

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

CUSTOMER: _____
SO: _____
MODEL NO: SDLVA-1G20G-55-12-SFF
SERIAL NO: PL53509/2526

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	± 2.30 dB See Plot	Pass
3	Log Linearity	±1.5 dB Typ (-50 to 0dBm)	± 2.62 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	1.786:1	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	50.04 mV/dB	Pass
10	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	7.5 nS	Pass
11	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	12.8 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	23.2 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-55.4 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	121mA	Pass

QA/QC Approval:  **PMI**
QAS

Date: 6-30-25



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LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 TESTED BY: Jeremy Walker
 DATE: 06/26/25
 SERIAL NO: PL53509
 Test Temp: +25C

Output Offset(V)= 0.139

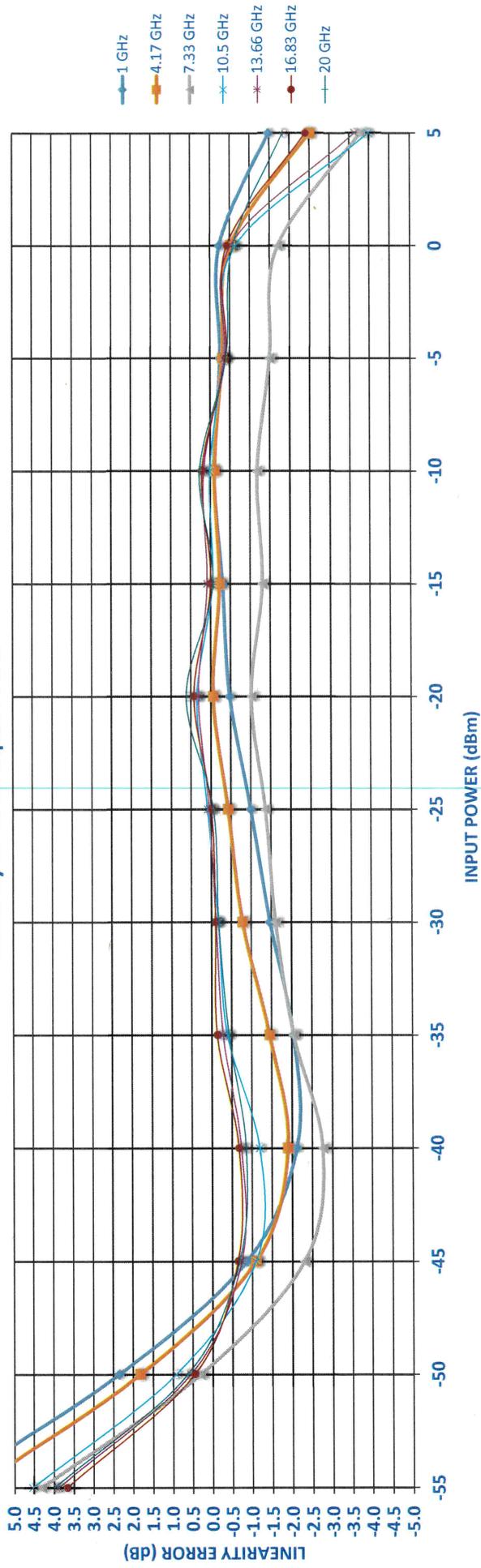
Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
1 GHz	2631	51.4	155	188	276	464	728	1015	1288	1571	1841	2109	2366	2623	2825
			349	125	-43	-112	-105	-75	-59	-33	-19	-8	-8	-8	-63
			6.80	2.44	-0.84	-2.18	-2.05	-1.46	-1.14	-0.63	-0.38	-0.16	-0.16	-0.15	-1.22
4.17 GHz	2689	51.9	158	196	300	511	791	1084	1354	1634	1898	2166	2417	2668	2839
			325	103	-53	-101	-81	-47	-37	-17	-12	-4	-13	-21	-110
			6.25	1.98	-1.01	-1.95	-1.56	-0.91	-0.71	-0.32	-0.24	-0.08	-0.24	-0.41	-2.11
7.33 GHz	2750	51.4	162	207	330	558	838	1118	1381	1658	1916	2180	2428	2674	2836
			241	28	-106	-135	-112	-89	-83	-64	-63	-56	-65	-76	-171
			4.68	0.55	-2.06	-2.62	-2.18	-1.74	-1.62	-1.24	-1.22	-1.09	-1.27	-1.48	-3.33
10.5 GHz	2703	50.4	172	233	391	636	908	1174	1430	1695	1948	2203	2439	2678	2774
			241	50	-44	-51	-31	-17	-13	0	1	4	-12	-25	-181
			4.78	0.99	-0.87	-1.01	-0.61	-0.34	-0.26	0.00	0.02	0.08	-0.24	-0.49	-3.59
13.66 GHz	2689	49.1	182	262	442	688	960	1213	1460	1720	1955	2204	2428	2667	2769
			194	28	-37	-37	-10	-3	-2	13	2	6	-16	-22	-166
			3.95	0.58	-0.76	-0.75	-0.21	-0.06	-0.03	0.26	0.05	0.12	-0.32	-0.46	-3.38
16.83 GHz	2657	48.3	183	265	453	694	962	1207	1442	1706	1931	2184	2400	2639	2793
			182	23	-31	-31	-5	-1	-8	15	-2	10	-16	-18	-106
			3.78	0.47	-0.63	-0.64	-0.10	-0.02	-0.16	0.31	-0.03	0.20	-0.32	-0.38	-2.19
20 GHz	2613	47.8	181	257	430	661	922	1172	1413	1684	1890	2145	2357	2588	2768
			195	32	-34	-42	-19	-8	-6	26	-6	10	-17	-25	-83
			4.08	0.67	-0.71	-0.87	-0.40	-0.17	-0.12	0.55	-0.13	0.21	-0.35	-0.51	-1.75
Flatness +/-dB			0.3	0.8	1.8	2.3	2.3	2.0	1.7	1.5	1.1	0.9	0.8	0.9	0.7
Slope Avg(mv/dB)															50.0

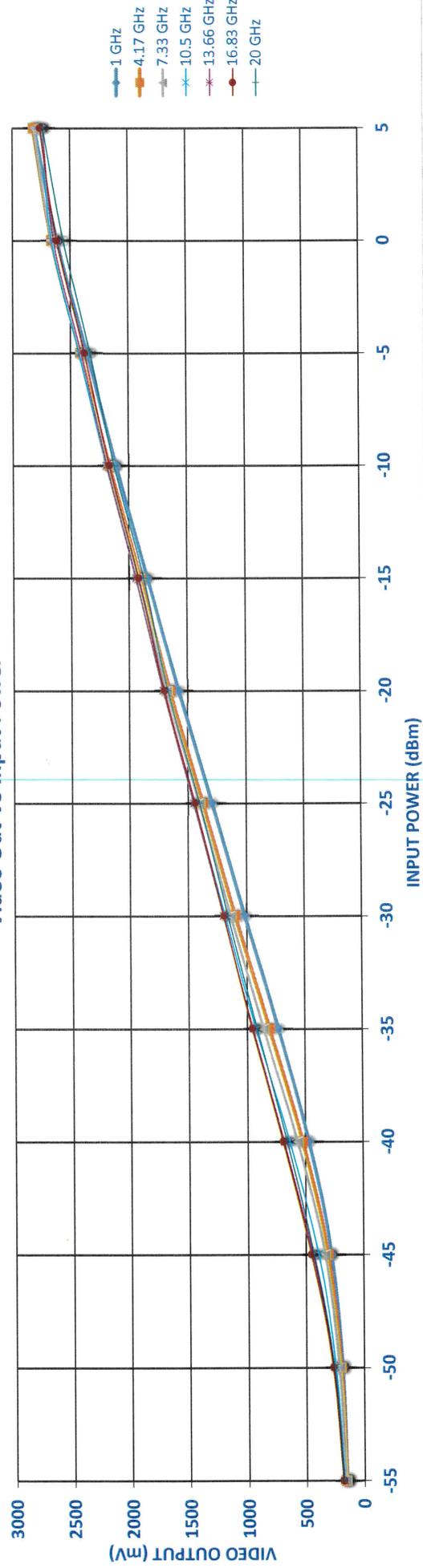
RF Input Power (dBm)	Measured Value (mV)	Error (mV)	LINEARITY ERROR (dB)
		-2.18	2.44
		-1.95	1.98
		-2.62	0.55
		-1.01	0.99
		-0.76	0.58
		-0.64	0.47
		-0.87	0.67
		+/-	2.30

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 SERIAL NO: PL53509
 Test Temp: +25C

Linearity Error VS Input Power



Video Out VS Input Power

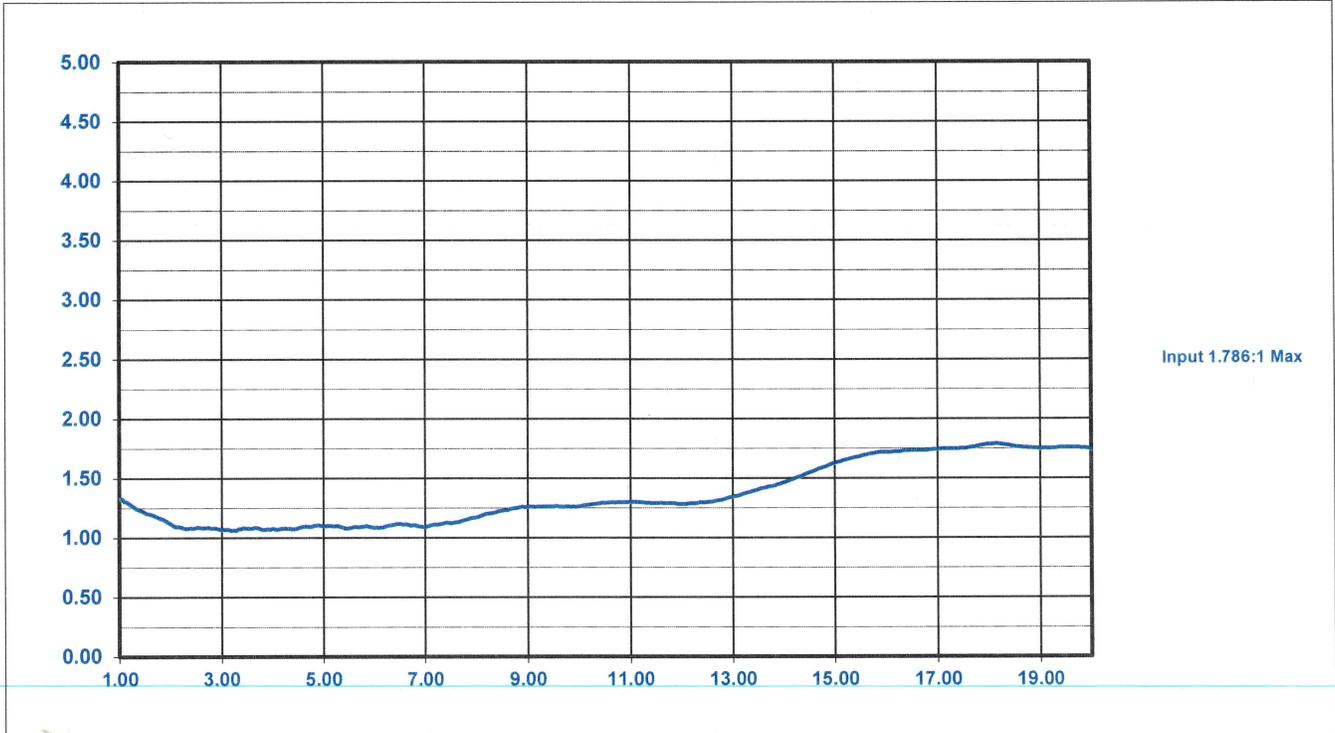




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SDLVA-1G20G-55-12-SFF**

Model Number: SDLVA-1G20G-55-12-SFF
Serial Number: PL53509

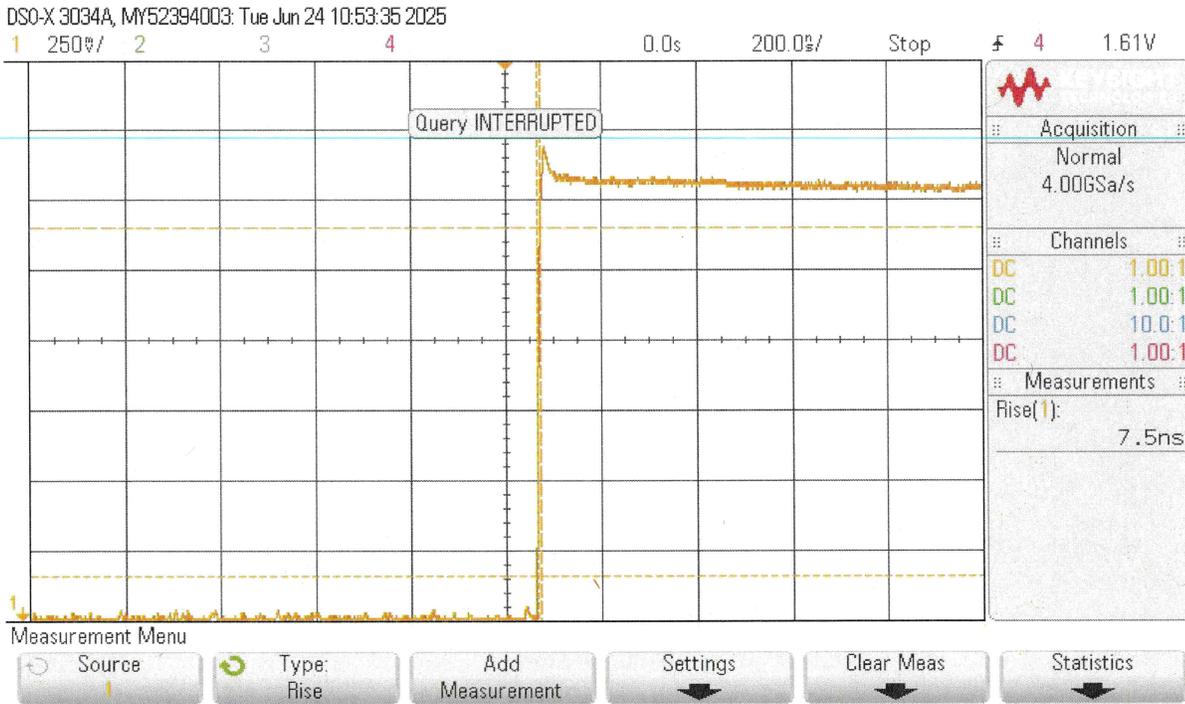
Temperature: +25C





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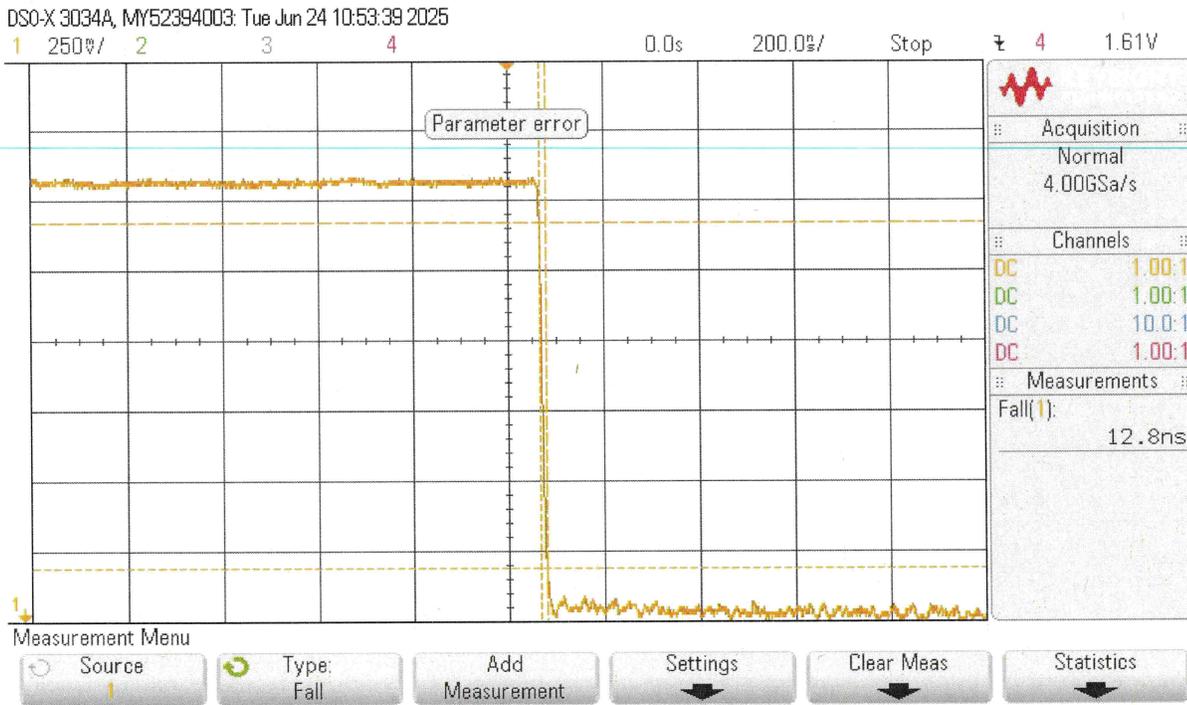
Rise Time = 7.5 ns





**SUMMARY TEST DATA
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Fall Time = 12.8 ns

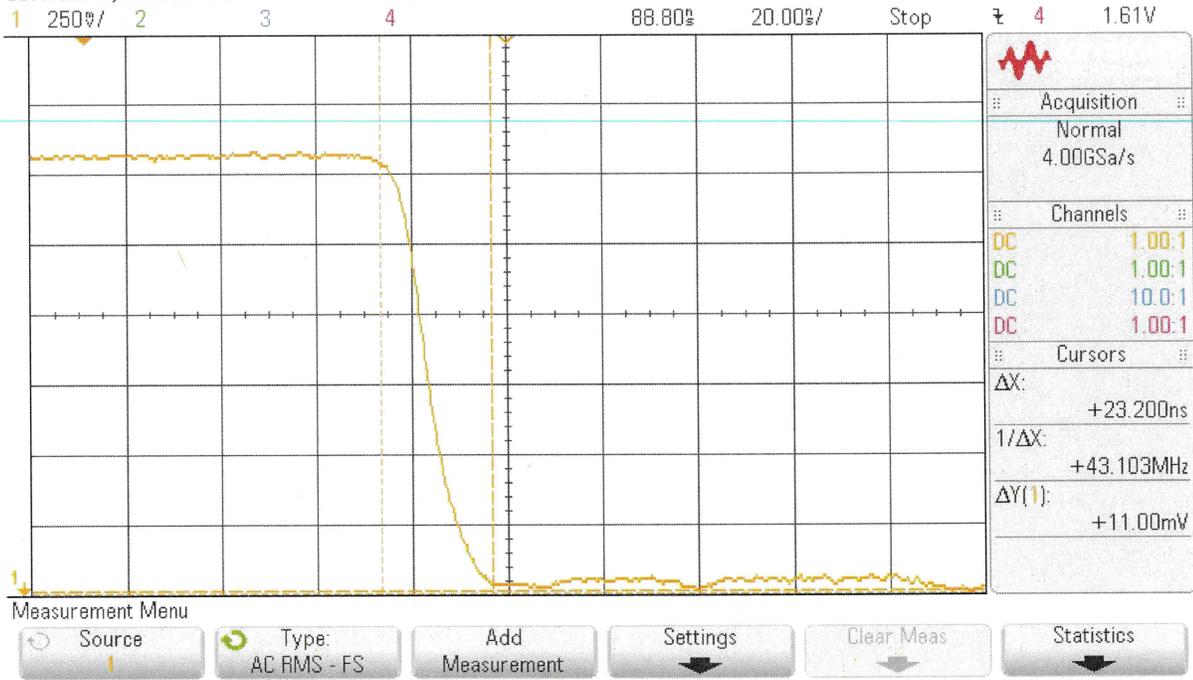




**SUMMARY TEST DATA
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Recovery Time = 23.2 ns

DSO-X 3034A, MY52394003: Tue Jun 24 10:54:08 2025





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TSS = -55.4 dBm

