



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

PL37926/2239

Customer: \_\_\_\_\_ Tested By: RCombs  
SO No: \_\_\_\_\_ Temperature: +25° C  
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/25/2022  
Serial No: PL37926/2239 Drawing No: 27623906 Rev: A1

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	±1.2 dB 25°C See Plots	
3	TSS:	-70 dBm Minimum	-72 dBm	
4	VSWR:	2.0:1 (Input)	1.7:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	12.67 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.8 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)	±1.2 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	7.5 ns	
12	Recovery Time:	60 ns Typical	49.8 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 277 mA -12V @ 102 mA	PMI QA2

QA/QC Approval: \_\_\_\_\_

PMI  
QA2

Date: 10/27/2022



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

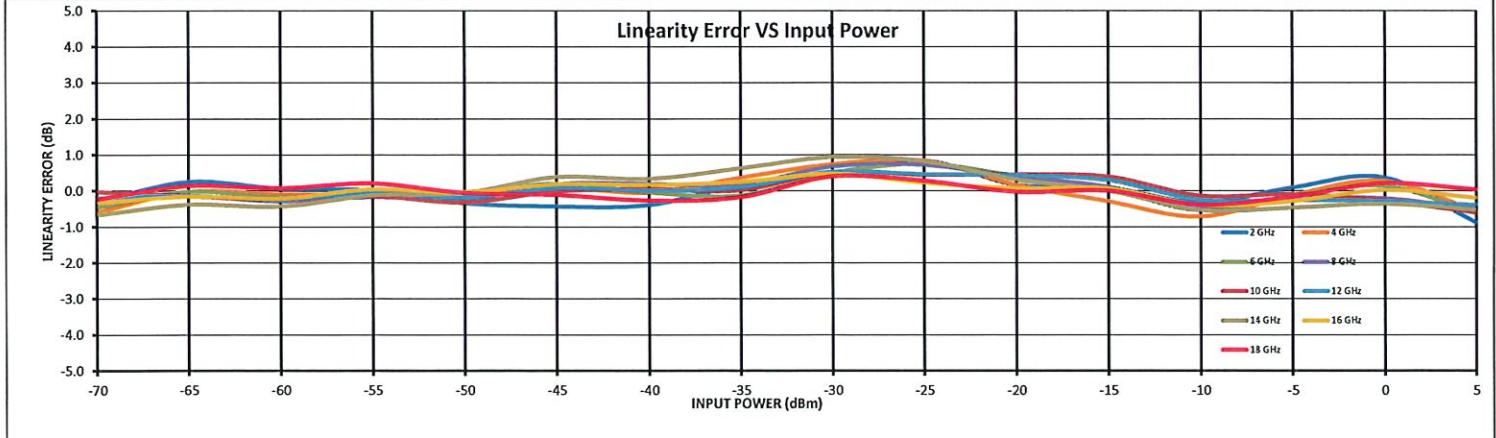
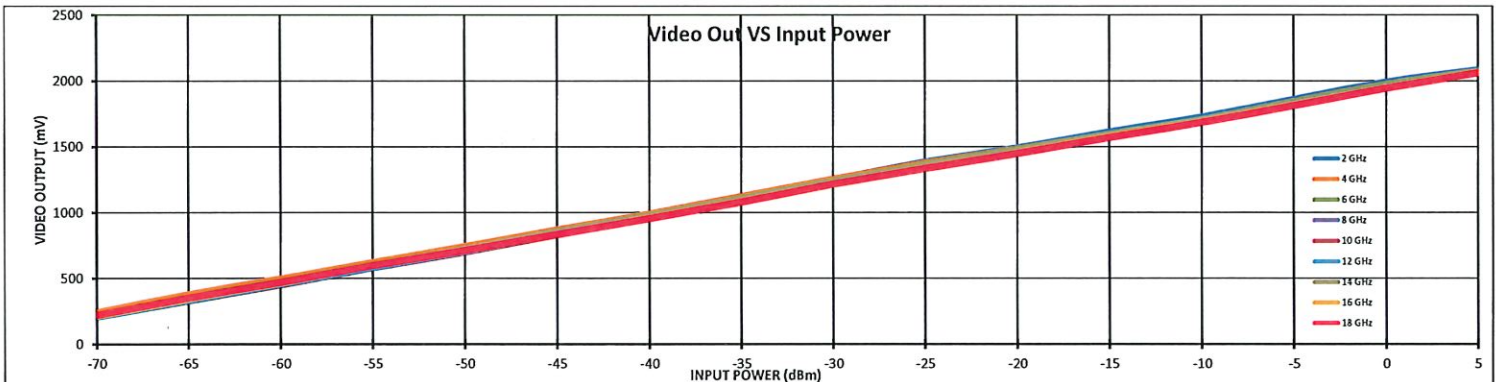
PL37926/2239

## Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL37926/2239  
 Date: 10/25/2022  
 Tested By: RCombs  
 Test Temp: +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	1990	24.8	0.9	246	384	503	626	741	863	988	1126	1258	1391	1498	1620	1734	1868	1999	2092	Measured Value (mV)
				-7	6	2	1	-8	-11	-10	4	12	21	4	2	-8	2	9	-22	ERROR (mV)
				-0.29	0.26	0.07	0.02	-0.34	-0.42	-0.39	0.17	0.50	0.85	0.17	0.09	-0.32	0.10	0.38	-0.88	LINEARITY ERROR (dB)
4 GHz	1976	24.5	0.8	249	385	506	629	751	878	996	1128	1260	1385	1491	1602	1714	1851	1983	2084	Measured Value (mV)
				-15	0	-2	-2	-1	3	-1	9	18	21	4	-7	-17	-3	7	-14	ERROR (mV)
				-0.59	-0.01	-0.09	-0.07	-0.05	0.11	-0.04	0.37	0.75	0.85	0.17	-0.28	-0.71	-0.12	0.28	-0.56	LINEARITY ERROR (dB)
6 GHz	1976	24.8	0.8	227	362	482	610	734	864	982	1104	1243	1374	1490	1605	1714	1848	1979	2085	Measured Value (mV)
				-11	0	-4	0	-1	5	-1	-3	12	19	10	2	-13	-3	4	-15	ERROR (mV)
				-0.45	-0.01	-0.16	-0.02	-0.02	0.21	-0.03	-0.12	0.49	0.77	0.42	0.07	-0.53	-0.13	0.15	-0.62	LINEARITY ERROR (dB)
8 GHz	1965	24.9	0.7	211	340	461	589	712	847	972	1096	1234	1360	1476	1594	1705	1835	1960	2077	Measured Value (mV)
				-8	-4	-7	-4	-6	5	4	17	18	10	3	-11	-5	-5	-13	ERROR (mV)	
				-0.32	-0.14	-0.28	-0.16	-0.24	0.20	0.20	0.17	0.69	0.73	0.40	0.12	-0.44	-0.21	-0.20	-0.52	LINEARITY ERROR (dB)
10 GHz	1953	25.0	0.6	202	324	447	574	695	827	954	1078	1216	1339	1464	1588	1699	1826	1946	2063	Measured Value (mV)
				-1	-3	-6	-3	-8	0	1	1	13	11	11	10	-3	-2	-7	-15	ERROR (mV)
				-0.02	-0.13	-0.23	-0.13	-0.31	0.00	0.06	0.02	0.53	0.45	0.45	0.41	-0.13	-0.08	-0.27	-0.60	LINEARITY ERROR (dB)
12 GHz	1960	25.0	0.5	209	335	457	586	708	839	962	1089	1225	1348	1472	1593	1704	1829	1953	2075	Measured Value (mV)
				-5	-3	-6	-2	-4	2	0	2	13	12	11	8	-6	-6	-7	-10	ERROR (mV)
				-0.19	-0.13	-0.23	-0.06	-0.17	0.09	0.01	0.10	0.54	0.47	0.44	0.30	-0.25	-0.24	-0.29	-0.39	LINEARITY ERROR (dB)
14 GHz	1962	24.7	0.9	216	347	469	600	725	860	982	1113	1244	1365	1475	1592	1702	1827	1953	2072	Measured Value (mV)
				-16	-9	-10	-3	-1	10	8	16	23	21	8	0	-13	-11	-9	-13	ERROR (mV)
				-0.66	-0.37	-0.42	-0.12	-0.04	0.39	0.34	0.63	0.94	0.83	0.32	0.02	-0.53	-0.46	-0.35	-0.53	LINEARITY ERROR (dB)
16 GHz	1958	24.8	0.5	212	341	463	594	716	846	969	1095	1225	1343	1463	1587	1700	1827	1958	2077	Measured Value (mV)
				-8	-4	-5	1	-1	5	4	6	12	6	2	2	-10	-7	1	-5	ERROR (mV)
				-0.32	-0.15	-0.20	0.06	-0.03	0.20	0.17	0.25	0.48	0.24	0.08	0.07	-0.39	-0.28	0.03	-0.19	LINEARITY ERROR (dB)
18 GHz	1940	24.5	0.4	221	352	473	599	715	836	954	1079	1215	1335	1450	1573	1686	1814	1945	2063	Measured Value (mV)
				-5	4	2	5	-1	-3	-7	-4	10	7	-1	0	-9	-4	5	1	ERROR (mV)
				-0.23	0.15	0.08	0.22	-0.05	-0.11	-0.27	-0.18	0.40	0.29	-0.02	0.01	-0.38	-0.15	0.21	0.04	LINEARITY ERROR (dB)
Avg. Slope: 24.8 mV/dB				0.9	1.2	1.2	1.1	1.1	1	0.9	1	0.9	1.1	1	1	1	1.1	1.1	0.6	Flatness dB: ±1.2 dB





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

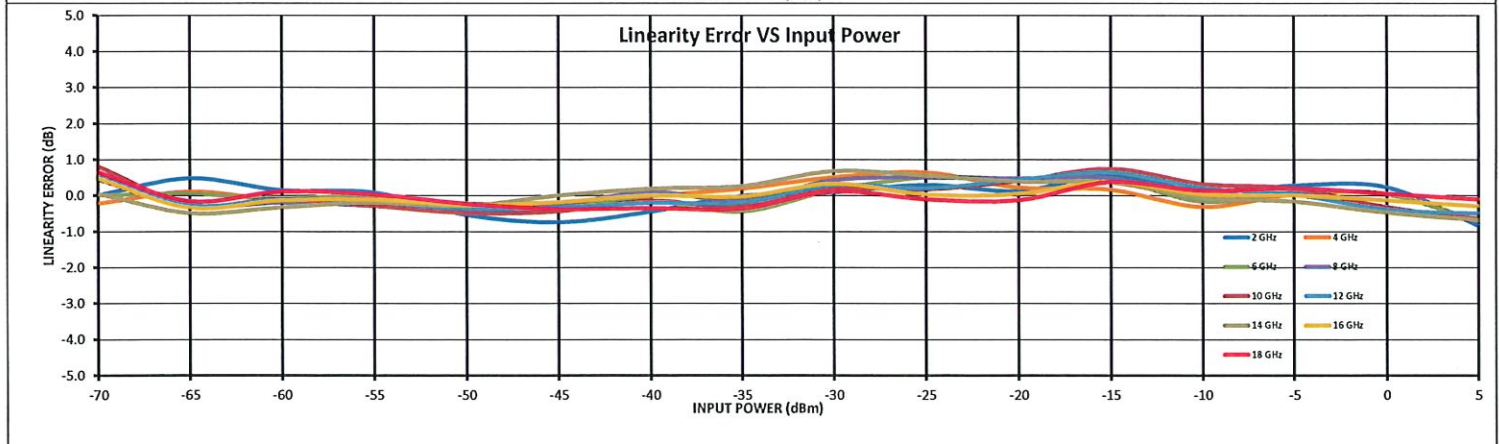
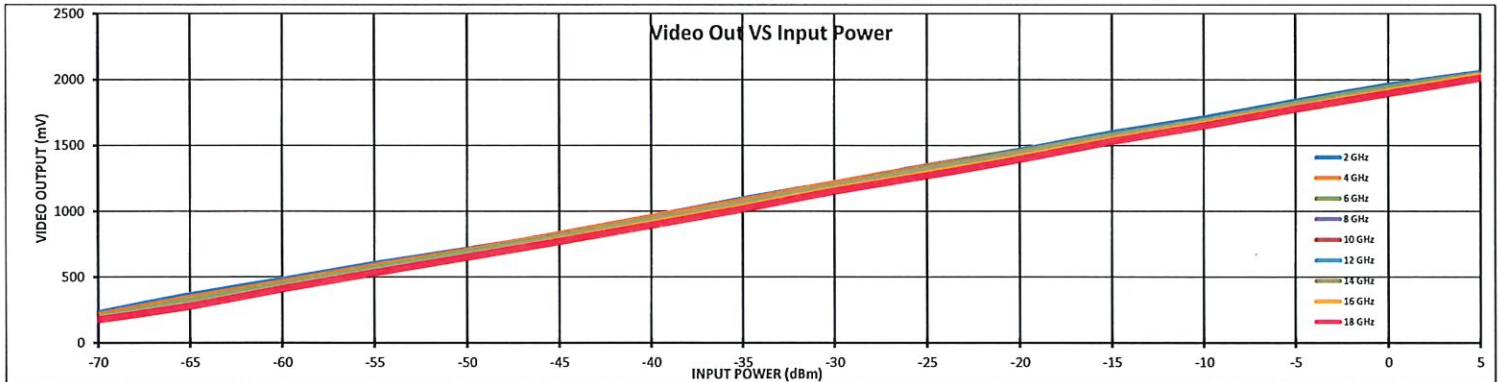
PL37926/2239

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL37926/2239  
 Date: 10/25/2022  
 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)	Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)
2 GHz	1954	24.6	0.8	233	367	482	603	711	829	959	1093	1219	1347	1466	1600	1711	1838	1960	2057				
				1	12	4	2	-13	-18	-11	0	2	8	3	14	2	7	6	-20				
				0.02	0.49	0.16	0.09	-0.53	-0.73	-0.44	0.00	0.10	0.31	0.14	0.58	0.10	0.29	0.25	-0.83				
4 GHz	1943	24.6	0.7	217	348	466	590	706	830	960	1088	1219	1345	1457	1579	1690	1821	1945	2049				
				-5	3	-3	-1	-8	-7	0	5	13	16	6	4	-8	1	2	-17				
				-0.21	0.12	-0.11	-0.06	-0.34	-0.28	-0.01	0.20	0.52	0.65	0.24	0.17	-0.31	0.04	0.07	-0.70				
6 GHz	1944	24.9	0.7	203	328	449	576	695	820	945	1062	1202	1335	1458	1583	1691	1822	1946	2051				
				0	2	-2	1	-5	-4	-3	-11	4	13	12	12	-4	2	1	-17				
				0.02	0.06	-0.08	0.02	-0.21	-0.18	-0.13	-0.43	0.17	0.52	0.48	0.47	-0.16	0.10	0.05	-0.70				
8 GHz	1934	25.2	0.7	181	289	417	541	662	793	929	1049	1189	1317	1442	1569	1682	1810	1926	2043				
				12	-7	-5	-7	-12	-6	3	-3	11	13	12	13	0	2	-8	-17				
				0.46	-0.28	-0.18	-0.28	-0.46	-0.25	0.11	-0.13	0.44	0.51	0.49	0.50	0.00	0.07	-0.31	-0.69				
10 GHz	1921	25.2	0.8	175	274	404	526	647	774	908	1030	1169	1295	1427	1561	1677	1800	1913	2031				
				21	-6	-2	-7	-12	-11	-4	-8	5	10	19	8	5	-8	-16					
				0.83	-0.25	-0.08	-0.27	-0.48	-0.43	-0.14	-0.30	0.20	0.18	0.42	0.75	0.33	0.21	-0.33	-0.63				
12 GHz	1929	25.2	0.7	180	284	415	539	660	787	916	1042	1181	1304	1436	1568	1683	1804	1920	2043				
				15	-6	-2	-4	-9	-8	-5	-5	8	5	11	17	6	1	-10	-12				
				0.58	-0.26	-0.09	-0.16	-0.36	-0.33	-0.19	-0.19	0.30	0.21	0.45	0.66	0.22	0.04	-0.38	-0.49				
14 GHz	1929	24.9	0.7	184	295	424	552	675	807	936	1063	1198	1319	1440	1564	1678	1800	1917	2037				
				2	-12	-8	-5	-7	0	5	7	17	14	10	9	-1	-4	-12	-17				
				0.07	-0.48	-0.31	-0.18	-0.27	0.01	0.20	0.27	0.69	0.57	0.40	0.37	-0.05	-0.16	-0.46	-0.67				
16 GHz	1921	25.1	0.5	179	284	414	540	661	789	919	1043	1178	1296	1421	1555	1672	1796	1918	2040				
				12	-8	-3	-2	-6	-4	0	8	1	1	10	1	0	-3	-7					
				0.49	-0.33	-0.12	-0.10	-0.25	-0.17	0.01	-0.02	0.34	0.04	0.06	0.39	0.05	0.01	-0.12	-0.28				
18 GHz	1895	24.8	0.7	178	281	412	534	651	771	896	1019	1155	1273	1397	1533	1651	1776	1896	2016				
				16	-4	3	1	-6	-9	-8	-9	3	-2	-3	10	4	5	2	-2				
				0.66	-0.15	0.12	0.04	-0.23	-0.37	-0.34	-0.35	0.13	-0.09	-0.12	0.38	0.14	0.21	0.06	-0.09				
Avg. Slope: 24.9 mV/dB				1.2	1.9	1.6	1.6	1.3	1.2	1.3	1.5	1.3	1.5	1.4	1.3	1.2	1.2	1.3	0.8	Flatness dB: ±1.9 dB			





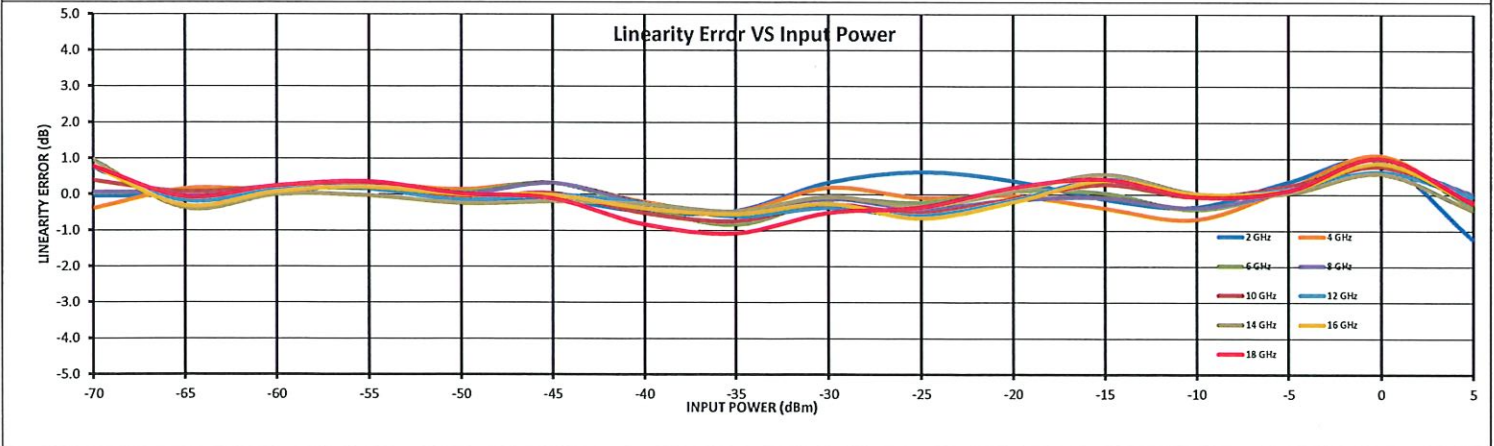
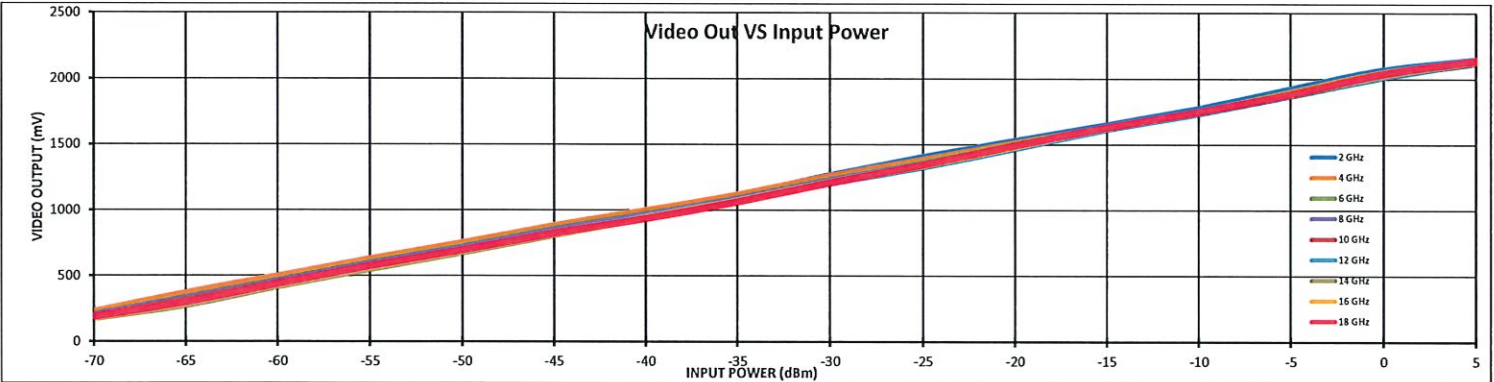
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218 Log Transfer Over Frequency -40°C

PL37926/2239



Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL37926/2239  
Date: 10/25/2022  
Tested By: RCombs  
Test Temp: -40°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	2052	26.3	1.2	210	342	474	614	732	865	988	1120	1272	1412	1537	1655	1781	1931	2077	2151	Measured Value (mV)	
				-1	-1	0	8	-5	-4	-12	-12	9	17	10	-3	-9	10	25	-33	Error (mV)	
				-0.04	-0.02	0.01	0.31	-0.19	-0.14	-0.47	-0.45	0.34	0.64	0.39	-0.12	-0.33	0.37	0.95	-1.24	Linearity Error (dB)	
4 GHz	2027	25.5	1.1	235	376	503	634	758	890	1003	1124	1268	1388	1517	1636	1755	1905	2055	2145	Measured Value (mV)	
				-10	4	3	8	4	8	-5	-12	5	-2	0	-9	-17	5	28	-9	Error (mV)	
				-0.39	0.16	0.14	0.30	0.14	0.33	-0.20	-0.46	0.20	-0.08	-0.02	-0.37	-0.68	0.19	1.10	-0.36	Linearity Error (dB)	
6 GHz	2022	25.9	1.0	211	341	471	606	729	866	977	1094	1241	1369	1507	1635	1752	1897	2048	2143	Measured Value (mV)	
				2	2	3	8	2	9	-9	-22	-4	-6	3	1	-11	4	26	-9	Error (mV)	
				0.06	0.08	0.10	0.31	0.08	0.34	-0.35	-0.84	-0.14	-0.22	0.11	0.05	-0.16	0.16	1.00	-0.34	Linearity Error (dB)	
8 GHz	2009	25.7	0.8	209	338	468	601	723	859	973	1094	1234	1355	1490	1621	1742	1883	2030	2138	Measured Value (mV)	
				2	2	3	7	1	8	-6	-14	-3	-10	-4	-2	-9	3	21	0	Error (mV)	
				0.07	0.07	0.13	0.29	0.02	0.32	-0.24	-0.65	-0.11	-0.39	-0.14	-0.07	-0.36	0.12	0.82	0.02	Linearity Error (dB)	
10 GHz	1995	25.8	0.8	201	321	454	586	704	836	951	1074	1215	1338	1477	1616	1736	1873	2016	2120	Measured Value (mV)	
				10	2	6	9	-2	1	-13	-19	-7	-13	-3	8	-1	7	20	-4	Error (mV)	
				0.40	0.08	0.22	0.34	-0.07	0.04	-0.51	-0.73	-0.27	-0.50	-0.11	0.29	-0.05	0.25	0.79	-0.15	Linearity Error (dB)	
12 GHz	2003	26.2	0.7	190	297	435	567	690	825	949	1071	1208	1333	1475	1621	1741	1876	2019	2132	Measured Value (mV)	
				20	-4	4	4	-4	0	-6	-16	-9	-15	-4	11	0	4	17	-1	Error (mV)	
				0.75	-0.17	0.14	0.16	-0.14	0.01	-0.25	-0.60	-0.36	-0.58	-0.16	0.44	0.01	0.16	0.64	-0.05	Linearity Error (dB)	
14 GHz	2016	26.6	1.0	181	279	422	554	681	815	946	1074	1217	1343	1487	1633	1751	1884	2032	2138	Measured Value (mV)	
				28	-10	0	-1	-6	-5	-7	-12	-1	-8	3	15	1	1	16	-11	Error (mV)	
				0.97	-0.37	0.00	-0.02	-0.23	-0.19	-0.25	-0.46	-0.06	-0.31	0.10	0.57	0.04	0.05	0.59	-0.42	Linearity Error (dB)	
16 GHz	2013	26.4	0.9	185	288	430	566	692	824	946	1074	1214	1335	1479	1627	1750	1884	2036	2139	Measured Value (mV)	
				21	-8	2	6	0	0	-10	-14	-7	-17	-5	11	1	3	23	-6	Error (mV)	
				0.80	-0.30	0.09	0.21	0.00	0.00	-0.38	-0.54	-0.25	-0.65	-0.21	0.40	0.03	0.13	0.88	-0.22	Linearity Error (dB)	
18 GHz	2016	26.4	1.077	189	299	439	574	697	826	939	1064	1211	1347	1494	1632	1751	1888	2043	2142	Measured Value (mV)	
				21	-2	7	10	1	-3	-22	-28	-13	-9	5	11	-1	3	27	-6	Error (mV)	
				0.79	-0.06	0.25	0.36	0.03	-0.10	-0.82	-1.08	-0.50	-0.35	0.20	0.43	-0.05	0.12	1.02	-0.23	Linearity Error (dB)	
Avg. Slope: 26.1 mV/dB				1	1.9	1.6	1.5	1.5	1.4	1.2	1.2	1.2	1.2	1.5	1.2	0.7	0.9	1.1	1.2	0.6	Flatness dB: ±1.9 dB

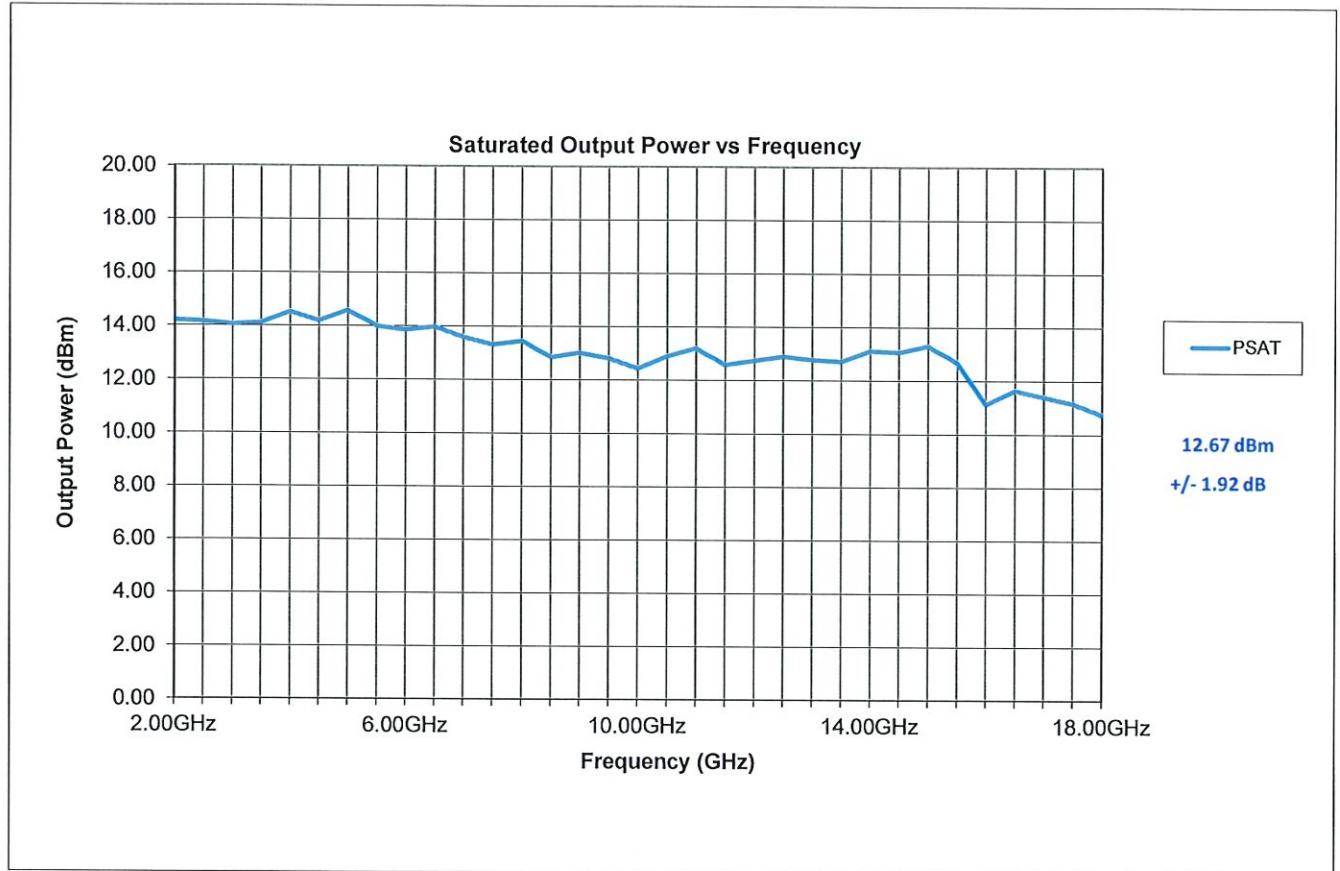




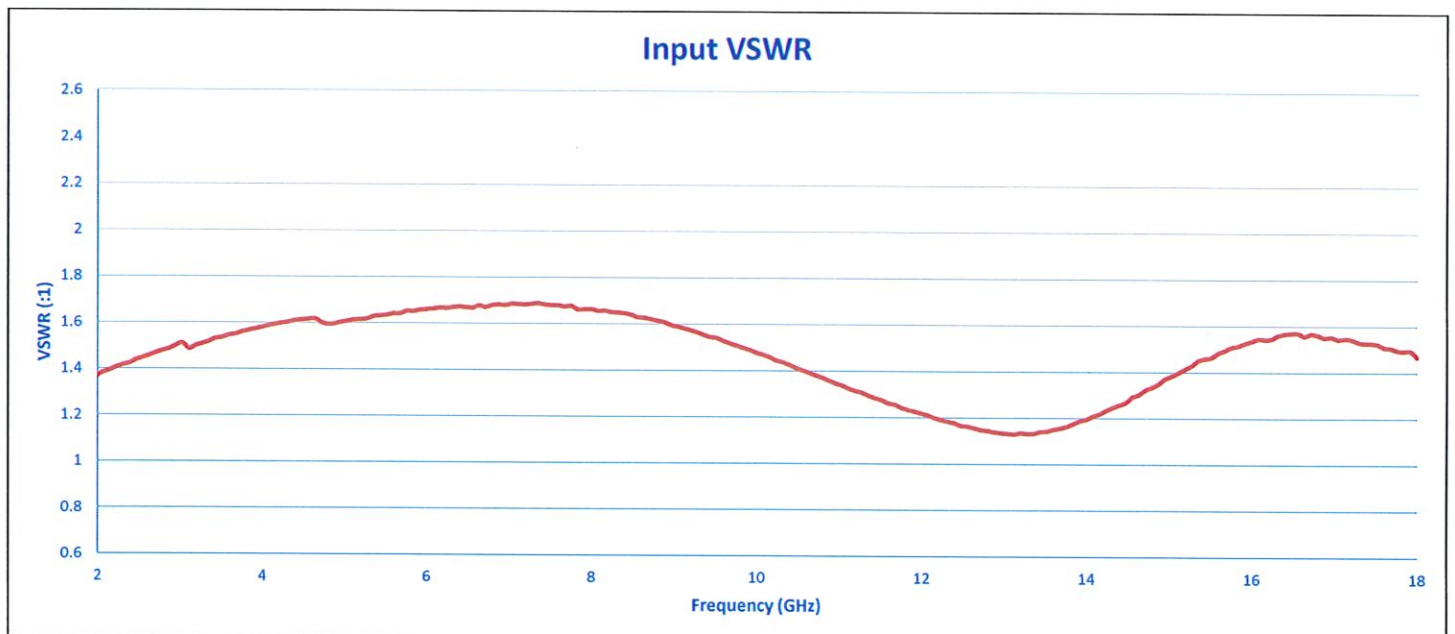
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL37926/2239

## PSAT



## INPUT VSWR

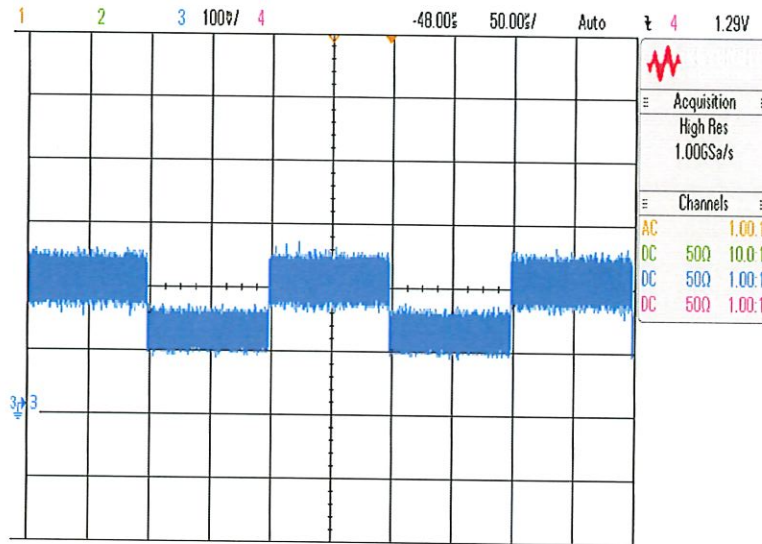




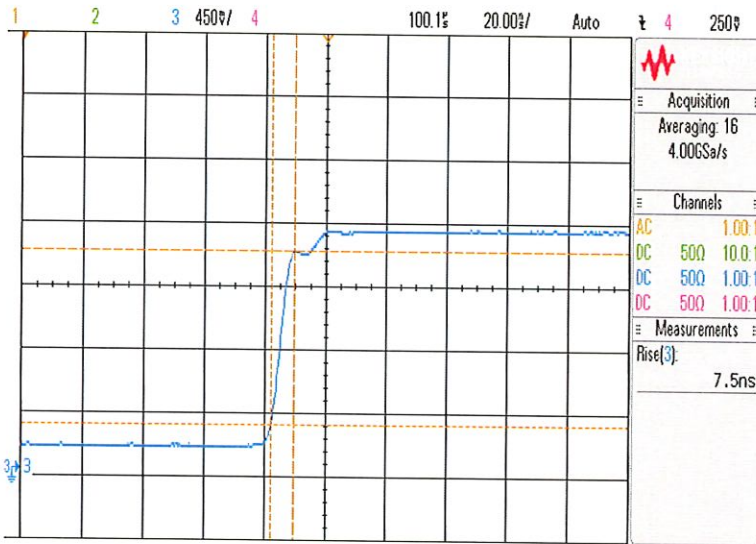
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL37926/2239

## TSS



## Rise Time



## Fall Time

