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

Customer: [redacted]
SO No: [redacted]
Model No: ERDLVA-2G18G-65-70MV-70C
Serial No: PL44920/2443

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	**1.76:1 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	**71.2/68.9 mv/db**	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	**.51/-.50 db**	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	**1.03/-1.12 db**	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	**1.61/-1.50 db**	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	**28 mV**	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	**20.5 ns**	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	**132.5 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
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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	**±0.78 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	**1.5 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	**121 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. Klamm 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: PL44920
Test Temp: +25°C

Frequency

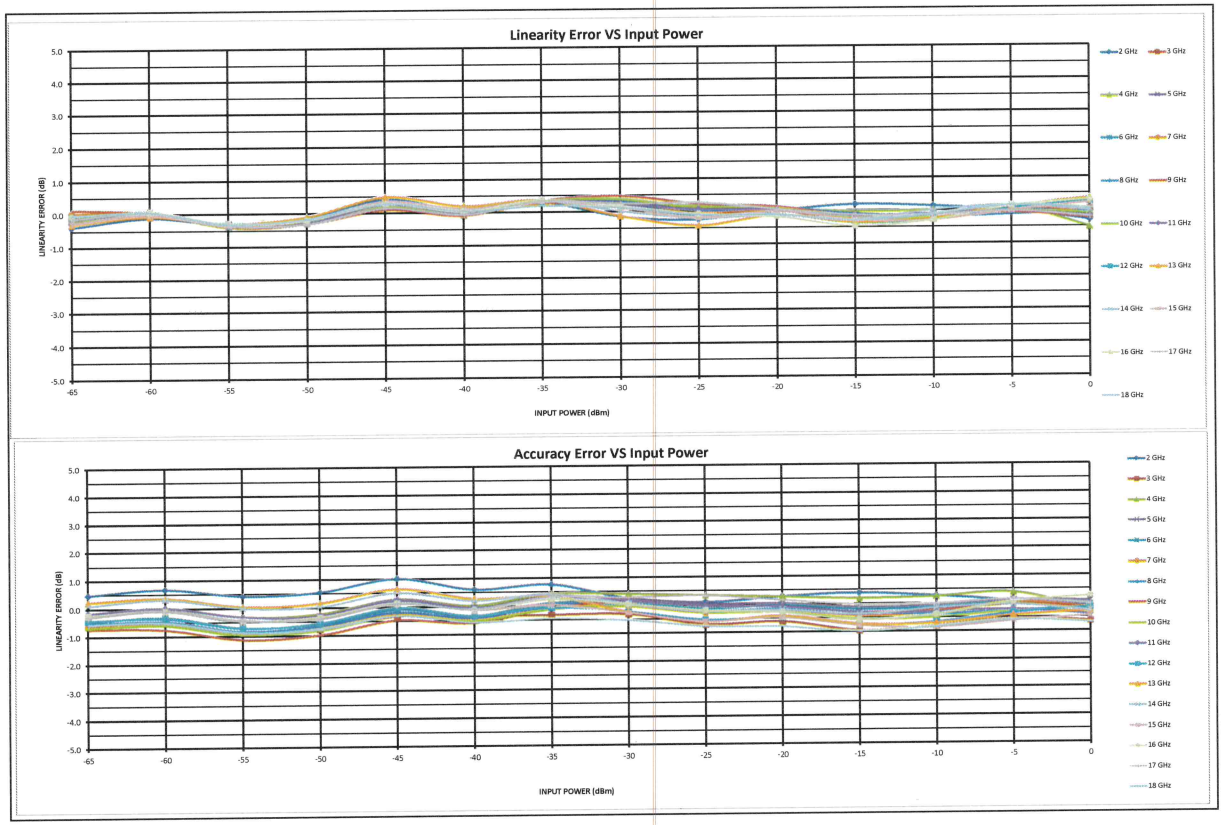
	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	354	719	1052	1411	1795	2117	2479	2794	3133	3497	3856	4198	4535	4860	Measured Value (mV)
Intercept (mV) 4881	-26	-7	-21	-8	30	6	22	-10	-17	1	14	10	1	-21	Error (mV)
Slope (mV/dB) 69.24	-0.38	-0.11	-0.30	-0.11	0.43	0.08	0.31	-0.14	-0.24	0.02	0.20	0.14	0.01	-0.30	0.43 Linearity Error (dB)
	0.48	0.69	0.43	0.55	1.03	0.62	0.78	0.27	0.10	0.29	0.40	0.28	0.08	-0.28	1.03 Accuracy Error (dB)
3 GHz	277	635	961	1319	1701	2035	2402	2754	3077	3434	3761	4122	4491	4835	Measured Value (mV)
Intercept (mV) 4833	-5	3	-21	-14	18	2	19	21	-6	1	-22	-11	8	2	Error (mV)
Slope (mV/dB) 70.02	-0.08	0.04	-0.31	-0.19	0.26	0.03	0.27	0.30	-0.08	0.01	-0.32	-0.16	0.11	0.02	0.32 Linearity Error (dB)
	-0.61	-0.51	-0.86	-0.76	-0.31	-0.31	-0.32	-0.30	-0.70	-0.61	-0.95	-0.80	-0.54	-0.64	0.95 Accuracy Error (dB)
4 GHz	308	672	1000	1357	1743	2077	2456	2805	3151	3497	3842	4197	4557	4865	Measured Value (mV)
Intercept (mV) 4900	-11	0	-24	-20	14	-4	22	19	13	6	-1	1	9	-35	Error (mV)
Slope (mV/dB) 70.48	-0.16	0.00	-0.34	-0.28	0.20	-0.06	0.32	0.27	0.18	0.09	-0.02	0.02	0.13	-0.50	0.50 Linearity Error (dB)
	-0.17	0.02	-0.31	-0.22	0.28	0.05	0.45	0.42	0.35	0.29	0.20	0.27	0.40	-0.21	0.45 Accuracy Error (dB)
5 GHz	302	664	989	1352	1739	2071	2449	2791	3129	3479	3819	4173	4537	4885	Measured Value (mV)
Intercept (mV) 4888	-8	2	-26	-15	20	0	26	16	2	0	-13	-11	1	-3	Error (mV)
Slope (mV/dB) 70.42	-0.12	0.02	-0.36	-0.21	0.29	0.00	0.37	0.23	0.02	-0.01	-0.18	-0.15	0.02	-0.04	0.37 Linearity Error (dB)
	-0.26	-0.10	-0.46	-0.29	0.23	-0.04	0.35	0.22	0.04	0.03	-0.12	-0.08	0.11	0.07	0.46 Accuracy Error (dB)
6 GHz	288	649	973	1332	1718	2052	2433	2782	3118	3475	3815	4170	4532	4876	Measured Value (mV)
Intercept (mV) 4884	-1	6	-23	-18	15	-5	23	19	1	5	-9	-7	1	-8	Error (mV)
Slope (mV/dB) 70.69	-0.02	0.09	-0.33	-0.25	0.21	-0.06	0.33	0.26	0.02	0.07	-0.13	-0.10	0.02	-0.12	0.33 Linearity Error (dB)
	-0.46	-0.31	-0.69	-0.57	-0.07	-0.31	0.12	0.10	-0.12	-0.03	-0.18	-0.12	0.04	-0.06	0.69 Accuracy Error (dB)
7 GHz	278	634	960	1323	1706	2041	2420	2774	3107	3463	3798	4157	4533	4870	Measured Value (mV)
Intercept (mV) 4877	3	5	-23	-14	15	-4	21	21	0	2	-17	-12	10	-7	Error (mV)
Slope (mV/dB) 70.80	0.04	0.07	-0.32	-0.20	0.21	-0.05	0.30	0.30	0.00	0.03	-0.24	-0.17	0.15	-0.09	0.32 Linearity Error (dB)
	-0.60	-0.52	-0.88	-0.70	-0.24	-0.47	-0.07	-0.02	-0.27	-0.20	-0.42	-0.30	0.05	-0.14	0.88 Accuracy Error (dB)
8 GHz	283	639	964	1327	1711	2047	2428	2779	3111	3467	3808	4153	4511	4869	Measured Value (mV)
Intercept (mV) 4872	-1	2	-26	-16	15	-2	26	24	3	6	-6	-14	-9	-3	Error (mV)
Slope (mV/dB) 70.59	-0.02	0.02	-0.37	-0.23	0.21	-0.03	0.37	0.34	0.04	0.09	-0.08	-0.19	-0.12	-0.05	0.37 Linearity Error (dB)
	-0.53	-0.45	-0.82	-0.65	-0.17	-0.38	0.05	0.05	-0.22	-0.14	-0.28	-0.36	-0.26	-0.16	0.82 Accuracy Error (dB)
9 GHz	269	618	943	1304	1690	2033	2420	2785	3123	3472	3807	4162	4526	4870	Measured Value (mV)
Intercept (mV) 4886	11	4	-27	-22	8	-5	26	35	17	10	-11	-12	-4	-16	Error (mV)
Slope (mV/dB) 71.20	0.15	0.05	-0.38	-0.31	0.11	-0.07	0.36	0.49	0.24	0.14	-0.16	-0.17	-0.06	-0.23	0.49 Linearity Error (dB)
	-0.73	-0.75	-1.12	-0.97	-0.47	-0.58	-0.07	0.14	-0.04	-0.07	-0.29	-0.23	-0.04	-0.14	1.12 Accuracy Error (dB)
10 GHz	272	629	955	1316	1702	2039	2418	2775	3108	3459	3790	4145	4510	4859	Measured Value (mV)
Intercept (mV) 4865	-3	1	-26	-18	15	-1	25	28	8	6	-16	-14	-2	-6	Error (mV)
Slope (mV/dB) 70.62	-0.04	0.02	-0.37	-0.26	0.21	-0.02	0.35	0.40	0.12	0.09	-0.22	-0.20	-0.03	-0.09	0.40 Linearity Error (dB)
	-0.68	-0.60	-0.95	-0.80	-0.30	-0.50	-0.09	0.00	-0.26	-0.25	-0.54	-0.48	-0.27	-0.30	0.95 Accuracy Error (dB)
11 GHz	309	673	1000	1353	1742	2072	2446	2787	3124	3472	3807	4159	4514	4852	Measured Value (mV)
Intercept (mV) 4864	-16	-2	-24	-20	20	1	26	18	6	4	-10	-7	-1	-12	Error (mV)
Slope (mV/dB) 69.83	-0.24	-0.02	-0.34	-0.28	0.29	0.01	0.37	0.25	0.08	0.06	-0.14	-0.10	-0.01	-0.17	0.37 Linearity Error (dB)
	-0.16	0.03	-0.31	-0.27	0.27	-0.03	0.31	0.17	-0.03	-0.07	-0.29	-0.28	-0.22	-0.40	0.40 Accuracy Error (dB)
12 GHz	291	646	972	1334	1722	2052	2422	2761	3090	3444	3775	4133	4506	4871	Measured Value (mV)
Intercept (mV) 4852	-2	2	-23	-12	26	5	24	13	-9	-6	-25	-18	4	19	Error (mV)
Slope (mV/dB) 70.14	-0.03	0.03	-0.33	-0.16	0.37	0.07	0.35	0.18	-0.13	-0.08	-0.36	-0.26	0.06	0.26	0.37 Linearity Error (dB)
	-0.41	-0.35	-0.71	-0.55	-0.01	-0.31	-0.04	-0.20	-0.51	-0.47	-0.75	-0.65	-0.33	-0.13	0.75 Accuracy Error (dB)
13 GHz	337	697	1026	1384	1769	2094	2450	2760	3084	3449	3778	4130	4500	4861	Measured Value (mV)
Intercept (mV) 4835	-19	-4	-19	-6	35	15	27	-8	-28	-8	-24	-16	9	26	Error (mV)
Slope (mV/dB) 68.91	-0.28	-0.05	-0.28	-0.08	0.51	0.22	0.39	-0.11	-0.41	-0.12	-0.34	-0.23	0.14	0.37	0.51 Linearity Error (dB)
	0.24	0.37	0.06	0.17	0.66	0.29	0.36	-0.22	-0.60	-0.40	-0.71	-0.69	-0.42	-0.27	0.71 Accuracy Error (dB)
14 GHz	328	693	1022	1375	1759	2089	2455	2779	3111	3464	3802	4168	4526	4862	Measured Value (mV)
Intercept (mV) 4862	-17	1	-18	-12	24	7	25	2	-14	-8	-18	1	11	0	Error (mV)
Slope (mV/dB) 69.50	-0.24	0.01	-0.26	-0.18	0.35	0.10	0.36	0.02	-0.20	-0.12	-0.26	0.01	0.16	0.00	0.36 Linearity Error (dB)
	0.11	0.32	0.01	0.04	0.51	0.22	0.43	0.05	-0.22	-0.18	-0.37	-0.15	-0.04	-0.26	0.51 Accuracy Error (dB)
15 GHz	303	667	991	1349	1734	2065	2429	2758	3085	3444	3773	4118	4485	4848	Measured Value (mV)
Intercept (mV) 4832	-17	0	-23	-12	25	9	26	8	-12	0	-18	-20	0	16	Error (mV)
Slope (mV/dB) 69.41	-0.25	-0.01	-0.34	-0.18	0.37	0.14	0.38	0.12	-0.17	0.00	-0.26	-0.29	0.00	0.23	0.38 Linearity Error (dB)
	-0.24	-0.05	-0.44	-0.33	0.16	-0.13	0.06	-0.25	-0.59	-0.47	-0.78	-0.86	-0.63	-0.45	0.86 Accuracy Error (dB)
16 GHz	304	664	990	1348	1733	2067	2442	2779	3113	3458	3788	4152	4534	4898	Measured Value (mV)
Intercept (mV) 4875	-3	6	-20	-13	21	3	27	12	-5	-11	-33	-20	10	23	Error (mV)
Slope (mV/dB) 70.28	-0.04	0.08	-0.28	-0.18	0.29	0.05	0.38	0.18	-0.07	-0.16	-0.47	-0.29	0.15	0.33	0.47 Linearity Error (dB)
	-0.23	-0.10	-0.45	-0.35	0.14	-0.10	0.25	0.05	-0.19	-0.27	-0.56	-0.38	0.07	0.26	0.56 Accuracy Error (dB)
17 GHz	299	665	990	1344	1731	2068	2448	2795	3149	3487	3826	4178	4539	4879	Measured Value (mV)
Intercept (mV) 4893	-9	4	-23	-22	12	-3	24	18	19	5	-9	-10	-1	-14	Error (mV)
Slope (mV/dB) 70.54	-0.13	0.06	-0.33	-0.31	0.17	-0.05	0.34	0.26	0.28	0.07	-0.13	-0.14	-0.02	-0.20	0.34 Linearity Error (dB)
	-0.30	-0.08	-0.45	-0.40	0.11	-0.08	0.33	0.28	0.33	0.14	-0.02	-0.01	0.14	-0.01	0.45 Accuracy Error (dB)
18 GHz	281	636	961	1320	1702	2035	2394	2739	3073	3422	3759	4121	4489	4832	Measured Value (mV)
Intercept (mV) 4828	-1	5	-20	-11	22	5	14	10	-6	-7	-20	-7	11	4	Error (mV)
Slope (mV/dB) 69.94	-0.01	0.07	-0.29	-0.15	0.31	0.07	0.20	0.14	-0.09	-0.10	-0.28	-0.10	0.16	0.06	0.31 Linearity Error (dB)
	-0.56	-0.50	-0.86	-0.75	-0.30	-0.55	-0.44	-0.52	-0.76	-0.78	-0.98	-0.82	-0.57	-0.68	0.98 Accuracy Error (dB)

Output Vos: 28.0 mV

Avg Slope: 70.2 mV/dB	354	719	1052	1411	1795	2117	2479	2805	3151	3497	3856	4198	4557	4898	Max Measured (mV)
Max Slope: 71.2 mv/dB	269	618	943	1304	1690	2033	2394	2739	3073	3422	3759	4118	4485	4832	Min Measured (mV)
Min Slope: 68.9 mv/dB	0.61	0.72	0.78	0.76	0.75	0.60	0.61	0.47	0.56	0.53	0.69	0.57	0.51	0.47	Flatness Error (+/-dB)

PL44920

+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: PL44920
Test Temp: +70°C

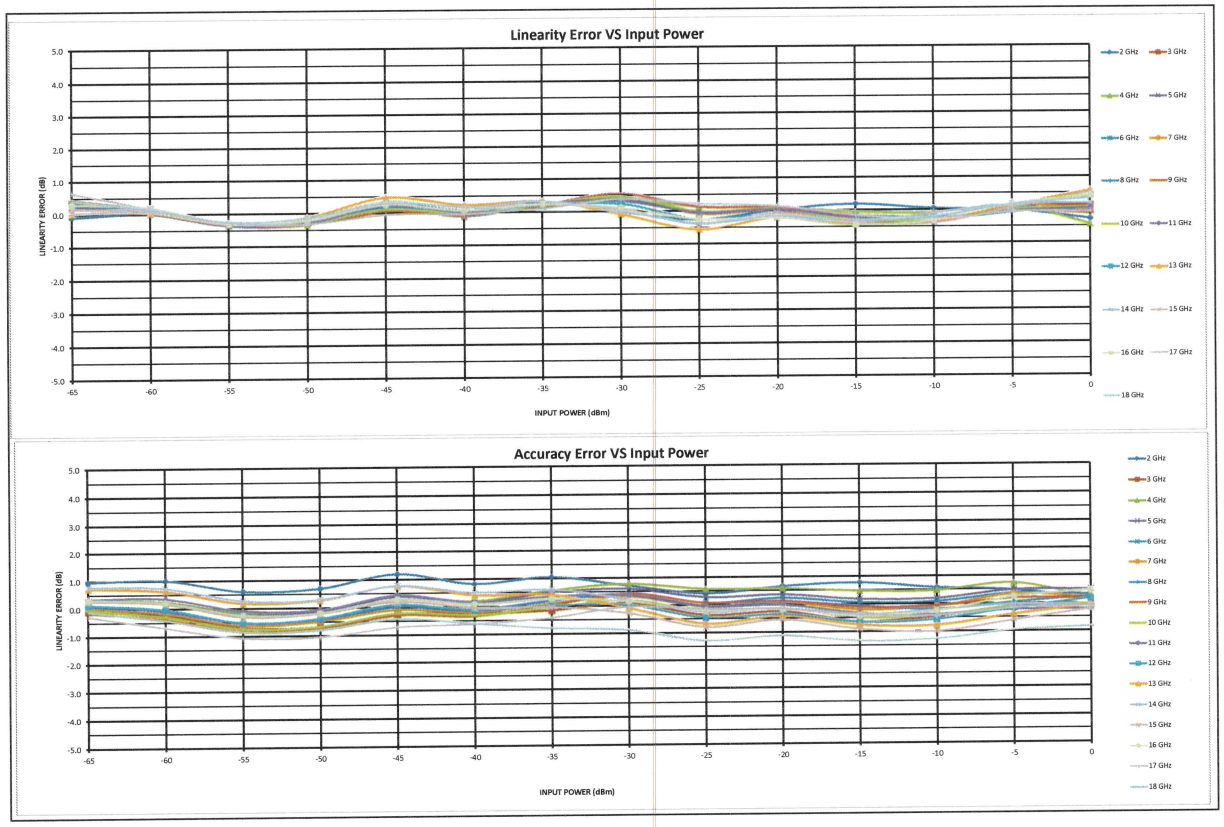
Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	Intercept (mV) 4838	342	694	1015	1370	1754	2076	2441	2766	3094	3459	3816	4151	4493	4819	Measured Value (mV)
	Slope (mV/dB) 69.09	-5	1	-23	-13	25	2	21	1	-17	3	14	4	1	-19	Error (mV)
		-0.08	0.02	-0.33	-0.20	0.36	0.02	0.31	0.01	-0.24	0.04	0.21	0.06	0.01	-0.27	0.36 Linearity Error (dB)
		0.96	1.01	0.61	0.70	1.21	0.83	1.06	0.72	0.43	0.66	0.78	0.58	0.49	0.16	1.21 Accuracy Error (dB)
3 GHz	Intercept (mV) 4793	269	608	924	1275	1653	1995	2356	2722	3039	3395	3718	4078	4451	4803	Measured Value (mV)
	Slope (mV/dB) 69.99	25	14	-20	-19	9	1	12	28	-5	1	-26	-16	8	10	Error (mV)
		0.36	0.20	-0.28	-0.27	0.13	0.02	0.18	0.41	-0.07	0.02	-0.36	-0.22	0.11	0.14	0.41 Linearity Error (dB)
		-0.09	-0.22	-0.69	-0.66	-0.24	-0.24	-0.16	0.09	-0.36	-0.26	-0.63	-0.46	-0.11	-0.07	0.69 Accuracy Error (dB)
4 GHz	Intercept (mV) 4852	298	641	961	1313	1697	2033	2407	2771	3105	3454	3795	4144	4511	4822	Measured Value (mV)
	Slope (mV/dB) 70.32	17	8	-24	-23	9	-6	16	28	11	8	-2	-5	10	-30	Error (mV)
		0.24	0.11	-0.33	-0.33	0.13	-0.09	0.23	0.40	0.15	0.12	-0.04	-0.07	0.15	-0.43	0.43 Linearity Error (dB)
		0.33	0.25	-0.16	-0.11	0.39	0.21	0.57	0.79	0.58	0.59	0.48	0.48	0.75	0.21	0.79 Accuracy Error (dB)
5 GHz	Intercept (mV) 4840	296	639	957	1312	1697	2029	2402	2758	3084	3438	3774	4124	4493	4842	Measured Value (mV)
	Slope (mV/dB) 70.19	18	10	-23	-19	15	-4	18	23	-2	2	-13	-14	4	2	Error (mV)
		0.26	0.15	-0.32	-0.27	0.22	-0.05	0.26	0.33	-0.02	0.02	-0.19	-0.21	0.05	0.02	0.33 Linearity Error (dB)
		0.30	0.22	-0.22	-0.13	0.39	0.15	0.50	0.61	0.28	0.36	0.18	0.20	0.49	0.49	0.61 Accuracy Error (dB)
6 GHz	Intercept (mV) 4833	280	619	936	1291	1671	2008	2381	2745	3070	3430	3766	4116	4485	4830	Measured Value (mV)
	Slope (mV/dB) 70.47	27	14	-21	-19	9	-6	14	26	-1	6	-10	-13	4	-3	Error (mV)
		0.39	0.20	-0.30	-0.26	0.13	-0.09	0.20	0.37	-0.02	0.09	-0.14	-0.18	0.06	-0.05	0.39 Linearity Error (dB)
		0.07	-0.07	-0.52	-0.43	0.02	-0.15	0.20	0.42	0.08	0.24	0.06	0.08	0.37	0.32	0.52 Accuracy Error (dB)
7 GHz	Intercept (mV) 4823	276	612	930	1288	1664	2004	2374	2739	3060	3418	3748	4104	4483	4822	Measured Value (mV)
	Slope (mV/dB) 70.39	28	12	-21	-15	9	-3	15	28	-3	3	-19	-15	12	-1	Error (mV)
		0.40	0.18	-0.31	-0.22	0.12	-0.05	0.21	0.39	-0.05	0.04	-0.27	-0.21	0.17	-0.01	0.40 Linearity Error (dB)
		0.01	-0.17	-0.61	-0.47	-0.08	-0.21	0.10	0.33	-0.06	0.07	-0.20	-0.09	0.34	0.21	0.61 Accuracy Error (dB)
8 GHz	Intercept (mV) 4818	284	618	937	1293	1675	2012	2382	2743	3062	3420	3757	4097	4463	4824	Measured Value (mV)
	Slope (mV/dB) 70.14	25	8	-24	-18	13	-1	19	29	-3	5	-9	-20	-4	6	Error (mV)
		0.35	0.11	-0.34	-0.26	0.18	-0.01	0.27	0.41	-0.04	0.07	-0.13	-0.28	-0.06	0.08	0.41 Linearity Error (dB)
		0.13	-0.08	-0.51	-0.40	0.08	-0.09	0.22	0.39	-0.03	0.10	-0.07	-0.19	0.06	0.23	0.51 Accuracy Error (dB)
9 GHz	Intercept (mV) 4827	265	597	915	1270	1650	1995	2370	2746	3070	3422	3754	4105	4472	4820	Measured Value (mV)
	Slope (mV/dB) 70.69	33	11	-24	-23	4	-5	17	39	10	8	-13	-15	-2	-7	Error (mV)
		0.46	0.16	-0.34	-0.32	0.05	-0.07	0.24	0.56	0.14	0.12	-0.18	-0.22	-0.03	-0.10	0.56 Linearity Error (dB)
		-0.14	-0.38	-0.82	-0.73	-0.28	-0.33	0.04	0.44	0.08	0.13	-0.11	-0.08	0.19	0.18	0.82 Accuracy Error (dB)
10 GHz	Intercept (mV) 4801	273	603	921	1275	1655	1997	2364	2730	3049	3403	3728	4081	4452	4807	Measured Value (mV)
	Slope (mV/dB) 70.13	30	10	-23	-20	10	1	17	33	1	4	-21	-19	1	6	Error (mV)
		0.43	0.14	-0.33	-0.28	0.14	0.01	0.25	0.47	0.01	0.06	-0.30	-0.27	0.02	0.08	0.47 Linearity Error (dB)
		-0.03	-0.30	-0.74	-0.66	-0.21	-0.31	-0.04	0.21	-0.22	-0.14	-0.48	-0.42	-0.10	-0.01	0.74 Accuracy Error (dB)
11 GHz	Intercept (mV) 4790	300	649	966	1316	1700	2029	2392	2742	3061	3412	3739	4083	4443	4794	Measured Value (mV)
	Slope (mV/dB) 69.09	1	4	-24	-20	19	3	20	25	-2	4	-15	-16	-2	4	Error (mV)
		0.01	0.06	-0.35	-0.28	0.28	0.04	0.29	0.36	-0.03	0.05	-0.21	-0.24	-0.02	0.06	0.36 Linearity Error (dB)
		0.36	0.36	-0.09	-0.07	0.44	0.15	0.36	0.38	-0.05	-0.01	-0.32	-0.39	-0.23	-0.20	0.44 Accuracy Error (dB)
12 GHz	Intercept (mV) 4790	285	622	937	1295	1677	2010	2369	2718	3033	3389	3717	4071	4448	4820	Measured Value (mV)
	Slope (mV/dB) 69.66	23	11	-22	-12	21	6	17	18	-16	-8	-28	-23	6	30	Error (mV)
		0.32	0.16	-0.32	-0.18	0.31	0.09	0.24	0.25	-0.23	-0.12	-0.41	-0.32	0.09	0.43	0.43 Linearity Error (dB)
		0.14	-0.02	-0.51	-0.37	0.11	-0.12	0.03	0.03	-0.45	-0.34	-0.64	-0.56	-0.16	0.18	0.64 Accuracy Error (dB)
13 GHz	Intercept (mV) 4763	326	668	986	1341	1723	2048	2396	2710	3018	3384	3710	4057	4432	4803	Measured Value (mV)
	Slope (mV/dB) 68.31	3	4	-20	-6	34	18	24	-4	-37	-13	-28	-23	11	40	Error (mV)
		0.05	0.05	-0.29	-0.09	0.50	0.26	0.35	-0.05	-0.54	-0.18	-0.41	-0.33	0.16	0.59	0.59 Linearity Error (dB)
		0.73	0.64	0.20	0.29	0.77	0.43	0.42	-0.08	-0.66	-0.42	-0.74	-0.76	-0.39	-0.07	0.77 Accuracy Error (dB)
14 GHz	Intercept (mV) 4788	330	675	992	1342	1724	2054	2409	2731	3047	3403	3736	4095	4457	4802	Measured Value (mV)
	Slope (mV/dB) 68.65	5	6	-20	-13	26	12	24	3	-24	-12	-22	-6	13	14	Error (mV)
		0.07	0.09	-0.29	-0.19	0.37	0.18	0.35	0.04	-0.36	-0.17	-0.32	-0.09	0.18	0.21	0.37 Linearity Error (dB)
		0.79	0.74	0.28	0.30	0.78	0.51	0.60	0.22	-0.25	-0.14	-0.37	-0.22	-0.03	-0.08	0.79 Accuracy Error (dB)
15 GHz	Intercept (mV) 4756	295	636	951	1307	1684	2016	2365	2697	3009	3375	3699	4041	4417	4793	Measured Value (mV)
	Slope (mV/dB) 68.81	12	9	-20	-8	25	13	18	5	-27	-5	-25	-27	5	37	Error (mV)
		0.17	0.13	-0.30	-0.12	0.36	0.18	0.25	0.08	-0.39	-0.07	-0.36	-0.39	0.08	0.54	0.54 Linearity Error (dB)
		0.29	0.18	-0.31	-0.20	0.21	-0.03	-0.03	-0.27	-0.79	-0.54	-0.90	-0.99	-0.60	-0.21	0.99 Accuracy Error (dB)
16 GHz	Intercept (mV) 4810	297	639	955	1308	1690	2025	2386	2727	3050	3401	3732	4092	4476	4840	Measured Value (mV)
	Slope (mV/dB) 69.77	22	15	-18	-14	20	6	18	10	-16	-14	-32	-20	15	30	Error (mV)
		0.31	0.22	-0.26	-0.20	0.28	0.08	0.26	0.14	-0.23	-0.20	-0.45	-0.29	0.21	0.43	0.45 Linearity Error (dB)
		0.32	0.22	-0.25	-0.19	0.29	0.10	0.27	0.16	-0.21	-0.17	-0.42	-0.26	0.24	0.46	0.46 Accuracy Error (dB)
17 GHz	Intercept (mV) 4805	255	576	898	1248	1620	1975	2338	2713	3054	3402	3735	4080	4448	4801	Measured Value (mV)
	Slope (mV/dB) 70.71	46	14	-18	-22	-3	-2	8	29	17	11	-9	-18	-3	-4	Error (mV)
		0.65	0.19	-0.25	-0.30	-0.04	-0.02	0.11	0.41	0.24	0.16	-0.13	-0.25	-0.05	-0.06	0.65 Linearity Error (dB)
		-0.29	-0.68	-1.07	-1.05	-0.71	-0.62	-0.42	-0.04	-0.15	-0.16	-0.38	-0.43	-0.16	-0.09	1.07 Accuracy Error (dB)
18 GHz	Intercept (mV) 4726	268	594	913	1266	1641	1977	2313	2656	2976	3336	3670	4023	4393	4750	Measured Value (mV)
	Slope (mV/dB) 69.05	30	11	-15	-8	22	13	4	2	-24	-9	-20	-12	12	24	Error (mV)
		0.44	0.16	-0.22	-0.11	0.32	0.19	0.05	0.02	-0.34	-0.13	-0.29	-0.18	0.18	0.35	0.44 Linearity Error (dB)
		-0.10	-0.43	-0.85	-0.79	-0.41	-0.59	-0.77	-0.86	-1.27	-1.10	-1.31	-1.25	-0.95	-0.83	1.31 Accuracy Error (dB)

Output Vos: 65.0 mV

Avg Slope: 69.7 mV/dB	342	694	1015	1370	1754	2076	2441	2771	3105	3459	3816	4151	4511	4842	Max Measured (mV)
Max Slope: 70.7 mv/dB	255	576	898	1248	1620	1975	2313	2656	2976	3336	3670	4023	4393	4750	Min Measured (mV)
Min Slope: 68.3 mv/dB	0.62	0.85	0.84	0.87	0.96	0.72	0.92	0.82	0.92	0.88	1.05	0.92	0.85	0.66	Flatness Error (+/-dB)

PL44920

+70°C

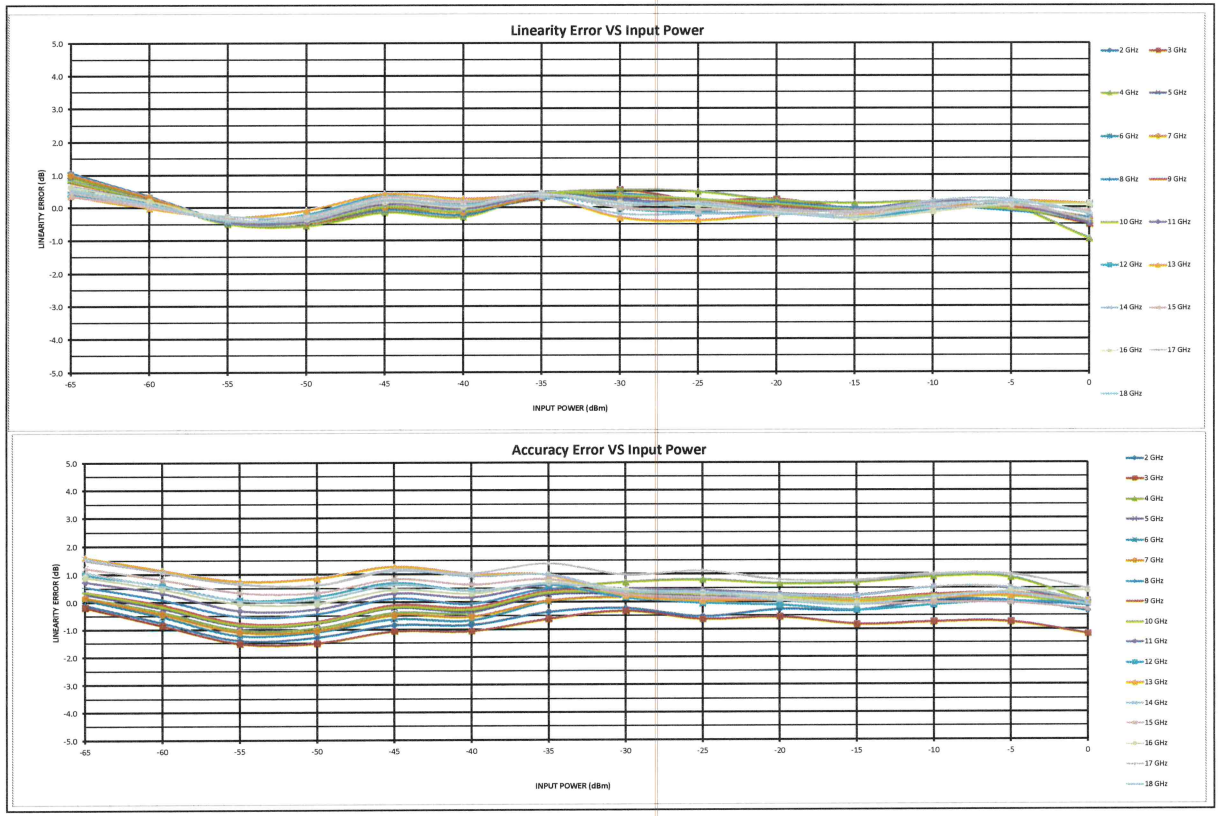

Linearity Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)
2 GHz
3 GHz
4 GHz
5 GHz
6 GHz
7 GHz
8 GHz
9 GHz
10 GHz
11 GHz
12 GHz
13 GHz
14 GHz
15 GHz
16 GHz
17 GHz
18 GHz
Accuracy Error VS Input Power
LINEARITY ERROR (dB)
INPUT POWER (dBm)

LOG TRANSFER VS. FREQUENCY
Model: ERDLVA-218-65-70MV-70
Tested By: Jim Hopson
Date: 10-18-24
Serial Number: PL44920
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)	4817	257	563	867	1225	1607	1957	2340	2699	3028	3396	3743	4118	4468	4791	Measured Value (mV)
	Slope (mV/dB)	71.34	77	26	-27	-25	0	-7	20	22	-6	6	-4	14	7	-26	Error (mV)
			1.08	0.37	-0.37	-0.35	0.00	-0.09	0.28	0.31	-0.08	0.08	-0.06	0.20	0.10	-0.37	1.08 Linearity Error (dB)
			-0.11	-0.74	-1.40	-1.29	-0.83	-0.83	-0.36	-0.23	-0.53	-0.27	-0.31	0.04	0.04	-0.34	1.40 Accuracy Error (dB)
3 GHz	Intercept (mV)	4769	252	556	859	1210	1591	1942	2322	2692	3021	3377	3708	4064	4414	4733	Measured Value (mV)
	Slope (mV/dB)	70.52	67	19	-31	-33	-4	-6	22	39	15	19	-3	1	-2	-36	Error (mV)
			0.95	0.26	-0.44	-0.46	-0.06	-0.08	0.31	0.55	0.22	0.27	-0.04	0.01	-0.03	-0.50	0.95 Linearity Error (dB)
			-0.19	-0.84	-1.51	-1.50	-1.06	-1.06	-0.61	-0.33	-0.63	-0.54	-0.81	-0.73	-0.73	-1.17	1.51 Accuracy Error (dB)
4 GHz	Intercept (mV)	4884	277	590	894	1249	1638	1988	2397	2766	3122	3462	3815	4179	4527	4816	Measured Value (mV)
	Slope (mV/dB)	71.92	68	21	-34	-39	-10	-19	30	40	36	16	10	14	3	-68	Error (mV)
			0.94	0.29	-0.48	-0.54	-0.13	-0.27	0.42	0.55	0.50	0.23	0.14	0.20	0.04	-0.94	0.94 Linearity Error (dB)
			0.17	-0.36	-1.01	-0.94	-0.39	-0.39	0.46	0.73	0.81	0.67	0.71	0.91	0.89	0.01	1.01 Accuracy Error (dB)
5 GHz	Intercept (mV)	4839	286	599	905	1261	1650	1991	2384	2734	3078	3424	3769	4129	4482	4817	Measured Value (mV)
	Slope (mV/dB)	70.97	60	19	-30	-29	5	-9	29	25	14	5	-5	0	-2	-22	Error (mV)
			0.85	0.26	-0.43	-0.41	0.07	-0.12	0.41	0.35	0.19	0.07	-0.07	0.00	-0.02	-0.30	0.85 Linearity Error (dB)
			0.30	-0.23	-0.86	-0.77	-0.21	-0.34	0.27	0.27	0.19	0.13	0.06	0.20	0.24	0.03	0.86 Accuracy Error (dB)
6 GHz	Intercept (mV)	4841	271	578	880	1239	1622	1969	2366	2729	3071	3424	3769	4131	4481	4809	Measured Value (mV)
	Slope (mV/dB)	71.45	74	24	-31	-30	-4	-14	26	31	16	12	0	5	-3	-32	Error (mV)
			1.04	0.33	-0.44	-0.41	-0.05	-0.20	0.36	0.44	0.23	0.17	0.00	0.06	-0.04	-0.45	1.04 Linearity Error (dB)
			0.09	-0.53	-1.21	-1.09	-0.61	-0.66	0.01	0.20	0.09	0.13	0.06	0.23	0.23	-0.09	1.21 Accuracy Error (dB)
7 GHz	Intercept (mV)	4839	277	585	889	1243	1632	1978	2369	2727	3067	3418	3763	4128	4485	4818	Measured Value (mV)
	Slope (mV/dB)	71.31	73	24	-28	-31	1	-9	25	27	10	5	-7	2	2	-21	Error (mV)
			1.02	0.34	-0.40	-0.44	0.02	-0.13	0.36	0.38	0.14	0.07	-0.09	0.02	0.03	-0.30	1.02 Linearity Error (dB)
			0.17	-0.43	-1.09	-1.03	-0.47	-0.53	0.06	0.17	0.03	0.04	-0.03	0.19	0.29	0.04	1.09 Accuracy Error (dB)
8 GHz	Intercept (mV)	4826	304	621	928	1285	1674	2011	2399	2734	3075	3425	3771	4127	4467	4806	Measured Value (mV)
	Slope (mV/dB)	70.29	47	13	-32	-26	11	-3	33	17	6	5	-1	4	-8	-20	Error (mV)
			0.67	0.18	-0.45	-0.37	0.16	-0.05	0.47	0.24	0.09	0.07	-0.01	0.06	-0.11	-0.28	0.67 Linearity Error (dB)
			0.56	0.09	-0.53	-0.43	0.13	-0.06	0.49	0.27	0.14	0.14	0.09	0.17	0.03	-0.13	0.56 Accuracy Error (dB)
9 GHz	Intercept (mV)	4843	291	608	912	1266	1657	2001	2393	2744	3089	3431	3772	4134	4488	4817	Measured Value (mV)
	Slope (mV/dB)	70.89	56	18	-32	-33	4	-6	31	28	18	6	-8	0	0	-26	Error (mV)
			0.79	0.26	-0.45	-0.46	0.06	-0.09	0.44	0.39	0.26	0.08	-0.11	0.00	-0.01	-0.37	0.79 Linearity Error (dB)
			0.37	-0.10	-0.76	-0.70	-0.11	-0.20	0.40	0.41	0.34	0.23	0.10	0.27	0.33	0.03	0.76 Accuracy Error (dB)
10 GHz	Intercept (mV)	4836	291	603	907	1263	1652	1996	2389	2739	3085	3428	3770	4129	4479	4807	Measured Value (mV)
	Slope (mV/dB)	70.84	59	17	-33	-32	3	-7	32	28	20	8	-4	1	-3	-29	Error (mV)
			0.83	0.24	-0.47	-0.45	0.05	-0.10	0.45	0.39	0.28	0.12	-0.05	0.01	-0.05	-0.42	0.83 Linearity Error (dB)
			0.37	-0.17	-0.83	-0.74	-0.19	-0.27	0.34	0.34	0.29	0.19	0.07	0.20	0.20	-0.11	0.83 Accuracy Error (dB)
11 GHz	Intercept (mV)	4844	317	638	943	1297	1687	2027	2409	2749	3095	3436	3782	4153	4499	4811	Measured Value (mV)
	Slope (mV/dB)	70.36	47	16	-31	-28	10	-2	28	16	10	0	-6	13	7	-33	Error (mV)
			0.67	0.23	-0.44	-0.40	0.14	-0.03	0.40	0.23	0.15	-0.01	-0.09	0.18	0.10	-0.46	0.67 Linearity Error (dB)
			0.74	0.33	-0.31	-0.26	0.31	0.17	0.63	0.49	0.43	0.30	0.24	0.54	0.49	-0.06	0.74 Accuracy Error (dB)
12 GHz	Intercept (mV)	4803	334	658	970	1329	1715	2044	2410	2726	3062	3407	3744	4107	4466	4811	Measured Value (mV)
	Slope (mV/dB)	69.20	29	7	-27	-14	26	9	29	-1	-11	-12	-21	-4	9	8	Error (mV)
			0.42	0.10	-0.39	-0.20	0.38	0.13	0.42	-0.01	-0.16	-0.17	-0.30	-0.06	0.13	0.12	0.42 Linearity Error (dB)
			0.99	0.61	0.07	0.20	0.71	0.41	0.64	0.16	-0.04	-0.11	-0.30	-0.11	0.01	-0.06	0.99 Accuracy Error (dB)
13 GHz	Intercept (mV)	4809	378	695	1019	1376	1754	2086	2433	2732	3069	3424	3766	4125	4481	4818	Measured Value (mV)
	Slope (mV/dB)	68.56	26	0	-19	-5	30	19	24	-20	-26	-14	-15	2	15	9	Error (mV)
			0.37	0.00	-0.28	-0.07	0.44	0.28	0.35	-0.29	-0.38	-0.20	-0.21	0.02	0.22	0.13	0.44 Linearity Error (dB)
			1.61	1.14	0.77	0.87	1.27	1.01	0.97	0.24	0.06	0.13	0.01	0.14	0.23	0.04	1.61 Accuracy Error (dB)
14 GHz	Intercept (mV)	4829	375	689	1012	1358	1744	2080	2434	2744	3089	3433	3780	4153	4502	4816	Measured Value (mV)
	Slope (mV/dB)	69.08	36	5	-18	-17	24	14	23	-12	-13	-14	-13	15	19	-13	Error (mV)
			0.53	0.07	-0.25	-0.24	0.34	0.21	0.33	-0.18	-0.19	-0.21	-0.18	0.22	0.27	-0.19	0.53 Linearity Error (dB)
			1.57	1.06	0.67	0.61	1.13	0.93	0.99	0.41	0.34	0.26	0.21	0.54	0.53	0.01	1.57 Accuracy Error (dB)
15 GHz	Intercept (mV)	4802	350	673	989	1339	1724	2060	2423	2736	3076	3421	3758	4113	4462	4796	Measured Value (mV)
	Slope (mV/dB)	68.87	24	3	-25	-20	21	13	31	0	-5	-4	-11	-1	4	-6	Error (mV)
			0.36	0.04	-0.37	-0.29	0.30	0.18	0.45	0.00	-0.07	-0.06	-0.16	-0.01	0.06	-0.09	0.45 Linearity Error (dB)
			1.21	0.83	0.34	0.34	0.84	0.64	0.83	0.30	0.16	0.09	-0.10	-0.03	-0.04	-0.27	1.21 Accuracy Error (dB)
16 GHz	Intercept (mV)	4836	329	649	961	1311	1697	2037	2415	2746	3088	3426	3761	4126	4493	4844	Measured Value (mV)
	Slope (mV/dB)	70.04	45	15	-23	-23	13	2	30	11	3	-9	-24	-10	7	8	Error (mV)
			0.65	0.22	-0.33	-0.33	0.18	0.03	0.43	0.16	0.04	-0.13	-0.35	-0.14	0.10	0.11	0.65 Linearity Error (dB)
			0.91	0.49	-0.06	-0.06	0.46	0.31	0.71	0.44	0.33	0.16	-0.06	0.16	0.40	0.41	0.91 Accuracy Error (dB)
17 GHz	Intercept (mV)	4875	370	691	1011	1359	1747	2087	2462	2783	3143	3471	3820	4185	4534	4849	Measured Value (mV)
	Slope (mV/dB)	69.82	33	5	-24	-25	14	5	31	3	14	-7	-7	8	8	-26	Error (mV)
			0.48	0.08	-0.34	-0.35	0.20	0.07	0.44	0.04	0.20	-0.11	-0.11	0.12	0.12	-0.37	0.48 Linearity Error (dB)
			1.50	1.09	0.66	0.63	1.17	1.03	1.39	0.97	1.11	0.80	0.79	1.00	0.99	0.49	1.50 Accuracy Error (dB)
18 GHz	Intercept (mV)	4821	340	656	969	1321	1709	2044	2413	2743	3090	3418	3757	4128	4487	4807	Measured Value (mV)
	Slope (mV/dB)	69.55	40	9	-26	-22	18	6	27	9	8	-12	-20	3	14	-14	Error (mV)
			0.58	0.12	-0.38	-0.32	0.26	0.08	0.38	0.13	0.12	-0.17	-0.29	0.04	0.20	-0.20	0.58 Linearity Error (dB)
			1.07	0.59	0.06	0.09	0.63	0.41	0.69	0.40	0.36	0.04	-0.11	0.19	0.31	-0.11	1.07 Accuracy Error (dB)
Output Vos:		56.0 mV															
Avg Slope:		70.3 mV/dB	378	695	1019	1376	1754	2087	2462	2783	3143	3471	3820	4185	4534	4849	Max Measured (mV)
Max Slope:		71.9 mv/dB	252	556	859	1210	1591	1942	2322	2692	3021	3377	3708	4064	4414	4733	Min Measured (mV)
Min Slope:		68.6 mv/dB	0.90	0.99	1.14	1.18	1.16	1.03	1.00	0.65	0.87	0.67	0.80	0.86	0.85	0.83	Flatness Error (+/-dB)

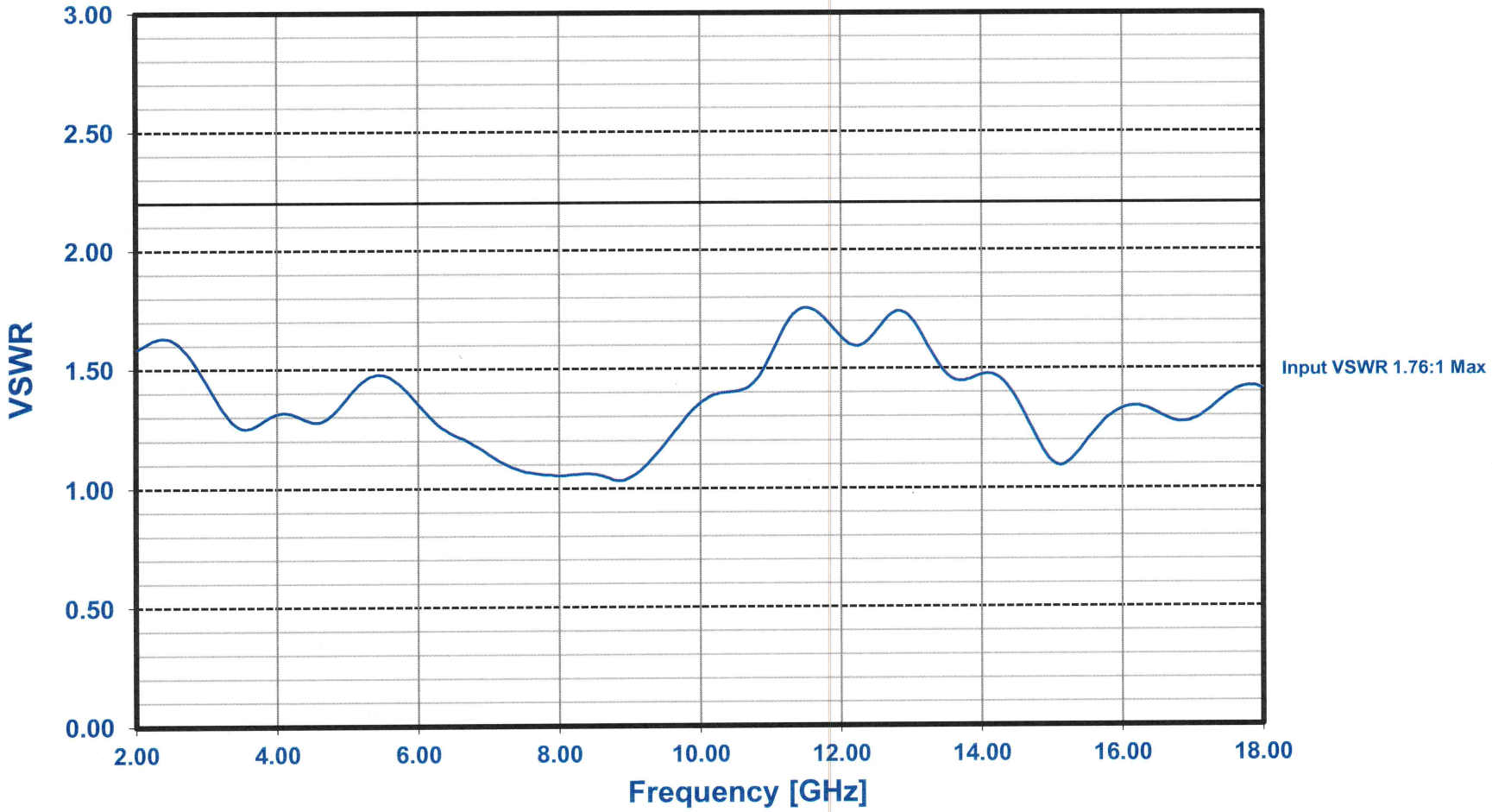
PL44920
-40°C


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)
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

Model Number: ERDLVA-2G18G-65-70MV-70C
Serial Number: PL44920
Date: 10/18/2024

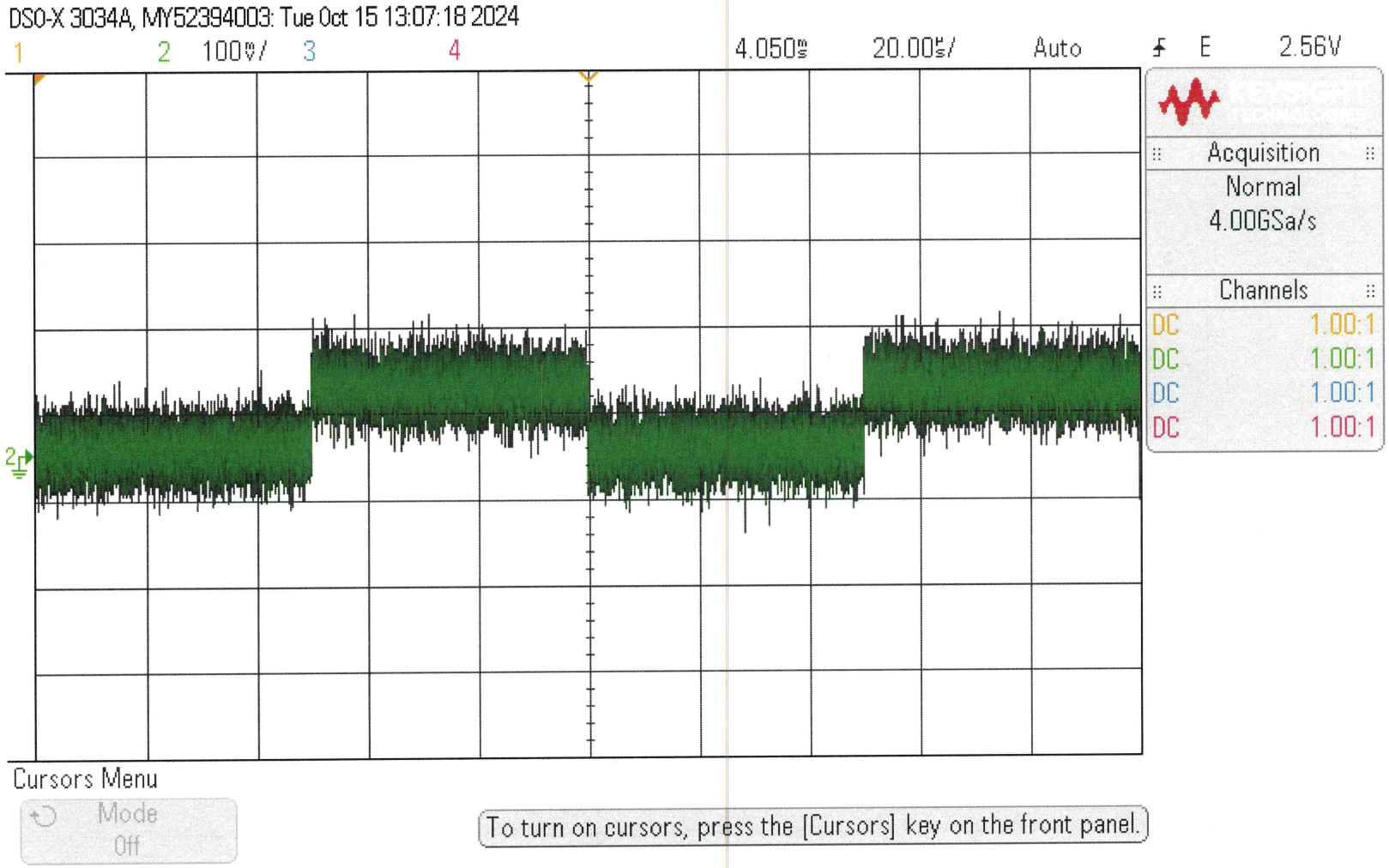
Temperature: +25C

VSWR GRAPH

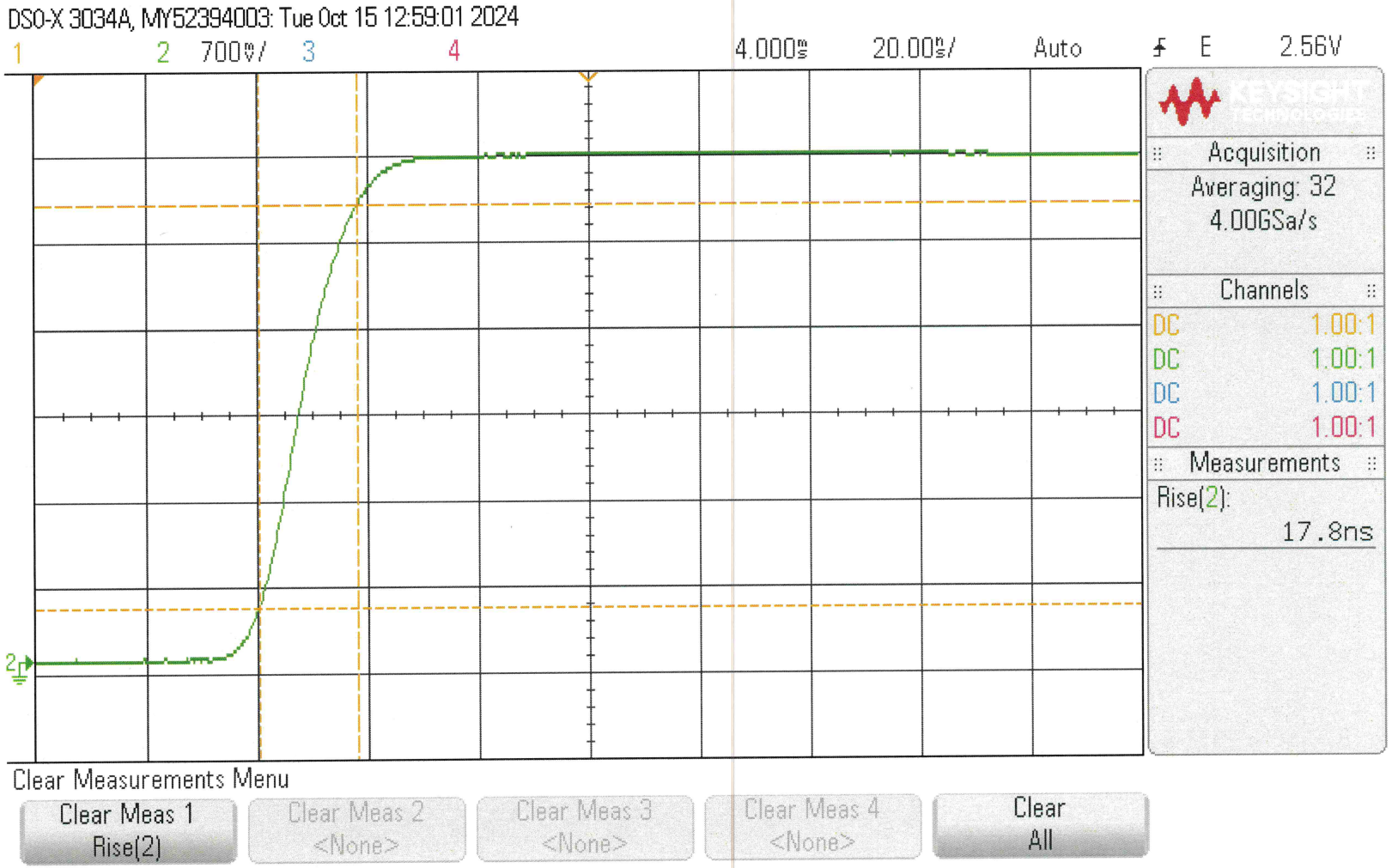


PL44920

TSS -71 dbm

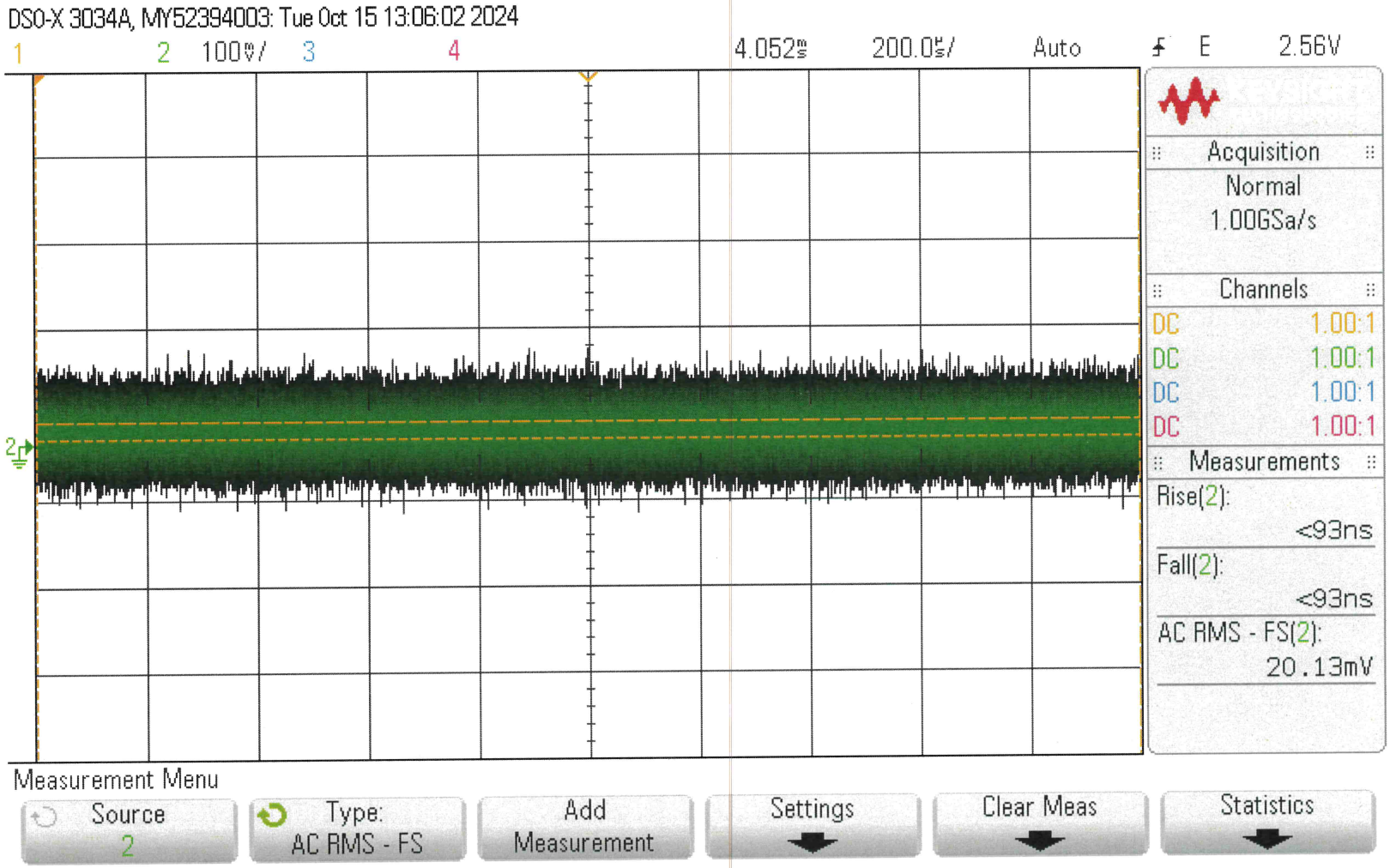


PL44920
settle



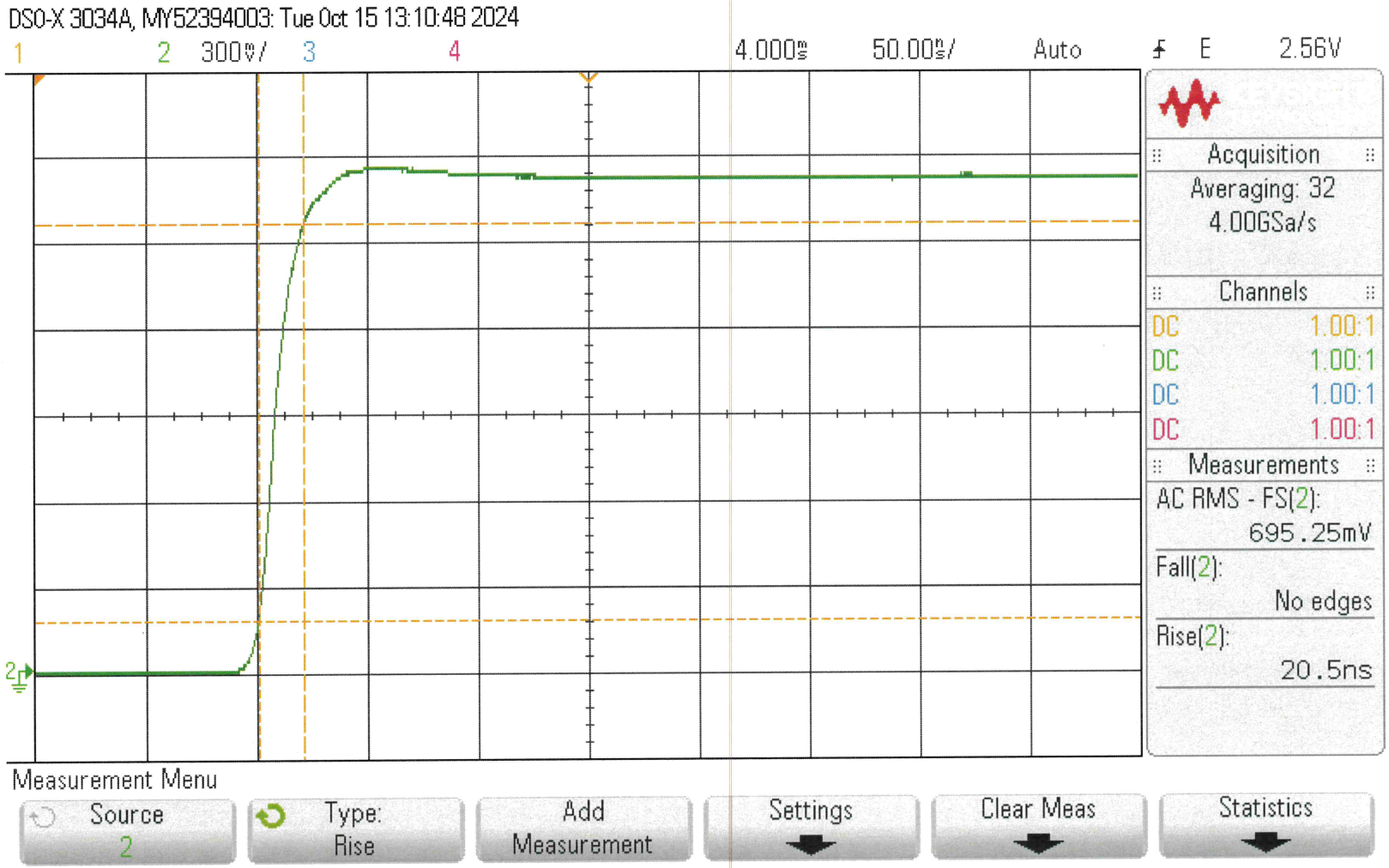
PL44920

Rms noise

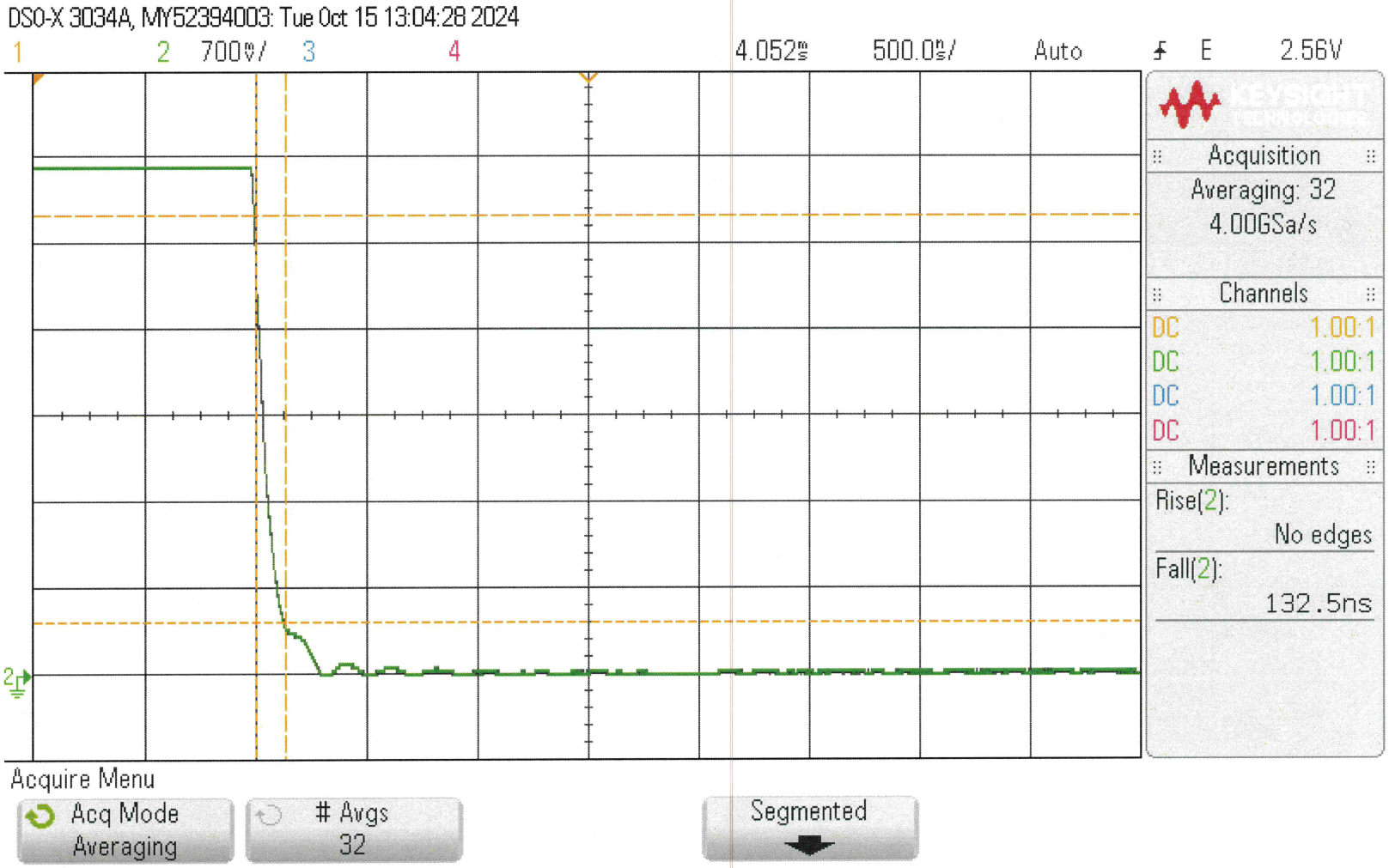


PL44920

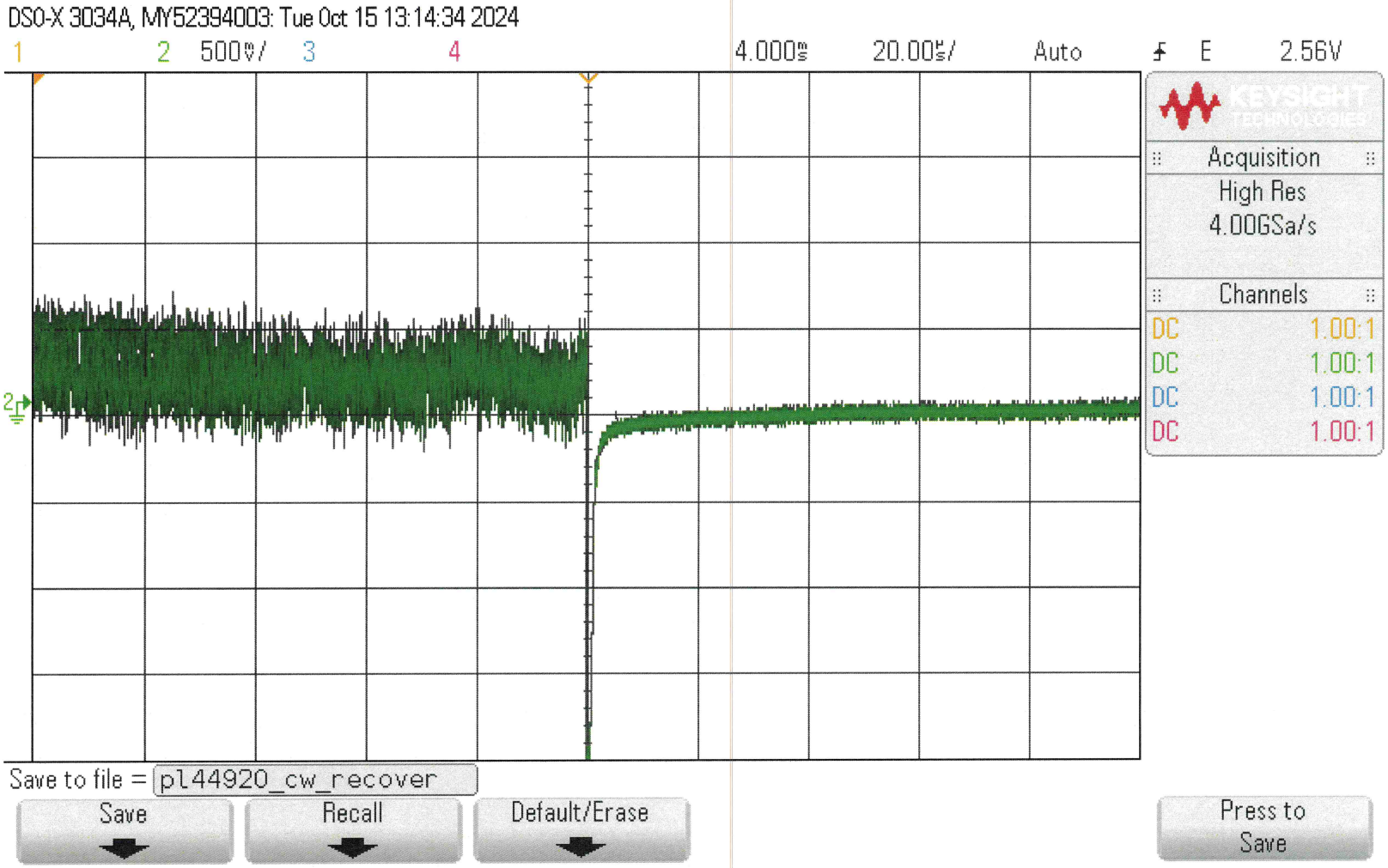
Rise Time -45dbm



PL44919
Recovery Fall



PL44920
CW Recovery



PL 44920

CW Immune