7587	-105.677	-101.65	-13.3463
-96.4632	-96.7861	-10.8021	-11.6763	-96.5247	-101.428	-13.449
-97.2483	-117.563	-10.7162	-11.581	-96.9056	-95.6041	-13.6537
-102.144	-97.4748	-10.5805	-11.6324	-99.4605	-101.291	-13.6096
-110.775	-99.013	-10.5529	-11.5966	-96.9633	-95.627	-13.8384
-98.2534	-96.7944	-10.421	-11.4838	-103.914	-96.6994	-13.8635
-104.165	-98.7858	-10.1493	-11.4388	-100.463	-96.1826	-13.8574
-123.825	-101.968	-10.0024	-11.4289	-100.949	-92.4746	-13.7016
-98.5019	-98.7548	-9.81729	-11.4139	-101.646	-100.323	-13.6929
-94.2849	-93.8199	-9.67076	-11.5105	-99.7248	-98.9955	-13.5278
-97.9874	-92.5587	-9.43072	-11.4237	-104.345	-106.777	-13.3447
-96.1174	-101.215	-9.23422	-11.4896	-108.15	-97.6823	-13.1342
-99.5046	-96.7068	-9.14982	-11.4534	-97.1885	-93.8714	-13.0133
-102.937	-105.323	-9.02629	-11.6602	-97.4429	-100.106	-12.8232
-103.414	-103.134	-8.95098	-11.761	-97.3844	-91.6495	-12.6827
-102.955	-103.604	-8.77425	-11.7453	-96.9204	-98.0898	-12.4384

J5-J8

S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)
-18.0581	-107.752	-97.2907	-17.3159
-31.6384	-116.739	-101.259	-31.9998
-30.5963	-119.793	-103.81	-33.6893
-29.3969	-108.685	-108.281	-32.5795
-28.7719	-106.821	-106.713	-31.7417
-28.3305	-109.562	-115.572	-31.1534
-28.0858	-116.374	-123.159	-30.8817
-27.9202	-108.848	-107.931	-30.8187
-27.9586	-104.121	-110.052	-31.0097
-28.0408	-112.43	-121.569	-31.037
-28.0047	-114.777	-108.366	-31.226
-27.972	-112.773	-115.787	-31.1856
-28.1192	-122.455	-114.529	-31.5078
-28.1846	-115.536	-111.495	-31.723
-28.3571	-122.877	-105.86	-32.2266
-28.5481	-105.06	-110.175	-32.6075
-28.5092	-116.712	-106.014	-32.918
-28.9348	-111.265	-109.552	-33.3198
-29.1338	-113.601	-116.804	-33.8092
-29.3452	-117.846	-115.651	-34.3325
-29.5215	-110.535	-107.651	-35.0718
-29.6326	-117.942	-106.688	-35.7796
-30.1609	-119.755	-116.227	-36.8147
-30.4934	-119.142	-109.854	-38.3361
-31.1439	-115.694	-117.032	-39.4532
-31.7281	-114.272	-116.462	-41.5399
-32.2724	-111.567	-108.444	-43.4147
-33.1513	-105.818	-117.096	-46.4947
-34.3316	-107.563	-111.555	-48.3251
-35.4769	-115.964	-105.727	-44.8604
-36.2581	-108.544	-109.495	-41.2552
-36.6359	-118.532	-111.532	-39.334
-36.7425	-104.579	-110.574	-38.9303
-36.5777	-115.881	-112.065	-38.8734
-36.2745	-119.788	-110.298	-39.891
-36.1399	-114.216	-105.624	-40.6222
-36.1575	-115.003	-113.632	-41.2631
-36.2223	-115.401	-107.939	-41.154
-36.2025	-115.713	-111.049	-39.7714
-35.8658	-107.882	-114.677	-39.056
-35.7411	-126.442	-117.125	-38.3496

J6-J7

S11 (dB)	S21 (dB)	S12 (dB)
-17.7028	-101.284	-99.7763
-30.9664	-91.4709	-94.9775
-31.356	-95.4773	-96.1997
-30.2587	-94.6193	-94.8519
-29.5083	-96.1483	-96.034
-28.913	-96.5892	-96.6969
-28.5244	-98.6069	-97.0085
-28.2117	-100.573	-105.214
-28.0999	-100.177	-102.127
-28.0225	-100.17	-105.199
-27.7815	-104.194	-108.828
-27.5357	-109.876	-105.96
-27.5171	-102.339	-105.393
-27.3975	-105.582	-105.405
-27.2962	-106.767	-106.799
-27.1831	-107.18	-106.717
-26.9188	-107.447	-112.225
-26.9774	-111.434	-110.329
-26.9249	-110.592	-106.769
-26.7819	-116.264	-113.238
-26.6123	-109.202	-106.903
-26.3769	-108.096	-108.613
-26.3968	-109.666	-106.198
-26.2909	-108.742	-105.302
-26.3221	-110.135	-108.595
-26.2819	-108.064	-115.849
-26.1635	-109.549	-109.36
-26.2784	-118.162	-113.033
-26.499	-112.288	-104.332
-26.7121	-116.287	-115.333
-26.7865	-108.972	-111.354
-26.8468	-113.071	-111.169
-26.7376	-111.708	-112.801
-26.4632	-112.239	-112.56
-26.1071	-108.613	-105.363
-25.6738	-110.696	-109.251
-25.2561	-109.039	-109.471
-24.967	-109.294	-115.758
-24.6147	-108.626	-113.632
-24.2388	-114.409	-108.88
-23.9673	-107.393	-108.051

-35.4626	-112.545	-105.04	-37.8212	-23.6962	-113.233	-122.643
-35.0074	-118.783	-107.579	-36.8849	-23.4131	-104.323	-111.637
-34.6358	-111.431	-109.341	-35.5715	-23.1804	-117.421	-125.833
-34.6149	-109.476	-111.203	-34.5528	-23.0545	-119.066	-104.628
-34.33	-112.534	-113.137	-33.546	-22.8694	-112.677	-116.361
-33.9177	-112.04	-111.346	-32.8013	-22.6444	-120.214	-133.28
-33.681	-110.482	-104.284	-32.4763	-22.4776	-108.059	-112.02
-32.8427	-116.495	-112.789	-32.6931	-22.1045	-115.79	-106.631
-32.2229	-109.326	-109.382	-32.956	-21.8105	-113.619	-115.644
-31.6825	-110.584	-107.682	-33.3089	-21.4992	-111.584	-115.216
-30.7547	-111.533	-117.71	-33.4017	-21.0784	-106.334	-112.629
-30.1079	-115.71	-109.638	-33.1398	-20.7271	-107.037	-110.909
-29.3395	-114.642	-116.601	-32.8902	-20.3477	-114.974	-109.888
-28.6761	-118.164	-104.957	-32.2459	-19.9894	-107.934	-103.144
-27.9604	-116.182	-116.944	-31.5582	-19.6022	-105.025	-117.743
-27.4738	-116.144	-121.41	-31.0767	-19.2948	-111.782	-112.053
-26.9187	-111.502	-118.268	-30.4821	-18.98	-128.861	-110.836
-26.4604	-121.978	-115.024	-29.754	-18.7025	-108.997	-116.777
-26.0337	-129.343	-105.893	-28.8646	-18.4254	-117.942	-103.086
-25.6384	-127.817	-109.717	-28.2988	-18.183	-128.083	-110.078
-25.2649	-109.494	-115	-27.754	-17.9351	-115.948	-108.704
-24.9126	-107.569	-107.365	-27.3993	-17.6931	-113.228	-107.228
-24.6131	-112.337	-115.479	-26.8183	-17.485	-108.404	-117.21
-24.3948	-118.326	-117.717	-26.3611	-17.3159	-111.41	-113.279
-24.0628	-114.088	-124.712	-25.9693	-17.0945	-110.077	-117.774
-23.9373	-108.503	-105.713	-25.4488	-16.9747	-119.465	-112.933
-23.635	-117.849	-126.296	-25.0645	-16.7779	-113.799	-119.106
-23.342	-114.176	-105.897	-24.6443	-16.5803	-113.281	-120.243
-23.0909	-116.977	-116.139	-24.4081	-16.4	-117.135	-106.88
-22.8928	-110.377	-113.24	-24.1282	-16.2415	-106.672	-114.418
-22.6564	-108.818	-109.227	-23.7566	-16.0782	-113.718	-117.846
-22.5824	-115.881	-104.03	-23.3884	-15.9844	-106.66	-116.634
-22.2973	-111.324	-116.06	-22.9668	-15.7985	-110.917	-108.512
-22.2066	-111.181	-106.266	-22.5826	-15.699	-121.35	-110.321
-21.9686	-115.384	-114.348	-22.0658	-15.5285	-107.602	-117.647
-21.7602	-109.692	-112.744	-21.7932	-15.3941	-110.686	-108.042
-21.6537	-120.412	-136.553	-21.5843	-15.2965	-113.65	-106.044
-21.5763	-111.45	-116.004	-21.4185	-15.22	-109.918	-125.355
-21.5587	-111.312	-123.815	-21.0768	-15.1671	-114.675	-113.468
-21.3794	-106.827	-108.704	-20.8975	-15.0458	-110.446	-118.694
-21.3681	-113.885	-109.592	-20.6354	-15.0039	-111.921	-113.141
-21.3255	-109.256	-113.426	-20.2846	-14.9537	-109.699	-107.617
-21.2389	-115.382	-112.339	-19.9974	-14.8924	-111.682	-113.823
-21.1557	-120.109	-126.318	-19.7681	-14.8297	-111.451	-106.482
-21.1495	-114.558	-114.57	-19.663	-14.8095	-110.322	-115.132
-21.1299	-107.155	-112.322	-19.5004	-14.7801	-110.353	-110.1
-21.1125	-108.876	-107.587	-19.4378	-14.7451	-109.219	-112.528
-21.1613	-114.917	-110.816	-19.3073	-14.7622	-119.676	-112.877
-20.9993	-105.066	-126.168	-19.0908	-14.6836	-117.766	-108.192
-21.1287	-111.869	-126.89	-18.8699	-14.7405	-119.32	-120.612
-21.0706	-116.283	-130.22	-18.573	-14.7086	-118.825	-112.259
-21.0806	-108.716	-107.549	-18.4102	-14.707	-108.063	-103.487
-20.9987	-108.668	-118.405	-18.156	-14.6642	-106.026	-116.762
-21.0721	-107.661	-114.266	-18.025	-14.722	-113.769	-107.154
-21.0961	-109.387	-110.426	-17.8778	-14.7293	-108.19	-106.505

-21.1276	-116.642	-121.225	-17.8018	-14.7695	-104.115	-121.463
-21.0646	-105.67	-104.978	-17.6475	-14.7462	-108.602	-102.867
-21.0394	-109.101	-119.454	-17.6132	-14.7525	-110.704	-111.84
-21.04	-108.237	-107.602	-17.6093	-14.7636	-108.018	-114.689
-21.1035	-115.918	-108.571	-17.4551	-14.8143	-113.616	-111.71
-21.0857	-116.069	-104.002	-17.3594	-14.8526	-113.766	-116.902
-21.0825	-115.942	-109.998	-17.3857	-14.875	-106.175	-111.036
-21.2083	-116.575	-106.534	-17.2849	-14.9797	-107.541	-105.94
-21.3438	-105.532	-105.565	-17.3073	-15.0822	-111.472	-105.016
-21.2101	-99.3564	-101.887	-17.3113	-15.0585	-97.1642	-102.396
-21.2471	-116.01	-100.431	-17.362	-15.1193	-105.351	-98.3923
-21.327	-102.953	-98.4908	-17.4672	-15.2245	-101.149	-106.988
-21.2357	-117.182	-112.67	-17.5761	-15.226	-108.304	-96.8282
-21.3993	-105.225	-104.653	-17.5279	-15.3691	-106.386	-101.59
-21.4829	-101.325	-108.871	-17.6969	-15.4718	-106.894	-100.752
-21.403	-114.469	-96.7284	-17.666	-15.5096	-100.948	-98.0542
-21.2739	-108.003	-96.6344	-17.5863	-15.5087	-119.772	-101.558
-21.0655	-104.248	-106.147	-17.5968	-15.4562	-108.108	-101.415
-21.1038	-98.1785	-102.333	-17.6318	-15.5552	-100.411	-96.1638
-21.1246	-108.772	-96.5639	-17.6173	-15.6415	-96.9205	-98.1917
-21.0477	-97.9576	-100.374	-17.6503	-15.702	-98.8805	-95.1935
-20.9102	-110.128	-94.184	-17.5764	-15.7026	-103.648	-113.493
-20.7369	-101.77	-97.798	-17.5226	-15.6887	-111.582	-99.0698
-20.6565	-102.075	-98.8349	-17.4505	-15.7306	-104.81	-103.195
-20.5778	-108.362	-105.666	-17.2404	-15.7642	-98.3357	-100.79
-20.2987	-98.2795	-111.349	-17.0121	-15.6773	-101.023	-97.3652
-20.2862	-95.6666	-98.3982	-16.8033	-15.7693	-103.683	-97.7258
-20.0705	-103.193	-97.0918	-16.8241	-15.7724	-105.5	-98.8737
-19.9748	-102.21	-99.836	-16.8087	-15.787	-104.527	-99.6565
-19.8254	-104.987	-100.746	-16.6145	-15.8043	-110.993	-97.5696
-19.882	-101.715	-113.119	-16.604	-15.9126	-102.868	-95.8326
-19.5019	-98.821	-100.875	-16.6246	-15.7955	-99.396	-98.4162
-19.5293	-100.195	-100.066	-16.4071	-15.9056	-96.8027	-116.619
-19.3445	-105.328	-109.058	-16.2582	-15.8828	-94.7423	-101.321
-19.2441	-108.124	-111.637	-16.1338	-15.9279	-107.31	-96.5273
-19.1182	-102.73	-102.923	-16.1135	-15.9469	-109.036	-106.664
-18.961	-99.6402	-97.6351	-16.0381	-15.9378	-98.1731	-96.4945
-18.8281	-100.61	-104.031	-16.1005	-15.9665	-100.875	-98.4629
-18.6953	-112.952	-108.996	-16.0837	-15.9843	-98.1344	-99.4305
-18.6458	-104.624	-97.716	-16.1929	-16.0412	-99.4192	-95.0536
-18.4387	-98.5258	-93.2505	-16.0323	-15.9977	-102.791	-100.281
-18.3202	-98.6775	-105.853	-16.1202	-16.0052	-100.683	-118.36
-18.2278	-104.161	-98.2245	-16.0113	-16.0007	-104.16	-99.7453
-18.1963	-97.6145	-110.036	-15.9696	-16.1127	-96.0221	-98.7574
-18.0361	-103.973	-98.202	-15.9197	-16.0784	-99.9343	-103.632
-17.9822	-106.505	-97.5002	-15.7795	-16.141	-94.9753	-94.4033
-17.7861	-96.2703	-96.4867	-15.7803	-16.0851	-99.8074	-98.4336
-17.728	-107.271	-102.857	-15.8833	-16.1374	-98.3607	-96.9512
-17.6402	-107.491	-111.522	-15.8008	-16.1613	-97.1287	-100.829
-17.5003	-100.748	-99.6762	-15.8612	-16.1304	-99.201	-107.915
-17.4083	-99.7527	-105.247	-15.8103	-16.1489	-98.9978	-94.9015
-17.2642	-101.929	-98.0784	-15.6785	-16.0949	-112.247	-102.277
-17.1549	-98.1118	-98.1508	-15.5398	-16.0587	-103.339	-127.402
-17.0127	-95.2977	-97.1406	-15.3414	-16.0256	-98.4128	-99.6186
-17.1241	-104.629	-95.7825	-15.2187	-16.1769	-100.326	-97.6744

-16.9414	-114.148	-96.3757	-15.2096	-16.0725	-100.681	-96.7381
-16.8911	-103.729	-98.6143	-15.1075	-16.076	-97.9172	-95.2662
-16.6989	-109.749	-93.2687	-15.018	-15.935	-108.552	-102.933
-16.5565	-100.067	-99.956	-14.847	-15.8106	-102.963	-99.3789
-16.3679	-107.271	-108.62	-14.7771	-15.6488	-93.4573	-101.391
-16.24	-101.202	-103.434	-14.7673	-15.5364	-104.034	-102.558
-16.0602	-98.2413	-104.44	-14.719	-15.365	-95.353	-110.852
-15.9798	-111.069	-94.4338	-14.5255	-15.2719	-99.4791	-97.0218
-15.6609	-97.4931	-97.3759	-14.5183	-14.9576	-96.9605	-100.32
-15.6916	-102.758	-94.9368	-14.287	-14.9605	-110.186	-99.6603
-15.4099	-95.4242	-99.037	-14.2869	-14.6661	-97.8558	-95.1048
-15.2011	-96.2629	-107.23	-14.2229	-14.417	-97.9359	-99.8033
-14.9878	-123.258	-93.0489	-14.0022	-14.1817	-109.573	-99.8802
-14.8724	-95.8593	-94.6983	-13.8461	-14.0255	-98.6569	-107.156
-14.6637	-108.182	-103.742	-13.7126	-13.7687	-116.788	-97.3233
-14.5839	-106.195	-95.9077	-13.5344	-13.6637	-94.933	-106.919
-14.1238	-108.832	-99.3546	-13.4262	-13.1573	-96.9836	-94.9007
-14.0061	-102.363	-98.3872	-13.1418	-13.0245	-95.6863	-96.7976
-13.7184	-105.412	-100.094	-12.8863	-12.6856	-102.552	-99.9362
-13.7473	-109.908	-98.5479	-12.6166	-12.6426	-109.405	-103.765
-13.4787	-104.118	-121.067	-12.4359	-12.3158	-107.638	-97.3732
-13.4524	-96.8658	-98.7025	-12.2277	-12.2471	-101.807	-100.595
-13.2627	-109.529	-95.3842	-12.1902	-12.0364	-94.5453	-100.862
-12.9884	-103.332	-103.589	-12.1781	-11.7087	-98.0851	-94.7088
-12.9606	-109.635	-103.123	-11.9254	-11.6288	-97.5401	-95.1286
-12.8401	-102.713	-101.486	-11.7218	-11.4535	-94.98	-94.7042
-12.5719	-93.6559	-101.207	-11.5986	-11.1692	-95.9426	-119.714
-12.5591	-106.941	-107.702	-11.4072	-11.0825	-92.2873	-98.059
-12.284	-103.177	-106.918	-11.325	-10.8126	-91.6442	-105.869
-12.3087	-97.725	-90.8552	-11.2966	-10.7665	-93.5641	-98.0302
-12.0382	-96.3755	-101.436	-11.2169	-10.4586	-93.4915	-102.844
-12.0139	-93.1849	-105.188	-11.141	-10.3858	-99.6	-102.199
-11.9998	-105.027	-94.6515	-11.0361	-10.2873	-98.4993	-109.39
-11.87	-102.093	-106.121	-11.0378	-10.1325	-114.779	-95.8691
-11.765	-102.432	-100.806	-10.8779	-10.0038	-113.22	-99.3388
-11.6801	-98.8965	-98.8636	-10.7806	-9.8866	-97.938	-95.0593
-11.582	-94.1574	-90.5776	-10.7198	-9.734	-107.416	-88.1103
-11.6342	-99.5815	-93.4672	-10.5555	-9.76671	-96.1219	-99.9837
-11.6026	-95.5742	-95.7713	-10.5414	-9.6482	-98.2972	-100.537
-11.4779	-99.7417	-93.104	-10.4033	-9.46304	-100.747	-100.518
-11.438	-104.008	-111.905	-10.1673	-9.42393	-96.1005	-100.482
-11.4301	-101.82	-91.9196	-9.98868	-9.37545	-95.6849	-99.7194
-11.4189	-97.5628	-105.165	-9.81014	-9.3525	-107.563	-99.5505
-11.5152	-96.077	-105.911	-9.64007	-9.36603	-102.128	-89.8788
-11.4219	-104.31	-94.5475	-9.39922	-9.18317	-101.009	-91.4148
-11.4913	-99.3265	-101.265	-9.19187	-9.22161	-99.629	-94.2186
-11.4525	-96.7664	-101.217	-9.07106	-9.15604	-91.5741	-93.0648
-11.6646	-101.76	-100.066	-8.90759	-9.25096	-94.6888	-98.7054
-11.7579	-100.619	-97.4104	-8.80444	-9.24792	-95.2853	-93.9307
-11.7437	-106.447	-95.2327	-8.59077	-9.14362	-96.7187	-96.7797

J6-J8

S22 (dB)	S11 (dB)	S21 (dB)	S12 (dB)	S22 (dB)	S11 (dB)
-17.6694	-17.6743	-100.937	-96.1748	-17.3074	-17.619
-33.1427	-30.8695	-108.278	-104.623	-31.9546	-32.8399
-32.3003	-31.389	-119.864	-106.954	-33.6928	-32.4332
-30.8422	-30.3319	-107.343	-101.548	-32.5574	-30.9455
-30.0741	-29.5827	-107.239	-107.763	-31.6997	-30.2113
-29.7048	-28.9784	-103.389	-107.182	-31.1853	-29.7328
-29.5254	-28.5847	-104.559	-114.473	-30.8845	-29.4792
-29.4646	-28.2616	-109.263	-104.628	-30.8011	-29.3331
-29.7374	-28.1392	-117.404	-105.816	-31.0181	-29.4828
-29.77	-28.0514	-109.392	-117.012	-31.0291	-29.6458
-29.9334	-27.7977	-115.075	-113.419	-31.1878	-29.7269
-29.9646	-27.5402	-109.256	-119.775	-31.1542	-29.8017
-30.1981	-27.5149	-111.157	-113.927	-31.4483	-29.9038
-30.4047	-27.3895	-110.689	-106.033	-31.6617	-29.969
-30.8613	-27.281	-123.241	-103.093	-32.1419	-30.2682
-31.2469	-27.1603	-121.434	-113.02	-32.5387	-30.6413
-31.5652	-26.8918	-118.5	-110.484	-32.8647	-30.7478
-31.8878	-26.9431	-106.323	-109.578	-33.2524	-31.3074
-32.3201	-26.8889	-105.69	-116.902	-33.7398	-31.4668
-32.8019	-26.7439	-109.136	-114.178	-34.2407	-31.8889
-33.6019	-26.5738	-116.214	-117.992	-34.9704	-32.244
-34.2494	-26.3381	-106.118	-119.67	-35.6625	-32.6406
-34.8704	-26.3555	-104.587	-110.2	-36.6761	-33.3435
-35.8748	-26.2477	-112.925	-110.381	-38.148	-33.8532
-36.534	-26.2763	-108.286	-113.867	-39.1666	-34.5954
-37.3327	-26.2326	-104.862	-108.207	-41.0615	-35.2424
-38.1075	-26.1118	-122.965	-112.973	-42.8538	-36.0725
-38.9636	-26.2223	-112.772	-101.103	-45.778	-35.8608
-37.9528	-26.4405	-110.746	-106.786	-48.3498	-34.9346
-36.2102	-26.6474	-115.756	-123.711	-45.404	-33.6936
-34.2373	-26.7189	-117.731	-108.908	-41.7149	-32.5413
-32.91	-26.7762	-107.225	-110.775	-39.673	-31.461
-32.2548	-26.6628	-113.164	-111.591	-39.1666	-30.8245
-31.9299	-26.3842	-109.97	-128.214	-39.0316	-30.5616
-32.2557	-26.0268	-108.496	-108.251	-40.0597	-30.5775
-32.4585	-25.5952	-115.99	-114.283	-40.7954	-30.7905
-32.9679	-25.1763	-111.884	-112.981	-41.6172	-31.0207
-33.1537	-24.8882	-111.091	-122.748	-41.5331	-31.153
-32.7906	-24.536	-115.183	-111.759	-40.0185	-31.2764
-32.6146	-24.1631	-116.548	-113.513	-39.3159	-31.466
-32.5038	-23.8905	-114.41	-114.016	-38.5594	-31.3903

-32.4945	-23.6237	-120.692	-118.039	-38.0681	-31.2355
-32.4713	-23.3481	-126.425	-116.88	-37.1345	-31.1418
-32.1987	-23.1198	-110.9	-112.868	-35.8017	-30.7561
-31.9009	-22.999	-112.561	-114.823	-34.7674	-30.274
-31.3757	-22.8221	-111.018	-107.908	-33.6891	-29.9266
-30.9977	-22.6015	-116.414	-111.009	-32.9539	-29.8046
-30.7323	-22.4391	-117.711	-115.711	-32.6472	-29.755
-31.0239	-22.0725	-124.65	-115.475	-32.8838	-29.8492
-31.2736	-21.7835	-110.678	-107.601	-33.1729	-29.9764
-32.0176	-21.4781	-122.561	-107.651	-33.5513	-30.4105
-32.4743	-21.0656	-120.131	-110.878	-33.6811	-30.7686
-32.9618	-20.7205	-105.389	-113.627	-33.4457	-31.2132
-33.3561	-20.3486	-127.733	-107.065	-33.2069	-31.2432
-33.0398	-19.9955	-103.171	-125.66	-32.5367	-31.1121
-32.827	-19.6154	-107.099	-104.802	-31.8496	-30.7613
-32.8502	-19.3093	-105.03	-123.162	-31.3513	-30.5715
-32.5666	-18.999	-121.205	-114.008	-30.7532	-30.1035
-31.9808	-18.7249	-117.161	-120.175	-30.0053	-29.5343
-31.0146	-18.4518	-110.332	-109.123	-29.0854	-29.0372
-30.2903	-18.2133	-111.282	-117.552	-28.4955	-28.4155
-29.6746	-17.9669	-105.341	-110.436	-27.9293	-27.8848
-29.2781	-17.7257	-108.558	-106.233	-27.5651	-27.3666
-28.5541	-17.5173	-110.443	-109.866	-26.965	-26.9023
-27.9936	-17.3488	-126.731	-108.241	-26.4908	-26.4913
-27.537	-17.1258	-108.106	-116.533	-26.0891	-25.999
-26.8377	-17.0062	-109.47	-110.654	-25.551	-25.7577
-26.3034	-16.8086	-117.18	-116.821	-25.1534	-25.3048
-25.7455	-16.6093	-105.185	-108.184	-24.7407	-24.835
-25.4026	-16.4277	-124.651	-114.685	-24.5163	-24.3928
-25.014	-16.2636	-112.73	-128.906	-24.2372	-24.0081
-24.5708	-16.1005	-112.218	-112.571	-23.8817	-23.5598
-24.139	-16.0033	-116.15	-113.214	-23.5188	-23.2706
-23.6117	-15.816	-110.877	-111.502	-23.0923	-22.7667
-23.1349	-15.7147	-115.922	-128.75	-22.7136	-22.4755
-22.5226	-15.5424	-107.292	-115.363	-22.1957	-22.0199
-22.143	-15.4039	-118.522	-113.938	-21.9095	-21.5943
-21.85	-15.3049	-117.268	-106.82	-21.7098	-21.2715
-21.5964	-15.226	-117.723	-104.835	-21.5417	-20.9838
-21.181	-15.1685	-108.398	-105.048	-21.1959	-20.7529
-20.9194	-15.0425	-122.292	-108.701	-21.0181	-20.38
-20.5771	-15.0019	-140.171	-105.34	-20.7485	-20.1703
-20.1359	-14.95	-114.147	-108.1	-20.3789	-19.9442
-19.751	-14.8898	-118.07	-118.464	-20.0742	-19.698
-19.4218	-14.8228	-119.306	-109.547	-19.8316	-19.4396
-19.2133	-14.8027	-114.297	-111.286	-19.7202	-19.2621
-18.9671	-14.7725	-109.373	-106.5	-19.5428	-19.0629
-18.8089	-14.7366	-112.787	-102.278	-19.4737	-18.8603
-18.5991	-14.7527	-116.168	-111.307	-19.3412	-18.7276
-18.3179	-14.6731	-109.356	-117.548	-19.1215	-18.448
-18.0046	-14.7345	-112.948	-110.893	-18.8763	-18.3904
-17.6632	-14.7029	-112.68	-106.621	-18.5815	-18.1823
-17.4351	-14.7036	-116.465	-110.696	-18.4094	-18.0212
-17.1258	-14.667	-116.311	-104.604	-18.1463	-17.7881
-16.9483	-14.7192	-114.941	-105.516	-18.0172	-17.6788
-16.7487	-14.7294	-108.582	-110.659	-17.8592	-17.5177

-16.6053	-14.774	-111.445	-132.232	-17.7767	-17.3929
-16.4123	-14.7543	-111.35	-108.287	-17.6352	-17.1957
-16.3043	-14.7623	-111.429	-110.749	-17.5841	-17.0321
-16.2289	-14.7776	-111.907	-109.829	-17.5795	-16.8743
-16.0326	-14.8329	-119.918	-107.151	-17.4187	-16.7541
-15.872	-14.8723	-123.658	-105.989	-17.3095	-16.639
-15.8253	-14.8966	-113.819	-107.64	-17.3263	-16.4913
-15.6589	-15.0034	-113.375	-115.536	-17.2118	-16.4272
-15.6056	-15.1079	-112.16	-106.102	-17.2262	-16.382
-15.5434	-15.0882	-107.111	-100.388	-17.222	-16.1952
-15.5201	-15.15	-98.2968	-98.2796	-17.2724	-16.1073
-15.544	-15.2553	-99.428	-104.865	-17.3786	-16.0604
-15.5866	-15.2588	-110.607	-105.708	-17.4784	-15.9029
-15.5006	-15.3947	-97.7446	-95.4886	-17.4321	-15.8982
-15.5876	-15.5058	-108.884	-94.8879	-17.5975	-15.8403
-15.5304	-15.5304	-107.346	-107.431	-17.566	-15.7389
-15.4595	-15.5311	-103.702	-97.3801	-17.4989	-15.5891
-15.4429	-15.4736	-105.656	-109.63	-17.5008	-15.3909
-15.4521	-15.571	-100.702	-96.0816	-17.5367	-15.3657
-15.45	-15.6527	-104.177	-97.9968	-17.5389	-15.3098
-15.4586	-15.7065	-101.996	-99.4724	-17.5757	-15.247
-15.3974	-15.7025	-109.057	-93.9331	-17.5089	-15.1081
-15.3504	-15.6821	-101.782	-103.024	-17.4582	-14.9697
-15.2739	-15.717	-98.3259	-96.4426	-17.3729	-14.89
-15.0697	-15.7459	-106.715	-103.555	-17.1651	-14.7831
-14.903	-15.6535	-104.426	-98.7968	-16.9328	-14.5946
-14.7336	-15.7398	-105.578	-95.8321	-16.7175	-14.5599
-14.7498	-15.7424	-105.154	-97.7407	-16.7391	-14.4943
-14.7194	-15.7515	-108.377	-103.328	-16.7247	-14.38
-14.5569	-15.7661	-99.7805	-93.9999	-16.5321	-14.3052
-14.5505	-15.8708	-98.5614	-101.432	-16.5256	-14.2624
-14.5399	-15.7523	-104.936	-98.7775	-16.5575	-14.1091
-14.3631	-15.8608	-101.193	-97.0274	-16.3496	-14.0899
-14.2401	-15.8399	-111.781	-97.1903	-16.2011	-13.9974
-14.1452	-15.8851	-107.839	-96.7536	-16.093	-13.9507
-14.1401	-15.9071	-109.625	-102.751	-16.0832	-13.8937
-14.1344	-15.9	-103.399	-99.1592	-16.0328	-13.8159
-14.1654	-15.9363	-99.9769	-97.4453	-16.1135	-13.7813
-14.1702	-15.9524	-108.122	-101.123	-16.1029	-13.7353
-14.2461	-16.0171	-99.3718	-104.306	-16.2314	-13.7094
-14.1588	-15.979	-98.8403	-98.3544	-16.0872	-13.6304
-14.1939	-15.9909	-109.754	-94.1896	-16.1727	-13.5884
-14.1209	-15.9925	-124.999	-98.7665	-16.0722	-13.4694
-14.0835	-16.1109	-109.134	-105.161	-16.0328	-13.5309
-14.0805	-16.0821	-105.028	-117.769	-15.9868	-13.4487
-13.9813	-16.1557	-100.209	-103.345	-15.8468	-13.4563
-13.9756	-16.1013	-115.318	-105.158	-15.8357	-13.4102
-14.0857	-16.1582	-97.8746	-105.252	-15.9367	-13.4185
-13.9693	-16.188	-97.0807	-105.527	-15.8454	-13.419
-14.0509	-16.16	-97.6021	-94.9047	-15.8956	-13.3966
-14.0246	-16.185	-104.262	-116.603	-15.8344	-13.4365
-13.9526	-16.1322	-103.631	-102.266	-15.7142	-13.3822
-13.8628	-16.1009	-99.5169	-106.778	-15.5502	-13.3475
-13.7211	-16.0634	-116.136	-105.938	-15.3532	-13.4346
-13.6207	-16.2107	-98.1437	-102.968	-15.2138	-13.4257

-13.644	-16.1098	-95.7352	-106.552	-15.1902	-13.4597
-13.5735	-16.1116	-106.929	-92.9238	-15.1112	-13.544
-13.5443	-15.9659	-98.5858	-93.045	-15.0175	-13.6496
-13.4566	-15.839	-95.3827	-95.7488	-14.8434	-13.5908
-13.4268	-15.6736	-103.749	-93.1916	-14.7618	-13.6437
-13.3639	-15.5581	-128.979	-92.2528	-14.7516	-13.6258
-13.4863	-15.3803	-94.7218	-100.623	-14.7072	-13.6762
-13.338	-15.2857	-98.5095	-102.055	-14.5089	-13.7025
-13.3655	-14.9629	-95.2505	-100.232	-14.4883	-13.7298
-13.2641	-14.9617	-113.857	-96.2635	-14.266	-13.8666
-13.3389	-14.6642	-99.2403	-99.6514	-14.2579	-13.8159
-13.3945	-14.4159	-101.16	-96.7414	-14.1965	-13.9197
-13.3073	-14.1779	-101.982	-102.868	-13.9666	-13.8129
-13.2718	-14.0143	-106.667	-100.956	-13.8103	-13.8772
-13.2829	-13.7626	-113.307	-101.637	-13.6814	-13.9358
-13.2352	-13.6517	-104.869	-93.9029	-13.5064	-13.8984
-13.2704	-13.149	-100.133	-95.8643	-13.3956	-13.791
-13.1282	-13.0077	-105.218	-93.1714	-13.1168	-13.6692
-13.0675	-12.6884	-97.9562	-99.179	-12.8767	-13.6011
-12.9102	-12.6299	-107.071	-95.867	-12.6022	-13.8206
-12.9635	-12.3067	-106.208	-110.777	-12.4232	-13.7461
-12.7952	-12.2369	-96.7516	-97.0744	-12.216	-13.7567
-12.9055	-12.0304	-99.8066	-98.1715	-12.1661	-13.6009
-13.0499	-11.7004	-96.5804	-94.1154	-12.1857	-13.5312
-12.8494	-11.622	-94.8345	-97.5406	-11.9271	-13.5347
-12.802	-11.4502	-96.1572	-103.785	-11.7294	-13.5182
-12.8745	-11.1649	-95.0099	-95.958	-11.6161	-13.2979
-12.7826	-11.0802	-106.024	-106.015	-11.4229	-13.4108
-12.8003	-10.8109	-96.6183	-102.556	-11.3506	-13.1302
-12.9117	-10.765	-102.933	-112.73	-11.3448	-13.1733
-13.0236	-10.4594	-107.903	-93.8689	-11.2594	-12.9727
-13.1131	-10.3865	-100.973	-98.0333	-11.2014	-12.9513
-13.1841	-10.2848	-106.508	-92.5704	-11.1039	-12.972
-13.3304	-10.1285	-98.9615	-107.512	-11.1087	-12.8498
-13.4025	-10.0017	-118.005	-103.278	-10.9625	-12.686
-13.5263	-9.88766	-108.673	-98.8412	-10.8709	-12.5843
-13.7531	-9.73409	-100.902	-103.517	-10.8234	-12.506
-13.7374	-9.76133	-97.3548	-99.5537	-10.6532	-12.4601
-13.9832	-9.6511	-99.1245	-103.471	-10.648	-12.4397
-14.017	-9.46246	-98.6476	-105.787	-10.5192	-12.373
-14.0182	-9.42141	-95.1203	-100.363	-10.28	-12.2507
-13.85	-9.37282	-108.945	-101.202	-10.0848	-12.1941
-13.8511	-9.35232	-100.909	-110.771	-9.90296	-12.107
-13.6487	-9.35602	-104.617	-101.259	-9.71243	-12.1717
-13.4506	-9.16665	-95.2838	-95.8447	-9.46061	-12.1098
-13.2134	-9.22566	-95.8748	-94.6371	-9.2431	-12.1051
-13.0615	-9.15525	-102.289	-95.2057	-9.11157	-11.992
-12.8452	-9.2504	-97.9185	-89.9447	-8.93499	-12.1626
-12.6779	-9.2432	-101.361	-94.8601	-8.82161	-12.2167
-12.3979	-9.13448	-104.419	-96.4886	-8.59263	-12.192

		0.2 TO 19
max	1.824764	2.092795
Max	1.882096	1.933467
max	1.882096	2.092795

J7-J8

S21 (dB)	S12 (dB)	S22 (dB)	Frequency (GHz)	J1 In	J1 Out	J2 In	J2 Out
-93.2061	-99.3346	-17.3063	0.1	2.414608	3.404736	1.989768	1.991254
-95.6779	-93.2292	-31.9791	0.1995	1.391042	1.24423	1.403977	1.309628
-94.5546	-93.0657	-33.7053	0.299	1.194896	1.142585	1.21853	1.183843
-93.7324	-95.3336	-32.5233	0.3985	1.15851	1.188545	1.137097	1.141157
-95.1516	-95.0716	-31.66	0.498	1.156305	1.216401	1.100622	1.122164
-93.8035	-96.1952	-31.1518	0.5975	1.168829	1.230137	1.090197	1.114598
-97.1419	-98.3397	-30.8588	0.697	1.183877	1.238555	1.0914	1.109975
-97.6714	-97.9403	-30.7866	0.7965	1.19508	1.235037	1.103924	1.104996
-103.768	-103.894	-31.0083	0.896	1.214554	1.23424	1.121307	1.104348
-105.837	-103.171	-31.0126	0.9955	1.234899	1.232076	1.143314	1.107829
-109.405	-110.91	-31.1596	1.095	1.24305	1.222988	1.151664	1.106039
-111.357	-101.449	-31.1167	1.1945	1.261837	1.218816	1.167828	1.109261
-108.141	-109.443	-31.3986	1.294	1.271578	1.208221	1.181082	1.106562
-109.332	-116.579	-31.6178	1.3935	1.282451	1.210707	1.191547	1.116737
-113.143	-108.602	-32.1035	1.493	1.296843	1.202043	1.203729	1.114782
-120.289	-108.598	-32.4983	1.5925	1.313892	1.20192	1.220692	1.120857
-111.087	-115.029	-32.8291	1.692	1.319777	1.199531	1.226205	1.12304
-124.983	-119.205	-33.2039	1.7915	1.326952	1.195188	1.229709	1.12288
-112.592	-107.067	-33.6931	1.891	1.336247	1.200497	1.237744	1.128702
-109.444	-108.809	-34.1777	1.9905	1.344627	1.195798	1.243262	1.124423
-103.585	-108.678	-34.9	2.09	1.35531	1.204851	1.251533	1.130337
-111.317	-119.471	-35.6173	2.1895	1.365622	1.212012	1.256439	1.13386
-120.988	-105.616	-36.6389	2.289	1.364103	1.216701	1.252156	1.132141
-116.428	-111.494	-38.1243	2.3885	1.372775	1.220804	1.254636	1.132949
-110.286	-106.902	-39.1556	2.488	1.371435	1.224661	1.249104	1.130923
-112.077	-110.332	-41.0372	2.5875	1.377068	1.228624	1.250496	1.128769
-116.524	-107.594	-42.8015	2.687	1.375421	1.232783	1.244771	1.123991
-107.641	-109.607	-45.684	2.7865	1.37236	1.236028	1.240422	1.121668
-107.869	-105.499	-48.4016	2.886	1.372804	1.245192	1.239298	1.12357
-108.735	-113.953	-45.6869	2.9855	1.368798	1.246837	1.239427	1.119794
-108.089	-117.795	-41.9445	3.085	1.372091	1.256398	1.249722	1.121004
-111.564	-125.003	-39.8372	3.1845	1.375135	1.266562	1.256438	1.124362
-109.97	-102.551	-39.2924	3.284	1.387633	1.279189	1.272694	1.128765
-117.418	-110.888	-39.1338	3.3835	1.394419	1.283334	1.276522	1.128
-110.969	-123.212	-40.1417	3.483	1.40718	1.283712	1.290202	1.129764
-113.308	-104.699	-40.8362	3.5825	1.408112	1.281967	1.291157	1.130267
-113.937	-110.441	-41.6903	3.682	1.415032	1.274199	1.300948	1.127089
-116.284	-109.029	-41.5783	3.7815	1.405946	1.2687	1.302864	1.133964
-108.063	-125.941	-40.0286	3.881	1.413466	1.256628	1.317296	1.132453
-116.449	-113.073	-39.3192	3.9805	1.404324	1.242981	1.32297	1.135476
-117.662	-109.48	-38.5811	4.08	1.397511	1.230336	1.336705	1.141105

-119.306	-104.768	-38.0943	4.1795	1.387508	1.214656	1.351062	1.149038
-113.033	-119.835	-37.1824	4.279	1.375397	1.194232	1.362178	1.152705
-111.84	-115.584	-35.8372	4.3785	1.369607	1.173986	1.382822	1.158841
-113.393	-109.67	-34.7774	4.478	1.363635	1.154669	1.399306	1.166805
-108.216	-109.449	-33.6872	4.5775	1.361991	1.140356	1.41882	1.17483
-110.443	-118.392	-32.9423	4.677	1.360923	1.120901	1.43418	1.187231
-118.928	-108.283	-32.6385	4.7765	1.36625	1.106895	1.452296	1.199178
-115.572	-107.681	-32.853	4.876	1.358687	1.101968	1.454334	1.213972
-113.884	-112.193	-33.1503	4.9755	1.352654	1.080918	1.461973	1.235858
-118.001	-113.358	-33.5301	5.075	1.340204	1.073582	1.464079	1.249181
-106.441	-111.872	-33.6753	5.1745	1.325907	1.063997	1.466004	1.267817
-110.343	-108.749	-33.459	5.274	1.307531	1.055341	1.466216	1.292875
-120.062	-108.042	-33.2421	5.3735	1.293442	1.05485	1.46611	1.308435
-107.861	-114.833	-32.5934	5.473	1.273177	1.051335	1.463367	1.324346
-112.098	-123.149	-31.896	5.5725	1.256973	1.062183	1.460582	1.340466
-125.949	-127.928	-31.4051	5.672	1.246548	1.075037	1.457611	1.353481
-105.001	-104.826	-30.7871	5.7715	1.231115	1.087384	1.45035	1.364084
-110.189	-112.497	-30.0173	5.871	1.220525	1.103776	1.445071	1.376963
-109.967	-112.88	-29.0853	5.9705	1.215432	1.116263	1.44356	1.384223
-109.714	-109.273	-28.4949	6.07	1.198223	1.13224	1.425563	1.393072
-114.316	-114.151	-27.9213	6.1695	1.190999	1.143666	1.417586	1.398656
-106.676	-110.945	-27.5619	6.269	1.183333	1.151365	1.406588	1.398657
-107.546	-107.862	-26.9478	6.3685	1.176448	1.159336	1.396233	1.401288
-113.22	-114.315	-26.4575	6.468	1.174883	1.163309	1.388945	1.399089
-129.925	-112.787	-26.0527	6.5675	1.165056	1.161798	1.369931	1.38936
-107.823	-110.355	-25.5105	6.667	1.162342	1.163849	1.3592	1.387451
-128.927	-114.408	-25.1149	6.7665	1.159032	1.180081	1.346363	1.397578
-115.59	-113.717	-24.7054	6.866	1.159769	1.185009	1.33833	1.395261
-121.453	-113.349	-24.4815	6.9655	1.160152	1.183194	1.326294	1.387794
-112.67	-105.524	-24.2079	7.065	1.165395	1.196566	1.317607	1.392061
-111.296	-107.027	-23.8596	7.1645	1.179333	1.205656	1.315346	1.394977
-120.872	-104.209	-23.4976	7.264	1.195237	1.212854	1.314573	1.391347
-111.352	-105.094	-23.067	7.3635	1.207705	1.222005	1.313751	1.391763
-112.634	-108.233	-22.693	7.463	1.229895	1.236466	1.322596	1.394597
-112.417	-107.815	-22.1827	7.5625	1.252906	1.259312	1.33141	1.408721
-106.063	-109.983	-21.9043	7.662	1.280506	1.280823	1.343529	1.418086
-109.349	-121.77	-21.7071	7.7615	1.305824	1.306418	1.356309	1.427399
-118.36	-116.861	-21.5389	7.861	1.342309	1.335222	1.38204	1.447882
-110.761	-110.625	-21.19	7.9605	1.358773	1.340319	1.383491	1.438505
-117.326	-101.197	-20.9984	8.06	1.390136	1.365413	1.404657	1.448615
-103.147	-123.057	-20.7202	8.1595	1.416921	1.379437	1.420703	1.449583
-111.608	-110.187	-20.3506	8.259	1.446077	1.402149	1.438292	1.463725
-120.331	-110.132	-20.048	8.3585	1.472126	1.418103	1.454617	1.461734
-107.01	-106.761	-19.7909	8.458	1.487106	1.434165	1.460226	1.464804
-110.371	-103.175	-19.6721	8.5575	1.52414	1.460702	1.483575	1.473557
-109.053	-115.205	-19.4946	8.657	1.536817	1.479804	1.487603	1.473734
-111.831	-118.974	-19.4186	8.7565	1.567119	1.492391	1.507013	1.467552
-108.732	-106.578	-19.2879	8.856	1.575548	1.502244	1.508971	1.464912
-113.659	-116.13	-19.068	8.9555	1.593059	1.514974	1.518549	1.462172
-105.409	-112.337	-18.8253	9.055	1.604028	1.517558	1.522416	1.443716
-110.655	-115.65	-18.5326	9.1545	1.608499	1.526819	1.523079	1.429132
-112.327	-106.726	-18.3671	9.254	1.614275	1.53625	1.523794	1.417988
-112.429	-107.927	-18.1054	9.3535	1.622654	1.531658	1.525522	1.396725
-108.246	-105.653	-17.9845	9.453	1.636699	1.545648	1.538697	1.394128
-107.553	-127.562	-17.8337	9.5525	1.62637	1.553714	1.523234	1.379993

-109.326	-108.442	-17.758	9.652	1.633215	1.564165	1.52381	1.377092
-105.027	-108.986	-17.6199	9.7515	1.645731	1.571014	1.535029	1.368305
-111.86	-107.728	-17.5733	9.851	1.655509	1.576788	1.534591	1.362714
-106.016	-110.939	-17.574	9.9505	1.660847	1.569289	1.541301	1.350564
-119.553	-106.333	-17.413	10.05	1.668328	1.569556	1.537136	1.346511
-110.71	-108.689	-17.3044	10.1495	1.661977	1.575079	1.53857	1.344702
-113.339	-103.175	-17.319	10.249	1.663065	1.568105	1.534929	1.341546
-115.833	-110.372	-17.2085	10.3485	1.672601	1.576719	1.541778	1.346605
-119.068	-105.49	-17.2201	10.448	1.670535	1.576021	1.537783	1.346915
-101.04	-101.268	-17.2182	10.5475	1.681289	1.580484	1.53926	1.342276
-122.015	-101.011	-17.2679	10.647	1.691595	1.575397	1.546601	1.345643
-100.662	-98.0151	-17.3765	10.7465	1.693794	1.587351	1.538879	1.361734
-102.676	-103.294	-17.481	10.846	1.699526	1.584176	1.54709	1.361883
-101.833	-100.207	-17.4363	10.9455	1.684244	1.575379	1.525887	1.349051
-103.691	-96.1401	-17.6056	11.045	1.685569	1.584144	1.515497	1.359334
-108.015	-97.962	-17.5778	11.1445	1.675368	1.573757	1.490637	1.351706
-94.8288	-96.7457	-17.5134	11.244	1.665713	1.547578	1.48197	1.329068
-106.638	-98.9547	-17.5273	11.3435	1.653945	1.552566	1.469924	1.334266
-106.237	-102.881	-17.5693	11.443	1.645105	1.542904	1.452914	1.325086
-112.106	-98.6223	-17.5801	11.5425	1.656467	1.524829	1.436493	1.314482
-99.1819	-99.2194	-17.6246	11.642	1.643539	1.510608	1.424366	1.300416
-98.7308	-105.873	-17.5679	11.7415	1.621038	1.507198	1.386057	1.292861
-108.693	-100.595	-17.5155	11.841	1.635877	1.490632	1.388095	1.284758
-101.695	-97.1967	-17.4223	11.9405	1.628524	1.475551	1.369608	1.261824
-99.8979	-95.1896	-17.2033	12.04	1.598059	1.47158	1.334978	1.266619
-105.143	-99.7883	-16.9642	12.1395	1.606048	1.456076	1.338925	1.250626
-98.7089	-115.069	-16.7465	12.239	1.587472	1.444068	1.307665	1.239273
-110.041	-98.7172	-16.7547	12.3385	1.613927	1.41385	1.32046	1.215941
-103.479	-98.0664	-16.7395	12.438	1.584284	1.413707	1.281753	1.216567
-106.464	-98.5529	-16.5394	12.5375	1.571153	1.3993	1.264029	1.207116
-105.053	-97.1891	-16.5277	12.637	1.591053	1.387739	1.275884	1.196354
-102.306	-100.16	-16.5551	12.7365	1.602414	1.382136	1.277452	1.191608
-106.16	-102.257	-16.3425	12.836	1.595656	1.373789	1.257571	1.187428
-97.3249	-102.405	-16.1899	12.9355	1.604083	1.357845	1.253673	1.183375
-99.194	-97.8631	-16.0808	13.035	1.601723	1.365082	1.248319	1.18879
-102.157	-104.877	-16.0639	13.1345	1.613511	1.340248	1.250167	1.172324
-100.228	-106.556	-16.0178	13.234	1.614416	1.334867	1.249017	1.172243
-94.6086	-91.9664	-16.1043	13.3335	1.632548	1.346727	1.270011	1.184796
-99.1087	-109.486	-16.1064	13.433	1.65182	1.330993	1.272021	1.185691
-99.3632	-101.181	-16.2372	13.5325	1.654818	1.302879	1.270924	1.158642
-106.928	-105.156	-16.0882	13.632	1.650264	1.329585	1.265018	1.196285
-96.5765	-101.523	-16.1818	13.7315	1.677039	1.323705	1.282263	1.189604
-99.7343	-97.6012	-16.0746	13.831	1.69628	1.326523	1.286541	1.204511
-98.6753	-96.1067	-16.0319	13.9305	1.715098	1.34362	1.299107	1.225516
-107.548	-107.839	-15.9804	14.03	1.733284	1.350706	1.309091	1.241681
-99.1116	-106.586	-15.8465	14.1295	1.760548	1.363536	1.331074	1.25358
-104.798	-96.2104	-15.8291	14.229	1.723565	1.398773	1.312981	1.289319
-98.5157	-95.2902	-15.9344	14.3285	1.775161	1.395244	1.33701	1.304933
-102.706	-97.3494	-15.8409	14.428	1.785472	1.40867	1.356346	1.316267
-104.798	-98.7788	-15.8903	14.5275	1.786311	1.419523	1.36102	1.336821
-97.9043	-101.737	-15.8291	14.627	1.793227	1.435845	1.376878	1.351568
-94.3526	-103.78	-15.7147	14.7265	1.810762	1.466991	1.403598	1.396489
-97.846	-98.3438	-15.545	14.826	1.807574	1.497393	1.40854	1.416996
-100.99	-93.6762	-15.337	14.9255	1.818487	1.509879	1.425463	1.441734
-106.105	-100.366	-15.2113	15.025	1.824764	1.537226	1.442165	1.4666

-117.062	-100.006	-15.1892	15.1245	1.805659	1.553548	1.427598	1.482096
-95.009	-95.9715	-15.1129	15.224	1.790789	1.575025	1.437914	1.506882
-97.7347	-99.8514	-15.0213	15.3235	1.796429	1.582353	1.45973	1.497199
-108.571	-97.5287	-14.8559	15.423	1.756465	1.606948	1.447706	1.520665
-99.9925	-114.298	-14.7678	15.5225	1.761687	1.598236	1.454787	1.518116
-103.258	-102.754	-14.7577	15.622	1.705304	1.591849	1.424587	1.49825
-112.12	-105.455	-14.7095	15.7215	1.680262	1.616456	1.417939	1.513168
-95.9848	-102.495	-14.5045	15.821	1.669474	1.638576	1.412785	1.51911
-94.935	-102.736	-14.4887	15.9205	1.649617	1.622147	1.40142	1.495855
-98.1397	-94.3535	-14.2616	16.02	1.629134	1.640859	1.406414	1.498411
-100.771	-105.149	-14.2484	16.1195	1.591562	1.646433	1.391413	1.484117
-98.9794	-91.252	-14.185	16.219	1.549388	1.624897	1.352764	1.444792
-98.0511	-96.3317	-13.9605	16.3185	1.513688	1.617038	1.328965	1.417534
-100.175	-99.0276	-13.7942	16.418	1.497316	1.617223	1.324622	1.391638
-103.357	-107.366	-13.6642	16.5175	1.475231	1.597571	1.309272	1.363001
-102.023	-106.454	-13.4899	16.617	1.437589	1.581327	1.279123	1.318892
-99.5052	-107.159	-13.3731	16.7165	1.398286	1.562877	1.252833	1.29987
-106.016	-98.5519	-13.0934	16.816	1.360646	1.53274	1.230678	1.254268
-95.9904	-98.7269	-12.8619	16.9155	1.319062	1.52211	1.204016	1.227534
-98.8754	-99.1474	-12.5901	17.015	1.291405	1.480033	1.213639	1.177417
-98.9388	-94.6639	-12.4173	17.1145	1.251489	1.470458	1.195258	1.154631
-101.423	-106.607	-12.2186	17.214	1.21202	1.42456	1.178748	1.108549
-100.836	-95.5727	-12.1774	17.3135	1.166098	1.389908	1.184037	1.084474
-109.817	-104.07	-12.1882	17.413	1.143559	1.358906	1.196467	1.059092
-100.072	-96.8534	-11.9328	17.5125	1.092457	1.334845	1.213192	1.070102
-99.4072	-92.6064	-11.7342	17.612	1.055743	1.288761	1.242082	1.110989
-93.9903	-95.5407	-11.6183	17.7115	1.008561	1.268895	1.275302	1.133552
-95.3843	-108.882	-11.4172	17.811	1.021269	1.24397	1.313943	1.169007
-111.959	-96.5899	-11.3545	17.9105	1.077203	1.219643	1.33403	1.205661
-99.4629	-97.6903	-11.3384	18.01	1.122836	1.203281	1.366369	1.244751
-96.9524	-101.593	-11.2654	18.1095	1.171236	1.205866	1.41236	1.261957
-96.0151	-107.486	-11.2106	18.209	1.235532	1.20564	1.437795	1.293819
-114.984	-101.553	-11.1138	18.3085	1.285875	1.208528	1.476101	1.316033
-93.8654	-118.772	-11.1194	18.408	1.362427	1.196619	1.519781	1.33473
-94.3845	-94.3744	-10.9742	18.5075	1.421491	1.212977	1.545007	1.370011
-93.8339	-94.4999	-10.8841	18.607	1.498278	1.223247	1.565869	1.380117
-98.5565	-92.7905	-10.8441	18.7065	1.586573	1.23666	1.625868	1.391846
-96.6266	-103.938	-10.684	18.806	1.646913	1.245653	1.631521	1.41598
-99.4378	-105.044	-10.677	18.9055	1.752612	1.246768	1.661744	1.39205
-110.439	-94.624	-10.5493	19.005	1.854017	1.266718	1.733524	1.385089
-98.9246	-102.041	-10.3072	19.1045	1.933292	1.284956	1.730531	1.423746
-95.2528	-108.849	-10.1096	19.204	2.032707	1.267759	1.774252	1.424476
-97.3591	-94.8461	-9.93135	19.3035	2.118385	1.285374	1.809825	1.428437
-96.8985	-101.46	-9.73251	19.403	2.207947	1.260382	1.829354	1.411289
-105.742	-93.0584	-9.47204	19.5025	2.376753	1.271486	1.908749	1.393922
-93.0503	-96.2644	-9.24881	19.602	2.442652	1.273184	1.93694	1.396739
-100.525	-99.7901	-9.1142	19.7015	2.542151	1.261523	1.964678	1.367136
-96.194	-96.9288	-8.93905	19.801	2.642047	1.270037	2.000505	1.321248
-94.7306	-98.5058	-8.82111	19.9005	2.731541	1.270299	2.048842	1.320162
-95.3688	-99.376	-8.59421	20	2.925188	1.284389	2.119647	1.277841

VSWR/IN - OUT

J3 In	J3 Out	J4 In	J4 Out	J5 In	J5 Out	J6 In	J6 Out	J7 In	J7 Out
1.878164	1.867422	2.086285	2.095251	2.010615	2.011027	2.014467	2.00925	2.051232	2.076817
1.416985	1.324316	1.417935	1.32725	1.394232	1.304249	1.401487	1.309403	1.422177	1.330772
1.233717	1.19428	1.234654	1.193997	1.219494	1.186707	1.213719	1.17533	1.234309	1.196178
1.152203	1.152476	1.149398	1.149064	1.13928	1.150125	1.12958	1.135483	1.150914	1.150893
1.116671	1.127352	1.111237	1.125541	1.104379	1.133044	1.089825	1.119103	1.114774	1.127729
1.10239	1.115491	1.093068	1.115542	1.090486	1.12733	1.079579	1.117356	1.102841	1.115522
1.099269	1.103169	1.086794	1.105913	1.08803	1.122949	1.082127	1.119546	1.103509	1.104721
1.108497	1.092481	1.09294	1.09674	1.098119	1.116444	1.095183	1.121732	1.115604	1.095591
1.123512	1.08357	1.105389	1.088589	1.111734	1.112805	1.112114	1.126129	1.132402	1.090911
1.142135	1.081655	1.122682	1.086889	1.131147	1.112456	1.134917	1.133749	1.155399	1.091795
1.148478	1.076147	1.126356	1.078965	1.137141	1.107107	1.141072	1.135128	1.163712	1.09074
1.164283	1.077736	1.13925	1.077619	1.150221	1.107588	1.155849	1.139999	1.182807	1.098052
1.180713	1.076496	1.150687	1.071907	1.162183	1.102997	1.167938	1.139765	1.200183	1.100021
1.189724	1.088356	1.156528	1.076917	1.170418	1.1093	1.176839	1.147707	1.212711	1.116001
1.202907	1.093456	1.164864	1.071966	1.178652	1.105137	1.18534	1.14419	1.227971	1.123505
1.221582	1.106425	1.179206	1.07681	1.192787	1.106001	1.197359	1.143341	1.249607	1.139334
1.229226	1.114172	1.183843	1.077248	1.1974	1.105967	1.197454	1.141235	1.260021	1.148477
1.238014	1.122646	1.187901	1.076617	1.200298	1.10215	1.197318	1.132873	1.268017	1.156329
1.251577	1.136814	1.19481	1.082925	1.205902	1.106811	1.199708	1.133041	1.281647	1.172318
1.25713	1.141177	1.196934	1.08118	1.21002	1.098441	1.196775	1.116902	1.28813	1.175241
1.268698	1.152693	1.204408	1.087	1.21417	1.100539	1.196601	1.112418	1.300544	1.185564
1.275936	1.162547	1.211093	1.092007	1.216383	1.100716	1.192449	1.104875	1.31046	1.196802
1.275135	1.167882	1.20589	1.093138	1.209513	1.096341	1.180262	1.093359	1.310177	1.201189
1.280524	1.1741	1.20623	1.09468	1.209233	1.094639	1.176309	1.084859	1.314754	1.208538
1.277413	1.175253	1.205309	1.093259	1.201523	1.089139	1.160508	1.073454	1.313629	1.212202
1.28236	1.176688	1.209361	1.094211	1.201509	1.084779	1.151891	1.059985	1.3182	1.214059
1.277072	1.17677	1.205193	1.091712	1.192796	1.079336	1.137545	1.049014	1.314878	1.21403
1.27469	1.177187	1.205511	1.08918	1.186153	1.074715	1.125954	1.036568	1.31048	1.213025
1.275337	1.180571	1.206387	1.093367	1.18216	1.07541	1.118237	1.02039	1.307047	1.212713
1.274257	1.179273	1.209502	1.089784	1.179825	1.070836	1.112911	1.014832	1.302822	1.207616
1.284173	1.183439	1.221862	1.088307	1.187337	1.067297	1.122305	1.016255	1.308779	1.210367
1.287805	1.183443	1.22919	1.094975	1.190592	1.06675	1.128998	1.022917	1.308893	1.209249
1.298852	1.182804	1.248044	1.102189	1.20386	1.069079	1.148444	1.036384	1.31967	1.208453
1.296744	1.173036	1.255514	1.106713	1.206392	1.06985	1.155194	1.057694	1.318078	1.199067
1.298583	1.161554	1.271712	1.113168	1.21949	1.075404	1.176815	1.085326	1.324801	1.185525
1.287126	1.146326	1.275654	1.117254	1.222412	1.080662	1.189908	1.109915	1.315257	1.170733
1.283057	1.128444	1.287992	1.117566	1.233466	1.085149	1.214519	1.13621	1.315566	1.151615
1.268672	1.111296	1.294132	1.129283	1.240024	1.099034	1.237051	1.169386	1.300673	1.12978
1.265536	1.088009	1.306338	1.129803	1.254181	1.107104	1.264342	1.196426	1.296838	1.106683
1.254911	1.06657	1.31675	1.135285	1.266957	1.117924	1.294152	1.224633	1.285924	1.081838
1.251489	1.043323	1.33177	1.145926	1.286165	1.132746	1.331681	1.254801	1.281029	1.058777

1.248517	1.02046	1.346983	1.155669	1.306599	1.14721	1.368572	1.28148	1.276666	1.03449
1.245874	1.006883	1.362019	1.165021	1.325494	1.160879	1.402989	1.305795	1.273339	1.017086
1.254239	1.029206	1.385987	1.177481	1.352352	1.175002	1.445022	1.329163	1.278312	1.020544
1.259943	1.049989	1.404776	1.189145	1.373362	1.190502	1.478647	1.352123	1.285394	1.037263
1.272526	1.069802	1.42898	1.199461	1.39911	1.203036	1.517083	1.371834	1.295648	1.053861
1.282428	1.094326	1.448762	1.21785	1.421721	1.222763	1.549318	1.397629	1.304421	1.073385
1.293593	1.119501	1.468124	1.234894	1.443182	1.24427	1.581238	1.42464	1.316175	1.092085
1.296445	1.139638	1.476507	1.250322	1.454606	1.260948	1.601523	1.44871	1.315151	1.10486
1.306884	1.178389	1.49038	1.279859	1.472347	1.293612	1.627857	1.485191	1.319277	1.134197
1.312992	1.201267	1.495873	1.298887	1.479538	1.312859	1.647771	1.508584	1.321223	1.150901
1.325592	1.230379	1.504391	1.322375	1.49414	1.335135	1.665513	1.54215	1.326641	1.17323
1.340974	1.266654	1.509591	1.351382	1.502512	1.364901	1.681679	1.573175	1.332297	1.202683
1.357553	1.294433	1.516763	1.377383	1.510762	1.386379	1.69236	1.599018	1.335613	1.223801
1.377257	1.335615	1.523415	1.40423	1.5209	1.41143	1.701716	1.623374	1.34234	1.251639
1.391806	1.367156	1.524511	1.427042	1.523849	1.43326	1.701152	1.640418	1.342955	1.27002
1.406267	1.39653	1.527232	1.448158	1.527139	1.449567	1.701076	1.655346	1.343416	1.283122
1.426626	1.42106	1.528053	1.462929	1.529833	1.461293	1.69774	1.659364	1.347858	1.292673
1.440321	1.448434	1.526248	1.48015	1.528263	1.476858	1.687341	1.66794	1.346573	1.305901
1.45452	1.472693	1.527353	1.492719	1.530788	1.484376	1.683906	1.672728	1.347	1.312793
1.460214	1.495536	1.511395	1.506114	1.518324	1.494491	1.661377	1.680845	1.340289	1.325983
1.466982	1.509022	1.505749	1.511459	1.513373	1.498035	1.647378	1.683337	1.334783	1.33001
1.470635	1.524148	1.493548	1.511754	1.504955	1.49706	1.629778	1.678829	1.326742	1.333349
1.468572	1.530647	1.47763	1.515344	1.490147	1.497714	1.605484	1.66988	1.312567	1.328137
1.471463	1.537428	1.469922	1.509927	1.48562	1.494184	1.591047	1.65438	1.30182	1.321884
1.465858	1.527515	1.450288	1.497791	1.467749	1.479586	1.558748	1.629827	1.284451	1.300051
1.450276	1.529096	1.430959	1.490713	1.446611	1.472879	1.530476	1.610245	1.262185	1.285059
1.438638	1.540302	1.41037	1.495349	1.428483	1.48044	1.501111	1.60753	1.241522	1.282266
1.430363	1.536	1.39544	1.486117	1.41569	1.46702	1.48701	1.592661	1.228254	1.26723
1.41263	1.522344	1.375153	1.468595	1.394635	1.454007	1.466014	1.575067	1.210645	1.252467
1.401322	1.524677	1.357392	1.463636	1.376655	1.452481	1.448733	1.577218	1.197315	1.248285
1.382632	1.516706	1.341091	1.456109	1.360565	1.444176	1.435766	1.572456	1.187333	1.241531
1.369631	1.511199	1.328299	1.446303	1.346973	1.436711	1.427004	1.559984	1.180765	1.231605
1.360964	1.498996	1.31709	1.434158	1.335834	1.423298	1.413795	1.544919	1.175105	1.220922
1.361548	1.497577	1.316732	1.421906	1.334969	1.417951	1.413263	1.530847	1.180481	1.209734
1.358478	1.502111	1.314656	1.425979	1.331488	1.419151	1.410136	1.523011	1.181505	1.206825
1.353071	1.4984	1.31075	1.42228	1.326136	1.417174	1.41231	1.519823	1.186238	1.20642
1.360885	1.503948	1.315934	1.420136	1.333372	1.417978	1.416269	1.513713	1.195035	1.202367
1.378626	1.517072	1.329843	1.430638	1.347835	1.430392	1.432841	1.519099	1.213554	1.210175
1.378813	1.497659	1.324584	1.408633	1.343997	1.412937	1.419306	1.501879	1.206239	1.197447
1.397918	1.50839	1.339723	1.413165	1.362279	1.418297	1.434727	1.498701	1.221405	1.19672
1.408084	1.510428	1.345338	1.404998	1.370369	1.414743	1.437656	1.488195	1.223524	1.190661
1.431781	1.515396	1.361199	1.405997	1.390008	1.416097	1.445088	1.483232	1.233105	1.190146
1.453404	1.516098	1.369285	1.396098	1.404083	1.414877	1.450975	1.461306	1.236192	1.175107
1.450208	1.517301	1.365439	1.392585	1.398521	1.410119	1.438382	1.444037	1.22375	1.163852
1.488492	1.525316	1.391492	1.395346	1.430705	1.418338	1.44943	1.433316	1.237989	1.153067
1.503539	1.525794	1.396567	1.390973	1.44047	1.417387	1.442031	1.411423	1.23106	1.135976
1.521326	1.520845	1.408092	1.383914	1.458721	1.417433	1.447316	1.388996	1.233017	1.117322
1.537166	1.522991	1.416029	1.378832	1.467642	1.413756	1.443072	1.371333	1.230486	1.103214
1.560464	1.515696	1.434156	1.37081	1.489598	1.411204	1.447173	1.355868	1.240982	1.092784
1.567841	1.509933	1.43791	1.361492	1.495931	1.401689	1.445717	1.329501	1.240238	1.08601
1.574795	1.497704	1.443317	1.356932	1.502727	1.393625	1.441645	1.316892	1.244768	1.087518
1.580132	1.488399	1.448108	1.352675	1.512112	1.39041	1.43781	1.307886	1.251328	1.100965
1.592037	1.466709	1.461958	1.337231	1.516889	1.371518	1.444322	1.290319	1.271256	1.112416
1.605626	1.460932	1.48003	1.346049	1.541432	1.374766	1.463754	1.293647	1.29002	1.144519
1.605312	1.44719	1.483394	1.349226	1.541672	1.369043	1.455363	1.28728	1.314748	1.183551

1.597567	1.444469	1.487484	1.360328	1.54044	1.372389	1.456887	1.290225	1.318292	1.213168
1.61988	1.433727	1.513497	1.36847	1.563554	1.370073	1.477065	1.289776	1.357503	1.248685
1.62004	1.42523	1.52751	1.382458	1.567509	1.373141	1.47949	1.291198	1.37535	1.288901
1.627097	1.413533	1.546689	1.389088	1.580209	1.366915	1.494114	1.294129	1.406896	1.314261
1.623566	1.405333	1.553041	1.407534	1.583076	1.370687	1.503339	1.307674	1.427956	1.354629
1.623569	1.399264	1.566087	1.417249	1.586476	1.369864	1.515821	1.320333	1.458043	1.373656
1.607534	1.388023	1.567819	1.42898	1.575923	1.369655	1.514607	1.335269	1.470519	1.40523
1.6111	1.390891	1.578735	1.446015	1.580864	1.37786	1.52831	1.361917	1.496129	1.447785
1.60335	1.38407	1.580612	1.456593	1.578412	1.375763	1.53716	1.380737	1.520431	1.487566
1.601498	1.381649	1.591303	1.468356	1.576575	1.375438	1.544764	1.398879	1.55271	1.520394
1.603171	1.371658	1.595966	1.468084	1.575302	1.368373	1.552757	1.403007	1.560789	1.551366
1.586629	1.386656	1.577732	1.497342	1.560774	1.370803	1.541287	1.42271	1.567331	1.597412
1.595721	1.372402	1.594759	1.483662	1.566268	1.363301	1.551663	1.412862	1.597135	1.604904
1.570304	1.360058	1.569286	1.477542	1.537444	1.347787	1.53348	1.404852	1.582485	1.615126
1.5544	1.371093	1.564995	1.486065	1.520178	1.348779	1.526745	1.412151	1.59362	1.632012
1.52715	1.355642	1.537398	1.475278	1.483384	1.331274	1.503579	1.399046	1.589168	1.631435
1.511009	1.334267	1.520715	1.449657	1.465805	1.307719	1.490481	1.388773	1.594732	1.635887
1.49442	1.344723	1.504626	1.462339	1.446523	1.310474	1.482963	1.408169	1.589506	1.671604
1.494362	1.333786	1.493474	1.437789	1.43316	1.290837	1.478608	1.40278	1.59664	1.667908
1.462873	1.325295	1.469211	1.422102	1.396897	1.278304	1.452421	1.395187	1.569385	1.683268
1.454919	1.316294	1.455811	1.411506	1.377769	1.259316	1.448953	1.387784	1.580474	1.689419
1.423007	1.31683	1.416347	1.397156	1.351033	1.247752	1.418627	1.36949	1.567075	1.70399
1.419573	1.309309	1.412576	1.381804	1.335738	1.237484	1.408824	1.35366	1.559371	1.699236
1.39063	1.291835	1.37443	1.353307	1.301666	1.219058	1.376328	1.323986	1.536734	1.68439
1.358995	1.300696	1.344475	1.346982	1.271274	1.223214	1.344039	1.317377	1.509082	1.678208
1.367592	1.29028	1.343897	1.328621	1.266144	1.213922	1.343611	1.295005	1.516835	1.667347
1.331155	1.284089	1.30104	1.311857	1.228954	1.20469	1.306513	1.27699	1.477606	1.660585
1.338499	1.278434	1.309414	1.277689	1.232085	1.205939	1.32147	1.259691	1.488351	1.645706
1.304241	1.274817	1.269293	1.272336	1.194879	1.200437	1.286809	1.258766	1.463622	1.641953
1.28333	1.271046	1.242419	1.25264	1.172197	1.209278	1.264724	1.258754	1.449686	1.654018
1.283502	1.268813	1.243042	1.229033	1.164717	1.213415	1.265734	1.247108	1.443257	1.657155
1.283621	1.257804	1.242758	1.21186	1.150489	1.209414	1.25583	1.233089	1.429526	1.648521
1.259926	1.258363	1.216397	1.199462	1.136774	1.221975	1.238784	1.224045	1.427595	1.660117
1.255842	1.25271	1.218312	1.177193	1.123053	1.235329	1.226841	1.209722	1.413755	1.643487
1.24262	1.254334	1.213963	1.172577	1.10877	1.236887	1.218542	1.196685	1.398311	1.626732
1.252176	1.235942	1.210649	1.14452	1.107495	1.241159	1.216049	1.171748	1.404112	1.596251
1.243694	1.229805	1.208449	1.131029	1.101349	1.2566	1.213318	1.163035	1.394684	1.580898
1.263893	1.238354	1.228184	1.132729	1.108154	1.265336	1.229431	1.172833	1.404254	1.58135
1.264039	1.230268	1.226807	1.110602	1.113999	1.287537	1.235263	1.177778	1.417797	1.594943
1.257136	1.197331	1.226453	1.071624	1.10194	1.276218	1.233479	1.1514	1.407097	1.545882
1.257579	1.227396	1.219254	1.075068	1.105765	1.313216	1.225985	1.187947	1.41344	1.578533
1.270276	1.208728	1.228374	1.057696	1.110943	1.308475	1.232464	1.181607	1.420816	1.573542
1.276422	1.206128	1.225151	1.048172	1.11849	1.326205	1.229535	1.185921	1.425113	1.556414
1.286074	1.214866	1.238339	1.034601	1.120888	1.349176	1.232223	1.193844	1.428785	1.556505
1.291655	1.214095	1.237296	1.018624	1.137357	1.359665	1.2368	1.196906	1.444942	1.542287
1.302701	1.211947	1.233051	1.012287	1.152918	1.375212	1.246137	1.189698	1.450154	1.520677
1.275728	1.228363	1.199946	1.016338	1.160362	1.399797	1.224315	1.20487	1.442324	1.524309
1.300058	1.226014	1.20726	1.025519	1.182259	1.423506	1.246466	1.217739	1.470898	1.514198
1.301062	1.218393	1.198267	1.033649	1.195923	1.432458	1.240749	1.218253	1.459341	1.497917
1.292511	1.225577	1.180801	1.055313	1.209281	1.452127	1.242865	1.246851	1.47323	1.50407
1.290074	1.227263	1.156348	1.080871	1.236759	1.474225	1.236518	1.266202	1.48559	1.49726
1.295776	1.248355	1.148237	1.111605	1.267331	1.516819	1.255585	1.308505	1.495136	1.512668
1.288481	1.255529	1.126873	1.117869	1.283317	1.534064	1.244416	1.328468	1.489037	1.522595
1.286857	1.257605	1.11715	1.131641	1.305146	1.542803	1.246401	1.339272	1.482987	1.506751
1.2828	1.271256	1.100288	1.160462	1.330757	1.572087	1.248191	1.355373	1.494286	1.496262

1.254007	1.283965	1.071775	1.190396	1.333434	1.604253	1.229252	1.385709	1.460887	1.502049
1.250039	1.293302	1.061068	1.214705	1.367202	1.621838	1.240093	1.393073	1.470822	1.486402
1.250912	1.281179	1.083094	1.222678	1.390795	1.616215	1.259934	1.381232	1.480593	1.460219
1.230605	1.300932	1.095151	1.256952	1.41004	1.635766	1.260579	1.422237	1.480227	1.47067
1.225741	1.292046	1.11628	1.268148	1.416174	1.634796	1.268493	1.415819	1.474481	1.449288
1.203562	1.285374	1.138453	1.298195	1.416416	1.623889	1.270519	1.440779	1.477562	1.440905
1.195222	1.308397	1.17542	1.325956	1.407444	1.631677	1.284442	1.468877	1.463331	1.449698
1.198574	1.313102	1.209686	1.346373	1.420965	1.645657	1.290023	1.487751	1.478637	1.464501
1.19805	1.307189	1.237999	1.364631	1.414325	1.614156	1.29833	1.475725	1.4659	1.440061
1.2119	1.316929	1.273901	1.371448	1.423165	1.606216	1.319323	1.474274	1.476867	1.443441
1.223389	1.327778	1.31094	1.406333	1.419856	1.602895	1.332407	1.47995	1.475336	1.437156
1.232718	1.311642	1.338297	1.406871	1.397278	1.559934	1.325558	1.446232	1.452922	1.409888
1.245166	1.304419	1.369081	1.419179	1.388036	1.529116	1.338325	1.422903	1.460991	1.386176
1.271631	1.308258	1.40366	1.420575	1.379958	1.509732	1.346365	1.414359	1.451651	1.38183
1.299545	1.28975	1.426134	1.412108	1.388046	1.472239	1.365102	1.395237	1.448468	1.362079
1.30769	1.282302	1.438171	1.415996	1.361259	1.429394	1.363485	1.374338	1.430657	1.348651
1.329729	1.288342	1.440747	1.40856	1.352092	1.399635	1.363952	1.363393	1.398461	1.352051
1.346056	1.250689	1.460635	1.381331	1.345563	1.347617	1.371932	1.337322	1.396046	1.336393
1.376302	1.231269	1.476546	1.354133	1.342614	1.312757	1.376151	1.314471	1.37662	1.333652
1.410833	1.199058	1.500433	1.315368	1.362194	1.252083	1.401618	1.260227	1.357667	1.296737
1.418064	1.184748	1.494967	1.301923	1.351998	1.218981	1.383024	1.234319	1.32931	1.291865
1.406798	1.155573	1.478088	1.250125	1.350623	1.15841	1.364301	1.191093	1.279172	1.254746
1.423101	1.125574	1.478939	1.215767	1.363122	1.123193	1.367177	1.162372	1.236897	1.227297
1.418402	1.106832	1.478053	1.187158	1.361003	1.080144	1.34816	1.129529	1.186065	1.209846
1.42199	1.0758	1.469035	1.137167	1.371525	1.052059	1.330617	1.112286	1.137021	1.197703
1.429548	1.04097	1.47569	1.087145	1.384548	1.037103	1.325603	1.089074	1.086821	1.167392
1.447228	1.013207	1.487041	1.045934	1.409984	1.052729	1.328801	1.102269	1.042347	1.173484
1.457086	1.0183	1.509433	1.02219	1.428616	1.08532	1.326732	1.112573	1.029963	1.182117
1.452386	1.049159	1.511517	1.051885	1.438174	1.120058	1.320107	1.134939	1.088241	1.202124
1.462289	1.093373	1.533272	1.108314	1.454097	1.156127	1.33879	1.163232	1.145643	1.225793
1.492743	1.131661	1.564219	1.162895	1.474832	1.190514	1.363756	1.204029	1.224506	1.253252
1.516982	1.175389	1.584642	1.219296	1.501862	1.227392	1.399025	1.251286	1.303809	1.296638
1.564259	1.227862	1.627157	1.276004	1.520776	1.254685	1.426277	1.3003	1.400553	1.353429
1.60282	1.273679	1.692365	1.333639	1.547313	1.275501	1.475063	1.340275	1.500716	1.396834
1.638756	1.346436	1.719467	1.41948	1.559073	1.327465	1.5099	1.402086	1.599608	1.467227
1.678645	1.408065	1.75729	1.485262	1.567065	1.358169	1.541062	1.438071	1.711856	1.544429
1.74887	1.476342	1.84063	1.55968	1.62036	1.385283	1.609604	1.471305	1.847514	1.603008
1.797019	1.543134	1.865173	1.634786	1.627553	1.425003	1.635196	1.503851	1.9224	1.666735
1.867198	1.590209	1.944772	1.671076	1.658893	1.414059	1.705332	1.503984	2.092795	1.704299
1.975305	1.661448	2.047976	1.74129	1.730052	1.436292	1.765177	1.519873	2.254821	1.791392
2.027919	1.782349	2.081837	1.844971	1.755901	1.503412	1.812176	1.578548	2.373829	1.853712
2.102653	1.825461	2.150447	1.90598	1.805971	1.509627	1.864283	1.593211	2.454109	1.881778
2.160842	1.930782	2.208015	1.99172	1.838341	1.550045	1.899414	1.622711	2.557358	1.95552
2.214181	1.971103	2.229051	2.002481	1.870607	1.553923	1.954788	1.62187	2.678624	2.010622
2.35872	2.039653	2.420504	2.068063	1.961055	1.568568	2.083557	1.633348	2.909188	2.070153
2.394008	2.118154	2.37253	2.116745	2.003803	1.580816	2.103063	1.65445	2.895661	2.127414
2.450254	2.191501	2.496845	2.112679	2.037615	1.599907	2.137991	1.633282	3.051997	2.163381
2.505184	2.173705	2.523487	2.109892	2.178346	1.581214	2.202043	1.603095	3.170539	2.21591
2.576136	2.284952	2.572044	2.143347	2.205945	1.598971	2.240322	1.612774	3.244272	2.227218
2.647146	2.28845	2.631974	2.141298	2.325175	1.597171	2.34062	1.566051	3.37934	2.240269

VSWR - TERM

J8 In	J8 Out	Frequency (GHz)	J1 TERM	J2 TERM	J3 TERM	J4 TERM	J5 TERM
1.998392	2.049939	0.1	2.873822	1.300215	1.306547	1.298903	1.281893
1.420565	1.329451	0.1995	1.620223	1.050114	1.045044	1.074491	1.052445
1.220142	1.177883	0.299	1.388166	1.046606	1.037228	1.072893	1.06067
1.130697	1.128244	0.3985	1.288244	1.053272	1.045117	1.07623	1.069418
1.09396	1.108829	0.498	1.233278	1.058477	1.052384	1.080031	1.075239
1.090678	1.106143	0.5975	1.199285	1.062016	1.057358	1.083107	1.07887
1.104728	1.109566	0.697	1.17663	1.063914	1.060472	1.086119	1.081458
1.123568	1.113525	0.7965	1.158631	1.064432	1.062903	1.087439	1.082253
1.153022	1.126072	0.896	1.145777	1.063512	1.062434	1.087343	1.081001
1.182345	1.13753	0.9955	1.135227	1.063267	1.06351	1.087864	1.080183
1.197048	1.148121	1.095	1.126623	1.062758	1.064236	1.08799	1.079127
1.22268	1.16241	1.1945	1.121118	1.063295	1.065407	1.089741	1.079378
1.244647	1.168204	1.294	1.1142	1.061992	1.065497	1.089251	1.077445
1.261156	1.187521	1.3935	1.108836	1.06103	1.065469	1.089614	1.076267
1.280521	1.196909	1.493	1.103011	1.058758	1.063812	1.088599	1.073742
1.3069	1.212551	1.5925	1.097979	1.057285	1.063186	1.088344	1.072346
1.319964	1.22265	1.692	1.094209	1.056524	1.062724	1.088156	1.070734
1.332317	1.229533	1.7915	1.089966	1.055154	1.062248	1.08685	1.068569
1.34745	1.244268	1.891	1.086079	1.053804	1.061234	1.085474	1.065969
1.35806	1.246542	1.9905	1.082793	1.052764	1.060525	1.084769	1.064527
1.375232	1.25727	2.09	1.078929	1.051226	1.058284	1.083648	1.062939
1.387244	1.268558	2.1895	1.075148	1.050026	1.057615	1.083068	1.062158
1.386722	1.272759	2.289	1.070642	1.047814	1.057176	1.0813	1.060186
1.397487	1.278785	2.3885	1.065369	1.044907	1.055453	1.07864	1.057338
1.395099	1.280552	2.488	1.062291	1.043872	1.055087	1.077782	1.056127
1.3987	1.280609	2.5875	1.058143	1.041502	1.055029	1.074759	1.052831
1.395967	1.282526	2.687	1.054966	1.040139	1.055776	1.072942	1.051239
1.39074	1.282173	2.7865	1.049494	1.036961	1.056659	1.069006	1.048091
1.392386	1.284118	2.886	1.044892	1.032691	1.062107	1.063093	1.043457
1.38743	1.282874	2.9855	1.043342	1.030095	1.069418	1.056895	1.039409
1.393479	1.290414	3.085	1.045325	1.029236	1.07801	1.049894	1.036032
1.397565	1.29308	3.1845	1.049816	1.031232	1.08408	1.044281	1.035195
1.408313	1.294353	3.284	1.055917	1.035834	1.087857	1.041795	1.03691
1.410532	1.286989	3.3835	1.06054	1.039573	1.090372	1.040978	1.038291
1.415082	1.273243	3.483	1.061494	1.042232	1.089444	1.042534	1.040784
1.409899	1.259788	3.5825	1.062517	1.04368	1.089473	1.044156	1.042394
1.406556	1.244146	3.682	1.059454	1.042565	1.087038	1.04451	1.043514
1.394042	1.225764	3.7815	1.058449	1.041709	1.086097	1.045421	1.044433
1.394793	1.207289	3.881	1.058499	1.038749	1.087529	1.043985	1.043229
1.381176	1.186767	3.9805	1.059998	1.037791	1.088627	1.043904	1.042606
1.373779	1.165625	4.08	1.06099	1.036896	1.089583	1.043779	1.04241

1.363402	1.142826	4.1795	1.062495	1.037089	1.091331	1.043401	1.041162
1.352849	1.121156	4.279	1.062651	1.036876	1.092668	1.043639	1.041318
1.350417	1.099448	4.3785	1.062995	1.036061	1.094672	1.043228	1.040784
1.350476	1.080201	4.478	1.064339	1.036107	1.096333	1.043737	1.041032
1.353378	1.065299	4.5775	1.066029	1.035235	1.098205	1.04322	1.040797
1.353941	1.046575	4.677	1.067978	1.035133	1.09868	1.043392	1.041862
1.363951	1.030749	4.7765	1.071507	1.035155	1.09985	1.042148	1.04195
1.358443	1.018152	4.876	1.07227	1.03793	1.097928	1.042623	1.044194
1.35382	1.006781	4.9755	1.073977	1.039836	1.097327	1.042044	1.045442
1.349228	1.023183	5.075	1.071277	1.04442	1.093086	1.0452	1.049892
1.33989	1.044966	5.1745	1.070622	1.04699	1.091018	1.046901	1.052226
1.333059	1.071826	5.274	1.066853	1.051559	1.086056	1.052455	1.057628
1.325676	1.093276	5.3735	1.06478	1.055452	1.081208	1.058586	1.062739
1.318066	1.116695	5.473	1.062849	1.057451	1.079024	1.064083	1.066535
1.310151	1.136765	5.5725	1.059772	1.061583	1.075273	1.071733	1.071523
1.307078	1.154577	5.672	1.056096	1.066929	1.070646	1.07952	1.07596
1.303063	1.170569	5.7715	1.053228	1.070794	1.068526	1.085537	1.079035
1.299042	1.189516	5.871	1.049791	1.075114	1.066693	1.091475	1.082467
1.301284	1.20276	5.9705	1.046976	1.078942	1.065916	1.097773	1.086785
1.285432	1.221417	6.07	1.047088	1.080132	1.066515	1.102357	1.089812
1.284685	1.233299	6.1695	1.043477	1.085408	1.062887	1.109666	1.094685
1.280517	1.240919	6.269	1.04092	1.0897	1.06002	1.116112	1.098398
1.276628	1.248805	6.3685	1.03728	1.095469	1.059315	1.124246	1.103077
1.277085	1.254475	6.468	1.033164	1.101713	1.058264	1.132275	1.107856
1.268462	1.250937	6.5675	1.028773	1.108163	1.056821	1.138691	1.110756
1.27242	1.255833	6.667	1.026108	1.114341	1.058524	1.145507	1.115765
1.271552	1.271752	6.7665	1.024123	1.119638	1.059024	1.15042	1.119366
1.277018	1.277383	6.866	1.023349	1.125229	1.060903	1.156987	1.125199
1.28315	1.281088	6.9655	1.02206	1.129375	1.061273	1.161014	1.12879
1.29266	1.298181	7.065	1.019556	1.135327	1.06161	1.16714	1.13318
1.311475	1.310323	7.1645	1.017232	1.142462	1.063912	1.175043	1.139162
1.331962	1.320801	7.264	1.014078	1.150652	1.065666	1.182646	1.143451
1.346429	1.334657	7.3635	1.01438	1.15923	1.06948	1.190812	1.148498
1.369811	1.35089	7.463	1.016626	1.16646	1.073671	1.197535	1.152502
1.393079	1.370723	7.5625	1.021618	1.174754	1.081537	1.206318	1.15965
1.423478	1.396726	7.662	1.024186	1.18009	1.085911	1.211582	1.163691
1.446151	1.416356	7.7615	1.025215	1.184506	1.089786	1.216731	1.167395
1.480187	1.444959	7.861	1.026438	1.188109	1.094993	1.221378	1.170492
1.492375	1.448946	7.9605	1.026528	1.196418	1.099549	1.228969	1.175349
1.521829	1.462465	8.06	1.027177	1.201806	1.103965	1.233741	1.177112
1.542039	1.471377	8.1595	1.028865	1.208983	1.109005	1.239556	1.180245
1.55942	1.492959	8.259	1.032943	1.21879	1.116348	1.247751	1.185334
1.574679	1.489886	8.3585	1.036772	1.227438	1.123654	1.254272	1.189479
1.590329	1.499186	8.458	1.040893	1.235285	1.13108	1.260637	1.193322
1.606504	1.506859	8.5575	1.040765	1.239363	1.136663	1.263748	1.195241
1.603844	1.50883	8.657	1.041802	1.245167	1.1439	1.268337	1.198561
1.621077	1.497476	8.7565	1.040797	1.248433	1.148646	1.269988	1.200069
1.618981	1.489043	8.856	1.040647	1.253632	1.153201	1.273074	1.201585
1.618432	1.481464	8.9555	1.043628	1.260535	1.160443	1.277149	1.20506
1.618392	1.459065	9.055	1.048197	1.269449	1.166641	1.283197	1.20818
1.614352	1.447296	9.1545	1.054883	1.280253	1.176077	1.290842	1.21298
1.604258	1.435283	9.254	1.05815	1.287036	1.183224	1.296312	1.215321
1.606465	1.415501	9.3535	1.064132	1.296614	1.193411	1.304426	1.220731
1.608059	1.406467	9.453	1.067382	1.301817	1.199278	1.309196	1.222079
1.586691	1.386107	9.5525	1.070428	1.306946	1.206051	1.313153	1.22369

1.590514	1.376891	9.652	1.072841	1.309779	1.209951	1.316417	1.223979
1.586958	1.362472	9.7515	1.078083	1.314584	1.214396	1.321717	1.224953
1.584535	1.34411	9.851	1.080983	1.316067	1.217313	1.32311	1.223653
1.578323	1.327393	9.9505	1.08514	1.315578	1.216414	1.32321	1.219479
1.575806	1.31034	10.05	1.091083	1.322209	1.22402	1.330405	1.221844
1.565563	1.307034	10.1495	1.09789	1.325461	1.227723	1.334672	1.220089
1.558612	1.29627	10.249	1.100319	1.325509	1.229614	1.336321	1.216345
1.559024	1.293254	10.3485	1.105168	1.329853	1.235178	1.34201	1.216404
1.546835	1.285299	10.448	1.106455	1.328318	1.235685	1.341665	1.212817
1.542345	1.285458	10.5475	1.107628	1.327736	1.238275	1.342994	1.211574
1.548074	1.277637	10.647	1.107894	1.324022	1.2367	1.341385	1.207096
1.540698	1.284464	10.7465	1.105741	1.318936	1.235097	1.338129	1.201995
1.545715	1.281548	10.846	1.106662	1.31353	1.233172	1.334648	1.196974
1.521695	1.272247	10.9455	1.109827	1.314225	1.236175	1.337606	1.195893
1.521747	1.286331	11.045	1.106677	1.306099	1.231605	1.331126	1.187305
1.503301	1.283555	11.1445	1.106924	1.305914	1.234362	1.330773	1.185066
1.498056	1.267068	11.244	1.104268	1.306941	1.239855	1.330312	1.186524
1.495717	1.273244	11.3435	1.101233	1.30441	1.241581	1.326409	1.184867
1.486573	1.271377	11.443	1.096396	1.299543	1.241179	1.320335	1.182046
1.490334	1.267424	11.5425	1.092505	1.296608	1.243028	1.3142	1.182465
1.482526	1.262467	11.642	1.088627	1.291646	1.242132	1.309149	1.180644
1.463672	1.258903	11.7415	1.088973	1.291136	1.244777	1.306183	1.181858
1.474783	1.253298	11.841	1.088764	1.290032	1.246942	1.301856	1.182717
1.472513	1.238029	11.9405	1.088784	1.290412	1.249329	1.295934	1.182983
1.444954	1.248027	12.04	1.095205	1.295035	1.253376	1.296828	1.183429
1.460538	1.236763	12.1395	1.0993	1.302152	1.262166	1.294185	1.19077
1.443223	1.23499	12.239	1.10474	1.308513	1.269602	1.293559	1.196574
1.46931	1.216196	12.3385	1.101939	1.305128	1.267822	1.281887	1.196141
1.452366	1.220348	12.438	1.103566	1.30386	1.267313	1.275327	1.196408
1.441885	1.214836	12.5375	1.10958	1.309601	1.27427	1.272972	1.205662
1.469404	1.208448	12.637	1.109186	1.308249	1.273518	1.262532	1.208469
1.481502	1.209853	12.7365	1.109665	1.303397	1.268376	1.254492	1.206173
1.467915	1.207003	12.836	1.117727	1.311693	1.274681	1.252532	1.214309
1.485195	1.202575	12.9355	1.125817	1.317587	1.277763	1.250644	1.21818
1.489452	1.21398	13.035	1.131321	1.322741	1.280236	1.246258	1.221231
1.498639	1.199942	13.1345	1.132736	1.32555	1.28031	1.237444	1.225144
1.512087	1.197808	13.234	1.137227	1.331152	1.283355	1.230915	1.233004
1.540582	1.212044	13.3335	1.13566	1.326973	1.277796	1.223796	1.230275
1.551736	1.207808	13.433	1.136506	1.330623	1.278146	1.216458	1.238034
1.562444	1.186603	13.5325	1.135357	1.326635	1.270775	1.206701	1.237918
1.567869	1.197553	13.632	1.143017	1.337842	1.275732	1.203617	1.24895
1.581541	1.19599	13.7315	1.141482	1.337314	1.26818	1.194033	1.248027
1.592327	1.201438	13.831	1.149668	1.34634	1.269384	1.193778	1.25306
1.615411	1.197164	13.9305	1.154568	1.354572	1.268229	1.189806	1.256688
1.634313	1.200556	14.03	1.162073	1.366869	1.270924	1.189068	1.265416
1.652335	1.203616	14.1295	1.170551	1.379891	1.274766	1.191951	1.274239
1.613903	1.220229	14.229	1.173637	1.391903	1.275251	1.187219	1.284002
1.653998	1.208313	14.3285	1.174854	1.397078	1.270433	1.181787	1.290186
1.654431	1.203889	14.428	1.179808	1.40525	1.269084	1.182416	1.293483
1.656405	1.208342	14.5275	1.182056	1.414889	1.26622	1.176375	1.303226
1.653174	1.198583	14.627	1.187635	1.426655	1.264661	1.174562	1.310716
1.660209	1.213001	14.7265	1.195786	1.441187	1.266564	1.176482	1.320352
1.659656	1.226345	14.826	1.20427	1.461862	1.270943	1.177507	1.333968
1.646281	1.226849	14.9255	1.219821	1.480964	1.277353	1.185159	1.341849
1.648851	1.231522	15.025	1.224719	1.49834	1.28006	1.184108	1.350933

1.6165	1.249749	15.1245	1.227519	1.510578	1.279353	1.184259	1.363867
1.597322	1.254505	15.224	1.233779	1.523895	1.27823	1.183267	1.371847
1.586707	1.256211	15.3235	1.241717	1.539304	1.280897	1.186367	1.383166
1.572661	1.266525	15.423	1.247713	1.558366	1.282731	1.188185	1.392928
1.545542	1.268198	15.5225	1.255595	1.571975	1.283912	1.189963	1.403507
1.496211	1.257477	15.622	1.255378	1.575465	1.273809	1.181771	1.396871
1.473029	1.276656	15.7215	1.261802	1.596128	1.276368	1.186397	1.412891
1.463386	1.290075	15.821	1.271408	1.614231	1.280423	1.191921	1.423405
1.431116	1.27766	15.9205	1.273894	1.623266	1.276275	1.190694	1.426315
1.4326	1.289965	16.02	1.286875	1.64737	1.283904	1.200991	1.444412
1.399372	1.293979	16.1195	1.287045	1.654322	1.279403	1.200366	1.447954
1.359054	1.279744	16.219	1.289776	1.662395	1.278283	1.203683	1.456112
1.33325	1.274739	16.3185	1.300792	1.685659	1.283961	1.212703	1.472088
1.321966	1.272091	16.418	1.308331	1.698734	1.285858	1.218888	1.483503
1.310255	1.261635	16.5175	1.314777	1.710388	1.287725	1.226259	1.492807
1.277704	1.253815	16.617	1.322491	1.724184	1.289207	1.233686	1.501394
1.2535	1.25236	16.7165	1.329257	1.731166	1.290677	1.24232	1.507278
1.240478	1.220641	16.816	1.342099	1.75256	1.296131	1.253602	1.521694
1.210513	1.211489	16.9155	1.3525	1.770871	1.302972	1.268687	1.537169
1.21371	1.184684	17.015	1.367535	1.793405	1.308961	1.282445	1.552701
1.184119	1.177451	17.1145	1.374645	1.809563	1.315723	1.301244	1.566505
1.168595	1.150337	17.214	1.384122	1.819546	1.316412	1.311833	1.576281
1.142206	1.131599	17.3135	1.388631	1.82269	1.314344	1.322604	1.574229
1.13424	1.127238	17.413	1.379536	1.811128	1.304951	1.330309	1.567728
1.111116	1.103309	17.5125	1.397741	1.833901	1.310865	1.349128	1.585655
1.09563	1.07959	17.612	1.410472	1.853593	1.316167	1.369965	1.595951
1.087657	1.069305	17.7115	1.413607	1.85913	1.316289	1.38514	1.594976
1.085823	1.065563	17.811	1.424903	1.879593	1.318043	1.405391	1.605365
1.09144	1.061103	17.9105	1.429514	1.882096	1.316551	1.419475	1.604216
1.104713	1.06702	18.01	1.426714	1.877094	1.308632	1.428937	1.597046
1.132932	1.064652	18.1095	1.430178	1.884895	1.311809	1.452216	1.602062
1.163979	1.071432	18.209	1.432813	1.886407	1.311201	1.469236	1.601891
1.202301	1.079687	18.3085	1.436937	1.895513	1.314119	1.489504	1.602632
1.251831	1.083949	18.408	1.435687	1.887241	1.312136	1.501894	1.595915
1.288234	1.099971	18.5075	1.446387	1.903633	1.323849	1.530473	1.602274
1.34808	1.099252	18.607	1.451238	1.911134	1.331802	1.553015	1.602093
1.411026	1.102448	18.7065	1.452806	1.911686	1.342092	1.574185	1.598662
1.44347	1.106382	18.806	1.465723	1.926958	1.352126	1.597207	1.606855
1.529239	1.088749	18.9055	1.464325	1.923275	1.359408	1.61046	1.599038
1.580784	1.077184	19.005	1.471825	1.933467	1.372058	1.631647	1.600511
1.659736	1.092711	19.1045	1.4906	1.961994	1.40063	1.669181	1.617034
1.733519	1.083945	19.204	1.512456	1.983715	1.415802	1.692471	1.625658
1.805293	1.076312	19.3035	1.525065	2.004234	1.437387	1.719536	1.629024
1.855605	1.057676	19.403	1.545299	2.026113	1.450831	1.738784	1.635075
1.985431	1.042859	19.5025	1.571305	2.063945	1.478489	1.777073	1.649748
2.038834	1.033507	19.602	1.596602	2.093651	1.502442	1.80913	1.660396
2.118098	1.013668	19.7015	1.612127	2.111278	1.512433	1.826458	1.661126
2.195375	1.034195	19.801	1.630539	2.137026	1.52362	1.850937	1.669356
2.267559	1.033419	19.9005	1.645571	2.152459	1.535509	1.872495	1.669947
2.388587	1.067144	20	1.672912	2.192713	1.553004	1.909648	1.684932

0.2 to 19	-64.7026
Max	-67.558

J6 TERM J7 TERM J8 TERM

			J0-J1	J0-J2	J0-J3	J0-J4	J0-J5
1.296705	1.297283	1.311618	-82.4719	-89.9159	-87.2859	-83.422	-93.2767
1.057573	1.044341	1.051099	-87.8107	-99.4179	-104.847	-94.3394	-98.594
1.055743	1.049838	1.043515	-84.9474	-99.4535	-100.87	-97.3062	-90.9366
1.062448	1.059284	1.049347	-84.0833	-96.8624	-95.4509	-93.4912	-90.9206
1.068423	1.06524	1.055283	-83.4309	-95.6562	-91.5087	-90.1744	-90.2595
1.072297	1.067957	1.058514	-84.2778	-93.5379	-94.1247	-89.4462	-90.3981
1.075477	1.069159	1.059898	-84.1991	-93.7196	-91.6086	-88.6058	-90.3543
1.077825	1.070133	1.061042	-83.8614	-94.1905	-91.9997	-88.5082	-89.0578
1.079077	1.068148	1.059604	-84.1997	-95.1871	-92.2429	-88.3922	-89.5683
1.080822	1.067853	1.059395	-85.2017	-95.3022	-91.7573	-87.7524	-90.3237
1.082162	1.066815	1.058923	-84.7818	-96.8545	-91.2933	-88.1625	-89.9977
1.085102	1.066247	1.058929	-85.5776	-93.7795	-90.0339	-88.5145	-90.064
1.08579	1.064242	1.057083	-86.3763	-94.815	-91.1429	-88.136	-89.5727
1.087093	1.062287	1.055949	-86.5264	-94.4064	-92.1359	-87.5191	-90.8175
1.087746	1.058609	1.053084	-87.3021	-95.5041	-93.0281	-88.0515	-91.1513
1.089001	1.05606	1.050794	-87.4658	-94.7788	-91.5518	-88.416	-89.8452
1.090533	1.054069	1.048963	-86.6992	-96.9045	-92.6224	-88.2353	-91.25
1.091514	1.052445	1.046825	-87.254	-95.9489	-91.7441	-88.5733	-89.2467
1.09261	1.05057	1.044429	-87.5814	-94.6774	-92.3426	-89.9685	-92.0604
1.095722	1.048942	1.042644	-88.6741	-94.894	-91.9699	-90.4664	-90.9315
1.099532	1.044992	1.039562	-88.6535	-95.7105	-91.643	-88.0958	-90.7686
1.102879	1.041742	1.036773	-87.8175	-95.8478	-92.501	-88.9858	-92.3406
1.105014	1.037679	1.03315	-88.43	-93.7027	-92.7748	-88.7928	-93.2265
1.106354	1.032152	1.027907	-88.8591	-93.9436	-92.3391	-90.2499	-90.9734
1.108083	1.029347	1.024751	-88.2269	-95.6393	-93.1299	-89.6278	-90.9642
1.107957	1.027288	1.019936	-88.2557	-96.9352	-91.0709	-89.9035	-92.069
1.108719	1.027345	1.015991	-88.6967	-95.8413	-91.9057	-89.6642	-93.014
1.109541	1.027223	1.010903	-87.6992	-94.461	-92.6364	-89.2412	-93.0999
1.108526	1.030405	1.006258	-88.8531	-96.1145	-93.0087	-90.0912	-93.0312
1.10821	1.034668	1.008059	-88.8687	-94.718	-91.5896	-89.6747	-91.3658
1.107647	1.04056	1.014343	-88.6653	-96.3749	-92.9742	-89.7844	-91.5272
1.10819	1.046023	1.0196	-90.3022	-93.9262	-92.822	-89.0743	-91.2542
1.110375	1.049291	1.02126	-88.901	-97.9421	-92.7326	-89.8184	-91.3639
1.111478	1.052408	1.02231	-88.8072	-93.7348	-92.1173	-89.7811	-91.3483
1.115287	1.052211	1.020169	-88.5558	-94.6731	-92.046	-90.1205	-92.4074
1.118277	1.05242	1.018729	-88.6773	-95.4556	-94.6718	-88.9386	-91.8008
1.124108	1.049924	1.016653	-88.4757	-93.3421	-91.9919	-88.8312	-91.7446
1.129948	1.047578	1.016236	-88.0787	-95.8201	-92.5894	-88.3777	-90.9991
1.134397	1.047251	1.019448	-88.5119	-94.5358	-92.3419	-91.0073	-93.0485
1.138906	1.046692	1.021477	-88.335	-93.705	-91.3597	-89.7247	-91.0004
1.142856	1.047076	1.023672	-89.0201	-93.348	-92.8001	-89.4528	-90.9488

1.145285	1.048365	1.025491	-88.0528	-92.8133	-91.2512	-89.7967	-89.9869
1.147843	1.050454	1.02858	-87.9771	-93.2172	-91.7903	-89.395	-90.9234
1.149583	1.053286	1.032983	-88.1974	-91.7379	-91.2678	-89.8328	-91.4133
1.151903	1.055298	1.037117	-87.2722	-92.8741	-91.9029	-90.383	-91.1182
1.154374	1.057996	1.042335	-87.864	-92.8465	-91.9699	-88.7692	-91.5328
1.157867	1.059405	1.046009	-87.9427	-92.2101	-90.8501	-88.3312	-90.8211
1.160542	1.060286	1.04761	-87.4561	-94.1187	-89.944	-89.415	-91.2691
1.165855	1.057989	1.046438	-86.7545	-91.8502	-89.8936	-89.0823	-91.163
1.17043	1.056341	1.044844	-87.2522	-92.55	-90.5724	-89.1487	-91.1678
1.179867	1.051365	1.042474	-86.5863	-92.2002	-90.6661	-89.2851	-89.6839
1.186795	1.049436	1.042228	-86.4677	-91.9532	-91.9847	-89.2062	-89.9274
1.197383	1.047137	1.043622	-85.6322	-91.4803	-90.7694	-88.733	-91.0561
1.205332	1.046625	1.045388	-85.9171	-92.1134	-90.1903	-88.9077	-89.6707
1.212196	1.049316	1.049993	-85.7989	-91.2544	-89.2555	-89.0011	-89.892
1.219029	1.050424	1.053887	-86.2256	-90.211	-89.611	-88.7521	-90.4198
1.225607	1.048818	1.056345	-86.2526	-91.1249	-89.4132	-87.9829	-89.1013
1.232084	1.048486	1.059948	-85.4812	-90.5218	-90.2922	-88.7161	-90.1
1.240861	1.050453	1.065516	-85.6227	-89.6015	-90.9316	-89.3495	-89.2392
1.251974	1.05583	1.072793	-85.419	-91.551	-88.9881	-87.9065	-92.1627
1.260688	1.063949	1.079638	-85.6681	-89.6951	-90.1897	-87.7354	-89.277
1.271821	1.070917	1.085783	-84.8647	-88.8645	-89.5473	-87.6252	-89.8957
1.278881	1.076377	1.090396	-84.6934	-88.7647	-88.7477	-88.2576	-89.3547
1.283666	1.080956	1.095717	-83.8486	-90.0379	-87.7041	-88.1615	-90.2105
1.288684	1.084492	1.100998	-84.1523	-88.4585	-88.3388	-88.1026	-88.3926
1.292362	1.084806	1.104526	-83.7439	-88.2883	-89.2916	-87.5774	-89.081
1.300734	1.089897	1.111489	-83.8112	-88.983	-88.0275	-87.3335	-88.7592
1.309488	1.095178	1.116836	-83.6247	-88.501	-87.7222	-87.3044	-88.9145
1.322671	1.105363	1.12435	-83.5119	-87.1964	-87.8631	-86.4871	-88.3295
1.333266	1.11373	1.128673	-83.263	-87.3416	-87.7938	-86.5939	-88.2724
1.34359	1.122572	1.133616	-83.2113	-87.8292	-87.5478	-87.8041	-88.7962
1.351478	1.130269	1.138964	-82.9147	-86.8369	-87.2638	-86.4266	-88.1703
1.35691	1.13604	1.144647	-82.8521	-87.74	-87.8374	-86.636	-88.2168
1.362474	1.141944	1.15202	-82.5447	-86.5491	-86.4471	-86.6714	-87.4733
1.368595	1.148525	1.160091	-82.1062	-87.8546	-86.7543	-86.4413	-88.2028
1.376846	1.156328	1.168921	-82.5399	-87.5241	-87.0888	-85.9545	-87.7793
1.385766	1.165481	1.176214	-82.6196	-86.9296	-86.7974	-86.2869	-87.5171
1.397769	1.176717	1.183288	-82.0169	-86.6211	-86.0631	-86.1669	-88.6448
1.407059	1.186832	1.188411	-82.9714	-86.8472	-86.2382	-86.1984	-87.4198
1.414722	1.195858	1.193718	-81.6232	-86.5451	-85.8369	-85.8774	-86.7098
1.421147	1.205344	1.20004	-82.0061	-86.795	-86.5714	-85.4671	-86.4779
1.426115	1.213438	1.206792	-81.5407	-85.8932	-86.013	-86.2897	-87.0698
1.431577	1.222031	1.216349	-81.6548	-85.498	-85.7533	-86.1291	-86.3021
1.434659	1.22837	1.224728	-81.0475	-85.585	-86.2437	-84.6006	-87.387
1.437552	1.23565	1.232653	-81.5128	-85.1457	-85.6054	-85.5036	-86.6799
1.440976	1.241054	1.236276	-81.3206	-85.5051	-86.1555	-85.1035	-85.953
1.44737	1.249899	1.241287	-80.9378	-85.4322	-85.0471	-85.353	-85.3897
1.454578	1.259979	1.244465	-81.3419	-85.4438	-85.0141	-85.1916	-85.809
1.461951	1.270473	1.248152	-80.7882	-84.8839	-84.8852	-84.8222	-85.6253
1.467842	1.280794	1.253569	-80.5623	-84.4849	-84.2127	-84.6042	-85.5191
1.473651	1.291204	1.261324	-80.761	-84.8374	-84.2358	-84.7515	-85.1747
1.476816	1.300142	1.270329	-80.5372	-84.3999	-84.6563	-84.0524	-85.0938
1.474522	1.304012	1.275532	-80.8815	-84.4204	-84.3277	-84.3033	-85.4609
1.474224	1.309403	1.282572	-80.57	-84.3682	-83.9283	-83.5918	-84.3642
1.473449	1.315182	1.286772	-80.0679	-84.6242	-83.2517	-83.6395	-84.4845
1.472267	1.321885	1.28951	-79.9327	-83.8125	-83.6921	-83.7939	-84.7619

1.477391	1.334	1.293487	-79.9781	-83.7825	-83.476	-83.9103	-84.3904
1.486016	1.349187	1.299339	-79.6752	-84.1384	-83.6159	-83.7229	-83.8634
1.488687	1.359981	1.302814	-79.2932	-84.3118	-83.395	-83.6016	-84.2911
1.485798	1.365363	1.303613	-79.4375	-83.3773	-83.0319	-82.7658	-84.1691
1.483883	1.372628	1.31065	-79.491	-83.3098	-82.7521	-82.3026	-83.1288
1.471754	1.36867	1.310261	-79.3037	-82.1469	-82.6436	-82.3817	-83.482
1.459347	1.367189	1.31122	-78.657	-82.1868	-82.5232	-82.2821	-83.3553
1.456012	1.373289	1.316465	-78.6487	-82.1327	-82.582	-82.3227	-82.9127
1.450619	1.378113	1.316887	-78.6152	-81.7043	-81.8116	-81.9766	-82.8176
1.453325	1.39062	1.320763	-78.0994	-80.4595	-81.5389	-80.5157	-82.8143
1.455591	1.40197	1.321166	-77.5269	-80.8655	-82.402	-82.1339	-83.0478
1.456362	1.411038	1.320185	-78.3566	-82.2748	-82.1407	-81.8052	-82.2784
1.450155	1.414465	1.317926	-78.247	-82.5754	-81.8409	-80.8397	-82.1183
1.444516	1.417833	1.31989	-77.8747	-81.5949	-80.9479	-81.8331	-81.6201
1.425277	1.408156	1.313223	-76.7861	-81.1913	-80.8026	-80.513	-81.8587
1.410754	1.404074	1.313462	-77.3819	-79.687	-80.9596	-80.8714	-81.3532
1.403024	1.406405	1.317446	-77.4561	-80.5316	-79.8861	-81.6132	-81.5729
1.394345	1.40839	1.317577	-77.2854	-78.4615	-80.9855	-78.3851	-80.4487
1.388969	1.412657	1.31566	-77.5695	-80.7204	-79.1193	-79.9375	-80.3662
1.38972	1.421536	1.315845	-77.1484	-79.7324	-79.3759	-80.8807	-80.4457
1.391104	1.430872	1.314837	-76.1653	-80.4193	-79.582	-79.8182	-80.4772
1.391659	1.437306	1.315331	-76.9099	-81.5082	-78.7301	-78.0728	-81.4455
1.387074	1.438095	1.315664	-76.8219	-78.8846	-79.0217	-81.3007	-79.6383
1.377455	1.433965	1.316722	-75.6037	-79.5375	-79.0141	-79.2512	-80.2241
1.365481	1.430593	1.320033	-76.6606	-79.6155	-78.5517	-80.1175	-79.769
1.359171	1.429864	1.327456	-76.574	-80.1249	-78.5554	-80.5628	-81.6927
1.354437	1.434199	1.334872	-75.8446	-79.1213	-78.5847	-80.3086	-79.4786
1.344877	1.430548	1.331	-75.9294	-78.8008	-77.7046	-79.2944	-78.8456
1.346115	1.440751	1.333314	-75.8073	-78.7864	-79.3817	-79.885	-78.756
1.357169	1.457188	1.340753	-76.0585	-78.5835	-78.6627	-78.3838	-78.901
1.361521	1.463707	1.340554	-75.3434	-78.0532	-78.467	-79.2639	-78.1678
1.357886	1.463579	1.337517	-75.4148	-78.5757	-77.8448	-78.6673	-77.4804
1.363238	1.470891	1.347166	-75.7298	-77.5851	-77.5111	-78.6599	-78.0175
1.358614	1.470214	1.353375	-74.9626	-78.2433	-77.653	-78.8294	-78.784
1.349895	1.466886	1.358183	-75.0494	-78.7178	-77.3713	-78.656	-78.3681
1.341174	1.461701	1.359811	-75.1224	-78.0546	-77.1555	-77.7359	-77.959
1.338284	1.46437	1.363362	-74.9709	-77.9497	-76.5356	-77.3013	-77.8333
1.332421	1.469841	1.359704	-74.8177	-76.7576	-78.2935	-76.9338	-77.1716
1.339972	1.481326	1.36258	-75.2789	-76.4624	-77.2323	-77.3547	-78.1682
1.345813	1.491052	1.361147	-74.9532	-77.8339	-76.6602	-78.1081	-77.1445
1.357961	1.502485	1.367902	-74.0356	-76.6133	-77.1706	-75.8839	-78.4789
1.358421	1.499334	1.366149	-74.7501	-75.9869	-76.1564	-76.1083	-76.6257
1.357077	1.499264	1.371368	-74.5993	-75.3179	-75.5329	-75.801	-77.7922
1.350306	1.489605	1.371667	-74.3268	-76.4108	-76.2139	-76.4522	-76.4678
1.348103	1.488428	1.378371	-73.8153	-75.7552	-76.7954	-74.6738	-75.2834
1.342676	1.490556	1.382538	-72.8806	-76.4455	-75.155	-74.478	-77.152
1.344152	1.492809	1.385136	-73.2773	-76.1412	-75.6449	-74.3755	-77.0774
1.349981	1.500412	1.385455	-73.2643	-75.5838	-76.2467	-73.214	-76.7918
1.355053	1.512879	1.386633	-73.4509	-75.9563	-75.6774	-73.4819	-76.0939
1.370397	1.515577	1.388952	-73.286	-75.2845	-75.8648	-73.8835	-76.5568
1.380152	1.518606	1.392434	-73.1976	-75.5293	-74.7679	-75.4592	-75.3528
1.38752	1.516331	1.396481	-72.8067	-74.7327	-76.0546	-75.3076	-77.3442
1.394604	1.513606	1.403972	-73.0047	-74.4879	-74.7574	-76.5445	-75.354
1.392951	1.509032	1.41105	-72.6562	-75.7702	-75.4805	-78.8467	-76.8436
1.387845	1.504376	1.413039	-73.0296	-75.1212	-75.6041	-82.7666	-76.3467

1.396835	1.503996	1.418912	-72.8238	-74.8863	-75.386	-77.9447	-75.8074
1.400011	1.5158	1.423512	-73.1025	-74.5302	-75.5227	-73.1671	-76.0654
1.417728	1.538568	1.438664	-72.5525	-74.2323	-74.7137	-73.5202	-75.6971
1.430855	1.541341	1.442043	-72.6326	-73.7325	-74.5789	-72.8842	-76.0528
1.447564	1.549167	1.447465	-72.216	-74.4907	-75.0279	-73.483	-76.946
1.449407	1.541188	1.444637	-72.804	-73.8367	-74.7534	-72.3532	-75.2946
1.471032	1.540915	1.459332	-72.4958	-74.8532	-74.6521	-73.0111	-75.4892
1.473219	1.534311	1.464235	-72.6035	-74.0214	-74.3613	-72.6911	-75.3464
1.471571	1.529835	1.469259	-72.7568	-74.6227	-73.1015	-72.4622	-74.958
1.483377	1.539521	1.487531	-72.1058	-73.4198	-73.8622	-73.4146	-75.8656
1.486397	1.539539	1.491703	-72.2702	-73.6485	-72.7225	-72.4808	-74.405
1.496457	1.541153	1.496045	-71.6605	-73.4111	-73.0373	-71.9226	-74.6849
1.519599	1.556556	1.513139	-71.8566	-73.3291	-73.1967	-71.988	-74.7594
1.542275	1.567021	1.525499	-71.4246	-73.3407	-72.3277	-71.8163	-74.5767
1.558902	1.565861	1.534126	-71.1787	-73.0668	-71.8711	-71.3316	-73.9837
1.575052	1.563979	1.545614	-71.1703	-73.4332	-71.6218	-71.7288	-74.5274
1.580999	1.558642	1.554442	-70.579	-73.3429	-71.85	-71.8763	-74.3826
1.591091	1.562559	1.573472	-70.7282	-73.0936	-70.6769	-71.4907	-73.7463
1.600065	1.560507	1.589473	-70.6687	-73.3478	-70.5987	-71.9081	-73.5924
1.61811	1.569275	1.611757	-70.748	-72.8408	-71.4052	-71.1936	-72.8694
1.633341	1.580425	1.631556	-71.0122	-72.4629	-70.9306	-71.6319	-73.4527
1.647789	1.579333	1.64296	-70.9317	-72.5239	-69.9764	-71.6577	-72.7461
1.659517	1.579572	1.648734	-70.3087	-72.4801	-70.5454	-71.2375	-73.0029
1.664494	1.564667	1.643737	-71.2662	-72.3607	-69.8995	-71.8511	-72.053
1.694204	1.577873	1.670805	-70.2806	-72.3115	-69.9183	-70.5552	-72.8252
1.716975	1.582116	1.694838	-70.3399	-72.1186	-69.4866	-70.6132	-71.585
1.720182	1.569637	1.704227	-70.3941	-72.2589	-69.9748	-70.3416	-72.6636
1.734465	1.573132	1.729628	-69.5154	-72.0056	-70.5446	-70.3259	-72.0123
1.734546	1.568848	1.738536	-69.5523	-71.7569	-69.3646	-69.9071	-72.341
1.736294	1.564797	1.745638	-70.2123	-73.0482	-69.0005	-70.376	-71.6175
1.761086	1.569839	1.76413	-68.9843	-72.3437	-69.6022	-70.0078	-70.5422
1.779012	1.57308	1.77555	-69.6131	-71.7139	-69.2574	-69.9636	-70.8048
1.801032	1.575538	1.791358	-69.3797	-70.9838	-69.1336	-69.7248	-70.0638
1.808301	1.569031	1.794492	-69.2698	-70.8744	-68.965	-69.2515	-69.6741
1.833775	1.568115	1.81794	-69.4867	-71.2691	-68.4366	-69.0205	-69.3133
1.847048	1.562824	1.834374	-69.2256	-71.0587	-69.0414	-69.0717	-69.2966
1.851507	1.552894	1.847091	-68.7972	-71.1429	-68.358	-68.5726	-69.3321
1.860184	1.552999	1.866936	-68.2594	-70.1148	-67.7823	-68.0317	-69.1693
1.861227	1.549791	1.874131	-68.5341	-70.8022	-67.812	-67.9768	-69.5207
1.877163	1.550381	1.886385	-67.9352	-69.8698	-68.0802	-68.009	-68.9809
1.9182	1.560949	1.918648	-67.9528	-70.3425	-67.4097	-67.4418	-69.2846
1.939761	1.572707	1.940787	-67.2638	-69.6584	-67.3623	-67.7339	-68.3353
1.965602	1.569914	1.959328	-67.0758	-69.6527	-67.2851	-67.0698	-67.9969
1.975441	1.567725	1.97427	-66.7326	-69.8321	-66.4244	-66.9238	-68.5001
2.006996	1.569416	2.011565	-66.4018	-69.6051	-65.9568	-66.5212	-68.0941
2.022198	1.569286	2.039659	-66.4754	-69.147	-66.5296	-65.8983	-67.5143
2.02125	1.56791	2.055936	-66.1641	-68.2875	-65.9376	-65.6129	-66.3383
2.029663	1.573476	2.079322	-65.1683	-69.1192	-65.4122	-65.5701	-66.8134
2.04005	1.576986	2.092838	-65.5686	-68.5678	-65.5756	-65.409	-67.042
2.079451	1.599275	2.132818	-65.2267	-68.4579	-65.5093	-64.3258	-65.5847

J0-J6	J0-J7	J0-J8	J1-J2	J1-J3	J1-J4	J1-J5	J1-J6	J1-J7	J1-J8
-92.0281	-85.7982	-89.3383	-87.4062	-95.8557	-96.3613	-94.5835	-105.088	-104.813	-92.0867
-110.326	-92.0931	-87.7265	-84.8937	-92.8741	-94.2099	-93.4527	-94.9329	-97.7815	-96.3777
-97.9884	-93.7269	-86.6568	-81.1776	-90.2241	-90.1423	-94.7429	-90.2245	-100.437	-93.8386
-94.0561	-93.0747	-85.6964	-80.9395	-88.5726	-90.3269	-89.7396	-88.6324	-96.2902	-90.6475
-93.2747	-91.5863	-84.733	-80.8631	-88.9205	-92.143	-92.0881	-88.8971	-98.2901	-90.6503
-92.4511	-91.0163	-85.0069	-80.7727	-89.5657	-90.3782	-91.2542	-89.2389	-100.072	-90.396
-91.2841	-90.3297	-85.225	-81.0816	-88.72	-91.6602	-92.6056	-88.7917	-97.8663	-89.9047
-91.8263	-91.1687	-84.6604	-81.4192	-89.1068	-91.5118	-92.4166	-90.1653	-98.9851	-90.322
-92.5823	-92.1534	-86.0141	-82.1382	-91.2153	-92.1783	-92.7885	-89.9847	-97.3161	-89.4842
-91.1321	-92.4058	-86.1505	-82.3887	-91.2981	-94.2476	-93.2344	-91.121	-97.9639	-89.3137
-91.6283	-91.5459	-86.1631	-83.0999	-91.2711	-93.6725	-95.0748	-91.2388	-104.378	-90.0379
-90.2143	-90.5102	-86.9217	-83.3057	-91.1865	-94.5001	-94.0876	-91.7133	-101.833	-89.6687
-92.0361	-92.2762	-87.3544	-84.0911	-93.4093	-93.7678	-98.2173	-92.7877	-105.858	-89.9222
-91.2068	-90.4655	-87.0752	-84.279	-93.5089	-94.8943	-95.8135	-92.9227	-105.494	-90.4123
-92.6769	-92.7142	-88.1588	-85.3074	-94.1657	-96.4587	-97.4806	-93.0398	-106.779	-90.4763
-91.2953	-92.2556	-87.4823	-85.3724	-94.0938	-97.2442	-100.346	-95.6845	-103.067	-91.5321
-90.9141	-94.1002	-88.6877	-85.6727	-95.4366	-97.4423	-98.4794	-96.2518	-107.498	-89.7996
-92.1594	-93.4452	-89.1562	-86.2635	-96.8296	-99.6758	-101.988	-95.5409	-109.518	-90.7364
-91.4778	-93.1502	-87.6105	-86.9555	-96.7754	-98.7342	-100.757	-95.9342	-110.493	-92.0998
-90.9114	-93.6881	-88.684	-86.3226	-96.4334	-99.2247	-103.433	-97.708	-114.081	-93.7767
-95.0731	-92.3799	-90.3186	-88.6975	-96.2269	-102.182	-101.473	-99.9147	-110.867	-92.6552
-91.8836	-92.3854	-88.7187	-87.3529	-99.4181	-104.292	-102.885	-96.8294	-110.855	-91.9974
-91.7136	-92.8171	-89.3319	-88.1888	-97.7528	-104.599	-104.966	-99.2116	-102.465	-91.4414
-92.067	-93.4354	-88.5418	-88.3211	-98.9709	-106.246	-101.585	-98.6535	-118.012	-91.8323
-90.8788	-94.3749	-89.3039	-88.7434	-99.2198	-100.179	-106.025	-102.171	-107.252	-91.5773
-93.1556	-92.6682	-88.8624	-88.6009	-96.0862	-103.124	-103.31	-99.5005	-116.188	-90.8289
-93.0552	-94.1217	-88.8964	-90.7064	-99.7349	-106.484	-105.406	-98.8502	-112.415	-93.2756
-93.2865	-93.9627	-89.2376	-90.3799	-98.5154	-104.717	-102.227	-101.999	-104.041	-92.6398
-91.222	-93.9216	-89.8785	-89.9032	-100.786	-106.015	-107.531	-103.875	-106.204	-91.8712
-92.5115	-93.461	-88.9099	-89.8169	-99.5966	-101.528	-102.267	-101.871	-122.816	-93.9022
-91.3552	-91.7923	-89.9617	-90.8513	-100.427	-107.674	-106.365	-102.351	-111.415	-93.0818
-91.4509	-93.2383	-89.0217	-89.8885	-97.7192	-104.216	-109.874	-107.956	-120.611	-92.8184
-90.5458	-93.9491	-89.4265	-91.2291	-104.437	-103.537	-107.392	-103.839	-118.404	-93.3918
-91.1607	-92.5197	-88.7101	-90.6696	-104.625	-104.702	-108.679	-103.171	-114.676	-93.9158
-92.0132	-92.6476	-88.8779	-90.9581	-103.047	-136.092	-102.815	-104.962	-114.811	-92.2755
-91.729	-92.2376	-88.3545	-90.51	-105.578	-105.555	-105.712	-102.704	-109.708	-92.5042
-92.232	-90.5116	-87.618	-91.032	-113.81	-104.859	-111.792	-106.311	-111.255	-93.7161
-91.0305	-91.5622	-88.0825	-92.2935	-108.986	-100.705	-107.076	-105.611	-110.165	-93.5304
-89.8363	-92.8519	-88.2216	-92.1378	-103.75	-109.573	-104.113	-103.195	-112.105	-92.8473
-90.6942	-93.4562	-88.2928	-91.9403	-101.522	-104.838	-116.881	-107.525	-102.343	-92.5479
-90.1634	-90.1201	-87.4079	-91.7055	-102.746	-108.2	-109.376	-114.478	-117.095	-93.4769

-91.0155	-90.2045	-88.908	-90.5607	-102.001	-108.054	-119.512	-107.837	-106.094	-93.8445
-90.7362	-92.3788	-87.6246	-92.5227	-110.785	-112.987	-105.589	-111.425	-108.965	-93.0004
-89.9143	-90.7184	-87.9175	-92.3966	-104.958	-111.941	-130.274	-107.935	-108.309	-92.0047
-91.3637	-91.2407	-87.8678	-93.6612	-113.279	-105.07	-108.395	-102.944	-108.188	-92.4976
-90.1985	-90.0627	-87.4071	-92.7114	-106.911	-110.213	-109.236	-108.787	-104.281	-93.013
-89.5675	-90.4305	-86.281	-93.8467	-104.598	-106.78	-114.286	-110.674	-108.188	-93.3882
-90.1259	-89.9264	-87.1878	-92.3858	-113.048	-112.141	-111.532	-117.069	-106.27	-92.2566
-89.133	-89.5601	-86.7217	-91.8742	-104.289	-119.991	-109.385	-104.779	-111.667	-93.5836
-89.4594	-88.619	-86.9697	-92.7667	-105.53	-113.998	-112.414	-111.328	-104.54	-92.5025
-88.9199	-89.5169	-86.8415	-93.3713	-105.544	-106.624	-115.021	-107.319	-107.168	-92.9913
-88.9565	-90.2213	-85.5035	-92.6787	-106.333	-123.203	-113.963	-106.022	-105.726	-92.0411
-89.1084	-89.5548	-86.6024	-92.9727	-113.164	-108.574	-105.108	-104.665	-102.284	-91.9663
-88.918	-88.5889	-86.0643	-93.871	-118.422	-107.235	-110.11	-111.382	-105.857	-92.0171
-89.2036	-89.6363	-86.3381	-94.9976	-109.659	-115.477	-107.311	-105.585	-101.737	-91.031
-88.718	-89.2983	-85.097	-94.0008	-110.254	-110.541	-115.56	-113.103	-105.413	-91.74
-88.9806	-90.299	-85.1309	-92.8651	-105.107	-109.282	-107.786	-113.326	-102.322	-92.0465
-88.0799	-88.1732	-84.5606	-93.5493	-103.686	-109.175	-115.81	-114.822	-100.501	-91.614
-88.787	-88.1274	-85.1164	-93.9544	-110.283	-113.485	-116.773	-108.223	-104.034	-92.2355
-87.5953	-88.1984	-84.8574	-92.9253	-127.911	-110.908	-113.392	-109.403	-109.501	-91.6522
-88.8273	-88.6692	-84.6245	-93.7421	-107.834	-107.278	-109.284	-132.709	-101.564	-91.829
-88.6757	-87.6622	-84.518	-93.5885	-102.491	-111.624	-115.823	-107.279	-99.8653	-91.9513
-88.2574	-88.4031	-84.9359	-93.6686	-111.849	-105.092	-110.038	-115.152	-101.877	-90.1266
-88.7918	-88.3493	-83.7962	-94.6127	-125.318	-115.122	-108.356	-109.285	-99.0516	-89.9886
-88.5531	-87.5602	-83.3678	-92.8861	-105.18	-104.705	-111.049	-109.145	-105.168	-90.3398
-87.1353	-86.5947	-83.8106	-93.3027	-110.246	-107.828	-108.545	-111.353	-99.1765	-90.7703
-87.8497	-87.1779	-83.705	-93.2562	-106.323	-112.432	-123.37	-104.445	-100.187	-89.9334
-87.4445	-86.3978	-83.0568	-93.1625	-103.854	-118.292	-106.771	-113.832	-101.825	-91.4455
-87.3514	-86.8824	-83.2956	-93.2955	-106.662	-105.041	-105.736	-107.062	-102.06	-90.9996
-87.158	-86.9359	-83.2099	-92.8654	-106.716	-105.063	-106.053	-112.79	-98.8601	-90.6523
-86.9929	-86.6144	-82.9554	-93.99	-105.005	-104.762	-103.252	-107.181	-103.109	-90.1318
-86.7612	-86.4339	-82.5705	-93.432	-112.547	-107.129	-109.824	-115.487	-103.013	-89.8932
-86.9029	-86.1342	-82.7163	-93.4084	-106.392	-108.64	-106.165	-102.81	-101.896	-90.0774
-87.4963	-85.9707	-82.7392	-94.1908	-102.618	-107.322	-105.249	-106.337	-99.1965	-89.9751
-86.6732	-85.5626	-82.0692	-93.4197	-104.403	-110.285	-101.425	-119.609	-100.423	-89.6844
-86.6213	-85.7031	-82.2655	-94.0036	-107.546	-104.533	-106.892	-111.382	-99.5136	-89.2038
-86.1149	-85.3914	-81.5718	-94.2001	-105.706	-101.341	-108.262	-107.206	-99.6242	-89.4472
-87.1424	-84.9442	-81.6388	-93.3269	-102.054	-105.272	-102.595	-114.602	-96.7435	-89.4594
-86.6641	-84.5497	-81.35	-93.7717	-100.688	-102.73	-104.804	-107.947	-99.0263	-90.106
-85.9057	-85.1776	-81.8676	-91.4073	-107.212	-108.471	-98.1927	-104.22	-96.9556	-89.3746
-86.1016	-85.25	-81.5137	-93.0408	-102.606	-103	-100.928	-102.297	-96.5744	-90.3461
-85.8441	-84.4427	-81.3237	-92.8553	-102.807	-103.953	-105.061	-102.378	-97.3553	-90.2124
-85.6441	-84.845	-81.449	-94.0864	-107.169	-101.35	-98.7471	-104.651	-97.7728	-89.0643
-85.2611	-84.7091	-81.3446	-93.1085	-106.067	-104.049	-99.6772	-105.02	-96.6671	-88.6321
-85.636	-84.3289	-81.0949	-92.2746	-101.706	-100.527	-106.258	-101.489	-95.8126	-89.2693
-84.9692	-83.4675	-80.6335	-92.1996	-101.12	-102.932	-102.099	-108.02	-96.8656	-89.3087
-85.0096	-84.6509	-80.669	-92.9545	-100.776	-101.6	-101.214	-101.861	-97.5596	-89.6966
-84.9548	-84.2993	-80.6906	-92.7728	-98.2369	-103.849	-99.8121	-104.581	-95.7292	-89.2887
-84.6665	-84.5631	-80.6233	-93.9527	-99.2266	-103.426	-100.435	-100.344	-94.4489	-89.7297
-85.0652	-83.2774	-80.1483	-93.4432	-101.375	-99.9226	-100.048	-101.451	-96.0447	-88.4294
-84.1008	-84.112	-80.7327	-91.6193	-99.4089	-100.423	-103.653	-101.942	-95.9128	-89.2521
-84.36	-83.571	-80.2325	-92.1765	-101.619	-100.93	-102.296	-101.764	-95.6659	-89.3334
-84.4625	-83.0125	-80.0438	-92.6072	-98.6709	-98.4431	-99.3814	-100.765	-96.1002	-89.2502
-84.1504	-82.988	-79.7072	-92.4133	-101.803	-100.241	-97.6398	-100.646	-95.6224	-88.6497
-83.9621	-82.6502	-79.5386	-93.1513	-98.6137	-99.3499	-98.5039	-101.764	-97.604	-88.5438
-83.0311	-82.1269	-79.7933	-92.2007	-98.5088	-99.5808	-100.101	-99.4598	-97.2405	-89.5283

-83.4029	-82.5884	-79.5356	-93.0397	-100.328	-104.579	-100.813	-101.602	-97.2381	-88.8034
-82.6506	-81.8722	-79.1399	-91.9492	-96.1266	-99.8713	-103.07	-102.16	-95.9279	-88.5702
-82.9178	-81.5048	-79.0162	-94.1291	-97.9666	-101.407	-101.197	-102.414	-96.2933	-88.6426
-82.9426	-82.1719	-78.5075	-92.4063	-99.9042	-101.692	-101.029	-103.41	-95.6789	-88.6986
-82.4314	-81.2213	-78.6405	-92.3575	-98.3085	-97.0385	-97.0983	-96.7784	-95.6288	-88.0523
-82.7142	-81.7476	-78.6216	-92.7672	-101.989	-99.7958	-96.8768	-102.907	-96.8252	-88.2814
-82.32	-80.7723	-78.2407	-94.5488	-98.5155	-99.0537	-98.5617	-99.1854	-92.3917	-87.6928
-81.9728	-80.7453	-77.8457	-92.6132	-100.834	-98.5044	-98.3621	-97.6597	-93.4006	-87.3031
-82.172	-80.3942	-77.9145	-92.4437	-98.3355	-97.2407	-97.122	-101.272	-93.825	-88.0078
-82.7562	-80.0774	-77.0959	-92.5755	-91.9789	-103.269	-100.607	-94.3581	-92.3912	-89.3533
-80.5328	-80.8181	-78.0751	-93.4354	-97.8087	-102.81	-94.8098	-100.523	-92.2972	-85.997
-82.6789	-79.8161	-76.6148	-93.8617	-100.935	-91.983	-96.6584	-94.398	-96.8134	-88.3072
-81.1623	-79.984	-77.8919	-96.2647	-93.7349	-93.5738	-111.093	-94.133	-89.6891	-85.7122
-81.0943	-78.9434	-77.2183	-91.7602	-96.6006	-92.1648	-102.318	-97.8742	-88.4976	-87.4338
-80.9956	-78.7408	-76.9875	-89.4316	-93.3637	-93.7037	-91.3475	-92.3486	-92.1846	-86.3373
-80.1317	-78.9409	-76.881	-87.1699	-97.3841	-95.8871	-98.5579	-91.4086	-94.4212	-86.8567
-80.7982	-78.6624	-76.012	-90.4245	-93.2504	-92.8009	-91.2762	-96.8113	-92.7692	-88.2332
-81.0474	-78.5452	-75.7834	-88.2948	-91.604	-94.3141	-92.8495	-93.3436	-91.9709	-87.1234
-80.0165	-78.1397	-76.0332	-94.2122	-93.7246	-94.9626	-94.2173	-99.0413	-87.4559	-85.1507
-81.4174	-78.5232	-75.458	-91.6328	-91.0353	-95.3027	-91.1987	-93.9166	-88.0834	-87.2342
-80.7692	-77.4881	-74.7235	-92.2231	-100.806	-91.8122	-92.8844	-97.2269	-88.7969	-85.8249
-79.0234	-77.9529	-76.1967	-88.386	-96.8235	-91.2084	-91.7808	-94.0436	-91.137	-85.9586
-78.0173	-77.3156	-76.163	-93.9253	-92.0168	-92.3193	-89.8796	-94.7735	-90.5178	-86.4862
-79.8132	-78.9451	-76.0245	-89.4896	-94.6959	-94.7775	-92.8369	-92.7064	-93.784	-86.4074
-79.8679	-78.0734	-74.3955	-89.9603	-93.4834	-94.3298	-96.3185	-91.0946	-88.374	-84.7718
-80.0067	-77.7647	-75.0548	-89.4604	-89.1883	-96.3791	-94.1575	-92.0018	-89.0522	-85.381
-79.3781	-77.5793	-76.1748	-89.781	-93.3172	-90.1073	-99.5038	-92.8125	-86.9582	-88.0266
-78.2902	-77.7858	-74.8153	-88.6712	-90.5897	-93.8246	-94.8121	-104.88	-89.5438	-85.1161
-77.8019	-76.5779	-74.2221	-89.0362	-92.4013	-91.7932	-91.5824	-90.2612	-91.6556	-84.6148
-78.1047	-77.5765	-75.0797	-91.2964	-94.7402	-87.7484	-89.6844	-90.6525	-89.0146	-85.9093
-78.1795	-75.8962	-74.13	-89.4991	-89.5766	-93.9909	-92.0543	-95.7454	-88.1753	-84.4517
-78.0943	-77.3155	-74.4944	-86.8724	-89.427	-91.617	-90.8094	-94.6271	-88.3179	-82.5206
-76.7732	-76.9333	-74.3541	-89.3833	-90.1364	-93.4256	-94.1906	-93.213	-87.6013	-83.4757
-77.1705	-76.468	-75.0111	-88.7014	-89.1301	-89.4324	-90.628	-91.2352	-89.9891	-83.6102
-76.9987	-76.1919	-74.4479	-87.728	-93.5788	-93.2623	-94.1158	-89.4003	-87.6747	-83.7374
-76.8031	-75.3603	-74.14	-86.0815	-90.4674	-94.3297	-89.6151	-91.6467	-88.357	-84.1993
-76.2493	-75.4872	-73.5157	-86.6007	-87.1499	-89.9165	-87.6045	-89.4995	-86.675	-84.0506
-76.2049	-76.1085	-73.9873	-88.8133	-88.4456	-89.991	-92.6295	-89.9153	-87.033	-85.0158
-76.542	-75.2462	-73.6165	-87.2365	-91.1479	-90.7769	-89.1276	-91.2884	-85.8343	-83.6574
-77.2146	-75.5489	-72.8235	-87.6856	-93.5001	-89.9056	-93.115	-91.714	-86.8604	-83.9706
-76.858	-75.1015	-73.2152	-86.3838	-88.686	-88.7788	-89.3385	-90.3845	-87.951	-84.6028
-74.8139	-74.3464	-74.1641	-86.3497	-92.5868	-89.1967	-90.6926	-90.3866	-86.4924	-84.3386
-76.1276	-75.1894	-72.9058	-85.7963	-87.6782	-90.381	-89.4693	-92.8922	-87.0951	-82.4203
-76.423	-74.5165	-72.7572	-84.8882	-92.0731	-89.2372	-90.8213	-88.1032	-86.7078	-83.7932
-76.7749	-74.6012	-72.9627	-85.6768	-88.1591	-91.418	-88.7319	-91.9151	-84.7961	-84.7895
-74.7358	-74.6399	-73.6291	-84.6572	-87.8822	-89.0377	-89.5693	-90.3946	-84.2384	-82.2651
-76.0469	-75.1708	-72.9145	-83.4223	-86.6556	-86.9765	-88.4726	-88.2791	-84.2855	-81.8246
-74.5884	-74.1252	-73.3257	-84.1761	-88.7872	-87.2879	-85.6276	-86.8269	-83.6294	-81.9397
-75.5739	-74.1135	-72.3398	-84.9395	-88.6211	-85.6734	-89.0714	-86.1582	-83.5692	-81.675
-74.4554	-74.058	-72.5739	-83.0814	-87.9937	-86.3392	-86.6053	-88.6107	-85.2565	-82.6159
-74.5237	-74.2618	-74.1995	-83.5941	-87.3001	-85.7207	-87.031	-89.1907	-83.7677	-81.7892
-73.9598	-74.1849	-73.1417	-83.7145	-85.2446	-88.0029	-90.1815	-86.976	-85.2707	-81.2318
-74.6086	-73.9467	-73.085	-83.693	-86.9367	-87.9859	-85.4544	-87.7216	-84.6638	-81.4964
-74.5422	-73.3273	-72.7721	-85.49	-89.1275	-85.9159	-87.6806	-88.3857	-85.516	-82.2835
-74.1873	-73.2076	-72.6576	-85.1752	-86.3154	-85.3352	-88.6428	-88.3495	-83.6673	-81.556

-74.4738	-73.7233	-72.5768	-83.8835	-86.4108	-88.839	-93.6359	-86.4029	-84.9965	-83.2644
-74.3428	-73.0867	-72.4312	-84.9625	-85.639	-84.9962	-87.1862	-85.7124	-84.0305	-82.2909
-74.1049	-73.2207	-72.5717	-82.8142	-86.5465	-85.2857	-88.2107	-85.86	-83.8236	-81.469
-74.1842	-72.6509	-72.9751	-83.6413	-86.0176	-83.9056	-87.5148	-90.7559	-84.0826	-81.6959
-73.7891	-73.2199	-73.1407	-82.4443	-87.3343	-86.547	-89.0292	-85.5538	-83.9176	-82.6029
-74.0154	-72.826	-72.1805	-83.8401	-86.6976	-84.8351	-88.0758	-87.3042	-82.0716	-82.0726
-73.0889	-73.5787	-72.1223	-84.1851	-84.0766	-84.6331	-86.728	-84.7219	-84.0807	-82.9253
-73.3407	-71.5309	-72.1358	-81.5948	-86.6843	-83.1724	-89.2495	-83.8562	-84.4065	-82.3773
-73.0789	-73.0362	-72.0381	-81.7446	-87.2806	-86.3101	-86.8621	-84.2361	-83.7859	-82.0405
-73.0363	-71.9794	-72.2785	-82.3224	-86.0415	-85.2282	-87.172	-85.7576	-82.9508	-81.52
-72.6636	-71.6223	-70.9129	-82.1983	-86.9581	-84.7375	-89.8374	-85.4	-82.8372	-81.3003
-72.7694	-71.7546	-71.8906	-81.4055	-84.1355	-82.919	-88.5902	-86.837	-84.6272	-81.7378
-72.2691	-71.5653	-71.3976	-82.1341	-82.8805	-86.1159	-88.4159	-84.6286	-83.3394	-81.928
-72.3686	-70.8569	-71.5862	-80.6668	-83.1377	-85.9871	-86.434	-87.2124	-81.8591	-81.6628
-71.465	-70.9176	-71.6723	-79.5723	-84.3485	-82.4222	-86.3848	-84.0865	-81.6691	-81.1534
-70.8174	-70.9749	-70.8404	-82.431	-81.4154	-84.0453	-85.1908	-86.0701	-82.5305	-82.8527
-70.7707	-70.1506	-71.3349	-79.4441	-83.4692	-83.0558	-86.6591	-84.1201	-81.9469	-82.0364
-70.6897	-70.461	-70.316	-80.9993	-83.8168	-84.3149	-83.4172	-82.8718	-80.6785	-80.5982
-70.7325	-69.8546	-69.4858	-80.4984	-81.6078	-81.8995	-85.38	-84.4976	-81.0557	-82.5865
-70.9414	-69.731	-69.6847	-79.8577	-81.1998	-81.7247	-84.0044	-83.817	-80.6792	-81.5519
-69.8877	-69.7027	-69.2506	-80.6858	-81.9699	-80.8892	-83.4852	-83.9669	-81.2359	-79.442
-70.6308	-69.4214	-69.6878	-81.156	-80.3941	-81.883	-84.4724	-82.3812	-80.9743	-80.0294
-70.0529	-69.5122	-69.768	-79.7883	-82.5215	-81.115	-83.1501	-80.6118	-79.5164	-80.0917
-69.4217	-69.4028	-69.64	-79.2848	-80.5785	-80.8104	-81.6603	-82.117	-78.6112	-81.724
-69.2539	-68.8069	-69.55	-79.5238	-80.4013	-80.5672	-84.6562	-81.7517	-78.9143	-80.6072
-69.5359	-69.2505	-69.2729	-78.4449	-80.5437	-80.3467	-82.3499	-80.3858	-79.4488	-79.2753
-69.2695	-68.5828	-68.6063	-79.5013	-79.7241	-79.9532	-83.4456	-79.9964	-78.7352	-79.6047
-68.9884	-68.954	-69.0012	-79.5307	-80.3413	-79.9122	-80.9139	-80.9839	-77.9783	-80.3839
-68.6615	-68.4603	-69.12	-79.9522	-80.7284	-79.5922	-81.449	-79.5831	-77.7668	-79.0349
-68.1965	-67.558	-69.0027	-79.8975	-78.9042	-79.1083	-81.371	-80.0227	-76.8601	-79.3935
-68.0001	-67.716	-68.7024	-78.3419	-79.6544	-78.2384	-80.228	-80.7457	-76.9746	-79.5375
-67.7677	-67.3108	-68.3446	-79.7799	-78.7181	-78.4222	-80.9249	-78.5429	-77.1707	-79.1032
-68.4822	-67.1686	-68.6856	-78.9948	-77.9605	-79.1708	-80.6588	-78.1239	-75.2985	-77.3632
-67.8986	-66.4127	-68.6523	-78.7873	-80.1013	-78.0192	-80.2061	-79.6311	-75.3718	-78.479
-67.8762	-66.8175	-68.4248	-77.7274	-78.1072	-78.176	-79.0652	-78.6394	-75.8154	-78.155
-67.7431	-66.588	-68.2162	-78.4529	-77.1044	-78.2567	-77.94	-78.5891	-75.1418	-78.1559
-67.6399	-65.7017	-68.0959	-78.6281	-78.2405	-77.0361	-79.5493	-77.8804	-74.8687	-78.0999
-66.9374	-65.4724	-68.4157	-79.3999	-78.0314	-76.6746	-78.0088	-77.7097	-74.7912	-78.3895
-66.6123	-64.9254	-67.9225	-77.9009	-77.7006	-77.6341	-77.8078	-77.4912	-74.7193	-77.4384
-66.5562	-64.7026	-68.1996	-77.715	-77.7564	-75.9868	-77.9875	-78.021	-74.3224	-77.0739
-66.7217	-64.6108	-67.0093	-79.2221	-76.966	-76.1983	-77.4532	-76.9767	-73.8464	-77.4124
-66.6112	-64.3883	-67.8729	-78.845	-77.8368	-75.7079	-76.6369	-77.362	-73.9915	-77.0836
-66.6476	-63.8264	-67.641	-77.9257	-77.5771	-75.6763	-76.5999	-77.053	-73.903	-76.596
-66.197	-63.0524	-67.8848	-78.1485	-76.851	-75.3536	-77.1557	-76.396	-73.7268	-77.7138
-66.3168	-63.0017	-67.8414	-79.1416	-77.1551	-75.4266	-76.9025	-75.9235	-73.2061	-77.4703
-65.9367	-62.3677	-68.2507	-77.8865	-75.9345	-74.6437	-76.5053	-75.8217	-73.1448	-76.3509
-65.7763	-61.8974	-67.8852	-78.2374	-76.3325	-75.3885	-76.6612	-75.2613	-72.8672	-77.2944
-65.3817	-62.0286	-67.4167	-77.7655	-76.8043	-75.1894	-76.2166	-75.6326	-72.8117	-76.468
-65.4048	-61.747	-66.7557	-77.8033	-76.7245	-74.6242	-76.0343	-74.9746	-72.334	-75.9853
-64.9231	-61.2945	-66.8728	-78.3377	-76.3433	-73.5349	-76.0099	-74.7966	-73.0188	-78.4691

Isolation

J2-J3	J2-J4	J2-J5	J2-J6	J2-J7	J2-J8	J3-J4	J3-J5	J3-J6	J3-J7
-95.5407	-107.089	-97.7789	-100.857	-95.1151	-120.01	-93.8162	-95.3141	-102.051	-94.2535
-94.3919	-105.208	-104.831	-101.377	-107.125	-104.329	-103.628	-108.139	-106.345	-105.344
-95.1634	-114.927	-114.164	-105.645	-108.418	-106.07	-94.1987	-103.882	-105.356	-110.618
-94.4852	-103.475	-114.269	-107.413	-116.429	-105.084	-95.4353	-108.727	-110.512	-118.423
-95.9273	-112.967	-108.676	-113.291	-113.479	-109.636	-94.5793	-103.498	-110.808	-111.6
-96.8968	-107.141	-110.46	-109.571	-111.191	-114.674	-97.6271	-106.814	-119.154	-113.361
-95.6255	-110.996	-112.043	-115.217	-107.752	-118.776	-97.9727	-109.052	-115.61	-110.521
-106.125	-107.239	-111.3	-104.381	-116.189	-115.141	-96.6503	-117.995	-108.991	-106.183
-103.25	-107.863	-110.294	-124.505	-110.244	-112.437	-103.083	-113.489	-106.8	-112.269
-103.375	-117.765	-109.86	-111.81	-110.264	-127.843	-101.681	-115.133	-112.264	-123.152
-110.403	-112.508	-110.75	-106.801	-109.484	-110.52	-108.711	-120.311	-124.618	-112.78
-105.499	-103.411	-108.268	-108.738	-115.858	-112.594	-105.393	-120.384	-116.938	-108.622
-108.788	-116.754	-118.556	-112.673	-120.532	-115.22	-103.586	-118.58	-112.854	-115.28
-111.223	-114.216	-111.337	-125.434	-110.586	-114.711	-123.678	-108.37	-117.913	-109.645
-105.909	-118.634	-120.313	-116.082	-119.505	-108.054	-106.249	-117.388	-108.67	-105.937
-114.623	-121.432	-111.284	-122.782	-117.736	-110.652	-112.56	-106.334	-114.831	-124.583
-107.254	-126.038	-119.634	-114.422	-115.141	-106.187	-118.637	-119.267	-125.445	-108.643
-112.301	-108.792	-108.264	-109.645	-106.918	-110.438	-105.318	-108.276	-122.216	-106.262
-107.841	-119.97	-109.436	-110.043	-113.944	-115.849	-116.314	-109.128	-116.641	-119.589
-113.595	-111.089	-118.236	-107.513	-112.412	-106.195	-109.982	-111.203	-116.541	-109.337
-104.019	-114.972	-113.313	-110.387	-111.674	-116.111	-105.577	-116	-106.806	-112.952
-109.558	-116.578	-114.546	-116.414	-110.316	-126.434	-114.126	-104.468	-112.122	-116.109
-120.501	-111.56	-121.09	-103.314	-106.123	-106.631	-115.543	-118.44	-108.112	-110.38
-112.029	-110.038	-113.76	-106.131	-113.681	-117.365	-115.351	-109.03	-112.363	-111.713
-106.727	-114.669	-113.574	-113.326	-113.1	-108.848	-111.224	-108.532	-112.795	-111.78
-116.492	-115.223	-111.293	-111.594	-113.103	-122.486	-107.716	-115.956	-105.919	-117.79
-111.183	-108.438	-112.967	-116.843	-111.428	-113.736	-103.731	-108.416	-111.127	-109.097
-108.759	-116.439	-119.845	-109.147	-110.469	-111.627	-115.843	-117.831	-114.904	-104.996
-105.21	-111.425	-124.338	-116.816	-111.22	-116.495	-111.424	-117.588	-109.723	-106.931
-107.213	-121.586	-127.049	-105.098	-123.447	-113.873	-127.068	-106.357	-110.199	-113.805
-110.619	-109.529	-112.696	-110.724	-107.592	-111.586	-104.998	-138.904	-112.522	-121.262
-130.839	-115.287	-114.049	-126.488	-114.172	-113.694	-114.211	-107.834	-108.265	-114.472
-109.009	-124.824	-108.373	-121.298	-119.045	-114.671	-110.592	-121.388	-111.897	-113.054
-114.883	-118.765	-108.145	-104.426	-114.056	-118.894	-110.435	-105.649	-115.508	-123.295
-111.122	-110.533	-115.731	-109.145	-115.588	-114.511	-110.764	-113.965	-111.661	-111.861
-111.623	-112.535	-117.267	-107.547	-109.108	-116.328	-111.129	-113.742	-116.391	-105.973
-111.113	-111.625	-104.896	-110.043	-107.411	-111.354	-108.935	-111.514	-103.426	-108.841
-105.842	-112.184	-119.675	-120.903	-110.482	-113.278	-118.573	-110.234	-114.413	-118.928
-106.646	-109.669	-107.234	-108.188	-123.455	-113.835	-115.302	-108.25	-119.558	-108.647
-110.605	-117.89	-108.985	-110.467	-123.668	-117.052	-114.6	-110.277	-107.34	-116.129
-117.604	-112.008	-108.297	-111.455	-108.075	-120.206	-118.037	-116.546	-108.912	-107.779

-114.993	-112.128	-109.766	-113.338	-114.783	-108.585	-109.462	-112.931	-110.261	-121.586
-120.351	-114.226	-113.129	-107.95	-111.813	-114.214	-119.15	-111.681	-117.087	-115.49
-111.692	-105.468	-110.629	-115.364	-109.951	-111.452	-114.627	-115.75	-108.265	-115.9
-110.717	-114.642	-115.272	-133.213	-110.018	-112.311	-111.824	-105.319	-114.479	-113.445
-111.049	-115.801	-111.608	-110.618	-119.738	-112.555	-109.377	-116.718	-112.618	-137.266
-113.69	-111.726	-118.017	-108.141	-112.212	-108.177	-111.169	-113.133	-115.923	-107.894
-112.925	-111.658	-109.667	-118.656	-111.246	-111.103	-106.05	-106.623	-113.019	-122.11
-121.184	-107.527	-112.025	-124.158	-121.971	-113.128	-111.989	-110.516	-129.686	-114.665
-109.48	-114.034	-112.712	-113.733	-121.722	-112.63	-112.096	-115.634	-118.606	-125.082
-113.937	-107.928	-111.02	-109.207	-119.71	-115.909	-113.562	-111.2	-122.736	-111.154
-105.506	-108.352	-119.167	-113.117	-115.686	-119.237	-118.9	-115.047	-113.451	-114.507
-110.915	-129.717	-111.906	-116.931	-135.282	-117.052	-113.768	-108.767	-108.563	-120.543
-122.704	-115.71	-119.09	-114.947	-111.678	-115.015	-116.243	-118.399	-108.106	-110.507
-112.01	-108.163	-116.103	-111.552	-110.857	-106.427	-120.992	-112.618	-112.961	-111.068
-106.701	-115.679	-114.94	-108.936	-112.685	-126.098	-108.91	-117.588	-113.2	-116.32
-110.23	-113.603	-106.386	-113.079	-109.194	-116.407	-107.208	-109.663	-110.64	-105.721
-124.904	-113.385	-106.265	-107.635	-109.685	-108.383	-110.793	-106.119	-121.824	-112.714
-112.516	-114.576	-123.494	-121.412	-106.517	-108.964	-116.682	-109.333	-117.094	-109.095
-109.956	-106.008	-111.872	-118.846	-108.458	-112.107	-107.737	-118.201	-113.798	-115.178
-118.2	-102.624	-110.079	-119.581	-111.87	-115.54	-113.302	-110.496	-111.055	-120.75
-107.574	-114.411	-122.746	-114.345	-107.813	-113.442	-109.817	-111.636	-115.422	-111.027
-116.917	-106.151	-104.721	-109.722	-113.093	-113.734	-117.707	-114.515	-110.543	-113.707
-112.161	-121.222	-113.932	-120.094	-118.978	-114.689	-111.629	-120.228	-117.712	-115.999
-109.521	-111.556	-117.634	-118.586	-110.667	-111.024	-107.811	-108.811	-113.048	-117.561
-131.038	-114.116	-125.414	-112.02	-114.687	-111.17	-112.069	-110.506	-117.729	-109.239
-108.323	-113.61	-111.397	-115.658	-107.456	-119.527	-113.571	-119.262	-112.371	-107.084
-111.191	-112.681	-111.51	-115.665	-106.937	-108.266	-109.555	-119.494	-116.665	-118.304
-124.367	-123.069	-116.198	-124.753	-119.941	-115.089	-111.622	-128.205	-125.048	-113.078
-123.526	-113.854	-111.236	-110.691	-117.276	-113.589	-112.008	-120.147	-128.174	-112.36
-116.608	-126.203	-123.461	-111.678	-119.636	-121.195	-113.881	-116.008	-120.813	-126.496
-116.051	-111.598	-122.18	-112.38	-112.702	-112.741	-116.485	-118.057	-110.432	-115.06
-115.524	-111.817	-106.546	-117.084	-111.128	-108.779	-109.326	-121.672	-113.902	-120.487
-105.688	-127.002	-135.487	-110.147	-113.14	-126.745	-109.962	-113.105	-111.351	-111.224
-116.4	-110.964	-119.762	-109.749	-113.917	-105.77	-110.396	-113.152	-118.046	-119.336
-105.174	-114.645	-106.793	-114.761	-109.677	-114.594	-118.123	-116.645	-111.374	-109.461
-118.237	-105.628	-113.153	-115.241	-116.583	-118.493	-118.831	-121.556	-113.153	-118.935
-102.969	-112.012	-109.161	-113.916	-113.226	-122.829	-110.858	-113.18	-111.419	-109.449
-110.763	-107.578	-112.036	-109.992	-112.819	-108.98	-118.599	-108.079	-115.496	-109.647
-123.941	-108.641	-110.579	-108.033	-107.718	-114.992	-112.985	-112.229	-116.15	-111.489
-113.229	-111.364	-111.107	-108.013	-118.966	-107.378	-111.368	-113.179	-112.402	-108.353
-113.129	-113.605	-112.802	-108.139	-123.104	-116.437	-110.471	-115.121	-116.311	-111.326
-112.838	-115.763	-108.84	-113.958	-117.896	-128.827	-123.629	-108.885	-120.081	-113.167
-107.756	-107.982	-110.172	-111.993	-127.023	-120.92	-116.786	-112.699	-119.751	-128.264
-107.565	-110.661	-129.444	-117.762	-111.485	-110.522	-108.616	-108.69	-106.474	-110.609
-108.438	-107.336	-114.323	-118.905	-117.842	-113.928	-117.589	-117.66	-112.842	-113.124
-109.953	-106.083	-115.431	-108.342	-118.403	-110.934	-105.76	-109.889	-113.368	-115.997
-115.791	-113.036	-115.004	-110.727	-120.154	-120.318	-111.296	-107.425	-112.817	-109.796
-124.145	-106.951	-120.736	-109.306	-120.348	-113.616	-111.241	-110.255	-111.301	-111.912
-110.749	-109.338	-116.89	-109.459	-114.244	-114.286	-117.339	-114.392	-120.365	-117.355
-111.825	-109.156	-112.752	-117.792	-107.912	-111.631	-111.129	-112.822	-125.058	-115.076
-108.913	-119.768	-110.071	-115.258	-109.826	-116.374	-114.451	-116.536	-111.711	-119.592
-111.215	-115.629	-107.941	-116.352	-107.16	-117.415	-119.257	-110.958	-111.081	-109.477
-115.781	-114.469	-112.511	-110.311	-116.869	-112.188	-112.626	-111.886	-123.904	-121.326
-110.055	-109.367	-119.255	-128.829	-113.172	-113.623	-106.42	-115.525	-111.069	-110.214
-109.142	-111.923	-115.535	-117.601	-117.914	-105.286	-109.311	-105.224	-112.518	-106.6

-111.35	-106.952	-112.865	-109.951	-110.391	-111.567	-117.231	-111.395	-107.377	-109.403
-118.984	-110.134	-118.715	-107.616	-116.733	-119.672	-108.658	-111.915	-103.955	-111.322
-111.497	-115.84	-109.736	-111.137	-107.996	-106.434	-113.902	-109.159	-107.325	-108.883
-103.358	-104.177	-123.966	-117.5	-111.054	-109.656	-110.812	-119.26	-114.229	-114.152
-109.06	-108.949	-112.63	-116.425	-109.047	-115.529	-113.532	-110.669	-112.113	-105.63
-111.055	-115.677	-110.228	-106.707	-129.813	-106.271	-120.092	-107.096	-116.497	-118.014
-107.002	-114.265	-112.823	-117.135	-106.788	-111.648	-115.1	-106.044	-111.084	-116.715
-123.653	-126.779	-129.318	-113.01	-115.036	-105.867	-126.552	-121.632	-107.636	-120.323
-106.532	-114.961	-109.021	-111.594	-115.93	-110.69	-108.476	-107.051	-117.747	-123.039
-113.809	-100.611	-113.113	-109.246	-102.594	-101.551	-114.434	-113.639	-96.5913	-101.91
-104.875	-110.456	-105.96	-95.6726	-98.4341	-112.874	-101.931	-98.6038	-104.392	-103.214
-96.0741	-119.072	-99.8111	-96.9852	-105.498	-107.074	-109.941	-105.468	-113.674	-103.31
-103.622	-96.4875	-101.711	-102.807	-100.264	-101.369	-103.728	-113.936	-97.6446	-110.304
-110.063	-113.557	-95.8574	-104.478	-99.139	-109.186	-104.184	-107.082	-107.234	-97.4047
-106.818	-100.014	-111.966	-99.744	-97.1098	-120.487	-115.315	-101.033	-104.123	-103.835
-98.9621	-97.8468	-110.652	-103.442	-100.822	-103.565	-102.143	-104.819	-98.8028	-97.694
-99.9559	-107.273	-103.456	-101.477	-114.17	-98.7246	-97.613	-97.0528	-111.353	-105.198
-100.387	-101.952	-102.581	-108.28	-101.719	-108.214	-112.222	-98.4416	-104.318	-106.689
-105.471	-99.6991	-100.051	-93.9625	-104.58	-109.724	-103.697	-106.903	-106.227	-104.212
-103.004	-99.0695	-99.1513	-100.499	-119.517	-97.6791	-97.1708	-101.513	-100.743	-102.85
-100.516	-101.331	-115.775	-99.3372	-101.755	-104.983	-104.653	-96.8753	-105.746	-109.837
-102.228	-108.618	-112.601	-99.153	-99.1111	-95.3989	-100.677	-101.094	-100.272	-98.8965
-106.297	-107.556	-97.0879	-99.4036	-103.862	-103.843	-115.017	-96.4594	-123.38	-101.95
-101.499	-103.915	-98.4675	-108.03	-102.613	-100.053	-106.682	-114.069	-100.408	-105.341
-101.961	-106.204	-98.4967	-97.2701	-96.8911	-102.346	-104.089	-115.923	-101.768	-112.273
-113.762	-96.5472	-107.887	-99.5343	-94.5989	-100.222	-110.86	-106.179	-98.4259	-106.03
-105.503	-105.002	-96.2408	-102.35	-105.53	-98.4425	-100.309	-107.31	-97.0753	-96.662
-105.803	-105.039	-99.58	-100.797	-96.7774	-95.6913	-109.168	-98.0395	-99.6769	-110.099
-102.092	-99.4663	-96.2871	-108.639	-113.003	-116.007	-94.7746	-103.606	-98.2607	-107.49
-98.447	-96.6643	-105.737	-117.14	-105.319	-96.706	-103.708	-98.0206	-100.875	-96.7203
-103.41	-99.7854	-98.6883	-96.9647	-98.1899	-105.053	-105.492	-95.8766	-113.222	-107.609
-98.4065	-102.185	-100.28	-98.3158	-113.834	-111.174	-104.524	-105.205	-104.287	-107.906
-110.225	-104.838	-99.6571	-107.325	-94.8471	-101.084	-105.613	-97.5155	-102.375	-98.6088
-98.3637	-99.2963	-106.291	-98.0964	-114.013	-108.918	-101.551	-109.505	-100.518	-94.9678
-97.3816	-102.75	-100.596	-107.419	-99.922	-99.452	-118.452	-96.9224	-106.807	-106.02
-100.628	-97.8352	-109.942	-112.555	-113	-113.558	-103.15	-102.951	-101.721	-103.687
-99.129	-106.134	-105.015	-109.309	-101.761	-103.571	-117.928	-100.786	-105.131	-103.7
-95.6682	-104.151	-95.7095	-111.714	-101.502	-106.26	-105.055	-103.199	-107.948	-103.362
-102.344	-113.141	-107.61	-101.442	-96.0225	-106.845	-96.2781	-100.1	-110.6	-98.5332
-104.49	-105.289	-99.3877	-99.204	-96.8248	-100.342	-98.6104	-106.148	-99.8938	-108.131
-101.921	-111.543	-100.182	-96.6298	-106.696	-103.218	-97.8198	-98.0772	-105.984	-105.83
-106.123	-97.2421	-96.3373	-97.9302	-98.2256	-99.3879	-107.456	-103.373	-104.22	-98.263
-99.0384	-99.1869	-99.1638	-97.7443	-94.4875	-101.476	-97.794	-96.8953	-100.126	-98.173
-106.164	-95.1393	-107.924	-102.948	-104.957	-98.0409	-108.162	-100.038	-99.6625	-93.1704
-106.011	-99.1441	-100.435	-92.4475	-100.95	-98.8775	-95.3147	-96.0161	-108.248	-97.1066
-95.1755	-105.284	-96.0054	-100.045	-101.612	-101.174	-108.505	-101.951	-100.983	-101.386
-110.727	-118.067	-100.931	-94.079	-95.5244	-114.119	-99.5955	-102.21	-102.247	-104.679
-107.555	-101.655	-99.9674	-100.213	-95.0659	-103.393	-104.633	-99.1592	-100.761	-102.36
-98.055	-104.659	-97.2005	-98.7147	-99.9259	-103.342	-103.747	-97.1476	-98.0232	-101.696
-105.784	-95.2522	-109.078	-96.3785	-96.7973	-111.277	-109.009	-98.9857	-107.556	-102.817
-99.1159	-109.028	-96.4352	-101.796	-111.662	-98.4291	-99.993	-101.118	-108.275	-100.249
-110.192	-97.8509	-101.524	-94.803	-102.894	-101.493	-98.9168	-102.37	-96.7477	-104.302
-97.3442	-102.374	-102.12	-109.128	-105.451	-101.087	-100.924	-101.11	-101.389	-94.7356
-107.262	-102.924	-99.718	-102.335	-99.7623	-99.4768	-100.922	-99.9585	-101.966	-103.01
-99.5587	-107.75	-97.158	-97.786	-99.5038	-95.3284	-99.9696	-103.275	-102.209	-97.6032

-100.623	-118.404	-114.062	-111.564	-113.99	-98.3307	-96.5285	-101.988	-102.621	-99.0922
-102.218	-101.599	-101.764	-109.872	-100.714	-103.903	-96.8846	-105.18	-103.193	-102.62
-108.092	-98.848	-97.0918	-107.592	-100.704	-100.376	-97.5425	-99.8268	-102.681	-103.44
-102.39	-100.724	-99.4918	-101.689	-101.278	-95.777	-97.9899	-109.092	-94.9519	-97.9784
-99.1134	-93.8586	-96.4082	-98.1383	-98.9472	-99.0142	-100.191	-118.743	-100.293	-105.828
-99.7331	-100.658	-104.231	-95.8005	-109.02	-103.472	-96.296	-104.579	-97.6464	-101.588
-100.754	-98.9799	-108.088	-108.464	-100.269	-95.7833	-99.1147	-95.5996	-97.0621	-109.429
-96.3844	-98.0133	-106.242	-108.511	-102.075	-107.07	-96.866	-96.5782	-94.5379	-98.346
-98.9077	-93.5258	-105.508	-103.004	-98.5507	-112.035	-102.625	-101.456	-98.9366	-103.431
-97.0341	-100.058	-96.2473	-97.3145	-100.565	-97.9703	-97.6325	-118.826	-103.123	-107.943
-94.9567	-108.392	-106.882	-97.8704	-99.9768	-98.567	-99.9753	-96.6921	-104.954	-106.373
-95.3887	-108.605	-111.211	-100.319	-103.529	-101.19	-110.364	-99.6824	-106.306	-100.084
-98.4021	-98.4222	-101.305	-96.0153	-104.06	-103.403	-105.789	-108.572	-96.3162	-97.7163
-97.6102	-95.025	-106.408	-105.472	-109.071	-104.635	-100.835	-98.4435	-99.5261	-104.155
-97.4166	-111.018	-104.633	-100.764	-104.667	-101.746	-95.9215	-100.796	-106.149	-107.121
-97.3801	-105.001	-95.523	-111.091	-98.6579	-104.785	-97.557	-96.0025	-101.006	-100.595
-97.6504	-113.194	-107.285	-96.2395	-110.404	-102.678	-106.011	-96.8432	-100.025	-114.629
-97.9562	-109.38	-94.2812	-103.133	-102.601	-101.812	-98.5526	-97.0982	-96.2814	-99.1514
-99.4901	-103.348	-101.448	-104.349	-112.822	-108.132	-99.8369	-103.176	-103.375	-96.5078
-100.51	-94.0871	-104.658	-106.757	-99.191	-100.44	-104.792	-99.0453	-108.385	-109.859
-106.876	-97.43	-94.7543	-94.8167	-101.435	-101.633	-123.018	-106.514	-98.8067	-106.011
-109.336	-104.871	-103.296	-102.808	-104.853	-97.6053	-106.052	-93.9909	-106.973	-102.405
-93.1818	-101.753	-102.386	-115.204	-99.0624	-104.737	-95.9995	-98.992	-98.284	-95.1499
-103.149	-95.032	-112.03	-99.754	-101.589	-101.586	-96.1696	-98.2813	-94.5534	-95.4521
-100.045	-100.652	-104.392	-98.0675	-101.224	-101.648	-99.6977	-103.227	-89.1236	-96.7825
-97.2454	-100.135	-99.8886	-92.4385	-105.385	-99.241	-95.6585	-101.93	-108.755	-91.3122
-92.8377	-122.707	-97.3342	-101.066	-93.007	-128.192	-100.777	-115.39	-96.4789	-99.7727
-94.7521	-107.56	-102.79	-107.708	-104.415	-102.069	-117.717	-99.1543	-107.046	-101.593
-108.209	-100.979	-106.545	-101.365	-107.962	-101.07	-96.9905	-106.815	-98.8825	-97.3345
-102.099	-98.4414	-104.287	-109.305	-95.1102	-113.639	-101.941	-103.666	-110.684	-98.5692
-93.6298	-104.561	-101.889	-99.0042	-94.717	-99.3538	-98.3561	-91.2145	-99.9301	-99.78
-96.5768	-94.8441	-105.388	-100.928	-103.766	-112.735	-102.597	-102.181	-114.768	-97.3689
-93.4389	-111.439	-98.0548	-103.902	-97.172	-100.801	-98.2736	-103.722	-100.945	-99.9432
-100.318	-105.042	-99.9247	-98.0744	-101.272	-102.27	-94.9127	-95.6726	-104.663	-98.2792
-100.092	-94.9727	-101.033	-102.899	-106.146	-97.234	-94.1937	-105.792	-97.1985	-103.641
-101.951	-101.973	-101.983	-98.8318	-99.0113	-104.124	-101.64	-100.25	-102.518	-99.6552
-105.026	-102.083	-113.852	-116.84	-96.303	-97.2937	-92.437	-92.6741	-95.115	-101.838
-101.451	-95.6834	-94.7112	-102.372	-96.5012	-101.722	-119.324	-95.2701	-103.484	-99.9398
-102.596	-100.148	-101.729	-95.1995	-95.2558	-99.1888	-90.4946	-107.483	-100.429	-97.5669
-99.9341	-97.2005	-98.0948	-101.123	-97.498	-103.551	-99.6748	-95.5223	-100.399	-106.268
-103.481	-99.3644	-101.302	-102.031	-103.948	-104.374	-95.5739	-97.3625	-108.621	-103.209
-99.9118	-98.6252	-97.2601	-100.645	-104.558	-97.5278	-102.008	-98.3699	-96.2094	-101.826
-109.094	-96.8738	-104.604	-98.9151	-101.863	-96.8819	-98.051	-101.218	-102.151	-96.9628
-99.8141	-106.55	-100.893	-96.2472	-102.959	-106.928	-94.3145	-107.427	-111.115	-106.413
-99.2618	-99.9497	-106.377	-102.265	-95.0646	-94.04	-113.8	-113.114	-97.6548	-104.784
-96.8993	-124.65	-96.7529	-100.643	-116.049	-101.299	-101.366	-100.295	-101.449	-95.5618
-96.3151	-114.062	-116.322	-108.732	-111.995	-95.4215	-105.394	-103.785	-98.6374	-100.255
-96.5152	-102.739	-97.5089	-97.7401	-99.1078	-99.9729	-115.034	-100.062	-92.3203	-100.273
-100.389	-102.277	-98.2268	-105.484	-92.3901	-105.752	-103.26	-104.989	-114.759	-96.6508
-106.467	-93.6077	-101.577	-95.9463	-98.2477	-97.1351	-94.1721	-97.0409	-102.889	-93.5394

J3-J8	J4-J5	J4-J6	J4-J7	J4-J8	J5-J6	J5-J7	J5-J8	J6-J7	J6-J8
-94.3485	-95.7287	-108.977	-97.1913	-95.2864	-94.2475	-96.1671	-107.752	-101.284	-100.937
-101.14	-99.1952	-104.488	-98.6145	-104.678	-96.582	-116.304	-116.739	-91.4709	-108.278
-108.134	-96.4136	-111.943	-112.188	-104.492	-94.6745	-98.7782	-119.793	-95.4773	-119.864
-108.416	-95.6143	-105.454	-108.482	-117.709	-93.9989	-105.671	-108.685	-94.6193	-107.343
-114.282	-96.9323	-115.121	-111.688	-111.796	-97.1473	-121.091	-106.821	-96.1483	-107.239
-123.178	-97.5925	-112.456	-118.713	-108.338	-96.306	-107.361	-109.562	-96.5892	-103.389
-113.589	-99.4738	-119.139	-119.857	-126.201	-99.4318	-111.668	-116.374	-98.6069	-104.559
-103.763	-99.2379	-114.753	-111.667	-113.602	-97.8256	-122.54	-108.848	-100.573	-109.263
-106.965	-103.736	-113.392	-118.206	-111.275	-106.497	-125.883	-104.121	-100.177	-117.404
-122.512	-103.276	-117.59	-105.805	-109.04	-102.314	-110.361	-112.43	-100.17	-109.392
-119.261	-107.648	-107.089	-108.48	-116.033	-103.294	-108.421	-114.777	-104.194	-115.075
-106.533	-114.77	-131.515	-110.939	-119.578	-104.44	-117.074	-112.773	-109.876	-109.256
-111.046	-107.566	-118.357	-111.743	-124.567	-107.231	-117.241	-122.455	-102.339	-111.157
-110.245	-104.013	-114.352	-110.347	-118.372	-103.805	-108.548	-115.536	-105.582	-110.689
-110.979	-110.01	-111.379	-111.271	-110.723	-106.537	-114.638	-122.877	-106.767	-123.241
-111.596	-106.106	-111.658	-137.523	-112.989	-108.329	-106.091	-105.06	-107.18	-121.434
-112.351	-117.222	-110.372	-117.114	-111.871	-110.145	-120.013	-116.712	-107.447	-118.5
-107.59	-110.828	-115.134	-113.855	-110.998	-109.994	-110.091	-111.265	-111.434	-106.323
-114.543	-108.154	-119.792	-114.279	-113.518	-105.961	-111.453	-113.601	-110.592	-105.69
-111.013	-110.386	-114.407	-107.434	-109.114	-110.763	-107.957	-117.846	-116.264	-109.136
-110.137	-116.01	-120.666	-113.79	-105.922	-113.72	-113.446	-110.535	-109.202	-116.214
-107.43	-110.628	-113.066	-120.581	-110.393	-108.668	-105.984	-117.942	-108.096	-106.118
-116.82	-109.108	-121.534	-109.425	-114.765	-103.985	-121.921	-119.755	-109.666	-104.587
-111.052	-111.631	-119.302	-124.466	-106.395	-113.563	-107.803	-119.142	-108.742	-112.925
-106.055	-115.155	-116.987	-109.947	-106.268	-112.155	-111.117	-115.694	-110.135	-108.286
-117.126	-105.321	-108.743	-108.905	-113.937	-110.19	-108.182	-114.272	-108.064	-104.862
-108.993	-105.514	-128.368	-105.493	-107.662	-111.144	-114.844	-111.567	-109.549	-122.965
-122.011	-110.345	-121.709	-108.129	-109.864	-122.095	-110.182	-105.818	-118.162	-112.772
-120.915	-133.682	-121.138	-110.072	-116.826	-110.203	-115.674	-107.563	-112.288	-110.746
-115.502	-118.426	-110.935	-115.272	-109.531	-115.902	-111.913	-115.964	-116.287	-115.756
-122.858	-115.259	-115.328	-105.795	-126.561	-107.388	-122.202	-108.544	-108.972	-117.731
-117.671	-108.82	-112.901	-111.476	-113.412	-119.98	-110.632	-118.532	-113.071	-107.225
-112.218	-110.293	-132.329	-114.687	-108.645	-118.219	-116.229	-104.579	-111.708	-113.164
-119.887	-107.617	-107.405	-118.353	-112.407	-110.678	-117.547	-115.881	-112.239	-109.97
-105.78	-104.107	-114.157	-108.232	-118.764	-107.692	-108.417	-119.788	-108.613	-108.496
-110.528	-118.238	-111.475	-124.585	-106.161	-110.999	-117.049	-114.216	-110.696	-115.99
-109.703	-113.308	-108.008	-110.067	-111.5	-109.984	-109.685	-115.003	-109.039	-111.884
-113.476	-113.623	-115.781	-116.283	-109.835	-112.262	-114.286	-115.401	-109.294	-111.091
-118.092	-105.591	-114.594	-119.158	-119.216	-117.255	-108.924	-115.713	-108.626	-115.183
-113.22	-107.556	-112.955	-111.255	-107.417	-109.686	-109.013	-107.882	-114.409	-116.548
-126.446	-116.766	-109.662	-110.572	-114.749	-112.636	-111.071	-126.442	-107.393	-114.41

-111.19	-111.428	-116.936	-109.989	-110.836	-109.775	-108.759	-112.545	-113.233	-120.692
-112.474	-110.784	-109.611	-107.011	-114.943	-104.092	-115.182	-118.783	-104.323	-126.425
-110.745	-114.897	-113.779	-105.262	-121.328	-108.88	-106.662	-111.431	-117.421	-110.9
-105.666	-121.175	-109.478	-123.369	-113.752	-109.614	-117.145	-109.476	-119.066	-112.561
-106.857	-109.76	-114.257	-119.689	-112.223	-109.714	-115.4	-112.534	-112.677	-111.018
-112.32	-109.352	-108.775	-112.345	-114.667	-114.383	-109.253	-112.04	-120.214	-116.414
-110.646	-113.796	-112.213	-111.775	-118.201	-104.808	-129.461	-110.482	-108.059	-117.711
-115.186	-114.045	-113.925	-110.363	-110.267	-109.273	-108.88	-116.495	-115.79	-124.65
-113.944	-110.818	-121.698	-112.267	-106.125	-110.164	-115.028	-109.326	-113.619	-110.678
-124.346	-108.008	-117.675	-118.652	-109.061	-106.193	-111.485	-110.584	-111.584	-122.561
-118.737	-119.339	-111.124	-112.225	-131.668	-116.927	-112.756	-111.533	-106.334	-120.131
-103.435	-113.524	-112.573	-108.307	-119.402	-118.123	-117.738	-115.71	-107.037	-105.389
-112.967	-108.632	-108.618	-118.495	-110.891	-108.458	-108.923	-114.642	-114.974	-127.733
-120.026	-109.721	-117.37	-138.063	-109.909	-116.871	-113.84	-118.164	-107.934	-103.171
-116.885	-113.698	-115.547	-113.837	-110.708	-111.653	-111.155	-116.182	-105.025	-107.099
-110.577	-107.177	-120.257	-107.708	-117.485	-105.429	-109.319	-116.144	-111.782	-105.03
-115.824	-107.723	-119.28	-109.472	-112.565	-121.96	-121.989	-111.502	-128.861	-121.205
-112.027	-111.598	-110.885	-106.229	-106.512	-109.132	-118.417	-121.978	-108.997	-117.161
-110.182	-109.455	-106.856	-118.103	-111.219	-111.198	-119.536	-129.343	-117.942	-110.332
-105.425	-120.195	-107.456	-111.241	-126.172	-111.029	-112.681	-127.817	-128.083	-111.282
-110.883	-110.983	-114.746	-110.913	-113.464	-114.075	-110.491	-109.494	-115.948	-105.341
-107.041	-113.74	-110.753	-124.308	-115.2	-117.159	-107.094	-107.569	-113.228	-108.558
-110.958	-105.914	-113.852	-109.001	-116.294	-125.228	-106.526	-112.337	-108.404	-110.443
-109.001	-105.951	-119.653	-106.702	-115.394	-109.487	-117.39	-118.326	-111.41	-126.731
-136.664	-114.007	-111.156	-114.192	-112.541	-138.84	-109.791	-114.088	-110.077	-108.106
-115.915	-108.939	-115.55	-127.77	-118.131	-107.188	-117.284	-108.503	-119.465	-109.47
-118.155	-108.507	-128.306	-109.292	-112.435	-109.942	-120.217	-117.849	-113.799	-117.18
-108.725	-121.24	-113.505	-126.528	-110.862	-110.198	-111.044	-114.176	-113.281	-105.185
-119.038	-117.563	-107.817	-119.491	-108.668	-116.408	-106.267	-116.977	-117.135	-124.651
-110.396	-124.999	-107.799	-114.808	-114.407	-114.621	-115.783	-110.377	-106.672	-112.73
-110.845	-108.217	-113.023	-114.221	-112.783	-110.882	-114.318	-108.818	-113.718	-112.218
-113.628	-109.702	-125.523	-115.873	-118.449	-113.137	-116.697	-115.881	-106.66	-116.15
-110.025	-110.541	-112.463	-129.979	-113.875	-108.008	-117.54	-111.324	-110.917	-110.877
-113.062	-114.456	-106.077	-120.408	-133.555	-113.188	-110.819	-111.181	-121.35	-115.922
-116.085	-114.474	-115.928	-121.578	-111.633	-114.954	-119.442	-115.384	-107.602	-107.292
-122.965	-121.91	-107.697	-132.656	-108.622	-126.062	-108.068	-109.692	-110.686	-118.522
-115.108	-115.149	-112.4	-116.456	-108.778	-107.979	-120.852	-120.412	-113.65	-117.268
-115.124	-113.354	-119.142	-114.89	-109.931	-104.303	-104.099	-111.45	-109.918	-117.723
-112.416	-120.58	-107.664	-113.036	-111.187	-110.907	-119.787	-111.312	-114.675	-108.398
-111.382	-113.49	-109.284	-115.384	-113.854	-109.884	-110.861	-106.827	-110.446	-122.292
-109.621	-107.98	-107.716	-109.409	-107.69	-116.985	-124.146	-113.885	-111.921	-140.171
-113.203	-123.524	-110.542	-114.865	-109.28	-110.436	-107.344	-109.256	-109.699	-114.147
-109.703	-111.569	-112.621	-115.167	-107.094	-113.293	-115.887	-115.382	-111.682	-118.07
-114.747	-106.697	-110.831	-110.415	-114.13	-117.262	-116.235	-120.109	-111.451	-119.306
-111.373	-108.539	-109.576	-117.577	-115.652	-108.744	-110.649	-114.558	-110.322	-114.297
-125.171	-118.896	-110.289	-107.262	-113.902	-134.831	-108.003	-107.155	-110.353	-109.373
-113.622	-127.42	-105.493	-111.541	-107.811	-116.774	-111.201	-108.876	-109.219	-112.787
-114.426	-131.154	-110.849	-117.049	-110.903	-106.933	-118.576	-114.917	-119.676	-116.168
-116.707	-112.744	-115.824	-112.949	-111.127	-105.041	-110.773	-105.066	-117.766	-109.356
-112.794	-112.423	-113.324	-120.178	-112.806	-117.356	-119.254	-111.869	-119.32	-112.948
-115.243	-115.251	-111.096	-117.728	-112.526	-112.847	-112.669	-116.283	-118.825	-112.68
-107.021	-104.902	-114.208	-106.451	-114.286	-110.584	-110.115	-108.716	-108.063	-116.465
-107.657	-120.046	-119.375	-130.075	-113.004	-120.085	-112.996	-108.668	-106.026	-116.311
-113.126	-112.059	-124.686	-112.252	-113.408	-115.241	-110.975	-107.661	-113.769	-114.941
-115.467	-104.347	-105.491	-106.89	-120.972	-110.807	-107.858	-109.387	-108.19	-108.582

-108.462	-117.218	-114.535	-106.82	-118.467	-112.313	-117	-116.642	-104.115	-111.445
-104.157	-110.474	-112.965	-108.317	-117.722	-109.874	-106.811	-105.67	-108.602	-111.35
-109.076	-109.746	-113.312	-116.94	-114.997	-116.996	-109.412	-109.101	-110.704	-111.429
-111.857	-110.278	-116.676	-105.469	-116.13	-107.656	-113.238	-108.237	-108.018	-111.907
-116.409	-105.562	-107.192	-115.199	-106.463	-109.974	-106.095	-115.918	-113.616	-119.918
-112.913	-109.518	-107.01	-106.35	-111.855	-114.501	-114.572	-116.069	-113.766	-123.658
-109.283	-106.956	-117.146	-115.735	-114.693	-112.453	-105.298	-115.942	-106.175	-113.819
-118.492	-107.314	-113.675	-116.756	-125.618	-110.085	-111.877	-116.575	-107.541	-113.375
-118.205	-110.217	-115.517	-122.248	-109.214	-109.312	-113.391	-105.532	-111.472	-112.16
-104.552	-121.157	-103.926	-101.597	-99.6726	-112.336	-108.784	-99.3564	-97.1642	-107.111
-101.988	-97.6583	-98.663	-97.5258	-112.005	-107.361	-109.195	-116.01	-105.351	-98.2968
-102.292	-104.019	-101.637	-103.399	-101.614	-107.191	-103.728	-102.953	-101.149	-99.428
-110.892	-103.675	-98.0446	-102.042	-111.99	-105.019	-102.728	-117.182	-108.304	-110.607
-100.911	-112.144	-100.54	-111.432	-101.069	-98.7328	-101.968	-105.225	-106.386	-97.7446
-101.466	-102.447	-104.745	-104.635	-99.9523	-103.87	-102.826	-101.325	-106.894	-108.884
-96.4899	-99.4548	-101.611	-104.494	-97.0299	-107.049	-109.169	-114.469	-100.948	-107.346
-105.466	-99.3899	-97.2047	-95.3939	-109.447	-109.437	-106.66	-108.003	-119.772	-103.702
-95.3517	-104.03	-98.961	-101.554	-101.479	-103.685	-96.5182	-104.248	-108.108	-105.656
-102.954	-105.52	-104.181	-103.831	-106.511	-98.6203	-97.6075	-98.1785	-100.411	-100.702
-94.0042	-99.7132	-105.194	-96.8722	-102.902	-95.2242	-104.959	-108.772	-96.9205	-104.177
-102.248	-99.0626	-96.3129	-101.343	-113.111	-104.41	-99.3046	-97.9576	-98.8805	-101.996
-98.3655	-98.7241	-103.459	-103.672	-97.9393	-108.846	-95.2015	-110.128	-103.648	-109.057
-99.3558	-98.3286	-104.575	-116.701	-110.172	-97.3274	-95.9772	-101.77	-111.582	-101.782
-99.3866	-101.885	-97.0479	-102.756	-98.3754	-107.634	-113.881	-102.075	-104.81	-98.3259
-98.2391	-98.4616	-96.9771	-105.219	-102.379	-99.3031	-96.2999	-108.362	-98.3357	-106.715
-97.5556	-99.8814	-98.8909	-109.694	-95.2434	-97.965	-108.081	-98.2795	-101.023	-104.426
-98.4122	-113.849	-100.644	-97.4343	-103.299	-116.67	-108.323	-95.6666	-103.683	-105.578
-99.5646	-98.3116	-109.528	-104.703	-94.9237	-98.8187	-102.834	-103.193	-105.5	-105.154
-97.7947	-107.912	-112.15	-100.719	-97.6742	-103.161	-113.068	-102.21	-104.527	-108.377
-108.128	-101.083	-123.104	-102.496	-106.536	-113.887	-102.564	-104.987	-110.993	-99.7805
-97.4258	-104.764	-109.657	-103.915	-98.3339	-100.649	-108.044	-101.715	-102.868	-98.5614
-103.64	-95.4344	-105.1	-101.851	-98.2301	-98.8808	-108.517	-98.821	-99.396	-104.936
-106.043	-100.554	-110.479	-101.091	-101.686	-95.0453	-107.764	-100.195	-96.8027	-101.193
-107.057	-93.4073	-105.145	-101.275	-100.767	-103.605	-108.746	-105.328	-94.7423	-111.781
-101.18	-124.382	-104.652	-102.234	-108.009	-100.527	-113.377	-108.124	-107.31	-107.839
-116.87	-97.5318	-101.903	-110.329	-100.563	-99.1419	-101.172	-102.73	-109.036	-109.625
-103.395	-106.734	-97.7124	-100.137	-102.252	-102.592	-107.254	-99.6402	-98.1731	-103.399
-100.906	-98.0672	-103.207	-101.197	-98.5176	-106.605	-103.564	-100.61	-100.875	-99.9769
-104.283	-96.0529	-103.645	-97.5276	-109.559	-111.249	-102.075	-112.952	-98.1344	-108.122
-105.53	-104.521	-102.746	-110.417	-107.967	-114.159	-101.107	-104.624	-99.4192	-99.3718
-102.887	-101.239	-101.434	-99.0066	-106.011	-100.29	-100.286	-98.5258	-102.791	-98.8403
-99.5329	-114.93	-94.6123	-101.889	-95.3295	-109.774	-101.313	-98.6775	-100.683	-109.754
-100.151	-113.058	-103.499	-98.4691	-118.531	-96.7731	-96.0661	-104.161	-104.16	-124.999
-100.809	-100.333	-107.153	-96.2027	-111.149	-100.71	-93.2221	-97.6145	-96.0221	-109.134
-95.5225	-102.048	-99.0932	-108.261	-97.6118	-100.799	-107.196	-103.973	-99.9343	-105.028
-97.803	-101.894	-116.613	-97.582	-101.303	-100.805	-100.422	-106.505	-94.9753	-100.209
-97.2958	-95.6093	-100.872	-110.785	-108.169	-103.378	-102.142	-96.2703	-99.8074	-115.318
-100.82	-92.1506	-108.877	-103.141	-103.302	-102.376	-103.698	-107.271	-98.3607	-97.8746
-93.6197	-92.5089	-109.48	-108.151	-100.487	-103.313	-95.1394	-107.491	-97.1287	-97.0807
-98.403	-95.121	-97.7296	-107.036	-97.2266	-108.442	-96.3404	-100.748	-99.201	-97.6021
-100.645	-94.7054	-111.772	-105.247	-96.9724	-108.781	-102.195	-99.7527	-98.9978	-104.262
-105.011	-92.0859	-112.562	-103.659	-92.7513	-101.308	-100.385	-101.929	-112.247	-103.631
-110.095	-100.754	-96.9846	-97.7306	-98.7399	-107.99	-104.122	-98.1118	-103.339	-99.5169
-99.5177	-99.833	-99.5248	-99.6294	-97.8621	-105.616	-110.898	-95.2977	-98.4128	-116.136
-103.274	-96.298	-107.641	-100.683	-100.325	-99.5003	-97.6898	-104.629	-100.326	-98.1437

-95.1056	-95.1425	-101.301	-95.2787	-96.0564	-93.5707	-98.6304	-114.148	-100.681	-95.7352
-103.132	-101.602	-93.0003	-92.2874	-99.7024	-96.8143	-103.915	-103.729	-97.9172	-106.929
-93.0506	-101.581	-97.1431	-103.147	-95.6803	-98.4211	-109.036	-109.749	-108.552	-98.5858
-102.905	-100.056	-101.197	-111.281	-105.083	-100.079	-109.511	-100.067	-102.963	-95.3827
-104.216	-98.3108	-98.9101	-96.2467	-96.6815	-102.564	-99.1922	-107.271	-93.4573	-103.749
-100.791	-99.1832	-96.604	-94.1029	-92.8642	-97.4392	-98.7445	-101.202	-104.034	-128.979
-96.1112	-105.143	-97.379	-98.8171	-100.732	-117.7	-105.525	-98.2413	-95.353	-94.7218
-122.496	-96.9194	-102.388	-104.695	-99.2281	-98.4497	-102.997	-111.069	-99.4791	-98.5095
-99.1472	-106.395	-93.2036	-101.426	-100.587	-90.6296	-98.1225	-97.4931	-96.9605	-95.2505
-97.206	-102.184	-99.8207	-96.589	-95.909	-100.259	-95.9679	-102.758	-110.186	-113.857
-99.3715	-96.806	-96.472	-94.5179	-101.101	-96.8384	-96.3901	-95.4242	-97.8558	-99.2403
-100.614	-93.1465	-102.195	-101.488	-114.685	-93.6268	-97.6611	-96.2629	-97.9359	-101.16
-103.376	-99.6835	-118.53	-119.739	-109.279	-101.344	-105.509	-123.258	-109.573	-101.982
-98.2084	-99.2882	-98.9679	-102.71	-100.758	-101.638	-105.711	-95.8593	-98.6569	-106.667
-116.239	-101.116	-99.916	-99.2487	-98.9928	-96.8669	-99.0056	-108.182	-116.788	-113.307
-97.9506	-98.1544	-96.5165	-99.6051	-101.084	-96.3748	-97.2887	-106.195	-94.933	-104.869
-105.143	-101.353	-97.8835	-99.8744	-99.7937	-96.329	-110.175	-108.832	-96.9836	-100.133
-98.2246	-98.1351	-112.505	-103.489	-97.4714	-103.632	-108.608	-102.363	-95.6863	-105.218
-103.864	-105.405	-95.657	-99.1385	-103.939	-97.4429	-109.256	-105.412	-102.552	-97.9562
-101.26	-107.852	-102.002	-109.608	-106.132	-95.4975	-98.2744	-109.908	-109.405	-107.071
-94.5975	-97.7154	-100.259	-105.214	-98.3984	-96.921	-100.91	-104.118	-107.638	-106.208
-105.461	-100.415	-106.554	-109.391	-107.063	-100.577	-106.377	-96.8658	-101.807	-96.7516
-115.747	-101.873	-121.452	-94.4621	-102.325	-95.0673	-102.262	-109.529	-94.5453	-99.8066
-111.628	-99.8796	-95.2126	-102.758	-99.4173	-100.181	-97.2817	-103.332	-98.0851	-96.5804
-107.735	-101.232	-116.479	-103.116	-105.952	-91.192	-105.779	-109.635	-97.5401	-94.8345
-100.63	-100.544	-101.826	-102.105	-93.4605	-110.958	-105.256	-102.713	-94.98	-96.1572
-103.339	-99.8465	-98.0946	-97.8829	-97.8272	-100.456	-94.2944	-93.6559	-95.9426	-95.0099
-103.656	-105.042	-116.998	-100.98	-93.8285	-96.466	-105.704	-106.941	-92.2873	-106.024
-98.4559	-101.872	-108.397	-96.9196	-103.695	-101.381	-105.909	-103.177	-91.6442	-96.6183
-98.0456	-106.475	-95.6742	-103.903	-102.571	-102.694	-102.96	-97.725	-93.5641	-102.933
-99.7392	-101.423	-102.292	-100.451	-95.8334	-105.941	-105.436	-96.3755	-93.4915	-107.903
-108.746	-96.9438	-97.6075	-98.6141	-98.619	-98.4238	-105.442	-93.1849	-99.6	-100.973
-102.881	-92.9491	-95.3453	-101.884	-98.9215	-99.9195	-106.347	-105.027	-98.4993	-106.508
-97.0829	-110.477	-101.268	-97.0192	-99.333	-106.575	-97.8677	-102.093	-114.779	-98.9615
-101.197	-106.098	-106.277	-103.702	-111.018	-102.022	-105.677	-102.432	-113.22	-118.005
-99.6988	-122.87	-106.534	-110.341	-97.5795	-96.4632	-96.5247	-98.8965	-97.938	-108.673
-95.9608	-98.8344	-99.3596	-102.893	-124.134	-97.2483	-96.9056	-94.1574	-107.416	-100.902
-101.419	-107.845	-110.253	-98.0906	-96.7916	-102.144	-99.4605	-99.5815	-96.1219	-97.3548
-100.939	-95.9469	-98.5248	-100.967	-97.0272	-110.775	-96.9633	-95.5742	-98.2972	-99.1245
-95.3823	-107.601	-97.0212	-94.1397	-109.378	-98.2534	-103.914	-99.7417	-100.747	-98.6476
-102.798	-92.3045	-98.7663	-108.676	-101.672	-104.165	-100.463	-104.008	-96.1005	-95.1203
-96.1765	-98.9652	-96.4355	-98.5038	-94.3383	-123.825	-100.949	-101.82	-95.6849	-108.945
-102.598	-94.4172	-100.022	-105.028	-95.1976	-98.5019	-101.646	-97.5628	-107.563	-100.909
-94.2927	-97.8854	-101.839	-93.455	-100.207	-94.2849	-99.7248	-96.077	-102.128	-104.617
-96.6444	-105.284	-101.539	-107.976	-104.026	-97.9874	-104.345	-104.31	-101.009	-95.2838
-105.669	-102.816	-107.733	-101.716	-104.334	-96.1174	-108.15	-99.3265	-99.629	-95.8748
-94.7557	-93.3801	-96.5694	-98.9873	-96.111	-99.5046	-97.1885	-96.7664	-91.5741	-102.289
-102.284	-103.488	-102.151	-92.96	-93.9202	-102.937	-97.4429	-101.76	-94.6888	-97.9185
-102.08	-95.3243	-103.773	-95.4266	-100.544	-103.414	-97.3844	-100.619	-95.2853	-101.361
-98.9286	-91.8444	-109.102	-102.805	-99.5517	-102.955	-96.9204	-106.447	-96.7187	-104.419

0.2 to 19

2 to 6

6 to 12

12 to 18

J7-J8	Max	Min	Max	Min	Max	Freq
-93.2061	-4.5	-60	2	-0.5	0.5	0.1000
-95.6779	-4.5	-60	2	-0.5	0.5	0.1995
-94.5546	-4.5	-60	2	-0.5	0.5	0.2990
-93.7324	-4.5	-60	2	-0.5	0.5	0.3985
-95.1516	-4.5	-60	2	-0.5	0.5	0.4980
-93.8035	-4.5	-60	2	-0.5	0.5	0.5975
-97.1419	-4.5	-60	2	-0.5	0.5	0.6970
-97.6714	-4.5	-60	2	-0.5	0.5	0.7965
-103.768	-4.5	-60	2	-0.5	0.5	0.8960
-105.837	-4.5	-60	2	-0.5	0.5	0.9955
-109.405	-4.5	-60	2	-0.5	0.5	1.0950
-111.357	-4.5	-60	2	-0.5	0.5	1.1945
-108.141	-4.5	-60	2	-0.5	0.5	1.2940
-109.332	-4.5	-60	2	-0.5	0.5	1.3935
-113.143	-4.5	-60	2	-0.5	0.5	1.4930
-120.289	-4.5	-60	2	-0.5	0.5	1.5925
-111.087	-4.5	-60	2	-0.5	0.5	1.6920
-124.983	-4.5	-60	2	-0.5	0.5	1.7915
-112.592	-4.5	-60	2	-0.5	0.5	1.8910
-109.444	-4.5	-60	2	-0.5	0.5	1.9905
-103.585	-4.5	-60	2	-0.5	0.5	2.0900
-111.317	-4.5	-60	2	-0.5	0.5	2.1895
-120.988	-4.5	-60	2	-0.5	0.5	2.2890
-116.428	-4.5	-60	2	-0.5	0.5	2.3885
-110.286	-4.5	-60	2	-0.5	0.5	2.4880
-112.077	-4.5	-60	2	-0.5	0.5	2.5875
-116.524	-4.5	-60	2	-0.5	0.5	2.6870
-107.641	-4.5	-60	2	-0.5	0.5	2.7865
-107.869	-4.5	-60	2	-0.5	0.5	2.8860
-108.735	-4.5	-60	2	-0.5	0.5	2.9855
-108.089	-4.5	-60	2	-0.5	0.5	3.0850
-111.564	-4.5	-60	2	-0.5	0.5	3.1845
-109.97	-4.5	-60	2	-0.5	0.5	3.2840
-117.418	-4.5	-60	2	-0.5	0.5	3.3835
-110.969	-4.5	-60	2	-0.5	0.5	3.4830
-113.308	-4.5	-60	2	-0.5	0.5	3.5825
-113.937	-4.5	-60	2	-0.5	0.5	3.6820
-116.284	-4.5	-60	2	-0.5	0.5	3.7815
-108.063	-4.5	-60	2	-0.5	0.5	3.8810
-116.449	-4.5	-60	2	-0.5	0.5	3.9805
-117.662	-4.5	-60	2	-0.5	0.5	4.0800

-119.306	-4.5	-60	2	-0.5	0.5	4.1795
-113.033	-4.5	-60	2	-0.5	0.5	4.2790
-111.84	-4.5	-60	2	-0.5	0.5	4.3785
-113.393	-4.5	-60	2	-0.5	0.5	4.4780
-108.216	-4.5	-60	2	-0.5	0.5	4.5775
-110.443	-4.5	-60	2	-0.5	0.5	4.6770
-118.928	-4.5	-60	2	-0.5	0.5	4.7765
-115.572	-4.5	-60	2	-0.5	0.5	4.8760
-113.884	-4.5	-60	2	-0.5	0.5	4.9755
-118.001	-4.5	-60	2	-0.5	0.5	5.0750
-106.441	-4.5	-60	2	-0.5	0.5	5.1745
-110.343	-4.5	-60	2	-0.5	0.5	5.2740
-120.062	-4.5	-60	2	-0.5	0.5	5.3735
-107.861	-4.5	-60	2	-0.5	0.5	5.4730
-112.098	-4.5	-60	2	-0.5	0.5	5.5725
-125.949	-4.5	-60	2	-0.5	0.5	5.6720
-105.001	-4.5	-60	2	-0.5	0.5	5.7715
-110.189	-4.5	-60	2	-0.5	0.5	5.8710
-109.967	-4.5	-60	2	-0.5	0.5	5.9705
-109.714	-4.5	-60	2	-0.5	0.5	6.0700
-114.316	-4.5	-60	2	-0.5	0.5	6.1695
-106.676	-4.5	-60	2	-0.5	0.5	6.2690
-107.546	-4.5	-60	2	-0.5	0.5	6.3685
-113.22	-4.5	-60	2	-0.5	0.5	6.4680
-129.925	-4.5	-60	2	-0.5	0.5	6.5675
-107.823	-4.5	-60	2	-0.5	0.5	6.6670
-128.927	-4.5	-60	2	-0.5	0.5	6.7665
-115.59	-4.5	-60	2	-0.5	0.5	6.8660
-121.453	-4.5	-60	2	-0.5	0.5	6.9655
-112.67	-4.5	-60	2	-0.5	0.5	7.0650
-111.296	-4.5	-60	2	-0.5	0.5	7.1645
-120.872	-4.5	-60	2	-0.5	0.5	7.2640
-111.352	-4.5	-60	2	-0.5	0.5	7.3635
-112.634	-4.5	-60	2	-0.5	0.5	7.4630
-112.417	-4.5	-60	2	-0.5	0.5	7.5625
-106.063	-4.5	-60	2	-0.5	0.5	7.6620
-109.349	-4.5	-60	2	-0.5	0.5	7.7615
-118.36	-4.5	-60	2	-0.5	0.5	7.8610
-110.761	-4.5	-60	2	-0.5	0.5	7.9605
-117.326	-4.5	-60	2	-0.5	0.5	8.0600
-103.147	-4.5	-60	2	-0.5	0.5	8.1595
-111.608	-4.5	-60	2	-0.5	0.5	8.2590
-120.331	-4.5	-60	2	-0.5	0.5	8.3585
-107.01	-4.5	-60	2	-0.5	0.5	8.4580
-110.371	-4.5	-60	2	-0.5	0.5	8.5575
-109.053	-4.5	-60	2	-0.5	0.5	8.6570
-111.831	-4.5	-60	2	-0.5	0.5	8.7565
-108.732	-4.5	-60	2	-0.5	0.5	8.8560
-113.659	-4.5	-60	2	-0.5	0.5	8.9555
-105.409	-4.5	-60	2	-0.5	0.5	9.0550
-110.655	-4.5	-60	2	-0.5	0.5	9.1545
-112.327	-4.5	-60	2	-0.5	0.5	9.2540
-112.429	-4.5	-60	2	-0.5	0.5	9.3535
-108.246	-4.5	-60	2	-0.5	0.5	9.4530
-107.553	-4.5	-60	2	-0.5	0.5	9.5525

-109.326	-4.5	-60	2	-0.5	0.5	9.6520
-105.027	-4.5	-60	2	-0.5	0.5	9.7515
-111.86	-4.5	-60	2	-0.5	0.5	9.8510
-106.016	-4.5	-60	2	-0.5	0.5	9.9505
-119.553	-4.5	-60	2	-0.5	0.5	10.0500
-110.71	-4.5	-60	2	-0.5	0.5	10.1495
-113.339	-4.5	-60	2	-0.5	0.5	10.2490
-115.833	-4.5	-60	2	-0.5	0.5	10.3485
-119.068	-4.5	-60	2	-0.5	0.5	10.4480
-101.04	-4.5	-60	2	-0.5	0.5	10.5475
-122.015	-4.5	-60	2	-0.5	0.5	10.6470
-100.662	-4.5	-60	2	-0.5	0.5	10.7465
-102.676	-4.5	-60	2	-0.5	0.5	10.8460
-101.833	-4.5	-60	2	-0.5	0.5	10.9455
-103.691	-4.5	-60	2	-0.5	0.5	11.0450
-108.015	-4.5	-60	2	-0.5	0.5	11.1445
-94.8288	-4.5	-60	2	-0.5	0.5	11.2440
-106.638	-4.5	-60	2	-0.5	0.5	11.3435
-106.237	-4.5	-60	2	-0.5	0.5	11.4430
-112.106	-4.5	-60	2	-0.5	0.5	11.5425
-99.1819	-4.5	-60	2	-0.5	0.5	11.6420
-98.7308	-4.5	-60	2	-0.5	0.5	11.7415
-108.693	-4.5	-60	2	-0.5	0.5	11.8410
-101.695	-4.5	-60	2	-0.5	0.5	11.9405
-99.8979	-4.5	-60	2	-0.5	0.5	12.0400
-105.143	-4.5	-60	2	-0.5	0.5	12.1395
-98.7089	-4.5	-60	2	-0.5	0.5	12.2390
-110.041	-4.5	-60	2	-0.5	0.5	12.3385
-103.479	-4.5	-60	2	-0.5	0.5	12.4380
-106.464	-4.5	-60	2	-0.5	0.5	12.5375
-105.053	-4.5	-60	2	-0.5	0.5	12.6370
-102.306	-4.5	-60	2	-0.5	0.5	12.7365
-106.16	-4.5	-60	2	-0.5	0.5	12.8360
-97.3249	-4.5	-60	2	-0.5	0.5	12.9355
-99.194	-4.5	-60	2	-0.5	0.5	13.0350
-102.157	-4.5	-60	2	-0.5	0.5	13.1345
-100.228	-4.5	-60	2	-0.5	0.5	13.2340
-94.6086	-4.5	-60	2	-0.5	0.5	13.3335
-99.1087	-4.5	-60	2	-0.5	0.5	13.4330
-99.3632	-4.5	-60	2	-0.5	0.5	13.5325
-106.928	-4.5	-60	2	-0.5	0.5	13.6320
-96.5765	-4.5	-60	2	-0.5	0.5	13.7315
-99.7343	-4.5	-60	2	-0.5	0.5	13.8310
-98.6753	-4.5	-60	2	-0.5	0.5	13.9305
-107.548	-4.5	-60	2	-0.5	0.5	14.0300
-99.1116	-4.5	-60	2	-0.5	0.5	14.1295
-104.798	-4.5	-60	2	-0.5	0.5	14.2290
-98.5157	-4.5	-60	2	-0.5	0.5	14.3285
-102.706	-4.5	-60	2	-0.5	0.5	14.4280
-104.798	-4.5	-60	2	-0.5	0.5	14.5275
-97.9043	-4.5	-60	2	-0.5	0.5	14.6270
-94.3526	-4.5	-60	2	-0.5	0.5	14.7265
-97.846	-4.5	-60	2	-0.5	0.5	14.8260
-100.99	-4.5	-60	2	-0.5	0.5	14.9255
-106.105	-4.5	-60	2	-0.5	0.5	15.0250

-117.062	-4.5	-60	2	-0.5	0.5	15.1245
-95.009	-4.5	-60	2	-0.5	0.5	15.2240
-97.7347	-4.5	-60	2	-0.5	0.5	15.3235
-108.571	-4.5	-60	2	-0.5	0.5	15.4230
-99.9925	-4.5	-60	2	-0.5	0.5	15.5225
-103.258	-4.5	-60	2	-0.5	0.5	15.6220
-112.12	-4.5	-60	2	-0.5	0.5	15.7215
-95.9848	-4.5	-60	2	-0.5	0.5	15.8210
-94.935	-4.5	-60	2	-0.5	0.5	15.9205
-98.1397	-4.5	-60	2	-0.5	0.5	16.0200
-100.771	-4.5	-60	2	-0.5	0.5	16.1195
-98.9794	-4.5	-60	2	-0.5	0.5	16.2190
-98.0511	-4.5	-60	2	-0.5	0.5	16.3185
-100.175	-4.5	-60	2	-0.5	0.5	16.4180
-103.357	-4.5	-60	2	-0.5	0.5	16.5175
-102.023	-4.5	-60	2	-0.5	0.5	16.6170
-99.5052	-4.5	-60	2	-0.5	0.5	16.7165
-106.016	-4.5	-60	2	-0.5	0.5	16.8160
-95.9904	-4.5	-60	2	-0.5	0.5	16.9155
-98.8754	-4.5	-60	2	-0.5	0.5	17.0150
-98.9388	-4.5	-60	2	-0.5	0.5	17.1145
-101.423	-4.5	-60	2	-0.5	0.5	17.2140
-100.836	-4.5	-60	2	-0.5	0.5	17.3135
-109.817	-4.5	-60	2	-0.5	0.5	17.4130
-100.072	-4.5	-60	2	-0.5	0.5	17.5125
-99.4072	-4.5	-60	2	-0.5	0.5	17.6120
-93.9903	-4.5	-60	2	-0.5	0.5	17.7115
-95.3843	-4.5	-60	2	-0.5	0.5	17.8110
-111.959	-4.5	-60	2	-0.5	0.5	17.9105
-99.4629	-4.5	-60	2	-0.5	0.5	18.0100
-96.9524	-4.5	-60	2	-0.5	0.5	18.1095
-96.0151	-4.5	-60	2	-0.5	0.5	18.2090
-114.984	-4.5	-60	2	-0.5	0.5	18.3085
-93.8654	-4.5	-60	2	-0.5	0.5	18.4080
-94.3845	-4.5	-60	2	-0.5	0.5	18.5075
-93.8339	-4.5	-60	2	-0.5	0.5	18.6070
-98.5565	-4.5	-60	2	-0.5	0.5	18.7065
-96.6266	-4.5	-60	2	-0.5	0.5	18.8060
-99.4378	-4.5	-60	2	-0.5	0.5	18.9055
-110.439	-4.5	-60	2	-0.5	0.5	19.0050
-98.9246	-4.5	-60	2	-0.5	0.5	19.1045
-95.2528	-4.5	-60	2	-0.5	0.5	19.2040
-97.3591	-4.5	-60	2	-0.5	0.5	19.3035
-96.8985	-4.5	-60	2	-0.5	0.5	19.4030
-105.742	-4.5	-60	2	-0.5	0.5	19.5025
-93.0503	-4.5	-60	2	-0.5	0.5	19.6020
-100.525	-4.5	-60	2	-0.5	0.5	19.7015
-96.194	-4.5	-60	2	-0.5	0.5	19.8010
-94.7306	-4.5	-60	2	-0.5	0.5	19.9005
-95.3688	-4.5	-60	2	-0.5	0.5	20.0000

	1	$y = -0.1978345615x - 0.7189029988$
-5.04754	2	$y = -0.1604159035x - 0.8988678397$
	3	$y = -0.1645997782x - 0.8473192378$
-2.09337	4	$y = -0.1603986818x - 0.9076696566$
-3.0424	5	$y = -0.1666890484x - 0.9271116919$
-4.32286	6	$y = -0.1549493176x - 0.9413440558$
	7	$y = -0.1844566940x - 0.8653229768$
	8	$y = -0.1948175119x - 0.8553059966$

Insertion Loss

J0-J1	J0-J2	J0-J3	J0-J4	J0-J5	J0-J6	J0-J7	J0-J8	Freq
-4.63102	-3.23989	-2.95236	-3.36827	-3.27006	-3.20529	-3.5079	-3.41378	0.1
-1.20535	-1.06509	-1.10948	-1.0757	-1.07341	-1.05181	-1.13631	-1.1008	0.1995
-0.89426	-0.81883	-0.84875	-0.81661	-0.83408	-0.79301	-0.87889	-0.82091	0.299
-0.83908	-0.77197	-0.79488	-0.75968	-0.78809	-0.74978	-0.82081	-0.7762	0.3985
-0.81882	-0.7612	-0.79055	-0.74158	-0.7836	-0.74456	-0.81188	-0.76572	0.498
-0.82456	-0.78077	-0.80521	-0.7688	-0.80889	-0.76094	-0.82419	-0.78697	0.5975
-0.84767	-0.79045	-0.81439	-0.77445	-0.80973	-0.77312	-0.83942	-0.79355	0.697
-0.85221	-0.80819	-0.83434	-0.80046	-0.83093	-0.79167	-0.8566	-0.83357	0.7965
-0.87792	-0.85193	-0.86083	-0.83213	-0.86205	-0.83363	-0.89531	-0.86722	0.896
-0.89266	-0.8656	-0.88221	-0.85286	-0.88213	-0.85696	-0.91357	-0.87521	0.9955
-0.91167	-0.89189	-0.91066	-0.87751	-0.91249	-0.88103	-0.93394	-0.93126	1.095
-0.93577	-0.91804	-0.93231	-0.88473	-0.93657	-0.91219	-0.96155	-0.95258	1.1945
-0.95878	-0.94377	-0.96445	-0.9309	-0.9698	-0.92407	-0.99932	-0.98486	1.294
-0.99144	-0.97687	-1.00349	-0.96433	-1.00174	-0.96446	-1.03507	-1.02407	1.3935
-1.00685	-0.99588	-1.02366	-0.98518	-1.02579	-0.98444	-1.06817	-1.05533	1.493
-1.02376	-1.02893	-1.05607	-1.01111	-1.05621	-1.01618	-1.08968	-1.0849	1.5925
-1.0549	-1.0482	-1.06359	-1.02303	-1.06774	-1.03142	-1.11502	-1.11626	1.692
-1.09137	-1.08809	-1.11092	-1.05536	-1.09161	-1.05647	-1.15398	-1.15097	1.7915
-1.0949	-1.12766	-1.13692	-1.0858	-1.11846	-1.07667	-1.17944	-1.18288	1.891
-1.11667	-1.13845	-1.15944	-1.09787	-1.13948	-1.10854	-1.21612	-1.22678	1.9905
-1.15579	-1.17058	-1.19103	-1.13406	-1.17278	-1.13786	-1.25207	-1.25654	2.09
-1.17134	-1.18897	-1.2114	-1.15088	-1.19504	-1.15573	-1.2852	-1.28515	2.1895
-1.21811	-1.21265	-1.2392	-1.20028	-1.2374	-1.17524	-1.30406	-1.32424	2.289
-1.22059	-1.22045	-1.26741	-1.18773	-1.25216	-1.18223	-1.33109	-1.34371	2.3885
-1.23987	-1.28104	-1.29349	-1.22537	-1.26669	-1.22318	-1.35405	-1.38437	2.488
-1.28763	-1.30701	-1.35894	-1.27966	-1.32176	-1.26442	-1.42098	-1.43128	2.5875
-1.30831	-1.35147	-1.39061	-1.30171	-1.37519	-1.30674	-1.43861	-1.46574	2.687
-1.3604	-1.39937	-1.45439	-1.37292	-1.41481	-1.36516	-1.50223	-1.51854	2.7865
-1.41212	-1.47667	-1.52036	-1.42984	-1.47616	-1.4216	-1.55898	-1.59533	2.886
-1.47547	-1.528	-1.58906	-1.49967	-1.55058	-1.50118	-1.64025	-1.66127	2.9855
-1.5547	-1.57468	-1.64807	-1.55469	-1.59878	-1.54988	-1.69578	-1.72651	3.085
-1.60177	-1.60604	-1.67142	-1.60018	-1.60775	-1.58062	-1.73451	-1.76694	3.1845
-1.63303	-1.61217	-1.66412	-1.62553	-1.61267	-1.57293	-1.74325	-1.77389	3.284
-1.6101	-1.59128	-1.63557	-1.60191	-1.6093	-1.57669	-1.74514	-1.75557	3.3835
-1.62697	-1.60181	-1.65244	-1.63339	-1.62971	-1.58456	-1.73333	-1.77531	3.483
-1.60343	-1.58855	-1.62427	-1.63246	-1.61091	-1.57503	-1.7209	-1.74724	3.5825
-1.57064	-1.58622	-1.60949	-1.59889	-1.61561	-1.56605	-1.69603	-1.73349	3.682
-1.58214	-1.59671	-1.62878	-1.62476	-1.64272	-1.60734	-1.72511	-1.744	3.7815
-1.58829	-1.6009	-1.62483	-1.61074	-1.64112	-1.62433	-1.72894	-1.7441	3.881
-1.59405	-1.63675	-1.66445	-1.67098	-1.68179	-1.67858	-1.73195	-1.76121	3.9805
-1.57723	-1.65208	-1.65667	-1.67121	-1.69652	-1.67865	-1.74687	-1.76229	4.08

-1.61635	-1.69995	-1.70905	-1.7216	-1.7482	-1.7444	-1.7812	-1.80087	4.1795
-1.64079	-1.73527	-1.75936	-1.75421	-1.79977	-1.78086	-1.82263	-1.84537	4.279
-1.6633	-1.76912	-1.79307	-1.79732	-1.83615	-1.8557	-1.85965	-1.86752	4.3785
-1.69284	-1.79157	-1.80958	-1.82966	-1.87067	-1.88597	-1.88828	-1.88563	4.478
-1.72065	-1.84589	-1.85494	-1.86491	-1.89036	-1.91157	-1.91839	-1.93148	4.5775
-1.74616	-1.84934	-1.87495	-1.89596	-1.91863	-1.9712	-1.93554	-1.96236	4.677
-1.78695	-1.89579	-1.89809	-1.95039	-1.94443	-1.9822	-1.98202	-1.97537	4.7765
-1.80844	-1.85904	-1.91158	-1.9495	-1.95389	-2.01255	-1.97975	-1.99716	4.876
-1.81049	-1.88521	-1.8538	-1.94062	-1.93372	-2.03258	-1.99275	-1.98223	4.9755
-1.80203	-1.88825	-1.92216	-1.94048	-1.97281	-2.01905	-1.98209	-1.98505	5.075
-1.79099	-1.88531	-1.90476	-1.95478	-1.96353	-2.04517	-1.96879	-1.9871	5.1745
-1.74995	-1.8529	-1.87561	-1.93775	-1.95766	-2.01126	-1.94694	-1.95038	5.274
-1.73514	-1.85759	-1.88323	-1.93621	-1.97822	-2.04914	-1.96476	-1.95467	5.3735
-1.76203	-1.89651	-1.89343	-1.96029	-1.97379	-2.05837	-1.9698	-1.93273	5.473
-1.71904	-1.82699	-1.90297	-1.92712	-1.98165	-2.05469	-1.93624	-1.93734	5.5725
-1.70471	-1.85388	-1.92249	-1.93387	-1.96628	-2.03885	-1.94273	-1.94303	5.672
-1.72836	-1.88368	-1.95921	-1.95822	-2.01562	-2.07022	-1.96956	-1.96348	5.7715
-1.69068	-1.87645	-1.96695	-1.95119	-2.00388	-2.08418	-1.96428	-1.94852	5.871
-1.70108	-1.89645	-1.97681	-1.96507	-2.01569	-2.07134	-1.98454	-1.97042	5.9705
-1.71824	-1.91174	-2.00521	-2.00248	-2.04468	-2.09337	-2.00574	-2.01282	6.07
-1.74336	-1.91466	-2.02678	-1.99626	-2.04686	-2.10001	-2.00269	-2.00808	6.1695
-1.74918	-1.92002	-2.04822	-2.01457	-2.05629	-2.10569	-2.02049	-2.02297	6.269
-1.75902	-1.91802	-2.05126	-2.0328	-2.06614	-2.09945	-2.01004	-2.04143	6.3685
-1.79813	-1.95959	-2.07998	-2.0584	-2.08064	-2.11716	-2.08245	-2.05052	6.468
-1.79913	-1.98804	-2.09362	-2.06306	-2.10141	-2.10434	-2.04444	-2.08975	6.5675
-1.81028	-1.97213	-2.09261	-2.04166	-2.10559	-2.11251	-2.04688	-2.11051	6.667
-1.83889	-2.00109	-2.14057	-2.08393	-2.12385	-2.14096	-2.0994	-2.15089	6.7665
-1.86692	-2.00519	-2.1453	-2.09387	-2.14281	-2.13154	-2.1107	-2.17783	6.866
-1.9137	-2.03978	-2.18389	-2.10967	-2.1428	-2.13544	-2.09978	-2.17841	6.9655
-1.88111	-2.02418	-2.13224	-2.09723	-2.16057	-2.11141	-2.11446	-2.19357	7.065
-1.9389	-2.06683	-2.18512	-2.13499	-2.18445	-2.17841	-2.17731	-2.26806	7.1645
-1.95264	-2.07248	-2.18684	-2.11857	-2.16968	-2.15624	-2.1446	-2.26118	7.264
-1.9655	-2.08926	-2.19238	-2.10846	-2.16775	-2.14049	-2.12815	-2.26359	7.3635
-1.98487	-2.11138	-2.20014	-2.11586	-2.16153	-2.12786	-2.15525	-2.28581	7.463
-2.03758	-2.11674	-2.20946	-2.16267	-2.20346	-2.1902	-2.17082	-2.34747	7.5625
-2.07643	-2.13855	-2.24146	-2.15136	-2.20503	-2.22148	-2.16576	-2.34521	7.662
-2.07758	-2.16268	-2.25104	-2.15583	-2.22271	-2.18962	-2.21586	-2.37818	7.7615
-2.12824	-2.18065	-2.27862	-2.18196	-2.24875	-2.22307	-2.20023	-2.43067	7.861
-2.1278	-2.20214	-2.28596	-2.18172	-2.26229	-2.21704	-2.23049	-2.4413	7.9605
-2.2237	-2.23907	-2.26849	-2.21272	-2.27954	-2.22475	-2.24478	-2.45638	8.06
-2.21041	-2.21443	-2.31349	-2.21664	-2.30147	-2.2512	-2.26696	-2.48087	8.1595
-2.24331	-2.25034	-2.32689	-2.22536	-2.30523	-2.23273	-2.24464	-2.50919	8.259
-2.30695	-2.27538	-2.37603	-2.27931	-2.36625	-2.26587	-2.30717	-2.55708	8.3585
-2.35557	-2.30618	-2.3995	-2.26812	-2.36866	-2.27708	-2.31243	-2.53295	8.458
-2.37844	-2.31519	-2.44098	-2.30705	-2.38303	-2.31173	-2.32522	-2.59593	8.5575
-2.46518	-2.35104	-2.42085	-2.32402	-2.46141	-2.33569	-2.38859	-2.64758	8.657
-2.43988	-2.35154	-2.45367	-2.30383	-2.40669	-2.30024	-2.33245	-2.62298	8.7565
-2.50198	-2.41279	-2.50699	-2.3724	-2.46684	-2.32942	-2.41074	-2.67133	8.856
-2.53416	-2.4217	-2.54531	-2.38189	-2.52941	-2.33937	-2.425	-2.68307	8.9555
-2.51188	-2.38015	-2.53634	-2.37398	-2.50128	-2.31506	-2.39861	-2.67841	9.055
-2.53666	-2.4318	-2.52392	-2.45507	-2.45971	-2.32838	-2.42388	-2.69319	9.1545
-2.55408	-2.40277	-2.4835	-2.4068	-2.44901	-2.29283	-2.47196	-2.62016	9.254
-2.56475	-2.39011	-2.51784	-2.39424	-2.48854	-2.30583	-2.42403	-2.65911	9.3535
-2.61006	-2.41198	-2.5437	-2.44396	-2.54207	-2.34911	-2.47106	-2.67464	9.453
-2.60088	-2.381	-2.57365	-2.45538	-2.54494	-2.37524	-2.54486	-2.71513	9.5525

-2.59966	-2.43073	-2.59312	-2.46415	-2.55121	-2.43548	-2.5403	-2.67019	9.652
-2.65575	-2.42254	-2.53328	-2.44979	-2.56135	-2.33929	-2.51346	-2.69718	9.7515
-2.69969	-2.48861	-2.59648	-2.5172	-2.61012	-2.42314	-2.61392	-2.71101	9.851
-2.64004	-2.40893	-2.54942	-2.46788	-2.54373	-2.35922	-2.56777	-2.64939	9.9505
-2.6882	-2.50923	-2.57839	-2.57227	-2.56833	-2.45304	-2.63771	-2.71381	10.05
-2.7089	-2.4928	-2.55915	-2.56011	-2.6377	-2.45589	-2.60742	-2.72076	10.1495
-2.74428	-2.48495	-2.64134	-2.52139	-2.60818	-2.4477	-2.71456	-2.69595	10.249
-2.80038	-2.53264	-2.65814	-2.59885	-2.67558	-2.52412	-2.73811	-2.75782	10.3485
-2.75856	-2.50472	-2.60775	-2.5944	-2.64218	-2.48916	-2.76037	-2.7391	10.448
-2.77304	-2.53641	-2.60716	-2.59521	-2.64131	-2.4853	-2.78893	-2.77049	10.5475
-2.74983	-2.50878	-2.64428	-2.60997	-2.61944	-2.42584	-2.81721	-2.74856	10.647
-2.7892	-2.53077	-2.65214	-2.67145	-2.58284	-2.53232	-2.84172	-2.78303	10.7465
-2.84157	-2.56986	-2.64103	-2.67545	-2.65365	-2.58148	-2.84302	-2.82833	10.846
-2.8548	-2.53321	-2.64097	-2.63404	-2.64533	-2.54875	-2.89878	-2.79927	10.9455
-2.90617	-2.59397	-2.69387	-2.66875	-2.70598	-2.60378	-2.9367	-2.83087	11.045
-2.97444	-2.64738	-2.71966	-2.72684	-2.64783	-2.59129	-2.97196	-2.88745	11.1445
-2.82326	-2.54648	-2.56439	-2.63716	-2.562	-2.54867	-2.86959	-2.82497	11.244
-2.86908	-2.56031	-2.66368	-2.65218	-2.68838	-2.62194	-2.96115	-2.88722	11.3435
-2.90734	-2.58383	-2.64221	-2.63638	-2.63807	-2.5949	-2.96916	-2.85863	11.443
-2.96151	-2.6389	-2.69079	-2.66795	-2.69518	-2.62504	-3.0061	-2.94442	11.5425
-2.96435	-2.61605	-2.67864	-2.64571	-2.64724	-2.56332	-2.99946	-2.94722	11.642
-2.93534	-2.5671	-2.66998	-2.64102	-2.60388	-2.59265	-2.99629	-2.87701	11.7415
-2.94347	-2.65253	-2.70344	-2.66903	-2.69301	-2.56779	-3.04245	-2.98648	11.841
-3.00667	-2.62519	-2.62203	-2.67213	-2.73166	-2.55686	-2.94861	-2.94795	11.9405
-3.01616	-2.63513	-2.67279	-2.68109	-2.71198	-2.60412	-3.041	-3.01381	12.04
-2.98899	-2.64545	-2.68154	-2.63201	-2.70316	-2.6153	-3.03229	-3.03366	12.1395
-2.97102	-2.65984	-2.71421	-2.61433	-2.68492	-2.639	-3.01065	-3.02803	12.239
-3.02654	-2.63398	-2.73207	-2.67087	-2.70437	-2.62511	-3.0563	-3.07768	12.3385
-3.00994	-2.65587	-2.7218	-2.64931	-2.72851	-2.63723	-3.05819	-3.09444	12.438
-3.04904	-2.68726	-2.73151	-2.67727	-2.79485	-2.66085	-3.12601	-3.06761	12.5375
-3.05876	-2.6632	-2.68722	-2.6594	-2.78963	-2.6746	-3.05751	-3.06215	12.637
-3.01781	-2.69317	-2.71853	-2.63853	-2.78954	-2.62237	-3.06627	-3.09807	12.7365
-2.99783	-2.70913	-2.74299	-2.69232	-2.86644	-2.69569	-3.15339	-3.1266	12.836
-3.08185	-2.72641	-2.76143	-2.74879	-2.90112	-2.667	-3.11694	-3.1445	12.9355
-3.05871	-2.72395	-2.78702	-2.68046	-2.8612	-2.66549	-3.11404	-3.16093	13.035
-3.02139	-2.74923	-2.71711	-2.69301	-2.83671	-2.68088	-3.08417	-3.17726	13.1345
-3.14361	-2.79389	-2.86844	-2.79355	-2.91126	-2.75083	-3.20357	-3.27269	13.234
-3.20874	-2.76405	-2.75393	-2.6965	-2.92094	-2.70927	-3.14111	-3.23501	13.3335
-3.15259	-2.79002	-2.85155	-2.74583	-2.9972	-2.73076	-3.17605	-3.29779	13.433
-3.18534	-2.87907	-2.86121	-2.80933	-3.00853	-2.77792	-3.18479	-3.30446	13.5325
-3.26836	-2.91595	-2.87667	-2.82314	-3.04034	-2.80081	-3.22173	-3.34576	13.632
-3.24945	-2.90237	-2.87339	-2.86169	-3.05684	-2.81648	-3.20978	-3.43403	13.7315
-3.21399	-2.93561	-2.91232	-2.74482	-3.12866	-2.75902	-3.27514	-3.39174	13.831
-3.27883	-2.91688	-2.90562	-2.80599	-3.10544	-2.81318	-3.25426	-3.40833	13.9305
-3.27173	-2.89743	-2.83668	-2.83198	-3.10381	-2.78191	-3.22111	-3.40477	14.03
-3.34904	-3.01949	-2.95305	-2.89199	-3.16531	-2.85442	-3.25354	-3.44623	14.1295
-3.37922	-3.03206	-2.93269	-2.90004	-3.1725	-2.87106	-3.2763	-3.49379	14.229
-3.33525	-3.10554	-2.96611	-2.87641	-3.25123	-2.88844	-3.27212	-3.46904	14.3285
-3.40435	-3.10124	-2.94903	-2.9498	-3.26379	-2.9418	-3.30427	-3.57376	14.428
-3.39982	-3.11646	-3.00969	-2.96881	-3.29462	-2.92224	-3.23108	-3.52041	14.5275
-3.39362	-3.11269	-3.00448	-2.93248	-3.303	-2.98352	-3.24601	-3.52106	14.627
-3.42451	-3.11613	-2.95633	-2.9145	-3.28754	-2.91123	-3.27749	-3.5195	14.7265
-3.39814	-3.08165	-2.8925	-2.90174	-3.30035	-2.87296	-3.23787	-3.3985	14.826
-3.52506	-3.22418	-3.03279	-3.02892	-3.39678	-3.02115	-3.29063	-3.68549	14.9255
-3.42352	-3.20158	-3.06455	-2.95133	-3.35252	-2.94385	-3.34589	-3.54017	15.025

-3.41557	-3.15927	-2.95712	-3.02968	-3.3734	-2.96626	-3.27371	-3.58415	15.1245
-3.44816	-3.16167	-2.96944	-2.96942	-3.39877	-2.97662	-3.31902	-3.56543	15.224
-3.54544	-3.28517	-3.08692	-3.07316	-3.49804	-3.07411	-3.35291	-3.70185	15.3235
-3.54278	-3.24135	-3.07495	-3.10482	-3.42661	-3.04329	-3.35888	-3.54172	15.423
-3.46673	-3.26793	-3.08261	-3.0364	-3.41484	-3.10317	-3.34377	-3.66217	15.5225
-3.50824	-3.22478	-3.06806	-3.1392	-3.36892	-3.09813	-3.35881	-3.61928	15.622
-3.49398	-3.29002	-3.10904	-3.18677	-3.42778	-3.16647	-3.39432	-3.65455	15.7215
-3.49884	-3.32985	-3.18666	-3.23193	-3.40186	-3.2198	-3.42664	-3.67377	15.821
-3.48676	-3.38408	-3.20158	-3.31499	-3.43783	-3.27799	-3.42344	-3.70162	15.9205
-3.52545	-3.3718	-3.20312	-3.23743	-3.44648	-3.20776	-3.39962	-3.62857	16.02
-3.53687	-3.31665	-3.21978	-3.32801	-3.43691	-3.26113	-3.44153	-3.66389	16.1195
-3.56278	-3.44321	-3.26997	-3.39484	-3.41986	-3.26615	-3.56143	-3.70081	16.219
-3.53516	-3.36139	-3.2663	-3.36633	-3.39565	-3.25264	-3.41532	-3.67833	16.3185
-3.5305	-3.42039	-3.39508	-3.37064	-3.54025	-3.41482	-3.53616	-3.74906	16.418
-3.59241	-3.50433	-3.39872	-3.50529	-3.50444	-3.43456	-3.54692	-3.83874	16.5175
-3.65091	-3.44248	-3.5128	-3.49245	-3.48293	-3.51473	-3.56377	-3.75617	16.617
-3.66655	-3.48057	-3.4818	-3.58366	-3.57412	-3.53314	-3.63616	-3.87483	16.7165
-3.65254	-3.4924	-3.52373	-3.5101	-3.50603	-3.52844	-3.54287	-3.86149	16.816
-3.53809	-3.40305	-3.42709	-3.4249	-3.4299	-3.50775	-3.53505	-3.83177	16.9155
-3.6819	-3.51999	-3.60701	-3.56258	-3.55578	-3.58533	-3.7076	-3.9363	17.015
-3.62967	-3.47736	-3.56299	-3.52553	-3.57037	-3.58337	-3.54643	-3.97512	17.1145
-3.67693	-3.52336	-3.69117	-3.49653	-3.5411	-3.54324	-3.46951	-3.87042	17.214
-3.72251	-3.5429	-3.69831	-3.57456	-3.58887	-3.62773	-3.65453	-4.01034	17.3135
-3.8011	-3.59138	-3.76148	-3.63052	-3.65088	-3.64307	-3.65052	-4.06637	17.413
-3.86474	-3.61321	-3.7877	-3.67879	-3.73981	-3.69535	-3.66395	-4.15524	17.5125
-3.81417	-3.70613	-3.70765	-3.63417	-3.68276	-3.69674	-3.65337	-4.05453	17.612
-3.98825	-3.69533	-3.82494	-3.62169	-3.77702	-3.73769	-3.78605	-4.24036	17.7115
-3.95207	-3.70139	-3.85136	-3.63811	-3.74241	-3.72403	-3.67422	-4.14044	17.811
-4.04072	-3.70215	-3.83644	-3.70948	-3.8576	-3.71223	-3.77167	-4.22682	17.9105
-4.10924	-3.83976	-3.95718	-3.73384	-3.9309	-3.80474	-3.91278	-4.32286	18.01
-4.1051	-3.75311	-3.92927	-3.67875	-3.92202	-3.80716	-3.82179	-4.34382	18.1095
-4.17736	-3.86113	-3.95525	-3.85976	-3.89977	-3.70291	-3.97231	-4.43477	18.209
-4.25484	-3.80375	-3.89051	-3.79318	-3.92018	-3.76502	-3.89633	-4.4656	18.3085
-4.4354	-3.97659	-4.11408	-3.91061	-4.0387	-3.92713	-4.19312	-4.51433	18.408
-4.48392	-3.96911	-4.1174	-3.95287	-4.07369	-3.92629	-4.26486	-4.58075	18.5075
-4.53973	-4.04341	-4.17096	-3.98909	-4.15431	-3.90636	-4.29436	-4.57514	18.607
-4.60256	-4.02266	-4.2868	-4.08626	-4.0982	-3.96633	-4.50457	-4.65406	18.7065
-4.94755	-4.17658	-4.33122	-4.3488	-4.29535	-4.21866	-4.77953	-4.82636	18.806
-4.86265	-4.12995	-4.39154	-4.28317	-4.23787	-4.00618	-4.7836	-4.79147	18.9055
-5.04754	-4.21592	-4.4739	-4.3084	-4.35034	-4.18222	-4.94217	-5.02929	19.005
-5.26719	-4.30984	-4.61119	-4.42356	-4.42976	-4.30754	-5.17551	-5.11074	19.1045
-5.48706	-4.45882	-4.76198	-4.66296	-4.62245	-4.32269	-5.36034	-5.28242	19.204
-5.40111	-4.42339	-4.78787	-4.61089	-4.64656	-4.27486	-5.47013	-5.20327	19.3035
-5.73795	-4.59481	-5.04606	-4.81638	-4.7695	-4.75015	-5.71036	-5.61007	19.403
-5.66362	-4.4732	-4.97177	-4.64867	-4.64008	-4.44641	-5.73774	-5.33774	19.5025
-5.91866	-4.57023	-5.059	-4.85854	-4.77823	-4.5943	-5.94942	-5.63385	19.602
-6.2069	-4.82371	-5.25957	-4.94414	-5.03695	-4.70026	-6.13947	-5.88097	19.7015
-6.25959	-4.72511	-5.37384	-5.05155	-5.01346	-4.71201	-6.25618	-6.02979	19.801
-6.44889	-4.84982	-5.31982	-5.12976	-5.11306	-4.97635	-6.35476	-6.08331	19.9005
-6.57286	-4.89633	-5.56104	-5.16782	-5.37115	-4.96248	-6.55553	-6.181	20

-3.86432 -3.03346 -3.37603 -3.15094 -3.27196 -3.0571 -3.9038 -3.71877

Flatness Peak Max-Peak Min /2								IDEAL J1
Flatness J1	Flatness J2	Flatness J3	Flatness J4	Flatness J5	Flatness J6	Flatness J7	Flatness J8	
-0.76669	-0.20644	0.423667	-0.21733	0.001909	-0.14819	0.395895	0.304985	-0.73869
2.658972	1.968368	2.266552	2.075243	2.198551	2.005292	2.767493	2.617969	-0.75837
2.97006	2.214628	2.527283	2.334334	2.437881	2.264093	3.02491	2.897862	-0.77806
3.025249	2.261481	2.581148	2.391258	2.483873	2.307326	3.08299	2.942569	-0.79774
3.045505	2.272254	2.585485	2.409356	2.488365	2.312547	3.091915	2.95305	-0.81742
3.039768	2.252682	2.570818	2.382142	2.463073	2.296159	3.079608	2.931796	-0.83711
3.016653	2.243009	2.561647	2.376486	2.462234	2.283987	3.064383	2.925215	-0.85679
3.012119	2.225262	2.541695	2.350478	2.441032	2.265433	3.047198	2.885203	-0.87648
2.9864	2.18153	2.515204	2.318809	2.409919	2.223476	3.008489	2.851548	-0.89616
2.97166	2.167854	2.493824	2.298075	2.389837	2.200141	2.990231	2.843561	-0.91585
2.952651	2.141564	2.46537	2.273427	2.359478	2.176079	2.969861	2.787508	-0.93553
2.928558	2.11542	2.443727	2.266209	2.335393	2.144913	2.942245	2.76619	-0.95522
2.905545	2.08969	2.411586	2.220044	2.302162	2.133037	2.904483	2.733906	-0.9749
2.872887	2.056587	2.372542	2.18661	2.270226	2.092642	2.868729	2.694695	-0.99459
2.857474	2.037576	2.352372	2.165756	2.246179	2.072663	2.835634	2.663435	-1.01427
2.840563	2.004531	2.319958	2.139833	2.215754	2.040924	2.814123	2.633868	-1.03395
2.809422	1.985254	2.312442	2.127909	2.204229	2.025686	2.788776	2.602512	-1.05364
2.772952	1.945363	2.26511	2.095577	2.180355	2.000633	2.749822	2.567797	-1.07332
2.769426	1.905797	2.239114	2.065138	2.153503	1.980434	2.724361	2.535892	-1.09301
2.74765	1.895007	2.216594	2.053069	2.132487	1.94856	2.687679	2.491991	-1.11269
2.708535	1.862874	2.185005	2.016883	2.099184	1.919245	2.651726	2.462234	-1.13238
2.692989	1.844486	2.164636	2.000057	2.076924	1.901376	2.6186	2.43362	-1.15206
2.646211	1.820805	2.136829	1.950656	2.03456	1.881863	2.599742	2.394533	-1.17175
2.643734	1.813009	2.108625	1.96321	2.019803	1.874874	2.572711	2.375056	-1.19143
2.624453	1.752415	2.08254	1.925573	2.005277	1.833927	2.549746	2.334397	-1.21112
2.576697	1.726443	2.017089	1.871276	1.950205	1.792686	2.482816	2.287489	-1.2308
2.556017	1.681983	1.985419	1.849231	1.896775	1.750368	2.465193	2.253027	-1.25048
2.50392	1.634091	1.92164	1.778022	1.857159	1.691946	2.401564	2.200234	-1.27017
2.452202	1.556783	1.855672	1.721102	1.795806	1.635506	2.34482	2.123444	-1.28985
2.388859	1.505455	1.786968	1.651271	1.721388	1.555924	2.263552	2.0575	-1.30954
2.309623	1.458777	1.727959	1.596249	1.673182	1.507223	2.208022	1.99226	-1.32922
2.26255	1.427419	1.704615	1.550756	1.664218	1.476482	2.16929	1.951827	-1.34891
2.23129	1.421285	1.711913	1.525409	1.659296	1.484169	2.160552	1.944875	-1.36859
2.25422	1.442179	1.74046	1.549028	1.66266	1.480411	2.15866	1.963203	-1.38828
2.237359	1.431648	1.723594	1.517554	1.642254	1.472543	2.17047	1.94346	-1.40796
2.26089	1.444902	1.751763	1.518475	1.661053	1.482071	2.182898	1.971526	-1.42765
2.293682	1.447235	1.766539	1.552051	1.656351	1.49105	2.207769	1.985278	-1.44733
2.282187	1.436748	1.747255	1.526184	1.629244	1.449764	2.178686	1.974773	-1.46701
2.276036	1.432556	1.751202	1.540199	1.630846	1.432779	2.174862	1.974664	-1.4867
2.270271	1.396705	1.711586	1.479962	1.590173	1.378528	2.17185	1.957556	-1.50638
2.287094	1.381372	1.719361	1.479726	1.575443	1.378455	2.156932	1.956475	-1.52607

2.247975	1.333509	1.66698	1.429344	1.523766	1.3127	2.122597	1.917899	-1.54575
2.223538	1.298186	1.616671	1.396725	1.472192	1.276248	2.081174	1.873398	-1.56544
2.201029	1.264338	1.582964	1.353624	1.435819	1.201401	2.044151	1.851248	-1.58512
2.171489	1.241891	1.566455	1.321279	1.401299	1.17113	2.015523	1.833137	-1.60481
2.143677	1.187566	1.521095	1.286033	1.381607	1.145531	1.985409	1.787294	-1.62449
2.118169	1.184117	1.501086	1.254984	1.35333	1.085908	1.96826	1.756406	-1.64418
2.077379	1.137665	1.477942	1.200549	1.327538	1.074899	1.921781	1.743396	-1.66386
2.055881	1.174414	1.464451	1.201441	1.318076	1.044552	1.924053	1.721614	-1.68354
2.05383	1.148247	1.522228	1.210323	1.338244	1.024525	1.911049	1.736537	-1.70323
2.06229	1.145209	1.453875	1.210455	1.299159	1.038049	1.921705	1.733716	-1.72291
2.073333	1.148143	1.471277	1.196155	1.308438	1.011931	1.935005	1.731669	-1.7426
2.114371	1.180556	1.500421	1.213186	1.3143	1.045844	1.956861	1.768387	-1.76228
2.129181	1.175864	1.492801	1.214725	1.293746	1.007962	1.939037	1.764098	-1.78197
2.102297	1.136944	1.482598	1.190648	1.298173	0.998739	1.933998	1.786041	-1.80165
2.145287	1.206464	1.473065	1.223821	1.290316	1.002415	1.967561	1.781426	-1.82134
2.159613	1.179573	1.453543	1.217072	1.305681	1.018257	1.961066	1.775734	-1.84102
2.135968	1.149773	1.416819	1.192717	1.256345	0.986887	1.934244	1.755291	-1.86071
2.173648	1.157011	1.409081	1.199753	1.268085	0.972926	1.939519	1.770249	-1.88039
2.163241	1.137008	1.399223	1.185869	1.256275	0.985767	1.919257	1.748353	-1.90007
2.146088	1.121718	1.370824	1.148462	1.227283	0.96373	1.898057	1.705949	-1.91976
2.120961	1.118793	1.349249	1.154681	1.225102	0.957098	1.901105	1.710689	-1.93944
2.115141	1.113439	1.327811	1.136372	1.215673	0.951414	1.883306	1.695801	-1.95913
2.105305	1.115438	1.324772	1.118135	1.205826	0.957651	1.893755	1.677338	-1.97881
2.066199	1.073864	1.296054	1.092542	1.191324	0.939947	1.82135	1.668251	-1.9985
2.065195	1.045414	1.282414	1.087879	1.170555	0.952767	1.859357	1.629024	-2.01818
2.054048	1.061331	1.283417	1.109277	1.166371	0.944594	1.856915	1.608263	-2.03787
2.025432	1.032361	1.23546	1.067014	1.148116	0.916148	1.804399	1.567876	-2.05755
1.997402	1.028265	1.230732	1.057071	1.129152	0.925561	1.793102	1.540936	-2.07724
1.950624	0.993672	1.192144	1.04127	1.129163	0.921669	1.804022	1.540364	-2.09692
1.983211	1.009277	1.243793	1.05371	1.11139	0.945689	1.789336	1.525196	-2.1166
1.925422	0.966631	1.190911	1.015953	1.087515	0.878695	1.726488	1.450713	-2.13629
1.911684	0.96098	1.189191	1.032367	1.102286	0.90086	1.759201	1.457592	-2.15597
1.898821	0.944197	1.18365	1.04248	1.104213	0.916618	1.775648	1.455183	-2.17566
1.87945	0.922079	1.175889	1.035084	1.110431	0.929247	1.748546	1.432955	-2.19534
1.826746	0.916714	1.16657	0.988271	1.0685	0.866902	1.732977	1.371299	-2.21503
1.787897	0.894907	1.134574	0.999584	1.066934	0.835624	1.738042	1.37356	-2.23471
1.786744	0.870771	1.124989	0.995111	1.049254	0.867488	1.687935	1.340584	-2.2544
1.736084	0.852811	1.097412	0.968979	1.023213	0.834031	1.703568	1.288099	-2.27408
1.736528	0.831318	1.090073	0.969216	1.009673	0.840066	1.673311	1.277473	-2.29377
1.640629	0.794383	1.107543	0.938219	0.992425	0.832358	1.659024	1.262387	-2.31345
1.653912	0.81903	1.062546	0.934299	0.970493	0.805907	1.636842	1.237903	-2.33313
1.621011	0.783119	1.049143	0.925579	0.96673	0.82437	1.659158	1.209582	-2.35282
1.557379	0.75808	1.000005	0.871628	0.905712	0.791238	1.596628	1.161694	-2.3725
1.508757	0.727275	0.976528	0.882817	0.9033	0.780028	1.591364	1.185823	-2.39219
1.485881	0.718264	0.935049	0.843884	0.888932	0.745371	1.57858	1.122838	-2.41187
1.399147	0.682413	0.955178	0.826923	0.810551	0.721417	1.51521	1.071185	-2.43156
1.424441	0.681912	0.922362	0.847111	0.865275	0.756868	1.571351	1.095787	-2.45124
1.362343	0.620663	0.869043	0.778538	0.805128	0.727682	1.493055	1.047443	-2.47093
1.330169	0.611754	0.83072	0.769047	0.742557	0.717737	1.478802	1.035701	-2.49061
1.352441	0.653308	0.839692	0.776961	0.770685	0.742047	1.505185	1.040358	-2.51029
1.327662	0.601659	0.852113	0.695874	0.812256	0.728723	1.479923	1.025582	-2.52998
1.310249	0.630686	0.892528	0.744142	0.822954	0.764278	1.431838	1.098613	-2.54966
1.299575	0.643342	0.858194	0.7567	0.783425	0.751278	1.479772	1.059663	-2.56935
1.254267	0.621479	0.832333	0.706983	0.729897	0.707998	1.432736	1.044131	-2.58903
1.263444	0.652458	0.802386	0.695556	0.727021	0.681867	1.358941	1.003634	-2.60872

1.264665	0.602731	0.782909	0.686788	0.720755	0.621622	1.363495	1.048576	-2.6284
1.208578	0.610915	0.842752	0.701151	0.710611	0.717818	1.390337	1.021589	-2.64809
1.164636	0.544844	0.77955	0.63374	0.661844	0.633961	1.289882	1.007763	-2.66777
1.224285	0.624528	0.826611	0.683055	0.72823	0.697879	1.336032	1.069382	-2.68746
1.176129	0.524228	0.79764	0.578673	0.70363	0.604063	1.266091	1.004957	-2.70714
1.155425	0.540654	0.816883	0.590828	0.634269	0.601219	1.296376	0.998009	-2.72682
1.120045	0.548506	0.734693	0.629551	0.663788	0.609405	1.189235	1.022822	-2.74651
1.063943	0.500812	0.717896	0.552085	0.596386	0.532984	1.165687	0.960952	-2.76619
1.105766	0.528734	0.768283	0.556541	0.629789	0.56794	1.143432	0.979669	-2.78588
1.091288	0.49705	0.768868	0.55573	0.630659	0.571799	1.114865	0.948282	-2.80556
1.114498	0.524673	0.731756	0.540964	0.652525	0.631267	1.086589	0.970206	-2.82525
1.075127	0.502684	0.723897	0.479491	0.689122	0.52478	1.062079	0.935738	-2.84493
1.022759	0.463593	0.735005	0.475485	0.618319	0.475621	1.060782	0.890437	-2.86462
1.009523	0.500247	0.73506	0.516899	0.626636	0.508357	1.005016	0.919495	-2.8843
0.958154	0.43949	0.682159	0.482187	0.565984	0.453322	0.967102	0.887901	-2.90399
0.889882	0.38608	0.656375	0.424103	0.624136	0.465818	0.931842	0.831323	-2.92367
1.041065	0.486976	0.811646	0.513777	0.70996	0.508438	1.034209	0.893804	-2.94335
0.99524	0.473142	0.712349	0.498758	0.583584	0.435162	0.942654	0.831551	-2.96304
0.956989	0.449626	0.733825	0.514556	0.633896	0.462199	0.934642	0.860138	-2.98272
0.902814	0.394557	0.685237	0.482988	0.576784	0.432061	0.897704	0.77435	-3.00241
0.899977	0.417404	0.697395	0.505234	0.624727	0.493787	0.904336	0.771546	-3.02209
0.928985	0.466356	0.706049	0.509917	0.668089	0.464454	0.907508	0.841759	-3.04178
0.920858	0.380924	0.672594	0.481913	0.578956	0.489315	0.861354	0.732286	-3.06146
0.857653	0.408271	0.754004	0.478806	0.540305	0.500242	0.955191	0.770815	-3.08115
0.848167	0.398328	0.703242	0.469852	0.559982	0.452987	0.862804	0.704958	-3.10083
0.875339	0.388001	0.69449	0.518926	0.568802	0.441806	0.871508	0.685105	-3.12052
0.893305	0.373616	0.661827	0.536614	0.587048	0.418106	0.893145	0.690738	-3.1402
0.837786	0.399479	0.643964	0.48007	0.567592	0.431997	0.847498	0.641091	-3.15988
0.854381	0.377589	0.654229	0.501632	0.543456	0.419878	0.845607	0.624326	-3.17957
0.815282	0.346198	0.644518	0.473673	0.477113	0.396251	0.777791	0.651154	-3.19925
0.805561	0.370252	0.68881	0.491535	0.482335	0.382508	0.846292	0.656615	-3.21894
0.846513	0.340285	0.657506	0.512408	0.482421	0.434737	0.837531	0.620701	-3.23862
0.866498	0.324323	0.633039	0.45862	0.405522	0.361413	0.750409	0.592172	-3.25831
0.782474	0.307043	0.614601	0.402149	0.37084	0.390108	0.786862	0.574271	-3.27799
0.805611	0.30951	0.589011	0.470475	0.410767	0.391617	0.789758	0.557836	-3.29768
0.842939	0.284226	0.658925	0.45793	0.435255	0.376224	0.819625	0.541509	-3.31736
0.720718	0.23957	0.507591	0.357391	0.360705	0.30627	0.700231	0.446078	-3.33705
0.655589	0.269404	0.6221	0.454441	0.351023	0.347833	0.762687	0.483754	-3.35673
0.711732	0.243432	0.524481	0.405113	0.274763	0.326341	0.727752	0.420982	-3.37641
0.678985	0.154389	0.514822	0.34161	0.263436	0.279181	0.719006	0.414307	-3.3961
0.595962	0.117505	0.499363	0.327797	0.231627	0.25629	0.682068	0.373012	-3.41578
0.614878	0.131085	0.50264	0.289252	0.215128	0.24062	0.694022	0.284744	-3.43547
0.65033	0.097844	0.46371	0.406123	0.143302	0.298087	0.628661	0.327028	-3.45515
0.585492	0.116579	0.470408	0.344946	0.16652	0.24392	0.649535	0.310437	-3.47484
0.592598	0.136028	0.539349	0.318963	0.168154	0.275198	0.682691	0.313997	-3.49452
0.515285	0.01397	0.422984	0.258953	0.106652	0.202689	0.650259	0.272535	-3.51421
0.4851	0.0014	0.443347	0.250897	0.099461	0.186045	0.627498	0.224974	-3.53389
0.529077	-0.07208	0.409921	0.274531	0.02073	0.168659	0.631676	0.249732	-3.55358
0.459973	-0.06779	0.427005	0.201144	0.008176	0.115307	0.599526	0.145006	-3.57326
0.464508	-0.083	0.366342	0.182133	-0.02266	0.13486	0.672716	0.198358	-3.59294
0.470706	-0.07923	0.371547	0.218459	-0.03104	0.073588	0.657789	0.19771	-3.61263
0.439813	-0.08268	0.419699	0.236442	-0.01557	0.145875	0.626308	0.199265	-3.63231
0.466188	-0.0482	0.483532	0.249196	-0.02838	0.184146	0.665926	0.320267	-3.652
0.339265	-0.19073	0.343241	0.122019	-0.12481	0.035953	0.613165	0.033282	-3.67168
0.440808	-0.16812	0.311485	0.199605	-0.08055	0.113258	0.557904	0.178598	-3.69137

0.448758	-0.12581	0.418911	0.121263	-0.10143	0.090841	0.630087	0.134615	-3.71105
0.416163	-0.12822	0.406587	0.18152	-0.12681	0.080486	0.584776	0.153339	-3.73074
0.318882	-0.25171	0.289115	0.077781	-0.22607	-0.01701	0.550891	0.016916	-3.75042
0.321543	-0.2079	0.301082	0.046116	-0.15465	0.013817	0.544917	0.177047	-3.77011
0.397594	-0.23447	0.293421	0.114535	-0.14287	-0.04607	0.56003	0.056595	-3.78979
0.356084	-0.19133	0.307973	0.011174	-0.09696	-0.04103	0.544994	0.099486	-3.80947
0.370349	-0.25656	0.26699	-0.03583	-0.15582	-0.10937	0.509481	0.064216	-3.82916
0.365486	-0.2964	0.189368	-0.08099	-0.12989	-0.1627	0.477157	0.044998	-3.84884
0.377566	-0.35062	0.174456	-0.16405	-0.16586	-0.22089	0.480355	0.017153	-3.86853
0.338877	-0.33835	0.17291	-0.08649	-0.17451	-0.15065	0.504178	0.090197	-3.88821
0.327455	-0.28319	0.156248	-0.17707	-0.16494	-0.20402	0.462271	0.054877	-3.9079
0.301548	-0.40976	0.106061	-0.2439	-0.1479	-0.20905	0.342374	0.01796	-3.92758
0.329164	-0.32793	0.109728	-0.21539	-0.12368	-0.19554	0.488477	0.040443	-3.94727
0.333822	-0.38693	-0.01905	-0.2197	-0.26829	-0.35771	0.367642	-0.03029	-3.96695
0.271914	-0.47087	-0.02269	-0.35435	-0.23248	-0.37746	0.356878	-0.11997	-3.98664
0.213414	-0.40903	-0.13677	-0.34151	-0.21096	-0.45763	0.340024	-0.0374	-4.00632
0.197773	-0.44712	-0.10577	-0.43272	-0.30216	-0.47603	0.267641	-0.15606	-4.026
0.211788	-0.45894	-0.14769	-0.35916	-0.23407	-0.47134	0.360924	-0.14272	-4.04569
0.326236	-0.36959	-0.05105	-0.27396	-0.15794	-0.45065	0.368745	-0.113	-4.06537
0.182429	-0.48653	-0.23098	-0.41164	-0.28381	-0.52823	0.196199	-0.21753	-4.08506
0.23465	-0.44391	-0.18696	-0.37459	-0.2984	-0.52626	0.357367	-0.25635	-4.10474
0.187397	-0.4899	-0.31513	-0.34559	-0.26913	-0.48613	0.434285	-0.15165	-4.12443
0.141814	-0.50944	-0.32228	-0.42362	-0.31691	-0.57062	0.249273	-0.29157	-4.14411
0.063229	-0.55793	-0.38545	-0.47958	-0.37891	-0.58596	0.253276	-0.3476	-4.1638
-0.00041	-0.57976	-0.41167	-0.52785	-0.46785	-0.63825	0.239844	-0.43647	-4.18348
0.050159	-0.67268	-0.33162	-0.48324	-0.41079	-0.63964	0.250429	-0.33577	-4.20317
-0.12392	-0.66187	-0.44891	-0.47076	-0.50506	-0.68058	0.117752	-0.52159	-4.22285
-0.08775	-0.66793	-0.47532	-0.48717	-0.47045	-0.66692	0.229576	-0.42167	-4.24253
-0.17639	-0.66869	-0.46041	-0.55854	-0.58563	-0.65513	0.132133	-0.50805	-4.26222
-0.24491	-0.80631	-0.58115	-0.5829	-0.65893	-0.74764	-0.00898	-0.60409	-4.2819
-0.24078	-0.71966	-0.55324	-0.52781	-0.65006	-0.75006	0.082004	-0.62505	-4.30159
-0.31303	-0.82767	-0.57921	-0.70882	-0.62781	-0.6458	-0.06851	-0.716	-4.32127
-0.39051	-0.77029	-0.51448	-0.64224	-0.64821	-0.70791	0.007465	-0.74683	-4.34096
-0.57107	-0.94313	-0.73805	-0.75967	-0.76674	-0.87002	-0.28932	-0.79556	-4.36064
-0.6196	-0.93566	-0.74137	-0.80193	-0.80173	-0.86918	-0.36106	-0.86198	-4.38033
-0.6754	-1.00995	-0.79493	-0.83815	-0.88235	-0.84926	-0.39056	-0.85637	-4.40001
-0.73823	-0.9892	-0.91077	-0.93532	-0.82623	-0.90923	-0.60077	-0.93529	-4.4197
-1.08322	-1.14313	-0.95518	-1.19786	-1.02339	-1.16156	-0.87573	-1.10759	-4.43938
-0.99833	-1.0965	-1.01551	-1.13223	-0.9659	-0.94908	-0.8798	-1.0727	-4.45906
-1.18321	-1.18246	-1.09787	-1.15746	-1.07838	-1.12512	-1.03837	-1.31052	-4.47875
-1.40286	-1.27638	-1.23516	-1.27262	-1.1578	-1.25044	-1.27171	-1.39197	-4.49843
-1.62274	-1.42536	-1.38595	-1.51202	-1.35049	-1.26559	-1.45654	-1.56365	-4.51812
-1.53679	-1.38993	-1.41184	-1.45995	-1.37459	-1.21775	-1.56634	-1.4845	-4.5378
-1.87363	-1.56135	-1.67002	-1.66544	-1.49754	-1.69304	-1.80656	-1.8913	-4.55749
-1.79929	-1.43975	-1.59574	-1.49773	-1.36812	-1.3893	-1.83394	-1.61897	-4.57717
-2.05434	-1.53677	-1.68297	-1.7076	-1.50627	-1.53719	-2.04562	-1.91508	-4.59686
-2.34258	-1.79025	-1.88354	-1.7932	-1.76498	-1.64316	-2.23567	-2.1622	-4.61654
-2.39527	-1.69166	-1.99781	-1.90061	-1.74149	-1.65491	-2.35238	-2.31102	-4.63623
-2.58456	-1.81636	-1.94379	-1.97883	-1.8411	-1.91924	-2.45096	-2.36454	-4.65591
-2.70854	-1.86287	-2.18501	-2.01688	-2.09918	-1.90537	-2.65173	-2.46223	-4.67559

J3
J4
J5
J6
J7
J8
J9

2 to 18
0.89133 0.571046
-0.32028
max 0.445665
0.527285 0.273721

Ideal Line

IDEAL J2	IDEAL J3	IDEAL J4	IDEAL J5	IDEAL J6	IDEAL J7	IDEAL J8	Flatness J1	Flatness J2
-0.91491	-0.86378	-0.92371	-0.94378	-0.95684	-0.88377	-0.87479	-3.89233	-2.32498
-0.93087	-0.88016	-0.93967	-0.96037	-0.97226	-0.90212	-0.89417	-0.44698	-0.13422
-0.94683	-0.89653	-0.95563	-0.97695	-0.98767	-0.92048	-0.91356	-0.11621	0.128004
-0.96279	-0.91291	-0.97159	-0.99354	-1.00309	-0.93883	-0.93294	-0.04134	0.190819
-0.97875	-0.92929	-0.98755	-1.01012	-1.01851	-0.95718	-0.95233	-0.00139	0.217553
-0.99472	-0.94567	-1.00351	-1.02671	-1.03393	-0.97554	-0.97171	0.012553	0.213942
-1.01068	-0.96205	-1.01947	-1.04329	-1.04934	-0.99389	-0.99109	0.009122	0.22023
-1.02664	-0.97842	-1.03543	-1.05988	-1.06476	-1.01224	-1.01048	0.024273	0.218445
-1.0426	-0.9948	-1.05139	-1.07647	-1.08018	-1.0306	-1.02986	0.018238	0.190674
-1.05856	-1.01118	-1.06735	-1.09305	-1.0956	-1.04895	-1.04925	0.023183	0.192959
-1.07452	-1.02756	-1.08331	-1.10964	-1.11101	-1.0673	-1.06863	0.023859	0.182631
-1.09048	-1.04393	-1.09927	-1.12622	-1.12643	-1.08566	-1.08802	0.01945	0.172448
-1.10645	-1.06031	-1.11523	-1.14281	-1.14185	-1.10401	-1.1074	0.016122	0.16268
-1.12241	-1.07669	-1.13119	-1.15939	-1.15727	-1.12236	-1.12678	0.003148	0.145538
-1.13837	-1.09307	-1.14714	-1.17598	-1.17268	-1.14072	-1.14617	0.007419	0.142488
-1.15433	-1.10944	-1.1631	-1.19256	-1.1881	-1.15907	-1.16555	0.010193	0.125405
-1.17029	-1.12582	-1.17906	-1.20915	-1.20352	-1.17742	-1.18494	-0.00126	0.122089
-1.18625	-1.1422	-1.19502	-1.22574	-1.21894	-1.19578	-1.20432	-0.01805	0.09816
-1.20221	-1.15858	-1.21098	-1.24232	-1.23435	-1.21413	-1.22371	-0.00189	0.074555
-1.21818	-1.17496	-1.22694	-1.25891	-1.24977	-1.23248	-1.24309	-0.00398	0.079726
-1.23414	-1.19133	-1.2429	-1.27549	-1.26519	-1.25084	-1.26247	-0.02341	0.063555
-1.2501	-1.20771	-1.25886	-1.29208	-1.28061	-1.26919	-1.28186	-0.01927	0.061128
-1.26606	-1.22409	-1.27482	-1.30866	-1.29602	-1.28754	-1.30124	-0.04637	0.053409
-1.28202	-1.24047	-1.29078	-1.32525	-1.31144	-1.3059	-1.32063	-0.02916	0.061574
-1.29798	-1.25684	-1.30674	-1.34183	-1.32686	-1.32425	-1.34001	-0.02876	0.016942
-1.31394	-1.27322	-1.3227	-1.35842	-1.34228	-1.3426	-1.3594	-0.05683	0.006931
-1.32991	-1.2896	-1.33866	-1.37501	-1.35769	-1.36096	-1.37878	-0.05782	-0.02157
-1.34587	-1.30598	-1.35462	-1.39159	-1.37311	-1.37931	-1.39816	-0.09024	-0.0535
-1.36183	-1.32235	-1.37058	-1.40818	-1.38853	-1.39766	-1.41755	-0.12227	-0.11485
-1.37779	-1.33873	-1.38654	-1.42476	-1.40395	-1.41602	-1.43693	-0.16593	-0.15021
-1.39375	-1.35511	-1.4025	-1.44135	-1.41936	-1.43437	-1.45632	-0.22548	-0.18093
-1.40971	-1.37149	-1.41846	-1.45793	-1.43478	-1.45273	-1.4757	-0.25287	-0.19632
-1.42567	-1.38786	-1.43442	-1.47452	-1.4502	-1.47108	-1.49509	-0.26444	-0.1865
-1.44164	-1.40424	-1.45038	-1.4911	-1.46562	-1.48943	-1.51447	-0.22183	-0.14964
-1.4576	-1.42062	-1.46634	-1.50769	-1.48103	-1.50779	-1.53386	-0.219	-0.14421
-1.47356	-1.437	-1.4823	-1.52428	-1.49645	-1.52614	-1.55324	-0.17579	-0.115
-1.48952	-1.45338	-1.49826	-1.54086	-1.51187	-1.54449	-1.57262	-0.12331	-0.0967
-1.50548	-1.46975	-1.51422	-1.55745	-1.52728	-1.56285	-1.59201	-0.11512	-0.09123
-1.52144	-1.48613	-1.53018	-1.57403	-1.5427	-1.5812	-1.61139	-0.10159	-0.07946
-1.5374	-1.50251	-1.54614	-1.59062	-1.55812	-1.59955	-1.63078	-0.08767	-0.09935
-1.55336	-1.51889	-1.5621	-1.6072	-1.57354	-1.61791	-1.65016	-0.05116	-0.09872

-1.56933	-1.53526	-1.57806	-1.62379	-1.58895	-1.63626	-1.66955	-0.0706	-0.13062
-1.58529	-1.55164	-1.59402	-1.64037	-1.60437	-1.65461	-1.68893	-0.07535	-0.14998
-1.60125	-1.56802	-1.60998	-1.65696	-1.61979	-1.67297	-1.70831	-0.07817	-0.16787
-1.61721	-1.5844	-1.62593	-1.67355	-1.63521	-1.69132	-1.7277	-0.08803	-0.17435
-1.63317	-1.60077	-1.64189	-1.69013	-1.65062	-1.70967	-1.74708	-0.09616	-0.21272
-1.64913	-1.61715	-1.65785	-1.70672	-1.66604	-1.72803	-1.76647	-0.10198	-0.20021
-1.66509	-1.63353	-1.67381	-1.7233	-1.68146	-1.74638	-1.78585	-0.12309	-0.2307
-1.68106	-1.64991	-1.68977	-1.73989	-1.69688	-1.76473	-1.80524	-0.1249	-0.17799
-1.69702	-1.66629	-1.70573	-1.75647	-1.71229	-1.78309	-1.82462	-0.10727	-0.18819
-1.71298	-1.68266	-1.72169	-1.77306	-1.72771	-1.80144	-1.844	-0.07912	-0.17527
-1.72894	-1.69904	-1.73765	-1.78964	-1.74313	-1.81979	-1.86339	-0.04839	-0.15637
-1.7449	-1.71542	-1.75361	-1.80623	-1.75855	-1.83815	-1.88277	0.012329	-0.108
-1.76086	-1.7318	-1.76957	-1.82282	-1.77396	-1.8565	-1.90216	0.046824	-0.09673
-1.77682	-1.74817	-1.78553	-1.8394	-1.78938	-1.87485	-1.92154	0.039624	-0.11969
-1.79279	-1.76455	-1.80149	-1.85599	-1.8048	-1.89321	-1.94093	0.102299	-0.03421
-1.80875	-1.78093	-1.81745	-1.87257	-1.82022	-1.91156	-1.96031	0.13631	-0.04514
-1.82471	-1.79731	-1.83341	-1.88916	-1.83563	-1.92991	-1.9797	0.132349	-0.05897
-1.84067	-1.81368	-1.84937	-1.90574	-1.85105	-1.94827	-1.99908	0.189713	-0.03578
-1.85663	-1.83006	-1.86533	-1.92233	-1.86647	-1.96662	-2.01846	0.198991	-0.03982
-1.87259	-1.84644	-1.88129	-1.93891	-1.88189	-1.98498	-2.03785	0.201523	-0.03915
-1.88855	-1.86282	-1.89725	-1.9555	-1.8973	-2.00333	-2.05723	0.19608	-0.02611
-1.90452	-1.8792	-1.91321	-1.97209	-1.91272	-2.02168	-2.07662	0.209944	-0.0155
-1.92048	-1.89557	-1.92917	-1.98867	-1.92814	-2.04004	-2.096	0.219793	0.002458
-1.93644	-1.91195	-1.94513	-2.00526	-1.94356	-2.05839	-2.11539	0.200372	-0.02315
-1.9524	-1.92833	-1.96109	-2.02184	-1.95897	-2.07674	-2.13477	0.219052	-0.03564
-1.96836	-1.94471	-1.97705	-2.03843	-1.97439	-2.0951	-2.15415	0.22759	-0.00376
-1.98432	-1.96108	-1.99301	-2.05501	-1.98981	-2.11345	-2.17354	0.218658	-0.01677
-2.00028	-1.97746	-2.00897	-2.0716	-2.00523	-2.1318	-2.19292	0.210312	-0.00491
-2.01624	-1.99384	-2.02493	-2.08818	-2.02064	-2.15016	-2.21231	0.183219	-0.02354
-2.03221	-2.01022	-2.04089	-2.10477	-2.03606	-2.16851	-2.23169	0.235491	0.008027
-2.04817	-2.02659	-2.05685	-2.12136	-2.05148	-2.18686	-2.25108	0.197386	-0.01866
-2.06413	-2.04297	-2.07281	-2.13794	-2.0669	-2.20522	-2.27046	0.203332	-0.00835
-2.08009	-2.05935	-2.08877	-2.15453	-2.08231	-2.22357	-2.28984	0.210155	-0.00917
-2.09605	-2.07573	-2.10473	-2.17111	-2.09773	-2.24192	-2.30923	0.210468	-0.01533
-2.11201	-2.09211	-2.12068	-2.1877	-2.11315	-2.26028	-2.32861	0.177448	-0.00473
-2.12797	-2.10848	-2.13664	-2.20428	-2.12857	-2.27863	-2.348	0.158284	-0.01058
-2.14394	-2.12486	-2.1526	-2.22087	-2.14398	-2.29698	-2.36738	0.176815	-0.01875
-2.1599	-2.14124	-2.16856	-2.23745	-2.1594	-2.31534	-2.38677	0.14584	-0.02075
-2.17586	-2.15762	-2.18452	-2.25404	-2.17482	-2.33369	-2.40615	0.165968	-0.02628
-2.19182	-2.17399	-2.20048	-2.27063	-2.19024	-2.35204	-2.42554	0.089755	-0.04725
-2.20778	-2.19037	-2.21644	-2.28721	-2.20565	-2.3704	-2.44492	0.122722	-0.00664
-2.22374	-2.20675	-2.2324	-2.3038	-2.22107	-2.38875	-2.4643	0.109505	-0.02659
-2.2397	-2.22313	-2.24836	-2.32038	-2.23649	-2.4071	-2.48369	0.065558	-0.03567
-2.25567	-2.2395	-2.26432	-2.33697	-2.25191	-2.42546	-2.50307	0.036621	-0.05052
-2.27163	-2.25588	-2.28028	-2.35355	-2.26732	-2.44381	-2.52246	0.033429	-0.04357
-2.28759	-2.27226	-2.29624	-2.37014	-2.28274	-2.46216	-2.54184	-0.03362	-0.06346
-2.30355	-2.28864	-2.3122	-2.38672	-2.29816	-2.48052	-2.56123	0.011357	-0.04799
-2.31951	-2.30501	-2.32816	-2.40331	-2.31358	-2.49887	-2.58061	-0.03106	-0.09328
-2.33547	-2.32139	-2.34412	-2.4199	-2.32899	-2.51722	-2.59999	-0.04355	-0.08623
-2.35143	-2.33777	-2.36008	-2.43648	-2.34441	-2.53558	-2.61938	-0.00159	-0.02871
-2.3674	-2.35415	-2.37604	-2.45307	-2.35983	-2.55393	-2.63876	-0.00668	-0.0644
-2.38336	-2.37053	-2.392	-2.46965	-2.37525	-2.57229	-2.65815	-0.00441	-0.01941
-2.39932	-2.3869	-2.40796	-2.48624	-2.39066	-2.59064	-2.67753	0.004599	0.009203
-2.41528	-2.40328	-2.42392	-2.50282	-2.40608	-2.60899	-2.69692	-0.02102	0.003302
-2.43124	-2.41966	-2.43988	-2.51941	-2.4215	-2.62735	-2.7163	0.007837	0.050243

-2.4472	-2.43604	-2.45584	-2.53599	-2.43691	-2.6457	-2.73568	0.028742	0.016477
-2.46316	-2.45241	-2.4718	-2.55258	-2.45233	-2.66405	-2.75507	-0.00766	0.040622
-2.47912	-2.46879	-2.48776	-2.56917	-2.46775	-2.68241	-2.77445	-0.03192	-0.00949
-2.49509	-2.48517	-2.50372	-2.58575	-2.48317	-2.70076	-2.79384	0.047416	0.086158
-2.51105	-2.50155	-2.51968	-2.60234	-2.49858	-2.71911	-2.81322	0.018945	0.00182
-2.52701	-2.51792	-2.53564	-2.61892	-2.514	-2.73747	-2.83261	0.017925	0.034206
-2.54297	-2.5343	-2.5516	-2.63551	-2.52942	-2.75582	-2.85199	0.00223	0.05802
-2.55893	-2.55068	-2.56756	-2.65209	-2.54484	-2.77417	-2.87138	-0.03419	0.026288
-2.57489	-2.56706	-2.58352	-2.66868	-2.56025	-2.79253	-2.89076	0.02732	0.070171
-2.59085	-2.58344	-2.59947	-2.68526	-2.57567	-2.81088	-2.91014	0.032527	0.054448
-2.60682	-2.59981	-2.61543	-2.70185	-2.59109	-2.82923	-2.92953	0.075421	0.098033
-2.62278	-2.61619	-2.63139	-2.71844	-2.60651	-2.84759	-2.94891	0.055734	0.092005
-2.63874	-2.63257	-2.64735	-2.73502	-2.62192	-2.86594	-2.9683	0.023051	0.068875
-2.6547	-2.64895	-2.66331	-2.75161	-2.63734	-2.88429	-2.98768	0.029499	0.121491
-2.67066	-2.66532	-2.67927	-2.76819	-2.65276	-2.90265	-3.00707	-0.00218	0.076695
-2.68662	-2.6817	-2.69523	-2.78478	-2.66818	-2.921	-3.02645	-0.05077	0.039247
-2.70258	-2.69808	-2.71119	-2.80136	-2.68359	-2.93935	-3.04583	0.120096	0.156104
-2.71855	-2.71446	-2.72715	-2.81795	-2.69901	-2.95771	-3.06522	0.093955	0.158232
-2.73451	-2.73083	-2.74311	-2.83453	-2.71443	-2.97606	-3.0846	0.075388	0.150676
-2.75047	-2.74721	-2.75907	-2.85112	-2.72985	-2.99441	-3.10399	0.040898	0.111569
-2.76643	-2.76359	-2.77503	-2.86771	-2.74526	-3.01277	-3.12337	0.057746	0.150377
-2.78239	-2.77997	-2.79099	-2.88429	-2.76068	-3.03112	-3.14276	0.106438	0.215291
-2.79835	-2.79635	-2.80695	-2.90088	-2.7761	-3.04947	-3.16214	0.117995	0.14582
-2.81431	-2.81272	-2.82291	-2.91746	-2.79152	-3.06783	-3.18152	0.074475	0.189129
-2.83028	-2.8291	-2.83887	-2.93405	-2.80693	-3.08618	-3.20091	0.084674	0.195148
-2.84624	-2.84548	-2.85483	-2.95063	-2.82235	-3.10454	-3.22029	0.13153	0.200782
-2.8622	-2.86186	-2.87079	-2.96722	-2.83777	-3.12289	-3.23968	0.169181	0.202358
-2.87816	-2.87823	-2.88675	-2.9838	-2.85319	-3.14124	-3.25906	0.133347	0.244182
-2.89412	-2.89461	-2.90271	-3.00039	-2.8686	-3.1596	-3.27845	0.169626	0.238254
-2.91008	-2.91099	-2.91867	-3.01698	-2.88402	-3.17795	-3.29783	0.150212	0.222824
-2.92604	-2.92737	-2.93463	-3.03356	-2.89944	-3.1963	-3.31721	0.160175	0.262839
-2.942	-2.94374	-2.95059	-3.05015	-2.91486	-3.21466	-3.3366	0.220811	0.248834
-2.95797	-2.96012	-2.96655	-3.06673	-2.93027	-3.23301	-3.35598	0.260481	0.248833
-2.97393	-2.9765	-2.98251	-3.08332	-2.94569	-3.25136	-3.37537	0.196141	0.247515
-2.98989	-2.99288	-2.99847	-3.0999	-2.96111	-3.26972	-3.39475	0.238963	0.265943
-3.00585	-3.00926	-3.01443	-3.11649	-2.97653	-3.28807	-3.41414	0.295976	0.256621
-3.02181	-3.02563	-3.03039	-3.13307	-2.99194	-3.30642	-3.43352	0.193439	0.227926
-3.03777	-3.04201	-3.04635	-3.14966	-3.00736	-3.32478	-3.45291	0.147995	0.273721
-3.05373	-3.05839	-3.06231	-3.16625	-3.02278	-3.34313	-3.47229	0.223822	0.263711
-3.0697	-3.07477	-3.07826	-3.18283	-3.0382	-3.36148	-3.49167	0.21076	0.190629
-3.08566	-3.09114	-3.09422	-3.19942	-3.05361	-3.37984	-3.51106	0.147421	0.169706
-3.10162	-3.10752	-3.11018	-3.216	-3.06903	-3.39819	-3.53044	0.186022	0.199248
-3.11758	-3.1239	-3.12614	-3.23259	-3.08445	-3.41654	-3.54983	0.241159	0.181968
-3.13354	-3.14028	-3.1421	-3.24917	-3.09987	-3.4349	-3.56921	0.196005	0.216664
-3.1495	-3.15665	-3.15806	-3.26576	-3.11528	-3.45325	-3.5886	0.222795	0.252074
-3.16546	-3.17303	-3.17402	-3.28234	-3.1307	-3.4716	-3.60798	0.165167	0.145978
-3.18143	-3.18941	-3.18998	-3.29893	-3.14612	-3.48996	-3.62736	0.154666	0.149369
-3.19739	-3.20579	-3.20594	-3.31552	-3.16154	-3.50831	-3.64675	0.218328	0.091852
-3.21335	-3.22216	-3.2219	-3.3321	-3.17695	-3.52666	-3.66613	0.168909	0.112104
-3.22931	-3.23854	-3.23786	-3.34869	-3.19237	-3.54502	-3.68552	0.193128	0.11285
-3.24527	-3.25492	-3.25382	-3.36527	-3.20779	-3.56337	-3.7049	0.219011	0.132584
-3.26123	-3.2713	-3.26978	-3.38186	-3.22321	-3.58172	-3.72429	0.207802	0.145098
-3.27719	-3.28768	-3.28574	-3.39844	-3.23862	-3.60008	-3.74367	0.253861	0.195542
-3.29316	-3.30405	-3.3017	-3.41503	-3.25404	-3.61843	-3.76305	0.146623	0.068974
-3.30912	-3.32043	-3.31766	-3.43161	-3.26946	-3.63678	-3.78244	0.267851	0.107538

-3.32508	-3.33681	-3.33362	-3.4482	-3.28488	-3.65514	-3.80182	0.295485	0.16581
-3.34104	-3.35319	-3.34958	-3.46479	-3.30029	-3.67349	-3.82121	0.282575	0.179365
-3.357	-3.36956	-3.36554	-3.48137	-3.31571	-3.69185	-3.84059	0.204978	0.07183
-3.37296	-3.38594	-3.3815	-3.49796	-3.33113	-3.7102	-3.85998	0.227324	0.13161
-3.38892	-3.40232	-3.39746	-3.51454	-3.34654	-3.72855	-3.87936	0.32306	0.120998
-3.40489	-3.4187	-3.41342	-3.53113	-3.36196	-3.74691	-3.89875	0.301234	0.1801
-3.42085	-3.43507	-3.42938	-3.54771	-3.37738	-3.76526	-3.91813	0.335183	0.130831
-3.43681	-3.45145	-3.44534	-3.5643	-3.3928	-3.78361	-3.93751	0.350005	0.106956
-3.45277	-3.46783	-3.4613	-3.58088	-3.40821	-3.80197	-3.9569	0.38177	0.068692
-3.46873	-3.48421	-3.47726	-3.59747	-3.42363	-3.82032	-3.97628	0.362765	0.096929
-3.48469	-3.50059	-3.49322	-3.61406	-3.43905	-3.83867	-3.99567	0.371028	0.168042
-3.50065	-3.51696	-3.50918	-3.63064	-3.45447	-3.85703	-4.01505	0.364806	0.057439
-3.51661	-3.53334	-3.52514	-3.64723	-3.46988	-3.87538	-4.03444	0.412106	0.155229
-3.53258	-3.54972	-3.5411	-3.66381	-3.4853	-3.89373	-4.05382	0.436448	0.112191
-3.54854	-3.5661	-3.55705	-3.6804	-3.50072	-3.91209	-4.0732	0.394225	0.044211
-3.5645	-3.58247	-3.57301	-3.69698	-3.51614	-3.93044	-4.09259	0.355409	0.122016
-3.58046	-3.59885	-3.58897	-3.71357	-3.53155	-3.94879	-4.11197	0.359453	0.099887
-3.59642	-3.61523	-3.60493	-3.73015	-3.54697	-3.96715	-4.13136	0.393153	0.104023
-3.61238	-3.63161	-3.62089	-3.74674	-3.56239	-3.9855	-4.15074	0.527285	0.209333
-3.62834	-3.64798	-3.63685	-3.76333	-3.57781	-4.00385	-4.17013	0.403163	0.108354
-3.64431	-3.66436	-3.65281	-3.77991	-3.59322	-4.02221	-4.18951	0.475068	0.166942
-3.66027	-3.68074	-3.66877	-3.7965	-3.60864	-4.04056	-4.20889	0.4475	0.13691
-3.67623	-3.69712	-3.68473	-3.81308	-3.62406	-4.05891	-4.22828	0.421602	0.133328
-3.69219	-3.7135	-3.70069	-3.82967	-3.63948	-4.07727	-4.24766	0.362701	0.100808
-3.70815	-3.72987	-3.71665	-3.84625	-3.65489	-4.09562	-4.26705	0.318746	0.094937
-3.72411	-3.74625	-3.73261	-3.86284	-3.67031	-4.11397	-4.28643	0.389	0.017978
-3.74007	-3.76263	-3.74857	-3.87942	-3.68573	-4.13233	-4.30582	0.234603	0.044744
-3.75604	-3.77901	-3.76453	-3.89601	-3.70115	-4.15068	-4.3252	0.290464	0.05465
-3.772	-3.79538	-3.78049	-3.9126	-3.71656	-4.16903	-4.34459	0.221502	0.069847
-3.78796	-3.81176	-3.79645	-3.92918	-3.73198	-4.18739	-4.36397	0.172665	-0.05181
-3.80392	-3.82814	-3.81241	-3.94577	-3.7474	-4.20574	-4.38335	0.196488	0.050805
-3.81988	-3.84452	-3.82837	-3.96235	-3.76282	-4.22409	-4.40274	0.143917	-0.04125
-3.83584	-3.86089	-3.84433	-3.97894	-3.77823	-4.24245	-4.42212	0.086122	0.032093
-3.8518	-3.87727	-3.86029	-3.99552	-3.79365	-4.2608	-4.44151	-0.07475	-0.12478
-3.86777	-3.89365	-3.87625	-4.01211	-3.80907	-4.27916	-4.46089	-0.1036	-0.10135
-3.88373	-3.91003	-3.89221	-4.02869	-3.82449	-4.29751	-4.48028	-0.13972	-0.15968
-3.89969	-3.9264	-3.90817	-4.04528	-3.8399	-4.31586	-4.49966	-0.18286	-0.12297
-3.91565	-3.94278	-3.92413	-4.06187	-3.85532	-4.33422	-4.51904	-0.50817	-0.26093
-3.93161	-3.95916	-3.94009	-4.07845	-3.87074	-4.35257	-4.53843	-0.40359	-0.19834
-3.94757	-3.97554	-3.95605	-4.09504	-3.88616	-4.37092	-4.55781	-0.56879	-0.26834
-3.96353	-3.99192	-3.97201	-4.11162	-3.90157	-4.38928	-4.5772	-0.76875	-0.3463
-3.97949	-4.00829	-3.98797	-4.12821	-3.91699	-4.40763	-4.59658	-0.96894	-0.47932
-3.99546	-4.02467	-4.00393	-4.14479	-3.93241	-4.42598	-4.61597	-0.86331	-0.42793
-4.01142	-4.04105	-4.01989	-4.16138	-3.94783	-4.44434	-4.63535	-1.18047	-0.58339
-4.02738	-4.05743	-4.03584	-4.17796	-3.96324	-4.46269	-4.65473	-1.08644	-0.44582
-4.04334	-4.0738	-4.0518	-4.19455	-3.97866	-4.48104	-4.67412	-1.32181	-0.52689
-4.0593	-4.09018	-4.06776	-4.21114	-3.99408	-4.4994	-4.6935	-1.59036	-0.7644
-4.07526	-4.10656	-4.08372	-4.22772	-4.0095	-4.51775	-4.71289	-1.62336	-0.64985
-4.09122	-4.12294	-4.09968	-4.24431	-4.02491	-4.5361	-4.73227	-1.79298	-0.75859
-4.10719	-4.13931	-4.11564	-4.26089	-4.04033	-4.55446	-4.75166	-1.89727	-0.78914

$$y = -0.1688558642x - 0.9449888744$$

$$y = -0.1423794370x - 0.9701088840$$

$$y = -0.1385555597x - 1.0716609001$$

$$y = -0.1359343130x - 1.0245120986$$

$$y = -0.1450848443x - 1.0153827696$$

$$y = -0.1342263222x - 1.0362263641$$

$$y = -0.1496723326x - 1.0329323727$$

$$y = -0.1684833605x - 0.9862689726$$

0.2 to 19

1.14229 0.571046

-0.57124

0.571145

0.395176 0.383997 0.316836 0.365665 0.571046 0.356109

Flatness By Independent Port

Amplitude

Flatness J3	Flatness J4	Flatness J5	Flatness J6	Flatness J7	Flatness J8	J0-J1	J0-J2	J0-J3
-2.08859	-2.44456	-2.32627	-2.24845	-2.62413	-2.539	0	1.391125	1.678652
-0.22932	-0.13603	-0.11305	-0.07956	-0.23418	-0.20663	0	0.140265	0.095873
0.047785	0.139024	0.142868	0.194663	0.041586	0.09265	0	0.075436	0.045515
0.118028	0.211907	0.205446	0.253313	0.11802	0.15674	0	0.067101	0.044191
0.138743	0.245965	0.226524	0.273952	0.145299	0.186606	0	0.057618	0.028272
0.140453	0.23471	0.217817	0.272982	0.151345	0.184737	0	0.043782	0.019342
0.14766	0.245015	0.233564	0.276227	0.154474	0.19754	0	0.057224	0.033287
0.144086	0.234966	0.228947	0.273091	0.155642	0.176912	0	0.044012	0.017869
0.133973	0.219257	0.214419	0.246551	0.135286	0.162641	0	0.025998	0.017097
0.12897	0.214482	0.210923	0.238633	0.135381	0.174039	0	0.027062	0.010456
0.116894	0.205794	0.197149	0.229988	0.133365	0.13737	0	0.019781	0.001011
0.111629	0.214536	0.18965	0.214241	0.124102	0.135437	0	0.01773	0.003462
0.095866	0.18433	0.173005	0.217781	0.104694	0.122537	0	0.015013	-0.00567
0.073199	0.166856	0.157654	0.192804	0.087294	0.10271	0	0.014569	-0.01205
0.069406	0.161962	0.150193	0.188242	0.072552	0.090834	0	0.01097	-0.01681
0.05337	0.151998	0.136354	0.171921	0.069394	0.080651	0	-0.00516	-0.03231
0.062232	0.156034	0.141414	0.172101	0.062401	0.06868	0	0.0067	-0.00869
0.031278	0.139662	0.134126	0.162465	0.0418	0.05335	0	0.003279	-0.01955
0.02166	0.125183	0.123859	0.157683	0.034692	0.040829	0	-0.03276	-0.04202
0.015517	0.129073	0.119429	0.141227	0.016364	0.016313	0	-0.02178	-0.04276
0.000306	0.108846	0.102712	0.127329	-0.00124	0.005939	0	-0.01479	-0.03524
-0.00369	0.107981	0.097037	0.124878	-0.01601	-0.00329	0	-0.01764	-0.04006
-0.01512	0.074539	0.071259	0.120783	-0.01651	-0.02299	0	0.005462	-0.02109
-0.02694	0.103053	0.073087	0.12921	-0.02519	-0.02309	0	0.000143	-0.04682
-0.03665	0.081375	0.075147	0.103681	-0.0298	-0.04436	0	-0.04117	-0.05362
-0.08572	0.043038	0.03666	0.077858	-0.07838	-0.07188	0	-0.01939	-0.07132
-0.10101	0.036953	-0.00018	0.050957	-0.07765	-0.08696	0	-0.04317	-0.08231
-0.14842	-0.0183	-0.02321	0.007952	-0.12292	-0.12037	0	-0.03896	-0.09399
-0.19801	-0.05926	-0.06798	-0.03307	-0.16131	-0.17778	0	-0.06455	-0.10824
-0.25033	-0.11313	-0.12581	-0.09723	-0.22423	-0.22433	0	-0.05254	-0.1136
-0.29296	-0.15219	-0.15743	-0.13052	-0.2614	-0.27019	0	-0.01998	-0.09337
-0.29993	-0.18172	-0.14981	-0.14584	-0.28178	-0.29124	0	-0.00426	-0.06964
-0.27625	-0.19111	-0.13815	-0.12274	-0.27217	-0.27881	0	0.020864	-0.03108
-0.23133	-0.15153	-0.1182	-0.11108	-0.25571	-0.24109	0	0.018827	-0.02547
-0.23182	-0.16705	-0.12202	-0.10353	-0.22554	-0.24145	0	0.025157	-0.02547
-0.18727	-0.15017	-0.08664	-0.07858	-0.19476	-0.194	0	0.01488	-0.02083
-0.15612	-0.10063	-0.07475	-0.05419	-0.15154	-0.16087	0	-0.01558	-0.03885
-0.15902	-0.11054	-0.08527	-0.08006	-0.16227	-0.15199	0	-0.01457	-0.04664
-0.1387	-0.08056	-0.06709	-0.08162	-0.14774	-0.13271	0	-0.01261	-0.03654
-0.16194	-0.12484	-0.09117	-0.12046	-0.1324	-0.13044	0	-0.0427	-0.07039
-0.13778	-0.10912	-0.08932	-0.10511	-0.12896	-0.11213	0	-0.07485	-0.07944

-0.17379	-0.14354	-0.12441	-0.15545	-0.14494	-0.13132	0	-0.0836	-0.0927
-0.20772	-0.1602	-0.1594	-0.17648	-0.16801	-0.15644	0	-0.09448	-0.11857
-0.22505	-0.18734	-0.17919	-0.23591	-0.18668	-0.15921	0	-0.10582	-0.12977
-0.22518	-0.20372	-0.19712	-0.25077	-0.19696	-0.15793	0	-0.09873	-0.11674
-0.25416	-0.22301	-0.20023	-0.26095	-0.20872	-0.18439	0	-0.12524	-0.13429
-0.25779	-0.2381	-0.21192	-0.30515	-0.20751	-0.1959	0	-0.10318	-0.12879
-0.26456	-0.27658	-0.22112	-0.30075	-0.23564	-0.18952	0	-0.10885	-0.11114
-0.26167	-0.25972	-0.214	-0.31567	-0.21501	-0.19192	0	-0.0506	-0.10314
-0.18752	-0.23488	-0.17725	-0.32028	-0.20966	-0.15761	0	-0.07471	-0.04331
-0.23949	-0.21879	-0.19975	-0.29134	-0.18065	-0.14105	0	-0.08621	-0.12012
-0.20571	-0.21713	-0.17388	-0.30204	-0.149	-0.12371	0	-0.09432	-0.11376
-0.16019	-0.18414	-0.15143	-0.25271	-0.10879	-0.06761	0	-0.10295	-0.12566
-0.15144	-0.16664	-0.1554	-0.27518	-0.10826	-0.05251	0	-0.12245	-0.14809
-0.14526	-0.17476	-0.13439	-0.26898	-0.09495	-0.01119	0	-0.13449	-0.13141
-0.13842	-0.12563	-0.12566	-0.24989	-0.04303	0.003584	0	-0.10795	-0.18393
-0.14156	-0.11642	-0.09371	-0.21863	-0.03117	0.017276	0	-0.14917	-0.21778
-0.16191	-0.12481	-0.12646	-0.23458	-0.03964	0.016218	0	-0.15533	-0.23086
-0.15327	-0.10182	-0.09814	-0.23313	-0.01601	0.05056	0	-0.18577	-0.27627
-0.14675	-0.09974	-0.09336	-0.20487	-0.01792	0.048048	0	-0.19536	-0.27573
-0.15877	-0.12119	-0.10577	-0.21149	-0.02077	0.025028	0	-0.1935	-0.28697
-0.16397	-0.09901	-0.09136	-0.2027	0.000635	0.049152	0	-0.1713	-0.28342
-0.16903	-0.10136	-0.08421	-0.19297	0.001189	0.053648	0	-0.17083	-0.29904
-0.15569	-0.10364	-0.07747	-0.17131	0.029992	0.05457	0	-0.159	-0.29224
-0.16803	-0.11327	-0.07538	-0.1736	-0.02406	0.064868	0	-0.16147	-0.28185
-0.16529	-0.10197	-0.07957	-0.14536	0.0323	0.045025	0	-0.18891	-0.29449
-0.14791	-0.06461	-0.06717	-0.13812	0.048211	0.043648	0	-0.16185	-0.28234
-0.17949	-0.09092	-0.06884	-0.15115	0.014049	0.022645	0	-0.1622	-0.30168
-0.16784	-0.0849	-0.07121	-0.12632	0.021105	0.01509	0	-0.13827	-0.27838
-0.19005	-0.08474	-0.05462	-0.11479	0.050379	0.033902	0	-0.12608	-0.27019
-0.12202	-0.05634	-0.0558	-0.07535	0.054046	0.038118	0	-0.14307	-0.25113
-0.15853	-0.07814	-0.06309	-0.12693	0.009552	-0.01698	0	-0.12792	-0.24622
-0.14387	-0.04577	-0.03174	-0.08935	0.060618	0.009283	0	-0.11984	-0.2342
-0.13303	-0.01969	-0.01322	-0.05817	0.095419	0.026259	0	-0.12376	-0.22688
-0.12442	-0.01113	0.009578	-0.03013	0.08667	0.023415	0	-0.1265	-0.21527
-0.11736	-0.04198	-0.01577	-0.07705	0.089455	-0.01886	0	-0.07916	-0.17188
-0.13297	-0.01471	-0.00075	-0.09291	0.112873	0.002788	0	-0.06212	-0.16503
-0.12618	-0.00322	-0.00184	-0.04563	0.08112	-0.0108	0	-0.0851	-0.17346
-0.13738	-0.0134	-0.0113	-0.06367	0.115106	-0.0439	0	-0.05241	-0.15038
-0.12834	0.0028	-0.00825	-0.04222	0.103203	-0.03515	0	-0.07434	-0.15816
-0.0945	-0.01224	-0.00891	-0.03451	0.107269	-0.03085	0	-0.01538	-0.04479
-0.12311	-0.0002	-0.01426	-0.04554	0.10344	-0.03595	0	-0.00401	-0.10307
-0.12014	0.007042	-0.00144	-0.01166	0.14411	-0.04488	0	-0.00702	-0.08357
-0.1529	-0.03095	-0.04587	-0.02938	0.099933	-0.07339	0	0.031569	-0.06908
-0.16	-0.0038	-0.0317	-0.02517	0.113023	-0.02987	0	0.049386	-0.04394
-0.1851	-0.02677	-0.02948	-0.04441	0.118592	-0.07347	0	0.063251	-0.06254
-0.14859	-0.02778	-0.09128	-0.05295	0.073576	-0.10574	0	0.114134	0.044323
-0.16503	0.008373	-0.01997	-0.00208	0.14807	-0.06176	0	0.08834	-0.01379
-0.20197	-0.04424	-0.06353	-0.01585	0.088128	-0.09072	0	0.089187	-0.00501
-0.22392	-0.03777	-0.10951	-0.01037	0.092228	-0.08307	0	0.112454	-0.01116
-0.19857	-0.0139	-0.0648	0.029353	0.136964	-0.05903	0	0.131735	-0.02446
-0.16977	-0.07903	-0.00664	0.031446	0.130056	-0.05442	0	0.104865	0.012743
-0.11298	-0.0148	0.020642	0.082419	0.100324	0.037991	0	0.151305	0.070571
-0.13094	0.01372	-0.0023	0.084836	0.166612	0.018425	0	0.174635	0.046911
-0.14042	-0.02004	-0.03924	0.056974	0.137929	0.022278	0	0.19808	0.066358
-0.15399	-0.0155	-0.02553	0.04626	0.082488	0.001165	0	0.219883	0.027234

-0.15709	-0.00831	-0.01521	0.001433	0.105395	0.065492	0	0.168934	0.006537
-0.08087	0.022009	-0.00877	0.113046	0.15059	0.057888	0	0.233205	0.122467
-0.12769	-0.02944	-0.04095	0.044607	0.068489	0.063448	0	0.211076	0.103206
-0.06425	0.035833	0.042017	0.123943	0.132992	0.144451	0	0.231111	0.090618
-0.07685	-0.05259	0.034002	0.045544	0.081405	0.09941	0	0.178967	0.109803
-0.04122	-0.02448	-0.01877	0.058117	0.130043	0.111846	0	0.216097	0.149751
-0.10704	0.030207	0.027331	0.081721	0.041255	0.156044	0	0.259329	0.10294
-0.10746	-0.0313	-0.02349	0.020718	0.036061	0.113558	0	0.267737	0.142245
-0.04069	-0.01088	0.026503	0.071091	0.03216	0.151659	0	0.253837	0.15081
-0.02373	0.004266	0.043959	0.090367	0.021946	0.139657	0	0.23663	0.165872
-0.04446	0.00546	0.082411	0.165253	0.012023	0.180965	0	0.241043	0.10555
-0.03594	-0.04005	0.135593	0.074183	0.005867	0.165881	0	0.258426	0.137062
-0.00846	-0.0281	0.081375	0.040442	0.022923	0.139964	0	0.271702	0.200539
0.007974	0.029274	0.106278	0.088595	-0.01449	0.188407	0	0.321593	0.21383
-0.02855	0.010521	0.062212	0.048978	-0.03405	0.176197	0	0.312204	0.212297
-0.03796	-0.0316	0.136949	0.076891	-0.05096	0.139004	0	0.327066	0.254785
0.133693	0.07403	0.239359	0.134928	0.069764	0.220869	0	0.276779	0.258873
0.050773	0.074971	0.129568	0.07707	-0.00344	0.178001	0	0.308771	0.205401
0.088628	0.106728	0.196466	0.119524	0.006904	0.225971	0	0.323505	0.265129
0.056417	0.09112	0.15594	0.104804	-0.01168	0.159568	0	0.322612	0.270716
0.084953	0.129326	0.220468	0.181947	0.013305	0.176148	0	0.348295	0.285711
0.109984	0.149969	0.280416	0.168032	0.03483	0.265746	0	0.36824	0.265357
0.092907	0.137924	0.207868	0.20831	0.007029	0.175657	0	0.290935	0.240029
0.190695	0.150777	0.185802	0.234654	0.11922	0.233571	0	0.381486	0.384644
0.156311	0.157782	0.222065	0.202817	0.045186	0.187098	0	0.381029	0.343368
0.163937	0.222817	0.247471	0.207053	0.072244	0.186629	0	0.343531	0.307444
0.147651	0.256464	0.282302	0.198771	0.112234	0.211647	0	0.311179	0.256814
0.146166	0.215879	0.279432	0.228079	0.08494	0.181384	0	0.392561	0.294471
0.172808	0.253401	0.271881	0.231378	0.101403	0.184004	0	0.354076	0.288141
0.179474	0.241402	0.222124	0.223168	0.051941	0.230216	0	0.361784	0.317528
0.240144	0.275223	0.243932	0.224843	0.138795	0.255061	0	0.395559	0.371541
0.225218	0.312056	0.260603	0.292489	0.148387	0.238531	0	0.324641	0.299286
0.217129	0.274228	0.20029	0.234583	0.079619	0.229386	0	0.288693	0.254834
0.215069	0.233717	0.182194	0.278695	0.134426	0.23087	0	0.355437	0.32042
0.205856	0.318002	0.238706	0.295621	0.155675	0.233819	0	0.334767	0.271692
0.292148	0.321417	0.279779	0.295646	0.203896	0.236877	0	0.272155	0.304278
0.157191	0.236837	0.221815	0.24111	0.102855	0.16083	0	0.349721	0.275165
0.288078	0.349848	0.228718	0.29809	0.183664	0.21789	0	0.444684	0.454803
0.206837	0.316478	0.169044	0.292016	0.167082	0.174502	0	0.362569	0.301041
0.213556	0.268936	0.174303	0.260273	0.17669	0.187212	0	0.306272	0.32413
0.214475	0.271083	0.159079	0.252799	0.158106	0.165301	0	0.352411	0.391694
0.234129	0.248497	0.159166	0.252547	0.188413	0.096418	0	0.347076	0.376055
0.211577	0.381328	0.103925	0.325431	0.141406	0.158086	0	0.278382	0.301673
0.234653	0.33611	0.143729	0.286682	0.180633	0.16088	0	0.361955	0.373209
0.319972	0.326087	0.161948	0.333377	0.232142	0.183824	0	0.374298	0.435044
0.219983	0.282037	0.117032	0.276285	0.218063	0.161746	0	0.329553	0.395991
0.256724	0.28994	0.126427	0.275059	0.213656	0.133569	0	0.347168	0.44654
0.239676	0.329534	0.064281	0.273091	0.236188	0.177711	0	0.229712	0.369137
0.273137	0.272106	0.068313	0.235156	0.222391	0.09237	0	0.303106	0.455324
0.228853	0.269056	0.054066	0.270126	0.313935	0.165106	0	0.283357	0.390127
0.250435	0.321341	0.062272	0.224272	0.317361	0.183842	0	0.280931	0.389134
0.314964	0.355283	0.09432	0.311976	0.304234	0.204782	0	0.308377	0.468178
0.395176	0.383997	0.098095	0.365665	0.362205	0.345169	0	0.316485	0.505637
0.271262	0.27278	0.018252	0.232889	0.327797	0.077568	0	0.300878	0.492268
0.255884	0.366326	0.0791	0.325612	0.29089	0.242268	0	0.221937	0.35897

0.379687	0.303943	0.074805	0.318612	0.381426	0.21767	0	0.256299	0.458446
0.383741	0.380159	0.066014	0.323675	0.354469	0.255778	0	0.286487	0.478717
0.282647	0.29238	-0.01667	0.241597	0.338937	0.138739	0	0.260272	0.458526
0.310992	0.276675	0.071345	0.28784	0.351316	0.318255	0	0.30143	0.467832
0.319709	0.361054	0.099705	0.243374	0.384783	0.217187	0	0.198805	0.38412
0.350638	0.274219	0.162207	0.263831	0.3881	0.279462	0	0.283455	0.440181
0.326032	0.24261	0.119929	0.210908	0.370941	0.263577	0	0.20396	0.384933
0.264788	0.213411	0.162443	0.172998	0.35697	0.263742	0	0.168986	0.312174
0.266254	0.146312	0.143057	0.130222	0.378521	0.255283	0	0.102681	0.285183
0.281086	0.239826	0.150993	0.215876	0.420698	0.34771	0	0.153646	0.322326
0.280802	0.165209	0.17715	0.177924	0.397144	0.331775	0	0.220219	0.317085
0.246992	0.114335	0.21078	0.188316	0.295601	0.314242	0	0.119562	0.292805
0.267037	0.158803	0.251578	0.217243	0.460058	0.356109	0	0.173775	0.268856
0.154641	0.170453	0.123558	0.070485	0.357576	0.304758	0	0.110117	0.135426
0.167376	0.051762	0.175954	0.066157	0.365165	0.234463	0	0.088083	0.19369
0.06967	0.080569	0.214055	0.001406	0.366665	0.336422	0	0.208428	0.138107
0.117048	0.005313	0.139447	-0.00158	0.312635	0.237146	0	0.185978	0.184747
0.091503	0.094836	0.224121	0.01853	0.424272	0.269867	0	0.160138	0.128811
0.204521	0.195998	0.316836	0.054639	0.450446	0.318974	0	0.135038	0.111002
0.04097	0.074271	0.207548	-0.00753	0.296253	0.233831	0	0.161905	0.07488
0.101374	0.127284	0.209542	0.009856	0.475775	0.214388	0	0.15231	0.066686
-0.01043	0.172246	0.255401	0.065406	0.571046	0.338479	0	0.15357	-0.01424
-0.0012	0.110175	0.224212	-0.00367	0.404388	0.217943	0	0.179609	0.024197
-0.04798	0.070172	0.178791	-0.00359	0.426745	0.18129	0	0.209713	0.039617
-0.05783	0.037863	0.106444	-0.04046	0.431666	0.111811	0	0.251521	0.077035
0.038599	0.098436	0.180082	-0.02643	0.460604	0.231898	0	0.108031	0.106514
-0.06231	0.126876	0.102402	-0.05196	0.34628	0.065461	0	0.292917	0.163307
-0.07235	0.126423	0.153596	-0.02288	0.476458	0.184766	0	0.250685	0.100714
-0.04106	0.071009	0.054998	0.004332	0.397369	0.117769	0	0.338567	0.204273
-0.14542	0.062612	-0.00172	-0.07276	0.274609	0.041113	0	0.269474	0.152056
-0.10113	0.133657	0.023745	-0.05976	0.383947	0.039536	0	0.351985	0.175832
-0.11073	-0.03139	0.062579	0.059908	0.251782	-0.03203	0	0.316226	0.222111
-0.02961	0.051148	0.058762	0.013218	0.346115	-0.04348	0	0.451086	0.364327
-0.23681	-0.05032	-0.04318	-0.13348	0.067683	-0.07282	0	0.458808	0.321313
-0.22375	-0.07662	-0.06158	-0.11722	0.014292	-0.11986	0	0.514809	0.366523
-0.26093	-0.09688	-0.12562	-0.08188	0.003145	-0.09487	0	0.496318	0.368769
-0.3604	-0.17809	-0.05292	-0.12643	-0.18871	-0.1544	0	0.579898	0.315754
-0.38843	-0.42467	-0.23349	-0.36334	-0.44531	-0.30731	0	0.770963	0.616329
-0.43238	-0.34308	-0.15941	-0.13544	-0.43103	-0.25304	0	0.7327	0.471108
-0.49836	-0.35236	-0.25531	-0.29606	-0.57124	-0.47147	0	0.831623	0.573638
-0.61927	-0.45156	-0.31814	-0.40597	-0.78624	-0.53354	0	0.957353	0.655998
-0.75369	-0.675	-0.49425	-0.4057	-0.95271	-0.68584	0	1.028245	0.725084
-0.7632	-0.60697	-0.50176	-0.34245	-1.04415	-0.58731	0	0.977727	0.613243
-1.00501	-0.79649	-0.60812	-0.80232	-1.26602	-0.97472	0	1.143145	0.691897
-0.91435	-0.61283	-0.46212	-0.48317	-1.27505	-0.68301	0	1.190413	0.691844
-0.9852	-0.80674	-0.58368	-0.61564	-1.46837	-0.95973	0	1.348433	0.859663
-1.16939	-0.87637	-0.82581	-0.70618	-1.64007	-1.18747	0	1.383196	0.947335
-1.26728	-0.96783	-0.78574	-0.70251	-1.73843	-1.3169	0	1.534476	0.885752
-1.19688	-1.03008	-0.86875	-0.95144	-1.81865	-1.35104	0	1.599069	1.129063
-1.42172	-1.05218	-1.11026	-0.92214	-2.00107	-1.42935	0	1.67653	1.011823

Altitude Balance (Ref J1-J2)

Phase Balance

J0-J4	J0-J5	J0-J6	J0-J7	J0-J8	J0-J1-Ref	J0-J2	J0-J3	J0-J4
1.26275	1.360961	1.425727	1.123113	1.217233	-0.00803	-3.5375	-4.59605	-1.51297
0.129657	0.13194	0.153541	0.069047	0.104553	-0.00388	-0.2818	0.155356	0.42023
0.077659	0.060181	0.101253	0.015375	0.073358	-0.00707	-0.24522	0.046013	0.200492
0.079394	0.050984	0.089297	0.018267	0.062875	-0.00619	-0.24218	-0.02459	0.092609
0.077236	0.03522	0.074263	0.006936	0.053101	-0.00697	-0.25403	-0.08847	0.025339
0.055759	0.015665	0.063612	0.000365	0.037583	-0.00691	-0.26171	-0.13714	-0.02689
0.073219	0.037941	0.074555	0.008256	0.054117	-0.00387	-0.2744	-0.18481	-0.06572
0.051744	0.021273	0.060535	-0.0044	0.018639	-0.00515	-0.28819	-0.23974	-0.11326
0.045795	0.015878	0.044296	-0.01739	0.010703	-0.00012	-0.3063	-0.28622	-0.1389
0.0398	0.010536	0.035701	-0.0209	0.017456	-0.00328	-0.33018	-0.34288	-0.18787
0.034161	-0.00081	0.030648	-0.02226	-0.01959	0.002422	-0.33913	-0.38571	-0.22099
0.051036	-0.0008	0.023576	-0.02579	-0.01681	-0.00568	-0.36393	-0.45351	-0.27273
0.027884	-0.01102	0.034712	-0.04054	-0.02608	-0.00703	-0.38838	-0.5165	-0.31525
0.027108	-0.0103	0.026976	-0.04363	-0.03264	-0.00758	-0.40335	-0.57701	-0.35912
0.021667	-0.01893	0.022409	-0.06131	-0.04848	-0.00429	-0.43684	-0.6311	-0.41527
0.012655	-0.03245	0.007582	-0.06591	-0.06114	-0.00109	-0.45466	-0.69295	-0.47079
0.031872	-0.01283	0.023485	-0.06012	-0.06135	0.008067	-0.48762	-0.75642	-0.53299
0.03601	-0.00024	0.034901	-0.06261	-0.0596	-0.00685	-0.52271	-0.8198	-0.60134
0.009098	-0.02356	0.018229	-0.08454	-0.08798	0.003832	-0.55745	-0.89062	-0.67157
0.018804	-0.0228	0.008131	-0.09945	-0.1101	0.007478	-0.58744	-0.94903	-0.74717
0.021732	-0.01699	0.01793	-0.09628	-0.10075	0.000142	-0.63125	-1.01498	-0.83284
0.020453	-0.02371	0.015607	-0.11386	-0.11381	0.00244	-0.67117	-1.07374	-0.91382
0.01783	-0.01929	0.042873	-0.08594	-0.10612	0.003036	-0.71762	-1.13867	-1.00234
0.032862	-0.03157	0.038361	-0.1105	-0.12312	-0.00591	-0.76287	-1.21194	-1.09938
0.014505	-0.02682	0.016695	-0.11418	-0.1445	0.006185	-0.81227	-1.28493	-1.18299
0.007964	-0.03413	0.02321	-0.13336	-0.14365	0.004428	-0.90215	-1.41115	-1.328
0.0066	-0.06688	0.001572	-0.1303	-0.15743	0.00893	-1.04922	-1.62663	-1.55752
-0.01251	-0.0544	-0.00475	-0.14183	-0.15813	0.00469	-1.29569	-1.99945	-1.93564
-0.01771	-0.06404	-0.00948	-0.14686	-0.1832	0.015884	-1.58725	-2.44956	-2.39872
-0.0242	-0.07511	-0.02571	-0.16478	-0.1858	0.003882	-1.83233	-2.86284	-2.81247
1.11E-05	-0.04408	0.004821	-0.14108	-0.17181	0.004851	-1.9762	-3.08403	-3.02437
0.001592	-0.00597	0.021152	-0.13273	-0.16517	0.010367	-2.02448	-3.15425	-3.06703
0.007505	0.020367	0.0601	-0.11021	-0.14086	0.012069	-2.04734	-3.12559	-3.03116
0.008194	0.000801	0.033412	-0.13503	-0.14546	0.001921	-2.08703	-3.12626	-3.01786
-0.00642	-0.00275	0.042404	-0.10636	-0.14834	0.002185	-2.13003	-3.14343	-3.02496
-0.02903	-0.00748	0.028402	-0.11747	-0.14381	0.006101	-2.18517	-3.19322	-3.06986
-0.02825	-0.04497	0.004589	-0.12539	-0.16285	0.013871	-2.23009	-3.25605	-3.1227
-0.04262	-0.06058	-0.0252	-0.14298	-0.16186	0.005263	-2.30223	-3.35312	-3.22791
-0.02245	-0.05283	-0.03604	-0.14065	-0.15582	0.010476	-2.35143	-3.44477	-3.30876
-0.07692	-0.08774	-0.08452	-0.1379	-0.16716	0.016654	-2.41201	-3.54818	-3.3984
-0.09398	-0.11929	-0.10142	-0.16964	-0.18506	0.005592	-2.49433	-3.68242	-3.52577

-0.10525	-0.13185	-0.12806	-0.16485	-0.18452	0.014629	-2.59387	-3.83853	-3.67973
-0.11343	-0.15899	-0.14007	-0.18184	-0.20459	0.011808	-2.72795	-4.03696	-3.87426
-0.13402	-0.17285	-0.19241	-0.19635	-0.20423	0.013906	-2.90576	-4.26793	-4.12107
-0.13682	-0.17783	-0.19314	-0.19544	-0.1928	0.01295	-3.07991	-4.5067	-4.34116
-0.14426	-0.16971	-0.19093	-0.19774	-0.21083	0.016159	-3.20209	-4.68888	-4.51207
-0.1498	-0.17248	-0.22504	-0.18938	-0.21621	0.013135	-3.27739	-4.82348	-4.60045
-0.16345	-0.15748	-0.19526	-0.19507	-0.18843	0.014628	-3.29982	-4.89525	-4.62756
-0.14106	-0.14545	-0.20411	-0.1713	-0.18871	0.012736	-3.28498	-4.94691	-4.61171
-0.13012	-0.12323	-0.22208	-0.18226	-0.17174	0.000978	-3.25899	-4.97534	-4.5588
-0.13845	-0.17077	-0.21702	-0.18006	-0.18302	0.01634	-3.22146	-4.99149	-4.51586
-0.16379	-0.17254	-0.25418	-0.1778	-0.19611	0.006243	-3.15111	-4.99349	-4.45269
-0.1878	-0.20771	-0.26131	-0.19699	-0.20043	0.011018	-3.08695	-4.99617	-4.39504
-0.20107	-0.24307	-0.314	-0.22962	-0.21953	-0.00189	-3.02953	-5.00129	-4.34709
-0.19826	-0.21176	-0.29634	-0.20777	-0.1707	0.010622	-2.93804	-4.9699	-4.26632
-0.20808	-0.26261	-0.33565	-0.2172	-0.21831	0.007812	-2.84166	-4.92595	-4.1789
-0.22916	-0.26157	-0.33414	-0.23802	-0.23832	0.009565	-2.76592	-4.88671	-4.11184
-0.22987	-0.28726	-0.34186	-0.2412	-0.23512	0.016928	-2.67314	-4.82829	-4.0306
-0.26051	-0.3132	-0.3935	-0.2736	-0.25784	0.007784	-2.59713	-4.78554	-3.95631
-0.26399	-0.31461	-0.37025	-0.28346	-0.26933	0.021518	-2.50776	-4.70397	-3.86757
-0.28424	-0.32645	-0.37514	-0.28751	-0.29458	0.017629	-2.44474	-4.64913	-3.78932
-0.25289	-0.3035	-0.35664	-0.25933	-0.26472	0.020843	-2.37159	-4.56756	-3.70418
-0.26538	-0.30711	-0.35651	-0.27131	-0.27378	0.012236	-2.3182	-4.51173	-3.63864
-0.27379	-0.30712	-0.34043	-0.25102	-0.28241	0.023239	-2.26615	-4.45527	-3.57837
-0.26027	-0.28252	-0.31903	-0.28432	-0.25239	-0.00682	-2.24734	-4.3998	-3.5332
-0.26393	-0.30228	-0.30521	-0.24531	-0.29062	0.00942	-2.19963	-4.30697	-3.46449
-0.23139	-0.29532	-0.30223	-0.23661	-0.30023	0.022061	-2.13618	-4.22085	-3.37728
-0.24503	-0.28496	-0.30206	-0.26051	-0.312	0.018343	-2.07586	-4.14973	-3.30795
-0.22695	-0.27589	-0.26462	-0.24377	-0.31091	0.01754	-2.00614	-4.06743	-3.22312
-0.19597	-0.2291	-0.22173	-0.18608	-0.26471	0.005537	-1.93239	-3.98408	-3.13074
-0.21612	-0.27946	-0.2303	-0.23335	-0.31246	0.024898	-1.84183	-3.89151	-3.03627
-0.19608	-0.24555	-0.23951	-0.23841	-0.32915	0.021293	-1.76691	-3.83474	-2.9657
-0.16593	-0.21704	-0.2036	-0.19196	-0.30854	0.024797	-1.68045	-3.7548	-2.88584
-0.14296	-0.20225	-0.17498	-0.16265	-0.29808	0.024661	-1.60573	-3.70333	-2.8269
-0.13098	-0.17666	-0.14298	-0.17038	-0.30094	0.029511	-1.55482	-3.66946	-2.78315
-0.12509	-0.16589	-0.15262	-0.13324	-0.30989	0.015499	-1.49511	-3.64309	-2.7396
-0.07493	-0.1286	-0.14505	-0.08933	-0.26878	0.025429	-1.4398	-3.64291	-2.72962
-0.07825	-0.14513	-0.11204	-0.13828	-0.3006	0.030242	-1.42206	-3.64688	-2.72844
-0.05372	-0.12051	-0.09483	-0.07199	-0.30243	0.02821	-1.41305	-3.67453	-2.75068
-0.05393	-0.13449	-0.08924	-0.10269	-0.3135	0.036538	-1.43575	-3.72623	-2.79687
0.010975	-0.05584	-0.00105	-0.02108	-0.23269	0.029374	-1.46971	-3.78745	-2.85587
-0.00623	-0.09106	-0.04078	-0.05655	-0.27045	0.02704	-1.52951	-3.87152	-2.97248
0.017953	-0.06192	0.01058	-0.00133	-0.26587	0.041544	-1.58853	-3.94685	-3.07272
0.027634	-0.05931	0.041079	-0.00023	-0.25013	0.027314	-1.67081	-4.04348	-3.19419
0.087445	-0.0131	0.078491	0.043132	-0.17738	0.020924	-1.75616	-4.13517	-3.32871
0.071389	-0.00459	0.066711	0.053224	-0.21749	0.028119	-1.844	-4.21621	-3.45985
0.141161	0.003763	0.12949	0.076588	-0.18241	0.002039	-1.91639	-4.29544	-3.60965
0.136056	0.033195	0.139648	0.107436	-0.1831	0.013198	-1.99856	-4.38225	-3.74325
0.12958	0.035144	0.17256	0.091237	-0.16934	0.027464	-2.03889	-4.42285	-3.85931
0.152264	0.004748	0.194789	0.109159	-0.14891	0.025271	-2.10599	-4.478	-3.98547
0.137905	0.010604	0.196827	0.113269	-0.16653	0.024499	-2.19353	-4.55022	-4.11763
0.081597	0.076954	0.208281	0.112786	-0.15652	0.012896	-2.24449	-4.59717	-4.26343
0.147278	0.105065	0.261249	0.082114	-0.06608	0.022119	-2.279	-4.62498	-4.36198
0.170511	0.07621	0.258924	0.140723	-0.09436	0.017764	-2.31565	-4.65208	-4.44501
0.166101	0.067991	0.260952	0.138995	-0.06458	0.018756	-2.34897	-4.66829	-4.53403
0.145498	0.055937	0.225643	0.056023	-0.11425	0.018197	-2.38627	-4.68658	-4.60443

0.135509	0.048451	0.164178	0.059355	-0.07053	0.008837	-2.38191	-4.6575	-4.63596
0.205958	0.094393	0.31646	0.142284	-0.04143	0.041997	-2.35872	-4.65623	-4.64732
0.182489	0.089568	0.276545	0.085771	-0.01132	0.026367	-2.35538	-4.60422	-4.62077
0.172156	0.096306	0.280815	0.072273	-0.00935	0.02048	-2.33994	-4.58529	-4.61942
0.115929	0.11986	0.235154	0.050487	-0.02562	0.02905	-2.29798	-4.54857	-4.56009
0.148788	0.071204	0.253014	0.101476	-0.01186	0.005065	-2.25384	-4.47786	-4.50603
0.222891	0.136103	0.296581	0.029715	0.048333	0.028871	-2.16741	-4.38195	-4.35018
0.201527	0.124802	0.276262	0.062269	0.042564	0.015189	-2.07667	-4.30899	-4.2575
0.16416	0.116383	0.269395	-0.00181	0.019458	0.028235	-1.99213	-4.22334	-4.11532
0.177827	0.131731	0.287732	-0.0159	0.002549	0.036378	-1.90886	-4.13712	-3.98124
0.139851	0.130387	0.32399	-0.06738	0.001263	0.028219	-1.78395	-4.04051	-3.817
0.11775	0.206355	0.256874	-0.05252	0.006166	0.021338	-1.69375	-3.90881	-3.64874
0.166111	0.18792	0.260083	-0.00145	0.013233	0.025976	-1.5365	-3.75953	-3.47959
0.220762	0.209473	0.306055	-0.04398	0.055528	0.02678	-1.41957	-3.64034	-3.28108
0.237418	0.20019	0.302389	-0.03053	0.075302	0.031451	-1.29149	-3.54364	-3.13682
0.247607	0.326614	0.383157	0.002485	0.086997	0.039381	-1.14552	-3.40513	-2.9252
0.186097	0.261255	0.274593	-0.04633	-0.00171	0.007741	-1.03084	-3.28007	-2.73852
0.216903	0.180704	0.247143	-0.09206	-0.01813	0.013294	-0.93529	-3.15476	-2.56967
0.270952	0.269267	0.312431	-0.06182	0.048704	0.018185	-0.79937	-3.03042	-2.38492
0.293559	0.26633	0.336468	-0.04458	0.017092	0.030815	-0.68424	-2.90488	-2.23299
0.318642	0.31711	0.40103	-0.03512	0.017124	0.07331	-0.53307	-2.73373	-2.0326
0.294318	0.331464	0.34269	-0.06095	0.058329	0.048239	-0.48098	-2.66119	-1.93392
0.274441	0.250459	0.375678	-0.09898	-0.04302	0.037862	-0.38423	-2.55642	-1.78837
0.334538	0.275012	0.44981	0.058064	0.058718	0.039071	-0.28706	-2.42001	-1.61265
0.33507	0.304175	0.41204	-0.02484	0.002346	0.042283	-0.20886	-2.32254	-1.50953
0.356973	0.285824	0.373687	-0.04331	-0.04468	0.0337	-0.1356	-2.21008	-1.40509
0.356694	0.286103	0.332022	-0.03964	-0.05701	0.057686	-0.04511	-2.10815	-1.29087
0.355669	0.322165	0.401431	-0.02976	-0.05114	0.011414	0.037692	-2.00059	-1.2174
0.360637	0.281435	0.372718	-0.04825	-0.0845	0.03267	0.092703	-1.91032	-1.13554
0.371776	0.25419	0.388189	-0.07697	-0.01857	0.016275	0.154232	-1.80865	-1.09982
0.399359	0.269134	0.384168	0.001256	-0.00339	0.023777	0.238236	-1.70915	-1.00475
0.37928	0.228268	0.395445	-0.04846	-0.08026	0.022999	0.272091	-1.59079	-0.92037
0.305508	0.131384	0.302136	-0.15556	-0.12877	0.058476	0.357337	-1.47887	-0.90282
0.333061	0.180726	0.414855	-0.03509	-0.06265	0.023062	0.438358	-1.42694	-0.8811
0.378249	0.197516	0.393226	-0.05533	-0.10222	0.034331	0.495718	-1.33405	-0.81244
0.328376	0.184676	0.340505	-0.06279	-0.15587	0.027407	0.567546	-1.29934	-0.80013
0.350058	0.232348	0.392773	-0.05996	-0.12908	0.025957	0.636705	-1.18474	-0.76246
0.512238	0.287794	0.499465	0.067623	-0.02628	0.015613	0.697124	-1.10586	-0.72126
0.406766	0.155391	0.42183	-0.02345	-0.14519	0.022556	0.767968	-1.06793	-0.70384
0.376011	0.176811	0.407417	0.000547	-0.11912	0.043356	0.839015	-1.02302	-0.64168
0.445221	0.228025	0.467548	0.046632	-0.07739	0.034272	0.940732	-0.93742	-0.59747
0.38776	0.19261	0.432963	0.03967	-0.18458	0.014908	0.951976	-0.93353	-0.60998
0.469179	0.085332	0.454977	-0.06114	-0.17775	-0.0188	1.014894	-0.91904	-0.61642
0.472839	0.173389	0.465649	0.024568	-0.1295	0.0706	1.13902	-0.82235	-0.52369
0.439751	0.167916	0.489821	0.050619	-0.13305	0.041536	1.156066	-0.84038	-0.58168
0.457053	0.183727	0.494624	0.095499	-0.0972	0.060089	1.206818	-0.87422	-0.55699
0.479183	0.206722	0.508166	0.102924	-0.11457	0.008823	1.243218	-0.90507	-0.55637
0.45884	0.084013	0.446803	0.063125	-0.13379	0.037685	1.304717	-0.86535	-0.60107
0.454556	0.140563	0.462554	0.100078	-0.16941	0.042608	1.321629	-0.91964	-0.63837
0.431011	0.105196	0.477573	0.168734	-0.12059	0.034179	1.325864	-0.95377	-0.66817
0.461138	0.090618	0.410103	0.147608	-0.12744	0.070558	1.408841	-0.97477	-0.65439
0.510014	0.136973	0.513283	0.14702	-0.09499	0.057159	1.421617	-1.03985	-0.74948
0.496394	0.097788	0.525179	0.160264	-0.00036	0.048018	1.493043	-1.06106	-0.75087
0.49614	0.128283	0.503909	0.234425	-0.16043	0.043332	1.556013	-1.09841	-0.79069
0.472182	0.071001	0.479671	0.077622	-0.11665	0.018869	1.606908	-1.19936	-0.92951

0.385891	0.042172	0.449304	0.141855	-0.16859	0.05993	1.678658	-1.19595	-0.94688
0.478742	0.049389	0.471544	0.129138	-0.11727	0.040612	1.758366	-1.23997	-0.97227
0.472284	0.047406	0.47133	0.192535	-0.15641	0.044666	1.844454	-1.26216	-1.03251
0.437958	0.11617	0.499495	0.183899	0.00106	0.038971	2.01191	-1.24132	-1.00617
0.430326	0.051893	0.36356	0.122962	-0.19544	0.076623	2.1584	-1.18751	-0.95295
0.369041	0.139319	0.410109	0.149435	-0.11104	0.036902	2.200575	-1.29276	-1.02576
0.307208	0.066191	0.327504	0.099658	-0.16058	0.055876	2.459259	-1.19738	-0.8869
0.266912	0.096982	0.279039	0.072196	-0.17493	0.051068	2.605016	-1.18967	-0.88046
0.171773	0.04893	0.208766	0.063314	-0.21486	0.05162	2.856103	-1.07133	-0.65661
0.288018	0.078971	0.317692	0.125827	-0.10312	0.052992	3.050467	-0.96345	-0.52441
0.208862	0.099963	0.275743	0.095341	-0.12702	0.087363	3.30203	-0.78786	-0.35233
0.167935	0.142915	0.296625	0.001351	-0.13803	0.027513	3.493777	-0.62105	-0.13707
0.168828	0.139511	0.282519	0.119839	-0.14317	0.058438	3.727859	-0.46167	0.103384
0.159861	-0.00975	0.115686	-0.00565	-0.21856	0.010057	3.992817	-0.24648	0.389357
0.087117	0.087966	0.157848	0.045489	-0.24633	0.054308	4.247624	0.044419	0.773994
0.158465	0.167982	0.13618	0.087136	-0.10526	0.071558	4.544116	0.365273	1.115411
0.08289	0.092429	0.133414	0.030393	-0.20828	0.050736	4.752415	0.607282	1.45521
0.142438	0.146502	0.124095	0.109662	-0.20895	0.062419	5.02015	0.901112	1.803337
0.113193	0.108184	0.030338	0.003034	-0.29368	0.049057	5.304876	1.278178	2.225592
0.119313	0.126118	0.09656	-0.02571	-0.2544	0.065496	5.548577	1.594275	2.582298
0.104146	0.059305	0.046306	0.083242	-0.34545	0.090051	5.803303	1.917763	2.953764
0.1804	0.135831	0.133691	0.207413	-0.19349	0.065282	6.069351	2.259662	3.351551
0.147953	0.13364	0.094781	0.067984	-0.28783	0.047182	6.32009	2.615893	3.755109
0.170575	0.150218	0.15803	0.150572	-0.26528	0.062575	6.625864	3.005225	4.165568
0.185947	0.124925	0.169381	0.20078	-0.2905	0.063376	6.913982	3.37951	4.538712
0.179991	0.131408	0.117423	0.160795	-0.24037	0.072443	7.269713	3.795981	4.940499
0.366553	0.211224	0.25056	0.2022	-0.25211	0.062435	7.568526	4.099452	5.263159
0.313962	0.209655	0.228045	0.277847	-0.18837	0.050451	7.919472	4.483394	5.677514
0.331236	0.183119	0.328485	0.269051	-0.1861	0.061328	8.291838	4.84678	6.014328
0.375401	0.17834	0.304497	0.19646	-0.21362	0.042888	8.701853	5.19754	6.359348
0.426348	0.183079	0.29794	0.283306	-0.23872	0.060906	9.176728	5.578767	6.753903
0.3176	0.277582	0.474447	0.205043	-0.25741	0.058034	9.611001	5.932132	7.125526
0.461654	0.334659	0.489819	0.358501	-0.21077	0.062336	10.12796	6.28493	7.534116
0.524786	0.396692	0.50827	0.242278	-0.07893	0.04762	10.63824	6.653681	7.954016
0.531054	0.410231	0.557636	0.219059	-0.09683	0.05861	11.16208	7.006959	8.336844
0.55064	0.385412	0.633362	0.245362	-0.03542	0.055349	11.66906	7.341864	8.770624
0.516296	0.50436	0.636225	0.097989	-0.0515	0.05967	12.29611	7.69318	9.271029
0.598745	0.652192	0.728883	0.168018	0.121189	0.12202	12.83042	8.112724	9.8073
0.579483	0.624786	0.856472	0.079053	0.071182	0.039148	13.39934	8.536889	10.27908
0.739136	0.697196	0.86532	0.105373	0.018253	0.056851	13.93831	8.939799	10.83104
0.843626	0.837427	0.959643	0.091675	0.156449	0.056401	14.49194	9.414139	11.38576
0.824101	0.864609	1.164371	0.126719	0.204645	0.073193	15.12939	9.938692	12.04453
0.790222	0.754558	1.126258	-0.06902	0.197842	0.058009	15.59806	10.3183	12.57476
0.921578	0.968453	0.987807	0.027598	0.127888	0.031043	16.00505	10.83165	13.12045
1.014945	1.023532	1.217208	-0.07413	0.325875	0.094929	16.616	11.40971	13.82103
1.060123	1.140433	1.324365	-0.03075	0.284814	0.043726	16.9677	11.90681	14.38332
1.262764	1.169954	1.50664	0.067433	0.325929	0.046106	17.38517	12.54806	15.04121
1.208041	1.246133	1.54758	0.003409	0.229801	0.029263	17.75944	13.10123	15.63393
1.31912	1.335823	1.472537	0.09413	0.365574	0.063387	18.04814	13.82777	16.33332
1.405038	1.201711	1.610385	0.017334	0.391857	0.074422	18.3291	14.40427	17.03143

se (Ref J1-J2)

J0-J5	J0-J6	J0-J7	J0-J8
-2.60616	-2.88067	-2.75758	-3.2256
-0.43119	0.189509	-0.09469	0.220161
-0.40828	-0.03294	-0.29274	0.155832
-0.4182	-0.16702	-0.4497	0.125256
-0.43833	-0.26344	-0.59513	0.119931
-0.47243	-0.35319	-0.7355	0.124438
-0.50419	-0.42812	-0.8676	0.124517
-0.53989	-0.50358	-0.99631	0.132925
-0.58543	-0.55805	-1.13473	0.144663
-0.63885	-0.63696	-1.27399	0.146793
-0.67886	-0.69006	-1.40699	0.165384
-0.73078	-0.7709	-1.55073	0.177485
-0.7861	-0.83856	-1.69376	0.186341
-0.83867	-0.89937	-1.82445	0.19422
-0.90367	-0.9852	-1.96479	0.210471
-0.9631	-1.05675	-2.09511	0.233378
-1.02488	-1.13762	-2.23589	0.257884
-1.09691	-1.23723	-2.37049	0.278449
-1.17533	-1.33452	-2.50804	0.299541
-1.25712	-1.42167	-2.64362	0.337949
-1.33922	-1.53246	-2.78185	0.369183
-1.42459	-1.64159	-2.91575	0.403669
-1.51194	-1.75882	-3.03947	0.44657
-1.60728	-1.8797	-3.17925	0.486316
-1.6852	-1.99448	-3.32336	0.518413
-1.81526	-2.16696	-3.51509	0.507634
-2.0304	-2.41619	-3.80554	0.422488
-2.3632	-2.79763	-4.24232	0.207136
-2.77834	-3.26774	-4.78138	-0.08107
-3.13912	-3.67885	-5.25655	-0.35535
-3.36766	-3.92361	-5.55635	-0.47486
-3.46741	-4.02273	-5.68584	-0.47341
-3.52258	-4.06986	-5.73059	-0.39539
-3.60692	-4.1365	-5.78689	-0.32619
-3.67996	-4.21735	-5.85594	-0.26068
-3.76145	-4.31395	-5.96614	-0.21559
-3.8359	-4.41574	-6.09012	-0.18016
-3.94209	-4.53742	-6.24831	-0.16659
-4.02021	-4.64941	-6.41121	-0.15905
-4.10766	-4.76522	-6.58353	-0.16122
-4.2321	-4.90809	-6.79319	-0.20385

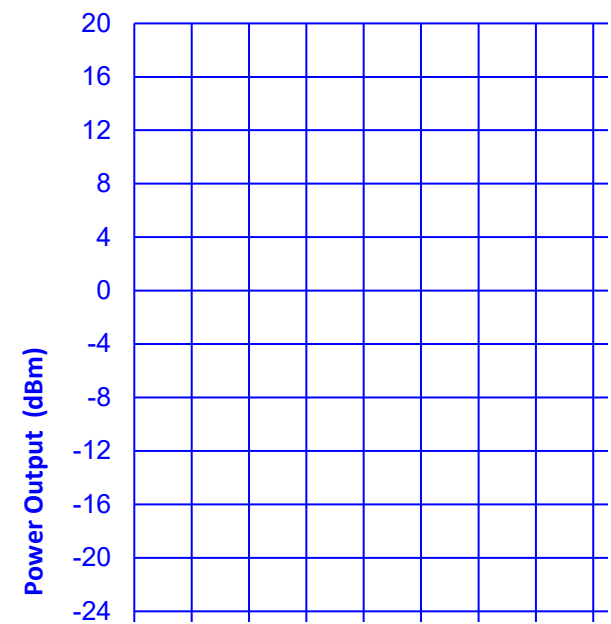
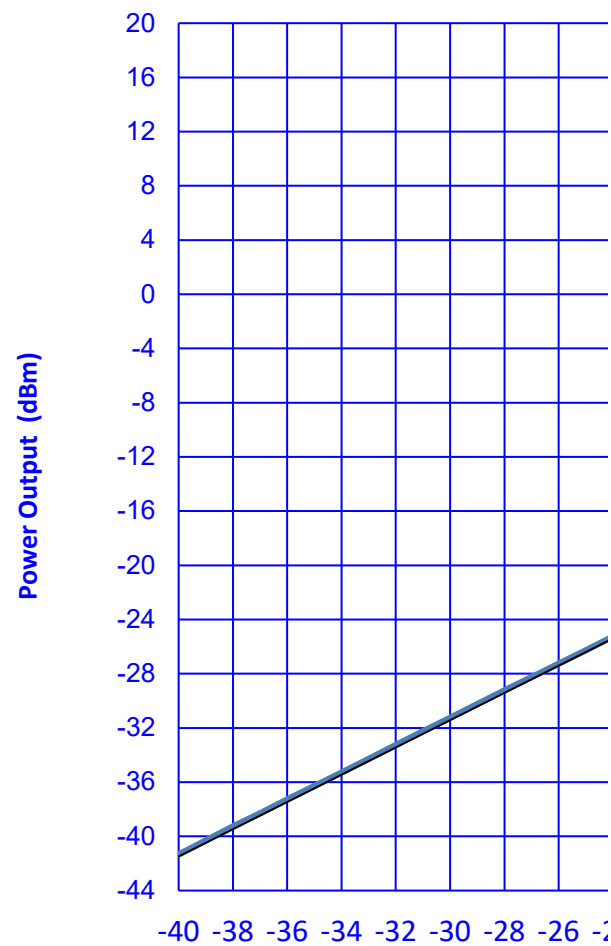
-4.37682	-5.06081	-7.03251	-0.27359
-4.55935	-5.26135	-7.32312	-0.39414
-4.79067	-5.4838	-7.65817	-0.565
-5.01374	-5.71195	-7.98679	-0.72184
-5.19683	-5.87536	-8.25896	-0.82913
-5.31917	-5.98555	-8.46705	-0.90499
-5.38156	-6.02417	-8.60715	-0.93201
-5.40462	-6.03288	-8.69703	-0.91076
-5.40685	-6.01215	-8.75819	-0.87224
-5.38301	-5.97833	-8.82142	-0.84109
-5.32969	-5.92643	-8.86888	-0.7863
-5.28068	-5.85377	-8.93453	-0.7481
-5.24491	-5.80949	-8.99045	-0.70407
-5.1614	-5.70917	-9.03827	-0.65731
-5.07086	-5.60527	-9.04587	-0.57314
-4.99449	-5.51458	-9.09761	-0.51337
-4.90724	-5.41106	-9.12743	-0.44113
-4.81842	-5.2937	-9.16233	-0.37601
-4.72904	-5.16979	-9.17901	-0.29837
-4.63592	-5.07199	-9.21664	-0.24494
-4.56088	-4.98211	-9.24928	-0.17803
-4.49885	-4.91113	-9.30987	-0.1341
-4.44696	-4.83791	-9.36948	-0.08817
-4.42426	-4.79837	-9.44998	-0.06749
-4.36581	-4.74303	-9.50372	-0.01219
-4.29288	-4.66607	-9.54371	0.052432
-4.23945	-4.60127	-9.59006	0.097228
-4.16748	-4.52293	-9.61126	0.163364
-4.08262	-4.44748	-9.62084	0.229055
-4.01747	-4.37213	-9.63185	0.294366
-3.95609	-4.31779	-9.66566	0.354949
-3.91144	-4.28323	-9.71188	0.410423
-3.88206	-4.26102	-9.76613	0.449481
-3.87026	-4.23423	-9.83003	0.497784
-3.86554	-4.23117	-9.89413	0.527594
-3.87245	-4.23083	-9.98911	0.552275
-3.88311	-4.2328	-10.0877	0.583127
-3.92986	-4.28642	-10.2413	0.592435
-3.9959	-4.35075	-10.4096	0.582156
-4.09379	-4.46646	-10.6204	0.563829
-4.21152	-4.58483	-10.8679	0.541642
-4.32375	-4.73718	-11.1274	0.501253
-4.46922	-4.89851	-11.4052	0.461741
-4.60166	-5.063	-11.6953	0.41671
-4.73437	-5.2619	-12.0006	0.357954
-4.89151	-5.43003	-12.3205	0.307226
-5.00341	-5.62414	-12.6351	0.262623
-5.09452	-5.76946	-12.9377	0.233502
-5.17489	-5.91645	-13.2368	0.194693
-5.2832	-6.07739	-13.5651	0.125033
-5.36598	-6.22957	-13.8796	0.115601
-5.4366	-6.35989	-14.1538	0.085396
-5.49903	-6.49225	-14.438	0.047677
-5.57341	-6.61272	-14.7108	0.046935
-5.59787	-6.70732	-14.9816	0.040585

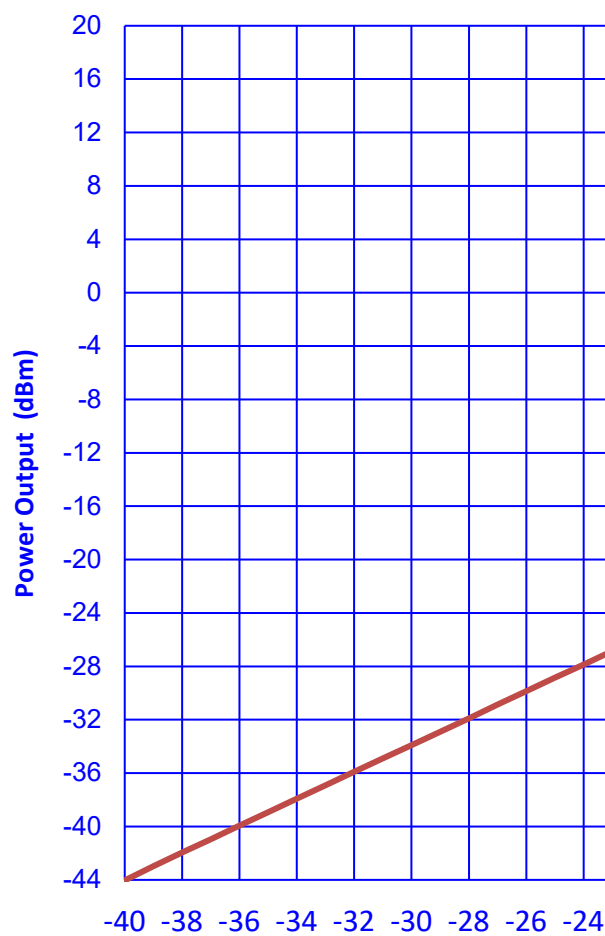
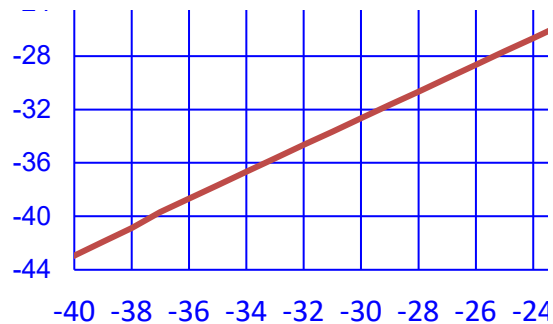
-5.61344	-6.74579	-15.1896	0.048301
-5.59903	-6.76082	-15.356	0.097507
-5.53096	-6.7538	-15.506	0.132055
-5.51913	-6.75336	-15.6955	0.16096
-5.45368	-6.71129	-15.8192	0.204287
-5.38893	-6.64897	-15.8928	0.258882
-5.29132	-6.55507	-15.9175	0.33478
-5.19422	-6.46599	-15.962	0.383499
-5.09576	-6.34896	-15.9463	0.474914
-5.00194	-6.22485	-15.9468	0.556527
-4.88	-6.11874	-15.9185	0.629901
-4.81757	-6.04479	-15.9001	0.706759
-4.70261	-5.91226	-15.838	0.793997
-4.61019	-5.78788	-15.7502	0.876375
-4.50702	-5.67852	-15.6954	0.96767
-4.36656	-5.49402	-15.5559	1.089025
-4.25046	-5.38007	-15.437	1.173318
-4.12831	-5.22786	-15.2974	1.275749
-4.05496	-5.14455	-15.2083	1.355024
-3.97737	-5.05712	-15.1172	1.467352
-3.90333	-4.99395	-15.0284	1.610547
-3.91892	-4.95828	-15.0409	1.680526
-3.81119	-4.88764	-14.9524	1.75814
-3.72103	-4.80886	-14.8363	1.873266
-3.66649	-4.74748	-14.7641	1.940989
-3.59563	-4.69141	-14.7198	2.038058
-3.58563	-4.68163	-14.6962	2.11957
-3.53658	-4.64991	-14.6124	2.20835
-3.52033	-4.6948	-14.6415	2.245423
-3.46103	-4.69042	-14.5988	2.312186
-3.38547	-4.63582	-14.5474	2.442885
-3.34359	-4.66402	-14.56	2.502533
-3.29934	-4.63858	-14.5545	2.530918
-3.27197	-4.67197	-14.6194	2.586765
-3.23163	-4.66857	-14.6277	2.670348
-3.24113	-4.71111	-14.6838	2.751333
-3.15012	-4.69621	-14.6466	2.827696
-3.08298	-4.72109	-14.646	2.848425
-3.06303	-4.71561	-14.651	2.952912
-2.95756	-4.691	-14.753	3.015534
-2.92529	-4.70598	-14.7348	3.099993
-2.96393	-4.81014	-14.8918	3.135065
-2.98284	-4.87654	-14.9813	3.160555
-2.84424	-4.83266	-15.0227	3.284605
-2.88096	-4.9016	-15.1249	3.301764
-2.87249	-4.9935	-15.2572	3.399492
-2.8853	-5.03011	-15.3873	3.389513
-2.81731	-5.02162	-15.4566	3.452268
-2.84693	-5.16419	-15.6424	3.486037
-2.8532	-5.23503	-15.8268	3.51247
-2.80447	-5.25468	-15.952	3.53265
-2.83988	-5.33869	-16.1692	3.532713
-2.8463	-5.39208	-16.39	3.55745
-2.8331	-5.439	-16.5731	3.540376
-2.86249	-5.57003	-16.8754	3.476388

-2.83562	-5.58012	-17.0261	3.519174
-2.77305	-5.60084	-17.2073	3.524198
-2.7328	-5.59981	-17.3601	3.525324
-2.59439	-5.50547	-17.5209	3.577106
-2.44954	-5.39678	-17.6243	3.610982
-2.40682	-5.32193	-17.8313	3.522809
-2.19649	-5.14159	-17.8614	3.607668
-2.1266	-5.03598	-18.0357	3.590765
-1.87157	-4.7285	-18.0277	3.624112
-1.73946	-4.55096	-18.1214	3.678915
-1.45035	-4.20686	-18.0834	3.770299
-1.23851	-3.9298	-18.0817	3.819321
-1.01169	-3.61634	-18.0518	3.918924
-0.70846	-3.24262	-17.9749	4.000228
-0.40854	-2.81118	-17.8413	4.113504
-0.08968	-2.38793	-17.7243	4.291746
0.184102	-1.99982	-17.6584	4.35597
0.481077	-1.62626	-17.5473	4.461002
0.798834	-1.21326	-17.405	4.593168
1.107695	-0.84575	-17.3118	4.734416
1.390482	-0.4787	-17.2365	4.843857
1.75046	-0.13276	-17.1281	5.022101
2.120826	0.241471	-17.1059	5.167899
2.504919	0.644544	-16.9825	5.351574
2.882503	0.974094	-16.9815	5.488613
3.319735	1.313662	-16.928	5.721915
3.70744	1.605871	-17.0416	5.885792
4.145339	1.883035	-17.0967	6.034286
4.570931	2.164485	-17.2058	6.24772
5.046413	2.453632	-17.3095	6.439838
5.579935	2.775482	-17.4245	6.672881
6.069568	3.100176	-17.5807	6.867603
6.597088	3.385722	-17.7001	7.071481
7.07948	3.740687	-17.9396	7.309226
7.551727	4.053694	-18.071	7.542802
8.07217	4.442943	-18.2071	7.783939
8.53585	4.8371	-18.3911	8.002822
9.117253	5.212572	-18.4758	8.299173
9.583784	5.765578	-18.532	8.470157
9.98696	6.215101	-18.6229	8.708547
10.44542	6.670157	-18.6787	8.957736
10.91196	7.210943	-18.6554	9.214837
11.23067	7.641722	-18.5038	9.368876
11.53576	8.103754	-18.433	9.540138
11.93767	8.660766	-18.2152	9.790549
12.11306	9.006853	-17.9814	9.859218
12.34948	9.427732	-17.7454	10.0065
12.48798	9.696043	-17.4388	10.01477
12.66159	10.16848	-16.9595	10.1394
12.91723	10.56669	-16.5197	10.20446

2GHz			10GHz			18GHz		
Power In	Power Out	Loss	Power In	Power Out	Loss	Power In	Power Out	Loss
-50	-52.668	2.668	-50	-54.969	4.969	-50	-57.121	7.121
-49	-51.303	2.303	-49	-53.36	4.36	-49	-55.152	6.152
-48	-50.068	2.068	-48	-51.991	3.991	-48	-53.61	5.61
-47	-48.894	1.894	-47	-50.701	3.701	-47	-52.078	5.078
-46	-47.744	1.744	-46	-49.483	3.483	-46	-50.787	4.787
-45	-46.643	1.643	-45	-48.321	3.321	-45	-49.563	4.563
-44	-45.547	1.547	-44	-47.193	3.193	-44	-48.394	4.394
-43	-44.475	1.475	-43	-46.104	3.104	-43	-47.261	4.261
-42	-43.421	1.421	-42	-45.03	3.03	-42	-46.162	4.162
-41	-42.372	1.372	-41	-43.974	2.974	-41	-45.08	4.08
-40	-41.329	1.329	-40	-42.931	2.931	-40	-44.027	4.027
-39	-40.292	1.292	-39	-41.897	2.897	-39	-42.981	3.981
-38	-39.266	1.266	-38	-40.869	2.869	-38	-41.937	3.937
-37	-38.292	1.292	-37	-39.688	2.688	-37	-40.959	3.959
-36	-37.283	1.283	-36	-38.671	2.671	-36	-39.94	3.94
-35	-36.29	1.29	-35	-37.66	2.66	-35	-38.925	3.925
-34	-35.281	1.281	-34	-36.668	2.668	-34	-37.912	3.912
-33	-34.269	1.269	-33	-35.662	2.662	-33	-36.905	3.905
-32	-33.259	1.259	-32	-34.653	2.653	-32	-35.912	3.912
-31	-32.247	1.247	-31	-33.659	2.659	-31	-34.901	3.901
-30	-31.244	1.244	-30	-32.656	2.656	-30	-33.909	3.909
-29	-30.237	1.237	-29	-31.658	2.658	-29	-32.903	3.903
-28	-29.226	1.226	-28	-30.663	2.663	-28	-31.901	3.901
-27	-28.255	1.255	-27	-29.657	2.657	-27	-30.854	3.854
-26	-27.255	1.255	-26	-28.657	2.657	-26	-29.859	3.859
-25	-26.258	1.258	-25	-27.657	2.657	-25	-28.855	3.855
-24	-25.257	1.257	-24	-26.657	2.657	-24	-27.856	3.856
-23	-24.254	1.254	-23	-25.659	2.659	-23	-26.859	3.859
-22	-23.253	1.253	-22	-24.662	2.662	-22	-25.864	3.864
-21	-22.248	1.248	-21	-23.667	2.667	-21	-24.87	3.87
-20	-21.244	1.244	-20	-22.674	2.674	-20	-23.874	3.874
-19	-20.238	1.238	-19	-21.679	2.679	-19	-22.878	3.878
-18	-19.228	1.228	-18	-20.683	2.683	-18	-21.88	3.88
-17	-18.255	1.255	-17	-19.726	2.726	-17	-20.887	3.887
-16	-17.258	1.258	-16	-18.722	2.722	-16	-19.892	3.892
-15	-16.256	1.256	-15	-17.724	2.724	-15	-18.891	3.891
-14	-15.254	1.254	-14	-16.726	2.726	-14	-17.897	3.897
-13	-14.252	1.252	-13	-15.724	2.724	-13	-16.901	3.901
-12	-13.251	1.251	-12	-14.729	2.729	-12	-15.906	3.906
-11	-12.246	1.246	-11	-13.732	2.732	-11	-14.911	3.911
-10	-11.243	1.243	-10	-12.737	2.737	-10	-13.917	3.917
-9	-10.237	1.237	-9	-11.74	2.74	-9	-12.925	3.925
-8	-9.2297	1.2297	-8	-10.742	2.742	-8	-11.932	3.932
-7	-8.2866	1.2866	-7	-9.7306	2.7306	-7	-10.943	3.943
-6	-7.2867	1.2867	-6	-8.7236	2.7236	-6	-9.9509	3.9509
-5	-6.2898	1.2898	-5	-7.7169	2.7169	-5	-8.9599	3.9599
-4	-5.2873	1.2873	-4	-6.7146	2.7146	-4	-7.9685	3.9685
-3	-4.2873	1.2873	-3	-5.7088	2.7088	-3	-6.9786	3.9786
-2	-3.2844	1.2844	-2	-4.7061	2.7061	-2	-5.9911	3.9911
-1	-2.2799	1.2799	-1	-3.7057	2.7057	-1	-5.0051	4.0051
0	-1.2762	1.2762	0	-2.7052	2.7052	0	-4.0175	4.0175
1	-0.2717	1.2717	1	-1.7014	2.7014	1	-3.0289	4.0289

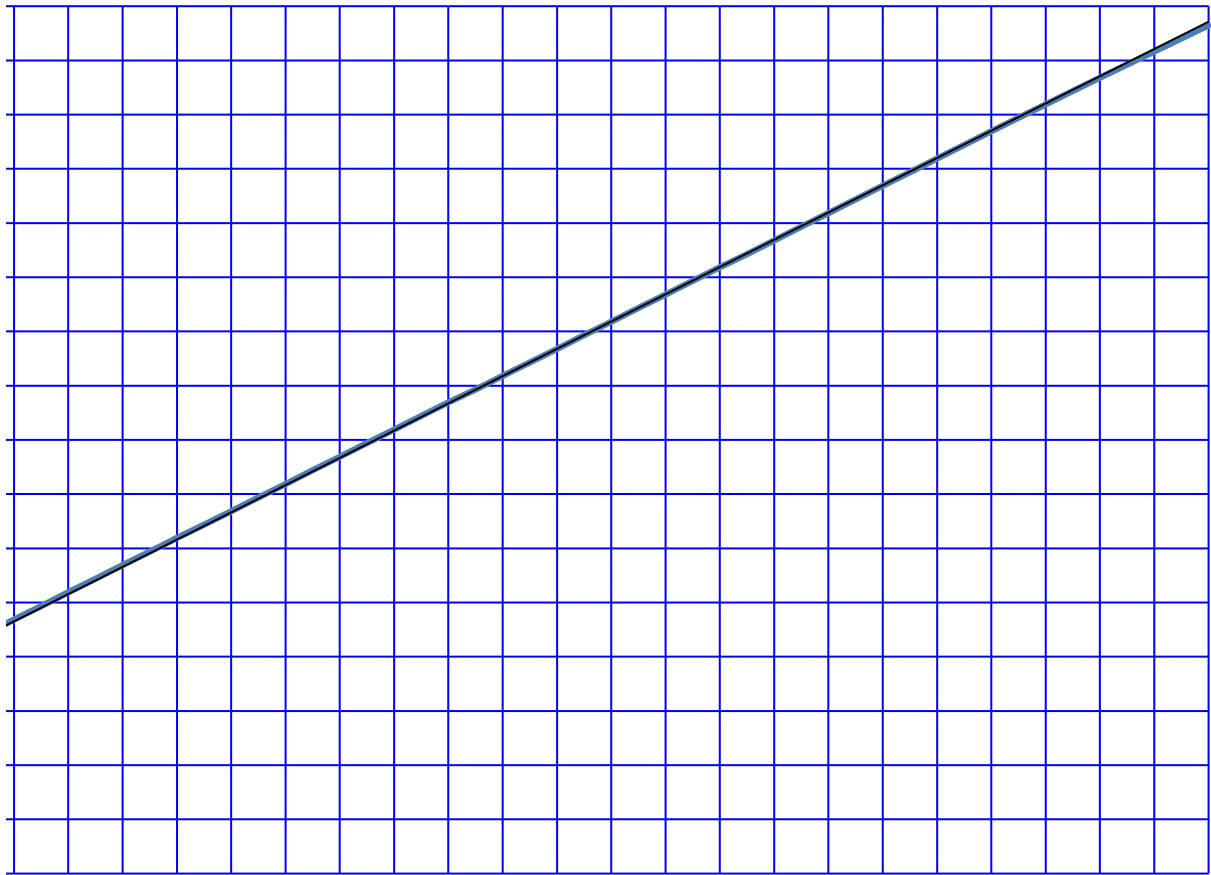
2	0.7373	1.2627	2	-0.6982	2.6982	2	-2.0364	4.0364
3	1.7122	1.2878	3	0.2808	2.7192	3	-0.9178	3.9178
4	2.7182	1.2818	4	1.2872	2.7128	4	0.0707	3.9293
5	3.7243	1.2757	5	2.2915	2.7085	5	1.0681	3.9319
6	4.7321	1.2679	6	3.2964	2.7036	6	2.066	3.934
7	5.7411	1.2589	7	4.3014	2.6986	7	3.0655	3.9345
8	6.749	1.251	8	5.3067	2.6933	8	4.0673	3.9327
9	7.7554	1.2446	9	6.3126	2.6874	9	5.0705	3.9295
10	8.7617	1.2383	10	7.3138	2.6862	10	6.0746	3.9254
11	9.7623	1.2377	11	8.3238	2.6762	11	7.079	3.921
12	10.772	1.228	12	9.3243	2.6757	12	8.0834	3.9166
13	11.767	1.233	13	10.325	2.675	13	9.0847	3.9153
14	12.76	1.24	14	11.337	2.663	14	10.099	3.901
15	13.743	1.257	15	12.345	2.655	15	11.114	3.886
16	14.726	1.274	16	13.349	2.651	16	12.14	3.86
17	15.695	1.305	17	14.362	2.638	17	13.165	3.835
18	16.665	1.335	18	15.374	2.626	18	14.201	3.799
19	17.629	1.371	19	16.391	2.609	19	15.183	3.817
20	18.586	1.414	20	17.417	2.583	20	16.182	3.818





Power Input Vs Power Output

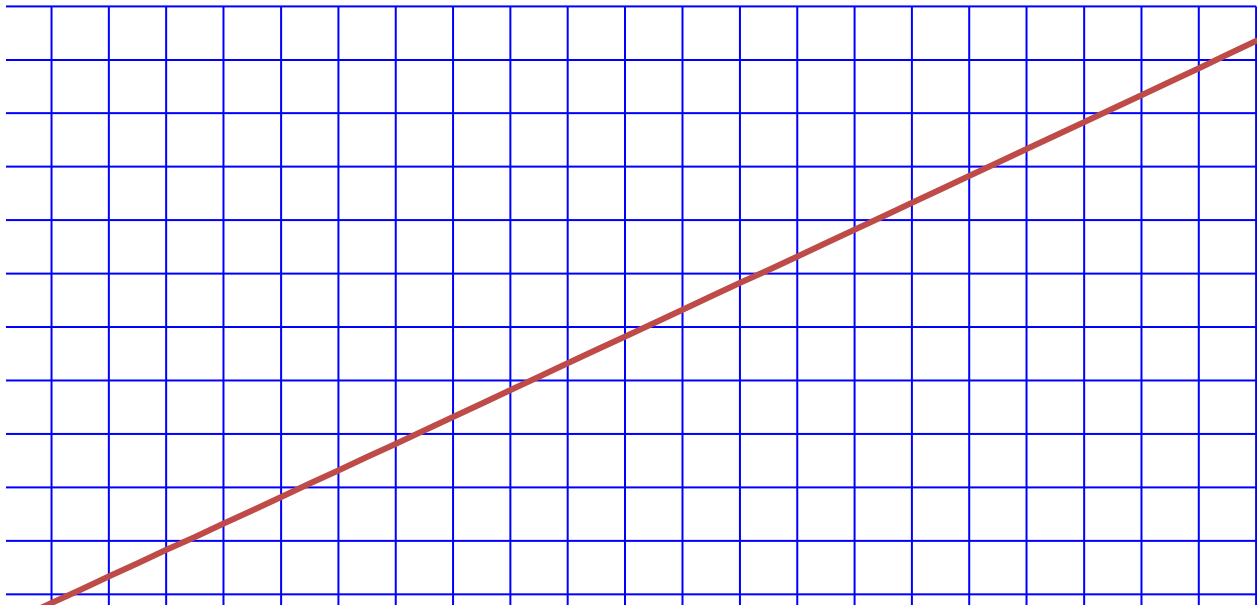
$y = 1.0057x - 1.2586$



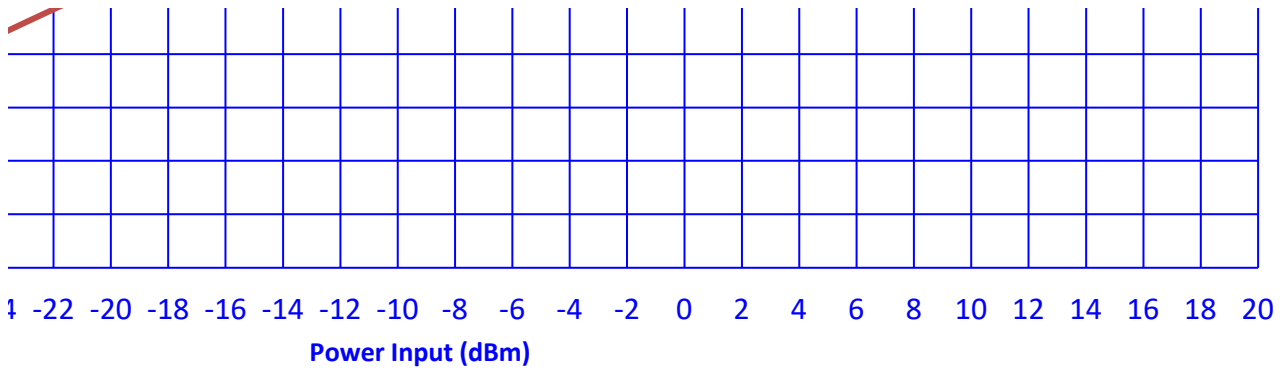
24 -22 -20 -18 -16 -14 -12 -10 -8 -6 -4 -2 0 2 4 6 8 10 12 14 16 18 20

Power Input (dBm)

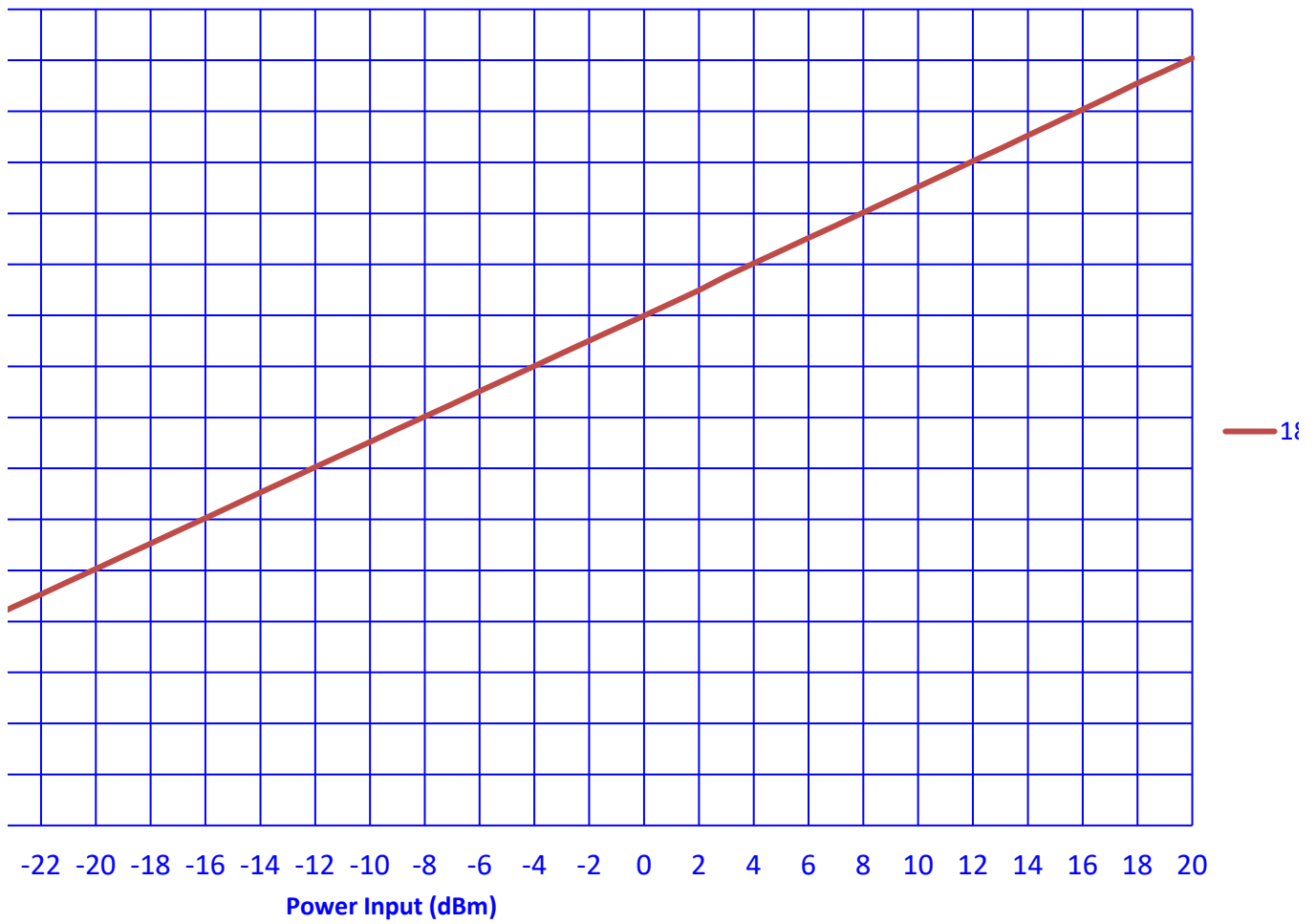
Power Input Vs Power Output



1



Power Input Vs Power Output







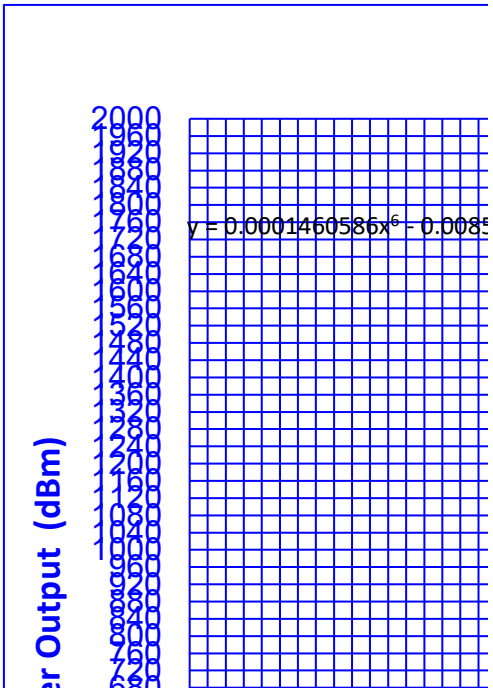
Characterization Crystal Detector					
2GHz		8 GHz		18 GHz	
Pin (dBm)	Out (mV)	Pin (dBm)	Out (mV)	Pin (dBm)	Out (mV)
0	180.25	0	165.47	0	135.59
1	200.54	1	180.97	1	155.27
2	230.36	2	202.68	2	177.73
3	258.64	3	237.18	3	191.73
4	292.28	4	257.37	4	211.55
5	295.42	5	293.22	5	242.31
6	374.76	6	345.55	6	275.02
7	421.20	7	385.01	7	313.93
8	465.41	8	442.46	8	350.23
9	538.35	9	519.07	9	395.03
10	580.97	10	585.77	10	440.17
11	660.23	11	603.56	11	490.70
12	770.34	12	677.74	12	550.45
13	857.17	13	800.64	13	620.54
14	969.18	14	900.51	14	690.88
15	1116.74	15	1000.93	15	800.82
16	1281.70	16	1172.05	16	900.68
17	1430.45	17	1272.12	17	995.20
18	1570.26	18	1497.66	18	1185.91
19	1807.70	19	1532.07	19	1302.25
20	2050.18	20	1738.99	20	1440.71

	2GHz			8GHz	
Pin (dBm)	Out (mv)	OutPut (dbm)	Loss	Out (mv)	OutPut (dbm)
0	176.35	-2.06	2.06	163.27	-2.74
1	194.94	-1.19	2.19	177.87	-1.98
2	222.56	-0.04	2.04	198.28	-1.04
3	247.54	0.88	2.12	231.98	-0.28
4	277.28	1.87	2.13	248.87	0.93
5	275.92	2.94	2.06	281.72	2.00
6	349.76	3.88	2.12	330.45	3.39
7	390.10	4.83	2.17	365.61	4.27
8	426.81	5.62	2.38	417.96	5.43
9	491.05	6.83	2.17	488.37	6.70
10	523.67	7.71	2.29	547.77	7.78
11	591.33	8.44	2.56	556.56	7.92
12	688.54	9.77	2.23	620.74	8.86

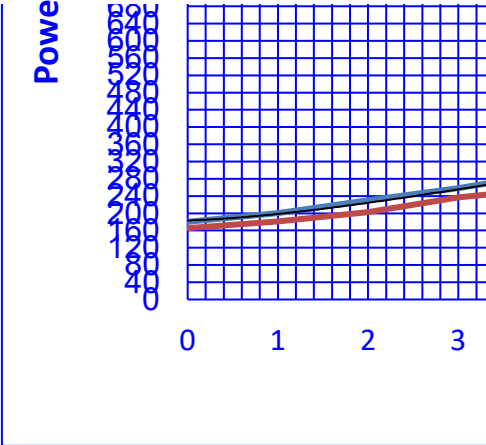
13	760.27	10.62	2.38	732.64	10.30
14	855.78	11.66	2.34	820.01	11.28
15	984.64	12.87	2.13	904.93	12.14
16	1128.80	14.06	1.94	1059.05	13.50
17	1254.25	14.97	2.03	1140.12	14.15
18	1368.86	15.73	2.27	1344.66	15.57
19	1577.10	16.96	2.04	1355.07	15.65
20	1787.58	18.05	1.95	1534.99	16.73

2GHz				
Pin (dBm)	Out (mV)	Pout (mv)	OutPut (dbm)	Loss
0	3.90	176.35	-2.06	2.06
1	5.60	194.94	-1.190	2.19
2	7.80	222.56	-0.040	2.04
3	11.10	247.54	0.880	2.12
4	15.00	277.28	1.870	2.13
5	19.50	275.92	2.940	2.06
6	25.00	349.76	3.880	2.12
7	31.10	390.10	4.830	2.17
8	38.60	426.81	5.620	2.38
9	47.30	491.05	6.830	2.17
10	57.30	523.67	7.710	2.29
11	68.90	591.33	8.440	2.56
12	81.80	688.54	9.770	2.23
13	96.90	760.27	10.620	2.38
14	113.40	855.78	11.660	2.34
15	132.10	984.64	12.870	2.13
16	152.90	1128.80	14.060	1.94
17	176.20	1254.25	14.970	2.03
18	201.40	1368.86	15.730	2.27
19	230.60	1577.10	16.960	2.04
20	262.60	1787.58	18.050	1.95

	18GHz		
Loss	Out (mv)	OutPut (dbm)	Loss
2.74	134.49	-4.41	4.41
2.98	153.87	-3.24	4.24
3.04	175.93	-2.08	4.08
3.28	190.03	-1.41	4.41
3.07	207.85	-0.64	4.64
3.00	237.31	0.52	4.48
2.61	267.82	1.56	4.44
2.73	304.13	2.67	4.33
2.57	337.23	3.56	4.44
2.30	378.23	4.56	4.44
2.22	418.87	5.45	4.55
3.08	464.10	6.34	4.66
3.14	517.55	7.30	4.70

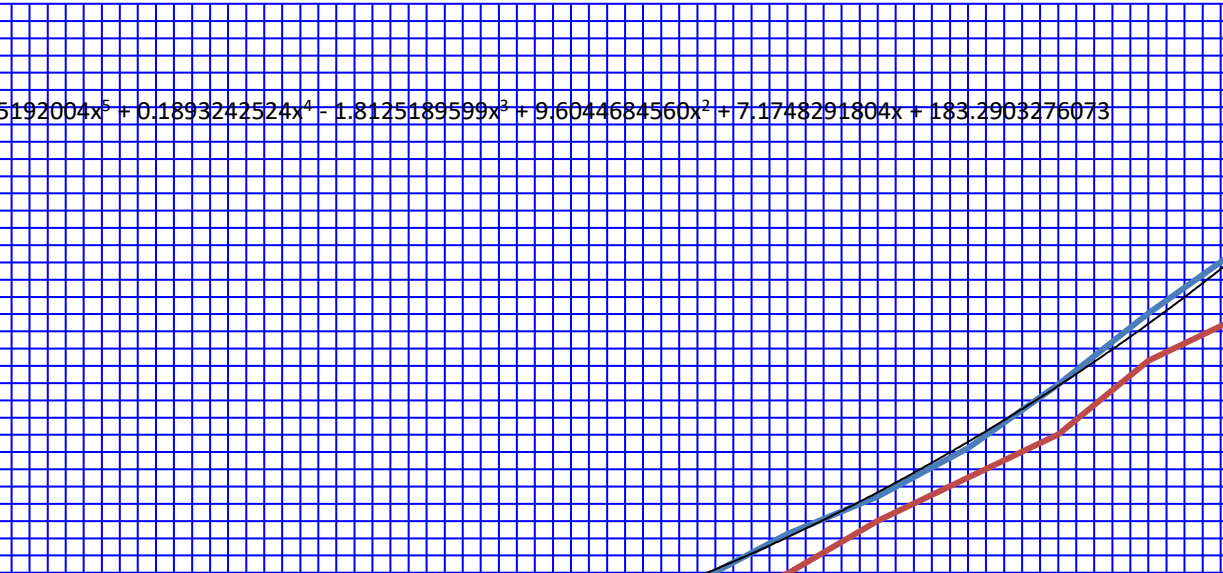


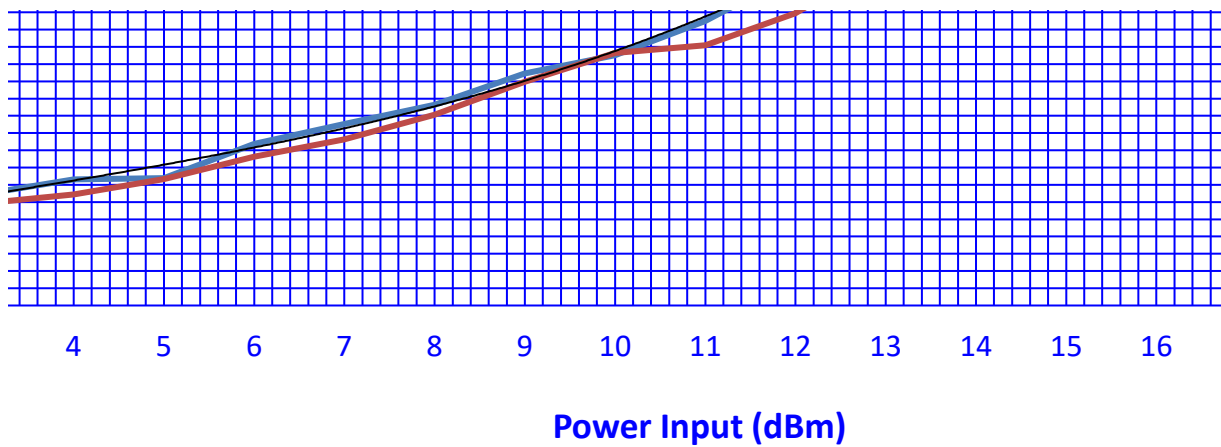
2.70	580.54	8.27	4.73
2.72	642.58	9.16	4.84
2.86	742.62	10.42	4.58
2.50	829.68	11.38	4.62
2.85	910.20	12.20	4.80
2.43	1085.91	13.72	4.28
3.35	1186.25	14.50	4.50
3.27	1323.71	15.44	4.56



8GHz						
Pin (dBm)	Out (mV)	Pout (mv)	OutPut (dbm)	Loss	Pin (dBm)	Out (mV)
0	2.20	163.27	-2.74	2.74	0	1.10
1	3.10	177.87	-1.98	2.98	1	1.40
2	4.40	198.28	-1.04	3.04	2	1.80
3	5.20	231.98	-0.28	3.28	3	1.70
4	8.50	248.87	0.93	3.07	4	3.70
5	11.50	281.72	2.00	3.00	5	5.00
6	15.10	330.45	3.39	2.61	6	7.20
7	19.40	365.61	4.27	2.73	7	9.80
8	24.50	417.96	5.43	2.57	8	13.00
9	30.70	488.37	6.70	2.30	9	16.80
10	38.00	547.77	7.78	2.22	10	21.30
11	47.00	556.56	7.92	3.08	11	26.60
12	57.00	620.74	8.86	3.14	12	32.90
13	68.00	732.64	10.30	2.70	13	40.00
14	80.50	820.01	11.28	2.72	14	48.30
15	96.00	904.93	12.14	2.86	15	58.20
16	113.00	1059.05	13.50	2.50	16	71.00
17	132.00	1140.12	14.15	2.85	17	85.00
18	153.00	1344.66	15.57	2.43	18	100.00
19	177.00	1355.07	15.65	3.35	19	116.00
20	204.00	1534.99	16.73	3.27	20	117.00

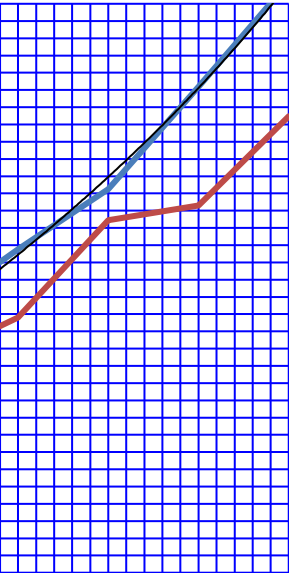
RF Input Power (CW)



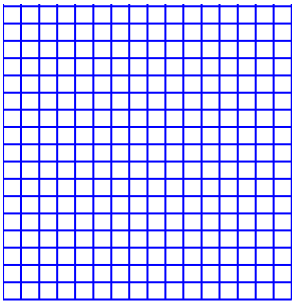


18GHz		
Pout (mv)	OutPut (dbm)	Loss
134.49	-4.41	4.41
153.87	-3.24	4.24
175.93	-2.08	4.08
190.03	-1.41	4.41
207.85	-0.64	4.64
237.31	0.52	4.48
267.82	1.56	4.44
304.13	2.67	4.33
337.23	3.56	4.44
378.23	4.56	4.44
418.87	5.45	4.55
464.10	6.34	4.66
517.55	7.30	4.70
580.54	8.27	4.73
642.58	9.16	4.84
742.62	10.42	4.58
829.68	11.38	4.62
910.20	12.20	4.80
1085.91	13.72	4.28
1186.25	14.50	4.50
1323.71	15.44	4.56

2GHz		
Pin (dBm)	Out (mv)	OutPut (dbm)
0	280	
1	310	
2	388	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		



— 2GHz



17 18 19 20

366.5295106

[illegible]

2GHz (J2)			18GHz (J2)		
Pin(dBm)	Pout(dBm)	Loss	Pin(dBm)	Pout(dBm)	Loss
0	-1.343	1.343	0	-3.919	1.343
1	-0.339	1.339	1	-2.932	1.339
2	0.671	1.329	2	-1.940	1.329
3	1.598	1.402	3	-0.921	1.402
4	2.605	1.395	4	0.066	1.395
5	3.612	1.388	5	1.060	1.388
6	4.619	1.381	6	2.056	1.381
7	5.629	1.372	7	3.053	1.372
8	6.637	1.363	8	4.053	1.363
9	7.642	1.358	9	5.053	1.358
10	8.652	1.348	10	6.055	1.348
11	9.647	1.353	11	7.057	1.353
12	10.655	1.345	12	8.055	1.345
13	11.657	1.343	13	9.058	1.343
14	12.647	1.353	14	10.063	1.353
-49.18	15	13.630	-40.55	15	11.083
-47.97	16	14.612	-39.47	16	12.102
-46.78	17	15.584	-38.4	17	13.125
-45.61	18	16.549	-37.35	18	14.156
-44.49	19	17.512	-36.28	19	15.197
-43.4	20	18.469	-35.2	20	15.935
-42.32	21	19.49	-34.03	21	16.78
-41.26	22	20.55	-32.94	22	17.82
-40.21	23	21.56	-31.89	23	18.82
-39.18	24	22.56	-30.82	24	19.83
-38.16	25	23.55	-29.78	25	20.88
-37.11	26	24.52	-28.73	26	21.9
-36.09	27	25.49	-27.71	27	22.91
-35.06	28	26.45	-26.67	28	23.91
-34.04	29	27.36	-25.62	29	24.91
-33.03	30	28.18	-24.53	30	25.93

2GHz (J2)						
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)		Pin(dBm)	
0	-1.343	1.343	0.000		0	
1	-0.339	1.339	-0.004		1	
2	0.671	1.329	-0.014		2	

3	1.598	1.402	0.059
4	2.605	1.395	0.052
5	3.612	1.388	0.045
6	4.619	1.381	0.038
7	5.629	1.372	0.029
8	6.637	1.363	0.020
9	7.642	1.358	0.015
10	8.652	1.348	0.005
11	9.647	1.353	0.010
12	10.655	1.345	0.002
13	11.657	1.343	0.000
14	12.647	1.353	0.010
15	13.630	1.370	0.027
16	14.612	1.388	0.045
17	15.584	1.416	0.073
18	16.549	1.451	0.108
19	17.512	1.488	0.145
20	18.469	1.531	0.188
21	19.49	1.510	0.167
22	20.55	1.450	0.107
23	21.56	1.440	0.097
24	22.56	1.440	0.097
25	23.55	1.450	0.107
26	24.52	1.480	0.137
27	25.49	1.510	0.167
28	26.45	1.550	0.207
29	27.36	1.640	0.297
30	28.18	1.820	0.477
31	29.16	1.840	0.497
32	30.12	1.880	0.537
33	31.05	1.950	0.607
34	32.02	1.980	0.637
Do not Exceed			

3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

18GHz (J2)					
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)		Pin(dBm)
0	-3.919	3.919	-0.001		0
1	-2.932	3.932	0.013		1
2	-1.940	3.940	0.021		2
3	-0.921	3.921	0.002		3
4	0.066	3.934	0.015		4
5	1.060	3.940	0.021		5
6	2.056	3.944	0.025		6
7	3.053	3.948	0.028		7
8	4.053	3.948	0.028		8
9	5.053	3.947	0.028		9
10	6.055	3.945	0.026		10
11	7.057	3.943	0.024		11
12	8.055	3.945	0.026		12
13	9.058	3.942	0.023		13

14	10.063	3.937	0.018
15	11.083	3.917	-0.002
16	12.102	3.898	-0.021
17	13.125	3.875	-0.044
18	14.156	3.844	-0.075
19	15.197	3.803	-0.116
20	15.935	4.065	0.146
21	16.78	4.220	0.301
22	17.82	4.180	0.261
23	18.82	4.180	0.261
24	19.83	4.170	0.251
25	20.88	4.120	0.201
26	21.9	4.100	0.181
27	22.91	4.090	0.171
28	23.91	4.090	0.171
29	24.91	4.090	0.171
30	25.93	4.070	0.151
31	26.9	4.100	0.181
32	27.8	4.200	0.281
33	28.75	4.250	0.331
34	29.68	4.320	0.401
Do not Exceed			

14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

10GHz (J2)					
Pin(dBm)	Pout(dBm)	Loss	Compression (dBm)		Pin(dBm)
0	-3.115	3.115	0.000		0
1	-2.116	3.116	0.001		1
2	-1.117	3.117	0.002		2
3	-0.147	3.147	0.032		3
4	0.853	3.147	0.032		4
5	1.857	3.143	0.028		5
6	2.861	3.139	0.024		6
7	3.863	3.137	0.022		7
8	4.866	3.134	0.019		8
9	5.871	3.129	0.014		9
10	6.875	3.125	0.010		10
11	7.881	3.119	0.004		11
12	8.883	3.117	0.002		12
13	9.884	3.116	0.001		13
14	10.882	3.118	0.003		14
15	11.896	3.104	-0.011		15
16	12.894	3.106	-0.009		16
17	13.905	3.095	-0.020		17
18	14.920	3.080	-0.035		18

19	15.933	3.067	-0.048
20	16.957	3.043	-0.072
21	17.780	3.220	0.105
22	18.670	3.330	0.215
23	19.600	3.400	0.285
24	20.450	3.550	0.435
25	21.400	3.600	0.485
26	22.360	3.640	0.525
27	23.330	3.670	0.555
28	24.290	3.710	0.595
29	25.250	3.750	0.635
30	26.240	3.760	0.645
31	27.200	3.800	0.685
32	28.220	3.780	0.665
33	29.200	3.800	0.685
34	30.180	3.820	0.705
Do not Exceed			

19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

J2)		2GHz (J4)			18GHz (J4)			
Loss		Pin(dBm)	Pout(dBm)	Loss	Pin(dBm)	Pout(dBm)	Loss	
3.919		0	####	1.292	0	-3.780	####	
3.932		1	####	1.287	1	-2.793	####	
3.940		2	####	1.277	2	-1.802	####	
3.921		3	####	1.338	3	-0.752	####	
3.934		4	####	1.332	4	0.237	####	
3.940		5	####	1.326	5	1.232	####	
3.944		6	####	1.319	6	2.230	####	
3.948		7	####	1.310	7	3.227	####	
3.948		8	####	1.302	8	4.228	####	
3.947		9	####	1.295	9	5.229	####	
3.945		10	####	1.288	10	6.230	####	
3.943		11	####	1.289	11	7.226	####	
3.945		12	####	1.288	12	8.228	####	
3.942		13	####	1.283	13	9.238	####	
3.937		14	####	1.293	14	10.241	####	
3.917	-49.18	15	####	1.309	-40.55	15	11.259	####
3.898	-47.97	16	####	1.331	-39.47	16	12.281	####
3.875	-46.78	17	####	1.361	-38.4	17	13.300	####
3.844	-45.61	18	####	1.398	-37.35	18	14.328	####
3.803	-44.49	19	####	1.435	-36.28	19	15.363	####
4.065	-43.4	20	####	1.482	-35.2	20	15.920	####
4.220	-42.32	21	19.4	1.590	-34.03	21	16.9	####
4.180	-41.26	22	20.4	1.570	-32.94	22	17.94	####
4.180	-40.21	23	21.4	1.580	-31.89	23	18.95	####
4.170	-39.18	24	22.4	1.610	-30.82	24	19.97	####
4.120	-38.16	25	23.4	1.630	-29.78	25	21.01	####
4.100	-37.11	26	24.3	1.680	-28.73	26	22.03	####
4.090	-36.09	27	25.3	1.720	-27.71	27	23.04	####
4.090	-35.06	28	26.2	1.770	-26.67	28	24.04	####
4.090	-34.04	29	27.1	1.860	-25.62	29	25.03	####
4.070	-33.03	30	28	2.020	-24.53	30	26.07	####

High Power Test Data

2GHz (J4)			2GHz (J6)			
Pout(dBm)	Loss	Compression(dBm)	Pin(dBm)	Pout(dBm)	Loss	Compression(dBm)
-1.292	1.292	0.000	0	-1.290	1.290	0.000
-0.287	1.287	-0.006	1	-0.286	1.286	-0.004
0.724	1.277	-0.016	2	0.726	1.275	-0.016

1.662	1.338	0.046
2.668	1.332	0.040
3.674	1.326	0.034
4.682	1.319	0.027
5.690	1.310	0.018
6.698	1.302	0.010
7.705	1.295	0.003
8.712	1.288	-0.004
9.711	1.289	-0.003
10.712	1.288	-0.004
11.717	1.283	-0.009
12.707	1.293	0.001
13.691	1.309	0.017
14.669	1.331	0.039
15.639	1.361	0.069
16.602	1.398	0.106
17.565	1.435	0.143
18.518	1.482	0.190
19.41	1.590	0.298
20.43	1.570	0.278
21.42	1.580	0.288
22.39	1.610	0.318
23.37	1.630	0.338
24.32	1.680	0.388
25.28	1.720	0.428
26.23	1.770	0.478
27.14	1.860	0.568
27.98	2.020	0.728
28.95	2.050	0.758
29.98	2.020	0.728
30.92	2.080	0.788
31.90	2.100	0.808
Do not Exceed		

3	1.673	1.327	0.037
4	2.678	1.322	0.032
5	3.685	1.315	0.025
6	4.693	1.308	0.018
7	5.703	1.297	0.007
8	6.711	1.290	0.000
9	7.718	1.282	-0.008
10	8.727	1.273	-0.017
11	9.723	1.277	-0.013
12	10.728	1.272	-0.018
13	11.727	1.273	-0.017
14	12.719	1.281	-0.009
15	13.703	1.297	0.007
16	14.683	1.317	0.027
17	15.656	1.344	0.054
18	16.619	1.381	0.091
19	17.582	1.418	0.128
20	18.535	1.465	0.175
21	19.36	1.640	0.350
22	20.39	1.610	0.320
23	21.38	1.620	0.330
24	22.36	1.640	0.350
25	23.54	1.460	0.170
26	24.29	1.710	0.420
27	25.25	1.750	0.460
28	26.22	1.780	0.490
29	27.16	1.840	0.550
30	28.03	1.970	0.680
31	29.01	1.990	0.700
32	30.02	1.980	0.690
33	30.98	2.020	0.730
34	31.99	2.010	0.720
Do not Exceed			

High Power Test Data And P1dB

18GHz (J4)		
Pout(dBm)	Loss	Compression(dBm)
-3.780	3.780	0.000
-2.793	3.793	0.013
-1.802	3.802	0.022
-0.752	3.752	-0.028
0.237	3.763	-0.017
1.232	3.768	-0.012
2.230	3.770	-0.010
3.227	3.773	-0.007
4.228	3.773	-0.007
5.229	3.772	-0.009
6.230	3.770	-0.010
7.226	3.774	-0.006
8.228	3.773	-0.007
9.238	3.762	-0.018

18GHz (J6)			
Pin(dBm)	Pout(dBm)	Loss	Compression(dBm)
0	-4.155	4.155	0.000
1	-3.167	4.167	0.012
2	-2.177	4.177	0.022
3	-1.151	4.151	-0.004
4	-0.161	4.161	0.006
5	0.831	4.169	0.014
6	1.829	4.171	0.016
7	2.827	4.173	0.018
8	3.825	4.175	0.020
9	4.825	4.175	0.020
10	5.827	4.174	0.018
11	6.829	4.172	0.016
12	7.822	4.178	0.023
13	8.832	4.168	0.013

10.241	3.759	-0.021
11.259	3.741	-0.039
12.281	3.719	-0.061
13.300	3.700	-0.080
14.328	3.672	-0.108
15.363	3.637	-0.143
15.920	4.080	0.300
16.9	4.100	0.320
17.94	4.060	0.280
18.95	4.050	0.270
19.97	4.030	0.250
21.01	3.990	0.210
22.03	3.970	0.190
23.04	3.960	0.180
24.04	3.960	0.180
25.03	3.970	0.190
26.07	3.930	0.150
27.02	3.980	0.200
27.98	4.020	0.240
28.9	4.100	0.320
29.85	4.150	0.370
Do not Exceed		

14	9.837	4.163	0.008
15	10.855	4.145	-0.010
16	11.872	4.128	-0.027
17	12.895	4.105	-0.050
18	13.921	4.079	-0.076
19	14.960	4.040	-0.115
20	15.757	4.243	0.088
21	16.25	4.750	0.595
22	17.29	4.710	0.555
23	18.3	4.700	0.545
24	19.33	4.670	0.515
25	20.37	4.630	0.475
26	21.39	4.610	0.455
27	22.4	4.600	0.445
28	23.41	4.590	0.435
29	24.43	4.570	0.415
30	25.48	4.520	0.365
31	26.45	4.550	0.395
32	27.38	4.620	0.465
33	28.30	4.700	0.545
34	29.20	4.800	0.645
Do not Exceed			

High Power Test Data

10GHz (J4)		
Pout(dBm)	Loss	Compression(dBm)
-2.897	2.897	0.000
-1.896	2.896	-0.001
-0.893	2.893	-0.004
0.064	2.936	0.039
1.068	2.932	0.035
2.073	2.927	0.030
3.078	2.922	0.025
4.080	2.920	0.023
5.086	2.914	0.017
6.091	2.909	0.012
7.107	2.893	-0.004
8.111	2.889	-0.008
9.107	2.893	-0.004
10.112	2.888	-0.009
11.108	2.892	-0.005
12.117	2.883	-0.014
13.118	2.882	-0.015
14.130	2.870	-0.027
15.144	2.856	-0.041

10GHz (J6)			
Pin(dBm)	Pout(dBm)	Loss	Compression(dBm)
0	-3.047	3.047	0.000
1	-2.044	3.044	-0.003
2	-1.044	3.044	-0.003
3	-0.086	3.086	0.039
4	0.917	3.083	0.036
5	1.923	3.077	0.030
6	2.930	3.070	0.023
7	3.933	3.067	0.020
8	4.940	3.060	0.013
9	5.946	3.054	0.007
10	6.951	3.049	0.002
11	7.957	3.043	-0.004
12	8.967	3.033	-0.014
13	9.969	3.032	-0.016
14	10.968	3.032	-0.015
15	11.975	3.025	-0.022
16	12.980	3.020	-0.027
17	13.991	3.009	-0.038
18	15.003	2.997	-0.050

16.158	2.842	-0.055
17.182	2.818	-0.079
18.000	3.000	0.103
18.940	3.060	0.163
19.880	3.120	0.223
20.850	3.150	0.253
21.790	3.210	0.313
22.750	3.250	0.353
23.710	3.290	0.393
24.690	3.310	0.413
25.660	3.340	0.443
26.600	3.400	0.503
27.570	3.430	0.533
28.520	3.480	0.583
29.490	3.510	0.613
30.450	3.550	0.653
Do not Exceed		

19	16.019	2.981	-0.066
20	17.044	2.956	-0.091
21	17.800	3.200	0.153
22	18.760	3.240	0.193
23	19.710	3.290	0.243
24	20.650	3.350	0.303
25	21.610	3.390	0.343
26	22.590	3.410	0.363
27	23.530	3.470	0.423
28	24.460	3.540	0.493
29	25.400	3.600	0.553
30	26.410	3.590	0.543
31	27.380	3.620	0.573
32	28.350	3.650	0.603
33	29.330	3.670	0.623
34	30.3	3.700	0.653
Do not Exceed			

2GHz (J6)			18GHz (J6)		
Pin(dBm)	Pout(dBm)	Loss	Pin(dBm)	Pout(dBm)	Loss
0	-1.290	1.290	0	-4.155	4.155
1	-0.286	1.286	1	-3.167	4.167
2	0.726	1.275	2	-2.177	4.177
3	1.673	1.327	3	-1.151	4.151
4	2.678	1.322	4	-0.161	4.161
5	3.685	1.315	5	0.831	4.169
6	4.693	1.308	6	1.829	4.171
7	5.703	1.297	7	2.827	4.173
8	6.711	1.290	8	3.825	4.175
9	7.718	1.282	9	4.825	4.175
10	8.727	1.273	10	5.827	4.174
11	9.723	1.277	11	6.829	4.172
12	10.728	1.272	12	7.822	4.178
13	11.727	1.273	13	8.832	4.168
14	12.719	1.281	14	9.837	4.163
-49.18	15	13.703	15	10.855	4.145
-47.97	16	14.683	16	11.872	4.128
-46.78	17	15.656	17	12.895	4.105
-45.61	18	16.619	18	13.921	4.079
-44.49	19	17.582	19	14.960	4.040
-43.4	20	18.535	20	15.757	4.243
-42.32	21	19.36	21	16.25	4.750
-41.26	22	20.39	22	17.29	4.710
-40.21	23	21.38	23	18.3	4.700
-39.18	24	22.36	24	19.33	4.670
-38.16	25	23.54	25	20.37	4.630
-37.11	26	24.29	26	21.39	4.610
-36.09	27	25.25	27	22.4	4.600
-35.06	28	26.22	28	23.41	4.590
-34.04	29	27.16	29	24.43	4.570
-33.03	30	28.03	30	25.48	4.520

2GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression(dBm)	
0	-1.411	1.411	0.000	
1	-0.406	1.406	-0.005	
2	0.603	1.397	-0.014	

3	1.479	1.521	0.110	
4	2.486	1.514	0.103	
5	3.492	1.508	0.097	
6	4.501	1.499	0.088	
7	5.511	1.489	0.078	
8	6.518	1.482	0.071	
9	7.532	1.468	0.057	
10	8.529	1.472	0.061	
11	9.533	1.467	0.056	
12	10.539	1.461	0.050	
13	11.538	1.462	0.051	
14	12.530	1.470	0.059	
15	13.516	1.484	0.073	
16	14.495	1.505	0.094	
17	15.465	1.535	0.124	
18	16.431	1.569	0.158	
19	17.392	1.608	0.197	
20	18.349	1.651	0.240	
21	19.47	1.530	0.119	
22	20.49	1.510	0.099	
23	21.47	1.530	0.119	
24	22.45	1.550	0.139	
25	23.46	1.540	0.129	
26	24.41	1.590	0.179	
27	25.39	1.610	0.199	
28	26.34	1.660	0.249	
29	27.24	1.760	0.349	
30	28.06	1.940	0.529	1 Watt
31	29.04	1.960	0.549	1.26 Watt
32	30.02	1.980	0.569	1.6 Watt
33	31.00	2.000	0.589	2 Watt
34	31.95	2.050	0.639	2.5 Watt
Do not Exceed				

18GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression(dBm)	
0	-4.417	4.417	0.000	
1	-3.431	4.431	0.014	
2	-2.439	4.439	0.022	
3	-1.506	4.506	0.089	
4	-0.516	4.516	0.099	
5	0.476	4.525	0.108	
6	1.475	4.525	0.108	
7	2.476	4.524	0.107	
8	3.478	4.522	0.105	
9	4.482	4.518	0.101	
10	5.487	4.513	0.096	
11	6.493	4.507	0.090	
12	7.499	4.501	0.084	
13	8.507	4.493	0.076	

33
33
33
33
33
33
33
33
33
33
33

14	9.518	4.482	0.065	
15	10.538	4.462	0.045	
16	11.569	4.431	0.014	
17	12.597	4.403	-0.014	
18	13.638	4.362	-0.055	
19	14.685	4.315	-0.102	
20	15.669	4.331	-0.086	
21	16.6	4.400	-0.017	
22	17.7	4.300	-0.117	
23	18.58	4.420	0.003	
24	19.5	4.500	0.083	
25	20.48	4.520	0.103	
26	21.02	4.980	0.563	
27	22.05	4.950	0.533	
28	23.07	4.930	0.513	
29	24.08	4.920	0.503	
30	25.12	4.880	0.463	1 Watt
31	26.1	4.900	0.483	1.26 Watt
32	26.73	5.270	0.853	1.6 Watt
33	27.6	5.400	0.983	2 Watt
34	28.44	5.560	1.143	2.5 Watt
Do not Exceed				

P1dB

10GHz (J8)				Power (Watts)
Pin(dBm)	Pout(dBm)	Loss	Compression(dBm)	
0	-3.338	3.338	0.000	
1	-2.335	3.335	-0.004	
2	-1.332	3.332	-0.006	
3	-0.371	3.371	0.033	
4	0.631	3.369	0.031	
5	1.637	3.363	0.025	
6	2.643	3.357	0.019	
7	3.648	3.352	0.014	
8	4.653	3.347	0.009	
9	5.660	3.340	0.002	
10	6.665	3.335	-0.003	
11	7.681	3.319	-0.019	
12	8.677	3.323	-0.015	
13	9.686	3.314	-0.024	
14	10.683	3.317	-0.021	
15	11.688	3.312	-0.026	
16	12.701	3.299	-0.039	
17	13.709	3.291	-0.047	
18	14.723	3.277	-0.061	

19	15.740	3.260	-0.078	
20	16.765	3.235	-0.103	
21	17.500	3.500	0.162	
22	18.460	3.540	0.202	
23	19.420	3.580	0.242	
24	20.370	3.630	0.292	
25	21.300	3.700	0.362	
26	22.250	3.750	0.412	
27	23.210	3.790	0.452	
28	24.180	3.820	0.482	
29	25.100	3.900	0.562	
30	26.060	3.940	0.602	1 Watt
31	27.020	3.980	0.642	1.26 Watt
32	28.000	4.000	0.662	1.6 Watt
33	28.950	4.050	0.712	2 Watt
34	29.900	4.100	0.762	2.5 Watt
Do not Exceed				

2GHz (J8)		
Pin(dBm)	Pout(dBm)	Loss
0	-1.411	1.411
1	-0.406	1.406
2	0.603	1.397
3	1.479	1.521
4	2.486	1.514
5	3.492	1.508
6	4.501	1.499
7	5.511	1.489
8	6.518	1.482
9	7.532	1.468
10	8.529	1.472
11	9.533	1.467
12	10.539	1.461
13	11.538	1.462
14	12.530	1.470
-49.18	15	13.516
-47.97	16	14.495
-46.78	17	15.465
-45.61	18	16.431
-44.49	19	17.392
-43.4	20	18.349
-42.32	21	19.47
-41.26	22	20.49
-40.21	23	21.47
-39.18	24	22.45
-38.16	25	23.46
-37.11	26	24.41
-36.09	27	25.39
-35.06	28	26.34
-34.04	29	27.24
-33.03	30	28.06

18GHz (J8)		
Pin(dBm)	Pout(dBm)	Loss
0	-4.417	4.417
1	-3.431	4.431
2	-2.439	4.439
3	-1.506	4.506
4	-0.516	4.516
5	0.476	4.525
6	1.475	4.525
7	2.476	4.524
8	3.478	4.522
9	4.482	4.518
10	5.487	4.513
11	6.493	4.507
12	7.499	4.501
13	8.507	4.493
14	9.518	4.482
-40.55	15	10.538
-39.47	16	11.569
-38.4	17	12.597
-37.35	18	13.638
-36.28	19	14.685
-35.2	20	15.669
-34.03	21	16.6
-32.94	22	17.7
-31.89	23	18.58
-30.82	24	19.5
-29.78	25	20.48
-28.73	26	21.02
-27.71	27	22.05
-26.67	28	23.07
-25.62	29	24.08
-24.53	30	25.12
-23	31	26.1
-21.92	32	26.73
-20.84	33	27.6
-19.81	34	28.44
-18.85	35	Fail
-17.67	36	36.000

-10	2	27.6
-5	4	27.6
0	6	27.6
5	8	27.6
10	10	27.6
15	12	27.6
20	14	27.6
25	16	27.6
30	18	27.6
35	20	27.6
40	22	27.6
	24	27.6
	26	27.6
	28	27.6
	30	27.6
	32	27.6
	34	27.6

