



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

PL42484/2341

Customer: \_\_\_\_\_ Tested By: RCombs  
SO No: \_\_\_\_\_ Temperature: +25° C  
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/11/2023  
Serial No: PL42484/2341 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 dB 25°C See Plots	
3	TSS:	-70 dBm Minimum	-72 dBm	
4	VSWR:	2.0:1 (Input)	1.6:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	12.07 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	25.3 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)	8.3 ns	
12	Recovery Time:	60 ns Typical	78.3 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 252 mA -12V @ 98 mA	PMI QA2

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

PMI  
QA2

Date: 10/13/2023



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

PL42484/2341

## Log Transfer Over Frequency +25°C

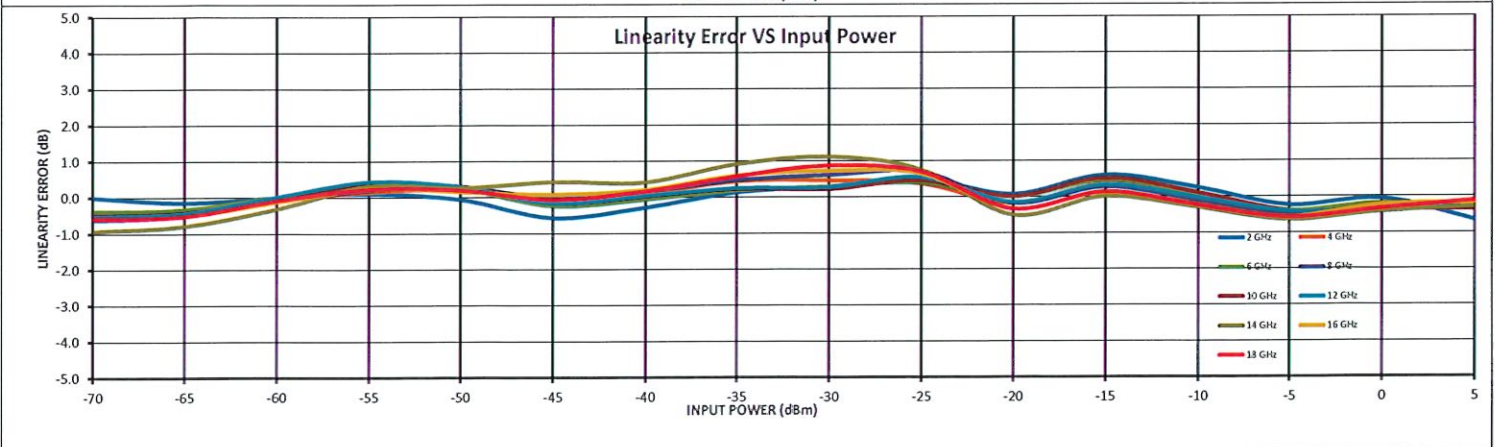
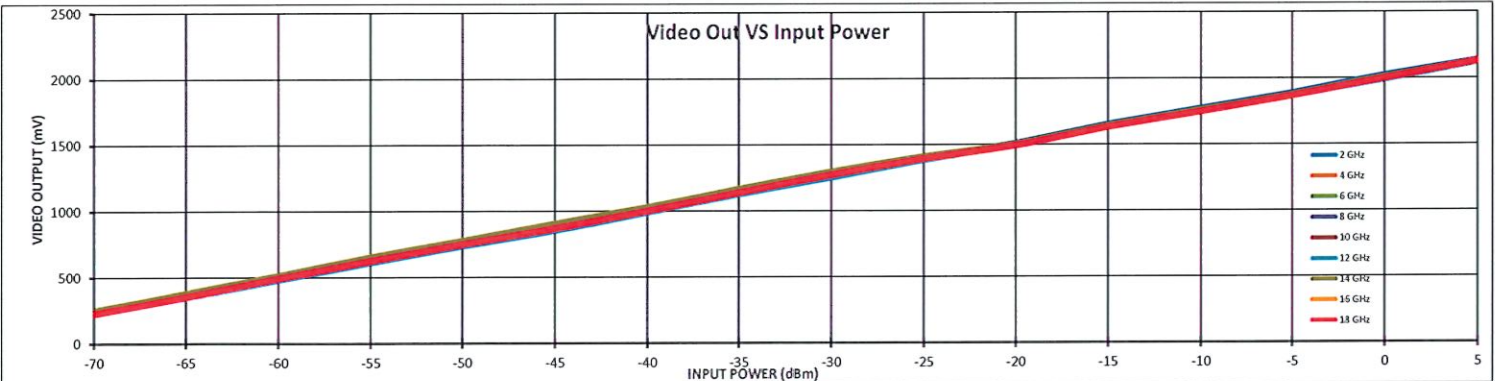


Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42484/2341  
 Date: 10/11/2023  
 Tested By: RCombs  
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	2028	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2028	222	347	480	612	737	852	989	1128	1261	1396	1514	1656	1776	1893	2026	2140	Measured Value (mV)
	SLOPE (mV/dB)	25.8	0	-4	0	3	-1	-14	-7	4	8	13	2	15	6	-5	-1	-17	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.01	-0.14	0.00	0.11	-0.05	-0.56	-0.28	0.14	0.29	0.50	0.07	0.60	0.25	-0.24	-0.06	-0.65	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2016	224	352	487	620	749	869	1001	1137	1264	1389	1502	1643	1761	1878	2010	2135	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-10	-10	-2	4	5	-2	3	11	12	9	-4	9	0	-10	-6	-8	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.41	-0.40	-0.08	0.16	0.20	-0.07	0.10	0.44	0.46	0.37	-0.18	0.35	-0.01	-0.41	-0.23	-0.30	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2017	223	351	488	622	748	864	996	1130	1260	1390	1507	1647	1764	1880	2013	2135	Measured Value (mV)
	SLOPE (mV/dB)	25.5	-10	-8	0	7	6	-5	-1	5	7	10	0	12	2	-10	-5	-9	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.38	-0.33	0.01	0.27	0.23	-0.23	-0.06	0.19	0.29	0.39	0.00	0.47	0.08	-0.39	-0.19	-0.37	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	2005	224	352	489	623	751	870	1000	1134	1264	1392	1496	1634	1750	1866	1994	2125	Measured Value (mV)
	SLOPE (mV/dB)	25.2	-15	-13	-3	5	7	0	4	12	15	17	-4	7	-3	-13	-11	-7	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.61	-0.52	-0.10	0.21	0.29	-0.01	0.16	0.48	0.61	0.69	-0.17	0.28	-0.11	-0.51	-0.42	-0.26	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	2010	222	351	488	625	750	865	997	1129	1255	1388	1503	1643	1759	1873	2001	2128	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-13	-11	0	9	8	-4	1	6	6	11	0	13	3	-10	-9	-9	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.50	-0.42	-0.02	0.36	0.32	-0.17	0.02	0.23	0.22	0.45	0.01	0.51	0.10	-0.40	-0.36	-0.35	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	2004	231	359	496	632	755	868	999	1130	1256	1389	1497	1635	1751	1868	1995	2126	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-13	-11	0	11	8	-4	1	6	7	14	-4	8	-1	-10	-9	-3	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.52	-0.44	0.02	0.44	0.30	-0.17	0.04	0.25	0.28	0.55	-0.15	0.33	-0.03	-0.41	-0.34	-0.13	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	2011	249	377	513	653	775	904	1028	1164	1294	1409	1502	1639	1755	1871	2001	2128	Measured Value (mV)
	SLOPE (mV/dB)	24.8	-23	-20	-8	8	6	11	10	23	28	19	-13	0	-7	-16	-10	-7	ERROR (mV)
	LIN. ERR. (dB)	1.1	-0.93	-0.79	-0.32	0.32	0.26	0.43	0.42	0.91	1.11	0.76	-0.51	0.01	-0.30	-0.65	-0.42	-0.29	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	2014	238	366	501	636	760	884	1013	1148	1277	1401	1502	1639	1756	1873	2008	2135	Measured Value (mV)
	SLOPE (mV/dB)	25.2	-15	-13	-3	6	4	2	5	15	18	16	-8	3	-6	-14	-6	-5	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.59	-0.52	-0.12	0.24	0.16	0.07	0.20	0.59	0.73	0.65	-0.33	0.13	-0.23	-0.57	-0.23	-0.18	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	2007	227	355	492	626	751	871	1003	1139	1272	1394	1494	1632	1749	1866	1999	2130	Measured Value (mV)
	SLOPE (mV/dB)	25.2	-16	-13	-2	6	5	-2	4	14	22	18	-8	3	-6	-15	-8	-3	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.59	-0.52	-0.09	0.23	0.20	-0.07	0.17	0.57	0.87	0.70	-0.33	0.14	-0.24	-0.58	-0.33	-0.12	LINEARITY ERROR (dB)

Avg. Slope: 25.3 mV/dB

0.5 0.6 0.6 0.8 0.8 1 0.8 0.7 0.8 0.4 0.4 0.5 0.5 0.5 0.6 0.3 Flatness dB: ±1 dB





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

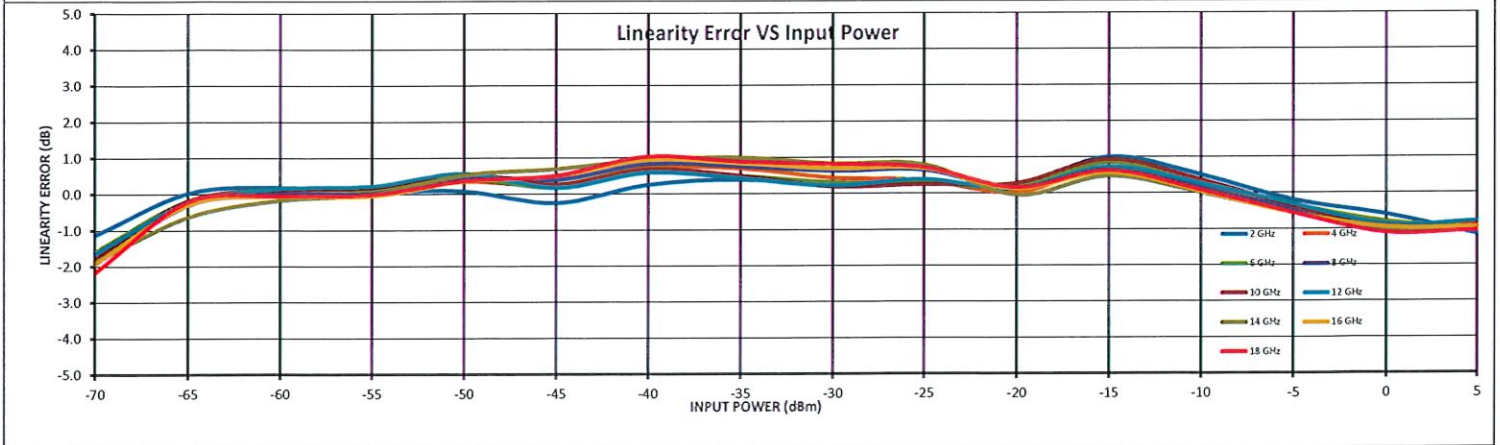
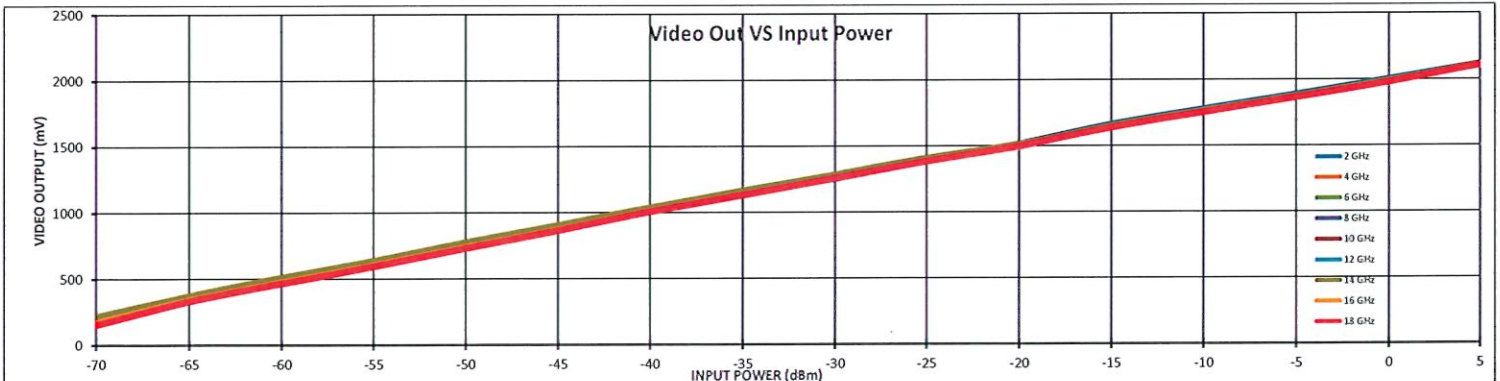
PL42484/2341

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL42484/2341  
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	2022	25.4	1.1	214	371	502	626	754	872	1012	1143	1286	1395	1519	1667	1781	1890	2007	2120	Measured Value (mV)	
				-29	1	6	2	2	-6	7	10	6	8	6	26	13	-5	-15	-29	ERROR (mV)	
				-1.14	0.03	0.19	0.08	0.09	-0.25	0.26	0.40	0.24	0.33	0.20	1.01	0.51	-0.19	-0.60	-1.15	LINEARITY ERROR (dB)	
4 GHz	2014	25.3	1.6	205	366	500	625	760	884	1022	1147	1267	1391	1509	1653	1768	1878	1993	2118	Measured Value (mV)	
				-40	-6	2	1	9	6	18	18	11	9	1	18	6	-9	-21	-22	ERROR (mV)	
				-1.60	-0.22	0.07	0.04	0.34	0.28	0.72	0.70	0.43	0.36	0.02	0.71	0.25	-0.37	-0.83	-0.89	LINEARITY ERROR (dB)	
6 GHz	2016	25.3	1.6	202	365	500	625	760	881	1018	1142	1264	1390	1514	1657	1770	1881	1995	2117	Measured Value (mV)	
				-40	-5	3	3	11	5	15	13	8	7	5	21	8	-8	-20	-25	ERROR (mV)	
				-1.60	-0.18	0.14	0.10	0.42	0.18	0.61	0.50	0.31	0.28	0.18	0.85	0.32	-0.33	-0.80	-0.98	LINEARITY ERROR (dB)	
8 GHz	2005	25.2	1.9	189	357	491	617	755	879	1017	1141	1264	1391	1504	1643	1757	1868	1979	2107	Measured Value (mV)	
				-49	-3	0	1	12	10	21	19	16	17	4	16	4	-12	-26	-25	ERROR (mV)	
				-1.94	-0.31	0.01	0.03	0.48	0.40	0.83	0.76	0.62	0.66	0.14	0.65	0.14	-0.46	-1.03	-0.99	LINEARITY ERROR (dB)	
10 GHz	2009	25.4	1.8	185	354	488	617	754	873	1011	1133	1252	1381	1508	1652	1764	1873	1984	2111	Measured Value (mV)	
				-46	-5	3	4	14	7	17	13	5	7	7	24	9	-9	-25	-25	ERROR (mV)	
				-1.82	-0.19	0.12	0.18	0.56	0.26	0.68	0.49	0.20	0.26	0.27	0.94	0.36	-0.37	-0.97	-0.97	LINEARITY ERROR (dB)	
12 GHz	2002	25.1	1.7	205	365	501	628	762	878	1014	1135	1255	1385	1504	1644	1758	1869	1980	2108	Measured Value (mV)	
				-41	-6	4	6	14	4	15	11	5	10	3	18	7	6	-22	-20	ERROR (mV)	
				-1.65	-0.25	0.16	0.22	0.57	0.17	0.59	0.43	0.21	0.39	0.13	0.72	0.26	-0.31	-0.88	-0.78	LINEARITY ERROR (dB)	
14 GHz	2012	25.0	1.9	216	372	508	637	776	905	1036	1162	1283	1407	1511	1649	1762	1873	1987	2113	Measured Value (mV)	
				-47	-16	-4	0	13	17	23	25	21	20	-1	12	0	-14	-25	-24	ERROR (mV)	
				-1.88	-0.63	-0.17	-0.01	0.53	0.69	0.94	1.00	0.83	0.80	-0.05	0.48	0.01	-0.56	-1.02	-0.96	LINEARITY ERROR (dB)	
16 GHz	2015	25.5	1.9	183	352	486	613	751	882	1021	1145	1269	1396	1509	1648	1762	1873	1991	2118	Measured Value (mV)	
				-49	-6	-1	-1	9	13	24	22	18	18	3	15	1	-15	-24	-24	ERROR (mV)	
				-1.93	-0.30	-0.05	-0.05	0.36	0.51	0.95	0.85	0.69	0.70	0.13	0.58	0.05	-0.57	-0.95	-0.96	LINEARITY ERROR (dB)	
18 GHz	2008	25.7	2.2	153	332	465	594	732	864	1006	1131	1258	1384	1498	1638	1753	1865	1979	2109	Measured Value (mV)	
				-68	-6	-1	0	9	13	26	23	21	19	4	16	2	-14	-29	-27	ERROR (mV)	
				-2.19	-0.22	-0.04	-0.02	0.37	0.50	1.03	0.88	0.81	0.72	0.15	0.62	0.09	-0.55	-1.11	-1.04	LINEARITY ERROR (dB)	
Avg. Slope: 25.3 mV/dB				1.2	0.8	0.9	0.9	0.8	0.6	0.6	0.6	0.5	0.4	0.6	0.6	0.5	0.6	0.3	Flatness dB: ±1.2 dB		





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

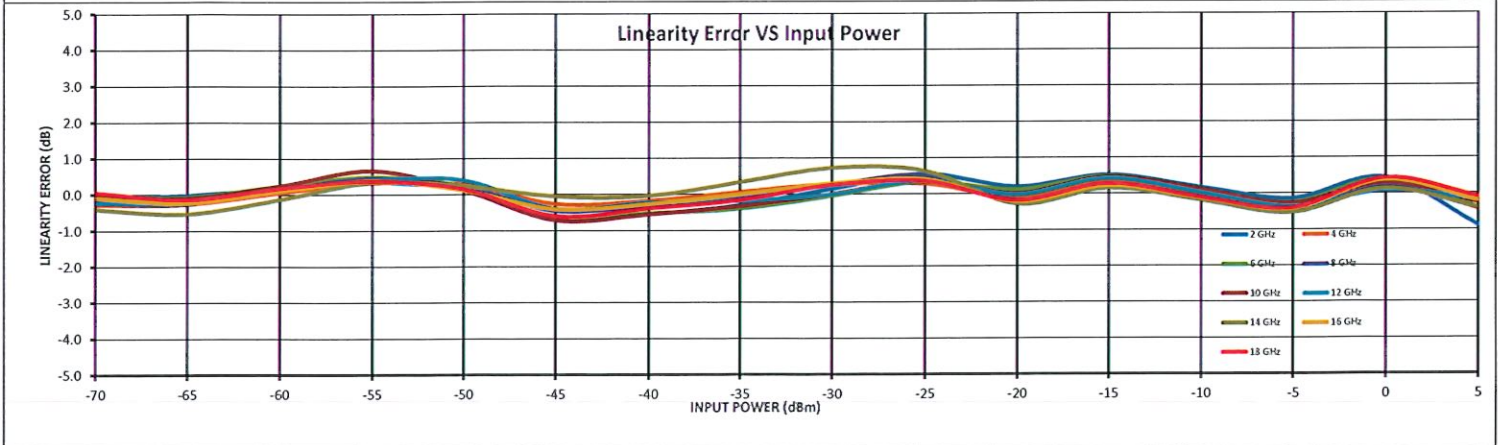
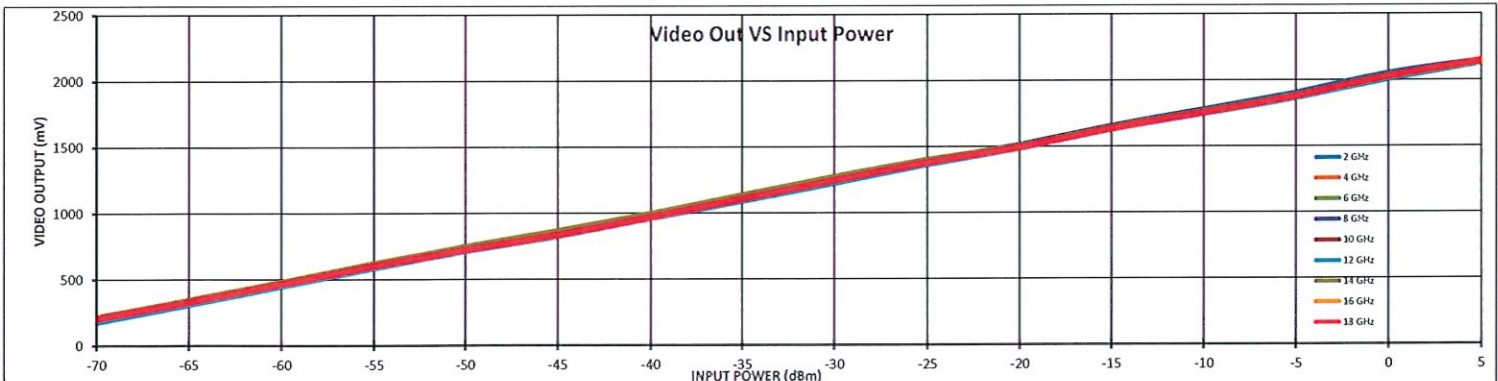
## Log Transfer Over Frequency -40°C

PL42484/2341



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL42484/2341  
 Date: 10/11/2023  
 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	2041	26.6	0.9	177	312	450	587	715	825	962	1102	1247	1391	1514	1656	1780	1904	2053	2151	Measured Value (mV)
				-2	0	5	9	3	-18	-16	-8	4	15	5	14	5	-4	12	-23	ERROR (mV)
				-0.09	-0.02	0.18	0.35	0.13	-0.69	-0.55	-0.31	0.15	0.55	0.20	0.52	0.17	-0.14	0.44	-0.88	LINEARITY ERROR (dB)
4 GHz	2026	26.1	0.4	192	322	461	599	728	844	977	1114	1250	1381	1501	1644	1764	1886	2033	2145	Measured Value (mV)
				-7	-7	1	8	7	-7	-5	2	7	7	-3	9	-1	-9	7	-11	ERROR (mV)
				-0.27	-0.27	0.05	0.32	0.28	-0.26	-0.18	0.06	0.27	0.28	-0.10	0.35	-0.03	-0.35	0.28	-0.44	LINEARITY ERROR (dB)
6 GHz	2026	26.1	0.7	198	328	466	603	727	834	968	1102	1242	1382	1507	1647	1768	1889	2036	2146	Measured Value (mV)
				-1	-2	6	13	6	-17	-14	-10	-1	9	3	13	3	-7	10	-11	ERROR (mV)
				-0.03	-0.07	0.24	0.49	0.23	-0.66	-0.52	-0.39	-0.05	0.34	0.11	0.48	0.11	-0.26	0.40	-0.41	LINEARITY ERROR (dB)
8 GHz	2012	25.7	0.5	208	336	474	610	733	844	977	1111	1248	1383	1494	1634	1753	1873	2017	2138	Measured Value (mV)
				-5	-6	4	12	6	-11	-8	-1	6	13	-5	7	-2	-11	5	-3	ERROR (mV)
				-0.20	-0.24	0.14	0.46	0.22	-0.45	-0.30	-0.05	0.25	0.52	-0.18	0.28	-0.09	-0.44	0.19	-0.11	LINEARITY ERROR (dB)
10 GHz	2018	25.7	0.7	219	345	483	622	737	843	976	1110	1247	1385	1504	1644	1764	1882	2025	2140	Measured Value (mV)
				-1	-3	6	17	3	-18	-14	-9	0	10	0	12	3	-7	8	-7	ERROR (mV)
				-0.02	-0.11	0.24	0.66	0.12	-0.71	-0.55	-0.33	-0.01	0.37	0.00	0.46	0.12	-0.28	0.29	-0.26	LINEARITY ERROR (dB)
12 GHz	2012	26.0	0.4	188	317	456	594	724	833	967	1098	1232	1372	1492	1633	1753	1872	2014	2137	Measured Value (mV)
				-6	-6	3	11	11	-10	-6	-5	0	10	0	11	1	-10	2	-5	ERROR (mV)
				-0.23	-0.24	0.12	0.41	0.41	-0.40	-0.22	-0.18	-0.01	0.37	-0.02	0.43	0.02	-0.37	0.09	-0.19	LINEARITY ERROR (dB)
14 GHz	2022	25.7	0.7	212	337	476	617	743	864	992	1131	1269	1396	1500	1640	1760	1880	2025	2140	Measured Value (mV)
				-10	-14	-3	9	6	-1	-1	9	19	16	-7	4	-5	-14	3	-11	ERROR (mV)
				-0.41	-0.53	-0.13	0.34	0.24	-0.05	-0.04	0.33	0.72	0.64	-0.28	0.15	-0.18	-0.53	0.13	-0.41	LINEARITY ERROR (dB)
16 GHz	2021	25.8	0.4	212	338	475	612	734	849	982	1118	1254	1387	1500	1640	1760	1882	2031	2145	Measured Value (mV)
				-2	-6	3	10	3	-10	-7	0	7	10	-5	6	-3	-11	10	-5	ERROR (mV)
				-0.09	-0.23	0.10	0.39	0.12	-0.40	-0.26	-0.01	0.29	0.41	-0.20	0.24	-0.11	-0.42	0.38	-0.21	LINEARITY ERROR (dB)
18 GHz	2018	25.9	0.601	204	328	466	601	725	835	970	1106	1246	1379	1495	1636	1756	1878	2029	2146	Measured Value (mV)
				1	-4	4	10	4	-18	-10	-4	6	9	-5	7	-3	-10	11	-2	ERROR (mV)
				0.06	-0.14	0.17	0.38	0.15	-0.60	-0.39	-0.16	0.25	0.36	-0.18	0.28	-0.10	-0.40	0.42	-0.09	LINEARITY ERROR (dB)
Avg. Slope: 26 mV/dB				0.8 0.6 0.6 0.7 0.5 0.7 0.6 0.6 0.7 0.5 0.4 0.4 0.5 0.6 0.7 0.3																Flatness dB: ±0.8 dB

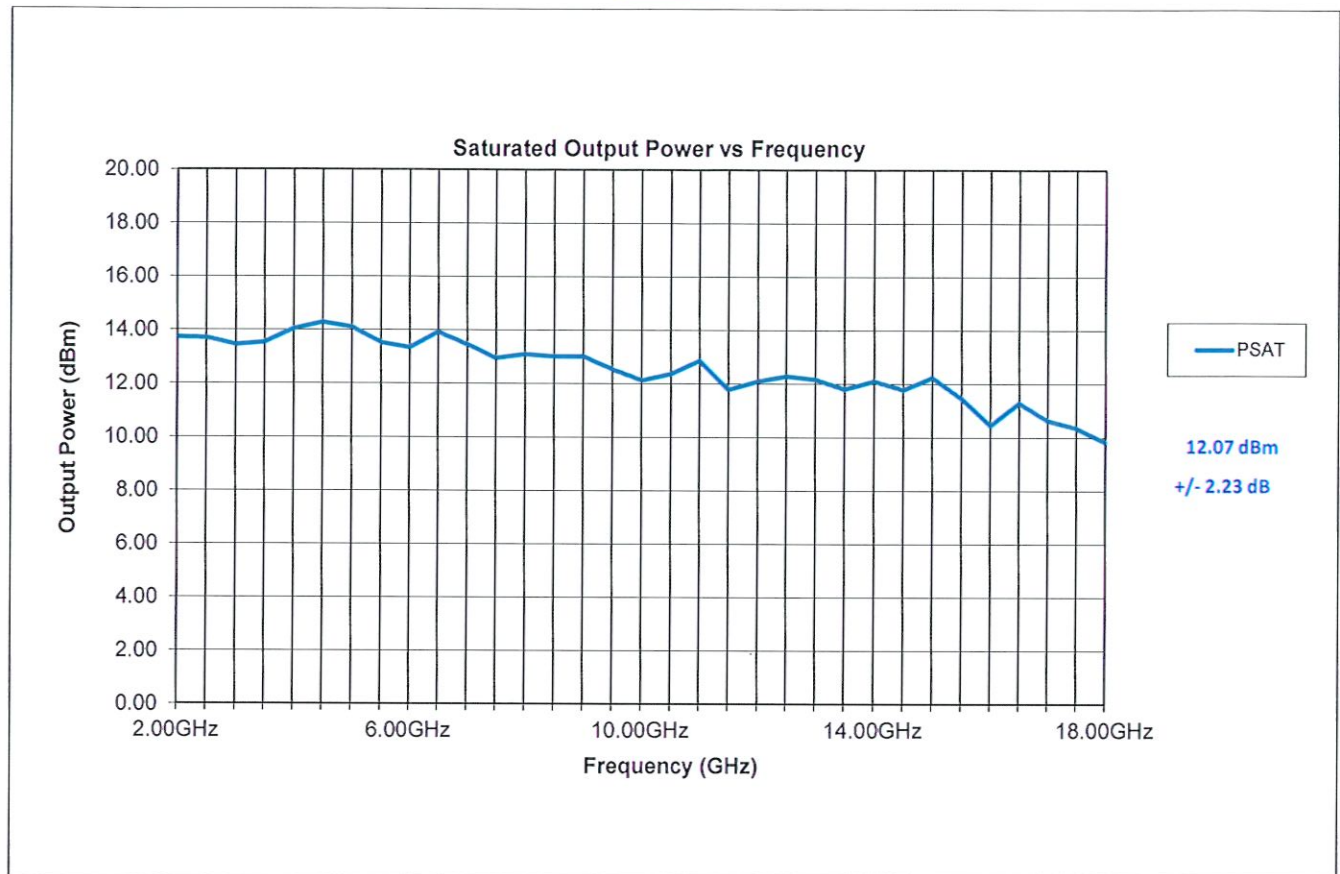




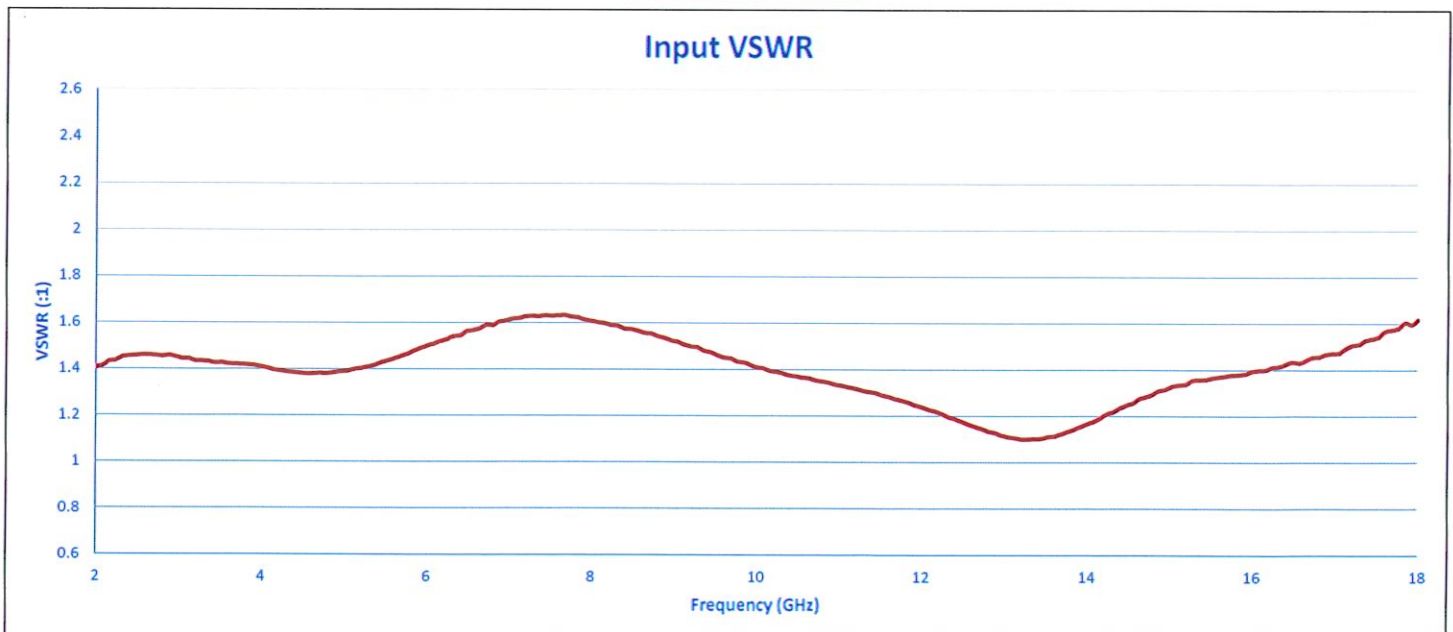
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42484/2341

## PSAT



## INPUT VSWR

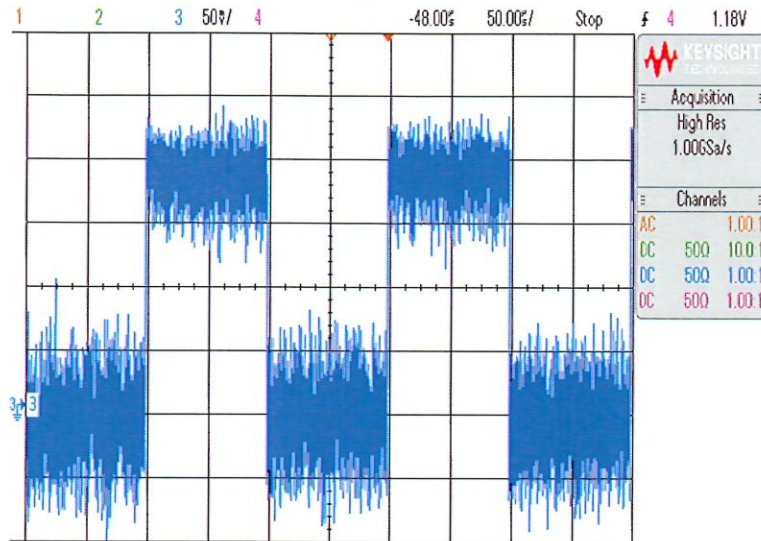




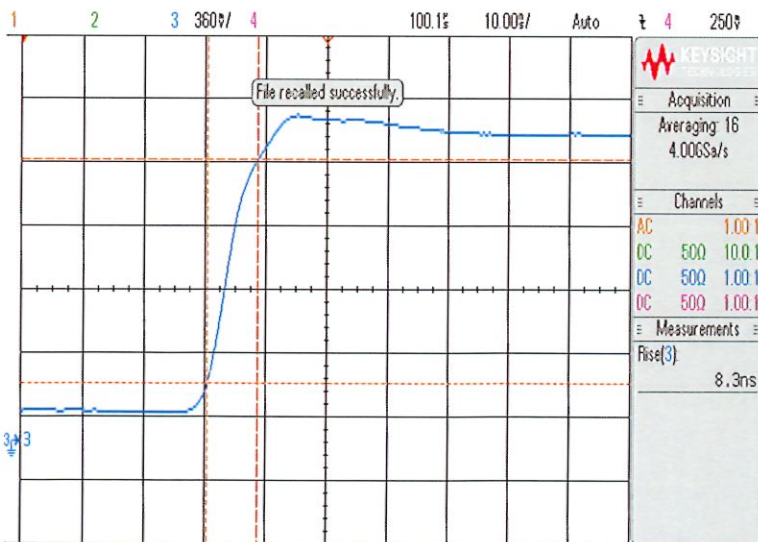
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42484/2341

## TSS



## Rise Time



## Fall Time

