



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

PL42483/2341

Customer: _____ Tested By: RCombs
 SO No: _____ Temperature: +25° C
 Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/11/2023
 Serial No: PL42483/2341 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)	2:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	11.67 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)	±1.6 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	56.5 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 247 mA -12V @ 96 mA	PMI QA2

QA/QC Approval: PMI QA2 Date: 10/13/2023



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

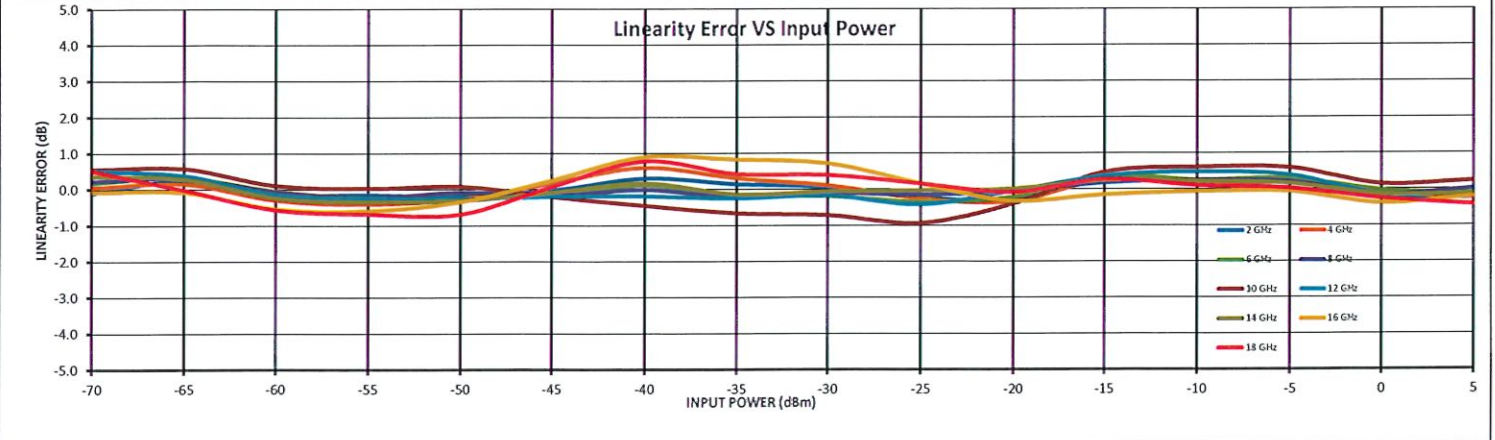
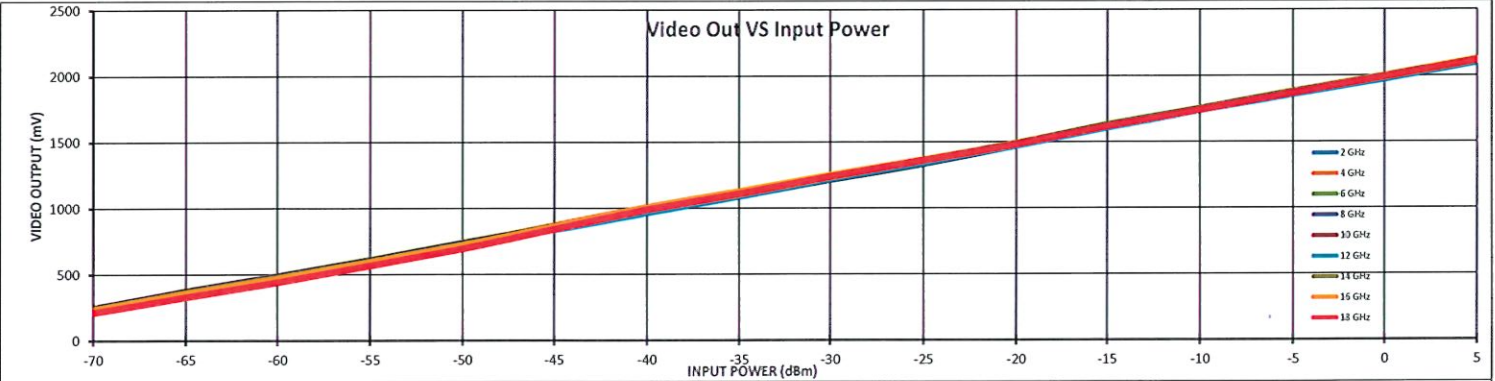
PL42483/2341

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42483/2341
 Date: 10/11/2023
 Tested By: RCombs
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	RF Input Power (dBm)															
2 GHz	1992	25.2	0.3	229	363	479	605	729	859	994	1115	1239	1358	1481	1621	1747	1873	1987	2111
				-3	6	-3	-4	-5	-1	8	4	2	-5	-8	6	5	7	-5	-6
				-0.10	0.26	-0.13	-0.14	-0.19	-0.02	0.31	0.15	0.07	-0.22	-0.31	0.25	0.24	0.26	-0.18	-0.25
4 GHz	2008	25.3	0.6	241	370	485	609	739	876	1013	1132	1253	1370	1494	1635	1758	1886	2005	2128
				1	4	-7	-10	-7	4	15	8	3	-6	-9	6	3	4	-3	-6
				0.05	0.16	-0.29	-0.41	-0.26	0.17	0.60	0.30	0.11	-0.26	-0.34	0.25	0.11	0.17	-0.12	-0.24
6 GHz	2002	25.1	0.4	250	379	495	615	745	869	1001	1119	1244	1366	1494	1635	1757	1884	2001	2124
				5	8	-1	-5	-2	-3	3	-5	-5	-9	-6	9	6	7	-1	-3
				0.18	0.34	-0.04	-0.22	-0.08	-0.13	0.12	-0.18	-0.18	-0.35	-0.22	0.38	0.25	0.30	-0.03	-0.12
8 GHz	1985	24.8	0.3	251	378	493	613	741	863	991	1110	1237	1360	1487	1617	1743	1866	1981	2109
				6	8	-1	-5	-2	-4	0	-5	-2	-4	-1	5	5	5	-4	0
				0.22	0.32	-0.06	-0.22	-0.08	-0.18	0.00	-0.22	-0.10	-0.15	-0.05	0.18	0.25	0.21	-0.15	0.01
10 GHz	1975	24.9	0.9	243	369	482	604	730	848	967	1086	1209	1329	1466	1613	1741	1865	1979	2106
				14	14	3	1	2	-5	-11	-17	-18	-23	-10	12	15	15	4	6
				0.55	0.58	0.11	0.03	0.08	-0.20	-0.45	-0.67	-0.72	-0.94	-0.41	0.47	0.61	0.59	0.14	0.22
12 GHz	1979	25.2	0.5	230	353	465	589	714	842	968	1092	1220	1339	1475	1611	1740	1863	1975	2102
				13	10	-3	-6	-7	-5	-5	-6	-4	-11	-1	9	12	10	-4	-3
				0.52	0.40	-0.14	-0.24	-0.26	-0.19	-0.18	-0.25	-0.17	-0.42	-0.04	0.37	0.48	0.39	-0.15	-0.13
14 GHz	1992	25.2	0.4	238	362	475	598	725	856	989	1107	1235	1361	1488	1621	1746	1870	1988	2114
				9	7	-5	-9	-8	-2	4	-4	-1	-1	0	6	6	4	-4	-3
				0.37	0.29	-0.24	-0.34	-0.30	-0.09	0.18	-0.14	-0.06	-0.04	0.01	0.26	0.23	0.16	-0.15	-0.14
16 GHz	1988	24.9	0.9	243	367	480	603	734	874	1014	1137	1259	1369	1482	1611	1737	1862	1978	2108
				-2	-2	-13	-15	-9	6	22	20	18	4	-8	-4	-2	-2	-10	-5
				-0.08	-0.08	-0.54	-0.59	-0.34	0.25	0.90	0.82	0.72	0.16	-0.32	-0.15	-0.07	-0.07	-0.40	-0.20
18 GHz	1998	25.7	0.8	213	328	442	568	696	844	990	1110	1237	1360	1482	1619	1743	1870	1991	2115
				13	0	-14	-17	-18	2	20	11	10	4	-2	7	3	0	-7	-11
				0.52	-0.02	-0.56	-0.68	-0.69	0.07	0.78	0.42	0.39	0.15	-0.08	0.27	0.10	0.02	-0.26	-0.43
Avg. Slope: 25.1 mV/dB				0.8 1 1.1 1 1 0.7 0.9 1 1 0.8 0.6 0.5 0.4 0.5 0.6 0.5 Flatness dB: ±1.1 dB															





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

PL42483/2341

Log Transfer Over Frequency +85°C

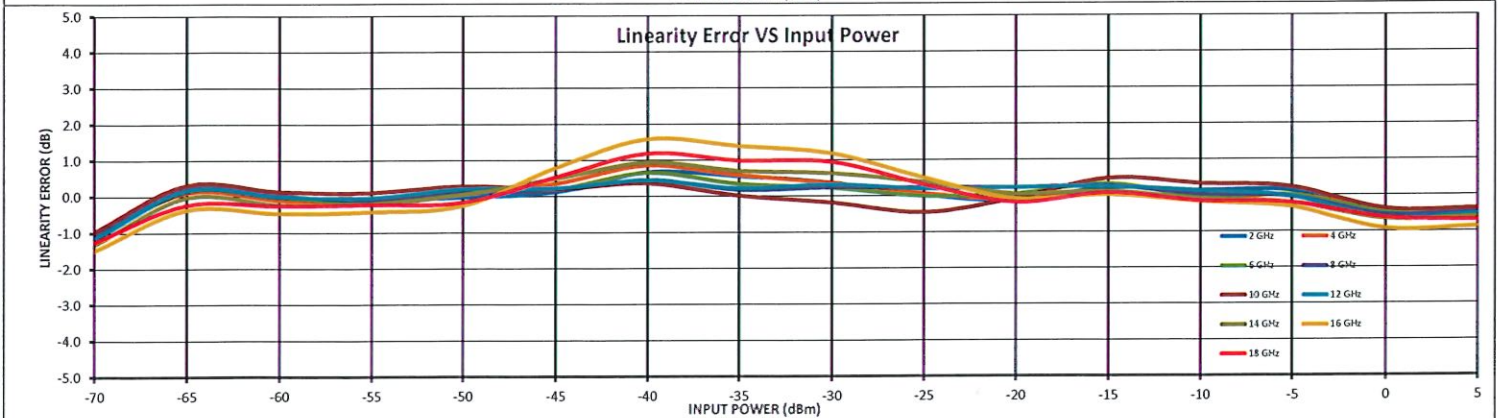
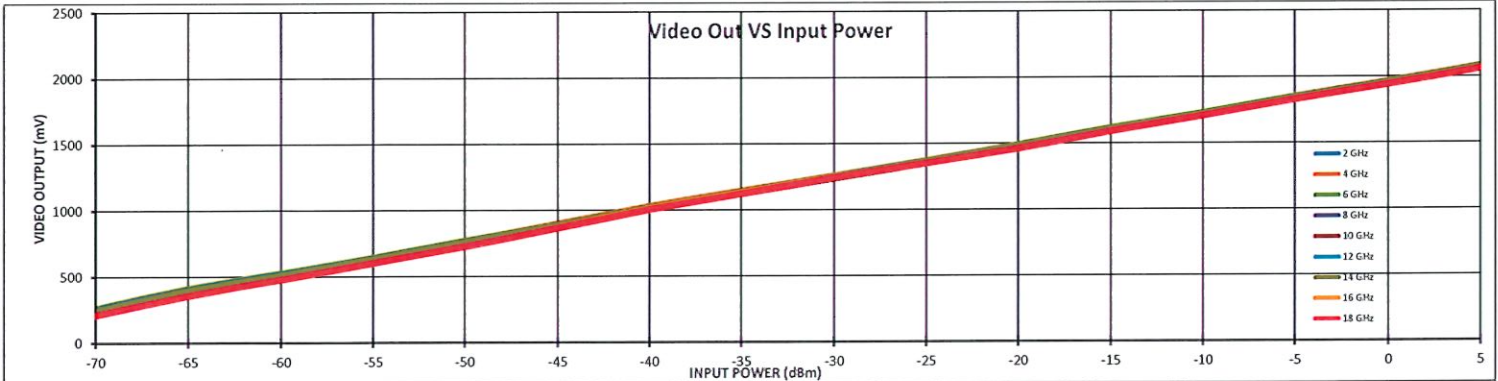


Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42483/2341
 Date: 10/11/2023
 Tested By: RCombs
 Test Temp: +85°C

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	1982	24.0	1.1	258	408	523	641	763	886	1019	1136	1251	1363	1479	1607	1725	1845	1950	2067	Measured Value (mV)	
				-26	5	-1	-2	0	3	16	13	9	1	-3	5	3	3	-12	-14		Error (mV)
				-1.07	0.20	-0.04	-0.08	-0.01	0.12	0.67	0.56	0.37	0.03	-0.13	0.22	0.14	0.13	-0.49	-0.60		LINEARITY ERROR (dB)
4 GHz	1976	24.1	1.1	265	414	529	647	774	901	1034	1148	1263	1376	1493	1618	1732	1856	1967	2086	Measured Value (mV)	
				-26	3	-2	-5	1	9	20	14	9	1	-2	3	-3	0	-10	-11		Error (mV)
				-1.08	0.11	-0.10	-0.21	0.06	0.36	0.85	0.58	0.36	0.05	-0.10	0.11	-0.14	0.00	-0.41	-0.45		LINEARITY ERROR (dB)
6 GHz	1974	24.0	1.0	267	416	531	648	775	897	1028	1141	1258	1373	1494	1621	1732	1853	1962	2083	Measured Value (mV)	
				-24	4	0	-3	3	5	16	8	6	0	1	8	-1	0	-11	-10		Error (mV)
				-1.02	0.19	-0.01	-0.14	0.12	0.20	0.65	0.34	0.23	0.00	0.05	0.32	-0.03	0.00	-0.46	-0.43		LINEARITY ERROR (dB)
8 GHz	1962	24.0	1.1	257	408	523	640	764	886	1013	1126	1248	1367	1487	1609	1723	1841	1949	2072	Measured Value (mV)	
				-25	6	1	-2	3	4	11	4	6	5	5	5	1	-1	-13	-11		Error (mV)
				-1.05	0.24	0.03	-0.09	0.10	0.16	0.46	0.18	0.25	0.22	0.22	0.27	0.03	-0.04	-0.54	-0.44		LINEARITY ERROR (dB)
10 GHz	1957	24.1	1.0	250	401	517	636	761	879	1003	1115	1231	1344	1474	1607	1724	1842	1948	2068	Measured Value (mV)	
				-23	8	3	3	7	5	9	0	-4	-11	-2	11	8	6	-9	-9		Error (mV)
				-0.97	0.32	0.13	0.11	0.29	0.21	0.36	0.01	-0.19	-0.46	-0.08	0.48	0.33	0.23	-0.38	-0.38		LINEARITY ERROR (dB)
12 GHz	1955	24.0	1.2	249	401	517	636	762	882	1007	1121	1244	1361	1481	1602	1718	1834	1940	2062	Measured Value (mV)	
				-28	4	0	-1	5	5	11	5	8	5	6	6	3	-1	-15	-13		Error (mV)
				-1.17	0.16	0.00	-0.03	0.21	0.22	0.45	0.22	0.32	0.20	0.24	0.25	0.13	-0.03	-0.64	-0.53		LINEARITY ERROR (dB)
14 GHz	1956	24.2	1.3	242	394	510	632	759	890	1022	1137	1256	1371	1484	1606	1722	1840	1950	2072	Measured Value (mV)	
				-32	-1	-5	-5	1	12	23	17	15	9	1	3	-2	-5	-16	-15		Error (mV)
				-1.33	-0.03	-0.22	-0.20	0.06	0.49	0.93	0.70	0.63	0.38	0.05	0.12	-0.10	-0.21	-0.66	-0.61		LINEARITY ERROR (dB)
16 GHz	1956	24.3	1.6	215	364	484	607	732	880	1021	1138	1254	1360	1467	1591	1708	1826	1933	2056	Measured Value (mV)	
				-37	-9	-11	-10	-6	19	38	34	29	12	-2	0	-4	-8	-23	-21		Error (mV)
				-1.50	-0.37	-0.47	-0.43	-0.26	0.78	1.58	1.39	1.18	0.50	-0.09	0.02	-0.18	-0.33	-0.93	-0.88		LINEARITY ERROR (dB)
18 GHz	1955	24.5	1.3	209	357	479	602	726	866	1004	1122	1243	1350	1460	1588	1706	1827	1939	2060	Measured Value (mV)	
				-31	-8	-6	-5	-4	13	29	24	23	8	-5	2	-4	-5	-15	-17		Error (mV)
				-1.26	-0.24	-0.26	-0.22	-0.17	0.53	1.18	0.99	0.94	0.31	-0.18	0.07	-0.16	-0.21	-0.63	-0.70		LINEARITY ERROR (dB)

Avg. Slope: 24.1 mV/dB

1.2 1.2 1.1 1 1 0.7 0.6 0.7 0.7 0.7 0.7 0.7 0.6 0.6 0.7 0.6 Flatness dB: ±1.2 dB





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

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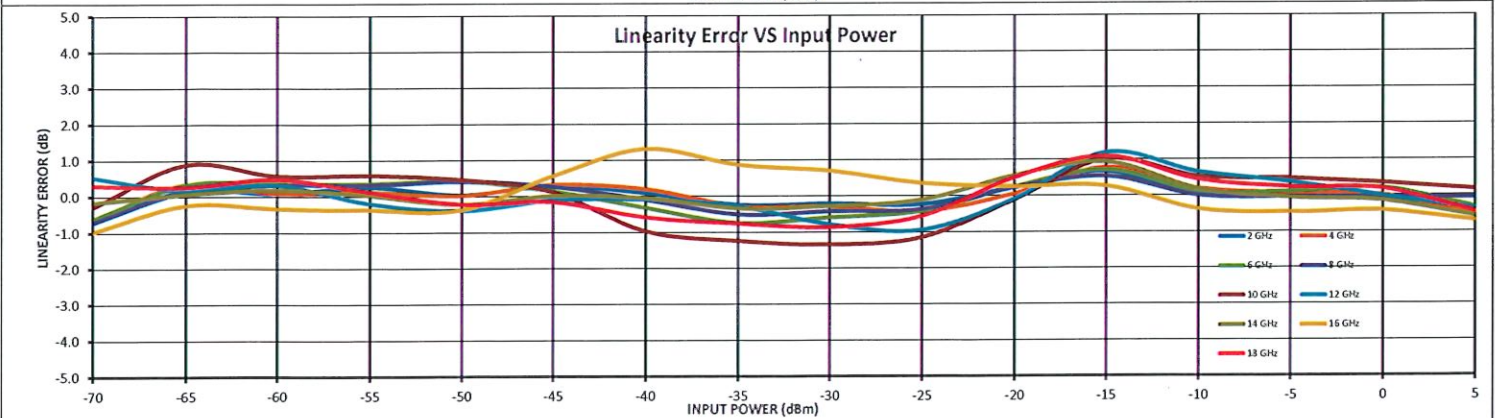
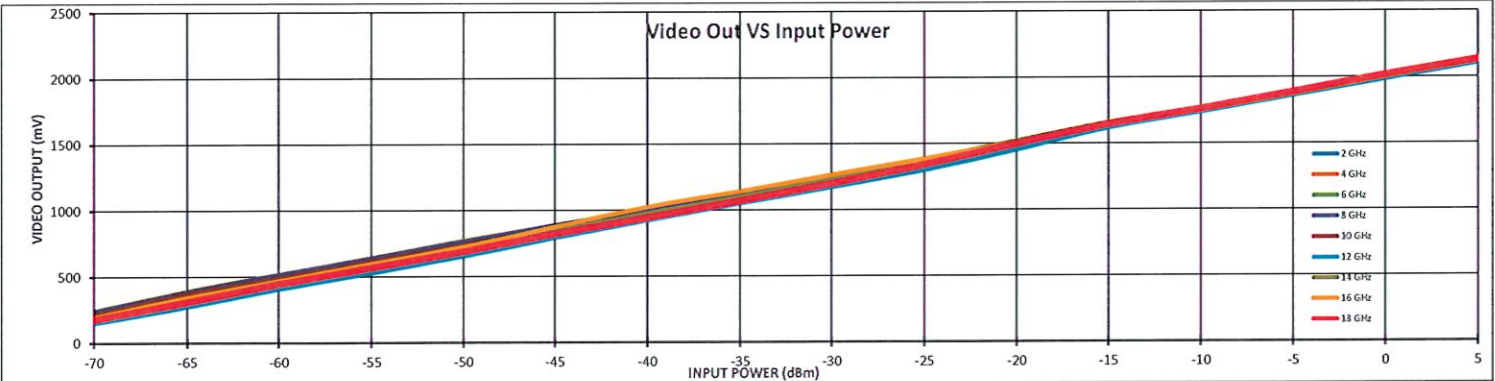
Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42483/2341
 Date: 10/11/2023
 Tested By: RCombs
 Test Temp: -40°C

Frequency	INTERCEPT (mV)	2005	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2005	192	341	468	601	723	858	981	1101	1230	1357	1498	1637	1748	1876	2002	2123	Measured Value (mV)
	SLOPE (mV/dB)	25.7	-17	4	2	7	1	6	2	-6	-5	-6	6	17	0	-1	-3	-10	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.66	0.16	0.10	0.26	0.04	0.30	0.09	-0.24	-0.20	-0.23	0.23	0.67	0.01	-0.03	-0.11	-0.39	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2017	204	358	480	609	734	870	996	1112	1240	1364	1505	1652	1765	1890	2017	2132	Measured Value (mV)
	SLOPE (mV/dB)	25.7	-17	9	2	3	1	8	5	-7	-7	-11	1	20	5	2	0	-13	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.65	0.34	0.09	0.12	0.02	0.32	0.20	-0.28	-0.29	-0.43	0.05	0.77	0.19	0.06	0.00	-0.51	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2014	238	388	514	640	768	888	1000	1115	1245	1375	1517	1655	1765	1891	2019	2131	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-16	8	9	9	11	4	-8	-19	-15	-11	6	18	3	3	5	-8	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.62	0.33	0.36	0.36	0.43	0.15	-0.31	-0.74	-0.59	-0.42	0.24	0.72	0.12	0.10	0.20	-0.33	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1999	236	382	512	636	763	884	1000	1114	1241	1367	1506	1639	1750	1873	1998	2122	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-18	4	8	8	11	7	-2	-13	-10	-9	6	13	0	-1	-1	-2	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.71	0.15	0.33	0.32	0.43	0.27	-0.09	-0.51	-0.42	-0.37	0.23	0.54	0.01	-0.04	-0.05	-0.07	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1989	215	371	489	616	739	856	955	1074	1198	1329	1481	1636	1750	1874	1997	2119	Measured Value (mV)
	SLOPE (mV/dB)	25.2	-8	22	14	15	12	3	-25	-31	-34	-29	-3	26	13	12	9	4	ERROR (mV)
	LIN. ERR. (dB)	1.3	-0.30	0.89	0.57	0.59	0.46	0.12	-0.97	-1.24	-1.35	-1.15	-0.12	1.01	0.52	0.46	0.34	0.16	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1993	162	285	420	539	665	804	937	1063	1192	1309	1464	1629	1747	1871	1993	2115	Measured Value (mV)
	SLOPE (mV/dB)	26.4	14	5	9	-5	-10	-3	-2	-7	-21	-25	-2	31	17	10	0	-10	ERROR (mV)
	LIN. ERR. (dB)	1.2	0.54	0.18	0.32	-0.19	-0.39	-0.10	-0.09	-0.28	-0.78	-0.94	-0.09	1.19	0.65	0.37	-0.01	-0.38	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	2012	183	320	453	580	703	840	969	1091	1223	1358	1505	1646	1756	1880	2008	2127	Measured Value (mV)
	SLOPE (mV/dB)	26.1	-4	2	5	1	-6	0	-1	-9	-7	-3	14	24	5	-2	-4	-15	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.16	0.06	0.19	0.03	-0.22	0.02	-0.05	-0.34	-0.28	-0.12	0.55	0.93	0.18	-0.06	-0.15	-0.59	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	2019	196	343	469	596	725	877	1025	1142	1266	1386	1511	1640	1752	1878	2008	2129	Measured Value (mV)
	SLOPE (mV/dB)	25.7	-25	-6	-9	-10	-10	14	34	22	18	9	7	7	-10	-12	-11	-18	ERROR (mV)
	LIN. ERR. (dB)	1.3	-0.99	-0.24	-0.34	-0.37	-0.37	0.56	1.31	0.86	0.70	0.35	0.26	0.26	-0.38	-0.48	-0.43	-0.71	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	2012	178	309	446	588	691	824	944	1071	1200	1339	1499	1646	1761	1887	2017	2132	Measured Value (mV)
	SLOPE (mV/dB)	26.3	8	7	13	3	-6	-4	-16	-20	-23	-15	13	29	12	6	5	-12	ERROR (mV)
	LIN. ERR. (dB)	1.086	0.30	0.27	0.49	0.12	-0.22	-0.16	-0.59	-0.76	-0.87	-0.57	0.50	1.09	0.44	0.23	0.18	-0.45	LINEARITY ERROR (dB)

Avg. Slope: 25.7 mV/dB 1.5 2 1.8 2 2 1.6 1.7 1.5 1.6 1.5 1 0.5 0.4 0.4 0.5 0.3 Flatness dB: ±2 dB

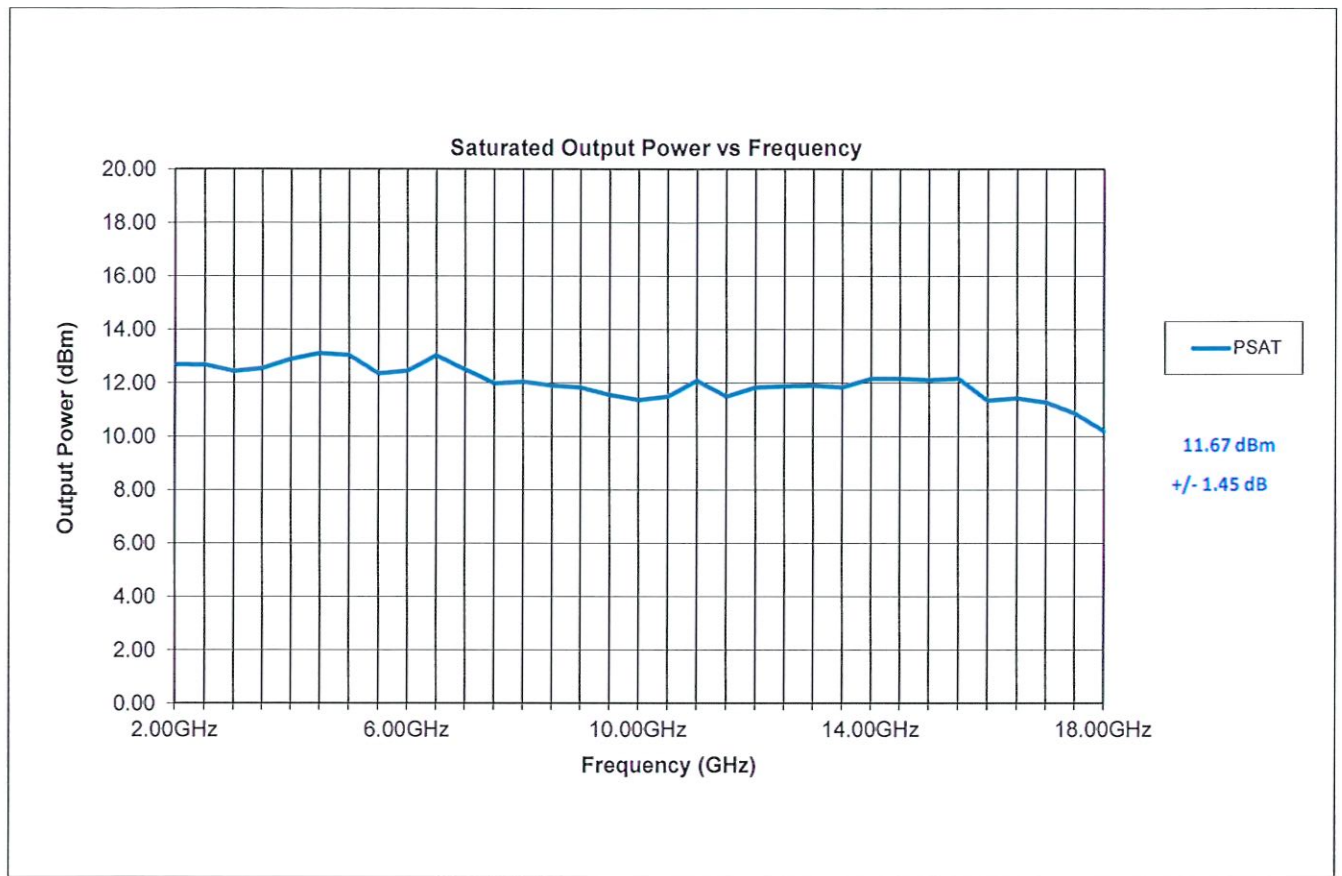




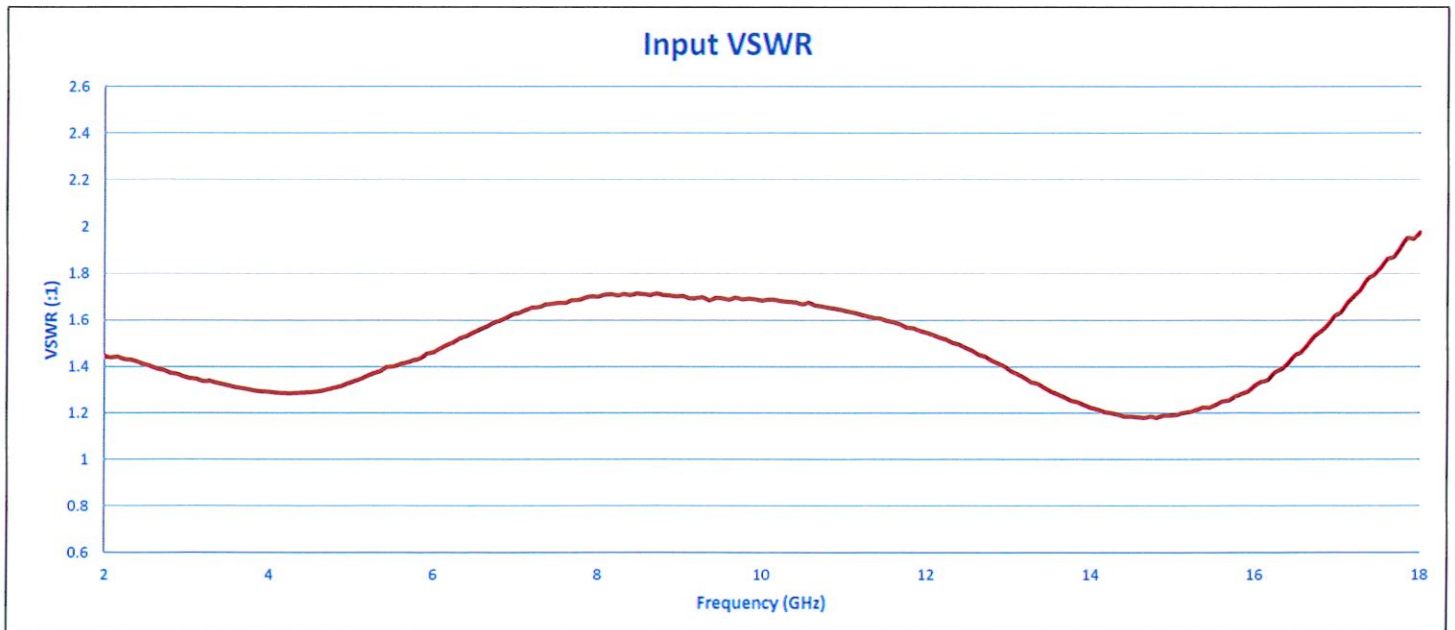
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42483/2341

PSAT



INPUT VSWR

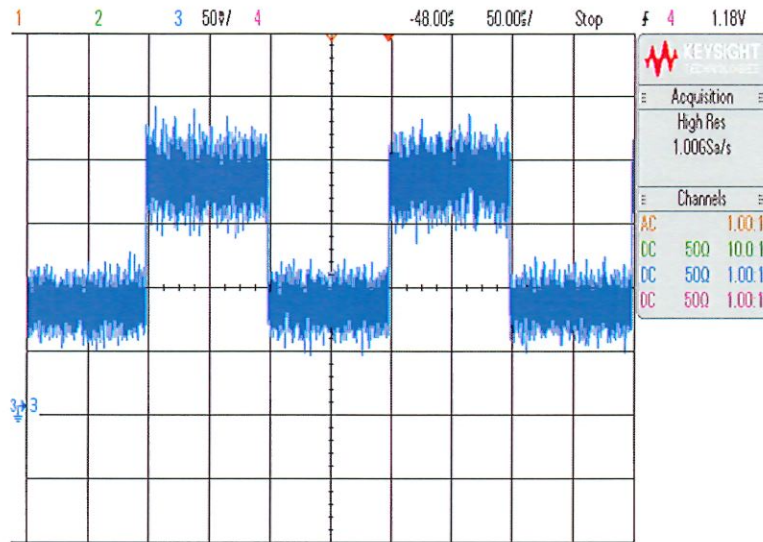




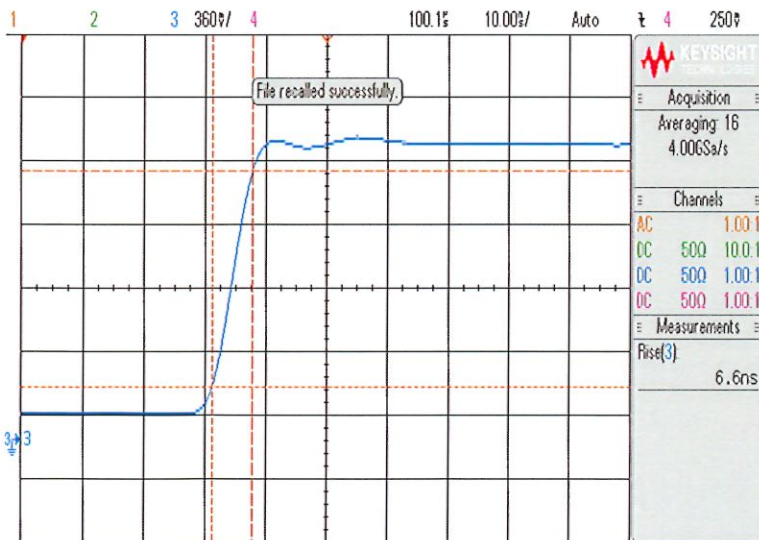
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42483/2341

TSS



Rise Time



Fall Time

