

SUMMARY TEST DATA ON SDLVA-1G20G-55-12-SFF

CUSTOMER: _____
SO: _____
MODEL NO: SDLVA-1G20G-55-12-SFF
SERIAL NO: PL53491/2526

TESTED BY: Jeremy Walker
TEMPERATURE: +25°C (Unless Otherwise Specified)
DATE: 6/25/2025
DRAWING NO: 27637600 REV: A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range	1 GHz – 20 GHz	1 GHz – 20 GHz	Pass
2	Frequency Flatness	±2.0 dB Typ	± 2.40 dB See Plot	Pass
3	Log Linearity	±1.5 dB Typ (-50 to 0dBm)	± 2.39 dB See Plot	Pass
4	Log Linearity Over Temp	±2.0 dB Typ (-50 to 0dBm) (@ -55°C to +85°C)	By Design	Pass
5	Logging Range	-55 to +5 dBm	PASS	Pass
6	Video Load	50 OHMS	50 OHMS	Pass
7	Input VSWR	2.8:1 Typ	1.788:1	Pass
8	Log Video Output Voltage	0.1 V to 2.5V Typ	See Plot	Pass
9	Log Video Output Slope	50 mV / dB Typ	50.71 mV/dB	Pass
10	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	7.8 nS	Pass
11	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	14 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	27 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-56.7 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	130mA	Pass

QA/QC Approval:  *K. Klamm*

Date: 6.25.25



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LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 TESTED BY: Jeremy Walker
 DATE: 6/25/2025
 SERIAL NO: PL53491
 Test Temp: +25C

Output Offset(V)= 0.151

Frequency

1 GHz	INTERCEPT (mV)	2746
	SLOPE (mV/dB)	52.6

4.17 GHz	INTERCEPT (mV)	2810
	SLOPE (mV/dB)	53.0

7.33 GHz	INTERCEPT (mV)	2860
	SLOPE (mV/dB)	52.2

10.5 GHz	INTERCEPT (mV)	2790
	SLOPE (mV/dB)	51.1

13.66 GHz	INTERCEPT (mV)	2772
	SLOPE (mV/dB)	49.5

16.83 GHz	INTERCEPT (mV)	2759
	SLOPE (mV/dB)	48.6

20 GHz	INTERCEPT (mV)	2724
	SLOPE (mV/dB)	48.1

Flatness +/-dB

Slope Avg(mv/dB) 50.7

RF Input Power (dBm)

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-1.79 1.86

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-1.47 1.31

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-2.39 -0.15

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.85 0.61

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.68 0.43

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.47 0.41

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.63 0.63

Flatness ERROR (dB)

Output Offset(V)= 0.151

	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
173	216	330	550	829	1123	1399	1684	1946	2213	2466	2732	2915	
317	98	-51	-94	-78	-47	-33	-11	-12	-8	-18	-14	-94	
6.04	1.86	-0.97	-1.79	-1.48	-0.89	-0.64	-0.21	-0.23	-0.15	-0.33	-0.27	-1.79	

	179	232	368	614	909	1206	1478	1757	2012	2276	2525	2783	2926
281	69	-59	-78	-48	-16	-8	6	-4	-5	-21	-27	-149	
5.31	1.31	-1.12	-1.47	-0.90	-0.30	-0.16	0.11	-0.08	-0.09	-0.39	-0.52	-2.82	

	183	242	393	647	937	1220	1486	1760	2012	2272	2516	2774	2917
194	-8	-118	-125	-96	-74	-69	-56	-65	-66	-83	-86	-204	
3.72	-0.15	-2.25	-2.39	-1.83	-1.41	-1.32	-1.07	-1.25	-1.27	-1.59	-1.65	-3.91	

	192	268	449	710	991	1258	1517	1778	2026	2279	2516	2771	2873
210	31	-43	-38	-12	4	9	2	0	-19	-19	-36	-37	-3.37
4.12	0.61	-0.85	-0.74	-0.23	0.00	0.07	0.18	0.04	-0.01	-0.36	-0.37	-3.37	

	207	304	510	767	1046	1298	1555	1803	2035	2280	2505	2751	2828
159	8	-34	-24	7	11	21	21	6	3	-20	-21	-192	
3.20	0.16	-0.68	-0.49	0.14	0.23	0.42	0.43	0.11	0.06	-0.40	-0.43	-3.87	

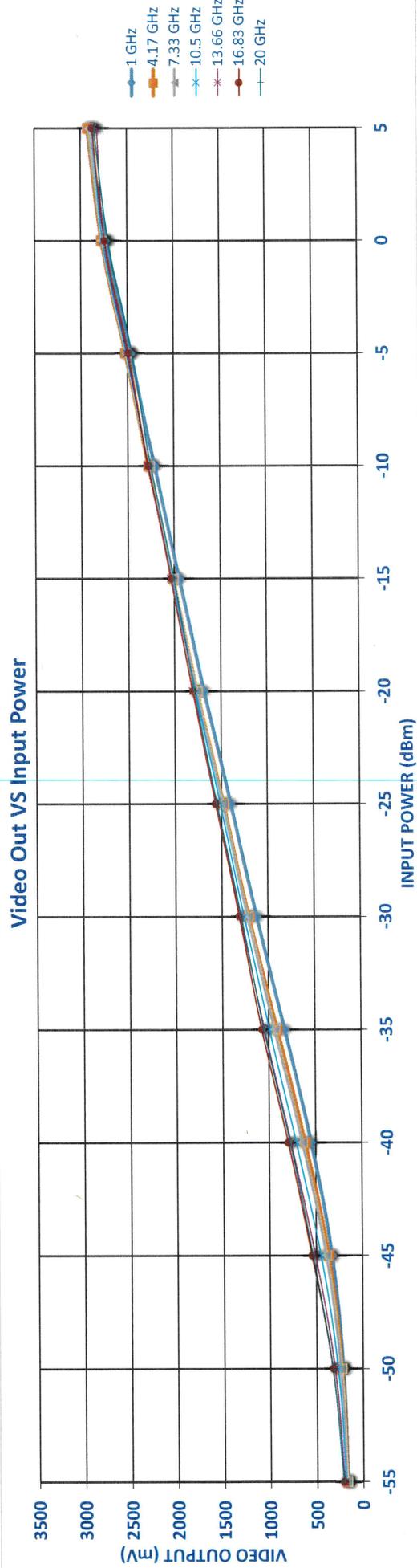
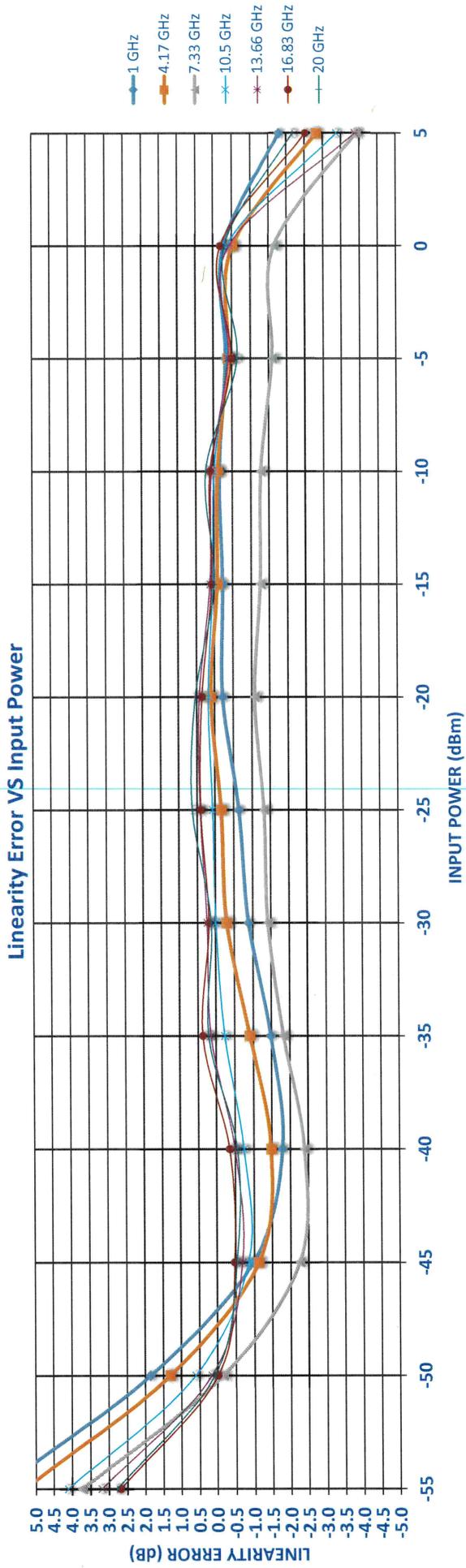
	215	327	548	797	1075	1309	1563	1804	2033	2278	2493	2750	2880
131	0	-23	-17	18	9	20	18	3	5	-23	-9	-122	
2.69	-0.01	-0.46	-0.34	0.37	0.18	0.41	0.36	0.07	0.11	-0.47	-0.19	-2.51	

	215	325	536	775	1052	1288	1553	1789	2003	2254	2453	2709	2860
134	4	-25	-27	10	6	31	26	0	11	-31	-15	-104	
2.79	0.08	-0.53	-0.56	0.21	0.12	0.63	0.55	0.00	0.22	-0.63	-0.31	-2.16	

Flatness +/-dB

Slope Avg(mv/dB) 50.7

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 SERIAL NO: PL53491
 Test Temp: +25C

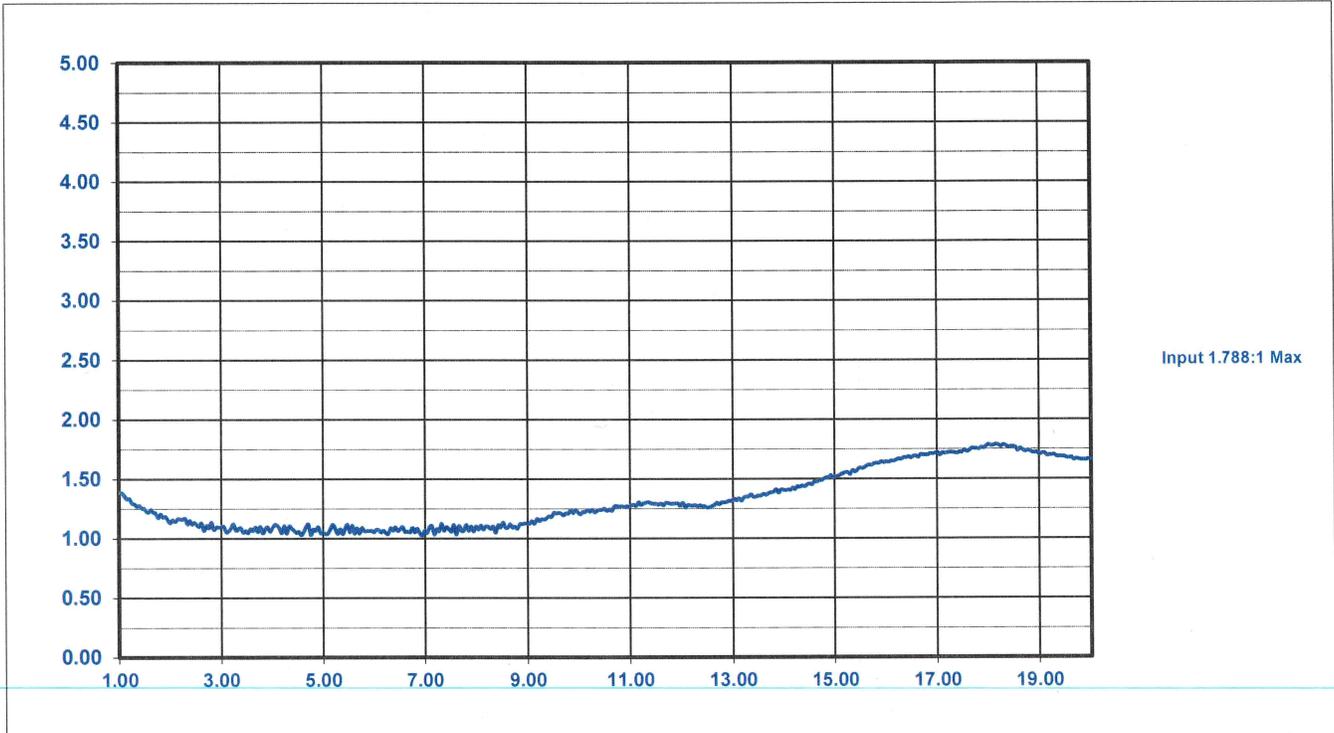




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Model Number: SDLVA-1G20G-55-12-SFF
Serial Number: PL53491

Temperature: +25C





**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

Rise Time = 7.8 ns





**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

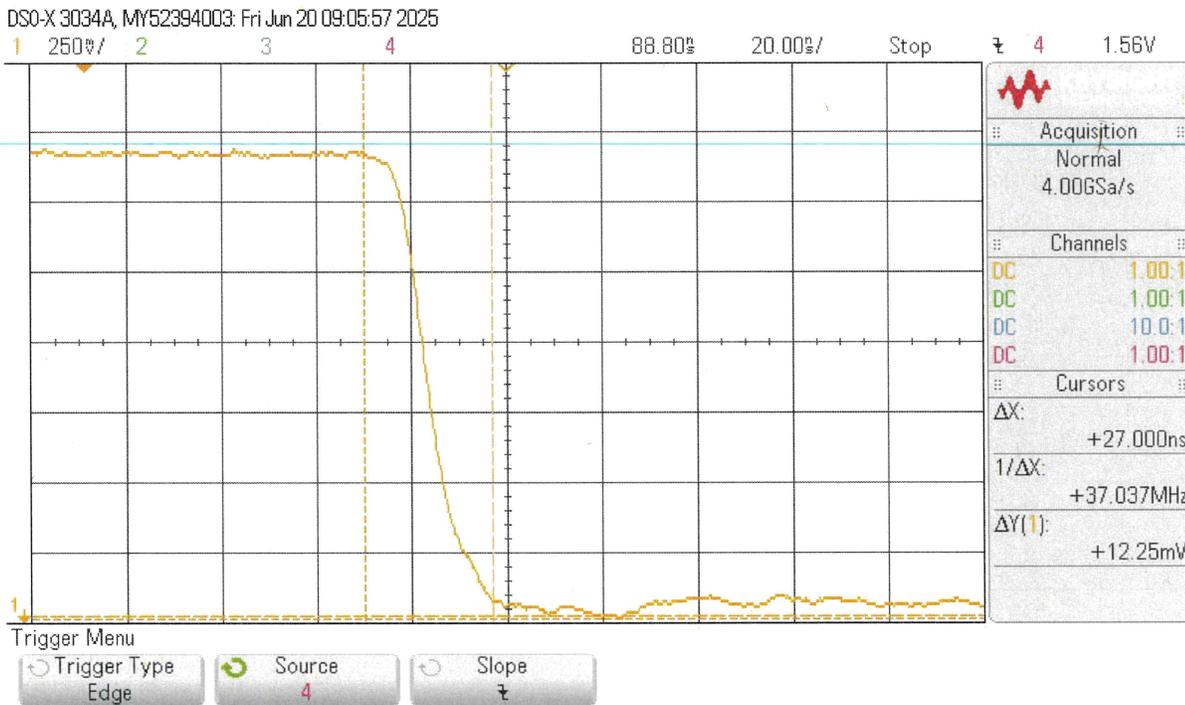
Fall Time = 14 ns





**SUMMARY TEST DATA
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Recovery Time = 27 ns





**SUMMARY TEST DATA
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TSS = -56.7 dBm

