



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

Customer: _____ Tested By: Jim Hopson
 SO No: _____ Temperature: -25C, 25C, 85C
 Model No: ERDLVA-OR5G2G-CW-75MV-93 Date 5/7/2024
 Serial No: PL45756/2419 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 QA ⁵
2	VSWR:	2.5:1 MAX @ -20 dBm	1.85:1	
3	Input Power:	23 dBm Max.	Pass	
4	VIDEO OUT TSS:	-42 dBm MAX	-45 dBm	
5	VIDEO OUT Dynamic Range:	-40 to +20 dBm	-40 to +20 dBm	
6	VIDEO OUT Log Slope Fixed:	75 ± 10mV/dB	75.4 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	90 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	<500 ns	
12	VIDEO OUT Video Frequency Flatness:	3.0 dB p-p MAX @ -20dBm	.6 db	



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

		CW Immune Power -50 to -10 dBm	Pass	PMI QA²
13	VIDEO OUT CW Immunity:	CW Attack Time 1500us MAX	1400 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 @ 170ma -12 V @ 70ma	

QA/QC Approval: 

Date: 5-7-24



PLANAR MONOLITHICS INDUSTRIES
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 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-rf.com | www.pmi-

LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 05-7-24
 SERIAL NO: PL45756
 Test Temp: +25C

90mv

RF Input Power (dBm)

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
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0.5 GHz	INTERCEPT (mV)	3337
	SLOPE (mV/dB)	75.5

310	676	1054	1468	1862	2204	2615	2983	3315	3655	4059	4466	4898
-6	-17	-17	19	36	0	33	23	-22	-60	-34	-4	50
-0.07	-0.23	-0.23	0.25	0.47	0.00	0.44	0.31	-0.30	-0.80	-0.45	-0.06	0.66

1.25 GHz	INTERCEPT (mV)	3401
	SLOPE (mV/dB)	75.9

349	740	1116	1522	1909	2221	2614	3032	3452	3822	4187	4502	4876
-16	-5	-8	19	26	-41	-28	11	51	42	28	-37	-42
-0.21	-0.06	-0.11	0.24	0.34	-0.54	-0.36	0.14	0.68	0.55	0.36	-0.48	-0.56

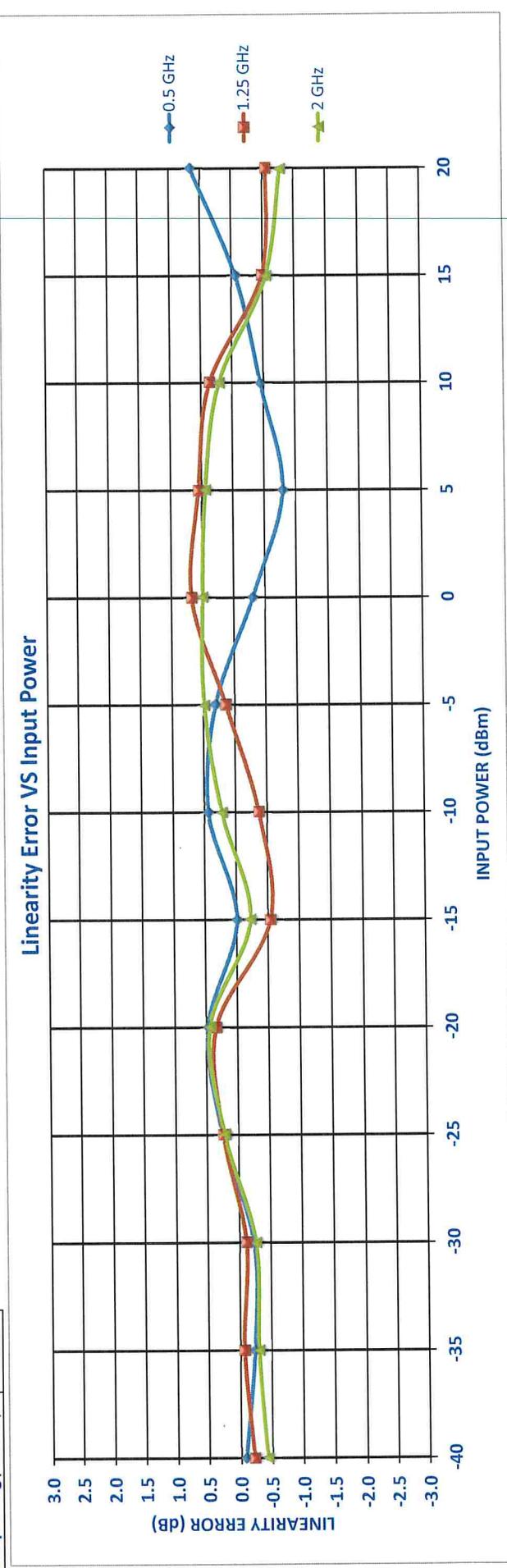
2 GHz	INTERCEPT (mV)	3349
	SLOPE (mV/dB)	74.8

323	707	1084	1494	1885	2210	2617	3011	3386	3756	4113	4430	4787
-32	-22	-19	16	33	-16	17	37	37	33	16	-41	-58
-0.43	-0.30	-0.26	0.22	0.44	-0.21	0.22	0.49	0.50	0.44	0.21	-0.55	-0.78

Flatness P-P

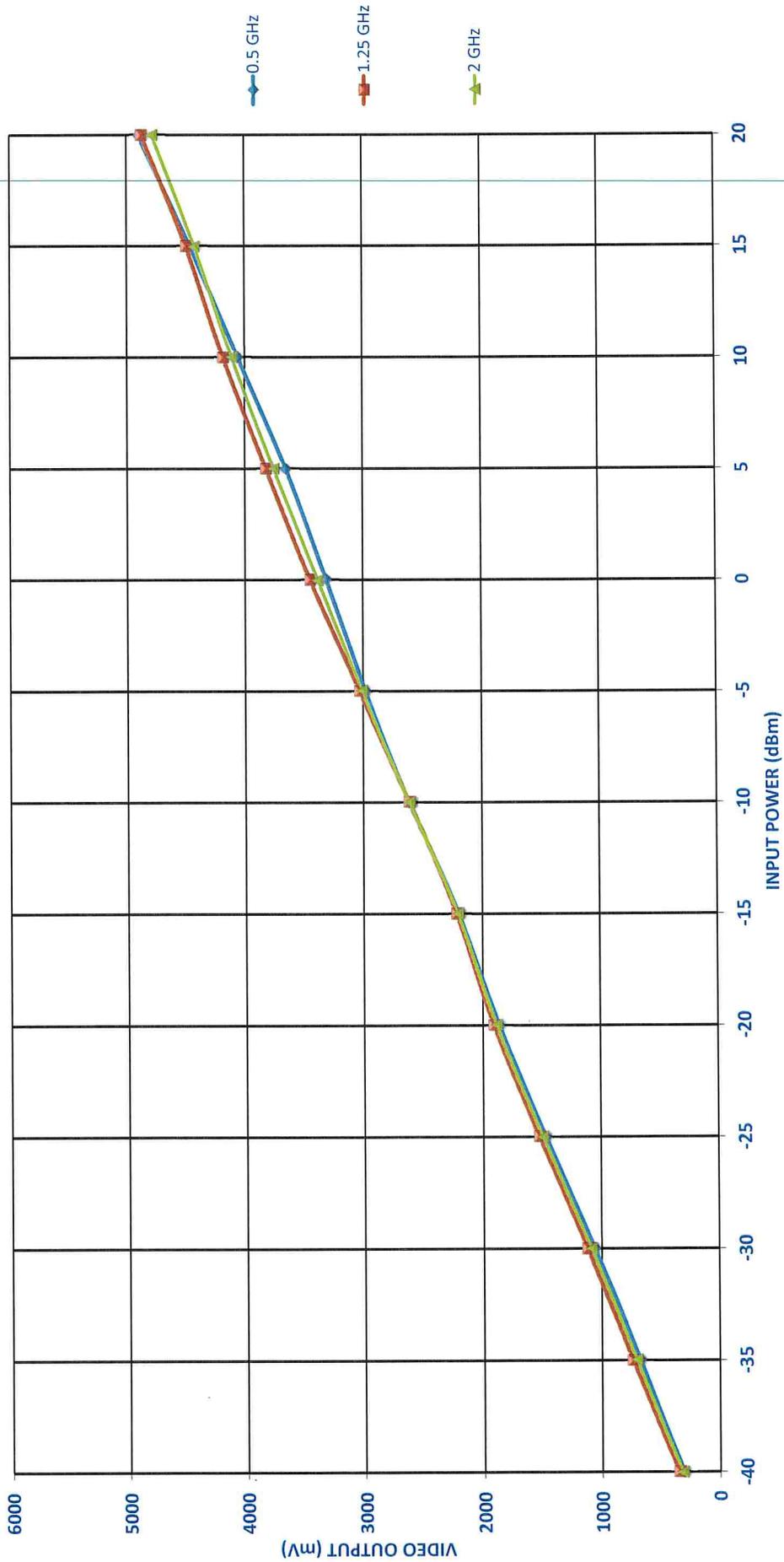
0.6	0.8	0.8	0.8	0.6	0.2	0.0	0.6	1.8	2.2	1.6	1.0	1.4
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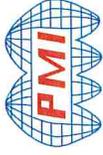
Slope Avg(mv/dB) 75.4



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45756
Test Temp: +25C

Video Out VS Input Power





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 TESTED BY: Jim Hopson
 DATE: 05-7-24
 SERIAL NO: PL45756
 Test Temp: -25C

RF Input Power (dBm)

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
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0.5 GHz	INTERCEPT (mV)	3385
	SLOPE (mV/dB)	75.4

357	733	1105	1515	1915	2256	2674	3031	3370	3703	4104	4505	4937
-13	-14	-19	14	38	2	43	23	-15	-59	-35	-10	45
-0.17	-0.19	-0.25	0.19	0.50	0.02	0.57	0.31	-0.20	-0.78	-0.46	-0.14	0.59

1.25 GHz	INTERCEPT (mV)	3439
	SLOPE (mV/dB)	75.4

401	793	1170	1571	1959	2271	2659	3065	3493	3866	4224	4536	4896
-21	-6	-6	18	28	-37	-26	3	54	50	30	-35	-52
-0.28	-0.08	-0.08	0.23	0.38	-0.49	-0.34	0.04	0.71	0.66	0.40	-0.46	-0.69

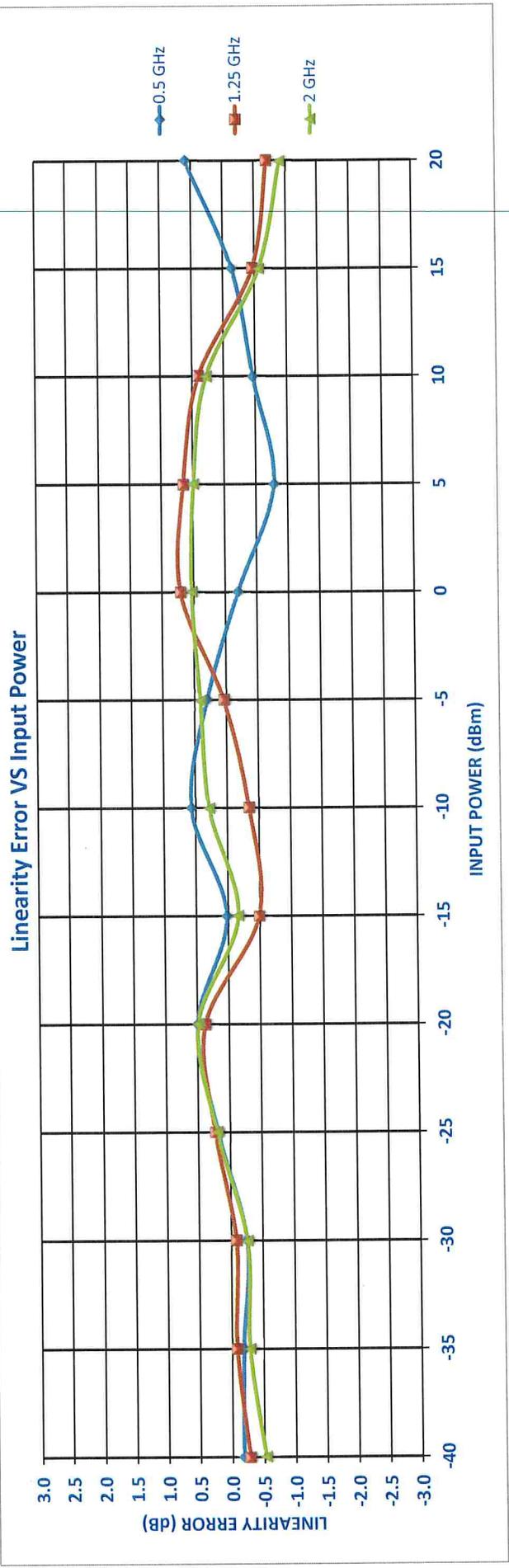
2 GHz	INTERCEPT (mV)	3393
	SLOPE (mV/dB)	74.4

379	769	1143	1549	1942	2266	2671	3052	3433	3802	4158	4467	4814
-39	-21	-19	15	36	-12	21	30	40	37	21	-42	-67
-0.53	-0.28	-0.26	0.20	0.49	-0.16	0.29	0.41	0.53	0.49	0.28	-0.57	-0.90

Flatness P-P

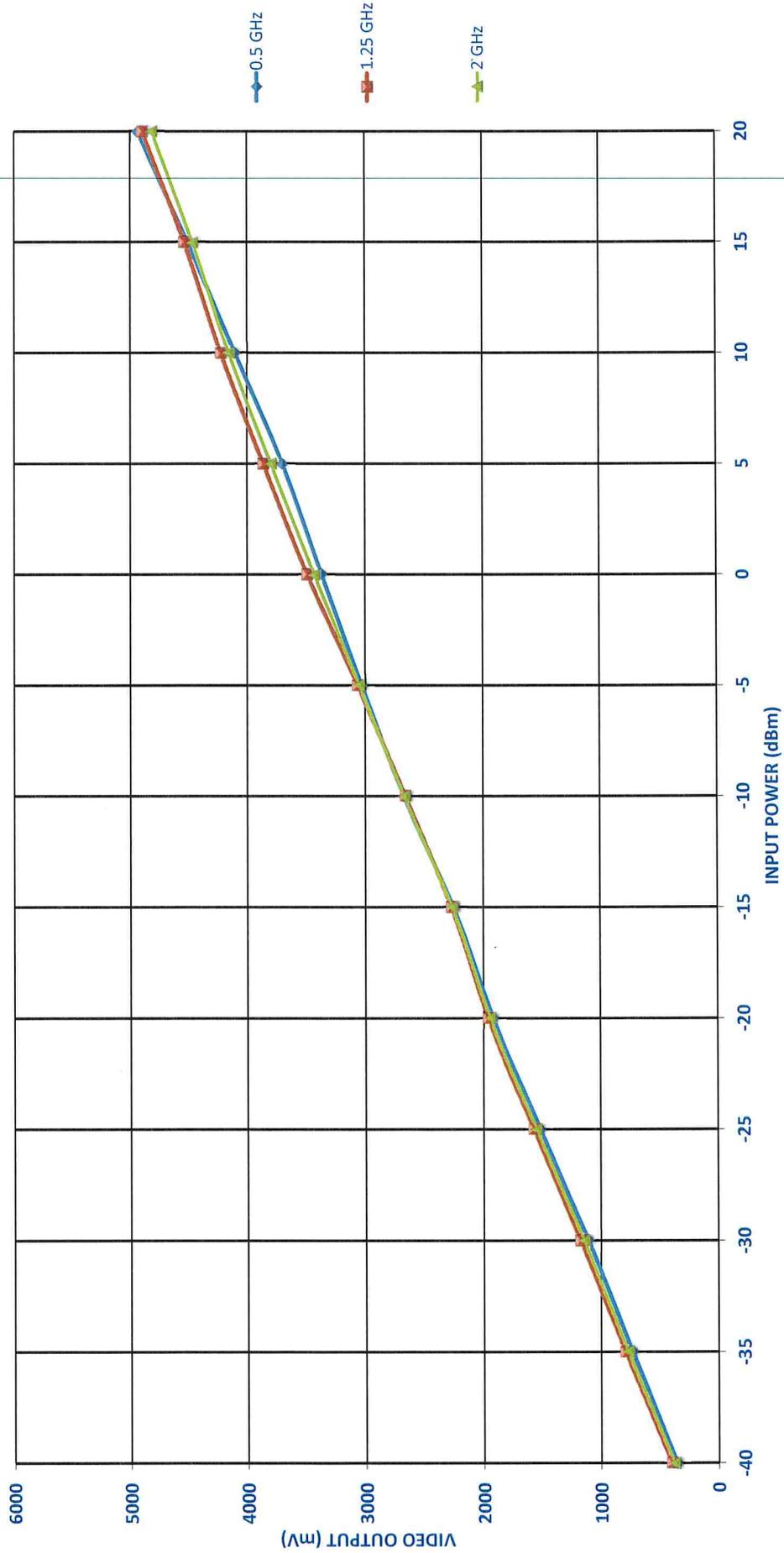
0.6	0.8	0.8	0.8	0.6	0.2	0.2	0.4	1.6	2.2	1.6	1.0	1.6
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Slope Avg(mv/dB) 75.1



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Video Out VS Input Power





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 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 05-7-24
 SERIAL NO: PL45756
 Test Temp: +85C

RF Input Power (dBm)

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
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0.5 GHz	INTERCEPT (mV)	3193
	SLOPE (mV/dB)	75.4

Measured Value (mV)	4738
Error (mV)	-3
LINEARITY ERROR (dB)	0.50

1.25 GHz	INTERCEPT (mV)	3267
	SLOPE (mV/dB)	76.1

Measured Value (mV)	4749
Error (mV)	-12
LINEARITY ERROR (dB)	-0.53

2 GHz	INTERCEPT (mV)	3214
	SLOPE (mV/dB)	75.0

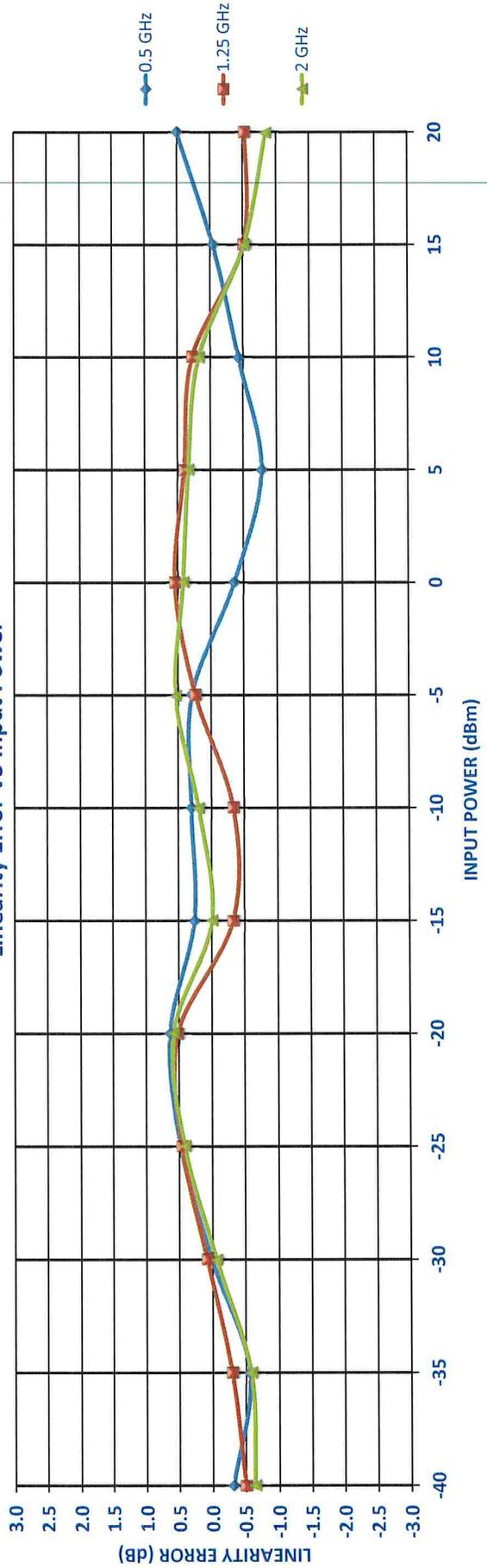
Measured Value (mV)	4651
Error (mV)	-39
LINEARITY ERROR (dB)	-0.84

Flatness P-P

0.4	1.0	0.8	0.8	0.6	0.2	0.2	0.8	1.8	2.2	1.8	1.0	1.2
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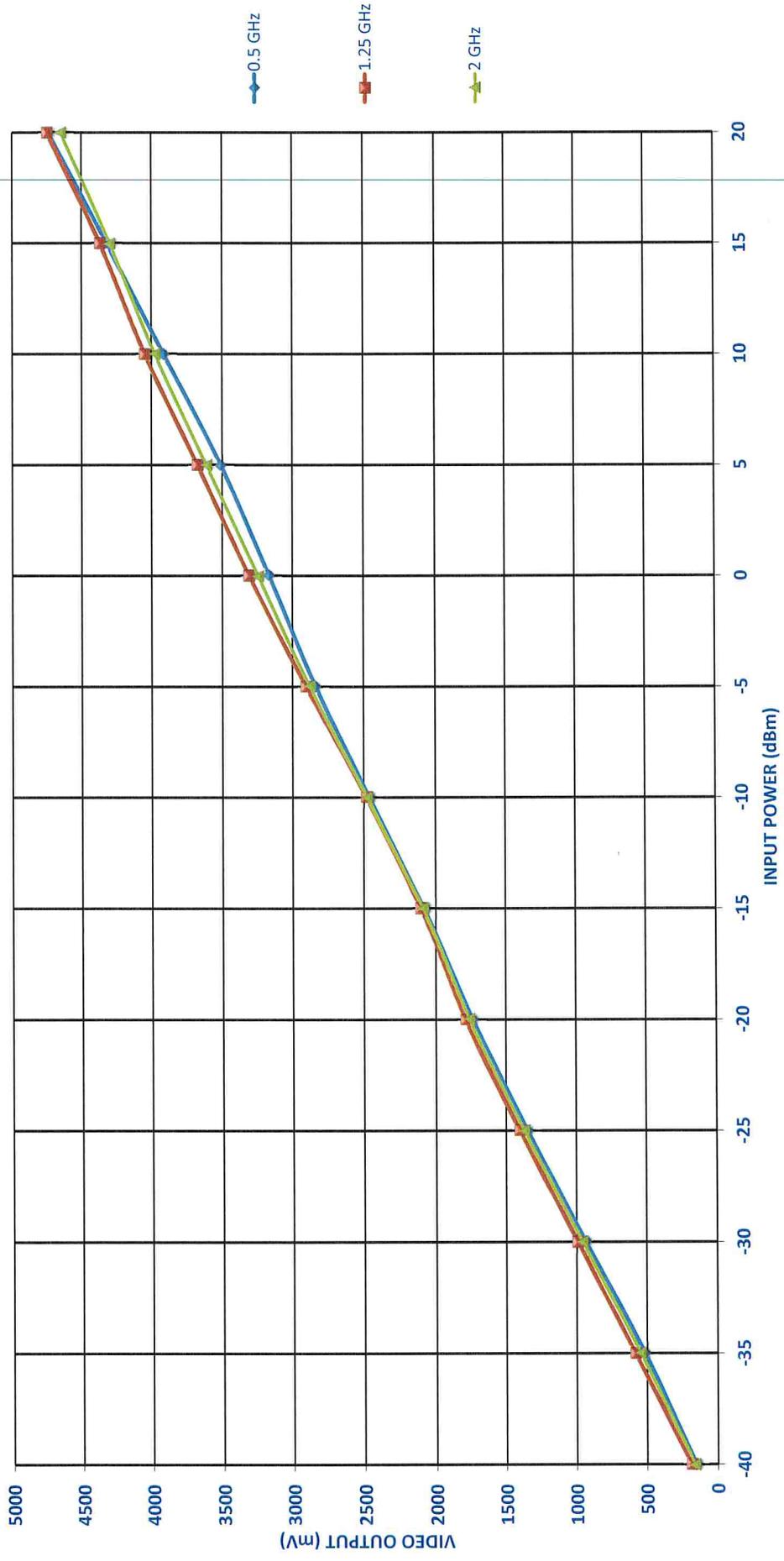
Slope Avg(mv/dB) 75.5

Linearity Error VS Input Power



LOG TRANSFER WITH FREQUENCY
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SERIAL NO: PL45756
Test Temp: +85C

Video Out VS Input Power

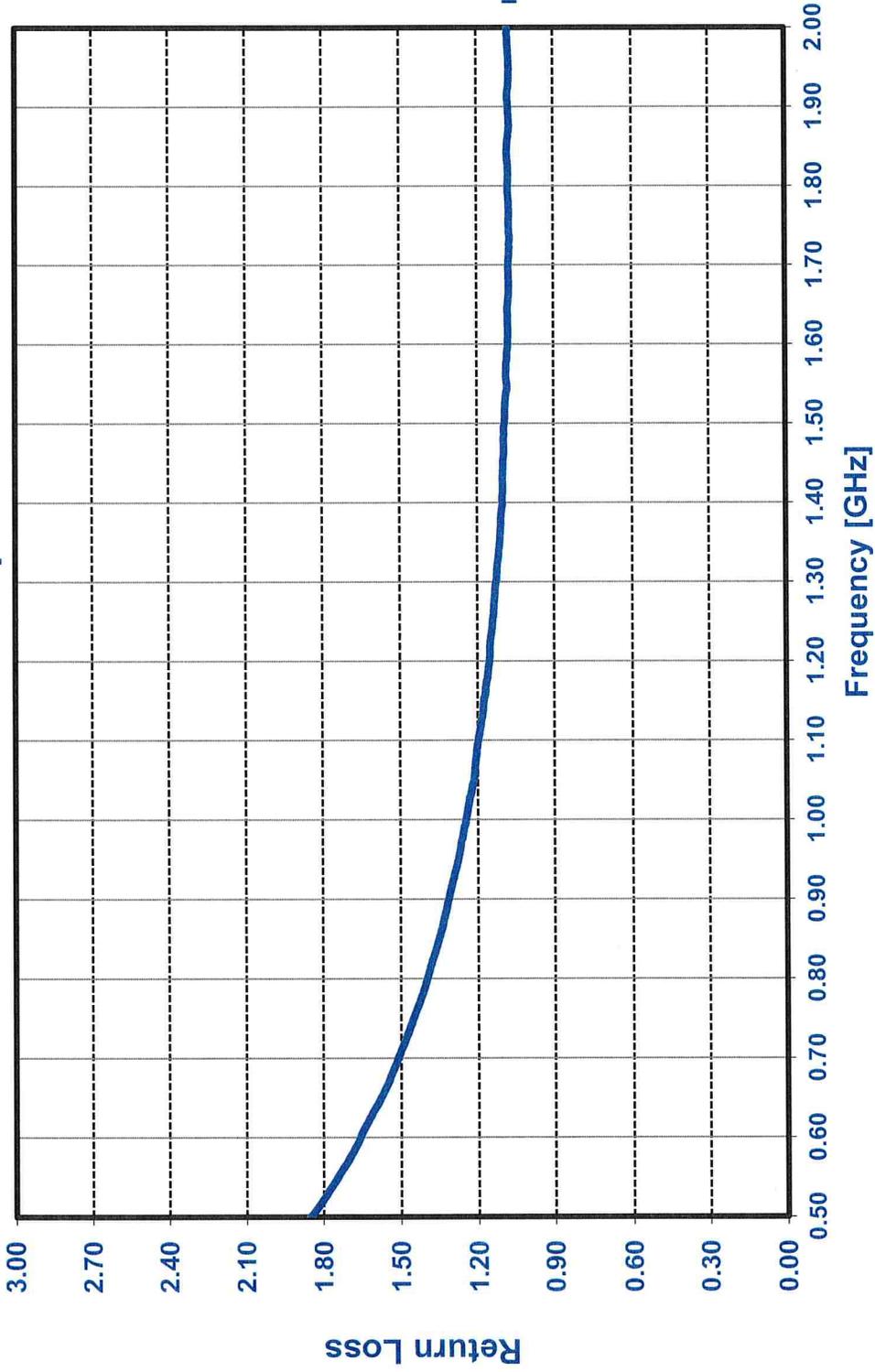


Model Number: ERDLVA-0R5G2G-CW-75MV-93

Serial Number: PL45756

Temperature: +25C

VSWR Graph

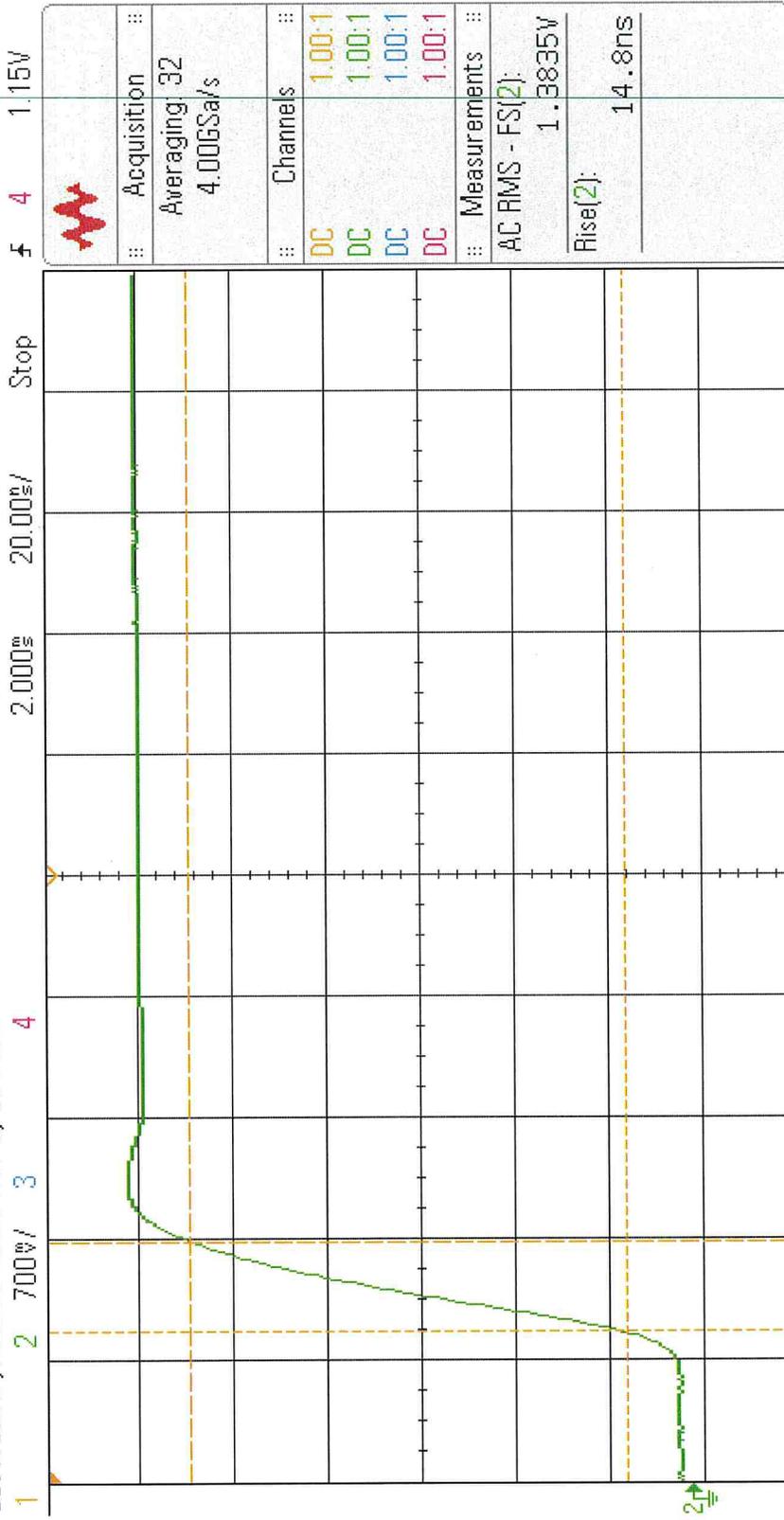


Input VSWR 1.85:1 Max

PL45756

settle / RiseTime

DSO-X 3034A, MY52394003, Mon May 06 14:58:32 2024



Clear Measurements Menu

Clear Meas 1
AC RMS - FS(2)

Clear Meas 2
Rise(2)

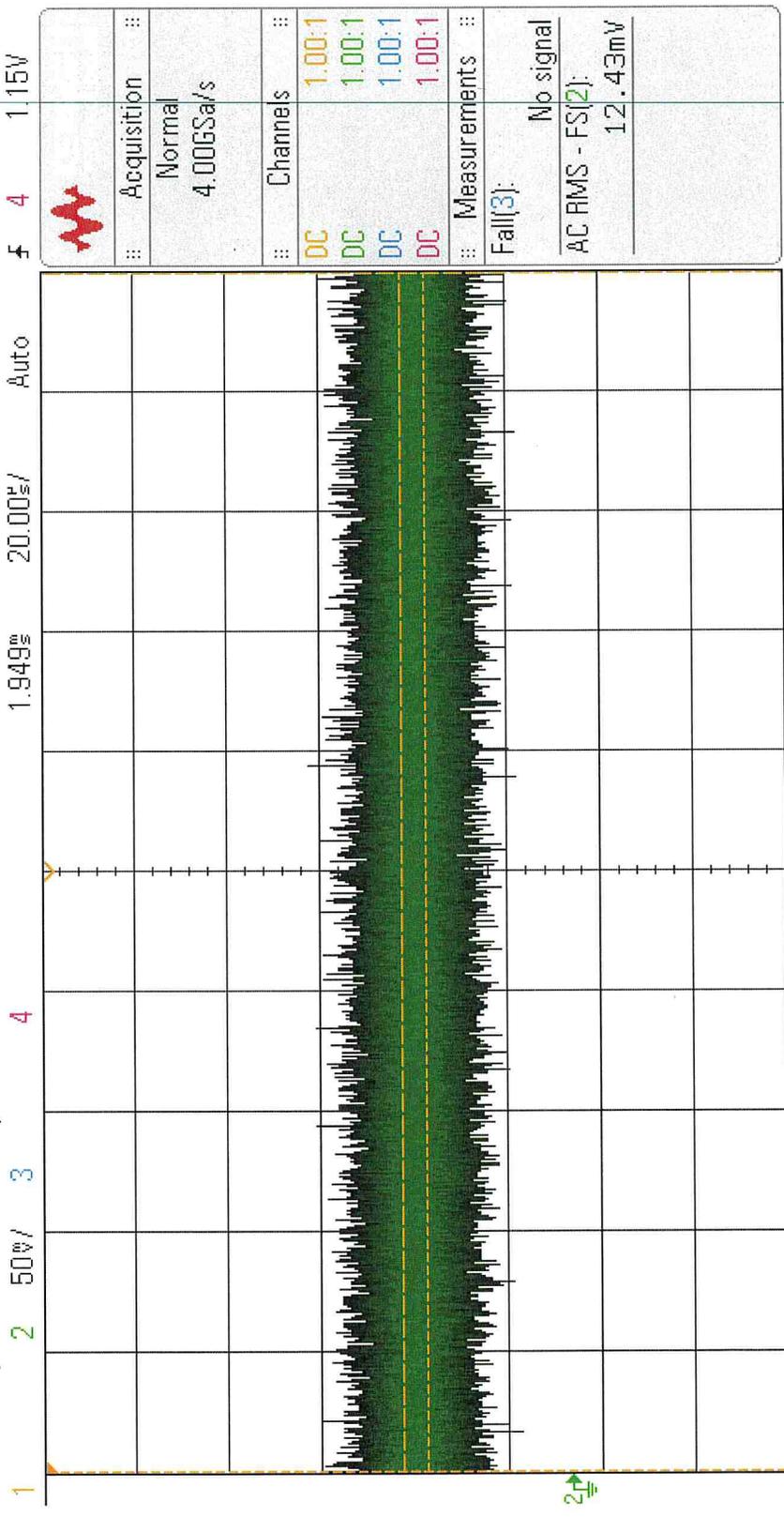
Clear Meas 3
<None>

Clear Meas 4
<None>

Clear All

PL45756
RMS noise

DSO-X 3034A, MY52394003: Mon May 06 14:54:33 2024



Measurement Menu

Source 2

Type: AC RMS - FS

Add Measurement

Settings

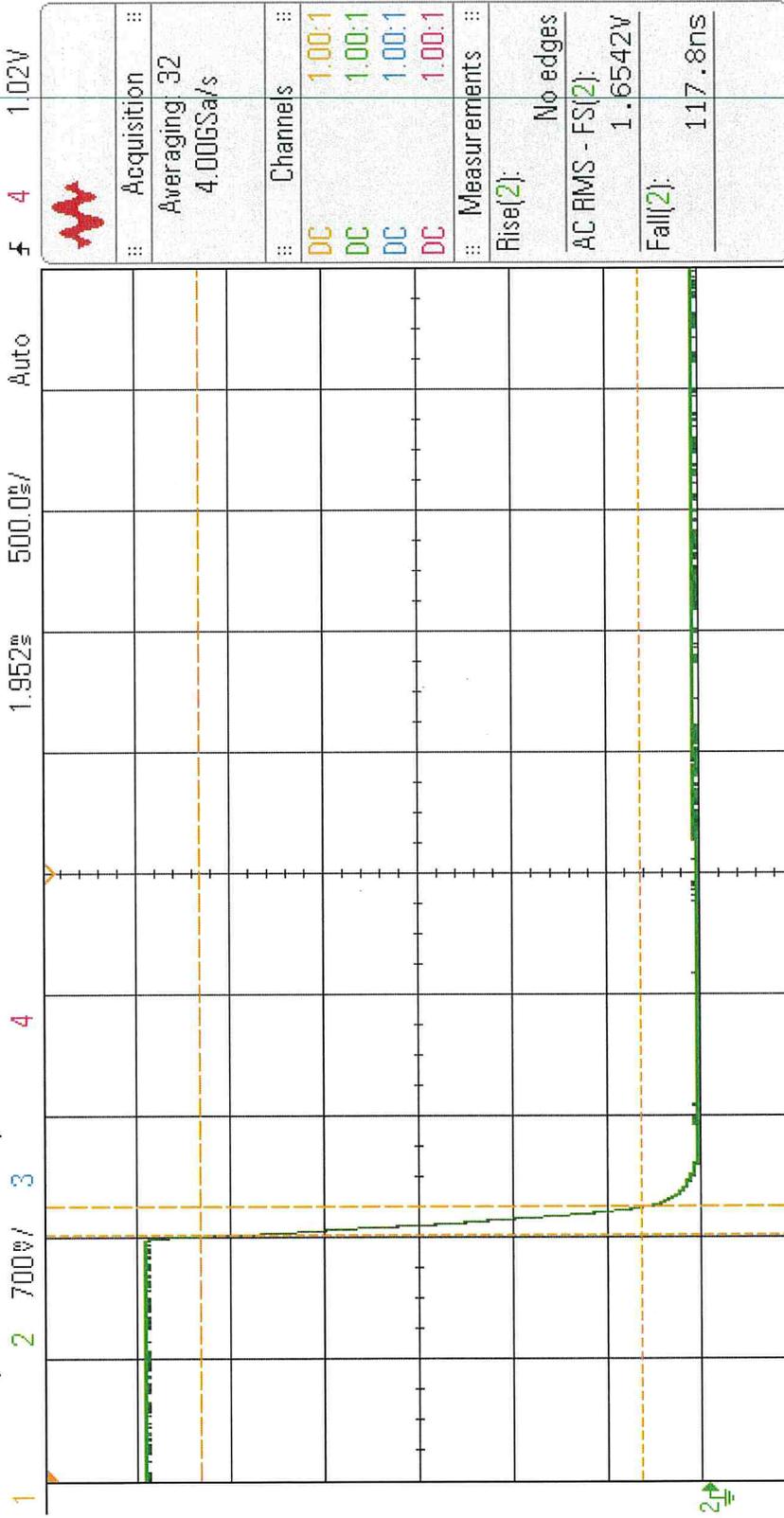
Clear Meas

Statistics

PL45756

Recovery/Fall

DSO-X 3034A, MY52394003: Tue May 07 08:08:20 2024



Save to file = [pl45756_recovery

Format BMP (8-bit)

Save to USB

File Name

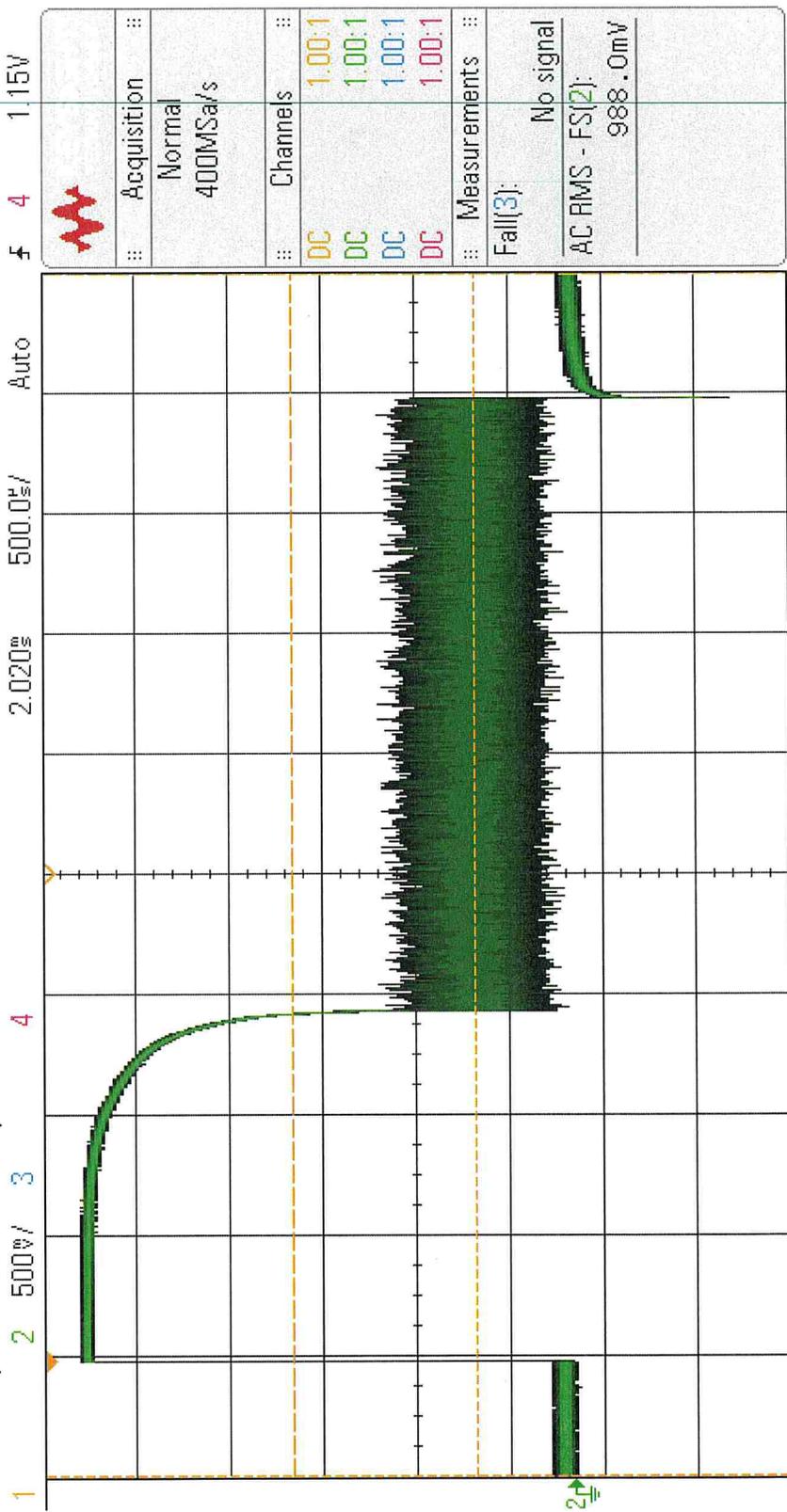
Settings

Press to Save

PL45756

CW Immune

DSO-X 3034A, MY52394003: Mon May 06 14:56:22 2024



Acquisition	Normal
Channels	1:00:1 2:00:1 3:00:1 4:00:1
Measurements	No signal
Fall(3)	AC RMS - FS(2): 988.0mV

Save to file = pl45756_cw_immune

Save

Recall

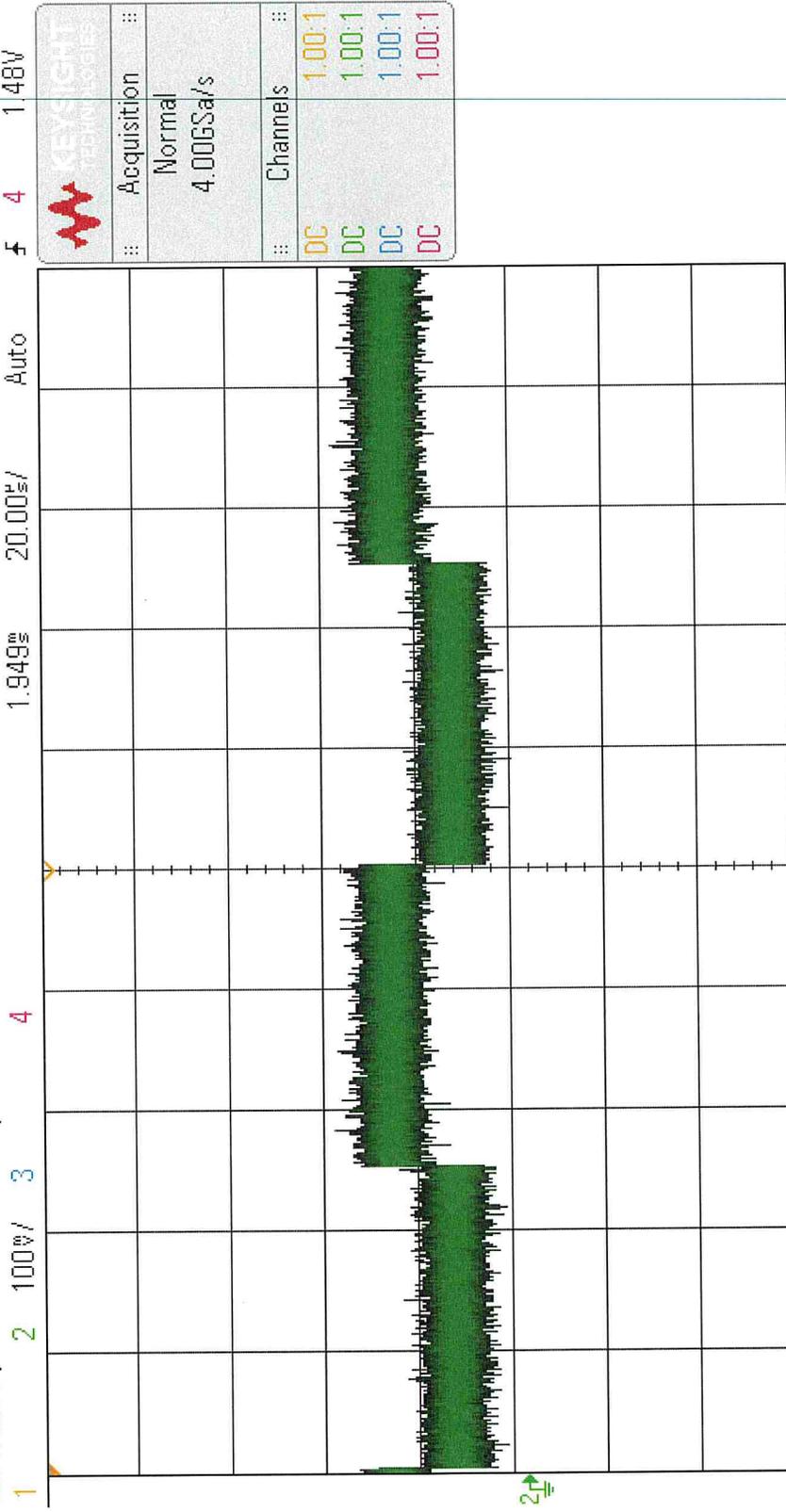
Default/Erse

Press to Save

PL45756

TSS - 45dbm

DSO-X 3034A, MY52394003: Mon May 06 14:53:05 2024



Save to file = pl45756_tss_45

Format
BMP (8-bit)

Save to
usb

File Name

Settings

Press to
Save