



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

PL42572/2342

Customer: _____ Tested By: RCombs
SO No: _____ Temperature: +25° C
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/30/2023
Serial No: PL42572/2342 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)	1.7:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	12.93 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	25.1 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)	±1.5 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	6.3 ns	
12	Recovery Time:	60 ns Typical	51.3 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 271 mA -12V @ 97 mA	PMI QA2

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



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

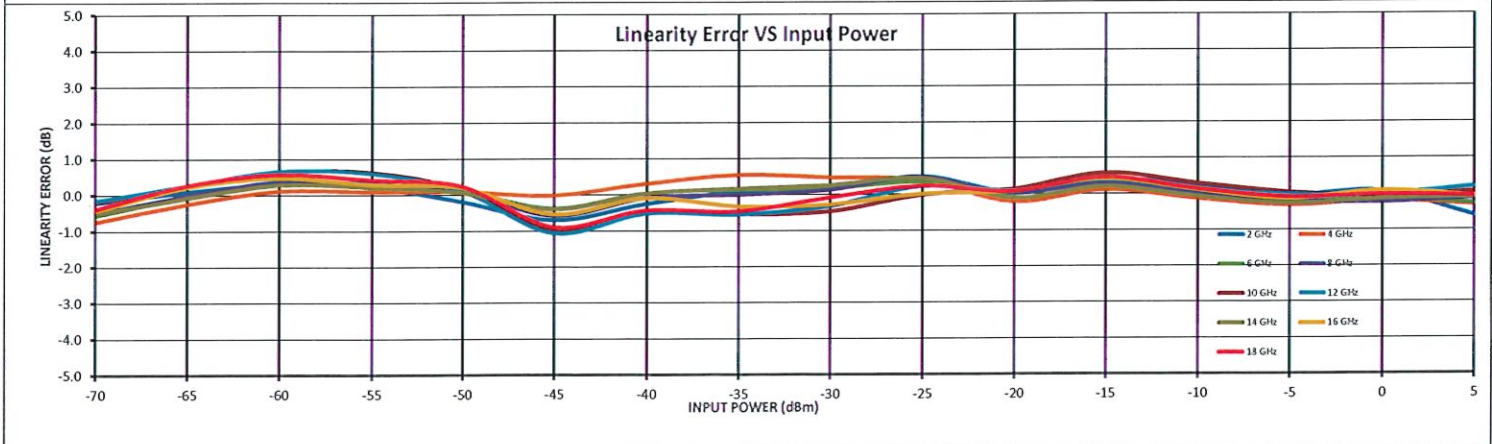
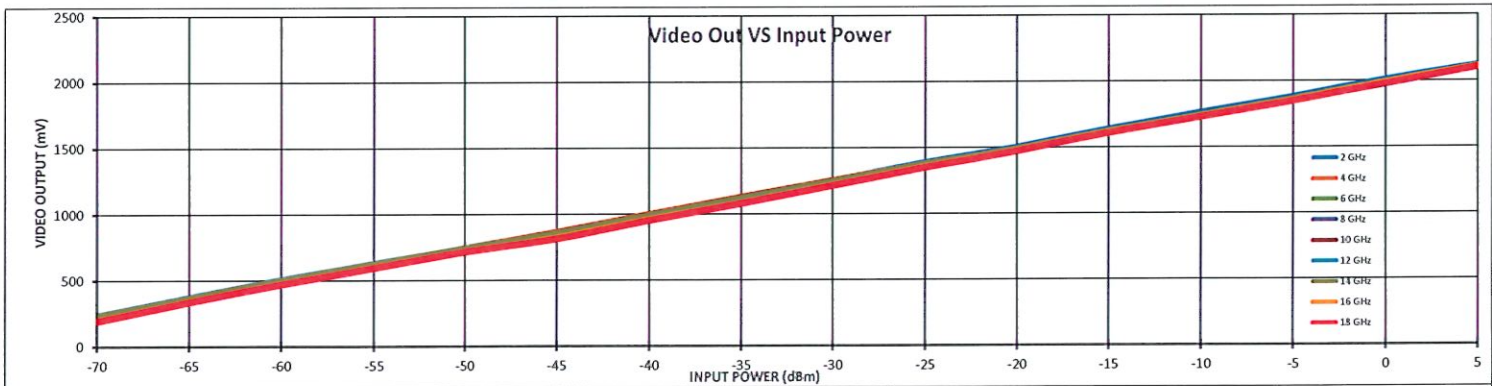
PL42572/2342

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42572/2342
 Date: 10/30/2023
 Tested By: RCombs
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	RF Input Power (dBm)																Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)																
2 GHz	2010	25.3	0.7	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	235	369	501	625	741	855	992	1127	1256	1389	1505	1641	1764	1883	2012	2121	2010	-16	-0.61
				-0.21	0.10	0.30	0.21	-0.19	-0.70	-0.26	0.08	0.17	0.42	0.01	0.40	0.25	-0.04	0.07																				
4 GHz	1998	25.0	0.7	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	225	363	497	622	747	870	1003	1135	1258	1381	1491	1625	1744	1864	1993	2115	1998	-7	-0.30
				-0.74	-0.24	0.12	0.10	0.09	-0.02	0.31	0.55	0.47	0.40	-0.21	0.12	-0.13	-0.32	-0.19	-0.30																			
6 GHz	1994	25.1	0.6	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	223	361	496	619	741	855	991	1119	1245	1375	1492	1625	1743	1863	1990	2112	1994	-3	-0.28
				-0.56	-0.05	0.30	0.22	0.09	-0.38	0.04	0.14	0.17	0.35	0.01	0.31	0.02	-0.23	-0.14	-0.28																			
8 GHz	1980	24.9	0.6	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	227	364	498	620	739	847	983	1110	1237	1371	1483	1615	1731	1851	1974	2101	1980	-3	-0.12
				-0.51	-0.02	0.38	0.32	0.10	-0.57	-0.09	0.00	0.13	0.49	0.03	0.30	0.00	-0.19	-0.24	-0.12																			
10 GHz	1978	24.9	1.0	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	230	366	500	624	736	832	959	1093	1219	1355	1483	1619	1736	1854	1976	2104	1978	1	0.06
				-0.19	0.27	0.65	0.63	0.15	-1.01	-0.50	-0.55	-0.47	-0.01	0.14	0.58	0.29	0.03	-0.06	0.06																			
12 GHz	1975	24.8	1.1	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	233	367	501	624	736	831	968	1092	1222	1359	1480	1612	1729	1850	1974	2104	1975	5	0.19
				-0.16	0.26	0.66	0.60	0.11	-1.06	-0.52	-0.56	-0.32	0.22	0.10	0.41	0.12	-0.03	-0.02	0.19																			
14 GHz	1987	24.9	0.5	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	229	364	498	621	741	855	990	1118	1245	1375	1485	1618	1736	1855	1983	2109	1987	-3	-0.10
				-0.50	-0.08	0.28	0.24	0.06	-0.40	0.04	0.16	0.26	0.45	-0.11	0.21	-0.08	-0.28	-0.14	-0.10																			
16 GHz	1990	25.5	0.5	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	194	338	472	594	720	828	987	1089	1218	1353	1482	1618	1737	1859	1992	2115	1990	-2	-0.08
				-0.43	0.22	0.48	0.29	0.20	-0.54	-0.10	-0.32	-0.28	0.02	0.08	0.43	0.11	-0.14	0.08	-0.08																			
18 GHz	1978	25.4	0.9	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	193	337	471	594	716	814	953	1079	1215	1350	1473	1609	1728	1849	1977	2103	1978	-2	-0.06
				-0.38	0.27	0.58	0.42	0.24	-0.89	-0.44	-0.46	-0.09	0.24	0.08	0.47	0.13	-0.10	-0.02	-0.06																			
Avg. Slope: 25.1 mV/dB				0.8 0.6 0.6 0.6 0.6 1.1 1 1.1 0.9 0.8 0.6 0.6 0.7 0.7 0.8 0.4																Flatness dB: ±1.1 dB																		





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

PL42572/2342

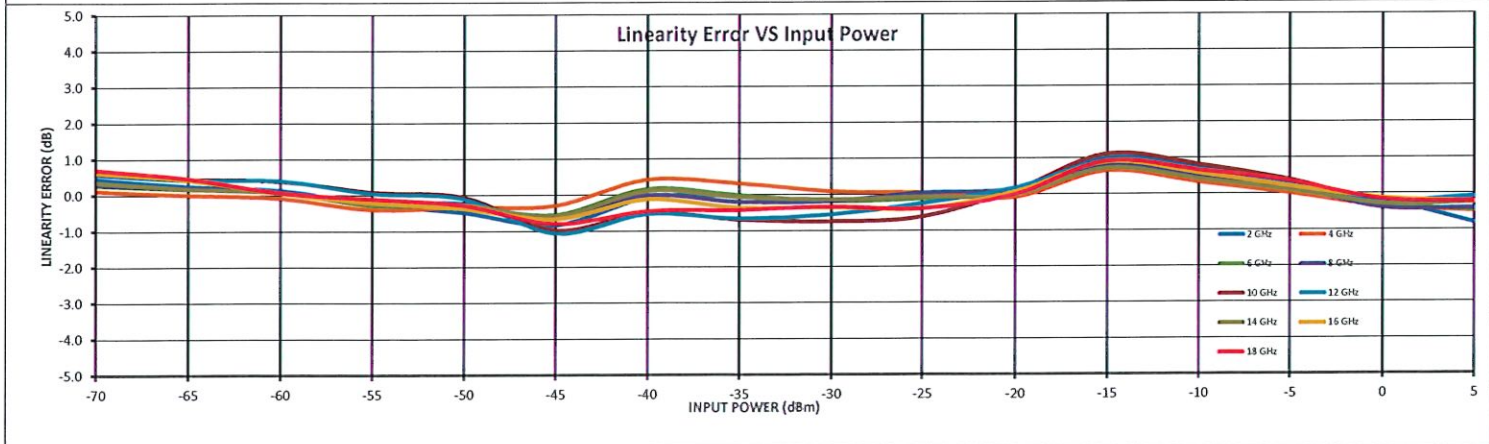
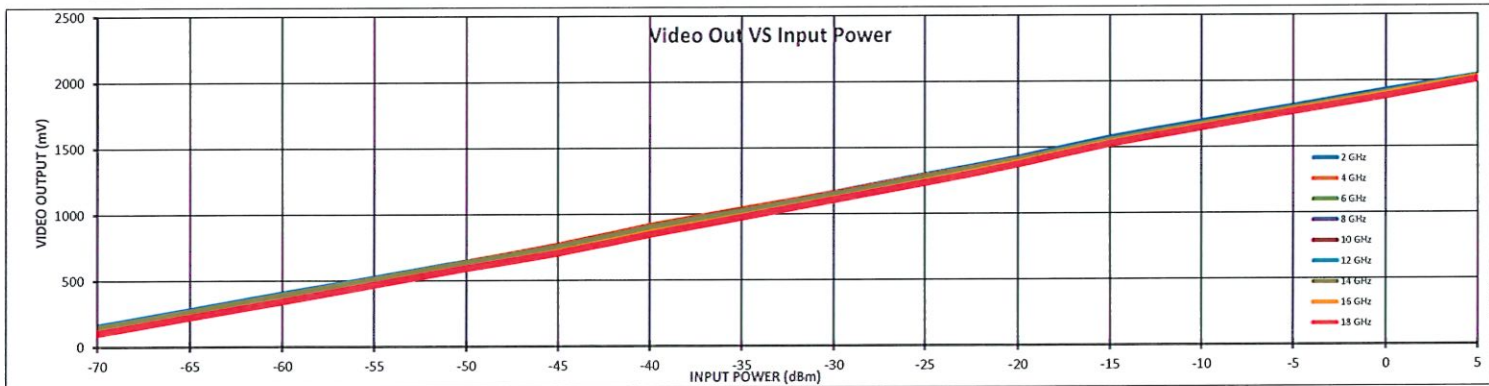
Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42572/2342
 Date: 10/30/2023
 Tested By: RCombs
 Test Temp: +85°C

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1929																Measured Value (mV)
	SLOPE (mV/dB)	25.5																Error (mV)
	LIN. ERR. (dB)	1.0																LINEARITY ERROR (dB)
		185	278	402	520	641	760	907	1035	1160	1290	1422	1572	1693	1807	1925	2036	
		12	7	3	-6	-12	-21	-2	-1	-4	-1	3	25	19	6	-5	-21	
		0.46	0.25	0.14	-0.24	-0.49	-0.84	-0.08	-0.04	-0.17	-0.05	0.12	0.99	0.73	0.22	-0.18	-0.81	
4 GHz	INTERCEPT (mV)	1919																Measured Value (mV)
	SLOPE (mV/dB)	25.4																Error (mV)
	LIN. ERR. (dB)	0.6																LINEARITY ERROR (dB)
		143	267	392	511	640	768	913	1037	1159	1285	1408	1554	1673	1792	1910	2033	
		3	0	-2	-10	-8	-7	11	8	2	1	-2	16	8	0	-9	-12	
		0.13	0.01	-0.07	-0.40	-0.32	-0.23	0.42	0.32	0.09	0.05	-0.08	0.64	0.32	0.01	-0.35	-0.48	
6 GHz	INTERCEPT (mV)	1914																Measured Value (mV)
	SLOPE (mV/dB)	25.4																Error (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
		141	265	390	508	635	756	901	1023	1146	1275	1407	1553	1672	1791	1906	2029	
		7	4	2	-7	-8	-14	4	0	-5	-3	2	21	13	4	-8	-12	
		0.28	0.18	0.08	-0.28	-0.31	-0.55	0.17	-0.02	-0.18	-0.12	0.07	0.82	0.49	0.15	-0.31	-0.47	
8 GHz	INTERCEPT (mV)	1902																Measured Value (mV)
	SLOPE (mV/dB)	25.3																Error (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
		136	260	385	503	629	745	888	1010	1137	1270	1399	1543	1661	1780	1892	2018	
		8	5	3	-5	-6	-17	0	-5	-5	1	4	21	13	5	-10	-10	
		0.31	0.20	0.12	-0.20	-0.24	-0.66	-0.01	-0.20	-0.18	0.04	0.14	0.81	0.50	0.18	-0.40	-0.41	
10 GHz	INTERCEPT (mV)	1898																Measured Value (mV)
	SLOPE (mV/dB)	25.3																Error (mV)
	LIN. ERR. (dB)	1.1																LINEARITY ERROR (dB)
		139	263	388	507	630	733	872	994	1119	1249	1394	1546	1666	1782	1894	2021	
		16	11	10	2	-2	-25	-13	-17	-19	-16	3	28	21	10	-5	-4	
		0.59	0.45	0.39	0.08	-0.06	-0.97	-0.50	-0.69	-0.75	-0.62	0.11	1.11	0.81	0.39	-0.19	-0.16	
12 GHz	INTERCEPT (mV)	1897																Measured Value (mV)
	SLOPE (mV/dB)	25.2																Error (mV)
	LIN. ERR. (dB)	1.1																LINEARITY ERROR (dB)
		147	269	395	512	634	736	875	998	1127	1260	1397	1541	1660	1779	1892	2021	
		16	11	10	1	-3	-27	-13	-17	-14	-6	4	23	15	8	-5	-2	
		0.58	0.43	0.41	0.05	-0.11	-1.07	-0.53	-0.66	-0.56	-0.25	0.17	0.89	0.60	0.32	-0.20	-0.08	
14 GHz	INTERCEPT (mV)	1909																Measured Value (mV)
	SLOPE (mV/dB)	25.4																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
		139	262	386	505	631	760	895	1018	1143	1272	1400	1546	1665	1784	1901	2029	
		9	5	2	-6	-7	-15	3	-2	-4	-2	-1	18	11	3	-7	-7	
		0.36	0.18	0.07	-0.25	-0.28	-0.58	0.11	-0.07	-0.14	-0.07	-0.02	0.71	0.41	0.10	-0.29	-0.26	
16 GHz	INTERCEPT (mV)	1906																Measured Value (mV)
	SLOPE (mV/dB)	25.9																Error (mV)
	LIN. ERR. (dB)	0.9																LINEARITY ERROR (dB)
		108	232	352	475	600	722	866	989	1119	1248	1389	1540	1661	1781	1902	2029	
		16	11	1	-5	-10	-17	-3	-9	-9	-10	1	23	15	5	-3	-6	
		0.63	0.43	0.06	-0.21	-0.37	-0.67	-0.12	-0.36	-0.35	-0.39	0.05	0.89	0.57	0.20	-0.13	-0.23	
18 GHz	INTERCEPT (mV)	1888																Measured Value (mV)
	SLOPE (mV/dB)	25.8																Error (mV)
	LIN. ERR. (dB)	0.9																LINEARITY ERROR (dB)
		102	225	343	468	592	708	845	975	1106	1234	1372	1525	1647	1768	1884	2011	
		18	12	2	-3	-7	-21	-12	-11	-9	-10	0	23	17	9	-4	-6	
		0.72	0.48	0.07	-0.10	-0.28	-0.80	-0.45	-0.42	-0.33	-0.39	-0.01	0.91	0.66	0.35	-0.16	-0.23	

Avg. Slope: 25.5 mV/dB 1 1 1.2 1 1 1.2 1.3 1.2 1 1.1 1 0.9 0.9 0.8 0.8 0.5 Flatness dB: ±1.3 dB





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

PL42572/2342

Log Transfer Over Frequency -40°C

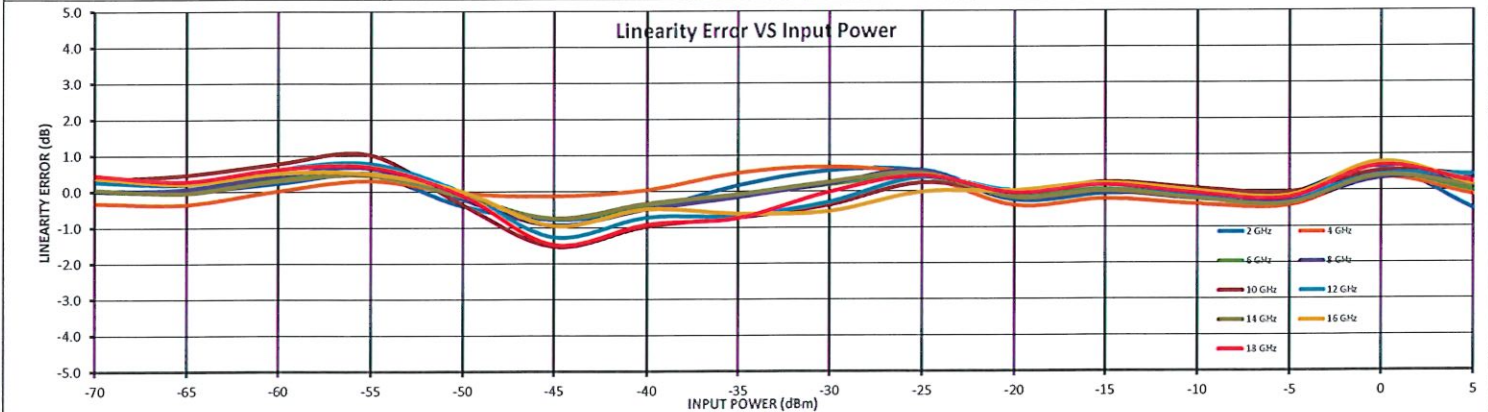
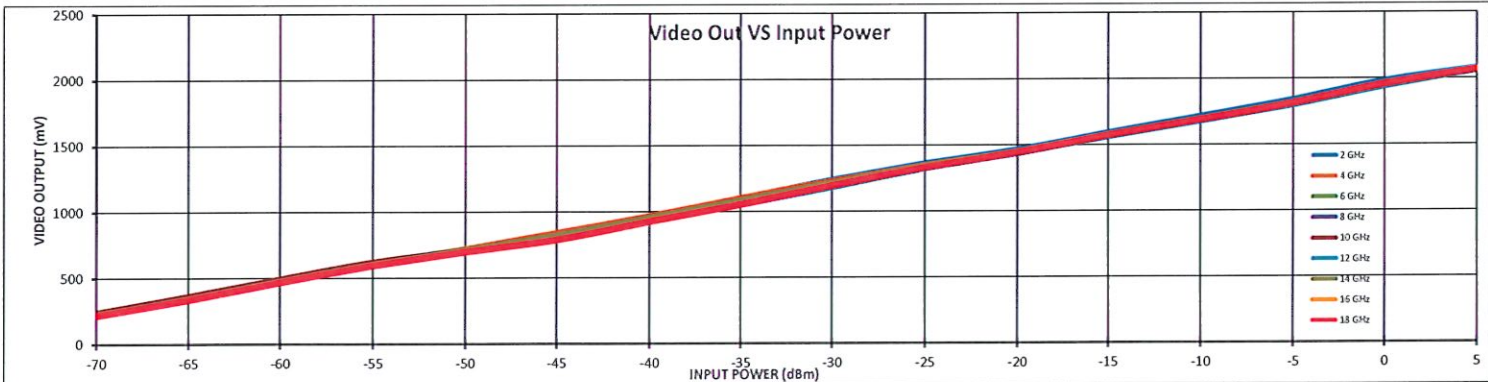


Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42572/2342
 Date: 10/30/2023
 Tested By: RCombs
 Test Temp: -40°C

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1967																Measured Value (mV)
	SLOPE (mV/dB)	24.8																ERROR (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
		235	358	487	617	719	834	964	1104	1238	1362	1485	1593	1717	1841	1983	2078	
		1	0	6	12	-10	-19	-12	4	14	14	-6	-2	-2	-2	16	-13	
		0.04	0.01	0.23	0.47	-0.40	-0.78	-0.50	0.16	0.57	0.55	-0.25	-0.08	-0.08	-0.08	0.65	-0.52	
4 GHz	INTERCEPT (mV)	1953																Measured Value (mV)
	SLOPE (mV/dB)	24.6																ERROR (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
		224	346	478	608	722	843	970	1105	1232	1349	1451	1579	1698	1819	1962	2073	
		-8	-9	1	8	-1	-3	1	12	17	11	-10	-5	-9	-10	9	-3	
		-0.32	-0.35	0.02	0.31	-0.04	-0.13	0.04	0.51	0.68	0.44	-0.39	-0.22	-0.37	-0.42	0.36	-0.12	
6 GHz	INTERCEPT (mV)	1947																Measured Value (mV)
	SLOPE (mV/dB)	24.7																ERROR (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
		222	344	476	604	712	819	951	1081	1212	1341	1451	1578	1697	1817	1959	2070	
		0	0	8	13	-3	-19	-10	-3	5	10	-3	1	-4	-7	11	0	
		0.02	-0.02	0.33	0.51	-0.11	-0.76	-0.40	-0.12	0.18	0.42	-0.11	0.04	-0.16	-0.29	0.46	-0.01	
8 GHz	INTERCEPT (mV)	1933																Measured Value (mV)
	SLOPE (mV/dB)	24.3																ERROR (mV)
	LIN. ERR. (dB)	0.9																LINEARITY ERROR (dB)
		234	356	487	614	714	818	950	1079	1210	1340	1443	1569	1685	1804	1941	2062	
		0	2	11	16	-5	-23	-12	-4	5	14	-5	0	-6	-8	8	7	
		0.01	0.07	0.44	0.66	-0.21	-0.94	-0.50	-0.17	0.21	0.58	-0.21	-0.02	-0.23	-0.31	0.33	0.29	
10 GHz	INTERCEPT (mV)	1932																Measured Value (mV)
	SLOPE (mV/dB)	24.2																ERROR (mV)
	LIN. ERR. (dB)	1.5																LINEARITY ERROR (dB)
		244	369	497	624	712	805	939	1066	1196	1332	1446	1574	1691	1810	1945	2063	
		8	11	19	26	-9	-37	-24	-18	-9	6	-1	6	2	-1	13	10	
		0.33	0.46	0.77	1.02	-0.37	-1.53	-0.97	-0.74	-0.38	0.23	-0.04	0.24	0.07	-0.05	0.54	0.41	
12 GHz	INTERCEPT (mV)	1929																Measured Value (mV)
	SLOPE (mV/dB)	24.5																ERROR (mV)
	LIN. ERR. (dB)	1.3																LINEARITY ERROR (dB)
		218	340	472	599	702	794	930	1054	1186	1325	1439	1585	1681	1802	1940	2063	
		7	5	15	19	-1	-31	-18	-17	-7	9	0	4	-3	-5	11	11	
		0.27	0.21	0.62	0.78	-0.02	-1.27	-0.73	-0.68	-0.30	0.38	0.00	0.17	-0.10	-0.19	0.43	0.43	
14 GHz	INTERCEPT (mV)	1942																Measured Value (mV)
	SLOPE (mV/dB)	24.6																ERROR (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
		222	342	474	600	709	817	950	1079	1210	1339	1445	1573	1690	1810	1952	2068	
		1	-1	8	11	-3	-18	-8	-2	6	12	-4	0	-5	-9	10	3	
		0.05	-0.04	0.31	0.45	-0.13	-0.75	-0.34	-0.09	0.26	0.49	-0.18	0.01	-0.22	-0.35	0.41	0.12	
16 GHz	INTERCEPT (mV)	1945																Measured Value (mV)
	SLOPE (mV/dB)	25.0																ERROR (mV)
	LIN. ERR. (dB)	1.0																LINEARITY ERROR (dB)
		207	327	460	584	697	797	934	1056	1182	1320	1446	1576	1695	1816	1964	2074	
		10	5	13	12	0	-24	-12	-15	-14	-1	0	5	0	-4	20	4	
		0.39	0.22	0.52	0.50	0.00	-0.95	-0.50	-0.62	-0.55	-0.03	0.00	0.22	0.00	-0.14	0.79	0.17	
18 GHz	INTERCEPT (mV)	1938																Measured Value (mV)
	SLOPE (mV/dB)	24.8																ERROR (mV)
	LIN. ERR. (dB)	1.476																LINEARITY ERROR (dB)
		216	336	468	594	698	788	925	1053	1195	1330	1442	1571	1689	1810	1955	2068	
		11	7	16	17	-2	-37	-23	-18	-1	11	-1	4	-2	-5	17	6	
		0.45	0.29	0.63	0.68	-0.10	-1.48	-0.92	-0.74	-0.02	0.43	-0.05	0.17	-0.07	-0.19	0.69	0.23	

Avg. Slope: 24.6 mV/dB

Flatness dB: ±1.1 dB

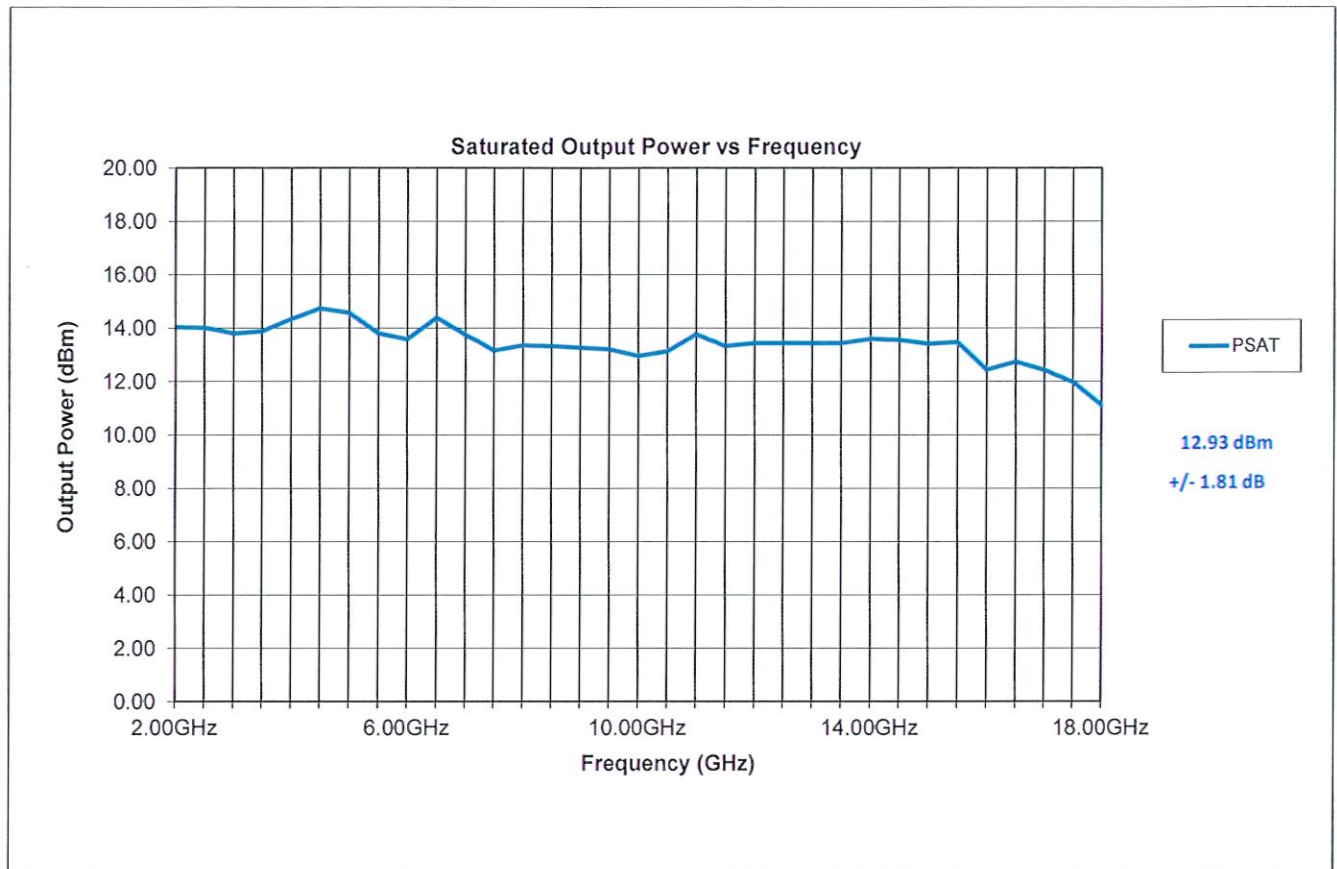




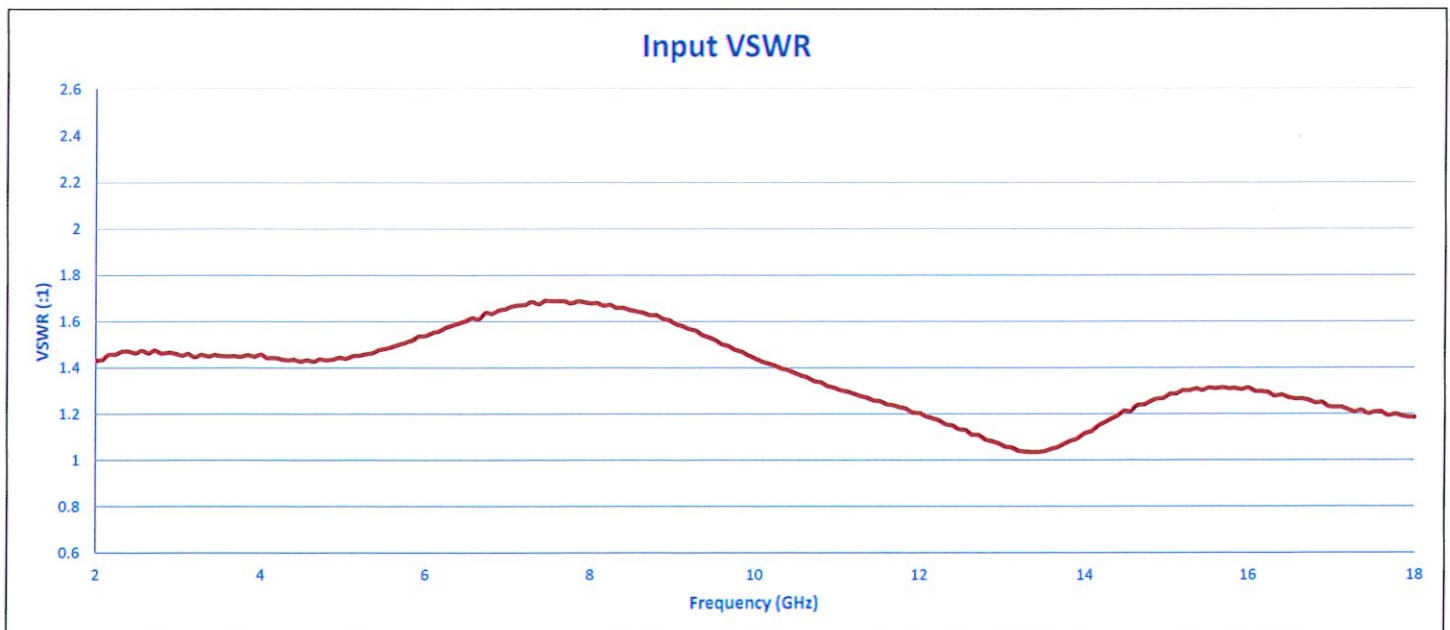
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42572/2342

PSAT



INPUT VSWR

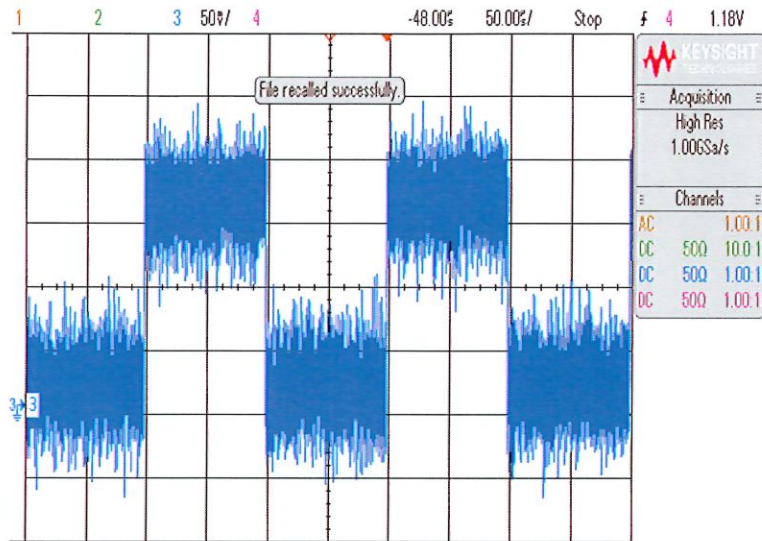




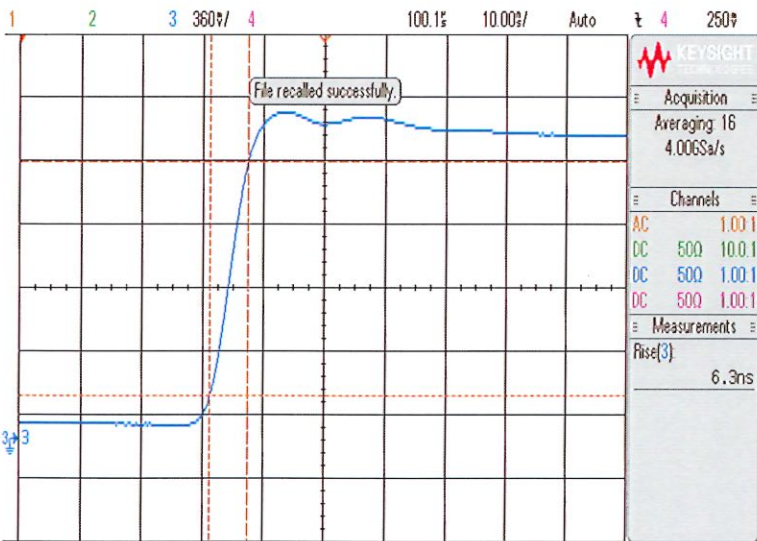
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42672/2342

TSS



Rise Time



Fall Time

