



**SUMMARY TEST DATA  
ON  
SDLVA-1G20G-58-12-SFF**

**PL26767/1945**

Customer: \_\_\_\_\_  
 SO No: \_\_\_\_\_  
 Model No: SDLVA-1G20G-58-12-SFF  
 Serial No: PL26767/1945

Tested By: Simon K. Sign: *SK*  
 QA/QC By: Arthur Z. Sign: *AZ*  
 Temperature: +25°C  
 Date: 11/06/2019  
 Drawing No: 27612160 Rev: A2

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST MEASUREMENT	TEST RESULT	QA QC	
1	Frequency Range	1 GHz – 20 GHz	1 GHz – 20 GHz	Pass	<i>AZ</i> 11-13-19	
2	Frequency Flatness	±2.0 dB Typ	See Plot	± 1.3 dB		
3	Log Linearity	±1.0 dB Typ	See Plot	Pass		
4	Log Linearity Over Temp	±1.0 dB Typ. (@ -55°C to +85°C)	By Design	Pass		
5	Logging Range	-54 to +5 dBm	See Plot	Pass		
6	Input VSWR	3.0:1 Typ	See Plot	3.86:1		
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.75 V		
8	Log Video Output Slope	14 mV / dB Typ	See Plot	14.2 mV		
9	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	See Typical Characteristics	Pass		
10	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	See Typical Characteristics	Pass		
11	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	See Typical Characteristics	Pass		
12	Log Video Propagation Delay	14 ns Typ	See Typical Characteristics	Pass		
13	Power Supply	+12V Typ @ 100mA	93 mA	Pass		<i>AZ</i> 11-13-19

QA/QC Approval: *Arthur Zimmerman* Date: 11-13-19



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**Transfer @ 25C – Data**

**LOG TRANSFER WITH FREQUENCY**  
**MODEL: SDLVA-1G20G-55-12-SFF**  
**TESTED BY: Simon K.**  
**DATE: 11/06/19**  
**SERIAL NO: PL26767**  
**Test Temp: +25C**



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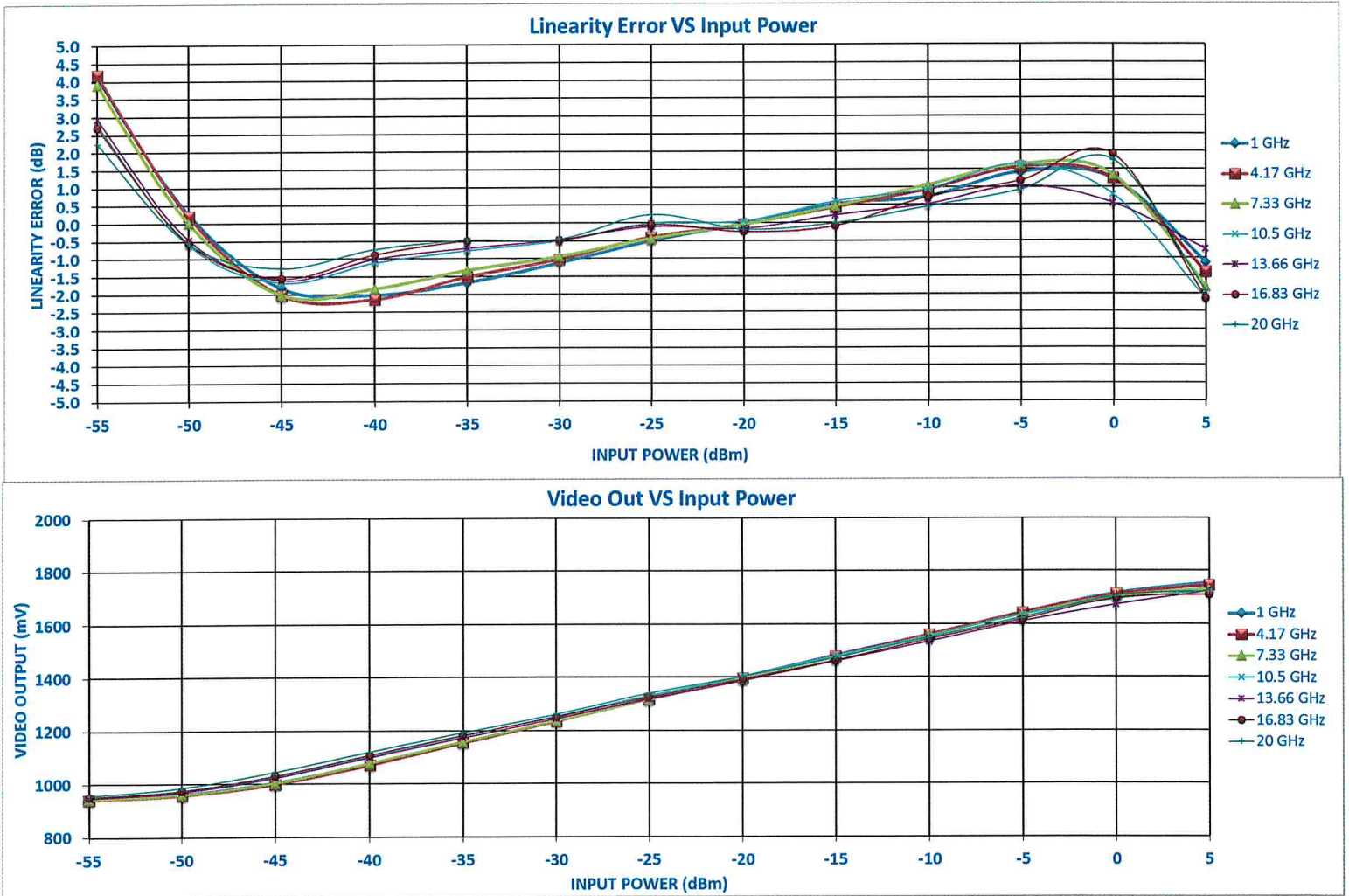
Frequency		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
<b>1 GHz</b>	<b>INTERCEPT (mV)</b>	1696														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>14.8</b>														Error (mV)
		944	961	1004	1075	1154	1236	1319	1400	1482	1559	1643	1714	1753	LINEARITY ERROR (dB)	
		61	4	-27	-30	-25	-17	-7	0	8	11	21	18	-17		
		4.12	0.27	-1.82	-2.02	-1.67	-1.12	-0.50	-0.02	0.53	0.74	1.42	1.23	-1.13		
		x														
<b>4.17 GHz</b>	<b>INTERCEPT (mV)</b>	1693														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>14.8</b>														Error (mV)
		943	958	999	1071	1154	1235	1318	1397	1478	1559	1642	1711	1746	LINEARITY ERROR (dB)	
		62	3	-30	-32	-22	-15	-6	-1	7	14	23	18	-21		
		4.19	0.20	-2.02	-2.14	-1.51	-1.03	-0.40	-0.05	0.44	0.93	1.55	1.23	-1.40		
		x														
<b>7.33 GHz</b>	<b>INTERCEPT (mV)</b>	1685														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>14.5</b>														Error (mV)
		944	960	1003	1078	1158	1236	1316	1394	1474	1555	1636	1704	1731	LINEARITY ERROR (dB)	
		57	0	-29	-27	-19	-14	-6	-1	7	15	24	19	-26		
		3.92	0.02	-2.02	-1.84	-1.33	-0.95	-0.43	-0.05	0.47	1.05	1.64	1.33	-1.81		
		x														
<b>10.5 GHz</b>	<b>INTERCEPT (mV)</b>	1682														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>14.0</b>														Error (mV)
		949	972	1027	1105	1180	1254	1331	1402	1480	1555	1635	1693	1722	LINEARITY ERROR (dB)	
		39	-8	-23	-16	-11	-7	0	1	8	13	23	11	-30		
		2.77	-0.59	-1.67	-1.11	-0.77	-0.50	-0.01	0.05	0.60	0.95	1.65	0.78	-2.15		
		x														
<b>13.66 GHz</b>	<b>INTERCEPT (mV)</b>	1665														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>13.8</b>														Error (mV)
		948	970	1023	1100	1173	1245	1319	1387	1461	1534	1610	1672	1723	LINEARITY ERROR (dB)	
		41	-6	-22	-14	-10	-7	-1	-2	3	7	14	7	-10		
		2.95	-0.45	-1.60	-1.01	-0.71	-0.48	-0.10	-0.16	0.21	0.52	1.04	0.54	-0.76		
		x														
<b>16.83 GHz</b>	<b>INTERCEPT (mV)</b>	1671														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>13.8</b>														Error (mV)
		951	975	1030	1108	1182	1251	1326	1392	1463	1543	1618	1697	1710	LINEARITY ERROR (dB)	
		37	-8	-21	-12	-7	-7	-1	-3	-1	10	16	26	-29		
		2.71	-0.55	-1.55	-0.88	-0.51	-0.49	-0.04	-0.25	-0.09	0.72	1.17	1.91	-2.14		
		x														
<b>20 GHz</b>	<b>INTERCEPT (mV)</b>	1680														Measured Value (mV)
	<b>SLOPE (mV/dB)</b>	<b>13.7</b>														Error (mV)
		956	986	1045	1121	1193	1262	1340	1403	1474	1549	1624	1704	1722	LINEARITY ERROR (dB)	
		31	-8	-17	-10	-7	-6	3	-2	0	6	13	24	-27		
		2.25	-0.56	-1.27	-0.73	-0.48	-0.45	0.23	-0.18	-0.01	0.46	0.92	1.75	-1.94		
		x														
<b>Flatness P-P</b>		1.0	2.0	3.2	3.6	2.8	2.0	1.6	1.2	1.4	1.8	2.4	3.0	3.0		
<b>Slope Avg (mv/dB)</b>		<b>14.2</b>														



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Transfer @ 25C – Plot

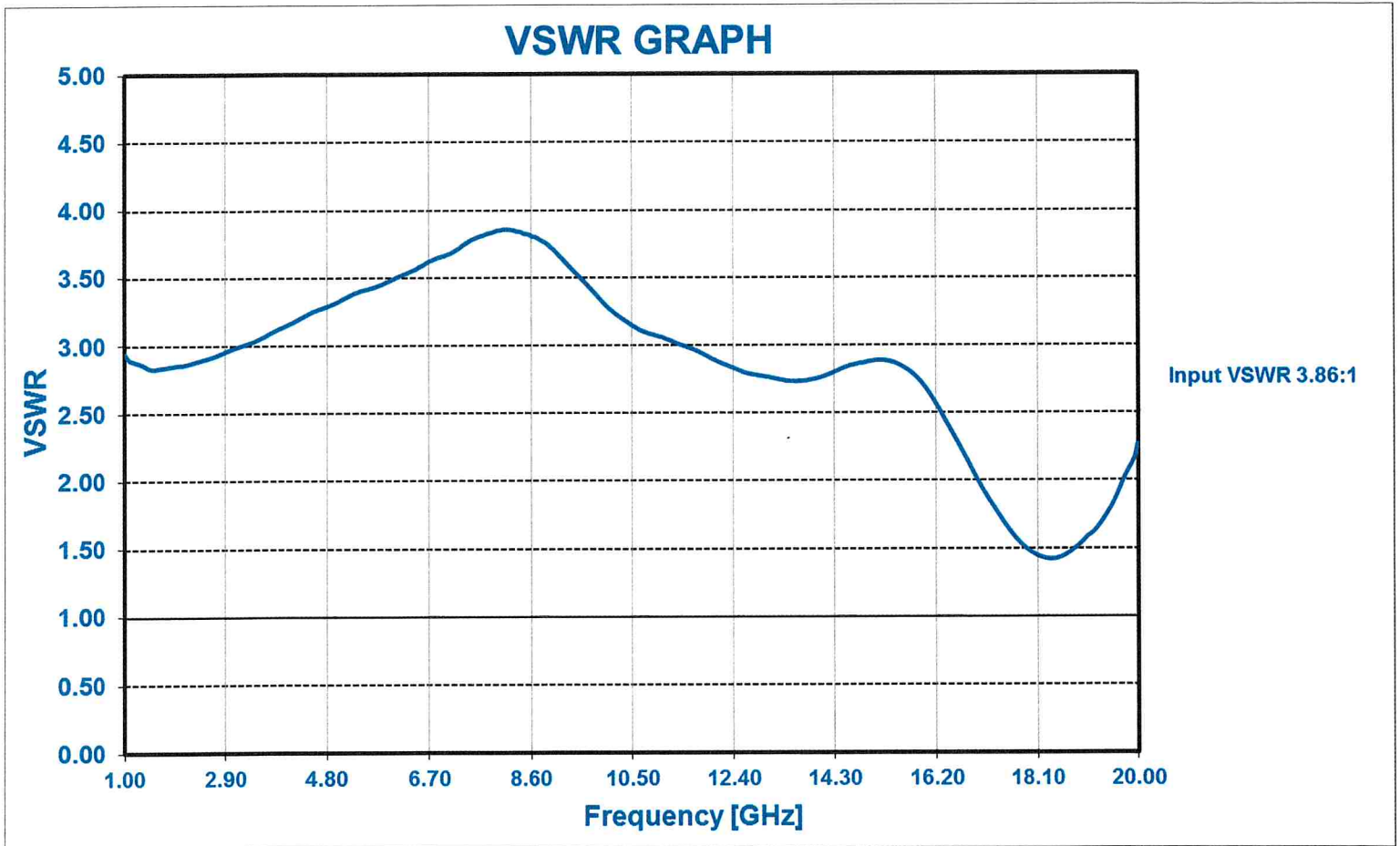




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VSWR

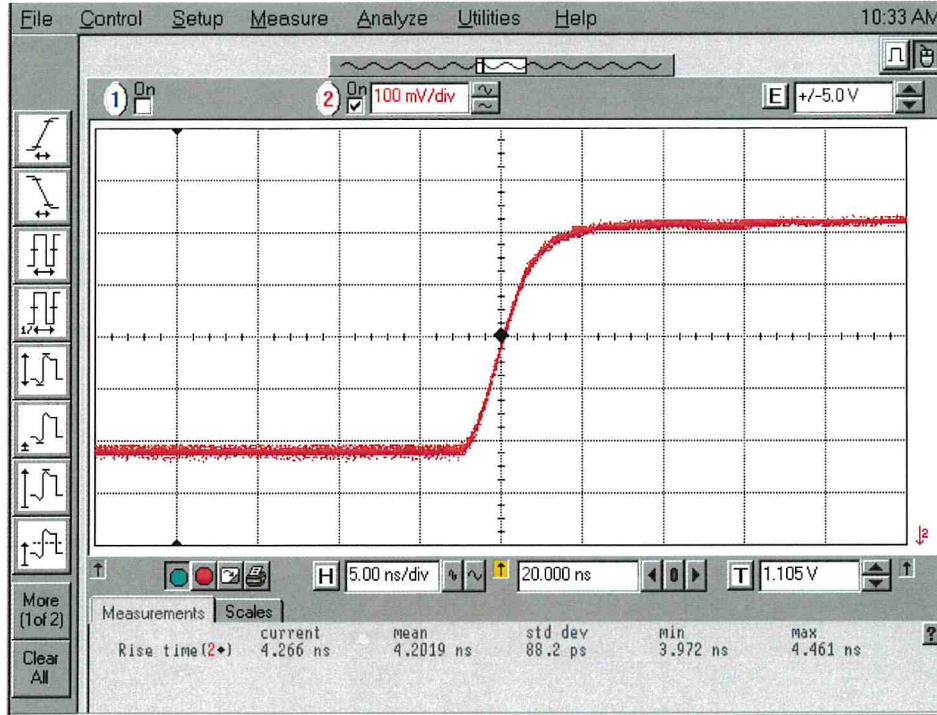




# SUMMARY TEST DATA ON SDLVA-1G20G-58-12-SFF

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## Rise Time



## Fall Time

