



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

PL36391/2218

Customer: \_\_\_\_\_ Tested By: Rcombs  
 SO No: \_\_\_\_\_ Temperature: +25° C  
 Model No: SDLVA-6G18G-CD-2-OPT218 Date: 4/28/2022  
 Serial No: PL36391/2218 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 QA 2
2	Flatness:	± 2.0 dB Maximum	±1.6 dB 25°C See Plots	
3	TSS:	-70 dBm Minimum	-72 dBm	
4	VSWR:	2.0:1 (Input)	1.8:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	+13 dBm ±3 dB Typical	13.50 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.6 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)	±1.3 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	5.8 ns	
12	Recovery Time:	60 ns Typical	38.5 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 259 mA -12V @ 98 mA	PMI QA 2

QA/QC Approval:  PMI QA 2

Date: 4/29/2022



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

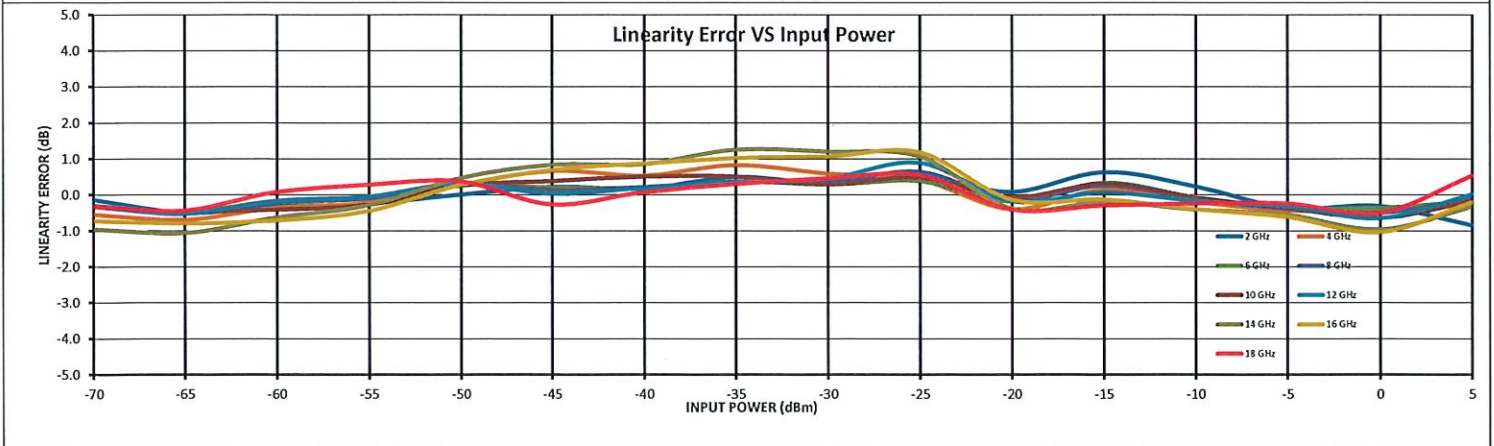
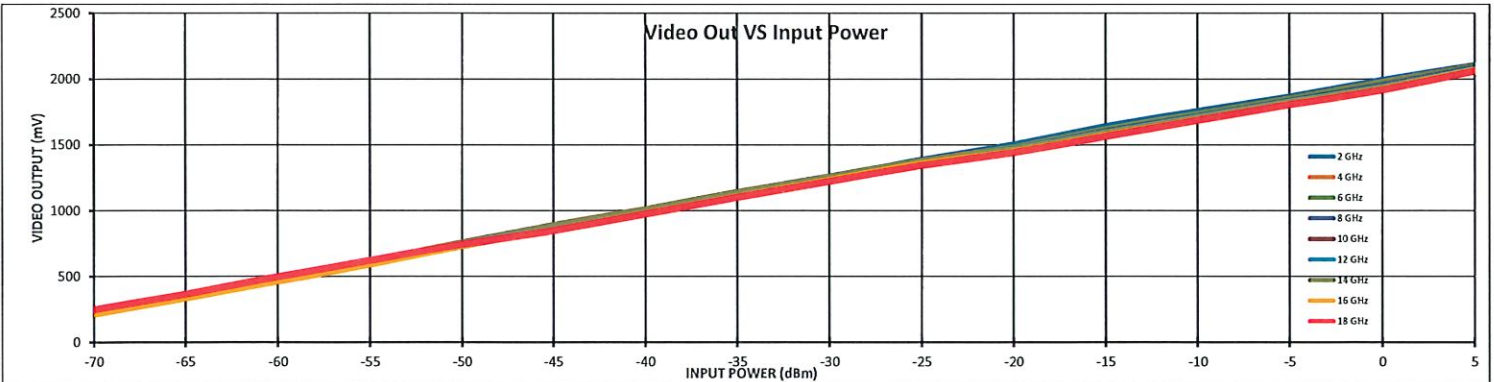
PL36391/2018

## Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL36391/2018  
 Date: 4/28/2022  
 Tested By: Rcombs  
 Test Temp: +25°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	SLOPE (mV/dB)	25.1	246	363	493	620	752	882	1006	1140	1261	1391	1505	1645	1760	1870	1997	2109	Measured Value (mV)
	LIN. ERR. (dB)	0.8	-3	-12	-8	-6	0	6	4	13	8	13	2	16	6	-9	-8	-21	ERROR (mV)
			-0.13	-0.49	-0.32	-0.24	0.02	0.22	0.17	0.50	0.33	0.50	0.08	0.64	0.24	-0.37	-0.31	-0.84	LINEARITY ERROR (dB)
4 GHz	SLOPE (mV/dB)	24.7	246	366	497	625	760	894	1014	1145	1262	1382	1485	1622	1737	1855	1979	2106	Measured Value (mV)
	LIN. ERR. (dB)	0.8	-13	-17	-9	-5	7	17	13	21	15	11	-10	4	-5	-11	-10	-7	ERROR (mV)
			-0.54	-0.69	-0.35	-0.21	0.28	0.67	0.54	0.84	0.60	0.43	-0.39	0.14	-0.19	-0.43	-0.42	-0.27	LINEARITY ERROR (dB)
6 GHz	SLOPE (mV/dB)	24.8	239	359	491	618	750	873	996	1125	1247	1373	1483	1621	1735	1852	1975	2105	Measured Value (mV)
	LIN. ERR. (dB)	0.5	-7	-12	-4	-1	7	5	5	9	7	10	-5	8	-2	-9	-9	-4	ERROR (mV)
			-0.29	-0.47	-0.17	-0.04	0.29	0.21	0.20	0.38	0.29	0.39	-0.18	0.34	-0.06	-0.35	-0.36	-0.16	LINEARITY ERROR (dB)
8 GHz	SLOPE (mV/dB)	24.8	231	351	481	608	742	861	987	1114	1238	1369	1473	1607	1721	1838	1959	2093	Measured Value (mV)
	LIN. ERR. (dB)	0.6	-7	-12	-5	-2	8	3	5	9	16	-3	7	-3	-10	-12	-3	-3	ERROR (mV)
			-0.30	-0.47	-0.20	-0.09	0.32	0.13	0.22	0.36	0.35	0.65	-0.14	0.27	-0.11	-0.39	-0.49	-0.10	LINEARITY ERROR (dB)
10 GHz	SLOPE (mV/dB)	25.0	212	334	460	588	726	854	982	1106	1226	1355	1466	1600	1715	1833	1951	2087	Measured Value (mV)
	LIN. ERR. (dB)	0.6	-8	-12	-10	-7	7	10	13	13	8	12	-2	8	-2	-9	-16	-4	ERROR (mV)
			-0.32	-0.46	-0.40	-0.27	0.26	0.39	0.51	0.51	0.30	0.49	-0.06	0.31	-0.09	-0.36	-0.63	-0.17	LINEARITY ERROR (dB)
12 GHz	SLOPE (mV/dB)	24.4	243	360	490	615	746	860	986	1112	1236	1368	1464	1592	1708	1826	1940	2078	Measured Value (mV)
	LIN. ERR. (dB)	0.9	-8	-13	-4	-1	8	1	5	8	11	22	-4	2	-4	-8	-16	1	ERROR (mV)
			-0.32	-0.52	-0.16	-0.04	0.32	0.03	0.20	0.35	0.45	0.90	-0.17	0.07	-0.17	-0.32	-0.65	0.02	LINEARITY ERROR (dB)
14 GHz	SLOPE (mV/dB)	24.2	237	355	487	616	756	886	1008	1139	1259	1377	1463	1588	1705	1822	1934	2070	Measured Value (mV)
	LIN. ERR. (dB)	1.3	-23	-26	-15	-7	12	20	21	31	29	26	-9	-5	-10	-13	-23	-8	ERROR (mV)
			-0.95	-1.06	-0.62	-0.28	0.48	0.84	0.86	1.26	1.20	1.07	-0.38	-0.19	-0.40	-0.65	-0.96	-0.33	LINEARITY ERROR (dB)
16 GHz	SLOPE (mV/dB)	24.8	204	326	452	583	724	859	987	1115	1240	1366	1457	1582	1699	1817	1931	2075	Measured Value (mV)
	LIN. ERR. (dB)	1.2	-18	-20	-18	-11	7	17	22	25	27	29	-3	-3	-10	-15	-26	-5	ERROR (mV)
			-0.72	-0.79	-0.71	-0.44	0.28	0.70	0.88	1.03	1.07	1.19	-0.13	-0.12	-0.39	-0.61	-1.03	-0.20	LINEARITY ERROR (dB)
18 GHz	SLOPE (mV/dB)	23.9	249	366	497	622	744	848	976	1101	1224	1346	1442	1565	1686	1805	1918	2063	Measured Value (mV)
	LIN. ERR. (dB)	0.5	-8	-10	2	7	9	-6	2	7	11	13	-10	-7	-6	-6	-12	13	ERROR (mV)
			-0.32	-0.43	0.08	0.29	0.38	-0.26	0.08	0.31	0.47	0.55	-0.41	-0.29	-0.23	-0.24	-0.50	0.54	LINEARITY ERROR (dB)
Avg. Slope: 24.6 mV/dB			0.9	0.8	0.9	0.8	0.7	0.9	0.8	0.9	0.8	0.9	1.3	1.6	1.5	1.3	1.6	0.9	Flatness dB: ±1.6 dB







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

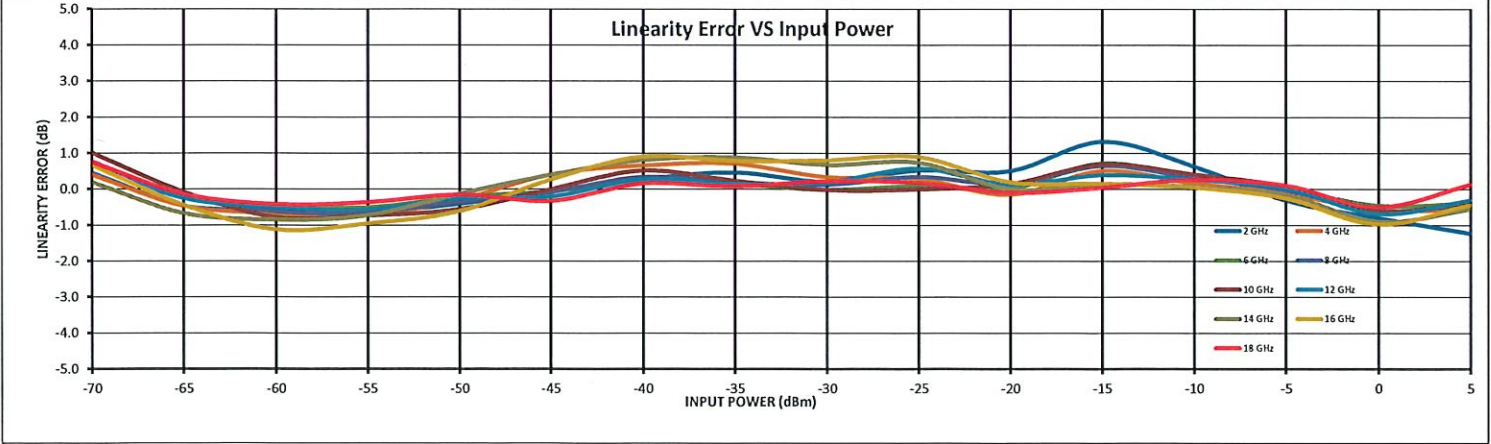
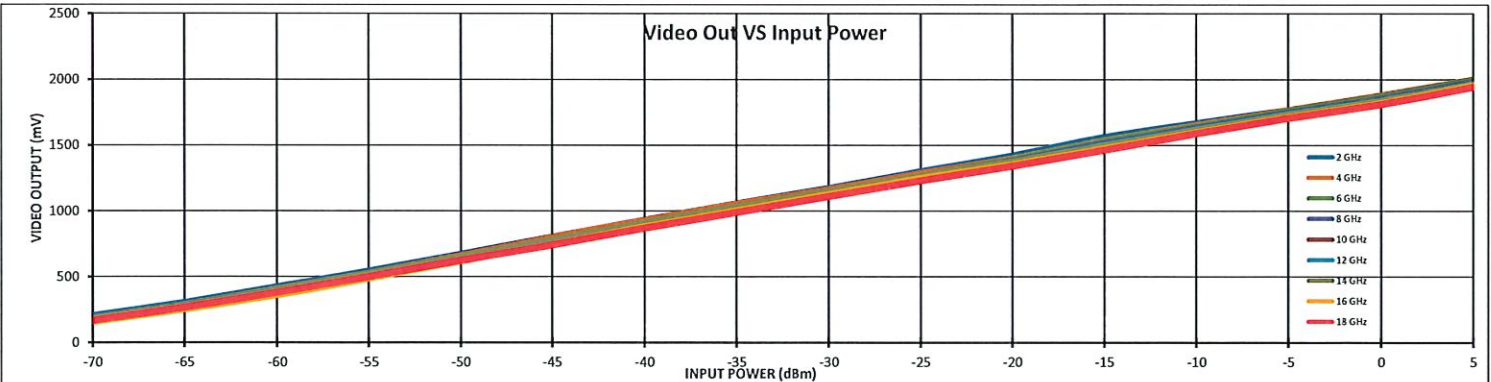
PL36391/2018

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL36391/2018  
Date: 4/28/2022  
Tested By: Rcombs  
Test Temp: +85°C

Frequency	INTERCEPT (mV)	1901	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	SLOPE (mV/dB)	24.3	210	309	428	549	675	806	935	1061	1177	1306	1427	1568	1673	1772	1881	1992	Measured Value (mV)
	LIN. ERR. (dB)	1.3	11	-11	-14	-15	-10	-1	7	11	5	13	12	32	16	-7	-19	-30	Error (mV)
			0.46	-0.46	-0.56	-0.62	-0.41	-0.04	0.28	0.47	0.21	0.53	0.51	1.33	0.64	-0.31	-0.80	-1.22	LINEARITY ERROR (dB)
4 GHz	SLOPE (mV/dB)	24.5	192	294	411	532	665	805	934	1058	1171	1293	1404	1543	1657	1773	1884	2007	Measured Value (mV)
	LIN. ERR. (dB)	0.7	10	-11	-16	-18	-7	10	16	17	8	7	-4	13	4	-3	-14	-13	Error (mV)
			0.40	-0.46	-0.67	-0.73	-0.29	0.41	0.67	0.71	0.34	0.30	-0.15	0.52	0.17	-0.11	-0.57	-0.55	LINEARITY ERROR (dB)
6 GHz	SLOPE (mV/dB)	24.5	190	291	408	529	659	785	915	1035	1153	1278	1399	1539	1651	1766	1877	2002	Measured Value (mV)
	LIN. ERR. (dB)	0.7	16	-5	-11	-12	-5	-2	6	4	0	2	1	18	8	0	-11	-9	Error (mV)
			0.67	-0.22	-0.43	-0.51	-0.21	-0.06	0.26	0.16	-0.01	0.10	0.02	0.73	0.32	0.02	-0.45	-0.38	LINEARITY ERROR (dB)
8 GHz	SLOPE (mV/dB)	24.6	173	272	385	507	637	767	900	1020	1141	1269	1387	1523	1637	1752	1861	1988	Measured Value (mV)
	LIN. ERR. (dB)	0.8	19	-5	-15	-16	-9	-2	8	5	3	9	4	16	8	-1	-15	-10	Error (mV)
			0.78	-0.19	-0.62	-0.64	-0.35	-0.08	0.34	0.20	0.13	0.35	0.14	0.66	0.32	-0.02	-0.59	-0.42	LINEARITY ERROR (dB)
10 GHz	SLOPE (mV/dB)	24.8	156	253	359	484	612	750	887	1004	1121	1246	1373	1510	1627	1743	1850	1980	Measured Value (mV)
	LIN. ERR. (dB)	1.0	25	-2	-19	-18	-14	0	13	6	0	0	4	17	10	2	-16	-8	Error (mV)
			1.02	-0.07	-0.78	-0.73	-0.56	0.00	0.52	0.24	-0.02	0.01	0.15	0.70	0.41	0.08	-0.62	-0.34	LINEARITY ERROR (dB)
12 GHz	SLOPE (mV/dB)	24.2	180	279	394	513	642	763	896	1014	1136	1266	1376	1503	1621	1736	1839	1970	Measured Value (mV)
	LIN. ERR. (dB)	0.7	16	-6	-12	-14	-6	-5	7	4	5	14	3	10	7	1	-16	-7	Error (mV)
			0.68	-0.24	-0.49	-0.56	-0.24	-0.20	0.28	0.15	0.20	0.58	0.13	0.40	0.27	0.03	-0.68	-0.30	LINEARITY ERROR (dB)
14 GHz	SLOPE (mV/dB)	24.0	177	277	392	515	650	783	913	1035	1150	1271	1374	1497	1616	1730	1833	1961	Measured Value (mV)
	LIN. ERR. (dB)	0.9	5	-18	-20	-17	-3	10	20	21	16	18	0	4	2	-4	-22	-13	Error (mV)
			0.20	-0.66	-0.85	-0.73	-0.12	0.40	0.81	0.89	0.68	0.75	0.00	0.15	0.08	-0.15	-0.90	-0.55	LINEARITY ERROR (dB)
16 GHz	SLOPE (mV/dB)	24.6	148	244	350	477	608	753	892	1011	1135	1260	1366	1488	1608	1724	1829	1965	Measured Value (mV)
	LIN. ERR. (dB)	1.1	17	-11	-28	-23	-15	7	22	19	20	22	5	4	1	-6	-24	-11	Error (mV)
			0.67	-0.43	-1.12	-0.95	-0.61	0.27	0.91	0.78	0.81	0.90	0.20	0.16	0.05	-0.25	-0.97	-0.44	LINEARITY ERROR (dB)
18 GHz	SLOPE (mV/dB)	23.9	169	267	380	501	625	740	871	989	1112	1230	1343	1466	1590	1706	1811	1945	Measured Value (mV)
	LIN. ERR. (dB)	0.8	18	-3	-10	-9	-4	-8	4	2	5	4	-2	1	6	3	-12	3	Error (mV)
			0.76	-0.13	-0.42	-0.36	-0.15	-0.32	0.16	0.08	0.23	0.18	-0.09	0.05	0.27	0.11	-0.50	0.14	LINEARITY ERROR (dB)
Avg. Slope: 24.4 mV/dB			1.3	1.3	1.6	1.5	1.4	1.3	1.3	1.5	1.3	1.6	1.7	2.1	1.7	1.4	1.5	1.3	Flatness dB: ±2.1 dB







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

PL36391/2018

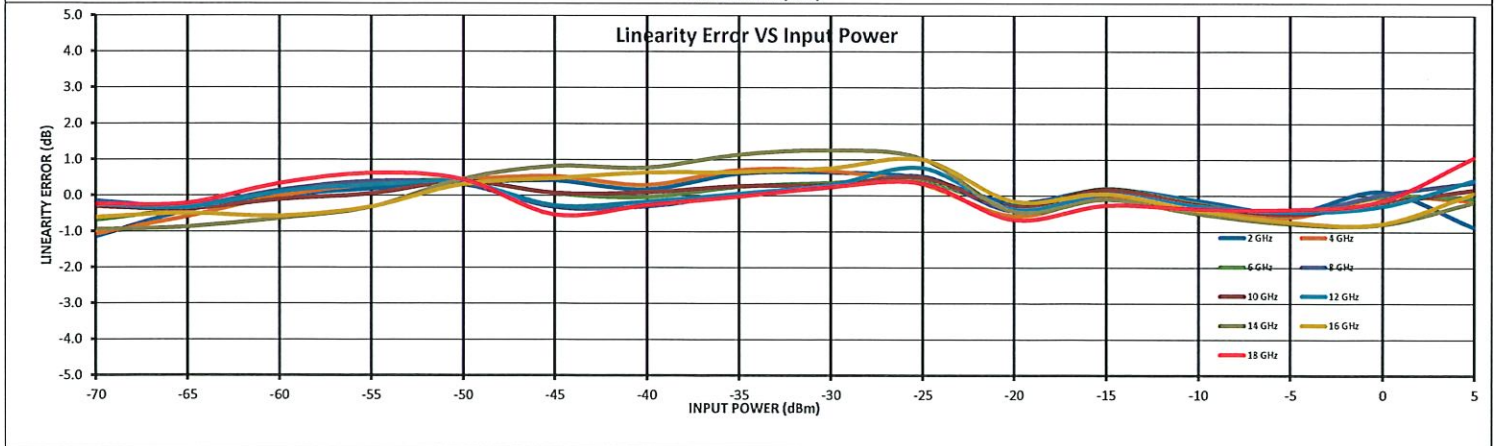
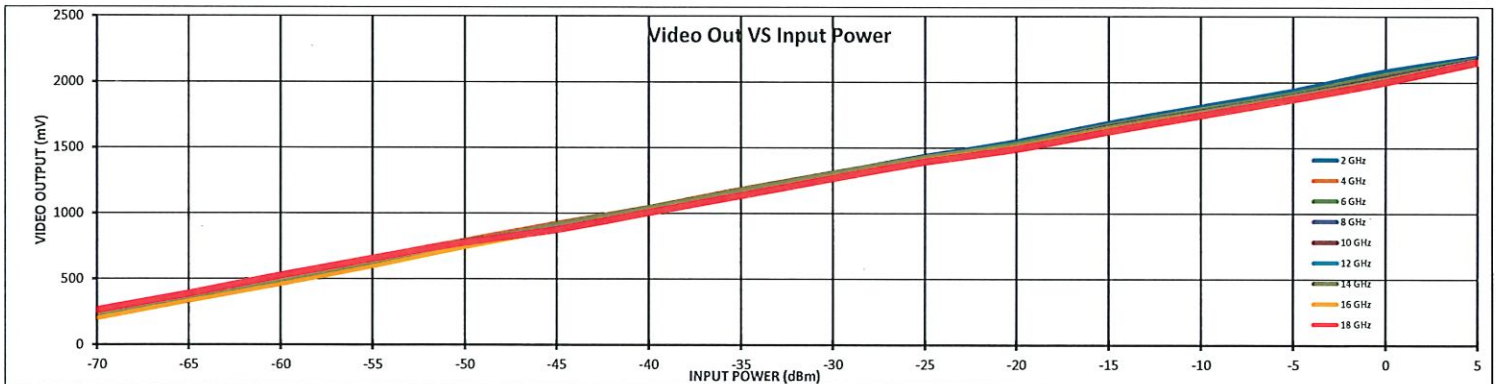
## Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL36391/2018  
 Date: 4/28/2022  
 Tested By: Rcombs  
 Test Temp: -40°C

Frequency	INTERCEPT (mV)	2081	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2081	206	357	499	637	773	906	1031	1175	1307	1435	1549	1690	1814	1936	2084	2189	Measured Value (mV)
	SLOPE (mV/dB)	26.3	-30	-11	0	5	9	11	5	16	17	13	-6	5	-3	-12	3	-23	Error (mV)
	LIN. ERR. (dB)	1.1	-1.14	-0.42	-0.01	0.19	0.35	0.42	0.17	0.62	0.65	0.51	-0.18	0.19	-0.13	-0.47	0.12	-0.87	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2055	244	384	526	662	792	922	1043	1181	1308	1426	1531	1672	1791	1912	2054	2179	Measured Value (mV)
	SLOPE (mV/dB)	25.5	-27	-15	0	8	11	14	7	18	17	8	-14	-1	-9	-15	-1	-3	Error (mV)
	LIN. ERR. (dB)	1.1	-1.06	-0.58	-0.02	0.32	0.45	0.54	0.29	0.72	0.69	0.33	-0.55	-0.02	-0.36	-0.60	-0.02	-0.13	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2053	234	371	512	646	777	897	1023	1159	1290	1421	1531	1672	1790	1911	2053	2180	Measured Value (mV)
	SLOPE (mV/dB)	25.7	-17	-9	3	9	11	2	-1	6	9	11	-8	5	-5	-13	0	-2	Error (mV)
	LIN. ERR. (dB)	0.7	-0.68	-0.36	0.10	0.34	0.42	0.06	-0.04	0.25	0.36	0.43	-0.30	0.21	-0.21	-0.52	0.00	-0.07	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	2036	268	391	528	660	784	894	1021	1155	1286	1420	1522	1661	1778	1898	2037	2172	Measured Value (mV)
	SLOPE (mV/dB)	25.2	-4	-7	4	10	8	-8	-7	1	6	14	-11	3	-6	-12	1	10	Error (mV)
	LIN. ERR. (dB)	0.5	-0.15	-0.29	0.15	0.40	0.32	-0.32	-0.30	0.03	0.23	0.54	-0.42	0.11	-0.25	-0.48	0.04	0.38	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	2037	243	369	504	635	771	891	1019	1151	1279	1412	1519	1659	1775	1896	2032	2169	Measured Value (mV)
	SLOPE (mV/dB)	25.5	-8	-9	-3	1	10	2	2	7	7	13	-8	5	-6	-13	-5	4	Error (mV)
	LIN. ERR. (dB)	0.5	-0.30	-0.37	-0.10	0.06	0.40	0.08	0.09	0.27	0.29	0.51	-0.31	0.18	-0.25	-0.51	-0.19	0.17	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	2024	262	385	522	652	779	888	1016	1147	1279	1416	1513	1649	1766	1887	2017	2160	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-6	-8	3	7	9	-7	-4	1	8	19	-9	1	-7	-11	-7	11	Error (mV)
	LIN. ERR. (dB)	0.8	-0.26	-0.33	0.11	0.29	0.37	-0.27	-0.16	0.06	0.30	0.78	-0.37	0.04	-0.28	-0.45	-0.29	0.44	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	2033	228	357	490	625	773	909	1035	1171	1302	1423	1513	1649	1766	1886	2012	2155	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-24	-22	-16	-8	12	21	20	29	32	26	-11	-2	-13	-20	-20	-4	Error (mV)
	LIN. ERR. (dB)	1.3	-0.94	-0.87	-0.63	-0.32	0.47	0.82	0.78	1.14	1.27	1.03	-0.43	-0.10	-0.49	-0.77	-0.79	-0.18	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	2028	199	332	459	595	741	875	1009	1139	1271	1407	1506	1641	1769	1880	2008	2160	Measured Value (mV)
	SLOPE (mV/dB)	25.9	-16	-13	-15	-8	8	13	17	17	20	26	-4	1	-10	-19	-20	2	Error (mV)
	LIN. ERR. (dB)	1.0	-0.60	-0.49	-0.57	-0.31	0.32	0.49	0.64	0.66	0.77	1.01	-0.15	0.06	-0.40	-0.73	-0.77	0.07	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	2005	263	388	526	657	777	876	1007	1137	1267	1394	1493	1627	1748	1872	2002	2155	Measured Value (mV)
	SLOPE (mV/dB)	24.8	-6	-5	8	16	11	-13	-7	-1	6	9	-16	6	-9	-9	-3	26	Error (mV)
	LIN. ERR. (dB)	1.061	-0.24	-0.21	0.34	0.63	0.45	-0.53	-0.27	-0.03	0.25	0.35	-0.66	-0.26	-0.36	-0.38	-0.14	1.06	LINEARITY ERROR (dB)

Avg. Slope: 25.5 mV/dB      Flatness dB: ±1.6 dB

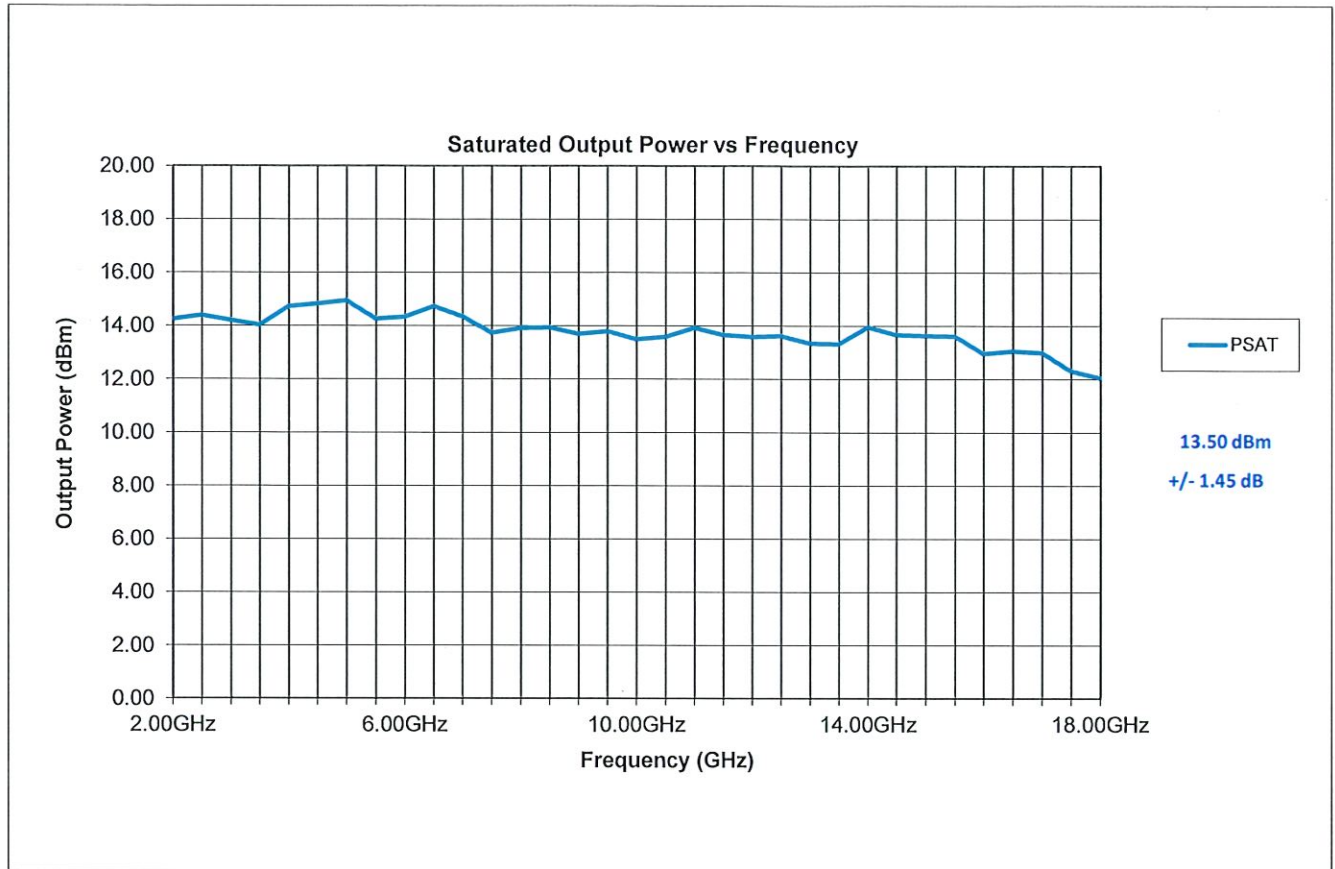




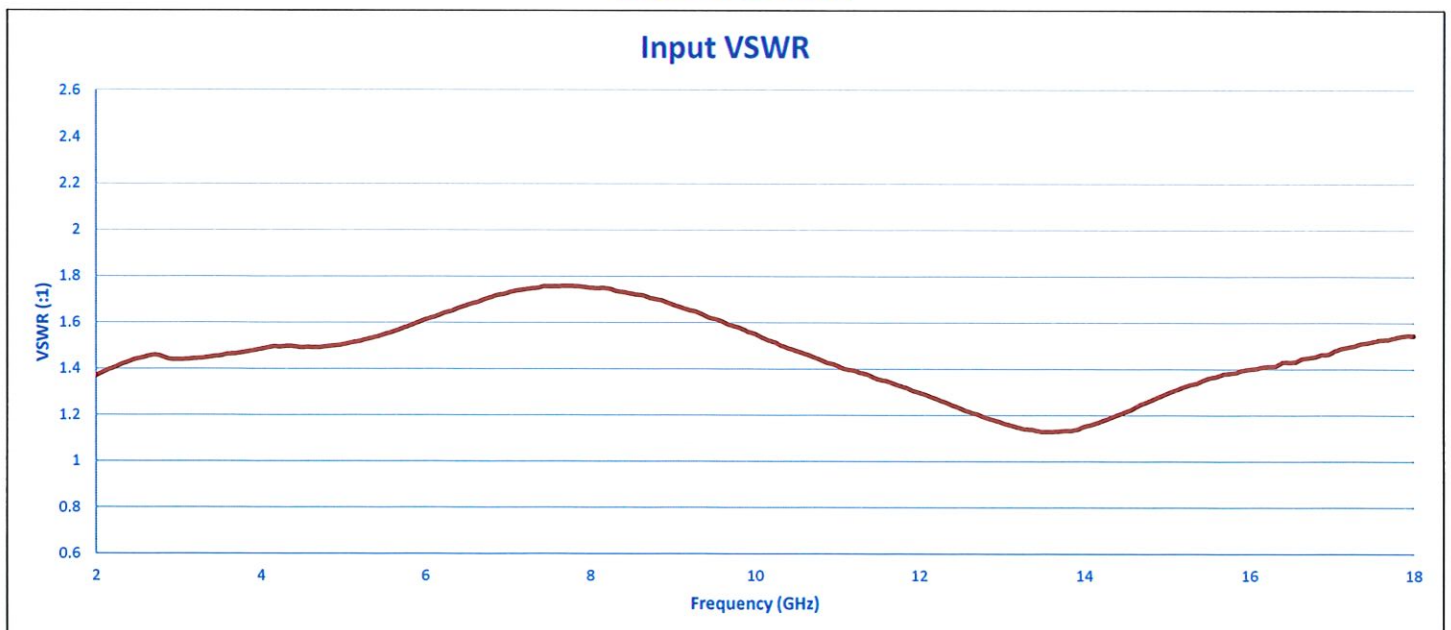
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PL36391/2018

## PSAT



## INPUT VSWR



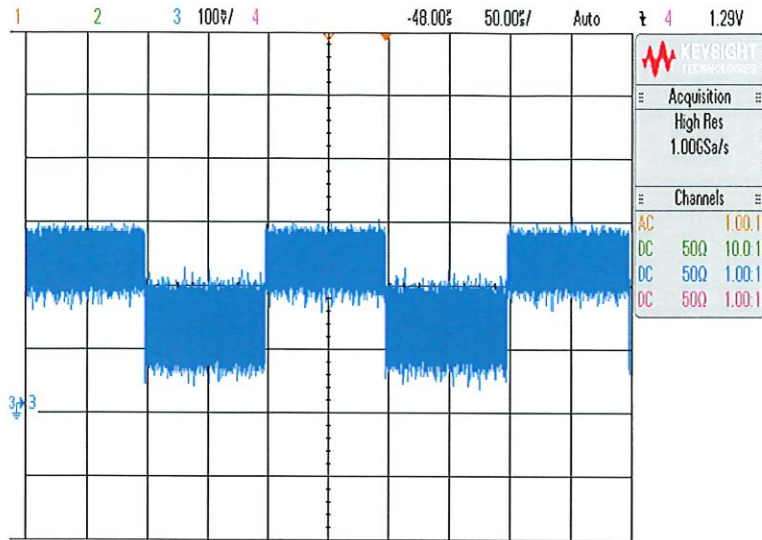




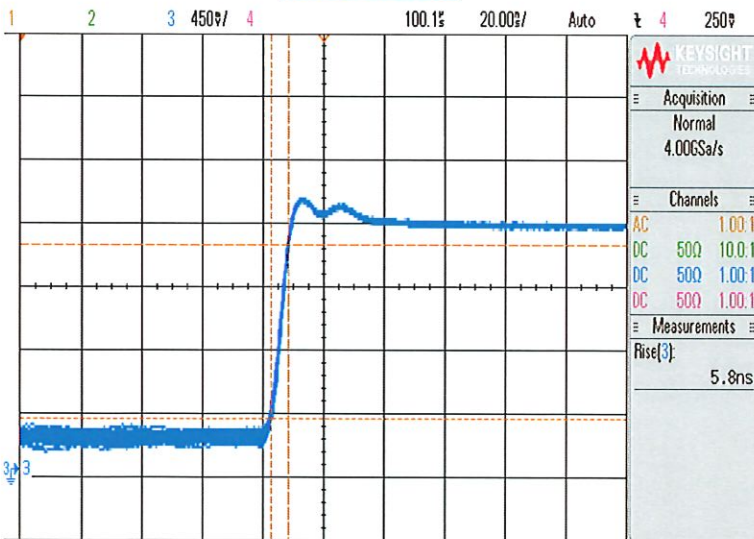
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36391/2018

## TSS



## Rise Time



## Fall Time

