



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

PL26765/1945

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL26765/1945

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	± 1.6 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	3.95:1		
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	13.9 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: 11-13-2019



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PL26765/1945

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-58-12-SFF
TESTED BY: Simon K.
DATE: 10/14/2019
SERIAL NO: PL26765
Test Temp: +25C



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 4921 Robert J. Mathews Parkway,
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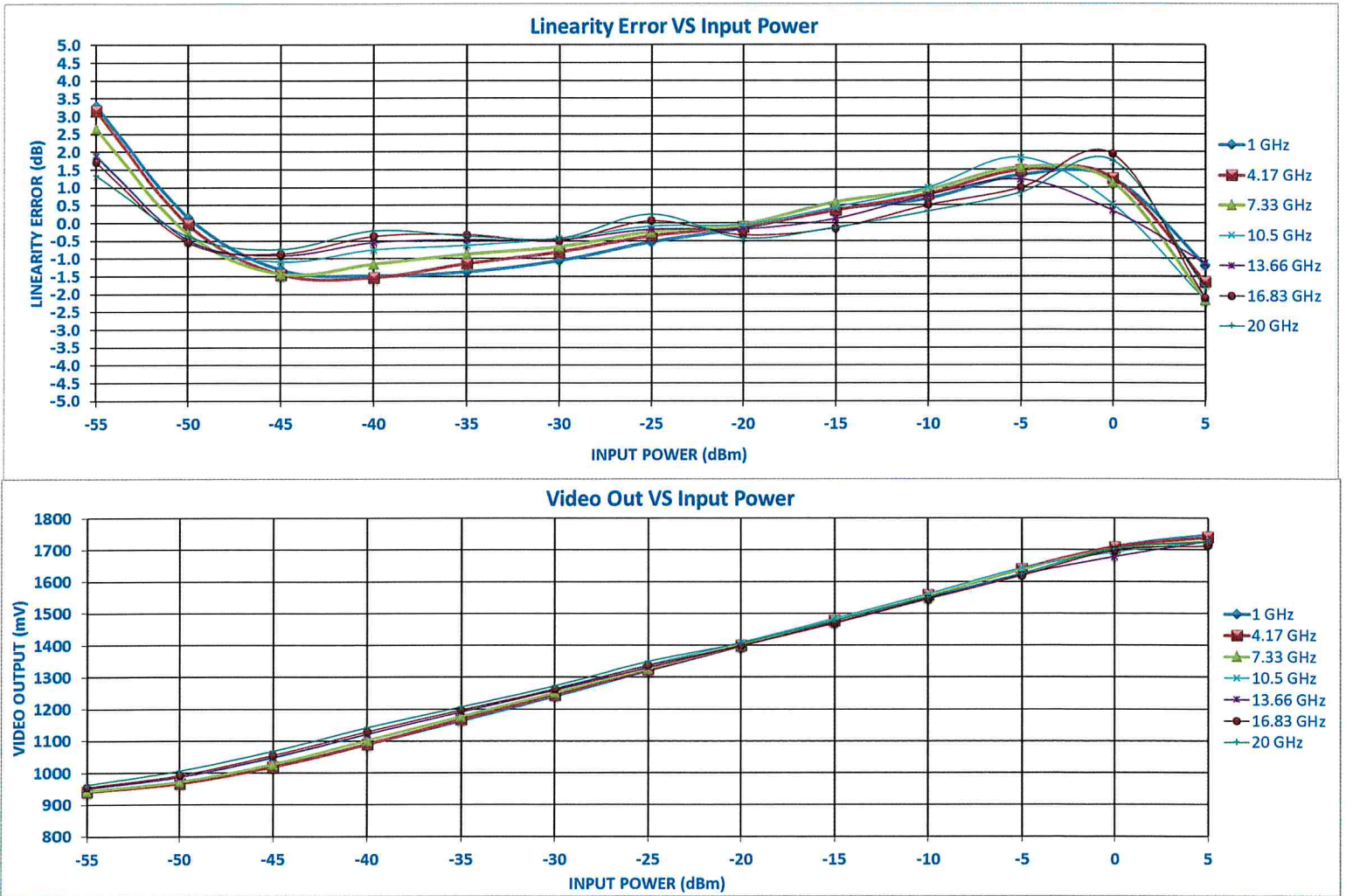
Frequency		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
1 GHz	INTERCEPT (mV)	1691	942	969	1020	1090	1164	1241	1321	1399	1479	1556	1638	1709	1746	Measured Value (mV)
	SLOPE (mV/dB)	14.5	48	2	-19	-21	-20	-15	-8	-2	5	10	20	18	-17	Error (mV)
			3.30	0.16	-1.32	-1.48	-1.37	-1.06	-0.54	-0.15	0.37	0.69	1.35	1.25	-1.20	LINEARITY ERROR (dB)
			×													
4.17 GHz	INTERCEPT (mV)	1691	941	967	1019	1090	1168	1245	1324	1400	1479	1558	1640	1709	1739	Measured Value (mV)
	SLOPE (mV/dB)	14.5	46	-1	-21	-22	-17	-12	-5	-1	5	12	22	18	-24	Error (mV)
			3.17	-0.04	-1.44	-1.53	-1.14	-0.82	-0.36	-0.10	0.36	0.82	1.49	1.26	-1.67	LINEARITY ERROR (dB)
			×													
7.33 GHz	INTERCEPT (mV)	1687	943	972	1027	1102	1177	1251	1328	1402	1482	1558	1638	1703	1727	Measured Value (mV)
	SLOPE (mV/dB)	14.2	38	-4	-20	-16	-12	-9	-4	-1	8	13	22	16	-31	Error (mV)
			2.66	-0.30	-1.43	-1.15	-0.87	-0.67	-0.25	-0.04	0.59	0.94	1.57	1.14	-2.17	LINEARITY ERROR (dB)
			×													
10.5 GHz	INTERCEPT (mV)	1686	950	986	1047	1121	1192	1264	1338	1408	1484	1561	1642	1693	1725	Measured Value (mV)
	SLOPE (mV/dB)	13.9	27	-7	-15	-10	-9	-6	-1	-1	6	14	25	7	-30	Error (mV)
			1.91	-0.49	-1.09	-0.75	-0.63	-0.43	-0.09	-0.04	0.44	0.99	1.84	0.52	-2.17	LINEARITY ERROR (dB)
			×													
13.66 GHz	INTERCEPT (mV)	1673	951	987	1049	1122	1191	1259	1331	1399	1471	1548	1622	1678	1726	Measured Value (mV)
	SLOPE (mV/dB)	13.6	26	-6	-12	-7	-6	-6	-2	-2	2	11	17	5	-15	Error (mV)
			1.88	-0.47	-0.91	-0.54	-0.47	-0.47	-0.18	-0.17	0.12	0.78	1.22	0.34	-1.13	LINEARITY ERROR (dB)
			×													
16.83 GHz	INTERCEPT (mV)	1673	955	992	1055	1129	1197	1262	1337	1399	1469	1545	1619	1699	1712	Measured Value (mV)
	SLOPE (mV/dB)	13.5	23	-7	-12	-5	-4	-7	1	-5	-2	7	13	26	-28	Error (mV)
			1.71	-0.54	-0.87	-0.37	-0.33	-0.50	0.06	-0.34	-0.14	0.50	0.99	1.93	-2.11	LINEARITY ERROR (dB)
			×													
20 GHz	INTERCEPT (mV)	1681	962	1006	1068	1142	1207	1273	1349	1407	1478	1551	1625	1704	1723	Measured Value (mV)
	SLOPE (mV/dB)	13.4	18	-5	-10	-3	-5	-6	3	-6	-2	4	11	23	-25	Error (mV)
			1.34	-0.37	-0.74	-0.22	-0.36	-0.43	0.24	-0.43	-0.13	0.32	0.85	1.75	-1.83	LINEARITY ERROR (dB)
			×													
	Flatness P-P		1.6	2.8	3.6	3.8	3.0	2.2	2.0	0.6	1.0	1.2	1.6	2.2	2.4	
	Slope Avg(mv/dB)	13.9														



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Transfer @ 25C – Plot

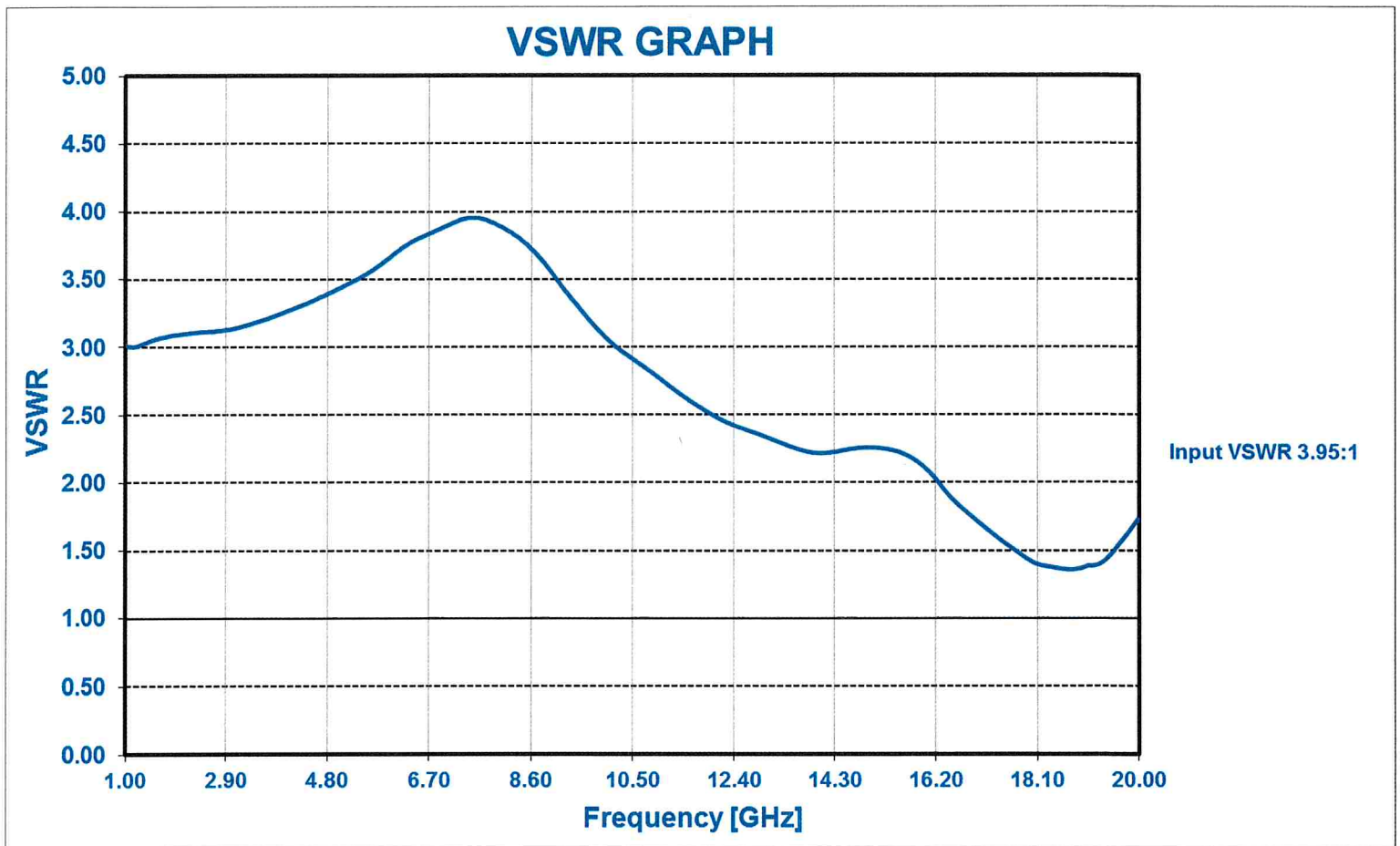




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VSWR

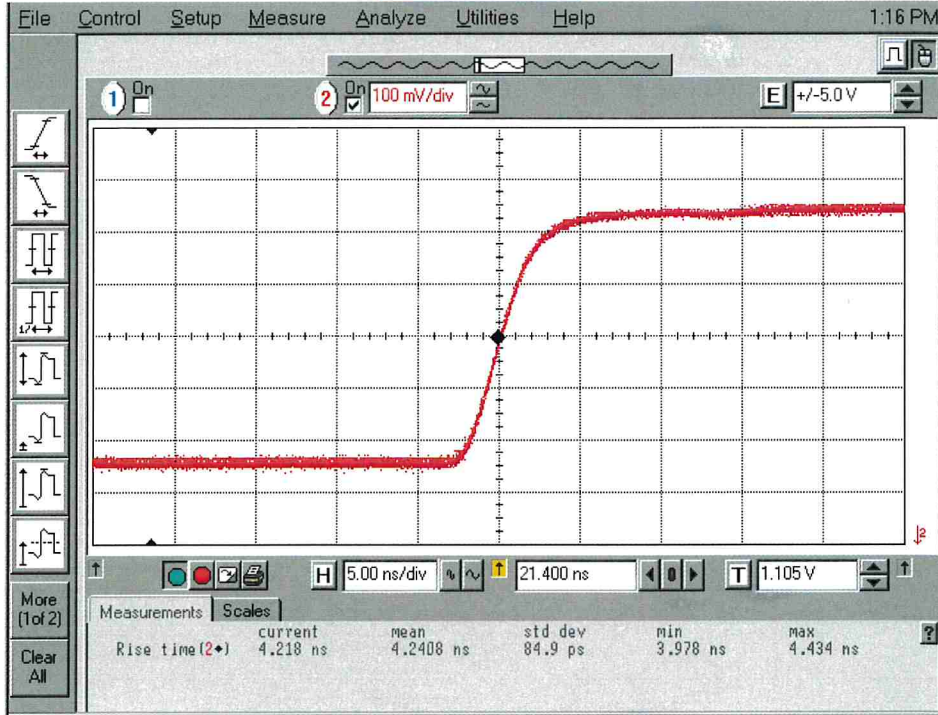




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Rise Time



Fall Time

