



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

PL36333/2217

Customer: _____	Tested By: <u>RCombs</u>
SO No: _____	Temperature: <u>+25° C</u>
Model No: <u>SDLVA-6G18G-CD-2-OPT218</u>	Date: <u>4/22/2022</u>
Serial No: <u>PL36333/2217</u>	Drawing No: <u>27623906</u> Rev: <u>A1</u>

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 QA 2
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)	1.8:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	12.51 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)	±2.1 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	5.8 ns	
12	Recovery Time:	60 ns Typical	38.5 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 258 mA -12V @ 98 mA	PMI QA 2

QA/QC Approval: Date: 4/25/2022



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PL36333/2217

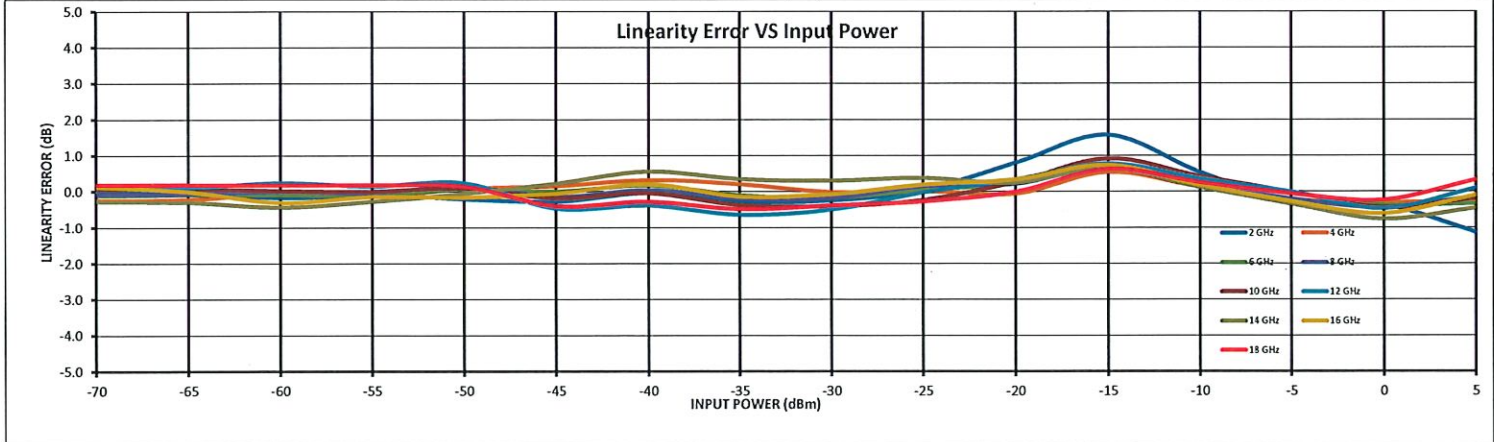
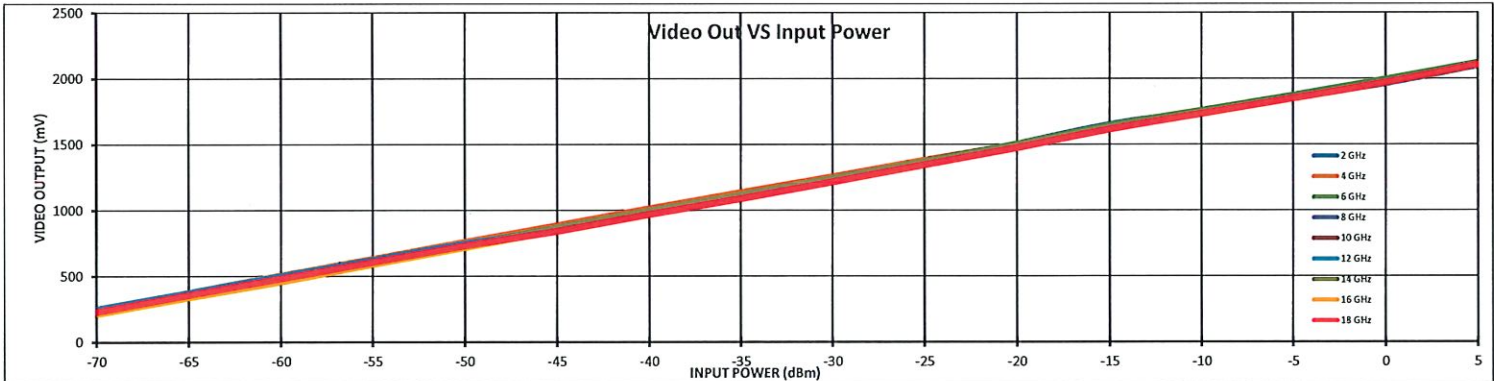


Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL36333/2217
Date: 4/22/2022
Tested By: RCombs
Test Temp: +25°C

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	1995	25.3	1.6	225	351	473	602	725	850	982	1103	1230	1364	1509	1655	1756	1861	1986	2093	Measured Value (mV)
				1	0	-4	-2	-5	-7	-1	-7	-6	1	20	40	14	-7	-9	-28	Error (mV)
				0.05	0.01	-0.17	-0.08	-0.20	-0.27	-0.03	-0.27	-0.24	0.05	0.80	1.58	0.54	-0.28	-0.36	-1.12	LINEARITY ERROR (dB)
4 GHz	2007	24.9	0.5	257	381	511	633	763	889	1018	1140	1259	1385	1507	1647	1761	1877	2000	2126	Measured Value (mV)
				-6	-6	-1	-3	2	4	8	5	0	0	-1	14	3	-6	-8	-6	Error (mV)
				-0.23	-0.22	-0.04	-0.13	0.08	0.16	0.33	0.21	-0.01	0.02	-0.05	0.55	0.13	-0.22	-0.31	-0.25	LINEARITY ERROR (dB)
6 GHz	2008	25.3	0.8	237	364	490	616	747	872	1002	1122	1246	1378	1509	1649	1762	1876	1999	2126	Measured Value (mV)
				-3	-2	-2	-2	2	0	5	-3	-4	2	6	20	6	-6	-9	-8	Error (mV)
				-0.10	-0.08	-0.09	-0.10	0.07	0.01	0.18	-0.10	-0.17	0.06	0.22	0.79	0.24	-0.23	-0.37	-0.33	LINEARITY ERROR (dB)
8 GHz	1990	24.9	0.7	242	367	493	617	746	864	994	1112	1237	1370	1497	1633	1746	1860	1979	2112	Measured Value (mV)
				-2	-1	0	-1	4	-4	1	-5	-5	4	5	17	5	-5	-11	-3	Error (mV)
				-0.08	-0.06	0.01	-0.03	0.15	-0.14	0.05	-0.19	-0.18	0.15	0.21	0.68	0.20	-0.20	-0.44	-0.13	LINEARITY ERROR (dB)
10 GHz	1985	25.0	0.9	233	359	483	608	735	853	982	1099	1224	1353	1491	1632	1745	1859	1974	2106	Measured Value (mV)
				2	2	1	0	2	-5	-1	-9	-10	-6	6	23	11	0	-11	-5	Error (mV)
				0.07	0.08	0.02	0.01	0.09	-0.18	-0.04	-0.37	-0.40	-0.23	0.26	0.92	0.42	-0.01	-0.45	-0.19	LINEARITY ERROR (dB)
12 GHz	1977	24.7	0.8	250	373	500	621	747	853	979	1096	1223	1358	1491	1625	1738	1853	1965	2103	Measured Value (mV)
				3	3	6	4	6	-12	-9	-16	-12	0	8	19	9	0	-12	2	Error (mV)
				0.13	0.11	0.25	0.16	0.25	-0.47	-0.38	-0.64	-0.50	-0.02	0.34	0.78	0.36	0.00	-0.47	0.10	LINEARITY ERROR (dB)
14 GHz	1991	25.2	0.8	220	345	468	598	729	862	997	1118	1242	1370	1493	1629	1742	1856	1971	2105	Measured Value (mV)
				-7	-7	-11	-7	-1	6	14	9	8	10	6	17	3	-9	-19	-11	Error (mV)
				-0.27	-0.29	-0.43	-0.27	-0.05	0.23	0.56	0.35	0.31	0.38	0.25	0.66	0.12	-0.34	-0.76	-0.45	LINEARITY ERROR (dB)
16 GHz	1989	25.5	0.7	204	329	448	580	708	838	972	1091	1221	1355	1487	1625	1738	1854	1973	2114	Measured Value (mV)
				4	0	-8	-4	-4	-1	5	-3	-2	5	9	19	5	-7	-16	-2	Error (mV)
				0.14	0.01	-0.30	-0.14	-0.16	-0.05	0.21	-0.13	-0.07	0.20	0.34	0.74	0.18	-0.27	-0.61	-0.09	LINEARITY ERROR (dB)
18 GHz	1976	25.0	0.6	233	358	482	607	731	842	970	1089	1217	1344	1476	1617	1732	1849	1969	2108	Measured Value (mV)
				5	5	5	5	4	-10	-7	-12	-10	-7	0	16	6	-1	.6	8	Error (mV)
				0.20	0.19	0.18	0.18	0.15	-0.40	-0.28	-0.49	-0.38	-0.27	-0.01	0.63	0.25	-0.05	-0.24	0.33	LINEARITY ERROR (dB)

Avg. Slope: 25.1 mV/dB 1 1.1 1.2 1.1 1.1 1 1 1 0.8 0.8 0.7 0.8 0.6 0.6 0.7 0.7 Flatness dB: ±1.2 dB





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

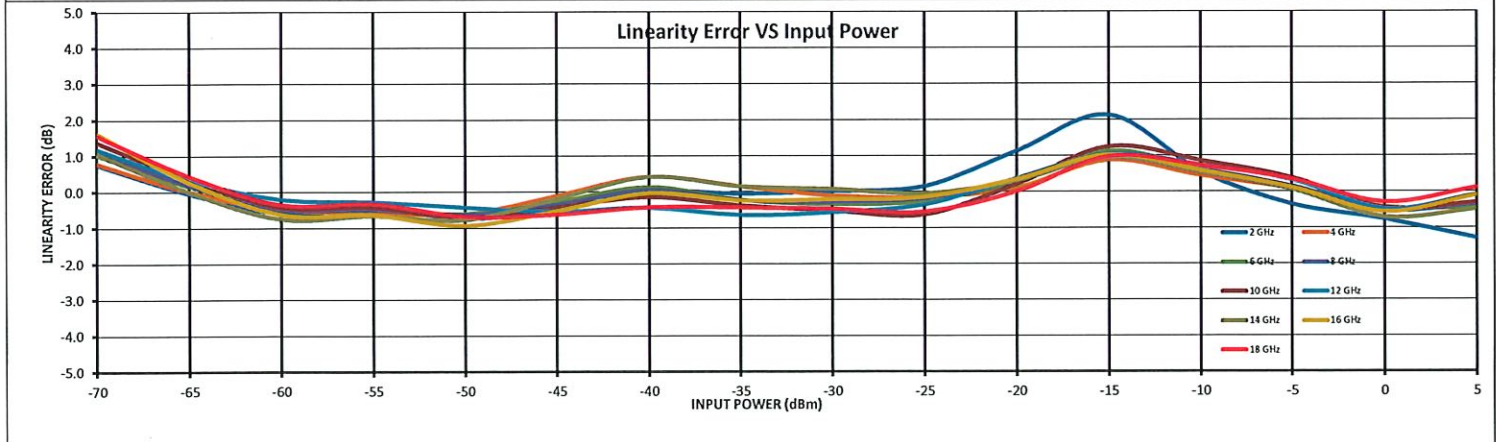
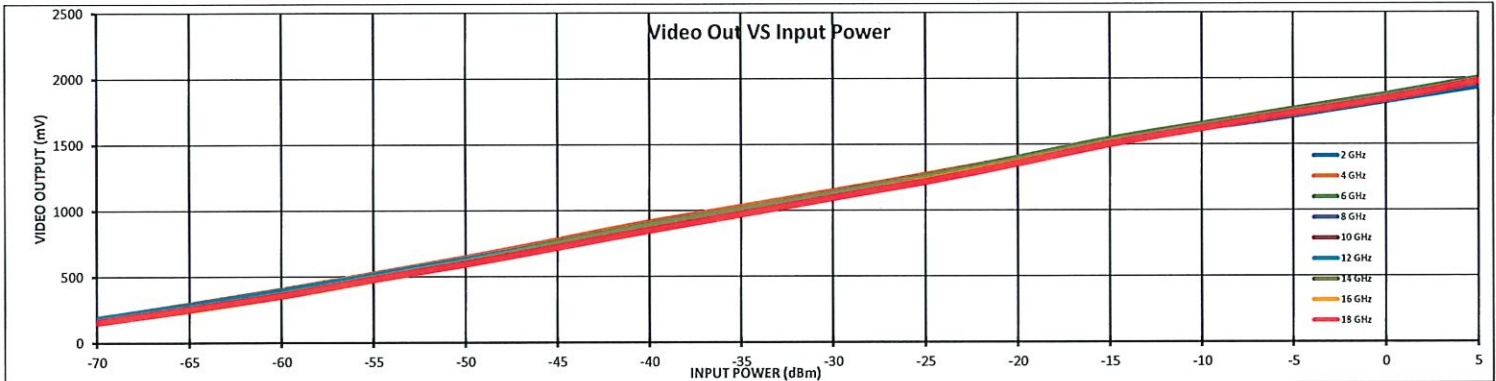
PL36333/2217

Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL36333/2217
Date: 4/22/2022
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)	
2 GHz	1845	24.1	2.1	178	279	386	609	623	749	882	1001	1123	1247	1391	1535	1618	1716	1827	1934	Measured Value (mV)	
				19	-1	-14	-11	-17	-13	0	-1	1	4	27	51	13	9	-18	-31		Error (mV)
				0.77	-0.04	-0.58	-0.46	-0.72	-0.52	0.01	-0.05	0.03	0.16	1.13	2.13	0.56	-0.35	-0.76	-1.30		LINEARITY ERROR (dB)
4 GHz	1887	24.6	0.9	186	290	401	622	643	779	914	1031	1147	1269	1398	1540	1652	1767	1877	1999	Measured Value (mV)	
				20	0	-12	-14	-15	-3	10	4	-3	-4	3	22	11	2	-11	-11		Error (mV)
				0.80	0.01	-0.47	-0.56	-0.61	-0.11	0.42	0.16	-0.10	-0.15	0.11	0.88	0.44	0.08	-0.43	-0.46		LINEARITY ERROR (dB)
6 GHz	1888	24.8	1.1	177	279	388	611	632	765	899	1014	1135	1261	1399	1544	1655	1767	1877	2002	Measured Value (mV)	
				26	4	-11	-12	-15	-7	3	-5	-8	-6	7	28	15	3	-11	-11		Error (mV)
				1.04	0.16	-0.45	-0.49	-0.60	-0.27	0.14	-0.22	-0.34	-0.26	0.28	1.13	0.61	0.12	-0.44	-0.43		LINEARITY ERROR (dB)
8 GHz	1874	24.7	1.1	172	272	380	603	623	763	887	1004	1126	1252	1388	1529	1643	1764	1861	1989	Measured Value (mV)	
				27	5	-11	-12	-16	-9	1	-6	-7	-4	8	26	15	4	-13	-9		Error (mV)
				1.11	0.19	-0.46	-0.49	-0.63	-0.35	0.05	-0.23	-0.27	-0.18	0.32	1.05	0.62	0.14	-0.52	-0.34		LINEARITY ERROR (dB)
10 GHz	1866	24.8	1.4	164	262	367	490	608	739	870	988	1109	1230	1375	1525	1639	1751	1854	1982	Measured Value (mV)	
				34	9	-11	-11	-18	-11	-3	-9	-13	-16	5	31	21	9	-11	-8		Error (mV)
				1.39	0.35	-0.43	-0.44	-0.71	-0.43	-0.14	-0.38	-0.52	-0.63	0.21	1.25	0.86	0.38	-0.45	-0.31		LINEARITY ERROR (dB)
12 GHz	1860	24.4	1.2	180	281	390	610	629	748	873	990	1114	1241	1381	1520	1634	1746	1848	1980	Measured Value (mV)	
				29	8	-5	-7	-10	-13	-11	-16	-14	-9	9	26	18	8	-12	-2		Error (mV)
				1.19	0.34	-0.20	-0.27	-0.42	-0.55	-0.43	-0.64	-0.57	-0.35	0.37	1.05	0.73	0.32	-0.49	-0.09		LINEARITY ERROR (dB)
14 GHz	1869	24.8	1.1	160	258	363	489	610	749	888	1005	1127	1248	1381	1521	1635	1747	1852	1981	Measured Value (mV)	
				27	0	-19	-16	-19	-5	10	4	2	-1	8	24	13	2	-18	-12		Error (mV)
				1.08	0.01	-0.75	-0.66	-0.77	-0.18	0.42	0.16	0.08	-0.05	0.31	0.96	0.54	0.06	-0.71	-0.49		LINEARITY ERROR (dB)
16 GHz	1867	25.1	1.6	148	240	343	468	586	722	860	981	1107	1235	1373	1515	1630	1744	1852	1990	Measured Value (mV)	
				41	7	-16	-16	-23	-13	-1	-6	-5	-4	9	26	15	3	-14	-3		Error (mV)
				1.63	0.27	-0.62	-0.64	-0.93	-0.53	-0.03	-0.23	-0.20	-0.14	0.35	1.03	0.59	0.11	-0.56	-0.10		LINEARITY ERROR (dB)
18 GHz	1850	24.7	1.6	157	253	357	481	596	721	850	973	1096	1217	1355	1503	1620	1735	1842	1976	Measured Value (mV)	
				39	11	-9	-8	-17	-16	-11	-11	-12	-14	0	24	18	9	-7	3		Error (mV)
				1.57	0.44	-0.35	-0.33	-0.68	-0.63	-0.43	-0.43	-0.47	-0.56	0.00	0.98	0.73	0.35	-0.30	0.11		LINEARITY ERROR (dB)
Avg. Slope: 24.7 mV/dB				0.9	1	1.2	1.1	1.2	1.2	1.3	1.2	1	1	0.9	0.8	0.8	1	1	1.4	Flatness dB: ±1.4 dB	





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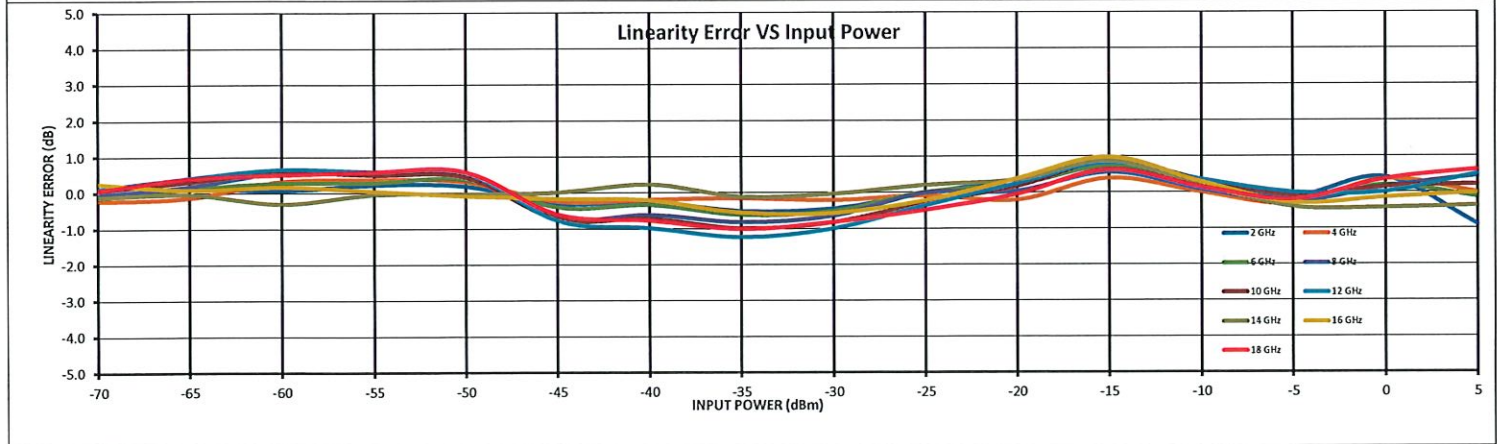
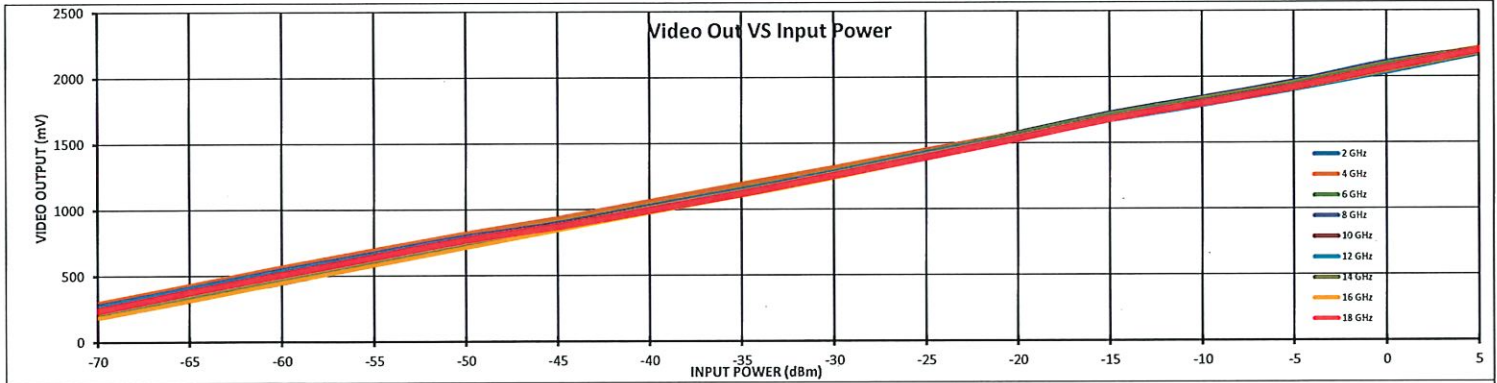
PL36333/2217

Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL36333/2217
 Date: 4/22/2022
 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	2097	26.6	0.9	233	372	504	641	773	893	1027	1153	1288	1432	1575	1722	1840	1961	2108	2206	Measured Value (mV)
				-3	3	2	6	5	-8	-6	-14	-12	0	10	24	9	-3	11	-24	ERROR (mV)
				-0.12	0.13	0.08	0.23	0.19	-0.30	-0.24	-0.51	-0.44	-0.02	0.36	0.90	0.35	-0.11	0.42	-0.90	LINEARITY ERROR (dB)
4 GHz	2086	25.5	0.4	294	424	563	691	818	931	1060	1189	1315	1445	1570	1713	1830	1950	2095	2213	Measured Value (mV)
				-6	-3	8	9	8	-6	-5	-4	-5	-2	-5	10	0	-8	9	0	ERROR (mV)
				-0.22	-0.13	0.32	0.37	0.31	-0.23	-0.19	-0.15	-0.21	-0.08	-0.21	0.40	0.00	-0.32	0.36	-0.02	LINEARITY ERROR (dB)
6 GHz	2081	26.1	0.7	254	391	525	655	788	898	1030	1153	1286	1430	1565	1709	1825	1943	2086	2208	Measured Value (mV)
				-3	3	8	8	10	-10	-9	-16	-13	0	6	19	5	-8	5	-3	ERROR (mV)
				-0.13	0.13	0.29	0.29	0.38	-0.40	-0.34	-0.61	-0.52	0.01	0.21	0.73	0.18	-0.30	0.20	-0.13	LINEARITY ERROR (dB)
8 GHz	2056	25.4	0.8	275	408	545	671	797	894	1024	1145	1277	1420	1549	1689	1804	1922	2060	2195	Measured Value (mV)
				-1	5	15	14	12	-18	-15	-21	-16	0	1	14	2	-7	4	12	ERROR (mV)
				-0.04	0.19	0.58	0.53	0.48	-0.71	-0.61	-0.82	-0.64	-0.01	0.04	0.57	0.09	-0.27	0.15	0.46	LINEARITY ERROR (dB)
10 GHz	2059	25.6	1.0	265	400	535	661	787	886	1014	1135	1268	1410	1550	1695	1810	1927	2062	2192	Measured Value (mV)
				2	8	16	13	11	-19	-18	-25	-21	-7	4	22	9	-2	4	6	ERROR (mV)
				0.07	0.32	0.58	0.50	0.44	-0.73	-0.72	-0.99	-0.82	-0.28	0.17	0.86	0.33	-0.09	0.15	0.22	LINEARITY ERROR (dB)
12 GHz	2041	25.5	1.2	256	391	525	651	778	872	994	1115	1249	1393	1536	1679	1795	1913	2041	2182	Measured Value (mV)
				3	11	17	15	14	-20	-25	-31	-25	-9	6	21	9	0	0	13	ERROR (mV)
				0.12	0.43	0.67	0.59	0.56	-0.77	-0.97	-1.23	-0.99	-0.35	0.24	0.83	0.36	0.00	0.01	0.51	LINEARITY ERROR (dB)
14 GHz	2064	26.6	0.9	195	331	457	597	730	865	1004	1128	1263	1403	1540	1687	1802	1920	2052	2187	Measured Value (mV)
				-3	-1	-8	-1	-1	0	6	-3	-1	6	9	23	5	-11	-11	-10	ERROR (mV)
				-0.11	-0.03	-0.30	-0.04	-0.04	0.01	0.24	-0.11	-0.03	0.21	0.35	0.88	0.20	-0.41	-0.43	-0.37	LINEARITY ERROR (dB)
16 GHz	2061	27.0	1.0	182	312	449	580	711	844	978	1103	1238	1382	1533	1684	1800	1919	2058	2198	Measured Value (mV)
				7	2	5	1	-2	-4	-6	-15	-15	-6	10	27	8	-8	-4	0	ERROR (mV)
				0.26	0.09	0.18	0.05	-0.09	-0.17	-0.20	-0.55	-0.56	-0.22	0.39	0.98	0.29	-0.29	-0.15	-0.01	LINEARITY ERROR (dB)
18 GHz	2055	26.0	1.01	238	377	509	641	771	870	996	1119	1254	1393	1534	1682	1799	1920	2064	2201	Measured Value (mV)
				2	11	13	15	15	-16	-20	-26	-21	-13	-1	17	4	-5	9	16	ERROR (mV)
				0.08	0.41	0.51	0.58	0.59	-0.60	-0.77	-1.01	-0.82	-0.49	-0.05	0.64	0.15	-0.20	0.36	0.62	LINEARITY ERROR (dB)
Avg. Slope: 26 mV/dB				2.1	2.1	2.2	2.1	2	1.7	1.6	1.6	1.5	1.2	0.8	0.8	0.9	0.9	1.3	0.6	Flatness dB: ±2.2 dB

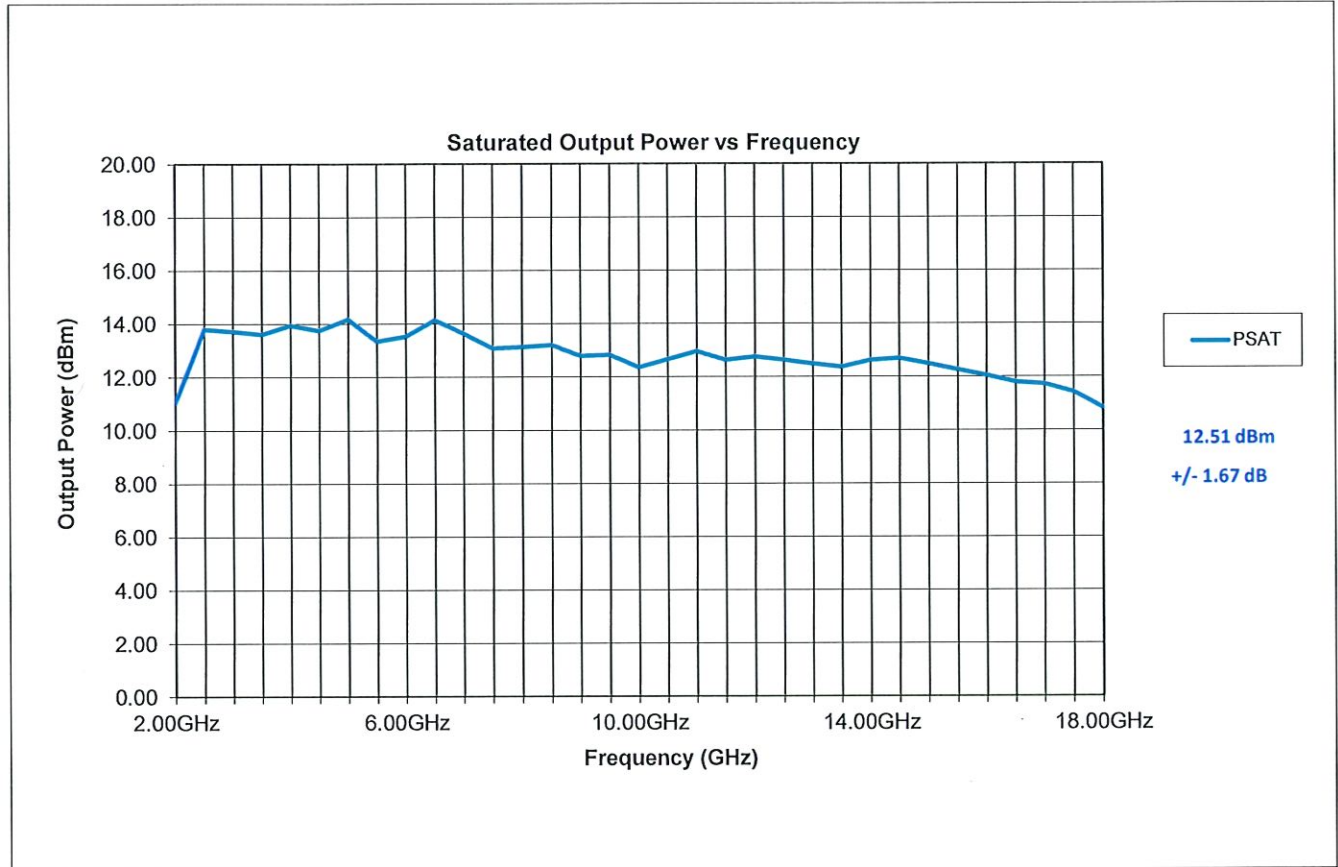




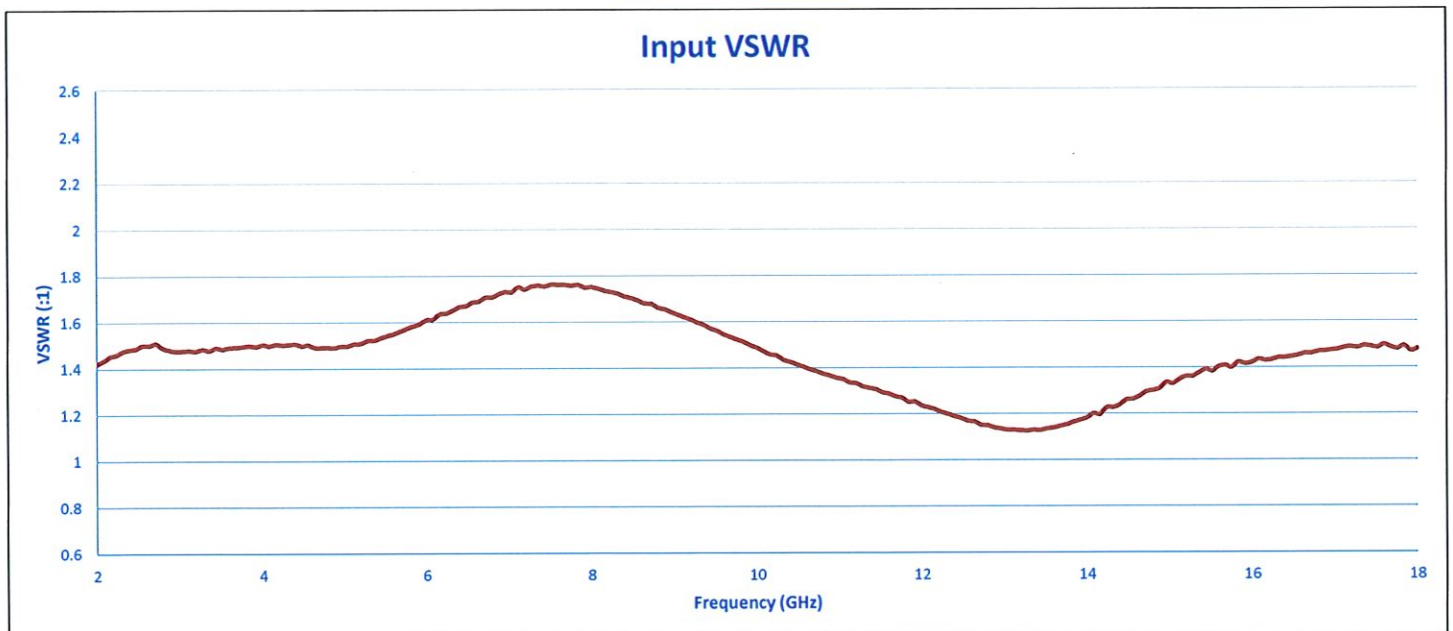
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36333/2217

PSAT



INPUT VSWR

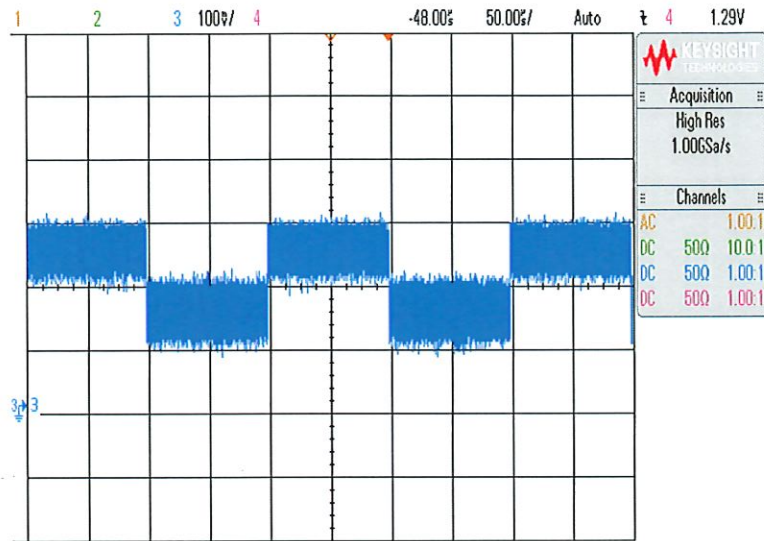




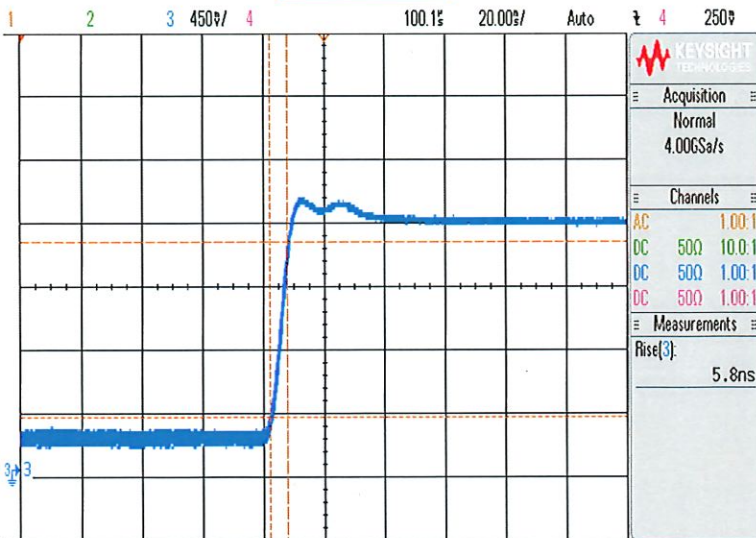
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36333/2217

TSS



Rise Time



Fall Time

