




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

PL36395/2218

Customer: _____	Tested By: <u>Rcombs</u>
SO No: _____	Temperature: <u>+25° C</u>
Model No: <u>SDLVA-6G18G-CD-2-OPT218</u>	Date: <u>4/28/2022</u>
Serial No: <u>PL36395/2218</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	±1.4 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	13.48 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.8 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)	6.0 ns	
12	Recovery Time:	60 ns Typical	40.8ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 264 mA -12V @ 97 mA	PMI QA 2

QA/QC Approval:  PMI QA 2 Date: 4/29/2022



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

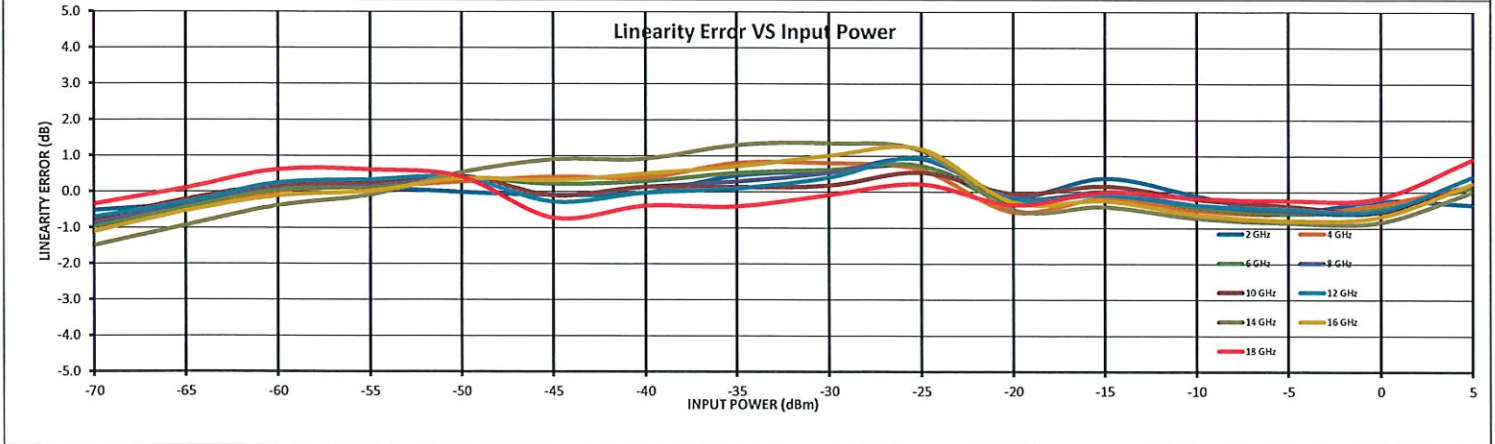
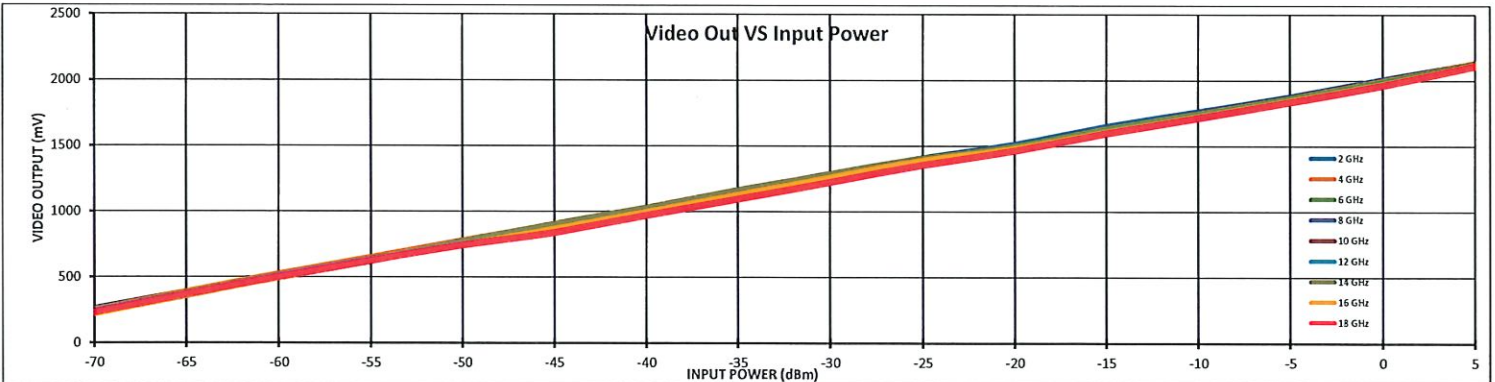
PL36395/2218

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL36395/2218
 Date: 4/28/2022
 Tested By: Rcombs
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	2016	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2016	262	391	525	651	772	895	1021	1157	1285	1412	1516	1653	1765	1878	2011	2132	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-13	-8	1	3	0	-2	0	11	15	18	-3	10	2	-14	-6	-9	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.51	-0.34	0.06	0.11	-0.01	-0.08	-0.02	0.46	0.59	0.72	-0.13	0.39	-0.10	-0.55	-0.23	-0.36	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2006	255	389	526	652	779	906	1029	1162	1286	1404	1499	1632	1747	1868	1998	2134	Measured Value (mV)
	SLOPE (mV/dB)	24.7	-24	-13	0	3	7	10	10	20	20	15	-14	-4	-13	-15	-8	5	ERROR (mV)
	LIN. ERR. (dB)	1.0	-0.98	-0.52	0.02	0.14	0.28	0.42	0.39	0.80	0.80	0.62	-0.55	-0.16	-0.51	-0.60	-0.33	0.19	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2003	229	368	505	632	762	884	1011	1141	1289	1396	1496	1628	1742	1863	1991	2131	Measured Value (mV)
	SLOPE (mV/dB)	25.0	-24	-11	2	4	9	5	8	13	16	18	-7	0	-11	-15	-11	3	ERROR (mV)
	LIN. ERR. (dB)	1.0	-0.96	-0.43	0.06	0.16	0.37	0.22	0.50	0.53	0.62	0.73	-0.28	0.01	-0.42	-0.60	-0.45	0.13	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1985	226	363	499	625	754	866	995	1123	1254	1387	1485	1612	1728	1848	1972	2115	Measured Value (mV)
	SLOPE (mV/dB)	24.8	-21	-8	4	5	10	-2	3	7	13	23	-4	0	-9	-13	-14	5	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.86	-0.32	0.16	0.22	0.40	-0.09	0.14	0.29	0.53	0.92	-0.16	-0.01	-0.36	-0.53	-0.55	0.22	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1981	217	356	490	617	746	857	988	1112	1238	1372	1482	1611	1727	1847	1967	2112	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-19	-5	5	6	11	-2	3	3	4	14	-1	4	-5	-10	-14	6	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.78	-0.21	0.18	0.25	0.44	-0.10	0.14	0.13	0.18	0.55	-0.05	0.17	-0.20	-0.39	-0.55	0.23	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1982	238	371	508	633	758	865	994	1121	1251	1388	1484	1610	1725	1847	1969	2115	Measured Value (mV)
	SLOPE (mV/dB)	24.7	-17	-7	6	8	10	-7	0	2	10	23	-4	-2	-9	-12	-13	11	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.70	-0.29	0.25	0.34	0.40	-0.27	-0.02	0.10	0.40	0.95	-0.18	-0.07	-0.36	-0.47	-0.51	0.43	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1993	223	361	499	630	769	902	1026	1159	1284	1403	1486	1612	1728	1849	1973	2117	Measured Value (mV)
	SLOPE (mV/dB)	24.8	-37	-23	-9	-2	13	22	23	32	34	28	-12	-10	-18	-21	-21	0	ERROR (mV)
	LIN. ERR. (dB)	1.5	-1.50	-0.93	-0.38	-0.09	0.54	0.90	0.92	1.31	1.35	1.15	-0.48	-0.41	-0.73	-0.85	-0.83	0.01	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1994	213	353	488	617	751	875	1005	1135	1268	1398	1486	1612	1728	1849	1977	2126	Measured Value (mV)
	SLOPE (mV/dB)	25.0	-28	-13	-3	1	9	8	13	18	25	30	-7	-6	-16	-20	-17	6	ERROR (mV)
	LIN. ERR. (dB)	1.2	-1.11	-0.53	-0.11	0.02	0.37	0.32	0.51	0.71	1.01	1.20	-0.28	-0.24	-0.63	-0.79	-0.68	0.25	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1965	233	367	503	626	744	839	971	1093	1224	1355	1464	1596	1715	1836	1952	2111	Measured Value (mV)
	SLOPE (mV/dB)	24.6	-8	3	15	15	10	-18	-10	-10	-2	6	-9	0	-4	-6	-4	23	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.34	0.10	0.62	0.82	0.41	-0.73	-0.39	-0.40	-0.08	0.22	-0.36	0.00	-0.18	-0.24	-0.16	0.92	LINEARITY ERROR (dB)
Avg. Slope: 24.8 mV/dB			1	0.8	0.8	0.7	0.7	1.4	1.2	1.4	1.2	1.2	1	1.1	1	0.8	1	0.5	Flatness dB: ±1.4 dB





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

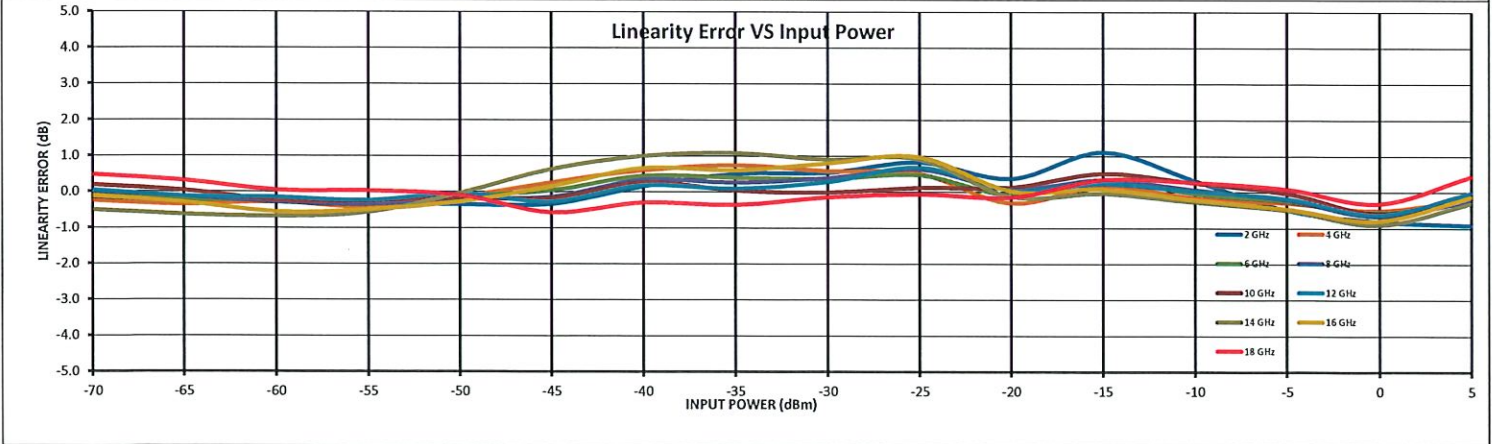
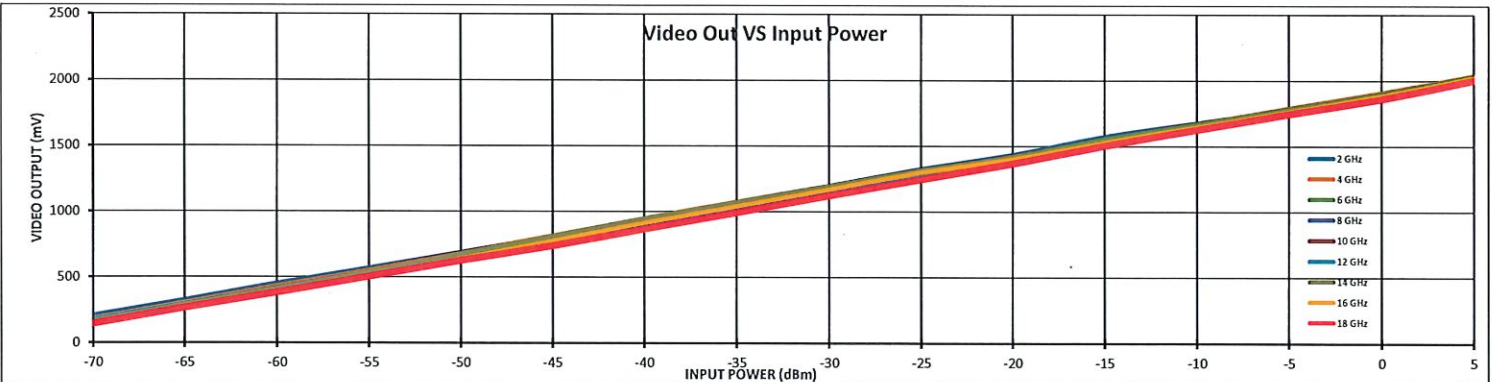
PL36395/2218

Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL36395/2218
 Date: 4/28/2022
 Tested By: Rcombs
 Test Temp: +85°C

Frequency	INTERCEPT (mV)	1907	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1907	206	322	448	565	686	807	940	1070	1193	1321	1431	1570	1673	1774	1888	2007	Measured Value (mV)
	SLOPE (mV/dB)	24.3	-3	-8	-4	-8	-8	-8	4	12	13	20	9	27	8	-12	-20	-22	ERROR (mV)
	LIN. ERR. (dB)	1.1	-0.13	-0.34	-0.16	-0.32	-0.34	-0.33	0.15	0.51	0.54	0.83	0.38	1.11	0.32	-0.50	-0.81	-0.91	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1917	183	303	429	549	679	812	944	1071	1190	1312	1415	1551	1666	1786	1904	2036	Measured Value (mV)
	SLOPE (mV/dB)	24.7	-6	-9	-7	-10	-4	7	15	18	14	13	-8	4	-4	-7	-13	-5	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.24	-0.35	-0.28	-0.42	-0.15	0.26	0.60	0.74	0.58	0.51	-0.31	0.18	-0.16	-0.29	-0.51	-0.18	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1911	169	290	414	536	666	794	928	1051	1175	1302	1412	1547	1661	1781	1897	2031	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-2	-5	-6	-8	-3	1	11	10	9	12	-2	9	-1	-6	-14	-4	ERROR (mV)
	LIN. ERR. (dB)	0.6	-0.09	-0.21	-0.25	-0.34	-0.11	0.04	0.45	0.40	0.37	0.48	-0.07	0.35	-0.04	-0.24	-0.56	-0.16	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1897	158	279	399	522	650	775	911	1034	1161	1291	1402	1532	1650	1767	1880	2016	Measured Value (mV)
	SLOPE (mV/dB)	24.8	0	-3	-7	-9	-4	-4	8	6	10	16	2	9	2	-5	-16	-5	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.01	-0.12	-0.28	-0.34	-0.17	-0.14	0.34	0.26	0.38	0.64	0.09	0.34	0.06	-0.20	-0.66	-0.21	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1891	149	270	388	512	639	764	899	1018	1142	1270	1395	1530	1648	1765	1876	2013	Measured Value (mV)
	SLOPE (mV/dB)	24.9	5	1	-6	-6	-4	-4	7	1	0	3	13	6	-1	-15	-15	-2	ERROR (mV)
	LIN. ERR. (dB)	0.6	0.19	0.04	-0.23	-0.25	-0.16	-0.18	0.27	0.04	-0.01	0.12	0.13	0.52	0.25	-0.03	-0.60	-0.10	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1892	168	287	410	531	659	777	911	1032	1160	1293	1401	1528	1646	1765	1877	2015	Measured Value (mV)
	SLOPE (mV/dB)	24.6	1	-3	-4	-6	-1	-7	5	2	7	17	2	6	1	-4	-16	0	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.05	-0.12	-0.15	-0.24	-0.04	-0.27	0.18	0.09	0.28	0.69	0.06	0.24	0.03	-0.17	-0.63	0.00	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1902	159	280	402	528	665	805	938	1064	1183	1307	1405	1531	1648	1766	1880	2018	Measured Value (mV)
	SLOPE (mV/dB)	24.7	-13	-15	-17	-14	-1	16	25	27	22	23	-3	-1	-7	-12	-22	-7	ERROR (mV)
	LIN. ERR. (dB)	1.1	-0.51	-0.62	-0.68	-0.57	-0.04	0.64	1.00	1.08	0.90	0.92	-0.12	-0.03	-0.27	-0.49	-0.90	-0.30	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1903	145	266	384	511	642	778	916	1040	1171	1301	1402	1529	1647	1766	1883	2025	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-3	-7	-14	-13	-7	4	17	15	20	25	1	2	-5	-12	-20	-3	ERROR (mV)
	LIN. ERR. (dB)	1.0	-0.11	-0.29	-0.55	-0.50	-0.27	0.15	0.66	0.60	0.79	0.98	0.03	0.08	-0.21	-0.46	-0.79	-0.12	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1868	145	265	382	505	626	738	869	991	1121	1247	1368	1505	1627	1746	1860	2003	Measured Value (mV)
	SLOPE (mV/dB)	24.8	12	8	1	1	-2	-14	-7	-9	-4	-1	-4	9	7	2	-8	11	ERROR (mV)
	LIN. ERR. (dB)	0.6	0.48	0.31	0.05	0.03	-0.09	-0.58	-0.30	-0.37	-0.15	-0.06	-0.15	0.35	0.27	0.09	-0.32	0.44	LINEARITY ERROR (dB)
Avg. Slope: 24.8 mV/dB			1.2	1.2	1.3	1.2	1.2	1.5	1.5	1.6	1.5	1.5	1.3	1.3	0.9	0.8	0.9	0.7	Flatness dB: ±1.6 dB





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

PL36395/2218

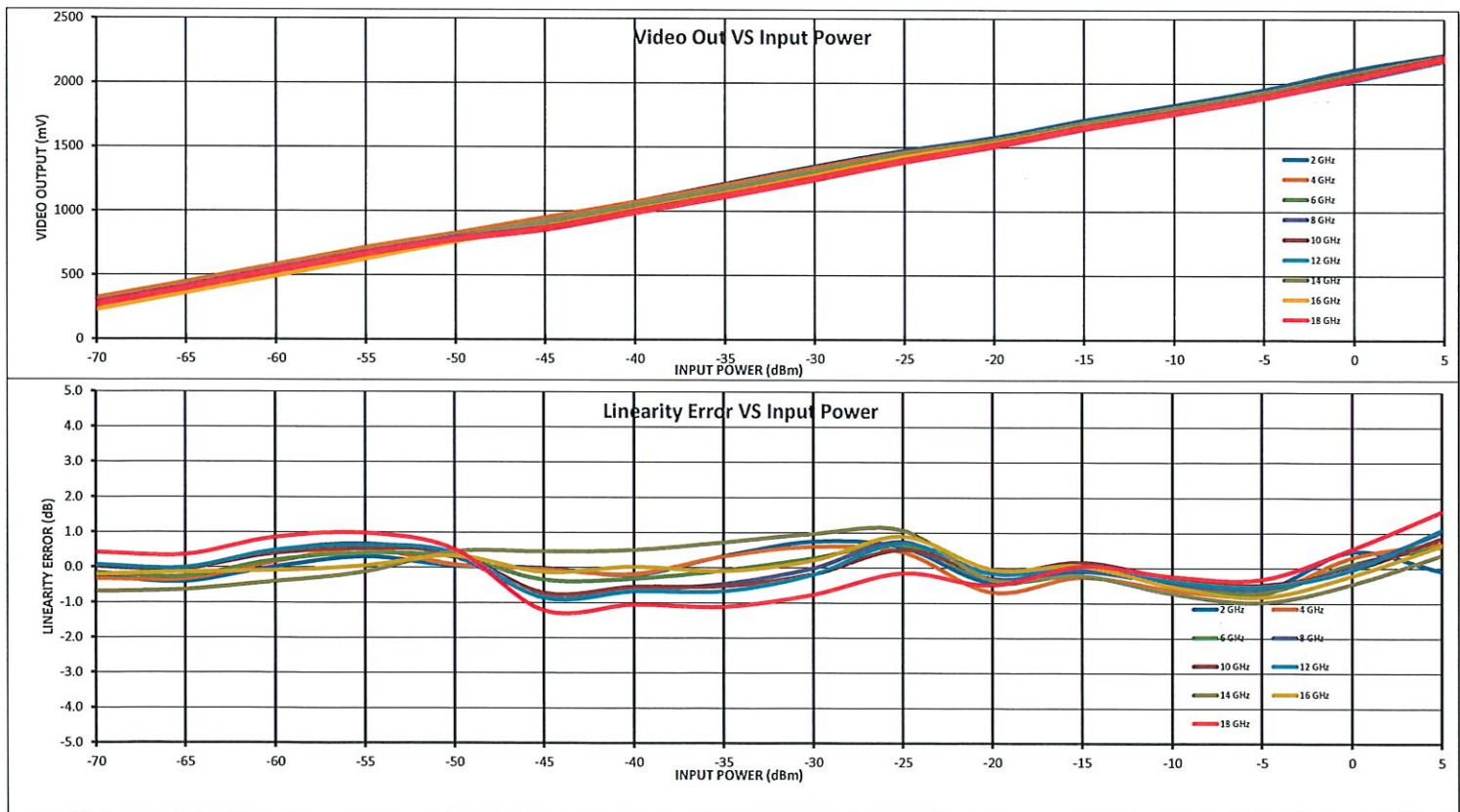
Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL36395/2218
 Date: 4/28/2022
 Tested By: Rcombs
 Test Temp: -40°C

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	LIN. ERR. (dB)	RF Input Power (dBm)																Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)																	
2 GHz	2092	25.5	0.7	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	302	426	564	699	819	945	1067	1209	1347	1470	1571	1708	1826	1948	2104	2217	2092	-2	-0.08	
				-0.25	-0.40	0.02	0.31	0.05	-0.01	-0.21	0.33	0.75	0.59	-0.43	-0.08	-0.44	-0.63	0.47	-0.08																				
4 GHz	2067	24.9	0.7	317	441	578	711	825	946	1067	1204	1335	1456	1552	1688	1803	1925	2075	2209	317	441	578	711	825	946	1067	1204	1335	1456	1552	1688	1803	1925	2075	2209	2067	-8	18	
				-0.32	-0.33	0.16	0.54	0.09	-0.04	-0.19	0.33	0.60	0.45	-0.69	-0.25	-0.62	-0.73	0.31	0.70																				
6 GHz	2052	25.4	0.7	280	404	543	675	800	910	1038	1171	1307	1444	1546	1681	1796	1917	2085	2205	280	404	543	675	800	910	1038	1171	1307	1444	1546	1681	1796	1917	2085	2205	2052	-4	16	
				-0.16	-0.25	0.21	0.41	0.31	-0.35	-0.07	0.27	0.67	0.7	-0.8	0	-12	-18	3	16																				
8 GHz	2039	25.0	1.0	289	412	550	680	798	892	1022	1152	1288	1432	1531	1663	1778	1899	2040	2190	289	412	550	680	798	892	1022	1152	1288	1432	1531	1663	1778	1899	2040	2190	2039	1	26	
				0.02	-0.05	0.48	0.68	0.31	-0.84	-0.65	-0.46	-0.01	0.75	-0.30	-0.03	-0.43	-0.58	0.05	1.05																				
10 GHz	2039	25.2	0.9	272	397	534	664	787	884	1015	1142	1277	1421	1530	1664	1779	1900	2038	2187	272	397	534	664	787	884	1015	1142	1277	1421	1530	1664	1779	1900	2038	2187	2039	1	22	
				0.03	-0.03	0.41	0.54	0.40	-0.72	-0.55	-0.52	-0.19	0.52	-0.14	0.17	-0.28	-0.47	-0.04	0.86																				
12 GHz	2036	25.1	1.1	277	401	539	669	789	882	1013	1139	1276	1425	1529	1659	1775	1897	2035	2189	277	401	539	669	789	882	1013	1139	1276	1425	1529	1659	1775	1897	2035	2189	2036	2	28	
				0.08	-0.01	0.49	0.65	0.42	-0.86	-0.67	-0.66	-0.19	0.71	-0.16	0.4	-1	-9	-13	-1	28																			
14 GHz	2055	25.7	1.1	240	370	504	640	783	911	1041	1175	1310	1441	1533	1664	1780	1901	2043	2193	240	370	504	640	783	911	1041	1175	1310	1441	1533	1664	1780	1901	2043	2193	2055	-18	10	
				-0.69	-0.63	-0.40	-0.13	0.46	0.45	0.50	0.73	0.97	1.07	-0.33	-0.21	-0.72	-0.98	-0.45	0.38																				
16 GHz	2054	26.0	0.9	227	359	490	624	762	879	1014	1141	1279	1427	1532	1665	1780	1902	2048	2201	227	359	490	624	762	879	1014	1141	1279	1427	1532	1665	1780	1902	2048	2201	2054	-5	17	
				-0.20	-0.13	-0.09	0.05	0.34	-0.13	0.02	-0.09	0.21	0.90	-0.04	0.06	-0.52	-0.82	-0.21	0.66																				
18 GHz	2029	25.2	1.613	276	400	539	668	782	864	994	1119	1254	1395	1513	1652	1771	1895	2042	2195	276	400	539	668	782	864	994	1119	1254	1395	1513	1652	1771	1895	2042	2195	2029	11	41	
				0.42	0.36	0.86	0.98	0.52	-1.23	-1.06	-1.12	-0.77	-0.15	-0.49	0.06	-0.23	-0.32	0.55	1.61																				

Avg. Slope: 25.3 mV/dB Flatness dB: ±1.8 dB

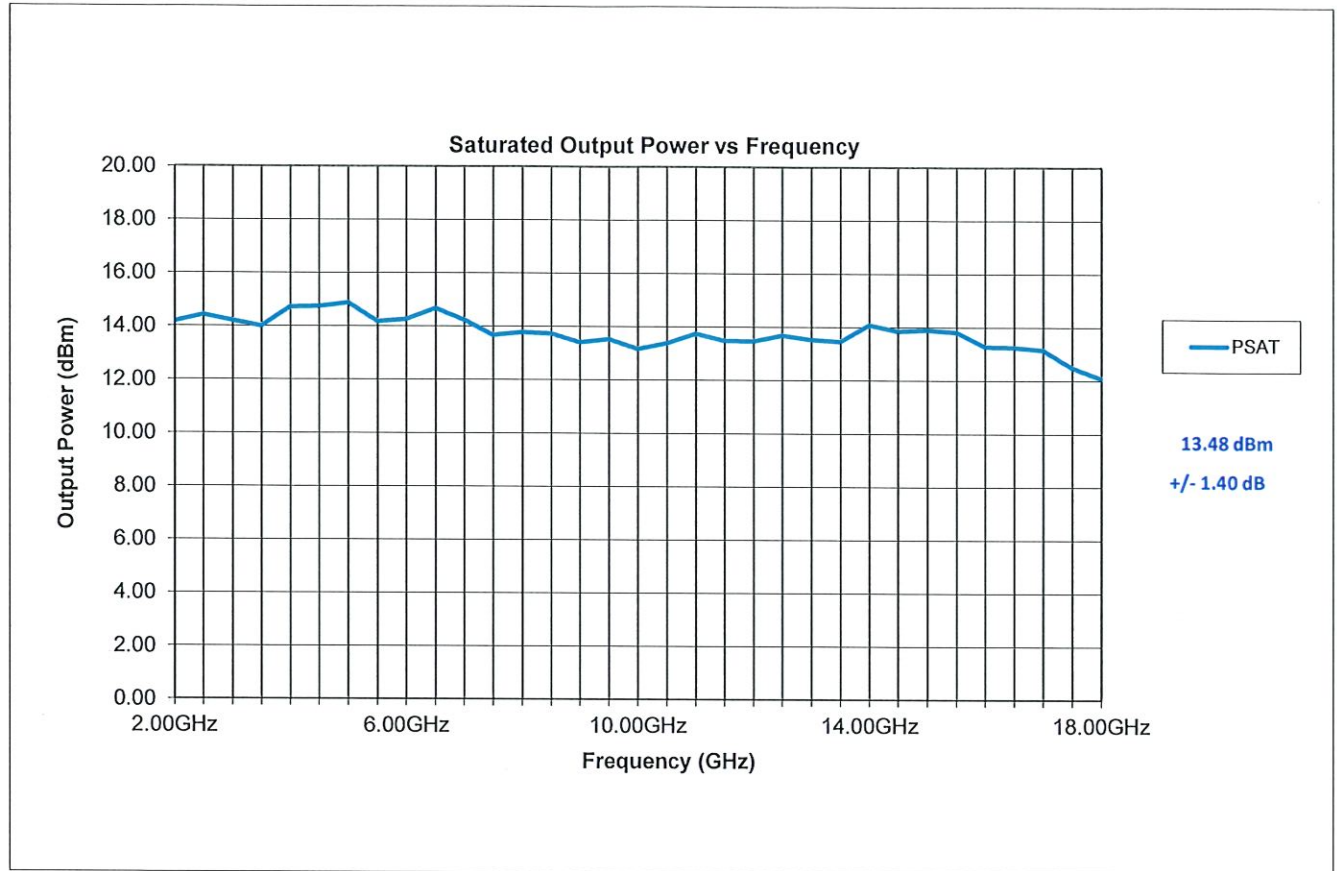




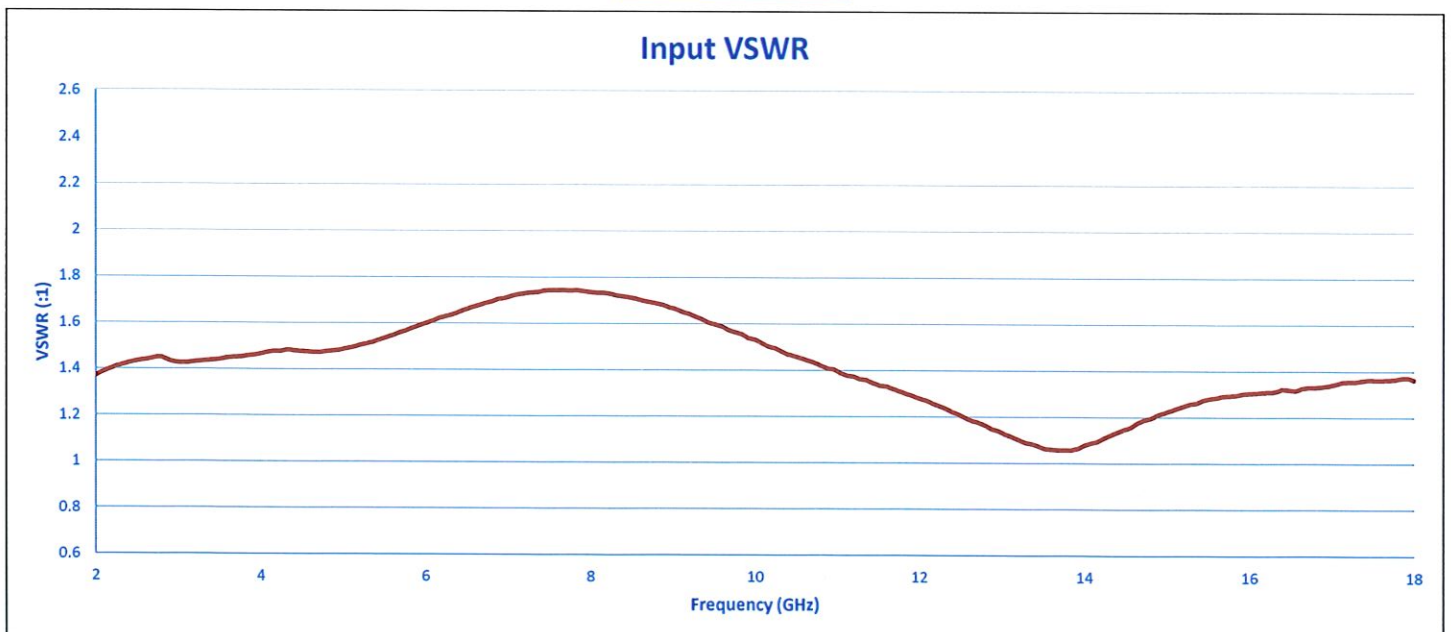
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36395/2218

PSAT



INPUT VSWR

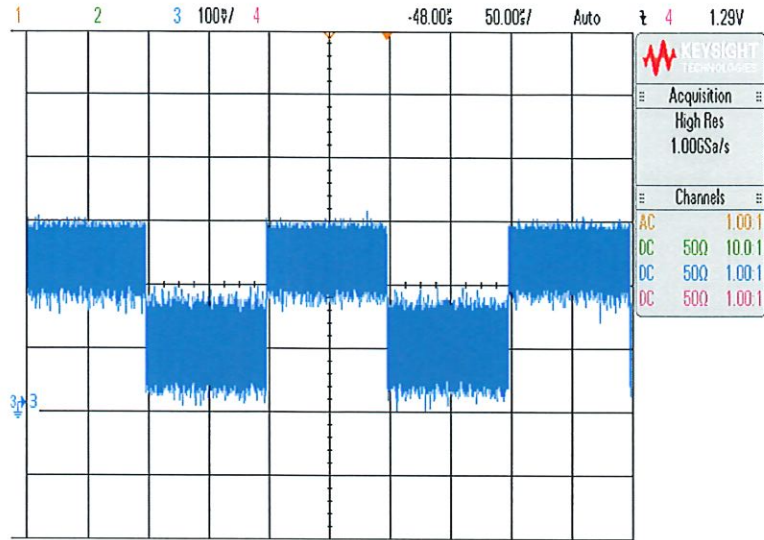




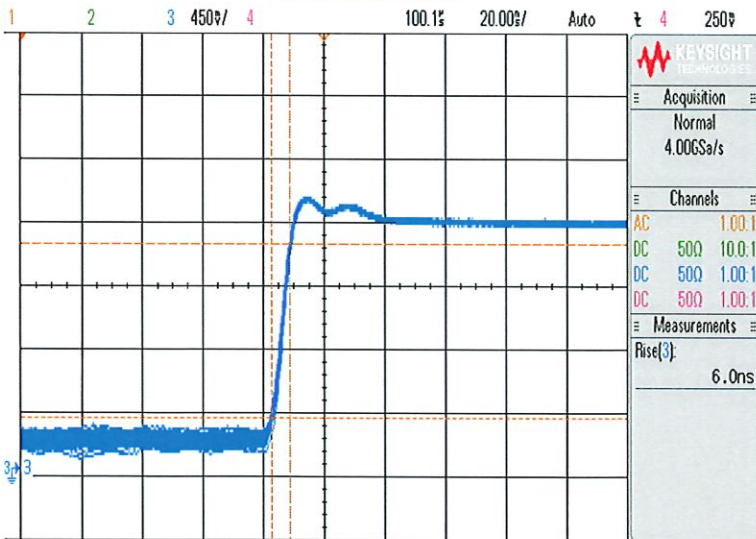
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36395/2218

TSS



Rise Time



Fall Time

