



SUMMARY TEST DATA
ON
SDLVA-8G18G-40-5-SFF

PL28819/2018

CUSTOMER:
SO:
MODEL NO: SDLVA-8G18G-40-5-SFF
SERIAL NO: PL28819/2018

TESTED BY: H. Gonzales
TEMPERATURE: +25°C, -54°C, +95°C
DATE: Tuesday, April 28, 2020
DRAWING NO: 27615839 **REV:** A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC	
1	Frequency Range	8 to 18 GHz	8 to 18 GHz	PMI QA1	
2	Frequency Flatness	±2.0 dB	±1.6 dB (See Plots)		
3	Log Linearity Over Temp.	±1.0 dB (P _{in} = -30dBm @ -54°C to +85°C)	± 0.23dB (See Plots)		
4	Logging Range	-40 to +0 dBm	-40 to +0 dBm (See Plots)		
5	Input VSWR	2.5:1 Max.	2.19:1 (See Plot)		
6	Max. RF Input	+10 dBm CW (Survival)	Pass (See Typical Characteristics)		
7	Log Video Output Voltage	10mV to 2.25V	28mV to 1.87V (See Plots)		
8	Log Video Output Slope	50mV/dB ±6.0mV/dB Max.	45.80mV/dB (See Plots)		
9	Log Video Output Rise Time	25ns Max. (P _{in} = -20dBm @ 10% to 90%)	8.80ns (See Plots)		
10	Log Video Output Fall Time	30ns Max. (P _{in} = -20dBm @ 90% to 10%)	16.10ns (See Plot)		
11	Log Video Recovery Time	40ns Max. (P _{in} = -20dBm @ 90% to 10%)	36.36ns (see Plot)		
12	Operating Voltage	+5V ±5% (Max. Ripple 100 mV pk-pk, 20 MHz BW)	Pass		
13	Operating Current	130 mA Max.	130mA @ 5 Volts		PMI QA1

QA/QC Approval: *[Signature]* PMI QA1 Date: 4/29/20



SUMMARY TEST DATA ON SDLVA-8G18G-40-5-SFF +25°C

PL28819/2018

LOG TRANSFER VS FREQUENCY
MODEL: SDLVA-8G18G-40-5-SFF
TESTED BY: H. Gonzales
SERIAL No. PL28819/2018
Temp: 25°C

OPTION :

Tuesday, April 28, 2020
9:51 AM

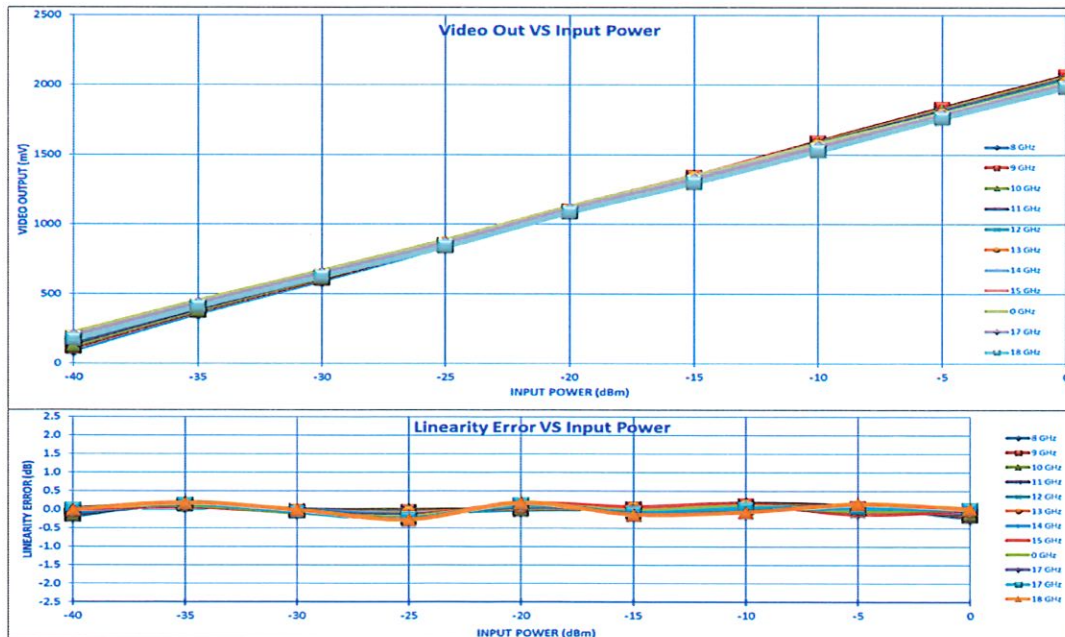


Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
8 GHz	2076	49.3	96	361	597	841	1092	1339	1592	1834	2066	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
9 GHz	2072	48.8	112	371	606	850	1097	1342	1591	1831	2063	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
10 GHz	2059	48.2	126	380	614	855	1086	1339	1584	1819	2053	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
11 GHz	2045	47.4	143	393	623	859	1097	1337	1576	1807	2041	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
12 GHz	2029	46.6	161	403	630	860	1098	1332	1567	1794	2028	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
13 GHz	2018	46.1	173	411	635	862	1098	1329	1562	1786	2015	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
14 GHz	2006	45.6	180	416	638	860	1098	1325	1556	1775	2004	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
15 GHz	2019	45	217	446	664	885	1125	1347	1575	1788	2018	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
0 GHz	2019	45	220	449	664	884	1124	1342	1573	1782	2019	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
17 GHz	2004	45.2	197	429	645	863	1107	1322	1554	1780	2005	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)
18 GHz	1979	45.2	171	405	622	837	1083	1295	1524	1759	1979	Measured Value (mV) Error (mV) LINEARITY ERROR (dB)

Average Slope	46.6
Flatness ± dB	
Average Offset	163.2

1.3	0.9	0.7	0.5	0.5	0.6	0.7	0.8	0.9
96	361	597	837	1083	1295	1524	1759	1979
220	449	664	885	1125	1347	1592	1834	2066





SUMMARY TEST DATA ON SDLVA-8G18G-40-5-SFF -54°C

PL28819/2018

LOG TRANSFER VS FREQUENCY
 MODEL: SDLVA-8G18G-40-5-SFF OPTION :
 TESTED BY: H. Gonzales Tuesday, April 28, 2020
 SERIAL No. PL28819/2018 8:52 AM
 Temp: -54°C

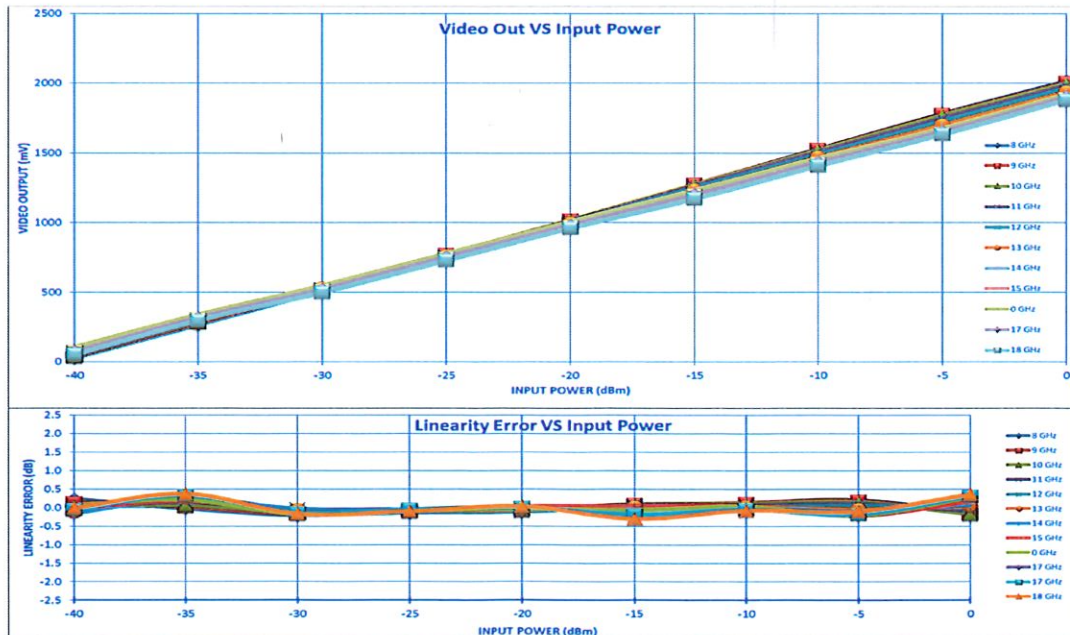


Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
8 GHz	2023	50.2	28	266	508	762	1014	1273	1527	1782	2016	Measured Value (mV)
			12	-1	-10	-7	-5	2	6	10	-7	Error (mV)
			0.23	-0.02	-0.20	-0.13	-0.11	0.05	0.12	0.20	-0.14	LINEARITY ERROR (dB)
9 GHz	2013	49.7	33	276	514	767	1016	1272	1523	1774	2005	Measured Value (mV)
			7	1	-9	-5	-4	4	6	9	-9	Error (mV)
			0.14	0.02	-0.18	-0.10	-0.08	0.08	0.12	0.18	-0.18	LINEARITY ERROR (dB)
10 GHz	2004	49.1	39	287	523	771	1018	1271	1517	1765	1995	Measured Value (mV)
			2	3	-6	-3	-3	5	5	7	-9	Error (mV)
			0.03	0.07	-0.13	-0.07	-0.06	0.09	0.10	0.14	-0.18	LINEARITY ERROR (dB)
11 GHz	1986	48.6	43	293	525	766	1010	1261	1503	1747	1981	Measured Value (mV)
			0	7	-4	-5	-4	4	3	4	-4	Error (mV)
			-0.01	0.14	-0.08	-0.11	-0.09	0.08	0.07	0.09	-0.09	LINEARITY ERROR (dB)
12 GHz	1961	47.7	48	300	527	763	1001	1246	1484	1724	1961	Measured Value (mV)
			-3	10	-1	-5	-3	1	1	2	0	Error (mV)
			-0.07	0.20	-0.03	-0.09	-0.11	0.03	0.01	0.04	0.01	LINEARITY ERROR (dB)
13 GHz	1936	47	51	304	525	769	994	1233	1468	1699	1936	Measured Value (mV)
			-6	12	-2	-3	-3	1	1	-2	2	Error (mV)
			-0.12	0.25	-0.05	-0.06	-0.06	0.02	0.03	-0.04	0.03	LINEARITY ERROR (dB)
14 GHz	1910	46.2	56	308	523	763	987	1217	1449	1675	1914	Measured Value (mV)
			-7	12	-2	-3	0	0	0	-5	4	Error (mV)
			-0.15	0.28	-0.04	-0.06	0.01	0.00	0.01	-0.10	0.08	LINEARITY ERROR (dB)
15 GHz	1912	45.3	100	335	547	777	1008	1235	1481	1676	1919	Measured Value (mV)
			-1	8	-6	-3	1	2	2	-10	7	Error (mV)
			-0.02	0.18	-0.14	-0.07	0.03	0.04	0.04	-0.22	0.16	LINEARITY ERROR (dB)
0 GHz	1908	45.1	106	339	546	777	1004	1228	1458	1673	1921	Measured Value (mV)
			3	9	-8	-3	-2	-3	1	-10	12	Error (mV)
			0.06	0.21	-0.18	-0.06	-0.04	-0.07	0.02	-0.21	0.28	LINEARITY ERROR (dB)
17 GHz	1887	45.3	71	315	520	762	981	1189	1431	1652	1901	Measured Value (mV)
			-2	15	-7	-2	0	-8	-2	-8	14	Error (mV)
			-0.05	0.33	-0.15	-0.04	0.01	-0.18	-0.05	-0.18	0.32	LINEARITY ERROR (dB)
18 GHz	1862	45.3	51	294	496	726	958	1169	1406	1631	1878	Measured Value (mV)
			0	17	-8	-4	2	-14	-4	-4	16	Error (mV)
			-0.01	0.37	-0.17	-0.10	0.03	-0.31	-0.06	-0.10	0.35	LINEARITY ERROR (dB)

Average Slope 47.2
 Flatness ± dB
 Average Offset 57.05

0.8	0.8	0.5	0.5	0.6	1.1	1.3	1.6	1.5
28	266	496	726	958	1169	1406	1631	1878
106	339	547	777	1018	1273	1527	1782	2016





SUMMARY TEST DATA ON SDLVA-8G18G-40-5-SFF +95°C

PL28819/2018

LOG TRANSFER VS FREQUENCY
MODEL: SDLVA-8G18G-40-5-SFF
TESTED BY: H. Gonzales
SERIAL No. PL28819/2018
Temp: 95°C

Tuesday, April 28, 2020
9:53 AM

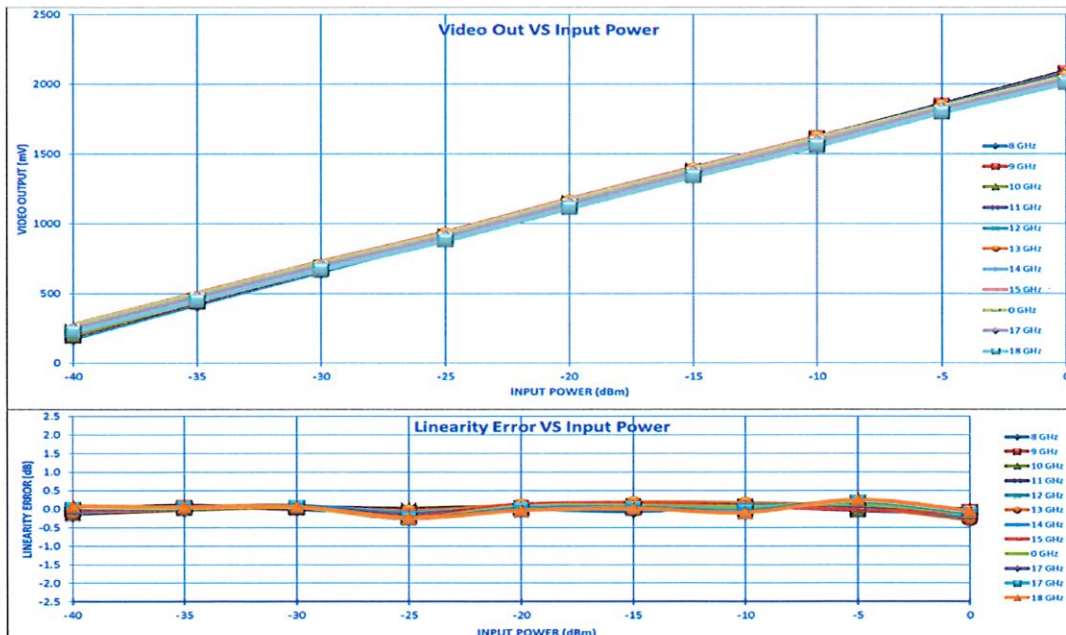


Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)														
8 GHz	2092	47.9	178	422	656	891	1135	1372	1617	1855	2092	0	4	0	-4	0	-3	3	2	-1	-0.01	0.09	-0.01	-0.09	-0.01	-0.06	0.06	0.04	-0.01
9 GHz	2088	47.4	188	431	665	899	1141	1377	1618	1850	2086	-3	3	0	-3	1	1	4	-1	-2	-0.06	0.07	0.00	-0.06	0.02	0.02	0.08	-0.02	-0.05
10 GHz	2084	47	198	439	675	909	1147	1381	1618	1847	2080	-5	1	2	0	4	2	4	-2	-5	-0.12	0.02	0.04	0.01	0.07	0.05	0.08	-0.04	-0.10
11 GHz	2081	46.4	217	457	692	920	1156	1390	1620	1847	2074	-7	1	3	0	4	5	3	-2	-7	-0.15	0.02	0.06	-0.01	0.08	0.11	0.07	-0.04	-0.14
12 GHz	2073	45.9	231	466	699	923	1158	1390	1619	1844	2062	-6	0	3	-2	4	6	5	1	-10	-0.14	0.00	0.07	-0.05	0.08	0.13	0.12	0.02	-0.22
13 GHz	2064	45.5	237	470	701	924	1158	1389	1615	1838	2050	-6	-1	2	-2	5	8	7	2	-13	-0.14	-0.03	0.05	-0.05	0.10	0.17	0.15	0.04	-0.30
14 GHz	2052	45.1	244	474	703	920	1153	1381	1605	1829	2042	-4	0	4	-5	3	5	4	3	-10	-0.10	-0.01	0.08	-0.11	0.07	0.12	0.10	0.07	-0.22
15 GHz	2063	44.7	275	500	726	938	1175	1400	1620	1839	2058	-2	0	2	-9	5	7	3	-1	-6	-0.04	0.00	0.05	-0.19	0.11	0.15	0.07	-0.02	-0.13
0 GHz	2052	44.6	270	492	716	926	1163	1387	1608	1835	2046	1	0	2	-11	3	3	2	6	-7	0.03	0.01	0.04	-0.25	0.06	0.07	0.05	0.14	-0.15
17 GHz	2035	44.8	245	469	695	904	1140	1365	1586	1821	2030	2	2	3	-11	1	2	-2	10	-5	0.03	0.04	0.08	-0.26	0.01	0.03	-0.04	0.21	-0.11
18 GHz	2006	44.8	219	442	666	876	1109	1336	1554	1793	2004	3	2	3	-11	-2	1	-4	11	-2	0.07	0.05	0.06	-0.25	-0.04	0.01	-0.10	0.24	-0.06

Average Slope	45.8
Flatness ± dB	
Average Offset	227.5

1.1	0.9	0.8	0.7	0.7	0.7	0.7	0.7	0.7	1
178	422	656	876	1109	1336	1554	1793	2004	
275	500	726	938	1175	1400	1620	1855	2092	

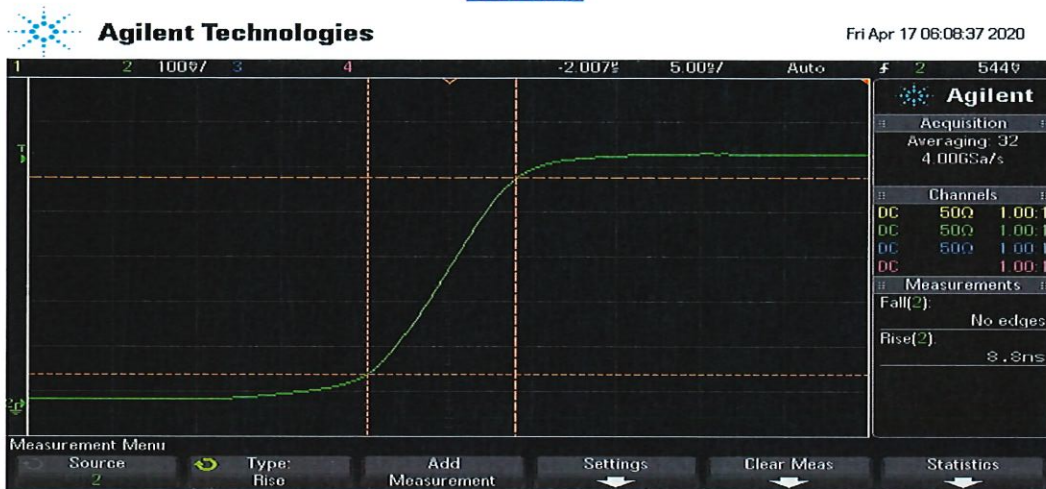




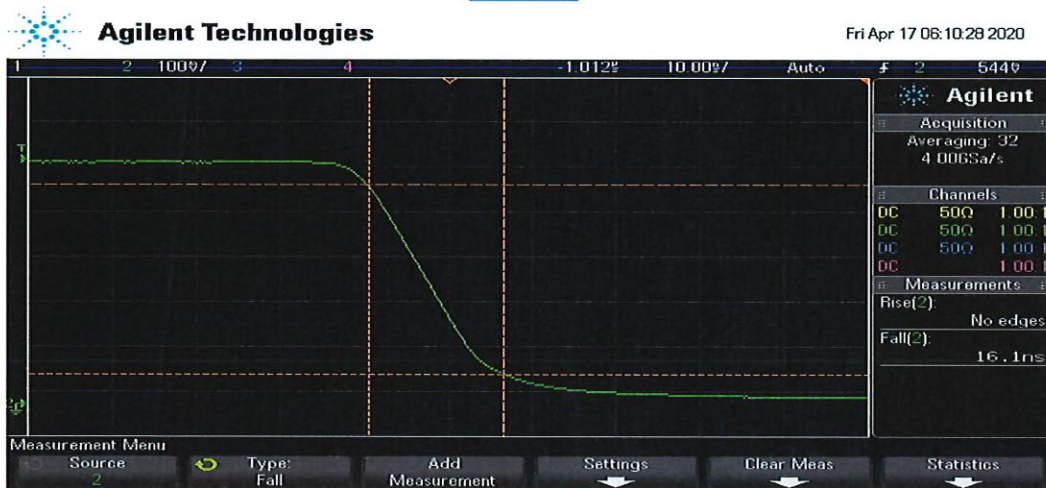
**SUMMARY TEST DATA
ON
SDLVA-8G18G-40-5-SFF**

PL28819/2018

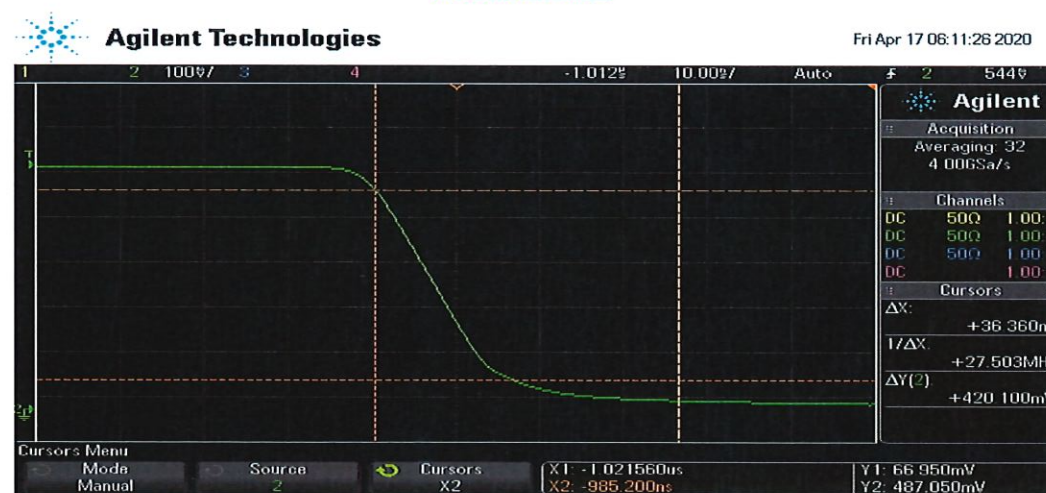
Rise Time



Fall Time



Recovery Time





SUMMARY TEST DATA ON SDLVA-8G18G-40-5-SFF

PL28819/2018

VSWR

