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

Customer: [redacted]
SO No: [redacted]
Model No: ERDLVA-2G18G-65-70MV-70C
Serial No: PL44919/2443

Tested By: Jim Hopson
Temperature: -40C TO +70C
Date 10/18/2024
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	**1.71:1 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	**71.1/67.8 mv/db**	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	**.67/-.58 db**	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	**1.25/-1.18 db**	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	**1.68/-1.63 db**	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	**42 mV**	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	**24.8 ns**	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	**134.4 ns**	
13	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value @-10 dBm	**40 ns**	

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

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14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	**600ns**	
15	VIDEO OUT Video Frequency Flatness:	±2.0 dB MAX @25C	**±1.17 dB MAX @25C**	PMI QA3
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	**1.8 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	**119 mV**	

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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. Klausing Date: 10·23·24

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LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44919
Test Temp: +25°C

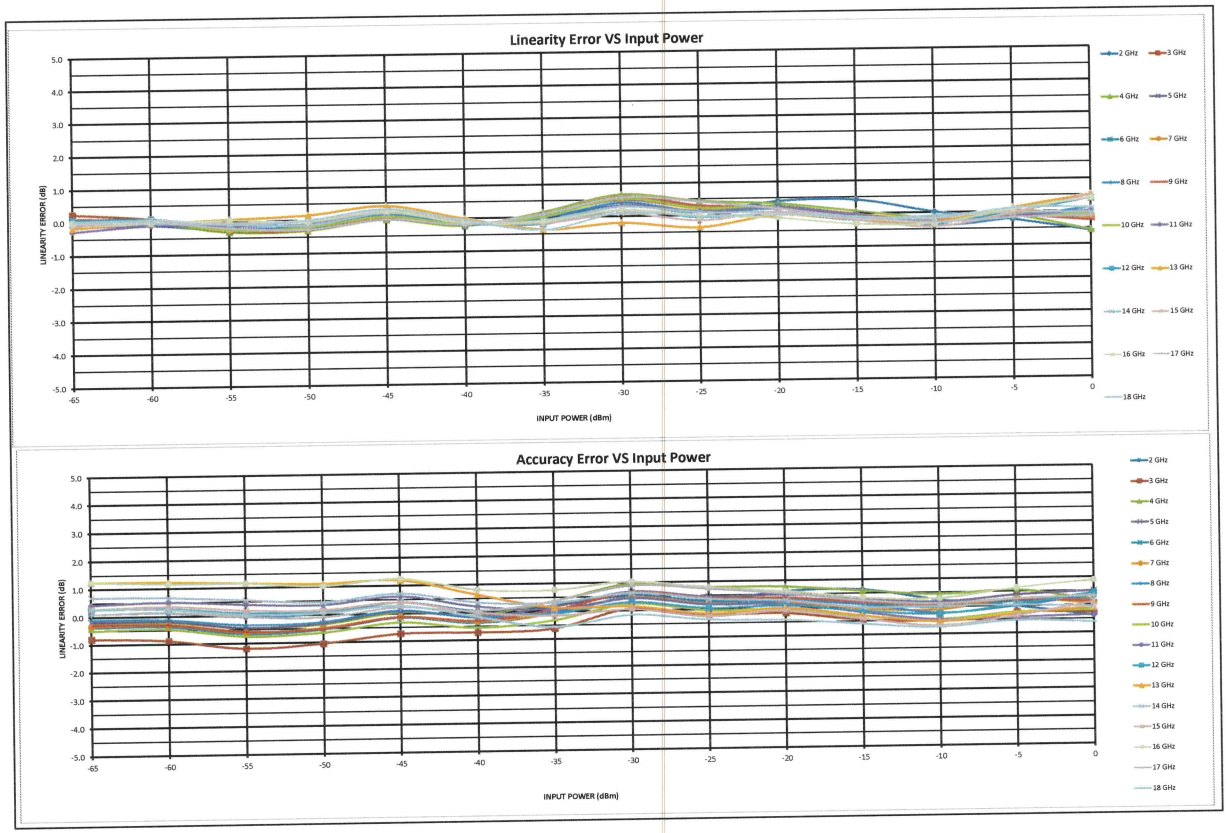
Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	Intercept (mV) 4893	337	689	1026	1383	1758	2084	2444	2817	3151	3522	3873	4195	4527	4852	Measured Value (mV)
	Slope (mV/dB) 69.95	-9	-6	-19	-12	13	-10	0	23	7	29	30	2	-16	-41	Error (mV)
		-0.12	-0.09	-0.27	-0.17	0.19	-0.15	0.00	0.33	0.10	0.41	0.43	0.03	-0.23	-0.58	0.58 Linearity Error (dB)
		0.10	0.13	-0.05	0.05	0.41	0.07	0.21	0.55	0.32	0.62	0.64	0.24	-0.01	-0.37	0.64 Accuracy Error (dB)
3 GHz	Intercept (mV) 4871	275	619	947	1307	1679	2019	2386	2784	3115	3467	3797	4144	4512	4860	Measured Value (mV)
	Slope (mV/dB) 70.99	18	7	-20	-14	3	-12	0	43	19	16	-9	-17	-4	-11	Error (mV)
		0.26	0.10	-0.28	-0.20	0.04	-0.17	0.00	0.60	0.27	0.22	-0.13	-0.24	-0.05	-0.15	0.60 Linearity Error (dB)
		-0.79	-0.87	-1.18	-1.04	-0.72	-0.72	-0.61	0.07	-0.20	-0.16	-0.45	-0.49	-0.23	-0.26	1.18 Accuracy Error (dB)
4 GHz	Intercept (mV) 4931	315	665	998	1355	1732	2072	2455	2846	3185	3533	3870	4209	4567	4891	Measured Value (mV)
	Slope (mV/dB) 71.08	4	-1	-23	-22	0	-16	12	48	31	24	5	-11	-8	-40	Error (mV)
		0.06	-0.01	-0.33	-0.31	0.00	-0.22	0.17	0.67	0.44	0.34	0.08	-0.15	-0.12	-0.56	0.67 Linearity Error (dB)
		-0.21	-0.21	-0.45	-0.35	0.04	-0.10	0.37	0.96	0.80	0.78	0.59	0.44	0.56	0.19	0.96 Accuracy Error (dB)
5 GHz	Intercept (mV) 4918	317	667	999	1358	1736	2068	2442	2826	3161	3513	3849	4190	4555	4913	Measured Value (mV)
	Slope (mV/dB) 70.91	8	4	-19	-14	9	-13	6	35	16	13	-5	-19	-8	-5	Error (mV)
		0.12	0.05	-0.26	-0.20	0.13	-0.19	0.09	0.50	0.22	0.19	-0.07	-0.27	-0.12	-0.07	0.50 Linearity Error (dB)
		-0.19	-0.18	-0.44	-0.31	0.10	-0.16	0.19	0.67	0.46	0.49	0.29	0.17	0.39	0.50	0.67 Accuracy Error (dB)
6 GHz	Intercept (mV) 4902	303	654	983	1342	1719	2053	2425	2813	3147	3503	3837	4176	4539	4891	Measured Value (mV)
	Slope (mV/dB) 70.89	9	5	-20	-16	7	-14	4	37	17	19	-2	-17	-9	-11	Error (mV)
		0.12	0.07	-0.28	-0.22	0.10	-0.19	0.06	0.53	0.24	0.26	-0.03	-0.25	-0.13	-0.16	0.53 Linearity Error (dB)
		-0.39	-0.37	-0.67	-0.54	-0.15	-0.37	-0.06	0.49	0.26	0.35	0.12	-0.03	0.16	0.19	0.67 Accuracy Error (dB)
7 GHz	Intercept (mV) 4896	306	658	987	1346	1721	2056	2424	2812	3143	3495	3825	4171	4546	4882	Measured Value (mV)
	Slope (mV/dB) 70.71	7	5	-20	-14	7	-11	3	38	15	14	-10	-18	4	-14	Error (mV)
		0.09	0.07	-0.28	-0.20	0.10	-0.16	0.05	0.53	0.21	0.19	-0.14	-0.25	0.06	-0.19	0.53 Linearity Error (dB)
		-0.34	-0.31	-0.61	-0.48	-0.12	-0.33	-0.07	0.47	0.20	0.24	-0.05	-0.10	0.26	0.06	0.61 Accuracy Error (dB)
8 GHz	Intercept (mV) 4893	323	671	1006	1361	1737	2067	2428	2810	3141	3498	3836	4162	4528	4902	Measured Value (mV)
	Slope (mV/dB) 70.41	7	3	-14	-11	13	-9	0	29	8	13	-1	-27	-13	9	Error (mV)
		0.10	0.04	-0.20	-0.16	0.18	-0.13	-0.01	0.42	0.12	0.19	-0.01	-0.38	-0.18	0.13	0.42 Linearity Error (dB)
		-0.10	-0.13	-0.34	-0.26	0.11	-0.17	-0.01	0.45	0.18	0.28	0.11	-0.23	0.00	0.34	0.45 Accuracy Error (dB)
9 GHz	Intercept (mV) 4907	310	659	990	1344	1721	2059	2433	2824	3157	3506	3842	4183	4544	4888	Measured Value (mV)
	Slope (mV/dB) 70.86	9	4	-19	-20	3	-13	7	43	22	17	-2	-15	-8	-19	Error (mV)
		0.13	0.06	-0.27	-0.28	0.04	-0.19	0.09	0.61	0.31	0.23	-0.02	-0.21	-0.12	-0.26	0.61 Linearity Error (dB)
		-0.29	-0.30	-0.57	-0.51	-0.12	-0.29	0.06	0.65	0.40	0.39	0.19	0.07	0.23	0.14	0.65 Accuracy Error (dB)
10 GHz	Intercept (mV) 4871	295	647	977	1334	1707	2041	2407	2796	3126	3478	3806	4146	4512	4866	Measured Value (mV)
	Slope (mV/dB) 70.47	4	4	-18	-14	7	-11	2	39	16	16	-8	-21	-7	-5	Error (mV)
		0.06	0.06	-0.26	-0.20	0.10	-0.16	0.03	0.55	0.23	0.23	-0.12	-0.29	-0.10	-0.07	0.55 Linearity Error (dB)
		-0.50	-0.47	-0.75	-0.65	-0.32	-0.55	-0.31	0.24	-0.04	-0.01	-0.32	-0.46	-0.23	-0.17	0.75 Accuracy Error (dB)
11 GHz	Intercept (mV) 4852	360	716	1058	1404	1773	2094	2434	2810	3141	3490	3816	4145	4499	4853	Measured Value (mV)
	Slope (mV/dB) 68.81	-19	-7	-9	-7	18	-5	-9	23	10	15	-3	-18	-8	1	Error (mV)
		-0.27	-0.10	-0.13	-0.10	0.26	-0.07	-0.13	0.33	0.14	0.21	-0.05	-0.27	-0.12	0.02	0.33 Linearity Error (dB)
		0.43	0.52	0.40	0.35	0.62	0.21	0.07	0.45	0.18	0.16	-0.18	-0.47	-0.42	-0.36	0.62 Accuracy Error (dB)
12 GHz	Intercept (mV) 4880	349	699	1036	1389	1758	2079	2424	2800	3132	3486	3819	4160	4531	4908	Measured Value (mV)
	Slope (mV/dB) 69.80	6	7	-5	-1	19	-9	-13	14	-3	2	-14	-22	0	28	Error (mV)
		0.08	0.10	-0.07	-0.02	0.27	-0.13	-0.19	0.20	-0.05	0.03	-0.20	-0.32	0.00	0.40	0.40 Linearity Error (dB)
		0.27	0.27	0.09	0.14	0.41	0.00	-0.07	0.30	0.05	0.11	-0.13	-0.26	0.04	0.43	0.43 Accuracy Error (dB)
13 GHz	Intercept (mV) 4838	417	766	1111	1457	1813	2124	2439	2790	3118	3480	3808	4141	4508	4873	Measured Value (mV)
	Slope (mV/dB) 67.85	-11	-1	5	12	29	0	-24	-12	-23	-1	-12	-18	10	35	Error (mV)
		-0.16	-0.01	0.07	0.17	0.42	0.00	-0.35	-0.18	-0.34	-0.01	-0.17	-0.27	0.14	0.52	0.52 Linearity Error (dB)
		1.24	1.23	1.16	1.11	1.20	0.64	0.14	0.16	-0.15	0.02	-0.29	-0.53	-0.29	-0.07	1.24 Accuracy Error (dB)
14 GHz	Intercept (mV) 4876	379	727	1069	1411	1780	2105	2451	2823	3155	3499	3829	4179	4530	4874	Measured Value (mV)
	Slope (mV/dB) 69.12	-4	-2	-5	-9	14	-6	-6	21	7	5	-10	-6	0	-2	Error (mV)
		-0.06	-0.03	-0.08	-0.13	0.21	-0.09	-0.08	0.30	0.10	0.08	-0.15	-0.08	-0.01	-0.03	0.30 Linearity Error (dB)
		0.70	0.67	0.56	0.45	0.72	0.37	0.31	0.63	0.38	0.29	0.01	0.01	0.03	-0.06	0.72 Accuracy Error (dB)
15 GHz	Intercept (mV) 4851	350	705	1043	1391	1758	2079	2418	2782	3111	3473	3800	4130	4503	4886	Measured Value (mV)
	Slope (mV/dB) 69.17	-4	5	-3	-1	20	-5	-11	7	-10	6	-13	-29	-2	35	Error (mV)
		-0.06	0.07	-0.04	-0.01	0.29	-0.07	-0.17	0.10	-0.15	0.09	-0.19	-0.42	-0.02	0.51	0.51 Linearity Error (dB)
		0.29	0.36	0.19	0.16	0.41	0.00	-0.16	0.04	-0.25	-0.08	-0.41	-0.69	-0.36	0.12	0.69 Accuracy Error (dB)
16 GHz	Intercept (mV) 4912	416	761	1110	1451	1817	2136	2483	2851	3183	3522	3853	4199	4573	4940	Measured Value (mV)
	Slope (mV/dB) 69.19	1	0	3	-2	18	-9	-8	14	0	-7	-22	-22	6	28	Error (mV)
		0.01	0.00	0.04	-0.03	0.26	-0.13	-0.11	0.20	0.00	-0.10	-0.31	-0.31	0.09	0.40	0.40 Linearity Error (dB)
		1.23	1.16	1.15	1.02	1.25	0.81	0.77	1.03	0.78	0.62	0.35	0.30	0.64	0.89	1.25 Accuracy Error (dB)
17 GHz	Intercept (mV) 4909	337	690	1026	1373	1745	2083	2455	2841	3180	3516	3846	4186	4546	4901	Measured Value (mV)
	Slope (mV/dB) 70.34	0	1	-15	-19	1	-13	8	42	29	13	-8	-20	-12	-8	Error (mV)
		0.00	0.02	-0.21	-0.27	0.02	-0.18	0.11	0.60	0.42	0.19	-0.12	-0.28	-0.17	-0.12	0.60 Linearity Error (dB)
		0.10	0.15	-0.05	-0.09	0.22	0.05	0.37	0.89	0.73	0.54	0.25	0.11	0.26	0.33	0.89 Accuracy Error (dB)
18 GHz	Intercept (mV) 4826	351	697	1032	1383	1749	2068	2390	2768	3103	3450	3787	4126	4491	4835	Measured Value (mV)
	Slope (mV/dB) 68.89	2	4	-6	1	22	-3	-25	8	-1	1	-6	-12	9	9	Error (mV)
		0.03	0.05	-0.08	0.01	0.32	-0.04	-0.37	0.12	-0.02	0.02	-0.09	-0.17	0.13	0.12	0.37 Linearity Error (dB)
		0.30	0.25	0.03	0.05	0.28	-0.16	-0.56	-0.16	-0.37	-0.41	-0.59	-0.75	-0.53	-0.61	0.75 Accuracy Error (dB)

Output Vos: 42.0 mV

Avg Slope:	70.0 mV/dB
Max Slope:	71.1 mv/dB
Min Slope:	67.8 mv/dB

417	766	1111	1457	1817	2136	2483	2851	3185	3533	3873	4209	4573	4940	Max Measured (mV)
275	619	947	1307	1679	2019	2386	2768	3103	3450	3787	4126	4491	4835	Min Measured (mV)
1.01	1.05	1.17	1.07	0.99	0.84	0.69	0.59	0.59	0.59	0.61	0.59	0.59	0.75	Flatness Error (+/-dB)

PL44919
+25°C

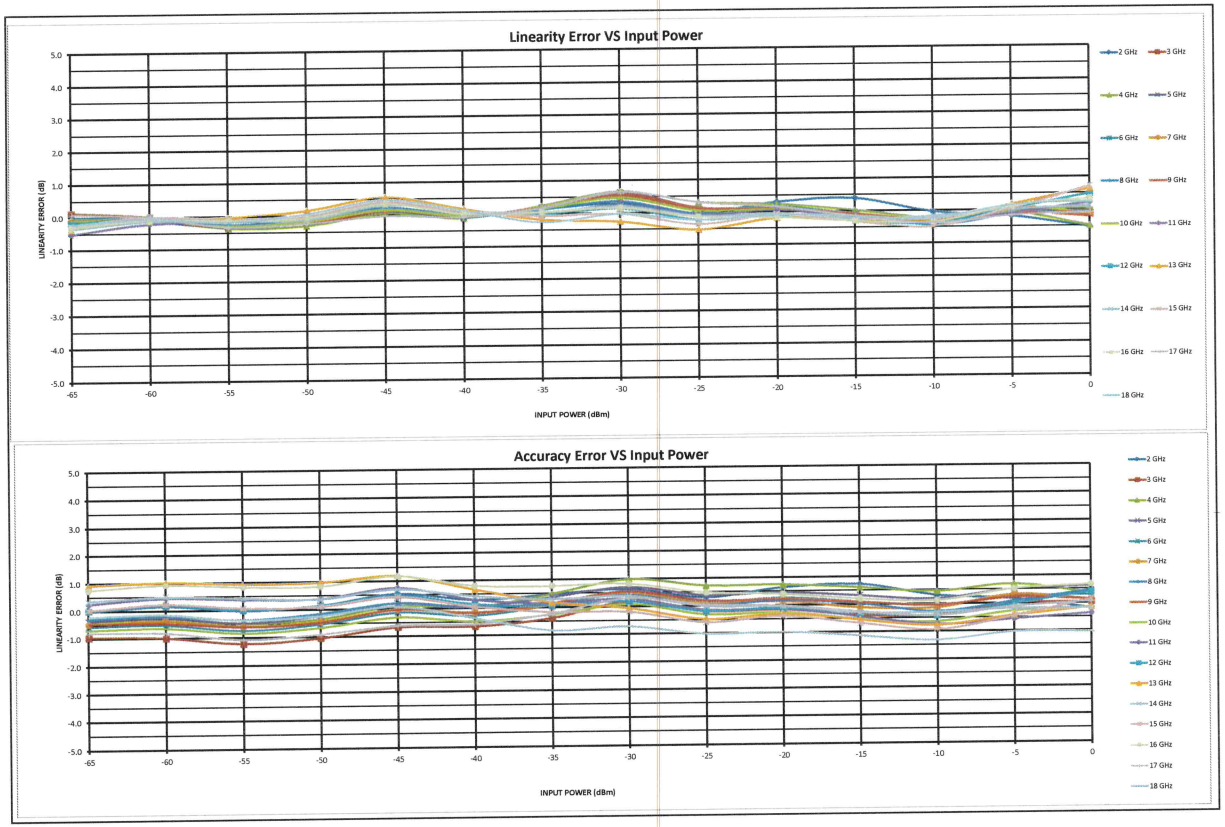

Linearity Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10 GHz
11 GHz
12 GHz
13 GHz
14 GHz
15 GHz
16 GHz
17 GHz
18 GHz
Accuracy Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10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

LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44919
Test Temp: +70ºC

PMI

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	Intercept (mV)	4820	323	680	1011	1366	1738	2065	2421	2776	3098	3465	3815	4130	4464	4784	Measured Value (mV)
	Slope (mV/dB)	68.85	-22	-9	-23	-12	16	-1	10	21	-1	22	27	-2	-12	-36	Error (mV)
			-0.32	-0.14	-0.33	-0.17	0.23	-0.02	0.15	0.31	-0.02	0.31	0.40	-0.03	-0.18	-0.53	0.53 Linearity Error (dB)
			-0.03	0.16	-0.03	0.13	0.54	0.29	0.47	0.63	0.31	0.64	0.73	0.31	0.16	-0.18	0.73 Accuracy Error (dB)
3 GHz	Intercept (mV)	4804	259	601	929	1285	1655	1997	2362	2745	3063	3410	3738	4081	4453	4799	Measured Value (mV)
	Slope (mV/dB)	70.07	10	2	-21	-15	5	-4	11	44	11	8	-15	-22	0	-5	Error (mV)
			0.15	0.03	-0.29	-0.21	0.07	-0.05	0.16	0.62	0.16	0.11	-0.21	-0.31	0.00	-0.07	0.62 Linearity Error (dB)
			-0.96	-0.99	-1.22	-1.05	-0.67	-0.67	-0.39	0.18	-0.20	-0.16	-0.39	-0.40	0.00	0.03	1.22 Accuracy Error (dB)
4 GHz	Intercept (mV)	4855	296	649	979	1333	1708	2047	2422	2801	3127	3472	3807	4140	4501	4821	Measured Value (mV)
	Slope (mV/dB)	70.02	-8	-5	-25	-21	4	-7	18	47	22	17	2	-15	-4	-34	Error (mV)
			-0.11	-0.07	-0.35	-0.30	0.06	-0.10	0.25	0.67	0.32	0.25	0.03	-0.21	-0.06	-0.49	0.67 Linearity Error (dB)
			-0.42	-0.29	-0.49	-0.35	0.10	0.03	0.48	0.99	0.73	0.74	0.61	0.45	0.70	0.35	0.99 Accuracy Error (dB)
5 GHz	Intercept (mV)	4841	301	651	981	1341	1715	2048	2414	2781	3103	3452	3787	4121	4489	4839	Measured Value (mV)
	Slope (mV/dB)	69.78	-4	-3	-22	-11	14	-2	15	33	6	6	-8	-22	-3	-2	Error (mV)
			-0.06	-0.05	-0.32	-0.16	0.20	-0.03	0.22	0.48	0.09	0.09	-0.11	-0.32	-0.05	-0.03	0.48 Linearity Error (dB)
			-0.35	-0.26	-0.46	-0.23	0.20	0.05	0.37	0.70	0.38	0.45	0.32	0.18	0.53	0.61	0.70 Accuracy Error (dB)
6 GHz	Intercept (mV)	4824	286	633	962	1320	1692	2026	2394	2766	3086	3439	3771	4105	4470	4816	Measured Value (mV)
	Slope (mV/dB)	69.82	0	-2	-22	-13	10	-5	14	37	8	12	-5	-21	-5	-8	Error (mV)
			0.00	-0.02	-0.31	-0.18	0.14	-0.07	0.20	0.53	0.11	0.17	-0.08	-0.29	-0.07	-0.11	0.53 Linearity Error (dB)
			-0.57	-0.52	-0.74	-0.54	-0.13	-0.27	0.07	0.48	0.13	0.26	0.09	-0.05	0.25	0.28	0.74 Accuracy Error (dB)
7 GHz	Intercept (mV)	4814	292	644	973	1327	1700	2034	2394	2765	3083	3431	3757	4100	4475	4805	Measured Value (mV)
	Slope (mV/dB)	69.47	-6	-2	-20	-13	12	-1	12	35	6	6	-15	-19	8	-9	Error (mV)
			-0.09	-0.02	-0.29	-0.19	0.18	-0.02	0.17	0.51	0.08	0.09	-0.22	-0.28	0.12	-0.13	0.51 Linearity Error (dB)
			-0.48	-0.36	-0.58	-0.44	-0.01	-0.16	0.07	0.47	0.09	0.15	-0.11	-0.13	0.32	0.12	0.58 Accuracy Error (dB)
8 GHz	Intercept (mV)	4812	306	656	989	1346	1715	2045	2400	2762	3080	3432	3767	4090	4458	4828	Measured Value (mV)
	Slope (mV/dB)	69.19	-8	-4	-17	-6	17	1	10	26	-2	4	-7	-30	-8	16	Error (mV)
			-0.12	-0.06	-0.25	-0.09	0.24	0.01	0.14	0.38	-0.03	0.06	-0.10	-0.43	-0.11	0.24	0.43 Linearity Error (dB)
			-0.28	-0.19	-0.35	-0.16	0.20	0.00	0.16	0.42	0.05	0.16	0.03	-0.27	0.08	0.45	0.45 Accuracy Error (dB)
9 GHz	Intercept (mV)	4820	293	638	971	1325	1699	2033	2399	2771	3090	3436	3771	4106	4468	4806	Measured Value (mV)
	Slope (mV/dB)	69.59	-3	-6	-21	-15	11	-3	15	39	10	8	-5	-18	-4	-14	Error (mV)
			-0.04	-0.09	-0.30	-0.21	0.16	-0.04	0.22	0.56	0.15	0.12	-0.07	-0.25	-0.05	-0.20	0.56 Linearity Error (dB)
			-0.47	-0.45	-0.61	-0.46	-0.03	-0.17	0.15	0.55	0.19	0.22	0.09	-0.04	0.22	0.14	0.61 Accuracy Error (dB)
10 GHz	Intercept (mV)	4781	277	625	955	1311	1680	2012	2371	2739	3056	3403	3729	4065	4434	4785	Measured Value (mV)
	Slope (mV/dB)	69.21	-6	-4	-20	-10	13	-1	12	34	5	6	-14	-24	-1	4	Error (mV)
			-0.08	-0.05	-0.28	-0.14	0.19	-0.01	0.17	0.49	0.07	0.08	-0.21	-0.35	-0.02	0.05	0.49 Linearity Error (dB)
			-0.70	-0.64	-0.84	-0.67	-0.30	-0.48	-0.26	0.09	-0.30	-0.26	-0.52	-0.64	-0.27	-0.17	0.84 Accuracy Error (dB)
11 GHz	Intercept (mV)	4756	342	700	1039	1383	1753	2065	2399	2752	3067	3412	3735	4058	4414	4771	Measured Value (mV)
	Slope (mV/dB)	67.37	-34	-13	-11	-4	29	4	1	18	-4	4	-10	-24	-5	15	Error (mV)
			-0.51	-0.20	-0.17	-0.06	0.43	0.06	0.02	0.26	-0.06	0.06	-0.15	-0.35	-0.07	0.23	0.51 Linearity Error (dB)
			0.25	0.45	0.38	0.38	0.76	0.29	0.15	0.28	-0.14	-0.13	-0.43	-0.74	-0.56	-0.37	0.76 Accuracy Error (dB)
12 GHz	Intercept (mV)	4791	326	681	1013	1366	1733	2054	2393	2746	3064	3414	3744	4080	4452	4824	Measured Value (mV)
	Slope (mV/dB)	68.50	-12	0	-10	0	25	3	0	10	-14	-7	-19	-26	4	33	Error (mV)
			-0.18	0.00	-0.15	0.00	0.36	0.05	0.00	0.15	-0.21	-0.10	-0.28	-0.37	0.06	0.49	0.49 Linearity Error (dB)
			0.01	0.17	0.00	0.13	0.47	0.13	0.06	0.19	-0.19	-0.10	-0.30	-0.42	-0.01	0.40	0.47 Accuracy Error (dB)
13 GHz	Intercept (mV)	4744	389	739	1078	1424	1783	2091	2401	2729	3044	3400	3727	4056	4424	4787	Measured Value (mV)
	Slope (mV/dB)	66.64	-24	-7	-1	12	38	13	-11	-16	-34	-11	-17	-22	13	43	Error (mV)
			-0.35	-0.10	-0.01	0.18	0.57	0.19	-0.16	-0.24	-0.51	-0.17	-0.26	-0.32	0.20	0.65	0.65 Linearity Error (dB)
			0.93	1.02	0.95	0.97	1.19	0.67	0.18	-0.06	-0.48	-0.30	-0.55	-0.77	-0.42	-0.14	1.19 Accuracy Error (dB)
14 GHz	Intercept (mV)	4776	349	703	1042	1382	1749	2074	2409	2759	3076	3418	3745	4088	4440	4784	Measured Value (mV)
	Slope (mV/dB)	67.74	-24	-9	-8	-7	21	8	4	15	-6	-3	-15	-11	3	8	Error (mV)
			-0.35	-0.13	-0.12	-0.10	0.31	0.11	0.06	0.22	-0.10	-0.05	-0.22	-0.16	0.04	0.12	0.35 Linearity Error (dB)
			0.35	0.49	0.42	0.36	0.70	0.42	0.29	0.38	-0.01	-0.04	-0.29	-0.30	-0.19	-0.18	0.70 Accuracy Error (dB)
15 GHz	Intercept (mV)	4757	327	685	1018	1364	1730	2048	2377	2720	3036	3394	3718	4045	4422	4806	Measured Value (mV)
	Slope (mV/dB)	67.90	-17	2	-5	2	28	7	-4	0	-24	-5	-21	-33	4	49	Error (mV)
			-0.25	0.02	-0.07	0.02	0.42	0.10	-0.06	0.00	-0.35	-0.08	-0.30	-0.49	0.06	0.72	0.72 Linearity Error (dB)
			0.03	0.23	0.07	0.10	0.42	0.05	-0.17	-0.19	-0.59	-0.39	-0.68	-0.93	-0.45	0.14	0.93 Accuracy Error (dB)
16 GHz	Intercept (mV)	4820	376	732	1070	1414	1782	2100	2442	2790	3110	3448	3779	4117	4489	4843	Measured Value (mV)
	Slope (mV/dB)	68.05	-20	-5	-7	-3	25	2	4	12	-8	-11	-20	-22	10	23	Error (mV)
			-0.30	-0.07	-0.10	-0.05	0.36	0.03	0.06	0.17	-0.12	-0.16	-0.29	-0.33	0.14	0.34	0.36 Linearity Error (dB)
			0.74	0.92	0.83	0.83	1.18	0.80	0.77	0.83	0.48	0.40	0.21	0.12	0.53	0.67	1.18 Accuracy Error (dB)
17 GHz	Intercept (mV)	4805	270	613	939	1295	1659	2005	2373	2754	3080	3419	3747	4080	4445	4800	Measured Value (mV)
	Slope (mV/dB)	69.88	7	1	-22	-16	-1	-5	14	46	22	12	-10	-26	-10	-5	Error (mV)
			0.11	0.01	-0.32	-0.23	-0.02	-0.07	0.20	0.65	0.32	0.17	-0.14	-0.37	-0.15	-0.07	0.65 Linearity Error (dB)
			-0.80	-0.81	-1.07	-0.90	-0.61	-0.58	-0.23	0.31	0.05	-0.03	-0.26	-0.42	-0.11	0.05	1.07 Accuracy Error (dB)
18 GHz	Intercept (mV)	4708	310	659	988	1341	1706	2020	2331	2684	3007	3354	3687	4018	4382	4725	Measured Value (mV)
	Slope (mV/dB)	67.43	-15	-3	-11	5	33	10	-17	-1	-15	-5	-9	-15	11	17	Error (mV)
			-0.22	-0.04	-0.16	0.07	0.48	0.14	-0.25	-0.01	-0.22	-0.08	-0.14	-0.23	0.17	0.26	0.48 Linearity Error (dB)
			-0.22	-0.15	-0.36	-0.23	0.07	-0.36	-0.84	-0.71	-1.01	-0.97	-1.13	-1.32	-1.03	-1.04	1.32 Accuracy Error (dB)
Output Vos:	52.0 mV																
Avg Slope:	68.8 mV/dB		389	739	1078	1424	1783	2100	2442	2801	3127	3472	3815	4140	4501	4843	Max Measured (mV)
Max Slope:	70.1 mv/dB		259	601	929	1285	1655	1997	2331	2684	3007	3354	3687	4018	4382	4725	Min Measured (mV)
Min Slope:	66.6 mv/dB		0.94	1.00	1.08	1.01	0.93	0.75	0.81	0.85	0.87	0.86	0.93	0.89	0.86	0.86	Flatness Error (+/-dB)

PL44919
+70°C

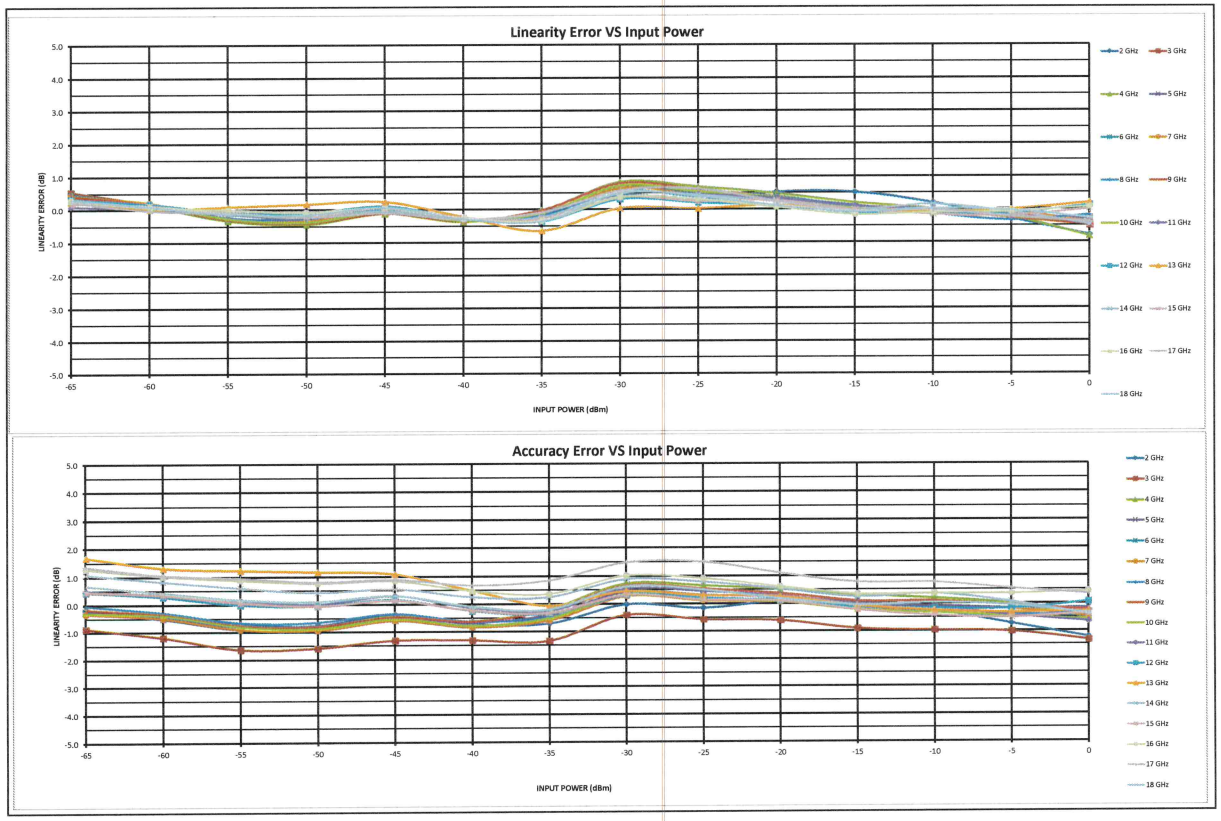

Linearity Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10 GHz
11 GHz
12 GHz
13 GHz
14 GHz
15 GHz
16 GHz
17 GHz
18 GHz
Accuracy Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10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

LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44919
Test Temp: -40°C

PMI

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	Intercept (mV)	4914	256	604	938	1294	1682	2016	2377	2786	3136	3513	3872	4209	4533	4857	Measured Value (mV)
	Slope (mV/dB)	71.95	19	7	-18	-22	6	-20	-18	31	21	38	38	15	-21	-57	Error (mV)
			0.27	0.10	-0.26	-0.31	0.09	-0.27	-0.26	0.43	0.29	0.53	0.52	0.21	-0.29	-0.79	0.79 Linearity Error (dB)
			-0.19	-0.36	-0.71	-0.76	-0.37	-0.73	-0.71	-0.02	-0.15	0.09	0.08	-0.24	-0.73	-1.23	1.23 Accuracy Error (dB)
3 GHz	Intercept (mV)	4886	207	544	872	1235	1614	1960	2331	2759	3106	3463	3801	4156	4512	4849	Measured Value (mV)
	Slope (mV/dB)	72.59	40	14	-21	-21	-5	-22	-14	51	35	29	4	-4	-11	-37	Error (mV)
			0.55	0.19	-0.29	-0.29	-0.07	-0.30	-0.19	0.70	0.49	0.40	0.06	-0.05	-0.15	-0.50	0.70 Linearity Error (dB)
			-0.88	-1.19	-1.63	-1.58	-1.31	-1.31	-1.35	-0.39	-0.57	-0.61	-0.91	-0.97	-1.02	-1.34	1.63 Accuracy Error (dB)
4 GHz	Intercept (mV)	4966	256	602	934	1290	1678	2024	2414	2840	3194	3544	3888	4239	4584	4906	Measured Value (mV)
	Slope (mV/dB)	72.88	27	9	-24	-32	-9	-27	-1	60	50	35	15	2	-18	-60	Error (mV)
			0.37	0.12	-0.33	-0.44	-0.12	-0.37	-0.02	0.83	0.68	0.49	0.21	0.02	-0.24	-0.83	0.83 Linearity Error (dB)
			-0.19	-0.38	-0.77	-0.82	-0.42	-0.61	-0.19	0.73	0.65	0.52	0.30	0.18	-0.02	-0.54	0.82 Accuracy Error (dB)
5 GHz	Intercept (mV)	4956	254	597	931	1293	1675	2020	2400	2818	3169	3523	3866	4220	4573	4934	Measured Value (mV)
	Slope (mV/dB)	72.84	33	12	-19	-21	-3	-22	-6	47	34	24	3	-8	-19	-22	Error (mV)
			0.45	0.16	-0.26	-0.29	-0.04	-0.31	-0.09	0.65	0.47	0.33	0.04	-0.10	-0.26	-0.30	0.65 Linearity Error (dB)
			-0.22	-0.45	-0.81	-0.78	-0.47	-0.67	-0.39	0.43	0.31	0.23	0.00	-0.08	-0.17	-0.16	0.81 Accuracy Error (dB)
6 GHz	Intercept (mV)	4941	251	592	923	1281	1666	2008	2390	2809	3158	3516	3857	4209	4559	4912	Measured Value (mV)
	Slope (mV/dB)	72.71	36	13	-19	-25	-3	-25	-6	49	34	29	6	-5	-19	-29	Error (mV)
			0.49	0.18	-0.26	-0.34	-0.05	-0.34	-0.09	0.67	0.47	0.40	0.09	-0.07	-0.26	-0.40	0.67 Linearity Error (dB)
			-0.26	-0.52	-0.92	-0.94	-0.59	-0.84	-0.53	0.30	0.15	0.13	-0.13	-0.24	-0.37	-0.46	0.94 Accuracy Error (dB)
7 GHz	Intercept (mV)	4941	246	594	924	1281	1666	2008	2385	2807	3155	3511	3851	4207	4571	4912	Measured Value (mV)
	Slope (mV/dB)	72.72	32	16	-17	-24	-3	-24	-11	48	32	24	1	-7	-6	-29	Error (mV)
			0.44	0.22	-0.24	-0.33	-0.03	-0.33	-0.15	0.65	0.44	0.34	0.01	-0.09	-0.09	-0.40	0.65 Linearity Error (dB)
			-0.33	-0.50	-0.91	-0.94	-0.59	-0.84	-0.59	0.27	0.11	0.06	-0.21	-0.26	-0.20	-0.46	0.94 Accuracy Error (dB)
8 GHz	Intercept (mV)	4938	267	609	942	1302	1684	2023	2394	2809	3158	3516	3862	4204	4552	4925	Measured Value (mV)
	Slope (mV/dB)	72.35	32	12	-17	-19	2	-21	-12	41	29	25	9	-11	-24	-13	Error (mV)
			0.44	0.16	-0.23	-0.26	0.02	-0.29	-0.17	0.57	0.39	0.34	0.13	-0.15	-0.34	-0.18	0.57 Linearity Error (dB)
			-0.04	-0.29	-0.66	-0.65	-0.34	-0.63	-0.47	0.30	0.15	0.13	-0.06	-0.30	-0.47	-0.28	0.66 Accuracy Error (dB)
9 GHz	Intercept (mV)	4964	258	604	934	1291	1676	2023	2412	2835	3186	3533	3873	4232	4581	4928	Measured Value (mV)
	Slope (mV/dB)	72.89	32	13	-21	-29	-8	-26	-1	57	44	27	2	-3	-19	-36	Error (mV)
			0.43	0.18	-0.29	-0.39	-0.11	-0.35	-0.02	0.79	0.60	0.36	0.03	-0.05	-0.26	-0.50	0.79 Linearity Error (dB)
			-0.17	-0.36	-0.77	-0.80	-0.45	-0.63	-0.22	0.66	0.54	0.37	0.09	0.08	-0.06	-0.24	0.80 Accuracy Error (dB)
10 GHz	Intercept (mV)	4933	249	602	932	1286	1671	2012	2391	2813	3162	3512	3850	4202	4553	4903	Measured Value (mV)
	Slope (mV/dB)	72.40	22	13	-19	-27	-4	-25	-8	52	39	27	3	-7	-18	-30	Error (mV)
			0.31	0.18	-0.26	-0.37	-0.05	-0.34	-0.11	0.72	0.54	0.38	0.05	-0.09	-0.24	-0.41	0.72 Linearity Error (dB)
			-0.29	-0.38	-0.80	-0.87	-0.52	-0.78	-0.51	0.36	0.21	0.07	-0.23	-0.33	-0.45	-0.59	0.87 Accuracy Error (dB)
11 GHz	Intercept (mV)	4926	305	655	1000	1349	1730	2059	2411	2826	3179	3527	3865	4215	4555	4898	Measured Value (mV)
	Slope (mV/dB)	71.22	8	2	-10	-17	8	-19	-23	36	33	25	7	1	-15	-28	Error (mV)
			0.11	0.02	-0.13	-0.23	0.12	-0.26	-0.32	0.51	0.46	0.35	0.10	0.01	-0.21	-0.40	0.51 Linearity Error (dB)
			0.49	0.35	0.15	0.00	0.30	-0.13	-0.23	0.54	0.44	0.28	-0.02	-0.15	-0.42	-0.66	0.66 Accuracy Error (dB)
12 GHz	Intercept (mV)	4940	301	649	988	1345	1720	2051	2403	2811	3162	3514	3857	4214	4572	4949	Measured Value (mV)
	Slope (mV/dB)	71.75	25	14	-6	-7	9	-19	-26	24	16	9	-7	-8	-9	9	Error (mV)
			0.35	0.20	-0.08	-0.10	0.12	-0.26	-0.36	0.33	0.22	0.13	-0.09	-0.12	-0.13	0.13	0.36 Linearity Error (dB)
			0.43	0.27	-0.02	-0.05	0.16	-0.24	-0.34	0.33	0.21	0.10	-0.13	-0.17	-0.19	0.05	0.43 Accuracy Error (dB)
13 GHz	Intercept (mV)	4912	391	724	1078	1433	1787	2103	2423	2820	3168	3525	3861	4208	4562	4926	Measured Value (mV)
	Slope (mV/dB)	69.83	18	2	7	13	18	-15	-45	3	2	10	-3	-5	0	14	Error (mV)
			0.26	0.03	0.10	0.18	0.25	-0.22	-0.64	0.05	0.03	0.14	-0.05	-0.08	-0.01	0.21	0.64 Linearity Error (dB)
			1.68	1.31	1.23	1.17	1.09	0.48	-0.07	0.45	0.29	0.25	-0.07	-0.25	-0.33	-0.27	1.68 Accuracy Error (dB)
14 GHz	Intercept (mV)	4951	348	689	1032	1379	1748	2086	2445	2852	3204	3545	3883	4251	4589	4917	Measured Value (mV)
	Slope (mV/dB)	71.12	20	6	-7	-15	-2	-20	-16	35	31	17	-1	12	-6	-34	Error (mV)
			0.29	0.08	-0.10	-0.22	-0.03	-0.28	-0.23	0.49	0.44	0.24	-0.01	0.16	-0.08	-0.47	0.49 Linearity Error (dB)
			1.08	0.83	0.59	0.42	0.55	0.25	0.24	0.90	0.79	0.53	0.23	0.35	0.05	-0.39	1.08 Accuracy Error (dB)
15 GHz	Intercept (mV)	4920	302	654	994	1344	1718	2052	2405	2810	3157	3514	3850	4195	4549	4920	Measured Value (mV)
	Slope (mV/dB)	71.26	14	10	-6	-12	5	-17	-20	28	19	20	-1	-12	-14	0	Error (mV)
			0.20	0.14	-0.09	-0.18	0.07	-0.24	-0.29	0.40	0.27	0.28	-0.01	-0.17	-0.20	0.01	0.40 Linearity Error (dB)
			0.44	0.34	0.07	-0.07	0.13	-0.22	-0.32	0.31	0.14	0.10	-0.23	-0.43	-0.51	-0.35	0.51 Accuracy Error (dB)
16 GHz	Intercept (mV)	4972	362	703	1052	1403	1769	2102	2453	2861	3213	3551	3891	4252	4610	4977	Measured Value (mV)
	Slope (mV/dB)	71.27	23	7	0	-5	4	-19	-24	27	23	5	-12	-7	-5	5	Error (mV)
			0.32	0.10	0.00	-0.07	0.06	-0.27	-0.34	0.38	0.32	0.07	-0.16	-0.10	-0.07	0.07	0.38 Linearity Error (dB)
			1.28	1.02	0.87	0.75	0.84	0.47	0.35	1.02	0.92	0.62	0.34	0.36	0.34	0.44	1.28 Accuracy Error (dB)
17 GHz	Intercept (mV)	4997	368	706	1058	1407	1773	2117	2489	2894	3255	3586	3922	4281	4624	4970	Measured Value (mV)
	Slope (mV/dB)	71.50	18	-2	-7	-16	-7	-21	-6	42	45	19	-3	-1	-16	-27	Error (mV)
			0.25	-0.02	-0.10	-0.22	-0.10	-0.29	-0.08	0.58	0.63	0.26	-0.04	-0.02	-0.22	-0.38	0.63 Linearity Error (dB)
			1.36	1.06	0.96	0.81	0.90	0.68	0.85	1.48	1.50	1.10	0.77	0.77	0.53	0.35	1.50 Accuracy Error (dB)
18 GHz	Intercept (mV)	4940	319	660	1001	1356	1730	2062	2414	2833	3183	3520	3863	4228	4581	4920	Measured Value (mV)
	Slope (mV/dB)	71.46	24	8	-9	-11	6	-20	-25	37	29	9	-5	2	-2	-20	Error (mV)
			0.34	0.11	-0.12	-0.15	0.08	-0.27	-0.35	0.51	0.41	0.13	-0.07	0.03	-0.03	-0.28	0.51 Linearity Error (dB)
			0.68	0.42	0.16	0.10	0.30	-0.09	-0.19	0.63	0.50	0.19	-0.05	0.03	-0.06	-0.35	0.68 Accuracy Error (dB)
Output Vos:		-16.0 mV															
Avg Slope:		71.9 mV/dB	391	724	1078	1433	1787	2117	2489	2894	3255	3586	3922	4281	4624	4977	Max Measured (mV)
Max Slope:		72.9 mv/dB	207	544	872	1235	1614	1960	2331	2759	3106	3463	3801	4156	4512	4849	Min Measured (mV)
Min Slope:		69.8 mv/dB	1.28	1.25	1.43	1.38	1.20	1.09	1.10	0.94	1.04	0.86	0.84	0.87	0.78	0.89	Flatness Error (+/-dB)

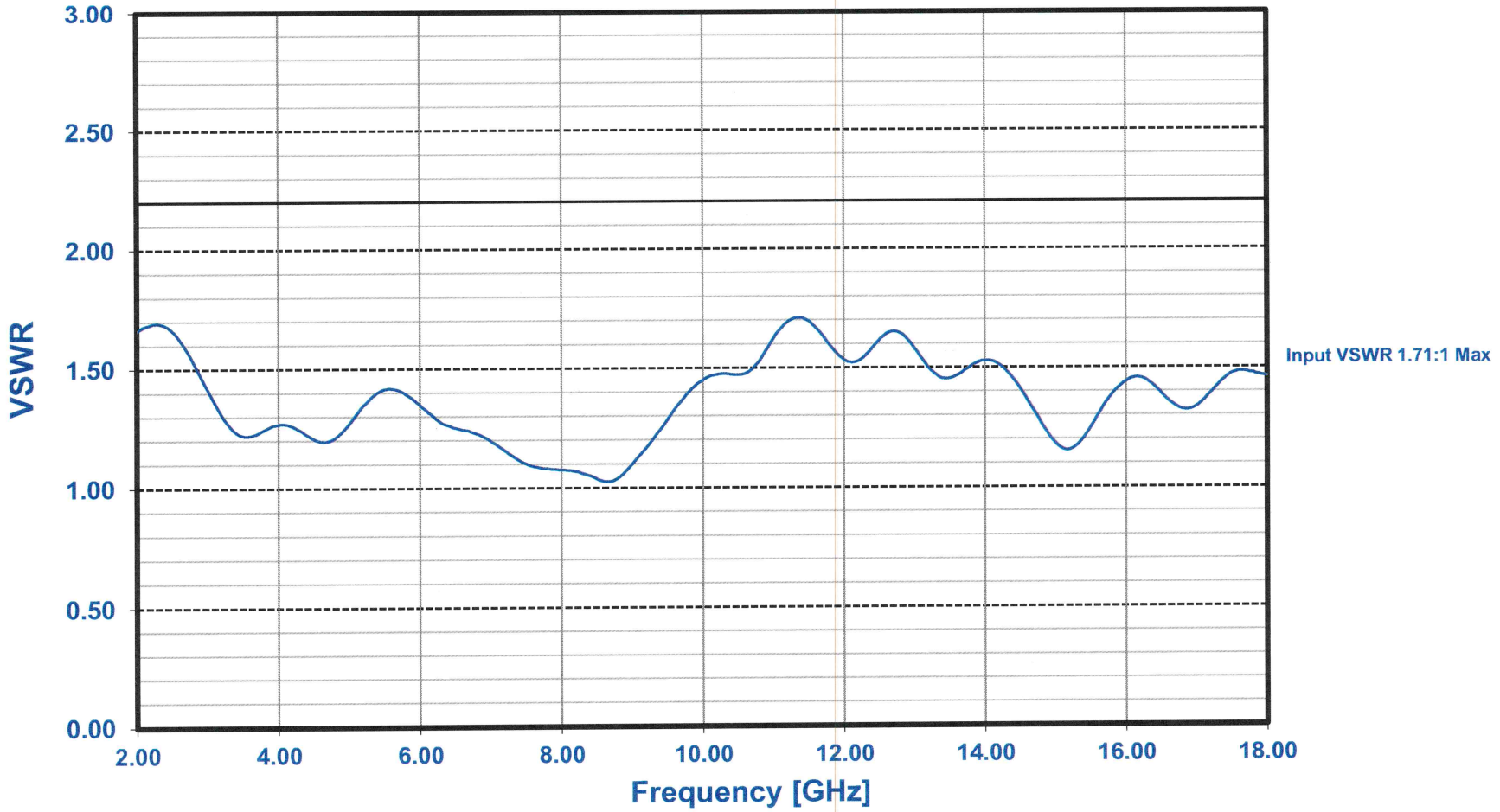
PL44919
-40°C


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: PL44919
Date: 10/18/2024

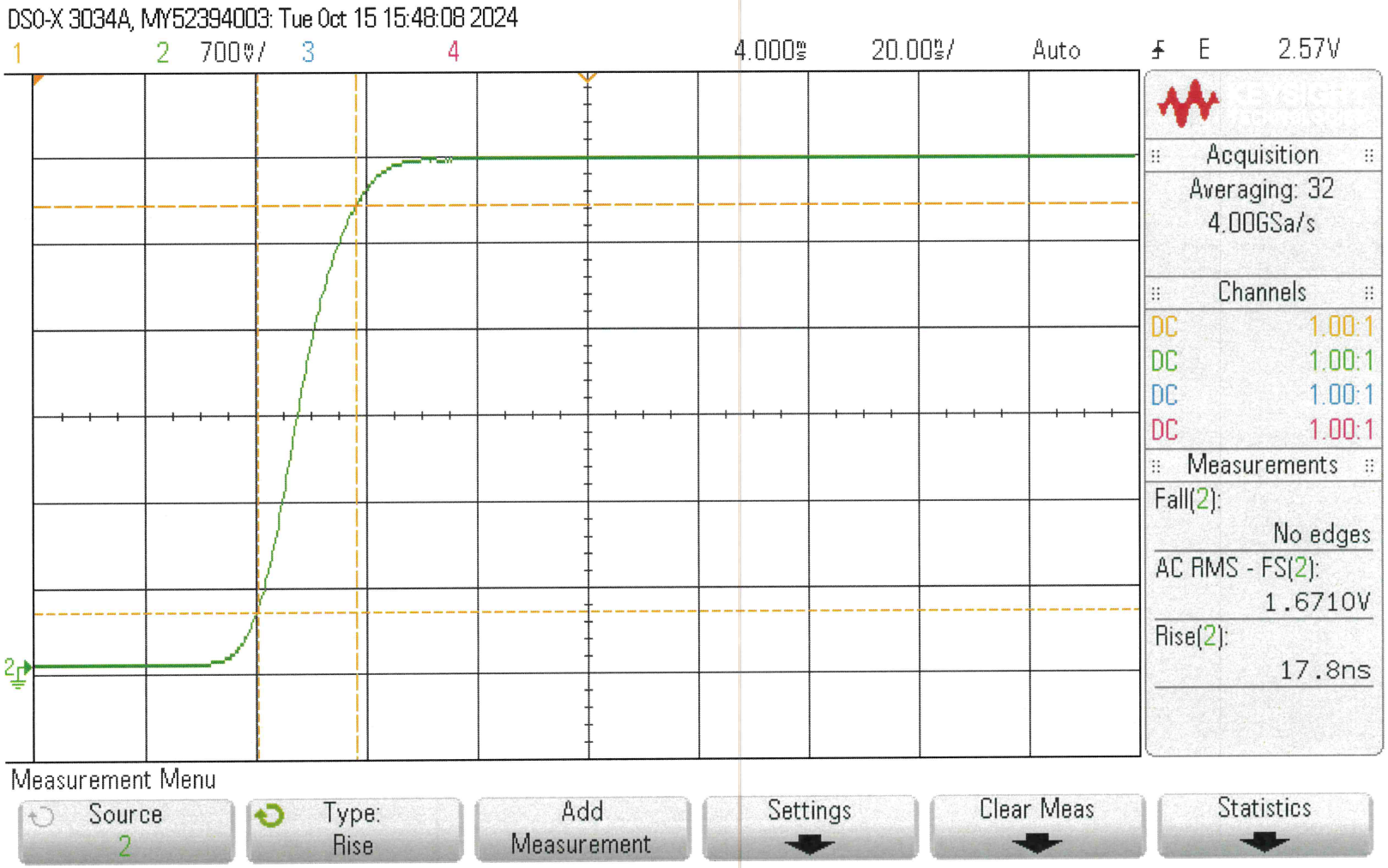
Temperature: +25C

VSWR GRAPH

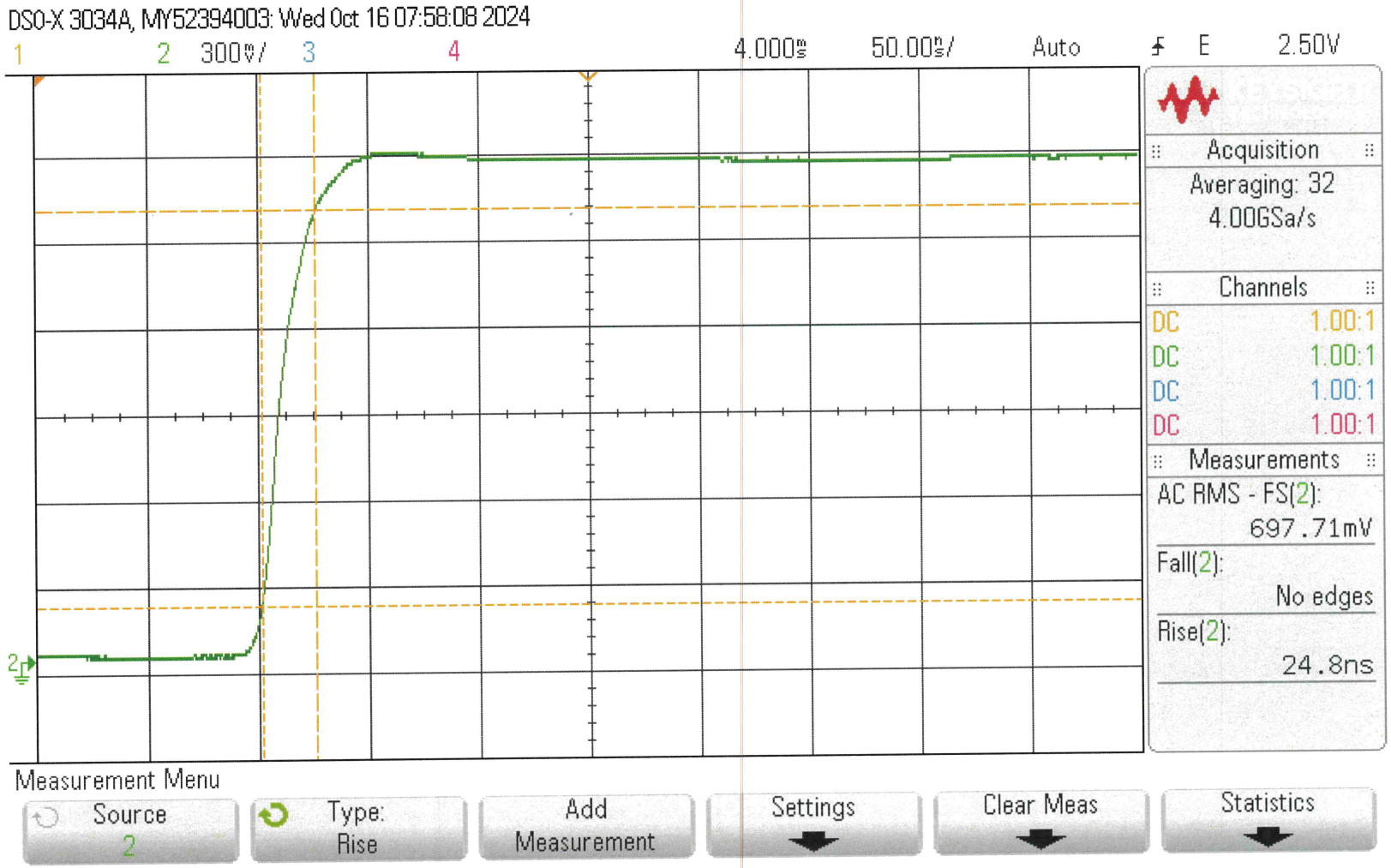


Input VSWR 1.71:1 Max

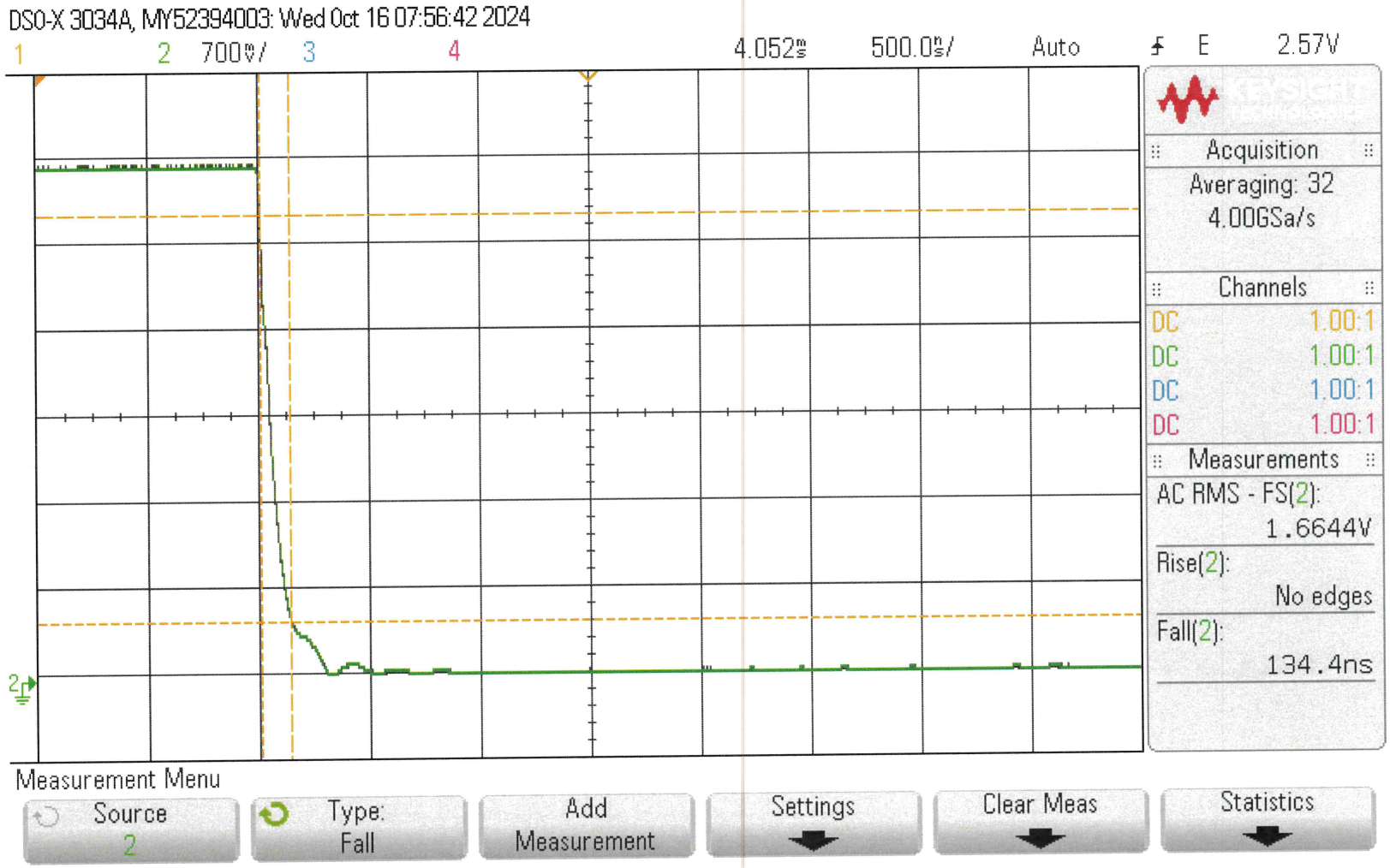
PL 44919
Settle



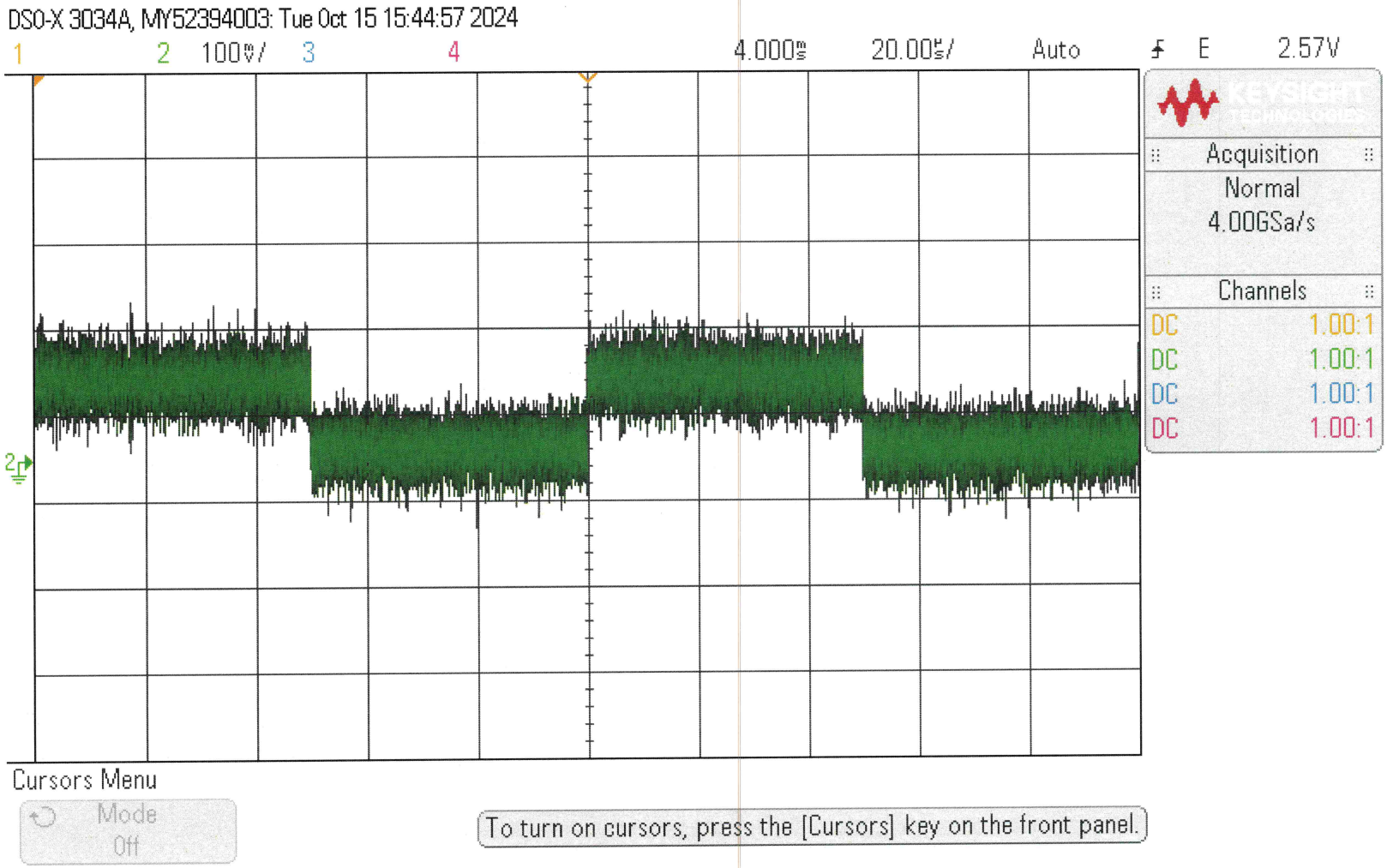
PL44919
Rise Time -45dbm



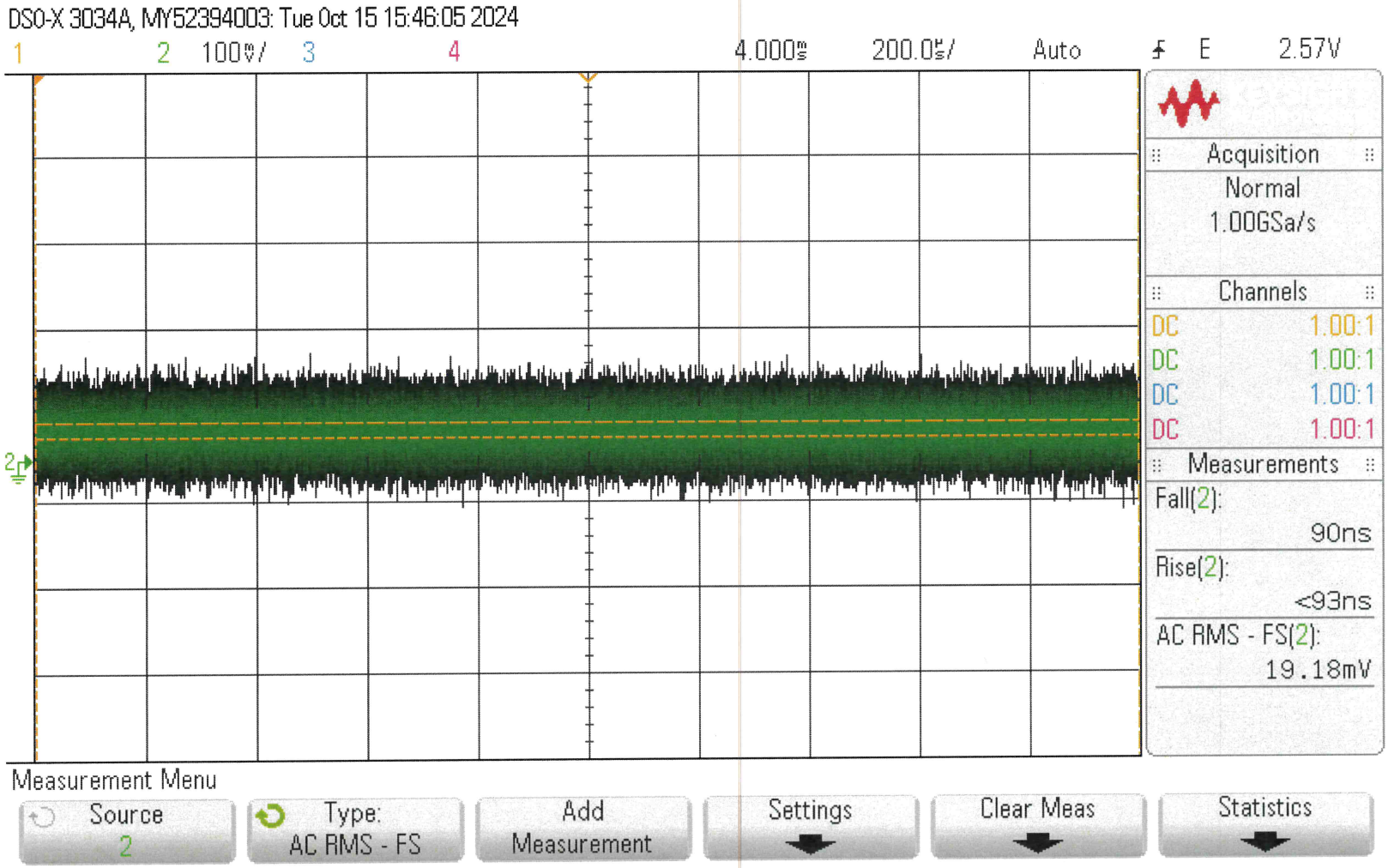
PL44919
Recovery Fall



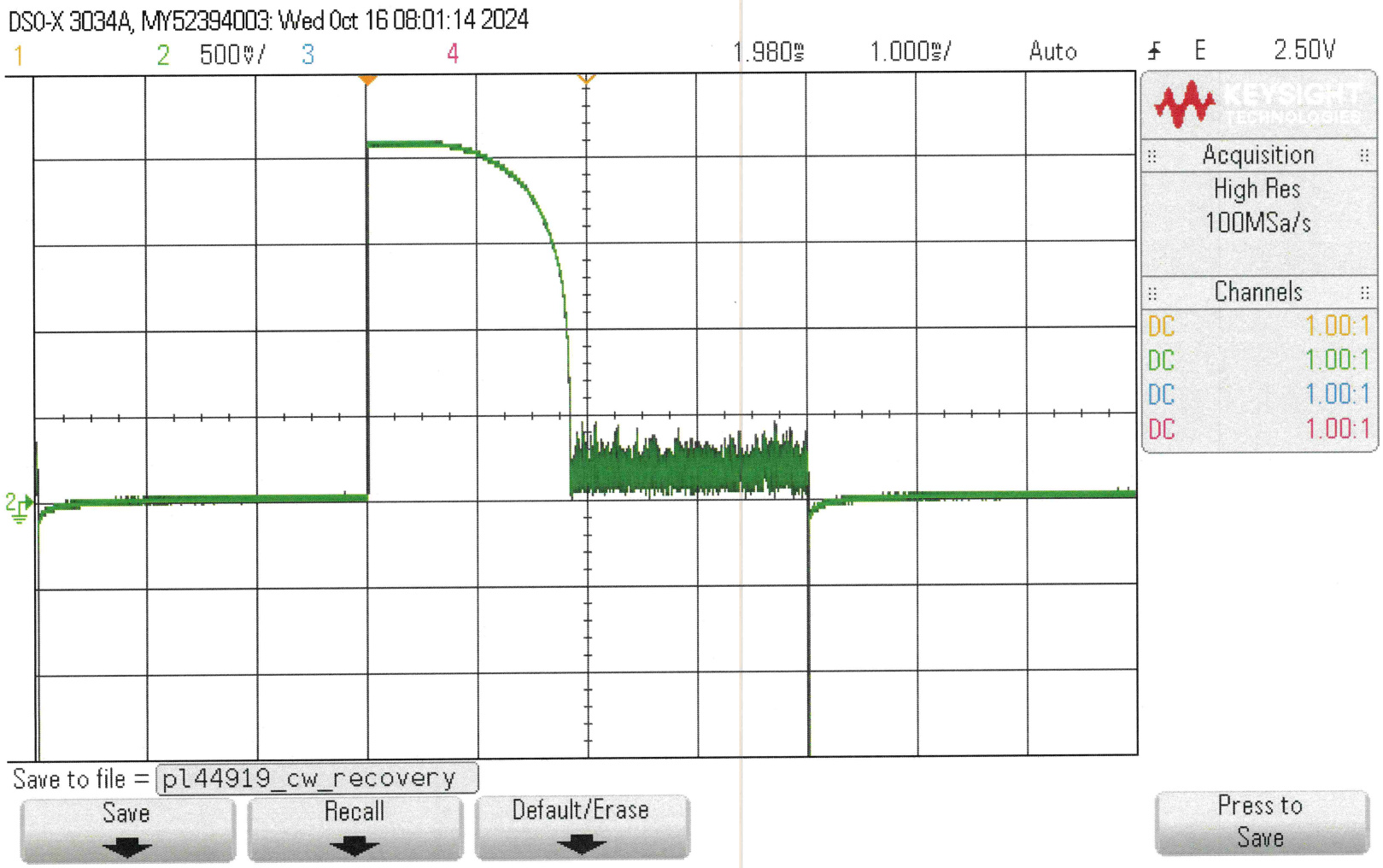
PL 44919
TSS -71 dbm



PL44919 -
RMS noise



PL 44919
cw Immune



PL 44919
CW Recovery