



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

PL36388/2218

Customer: \_\_\_\_\_ Tested By: RCombs  
SO No: \_\_\_\_\_ Temperature: +25° C  
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 4/28/2022  
Serial No: PL36388/2218 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	±1.3 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	13.43 dBm Avg.	
7	Log Slope:	25 mV/dB (±10%) 50Ω	25 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)	6.3 ns	
12	Recovery Time:	60 ns Typical	46.0	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 258 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

PL36388/2218

## Log Transfer Over Frequency +25°C

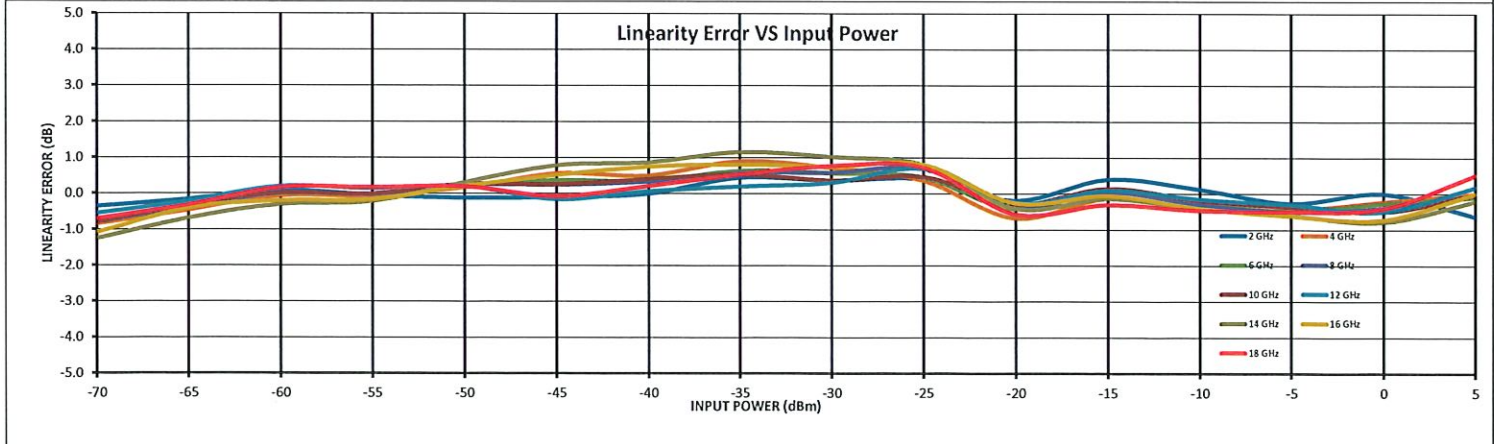
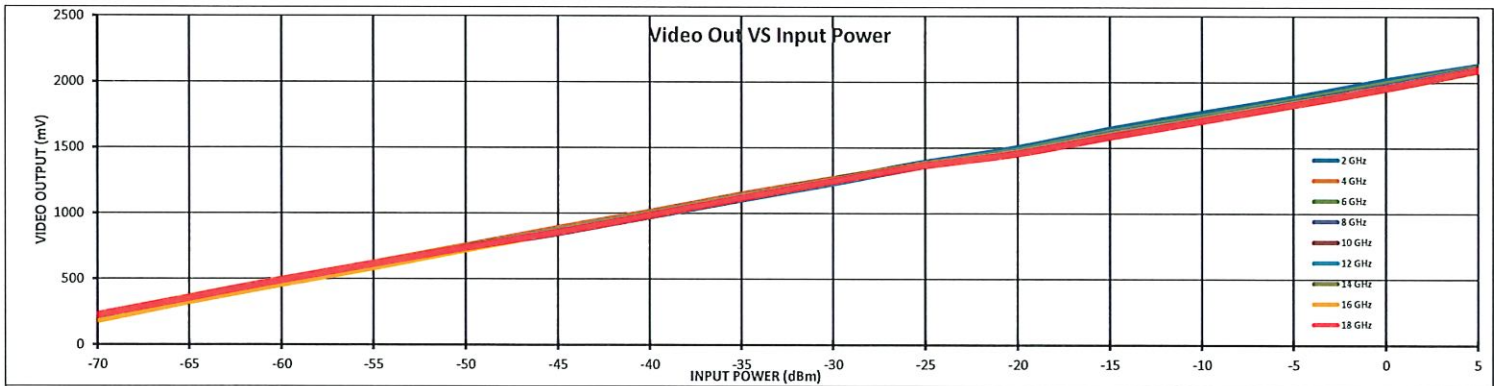


Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL36388/2218  
 Date: 4/28/2022  
 Tested By: RCombs  
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	2017	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2017	227	359	493	617	742	870	999	1138	1263	1392	1504	1646	1766	1883	2017	2128	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-9	-4	2	-1	-3	-2	0	11	9	10	-5	10	3	-7	0	-16	ERROR (mV)
	LIN. ERR. (dB)	0.6	-0.35	-0.16	0.09	-0.04	-0.12	-0.09	-0.01	0.45	0.37	0.41	-0.19	0.40	0.13	-0.26	0.00	-0.63	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1999	231	365	500	625	755	890	1013	1148	1268	1384	1483	1621	1740	1863	1993	2123	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-21	-11	-1	-2	4	14	13	23	18	9	-17	-3	-9	-11	-5	0	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.84	-0.46	-0.05	-0.06	0.17	0.56	0.51	0.91	0.72	0.37	-0.67	-0.12	-0.37	-0.45	-0.21	0.00	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1999	218	354	490	615	747	877	1002	1135	1259	1382	1485	1624	1741	1862	1993	2123	Measured Value (mV)
	SLOPE (mV/dB)	25.2	-20	-10	0	0	5	9	9	16	15	12	-11	2	-7	-12	-7	-2	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.79	-0.38	0.00	-0.01	0.21	0.38	0.35	0.64	0.58	0.46	-0.43	0.08	-0.27	-0.47	-0.27	-0.08	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1987	211	347	482	607	739	864	992	1124	1249	1377	1476	1612	1729	1849	1977	2112	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-20	-9	0	0	6	6	8	14	15	17	-9	1	-7	-13	-10	-1	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.80	-0.37	0.01	-0.02	0.25	0.25	0.33	0.58	0.59	0.70	-0.35	0.06	-0.30	-0.50	-0.39	-0.03	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1978	205	342	476	600	733	858	986	1115	1236	1364	1470	1606	1723	1844	1966	2103	Measured Value (mV)
	SLOPE (mV/dB)	25.0	-20	-8	0	0	7	6	10	13	9	12	-7	4	-5	-9	-12	-1	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.80	-0.32	0.02	-0.01	0.27	0.26	0.40	0.54	0.37	0.47	-0.29	0.15	-0.18	-0.37	-0.49	-0.03	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1969	223	355	489	612	737	852	981	1108	1234	1368	1468	1600	1718	1838	1957	2097	Measured Value (mV)
	SLOPE (mV/dB)	24.7	-14	-5	5	4	5	-4	2	5	7	17	-6	3	-4	-7	-12	5	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.55	-0.21	0.20	0.15	0.21	-0.16	0.07	0.20	0.30	0.70	-0.26	0.10	-0.15	-0.29	-0.50	0.18	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1975	196	336	470	597	735	872	998	1131	1252	1371	1466	1598	1715	1836	1956	2095	Measured Value (mV)
	SLOPE (mV/dB)	25.0	-31	-17	-7	-5	8	20	22	29	26	20	-10	-3	-10	-15	-20	-5	ERROR (mV)
	LIN. ERR. (dB)	1.3	-1.25	-0.68	-0.30	-0.21	0.31	0.79	0.87	1.16	1.03	0.81	-0.41	-0.13	-0.42	-0.59	-0.78	-0.20	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1976	175	319	451	578	715	849	982	1110	1235	1363	1463	1595	1713	1834	1958	2103	Measured Value (mV)
	SLOPE (mV/dB)	25.3	-27	-10	-5	-4	5	13	19	21	19	21	-7	-1	-10	-15	-18	0	ERROR (mV)
	LIN. ERR. (dB)	1.1	-1.08	-0.41	-0.19	-0.16	0.21	0.52	0.75	0.82	0.76	0.81	-0.26	-0.05	-0.40	-0.61	-0.71	0.00	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1964	224	356	491	614	738	854	985	1116	1245	1367	1458	1587	1706	1829	1954	2100	Measured Value (mV)
	SLOPE (mV/dB)	24.6	-17	-8	4	4	6	-2	5	13	19	18	-14	-7	-11	-12	-10	13	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.70	-0.32	0.17	0.17	0.20	-0.08	0.21	0.54	0.78	0.73	-0.56	-0.30	-0.46	-0.48	-0.41	0.52	LINEARITY ERROR (dB)

Avg. Slope: 25 mV/dB

1.1 0.9 1 0.9 0.8 0.8 0.6 0.8 0.7 0.6 0.9 1.2 1.2 1.1 1.3 0.7 Flatness dB: ±1.3 dB





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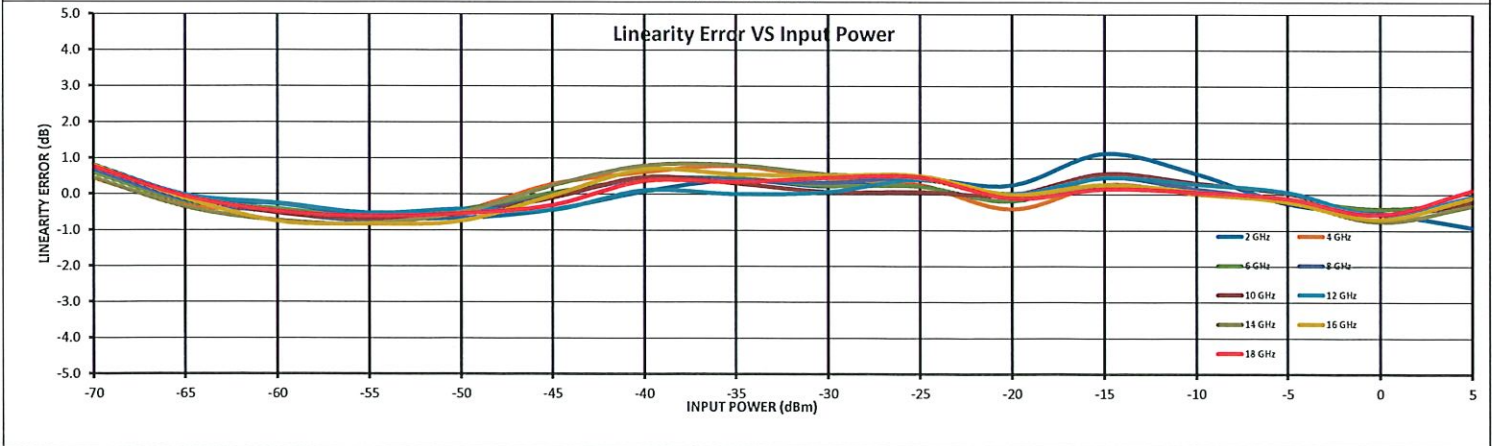
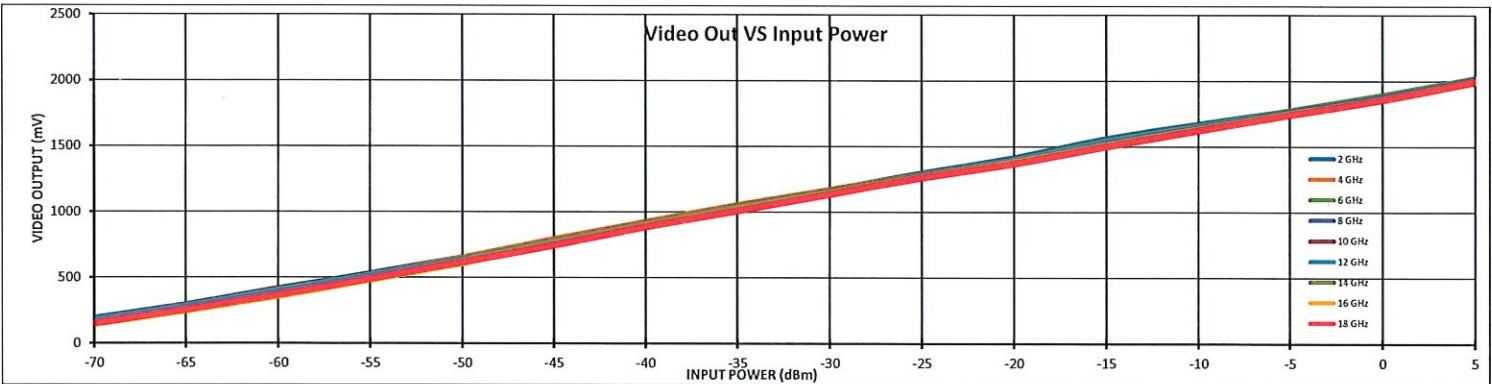
## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL36388/2218  
Date: 4/28/2022  
Tested By: RCombs  
Test Temp: +85°C

Frequency	INTERCEPT (mV)	1905	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1905	192	295	416	531	654	783	919	1050	1170	1298	1417	1563	1672	1775	1893	2006	Measured Value (mV)
	SLOPE (mV/dB)	24.7	16	-4	-7	-15	-16	-11	2	10	6	11	6	28	14	-6	-12	-22	ERROR (mV)
	LIN. ERR. (dB)	1.1	0.65	-0.15	-0.27	-0.61	-0.66	-0.43	0.08	0.40	0.23	0.44	0.26	1.14	0.58	-0.25	-0.50	-0.91	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1905	179	284	404	521	652	795	927	1056	1171	1291	1398	1539	1657	1777	1895	2024	Measured Value (mV)
	SLOPE (mV/dB)	24.8	11	-8	-11	-19	-12	7	15	20	11	7	-10	7	0	-4	-10	-5	ERROR (mV)
	LIN. ERR. (dB)	0.8	0.45	-0.31	-0.46	-0.75	-0.47	0.28	0.62	0.79	0.44	0.27	-0.41	0.28	0.02	-0.14	-0.39	-0.20	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1903	174	279	398	517	647	783	917	1042	1162	1286	1400	1542	1658	1776	1893	2023	Measured Value (mV)
	SLOPE (mV/dB)	24.9	15	-5	-10	-16	-11	1	10	11	6	6	-5	12	3	-3	-10	-5	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.60	-0.20	-0.40	-0.66	-0.42	0.04	0.41	0.45	0.24	0.23	-0.19	0.49	0.13	-0.12	-0.40	-0.20	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1892	161	264	381	500	630	766	904	1028	1151	1279	1392	1530	1647	1764	1879	2011	Measured Value (mV)
	SLOPE (mV/dB)	25.0	17	-4	-13	-18	-13	-2	11	10	8	12	-1	12	4	-4	-13	-7	ERROR (mV)
	LIN. ERR. (dB)	0.7	0.69	-0.16	-0.51	-0.73	-0.52	-0.07	0.44	0.41	0.32	0.46	-0.02	0.49	0.16	-0.14	-0.54	-0.27	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1881	151	255	368	489	617	753	893	1013	1132	1258	1381	1520	1639	1767	1887	2001	Measured Value (mV)
	SLOPE (mV/dB)	25.0	20	-1	-13	-17	-14	-3	12	8	2	2	0	15	8	1	-14	-5	ERROR (mV)
	LIN. ERR. (dB)	0.8	0.82	-0.04	-0.52	-0.68	-0.56	-0.11	0.48	0.31	0.07	0.07	-0.01	0.58	0.31	0.04	-0.56	-0.21	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1873	169	272	389	506	632	754	891	1011	1136	1258	1381	1515	1634	1752	1860	1995	Measured Value (mV)
	SLOPE (mV/dB)	24.6	20	0	-6	-13	-10	-11	3	0	2	10	1	12	7	2	-14	-1	ERROR (mV)
	LIN. ERR. (dB)	0.8	0.81	-0.02	-0.25	-0.52	-0.41	-0.44	0.11	0.00	0.07	0.41	0.02	0.47	0.29	0.06	-0.56	-0.06	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1877	163	256	371	493	624	767	905	1029	1147	1269	1379	1512	1631	1749	1858	1993	Measured Value (mV)
	SLOPE (mV/dB)	24.8	12	-9	-18	-20	-13	6	20	20	14	12	-2	7	2	-4	-19	-8	ERROR (mV)
	LIN. ERR. (dB)	0.8	0.47	-0.35	-0.73	-0.81	-0.50	0.24	0.80	0.81	0.56	0.47	-0.08	0.27	0.08	-0.16	-0.76	-0.31	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1877	136	239	349	473	600	744	888	1011	1136	1261	1374	1507	1627	1746	1860	2001	Measured Value (mV)
	SLOPE (mV/dB)	25.2	20	-3	-19	-21	-19	-1	17	14	13	13	0	7	2	-5	-17	-2	ERROR (mV)
	LIN. ERR. (dB)	0.8	0.81	-0.11	-0.75	-0.82	-0.75	-0.04	0.69	0.56	0.53	0.52	0.00	0.28	0.06	-0.20	-0.69	-0.09	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1870	152	256	369	490	616	746	887	1010	1137	1262	1371	1502	1624	1743	1856	1997	Measured Value (mV)
	SLOPE (mV/dB)	24.8	19	-1	-12	-15	-13	-8	9	9	12	12	-3	4	2	-3	-14	3	ERROR (mV)
	LIN. ERR. (dB)	0.8	0.77	-0.06	-0.48	-0.61	-0.54	-0.31	0.37	0.35	0.46	0.48	-0.11	0.16	0.06	-0.11	-0.56	0.12	LINEARITY ERROR (dB)

Avg. Slope: 24.9 mV/dB      1.1   1.1   1.4   1.2   1.1   1   0.8   0.9   0.8   0.8   0.9   1.2   1   0.7   0.8   0.6   Flatness dB: ±1.4 dB





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

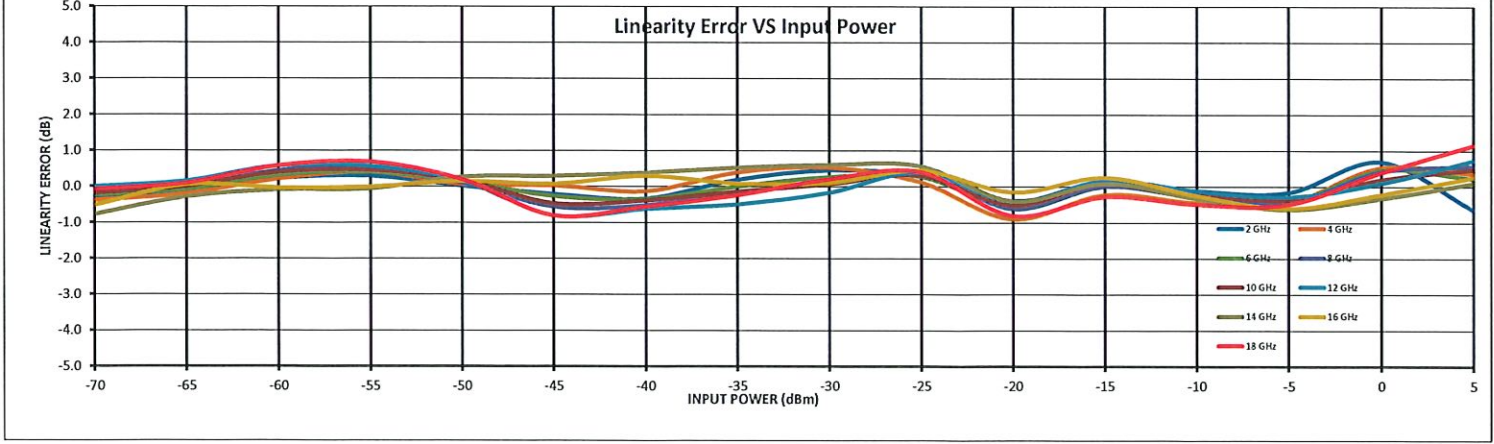
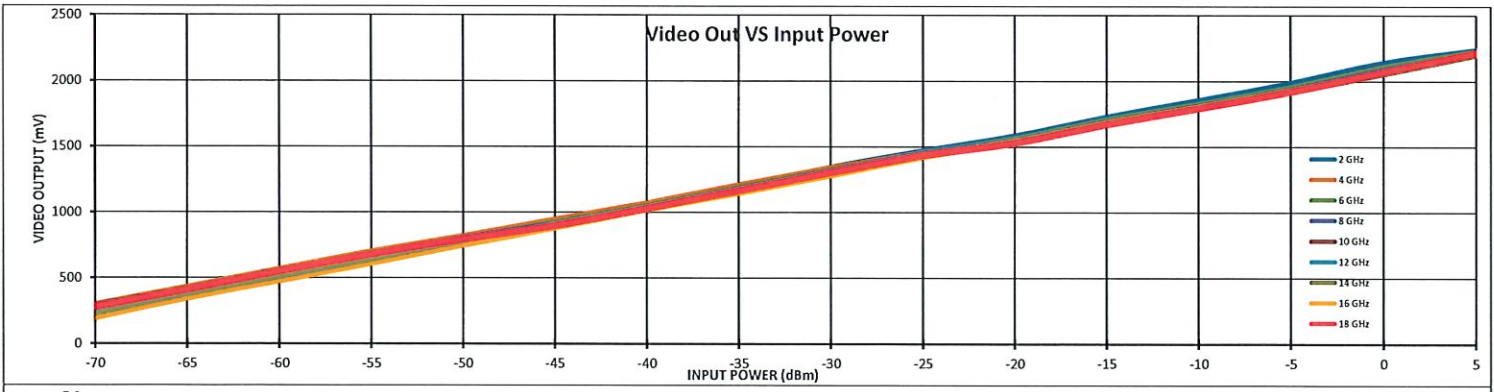
PL36388/2218

## Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL36388/2218  
 Date: 4/28/2022  
 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	2123	26.4	0.7	264	402	543	677	802	928	1057	1203	1342	1470	1584	1729	1856	1987	2141	2238	Measured Value (mV)
				-9	-3	6	8	1	-5	-9	5	-12	8	-10	2	-3	-4	19	-17	Error (mV)
				-0.34	-0.12	0.23	0.30	0.02	-0.21	-0.34	0.19	0.46	0.31	-0.39	0.09	-0.11	-0.15	0.70	-0.64	LINEARITY ERROR (dB)
4 GHz	2092	25.5	0.9	299	431	569	701	820	946	1069	1210	1341	1458	1559	1704	1826	1953	2105	2228	Measured Value (mV)
				-10	-5	6	11	2	1	-3	10	14	3	-23	-5	-11	-11	14	9	Error (mV)
				-0.38	-0.20	0.22	0.42	0.07	0.03	-0.13	0.40	0.54	0.13	-0.90	-0.21	-0.44	-0.44	0.54	0.36	LINEARITY ERROR (dB)
6 GHz	2092	25.8	0.5	279	412	552	683	805	924	1051	1189	1325	1454	1562	1706	1827	1952	2104	2227	Measured Value (mV)
				-6	-2	8	11	4	-7	-9	0	7	7	-14	1	-7	-11	12	6	Error (mV)
				-0.24	-0.08	0.31	0.41	0.14	-0.26	-0.34	0.00	0.27	0.28	-0.55	0.06	-0.27	-0.42	0.46	0.23	LINEARITY ERROR (dB)
8 GHz	2076	25.5	0.6	289	420	558	688	804	915	1043	1180	1315	1449	1551	1694	1814	1937	2087	2218	Measured Value (mV)
				-3	1	11	14	3	-14	-13	-4	4	10	-15	0	-7	-11	11	15	Error (mV)
				-0.10	0.03	0.45	0.55	0.11	-0.56	-0.52	-0.17	0.14	0.41	-0.61	0.02	-0.29	-0.45	0.42	0.57	LINEARITY ERROR (dB)
10 GHz	2071	25.6	0.5	277	410	548	677	798	909	1039	1173	1306	1440	1547	1691	1810	1934	2076	2211	Measured Value (mV)
				-5	0	10	12	5	-12	-10	-3	2	8	-13	3	-5	-9	5	12	Error (mV)
				-0.18	0.00	0.41	0.46	0.18	-0.47	-0.39	-0.14	0.07	0.32	-0.51	0.13	-0.20	-0.37	0.20	0.49	LINEARITY ERROR (dB)
12 GHz	2059	25.4	0.8	279	410	548	675	792	894	1026	1157	1292	1434	1540	1682	1802	1925	2062	2205	Measured Value (mV)
				0	4	15	14	4	-20	-16	-12	-4	10	-10	4	-3	-7	3	19	Error (mV)
				0.00	0.16	0.58	0.57	0.17	-0.80	-0.62	-0.49	-0.17	0.41	-0.41	0.17	-0.12	-0.28	0.10	0.73	LINEARITY ERROR (dB)
14 GHz	2072	26.1	0.8	223	366	502	633	773	904	1037	1171	1304	1434	1539	1683	1802	1925	2064	2205	Measured Value (mV)
				-20	-7	-2	-1	7	8	10	14	16	16	-10	3	-8	-16	-8	3	Error (mV)
				-0.77	-0.28	-0.09	-0.05	0.28	0.29	0.39	0.53	0.61	0.58	-0.40	0.10	-0.32	-0.63	-0.32	0.10	LINEARITY ERROR (dB)
16 GHz	2072	26.7	0.6	191	340	471	605	743	874	1013	1141	1275	1417	1535	1679	1799	1923	2067	2213	Measured Value (mV)
				-14	2	-1	0	4	2	8	2	3	12	-4	7	-7	-16	-6	7	Error (mV)
				-0.52	0.06	-0.03	-0.01	0.15	0.08	0.30	0.09	0.11	0.45	-0.15	0.26	-0.25	-0.60	-0.21	0.27	LINEARITY ERROR (dB)
18 GHz	2059	25.4	1.152	281	412	551	681	795	897	1030	1165	1303	1435	1531	1671	1793	1920	2069	2215	Measured Value (mV)
				-2	2	16	17	6	-20	-14	6	6	10	-21	-7	-12	-12	10	29	Error (mV)
				-0.08	0.10	0.58	0.69	0.20	-0.80	-0.56	-0.24	0.21	0.41	-0.81	-0.28	-0.48	-0.49	0.40	1.15	LINEARITY ERROR (dB)
Avg. Slope: 25.8 mV/dB				2.1	1.8	1.9	1.9	1.5	1.4	1.1	1.3	1.3	1	1	1.1	1.2	1.3	1.5	0.6	Flatness dB: ±2.1 dB

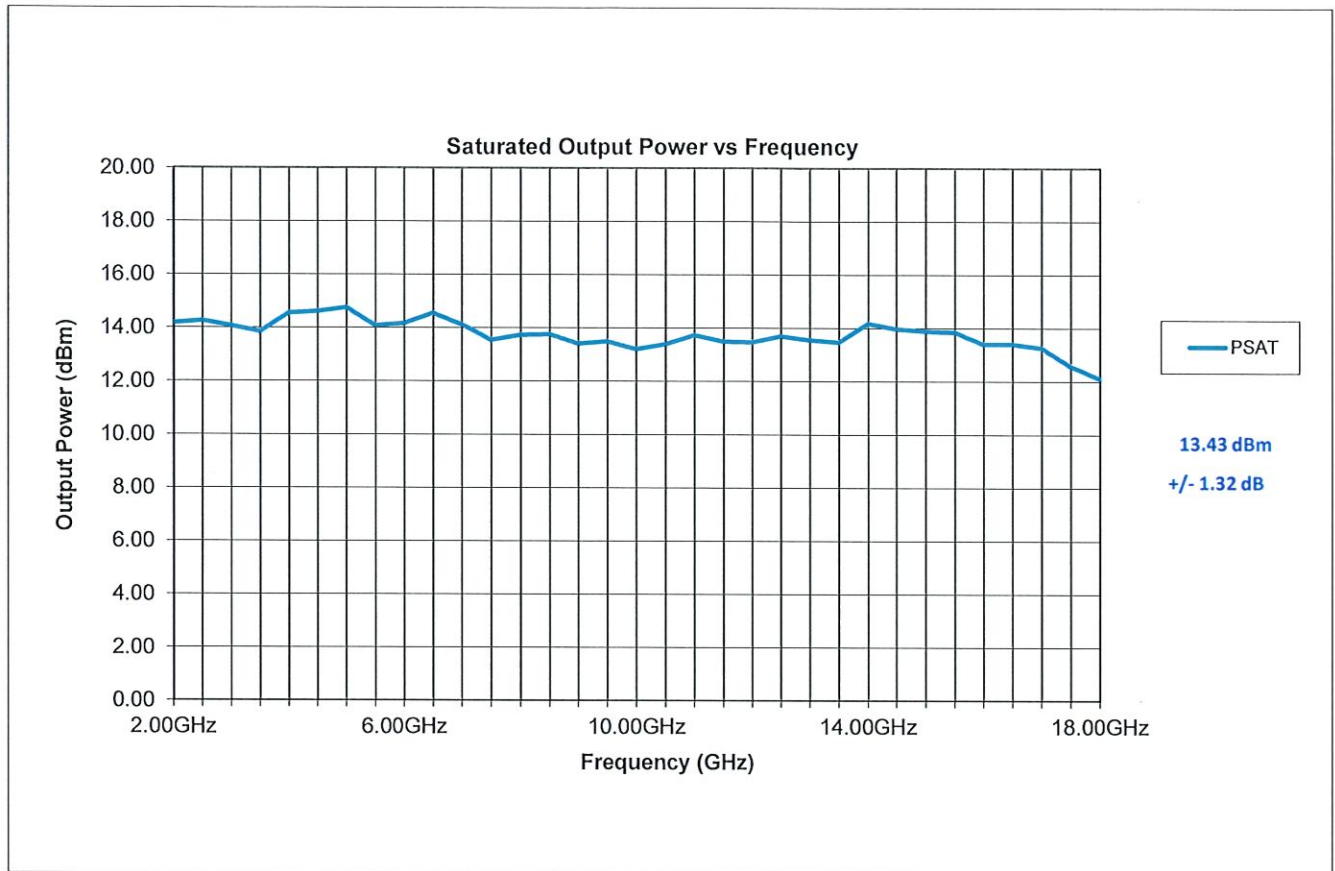




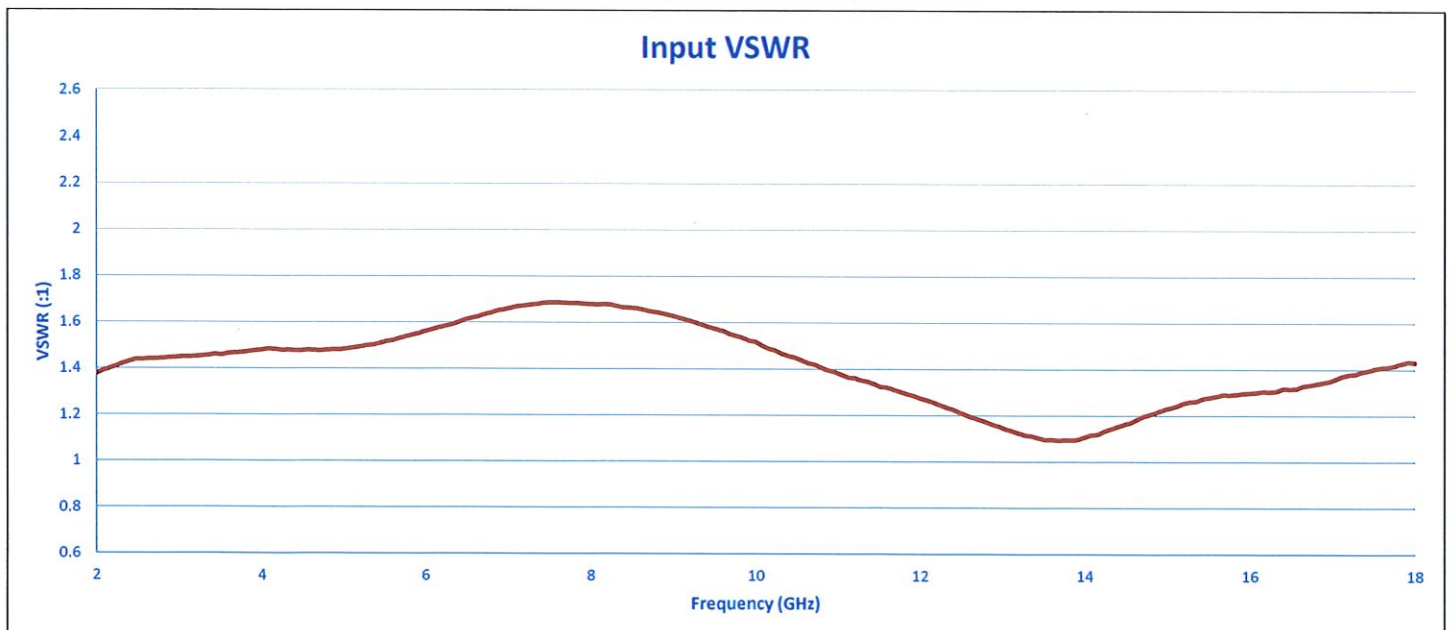
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

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## PSAT



## INPUT VSWR

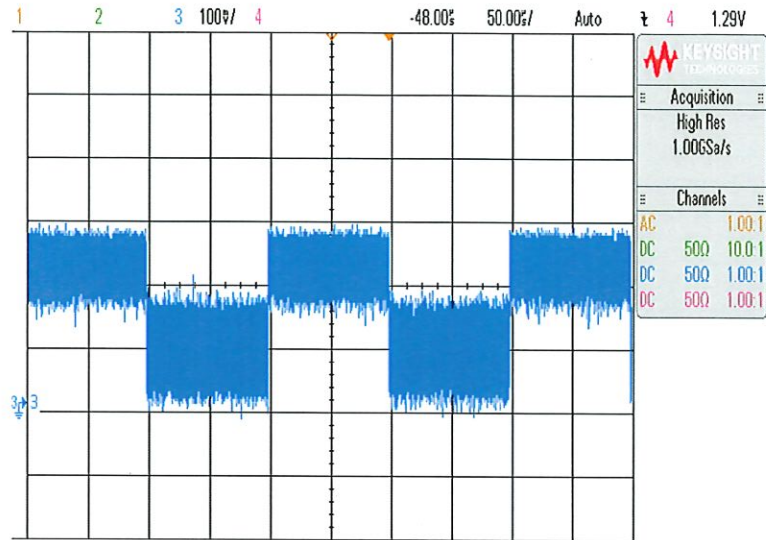




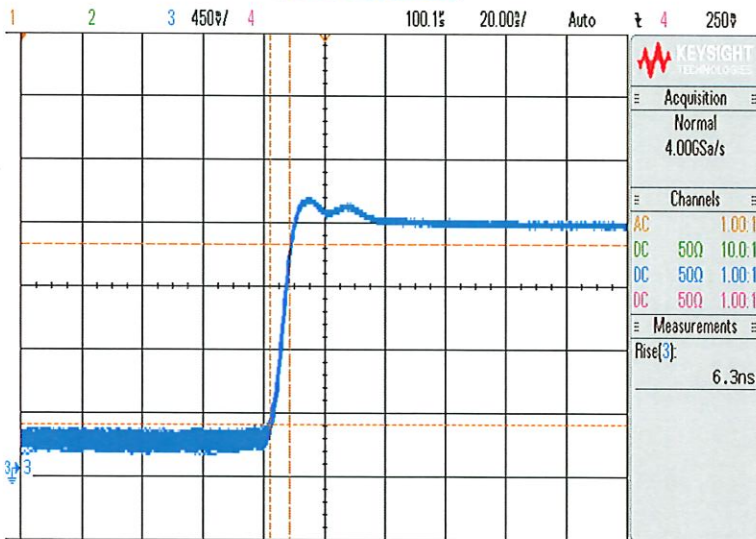
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36388/2218

## TSS



## Rise Time



## Fall Time

