



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

PL42574/2342

Customer: \_\_\_\_\_ Tested By: RCombs  
SO No: \_\_\_\_\_ Temperature: +25° C  
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/30/2023  
Serial No: PL42574/2342 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	±1.1 dB 25°C See Plots	
3	TSS:	-70 dBm Minimum	-72 dBm	
4	VSWR:	2.0:1 (Input)	1.9:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	13.01 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.9 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)	±1.6 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	6.6 ns	
12	Recovery Time:	60 ns Typical	55.5 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 260 mA -12V @ 97 mA	PMI QA2

QA/QC Approval:  PMI  
QA2 Date: 10/31/2023



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

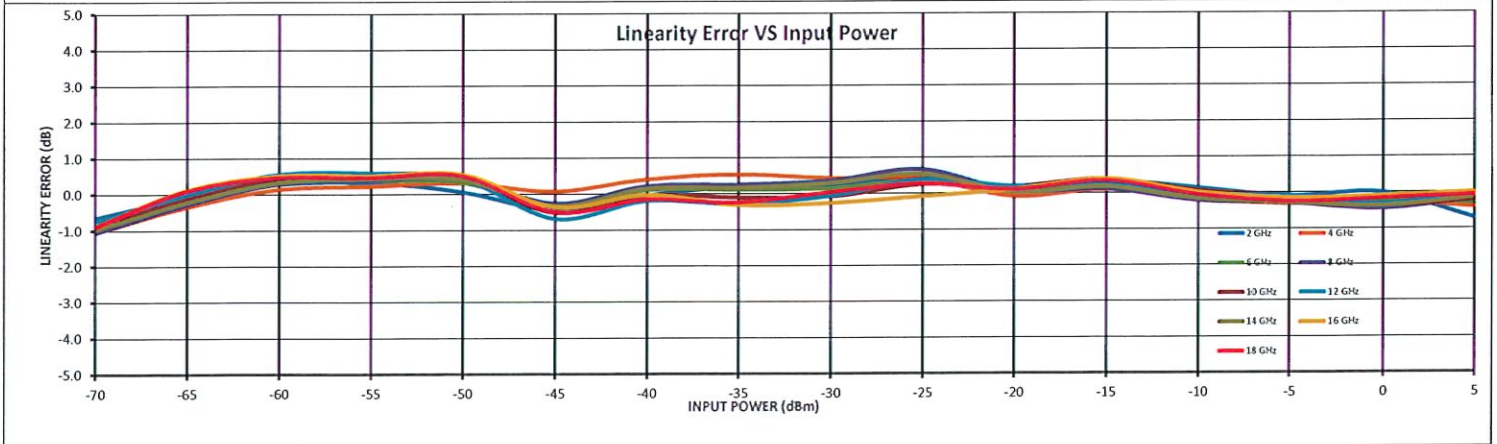
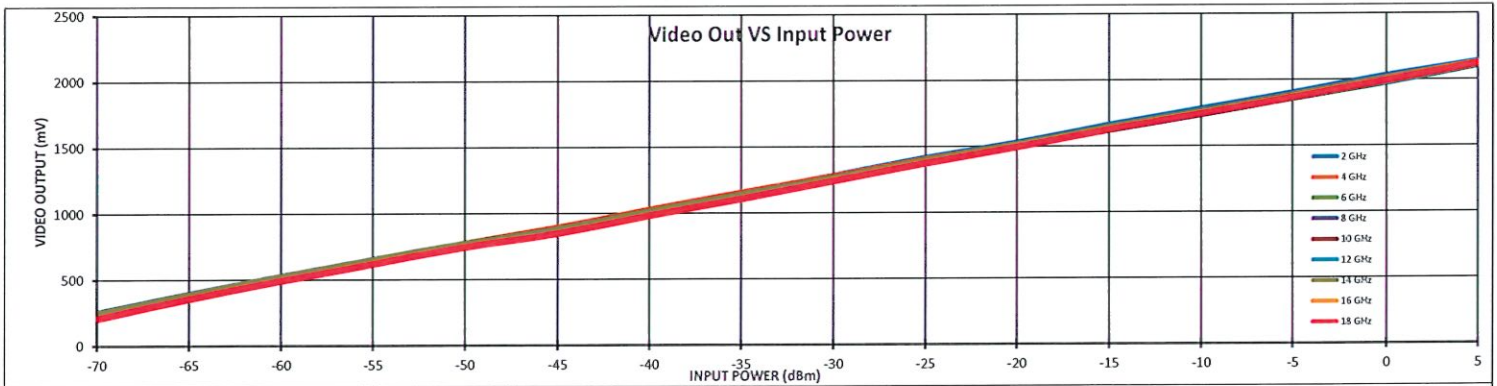
PL42574/2342



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42574/2342  
 Date: 10/30/2023  
 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	2030	25.1	0.7	254	394	529	656	775	888	1024	1155	1281	1414	1529	1651	1762	1902	2030	2138	Measured Value (mV)	
				-16	-2	7	8	1	-11	-1	5	5	12	1	8	3	-3	0	-18		Error (mV)
				-0.65	-0.09	0.29	0.32	0.06	-0.44	-0.04	0.19	0.20	0.48	0.06	0.33	0.13	-0.10	-0.01	-0.72		LINEARITY ERROR (dB)
4 GHz	2017	24.9	1.1	246	388	525	652	778	897	1030	1158	1280	1404	1516	1645	1763	1884	2010	2131	Measured Value (mV)	
				-26	-9	4	6	8	2	10	13	11	10	-2	3	-4	-8	-7	-10		Error (mV)
				-1.06	-0.34	0.14	0.23	0.30	0.07	0.41	0.54	0.43	0.41	-0.08	0.11	-0.17	-0.31	-0.26	-0.40		LINEARITY ERROR (dB)
6 GHz	2010	24.9	0.9	245	388	524	650	773	881	1016	1141	1266	1396	1514	1643	1759	1879	2004	2127	Measured Value (mV)	
				-22	-4	9	10	8	-8	3	3	4	9	2	7	-2	-5	-5	-7		Error (mV)
				-0.89	-0.14	0.35	0.39	0.32	-0.32	0.11	0.11	0.15	0.36	0.10	0.28	-0.07	-0.23	-0.21	-0.30		LINEARITY ERROR (dB)
8 GHz	1990	24.6	1.1	245	397	524	649	772	878	1013	1137	1262	1393	1500	1625	1739	1861	1979	2109	Measured Value (mV)	
				-26	-7	7	10	10	-7	5	6	9	16	1	3	-5	-7	-11	-4		Error (mV)
				-1.07	-0.28	0.30	0.40	0.41	-0.27	0.21	0.26	0.36	0.66	0.05	0.11	-0.22	-0.29	-0.46	-0.18		LINEARITY ERROR (dB)
10 GHz	1991	24.7	0.9	243	385	522	649	769	868	1003	1125	1249	1381	1502	1631	1746	1865	1982	2109	Measured Value (mV)	
				-22	-2	11	14	11	-13	-1	-3	-2	6	5	10	1	-2	-9	-5		Error (mV)
				-0.89	-0.10	0.46	0.58	0.46	-0.51	-0.04	-0.11	-0.08	0.25	0.19	0.39	0.06	-0.08	-0.36	-0.21		LINEARITY ERROR (dB)
12 GHz	1985	24.6	0.8	245	386	523	647	765	861	996	1117	1245	1380	1498	1623	1738	1860	1977	2108	Measured Value (mV)	
				-19	0	14	14	10	-17	-5	-7	-2	9	5	7	-1	-2	-8	0		Error (mV)
				-0.76	0.00	0.55	0.59	0.42	-0.69	-0.19	-0.28	-0.07	0.39	0.19	0.29	-0.03	-0.09	-0.33	0.00		LINEARITY ERROR (dB)
14 GHz	1994	24.7	1.0	244	386	522	648	771	876	1011	1135	1261	1391	1501	1628	1743	1863	1984	2114	Measured Value (mV)	
				-24	-5	8	11	10	-8	4	4	7	13	1	4	-4	-7	-9	-3		Error (mV)
				-0.97	-0.22	0.32	0.44	0.40	-0.33	0.14	0.16	0.28	0.54	0.03	0.18	-0.17	-0.28	-0.38	-0.14		LINEARITY ERROR (dB)
16 GHz	1999	25.2	0.9	210	361	497	623	751	854	989	1108	1235	1365	1496	1630	1747	1868	1996	2125	Measured Value (mV)	
				-23	3	13	13	14	-9	-1	-8	-7	-2	3	10	0	-4	-3	0		Error (mV)
				-0.90	0.12	0.51	0.51	0.54	-0.36	-0.02	-0.31	-0.26	-0.09	0.10	0.40	0.02	-0.16	-0.11	0.01		LINEARITY ERROR (dB)
18 GHz	1997	25.3	0.9	205	357	493	619	748	847	982	1107	1240	1372	1494	1627	1743	1864	1993	2122	Measured Value (mV)	
				-23	3	12	12	13	-13	-4	-6	1	7	3	9	-1	-6	-4	-2		Error (mV)
				-0.90	0.10	0.47	0.47	0.51	-0.50	-0.15	-0.24	0.04	0.27	0.11	0.35	-0.05	-0.24	-0.17	-0.07		LINEARITY ERROR (dB)
Avg. Slope: 24.9 mV/dB				1	0.7	0.7	0.7	0.6	1	1	1	0.9	1	0.7	0.8	0.9	0.8	1.1	0.6	Flatness dB: ±1.1 dB	





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

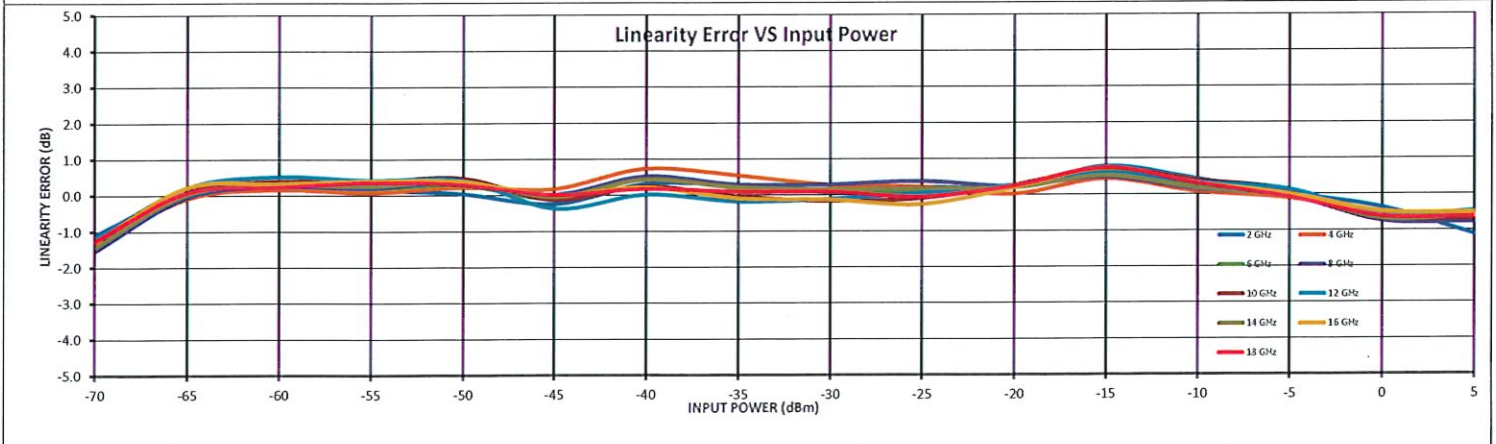
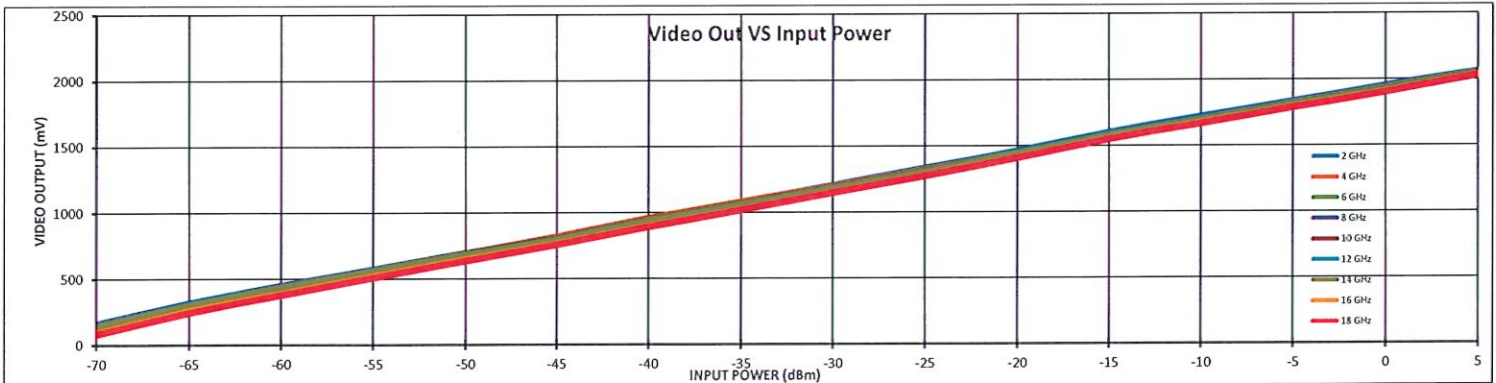
PL42574/2342

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42574/2342  
 Date: 10/30/2023  
 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	1965	25.3	1.1	164	321	452	576	699	819	959	1085	1207	1337	1464	1605	1722	1838	1955	2063	Measured Value (mV)	
				-28	3	7	4	1	-6	8	7	2	5	5	20	11	0	-9	-23		Error (mV)
				-1.11	0.10	0.29	0.15	0.04	-0.25	0.30	0.27	0.07	0.20	0.22	0.78	0.42	0.01	-0.37	-1.12		LINEARITY ERROR (dB)
4 GHz	1951	25.2	1.4	153	313	445	569	698	823	963	1084	1203	1327	1448	1584	1701	1822	1937	2057	Measured Value (mV)	
				-36	-2	4	2	6	4	19	14	7	6	1	11	2	-3	-14	-20		Error (mV)
				-1.45	-0.09	0.16	0.08	0.23	0.18	0.74	0.54	0.28	0.22	0.02	0.44	0.08	-0.11	-0.54	-0.78		LINEARITY ERROR (dB)
6 GHz	1944	25.1	1.3	151	312	444	567	694	810	949	1069	1192	1318	1447	1583	1697	1817	1930	2050	Measured Value (mV)	
				-33	2	8	5	7	-2	11	5	2	3	6	16	5	-1	-14	-19		Error (mV)
				-1.33	0.06	0.31	0.20	0.28	-0.09	0.44	0.19	0.09	0.11	0.24	0.63	0.20	-0.03	-0.55	-0.75		LINEARITY ERROR (dB)
8 GHz	1926	24.9	1.6	142	304	436	560	689	804	941	1060	1185	1312	1433	1564	1680	1800	1907	2031	Measured Value (mV)	
				-39	-1	6	5	10	0	13	7	7	9	6	12	3	-1	-19	-19		Error (mV)
				-1.55	-0.05	0.24	0.20	0.38	0.02	0.52	0.29	0.29	0.38	0.23	0.48	0.14	-0.06	-0.75	-0.78		LINEARITY ERROR (dB)
10 GHz	1924	25.0	1.4	137	301	432	557	685	795	929	1047	1169	1286	1430	1567	1684	1802	1909	2032	Measured Value (mV)	
				-35	3	10	10	12	-3	5	-1	-4	-2	7	18	10	3	-16	-17		Error (mV)
				-1.38	0.13	0.39	0.38	0.48	-0.13	0.25	-0.04	-0.17	-0.09	0.26	0.72	0.39	0.12	-0.63	-0.69		LINEARITY ERROR (dB)
12 GHz	1916	24.9	1.2	145	305	436	558	683	787	921	1041	1167	1285	1425	1557	1675	1795	1901	2028	Measured Value (mV)	
				-30	5	13	10	11	-9	0	-4	-3	1	7	15	8	3	-15	-12		Error (mV)
				-1.22	0.22	0.52	0.41	0.42	-0.37	0.01	-0.18	-0.11	0.05	0.26	0.59	0.33	0.13	-0.59	-0.48		LINEARITY ERROR (dB)
14 GHz	1924	25.0	1.4	134	297	428	553	681	796	933	1052	1176	1302	1428	1561	1678	1797	1907	2034	Measured Value (mV)	
				-36	1	7	7	10	-1	11	5	4	5	5	13	4	-2	-17	-15		Error (mV)
				-1.44	0.04	0.28	0.27	0.39	-0.04	0.43	0.21	0.15	0.18	0.19	0.52	0.17	-0.06	-0.68	-0.60		LINEARITY ERROR (dB)
16 GHz	1926	25.6	1.3	98	265	396	526	653	772	906	1026	1153	1278	1418	1550	1677	1798	1913	2041	Measured Value (mV)	
				-33	6	8	10	10	0	5	-2	-3	-7	5	19	8	0	-12	-13		Error (mV)
				-1.30	0.22	0.33	0.40	0.38	0.00	0.22	-0.09	-0.13	-0.26	0.19	0.73	0.31	0.00	-0.49	-0.51		LINEARITY ERROR (dB)
18 GHz	1918	25.8	1.3	81	244	377	510	637	758	891	1018	1147	1272	1409	1550	1668	1787	1902	2031	Measured Value (mV)	
				-33	2	6	9	8	0	5	2	2	-1	6	19	8	-2	-16	-16		Error (mV)
				-1.27	0.08	0.23	0.37	0.30	0.02	0.18	0.09	0.09	-0.06	0.24	0.74	0.30	-0.08	-0.62	-0.63		LINEARITY ERROR (dB)
Avg. Slope: 25.2 mV/dB				1.6	1.5	1.5	1.3	1.2	1.3	1.4	1.3	1.2	1.3	1.1	1.1	1.1	1	1.1	0.7	Flatness dB: ±1.6 dB	





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

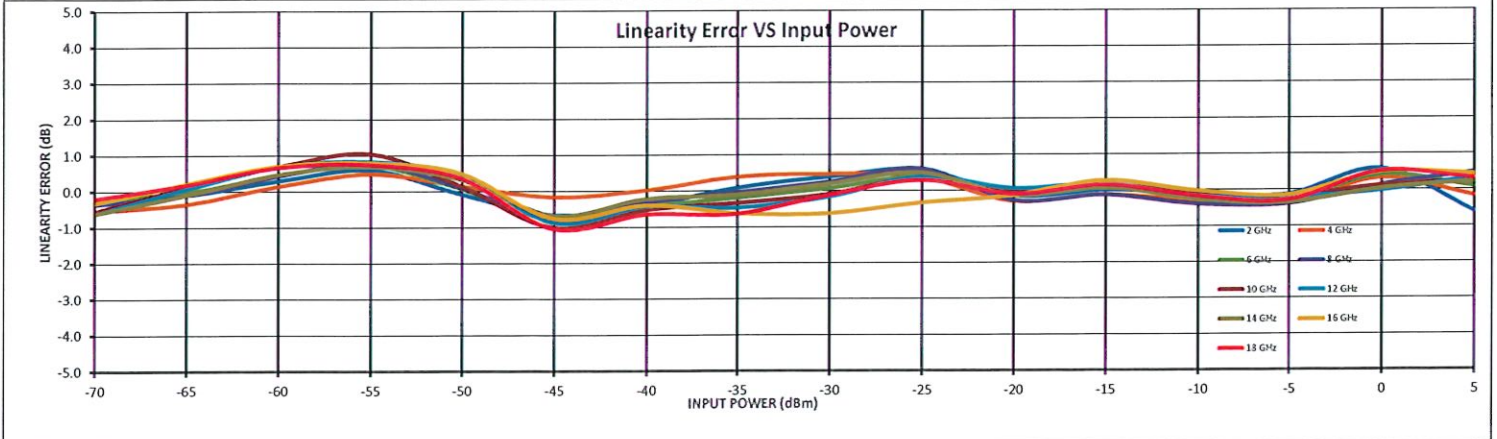
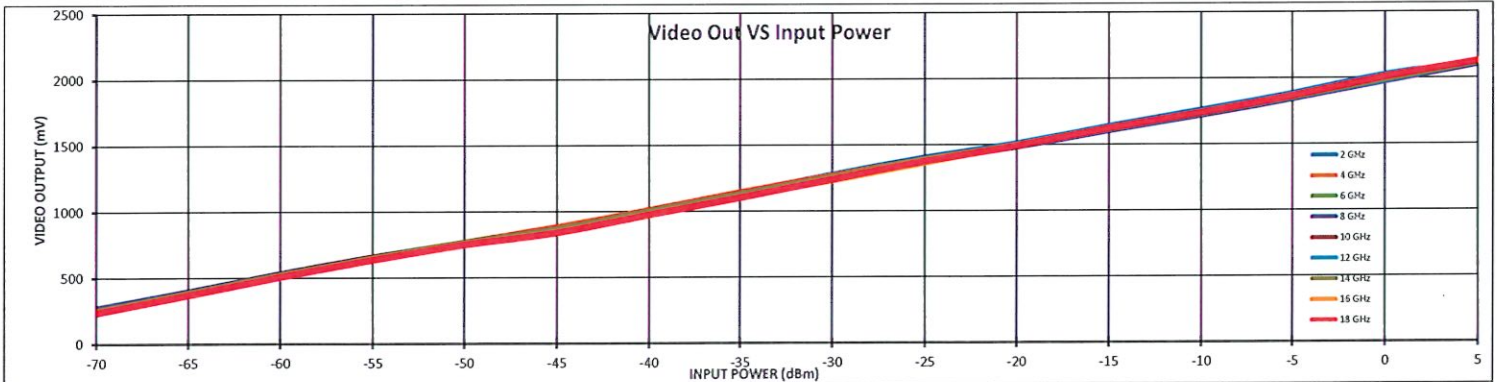
PL42574/2342



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42574/2342  
 Date: 10/30/2023  
 Tested By: RCombs  
 Test Temp: -40°C

## Log Transfer Over Frequency -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	2010	24.8	0.7	265	393	527	659	786	876	1007	1143	1274	1403	1509	1637	1759	1882	2024	2119	Measured Value (mV)	
				-7	-3	7	15	-2	-17	-10	2	10	14	-4	0	-2	-3	14	-16		ERROR (mV)
				-0.29	-0.11	0.29	0.59	-0.08	-0.67	-0.40	0.09	0.39	0.58	-0.15	0.00	-0.09	-0.13	0.58	-0.60		LINEARITY ERROR (dB)
4 GHz	1995	24.5	0.5	263	391	525	657	771	886	1014	1145	1270	1390	1497	1624	1742	1863	2003	2114	Measured Value (mV)	
				-13	-9	3	12	4	-4	1	-10	12	9	-7	-3	-8	-10	8	-4		ERROR (mV)
				-0.55	-0.35	0.14	0.48	0.19	-0.16	0.02	0.39	0.47	0.38	-0.30	-0.12	-0.32	-0.39	0.33	-0.16		LINEARITY ERROR (dB)
6 GHz	1985	24.5	0.8	268	395	529	658	764	865	997	1125	1253	1383	1493	1620	1736	1856	1995	2109	Measured Value (mV)	
				-5	-1	11	18	2	-19	-10	-5	2	9	-3	1	-4	-7	10	2		ERROR (mV)
				-0.22	-0.02	0.44	0.72	0.06	-0.79	-0.42	-0.19	0.07	0.38	-0.12	0.06	-0.18	-0.28	0.41	0.08		LINEARITY ERROR (dB)
8 GHz	1966	24.1	0.8	273	400	533	662	785	865	996	1123	1250	1379	1478	1602	1716	1837	1970	2098	Measured Value (mV)	
				-9	-3	10	19	2	-18	-7	-1	6	15	-7	-3	-8	-9	3	11		ERROR (mV)
				-0.35	-0.11	0.43	0.78	0.09	-0.77	-0.31	-0.04	0.24	0.61	-0.28	-0.13	-0.39	-0.39	0.13	0.48		LINEARITY ERROR (dB)
10 GHz	1986	24.6	1.0	252	391	528	660	780	855	990	1117	1246	1380	1493	1621	1737	1859	1989	2115	Measured Value (mV)	
				-14	3	17	26	3	-25	-13	-8	-2	9	-2	4	-3	-4	3	5		ERROR (mV)
				-0.56	0.11	0.69	1.04	0.14	-1.01	-0.52	-0.33	-0.09	0.36	-0.06	0.16	-0.12	-0.17	0.12	0.25		LINEARITY ERROR (dB)
12 GHz	1983	24.8	0.9	233	374	513	641	755	846	981	1104	1235	1373	1489	1615	1731	1854	1982	2115	Measured Value (mV)	
				-16	2	17	20	11	-22	-10	-12	-4	10	1	4	-4	-5	-1	8		ERROR (mV)
				-0.63	0.07	0.68	0.83	0.45	-0.88	-0.42	-0.47	-0.17	0.39	0.05	0.18	-0.17	-0.20	-0.03	0.33		LINEARITY ERROR (dB)
14 GHz	1990	24.7	0.7	246	382	520	649	763	862	997	1123	1254	1385	1493	1621	1736	1858	1991	2119	Measured Value (mV)	
				-16	-3	12	17	8	-17	-5	-3	5	12	-3	2	-7	-9	1	5		ERROR (mV)
				-0.62	-0.10	0.47	0.69	0.32	-0.68	-0.22	-0.11	0.19	0.49	-0.14	0.07	-0.27	-0.35	0.03	0.21		LINEARITY ERROR (dB)
16 GHz	1991	25.1	0.8	229	368	505	633	751	845	979	1099	1224	1356	1487	1622	1740	1862	2003	2127	Measured Value (mV)	
				-8	5	18	20	12	-19	-10	-16	-16	-8	-4	7	-1	-4	12	11		ERROR (mV)
				-0.32	0.21	0.70	0.79	0.50	-0.76	-0.39	-0.63	-0.63	-0.33	-0.14	0.27	-0.03	-0.14	0.48	0.43		LINEARITY ERROR (dB)
18 GHz	1993	25.0	1.05	236	371	508	635	751	841	976	1101	1239	1375	1490	1622	1739	1861	2006	2126	Measured Value (mV)	
				-5	5	17	19	9	-26	-16	-16	-3	7	-3	4	-4	-7	13	8		ERROR (mV)
				-0.20	0.18	0.66	0.74	0.36	-1.05	-0.65	-0.64	-0.12	0.29	-0.10	0.15	-0.17	-0.28	0.51	0.32		LINEARITY ERROR (dB)
Avg. Slope: 24.7 mV/dB				0.9	0.6	0.6	0.6	0.4	0.9	0.8	0.9	1	1	0.6	0.7	0.9	0.9	1.1	0.6	Flatness dB: ±1.1 dB	

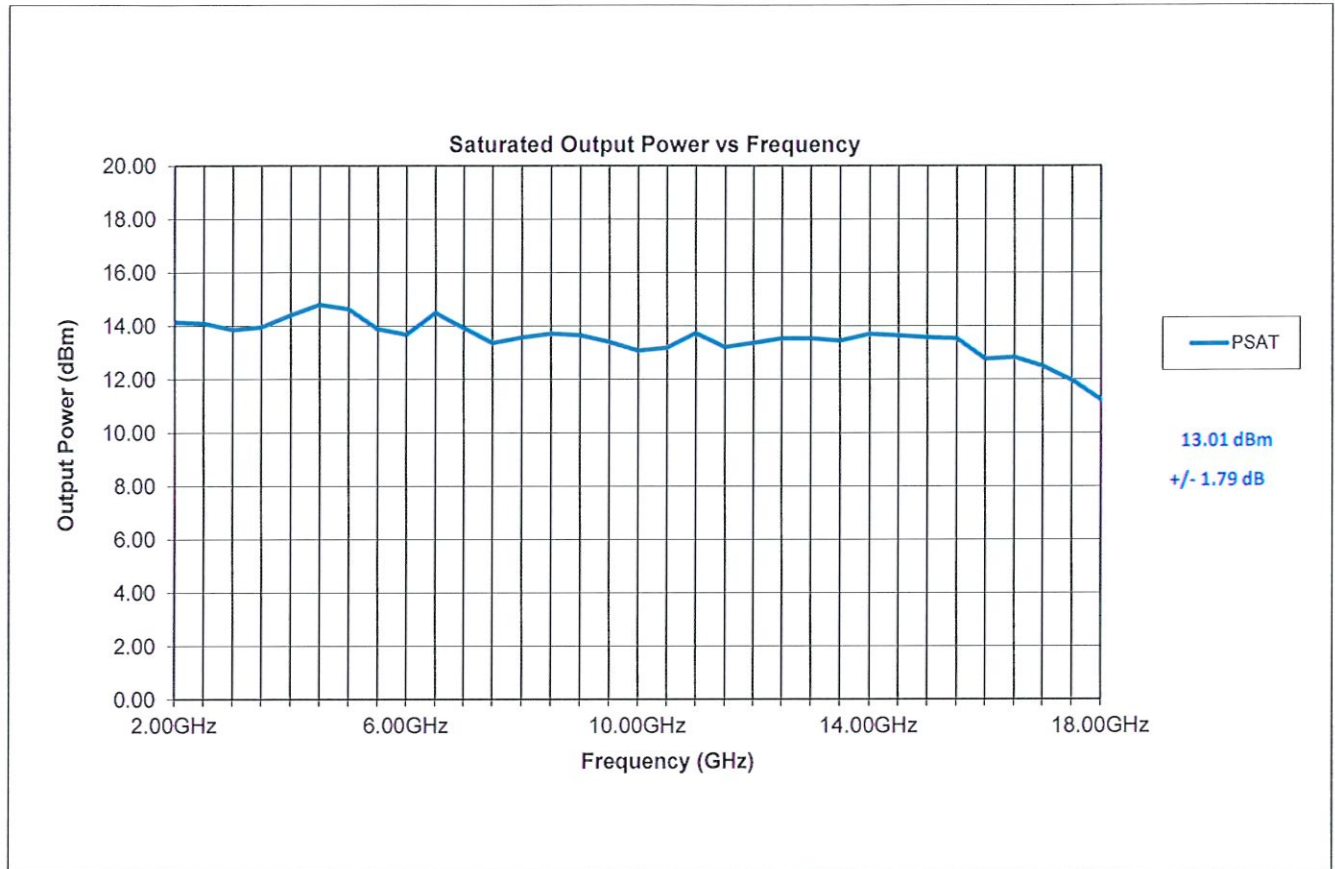




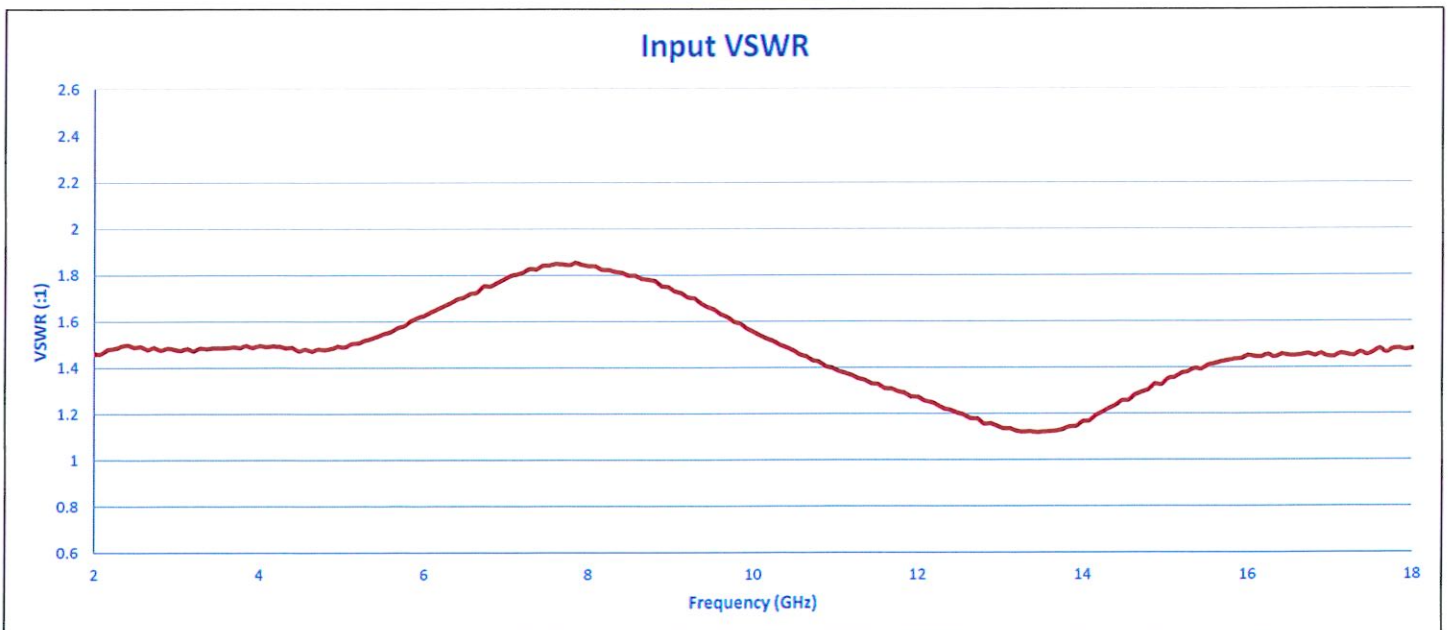
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42574/2342

## PSAT



## INPUT VSWR

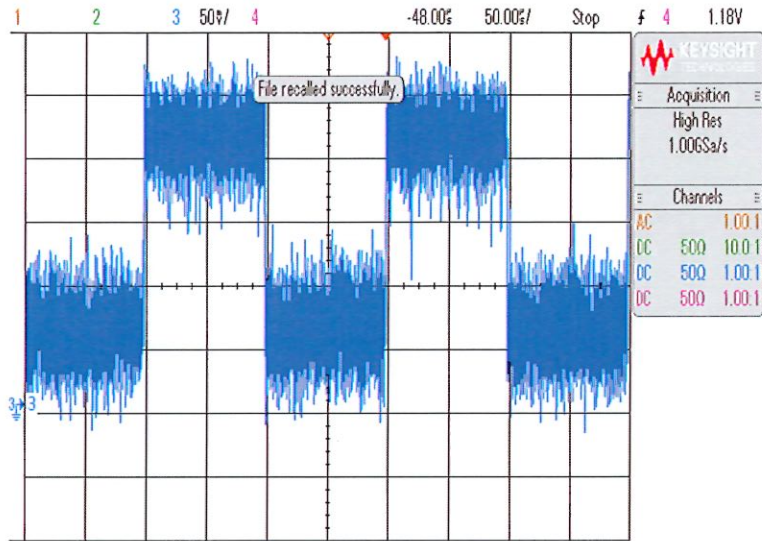




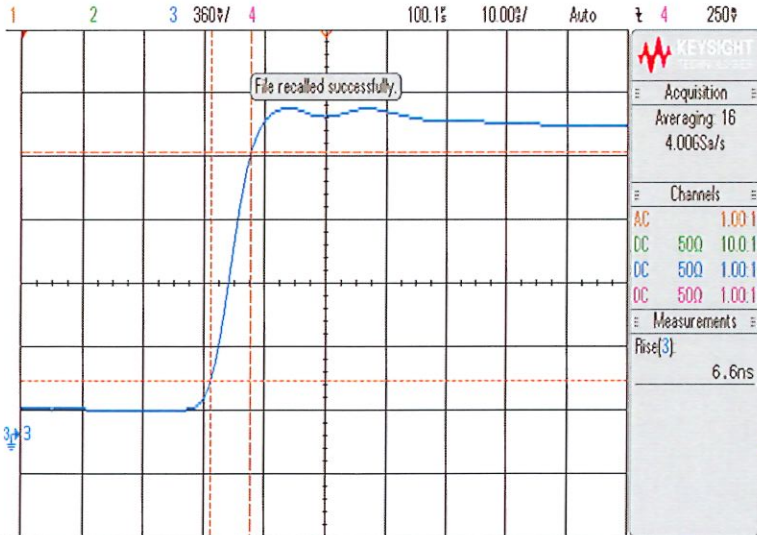
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42574/2342

## TSS



## Rise Time



## Fall Time

