



**SUMMARY TEST DATA  
ON  
SDLVA-6G18G-CD-2-OPT218**

PL38726/2248

Customer: _____	Tested By: <b>RCombs</b>
SO No: _____	Temperature: <b>+25° C</b>
Model No: <b>SDLVA-6G18G-CD-2-OPT218</b>	Date: <b>12/13/2022</b>
Serial No: <b>PL38726/2248</b>	Drawing No: <b>27623906</b> Rev: <b>A1</b>

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency:	2.0 GHz – 18.0 GHz	2.0 GHz – 18.0 GHz See Plots	PMI QA2
2	Flatness:	± 2.0 dB Maximum	±1 dB 25°C See Plots	
3	TSS:	-70 dBm Minimum	-72 dBm	
4	VSWR:	2.0:1 (Input)	1.6:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	10.23 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.7 mV/dB See Plots	
8	Log Range:	-70 to +5 dBm	-70 to +5 dBm See Plots	
9	Log Linearity:	±2.5 dB (-40°C - +85°C)	±1.1 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	5.8	
12	Recovery Time:	60 ns Typical	53.5 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 247 mA -12V @ 95 mA	PMI QA2

QA/QC Approval:       PMI QA2      Date: 12/16/2022



# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

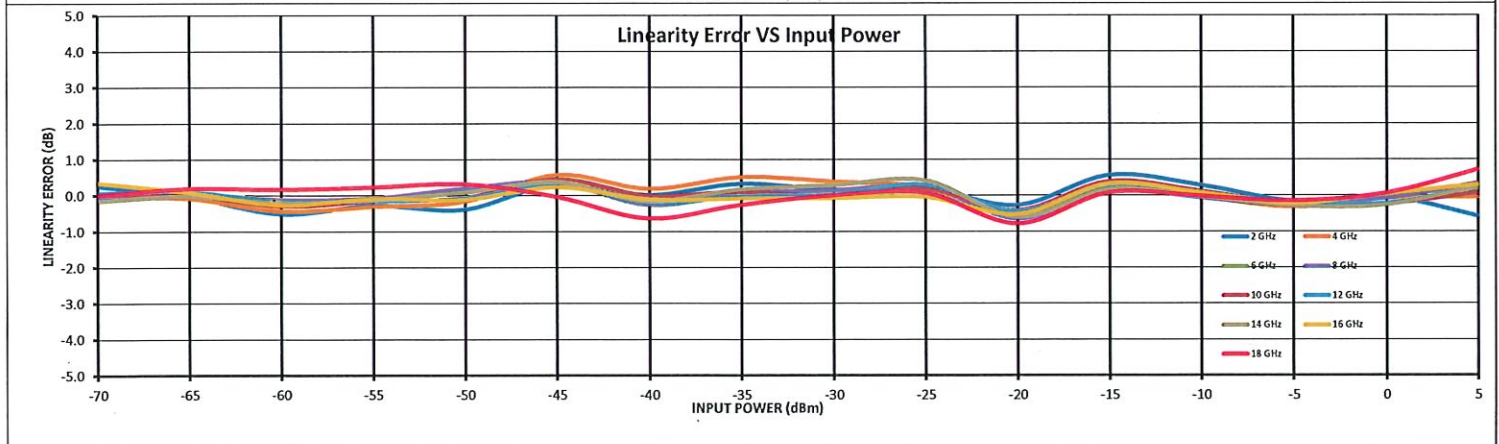
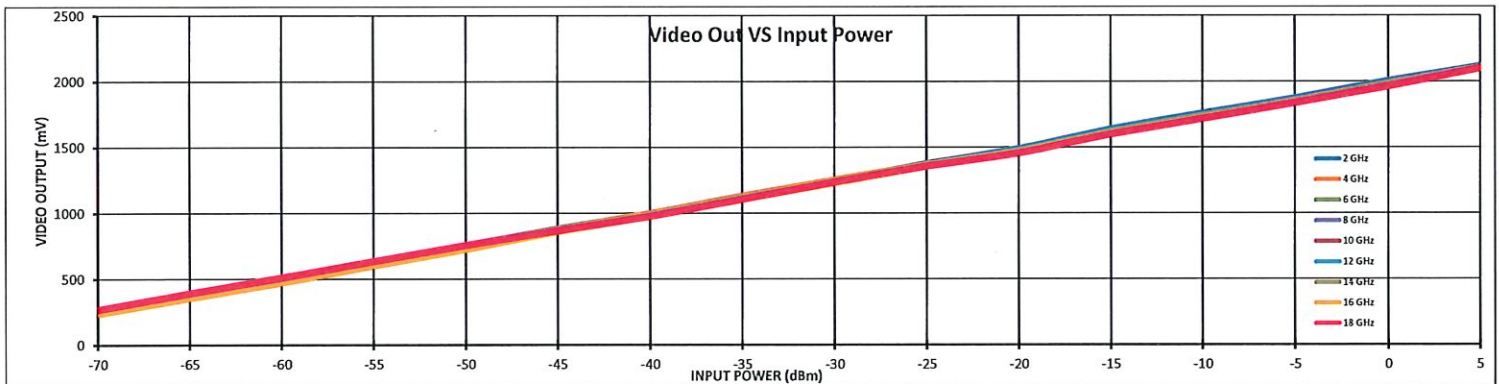
PL38726/2248

Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL38726/2248  
Date: 12/13/2022  
Tested By: RCombs  
Test Temp: +25°C

## Log Transfer Over Frequency +25°C



Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	2011	25.4	0.6	241	360	475	608	732	877	996	1131	1253	1381	1496	1645	1765	1880	2010	2124	Measured Value (mV)
				7	0	-13	-7	-10	9	0	9	4	5	-7	14	7	-4	-1	-15	ERROR (mV)
				0.27	-0.02	-0.50	-0.27	-0.38	0.34	0.02	0.34	0.16	0.20	-0.27	0.57	0.29	-0.15	-0.03	-0.57	LINEARITY ERROR (dB)
4 GHz	1994	24.9	0.6	251	374	490	618	746	889	1003	1136	1257	1377	1482	1626	1744	1862	1992	2117	Measured Value (mV)
				-1	-2	-11	-7	-4	14	5	13	10	5	-15	5	-1	-8	-2	-2	ERROR (mV)
				-0.04	-0.08	-0.42	-0.30	-0.16	0.58	0.19	0.51	0.39	0.22	-0.60	0.22	-0.04	-0.32	-0.07	-0.06	LINEARITY ERROR (dB)
6 GHz	1987	24.6	0.6	267	392	510	634	762	890	998	1128	1250	1374	1482	1625	1742	1858	1987	2114	Measured Value (mV)
				0	2	-3	-2	3	9	-6	1	1	2	-14	7	1	-5	1	4	ERROR (mV)
				-0.01	0.07	-0.11	-0.08	0.13	0.36	-0.26	0.04	0.02	0.08	-0.56	0.29	0.06	-0.22	0.03	0.18	LINEARITY ERROR (dB)
8 GHz	1978	24.4	0.6	267	392	511	634	763	889	996	1126	1249	1374	1475	1616	1733	1850	1977	2109	Measured Value (mV)
				-3	0	-3	-2	5	9	-6	2	3	6	-16	4	-1	-6	-2	8	ERROR (mV)
				-0.11	0.01	-0.11	-0.06	0.21	0.38	-0.25	0.07	0.14	0.26	-0.64	0.15	-0.06	-0.26	-0.08	0.34	LINEARITY ERROR (dB)
10 GHz	1974	24.7	0.5	246	370	485	612	738	874	986	1112	1233	1361	1470	1614	1730	1845	1969	2100	Measured Value (mV)
				1	1	-7	-4	-1	11	0	3	-1	5	-10	10	3	-5	-6	2	ERROR (mV)
				0.02	0.03	-0.29	-0.15	-0.06	0.46	0.00	0.10	-0.03	0.18	-0.41	0.40	0.12	-0.22	-0.23	0.08	LINEARITY ERROR (dB)
12 GHz	1970	24.5	0.4	253	377	493	616	741	873	983	1110	1234	1364	1468	1609	1726	1842	1964	2098	Measured Value (mV)
				2	3	-4	-3	-2	8	-5	-1	0	8	-11	8	2	-5	-5	6	ERROR (mV)
				0.08	0.11	-0.17	-0.14	-0.07	0.31	-0.19	-0.02	0.02	0.31	-0.44	0.31	0.08	-0.21	-0.22	0.23	LINEARITY ERROR (dB)
14 GHz	1970	24.4	0.6	258	383	501	625	752	881	990	1120	1245	1370	1467	1608	1725	1841	1964	2098	Measured Value (mV)
				-4	0	-5	-3	2	9	-4	4	7	10	-14	4	-1	-7	-6	6	ERROR (mV)
				-0.14	-0.01	-0.20	-0.11	0.09	0.38	-0.15	0.17	0.29	0.42	-0.59	0.17	-0.03	-0.28	-0.26	0.25	LINEARITY ERROR (dB)
16 GHz	1975	25.1	0.5	228	347	463	593	718	852	969	1095	1220	1347	1460	1607	1726	1844	1976	2108	Measured Value (mV)
				9	2	-7	-2	-3	6	-3	-2	-2	-1	-13	8	2	-5	1	8	ERROR (mV)
				0.36	0.10	-0.26	-0.08	-0.11	0.25	-0.10	-0.08	-0.07	-0.04	-0.51	0.33	0.07	-0.21	0.05	0.31	LINEARITY ERROR (dB)
18 GHz	1962	24.2	0.8	267	393	513	636	759	871	978	1108	1235	1358	1458	1600	1719	1837	1963	2100	Measured Value (mV)
				0	5	4	5	8	-1	-15	-6	0	2	-19	2	0	-4	1	17	ERROR (mV)
				0.01	0.20	0.17	0.23	0.32	-0.03	-0.63	-0.26	0.00	0.07	-0.78	0.09	-0.02	-0.15	0.06	0.72	LINEARITY ERROR (dB)
Avg. Slope: 24.7 mV/dB				0.8	0.9	1	0.9	0.9	0.8	0.7	0.8	0.7	0.7	0.8	0.9	0.9	0.9	1	0.5	Flatness dB: ±1 dB





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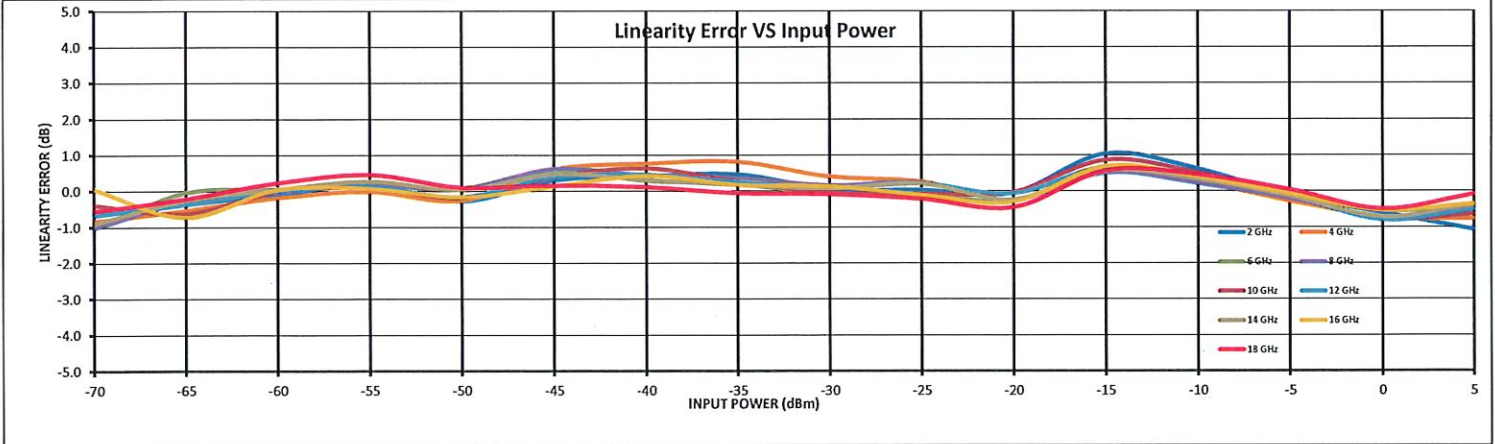
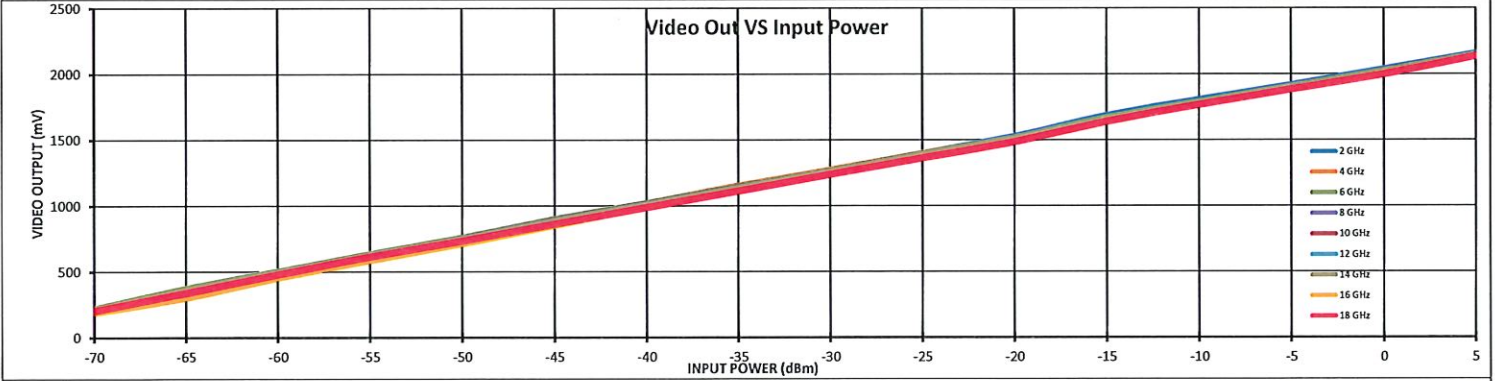
PL38726/2248

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL38726/2248  
 Date: 12/13/2022  
 Tested By: RCombs  
 Test Temp: +85°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	2058	26.2	1.1	205	344	482	620	739	886	1020	1153	1273	1403	1532	1692	1812	1923	2042	2161	Measured Value (mV)
				-17	-9	-2	5	-7	8	11	13	2	1	-1	27	16	-3	-16	-28	ERROR (mV)
				-0.64	-0.36	-0.08	0.18	-0.27	0.32	0.42	0.48	0.07	0.04	-0.04	1.05	0.62	-0.12	-0.59	-1.07	LINEARITY ERROR (dB)
4 GHz	2048	26.0	0.8	204	342	482	616	740	892	1027	1158	1278	1404	1521	1674	1794	1910	2029	2157	Measured Value (mV)
				-22	-14	-5	0	-7	16	20	21	11	7	-6	17	7	-7	-18	-20	ERROR (mV)
				-0.83	-0.53	-0.18	0.00	-0.25	0.61	0.77	0.82	0.41	0.27	-0.24	0.64	0.27	-0.28	-0.71	-0.77	LINEARITY ERROR (dB)
6 GHz	2040	25.5	1.0	228	380	511	642	766	907	1027	1152	1272	1401	1522	1675	1794	1909	2026	2156	Measured Value (mV)
				-26	-1	2	6	2	16	8	5	-2	-1	-7	18	9	-3	-13	-11	ERROR (mV)
				-1.01	-0.03	0.07	0.22	0.09	0.60	0.30	0.21	-0.08	-0.05	-0.28	0.69	0.36	-0.12	-0.53	-0.43	LINEARITY ERROR (dB)
8 GHz	2031	25.5	1.0	216	363	497	631	755	897	1020	1146	1268	1398	1513	1661	1781	1898	2012	2149	Measured Value (mV)
				-26	-7	0	5	1	16	11	10	4	6	-6	13	6	-5	-19	-10	ERROR (mV)
				-1.02	-0.27	-0.01	0.20	0.06	0.63	0.45	0.38	0.17	0.25	-0.25	0.51	0.22	-0.20	-0.72	-0.38	LINEARITY ERROR (dB)
10 GHz	2026	26.1	0.9	192	316	462	596	719	864	1001	1121	1244	1373	1504	1658	1779	1894	2007	2140	Measured Value (mV)
				-10	-16	0	3	-5	10	17	7	-1	-2	-1	23	13	-2	-20	-17	ERROR (mV)
				-0.38	-0.62	-0.01	0.11	-0.18	0.40	0.64	0.26	-0.03	-0.07	-0.03	0.87	0.51	-0.07	-0.76	-0.64	LINEARITY ERROR (dB)
12 GHz	2025	25.7	0.8	206	342	480	613	734	877	1007	1130	1255	1387	1508	1656	1777	1893	2004	2140	Measured Value (mV)
				-17	-9	0	4	-4	10	12	7	3	6	-2	18	10	-3	-20	-13	ERROR (mV)
				-0.66	-0.36	0.01	0.14	-0.15	0.40	0.46	0.26	0.10	0.22	-0.06	0.68	0.39	-0.12	-0.80	-0.51	LINEARITY ERROR (dB)
14 GHz	2023	25.5	0.9	215	359	494	627	749	888	1011	1135	1260	1391	1507	1655	1776	1892	2005	2141	Measured Value (mV)
				-23	-6	2	7	1	12	8	5	2	6	-6	15	9	-3	-18	-9	ERROR (mV)
				-0.90	-0.24	0.06	0.28	0.05	0.48	0.32	0.18	0.08	0.22	-0.24	0.57	0.33	-0.13	-0.71	-0.36	LINEARITY ERROR (dB)
16 GHz	2026	26.4	0.7	183	294	446	579	704	844	984	1109	1239	1365	1491	1649	1773	1892	2012	2149	Measured Value (mV)
				2	-19	1	2	-4	4	12	5	4	-3	-8	18	11	-2	-14	-9	ERROR (mV)
				0.07	-0.72	0.08	0.08	-0.16	0.14	0.44	0.18	0.15	-0.10	-0.29	0.70	0.40	-0.07	-0.52	-0.35	LINEARITY ERROR (dB)
18 GHz	2011	25.6	0.6	205	342	481	615	734	863	990	1114	1241	1366	1488	1642	1767	1884	1999	2137	Measured Value (mV)
				-14	-5	6	12	3	4	3	-1	-2	-5	-12	14	12	1	-13	-2	ERROR (mV)
				-0.55	-0.21	0.24	0.46	0.10	0.17	0.12	-0.05	-0.07	-0.21	-0.45	0.56	0.46	0.04	-0.50	-0.09	LINEARITY ERROR (dB)
Avg. Slope: 25.8 mV/dB				0.9	1.7	1.2	1.2	1.2	1.2	0.8	1	0.7	0.8	0.9	1	0.9	0.8	0.8	0.6	Flatness dB: ±1.7 dB





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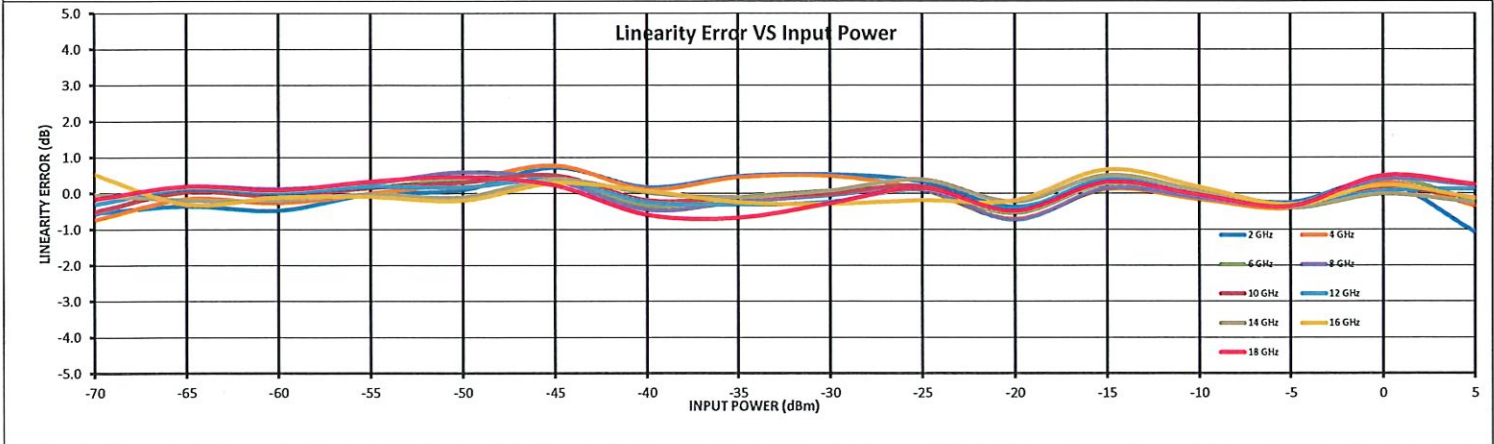
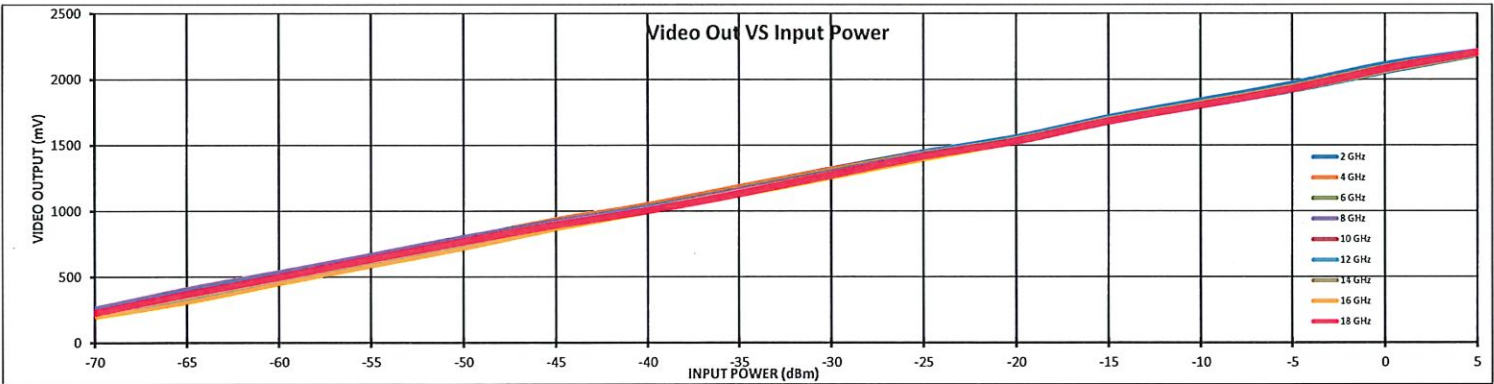
PL38726/2248

## Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL38726/2248  
 Date: 12/13/2022  
 Tested By: RCombs  
 Test Temp: -40°C

Frequency	INTERCEPT (mV)	2110	2088	2083	2069	2071	2071	2073	2070	Avg. Slope: 26.2 mV/dB	1.2	1.9	1.6	1.6	1.7	1.4	1.1	1.3	1.3	1.1	0.7	0.6	0.7	0.9	1	0.4	Flatness dB: ±1.9 dB
2 GHz	INTERCEPT (mV)	2110																									
	SLOPE (mV/dB)	26.8																									
	LIN. ERR. (dB)	1.1																									
4 GHz	INTERCEPT (mV)	2088																									
	SLOPE (mV/dB)	26.0																									
	LIN. ERR. (dB)	0.8																									
6 GHz	INTERCEPT (mV)	2083																									
	SLOPE (mV/dB)	26.0																									
	LIN. ERR. (dB)	0.5																									
8 GHz	INTERCEPT (mV)	2069																									
	SLOPE (mV/dB)	25.6																									
	LIN. ERR. (dB)	0.7																									
10 GHz	INTERCEPT (mV)	2071																									
	SLOPE (mV/dB)	26.0																									
	LIN. ERR. (dB)	0.5																									
12 GHz	INTERCEPT (mV)	2062																									
	SLOPE (mV/dB)	26.0																									
	LIN. ERR. (dB)	0.4																									
14 GHz	INTERCEPT (mV)	2071																									
	SLOPE (mV/dB)	26.6																									
	LIN. ERR. (dB)	0.5																									
16 GHz	INTERCEPT (mV)	2073																									
	SLOPE (mV/dB)	27.0																									
	LIN. ERR. (dB)	0.7																									
18 GHz	INTERCEPT (mV)	2070																									
	SLOPE (mV/dB)	26.2																									
	LIN. ERR. (dB)	0.672																									

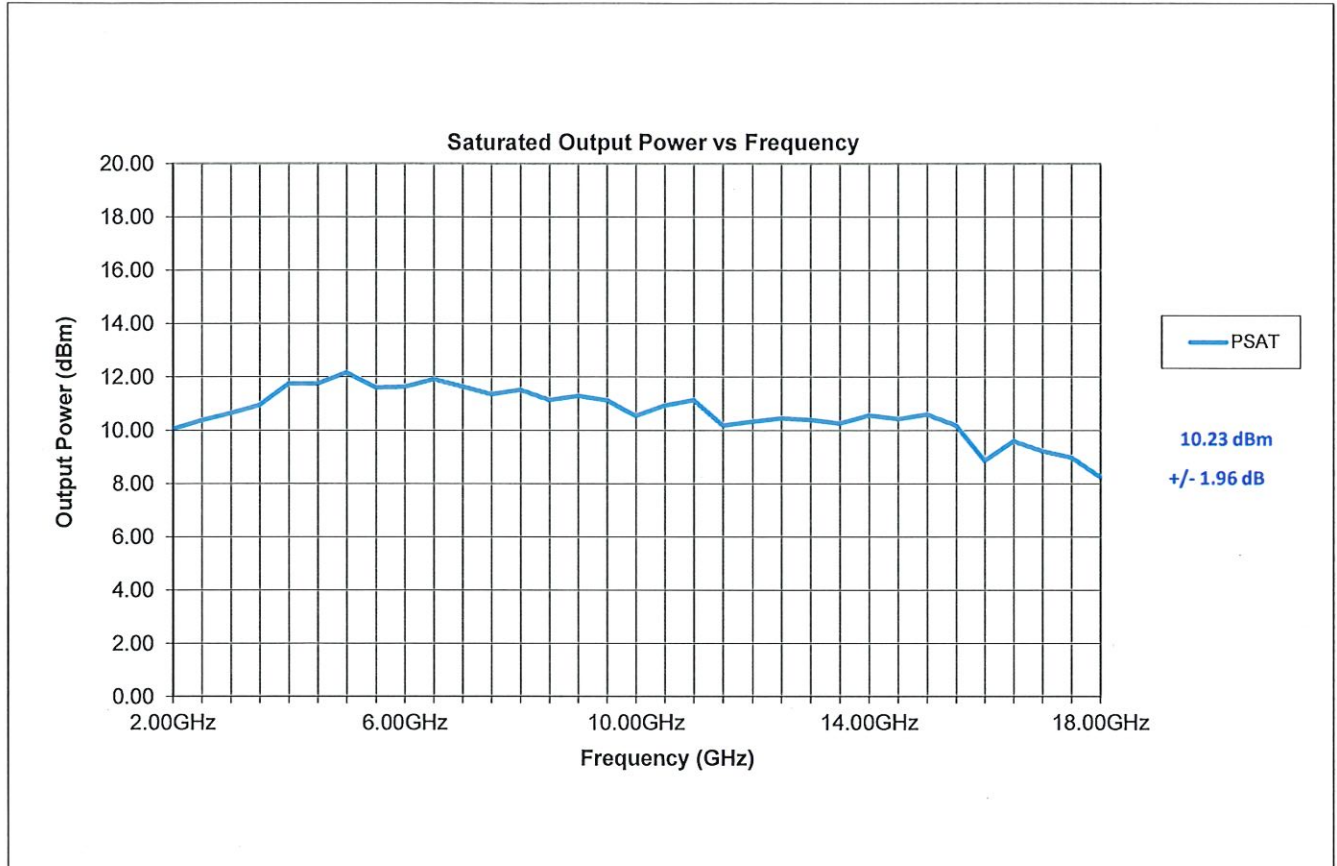




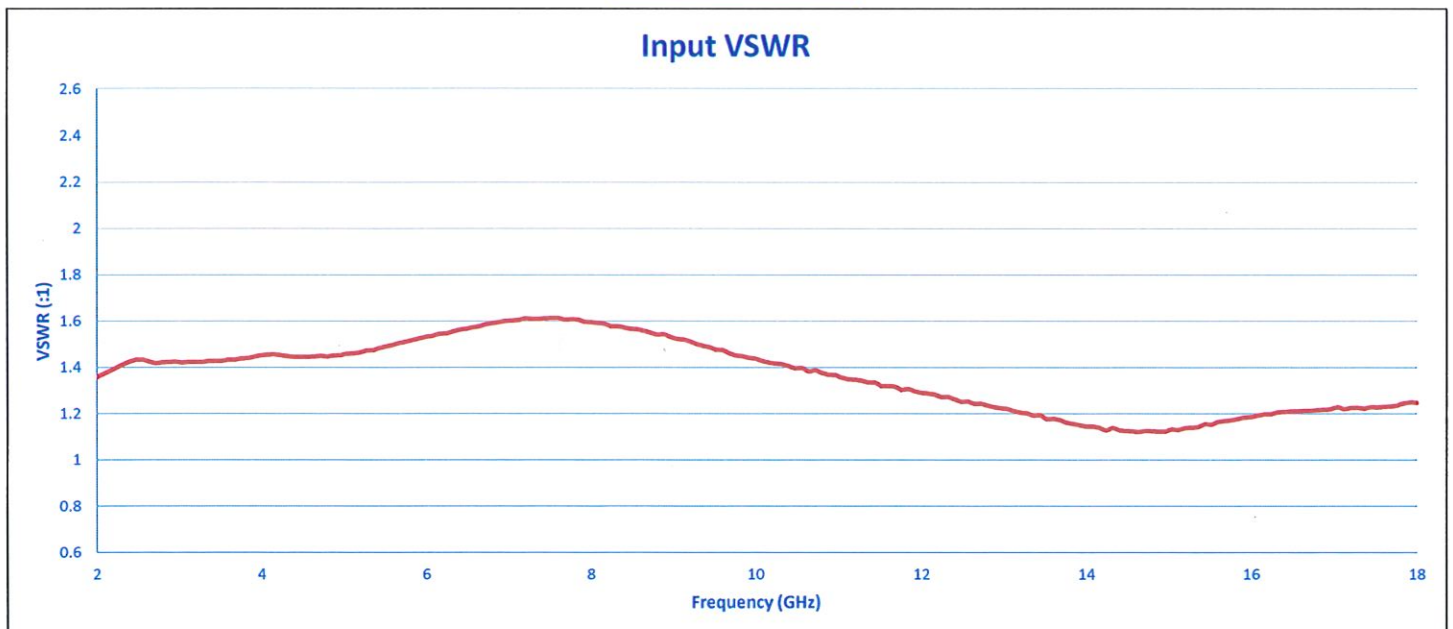
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## PSAT



## INPUT VSWR

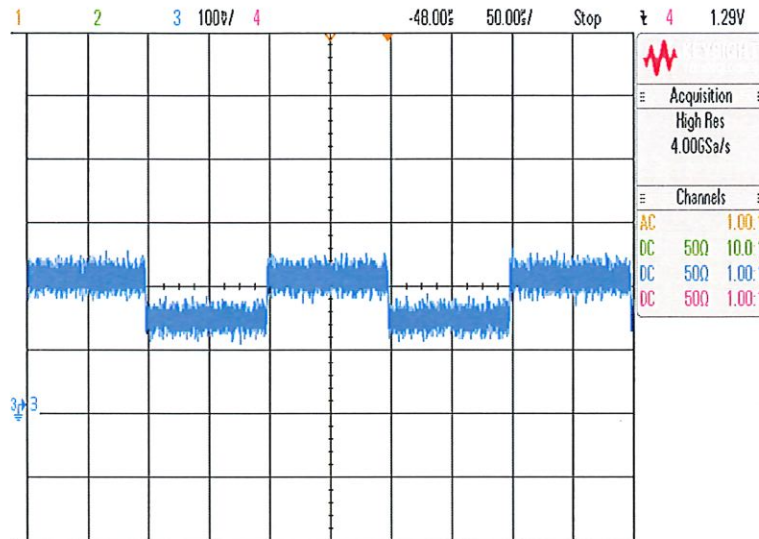




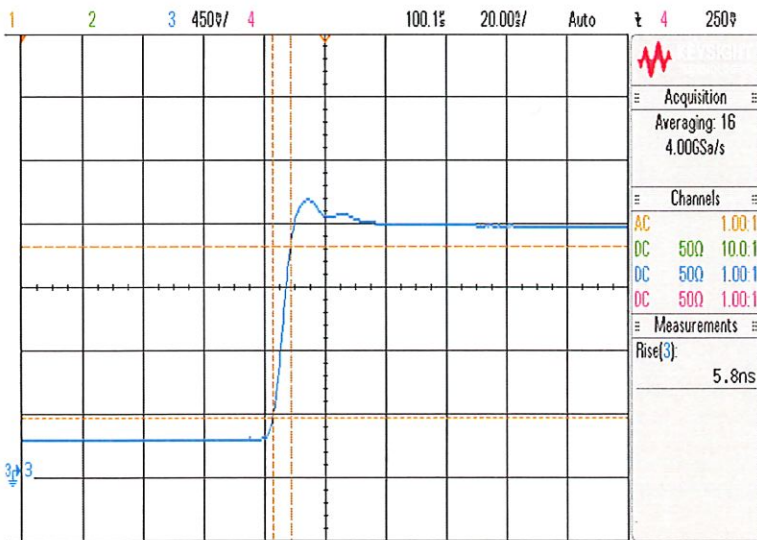
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## TSS



## Rise Time



## Fall Time

