



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

PL37925/2239

Customer: _____	Tested By: <u>RCombs</u>
SO No: _____	Temperature: <u>+25° C</u>
Model No: <u>SDLVA-6G18G-CD-2-OPT218</u>	Date: <u>10/25/2022</u>
Serial No: <u>PL37925/2239</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 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	11.46 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	25.4 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)	7.8 ns	
12	Recovery Time:	60 ns Typical	45.8 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 256 mA -12V @ 96 mA	PMI QA2

QA/QC Approval:  PMI QA2 Date: 10/27/2022



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

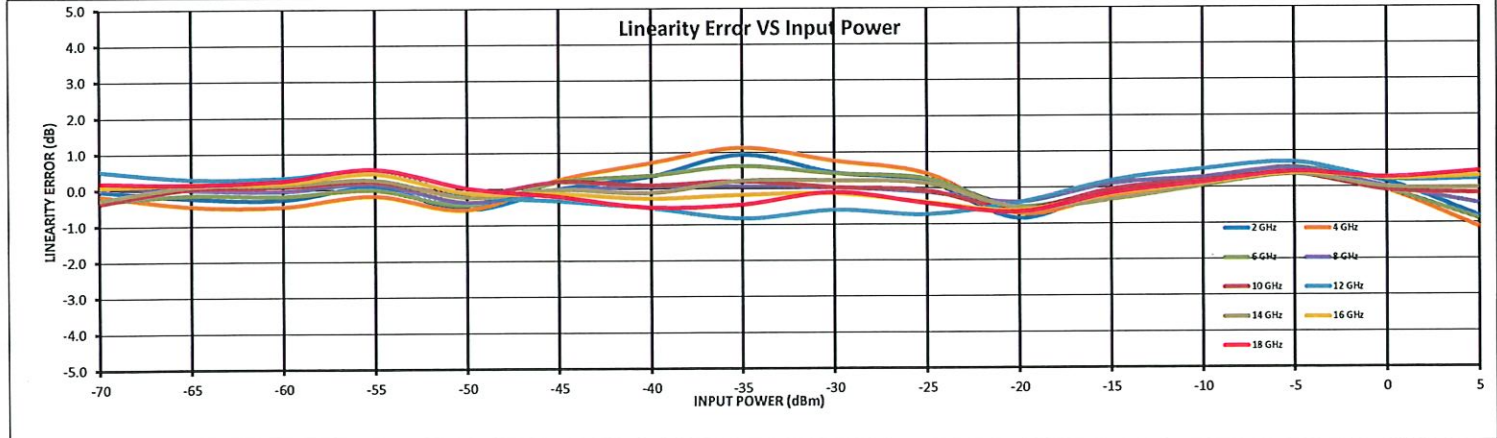
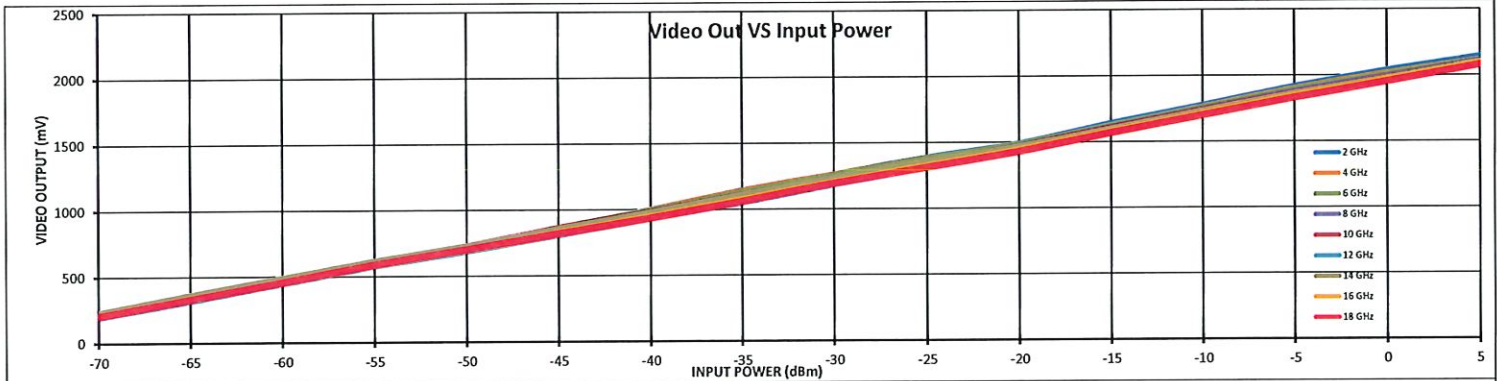
PL37925/2239

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL37925/2239
 Date: 10/25/2022
 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	2038	26.1	1.0	210	335	465	604	719	864	1003	1149	1266	1390	1494	1645	1779	1921	2042	2147	2038		
				0	-6	-7	2	-14	0	9	25	11	5	-22	-1	2	13	4	-21			
				-0.01	-0.23	-0.27	0.06	-0.54	0.01	0.35	0.95	0.44	0.20	-0.85	-0.05	0.08	0.51	0.16	-0.82			
4 GHz	2023	25.9	1.1	204	326	456	593	712	863	1005	1145	1265	1386	1486	1628	1767	1907	2021	2124	2023		
				-4	-12	-12	-4	-15	7	19	30	20	11	-18	-6	3	14	-2	-29			
				-0.15	-0.45	-0.46	-0.17	-0.57	0.26	0.72	1.14	0.77	0.42	-0.71	-0.23	0.10	0.53	-0.07	-1.12			
6 GHz	2016	25.6	0.9	218	351	478	610	727	871	1003	1137	1260	1383	1491	1630	1764	1902	2014	2121	2016		
				-8	-4	-4	0	-11	5	10	16	11	7	-13	-2	4	14	-2	-23			
				-0.31	-0.14	-0.17	-0.01	-0.43	0.20	0.38	0.84	0.42	0.27	-0.52	-0.08	0.15	0.55	-0.06	-0.89			
8 GHz	1999	25.6	0.5	207	333	460	594	708	845	975	1103	1231	1356	1476	1617	1750	1884	1999	2115	1999		
				2	0	-1	4	-9	-1	2	2	1	-3	-10	3	7	14	0	-12			
				0.09	0.01	-0.03	0.16	-0.36	-0.03	0.07	0.06	0.03	-0.10	-0.39	0.11	0.28	0.53	0.01	-0.46			
10 GHz	1988	25.0	0.6	229	364	490	619	734	868	991	1119	1239	1362	1473	1612	1743	1873	1986	2109	1988		
				-9	1	2	6	-4	5	2	5	1	-2	-15	-1	5	9	-2	-4			
				-0.36	0.05	0.09	0.23	-0.15	0.20	0.10	0.21	0.03	-0.07	-0.60	-0.05	0.19	0.37	-0.08	-0.17			
12 GHz	1968	25.4	0.8	204	325	453	585	694	817	939	1058	1191	1315	1450	1592	1727	1859	1974	2101	1968		
				13	8	9	13	-4	-8	-13	-21	-15	-18	-10	5	13	18	6	6			
				0.52	0.31	0.34	0.52	-0.16	-0.32	-0.53	-0.83	-0.59	-0.72	-0.41	0.20	0.51	0.70	0.22	0.23			
14 GHz	1975	24.9	0.5	228	361	486	614	726	856	978	1110	1234	1357	1464	1593	1727	1859	1975	2098	1975		
				-6	2	3	7	-6	0	-3	6	6	4	-14	-8	1	9	0	-1			
				-0.26	0.10	0.13	0.27	-0.22	0.00	-0.11	0.23	0.22	0.14	-0.55	-0.34	0.05	0.36	0.00	-0.02			
16 GHz	1972	25.1	0.6	214	342	468	600	712	837	960	1088	1214	1334	1453	1590	1723	1856	1978	2105	1972		
				2	4	5	11	-2	-3	-7	-4	-3	-10	-16	-5	3	10	6	8			
				0.09	0.17	0.19	0.45	-0.10	-0.12	-0.26	-0.16	-0.13	-0.39	-0.63	-0.18	0.12	0.41	0.24	0.30			
18 GHz	1947	24.9	0.7	208	331	458	591	702	820	937	1064	1197	1314	1432	1569	1701	1833	1954	2082	1947		
				5	4	6	14	1	-5	-13	-11	-3	-10	-17	-4	3	11	7	11			
				0.21	0.16	0.26	0.57	0.03	-0.21	-0.51	-0.44	-0.10	-0.41	-0.67	-0.16	0.14	0.43	0.27	0.44			
Avg. Slope: 25.4 mV/dB				0.5	0.8	0.7	0.7	0.8	1.1	1.3	1.8	1.5	1.5	1.2	1.5	1.5	1.7	1.7	1.3	Flatness dB: ±1.8 dB		





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

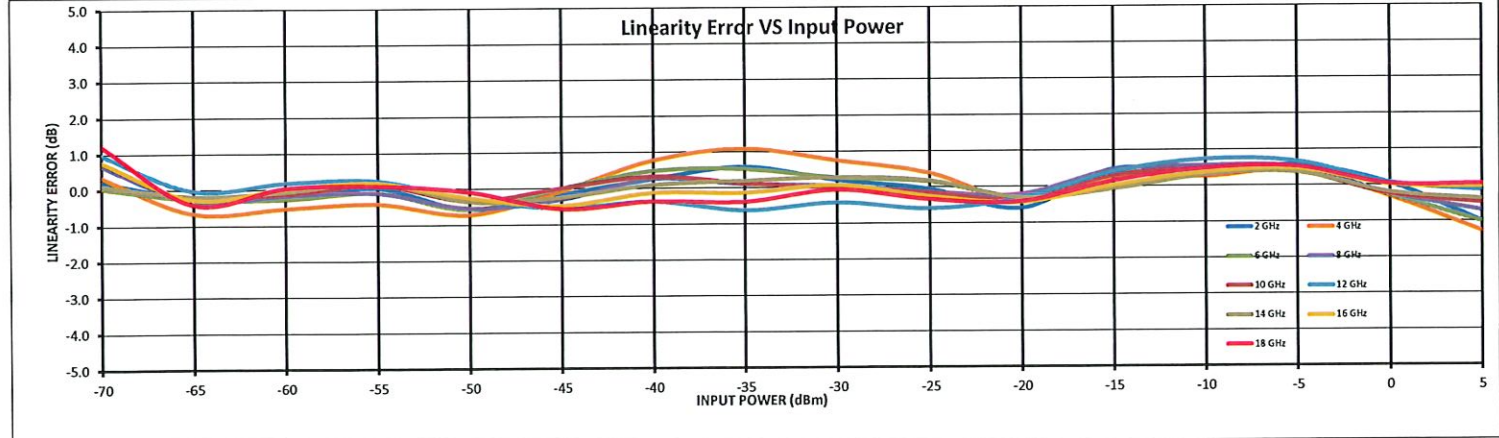
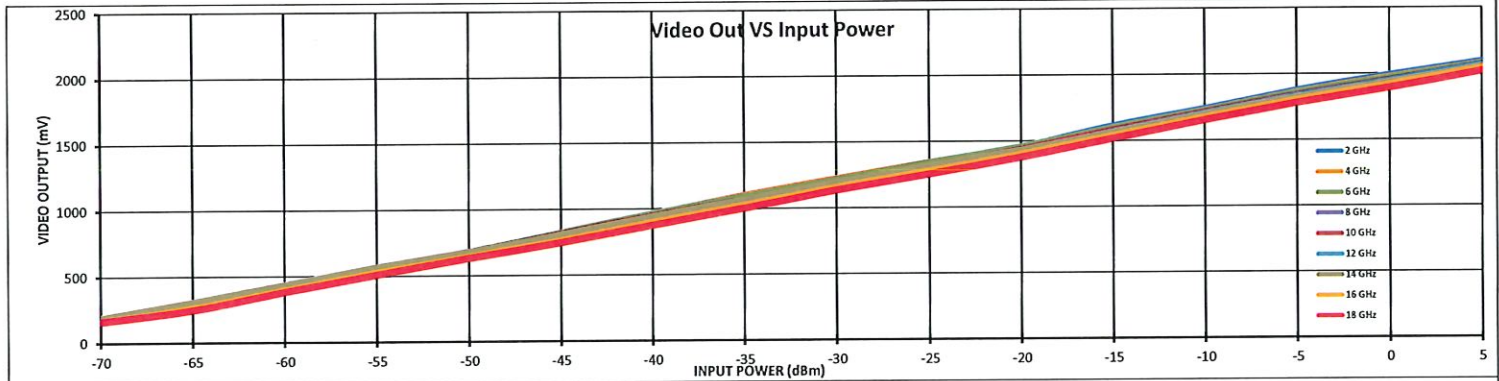
PL37925/2239

Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL37925/2239
 Date: 10/25/2022
 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	1996	25.9	1.0	188	306	436	572	686	826	966	1104	1224	1347	1462	1620	1745	1881	1997	2099	Measured Value (mV)
				6	-5	-5	1	-15	-4	7	15	5	-1	-15	13	9	15	2	-26	ERROR (mV)
				0.23	-0.21	-0.20	0.04	-0.57	-0.16	0.26	0.59	0.21	-0.05	-0.60	0.49	0.34	0.57	0.06	-1.01	LINEARITY ERROR (dB)
4 GHz	1990	26.0	1.3	175	279	413	546	668	816	968	1106	1228	1349	1458	1606	1736	1870	1982	2086	Measured Value (mV)
				9	-17	-14	-11	-19	-1	20	28	20	10	-11	7	7	11	-8	-33	ERROR (mV)
				0.36	-0.65	-0.52	-0.40	-0.71	-0.06	0.78	1.09	0.75	0.40	-0.40	0.28	0.26	0.42	-0.30	-1.28	LINEARITY ERROR (dB)
6 GHz	1982	25.6	1.0	190	311	438	571	687	830	970	1099	1221	1346	1463	1607	1735	1867	1976	2084	Measured Value (mV)
				1	-7	-7	-2	-14	0	13	14	7	4	-7	9	13	9	-7	-26	ERROR (mV)
				0.05	-0.26	-0.27	-0.09	-0.55	0.01	0.49	0.53	0.28	0.16	-0.26	0.36	0.33	0.49	-0.26	-1.01	LINEARITY ERROR (dB)
8 GHz	1965	25.8	0.7	177	281	413	544	662	797	940	1065	1193	1317	1444	1590	1722	1850	1960	2077	Measured Value (mV)
				17	-8	-4	-3	-14	-8	7	3	1	-3	-5	12	15	13	-6	-18	ERROR (mV)
				0.67	-0.30	-0.16	-0.11	-0.53	-0.30	0.27	0.11	0.06	-0.13	-0.20	0.46	0.56	0.51	-0.23	-0.70	LINEARITY ERROR (dB)
10 GHz	1959	25.3	0.5	190	308	437	569	684	820	954	1076	1199	1322	1443	1586	1717	1842	1952	2073	Measured Value (mV)
				3	-5	-3	3	-8	0	8	3	0	-4	-9	8	12	10	-6	-12	ERROR (mV)
				0.13	-0.19	-0.12	0.13	-0.34	0.01	0.33	0.12	0.00	-0.15	-0.35	0.30	0.47	0.39	-0.24	-0.49	LINEARITY ERROR (dB)
12 GHz	1941	25.6	1.0	174	277	410	539	654	775	908	1029	1162	1286	1421	1567	1704	1830	1943	2065	Measured Value (mV)
				25	-1	5	6	-7	-14	-9	-16	-11	-15	-8	10	19	17	2	-3	ERROR (mV)
				0.98	-0.03	0.19	0.23	-0.29	-0.54	-0.36	-0.62	-0.41	-0.59	-0.31	0.41	0.74	0.67	0.07	-0.14	LINEARITY ERROR (dB)
14 GHz	1939	25.0	0.4	190	308	436	567	679	807	941	1068	1196	1318	1431	1562	1697	1824	1935	2055	Measured Value (mV)
				3	-4	-1	5	-9	-6	3	5	7	5	-7	-2	8	9	-5	-10	ERROR (mV)
				0.12	-0.17	-0.06	0.18	-0.36	-0.24	0.10	0.20	0.29	0.18	-0.30	-0.07	0.31	0.37	-0.20	-0.38	LINEARITY ERROR (dB)
16 GHz	1930	25.4	0.8	173	274	408	538	655	776	912	1038	1170	1289	1411	1550	1686	1815	1931	2056	Measured Value (mV)
				20	-7	1	4	-6	-12	-3	-3	2	-7	-11	1	10	12	1	-1	ERROR (mV)
				0.78	-0.26	0.03	0.17	-0.25	-0.47	-0.12	-0.13	0.08	-0.26	-0.43	0.03	0.38	0.47	0.02	-0.04	LINEARITY ERROR (dB)
18 GHz	1893	25.1	1.2	164	248	385	512	634	747	878	1003	1137	1256	1380	1520	1654	1781	1894	2020	Measured Value (mV)
				31	-10	1	2	-2	-14	-9	-10	-1	-8	-10	4	12	13	1	1	ERROR (mV)
				1.22	-0.41	0.05	0.09	-0.09	-0.57	-0.36	-0.39	-0.06	-0.34	-0.41	0.15	0.49	0.53	0.04	0.04	LINEARITY ERROR (dB)
Avg. Slope: 25.5 mV/dB				0.5	1.2	1	1.2	1	1.6	1.8	2	1.8	1.8	1.6	2	1.8	2	2	1.6	Flatness dB: ±2 dB





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

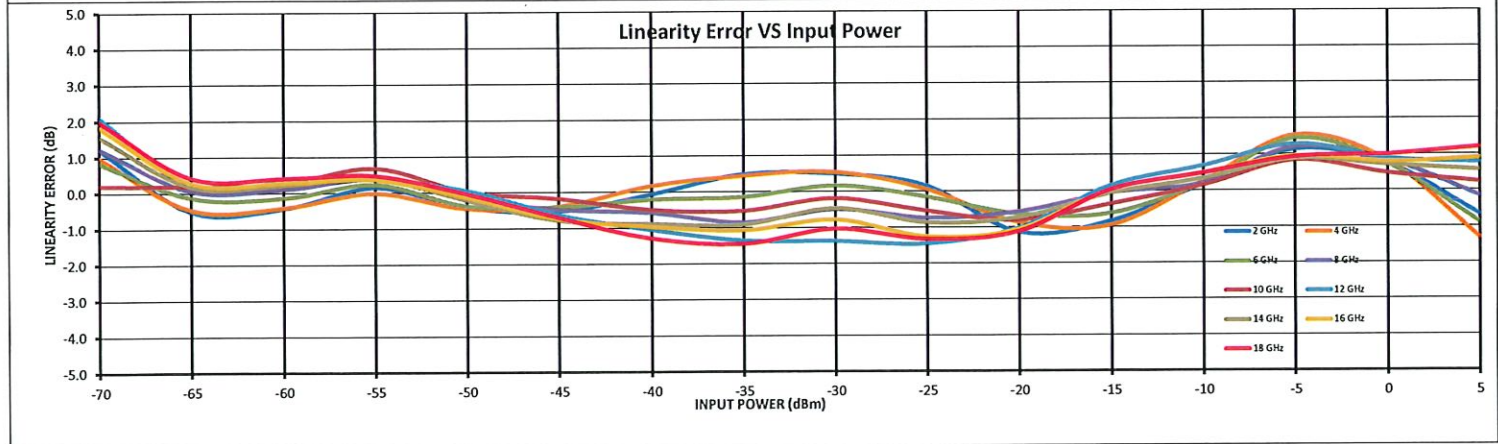
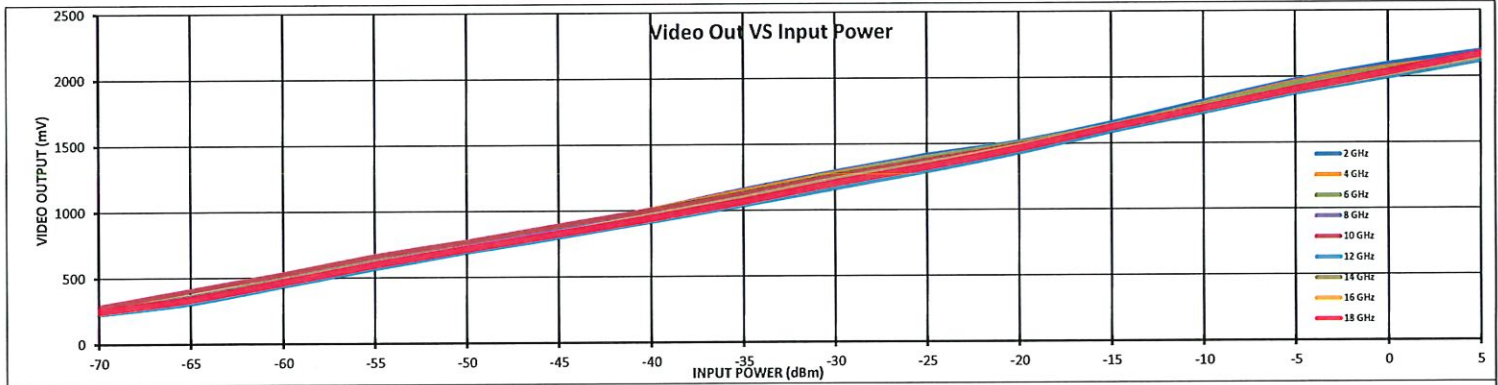
PL37925/2239

Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL37925/2239
 Date: 10/25/2022
 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	2075	26.6	1.2	242	329	465	613	732	862	1008	1155	1289	1413	1512	1653	1813	1972	2094	2190	Measured Value (mV)	
	33	-14	-11	4	-11	-14	-2	13	4	-30	-22	5	30	20	-18					ERROR (mV)	
	1.22	-0.51	-0.43	0.15	-0.41	-0.52	-0.06	0.49	0.50	0.16	-1.14	-0.84	0.19	1.14	0.73	-0.67				LINEARITY ERROR (dB)	
4 GHz	2048	26.1	1.5	249	342	474	614	733	865	1010	1147	1280	1398	1504	1632	1794	1957	2069	2144	Measured Value (mV)	
	26	-12	-11	0	-12	-10	4	12	14	2	-23	-25	7	40	22	-34				ERROR (mV)	
	0.98	-0.46	-0.40	-0.01	-0.44	-0.39	0.17	0.45	0.55	0.06	-0.87	-0.95	0.26	1.53	0.83	-1.31				LINEARITY ERROR (dB)	
6 GHz	2039	25.8	1.4	258	362	490	629	742	870	1003	1134	1271	1391	1508	1637	1787	1947	2058	2145	Measured Value (mV)	
	22	-3	-3	6	-10	-10	-5	-4	4	-4	-16	-16	6	37	19	-23				ERROR (mV)	
	0.85	-0.12	-0.13	0.24	-0.37	-0.40	-0.20	-0.14	0.17	-0.14	-0.63	-0.62	0.22	1.44	0.74	-0.88				LINEARITY ERROR (dB)	
8 GHz	2010	25.6	1.2	253	351	480	615	728	848	973	1094	1231	1353	1485	1626	1760	1914	2032	2134	Measured Value (mV)	
	32	2	3	10	-4	-12	-15	-22	-12	-19	-14	-1	5	31	21	-4				ERROR (mV)	
	1.24	0.06	0.11	0.39	-0.17	-0.47	-0.58	-0.85	-0.49	-0.73	-0.57	-0.05	0.21	1.21	0.84	-0.15				LINEARITY ERROR (dB)	
10 GHz	2004	24.7	0.8	282	405	530	664	771	889	1005	1127	1259	1374	1491	1625	1761	1902	2016	2133	Measured Value (mV)	
	5	5	7	17	1	-4	-12	-13	-5	-13	-20	-9	4	21	12	6				ERROR (mV)	
	0.21	0.19	0.27	0.69	0.02	-0.17	-0.49	-0.53	-0.19	-0.54	-0.80	-0.36	0.15	0.85	0.47	0.24				LINEARITY ERROR (dB)	
12 GHz	1982	25.7	2.1	241	320	451	581	701	812	929	1050	1178	1304	1443	1601	1743	1887	2005	2131	Measured Value (mV)	
	54	5	8	10	2	-16	-27	-35	-35	-37	-26	4	18	33	23	20				ERROR (mV)	
	2.11	0.20	0.32	0.37	0.06	-0.62	-1.04	-1.35	-1.37	-1.45	-1.02	0.16	0.69	1.29	0.88	0.78				LINEARITY ERROR (dB)	
14 GHz	2011	25.7	1.6	249	342	472	606	718	832	958	1086	1227	1345	1477	1623	1762	1904	2029	2154	Measured Value (mV)	
	40	5	6	11	-5	-20	-23	-23	-12	-19	-2	9	23	18	15					ERROR (mV)	
	1.57	0.18	0.23	0.41	-0.21	-0.78	-0.88	-0.91	-0.46	-0.86	-0.73	-0.06	0.34	0.87	0.71	0.56				LINEARITY ERROR (dB)	
16 GHz	2019	26.0	1.8	246	335	465	598	715	829	953	1080	1218	1336	1471	1630	1771	1914	2039	2172	Measured Value (mV)	
	48	7	7	10	-3	-19	-25	-28	-20	-33	-27	1	13	25	21	23				ERROR (mV)	
	1.84	0.28	0.29	0.37	-0.13	-0.74	-0.95	-1.07	-0.77	-1.25	-1.05	0.04	0.49	0.96	0.79	0.90				LINEARITY ERROR (dB)	
18 GHz	2010	25.9	1.992	251	340	469	600	716	828	942	1067	1208	1329	1464	1623	1764	1905	2036	2171	Measured Value (mV)	
	52	11	11	12	-1	-18	-33	-38	-27	-34	-29	1	13	24	26	31				ERROR (mV)	
	1.99	0.43	0.41	0.48	-0.04	-0.70	-1.29	-1.45	-1.03	-1.33	-1.11	0.03	0.49	0.93	0.99	1.20				LINEARITY ERROR (dB)	
Avg. Slope: 25.8 mV/dB				0.8	1.6	1.5	1.6	1.4	1.5	1.6	2	2.2	2.1	1.3	1	1.4	1.7	1.7	1.2	Flatness dB: ±2.2 dB	

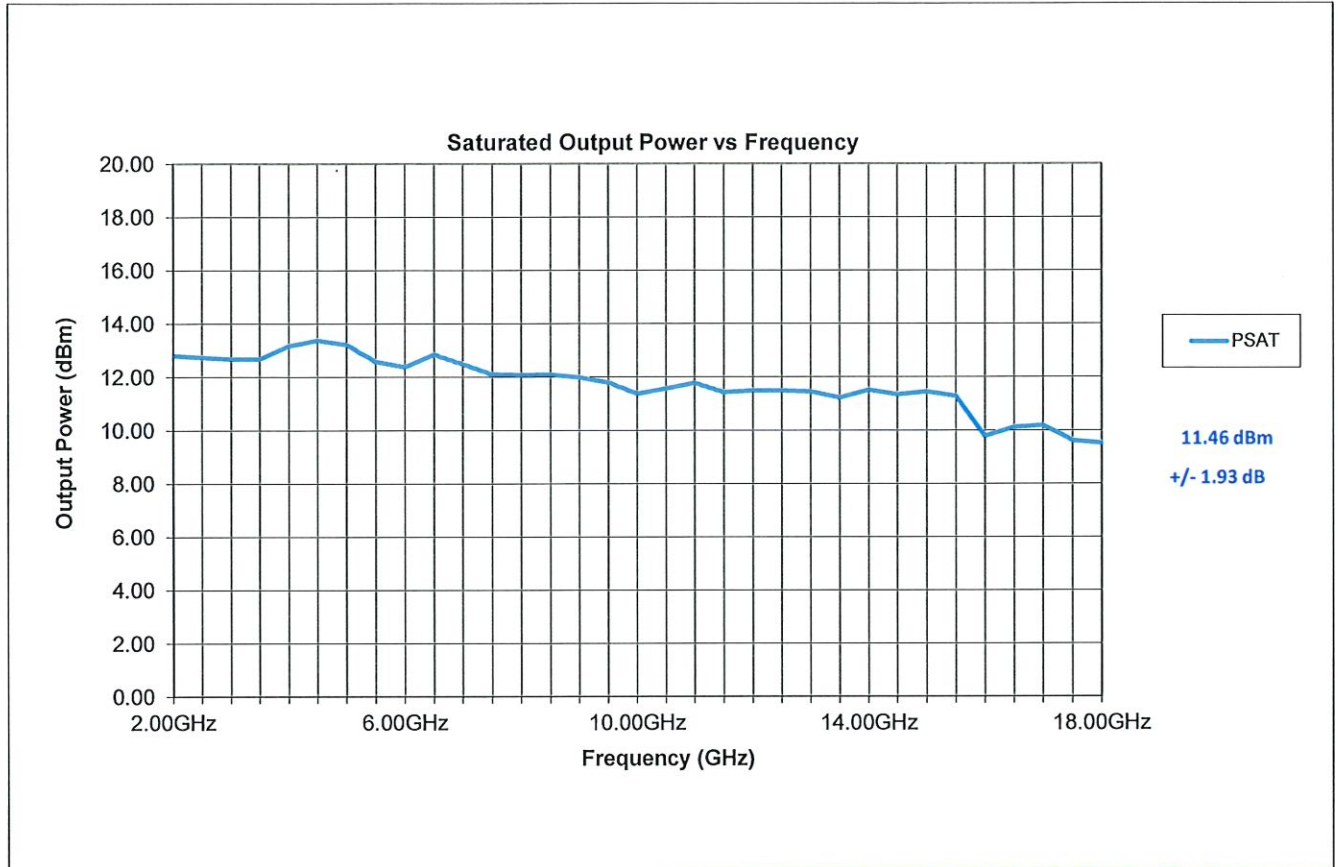




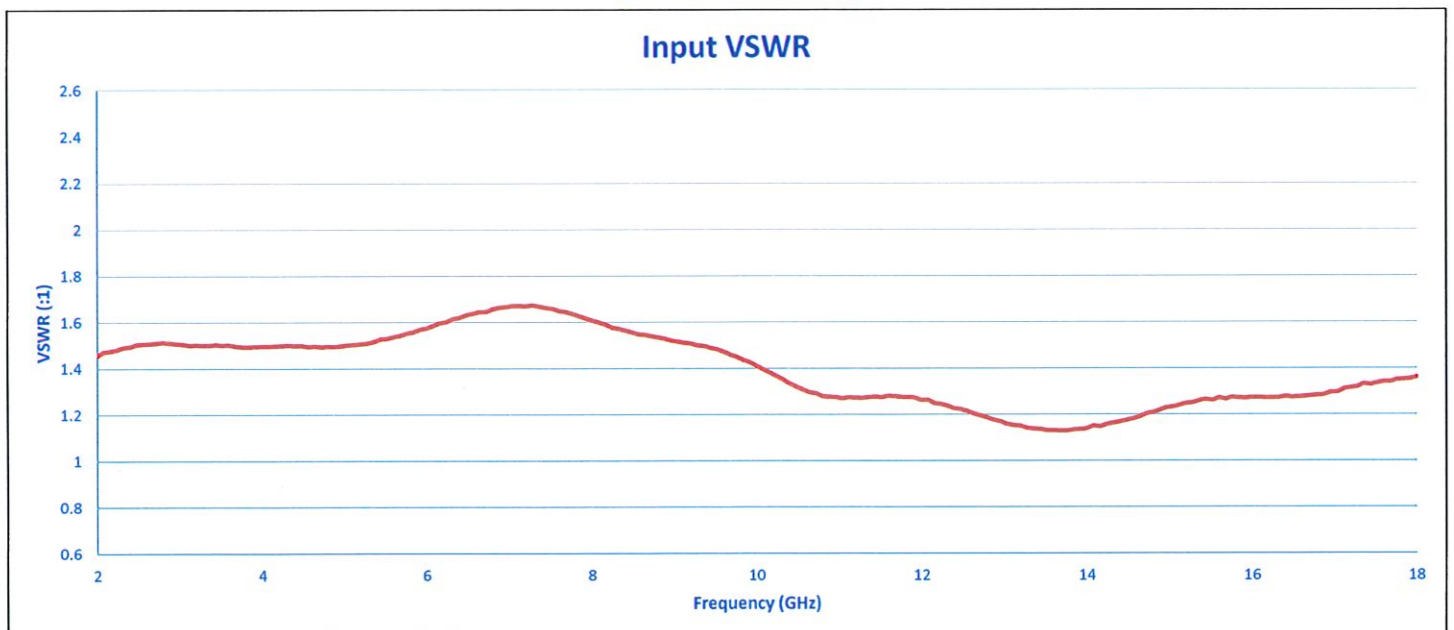
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL37925/2239

PSAT



INPUT VSWR

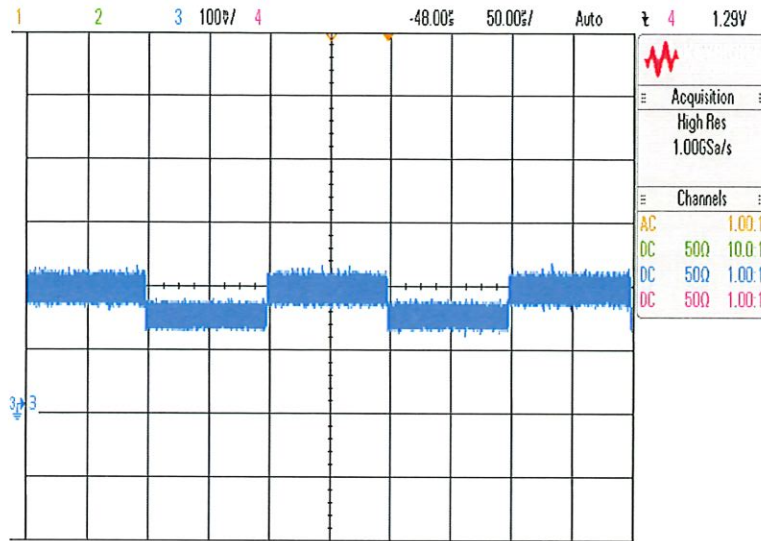




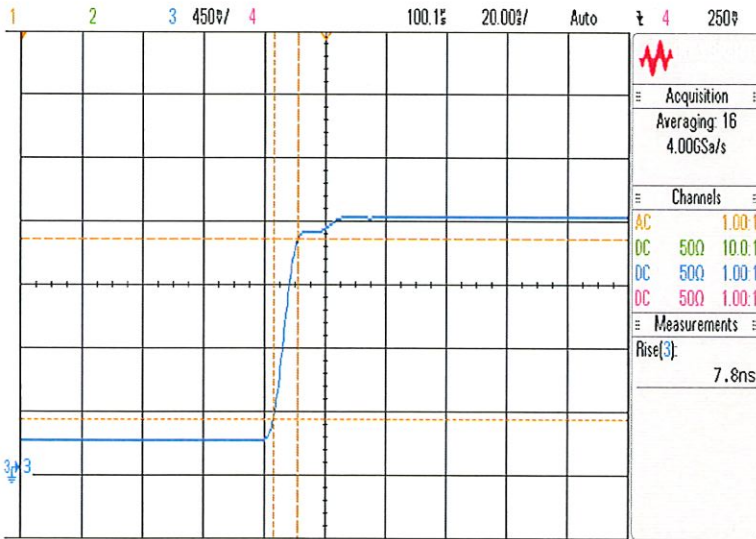
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL37926/2239

TSS



Rise Time



Fall Time

