

Summary Data
For
ERDLVA-8G18G-65-70MV-2

Customer: _____ Tested By: Jim Hopson
 _____ SO No: _____ Temperature: +25°C, +85C, -10C
 Model No: ERDLVA-8G18G-65-70MV-2 Date 9/19/2025
 Serial No: PL53799/2531 Drawing No: 27650100 Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	8 to 18 GHz	8 to 18 GHz	PM/ QA:✓
2	Input VSWR:	2.3:1 Max	1.82:1	
3	Input Power Max:	(1) 1 W CW (2) 100 W Peak @ PW = 1 us & Duty Cycle = 1%	W CW Pass W Peak Pass	
4	Switch Isolation:	60 dB Min (All Ports)	>60dB	
5	Switching Speed:	100 ns Max	<100ns	

**Summary Data
For
ERDLVA-8G18G-65-70MV-2**

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
6	TSS:	-71 dBm	-73dBm	PMI QAS
7	Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
8	Log Slope:	70 mV/dB $\pm$ 3 mV/dB	69.23/70.27mV/dB	
9	Log Linearity:	$\pm$ 1.0 dB Max	+42/-57dB	
10	Log Accuracy @ 25°C:	$\pm$ 1.75 dB Max	1.07/-1.10dB	
11	Absolute Log Accuracy:	$\pm$ 2.0 dB Max	+1.53/-1.47dB	
12	DC Offset:	$\pm$ 70 mV	+42mV	
13	Rise Time:	28 ns Max (10% to 90% @ -50 to 0 dBm, 10% to 90% Full Dynamic Range Guaranteed)	27.8ns	
14	Fall Time:	300 ns Max (10% to 90% @ -50 to 0 dBm, 10% to 90% Full Dynamic Range Guaranteed)	174.1ns	
15	Settling Time:	50 ns Max (From 10% to within 70 mV of final value @ -40 & -10 dBm)	<60ns	
16	Recovery Time:	1 us Max (From 90% to within $\pm$ 1.5 dB of baseline)	750ns	
17	Video Frequency Flatness:	$\pm$ 1.75 dB Max @ 25°C	$\pm$.94 dB Max @ 25°C	
18	Pulse Width Process Range:	100 ns to 100 us	100 ns to 100 us	
19	Video Output Load Impedance:	95 $\pm$ 1 Ω	95 $\pm$ 1 Ω	

7309-A Grove Road Frederick, MD 21704 USA Phone: (301) 662-5019 Fax: (301) 662-1731
Email: sales@quanticpmi.com

Summary Data
For
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TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
20	Video Output @ -65 dBm:	330 ± 123 mV Over Frequency	223/311mV	PMI QA3
21	Video Output Drive Capability:	Driving 100 ft RG180 into 95 Ω Load	Pass	
22	Pulse Density Capability:	10% Duty @ 100 ns PW 70% Duty @ 100 us PW	10% Duty @ 100ns PW 70% Duty @ 100us PW	
23	Noise Level:	25 mV RMS Max	22.5mV	
24	Pulse Droop @ -65 dBm:	70 mV Max for PW 100 us	<70mV	
25	Propagation Delay:	50 ns Max (50% RF to 10% Video)	<50ns	
26	CW Immune Power:	TSS to -40 dBm	TSS to -40 dBm	
27	Baseline Shift:	200 mV Max @ -40 dBm CW	<200mV	
28	Pulse Amplitude Loss with Pulse @ -30 dBm:	CW @ -50 dBm = No Loss CW @ -40 dBm = 2 dB Max	-50 dBm = 0dB -40 dBm = <1dB	
29	CW Immue Time @ CW = -40 dBm	4 ms Max	2.6ms	
30	CW Recovery Time @ CW = -40 dBm	120 us Max	<100us	
31	DC Power:	+15V (±5%) @ 500 mA Max -15V (±5%) @ 200 mA Max	480 mA 140 mA	
32	Ripple DC to 10 MHz	100 mV Max	<100mV	

QA/QC Approval: K. Kamm Date: 9-23-25

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LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-8G18G-65-70MV-2
TESTED BY: JIM HOPSON
DATE: 9/19/25
SERIAL NO: PL53799-RF

Test Temp: +25C



PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway STE 1
TEL: 916-542-1401 FAX: 301-662-1731
EMAIL: SALES@PMI-RF.COM
ISO 9001:2000 CERTIFIED

DC Offset= 0.042

Frequency

8000 MHz INTERCEPT (mV) 4829.5
SLOPE (mV/dB) 69.46

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
287	674	996	1371	1720	2039	2411	2753	3099	3433	3794	4122	4507	4801
-27	12	-13	15	16	-12	13	7	6	-7	6	-13	25	-28
-0.39	0.18	-0.19	0.21	0.24	-0.17	0.18	0.11	0.09	-0.10	0.09	-0.18	0.36	-0.41
-0.19	0.36	-0.03	0.35	0.35	-0.08	0.25	0.15	0.10	-0.11	0.06	-0.24	0.28	-0.51

RF Input Power (dBm)
Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

9000 MHz INTERCEPT (mV) 4822.3
SLOPE (mV/dB) 68.96

305	697	1017	1390	1737	2056	2429	2764	3106	3428	3788	4120	4505	4793
-35	12	-12	16	18	-8	20	11	8	-15	0	-13	28	-29
-0.51	0.18	-0.18	0.23	0.26	-0.11	0.29	0.15	0.11	-0.22	0.00	-0.18	0.40	-0.42
0.07	0.69	0.27	0.62	0.59	0.16	0.50	0.30	0.20	-0.18	-0.02	-0.27	0.25	-0.62

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

10000 MHz INTERCEPT (mV) 4844.3
SLOPE (mV/dB) 69.23

311	706	1025	1399	1746	2066	2438	2772	3124	3439	3814	4141	4527	4814
-34	15	-12	16	17	-9	17	5	16	-21	13	-6	29	-34
-0.48	0.22	-0.17	0.23	0.24	-0.13	0.24	0.07	0.15	-0.30	0.12	-0.16	0.42	-0.44
0.16	0.82	0.39	0.75	0.72	0.30	0.63	0.42	0.46	-0.02	0.35	0.03	0.56	-0.32

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

11000 MHz INTERCEPT (mV) 4849.8
SLOPE (mV/dB) 69.76

290	680	1002	1375	1724	2044	2418	2761	3122	3434	3816	4146	4530	4816
-26	16	-11	13	13	-16	10	4	16	-21	13	-6	29	-34
-0.37	0.22	-0.16	0.19	0.19	-0.22	0.14	0.06	0.23	-0.30	0.18	-0.09	0.42	-0.48
-0.14	0.44	0.06	0.40	0.40	-0.01	0.35	0.26	0.43	-0.10	0.38	0.11	0.61	-0.30

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

12000 MHz INTERCEPT (mV) 4841.7
SLOPE (mV/dB) 70.16

265	643	973	1343	1693	2018	2391	2742	3106	3426	3801	4131	4519	4809
-16	11	-10	9	10	-17	5	5	18	-12	12	-9	28	-33
-0.23	0.16	-0.14	0.13	0.12	-0.25	0.07	0.07	0.26	-0.18	0.17	-0.13	0.40	-0.47
-0.50	-0.09	-0.36	-0.06	-0.04	-0.38	-0.04	-0.01	0.20	-0.21	0.16	-0.11	0.45	-0.40

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

13000 MHz INTERCEPT (mV) 4838.1
SLOPE (mV/dB) 70.27

259	632	965	1332	1683	2011	2386	2732	3091	3427	3792	4124	4515	4812
-12	10	-8	7	7	-16	7	2	10	-6	8	-11	28	-26
-0.17	0.14	-0.12	0.10	0.10	-0.23	0.10	0.03	0.14	-0.20	0.15	-0.16	0.40	-0.37
-0.59	-0.24	-0.47	-0.21	-0.18	-0.48	-0.11	-0.15	-0.01	-0.20	0.03	-0.21	0.39	-0.35

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

14000 MHz INTERCEPT (mV) 4885.3
SLOPE (mV/dB) 70.21

297	694	1014	1384	1733	2064	2442	2773	3147	3467	3843	4174	4562	4856
-25	21	-10	9	7	-13	14	-6	17	-14	11	-9	28	-29
-0.35	0.30	-0.14	0.13	0.10	-0.19	0.20	-0.09	0.24	-0.20	0.15	-0.13	0.40	-0.42
-0.04	0.65	0.23	0.53	0.53	0.27	0.69	0.43	0.79	0.38	0.76	0.51	1.07	0.28

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

15000 MHz INTERCEPT (mV) 4815.4
SLOPE (mV/dB) 69.73

260	638	970	1343	1694	2021	2398	2724	3066	3417	3765	4102	4494	4798
-23	6	-10	14	16	-5	23	0	-6	-4	-5	-16	27	-17
-0.33	0.09	-0.15	0.20	0.23	-0.08	0.33	0.01	-0.09	-0.06	-0.06	-0.23	0.39	-0.25
-0.57	-0.16	-0.40	-0.06	-0.03	-0.34	0.06	-0.27	-0.37	-0.34	-0.35	-0.53	0.09	-0.55

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

16000 MHz INTERCEPT (mV) 4799.6
SLOPE (mV/dB) 69.66

253	618	956	1322	1675	2005	2382	2729	3077	3406	3754	4080	4471	4771
-19	-2	-12	5	10	-8	21	19	19	0	-1	-23	20	-29
-0.27	-0.03	-0.18	0.08	0.14	-0.12	0.29	0.28	0.27	-0.01	-0.01	-0.33	0.28	-0.41
-0.67	-0.44	-0.60	-0.36	-0.30	-0.57	-0.17	-0.20	-0.21	-0.50	-0.51	-0.84	-0.24	-0.94

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

17000 MHz INTERCEPT (mV) 4839.2
SLOPE (mV/dB) 70.12

261	636	969	1339	1692	2024	2406	2756	3108	3419	3787	4121	4515	4809
-20	4	-13	6	8	-10	21	21	22	-18	0	-17	26	-30
-0.29	0.06	-0.19	0.09	0.12	-0.15	0.30	0.29	0.31	-0.25	0.00	-0.24	0.38	-0.43
-0.56	-0.19	-0.41	-0.11	-0.06	-0.30	0.17	0.19	0.23	-0.31	-0.04	-0.25	0.39	-0.40

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

18000 MHz INTERCEPT (mV) 4793.3
SLOPE (mV/dB) 70.18

223	575	925	1285	1641	1974	2349	2716	3065	3388	3729	4074	4466	4764
-9	-7	-8	1	6	-12	12	28	26	-2	-12	-17	24	-29
-0.12	-0.11	-0.12	0.01	0.08	-0.17	0.17	0.40	0.37	-0.02	-0.16	-0.25	0.34	-0.42
-1.10	-1.06	-1.05	-0.89	-0.79	-1.02	-0.64	-0.38	-0.38	-0.76	-0.87	-0.93	-0.31	-1.04

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

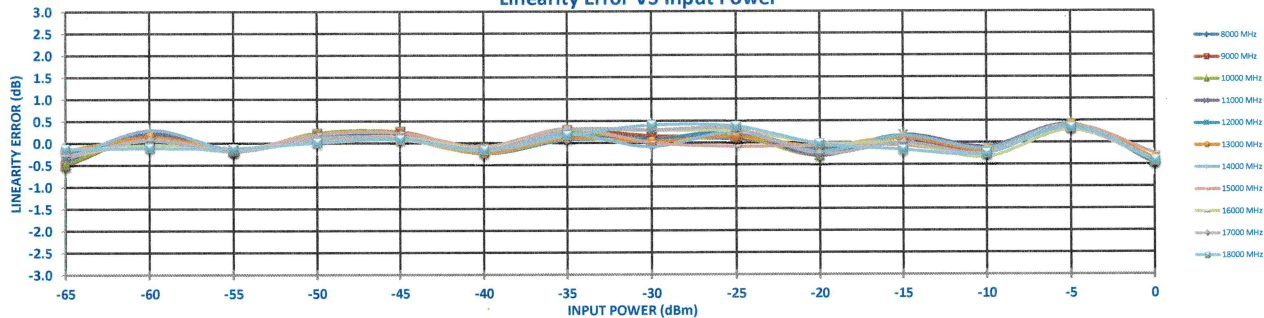
Flatness +/- dB

0.63	0.94	0.72	0.82	0.75	0.66	0.67	0.41	0.59	0.57	0.82	0.72	0.69	0.66
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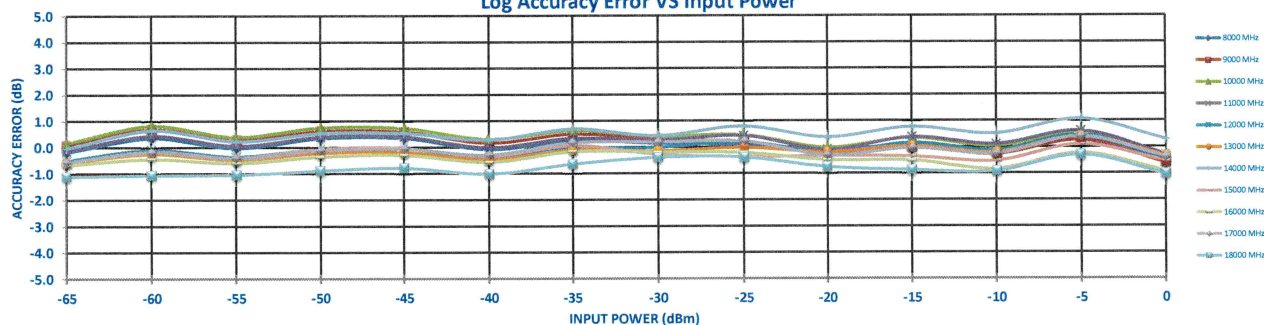
-65dBm mV-Out

311	Max
223	Min

Linearity Error VS Input Power



Log Accuracy Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-8G18G-65-70MV-2
TESTED BY: JIM HOPSON
DATE: 9/19/25
SERIAL NO: PL53799-BIT

Test Temp: +25C



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DC Offset= 0.024

Frequency

-65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 RF Input Power (dBm)

8000 MHz INTERCEPT (mV) 4837.5
SLOPE (mV/dB) 69.40

299	685	1008	1382	1731	2049	2423	2764	3111	3439	3804	4130	4516	4808
-28	11	-13	14	16	-13	14	8	8	-11	7	-13	26	-29
-0.40	0.16	-0.18	0.21	0.24	-0.18	0.21	0.12	0.12	-0.15	0.11	-0.19	0.37	-0.42
-0.16	0.38	0.01	0.37	0.37	-0.07	0.29	0.18	0.16	-0.14	0.09	-0.23	0.30	-0.51

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

9000 MHz INTERCEPT (mV) 4821.7
SLOPE (mV/dB) 68.90

306	697	1019	1392	1742	2061	2432	2766	3107	3430	3789	4118	4503	4791
-37	9	-13	15	21	-5	22	11	8	-14	1	-15	26	-31
-0.54	0.14	-0.19	0.22	0.30	-0.07	0.32	0.17	0.11	-0.20	0.01	-0.21	0.37	-0.45
-0.06	0.55	0.16	0.51	0.53	0.10	0.42	0.21	0.10	-0.27	-0.12	-0.41	0.11	-0.76

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

10000 MHz INTERCEPT (mV) 4846.9
SLOPE (mV/dB) 69.17

318	710	1030	1404	1753	2071	2445	2779	3129	3441	3816	4144	4530	4816
-33	13	-13	15	19	-8	19	7	11	-23	7	-11	29	-31
-0.48	0.19	-0.18	0.22	0.27	-0.13	0.27	0.10	0.16	-0.33	0.10	-0.16	0.42	-0.45
0.11	0.73	0.32	0.68	0.69	0.25	0.61	0.40	0.42	-0.11	0.26	-0.03	0.50	-0.40

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

11000 MHz INTERCEPT (mV) 4854.1
SLOPE (mV/dB) 69.73

296	686	1009	1379	1728	2050	2423	2769	3129	3439	3821	4150	4533	4820
-26	16	-10	11	12	-15	9	7	18	-21	13	-7	27	-34
-0.37	0.22	-0.15	0.16	0.17	-0.22	0.13	0.10	0.26	-0.30	0.18	-0.10	0.39	-0.49
-0.20	0.39	0.02	0.33	0.33	-0.05	0.29	0.25	0.42	-0.14	0.34	0.05	0.54	-0.34

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

12000 MHz INTERCEPT (mV) 4846.1
SLOPE (mV/dB) 70.09

271	652	981	1350	1702	2026	2400	2750	3114	3431	3807	4135	4522	4813
-19	11	-10	8	10	-16	7	7	20	-13	12	-10	26	-33
-0.27	0.16	-0.14	0.12	0.14	-0.23	0.10	0.09	0.29	-0.19	0.17	-0.15	0.38	-0.47
-0.56	-0.10	-0.38	-0.09	-0.04	-0.40	-0.04	-0.02	0.20	-0.25	0.14	-0.16	0.39	-0.44

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

13000 MHz INTERCEPT (mV) 4837.6
SLOPE (mV/dB) 70.25

259	630	965	1333	1685	2013	2387	2732	3090	3429	3791	4124	4513	4811
-12	7	-9	8	9	-15	8	2	9	-4	7	-11	27	-27
-0.17	0.11	-0.12	0.11	0.12	-0.21	0.12	0.03	0.12	-0.05	0.10	-0.16	0.38	-0.38
-0.73	-0.41	-0.61	-0.33	-0.29	-0.58	-0.22	-0.28	-0.14	-0.28	-0.09	-0.32	0.26	-0.47

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

14000 MHz INTERCEPT (mV) 4880.9
SLOPE (mV/dB) 70.18

301	689	1011	1379	1729	2060	2436	2769	3142	3462	3836	4171	4560	4855
-18	19	-10	7	6	-14	11	-6	16	-15	8	-8	30	-26
-0.26	0.27	-0.14	0.10	0.09	-0.19	0.16	-0.09	0.22	-0.22	0.11	-0.12	0.43	-0.37
-0.13	0.43	0.05	0.33	0.34	0.09	0.48	0.25	0.60	0.19	0.55	0.35	0.93	0.16

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

15000 MHz INTERCEPT (mV) 4840.3
SLOPE (mV/dB) 69.63

281	675	999	1373	1724	2052	2429	2752	3101	3440	3798	4124	4518	4818
-34	12	-12	14	17	-3	26	1	1	-8	2	-20	26	-22
-0.48	0.18	-0.17	0.20	0.24	-0.05	0.37	0.01	0.02	-0.11	0.03	-0.29	0.37	-0.32
-0.42	0.23	-0.12	0.24	0.27	-0.03	0.38	0.01	0.01	-0.13	0.01	-0.32	0.33	-0.37

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

16000 MHz INTERCEPT (mV) 4817.3
SLOPE (mV/dB) 69.71

262	637	971	1339	1692	2021	2399	2745	3095	3418	3771	4098	4491	4787
-24	2	-12	7	11	-8	21	19	20	-5	-1	-22	22	-30
-0.35	0.03	-0.18	0.10	0.16	-0.12	0.31	0.27	0.29	-0.07	-0.01	-0.32	0.32	-0.44
-0.69	-0.31	-0.52	-0.25	-0.19	-0.47	-0.05	-0.09	-0.07	-0.44	-0.38	-0.69	-0.06	-0.81

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

17000 MHz INTERCEPT (mV) 4856.4
SLOPE (mV/dB) 70.16

276	654	983	1354	1706	2039	2423	2773	3125	3434	3806	4140	4533	4823
-20	7	-15	5	7	-11	22	21	22	-19	2	-15	27	-33
-0.29	0.10	-0.21	0.08	0.09	-0.16	0.31	0.30	0.32	-0.28	0.03	-0.21	0.39	-0.48
-0.49	-0.07	-0.35	-0.03	0.01	-0.21	0.29	0.31	0.36	-0.21	0.12	-0.09	0.54	-0.30

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

18000 MHz INTERCEPT (mV) 4825.3
SLOPE (mV/dB) 70.04

257	619	958	1327	1681	2012	2393	2751	3106	3416	3773	4104	4498	4790
-16	-4	-15	4	8	-12	19	27	32	-8	-2	-21	23	-35
-0.22	-0.05	-0.21	0.05	0.11	-0.17	0.27	0.38	0.45	-0.12	-0.02	-0.30	0.33	-0.50
-0.76	-0.57	-0.71	-0.42	-0.34	-0.60	-0.14	0.00	0.09	-0.47	-0.35	-0.61	0.04	-0.77

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

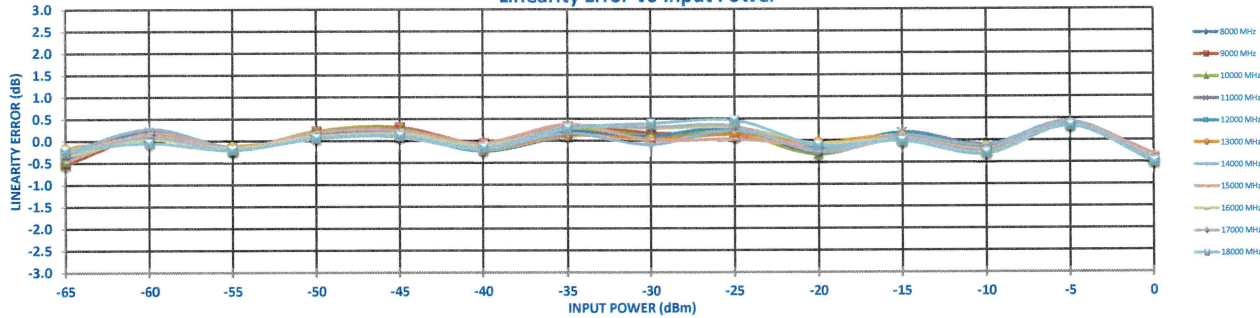
Flatness +/- dB

0.44	0.65	0.52	0.55	0.52	0.42	0.42	0.34	0.37	0.33	0.47	0.52	0.49	0.49
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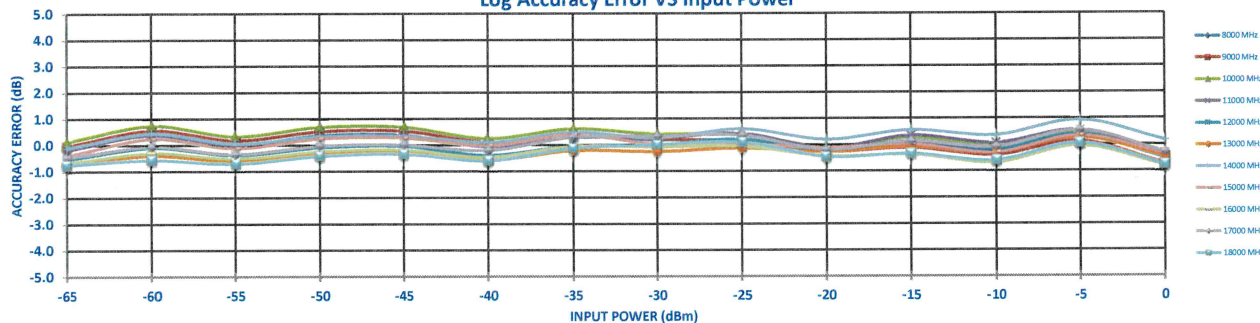
-65dBm mV-Out

318 Max
257 Min

Linearity Error VS Input Power



Log Accuracy Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-8G18G-65-70MV-2
TESTED BY: JIM HOPSON
DATE: 9/19/25
SERIAL NO: PL53799-RF

Test Temp: +85C



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ISO 9001:2000 CERTIFIED

DC Offset= 0.058

Frequency

8000 MHz	INTERCEPT (mV)	4780
	SLOPE (mV/dB)	68.74

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
270	638	984	1347	1704	2034	2407	2758	3099	3419	3756	4070	4435	4721
-42	-17	-15	4	17	4	33	40	38	14	7	-23	-1	-59
-0.61	-0.25	-0.22	0.06	0.25	0.05	0.48	0.59	0.55	0.20	0.10	-0.33	-0.02	-0.86
-0.07	0.25	0.24	0.49	0.65	0.42	0.81	0.88	0.81	0.43	0.30	-0.16	0.11	-0.76

RF Input Power (dBm)
Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

9000 MHz	INTERCEPT (mV)	4774.2
	SLOPE (mV/dB)	68.35

284	659	999	1361	1717	2046	2420	2768	3102	3414	3752	4070	4434	4714
-48	-14	-16	4	18	6	38	44	37	7	3	-21	2	-60
-0.70	-0.21	-0.23	0.06	0.27	0.08	0.56	0.65	0.53	0.10	0.04	-0.30	0.02	-0.88
0.13	0.55	0.46	0.69	0.84	0.59	0.99	1.02	0.85	0.36	0.24	-0.16	0.10	-0.86

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

10000 MHz	INTERCEPT (mV)	4794.7
	SLOPE (mV/dB)	68.59

290	666	1006	1370	1727	2056	2431	2776	3117	3424	3775	4089	4455	4734
-46	-13	-10	5	19	5	37	39	37	1	8	-20	3	-61
-0.67	-0.19	-0.23	0.07	0.28	0.07	0.54	0.57	0.54	0.02	0.13	-0.29	0.05	-0.88
0.22	0.65	0.56	0.82	0.98	0.73	1.15	1.14	1.07	0.50	0.57	0.11	0.40	-0.57

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

11000 MHz	INTERCEPT (mV)	4806.1
	SLOPE (mV/dB)	69.08

276	648	992	1356	1711	2043	2419	2772	3122	3428	3783	4098	4463	4743
-40	-13	-15	4	13	0	31	38	43	4	13	-17	2	-63
-0.58	-0.19	-0.21	0.06	0.20	0.00	0.44	0.55	0.62	0.05	0.19	-0.25	0.03	-0.91
0.01	0.39	0.36	0.62	0.75	0.55	0.98	1.08	1.14	0.56	0.69	0.24	0.51	-0.44

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

12000 MHz	INTERCEPT (mV)	4800.1
	SLOPE (mV/dB)	69.49

252	614	965	1326	1681	2017	2393	2755	3111	3424	3773	4086	4453	4735
-31	-17	-13	0	8	-4	25	39	48	14	15	-19	0	-65
-0.45	-0.24	-0.19	0.00	0.11	-0.05	0.36	0.57	0.69	0.20	0.22	-0.28	0.00	-0.94
-0.33	-0.10	-0.03	0.19	0.32	0.17	0.60	0.83	0.98	0.50	0.54	0.07	0.37	-0.55

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

13000 MHz	INTERCEPT (mV)	4796.1
	SLOPE (mV/dB)	69.65

244	597	954	1311	1666	2006	2383	2743	3099	3424	3765	4076	4447	4737
-25	-20	-11	-2	4	-4	25	37	44	21	14	-24	-1	-59
-0.35	-0.28	-0.16	-0.03	0.06	-0.06	0.36	0.53	0.64	0.30	0.20	-0.34	-0.01	-0.85
-0.45	-0.35	-0.19	-0.03	0.10	0.01	0.46	0.66	0.81	0.50	0.43	-0.08	0.28	-0.53

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

14000 MHz	INTERCEPT (mV)	4833.3
	SLOPE (mV/dB)	69.54

276	649	994	1353	1710	2050	2434	2782	3149	3456	3801	4117	4483	4770
-37	-12	-14	-3	6	-2	35	35	54	14	11	-21	-3	-63
-0.53	-0.17	-0.21	-0.04	0.09	-0.02	0.50	0.50	0.78	0.19	0.16	-0.30	-0.04	-0.91
0.01	0.40	0.39	0.58	0.74	0.65	1.20	1.23	1.53	0.96	0.95	0.52	0.80	-0.05

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

15000 MHz	INTERCEPT (mV)	4762.9
	SLOPE (mV/dB)	69.22

234	581	944	1305	1660	2000	2378	2725	3060	3400	3727	4045	4416	4711
-30	-29	-12	3	12	6	38	39	28	21	2	-26	-1	-52
-0.43	-0.42	-0.17	0.04	0.17	0.08	0.55	0.56	0.40	0.31	0.03	-0.37	-0.01	-0.75
-0.59	-0.58	-0.33	-0.12	0.01	-0.07	0.39	0.40	0.24	0.15	-0.12	-0.53	-0.16	-0.90

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

16000 MHz	INTERCEPT (mV)	4747.6
	SLOPE (mV/dB)	69.22

224	559	927	1281	1637	1981	2359	2726	3068	3388	3717	4025	4394	4684
-24	-35	-13	-5	4	2	34	55	51	25	8	-30	-7	-64
-0.35	-0.51	-0.19	-0.08	0.06	0.03	0.49	0.80	0.74	0.36	0.11	-0.44	-0.11	-0.92
-0.74	-0.90	-0.58	-0.46	-0.32	-0.35	0.11	0.42	0.36	-0.02	-0.26	-0.81	-0.48	-1.29

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

17000 MHz	INTERCEPT (mV)	4783
	SLOPE (mV/dB)	69.74

227	566	934	1291	1646	1993	2377	2749	3095	3401	3742	4060	4432	4718
-23	-33	-13	-5	1	0	35	58	55	13	5	-26	-2	-65
-0.33	-0.47	-0.19	-0.07	0.02	-0.01	0.50	0.83	0.80	0.18	0.07	-0.37	-0.03	-0.93
-0.69	-0.80	-0.48	-0.32	-0.19	-0.18	0.37	0.75	0.75	0.17	0.10	-0.31	0.07	-0.80

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

18000 MHz	INTERCEPT (mV)	4731.2
	SLOPE (mV/dB)	69.64

199	522	887	1234	1590	1942	2313	2704	3049	3366	3683	4009	4381	4672
-6	-31	-14	-15	-7	-4	19	62	59	28	-4	-26	-2	-59
-0.08	-0.44	-0.20	-0.22	-0.11	-0.05	0.28	0.89	0.84	0.40	-0.05	-0.37	-0.03	-0.85
-1.10	-1.43	-1.16	-1.14	-1.00	-0.91	-0.55	0.10	0.08	-0.34	-0.76	-1.05	-0.67	-1.47

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

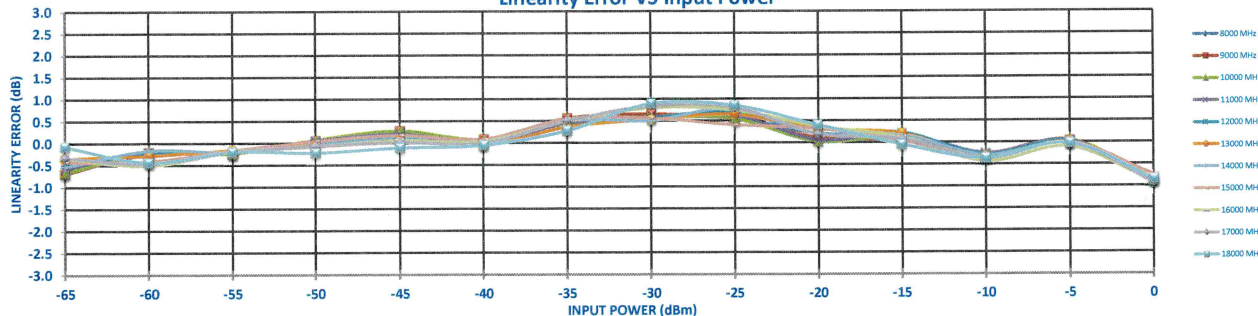
Flatness +/- dB

0.66	1.04	0.86	0.98	0.99	0.82	0.87	0.56	0.72	0.65	0.85	0.78	0.74	0.71
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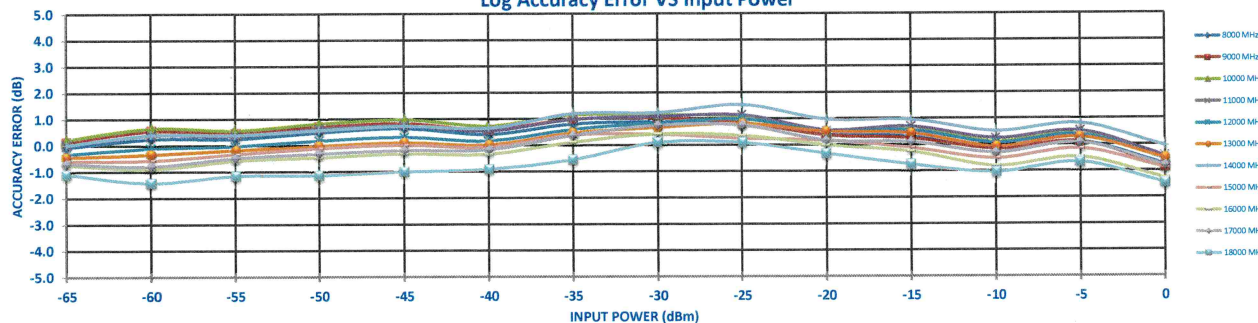
-65dBm mV-Out

290	Max
199	Min

Linearity Error VS Input Power



Log Accuracy Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-8G18G-65-70MV-2
TESTED BY: JIM HOPSON
DATE: 9/19/25
SERIAL NO: PL53799-RF

Test Temp: -10C



PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway STE 1
TEL: 916-542-1401 FAX: 301-662-1731
EMAIL: SALES@PMI-RF.COM
ISO 9001:2000 CERTIFIED

DC Offset= 0.038

Frequency

-65 -60 -55 -50 -45 -40 -35 -30 -25 -20 -15 -10 -5 0 RF Input Power (dBm)

8000 MHz INTERCEPT (mV) 4866.2
SLOPE (mV/dB) 70.09

305	686	1003	1378	1730	2035	2400	2753	3100	3450	3816	4160	4560	4860
-5	25	-8	16	18	-28	-13	-11	-14	-14	1	-5	44	-6
-0.08	0.36	-0.12	0.23	0.25	-0.39	-0.05	-0.12	-0.20	-0.11	0.02	-0.08	0.63	-0.09
0.09	0.50	0.00	0.33	0.34	-0.33	-0.14	-0.13	-0.19	-0.22	-0.02	-0.13	0.55	-0.18

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

9000 MHz INTERCEPT (mV) 4861.7
SLOPE (mV/dB) 69.55

326	715	1026	1403	1751	2058	2424	2767	3114	3450	3811	4160	4560	4854
-15	26	-10	19	19	-22	-3	-8	-9	-21	-7	-6	46	-8
-0.22	0.38	-0.15	0.27	0.27	-0.31	-0.05	-0.12	-0.13	-0.30	-0.11	-0.09	0.66	-0.11
0.38	0.91	0.33	0.69	0.63	0.00	0.20	0.07	0.00	-0.22	-0.09	-0.13	0.55	-0.27

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

10000 MHz INTERCEPT (mV) 4883.6
SLOPE (mV/dB) 69.85

332	721	1032	1410	1758	2064	2431	2772	3131	3459	3839	4181	4583	4874
-11	29	-10	19	18	-25	-6	-16	-5	-25	3	-4	49	-10
-0.16	0.41	-0.14	0.27	0.26	-0.36	-0.11	-0.23	-0.09	-0.39	0.05	-0.06	0.70	-0.14
0.47	1.00	0.42	0.79	0.73	0.08	0.30	0.14	0.25	-0.09	0.31	0.17	0.88	0.02

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

11000 MHz INTERCEPT (mV) 4882.1
SLOPE (mV/dB) 70.42

303	683	1002	1375	1727	2035	2401	2753	3123	3448	3833	4179	4578	4868
-2	26	-7	14	14	-30	-16	-16	1	-26	7	1	48	-14
-0.02	0.37	-0.10	0.20	0.20	-0.43	-0.23	-0.23	0.02	-0.36	0.10	0.02	0.68	-0.20
0.06	0.46	-0.01	0.29	0.29	-0.33	-0.13	-0.13	0.13	-0.25	0.22	0.14	0.81	-0.07

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

12000 MHz INTERCEPT (mV) 4865.9
SLOPE (mV/dB) 70.79

270	642	968	1336	1691	2004	2368	2725	3097	3432	3808	4158	4559	4855
5	24	-4	10	11	-30	-20	-17	1	-18	4	0	47	-11
0.08	0.33	-0.06	0.14	0.15	-0.43	-0.29	-0.24	0.01	-0.26	0.06	0.00	0.66	-0.15
-0.41	-0.13	-0.49	-0.26	-0.22	-0.77	-0.60	-0.52	-0.24	-0.48	-0.13	-0.16	0.54	-0.25

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

13000 MHz INTERCEPT (mV) 4860.1
SLOPE (mV/dB) 70.81

266	632	963	1327	1684	2000	2366	2716	3078	3432	3796	4150	4553	4857
9	21	-2	8	11	-27	-16	-20	-12	-12	-2	-2	47	-3
0.13	0.29	-0.03	0.11	0.15	-0.39	-0.22	-0.28	-0.16	-0.17	-0.03	-0.03	0.66	-0.04
-0.47	-0.27	-0.56	-0.39	-0.32	-0.83	-0.63	-0.65	-0.51	-0.48	-0.30	-0.27	0.45	-0.22

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

14000 MHz INTERCEPT (mV) 4914
SLOPE (mV/dB) 70.72

317	704	1018	1391	1741	2059	2429	2761	3140	3476	3858	4207	4610	4909
0	33	-7	13	9	-26	-10	-32	-6	-24	5	0	50	-5
-0.01	0.47	-0.09	0.18	0.13	-0.37	-0.14	-0.45	-0.09	-0.33	0.07	0.00	0.70	-0.07
0.26	0.76	0.22	0.52	0.49	0.01	0.27	-0.01	0.37	0.15	0.58	0.54	1.26	0.51

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

15000 MHz INTERCEPT (mV) 4850.1
SLOPE (mV/dB) 70.26

276	656	980	1353	1707	2022	2391	2722	3069	3434	3784	4139	4545	4854
-7	22	-6	16	19	-18	0	-20	-25	-11	-12	-8	46	4
-0.10	0.31	-0.08	0.23	0.27	-0.25	0.00	-0.29	-0.35	-0.15	-0.17	-0.12	0.66	0.06
-0.33	0.07	-0.32	-0.02	0.01	-0.51	-0.27	-0.57	-0.63	-0.45	-0.47	-0.43	0.34	-0.27

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

16000 MHz INTERCEPT (mV) 4833.4
SLOPE (mV/dB) 70.14

274	638	967	1333	1690	2007	2377	2725	3080	3424	3773	4115	4522	4828
0	13	-9	7	13	-21	-1	-4	0	-7	-8	-17	39	-5
0.00	0.19	-0.12	0.10	0.19	-0.30	-0.02	-0.06	0.00	-0.09	-0.12	-0.24	0.56	-0.08
-0.36	-0.18	-0.51	-0.31	-0.23	-0.73	-0.47	-0.52	-0.48	-0.59	-0.63	-0.77	0.01	-0.64

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

17000 MHz INTERCEPT (mV) 4873.7
SLOPE (mV/dB) 70.64

282	654	979	1350	1706	2025	2400	2753	3110	3436	3809	4157	4566	4866
0	18	-10	8	11	-23	-1	-2	2	-25	-5	-10	45	-8
-0.01	0.26	-0.14	0.11	0.15	-0.33	-0.02	-0.02	0.03	-0.35	-0.07	-0.15	0.64	-0.11
-0.24	0.05	-0.34	-0.06	0.00	-0.47	-0.14	-0.13	-0.05	-0.42	-0.12	-0.17	0.64	-0.10

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

18000 MHz INTERCEPT (mV) 4829.5
SLOPE (mV/dB) 70.75

242	594	935	1291	1654	1975	2341	2711	3066	3406	3752	4114	4518	4823
11	10	-3	-1	8	-25	-12	4	5	-9	-16	-8	42	-7
0.16	0.13	-0.05	-0.01	0.12	-0.35	-0.17	0.06	0.07	-0.12	-0.23	-0.11	0.60	-0.09
-0.81	-0.81	-0.96	-0.90	-0.74	-1.18	-0.98	-0.72	-0.68	-0.85	-0.93	-0.78	-0.04	-0.71

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

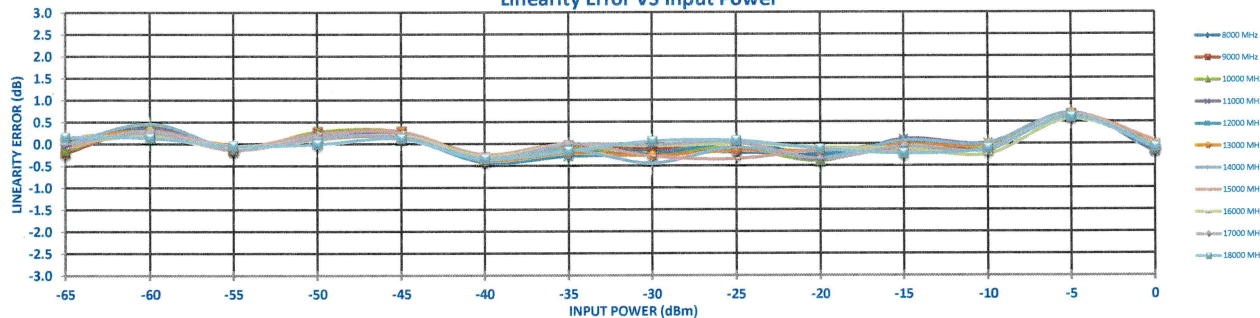
Flatness +/- dB

0.64 0.90 0.69 0.85 0.74 0.63 0.64 0.43 0.53 0.50 0.75 0.66 0.65 0.61

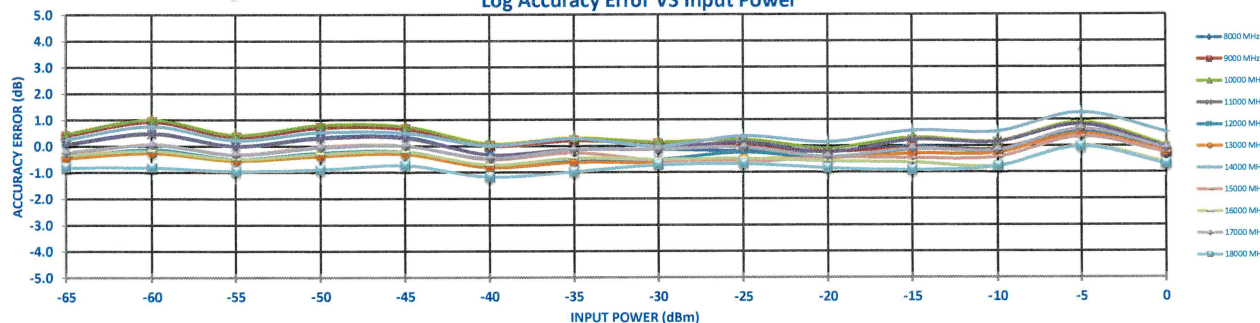
-65dBm mV-Out

332 Max
242 Min

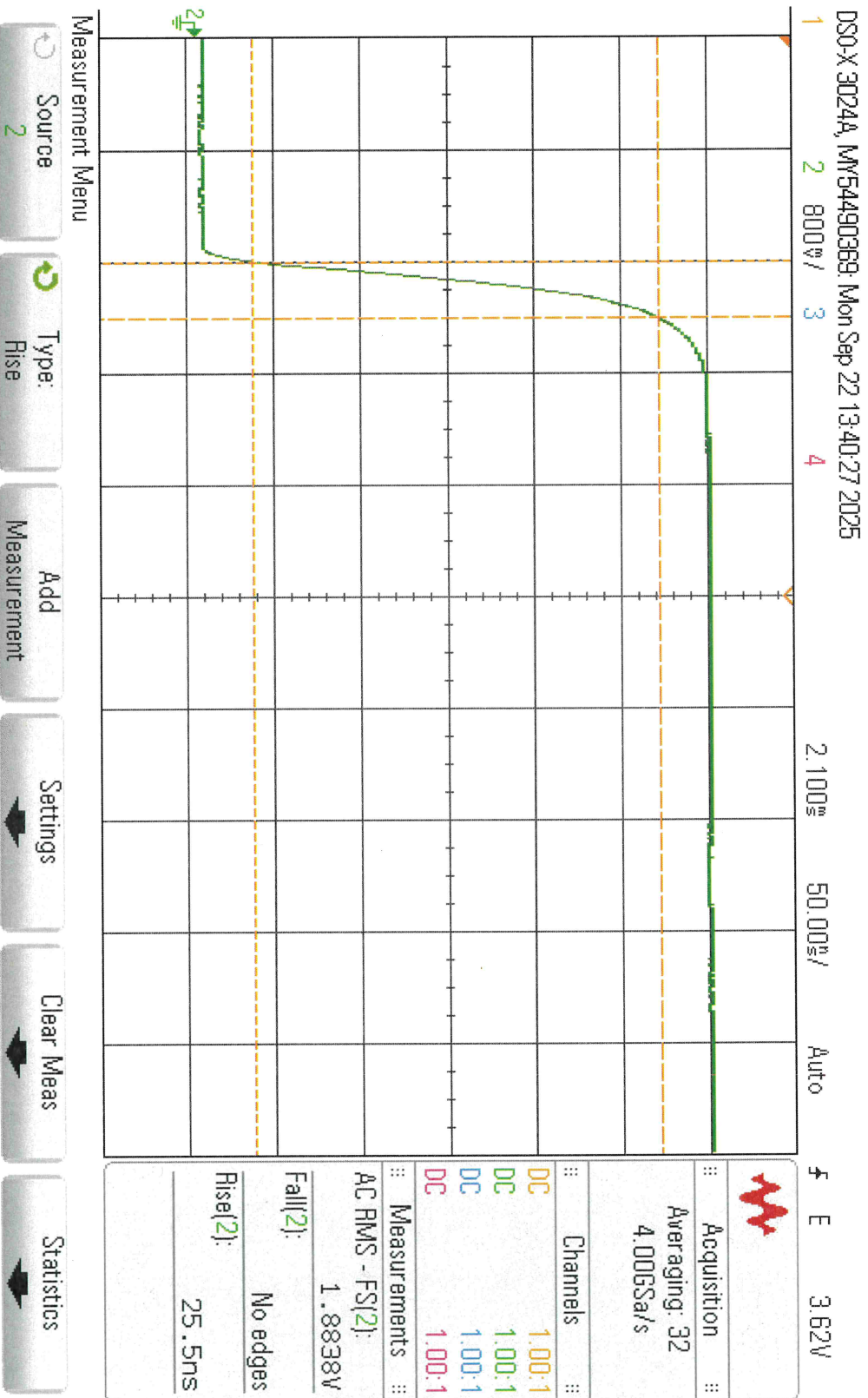
Linearity Error VS Input Power



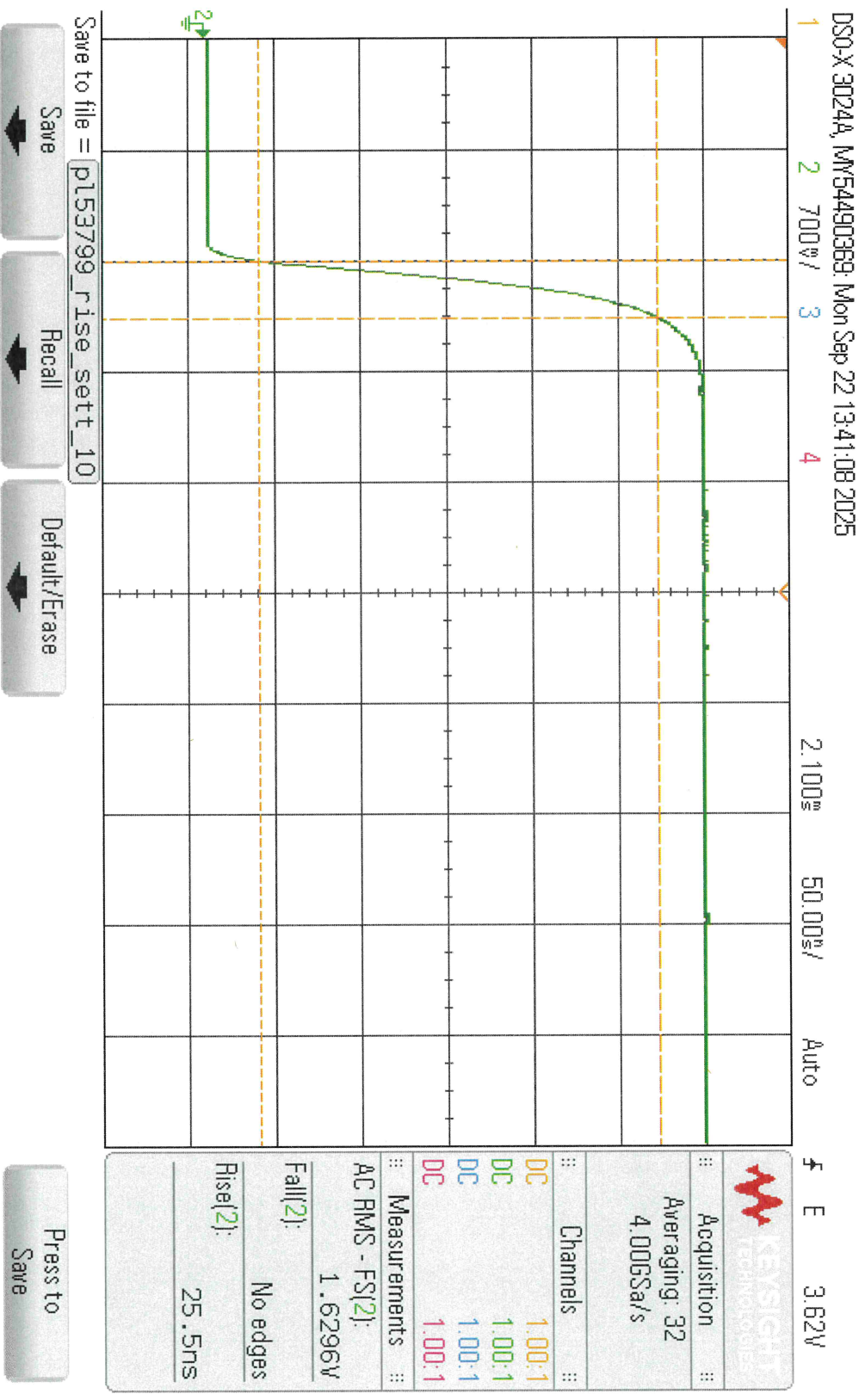
Log Accuracy Error VS Input Power



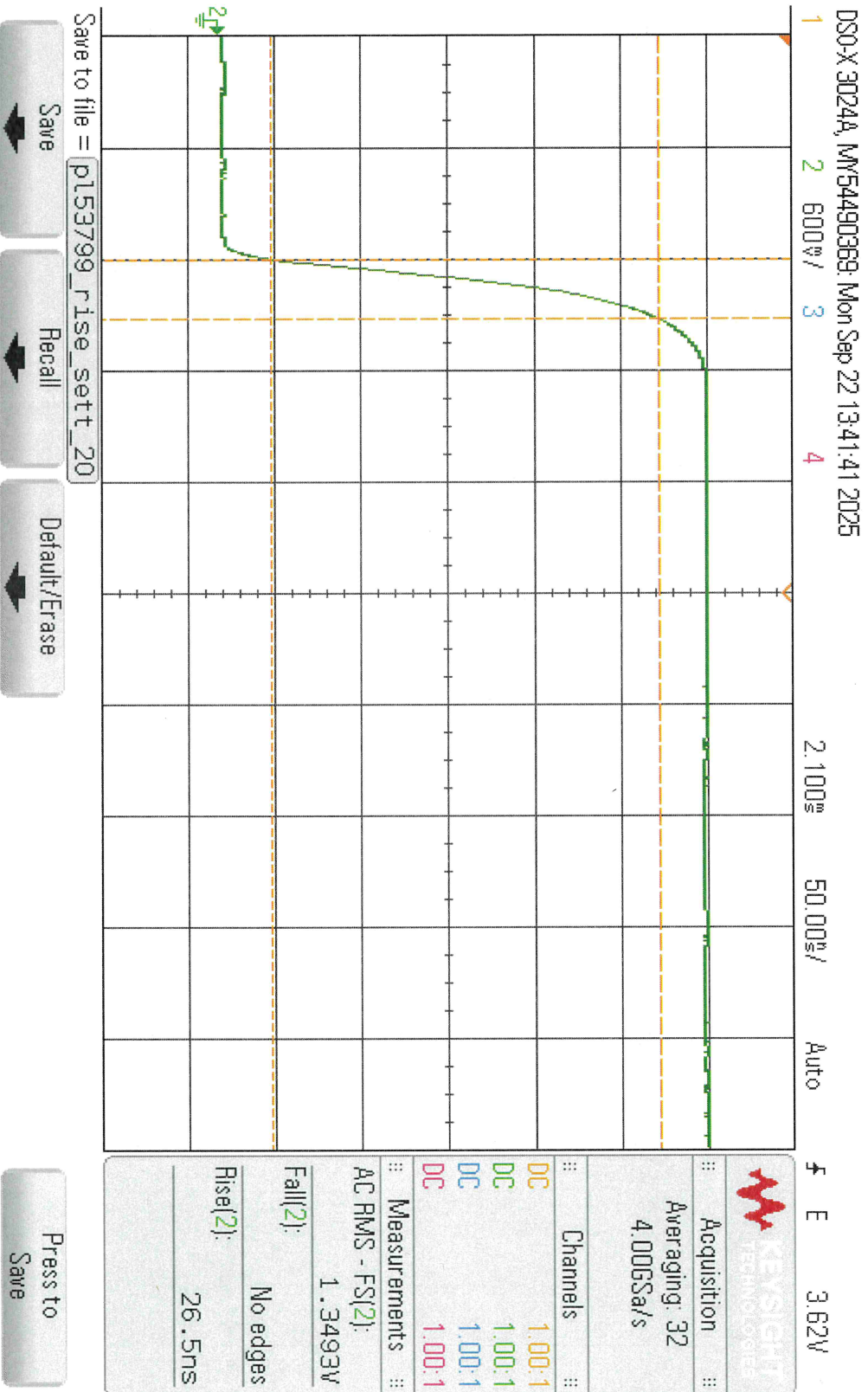
PL53799
Rise/settling @ Odbrn



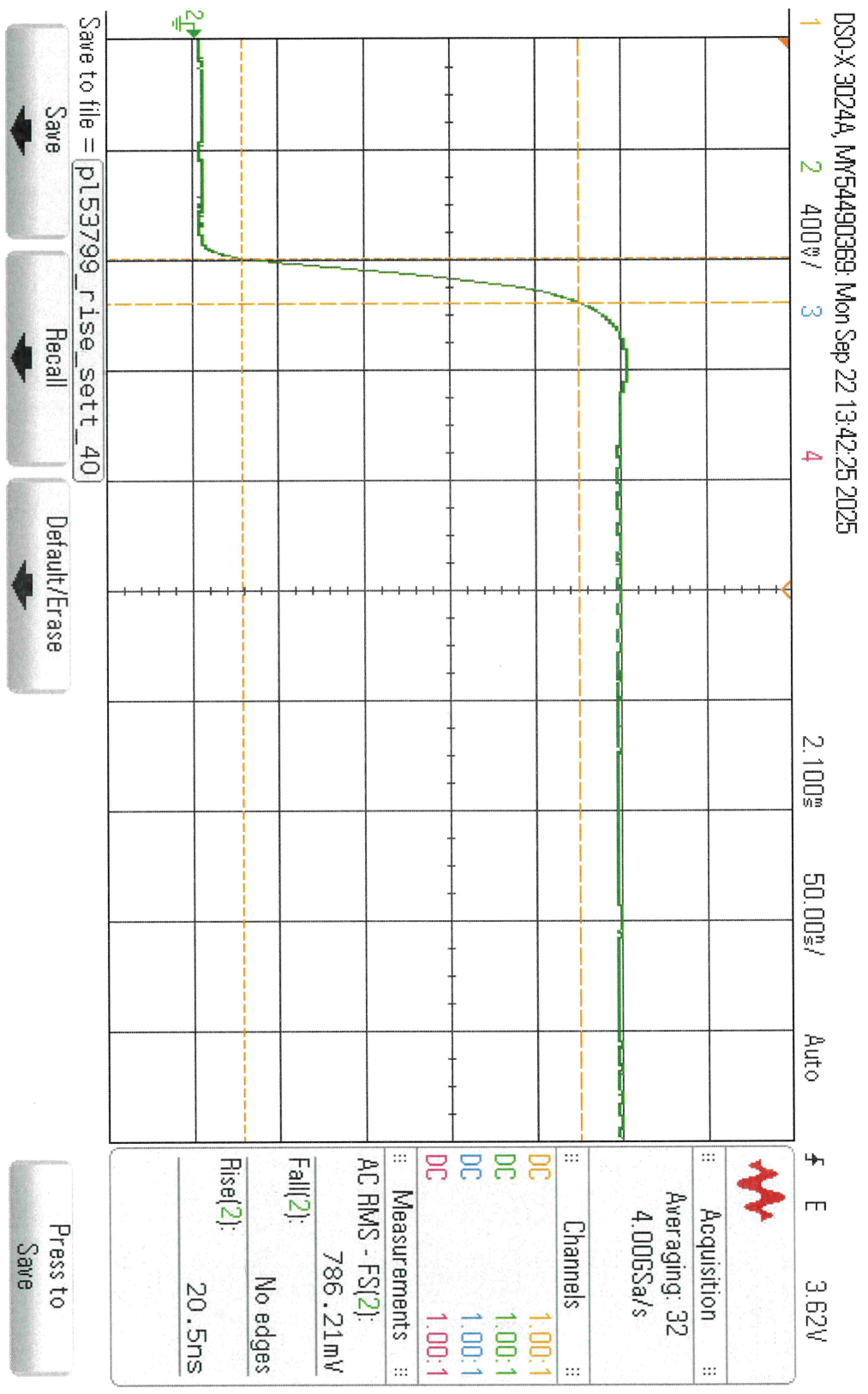
PL53799
Rise/setting @ -10dbm



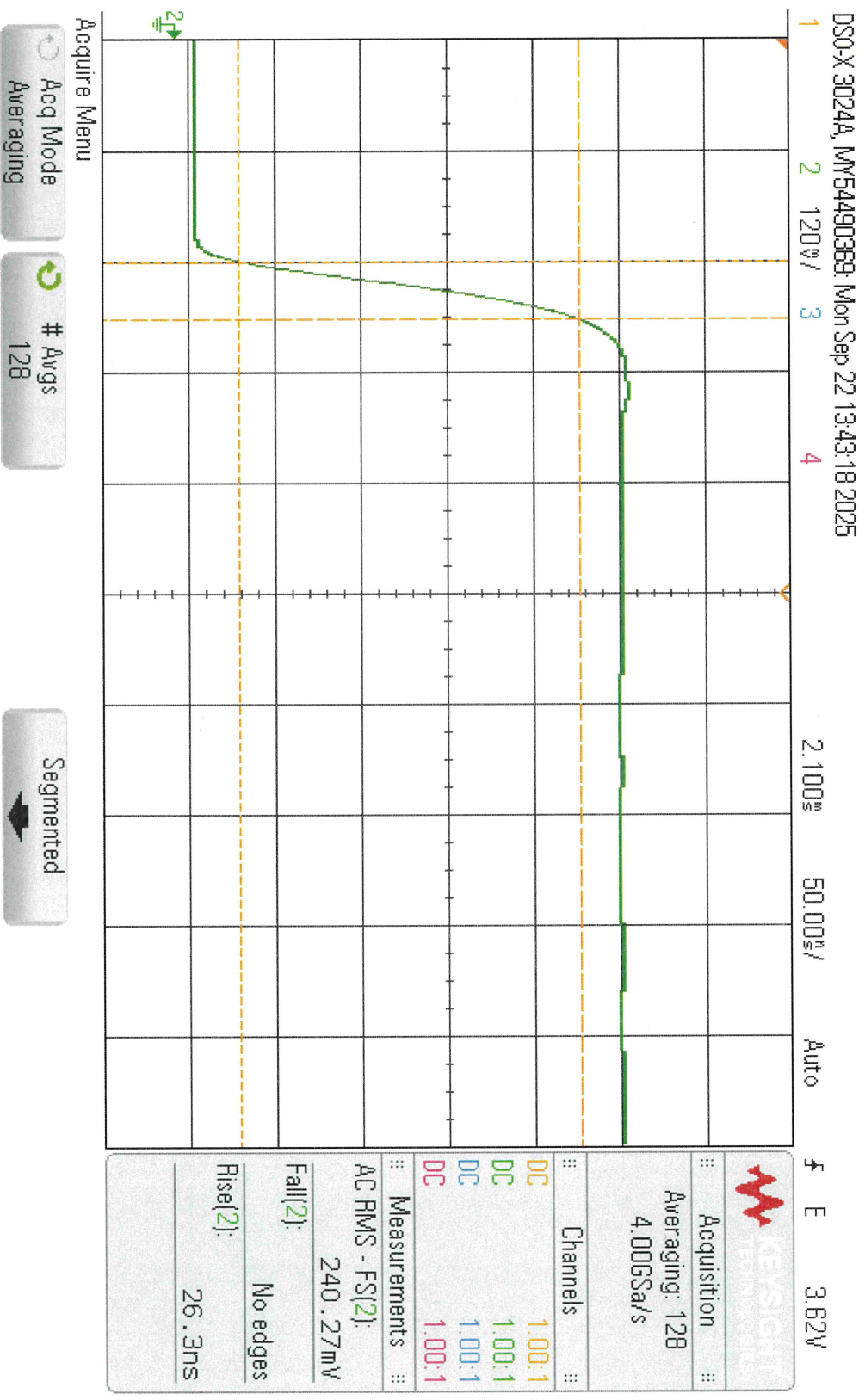
PL53799
Rise/settling @ -20dbm



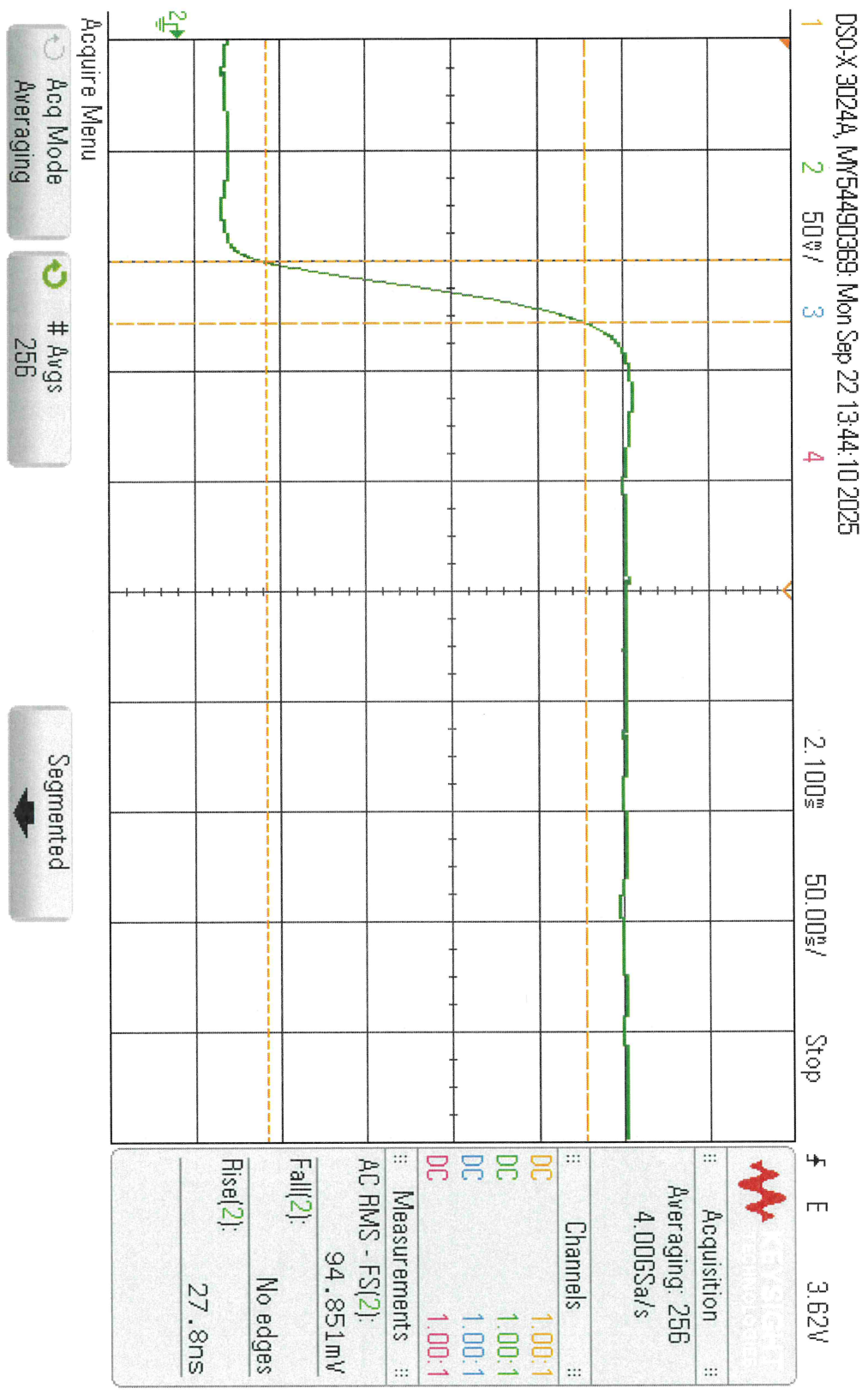
PL53799
Rise/settling @ -40dbm



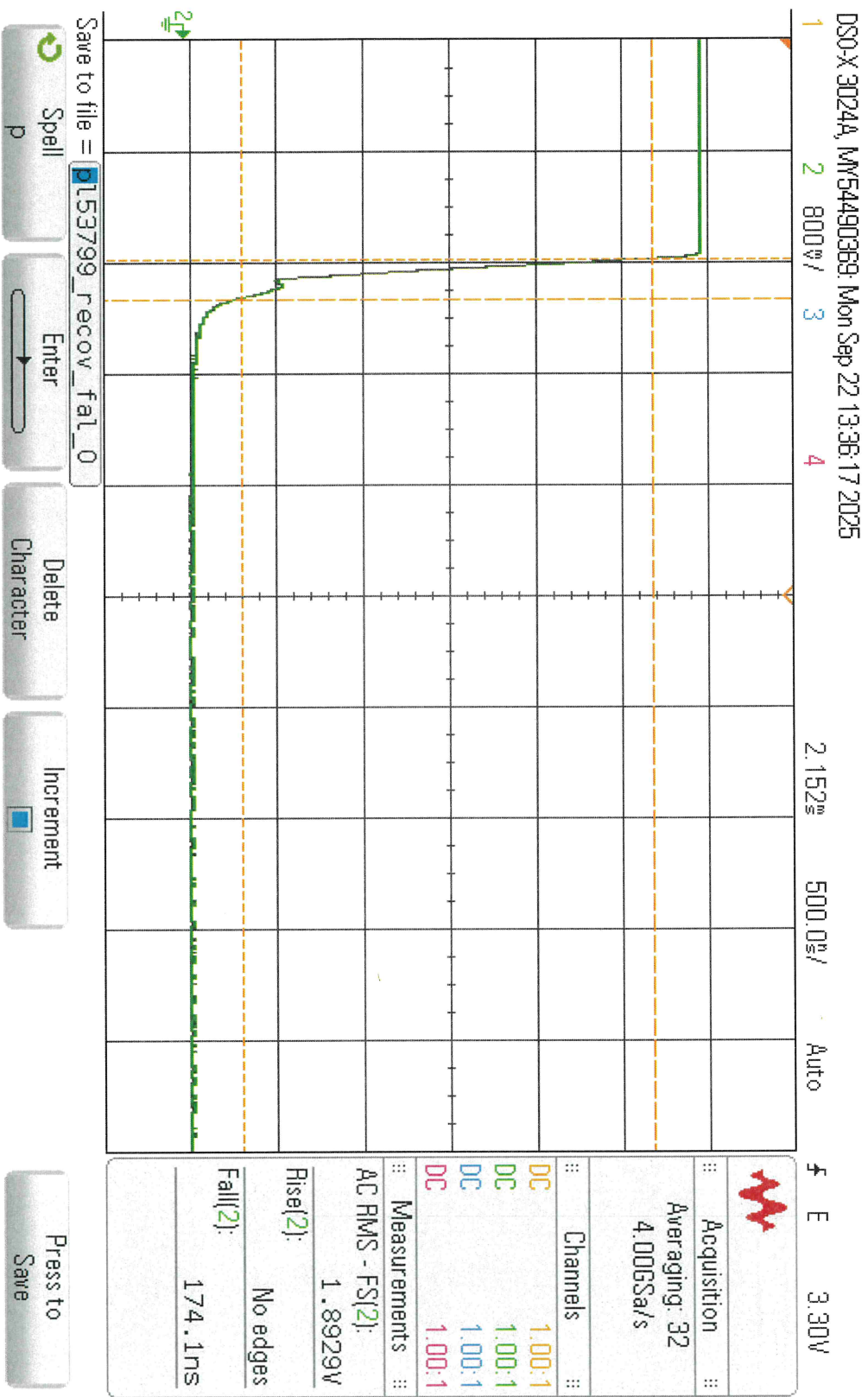
PL53799
Rise / setting @ -60dbm



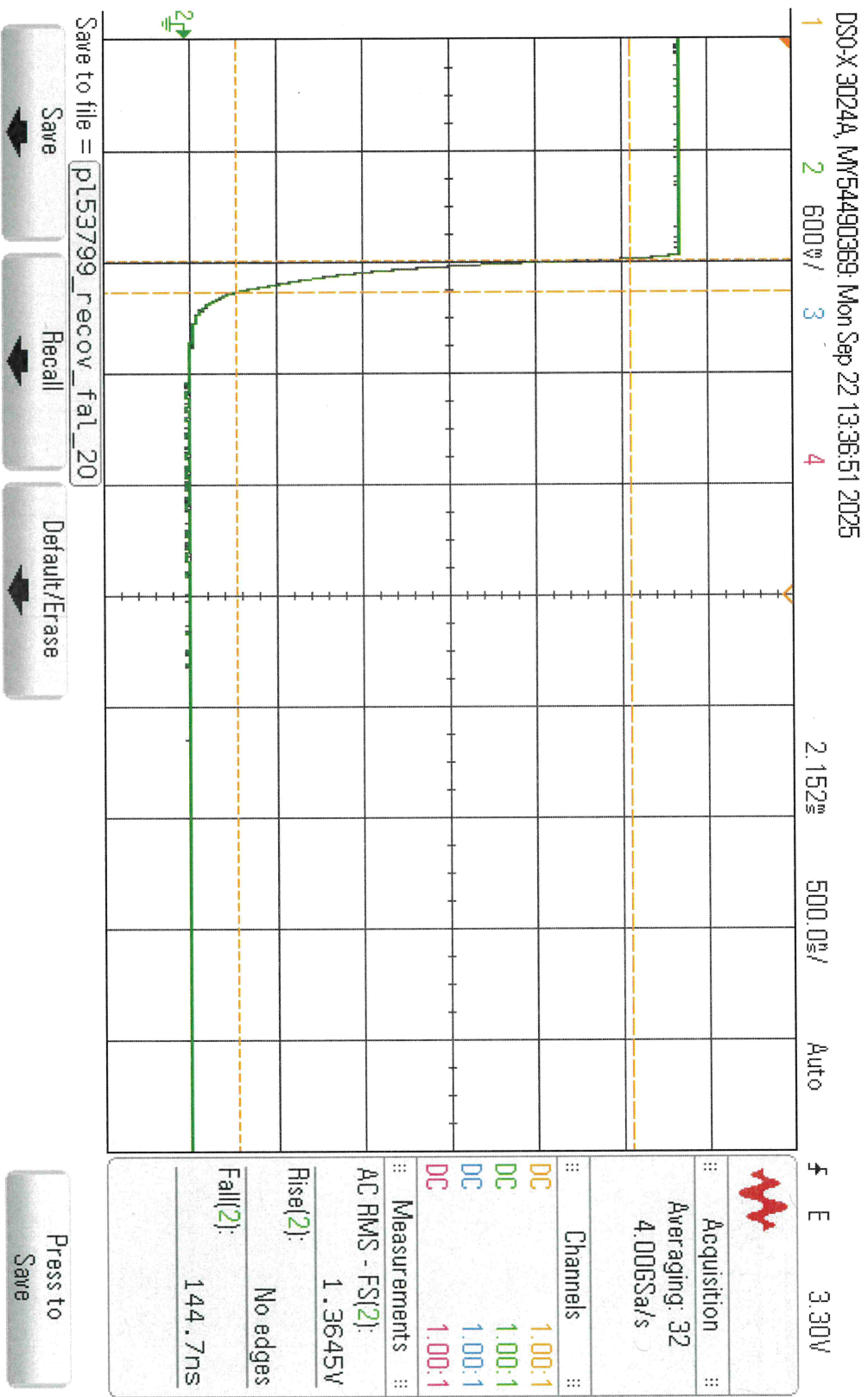
PL53799
Rise / settling @ -65dbm



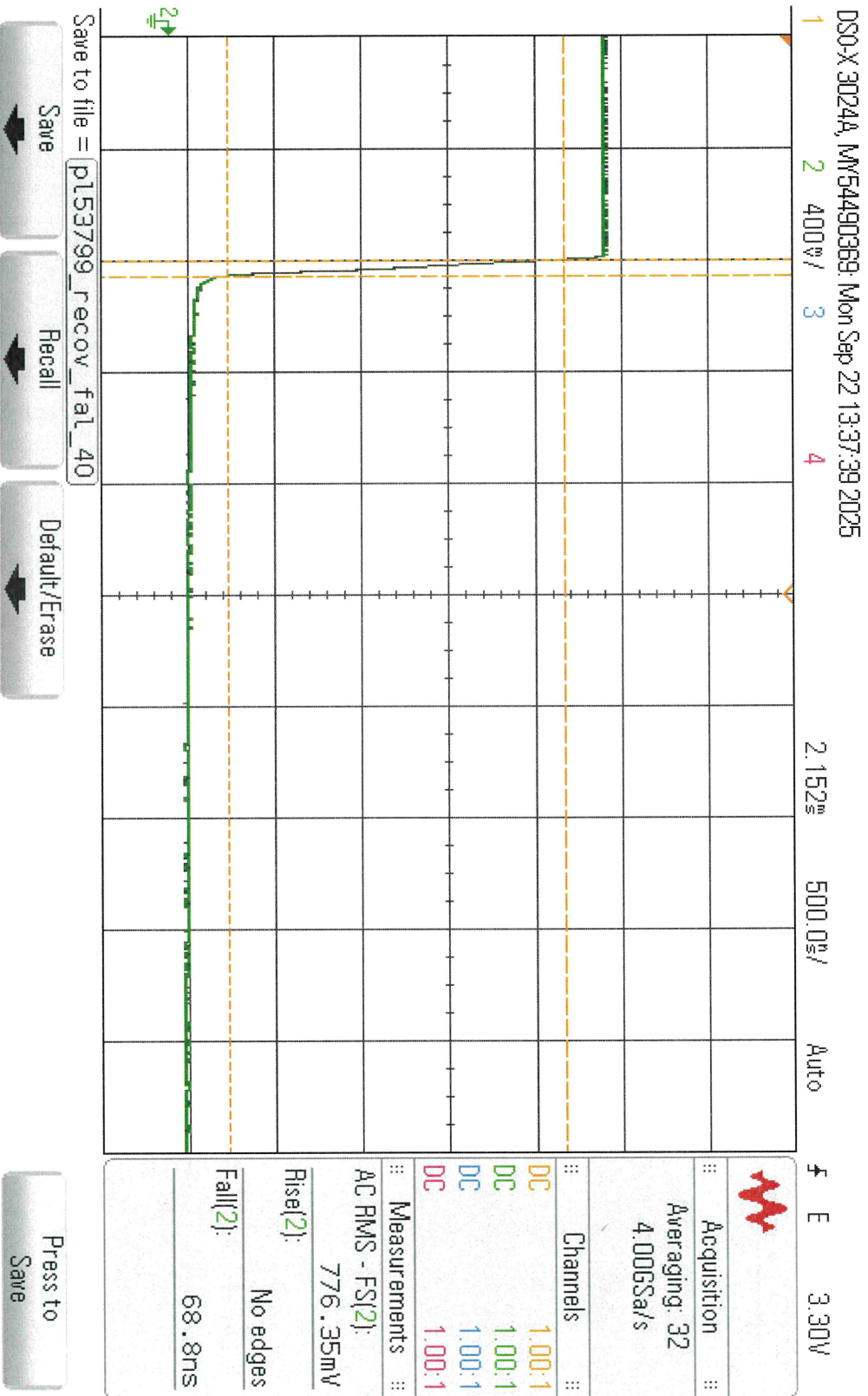
PL 53799
Recovery/Fall @ 0dbm



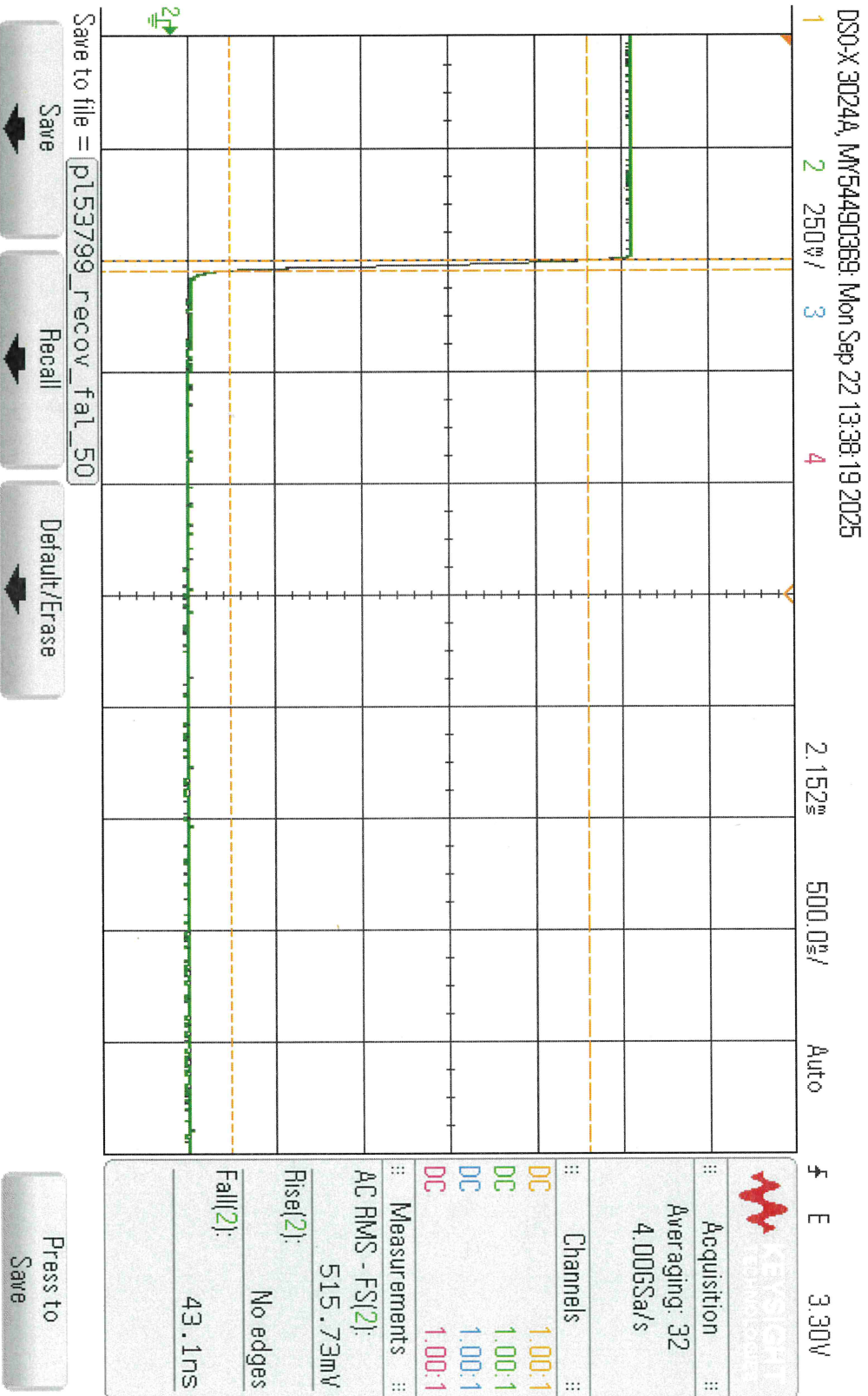
PL53799
Recovery/Fall @ -20dbm



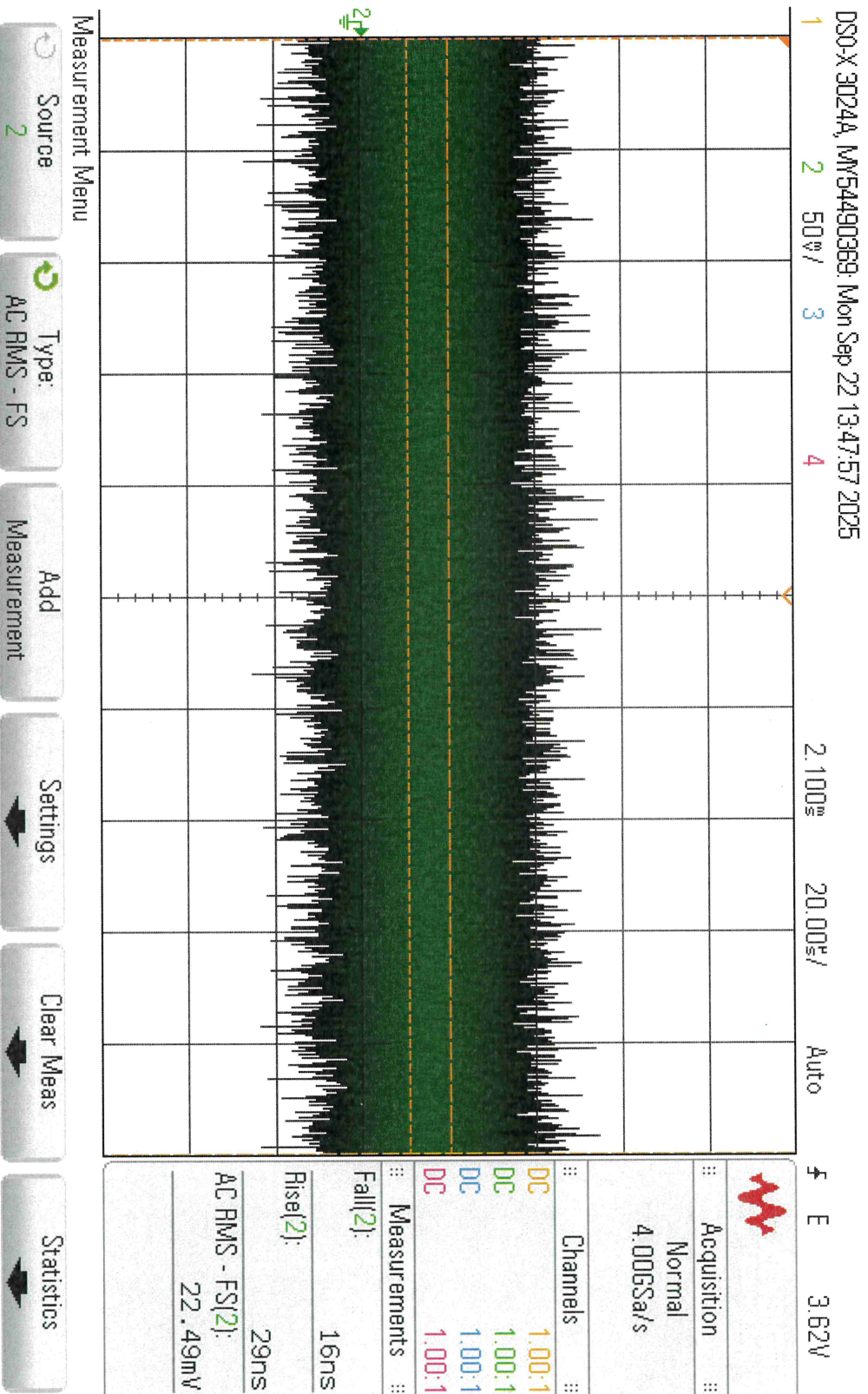
PL53799
Recovery/Fall @ -40dbm



PL53799
Recovery/Fall @ -50dbm



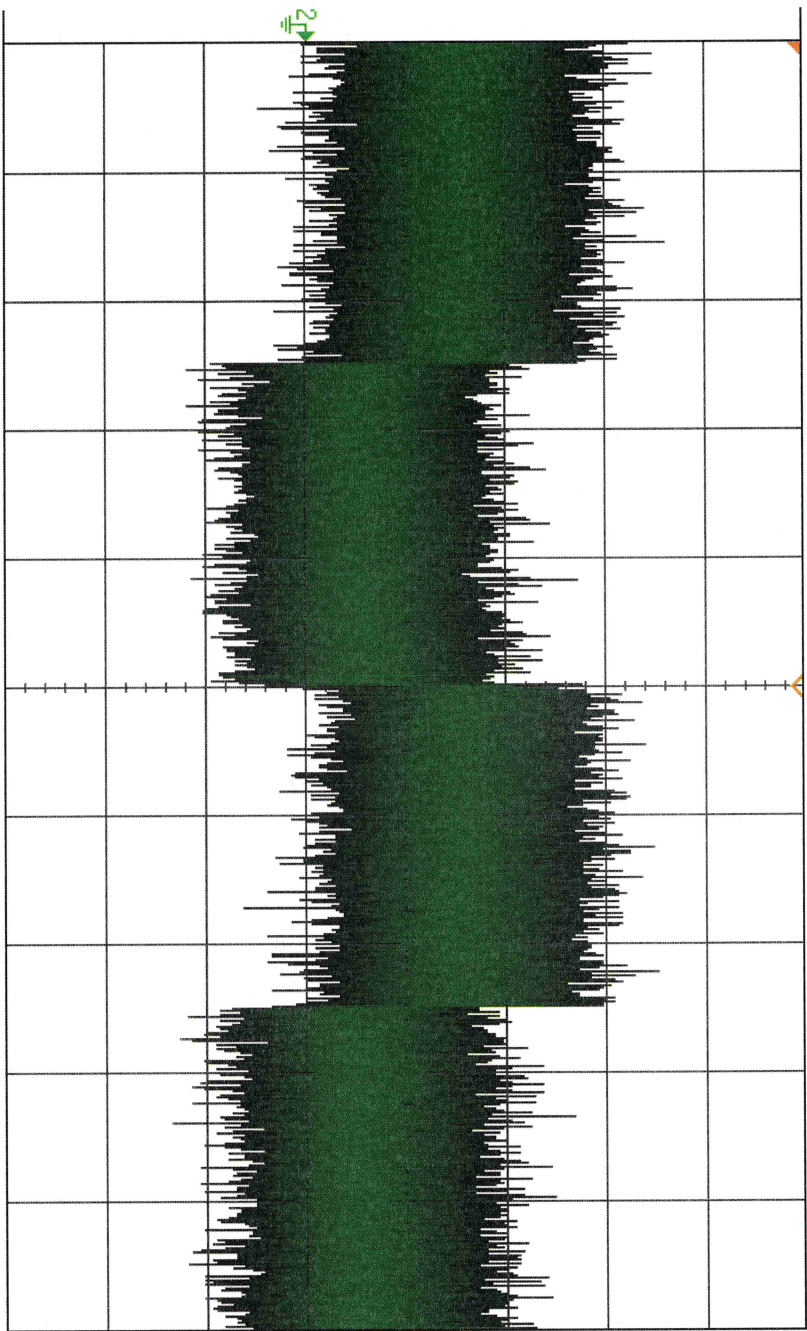
PL53299
Rms noise



PL53799
TSS -73 dbm

DSO-X 3024A, MW54490369, Mon Sep 22 13:47:16 2025

1 2 50% / 3 4 2.100ms 20.00ns / Auto f E 3.62V



KEYSIGHT
TECHNOLOGIES

Acquisition
Normal
4.00GSa/s

Channels	
DC	1.00:1
DC	1.00:1
DC	1.00:1
DC	1.00:1

Cursors Menu

Mode
Off

To turn on cursors, press the [Cursors] key on the front panel.

PL53799
CW Immune @ -40dbm

