

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

CUSTOMER: _____
SO: _____
MODEL NO: SDLVA-1G20G-55-12-SFF
SERIAL NO: PL53553/2526

TESTED BY: Jeremy Walker
TEMPERATURE: +25°C (Unless Otherwise Specified)
DATE: 6/26/2025
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	± 2.00 dB See Plot	Pass
3	Log Linearity	±1.5 dB Typ (-50 to 0dBm)	± 2.16 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	4.672:1	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	49.11 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%)	9.5 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	31.2 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-59.4 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	120mA	Pass

QA/QC Approval:  PMI QA/QC

Date: 6-30-25



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway, Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-rf.com/www.pmi-rf.com

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 TESTED BY: Jeremy Walker
 DATE: 6/26/2025
 SERIAL NO: PL53553
 Test Temp: +25C

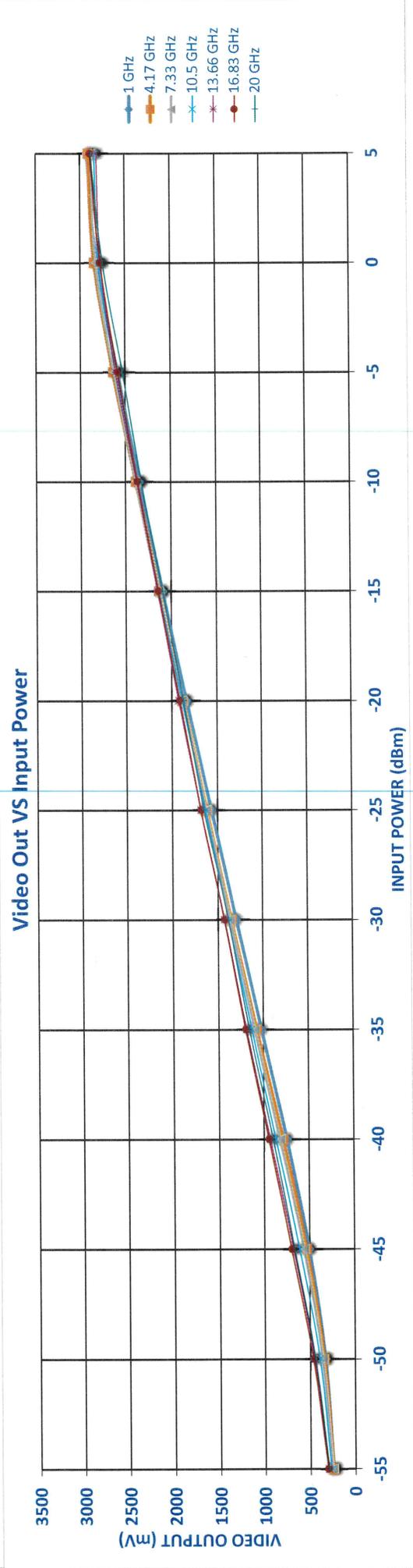
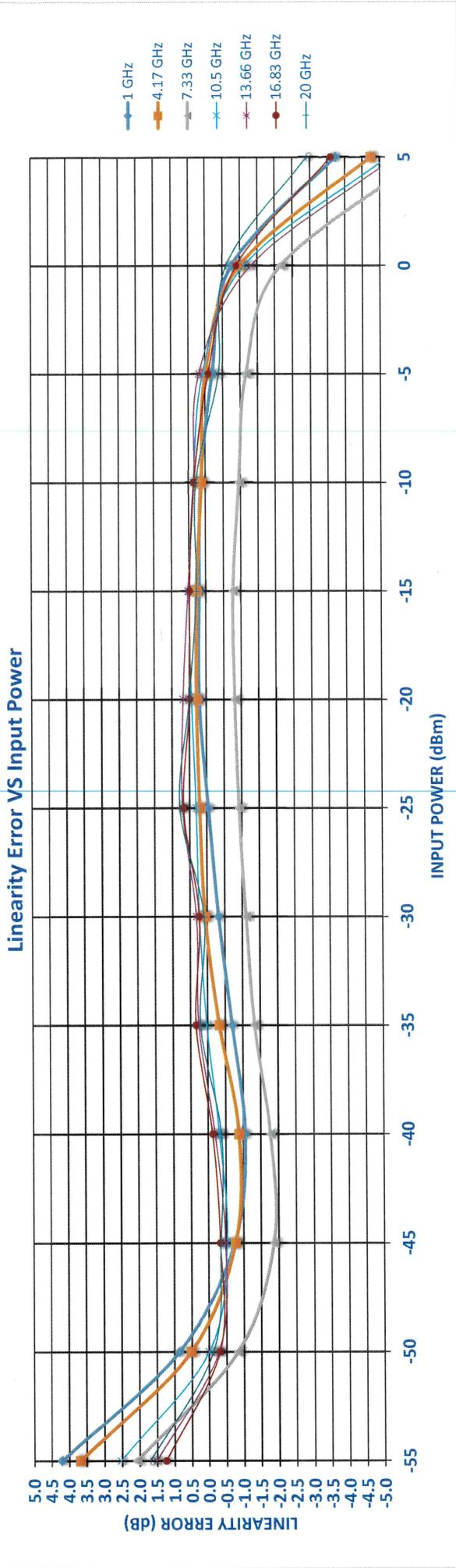
Output Offset(V)= 0.197

Frequency

Frequency	Intercept (mV)	Slope (mV/dB)	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
1 GHz	2854	51.3	246	331	505	746	1021	1297	1568	1838	2094	2348	2587	2815	2919
4.17 GHz	2896	51.5	216	44	-38	-54	-36	-16	-2	11	10	8	-10	-39	-192
7.33 GHz	2941	50.7	4.21	0.87	-0.75	-1.05	-0.70	-0.32	-0.04	0.22	0.20	0.15	-0.20	-0.76	-3.73
10.5 GHz	2849	49.2	251	346	537	789	1075	1353	1618	1880	2137	2387	2638	2845	2909
13.66 GHz	2837	47.5	190	27	-40	-45	-17	3	11	15	14	7	0	-51	-244
16.83 GHz	2823	46.8	3.68	0.53	-0.77	-0.88	-0.33	0.07	0.21	0.29	0.28	0.13	0.00	-0.98	-4.74
20 GHz	2781	46.7	257	363	564	822	1098	1363	1626	1885	2141	2385	2628	2831	2874
Flatness +/-dB			106	-42	-95	-90	-68	-56	-47	-41	-39	-49	-59	-110	-320
Slope Avg(mv/dB)	49.1		2.08	-0.83	-1.87	-1.78	-1.34	-1.11	-0.92	-0.82	-0.77	-0.96	-1.17	-2.16	-6.32
			269	390	610	866	1129	1385	1635	1887	2136	2375	2607	2794	2838
			125	0	-26	-16	1	11	16	22	25	18	4	-55	-257
			2.54	0.00	-0.52	-0.32	0.03	0.23	0.32	0.44	0.50	0.36	0.08	-1.12	-5.23
			298	450	678	929	1188	1428	1684	1920	2150	2379	2609	2775	2817
			72	-13	-23	-9	13	15	34	32	25	16	9	-62	-258
			1.52	-0.28	-0.48	-0.19	0.26	0.32	0.71	0.68	0.52	0.35	0.19	-1.31	-5.43
			306	467	700	944	1200	1429	1684	1909	2143	2371	2585	2781	2889
			59	-14	-16	-6	16	11	32	23	23	16	-4	-42	-168
			1.26	-0.31	-0.33	-0.12	0.35	0.24	0.68	0.48	0.48	0.35	-0.08	-0.89	-3.59
			293	441	664	896	1157	1385	1651	1871	2094	2328	2530	2753	2879
			80	-6	-16	-18	10	4	37	24	13	14	-18	-28	-136
			1.71	-0.12	-0.35	-0.38	0.21	0.10	0.79	0.50	0.28	0.29	-0.38	-0.61	-2.91
			0.6	1.4	2.0	2.0	1.8	1.3	1.2	0.8	0.6	0.6	1.1	0.9	1.0

RF Input Power (dBm)	Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)
-1.05	0.87		0.87
-0.98	0.53		0.53
-2.16	-0.77		-0.77
-1.12	0.50		0.50
-1.31	0.71		0.71
-0.89	0.68		0.68
-0.61	0.79		0.79
+/- 2.00			FLATNESS ERROR (dB)

LOG TRANSFER WITH FREQUENCY
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 SERIAL NO: PL53553
 Test Temp: +25C

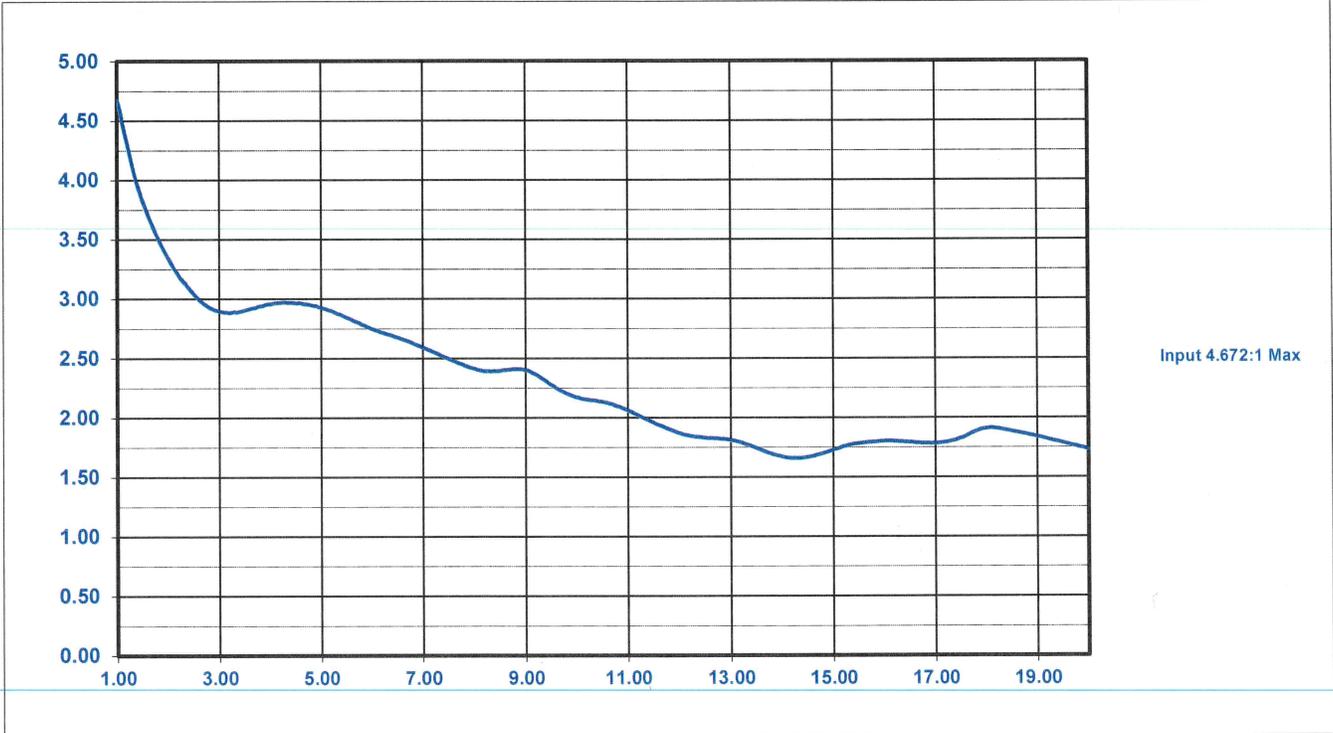




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Serial Number: PL53553

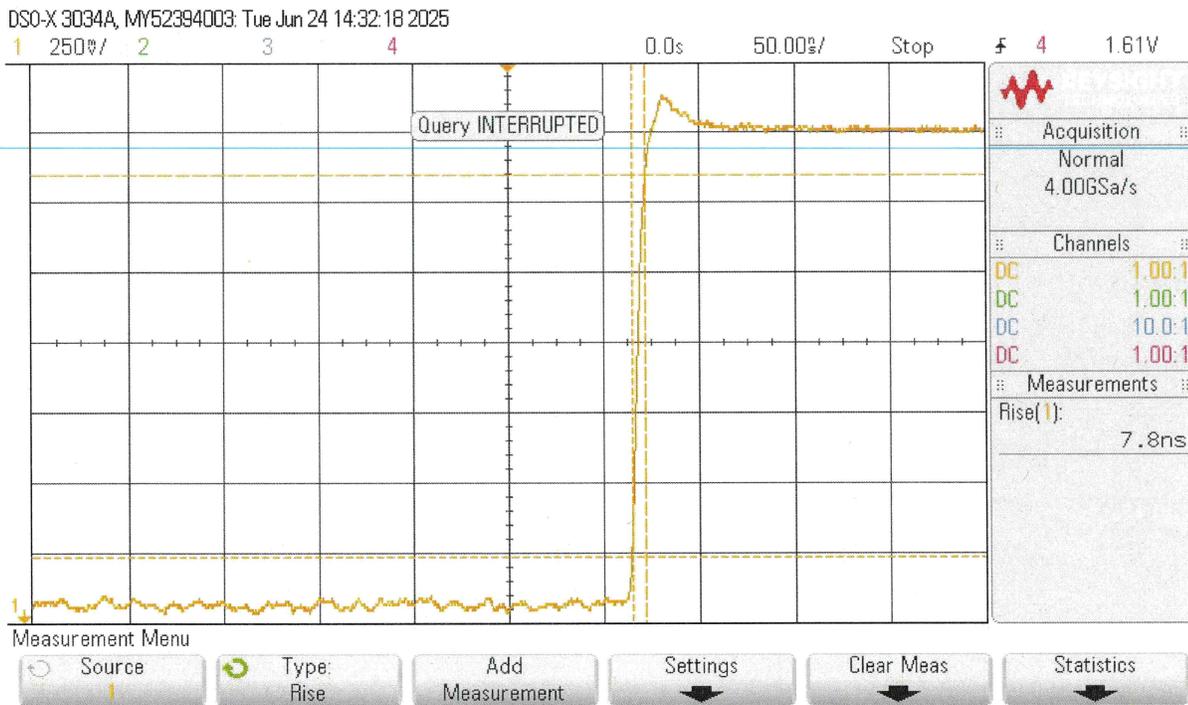
Temperature: +25C





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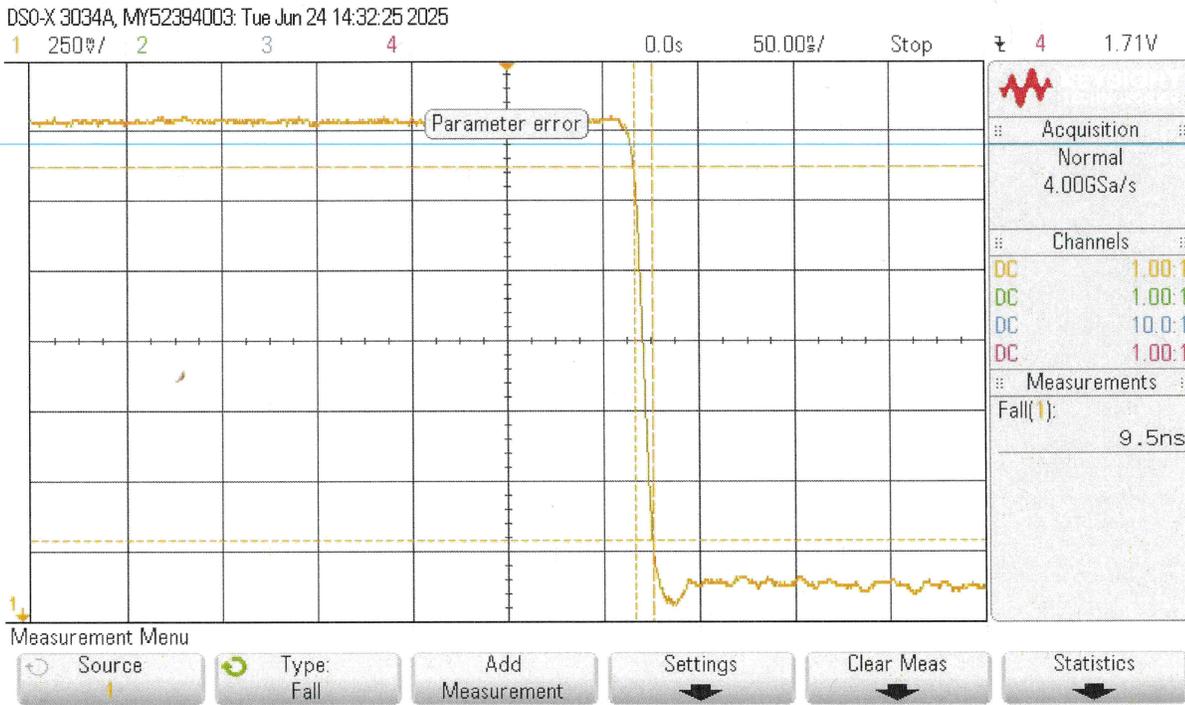
Rise Time = 7.8 ns





**SUMMARY TEST DATA
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Fall Time = 9.5 ns

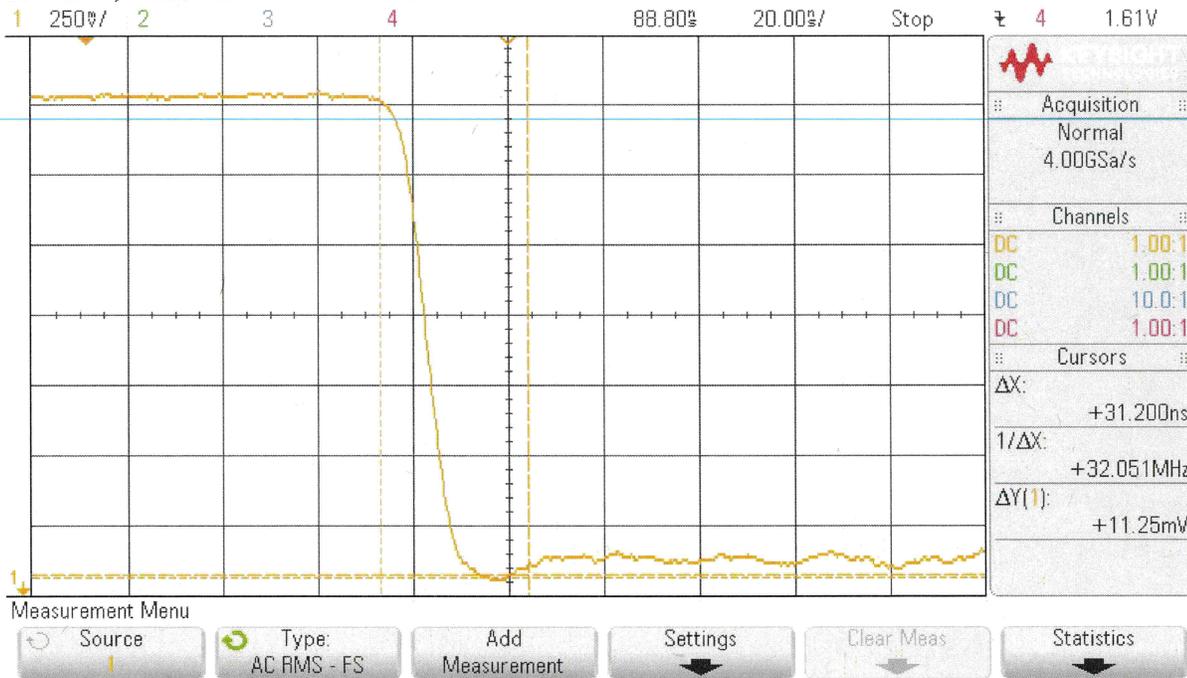




**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

Recovery Time = 31.2 ns

DSO-X 3034A, MY52394003: Tue Jun 24 14:33:03 2025





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

TSS = -59.4 dBm

DSO-X 3034A, MY52394003: Tue Jun 24 14:32:35 2025

