Summary Data
For
ERDLVA-2G18G-65-70MV-70C

Customer: [redacted] **Tested By:** Jim Hopson

SO No: [redacted] **Temperature:** -40C TO +70C

Model No: ERDLVA-2G18G-65-70MV-70C **Date** 10/18/2024

Serial No: PL44917/2443 **Drawing No:** 27642020 **Rev:** A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 18 GHz	**2 to 18 GHz**	PMI QA3
2	VSWR:	2.2:1 MAX @ 50 Ω	**1.76:1 MAX**	
3	Input Power:	(1) 1 W CW, Max. (2) 100 W Peak @ PW = 1 us & Duty Cycle = 1%, Max.	**Pass**	
4	VIDEO OUT TSS:	-71 dBm MAX	**-71 dBm**	
5	VIDEO OUT Dynamic Range:	-65 to 0 dBm	**-65 to 0 dBm**	
6	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	**71.5/69.0 mv/db**	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	**.71/-.61 db**	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	**.90/-.92 db**	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	**1.24/-1.49 db**	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	**36 mV**	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	**23.8 ns**	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	**175.6 ns**	
13	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value @-10 dBm	**40ns**	

7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

Summary Data
For
ERDLVA-2G18G-65-70MV-70C

14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	**600 ns**	PMI QA3
15	VIDEO OUT Video Frequency Flatness:	±2.0 dB MAX @25C	**±0.87 dB MAX @25C**	
16	VIDEO OUT CW Immunity:	CW Immune Power TSS to -40 dBm	**Pass**	
		Pulse Peak Amplitude Loss; 2 dB MAX @ -40dBm CW	**<2dB**	
		Baseline shift 200mV @-40dBm CW	**< 200mV**	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	**1.5 ms**	
		CW Recovery Time at CW = -40 dBm, ≤ 20 us	**<20 us**	
17	Pulse droop	1dB Max for 300us pulse at or above -65dBm	**<1dB**	
18	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	**100 ns to 300 us**	
19	VIDEO LOAD Impedance:	75 ±1 Ω	**75Ω**	
20	VIDEO driver capability	100 ft RG11 into 75 ohm load	**Pass**	
21	Pulse density capability	10% duty cycle 100 ns, 70% duty cycle 300 us at peak power -10 dBm with 1 dB variable for pulse amplitude and baseline	**Pass**	
22	VIDEO OUT Noise Level (Vp-p):	160 mV max	**135 mV**	

7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

Summary Data
For
ERDLVA-2G18G-65-70MV-70C

23	VIDEO OUT Propagation Delay:	50 ns MAX from RF 50% to 10% video (excluding cable)	**< 50 ns**	PMI QA3
24	Power Supply	+15 V @ 500 mA MAX -15 V @ 100 mA MAX	**+15 V @ 310 mA** **15 V @ 80 mA**	
25	Power Supply Ripple From DC to 10 MHz	100 mV MAX	**Pass**	

QA/QC Approval: K. Klamm **Date:** 10·23·24

7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44917
Test Temp: 25°C

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	Intercept (mV)	4908	356	729	1074	1430	1791	2125	2475	2829	3167	3532	3895	4213	4552	4883	Measured Value (mV)
	Slope (mV/dB)	69.52	-33	-8	-11	-2	11	-2	0	6	-3	14	29	0	-9	-25	Error (mV)
			-0.48	-0.12	-0.15	-0.03	0.16	-0.04	0.00	0.09	-0.05	0.20	0.42	0.00	-0.13	-0.36	0.48 Linearity Error (dB)
			0.44	0.74	0.64	0.70	0.82	0.57	0.54	0.57	0.37	0.55	0.71	0.23	0.04	-0.25	0.82 Accuracy Error (dB)
3 GHz	Intercept (mV)	4867	268	627	964	1327	1689	2031	2405	2787	3115	3465	3811	4139	4505	4856	Measured Value (mV)
	Slope (mV/dB)	70.63	-8	-2	-18	-8	1	-10	10	39	14	11	4	-21	-8	-11	Error (mV)
			-0.11	-0.03	-0.26	-0.12	0.01	-0.15	0.15	0.56	0.20	0.16	0.05	-0.30	-0.12	-0.15	0.56 Linearity Error (dB)
			-0.81	-0.71	-0.92	-0.77	-0.62	-0.62	-0.45	-0.03	-0.37	-0.40	-0.48	-0.82	-0.62	-0.64	0.92 Accuracy Error (dB)
4 GHz	Intercept (mV)	4939	303	670	1012	1371	1738	2083	2471	2844	3187	3536	3887	4218	4582	4896	Measured Value (mV)
	Slope (mV/dB)	71.06	-17	-6	-19	-15	-3	-14	19	37	24	18	14	-10	-2	-43	Error (mV)
			-0.24	-0.08	-0.27	-0.21	-0.05	-0.19	0.27	0.52	0.34	0.25	0.19	-0.15	-0.02	-0.61	0.61 Linearity Error (dB)
			-0.31	-0.10	-0.24	-0.14	0.07	-0.03	0.48	0.78	0.65	0.61	0.60	0.30	0.47	-0.07	0.78 Accuracy Error (dB)
5 GHz	Intercept (mV)	4919	317	682	1023	1382	1749	2090	2462	2826	3164	3514	3865	4191	4556	4919	Measured Value (mV)
	Slope (mV/dB)	70.57	-15	-3	-14	-8	6	-6	13	24	9	7	5	-22	-10	0	Error (mV)
			-0.21	-0.04	-0.20	-0.12	0.08	-0.09	0.19	0.34	0.13	0.09	0.07	-0.31	-0.14	0.00	0.34 Linearity Error (dB)
			-0.11	0.07	-0.09	0.01	0.23	0.07	0.36	0.53	0.33	0.30	0.28	-0.08	0.10	0.26	0.53 Accuracy Error (dB)
6 GHz	Intercept (mV)	4920	313	684	1022	1382	1747	2084	2457	2822	3160	3514	3866	4197	4561	4919	Measured Value (mV)
	Slope (mV/dB)	70.64	-16	2	-13	-6	5	-11	9	21	6	6	5	-17	-6	-1	Error (mV)
			-0.22	0.03	-0.19	-0.09	0.08	-0.15	0.13	0.30	0.08	0.09	0.07	-0.24	-0.09	-0.02	0.30 Linearity Error (dB)
			-0.17	0.10	-0.10	0.01	0.20	-0.01	0.28	0.47	0.27	0.30	0.30	0.00	0.17	0.26	0.47 Accuracy Error (dB)
7 GHz	Intercept (mV)	4911	297	663	999	1362	1726	2069	2441	2812	3146	3499	3850	4181	4557	4907	Measured Value (mV)
	Slope (mV/dB)	70.84	-9	3	-15	-7	3	-8	10	26	6	5	2	-21	0	-4	Error (mV)
			-0.13	0.04	-0.22	-0.09	0.04	-0.11	0.14	0.37	0.09	0.07	0.03	-0.30	0.01	-0.05	0.37 Linearity Error (dB)
			-0.40	-0.20	-0.43	-0.27	-0.10	-0.23	0.06	0.33	0.07	0.09	0.07	-0.23	0.11	0.09	0.43 Accuracy Error (dB)
8 GHz	Intercept (mV)	4909	295	657	995	1362	1726	2066	2441	2811	3146	3501	3857	4180	4538	4909	Measured Value (mV)
	Slope (mV/dB)	70.84	-9	-1	-18	-5	5	-9	11	27	8	9	11	-21	-17	0	Error (mV)
			-0.13	-0.02	-0.25	-0.07	0.07	-0.13	0.16	0.38	0.11	0.12	0.15	-0.29	-0.24	0.00	0.38 Linearity Error (dB)
			-0.43	-0.28	-0.48	-0.27	-0.10	-0.27	0.06	0.31	0.07	0.11	0.17	-0.24	-0.16	0.11	0.48 Accuracy Error (dB)
9 GHz	Intercept (mV)	4931	285	641	978	1343	1706	2056	2443	2825	3161	3511	3862	4196	4562	4920	Measured Value (mV)
	Slope (mV/dB)	71.54	4	2	-18	-11	-6	-14	16	40	18	11	4	-20	-11	-11	Error (mV)
			0.06	0.03	-0.26	-0.16	-0.08	-0.19	0.22	0.56	0.26	0.15	0.06	-0.28	-0.16	-0.16	0.56 Linearity Error (dB)
			-0.57	-0.51	-0.72	-0.54	-0.38	-0.41	0.09	0.51	0.28	0.26	0.24	-0.01	0.19	0.27	0.72 Accuracy Error (dB)
10 GHz	Intercept (mV)	4914	274	630	970	1335	1695	2046	2434	2814	3150	3499	3851	4180	4543	4898	Measured Value (mV)
	Slope (mV/dB)	71.37	-1	-2	-19	-10	-7	-13	18	41	20	13	8	-20	-14	-16	Error (mV)
			-0.01	-0.02	-0.26	-0.15	-0.10	-0.18	0.25	0.58	0.29	0.18	0.11	-0.28	-0.19	-0.22	0.58 Linearity Error (dB)
			-0.72	-0.67	-0.84	-0.65	-0.54	-0.55	-0.04	0.36	0.13	0.09	0.09	-0.24	-0.08	-0.04	0.84 Accuracy Error (dB)
11 GHz	Intercept (mV)	4916	291	650	988	1348	1709	2054	2439	2821	3160	3510	3863	4194	4547	4889	Measured Value (mV)
	Slope (mV/dB)	71.11	-3	1	-17	-12	-7	-17	12	39	22	16	14	-11	-13	-27	Error (mV)
			-0.04	0.01	-0.24	-0.17	-0.10	-0.24	0.17	0.54	0.31	0.23	0.20	-0.15	-0.18	-0.38	0.54 Linearity Error (dB)
			-0.48	-0.38	-0.58	-0.47	-0.34	-0.44	0.03	0.45	0.27	0.24	0.26	-0.04	-0.03	-0.17	0.58 Accuracy Error (dB)
12 GHz	Intercept (mV)	4879	284	640	977	1347	1709	2045	2413	2781	3110	3465	3817	4146	4519	4898	Measured Value (mV)
	Slope (mV/dB)	70.68	-1	1	-15	2	10	-7	7	22	-2	-1	-2	-27	-7	19	Error (mV)
			-0.02	0.02	-0.21	0.02	0.14	-0.10	0.10	0.31	-0.03	-0.01	-0.03	-0.38	-0.10	0.26	0.38 Linearity Error (dB)
			-0.58	-0.53	-0.74	-0.48	-0.34	-0.57	-0.34	-0.11	-0.44	-0.40	-0.40	-0.72	-0.43	-0.04	0.74 Accuracy Error (dB)
13 GHz	Intercept (mV)	4873	339	703	1047	1399	1759	2089	2439	2791	3120	3482	3834	4158	4524	4895	Measured Value (mV)
	Slope (mV/dB)	69.52	-15	1	-3	2	14	-3	-1	3	-15	-1	3	-20	-2	22	Error (mV)
			-0.22	0.01	-0.04	0.03	0.20	-0.05	-0.02	0.05	-0.22	-0.01	0.05	-0.29	-0.03	0.31	0.31 Linearity Error (dB)
			0.20	0.37	0.26	0.26	0.37	0.06	0.03	0.03	-0.30	-0.16	-0.16	-0.55	-0.35	-0.08	0.55 Accuracy Error (dB)
14 GHz	Intercept (mV)	4896	336	704	1044	1395	1753	2090	2446	2807	3141	3493	3849	4191	4554	4896	Measured Value (mV)
	Slope (mV/dB)	69.97	-12	6	-4	-3	5	-7	-1	10	-6	-4	2	-6	8	0	Error (mV)
			-0.17	0.09	-0.05	-0.04	0.08	-0.11	-0.02	0.14	-0.09	-0.06	0.03	-0.08	0.11	0.00	0.17 Linearity Error (dB)
			0.16	0.38	0.21	0.20	0.28	0.07	0.13	0.26	0.00	0.00	0.06	-0.08	0.07	-0.07	0.38 Accuracy Error (dB)
15 GHz	Intercept (mV)	4860	343	716	1060	1411	1771	2100	2443	2793	3123	3480	3831	4153	4510	4877	Measured Value (mV)
	Slope (mV/dB)	69.02	-31	-3	-4	1	16	0	-2	3	-12	0	6	-17	-5	17	Error (mV)
			-0.45	-0.05	-0.06	0.02	0.24	0.00	-0.03	0.05	-0.17	0.00	0.09	-0.25	-0.08	0.24	0.45 Linearity Error (dB)
			0.26	0.55	0.44	0.43	0.54	0.21	0.09	0.06	-0.26	-0.18	-0.20	-0.62	-0.55	-0.34	0.62 Accuracy Error (dB)
16 GHz	Intercept (mV)	4890	350	721	1063	1412	1770	2095	2427	2786	3123	3478	3831	4171	4557	4940	Measured Value (mV)
	Slope (mV/dB)	69.74	-7	15	9	9	18	-6	-22	-12	-24	-17	-13	-22	15	50	Error (mV)
			-0.10	0.22	0.12	0.13	0.26	-0.08	-0.32	-0.17	-0.34	-0.25	-0.19	-0.31	0.22	0.71	0.71 Linearity Error (dB)
			0.36	0.63	0.48	0.44	0.53	0.14	-0.14	-0.04	-0.26	-0.21	-0.20	-0.37	0.11	0.55	0.63 Accuracy Error (dB)
17 GHz	Intercept (mV)	4946	366	739	1086	1433	1794	2136	2496	2852	3192	3534	3889	4230	4598	4960	Measured Value (mV)
	Slope (mV/dB)	70.17	-20	3	-1	-5	5	-4	5	11	0	-9	-5	-15	2	14	Error (mV)
			-0.28	0.04	-0.02	-0.07	0.07	-0.05	0.08	0.15	0.00	-0.13	-0.07	-0.21	0.03	0.19	0.28 Linearity Error (dB)
			0.58	0.88	0.81	0.74	0.87	0.72	0.84	0.90	0.72	0.58	0.63	0.47	0.70	0.84	0.90 Accuracy Error (dB)
18 GHz	Intercept (mV)	4875	342	708	1049	1402	1762	2089	2426	2788	3119	3463	3820	4162	4540	4908	Measured Value (mV)
	Slope (mV/dB)	69.57	-10	8	1	6	18	-3	-14	1	-16	-20	-11	-17	13	33	Error (mV)
			-0.15	0.11	0.01	0.09	0.26	-0.04	-0.19	0.01	-0.23	-0.29	-0.16	-0.24	0.19	0.48	0.48 Linearity Error (dB)
			0.24	0.44	0.28	0.30	0.41	0.06	-0.16	-0.01	-0.31	-0.43	-0.35	-0.50	-0.13	0.10	0.50 Accuracy Error (dB)

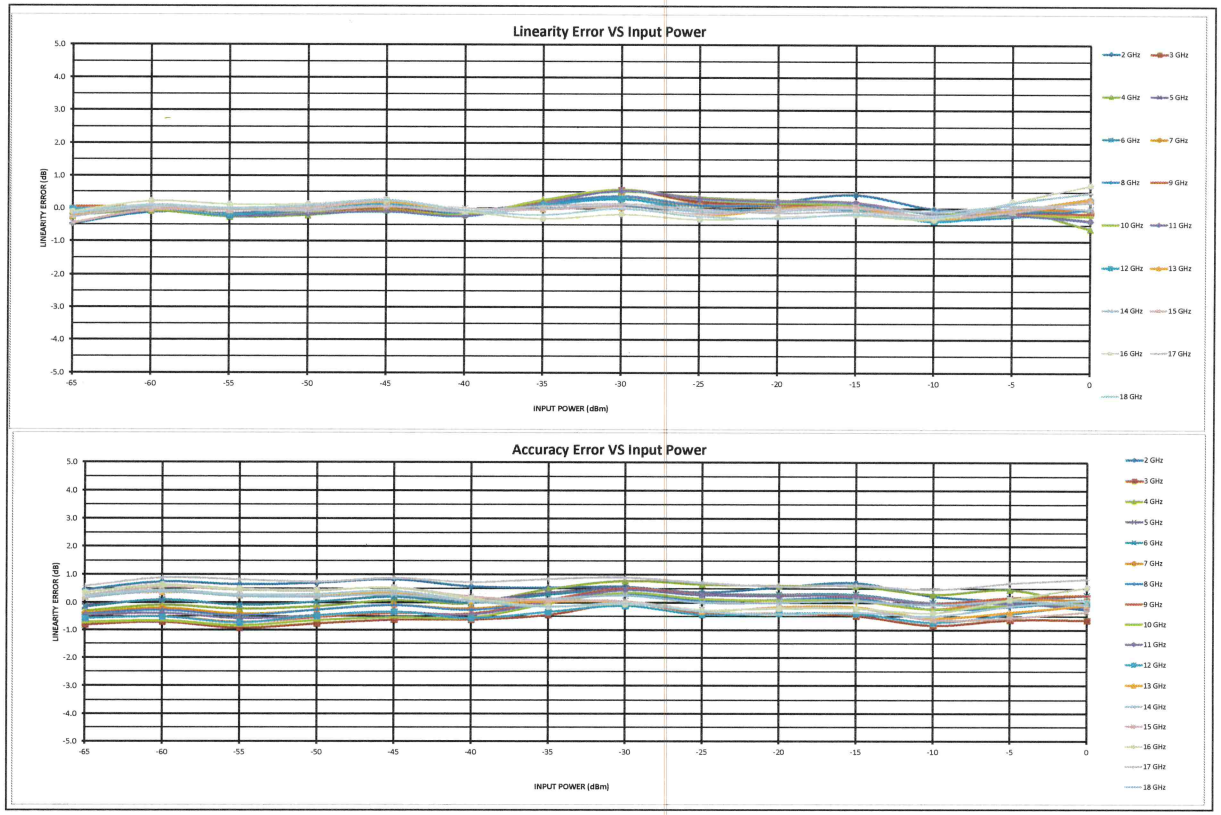
			366	739	1086	1433	1794	2136	2496	2852	3192	3536	3895	4230	4598	4960	Max Measured (mV)
			268	627	964	1327	1689	2031	2405	2781	3110	3463	3811	4139	4505	4856	Min Measured (mV)
			0.70	0.80	0.87	0.75	0.75	0.75	0.65	0.50	0.58	0.52	0.60	0.65	0.66	0.74	Flatness Error (+/-dB)

Output Vos: 36.0 mV

Avg Slope:	70.4 mV/dB
Max Slope:	71.5 mv/dB
Min Slope:	69.0 mv/dB

PL 44917

+25°C


Linearity Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10 GHz
11 GHz
12 GHz
13 GHz
14 GHz
15 GHz
16 GHz
17 GHz
18 GHz
Accuracy Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)

LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44917
Test Temp: -40ºC

Frequency

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz Intercept (mV) 4893 Slope (mV/dB) 71.60	255	608	945	1298	1666	2007	2368	2766	3120	3494	3858	4186	4518	4848	Measured Value (mV)
	16	11	-10	-15	-5	-22	-19	21	17	33	39	9	-17	-45	Error (mV)
	0.23	0.16	-0.14	-0.21	-0.07	-0.30	-0.26	0.30	0.24	0.46	0.55	0.13	-0.24	-0.63	0.63 Linearity Error (dB)
	0.69	0.56	0.21	0.07	0.15	-0.15	-0.17	0.32	0.20	0.36	0.38	-0.10	-0.52	-0.97	0.97 Accuracy Error (dB)
3 GHz Intercept (mV) 4846 Slope (mV/dB) 72.43	182	518	846	1205	1569	1920	2299	2722	3072	3428	3780	4110	4469	4810	Measured Value (mV)
	44	18	-16	-19	-18	-29	-12	49	37	31	21	-11	-15	-36	Error (mV)
	0.61	0.25	-0.22	-0.27	-0.24	-0.40	-0.16	0.68	0.51	0.43	0.29	-0.16	-0.20	-0.49	0.68 Linearity Error (dB)
	-0.32	-0.68	-1.16	-1.21	-1.19	-1.19	-1.12	-0.29	-0.46	-0.55	-0.70	-1.14	-1.19	-1.49	1.49 Accuracy Error (dB)
4 GHz Intercept (mV) 4935 Slope (mV/dB) 73.04	215	568	900	1253	1628	1980	2380	2796	3157	3512	3865	4203	4556	4873	Measured Value (mV)
	27	15	-18	-30	-20	-34	1	52	48	38	26	-2	-14	-62	Error (mV)
	0.37	0.21	-0.25	-0.41	-0.28	-0.46	0.02	0.71	0.66	0.52	0.35	-0.02	-0.19	-0.85	0.85 Linearity Error (dB)
	0.14	0.01	-0.41	-0.55	-0.37	-0.52	0.00	0.73	0.71	0.61	0.48	0.14	0.01	-0.62	0.73 Accuracy Error (dB)
5 GHz Intercept (mV) 4915 Slope (mV/dB) 72.74	221	571	901	1257	1625	1976	2364	2775	3133	3488	3841	4174	4531	4894	Measured Value (mV)
	34	20	-13	-21	-17	-30	-5	42	36	27	17	-14	-21	-21	Error (mV)
	0.47	0.28	-0.19	-0.29	-0.23	-0.41	-0.07	0.58	0.50	0.38	0.23	-0.19	-0.28	-0.29	0.58 Linearity Error (dB)
	0.22	0.05	-0.40	-0.49	-0.42	-0.58	-0.22	0.44	0.38	0.28	0.15	-0.26	-0.34	-0.33	0.58 Accuracy Error (dB)
6 GHz Intercept (mV) 4919 Slope (mV/dB) 72.66	232	577	913	1266	1637	1984	2366	2775	3133	3492	3845	4184	4538	4896	Measured Value (mV)
	36	18	-9	-20	-12	-28	-10	36	31	27	16	-8	-17	-23	Error (mV)
	0.50	0.24	-0.13	-0.27	-0.17	-0.39	-0.13	0.50	0.42	0.36	0.22	-0.11	-0.24	-0.31	0.50 Linearity Error (dB)
	0.37	0.13	-0.24	-0.37	-0.25	-0.47	-0.20	0.44	0.38	0.33	0.20	-0.12	-0.24	-0.30	0.47 Accuracy Error (dB)
7 GHz Intercept (mV) 4911 Slope (mV/dB) 72.96	210	559	885	1242	1612	1961	2346	2762	3118	3476	3831	4169	4533	4890	Measured Value (mV)
	42	26	-13	-21	-15	-31	-11	40	31	25	15	-12	-13	-21	Error (mV)
	0.57	0.36	-0.18	-0.28	-0.21	-0.43	-0.15	0.55	0.43	0.34	0.20	-0.16	-0.18	-0.28	0.57 Linearity Error (dB)
	0.07	-0.12	-0.62	-0.70	-0.60	-0.78	-0.47	0.26	0.17	0.11	0.01	-0.33	-0.31	-0.39	0.78 Accuracy Error (dB)
8 GHz Intercept (mV) 4909 Slope (mV/dB) 72.88	213	558	885	1245	1612	1962	2350	2765	3121	3481	3837	4172	4519	4885	Measured Value (mV)
	41	22	-15	-20	-17	-32	-8	43	34	30	21	-8	-26	-24	Error (mV)
	0.57	0.30	-0.21	-0.27	-0.24	-0.43	-0.11	0.58	0.47	0.41	0.29	-0.11	-0.35	-0.33	0.58 Linearity Error (dB)
	0.11	-0.13	-0.62	-0.66	-0.60	-0.77	-0.42	0.31	0.22	0.18	0.09	-0.29	-0.50	-0.46	0.77 Accuracy Error (dB)
9 GHz Intercept (mV) 4935 Slope (mV/dB) 73.60	200	545	870	1230	1596	1955	2360	2781	3141	3494	3844	4188	4545	4906	Measured Value (mV)
	49	26	-17	-25	-27	-36	1	54	46	31	13	-11	-22	-29	Error (mV)
	0.66	0.35	-0.24	-0.34	-0.37	-0.49	0.01	0.73	0.62	0.42	0.17	-0.15	-0.30	-0.40	0.73 Linearity Error (dB)
	-0.07	-0.31	-0.83	-0.86	-0.82	-0.86	-0.28	0.53	0.49	0.36	0.19	-0.07	-0.15	-0.17	0.86 Accuracy Error (dB)
10 GHz Intercept (mV) 4925 Slope (mV/dB) 73.35	200	549	874	1231	1599	1953	2357	2779	3139	3492	3845	4183	4536	4887	Measured Value (mV)
	42	24	-17	-27	-26	-38	-1	54	47	34	20	-9	-23	-38	Error (mV)
	0.57	0.33	-0.24	-0.37	-0.35	-0.52	-0.02	0.74	0.65	0.46	0.27	-0.12	-0.31	-0.52	0.74 Linearity Error (dB)
	-0.07	-0.26	-0.77	-0.85	-0.77	-0.89	-0.32	0.50	0.46	0.33	0.20	-0.14	-0.27	-0.43	0.89 Accuracy Error (dB)
11 GHz Intercept (mV) 4933 Slope (mV/dB) 73.32	213	557	887	1239	1607	1962	2362	2787	3147	3501	3855	4201	4547	4884	Measured Value (mV)
	46	23	-14	-28	-27	-38	-5	53	47	34	22	1	-19	-49	Error (mV)
	0.62	0.31	-0.19	-0.39	-0.37	-0.52	-0.07	0.73	0.64	0.47	0.30	0.02	-0.26	-0.67	0.73 Linearity Error (dB)
	0.11	-0.15	-0.59	-0.74	-0.66	-0.77	-0.25	0.61	0.57	0.46	0.34	0.11	-0.12	-0.47	0.77 Accuracy Error (dB)
12 GHz Intercept (mV) 4891 Slope (mV/dB) 72.62	212	555	882	1247	1613	1960	2339	2750	3104	3460	3814	4148	4511	4883	Measured Value (mV)
	41	21	-15	-13	-10	-27	-11	37	28	21	12	-17	-17	-8	Error (mV)
	0.56	0.29	-0.21	-0.18	-0.14	-0.37	-0.15	0.51	0.39	0.29	0.16	-0.24	-0.24	-0.12	0.56 Linearity Error (dB)
	0.10	-0.17	-0.66	-0.63	-0.58	-0.80	-0.57	0.10	-0.02	-0.11	-0.23	-0.62	-0.61	-0.48	0.80 Accuracy Error (dB)
13 GHz Intercept (mV) 4896 Slope (mV/dB) 71.79	268	613	949	1298	1655	1999	2359	2760	3116	3480	3835	4170	4528	4894	Measured Value (mV)
	38	24	1	-9	-11	-26	-25	17	14	19	15	-9	-9	-2	Error (mV)
	0.53	0.33	0.01	-0.13	-0.15	-0.36	-0.35	0.24	0.20	0.27	0.21	-0.12	-0.13	-0.03	0.53 Linearity Error (dB)
	0.87	0.63	0.26	0.07	0.00	-0.26	-0.29	0.24	0.15	0.17	0.06	-0.32	-0.38	-0.33	0.87 Accuracy Error (dB)
14 GHz Intercept (mV) 4911 Slope (mV/dB) 72.17	257	607	940	1287	1648	1997	2364	2771	3130	3484	3840	4191	4549	4890	Measured Value (mV)
	37	26	-2	-16	-15	-27	-21	25	23	16	11	2	-1	-21	Error (mV)
	0.51	0.36	-0.02	-0.22	-0.21	-0.38	-0.29	0.35	0.32	0.23	0.16	0.02	-0.02	-0.29	0.51 Linearity Error (dB)
	0.72	0.54	0.14	-0.08	-0.10	-0.29	-0.22	0.39	0.34	0.22	0.13	-0.03	-0.09	-0.39	0.72 Accuracy Error (dB)
15 GHz Intercept (mV) 4887 Slope (mV/dB) 71.33	270	620	960	1307	1668	2013	2373	2771	3129	3485	3836	4172	4514	4866	Measured Value (mV)
	19	13	-4	-14	-9	-21	-18	24	25	24	19	-2	-16	-21	Error (mV)
	0.27	0.18	-0.06	-0.19	-0.13	-0.29	-0.25	0.33	0.35	0.34	0.26	-0.03	-0.23	-0.30	0.35 Linearity Error (dB)
	0.90	0.72	0.41	0.20	0.18	-0.07	-0.10	0.39	0.33	0.24	0.08	-0.29	-0.57	-0.72	0.90 Accuracy Error (dB)
16 GHz Intercept (mV) 4888 Slope (mV/dB) 71.68	271	621	959	1303	1662	1994	2332	2738	3098	3460	3815	4156	4534	4918	Measured Value (mV)
	42	34	13	-1	-1	-27	-47	0	2	6	2	-15	4	30	Error (mV)
	0.59	0.47	0.18	-0.02	-0.01	-0.38	-0.66	0.00	0.03	0.08	0.03	-0.21	0.06	0.42	0.66 Linearity Error (dB)
	0.91	0.74	0.40	0.14	0.09	-0.33	-0.67	-0.07	-0.10	-0.11	-0.21	-0.51	-0.30	0.00	0.91 Accuracy Error (dB)
17 GHz Intercept (mV) 4980 Slope (mV/dB) 72.64	295	644	988	1328	1690	2047	2428	2830	3195	3542	3893	4251	4610	4966	Measured Value (mV)
	36	22	3	-20	-21	-28	-10	29	31	15	3	-3	-7	-14	Error (mV)
	0.50	0.31	0.04	-0.28	-0.29	-0.38	-0.13	0.40	0.43	0.20	0.03	-0.04	-0.09	-0.19	0.50 Linearity Error (dB)
	1.24	1.05	0.80	0.49	0.48	0.40	0.66	1.20	1.24	1.02	0.86	0.80	0.75	0.66	1.24 Accuracy Error (dB)
18 GHz Intercept (mV) 4919 Slope (mV/dB) 71.85	283	629	973	1317	1678	2021	2376	2788	3144	3484	3840	4191	4561	4924	Measured Value (mV)
	34	21	6	-9	-8	-24	-28	24	21	2	-1	-10	1	5	Error (mV)
	0.48	0.29	0.08	-0.13	-0.11	-0.33	-0.39	0.34	0.30	0.03	-0.02	-0.13	0.02	0.07	0.48 Linearity Error (dB)
	1.08	0.85	0.59	0.34	0.31	0.05	-0.06	0.62	0.53	0.22	0.13	-0.03	0.08	0.08	1.08 Accuracy Error (dB)

Output Vos: -46.0 mV

Avg Slope: 72.5 mV/dB	295	644	988	1328	1690	2047	2428	2830	3195	3542	3893	4251	4610	4966	Max Measured (mV)
Max Slope: 73.6 mv/dB	182	518	846	1205	1569	1920	2299	2722	3072	3428	3780	4110	4469	4810	Min Measured (mV)
Min Slope: 71.3 mv/dB	0.78	0.87	0.98	0.85	0.83	0.88	0.89	0.74	0.85	0.79	0.78	0.97	0.97	1.08	Flatness Error (+/-dB)

PL 449917
-40°C

LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44917
Test Temp: +70ºC

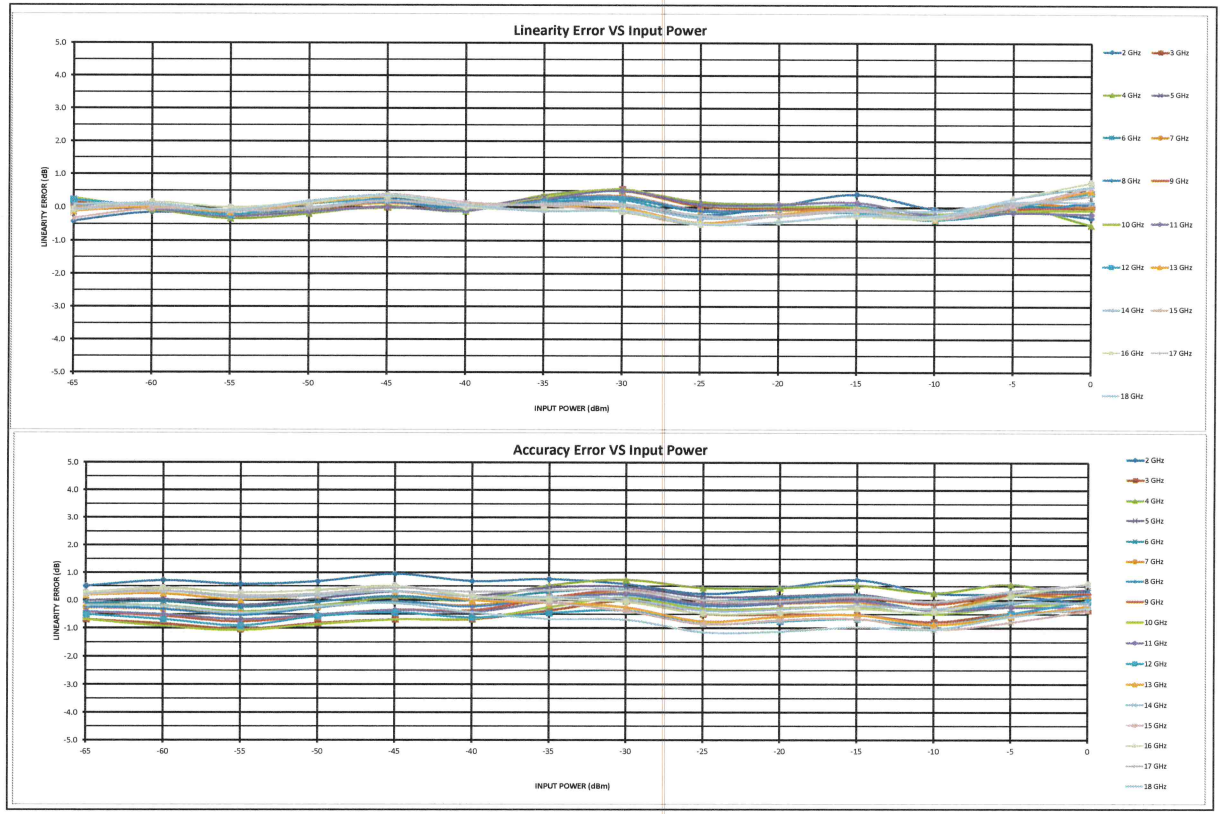
Frequency

		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	Intercept (mV) 4774	305	665	1001	1353	1718	2045	2396	2729	3050	3411	3776	4088	4429	4753	Measured Value (mV)
	Slope (mV/dB) 68.32	-28	-10	-15	-5	19	4	13	5	-16	4	27	-2	-3	-21	Error (mV)
		-0.41	-0.14	-0.22	-0.07	0.27	0.06	0.20	0.07	-0.23	0.05	0.40	-0.04	-0.04	-0.30	0.41 Linearity Error (dB)
		0.51	0.72	0.58	0.67	0.95	0.68	0.76	0.58	0.23	0.45	0.73	0.25	0.18	-0.13	0.95 Accuracy Error (dB)
3 GHz	Intercept (mV) 4737	223	558	890	1250	1605	1949	2318	2687	3001	3345	3690	4017	4385	4738	Measured Value (mV)
	Slope (mV/dB) 69.62	11	-2	-18	-6	1	-4	17	38	4	0	-3	-24	-4	1	Error (mV)
		0.16	-0.03	-0.26	-0.09	0.01	-0.05	0.25	0.55	0.06	0.00	-0.04	-0.35	-0.06	0.01	0.55 Linearity Error (dB)
		-0.68	-0.83	-1.03	-0.82	-0.68	-0.68	-0.37	-0.03	-0.48	-0.50	-0.51	-0.78	-0.46	-0.35	1.03 Accuracy Error (dB)
4 GHz	Intercept (mV) 4801	259	602	933	1293	1658	1997	2380	2740	3065	3411	3763	4089	4456	4765	Measured Value (mV)
	Slope (mV/dB) 69.90	1	-5	-24	-13	2	-8	25	36	12	8	11	-13	5	-36	Error (mV)
		0.02	-0.07	-0.34	-0.19	0.03	-0.12	0.36	0.52	0.16	0.12	0.15	-0.18	0.07	-0.51	0.52 Linearity Error (dB)
		-0.16	-0.20	-0.41	-0.20	0.08	-0.01	0.53	0.74	0.44	0.45	0.54	0.26	0.57	0.04	0.74 Accuracy Error (dB)
5 GHz	Intercept (mV) 4781	269	618	949	1310	1673	2008	2375	2722	3043	3390	3740	4064	4433	4787	Measured Value (mV)
	Slope (mV/dB) 69.32	-6	-3	-19	-4	12	0	21	21	-5	-4	-1	-23	-1	6	Error (mV)
		-0.08	-0.05	-0.27	-0.06	0.17	0.00	0.30	0.30	-0.07	-0.06	-0.01	-0.34	-0.01	0.09	0.34 Linearity Error (dB)
		-0.01	0.04	-0.17	0.05	0.30	0.15	0.46	0.48	0.13	0.15	0.21	-0.10	0.24	0.36	0.48 Accuracy Error (dB)
6 GHz	Intercept (mV) 4778	262	612	944	1302	1662	1997	2364	2715	3034	3386	3737	4065	4433	4782	Measured Value (mV)
	Slope (mV/dB) 69.44	-2	0	-15	-4	9	-3	16	20	-8	-3	1	-19	2	4	Error (mV)
		-0.04	0.00	-0.21	-0.06	0.13	-0.05	0.24	0.29	-0.12	-0.05	0.01	-0.27	0.03	0.06	0.29 Linearity Error (dB)
		-0.12	-0.05	-0.25	-0.07	0.14	-0.01	0.30	0.38	-0.01	0.09	0.17	-0.09	0.24	0.29	0.38 Accuracy Error (dB)
7 GHz	Intercept (mV) 4767	252	594	929	1289	1648	1985	2351	2706	3023	3372	3721	4050	4429	4768	Measured Value (mV)
	Slope (mV/dB) 69.51	3	-3	-15	-3	9	-2	17	24	-6	-5	-4	-22	9	1	Error (mV)
		0.04	-0.04	-0.22	-0.04	0.13	-0.03	0.24	0.35	-0.09	-0.07	-0.05	-0.32	0.13	0.01	0.35 Linearity Error (dB)
		-0.26	-0.31	-0.46	-0.26	-0.06	-0.18	0.11	0.25	-0.16	-0.11	-0.06	-0.30	0.18	0.09	0.46 Accuracy Error (dB)
8 GHz	Intercept (mV) 4765	253	594	924	1289	1649	1982	2349	2703	3021	3372	3728	4047	4409	4777	Measured Value (mV)
	Slope (mV/dB) 69.50	5	-1	-19	-1	11	-3	16	23	-7	-3	5	-23	-9	12	Error (mV)
		0.07	-0.02	-0.27	-0.02	0.16	-0.05	0.23	0.33	-0.10	-0.05	0.07	-0.34	-0.13	0.17	0.34 Linearity Error (dB)
		-0.25	-0.31	-0.54	-0.26	-0.05	-0.23	0.08	0.21	-0.19	-0.11	0.04	-0.35	-0.11	0.22	0.54 Accuracy Error (dB)
9 GHz	Intercept (mV) 4783	242	577	908	1270	1629	1973	2349	2714	3033	3380	3732	4062	4431	4779	Measured Value (mV)
	Slope (mV/dB) 70.11	16	1	-19	-8	1	-6	20	34	3	-1	1	-20	-2	-4	Error (mV)
		0.23	0.01	-0.27	-0.11	0.01	-0.08	0.28	0.49	0.04	-0.01	0.01	-0.29	-0.02	-0.06	0.49 Linearity Error (dB)
		-0.41	-0.56	-0.77	-0.53	-0.34	-0.36	0.08	0.36	-0.02	0.00	0.10	-0.13	0.21	0.25	0.77 Accuracy Error (dB)
10 GHz	Intercept (mV) 4760	223	551	887	1247	1605	1952	2326	2696	3014	3361	3711	4037	4403	4756	Measured Value (mV)
	Slope (mV/dB) 70.10	19	-3	-18	-8	-1	-4	19	39	6	3	2	-22	-7	-4	Error (mV)
		0.27	-0.05	-0.25	-0.12	-0.01	-0.06	0.27	0.55	0.09	0.04	0.03	-0.32	-0.10	-0.06	0.55 Linearity Error (dB)
		-0.68	-0.93	-1.07	-0.86	-0.68	-0.66	-0.25	0.10	-0.29	-0.27	-0.21	-0.49	-0.20	-0.09	1.07 Accuracy Error (dB)
11 GHz	Intercept (mV) 4758	242	581	914	1271	1628	1969	2340	2706	3026	3373	3725	4046	4400	4744	Measured Value (mV)
	Slope (mV/dB) 69.55	5	-3	-18	-9	0	-6	17	35	7	6	11	-16	-10	-14	Error (mV)
		0.08	-0.05	-0.26	-0.13	0.00	-0.09	0.24	0.50	0.10	0.09	0.15	-0.23	-0.14	-0.20	0.50 Linearity Error (dB)
		-0.41	-0.50	-0.68	-0.52	-0.35	-0.42	-0.05	0.25	-0.12	-0.10	-0.01	-0.36	-0.24	-0.26	0.68 Accuracy Error (dB)
12 GHz	Intercept (mV) 4729	235	568	898	1267	1622	1955	2312	2664	2976	3328	3679	4010	4384	4760	Measured Value (mV)
	Slope (mV/dB) 69.38	15	1	-15	7	15	1	11	16	-19	-14	-10	-26	2	31	Error (mV)
		0.22	0.02	-0.22	0.10	0.21	0.01	0.16	0.23	-0.27	-0.20	-0.14	-0.37	0.02	0.44	0.44 Linearity Error (dB)
		-0.51	-0.69	-0.91	-0.57	-0.44	-0.62	-0.45	-0.36	-0.84	-0.75	-0.67	-0.88	-0.47	-0.03	0.91 Accuracy Error (dB)
13 GHz	Intercept (mV) 4714	283	632	962	1319	1674	1998	2337	2672	2982	3340	3690	4011	4378	4749	Measured Value (mV)
	Slope (mV/dB) 68.05	-8	1	-9	7	22	6	5	-1	-31	-13	-3	-23	4	35	Error (mV)
		-0.11	0.01	-0.14	0.11	0.33	0.09	0.07	-0.01	-0.45	-0.19	-0.05	-0.33	0.06	0.51	0.51 Linearity Error (dB)
		0.19	0.24	0.01	0.18	0.32	0.00	-0.09	-0.24	-0.76	-0.58	-0.51	-0.87	-0.56	-0.19	0.87 Accuracy Error (dB)
14 GHz	Intercept (mV) 4743	285	638	968	1318	1674	2006	2352	2692	3009	3358	3713	4051	4412	4754	Measured Value (mV)
	Slope (mV/dB) 68.49	-6	5	-8	0	13	3	6	4	-22	-15	-2	-7	12	11	Error (mV)
		-0.09	0.07	-0.11	0.00	0.19	0.04	0.09	0.06	-0.31	-0.22	-0.04	-0.10	0.17	0.16	0.31 Linearity Error (dB)
		0.22	0.32	0.10	0.16	0.32	0.12	0.13	0.05	-0.37	-0.32	-0.18	-0.29	-0.07	-0.12	0.37 Accuracy Error (dB)
15 GHz	Intercept (mV) 4696	288	645	980	1331	1686	2007	2338	2663	2975	3331	3680	3999	4362	4737	Measured Value (mV)
	Slope (mV/dB) 67.47	-22	-3	-5	9	26	10	4	-9	-34	-16	-4	-22	3	41	Error (mV)
		-0.33	-0.04	-0.07	0.13	0.39	0.15	0.05	-0.13	-0.51	-0.23	-0.06	-0.33	0.05	0.61	0.61 Linearity Error (dB)
		0.26	0.43	0.27	0.35	0.49	0.13	-0.08	-0.37	-0.86	-0.71	-0.66	-1.04	-0.79	-0.36	1.04 Accuracy Error (dB)
16 GHz	Intercept (mV) 4751	289	647	979	1332	1688	2008	2345	2685	3002	3350	3705	4043	4427	4803	Measured Value (mV)
	Slope (mV/dB) 68.58	-4	11	0	10	23	0	-5	-8	-34	-29	-17	-22	19	52	Error (mV)
		-0.06	0.16	0.00	0.15	0.34	0.01	-0.08	-0.12	-0.50	-0.43	-0.25	-0.32	0.28	0.76	0.76 Linearity Error (dB)
		0.27	0.46	0.26	0.37	0.52	0.15	0.03	-0.06	-0.47	-0.43	-0.30	-0.40	0.15	0.59	0.59 Accuracy Error (dB)
17 GHz	Intercept (mV) 4777	285	638	972	1322	1683	2018	2368	2713	3035	3378	3735	4068	4439	4801	Measured Value (mV)
	Slope (mV/dB) 69.05	-3	4	-7	-2	13	3	8	8	-16	-18	-6	-18	7	24	Error (mV)
		-0.05	0.06	-0.10	-0.03	0.19	0.05	0.11	0.11	-0.23	-0.26	-0.09	-0.27	0.10	0.35	0.35 Linearity Error (dB)
		0.22	0.32	0.16	0.22	0.45	0.29	0.36	0.35	0.01	-0.03	0.14	-0.04	0.33	0.56	0.56 Accuracy Error (dB)
18 GHz	Intercept (mV) 4700	257	601	930	1291	1645	1968	2297	2641	2956	3303	3659	3999	4376	4743	Measured Value (mV)
	Slope (mV/dB) 68.45	6	8	-6	13	25	6	-8	-6	-33	-28	-15	-17	18	43	Error (mV)
		0.08	0.11	-0.08	0.19	0.36	0.08	-0.11	-0.09	-0.48	-0.41	-0.21	-0.24	0.26	0.63	0.63 Linearity Error (dB)
		-0.19	-0.21	-0.45	-0.23	-0.10	-0.43	-0.67	-0.69	-1.13	-1.11	-0.96	-1.04	-0.59	-0.28	1.13 Accuracy Error (dB)

Output Vos: 31.0 mV

Avg Slope: 69.1 mV/dB	305	665	1001	1353	1718	2045	2396	2740	3065	3411	3776	4089	4456	4803	Max Measured (mV)
Max Slope: 70.1 mv/dB	223	551	887	1247	1605	1949	2297	2641	2956	3303	3659	3999	4362	4737	Min Measured (mV)
Min Slope: 67.5 mv/dB	0.59	0.82	0.82	0.77	0.82	0.69	0.72	0.72	0.79	0.78	0.85	0.65	0.68	0.48	Flatness Error (+/-dB)

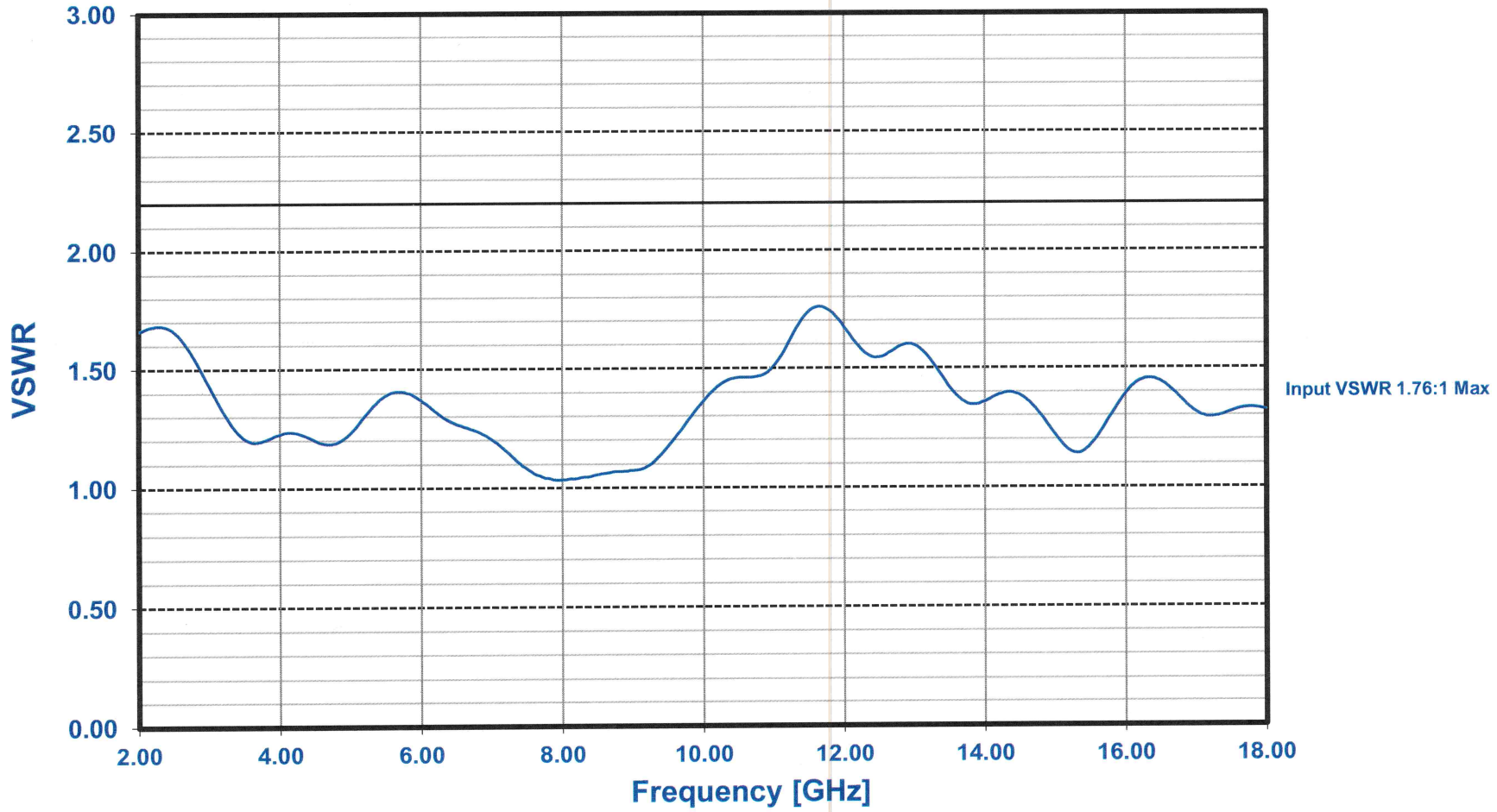
PL 44917
+70°C


Linearity Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10 GHz
11 GHz
12 GHz
13 GHz
14 GHz
15 GHz
16 GHz
17 GHz
18 GHz
Accuracy Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)

Model Number: ERDLVA-2G18G-65-70MV-70C
Serial Number: PL44917
Date: 10/18/2024

Temperature: +25C

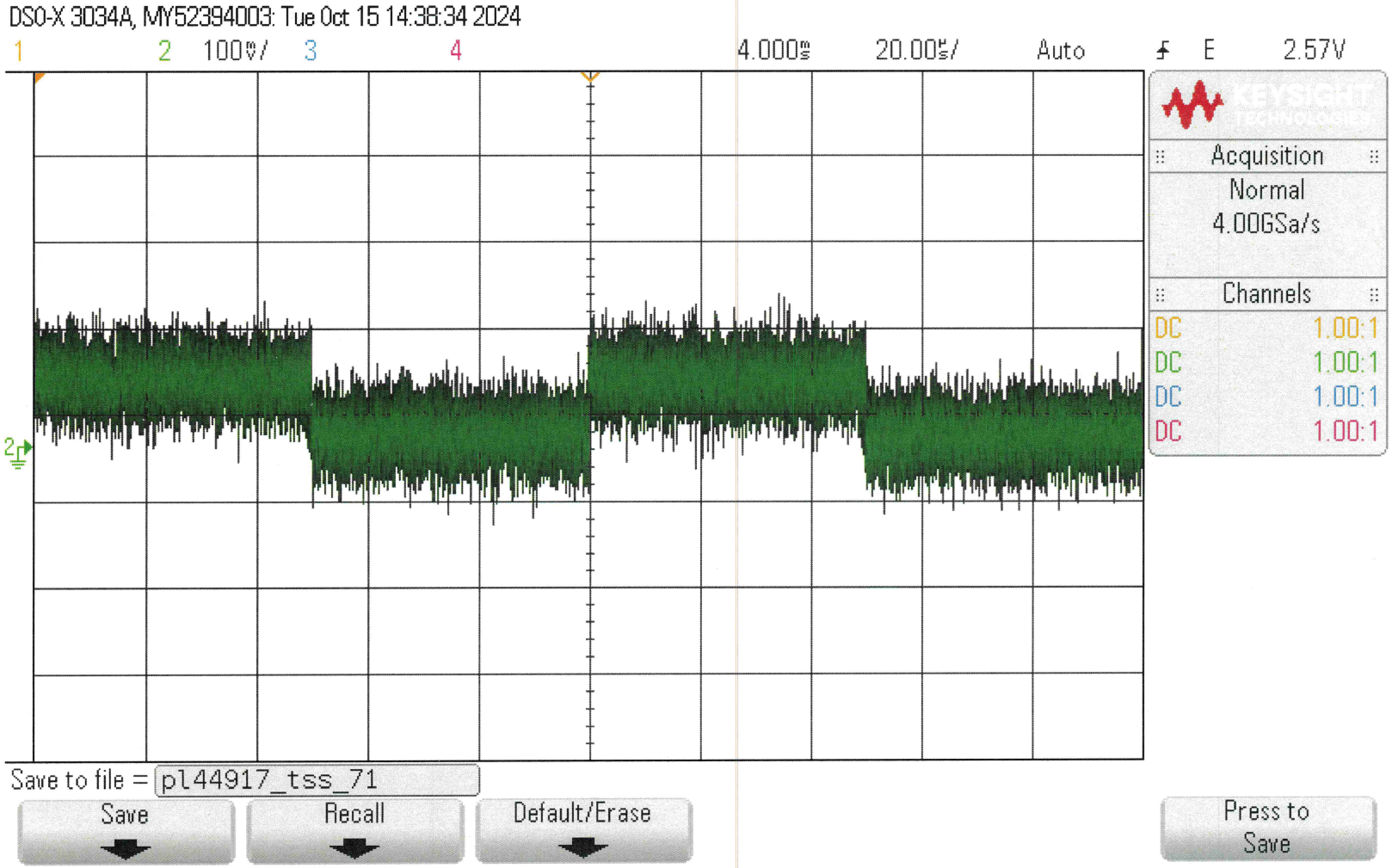
VSWR GRAPH



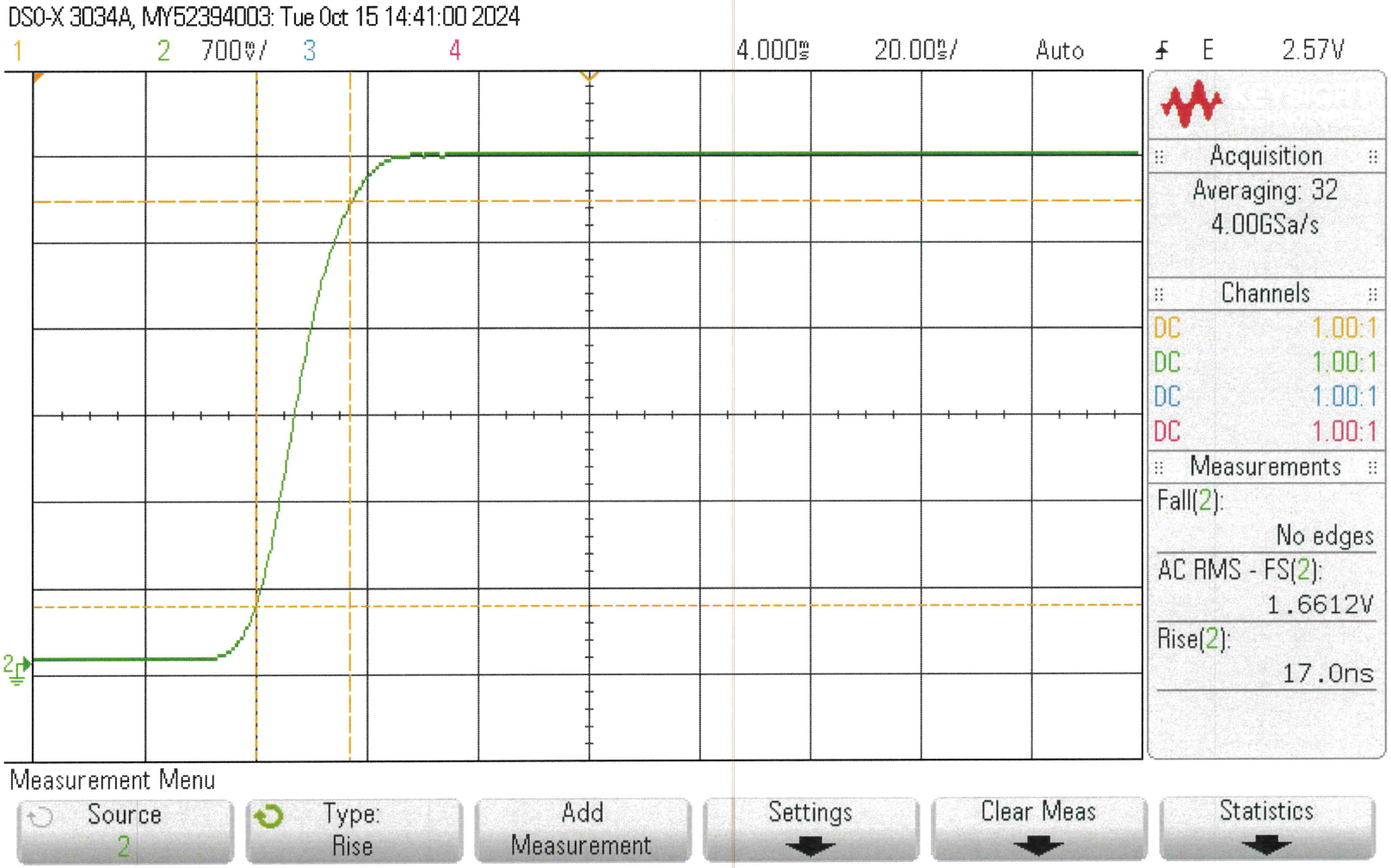
Input VSWR 1.76:1 Max

PL44917

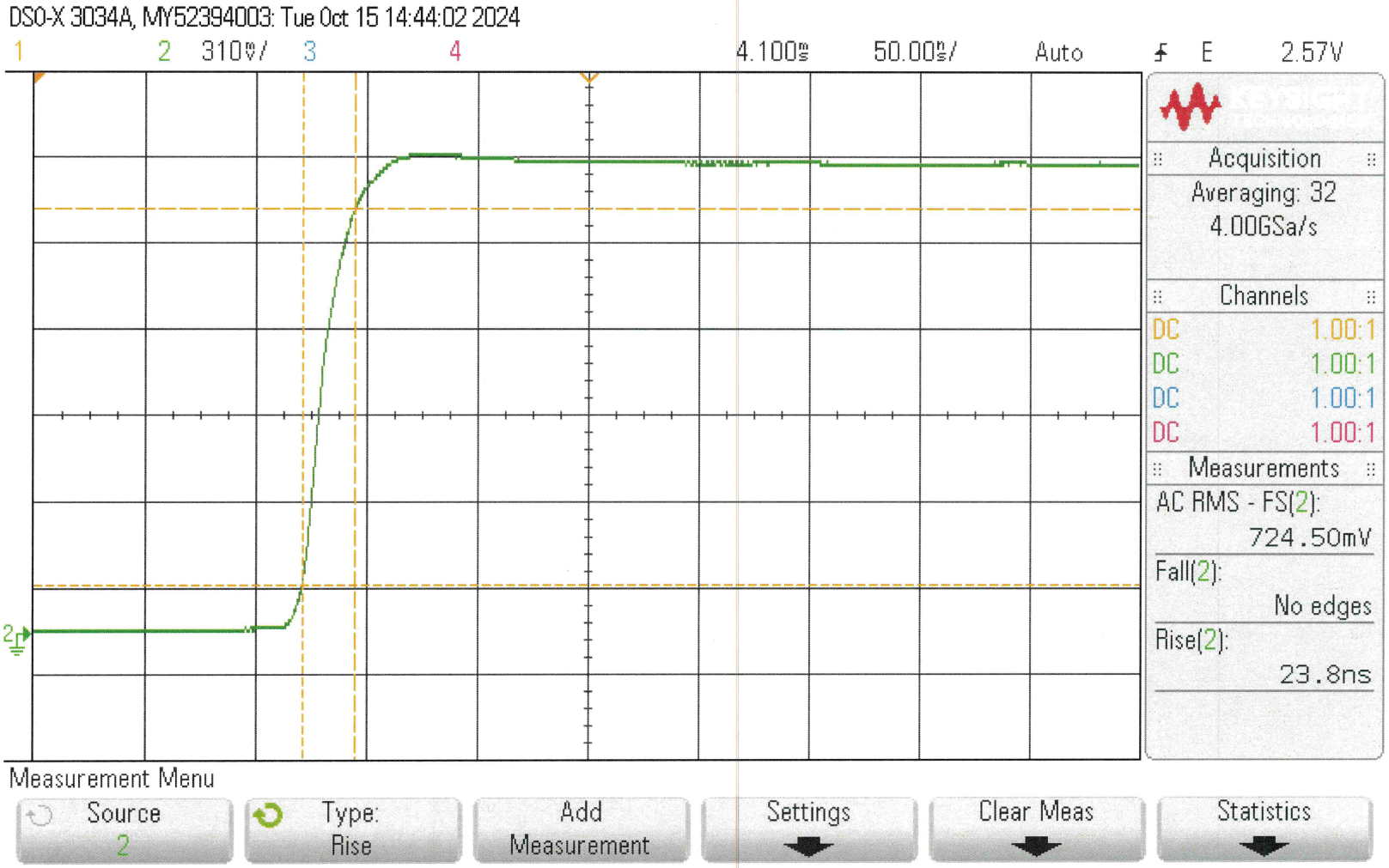
TSS -71dbm



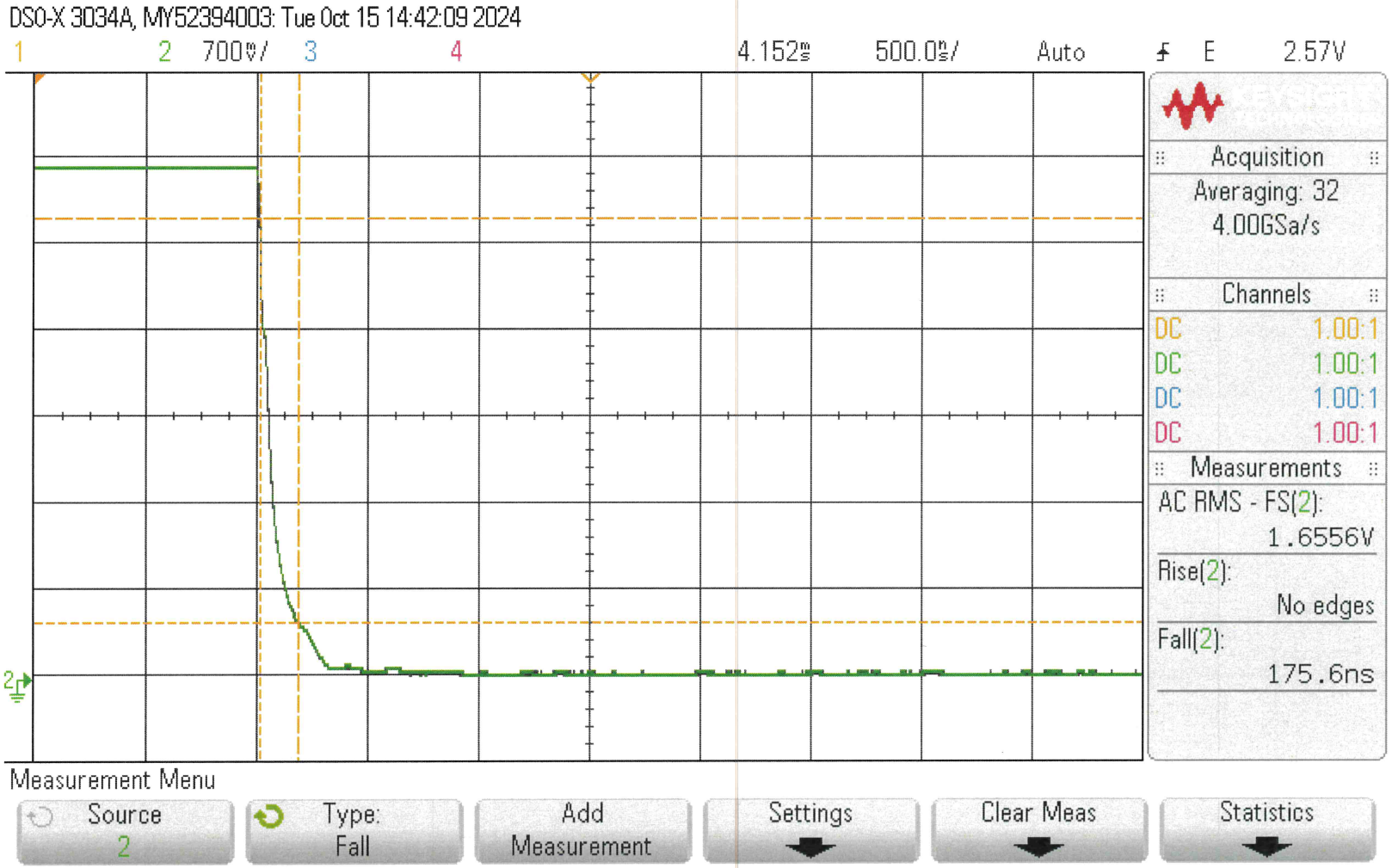
PL44917
settle



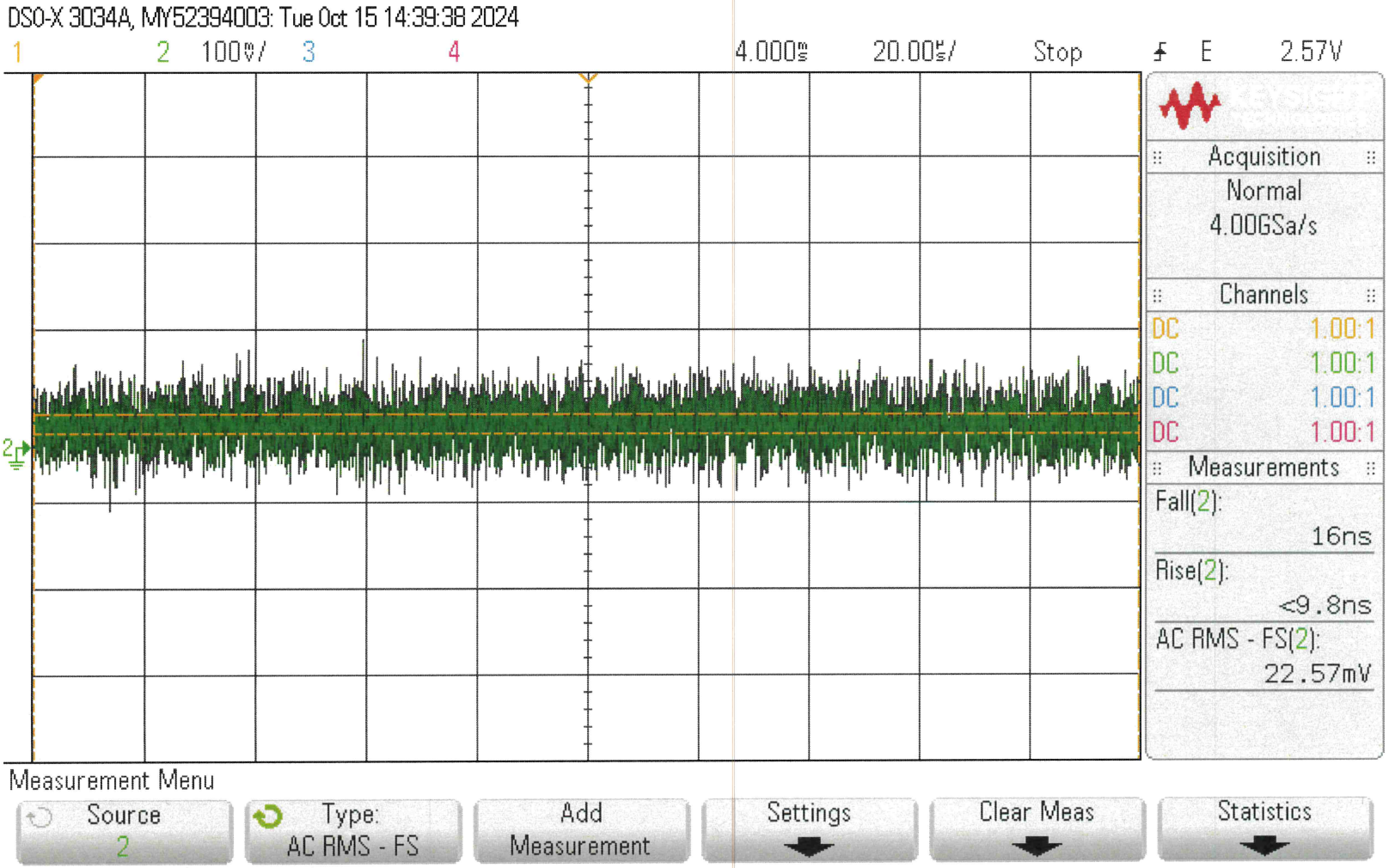
PL449.7
RiseTime -45dbm



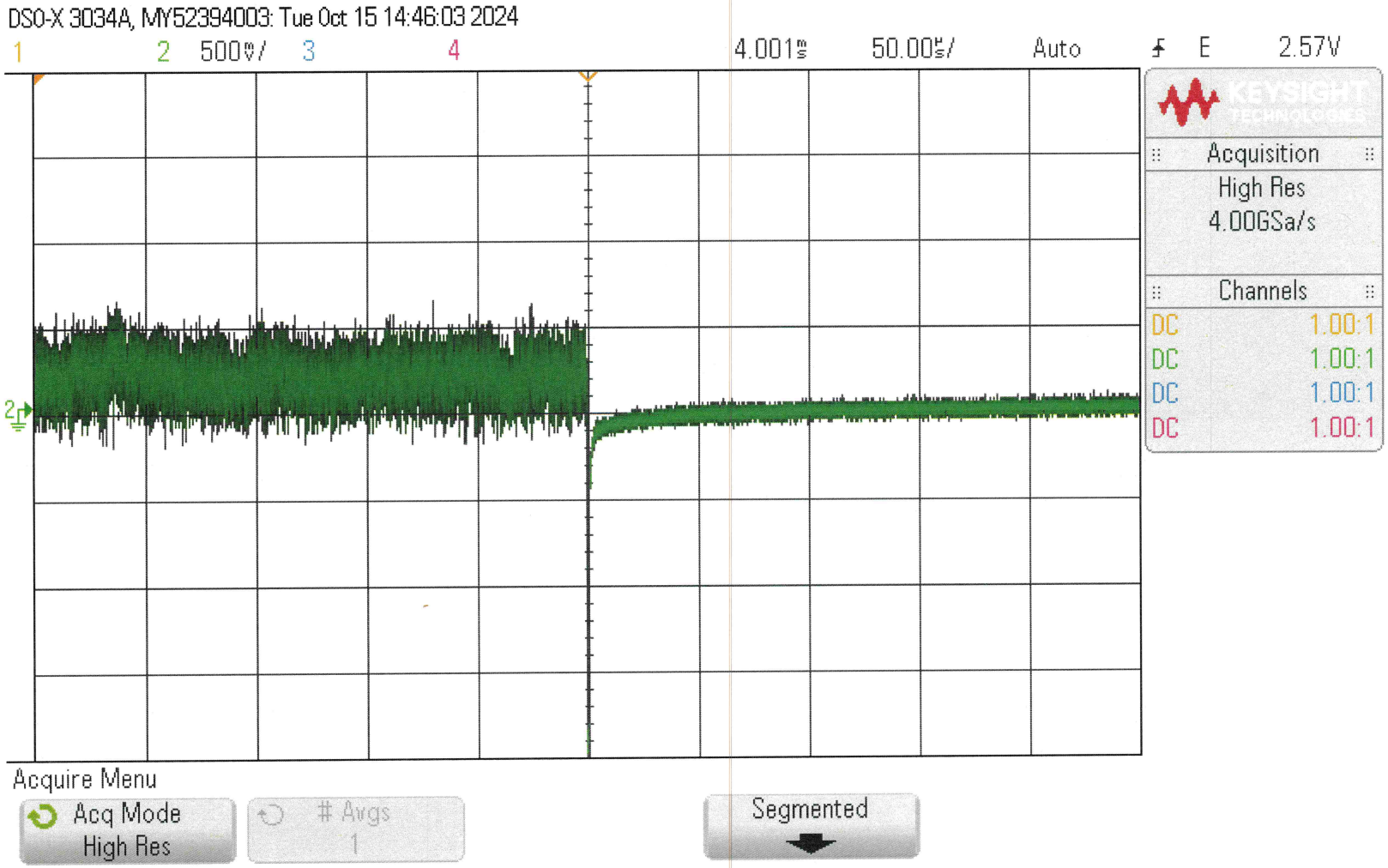
PL44917
Recovery Fall



PL 44917
Rms noise



PL44917
CW Recovery



PL44917
CW Immune