



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

PL36393/2218

Customer: \_\_\_\_\_ Tested By: Rcombs  
SO No: \_\_\_\_\_ Temperature: +25° C  
Model No: SDLVA-6G18G-CD-2-OPT218 Date: 4/28/2022  
Serial No: PL36393/2218 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	±1.1 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	13.41 dBm Avg.		
7	Log Slope:	25 mV/dB (±10%) 50Ω	25.1 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)	5.5 ns		
12	Recovery Time:	60 ns Typical	41.36 ns		
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 254 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

PL36393/2218

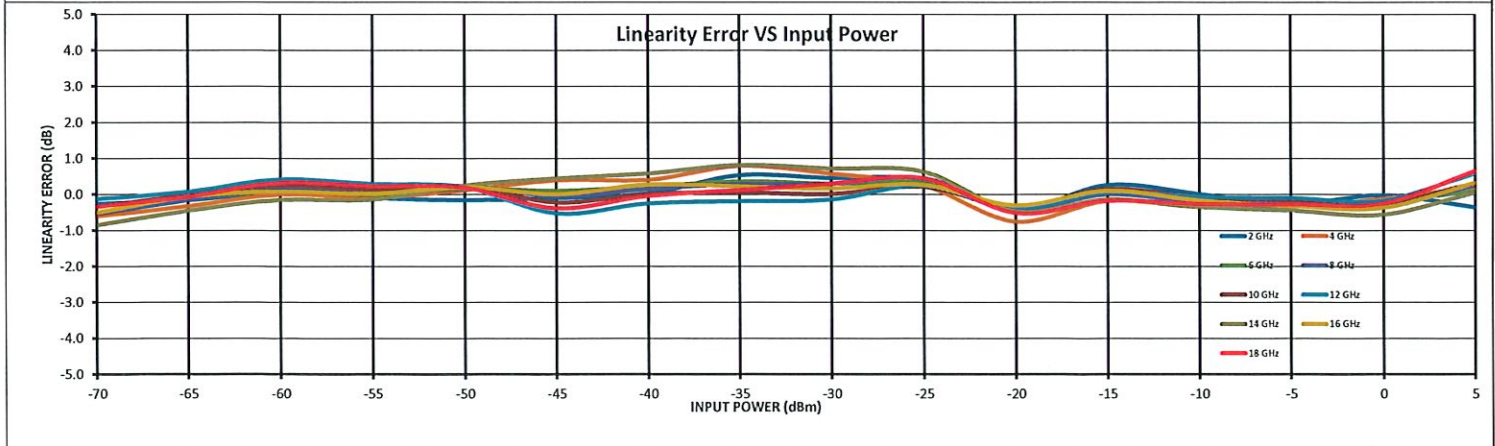
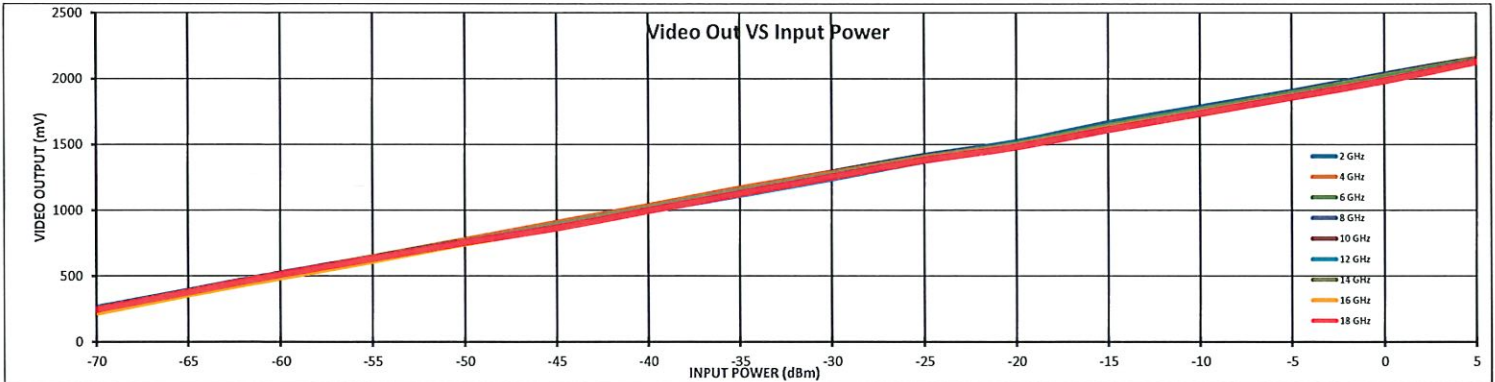
## Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL36393/2218  
 Date: 4/28/2022  
 Tested By: Rcombs  
 Test Temp: +25°C

Frequency	INTERCEPT (mV)	2037	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2037	261	390	522	645	769	897	1026	1166	1290	1416	1521	1665	1784	1903	2035	2164	Measured Value (mV)
	SLOPE (mV/dB)	25.3	-6	-4	2	-2	-4	-2	1	13	12	11	-11	7	0	-7	0	-9	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.25	-0.16	0.06	-0.08	-0.16	-0.09	0.03	0.54	0.46	0.43	-0.42	0.27	0.02	-0.27	-0.01	-0.36	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2024	256	389	522	645	775	907	1033	1168	1287	1404	1504	1644	1765	1890	2021	2164	Measured Value (mV)
	SLOPE (mV/dB)	25.0	-15	-8	0	-2	3	10	10	20	14	6	-19	-4	-9	-9	-3	5	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.61	-0.33	0.00	-0.08	0.12	0.40	0.40	0.79	0.58	0.25	-0.75	-0.17	-0.35	-0.35	-0.11	0.19	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2021	232	369	502	626	757	883	1012	1143	1268	1395	1504	1644	1763	1887	2017	2161	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-13	-4	3	0	4	3	5	9	8	8	-11	3	-5	-6	-5	3	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.53	-0.15	0.10	0.00	0.17	0.10	0.22	0.37	0.30	0.31	-0.41	0.12	-0.19	-0.31	-0.19	0.10	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	2002	234	369	502	625	755	873	1004	1132	1258	1387	1491	1627	1747	1870	1995	2134	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-13	-4	4	2	6	-1	4	7	7	11	-10	0	-5	-7	-7	6	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.53	-0.16	0.15	0.07	0.24	-0.04	0.16	0.29	0.29	0.46	-0.40	0.01	-0.20	-0.30	-0.30	0.26	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	2000	236	369	501	624	752	866	997	1124	1248	1378	1490	1628	1747	1871	1994	2133	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-9	0	6	4	6	-6	0	1	0	5	-8	4	-2	-4	-6	8	ERROR (mV)
	LIN. ERR. (dB)	0.3	-0.35	-0.02	0.25	0.14	0.23	-0.22	0.01	0.06	0.02	0.22	-0.33	0.16	-0.07	-0.16	-0.25	0.32	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1994	255	384	516	637	759	865	996	1121	1246	1380	1489	1624	1744	1868	1990	2133	Measured Value (mV)
	SLOPE (mV/dB)	24.8	-3	2	10	7	5	-13	-6	-5	-3	6	-9	2	-2	-2	-4	15	ERROR (mV)
	LIN. ERR. (dB)	0.6	-0.12	0.07	0.42	0.29	0.21	-0.52	-0.24	-0.18	-0.14	0.25	-0.38	0.07	-0.06	-0.09	-0.17	0.59	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	2004	229	364	497	622	757	888	1016	1147	1270	1393	1491	1625	1745	1868	1990	2131	Measured Value (mV)
	SLOPE (mV/dB)	25.1	-21	-11	-4	-3	6	11	15	21	18	16	-12	-3	-9	-11	-14	2	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.85	-0.45	-0.15	-0.14	0.26	0.45	0.59	0.82	0.72	0.63	-0.47	-0.13	-0.34	-0.44	-0.56	0.06	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	2003	212	350	481	606	738	860	994	1120	1245	1375	1487	1625	1745	1868	1994	2138	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-13	-2	2	0	5	0	7	6	4	7	-8	3	-4	-8	-9	8	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.50	-0.06	0.09	0.02	0.21	0.01	0.28	0.23	0.17	0.27	-0.30	0.11	-0.17	-0.32	-0.37	0.33	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1989	247	378	511	633	755	865	997	1125	1254	1381	1481	1614	1735	1859	1983	2129	Measured Value (mV)
	SLOPE (mV/dB)	24.7	8	-2	8	6	5	-10	-1	3	7	11	-13	-4	-7	-7	-6	16	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.34	-0.06	0.33	0.24	0.19	-0.39	-0.04	0.12	0.30	0.45	-0.51	-0.17	-0.26	-0.27	-0.25	0.66	LINEARITY ERROR (dB)

Avg. Slope: 25.1 mV/dB      1   0.8   0.8   0.8   0.7   0.9   0.8   1   0.9   0.8   0.8   1   1   0.9   1.1   0.5   Flatness dB: ±1.1 dB





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

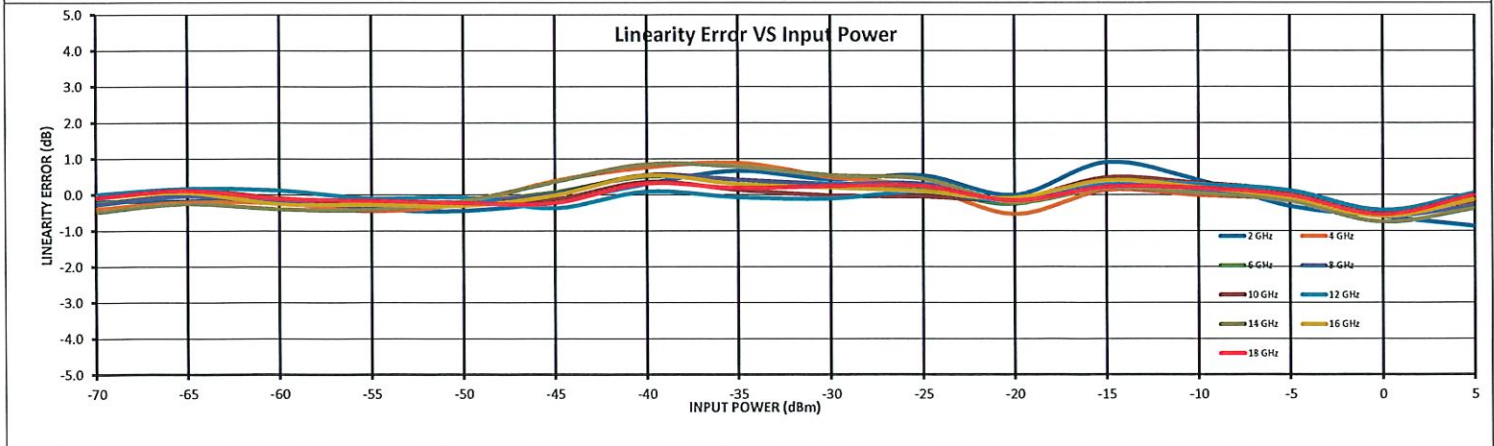
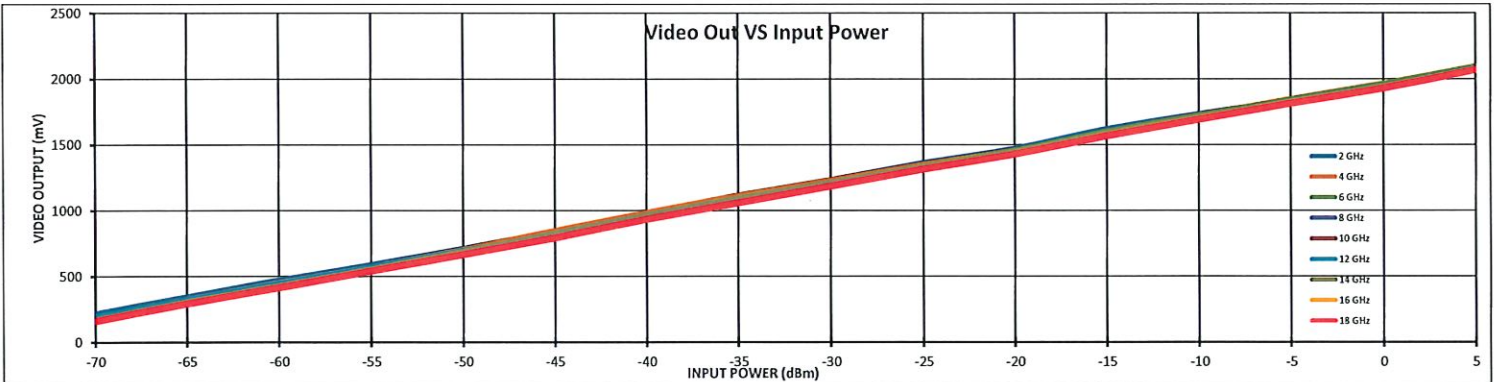
PL36393/2218

## Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218  
 Serial No: PL36393/2218  
 Date: 4/28/2022  
 Tested By: Rcombs  
 Test Temp: +85°C

Frequency	INTERCEPT (mV)	1972	-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)	25.0	220	345	472	589	713	844	981	1115	1234	1352	1473	1621	1733	1840	1957	2075	Measured Value (mV)	
	LIN. ERR. (dB)	0.9	-5	-4	-3	-10	-11	-5	8	17	11	13	0	23	10	-8	-15	-22	ERROR (mV)	
			-0.18	-0.17	-0.11	-0.39	-0.44	-0.19	0.30	0.67	0.43	0.54	-0.01	0.91	0.41	-0.32	-0.60	-0.86	LINEARITY ERROR (dB)	
4 GHz	SLOPE (mV/dB)	25.3	195	327	453	574	705	848	984	1113	1230	1350	1457	1600	1723	1847	1968	2096	Measured Value (mV)	
	LIN. ERR. (dB)	0.9	-10	-5	-6	-11	-6	10	19	22	13	6	-14	3	0	-3	-11	-7	ERROR (mV)	
			-0.40	-0.20	-0.23	-0.45	-0.24	0.39	0.76	0.89	0.50	0.22	-0.54	0.13	-0.01	-0.12	-0.43	-0.27	LINEARITY ERROR (dB)	
6 GHz	SLOPE (mV/dB)	25.5	182	315	439	562	693	827	966	1091	1213	1339	1456	1601	1722	1844	1962	2093	Measured Value (mV)	
	LIN. ERR. (dB)	0.5	-6	0	-4	-8	-5	2	13	11	6	4	-6	11	4	-1	-11	-8	ERROR (mV)	
			-0.23	-0.02	-0.14	-0.31	-0.20	0.08	0.51	0.42	0.22	0.15	-0.25	0.42	0.14	-0.06	-0.44	-0.29	LINEARITY ERROR (dB)	
8 GHz	SLOPE (mV/dB)	25.4	172	305	428	552	682	815	955	1079	1203	1330	1445	1585	1708	1829	1943	2077	Measured Value (mV)	
	LIN. ERR. (dB)	0.6	-7	-1	-5	-8	-5	1	14	11	8	8	-4	8	4	-2	-15	-6	ERROR (mV)	
			-0.28	-0.03	-0.20	-0.30	-0.20	0.04	0.55	0.43	0.30	0.31	-0.16	0.33	0.16	-0.07	-0.58	-0.30	LINEARITY ERROR (dB)	
10 GHz	SLOPE (mV/dB)	25.5	167	300	421	546	673	803	943	1064	1188	1315	1440	1583	1706	1828	1940	2076	Measured Value (mV)	
	LIN. ERR. (dB)	0.5	-2	4	-2	-5	-5	-3	9	4	-1	-1	-3	12	8	2	-13	-4	ERROR (mV)	
			-0.06	0.15	-0.10	-0.19	-0.20	-0.13	0.36	0.14	-0.02	-0.05	-0.13	0.48	0.32	0.10	-0.50	-0.17	LINEARITY ERROR (dB)	
12 GHz	SLOPE (mV/dB)	25.1	191	320	445	565	691	809	946	1068	1193	1323	1442	1581	1705	1826	1938	2076	Measured Value (mV)	
	LIN. ERR. (dB)	0.4	0	4	3	-2	-2	-9	2	-2	-3	2	-4	9	7	3	-11	1	ERROR (mV)	
			0.01	0.17	0.13	-0.09	-0.07	-0.37	0.10	-0.06	-0.10	0.09	-0.18	0.35	0.29	0.12	-0.43	0.06	LINEARITY ERROR (dB)	
14 GHz	SLOPE (mV/dB)	25.4	169	302	425	552	684	825	964	1089	1210	1334	1444	1581	1704	1825	1937	2074	Measured Value (mV)	
	LIN. ERR. (dB)	0.9	-12	-6	-10	-10	-4	9	22	20	14	11	-5	5	1	-4	-19	-10	ERROR (mV)	
			-0.49	-0.25	-0.40	-0.41	-0.17	0.36	0.85	0.79	0.55	0.44	-0.20	0.19	0.05	-0.17	-0.76	-0.38	LINEARITY ERROR (dB)	
16 GHz	SLOPE (mV/dB)	25.8	150	282	403	531	659	786	939	1061	1188	1314	1438	1580	1703	1825	1940	2081	Measured Value (mV)	
	LIN. ERR. (dB)	0.6	-2	2	-7	-7	-8	0	14	8	5	3	-2	10	5	-2	-16	-3	ERROR (mV)	
			-0.08	0.06	-0.26	-0.26	-0.31	-0.01	0.54	0.29	0.20	0.10	-0.09	0.41	0.21	-0.08	-0.61	-0.13	LINEARITY ERROR (dB)	
18 GHz	SLOPE (mV/dB)	25.4	162	294	415	541	666	793	934	1057	1186	1313	1430	1566	1692	1814	1928	2068	Measured Value (mV)	
	LIN. ERR. (dB)	0.5	-2	3	-3	-4	-6	-6	8	5	6	6	-4	6	5	0	-14	0	ERROR (mV)	
			-0.08	0.12	-0.11	-0.16	-0.23	-0.22	0.32	0.18	0.24	0.24	-0.15	0.22	0.19	-0.01	-0.55	-0.01	LINEARITY ERROR (dB)	
Avg. Slope: 25.4 mV/dB			1.4	1.2	1.4	1.1	1.1	1.1	1	1.1	1	1	1	0.9	1.1	0.8	0.6	0.7	0.6	Flatness dB: ±1.4 dB





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

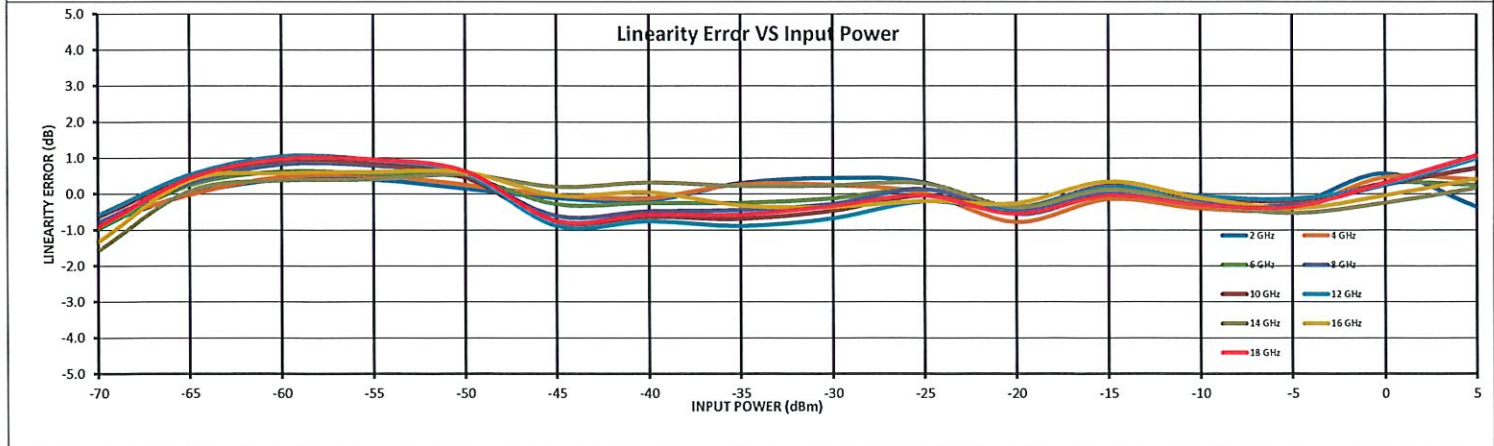
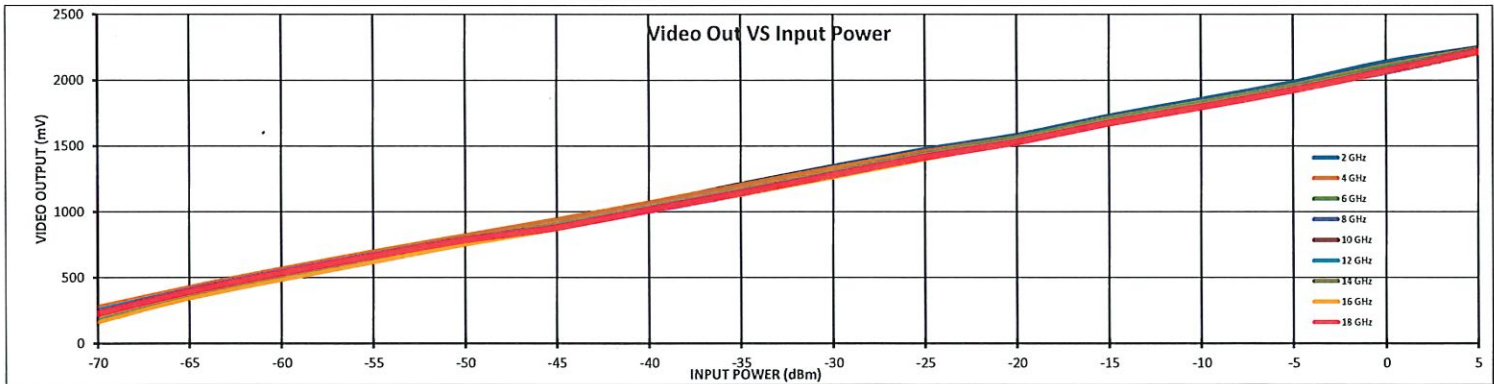
## Log Transfer Over Frequency -40°C

PL36393/2218



Model: SDLVA-6G18G-CD-2-OPT218  
Serial No: PL36393/2218  
Date: 4/28/2022  
Tested By: Rcombs  
Test Temp: -40°C

Frequency	INTERCEPT (mV)	2122	-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)	26.4	253	407	550	682	807	932	1062	1207	1343	1471	1580	1726	1852	1983	2137	2245	Measured Value (mV)
	LIN. ERR. (dB)	0.9	-23	0	11	11	4	-3	-5	8	12	9	-16	0	-7	-7	16	-9	ERROR (mV)
			-0.86	-0.01	0.41	0.40	0.16	-0.11	-0.18	0.30	0.45	0.32	-0.55	-0.01	-0.25	-0.28	0.57	-0.35	LINEARITY ERROR (dB)
4 GHz	SLOPE (mV/dB)	20.98	274	422	564	694	816	937	1064	1203	1331	1454	1562	1708	1830	1959	2110	2237	Measured Value (mV)
	LIN. ERR. (dB)	0.8	-20	-1	12	13	7	-1	-3	7	6	1	-20	-4	-10	-10	12	10	ERROR (mV)
			-0.79	-0.02	0.48	0.52	0.26	-0.03	-0.11	0.27	0.25	0.02	-0.78	-0.14	-0.40	-0.40	0.47	0.40	LINEARITY ERROR (dB)
6 GHz	SLOPE (mV/dB)	26.3	224	388	530	660	789	901	1034	1165	1300	1439	1558	1704	1825	1952	2102	2232	Measured Value (mV)
	LIN. ERR. (dB)	1.0	-25	7	16	15	12	-7	-6	-6	-3	4	-9	5	-5	-10	8	7	ERROR (mV)
			-0.97	0.25	0.62	0.57	0.47	-0.28	-0.24	-0.25	-0.12	0.13	-0.36	0.21	-0.20	-0.38	0.30	0.25	LINEARITY ERROR (dB)
8 GHz	SLOPE (mV/dB)	25.8	246	403	545	673	794	895	1027	1157	1290	1429	1542	1686	1807	1933	2077	2218	Measured Value (mV)
	LIN. ERR. (dB)	0.8	-20	8	21	20	13	-16	-12	-11	-7	3	-12	2	-6	-9	7	19	ERROR (mV)
			-0.79	0.31	0.83	0.79	0.50	-0.61	-0.48	-0.44	-0.27	0.13	-0.48	0.07	-0.22	-0.33	0.25	0.74	LINEARITY ERROR (dB)
10 GHz	SLOPE (mV/dB)	26.9	247	404	546	673	792	889	1021	1149	1284	1424	1543	1689	1809	1936	2077	2217	Measured Value (mV)
	LIN. ERR. (dB)	0.9	-16	11	24	22	12	-20	-16	-18	-12	-1	-10	6	-2	-5	7	18	ERROR (mV)
			-0.64	0.44	0.93	0.85	0.46	-0.78	-0.64	-0.69	-0.47	-0.04	-0.40	0.24	-0.08	-0.19	0.29	0.72	LINEARITY ERROR (dB)
12 GHz	SLOPE (mV/dB)	26.1	245	403	545	671	789	881	1013	1138	1272	1413	1536	1680	1802	1929	2068	2215	Measured Value (mV)
	LIN. ERR. (dB)	1.1	-15	14	27	24	14	-23	-19	-23	-17	-5	-10	5	-1	-3	7	26	ERROR (mV)
			-0.58	0.54	1.05	0.95	0.55	-0.89	-0.76	-0.88	-0.67	-0.20	-0.39	0.20	-0.05	-0.13	0.26	0.99	LINEARITY ERROR (dB)
14 GHz	SLOPE (mV/dB)	26.5	185	361	501	634	770	893	1029	1158	1291	1425	1540	1685	1806	1932	2072	2215	Measured Value (mV)
	LIN. ERR. (dB)	1.6	-42	2	10	11	14	5	9	6	6	8	-10	3	-7	-14	-7	5	ERROR (mV)
			-1.58	0.09	0.38	0.41	0.55	0.20	0.32	0.22	0.24	0.30	-0.36	0.13	-0.28	-0.53	-0.25	0.17	LINEARITY ERROR (dB)
16 GHz	SLOPE (mV/dB)	26.8	162	342	482	617	751	868	1004	1128	1261	1400	1532	1683	1805	1931	2075	2222	Measured Value (mV)
	LIN. ERR. (dB)	1.3	-36	10	16	17	16	-1	1	-8	-10	-5	-7	10	-3	-11	-1	12	ERROR (mV)
			-1.34	0.39	0.59	0.62	0.61	-0.03	0.04	-0.31	-0.36	-0.19	-0.26	0.35	-0.10	-0.40	-0.04	0.43	LINEARITY ERROR (dB)
18 GHz	SLOPE (mV/dB)	25.9	230	394	537	666	787	880	1014	1143	1279	1416	1532	1674	1797	1925	2071	2220	Measured Value (mV)
	LIN. ERR. (dB)	1.072	-23	11	26	25	16	-19	-15	-15	-9	-1	-14	-1	-8	-9	8	28	ERROR (mV)
			-0.90	0.44	0.99	0.97	0.64	-0.75	-0.57	-0.58	-0.34	-0.04	-0.55	-0.04	-0.30	-0.35	0.31	1.07	LINEARITY ERROR (dB)
Avg. Slope: 26.1 mV/dB			2.1	1.5	1.6	1.5	1.3	1.3	1.2	1.5	1.6	1.4	0.9	1	1	1.1	1.3	0.6	Flatness dB: ±2.1 dB

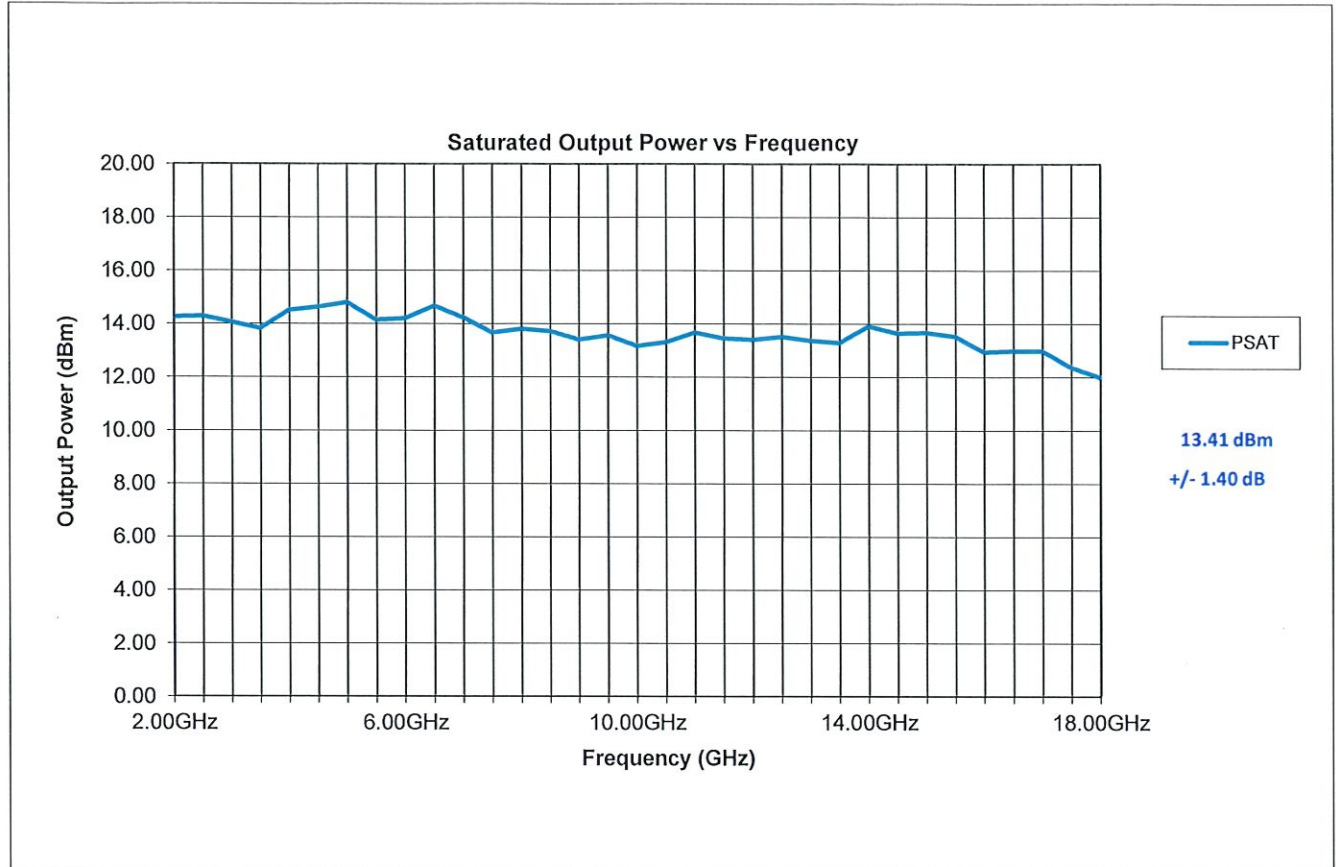




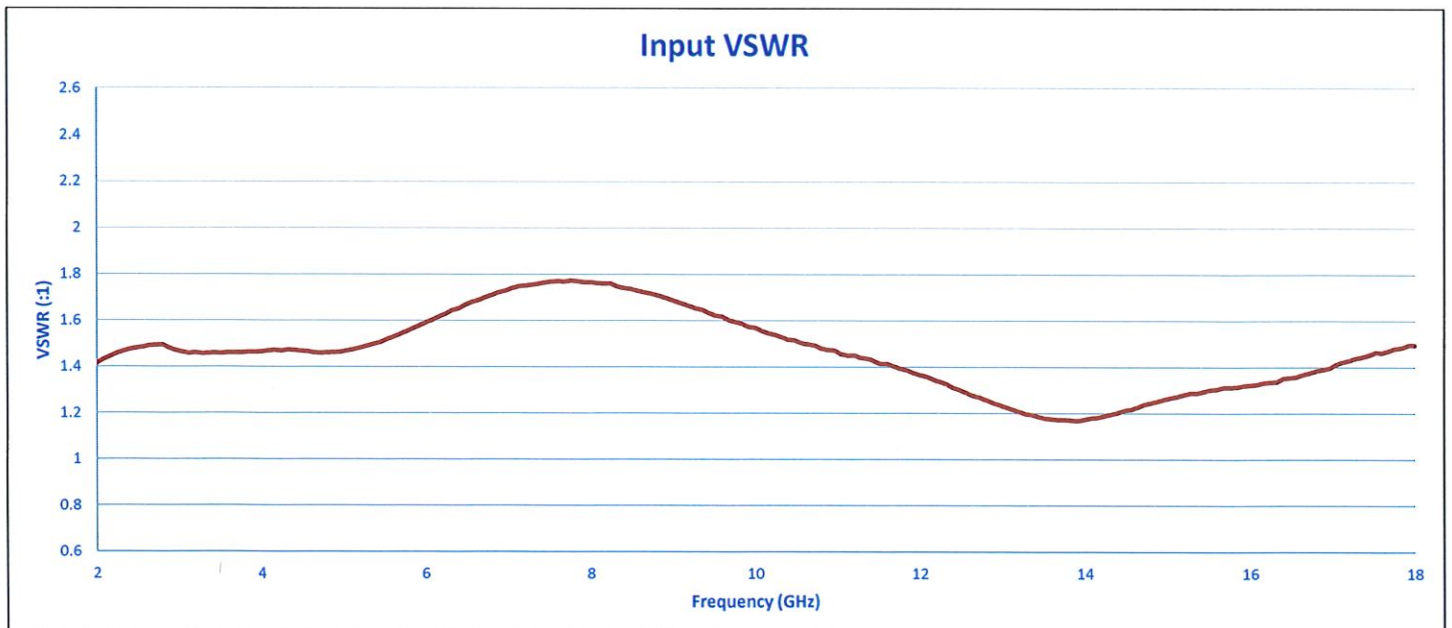
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36393/2218

## PSAT



## INPUT VSWR

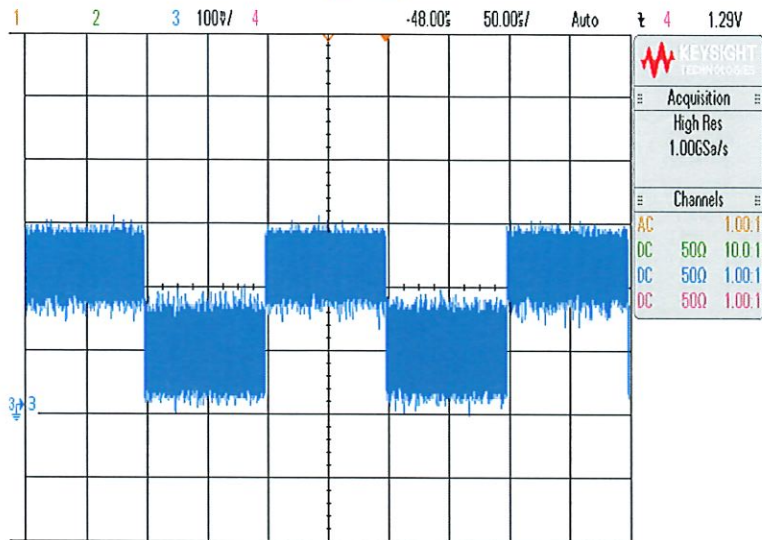




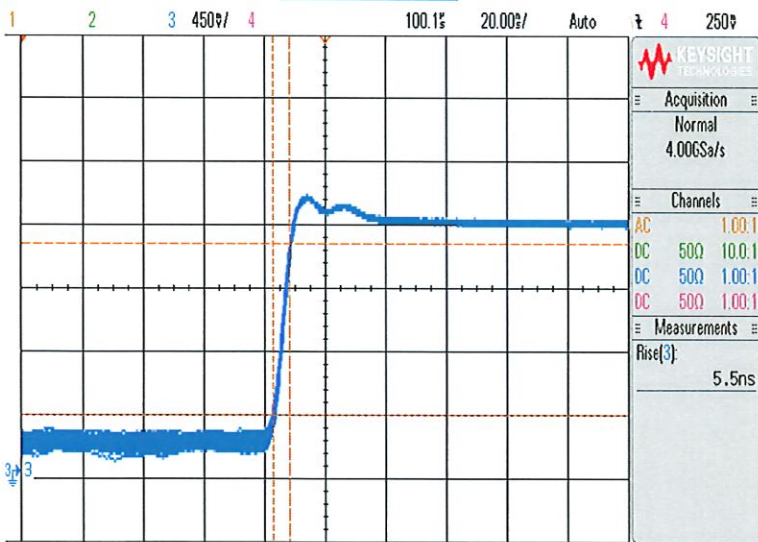
# SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL36393/2218

## TSS



## Rise Time



## Fall Time

