



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

PL38188/2243

Customer: _____ Tested By: RCombs
 SO No: _____ Temperature: +25° C
 Model No: SDLVA-6G18G-CD-2-OPT218 Date: 10/25/2022
 Serial No: PL38188/2243 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	±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	12.92 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)	±1.7 dB See Plots		
10	Pulse Range:	30 ns to CW	Pass		
11	Rise Time:	10 ns (6 ns Typical)	6.5 ns		
12	Recovery Time:	60 ns Typical	48.3 ns		
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+12V @ 270 mA -12V @ 93 mA		PMI QA2

QA/QC Approval: PMI QA2 Date: 10/27/2022



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

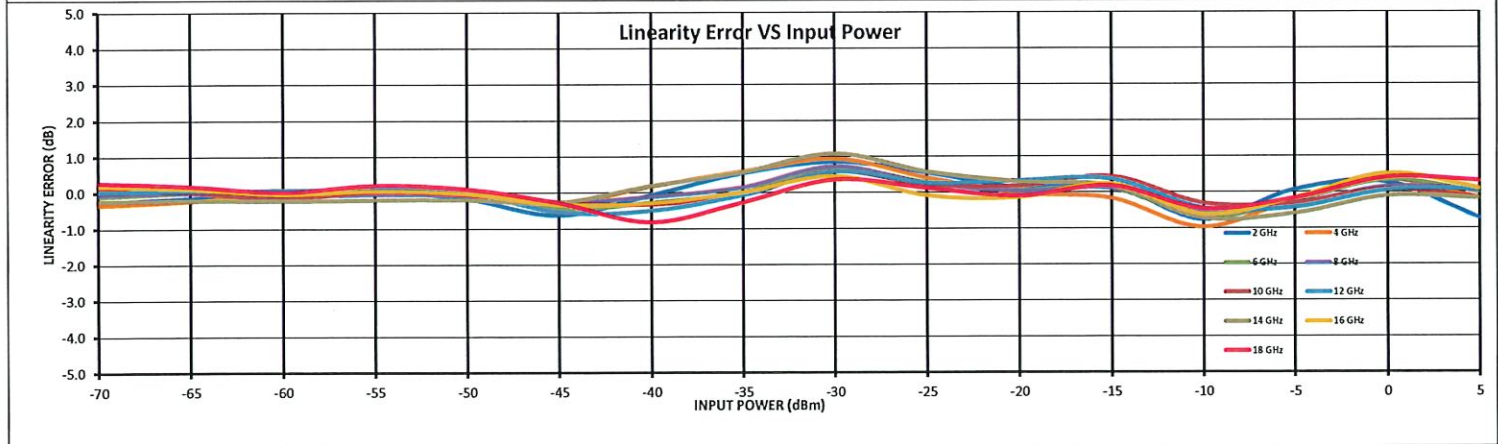
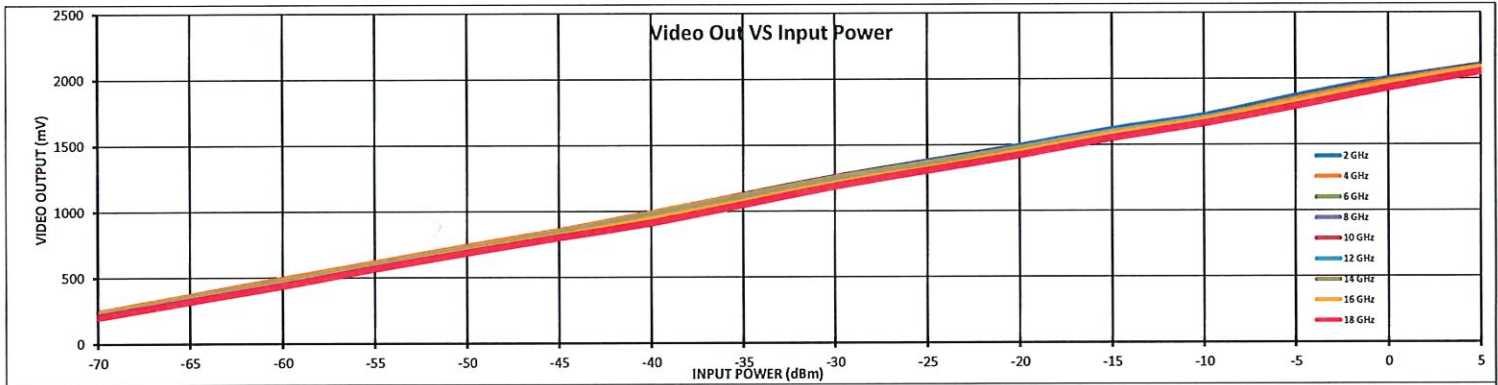
PL38188/2243

Log Transfer Over Frequency +25°C



Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL38188/2243
Date: 10/25/2022
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)	1993																Measured Value (mV)
	SLOPE (mV/dB)	25.2																Error (mV)
	LIN. ERR. (dB)	0.9																LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1973																Measured Value (mV)
	SLOPE (mV/dB)	24.7																Error (mV)
	LIN. ERR. (dB)	1.0																LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1961																Measured Value (mV)
	SLOPE (mV/dB)	24.7																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1950																Measured Value (mV)
	SLOPE (mV/dB)	24.7																Error (mV)
	LIN. ERR. (dB)	0.7																LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1948																Measured Value (mV)
	SLOPE (mV/dB)	25.0																Error (mV)
	LIN. ERR. (dB)	0.6																LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1952																Measured Value (mV)
	SLOPE (mV/dB)	24.7																Error (mV)
	LIN. ERR. (dB)	0.6																LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1962																Measured Value (mV)
	SLOPE (mV/dB)	24.8																Error (mV)
	LIN. ERR. (dB)	1.1																LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1958																Measured Value (mV)
	SLOPE (mV/dB)	25.0																Error (mV)
	LIN. ERR. (dB)	0.6																LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1919																Measured Value (mV)
	SLOPE (mV/dB)	24.7																Error (mV)
	LIN. ERR. (dB)	0.8																LINEARITY ERROR (dB)
Avg. Slope: 24.8 mV/dB		0.8	0.9	1	0.9	1	1.1	1.6	1.6	1.4	1.6	1.4	1.3	1.2	1.6	1.4	1	Flatness dB: ±1.6 dB





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

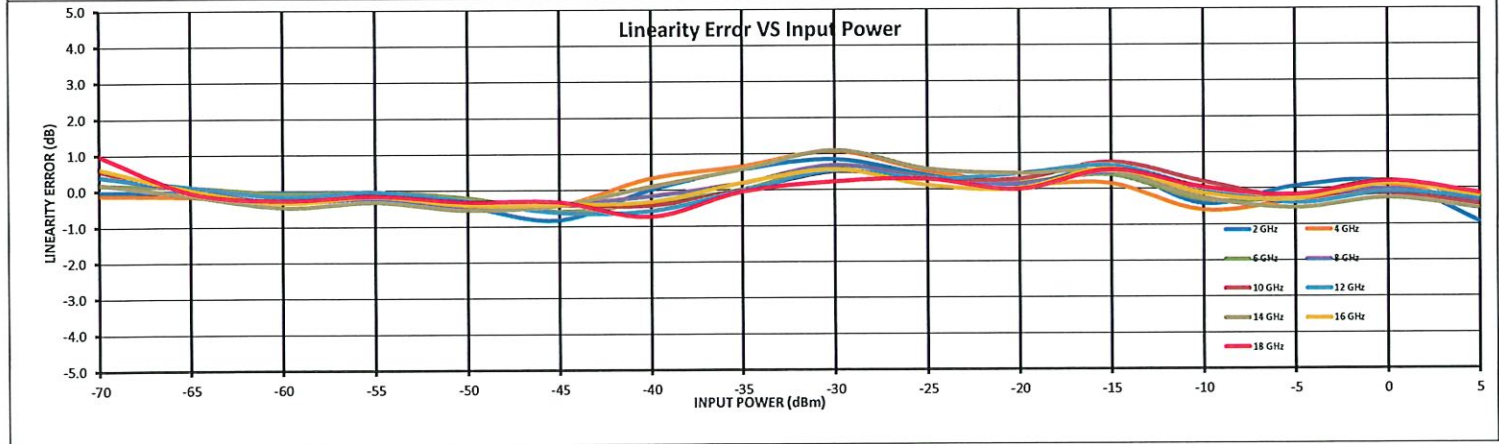
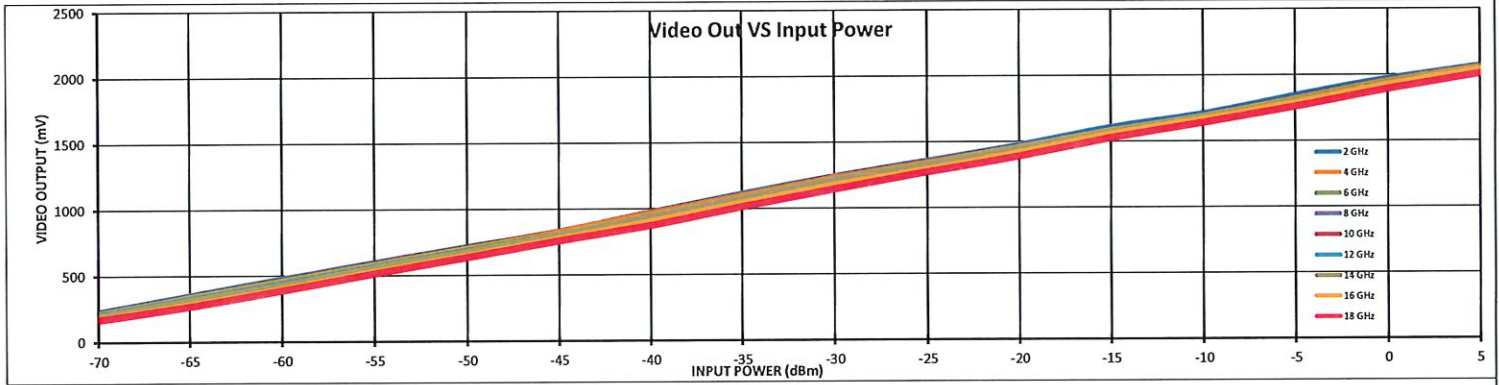
PL38188/2243

Log Transfer Over Frequency +85°C



Model: SDLVA-6G18G-CD-2-OPT218
 Serial No: PL38188/2243
 Date: 10/25/2022
 Tested By: RCombs
 Test Temp: +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)	Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)
2 GHz	1970	24.8	0.9	232	356	480	603	718	833	978	1116	1246	1360	1477	1611	1711	1848	1974	2071				
				-1	0	-1	-2	-11	-21	0	14	21	10	3	13	-10	2	4	-23				
				-0.03	-0.02	-0.03	-0.07	-0.44	-0.83	0.02	0.57	0.85	0.41	0.13	0.53	-0.41	0.07	0.17	-0.92				
4 GHz	1953	24.7	1.1	222	344	465	589	710	831	973	1105	1238	1348	1463	1586	1691	1821	1955	2062				
				-3	-4	-6	-5	-8	-11	8	16	26	13	4	4	-15	-8	3	-14				
				-0.12	-0.15	-0.26	-0.22	-0.32	-0.43	0.32	0.66	1.07	0.52	0.15	0.14	-0.61	-0.32	0.11	-0.55				
6 GHz	1941	25.0	0.7	216	338	457	581	701	815	944	1076	1216	1332	1451	1580	1686	1811	1946	2056				
				4	3	-2	-1	-5	-14	-8	0	16	8	5	10	-8	-6	5	-8				
				0.17	0.11	-0.06	-0.03	-0.20	-0.58	-0.33	0.01	0.66	0.34	0.19	0.39	-0.31	-0.24	0.22	-0.33				
8 GHz	1933	25.0	0.7	193	309	425	553	672	798	929	1063	1200	1316	1437	1569	1681	1801	1933	2048				
				10	1	-8	-5	-11	-10	-4	5	17	8	4	11	-1	-7	0	-10				
				0.41	0.04	-0.31	-0.21	-0.45	-0.39	-0.16	0.19	0.69	0.33	0.15	0.46	-0.06	-0.28	-0.01	-0.40				
10 GHz	1927	25.1	0.7	186	298	415	545	664	789	913	1049	1188	1308	1433	1569	1681	1794	1923	2041				
				14	0	-8	-3	-10	-10	-11	0	13	8	7	19	5	-7	-4	-12				
				0.56	0.02	-0.34	-0.13	-0.39	-0.41	-0.43	-0.01	0.51	0.30	0.28	0.74	0.19	-0.29	-0.14	-0.46				
12 GHz	1933	24.9	0.6	201	319	436	564	682	798	923	1061	1200	1318	1446	1576	1684	1798	1930	2050				
				10	3	-4	-1	-7	-15	-14	-1	13	7	11	16	0	-10	-2	-7				
				0.39	0.12	-0.15	-0.02	-0.29	-0.62	-0.57	-0.02	0.53	0.30	0.44	0.65	0.01	-0.40	-0.10	-0.26				
14 GHz	1940	25.0	1.1	197	313	430	558	678	806	944	1080	1218	1330	1452	1578	1684	1802	1934	2051				
				5	-3	-12	-8	-14	-10	3	14	27	14	11	12	-6	-13	-7	-14				
				0.20	-0.12	-0.46	-0.32	-0.55	-0.41	0.10	0.57	1.10	0.57	0.44	0.48	-0.25	-0.54	-0.26	-0.56				
16 GHz	1930	25.2	0.6	184	295	412	542	662	788	916	1054	1190	1304	1427	1567	1675	1797	1933	2051				
				16	1	-8	-4	-10	-10	-8	5	14	3	0	14	-3	-8	3	-5				
				0.62	0.03	-0.33	-0.16	-0.41	-0.40	-0.32	0.20	0.57	0.12	0.02	0.56	-0.13	-0.30	0.12	-0.20				
18 GHz	1887	24.9	1.0	169	268	387	514	634	759	873	1014	1146	1272	1389	1527	1639	1758	1892	2008				
				24	-1	-7	-4	-8	-8	-18	-1	6	7	0	13	1	-5	5	-3				
				0.98	-0.05	-0.27	-0.15	-0.33	-0.33	-0.74	-0.05	0.23	0.29	-0.01	0.53	0.03	-0.18	0.20	-0.14				
Avg. Slope: 24.9 mV/dB				1.3	1.8	1.9	1.8	1.7	1.5	2.1	2	2	1.8	1.8	1.7	1.5	1.8	1.7	1.3	Flatness dB: -12.1 dB			





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

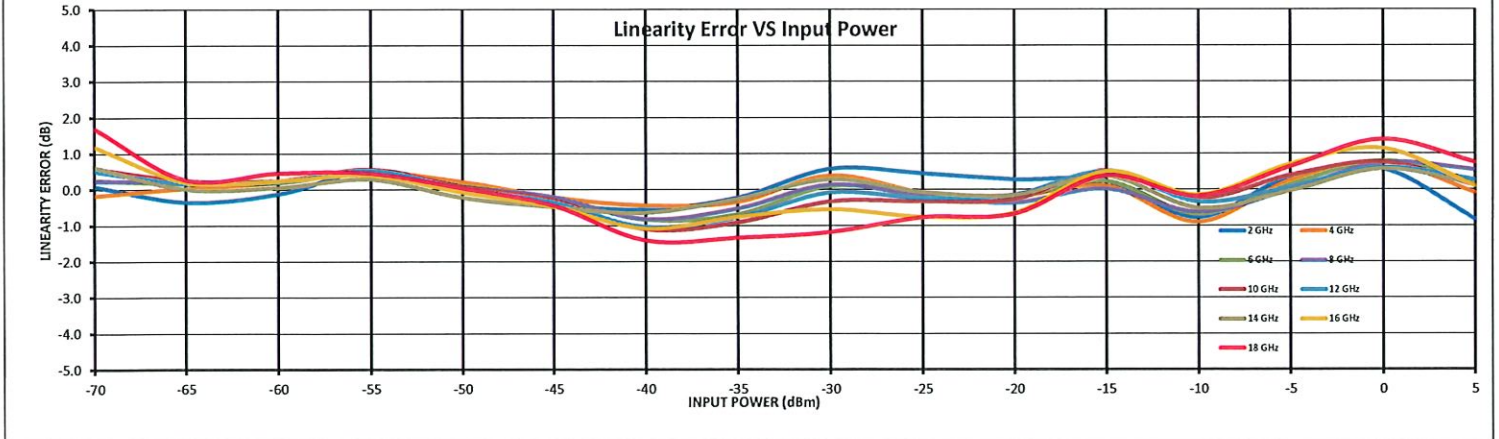
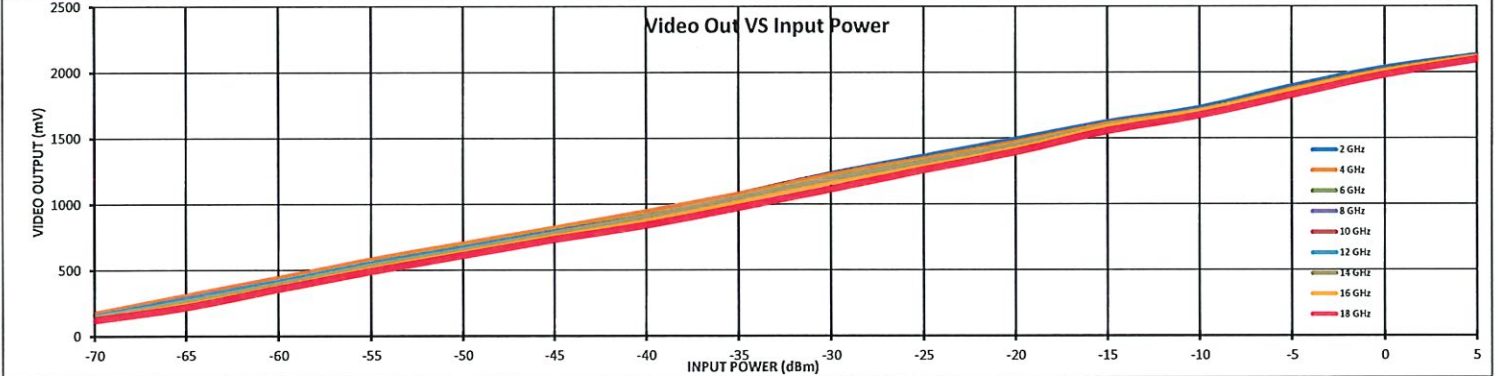
PL38188/2243

Log Transfer Over Frequency -40°C



Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL38188/2243
Date: 10/25/2022
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	2019	26.8	0.8	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	147	269	409	561	682	804	933	1076	1231	1361	1491	1624	1731	1895	2034	2130	2019	-2	-0.83
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				0.10	-0.34	-0.12	0.54	0.08	-0.39	-0.55	-0.22	0.58	0.45	0.28	0.24	-0.77	0.36	0.59	-0.83			
4 GHz	1993	26.0	0.9	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	170	305	440	577	700	819	943	1075	1224	1341	1468	1606	1710	1870	2013	2121	1993	-2	-0.09
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				-0.17	0.03	0.20	0.49	0.22	-0.21	-0.44	-0.35	0.39	-0.09	-0.20	0.10	-0.91	0.76	0.77	-0.09			
6 GHz	1977	26.1	0.8	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	156	284	415	554	674	796	910	1045	1196	1321	1449	1591	1698	1850	1997	2113	1977	14	0.22
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				0.26	0.17	0.20	0.50	0.11	-0.22	-0.83	-0.68	0.10	-0.11	-0.20	0.23	-0.68	0.14	0.80	0.22			
8 GHz	1959	25.8	0.8	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	157	286	416	551	670	792	905	1041	1188	1308	1433	1572	1684	1830	1978	2102	1959	14	0.65
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				0.24	0.23	0.24	0.47	0.08	-0.20	-0.81	-0.53	0.14	-0.18	-0.37	0.02	-0.63	0.00	0.74	0.55			
10 GHz	1963	26.2	1.1	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	148	270	400	539	658	779	888	1024	1170	1301	1433	1585	1695	1843	1993	2097	1963	3	0.11
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				0.59	0.24	0.25	0.55	0.09	-0.29	-1.10	-0.92	-0.34	-0.33	-0.28	0.52	-0.24	0.39	0.76	0.11			
12 GHz	1966	26.2	1.0	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	147	269	401	540	658	779	892	1030	1178	1305	1438	1586	1695	1837	1982	2103	1966	7	0.27
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				0.52	0.17	0.23	0.53	0.03	-0.35	-1.03	-0.76	-0.08	-0.24	-0.15	0.50	-0.34	0.08	0.62	0.27			
14 GHz	1976	26.5	0.6	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	140	256	390	528	647	772	900	1043	1189	1312	1442	1589	1697	1842	1991	2112	1976	4	0.15
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				0.62	0.01	0.06	0.29	-0.22	-0.48	-0.64	-0.25	0.29	-0.07	-0.16	0.38	-0.51	-0.04	0.58	0.15			
16 GHz	1980	26.8	1.2	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	133	241	376	514	636	759	877	1020	1160	1288	1425	1591	1707	1865	2011	2117	1980	3	0.09
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				1.19	0.21	0.24	0.40	-0.08	-0.46	-1.08	-0.76	-0.55	-0.76	-0.66	0.51	-0.15	0.71	1.14	0.09			
18 GHz	1946	26.7	1.699	-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	122	218	356	489	612	733	840	975	1113	1257	1393	1555	1674	1829	1983	2099	1946	20	0.75
																				Measured Value (mV)	ERROR (mV)	LINEARITY ERROR (dB)																
																				1.70	0.26	0.45	0.45	0.04	-0.44	-1.41	-1.34	-1.19	-0.78	-0.69	0.38	-0.18	0.63	1.39	0.75			
Avg. Slope: 26.3 mV/dB																				Flatness dB: ±2.2 dB																		

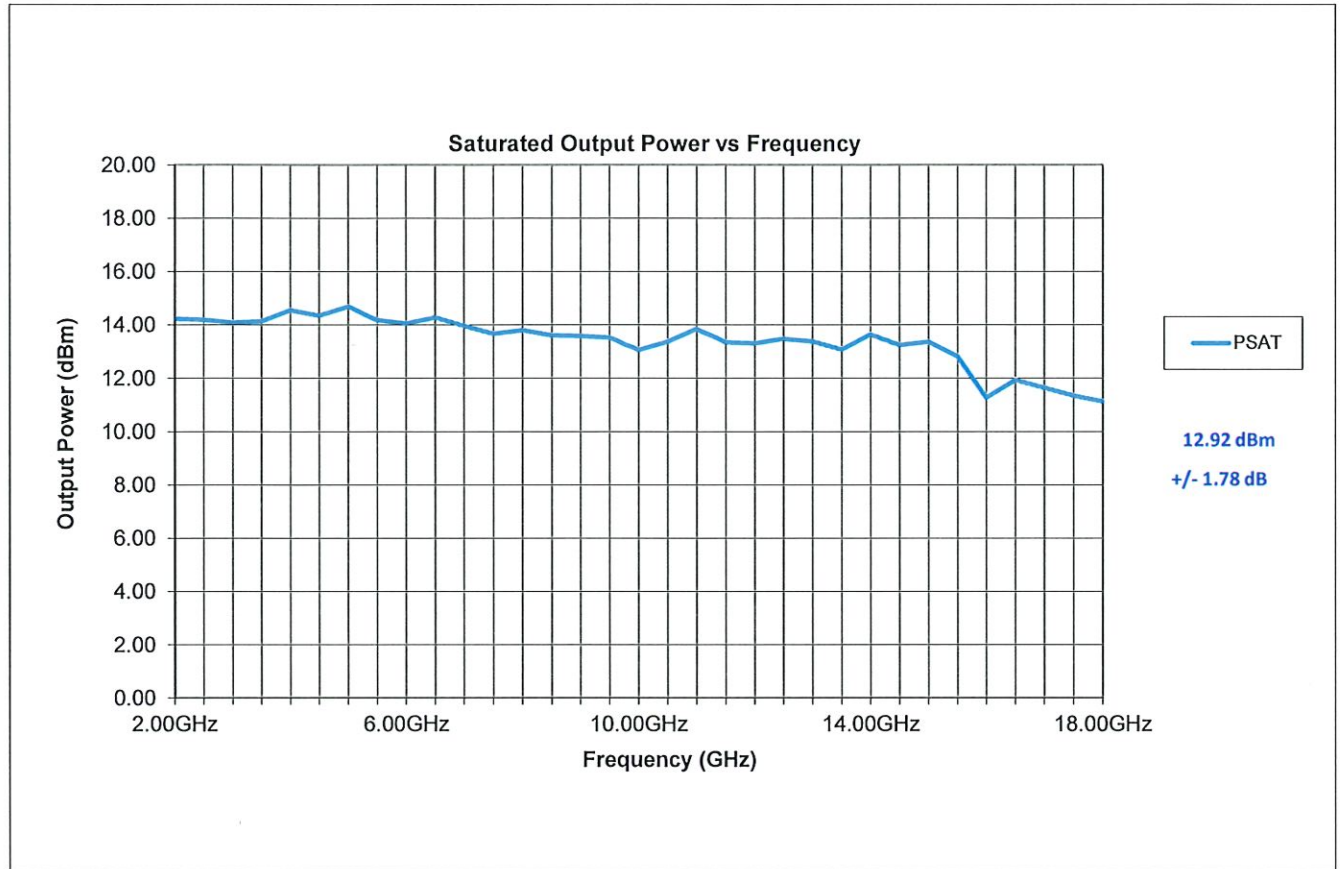




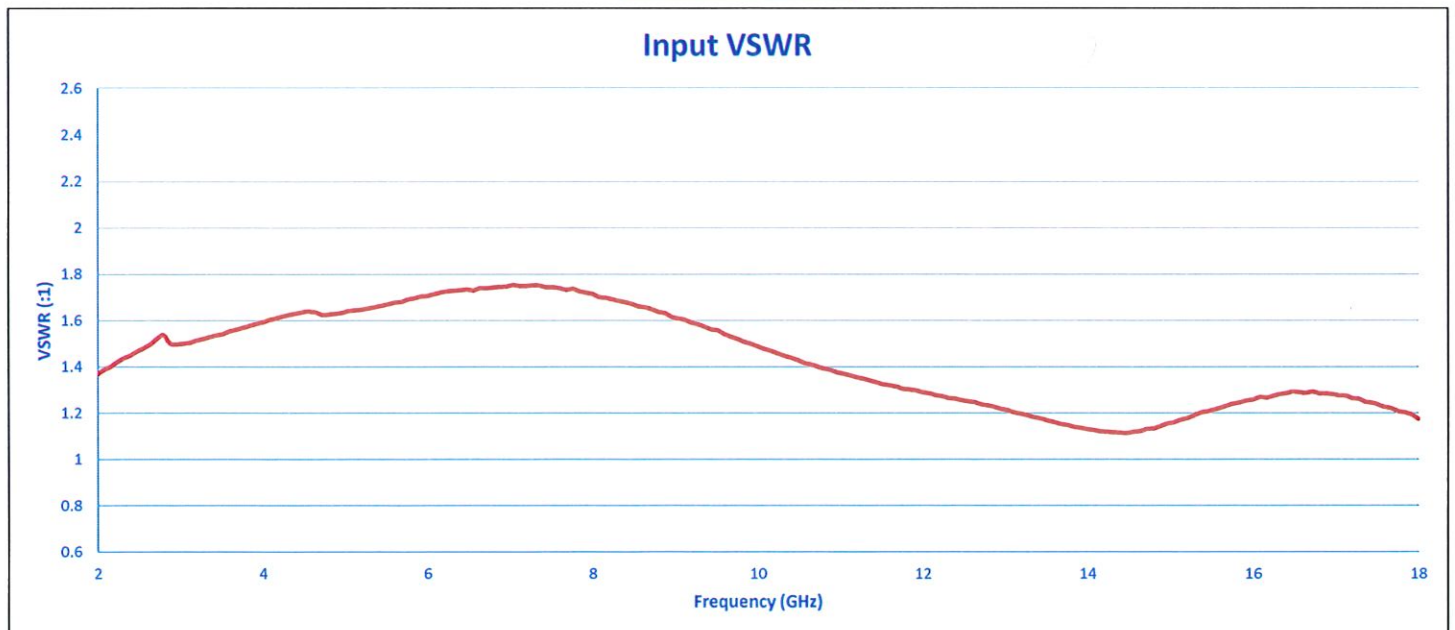
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL38188/2243

PSAT



INPUT VSWR

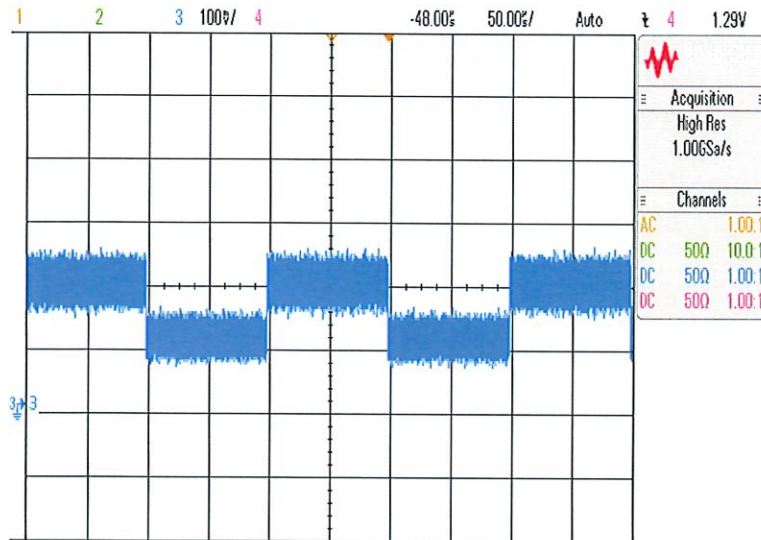




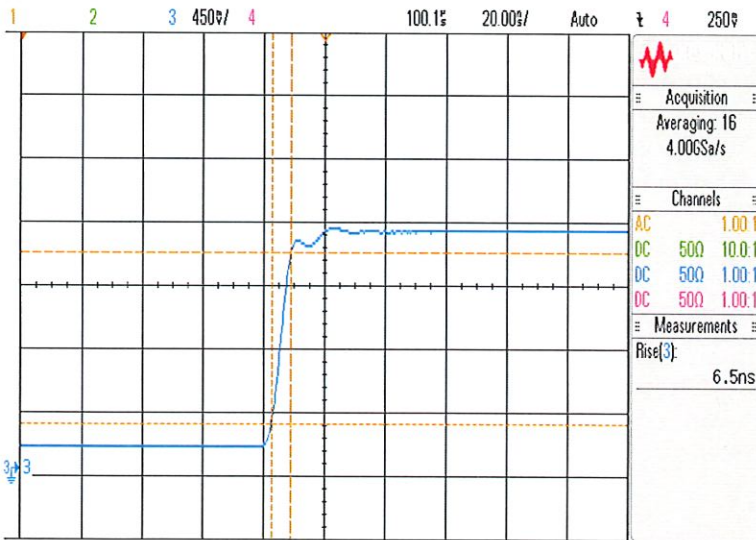
SUMMARY TEST DATA ON SDLVA-6G18G-CD-2-OPT218

PL38188/2243

TSS



Rise Time



Fall Time

