



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

PL42569/2342

Customer: \_\_\_\_\_ Tested By: RCombs  
SO No: \_\_\_\_\_ Temperature: +25° C  
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 3/30/2023  
Serial No: PL42569/2342 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	±1.3 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	12.19 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.7 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)	±2.2 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	6.4 ns	
12	Recovery Time:	60 ns Typical	55.5 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 263 mA -12V @ 100 mA	PMI QA2

QA/QC Approval: \_\_\_\_\_

PMI  
QA2

Date: 10/31/2023



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

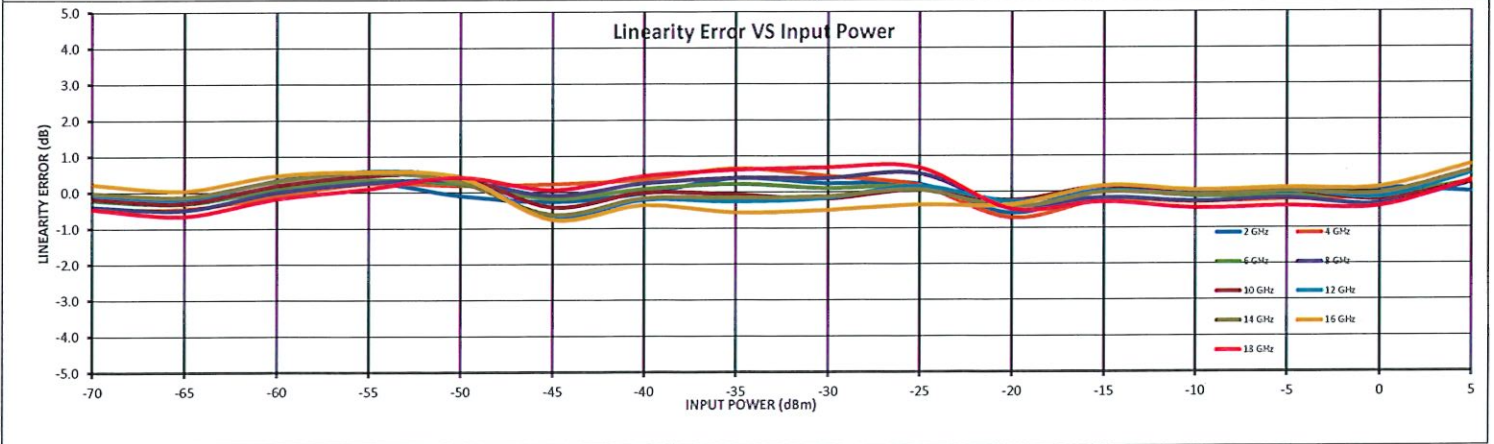
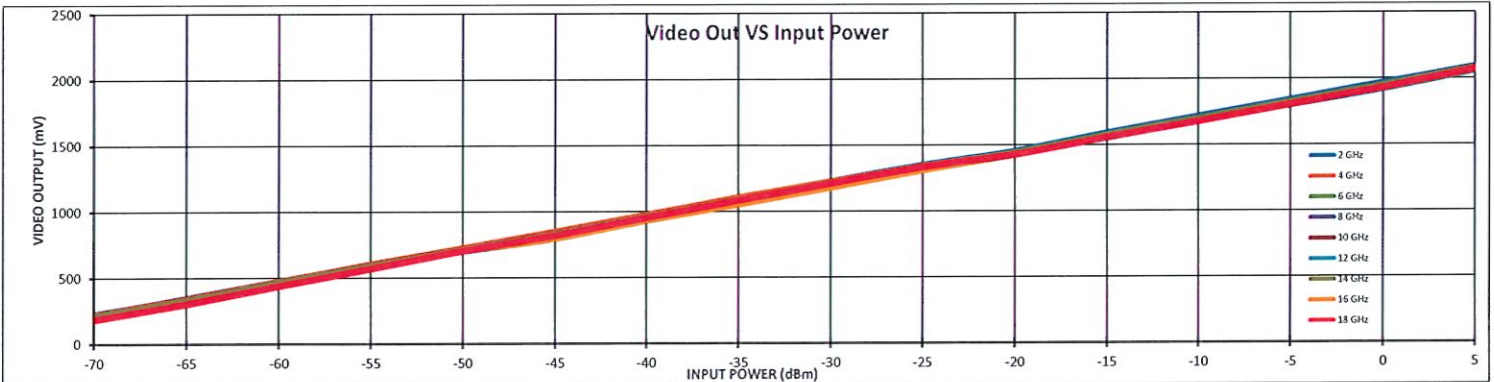
PL42569/2342



Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL42569/2342  
Date: 3/30/2023  
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	1968	24.9	0.6	226	348	477	607	722	842	972	1107	1228	1351	1455	1595	1719	1842	1970	2091	Measured Value (mV)
				-1	-4	1	7	-2	-7	-1	10	6	5	-15	0	0	-1	2	0	Error (mV)
				-0.05	-0.16	0.03	0.29	-0.10	-0.26	-0.04	0.39	0.24	0.22	-0.60	0.01	0.00	-0.05	0.09	-0.02	LINEARITY ERROR (dB)
4 GHz	1954	24.6	0.7	222	344	476	608	729	853	979	1109	1227	1344	1444	1580	1701	1826	1951	2083	Measured Value (mV)
				-11	-11	-2	6	5	6	9	16	11	4	-18	-6	-7	-5	-3	6	Error (mV)
				-0.43	-0.46	-0.09	0.26	0.19	0.23	0.35	0.65	0.44	0.18	-0.72	-0.23	-0.29	-0.21	-0.14	0.26	LINEARITY ERROR (dB)
6 GHz	1951	24.8	0.4	211	333	456	596	717	832	962	1089	1210	1335	1445	1579	1700	1824	1948	2081	Measured Value (mV)
				-5	-3	2	8	6	-4	2	6	3	4	-11	0	-3	-3	-2	6	Error (mV)
				-0.21	-0.31	0.09	0.34	0.23	-0.17	0.09	0.23	0.10	0.14	-0.43	0.01	-0.13	-0.13	-0.10	0.24	LINEARITY ERROR (dB)
8 GHz	1933	24.6	0.5	202	323	458	587	712	824	955	1082	1205	1331	1431	1560	1680	1805	1924	2061	Measured Value (mV)
				-10	-12	0	7	8	-2	6	10	9	12	-10	-5	-7	-4	-9	6	Error (mV)
				-0.39	-0.49	0.00	0.27	0.33	-0.10	0.24	0.39	0.39	0.51	-0.42	-0.16	-0.27	-0.18	-0.35	0.23	LINEARITY ERROR (dB)
10 GHz	1932	24.8	0.5	193	314	450	581	704	807	940	1063	1184	1314	1430	1564	1684	1809	1926	2062	Measured Value (mV)
				-4	-7	5	12	11	-10	0	-2	-5	2	6	4	0	1	-6	6	Error (mV)
				-0.17	-0.29	0.19	0.47	0.44	-0.41	-0.01	-0.07	-0.18	0.07	-0.24	0.15	0.00	0.03	-0.22	0.24	LINEARITY ERROR (dB)
12 GHz	1924	24.6	0.7	199	319	455	584	703	799	934	1056	1181	1312	1425	1555	1676	1802	1920	2059	Measured Value (mV)
				-1	-4	8	14	10	-17	-5	-6	-4	-7	0	2	1	-4	-4	12	Error (mV)
				-0.06	-0.18	0.33	0.59	0.41	-0.67	-0.21	-0.26	-0.17	0.16	-0.27	0.02	-0.08	0.05	-0.16	0.50	LINEARITY ERROR (dB)
14 GHz	1927	24.5	0.6	210	330	463	592	708	808	942	1065	1188	1315	1426	1559	1680	1805	1926	2064	Measured Value (mV)
				0	-3	8	14	7	-15	-4	-4	-3	1	-10	0	-2	0	-1	14	Error (mV)
				-0.01	-0.12	0.31	0.56	0.29	-0.62	-0.17	-0.16	-0.12	0.06	-0.43	-0.02	-0.10	0.01	-0.05	0.57	LINEARITY ERROR (dB)
16 GHz	1930	24.9	0.8	192	312	447	574	695	790	924	1044	1170	1298	1423	1560	1682	1808	1933	2073	Measured Value (mV)
				6	1	12	14	10	-19	-9	-14	-13	-9	-9	4	1	3	3	18	Error (mV)
				0.23	0.05	0.47	0.57	0.42	-0.76	-0.36	-0.56	-0.50	-0.36	-0.36	0.16	0.04	0.11	0.12	0.74	LINEARITY ERROR (dB)
18 GHz	1938	24.9	0.7	184	303	440	571	704	819	953	1082	1208	1333	1428	1558	1678	1804	1928	2070	Measured Value (mV)
				-11	-16	-4	2	11	2	11	16	17	17	-12	-7	-11	-10	-10	7	Error (mV)
				-0.45	-0.65	-0.17	0.10	0.42	0.07	0.45	0.62	0.68	0.68	-0.48	-0.28	-0.46	-0.40	-0.41	0.29	LINEARITY ERROR (dB)
Avg. Slope: 24.7 mV/dB				0.9	0.9	0.7	0.7	0.7	1.3	1.1	1.3	1.2	1.1	0.7	0.8	0.9	0.8	1	0.6	Flatness dB: ±1.3 dB







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

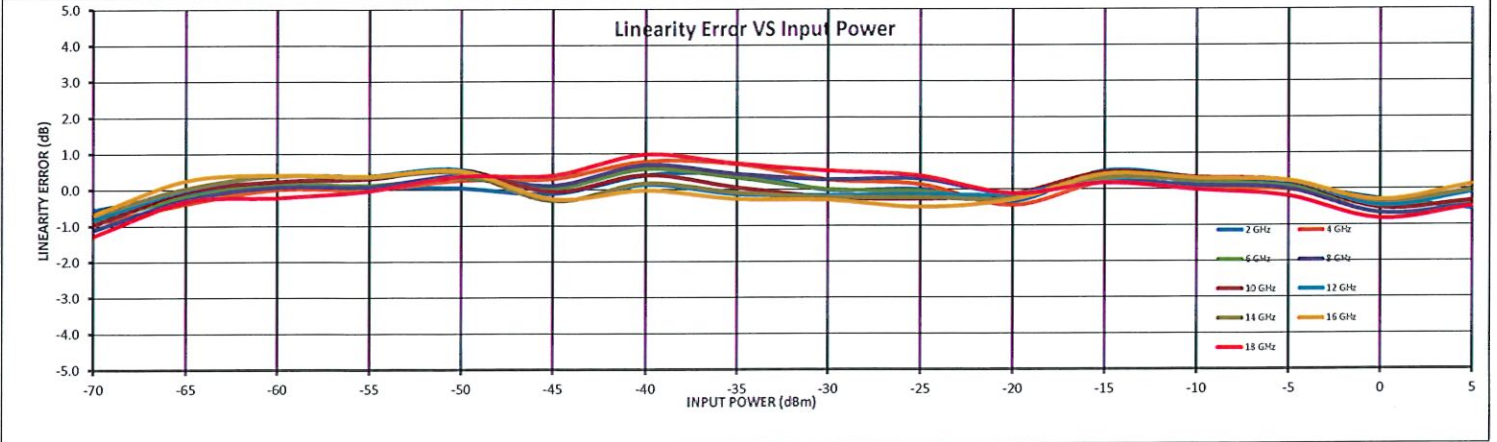
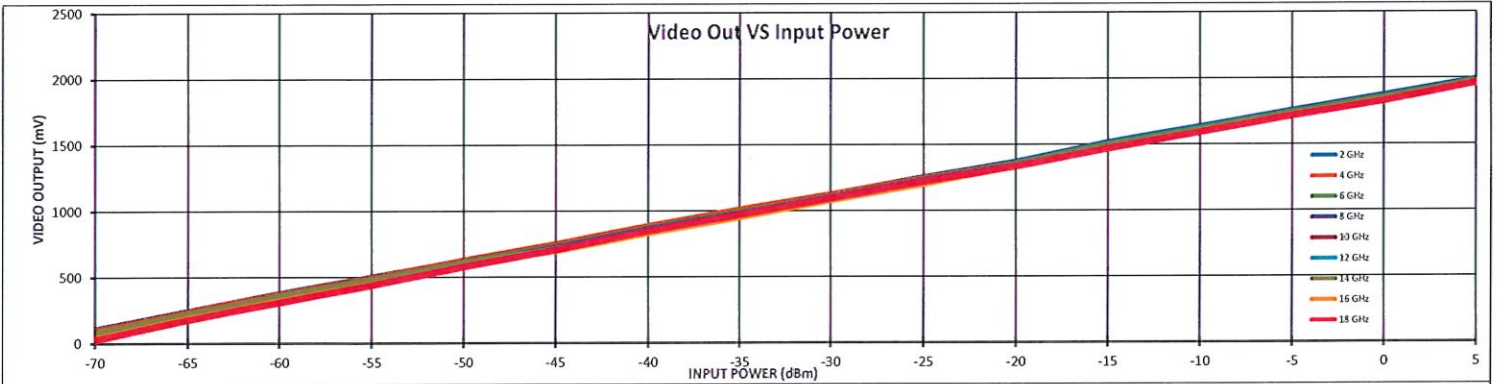
PL42569/2342

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42569/2342  
 Date: 3/30/2023  
 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	1880	25.1	0.6	108	245	377	501	626	747	885	1012	1126	1252	1389	1516	1636	1757	1872	1991	Measured Value (mV)
				-14	-3	3	2	1	-3	10	11	0	0	-9	13	8	3	-7	-14	ERROR (mV)
				-0.55	-0.13	0.14	0.08	0.04	-0.12	0.39	0.43	-0.01	-0.01	-0.35	0.50	0.31	0.10	-0.29	-0.55	LINEARITY ERROR (dB)
4 GHz	1867	24.9	0.9	101	239	374	498	629	754	891	1013	1127	1248	1358	1498	1618	1742	1855	1982	Measured Value (mV)
				-23	-10	0	0	7	7	19	18	7	3	-11	5	0	0	-12	-9	ERROR (mV)
				-0.94	-0.39	0.01	0.01	0.26	0.30	0.78	0.71	0.27	0.14	-0.45	0.19	0.00	-0.01	-0.50	-0.38	LINEARITY ERROR (dB)
6 GHz	1864	25.1	0.9	84	226	360	485	616	734	873	993	1110	1235	1356	1497	1618	1740	1852	1980	Measured Value (mV)
				-22	-5	4	3	6	1	14	6	0	-1	-6	10	5	2	-12	-9	ERROR (mV)
				-0.86	-0.19	0.15	0.12	0.33	0.04	0.74	0.33	0.00	-0.05	-0.23	0.40	0.20	0.06	-0.49	-0.38	LINEARITY ERROR (dB)
8 GHz	1849	25.1	1.1	67	213	347	473	606	724	864	983	1104	1230	1345	1479	1601	1724	1832	1963	Measured Value (mV)
				-28	-7	2	2	10	3	17	11	7	7	-3	6	3	0	-17	-12	ERROR (mV)
				-1.12	-0.27	0.08	0.08	0.39	0.11	0.68	0.43	0.27	0.29	-0.13	0.22	0.10	0.00	-0.67	-0.48	LINEARITY ERROR (dB)
10 GHz	1846	25.2	1.0	55	205	338	466	599	709	847	984	1084	1208	1338	1479	1602	1725	1833	1964	Measured Value (mV)
				-25	-1	6	8	14	-1	10	2	-5	-7	-3	12	8	5	-13	-8	ERROR (mV)
				-0.98	-0.05	0.24	0.31	0.56	-0.06	0.41	0.06	-0.21	-0.27	-0.14	0.47	0.32	0.21	-0.53	-0.33	LINEARITY ERROR (dB)
12 GHz	1839	25.0	0.8	66	212	347	472	601	705	841	960	1084	1210	1335	1471	1595	1720	1828	1962	Measured Value (mV)
				-21	0	10	10	14	-8	3	-3	-4	-3	-3	7	7	6	-11	-2	ERROR (mV)
				-0.83	0.01	0.39	0.39	0.55	-0.31	0.13	-0.13	-0.16	-0.14	-0.14	0.28	0.26	0.23	-0.46	-0.10	LINEARITY ERROR (dB)
14 GHz	1841	25.0	0.7	75	218	352	476	603	709	846	964	1086	1211	1335	1473	1597	1721	1832	1965	Measured Value (mV)
				-18	1	10	9	12	-8	4	-2	-5	-6	-6	7	6	6	-9	-1	ERROR (mV)
				-0.70	0.04	0.39	0.35	0.47	-0.32	0.17	-0.09	-0.21	-0.22	-0.26	0.29	0.26	0.22	-0.38	-0.04	LINEARITY ERROR (dB)
16 GHz	1841	25.4	0.7	44	195	326	452	583	690	823	944	1071	1193	1325	1470	1594	1719	1833	1971	Measured Value (mV)
				-18	6	10	10	13	-7	-1	-7	-7	-13	-7	11	8	6	-8	3	ERROR (mV)
				-0.69	0.25	0.41	0.38	0.52	-0.26	-0.02	-0.26	-0.29	-0.50	-0.29	0.41	0.31	0.23	-0.31	0.12	LINEARITY ERROR (dB)
18 GHz	1848	25.6	1.3	24	176	307	440	578	707	849	971	1094	1218	1333	1468	1592	1715	1827	1963	Measured Value (mV)
				-33	-8	6	-1	9	10	25	18	13	10	-3	4	0	-5	-21	-12	ERROR (mV)
				-1.29	-0.33	-0.22	-0.03	0.37	0.39	0.98	0.72	0.52	0.37	-0.12	0.17	-0.02	-0.20	-0.83	-0.49	LINEARITY ERROR (dB)
Avg. Slope: 25.2 mV/dB				1.7	1.4	1.4	1.2	1	1.3	1.3	1.4	1.1	1.2	0.9	0.9	0.9	0.8	0.9	0.6	Flatness dB: ±1.7 dB







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

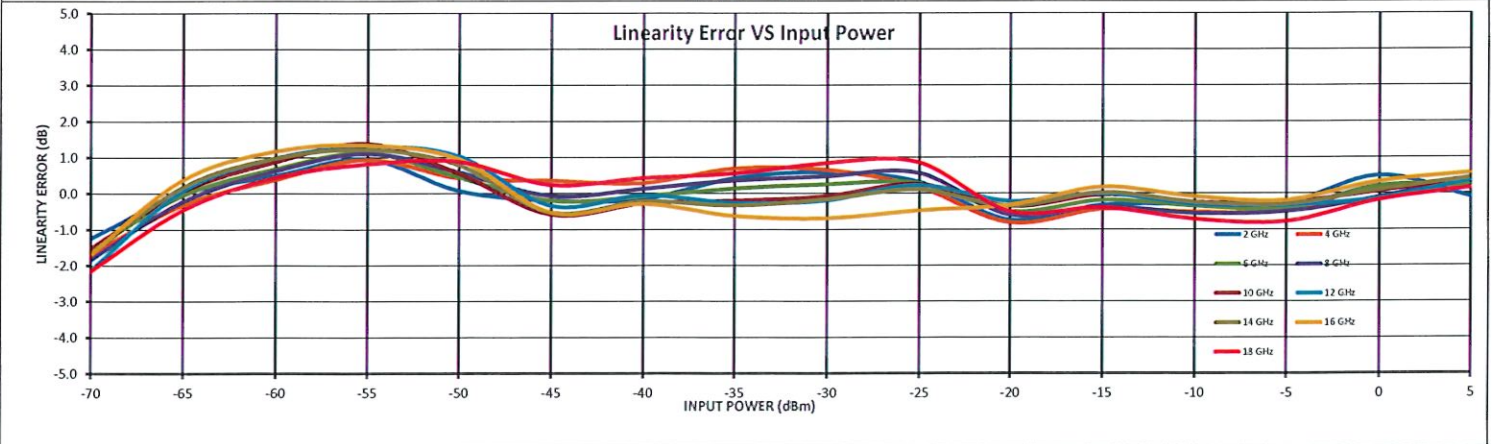
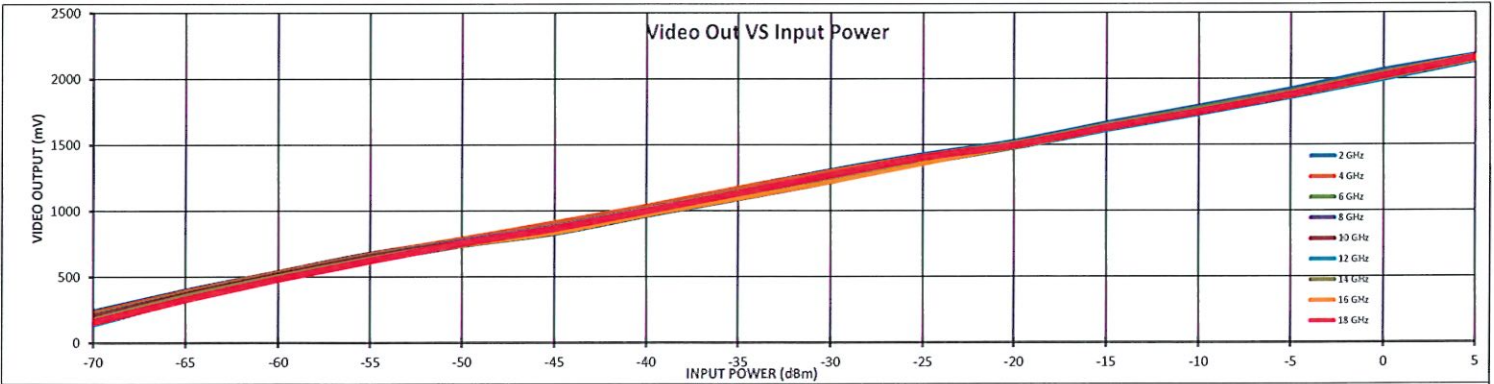
PL42569/2342

## Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42569/2342  
 Date: 3/30/2023  
 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	2050	25.5	1.2	236	395	535	674	779	899	1027	1170	1301	1421	1522	1660	1788	1916	2063	2176	Measured Value (mV)
				-32	0	13	24	2	-5	-4	11	15	8	-19	-8	-8	-7	13	-2	ERROR (mV)
				-1.25	-0.01	0.49	0.95	0.07	-0.19	-0.16	0.42	0.60	0.32	-0.74	-0.33	-0.30	-0.28	0.49	-0.09	LINEARITY ERROR (dB)
4 GHz	2035	25.2	1.7	225	387	530	671	784	908	1033	1169	1294	1409	1510	1645	1770	1897	2039	2166	Measured Value (mV)
				-43	-8	10	24	11	9	7	17	16	5	-21	-11	-13	-12	4	5	ERROR (mV)
				-1.71	-0.32	0.38	0.94	0.43	0.36	0.29	0.69	0.65	0.18	-0.82	-0.44	-0.52	-0.48	0.18	0.19	LINEARITY ERROR (dB)
6 GHz	2030	25.4	1.6	210	376	521	660	770	880	1011	1144	1274	1401	1509	1644	1767	1892	2035	2163	Measured Value (mV)
				-40	-1	17	29	11	-5	-2	4	6	7	-13	-5	-9	-11	5	5	ERROR (mV)
				-1.57	-0.05	0.68	1.13	0.45	-0.20	-0.08	0.14	0.25	0.28	-0.81	-0.19	-0.35	-0.42	0.20	0.23	LINEARITY ERROR (dB)
8 GHz	2011	25.2	1.8	202	369	516	654	767	876	1007	1139	1267	1396	1492	1624	1745	1872	2008	2147	Measured Value (mV)
				-45	-5	16	28	15	-2	3	9	12	14	-15	-9	-14	-13	-3	11	ERROR (mV)
				-1.84	-0.22	0.62	1.11	0.59	-0.07	0.13	0.36	0.47	0.57	-0.60	-0.37	-0.55	-0.51	-0.11	0.42	LINEARITY ERROR (dB)
10 GHz	2012	25.3	1.5	203	370	517	656	761	859	993	1121	1251	1386	1497	1632	1763	1879	2014	2148	Measured Value (mV)
				-39	2	22	35	14	-15	-7	-5	-2	7	-9	-1	-6	-7	2	9	ERROR (mV)
				-1.53	0.06	0.88	1.39	0.55	-0.59	-0.28	-0.20	-0.08	0.26	-0.36	-0.04	-0.25	-0.27	0.07	0.37	LINEARITY ERROR (dB)
12 GHz	2005	25.8	2.1	146	332	484	621	743	837	973	1096	1227	1367	1484	1618	1740	1868	2001	2143	Measured Value (mV)
				-55	2	25	33	27	-9	-1	-7	-5	6	-6	0	-8	-6	-4	9	ERROR (mV)
				-2.14	0.08	0.99	1.29	1.04	-0.34	-0.05	-0.26	-0.19	0.23	-0.22	0.01	-0.30	-0.33	-0.14	0.36	LINEARITY ERROR (dB)
14 GHz	2011	25.7	1.7	169	345	494	629	746	841	977	1103	1236	1371	1488	1626	1748	1875	2013	2150	Measured Value (mV)
				-43	5	25	31	20	-14	-6	-9	-4	3	-9	0	-6	-8	2	11	ERROR (mV)
				-1.68	0.18	0.98	1.22	0.79	-0.53	-0.22	-0.33	-0.17	0.10	-0.35	0.02	-0.24	-0.30	0.09	0.44	LINEARITY ERROR (dB)
16 GHz	2015	26.0	1.7	153	336	487	621	741	832	968	1089	1217	1353	1487	1629	1762	1880	2023	2159	Measured Value (mV)
				-44	10	30	35	25	-14	-7	-16	-18	-12	-8	4	-2	-5	8	15	ERROR (mV)
				-1.68	0.37	1.17	1.34	0.95	-0.53	-0.29	-0.63	-0.69	-0.48	-0.33	0.17	-0.10	-0.19	0.33	0.57	LINEARITY ERROR (dB)
18 GHz	2027	25.9	2.165	155	329	482	621	753	866	1000	1133	1270	1401	1495	1627	1749	1877	2022	2160	Measured Value (mV)
				-36	-12	11	21	23	6	11	14	22	22	-13	-10	-19	-20	-5	4	ERROR (mV)
				-2.16	-0.46	0.44	0.81	0.88	0.24	0.43	0.55	0.84	0.86	-0.50	-0.40	-0.71	-0.78	-0.19	0.15	LINEARITY ERROR (dB)
Avg. Slope: 25.6 mV/dB				1.8	1.3	1	1	0.9	1.5	1.3	1.6	1.6	1.3	0.7	0.8	0.9	0.9	1.2	0.6	Flatness dB: ±1.8 dB

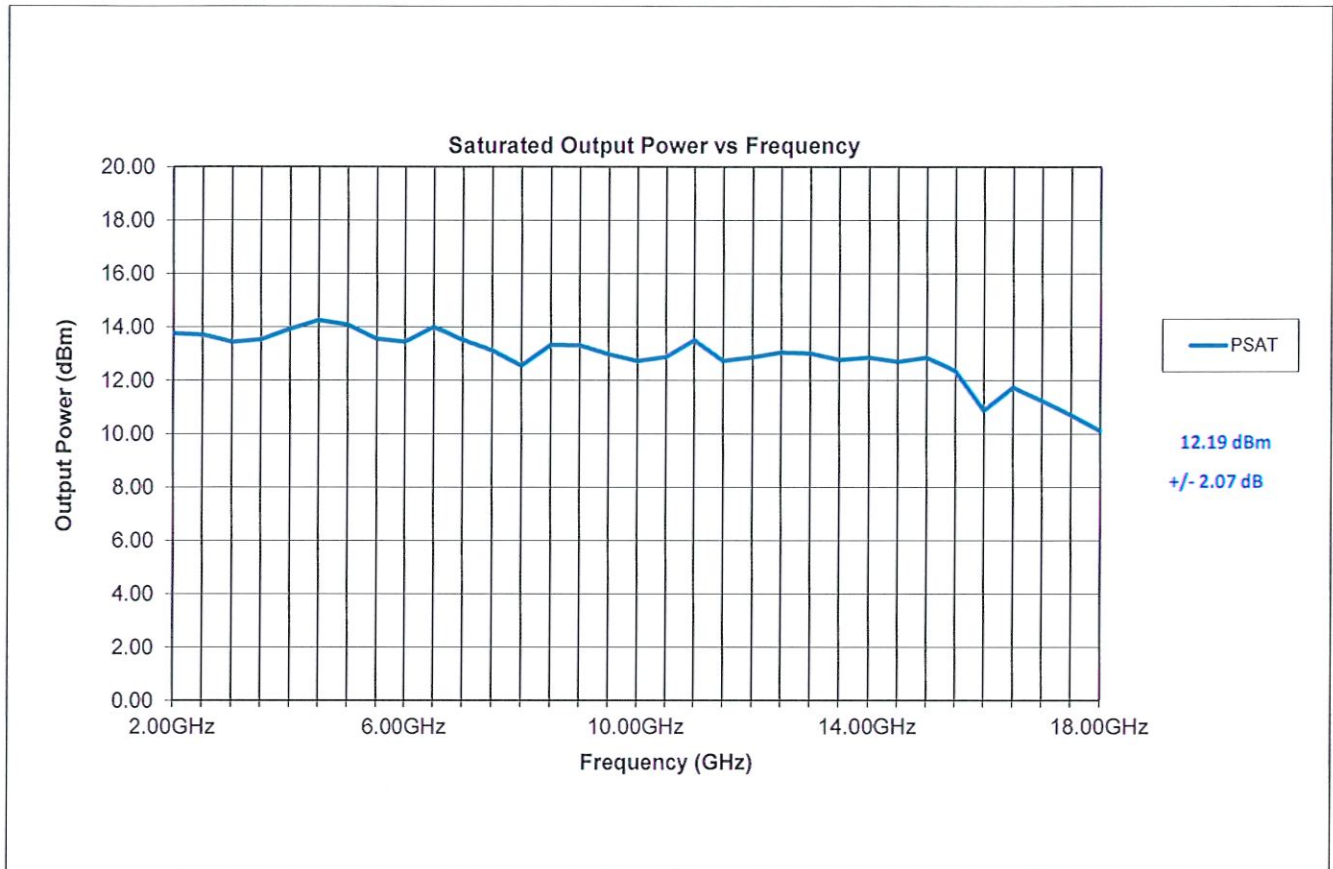




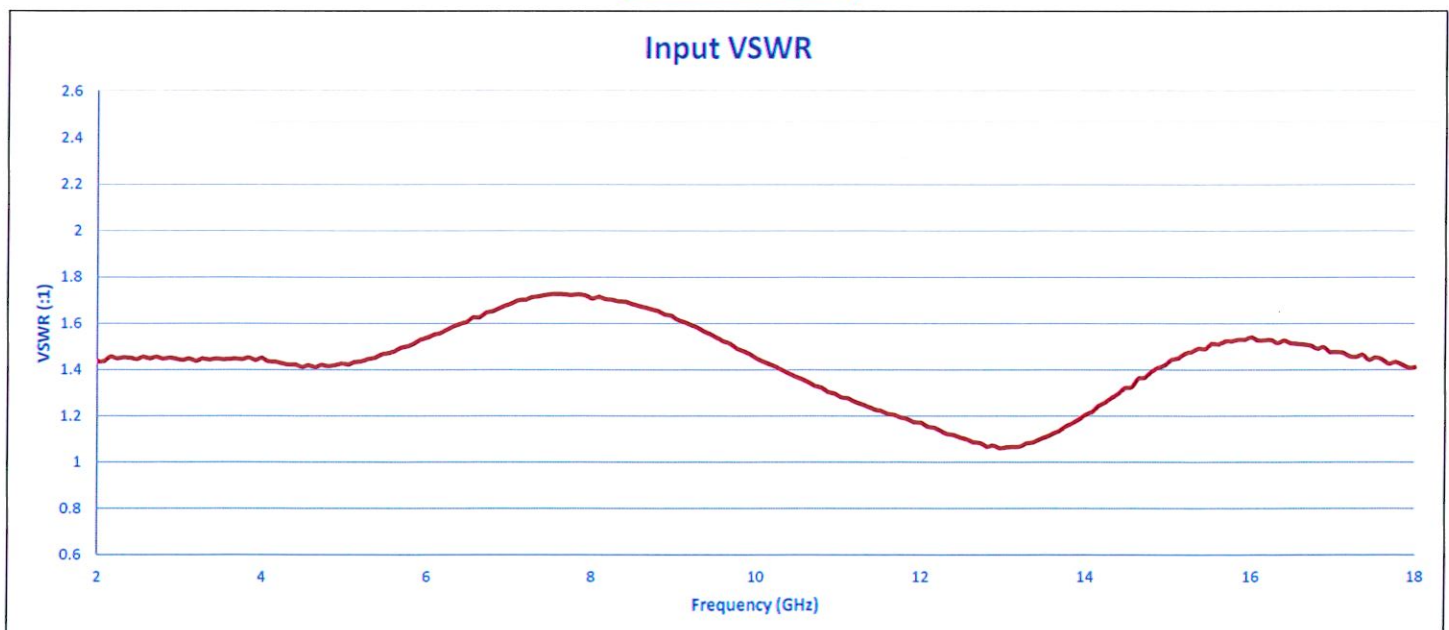
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PL42569/2342

## PSAT



## INPUT VSWR



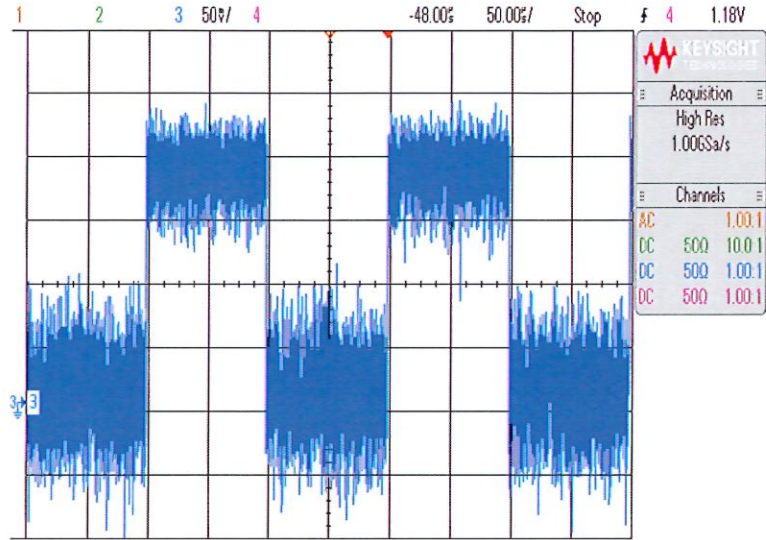




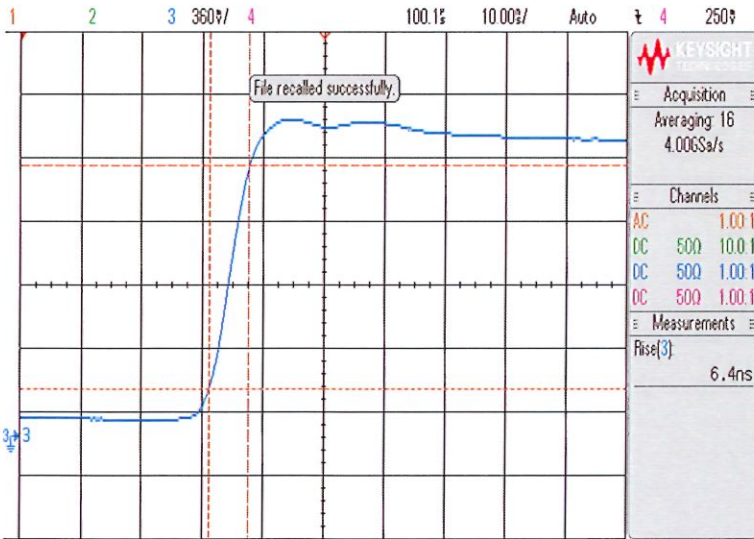
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42569/2342

## TSS



## Rise Time



## Fall Time

