



Summary Data
For
ERDLVA-OR5G2G-CW-75MV-93

Customer: _____ Tested By: Jim Hopson
 S O N o: _____ Temperature: -25C, 25C, 85C
 Model No: ERDLVA-0R5G2G-CW-75MV-93 Date 4/30/2024
 Serial No: PL45752/2418 Drawing No: 27643280 Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	0.5 to 2.0 GHz	0.5 to 2.0 GHz	PMI QA3
2	VSWR:	2.5:1 MAX @ -20 dBm	1.87:1	
3	Input Power:	23 dBm Max.	Pass	
4	VIDEO OUT TSS:	-42 dBm MAX	-45 dBm MAX	
5	VIDEO OUT Dynamic Range:	-40 to +20 dBm	-40 to +20 dBm	
6	VIDEO OUT Log Slope Fixed:	75 ± 10mV/dB	75.8 mv	
7	VIDEO OUT Log Linearity:	+1.0 dB MAX @25C ±1.5 dB MAX @ Over Temperature	See attached Graphs	
8	VIDEO OUT DC Offset:	0 to 125 mV @25C	45 mv	
9	VIDEO OUT Rise Time (10% to 90%):	25 ns MAX	14.8 ns	
10	VIDEO OUT Settling Time:	±0.5dB within 25ns from 90%	<25 ns	
11	VIDEO OUT Recovery Time:	500ns MAX	400 ns	
12	VIDEO OUT Video Frequency Flatness:	3.0 dB p-p MAX @ -20dBm	1.2 db	



**Summary Data
For
ERDLVA-OR5G2G-CW-75MV-93**

		CW Immune Power -50 to -10 dBm	Pass	PMI QA3
13	VIDEO OUT CW Immunity:	CW Attack Time 1500us MAX	1300 us	
		CW Release Time 250us	<100 us	
17	Pulse droop	1dB Max for 250us pulses	<1 dB	
18	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
19	VIDEO LOAD Impedance:	93 ±1 Ω	93Ω	
21	VIDEO OUT Noise Level (RMS):	102 mV max	12.4 mv	
22	VIDEO OUT Propagation Delay:	35 ns MAX from RF 10% to 10% video (excluding cable)	<35 ns	
23	Power Supply	+12 V @ 250 mA MAX -12 V @ 250 mA MAX	+12 V @ 170 ma -12 V @ 70 ma	

QA/QC Approval: K. [Signature]

Date: 4.30.24



PLANAR MONOLITHICS INDUSTRIES
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 Email: sales@pmi-rf.com | www.pmi-

LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 04-28-24
 SERIAL NO: PL45752
 Test Temp: +25C

45 mv

Frequency

0.5 GHz	INTERCEPT (mV)	3389
	SLOPE (mV/dB)	76.2

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
331	738	1101	1489	1884	2220	2628	3016	3377	3750	4146	4531	4935
-10	16	-2	5	19	-26	1	8	-12	-19	-4	0	23
-0.13	0.21	-0.02	0.07	0.25	-0.34	0.02	0.11	-0.15	-0.26	-0.06	-0.01	0.30

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

1.25 GHz	INTERCEPT (mV)	3490
	SLOPE (mV/dB)	76.0

436	846	1223	1605	1976	2298	2687	3089	3520	3929	4283	4615	4976
-13	17	14	16	7	-51	-42	-21	30	59	33	-15	-34
-0.17	0.22	0.18	0.21	0.09	-0.68	-0.56	-0.27	0.40	0.78	0.44	-0.20	-0.45

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

2 GHz	INTERCEPT (mV)	3422
	SLOPE (mV/dB)	75.1

385	802	1170	1553	1937	2264	2662	3049	3439	3846	4209	4529	4870
-31	10	2	10	18	-31	-8	3	17	49	36	-20	-54
-0.42	0.13	0.03	0.13	0.24	-0.41	-0.11	0.04	0.23	0.65	0.48	-0.26	-0.72

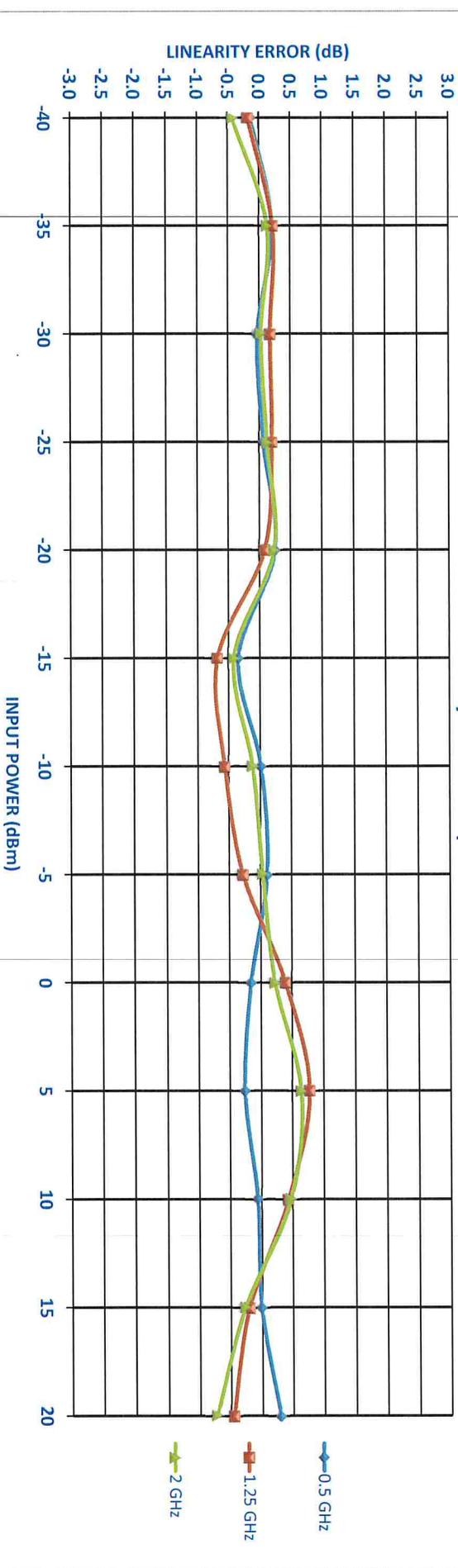
Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Flatness P-P

1.4	1.4	1.6	1.6	1.2	1.0	0.8	1.0	1.8	2.4	1.8	1.2	1.4
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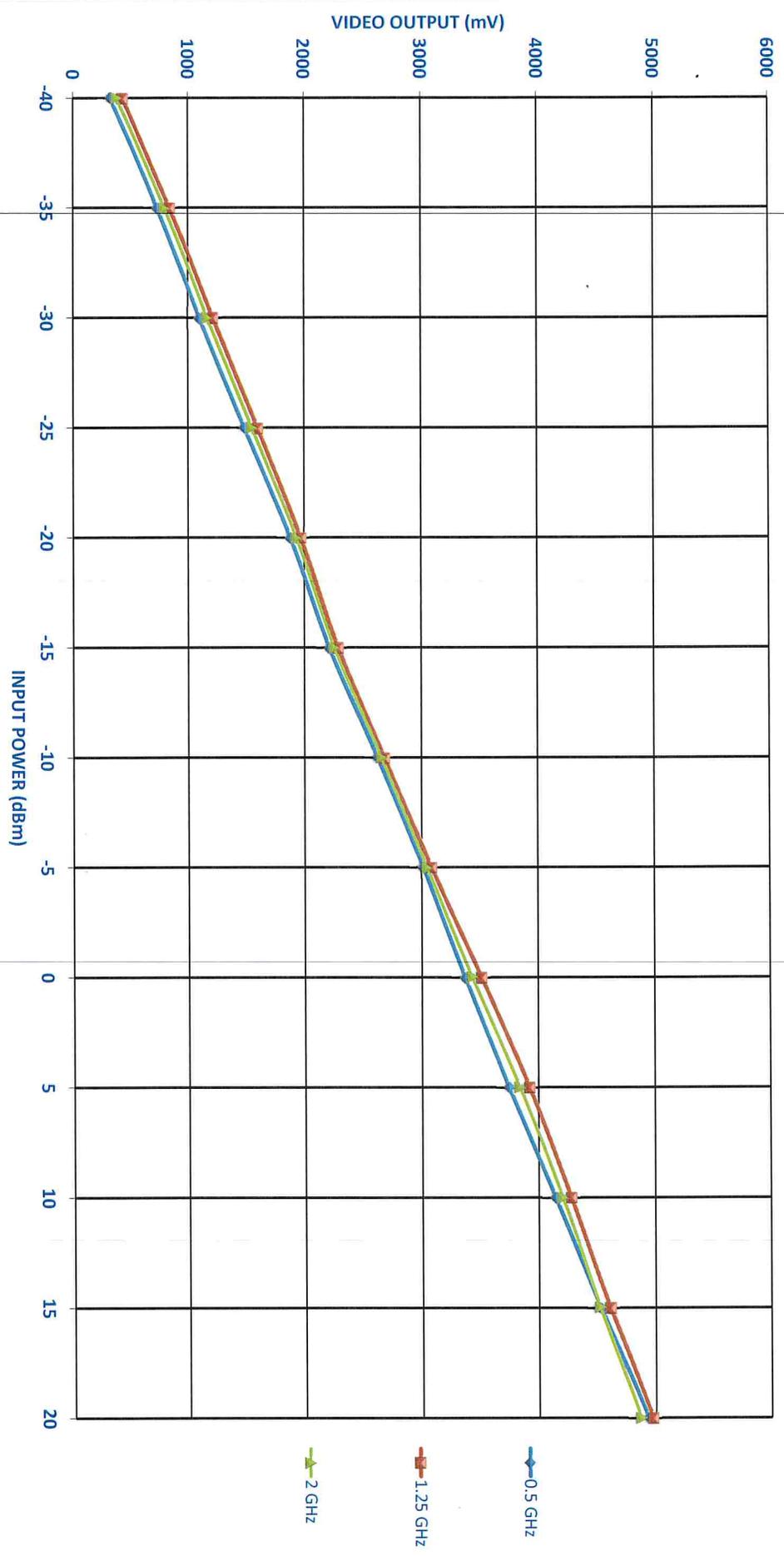
Slope Avg(mv/dB) 75.8

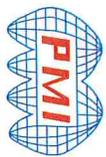
Linearity Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45752
Test Temp: +25C

Video Out VS Input Power





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LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 04-28-24
 SERIAL NO: PL45752
 Test Temp: +85C

Frequency

0.5 GHz	INTERCEPT (mV)	3232
	SLOPE (mV/dB)	76.0

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
166	579	963	1350	1741	2075	2466	2864	3219	3592	3990	4371	4763
-28	6	10	17	28	-17	-6	12	-13	-20	-1	0	12
-0.36	0.08	0.13	0.23	0.37	-0.23	-0.08	0.16	-0.17	-0.26	-0.02	0.00	0.16

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

1.25 GHz	INTERCEPT (mV)	3320
	SLOPE (mV/dB)	76.3

222	677	1050	1431	1815	2129	2522	2935	3347	3749	4112	4445	4810
-46	27	19	18	21	-47	-35	-4	27	47	29	-20	-36
-0.60	0.36	0.25	0.24	0.27	-0.61	-0.46	-0.05	0.35	0.62	0.38	-0.26	-0.48

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

2 GHz	INTERCEPT (mV)	3230
	SLOPE (mV/dB)	75.9

136	580	966	1351	1742	2069	2466	2870	3246	3646	4022	4348	4682
-59	5	12	18	30	-23	-5	20	16	37	34	-20	-65
-0.78	0.07	0.16	0.24	0.39	-0.30	-0.07	0.26	0.21	0.49	0.44	-0.26	-0.86

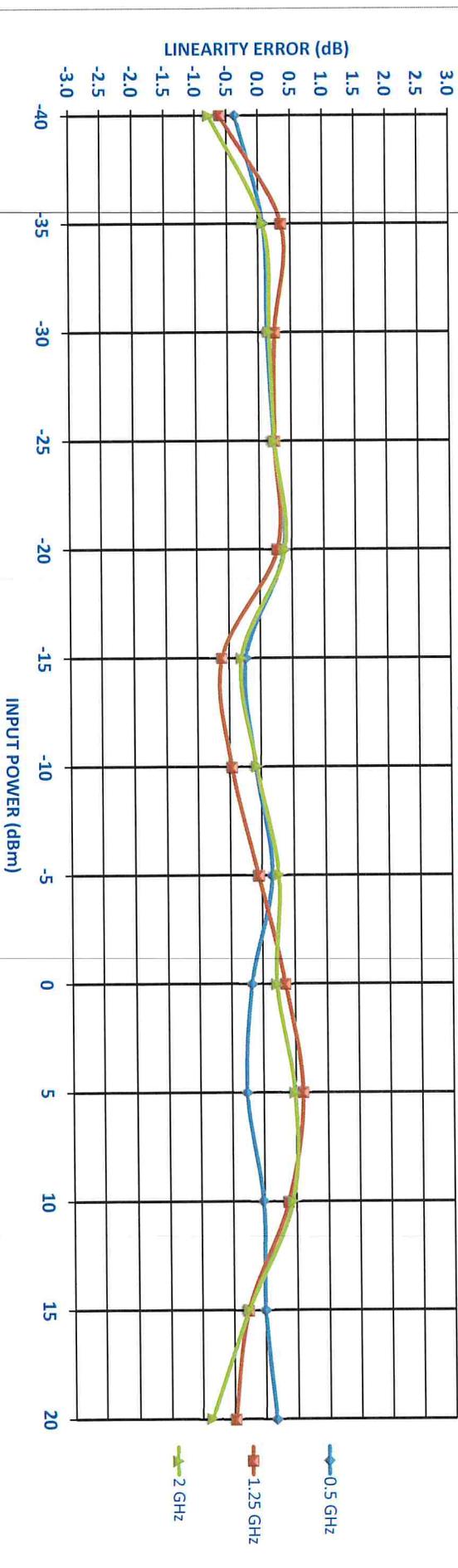
Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Flatness P-P

1.2	1.2	1.2	1.2	1.0	1.0	1.0	0.8	0.8	1.0	1.6	2.0	1.6	1.2	1.6
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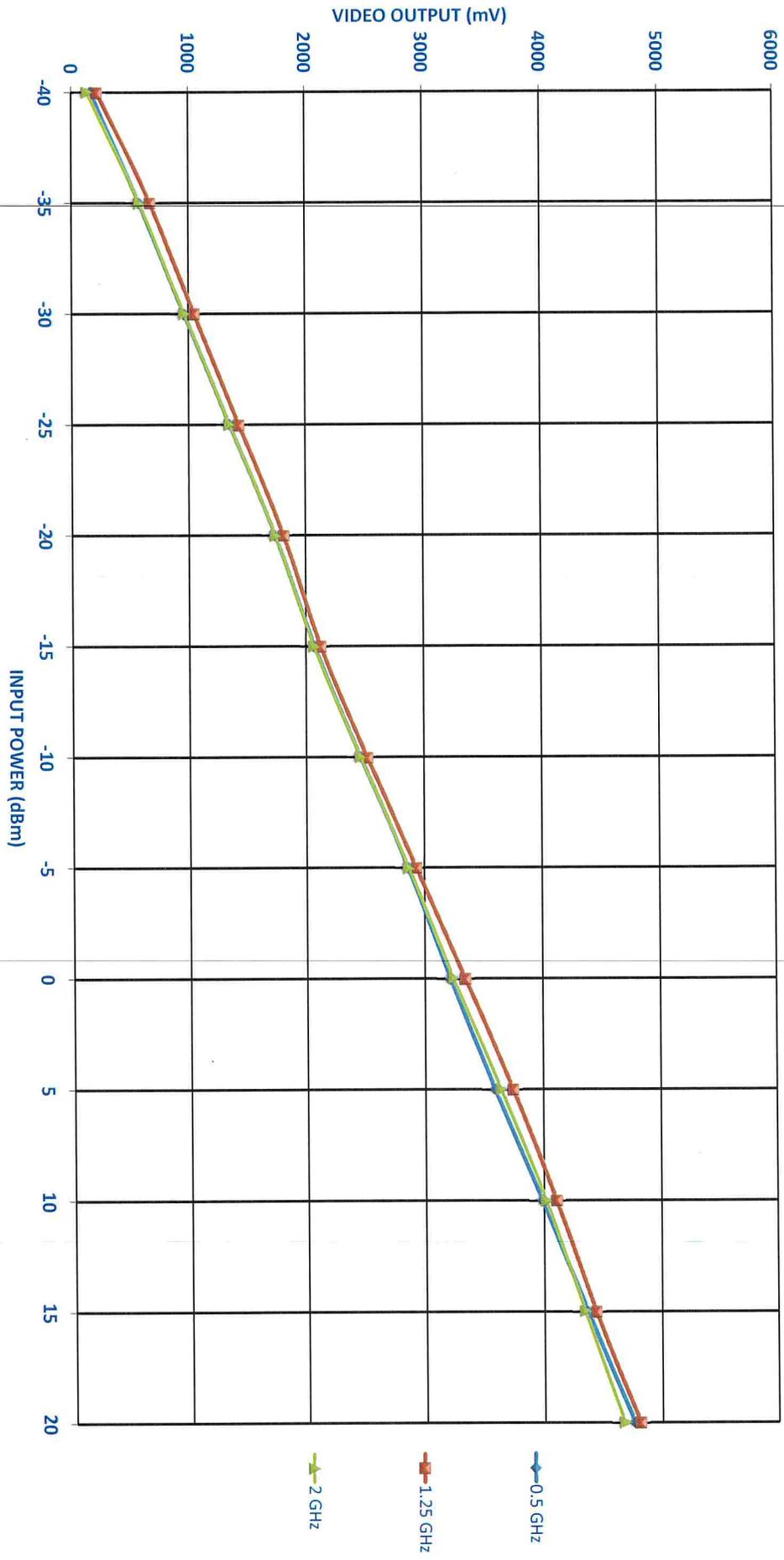
Slope Avg(mv/dB) 76.0

Linearity Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45752
Test Temp: +85C

Video Out VS Input Power





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 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 04-28-24
 SERIAL NO: PL45752
 Test Temp: -25C

Frequency

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
-----	-----	-----	-----	-----	-----	-----	----	---	---	----	----	----

0.5 GHz	INTERCEPT (mV)	3447
	SLOPE (mV/dB)	76.6

377	782	1146	1536	1934	2274	2681	3072	3442	3817	4208	4591	4998
-7	15	-4	3	18	-25	0	8	-5	-13	-5	-5	20
-0.10	0.19	-0.05	0.04	0.24	-0.32	-0.01	0.10	-0.07	-0.17	-0.06	-0.06	0.26

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

1.25 GHz	INTERCEPT (mV)	3560
	SLOPE (mV/dB)	76.2

502	904	1285	1671	2040	2368	2753	3153	3594	4010	4360	4689	5042
-9	12	12	17	5	-49	-45	-26	34	69	38	-15	-43
-0.11	0.16	0.16	0.22	0.06	-0.64	-0.59	-0.34	0.44	0.90	0.49	-0.19	-0.56

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

2 GHz	INTERCEPT (mV)	3505
	SLOPE (mV/dB)	75.4

461	872	1246	1631	2013	2347	2741	3125	3525	3937	4299	4616	4950
-29	5	2	11	16	-27	-10	-3	20	55	41	-19	-62
-0.38	0.07	0.03	0.14	0.21	-0.36	-0.13	-0.04	0.27	0.74	0.54	-0.26	-0.82

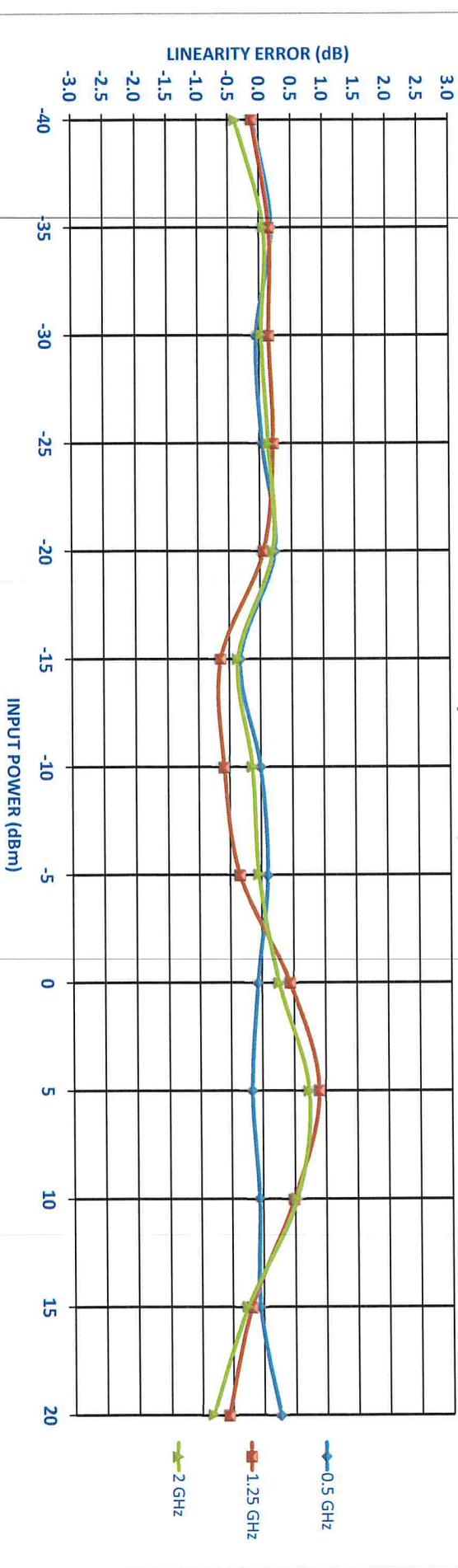
Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

Flatness P-P

1.6	1.6	1.8	1.8	1.4	1.2	1.0	1.0	2.0	2.0	2.6	2.0	1.2
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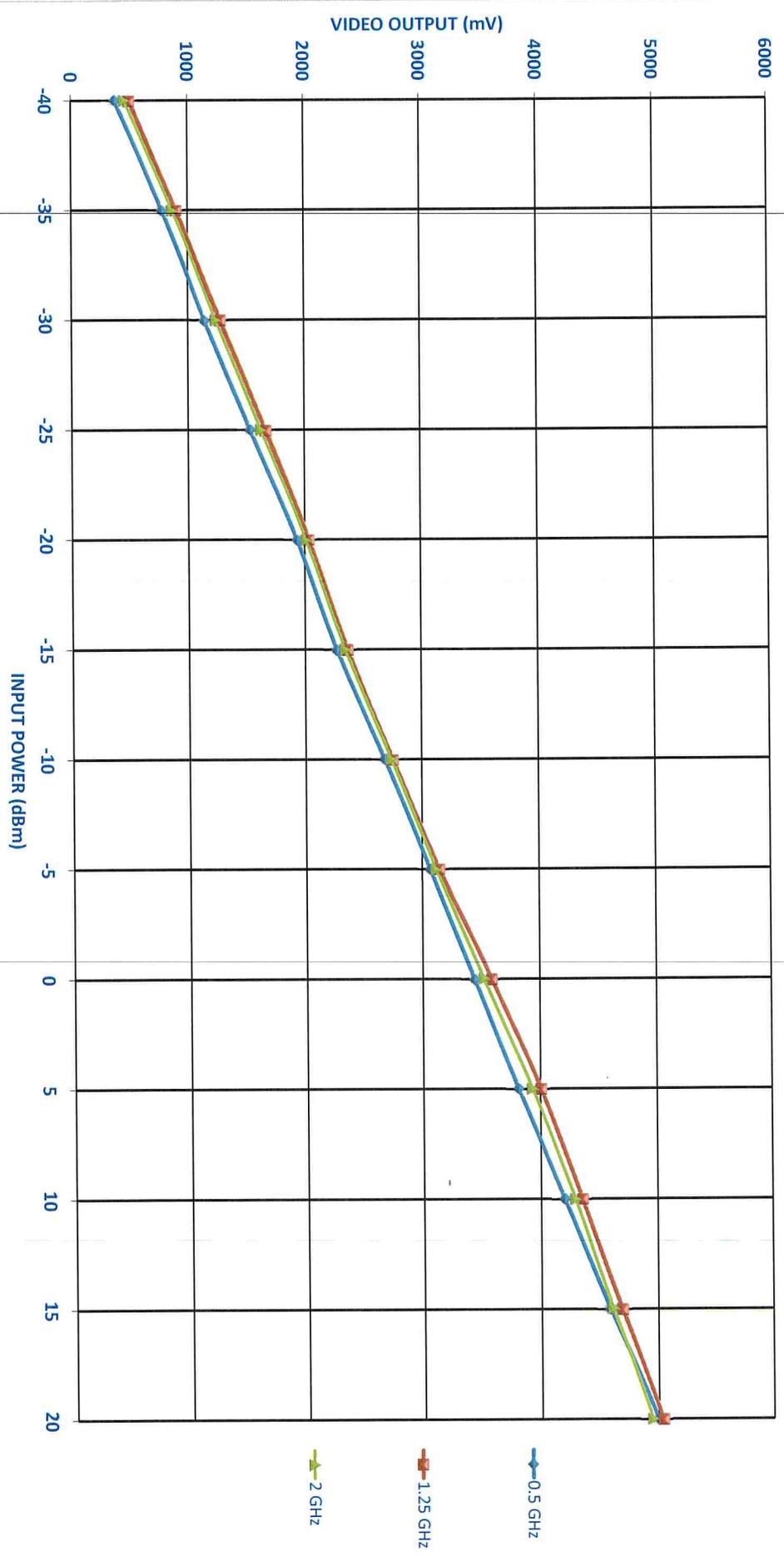
Slope Avg(mv/dB) 76.1

Linearity Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45752
Test Temp: -25C

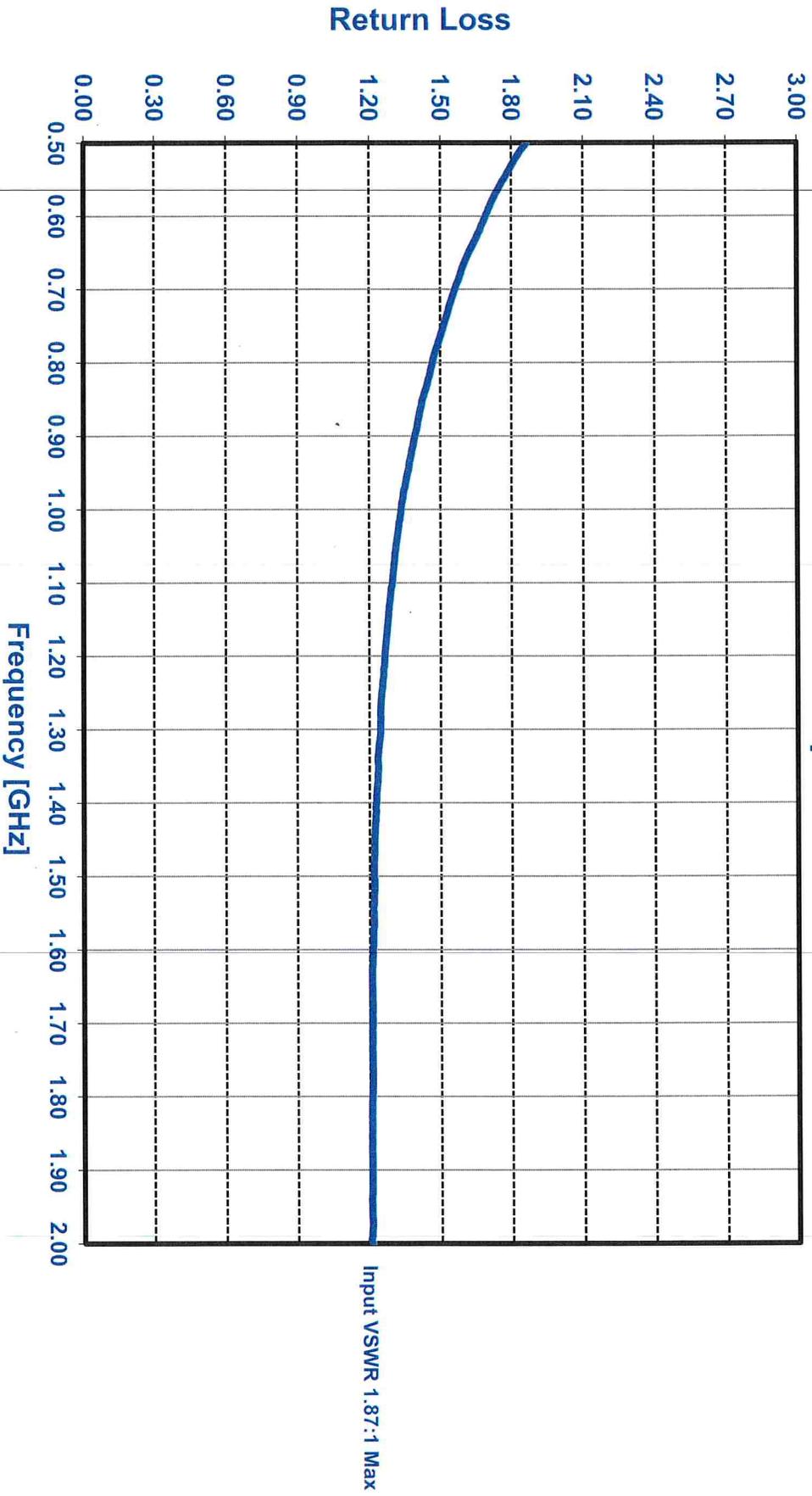
Video Out VS Input Power



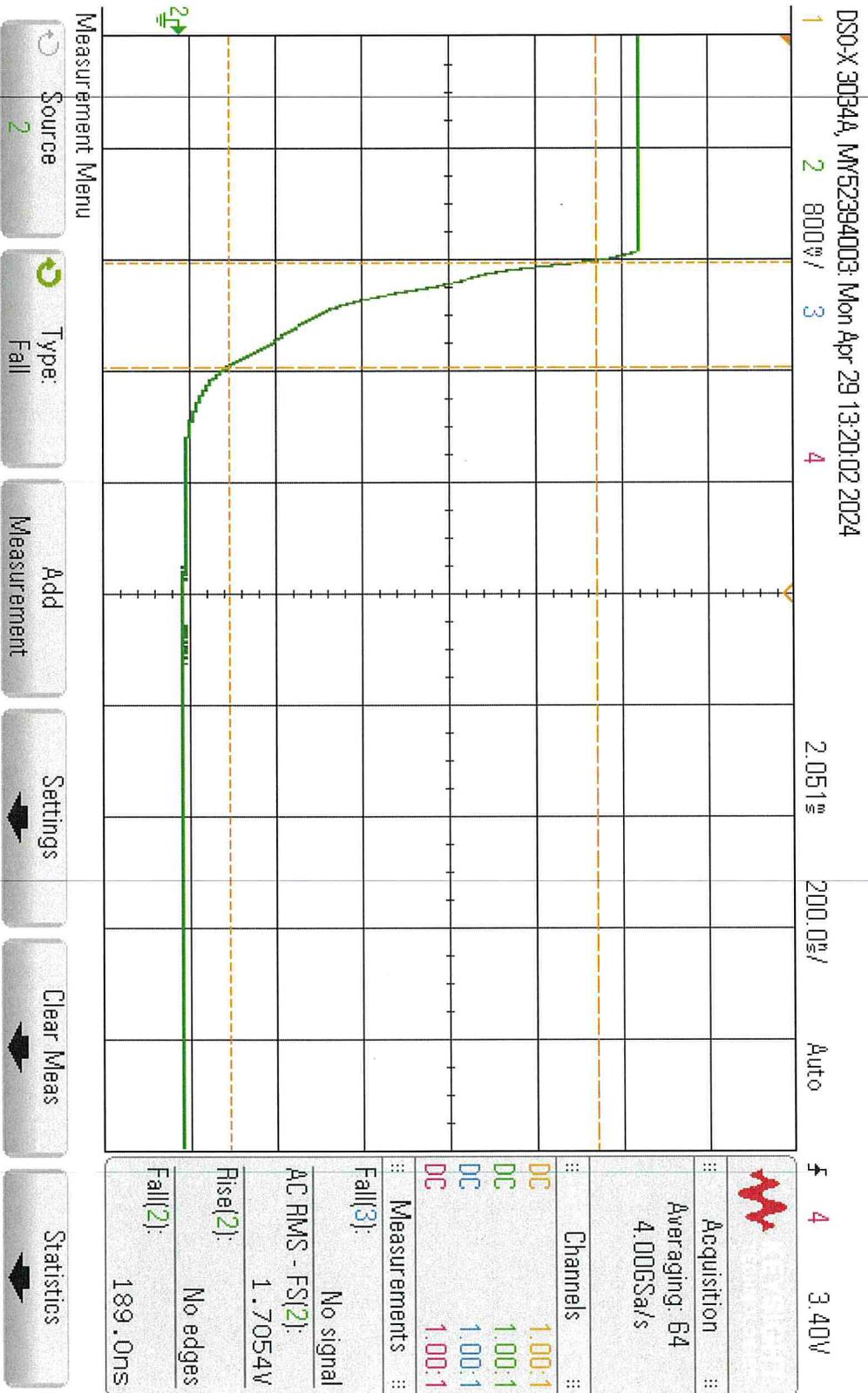
Model Number: ERDLVA-OR5G2G-CW-75MV-93
Serial Number: PL45752

Temperature: +25C

VSWR Graph

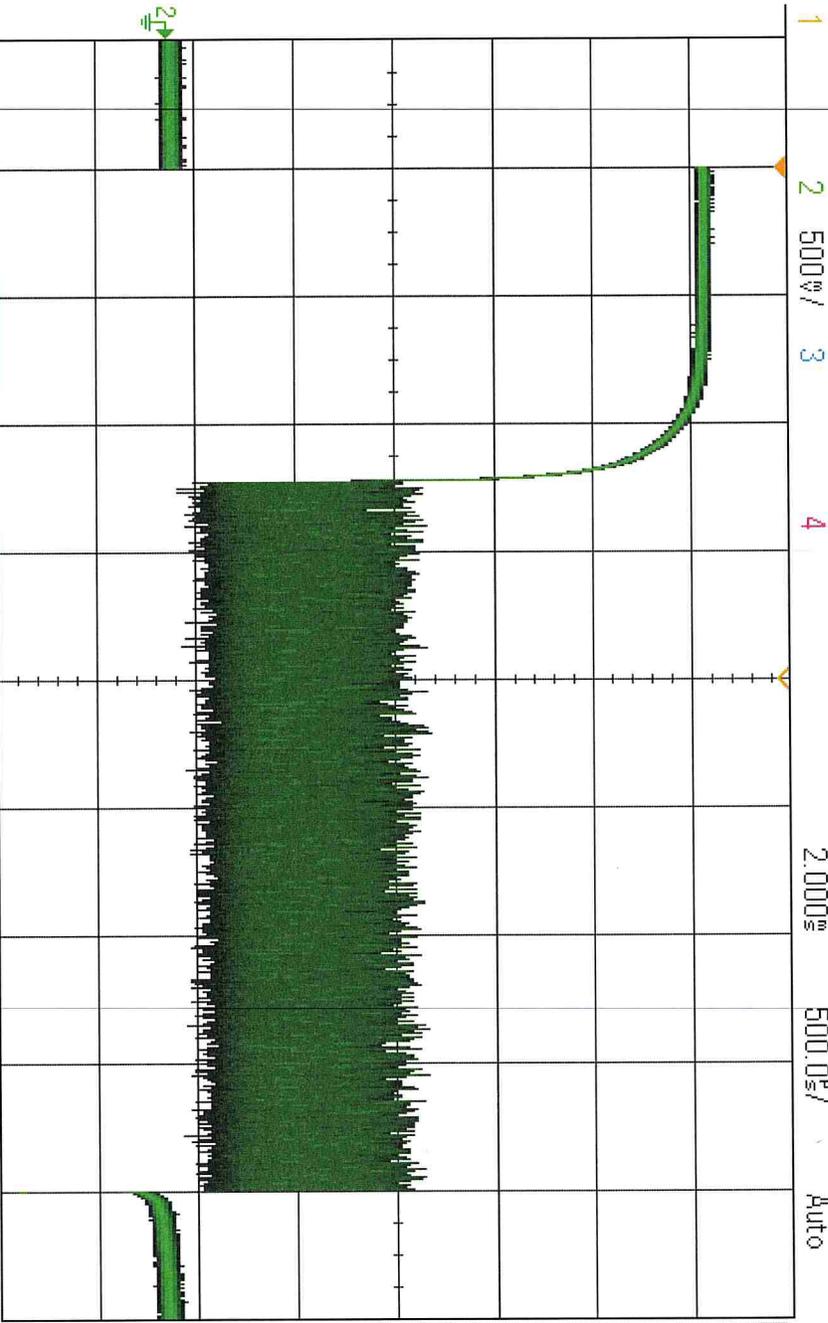


PL45752
Recovery / Fall



PL45752
CW Immune

DSO-X 30B4A, MW52394003: Mon Apr 29 15:26:53 2024



Acquisition	Normal
Channels	4
400MSa/s	1.00:1
DC	1.00:1

Save to file = pl45752_cw Immune

Save

Recall

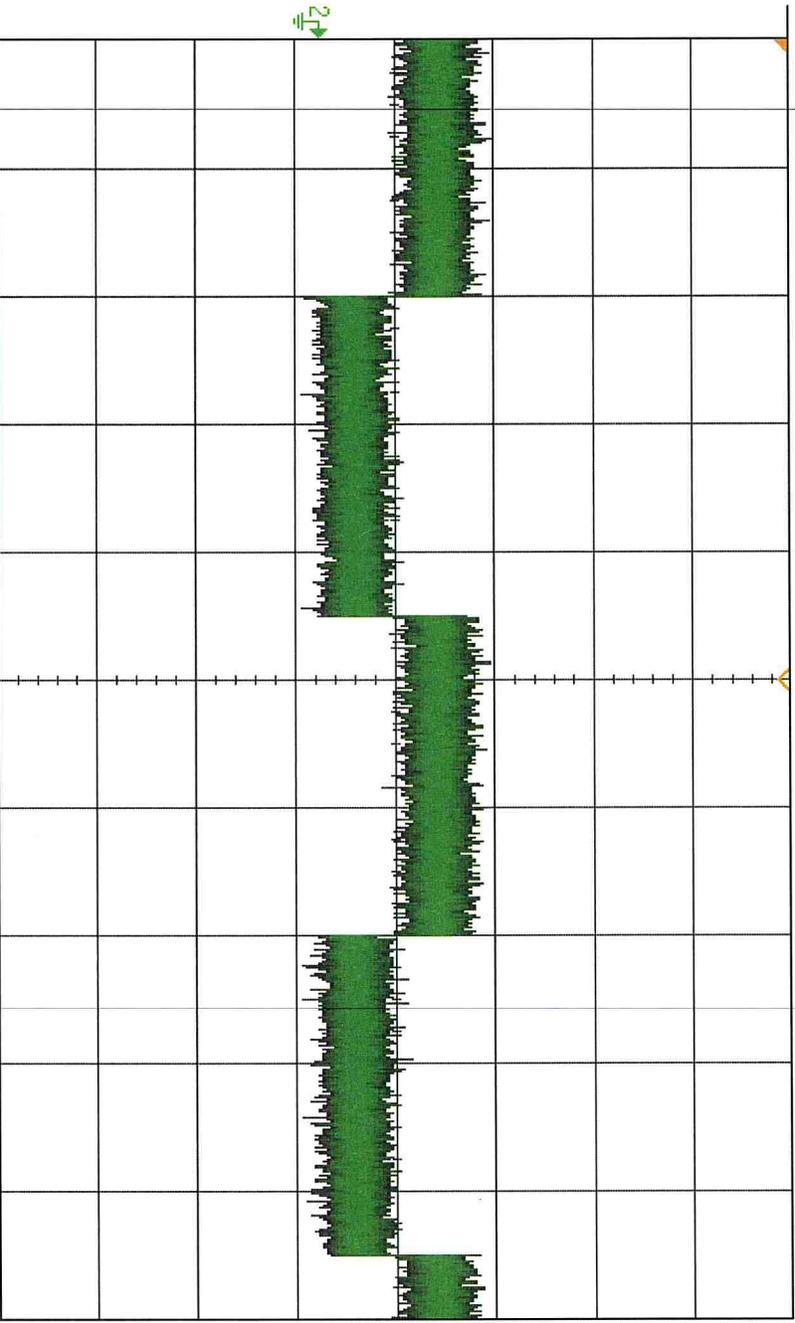
Default/Erase

Press to Save

PL45752
TSS -45 dbm

DSO-X 3034A, MW52394003: Mon Apr 29 13:16:48 2024

1 2 100% / 3 4 2.010ms 20.00ns / Auto f 4 3.40V



Acquisition	Normal
Channels	4.00GSa/s
DC	1.00:1

Save to file = pl45742_tss_45

Save

Recall

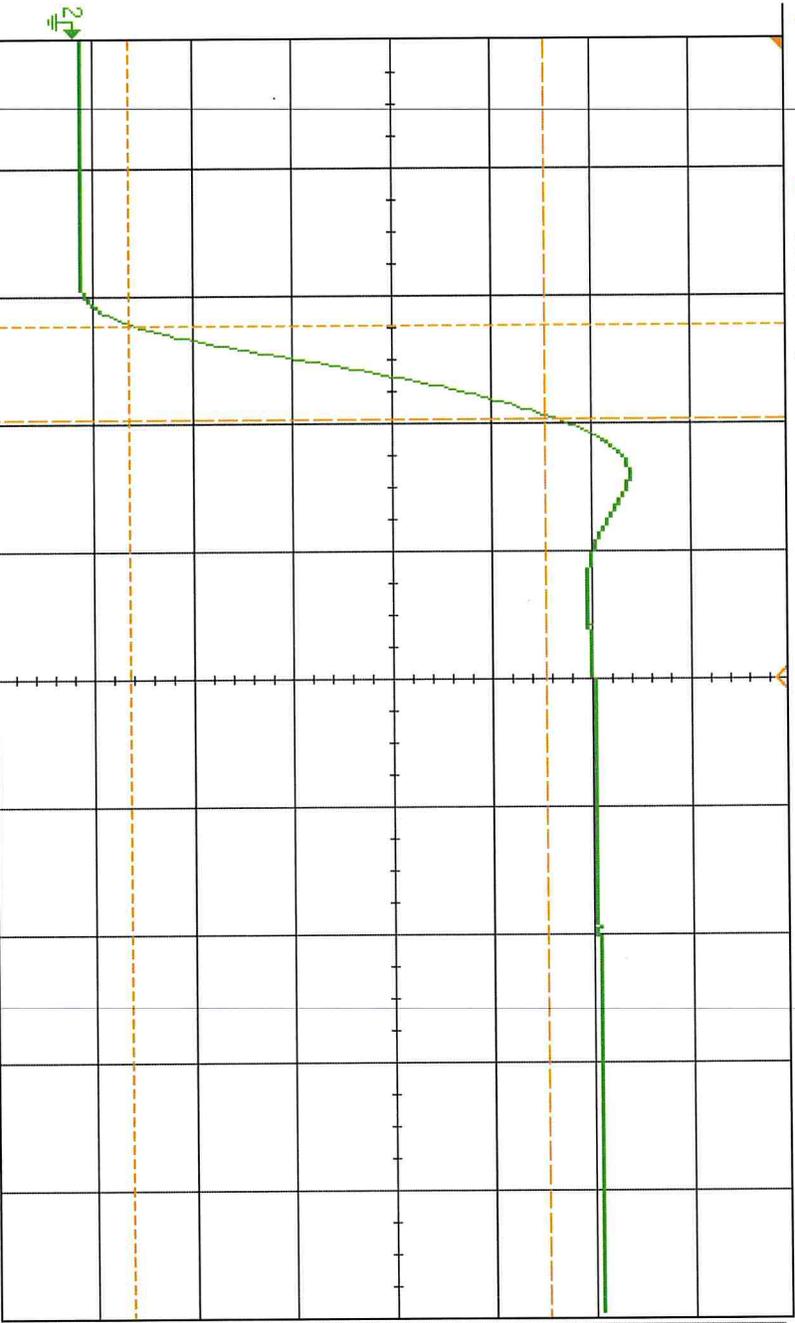
Default/Erase

Press to Save

PL45752
 settle / Rise Time

DSO-X 30B4A, MW52394003, Mon Apr 29 13:19:04 2024

2.000ns 20.00ns/ Auto f 4 3.40V



Acquisition	
Averaging: B4	
4.00GSa/s	
Channels	
DC	1.00:1
Measurements	
Fall[3]:	No signal
AC RMS - FS[2]:	1.7572V
Rise[2]:	14.8ns

Measurement Menu

Source 2

Type: Rise

Add Measurement

Settings

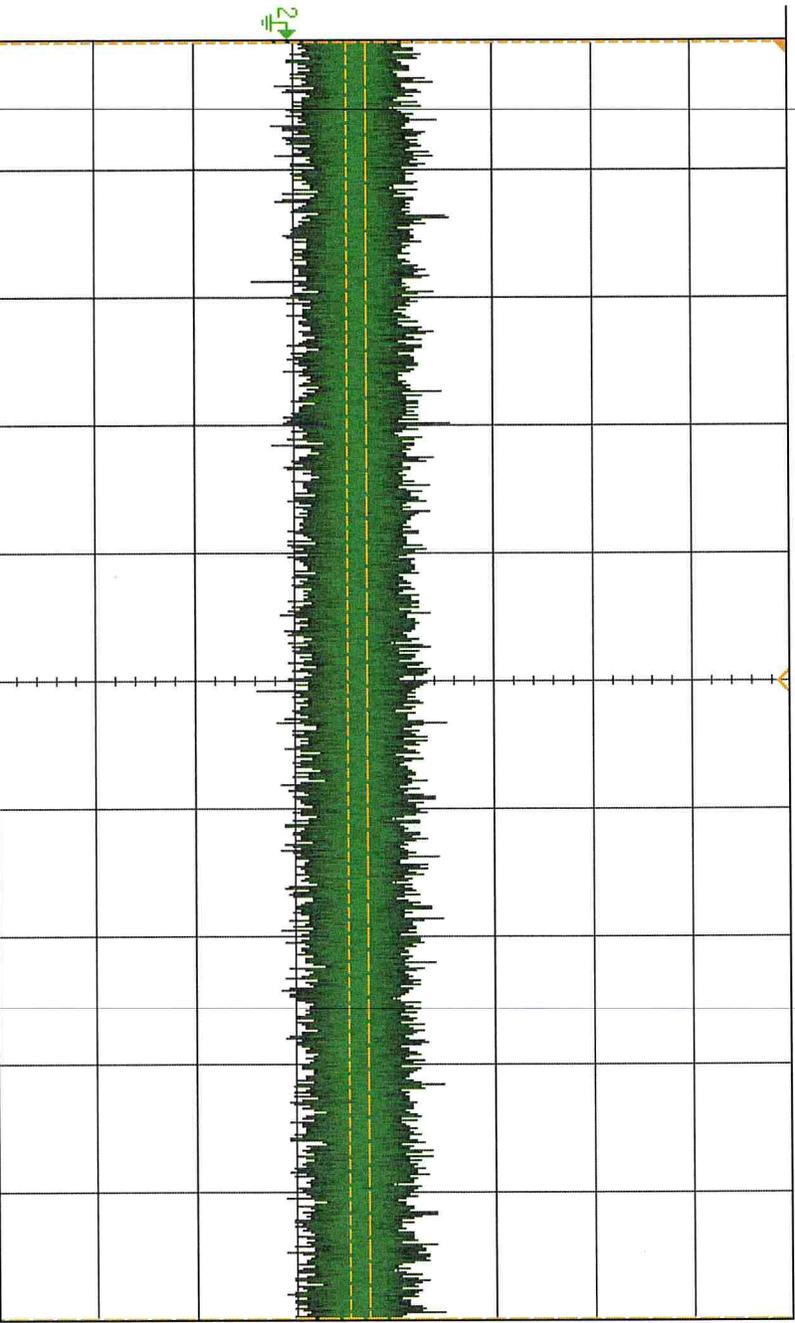
Clear Meas

Statistics

PL45752
RMS noise

DSO-X 3034A, MW52394003: Mon Apr 29 13:21:57 2024

1 2 60% / 3 4 2.051 μ s 20.00k μ s/V Auto f 4 3.38V



Acquisition	Normal
Channels	4.00GSa/s
DC	1.00:1
Measurements	
Rise(2):	78ns
AC RMS - FS(2):	12.41mV

Clear Measurements Menu

Clear Meas 1 Rise(2)

Clear Meas 2 AC RMS - FS(2)

Clear Meas 3 <None>

Clear Meas 4 <None>

Clear All