

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

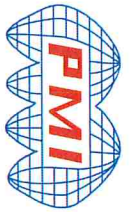
CUSTOMER: _____
 SO: _____
 MODEL NO: SDLVA-6G18G-CD-2-OPT218
 SERIAL NO: PL42816/2347

TESTED BY: Jim Hopson
 TEMPERATURE: +25°C
 DATE: 11/20/2023
 DRAWING NO: 27623906 REV: A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC PMI QA3
1	Frequency Range	2.0 GHz – 18.0 GHz	GHz - GHz	
2	Flatness	± 2.0 dB Maximum	± 1.6 dB 25°C See Plots	
3	TSS	-70 dBm Minimum	-71dBm	
4	VSWR	2.0:1 (Input)	1.59:1	
5	Input Power	+17 dBm CW Maximum	Pass	
6	RF Out	+13 dBm ±3 dB Typical	14.5/12.1 dBm	
7	Log Slope	25 mV/dB (±10%) 50Ω	25.1 mV/dB See Plot	
8	Log Range	-70 to +5 dBm	See Plots	
9	Log Linearity	±2.5 dB (-40°C - +85°C)	2.11/-1.29dB See Plots	
10	Pulse Range	30 ns to CW	Pass	
11	Rise Time	10 ns (6 ns Typical)	5.5 ns	
12	Recovery Time	60 ns Typical	60 ns Typical	
13	DC Supply	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	220 mA 100 mA	

QA/QC Approval: *K. Morte*

Date: 11-20-23



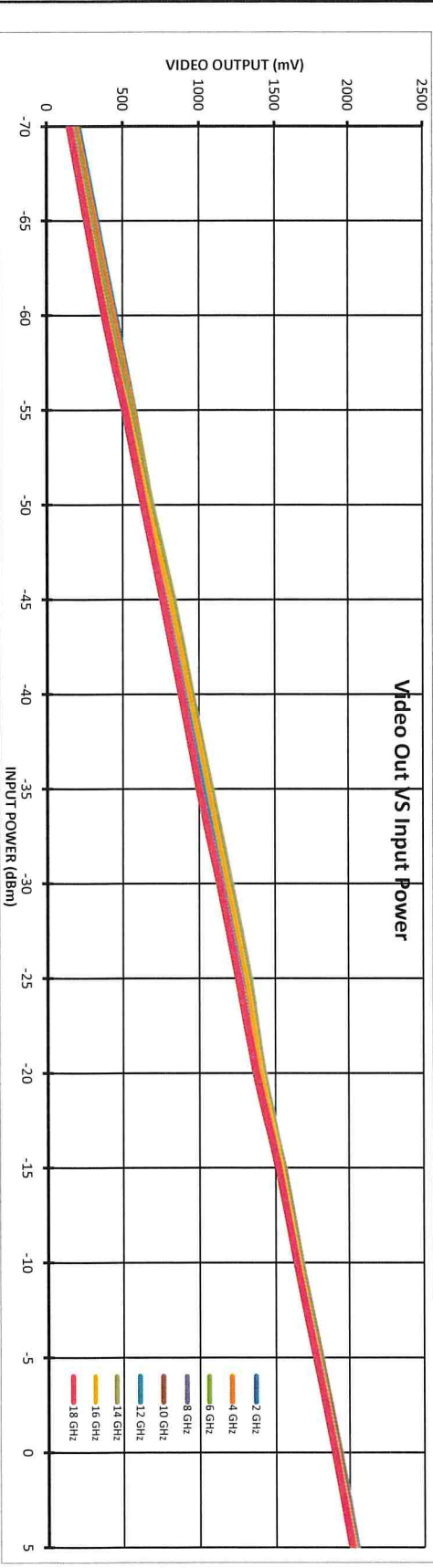
Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LN. ERR. (dB)
2 GHz	1917	24.52	0.9
4 GHz	1919	24.71	0.611
6 GHz	1925	25.22	1.161
8 GHz	1925	25.36	1.101
10 GHz	1929	25.71	0.787
12 GHz	1924	25.22	0.667
14 GHz	1930	24.98	1.047
16 GHz	1922	25.1	0.869
18 GHz	1897	25.19	0.669

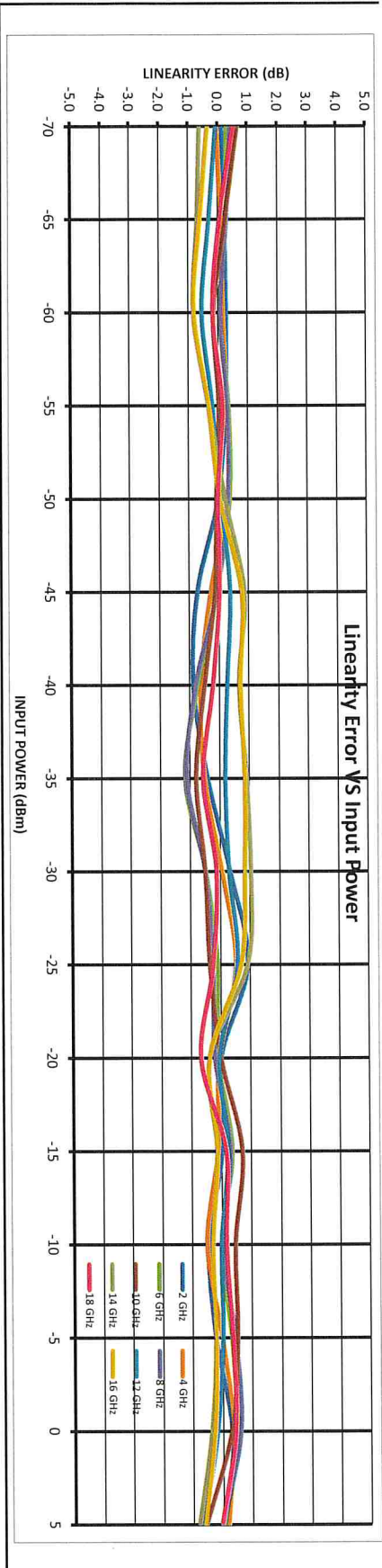
Avg. Slope: 25.1 mV/dB

RF Input Power (dbm)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
Measured Value (mV)	204	329	453	575	691	796	915	1049	1190	1327	1427	1550	1661	1789	1925	2044
Error (mV)	3	6	7	6	0	-18	-21	-10	8	23	0	1	-11	-6	8	4
Linearity Error (dB)	0.13	0.23	0.28	0.26	-0.01	-0.73	-0.87	-0.41	0.34	0.93	0.01	0.03	-0.45	-0.23	0.32	0.17
Measured Value (mV)	188	315	440	567	691	800	915	1041	1179	1314	1423	1545	1659	1795	1928	2047
Error (mV)	-1	3	4	4	8	-7	-15	-13	2	13	-1	-3	-12	-9	9	5
Linearity Error (dB)	-0.03	0.11	0.17	0.31	0.32	-0.27	-0.61	-0.51	0.07	0.54	-0.05	-0.12	-0.50	0.00	0.38	0.20
Measured Value (mV)	167	293	414	547	674	789	898	1013	1156	1292	1418	1556	1672	1807	1937	2052
Error (mV)	7	7	2	9	10	-1	-18	-29	-12	-2	-3	9	-1	8	12	1
Linearity Error (dB)	0.29	0.29	0.09	0.36	0.40	-0.04	-0.72	-1.16	-0.49	-0.10	-0.10	0.37	-0.03	0.33	0.48	0.04
Measured Value (mV)	162	285	406	539	666	783	891	1010	1152	1285	1413	1553	1673	1810	1941	2052
Error (mV)	12	8	2	8	8	-1	-20	-28	-13	-6	-5	8	1	11	16	0
Linearity Error (dB)	0.46	0.31	0.08	0.32	0.33	-0.05	-0.79	-1.10	-0.50	-0.26	-0.21	0.31	0.05	0.45	0.62	-0.01
Measured Value (mV)	147	265	383	516	642	769	888	1009	1145	1277	1415	1562	1694	1814	1937	2043
Error (mV)	17	7	-4	1	-2	-3	-13	-20	-13	-9	0	19	12	14	14	-14
Linearity Error (dB)	0.68	0.27	-0.14	0.03	-0.06	-0.12	-0.49	-0.79	-0.50	-0.36	0.01	0.72	0.47	0.53	0.31	-0.56
Measured Value (mV)	157	277	397	532	665	799	922	1046	1175	1308	1418	1551	1671	1798	1919	2033
Error (mV)	-2	-8	-14	-5	2	10	7	5	8	15	-1	5	-1	0	-5	-17
Linearity Error (dB)	-0.07	-0.31	-0.55	-0.19	0.08	0.39	0.27	0.19	0.31	0.58	-0.06	0.22	-0.02	0.01	-0.19	-0.67
Measured Value (mV)	166	289	411	548	687	828	948	1079	1207	1329	1421	1552	1673	1800	1921	2035
Error (mV)	-15	-17	-20	-8	6	22	17	23	26	23	-10	-4	-8	-5	-9	-20
Linearity Error (dB)	-0.62	-0.70	-0.81	-0.33	0.23	0.88	0.68	0.92	1.05	0.93	-0.39	-0.14	-0.30	-0.22	-0.37	-0.81
Measured Value (mV)	156	275	395	533	668	812	936	1065	1190	1312	1410	1542	1663	1791	1915	2032
Error (mV)	-9	-15	-21	-8	1	20	18	22	21	18	-10	-3	-8	-5	-7	-15
Linearity Error (dB)	-0.34	-0.60	-0.82	-0.32	0.05	0.79	0.73	0.87	0.85	0.71	-0.39	-0.13	-0.31	-0.21	-0.27	-0.61
Measured Value (mV)	147	261	381	515	637	764	884	1001	1138	1261	1376	1523	1649	1780	1908	2022
Error (mV)	14	2	-4	4	0	1	-5	-14	-3	-6	-17	4	4	9	11	-1
Linearity Error (dB)	0.55	0.07	-0.16	0.16	0.00	0.04	-0.20	-0.55	-0.12	-0.23	-0.67	-0.17	0.17	0.37	0.45	-0.03

Flatness dB: ±1.6 dB



PL422816
+25°C



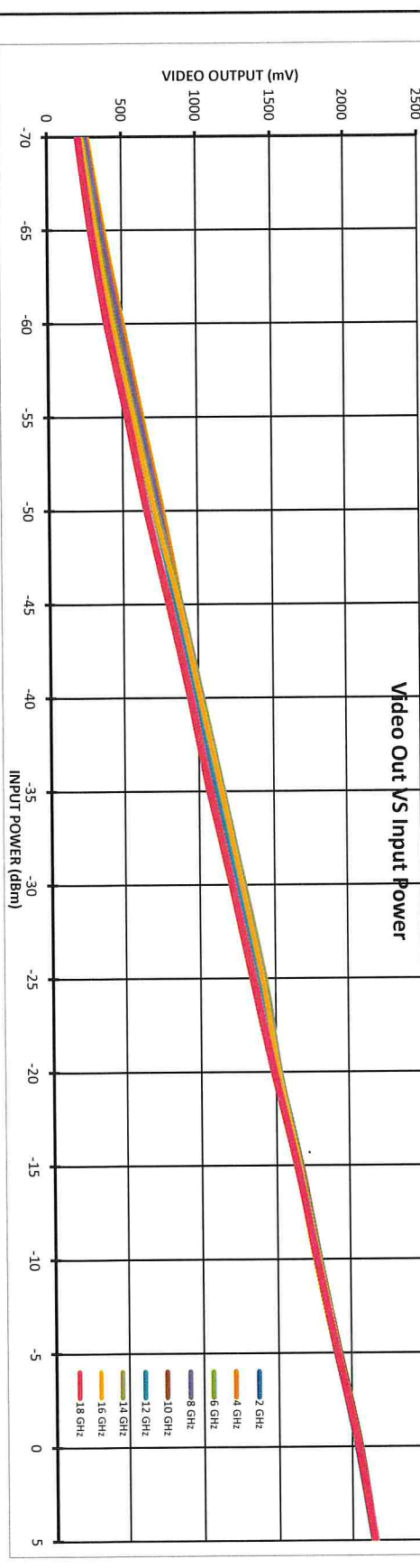


Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LN. ERR. (dB)
2 GHz	2029	25.38	1.1
4 GHz	2028	25.38	0.755
6 GHz	2027	25.75	1.333
8 GHz	2036	25.9	1.161
10 GHz	2047	26.41	1.452
12 GHz	2040	26.22	0.97
14 GHz	2051	26.28	1.268
16 GHz	2048	26.32	1.236
18 GHz	2029	26.86	2.115

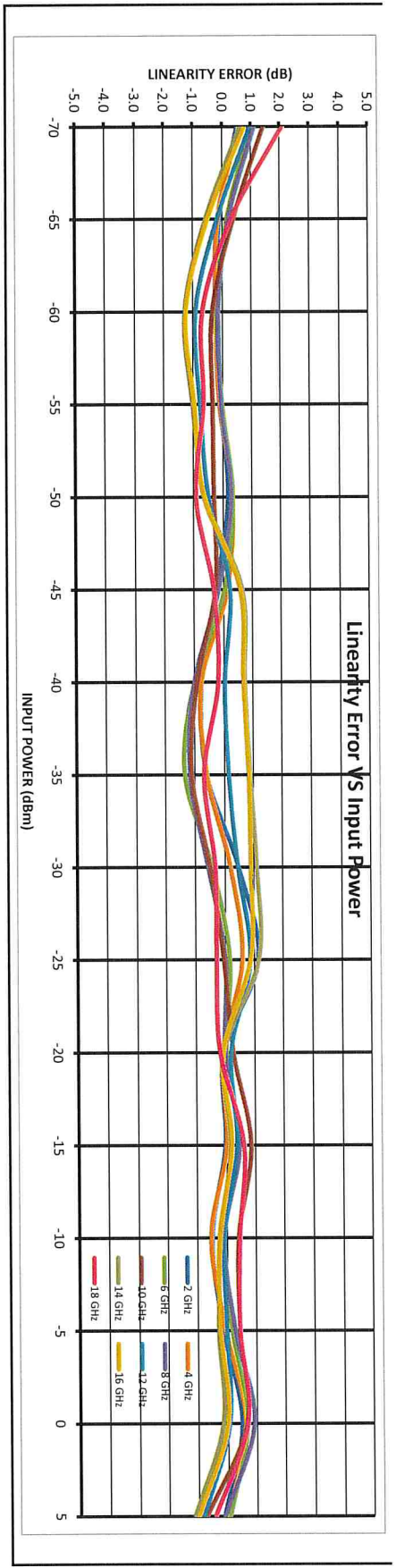
RF Input Power (dBm)	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	285	376	502	631	764	880	994	1125	1279	1423	1519	1647	1762	1898	2041	2152
4 GHz	267	375	500	630	768	890	994	1125	1272	1409	1518	1648	1761	1900	2044	2155
6 GHz	250	357	477	610	748	869	971	1091	1243	1387	1512	1652	1765	1902	2044	2157
8 GHz	253	359	479	611	749	867	975	1100	1245	1389	1518	1660	1775	1914	2060	2163
10 GHz	237	341	454	586	719	852	967	1094	1242	1386	1526	1674	1794	1927	2065	2160
12 GHz	230	331	443	578	716	866	992	1126	1265	1407	1520	1656	1775	1908	2041	2149
14 GHz	228	328	441	579	721	886	1019	1155	1292	1425	1524	1661	1783	1912	2047	2153
16 GHz	226	324	436	575	715	879	1013	1149	1282	1413	1519	1658	1778	1910	2048	2153
18 GHz	206	292	400	535	662	812	950	1071	1215	1350	1487	1643	1773	1907	2048	2152

Measured Value (mV)	285	376	502	631	764	880	994	1125	1279	1423	1519	1647	1762	1898	2041	2152
ERROR (mV)	13	-3	-4	-2	5	-6	-19	12	29	-2	-1	-13	-4	12	-3	
LINEARITY ERROR (dB)	0.52	-0.11	-0.14	-0.06	0.18	-0.25	-0.76	-0.60	0.47	1.14	-0.08	-0.03	-0.50	-0.14	0.49	-0.14



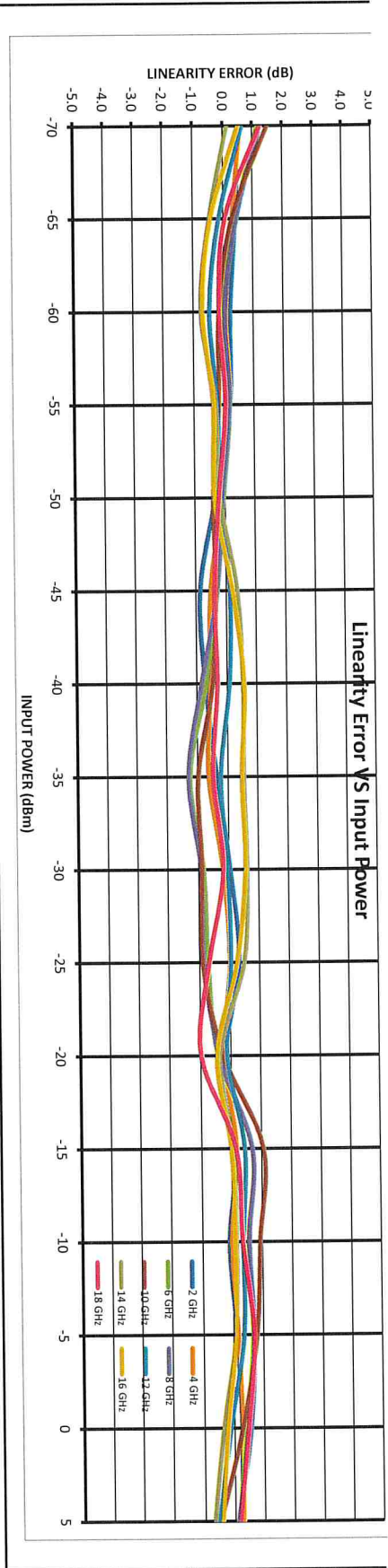
PL42816

-40°C



PL 42816

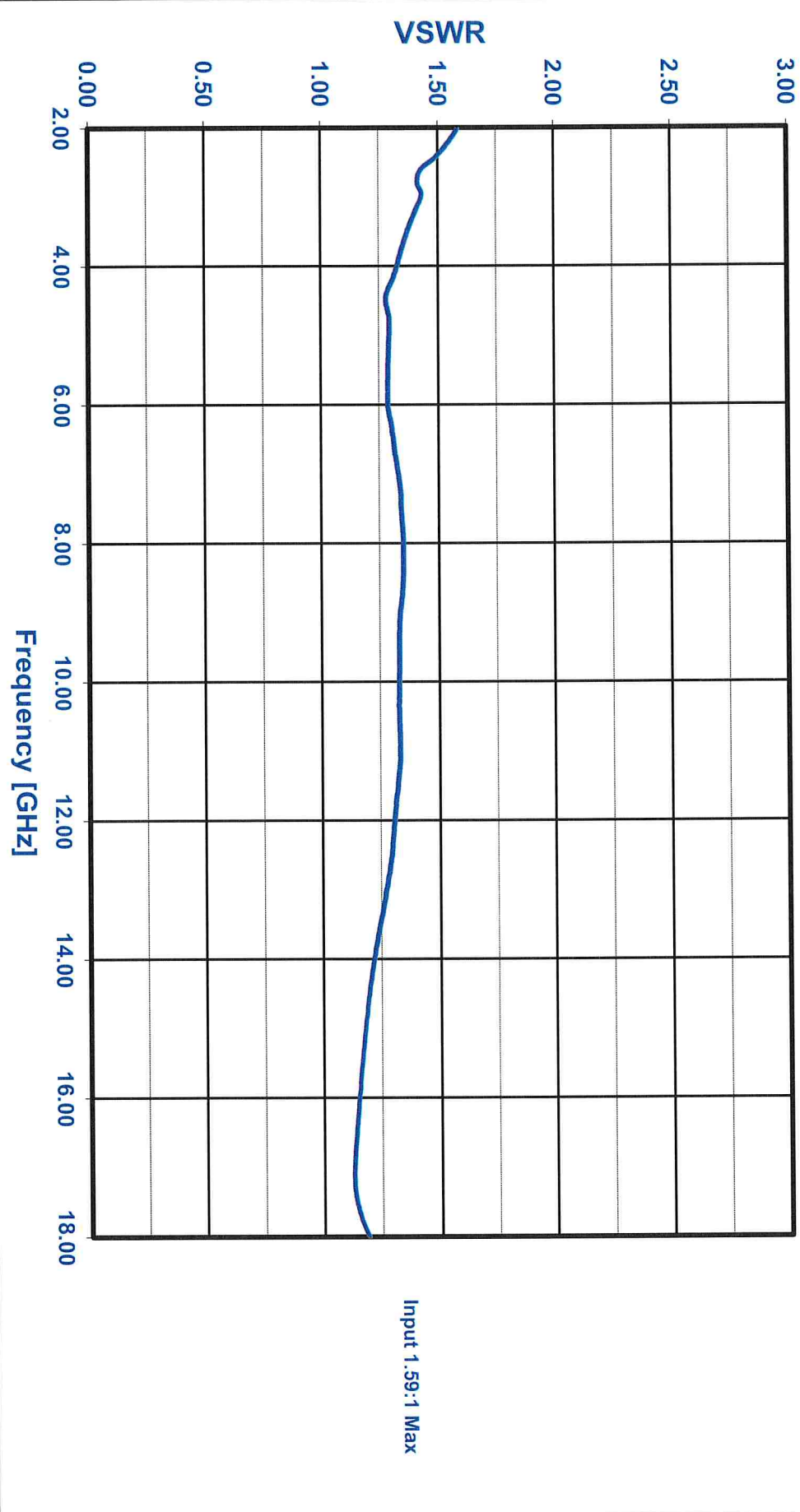
+85°C



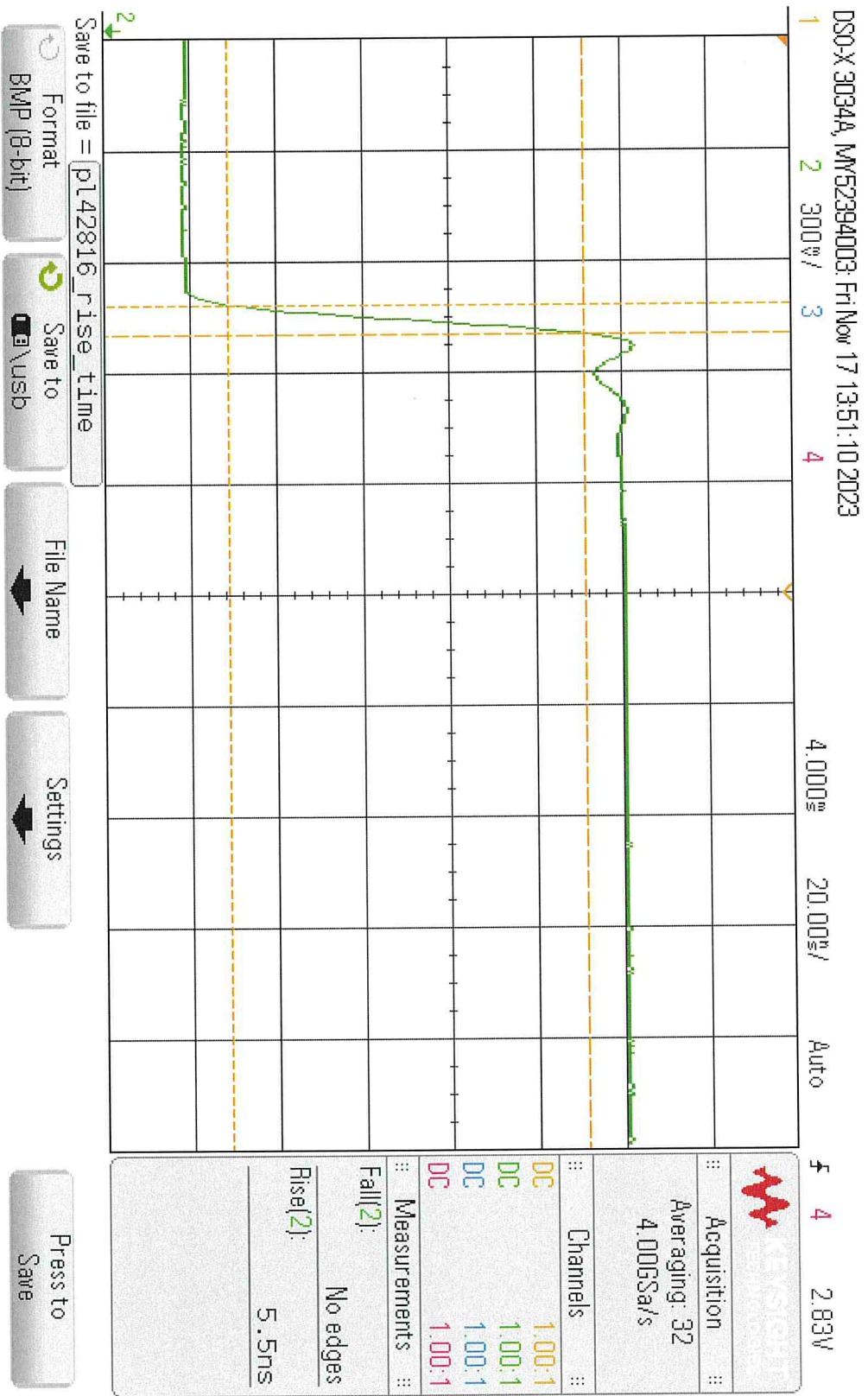
Model Number: SDLVA-2G18G-CD-2-OPT218
Serial Number: PL42816

Temperature: +25C

VSWR GRAPH

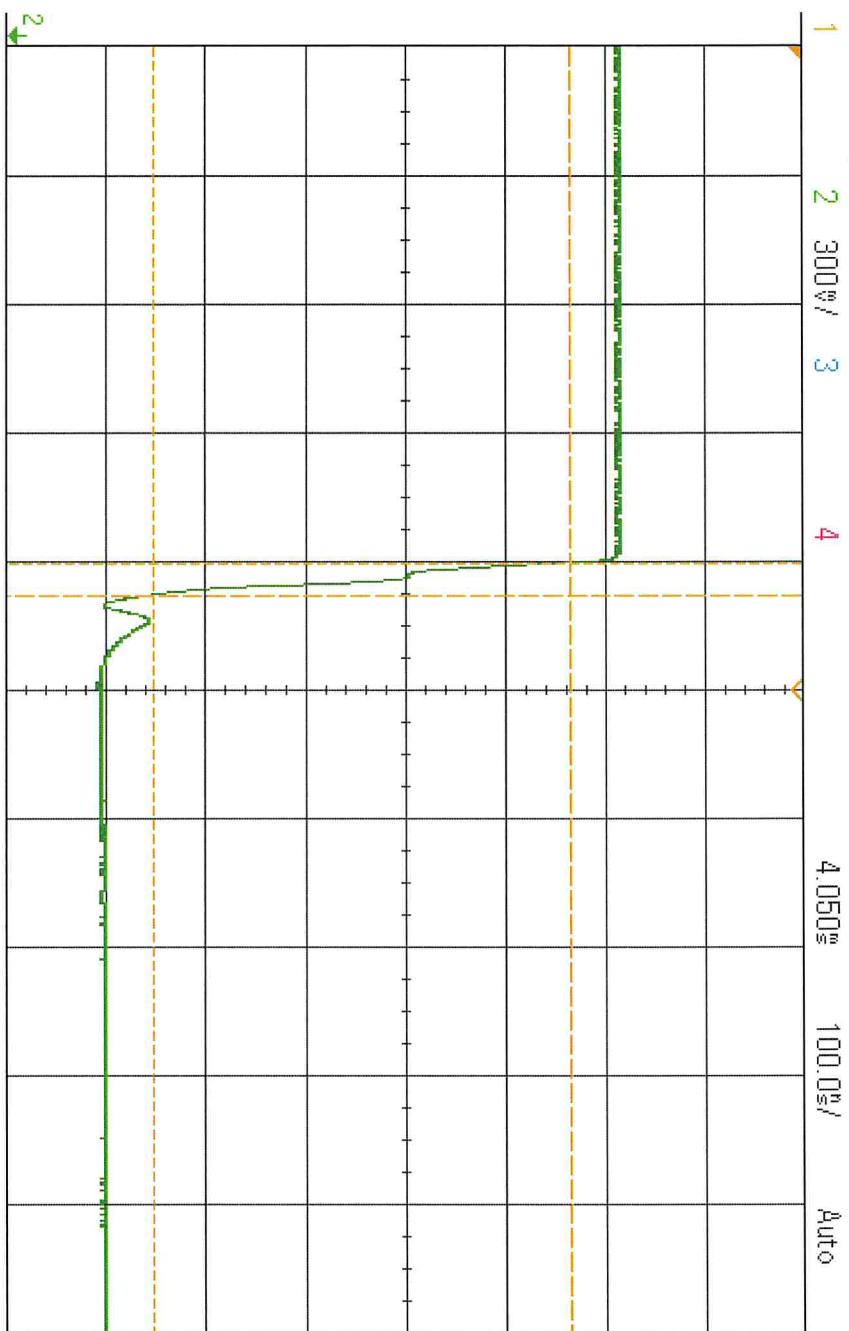


PL42816 Rise Time



PL42816 Recovery

DSO-X 3034A, MW52394003, Fri Nov 17 13:52:15 2023



4.050ns 100.0mV/div Auto

f 4 2.83V

KEYSIGHT
TECHNOLOGIES

Acquisition ::
Averaging: 32
4.00GSa/s

Channels	
DC	1.00:1
DC	1.00:1
DC	1.00:1
DC	1.00:1

Measurements ::

Rise(2): No edges

Fall(2): 24.8ns

Measurement Menu

Source 2

Type: Fall

Add Measurement

Settings

Clear Meas

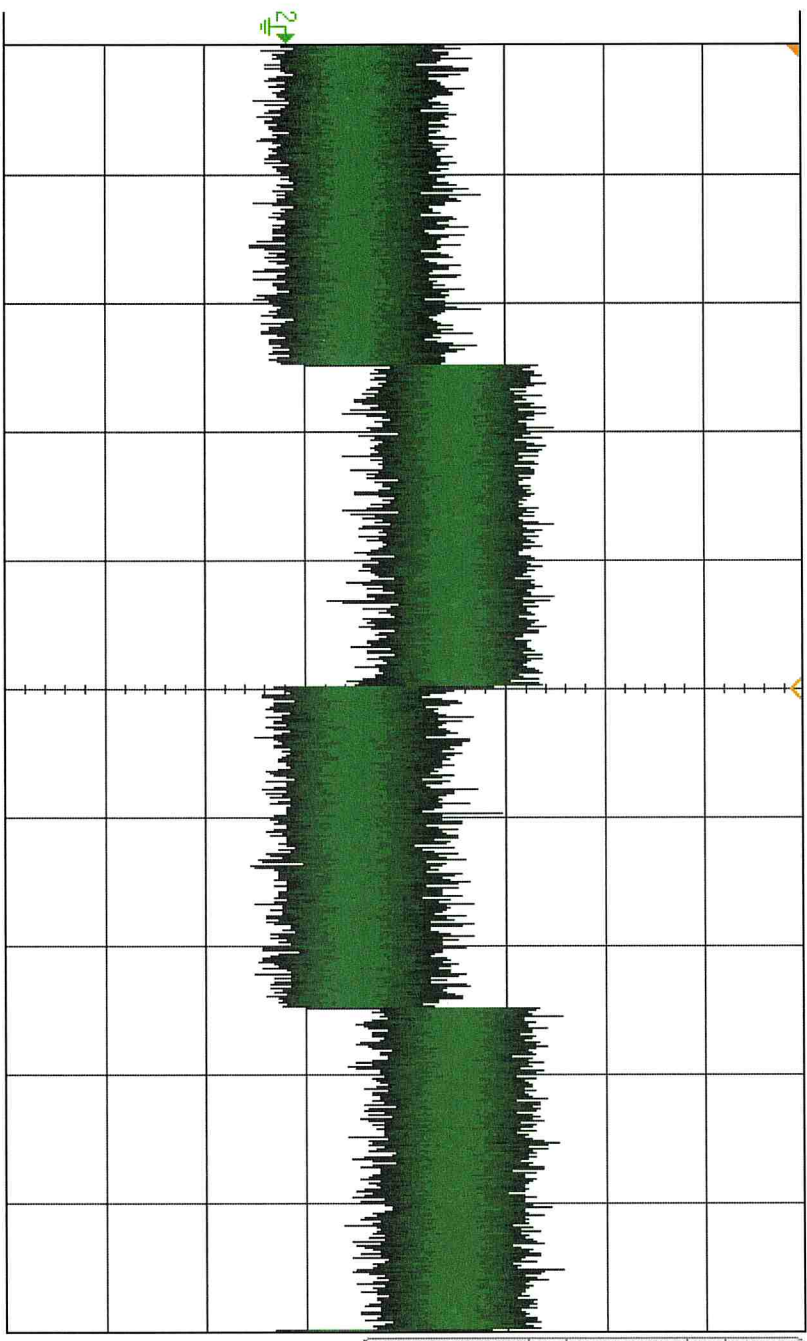
Statistics

PL 42816

TSS -71

DSO-X 3034A, MW52394003, Fri Nov 17 13:53:17 2023

1 2 100% / 3 4 4.050s 20.00s / Auto f 4 2.83V



KEYSIGHT TECHNOLOGIES	
Acquisition	:
Normal	:
4.00GSa/s	:
Channels	:
DC	1.00:1
DC	1.00:1
DC	1.00:1
DC	1.00:1

Cursors Menu
Mode
Off

To turn on cursors, press the [Cursors] key on the front panel.