



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

PL38725/2248

Customer: _____ Tested By: RCombs
SO No: _____ Temperature: +25° C
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 12/13/2022
Serial No: PL38725/2248 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	±1.8 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	11.86 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)	±1.5 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	5.9 ns	
12	Recovery Time:	60 ns Typical	71.9 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 268 mA -12V @ 96 mA	PMI QA2

QA/QC Approval: _____

PMI
QA2

Date: 12/16/2022



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

PL38725/2248

Log Transfer Over Frequency +25°C

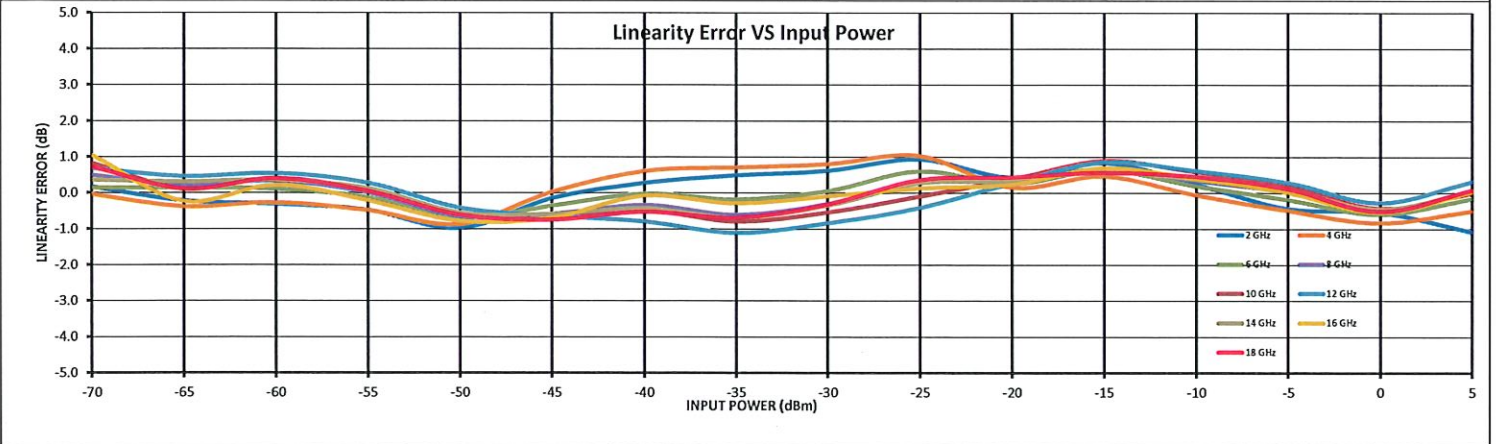
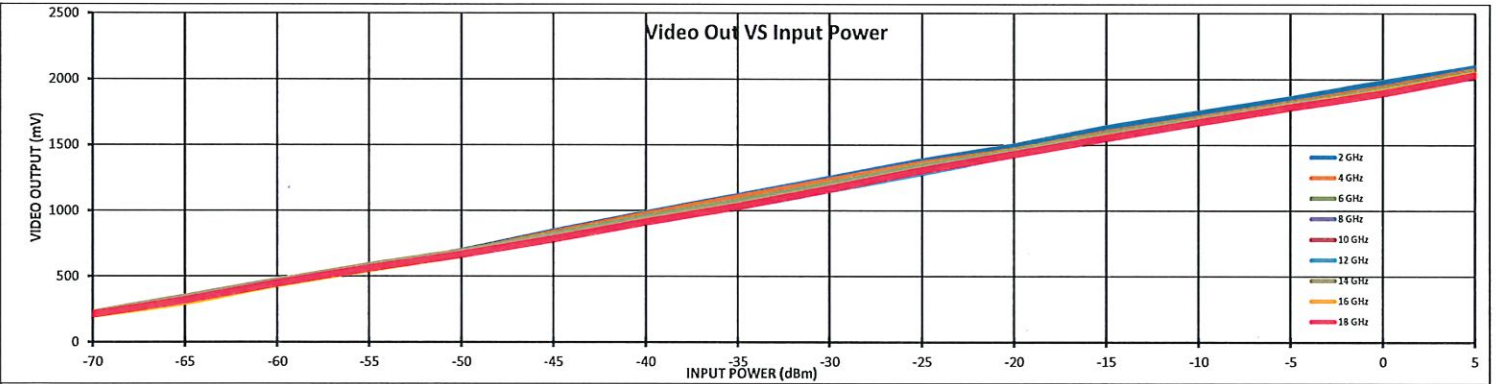


Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL38725/2248
 Date: 12/13/2022
 Tested By: RCombs
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	1995	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1995	219	336	461	584	698	847	985	1117	1248	1383	1497	1635	1747	1857	1982	2095	Measured Value (mV)
	SLOPE (mV/dB)	25.4	5	-5	-8	-12	-25	-3	7	13	16	24	11	22	6	-11	-13	-27	ERROR (mV)
	LIN. ERR. (dB)	1.1	0.18	-0.21	-0.30	-0.47	-0.97	-0.13	0.29	0.50	0.62	0.95	0.44	0.85	0.25	-0.43	-0.52	-1.07	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1960	215	331	458	578	692	839	979	1106	1232	1363	1465	1598	1709	1823	1939	2072	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-1	-9	-7	-12	-22	1	15	18	20	26	4	12	-1	-12	-20	-12	ERROR (mV)
	LIN. ERR. (dB)	1.0	-0.03	-0.38	-0.26	-0.48	-0.86	0.04	0.62	0.72	0.81	1.03	0.16	0.48	-0.05	-0.48	-0.82	-0.49	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1943	222	346	468	585	695	826	958	1077	1206	1342	1457	1590	1702	1816	1929	2063	Measured Value (mV)
	SLOPE (mV/dB)	24.6	4	4	3	-3	-16	-9	0	-4	1	15	7	16	5	-4	-14	-4	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.15	0.15	0.12	-0.11	-0.67	-0.35	-0.01	-0.17	0.06	0.61	0.26	0.65	0.20	-0.18	-0.58	-0.16	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1927	216	332	458	574	680	805	934	1051	1181	1319	1444	1574	1689	1805	1914	2052	Measured Value (mV)
	SLOPE (mV/dB)	24.6	12	6	8	1	-16	-14	-8	-15	-7	8	10	17	9	1	-13	2	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.50	0.22	0.34	0.02	-0.64	-0.57	-0.33	-0.60	-0.30	0.32	0.40	0.68	0.35	0.04	-0.52	0.08	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1919	209	315	446	561	668	791	919	1034	1164	1299	1434	1571	1687	1801	1909	2043	Measured Value (mV)
	SLOPE (mV/dB)	24.7	21	3	10	2	-15	-15	-12	-19	-13	-2	10	22	15	5	-11	0	ERROR (mV)
	LIN. ERR. (dB)	0.9	0.83	0.12	0.41	0.07	-0.60	-0.62	-0.47	-0.78	-0.54	-0.09	0.38	0.90	0.60	0.22	-0.43	0.00	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1917	220	337	461	577	682	799	918	1033	1162	1295	1434	1571	1687	1801	1910	2047	Measured Value (mV)
	SLOPE (mV/dB)	24.5	17	12	14	7	-10	-15	-19	-27	-20	-10	7	21	15	7	-6	8	ERROR (mV)
	LIN. ERR. (dB)	1.1	0.69	0.47	0.56	0.29	-0.40	-0.63	-0.78	-1.10	-0.83	-0.41	0.28	0.87	0.62	0.30	-0.26	0.33	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1921	222	342	465	582	687	809	934	1050	1180	1318	1441	1570	1686	1801	1910	2044	Measured Value (mV)
	SLOPE (mV/dB)	24.4	9	8	9	3	-13	-14	-10	-17	-8	7	8	16	9	2	-11	2	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.37	0.32	0.37	0.14	-0.54	-0.57	-0.42	-0.68	-0.34	0.28	0.33	0.64	0.39	0.10	-0.44	0.07	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1926	201	294	431	545	656	783	924	1043	1173	1304	1432	1569	1686	1802	1913	2052	Measured Value (mV)
	SLOPE (mV/dB)	25.0	26	-6	6	-5	-19	-17	-2	-7	-2	3	6	18	10	1	-13	1	ERROR (mV)
	LIN. ERR. (dB)	1.1	1.05	-0.23	0.23	-0.20	-0.77	-0.68	-0.07	-0.28	-0.09	0.13	0.24	0.71	0.41	0.02	-0.52	0.04	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1909	211	319	448	562	669	788	916	1035	1166	1305	1430	1556	1676	1790	1897	2034	Measured Value (mV)
	SLOPE (mV/dB)	24.5	18	3	10	1	-15	-18	-13	-17	-8	9	11	14	11	3	-12	2	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.73	0.11	0.40	0.06	-0.60	-0.73	-0.52	-0.68	-0.32	0.36	0.44	0.58	0.46	0.13	-0.51	0.09	LINEARITY ERROR (dB)

Avg. Slope: 24.8 mV/dB

0.4 1 0.8 0.8 0.9 1.3 1.4 1.7 1.7 1.8 1.4 1.6 1.4 1.4 1.7 1.2 Flatness dB: -1.8 dB





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PL38725/2248

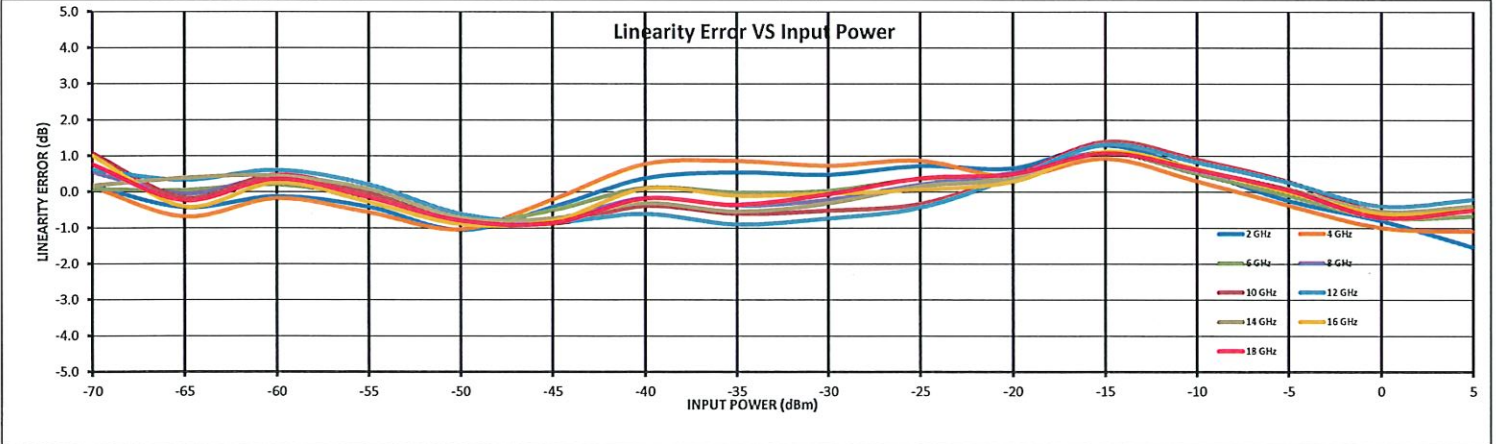
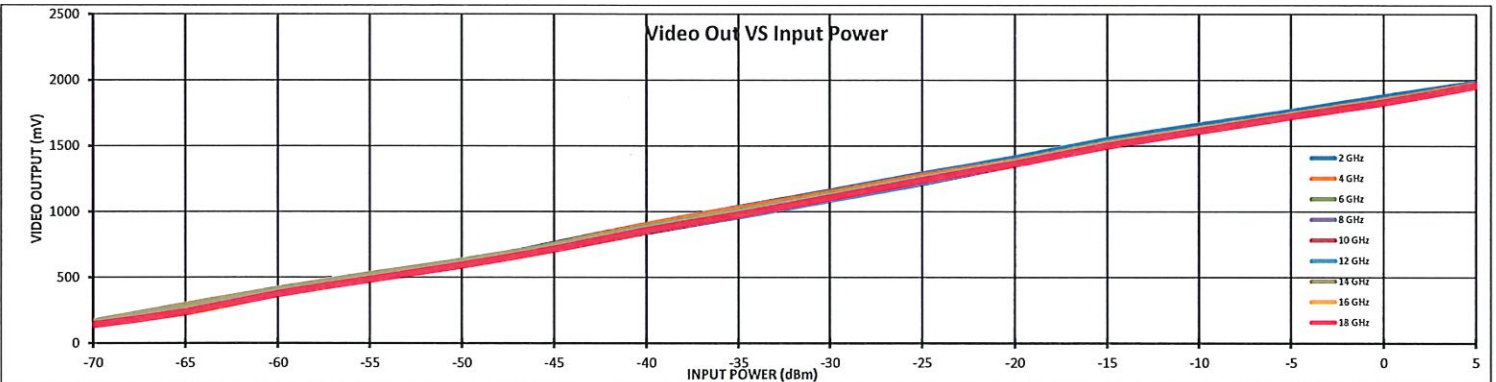
Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL38725/2248
 Date: 12/13/2022
 Tested By: RCombs
 Test Temp: +85°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	RF Input Power (dBm)																Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)																	
2 GHz	1896	25.0	1.5	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-16	-10	-5	0	5	150	260	392	510	619	760	905	1035	1158	1289	1413	1554	1661	1765	1877	1983	1896	-38	-1.53	
				0.19	-0.42	-0.11	-0.40	-1.05	-0.41	0.39	0.56	0.49	0.74	0.67	1.31	0.61	-0.24	-0.79	-1.53																				
4 GHz	1877	24.8	1.1	146	249	386	500	612	757	905	1031	1152	1279	1392	1529	1637	1744	1852	1974	146	-17	-4	-14	-25	-5	19	21	18	22	11	23	8	-9	-25	-27	1877	-27	-1.09	
				0.15	-0.68	-0.17	-0.56	-1.03	-0.20	0.78	0.86	0.74	0.88	0.43	0.94	0.31	-0.37	-0.99	-1.09																				
6 GHz	1865	24.4	1.1	168	279	405	519	624	754	891	1010	1133	1263	1386	1525	1633	1740	1847	1970	2	1	5	-3	-20	-12	3	0	1	9	10	27	13	-2	-17	-16	1865	-16	-0.67	
				0.08	0.06	0.21	-0.13	-0.82	-0.49	0.12	-0.01	0.04	0.38	0.40	1.10	0.52	-0.09	-0.70	-0.67																				
8 GHz	1850	24.5	1.1	147	255	389	500	604	728	865	982	1109	1242	1373	1509	1619	1729	1833	1961	14	-1	10	-1	-20	-18	-4	-9	-5	5	13	28	15	2	-16	-12	1850	-12	-0.48	
				0.56	-0.04	0.41	-0.06	-0.81	-0.75	-0.16	-0.37	-0.21	0.22	0.54	1.12	0.61	0.08	-0.66	-0.48																				
10 GHz	1844	24.7	1.4	138	232	371	482	588	709	845	963	1089	1217	1361	1508	1619	1728	1831	1956	27	-4	12	-1	-19	-22	-10	-15	-13	-8	11	35	23	7	-14	-12	1844	-12	-0.47	
				1.08	-0.15	0.49	-0.02	-0.75	-0.88	-0.39	-0.60	-0.51	-0.32	0.46	1.41	0.91	0.29	-0.55	-0.47																				
12 GHz	1847	24.3	1.3	153	268	397	509	611	728	856	971	1097	1226	1369	1513	1623	1732	1838	1964	15	8	15	5	-15	-20	-15	-22	-18	-10	10	32	20	7	-9	-5	1847	-5	-0.20	
				0.63	0.34	0.62	0.22	-0.60	-0.82	-0.60	-0.89	-0.72	-0.43	0.41	1.33	0.84	0.27	-0.39	-0.20																				
14 GHz	1853	24.2	1.1	163	289	411	524	625	746	877	992	1119	1252	1378	1516	1626	1734	1840	1964	4	10	11	2	-17	-18	-8	-13	-8	4	9	27	15	2	-13	-9	1853	-9	-0.39	
				0.18	0.40	0.46	0.09	-0.70	-0.73	-0.31	-0.54	-0.31	0.17	0.39	1.10	0.62	0.09	-0.53	-0.39																				
16 GHz	1856	24.9	1.1	136	228	367	478	588	714	862	981	1107	1235	1365	1511	1623	1732	1841	1969	25	-10	7	-7	-22	-20	3	-2	-1	2	7	28	16	0	-15	-12	1856	-12	-0.49	
				1.01	-0.40	0.27	-0.27	-0.88	-0.80	0.10	-0.09	-0.03	0.07	0.30	1.14	0.65	0.01	-0.59	-0.49																				
18 GHz	1848	24.7	1.1	141	240	378	489	596	717	858	977	1107	1241	1368	1505	1617	1726	1831	1959	19	-6	9	-3	-19	-21	-4	-9	-2	10	13	27	15	1	-17	-12	1848	-12	-0.51	
				0.77	-0.23	0.37	-0.13	-0.79	-0.86	-0.18	-0.35	-0.06	0.39	0.51	1.09	0.63	0.05	-0.70	-0.51																				

Avg. Slope: 24.6 mV/dB 0.5 1.0 0.9 0.9 0.8 1 1.2 1.5 1.4 1.5 1.1 1 0.9 0.8 0.9 0.6 Fitness dB: ±1.5 dB





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

PL38725/2248

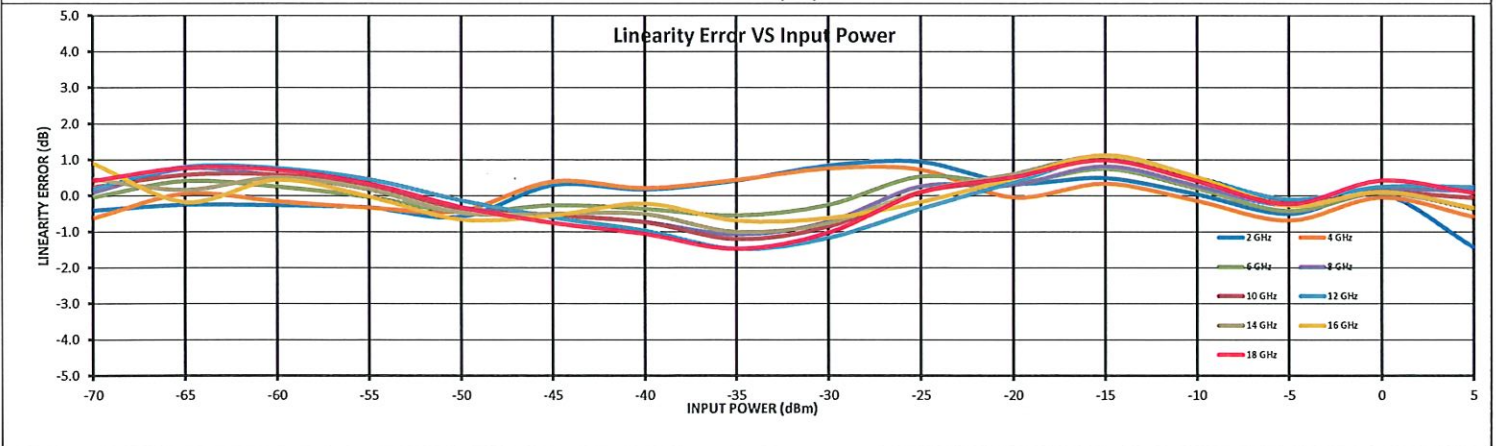
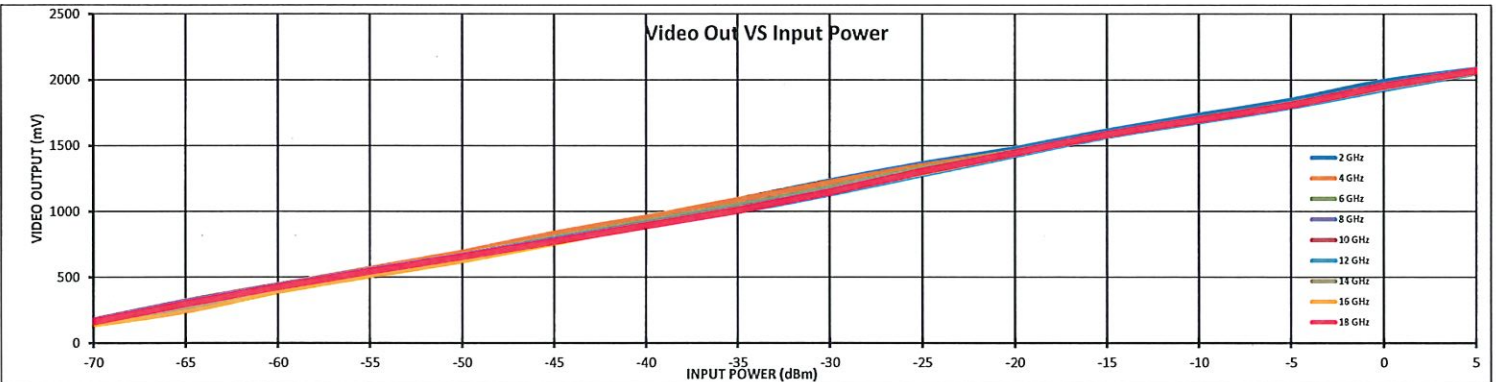
Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL38725/2248
Date: 12/13/2022
Tested By: RCombs
Test Temp: -40°C

Frequency	INTERCEPT (mV)	1990	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1990	163	297	426	554	677	830	957	1093	1234	1366	1481	1614	1732	1848	1992	2084	Measured Value (mV)
	SLOPE (mV/dB)	26.0	-10	-6	-7	-8	-15	8	5	11	22	25	9	13	1	-13	2	-37	Error (mV)
	LIN. ERR. (dB)	1.4	-0.40	-0.24	-0.26	-0.32	-0.58	0.30	0.18	0.43	0.85	0.95	0.36	0.51	0.04	-0.49	0.07	-1.42	Linearity Error (dB)
4 GHz	INTERCEPT (mV)	1965	179	323	444	566	690	837	959	1091	1225	1351	1458	1594	1708	1821	1964	2076	Measured Value (mV)
	SLOPE (mV/dB)	25.3	-16	2	-4	-8	-10	10	6	11	19	19	-1	9	-4	-17	-1	-14	Error (mV)
	LIN. ERR. (dB)	0.8	-0.62	0.07	-0.15	-0.33	-0.41	0.40	0.22	0.45	0.77	0.74	-0.04	0.34	-0.14	-0.69	-0.04	-0.57	Linearity Error (dB)
6 GHz	INTERCEPT (mV)	1954	172	311	434	554	671	803	927	1050	1184	1332	1454	1591	1705	1816	1956	2072	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-1	11	7	0	-11	-6	-9	-14	-6	14	9	19	5	-11	3	-9	Error (mV)
	LIN. ERR. (dB)	0.8	-0.03	0.42	0.26	-0.02	-0.44	-0.26	-0.36	-0.54	-0.24	0.55	0.36	0.76	0.21	-0.42	0.10	-0.35	Linearity Error (dB)
8 GHz	INTERCEPT (mV)	1936	177	320	440	557	670	791	911	1028	1163	1314	1440	1579	1691	1803	1939	2065	Measured Value (mV)
	SLOPE (mV/dB)	25.2	3	19	14	5	-8	-13	-18	-27	-18	7	8	21	7	-7	4	4	Error (mV)
	LIN. ERR. (dB)	1.1	0.10	0.77	0.56	0.20	-0.33	-0.52	-0.72	-1.07	-0.72	0.27	0.30	0.82	0.28	-0.26	0.14	0.16	Linearity Error (dB)
10 GHz	INTERCEPT (mV)	1935	162	298	425	544	655	778	900	1015	1151	1302	1439	1580	1693	1803	1937	2061	Measured Value (mV)
	SLOPE (mV/dB)	25.4	6	15	15	7	-9	-14	-18	-30	-22	3	12	27	12	-5	2	-1	Error (mV)
	LIN. ERR. (dB)	1.2	0.24	0.59	0.59	0.28	-0.35	-0.54	-0.73	-1.19	-0.85	0.11	0.47	1.05	0.46	-0.19	0.10	-0.05	Linearity Error (dB)
12 GHz	INTERCEPT (mV)	1932	166	308	434	553	664	779	896	1009	1144	1290	1435	1579	1692	1803	1938	2064	Measured Value (mV)
	SLOPE (mV/dB)	25.3	5	21	20	12	-3	-15	-24	-37	-29	-9	10	27	13	-2	7	6	Error (mV)
	LIN. ERR. (dB)	1.5	0.19	0.81	0.78	0.47	-0.12	-0.59	-0.96	-1.47	-1.16	-0.35	0.38	1.08	0.52	-0.10	0.26	0.26	Linearity Error (dB)
14 GHz	INTERCEPT (mV)	1948	150	271	409	530	643	771	901	1017	1153	1305	1447	1589	1702	1812	1950	2069	Measured Value (mV)
	SLOPE (mV/dB)	25.9	12	4	13	5	-12	-13	-13	-26	-19	3	16	29	13	-6	2	-8	Error (mV)
	LIN. ERR. (dB)	1.1	0.48	0.17	0.51	0.19	-0.47	-0.49	-0.50	-1.00	-0.75	0.13	0.61	1.12	0.50	-0.25	0.09	-0.33	Linearity Error (dB)
16 GHz	INTERCEPT (mV)	1951	139	242	389	508	623	756	896	1015	1148	1291	1439	1587	1702	1812	1954	2073	Measured Value (mV)
	SLOPE (mV/dB)	25.2	24	-4	12	0	-17	-14	-5	-18	-16	-4	13	30	14	-7	3	-8	Error (mV)
	LIN. ERR. (dB)	1.1	0.91	-0.16	0.45	-0.01	-0.85	-0.54	-0.21	-0.68	-0.61	-0.17	0.50	1.14	0.53	-0.28	0.12	-0.32	Linearity Error (dB)
18 GHz	INTERCEPT (mV)	1945	165	302	429	547	658	775	895	1012	1152	1308	1447	1587	1700	1811	1956	2075	Measured Value (mV)
	SLOPE (mV/dB)	25.6	11	20	19	9	-8	-19	-27	-38	-26	3	13	25	11	-6	11	2	Error (mV)
	LIN. ERR. (dB)	1.469	0.42	0.78	0.73	0.34	-0.31	-0.75	-1.05	-1.47	-1.02	0.10	0.52	0.99	0.42	-0.22	0.43	0.09	Linearity Error (dB)

Avg. Slope: 25.6 mV/dB 0.8 1.6 1.1 1.1 1.3 1.6 1.2 1.6 1.8 1.5 0.9 0.7 0.8 0.9 1.1 0.4 Fitness dB: ±1.8 dB

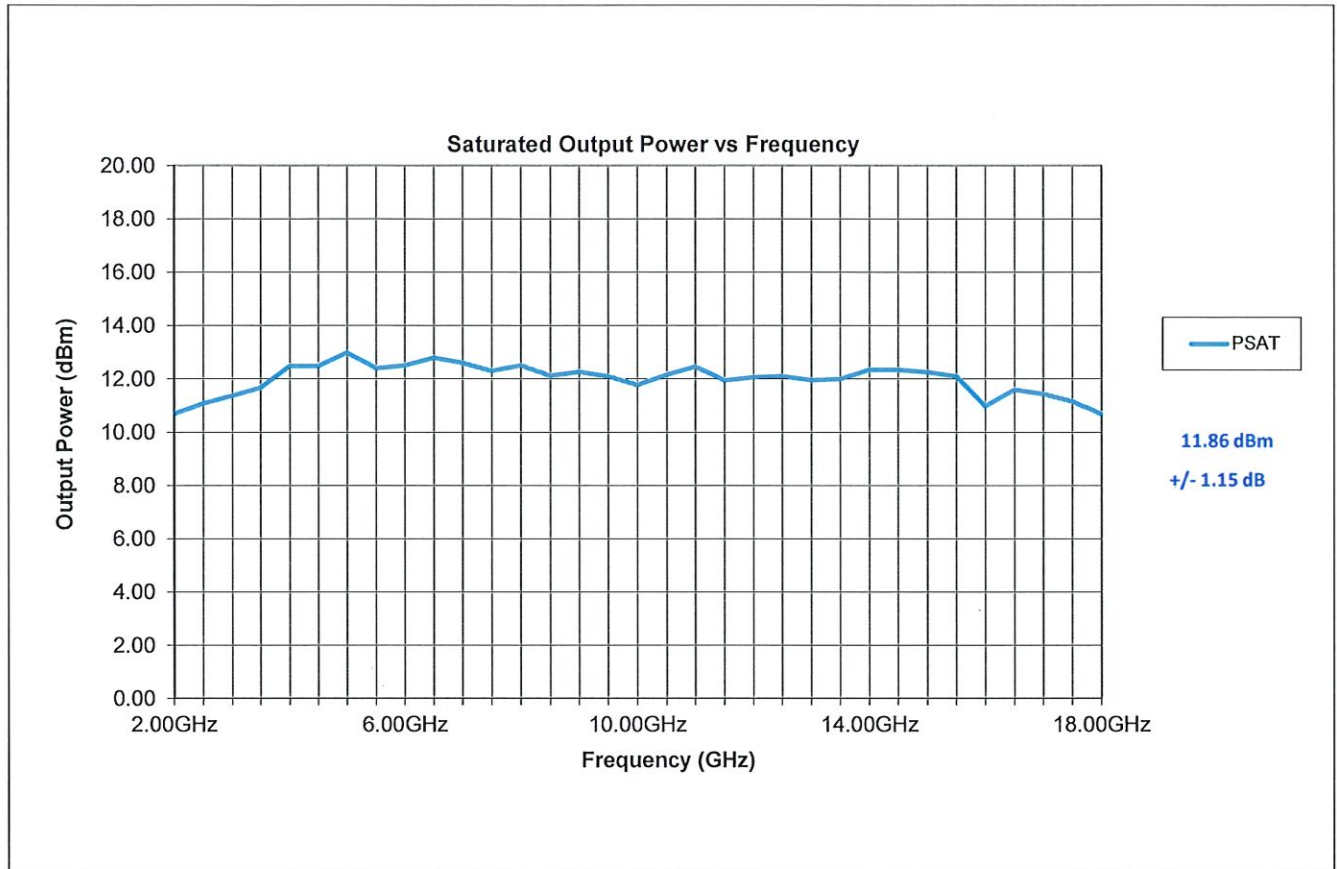




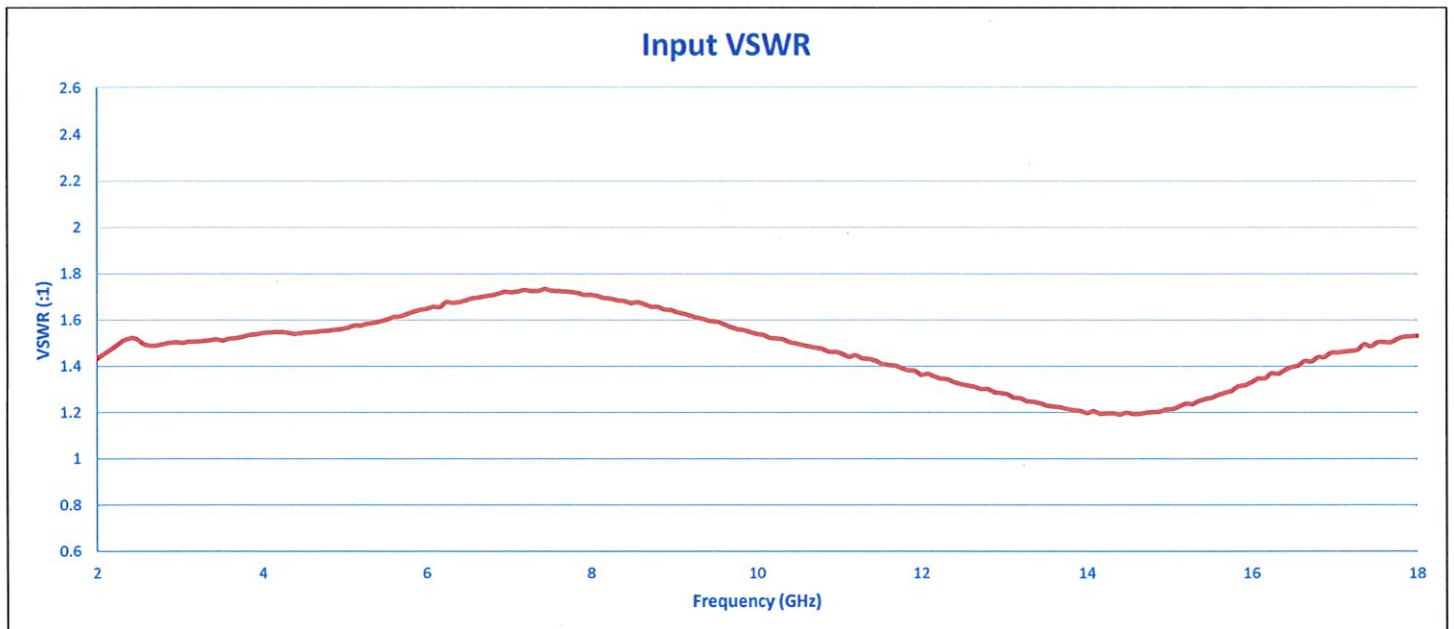
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL38725/2248

PSAT



INPUT VSWR

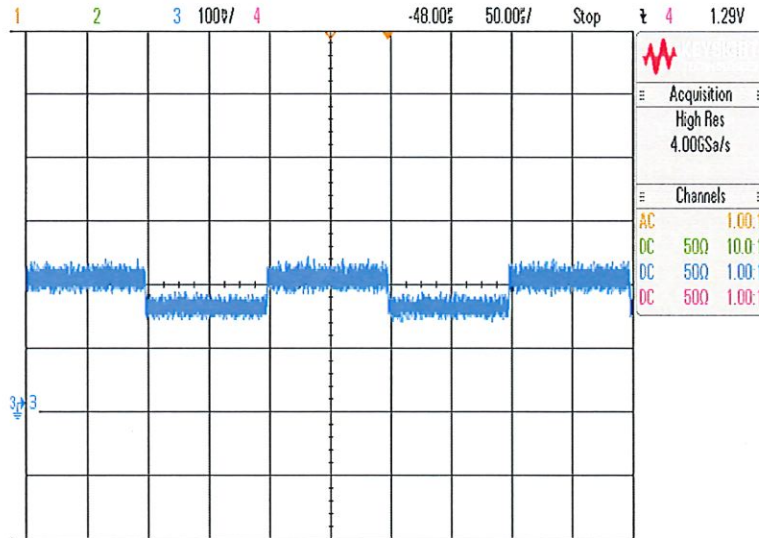




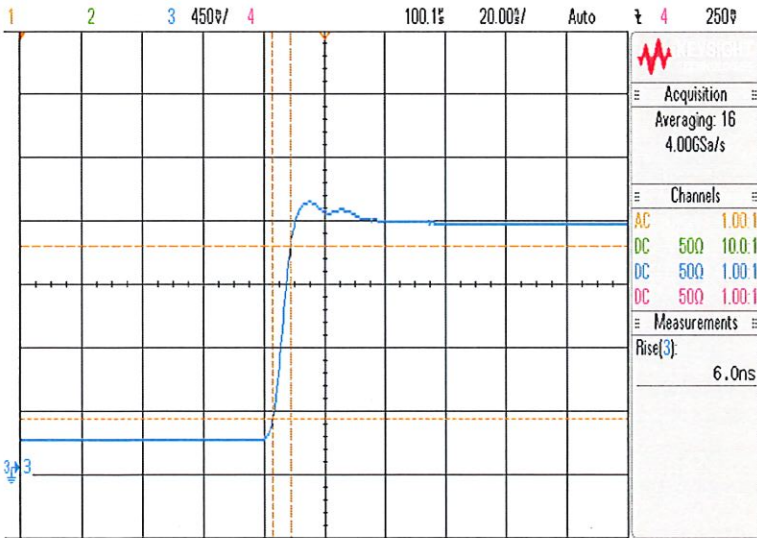
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL38726/2248

TSS



Rise Time



Fall Time

