



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

PL42577/2342

Customer: _____ Tested By: RCombs
SO No: _____ Temperature: +25° C
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 3/30/2023
Serial No: PL42577/2342 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	±0.9 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	12.68 dBm Avg.		
7	Log Slope:	25 mV/dB (±10%) 50Ω	24.9 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)	±1.7 dB See Plots		
10	Pulse Range:	30 ns to CW	Pass		
11	Rise Time:	10 ns (6 ns Typical)	6.6 ns		
12	Recovery Time:	60 ns Typical	59.8 ns		
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 250 mA -12V @ 98 mA		PMI QA2

QA/QC Approval: PMI QA2 Date: 10/31/2023



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

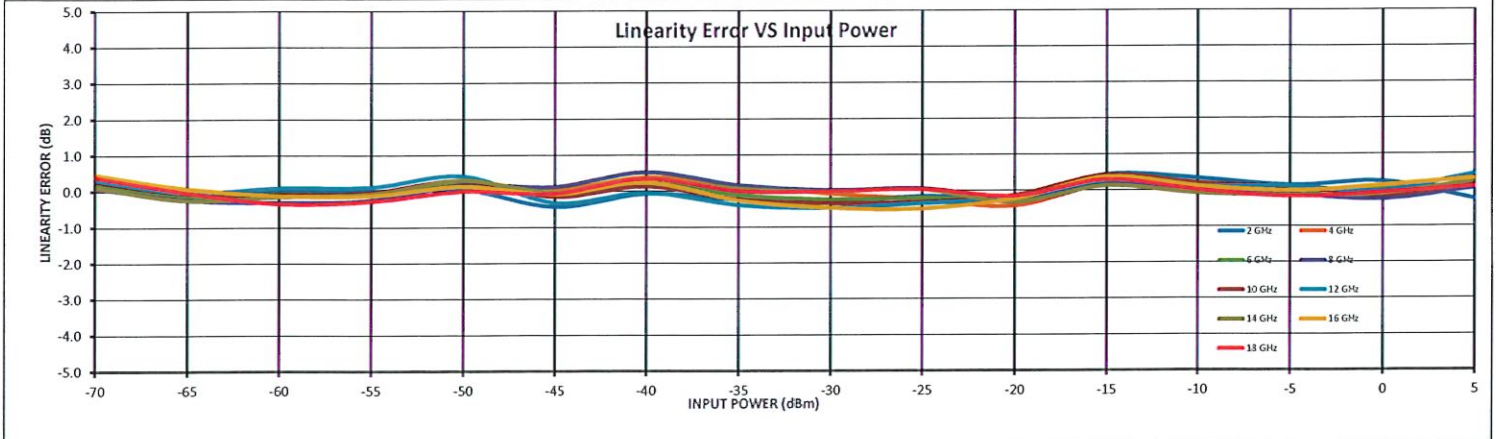
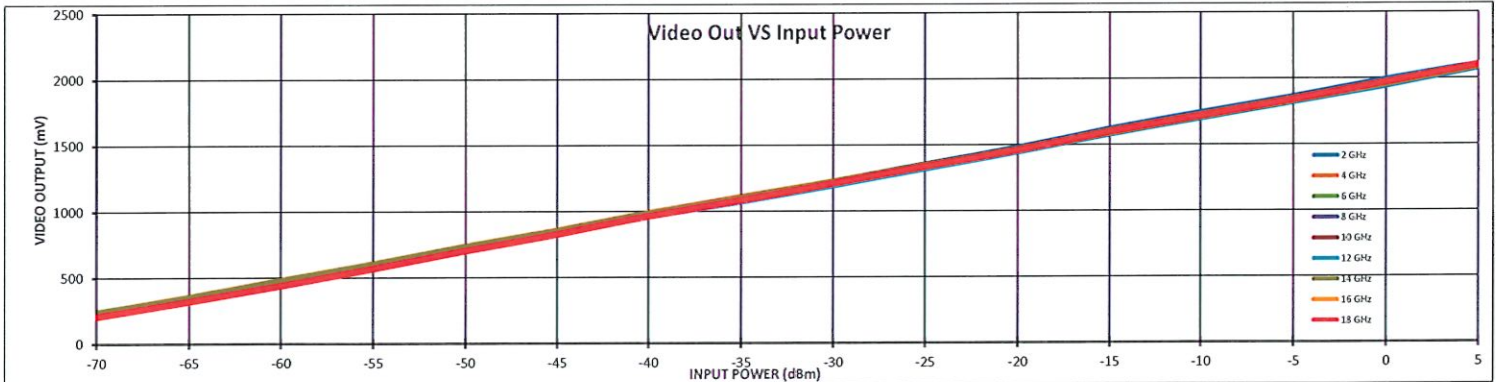
PL42577/2342

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42577/2342
 Date: 3/30/2023
 Tested By: RCombs
 Test Temp: +25°C

Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1986																Measured Value (mV)
	SLOPE (mV/dB)	25.1																ERROR (mV)
	LIN. ERR. (dB)	0.5																LINEARITY ERROR (dB)
		238	352	478	604	731	844	978	1100	1223	1354	1478	1620	1743	1863	1992	2105	Measured Value (mV)
		11	0	1	0	2	-11	-2	-5	-6	-4	-5	11	8	3	6	-6	ERROR (mV)
		0.45	0.01	0.03	0.00	0.06	-0.44	-0.08	-0.25	-0.34	-0.15	-0.19	0.44	0.33	0.13	0.24	-0.25	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1973																Measured Value (mV)
	SLOPE (mV/dB)	24.8																ERROR (mV)
	LIN. ERR. (dB)	0.4																LINEARITY ERROR (dB)
		240	355	482	606	738	858	990	1109	1227	1347	1467	1605	1726	1848	1974	2101	Measured Value (mV)
		3	-6	-2	-2	5	1	9	4	-2	-6	-11	4	0	-1	1	3	ERROR (mV)
		0.14	-0.24	-0.10	-0.10	0.22	0.03	0.38	0.15	-0.09	-0.25	-0.43	0.16	0.02	-0.06	0.04	0.12	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1969																Measured Value (mV)
	SLOPE (mV/dB)	24.9																ERROR (mV)
	LIN. ERR. (dB)	0.3																LINEARITY ERROR (dB)
		233	349	475	599	732	847	980	1095	1217	1342	1465	1603	1722	1844	1969	2096	Measured Value (mV)
		5	-3	-2	-2	7	-2	6	-3	-6	-5	-5	7	2	-1	0	3	ERROR (mV)
		0.22	-0.14	-0.06	-0.07	0.27	-0.10	0.24	-0.11	-0.24	-0.20	-0.26	0.29	0.08	-0.04	0.01	0.12	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1956																Measured Value (mV)
	SLOPE (mV/dB)	24.9																ERROR (mV)
	LIN. ERR. (dB)	0.5																LINEARITY ERROR (dB)
		217	333	456	582	717	840	974	1090	1210	1336	1454	1588	1707	1829	1950	2082	Measured Value (mV)
		2	-6	-8	-5	4	3	13	4	0	1	-5	5	-1	-3	-7	1	ERROR (mV)
		0.10	-0.23	-0.31	-0.25	0.17	0.12	0.52	0.16	0.01	0.06	-0.19	0.21	-0.03	-0.12	-0.27	0.05	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1954																Measured Value (mV)
	SLOPE (mV/dB)	24.8																ERROR (mV)
	LIN. ERR. (dB)	0.4																LINEARITY ERROR (dB)
		223	339	462	588	720	833	964	1079	1201	1325	1454	1592	1711	1832	1950	2081	Measured Value (mV)
		7	-2	-2	-1	7	-4	3	-6	-9	-8	-3	11	5	2	-4	3	ERROR (mV)
		0.28	-0.06	-0.08	-0.04	0.30	-0.16	0.13	-0.24	-0.35	-0.32	-0.14	0.43	0.20	0.08	-0.16	0.13	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1947																Measured Value (mV)
	SLOPE (mV/dB)	24.6																ERROR (mV)
	LIN. ERR. (dB)	0.5																LINEARITY ERROR (dB)
		233	348	474	597	728	832	962	1077	1197	1324	1450	1585	1704	1827	1946	2081	Measured Value (mV)
		8	-1	2	3	10	-8	-1	-10	-12	-9	-5	7	3	2	-1	11	ERROR (mV)
		0.32	-0.03	0.10	0.12	0.42	-0.33	-0.05	-0.39	-0.48	-0.35	-0.21	0.27	0.10	0.10	-0.04	0.44	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1960																Measured Value (mV)
	SLOPE (mV/dB)	24.7																ERROR (mV)
	LIN. ERR. (dB)	0.3																LINEARITY ERROR (dB)
		234	348	474	599	732	847	980	1097	1218	1343	1458	1593	1711	1833	1957	2089	Measured Value (mV)
		3	-6	-4	-2	7	-1	8	1	-1	1	-8	3	-2	-4	-3	6	ERROR (mV)
		0.11	-0.26	-0.15	-0.08	0.30	-0.03	0.34	0.06	-0.03	0.03	-0.32	0.13	-0.09	-0.15	-0.11	0.24	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1967																Measured Value (mV)
	SLOPE (mV/dB)	25.2																ERROR (mV)
	LIN. ERR. (dB)	0.5																LINEARITY ERROR (dB)
		213	329	450	576	709	829	964	1077	1198	1323	1456	1597	1717	1840	1970	2101	Measured Value (mV)
		12	2	-3	-3	3	-2	6	-7	-12	-13	-6	9	3	-1	3	8	ERROR (mV)
		0.46	0.07	-0.12	-0.12	0.14	-0.09	0.24	-0.26	-0.48	-0.50	-0.23	0.37	0.11	-0.03	0.12	0.32	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1969																Measured Value (mV)
	SLOPE (mV/dB)	25.4																ERROR (mV)
	LIN. ERR. (dB)	0.4																LINEARITY ERROR (dB)
		204	320	439	567	701	826	954	1082	1203	1336	1458	1596	1716	1838	1967	2098	Measured Value (mV)
		10	-1	-9	-7	0	-2	9	0	-1	1	-4	7	0	-5	-2	2	ERROR (mV)
		0.40	-0.04	-0.34	-0.28	-0.01	-0.07	0.35	0.00	-0.02	0.04	-0.16	0.29	0.01	-0.19	-0.07	0.09	LINEARITY ERROR (dB)
Avg. Slope: 24.9 mV/dB		0.7	0.7	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.7	0.9	0.5	Flatness dB: ±0.9 dB





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

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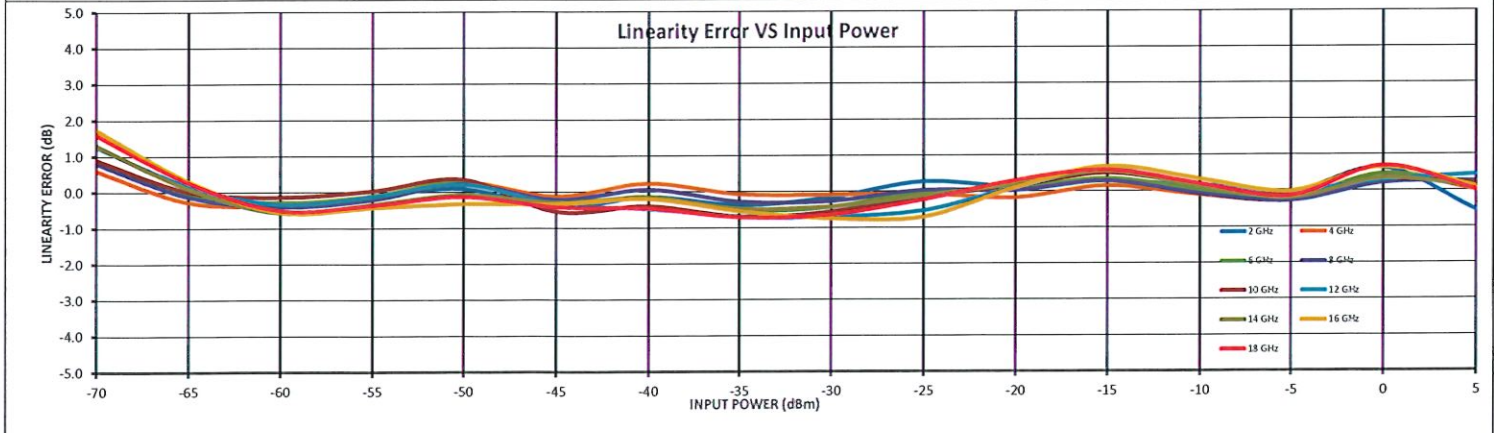
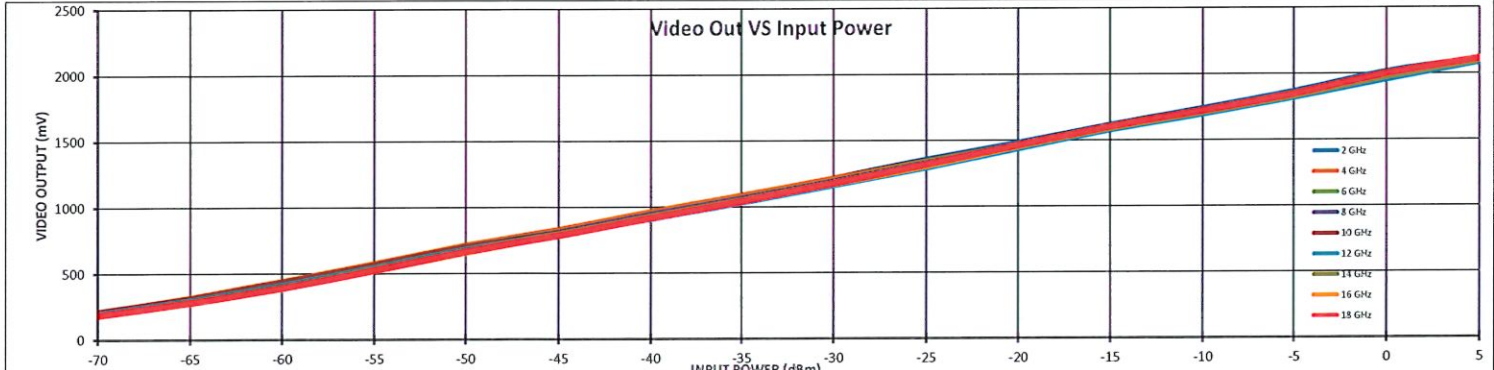
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 Serial No: PL42577/2342
 Date: 3/30/2023
 Tested By: RCombs
 Test Temp: +85°C

Log Transfer Over Frequency +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	1998	25.9	0.9	204	308	431	568	703	819	956	1080	1215	1356	1482	1617	1741	1866	2014	2113	Measured Value (mV)	
				22	-3	-11	-3	2	-11	-4	-10	-4	7	3	8	3	-2	16	-14		ERROR (mV)
				0.85	-0.12	-0.41	-0.11	0.09	-0.42	-0.15	-0.38	-0.17	0.27	0.12	0.30	0.10	-0.07	0.62	-0.55		LINEARITY ERROR (dB)
4 GHz	1979	25.5	0.6	212	317	442	576	713	830	966	1086	1213	1341	1465	1601	1721	1845	1990	2106	Measured Value (mV)	
				15	-7	-9	-3	7	-3	6	-2	-2	-2	-5	4	-3	-7	12	0		ERROR (mV)
				0.60	-0.28	-0.37	-0.14	0.28	-0.13	0.23	-0.07	-0.10	-0.07	-0.18	0.14	-0.11	-0.26	0.45	0.01		LINEARITY ERROR (dB)
6 GHz	1974	25.6	0.9	205	310	431	564	702	814	947	1065	1195	1334	1464	1599	1719	1840	1985	2104	Measured Value (mV)	
				22	-1	-8	-3	7	-9	-4	-13	-11	0	2	9	1	-5	12	2		ERROR (mV)
				0.86	-0.05	-0.29	-0.11	0.28	-0.34	-0.14	-0.51	-0.44	-0.02	0.08	0.34	0.03	-0.21	0.45	0.07		LINEARITY ERROR (dB)
8 GHz	1961	25.4	0.8	202	306	426	558	696	812	946	1064	1192	1327	1453	1587	1705	1827	1967	2095	Measured Value (mV)	
				21	-3	-10	-5	6	-5	1	-7	-7	1	0	7	-2	-7	5	6		ERROR (mV)
				0.81	-0.13	-0.41	-0.21	0.23	-0.22	0.06	-0.28	-0.27	0.03	0.02	0.28	-0.08	-0.28	0.21	0.25		LINEARITY ERROR (dB)
10 GHz	1951	25.3	0.9	211	315	438	569	704	808	938	1057	1187	1325	1458	1594	1712	1833	1969	2093	Measured Value (mV)	
				28	0	-3	1	9	-14	-10	-18	-14	-3	3	13	4	-2	7	5		ERROR (mV)
				0.90	0.01	-0.14	0.03	0.35	-0.55	-0.40	-0.70	-0.57	-0.14	0.14	0.50	0.16	-0.09	0.30	0.19		LINEARITY ERROR (dB)
12 GHz	1951	25.6	1.3	191	291	406	539	676	790	914	1037	1165	1297	1441	1582	1700	1822	1958	2090	Measured Value (mV)	
				32	4	-9	-3	6	-9	-12	-18	-18	-14	3	15	5	-1	7	11		ERROR (mV)
				1.26	0.17	-0.34	-0.13	0.22	-0.35	-0.48	-0.70	-0.71	-0.53	0.10	0.58	0.19	-0.03	0.29	0.44		LINEARITY ERROR (dB)
14 GHz	1968	26.0	1.3	184	282	395	531	667	791	925	1047	1178	1315	1453	1592	1711	1833	1976	2100	Measured Value (mV)	
				34	3	-15	-9	-2	-8	-4	-12	-11	-3	5	14	3	-5	9	2		ERROR (mV)
				1.30	0.10	-0.57	-0.34	-0.08	-0.30	-0.16	-0.47	-0.42	-0.12	0.19	0.55	0.12	-0.20	0.34	0.08		LINEARITY ERROR (dB)
16 GHz	1974	26.4	1.7	175	269	378	513	648	779	915	1037	1164	1296	1450	1597	1719	1842	1991	2109	Measured Value (mV)	
				46	8	-15	-11	-9	-9	-5	-14	-20	-19	2	18	9	-1	17	3		ERROR (mV)
				1.74	0.31	-0.56	-0.44	-0.33	-0.33	-0.20	-0.54	-0.75	-0.71	0.09	0.63	0.33	-0.02	0.64	0.10		LINEARITY ERROR (dB)
18 GHz	1980	26.3	1.6	182	278	389	524	662	786	916	1041	1174	1317	1462	1601	1722	1845	1998	2112	Measured Value (mV)	
				42	7	-13	-10	-3	-11	-12	-19	-17	-6	8	15	5	-4	18	1		ERROR (mV)
				1.60	0.27	-0.51	-0.37	-0.13	-0.42	-0.46	-0.72	-0.64	-0.24	0.29	0.58	0.19	-0.15	0.68	0.02		LINEARITY ERROR (dB)

Avg. Slope: 25.8 mV/dB

0.7 0.9 1.2 1.2 1.3 1 1 1 1 1.2 0.8 0.7 0.8 0.9 1.1 0.5 Flatness dB: ±1.3 dB





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

PL42577/2342



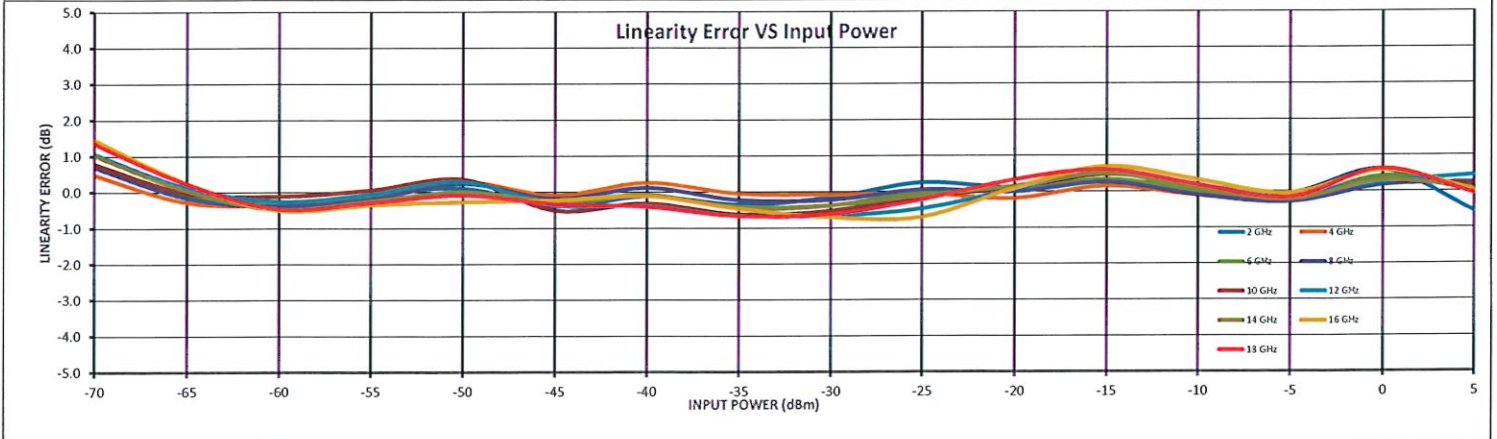
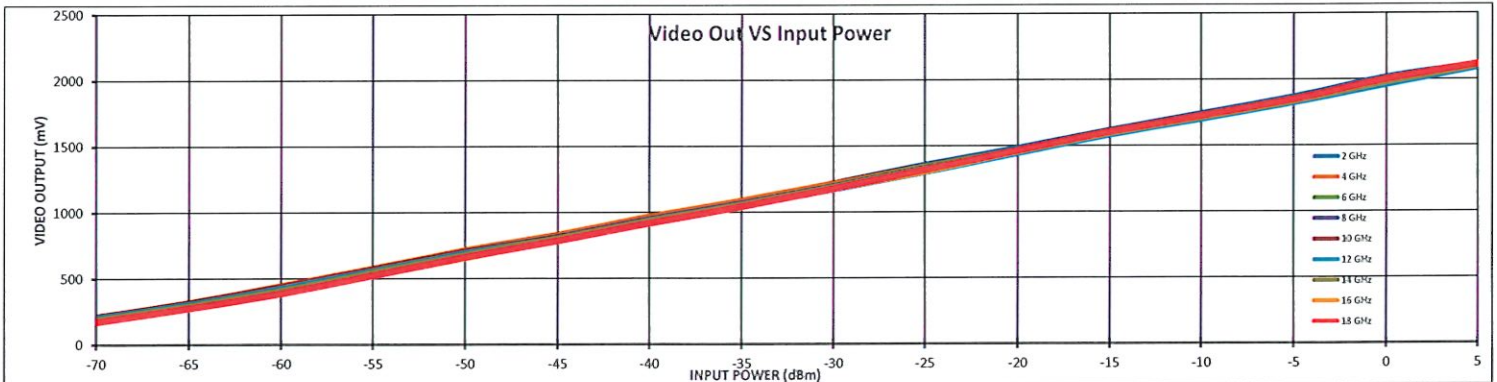
Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL42577/2342
 Date: 3/30/2023
 Tested By: RCombs
 Test Temp: -40°C

Log Transfer Over Frequency -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	2000	25.9	0.7	204	311	435	572	706	823	960	1083	1218	1358	1484	1619	1743	1869	2016	2115	Measured Value (mV)
	19	-3	-10	-2	3	-10	-3	-9	-4	7	3	8	3	-2	16	-15	ERROR (mV)			ERROR (mV)
	0.74	-0.13	-0.37	-0.07	0.11	-0.39	-0.12	-0.35	-0.17	0.25	0.11	0.30	0.10	-0.06	0.60	-0.56	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
4 GHz	1982	25.5	0.5	212	320	445	579	716	834	970	1089	1216	1344	1468	1604	1724	1848	1992	2109	Measured Value (mV)
	12	-7	-9	-3	7	-2	6	-1	-2	-1	-5	4	-3	-6	10	0	ERROR (mV)			ERROR (mV)
	0.49	-0.29	-0.34	-0.11	0.29	-0.09	0.25	-0.05	-0.08	-0.05	-0.19	0.15	-0.11	-0.25	0.41	-0.02	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
6 GHz	1977	25.6	0.8	206	313	435	568	706	818	952	1070	1200	1337	1467	1602	1721	1843	1987	2105	Measured Value (mV)
	19	-2	-7	-2	7	-8	-2	-11	-10	0	1	9	0	-5	11	1	ERROR (mV)			ERROR (mV)
	0.75	-0.08	-0.28	-0.10	0.29	-0.31	-0.08	-0.45	-0.39	-0.01	0.05	0.34	0.01	-0.21	0.41	0.06	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
8 GHz	1963	25.4	0.7	204	309	430	562	700	816	951	1089	1196	1330	1455	1589	1707	1829	1968	2096	Measured Value (mV)
	18	-4	-10	-5	6	-5	3	-5	-6	1	0	7	-3	-7	4	6	ERROR (mV)			ERROR (mV)
	0.69	-0.16	-0.39	-0.19	0.24	-0.19	0.12	-0.23	-0.23	0.06	-0.01	0.26	-0.10	-0.29	0.17	0.23	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
10 GHz	1954	25.3	0.8	214	320	444	574	709	813	944	1063	1192	1328	1460	1596	1714	1835	1970	2095	Measured Value (mV)
	20	-1	-3	1	9	-13	-8	-16	-13	-4	2	12	4	-2	7	5	ERROR (mV)			ERROR (mV)
	0.79	-0.02	-0.11	0.05	0.36	-0.51	-0.32	-0.63	-0.53	-0.14	0.10	0.48	0.14	-0.10	0.26	0.18	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
12 GHz	1953	25.5	1.1	197	300	418	550	687	798	924	1045	1172	1304	1445	1585	1702	1825	1960	2092	Measured Value (mV)
	27	3	-5	-2	7	-9	-10	-17	-17	-12	2	13	4	-1	6	11	ERROR (mV)			ERROR (mV)
	1.06	0.12	-0.25	-0.06	0.29	-0.35	-0.39	-0.67	-0.67	-0.47	0.06	0.53	0.15	-0.05	0.25	0.44	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
14 GHz	1971	25.9	1.0	185	289	405	540	676	799	933	1054	1184	1321	1457	1596	1714	1836	1979	2102	Measured Value (mV)
	27	1	-12	-7	0	-6	-2	-11	-10	-3	4	13	2	-6	8	2	ERROR (mV)			ERROR (mV)
	1.03	0.05	-0.48	-0.26	0.01	-0.25	-0.08	-0.42	-0.38	-0.11	0.15	0.50	0.08	-0.22	0.30	0.06	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
16 GHz	1978	26.5	1.5	163	263	376	512	647	780	916	1039	1165	1297	1451	1599	1722	1844	1993	2111	Measured Value (mV)
	39	7	-13	-9	-7	-6	-3	-13	-19	-19	2	18	8	-1	15	1	ERROR (mV)			ERROR (mV)
	1.46	0.25	-0.51	-0.35	-0.27	-0.23	-0.11	-0.47	-0.71	-0.71	0.09	0.69	0.32	-0.05	0.58	0.02	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)
18 GHz	1983	26.4	1.359	170	272	386	523	660	786	916	1041	1174	1317	1463	1603	1724	1847	1999	2114	Measured Value (mV)
	36	6	-12	-8	-2	-9	-11	-18	-18	-6	9	16	5	-4	16	-1	ERROR (mV)			ERROR (mV)
	1.36	0.23	-0.46	-0.30	-0.08	-0.33	-0.40	-0.67	-0.62	-0.23	0.33	0.60	0.18	-0.16	0.61	-0.06	LINEARITY ERROR (dB)			LINEARITY ERROR (dB)

Avg. Slope: 25.8 mV/dB

1 1.1 1.4 1.3 1.4 1 1.1 1 1 1.2 0.8 0.7 0.8 0.9 1.1 0.4 Flatness dB: ±1.4 dB

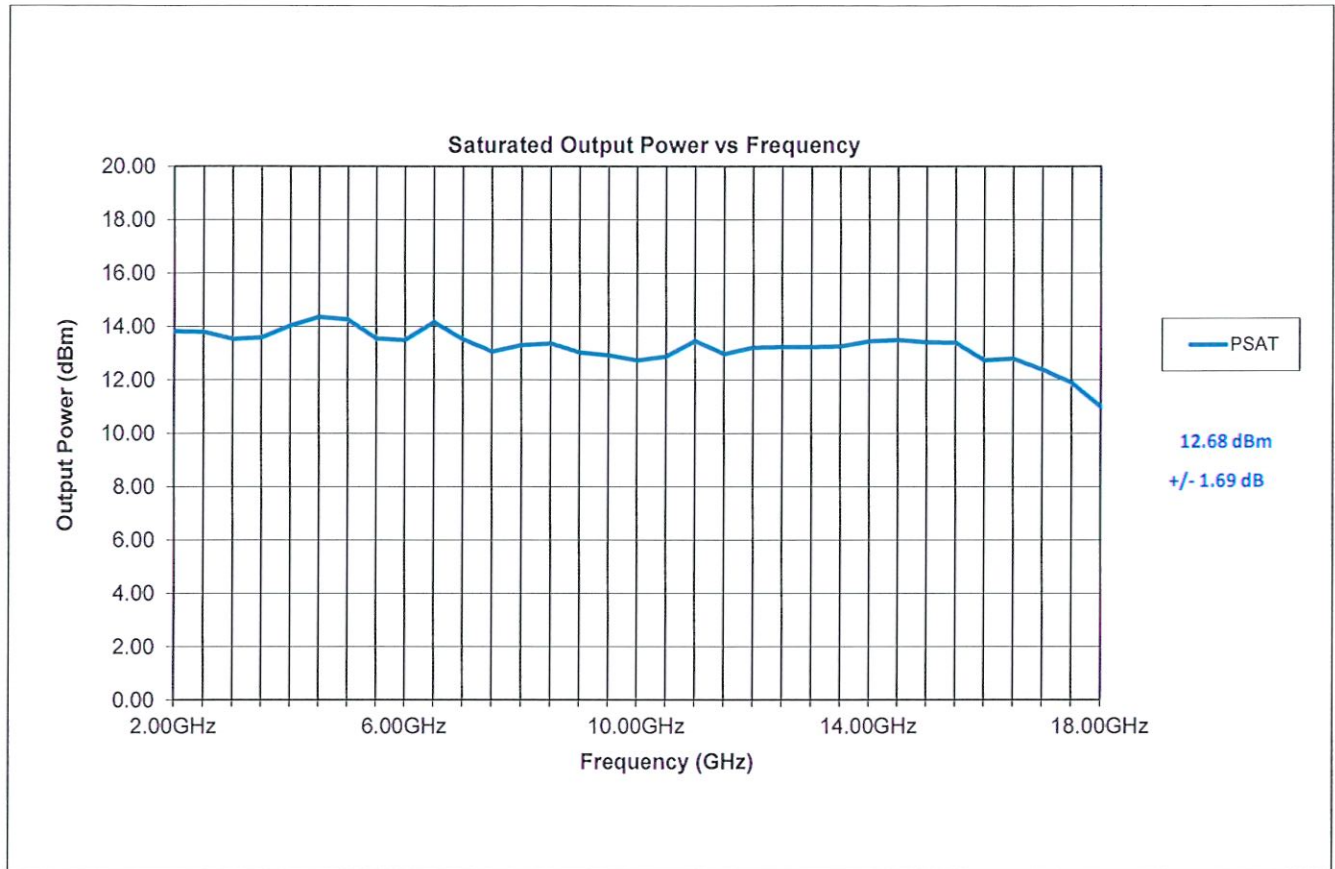




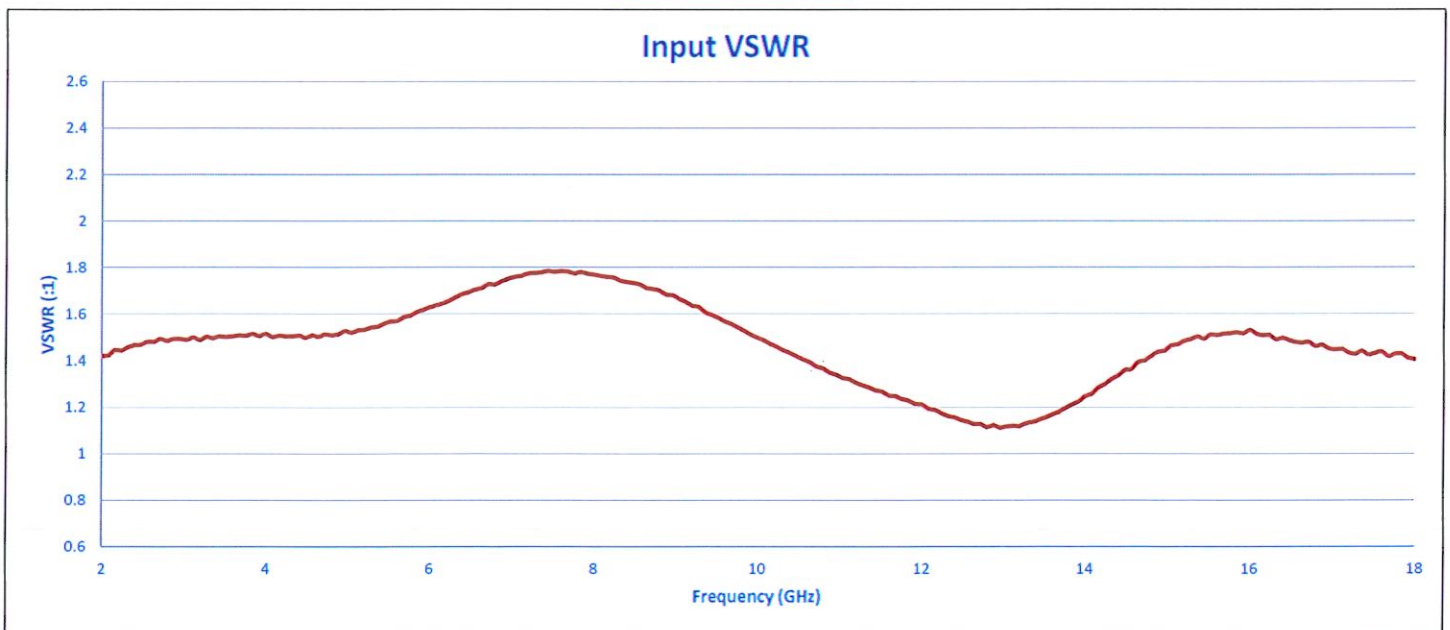
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42577/2342

PSAT



INPUT VSWR

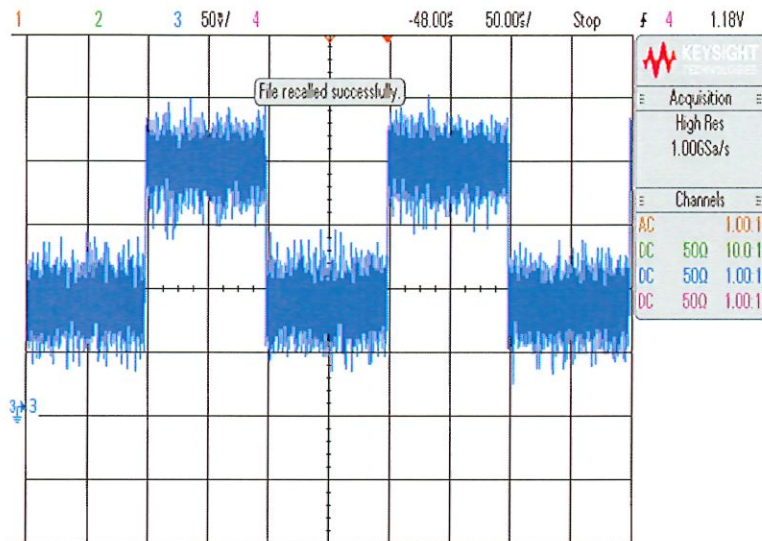




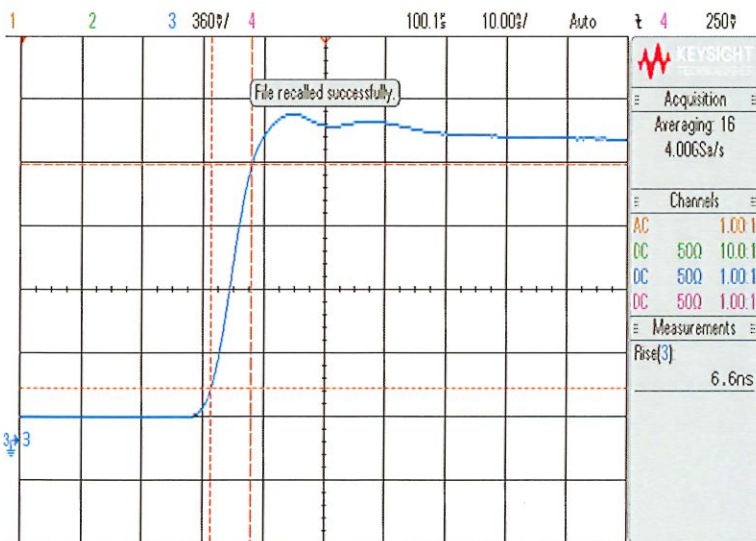
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL42577/2342

TSS



Rise Time



Fall Time

