



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 4/30/2024

Serial No: PL45755/2418

Drawing No: 27643280

Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC PMI QA3
1	Frequency Range:	0.5 to 2.0 GHz	0.5 to 2.0 GHz	
2	VSWR:	2.5:1 MAX @ -20 dBm	1.94:1	
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	75.5 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	59 mv	
9	VIDEO OUT Rise Time (10% to 90%):	25 ns MAX	14.5 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	

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



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

		CW Immune Power -50 to -10 dBm	Pass	PMI QAS
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	14.3 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: *K. Kuter*

Date: 4.30.24



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway, Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-irf.com | www.pmi-

LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-0R5G2G-CW-75MV-93V

TESTED BY: Jim Hopson
 DATE: 04-28-24
 SERIAL NO: PL45755
 Test Temp: +25C

59 mv

Frequency

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
322	713	1070	1460	1888	2224	2627	3001	3321	3675	4089	4490	4906
-10	3	-18	-6	45	3	28	24	-33	-57	-21	2	40
-0.14	0.04	-0.24	-0.07	0.59	0.04	0.37	0.32	-0.44	-0.76	-0.28	0.03	0.54

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

1.25 GHz	INTERCEPT (mV)	3412
	SLOPE (mV/dB)	75.9
	Measured Value (mV)	367
	Error (mV)	-11
	LINEARITY ERROR (dB)	-0.14

Measured Value (mV)	367
Error (mV)	-11
LINEARITY ERROR (dB)	-0.14

2 GHz	INTERCEPT (mV)	3349
	SLOPE (mV/dB)	75.0
	Measured Value (mV)	326
	Error (mV)	-24
	LINEARITY ERROR (dB)	-0.32

Measured Value (mV)	326
Error (mV)	-24
LINEARITY ERROR (dB)	-0.32

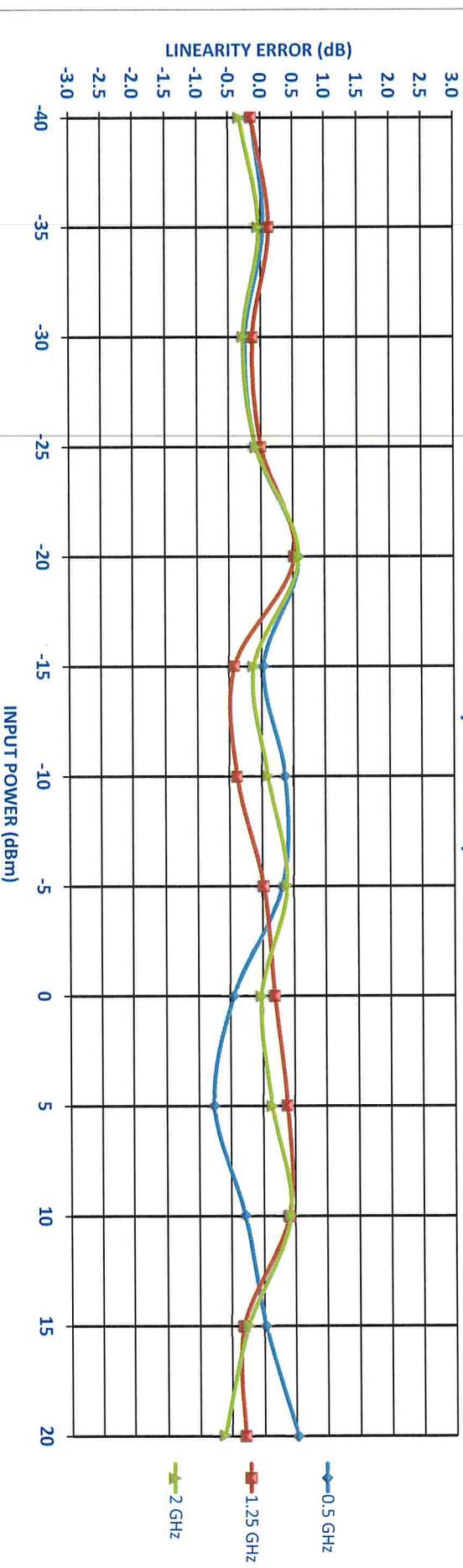
Flatness P-P

0.6	0.8	0.8	0.8	0.8	0.6	0.4	0.2	0.4	1.4	2.0	1.4	1.4
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Slope Avg(mv/dB)

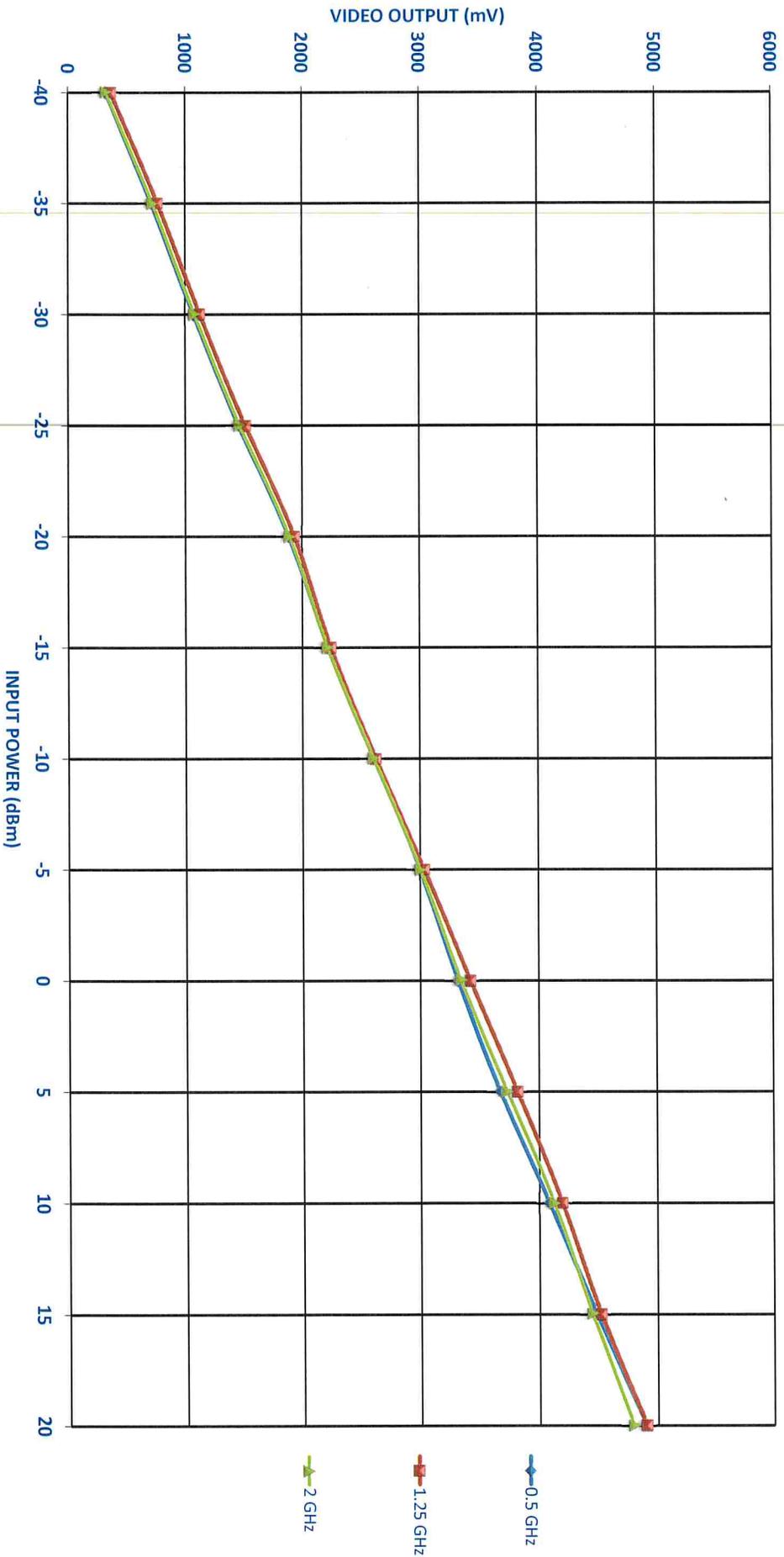
75.5

Linearity Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45755
Test Temp: +25C

Video Out VS Input Power





LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 04-28-24
 SERIAL NO: PL457755
 Test Temp: -25C

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 4921 Robert J. Matthews Parkway, Suite 1
 EI Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
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Frequency

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
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0.5 GHz	INTERCEPT (mV)	3388
	SLOPE (mV/dB)	77.2

302	695	1051	1433	1874	2220	2642	3033	3366	3731	4144	4544	4964
4	10	-20	-24	31	-9	27	32	-22	-43	-16	-2	32
0.05	0.14	-0.25	-0.31	0.40	-0.12	0.35	0.41	-0.28	-0.55	-0.21	-0.03	0.41

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

1.25 GHz	INTERCEPT (mV)	3443
	SLOPE (mV/dB)	77.6

346	746	1106	1488	1920	2238	2628	3058	3472	3882	4258	4583	4958
5	17	-11	-17	28	-42	-40	2	29	51	39	-24	-36
0.06	0.22	-0.14	-0.21	0.36	-0.54	-0.51	0.03	0.37	0.66	0.50	-0.31	-0.47

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

2 GHz	INTERCEPT (mV)	3384
	SLOPE (mV/dB)	76.6

306	708	1065	1446	1884	2215	2618	3031	3392	3797	4192	4514	4859
-12	6	-20	-22	33	-19	1	30	8	30	42	-19	-58
-0.16	0.08	-0.26	-0.29	0.43	-0.25	0.01	0.40	0.11	0.39	0.55	-0.25	-0.75

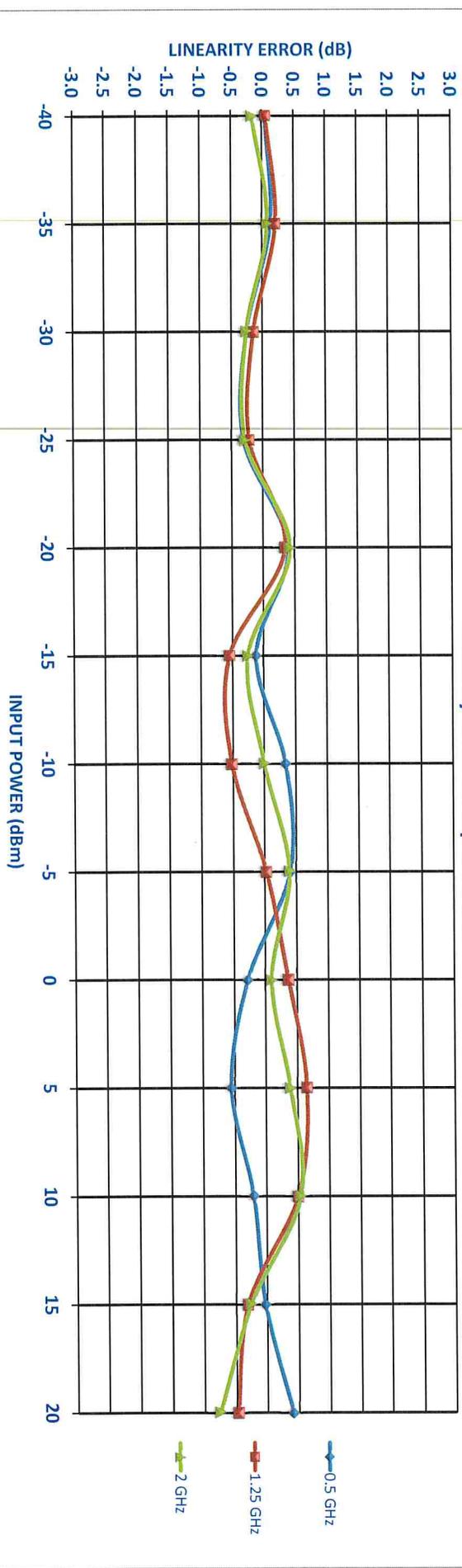
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Flatness P-P

0.6	0.6	0.8	0.8	0.6	0.2	0.4	0.4	1.4	2.0	1.4	0.8	1.4
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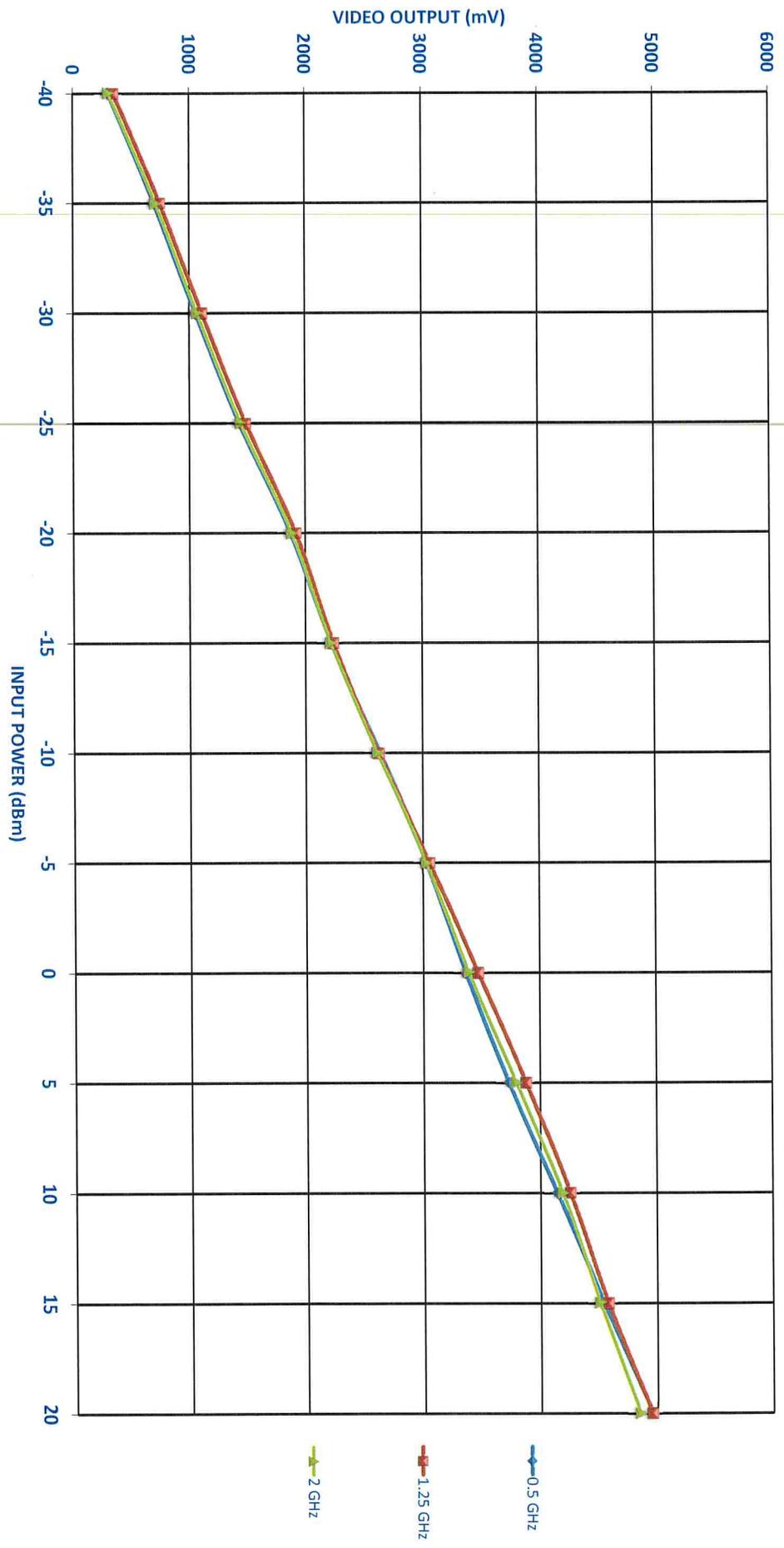
Slope Avg(mv/dB) 77.1

Linearity Error VS Input Power



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45755
Test Temp: -25C

Video Out VS Input Power





LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-0R5G2G-CW-75MV-93V
 TESTED BY: Jim Hopson
 DATE: 04-28-24
 SERIAL NO: PL45755
 Test Temp: +85C

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Frequency

0.5 GHz	INTERCEPT (mV)	3196
	SLOPE (mV/dB)	74.2

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
179	577	971	1366	1781	2112	2470	2841	3154	3505	3917	4314	4713
-47	-21	2	26	70	29	16	16	-42	-63	-22	4	32
-0.64	-0.28	0.03	0.35	0.94	0.40	0.22	0.21	-0.57	-0.84	-0.29	0.05	0.43

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

1.25 GHz	INTERCEPT (mV)	3265
	SLOPE (mV/dB)	74.9

214	643	1025	1420	1832	2133	2487	2893	3264	3647	4035	4365	4751
-54	0	7	28	65	-8	-29	2	-1	7	21	-24	-13
-0.73	0.00	0.10	0.37	0.87	-0.11	-0.39	0.03	-0.02	0.10	0.27	-0.32	-0.17

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

2 GHz	INTERCEPT (mV)	3199
	SLOPE (mV/dB)	74.0

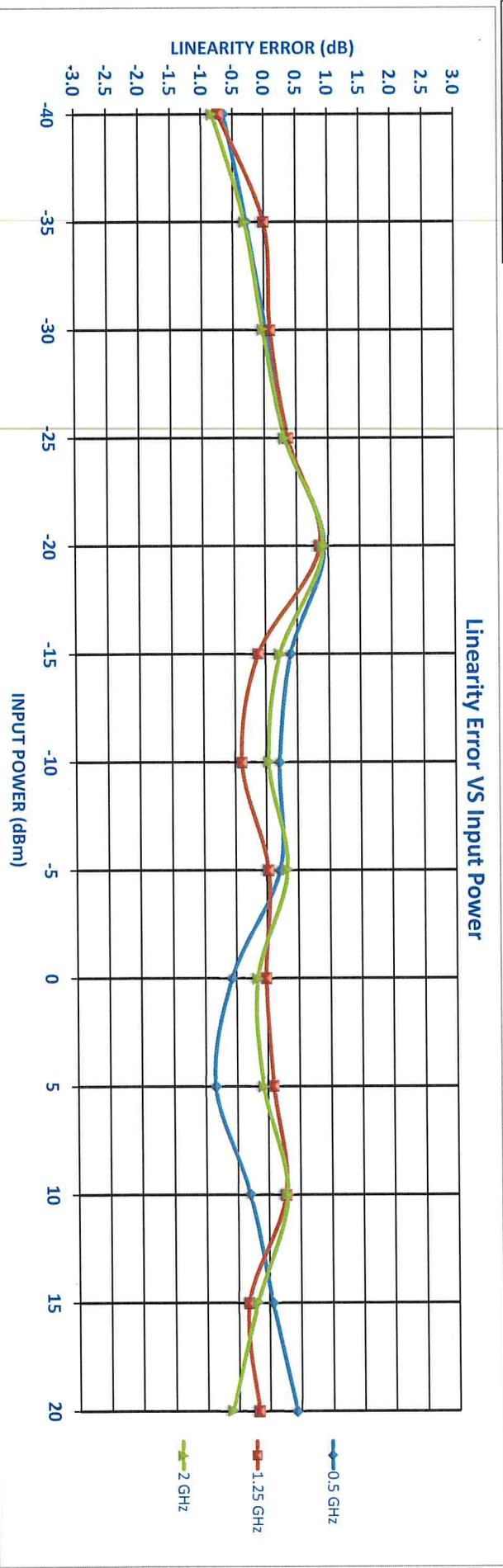
180	588	979	1374	1788	2107	2463	2854	3188	3564	3961	4295	4634
-61	-23	-1	24	68	17	3	25	-11	-5	22	-14	-44
-0.82	-0.31	-0.02	0.32	0.92	0.23	0.05	0.33	-0.15	-0.07	0.30	-0.18	-0.60

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

Flatness P-P

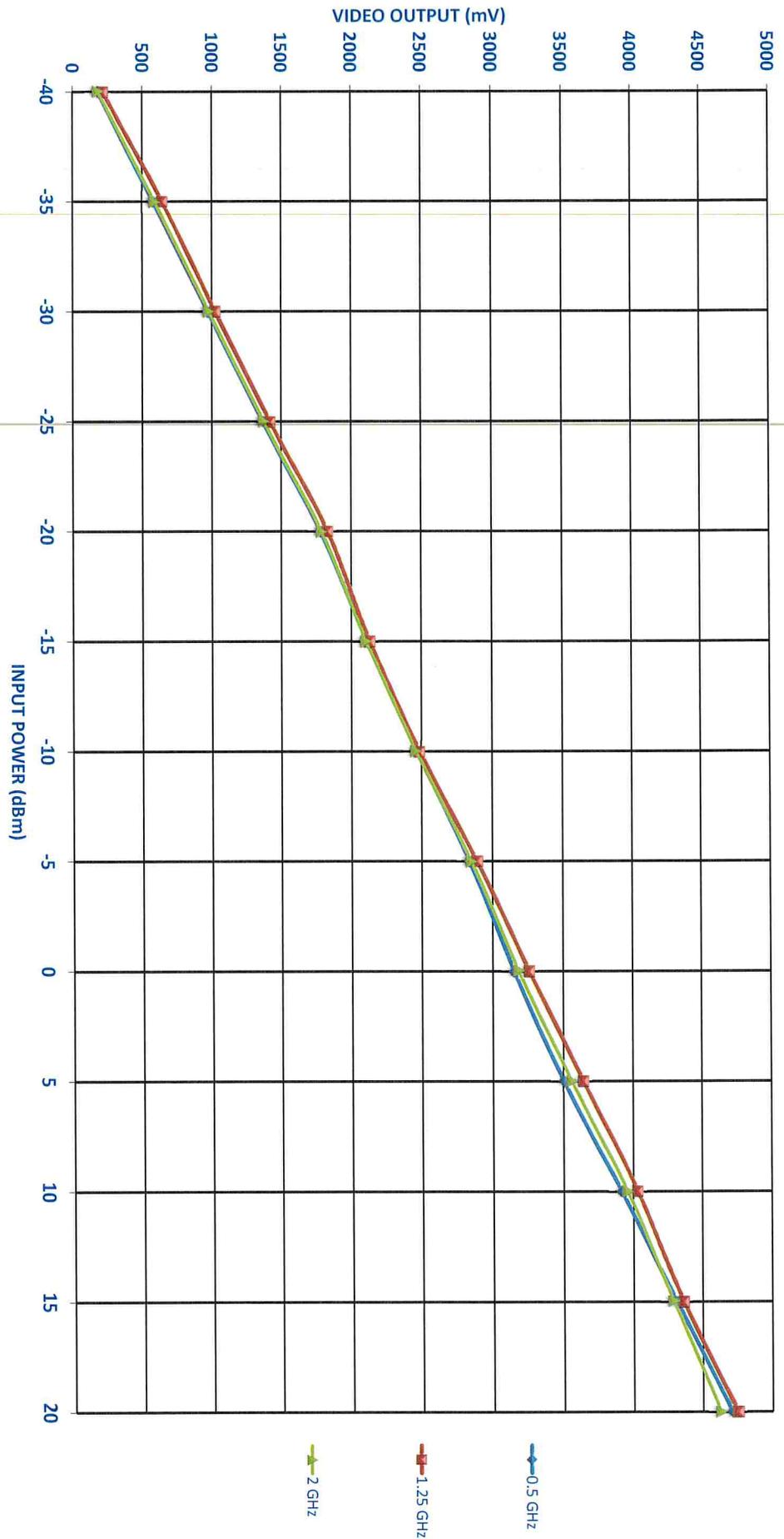
0.4	0.8	0.8	0.8	0.8	0.6	0.4	0.4	0.4	0.6	1.4	2.0	1.6	1.0	1.6
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Slope Avg(mv/dB) 74.4



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45755
Test Temp: +85C

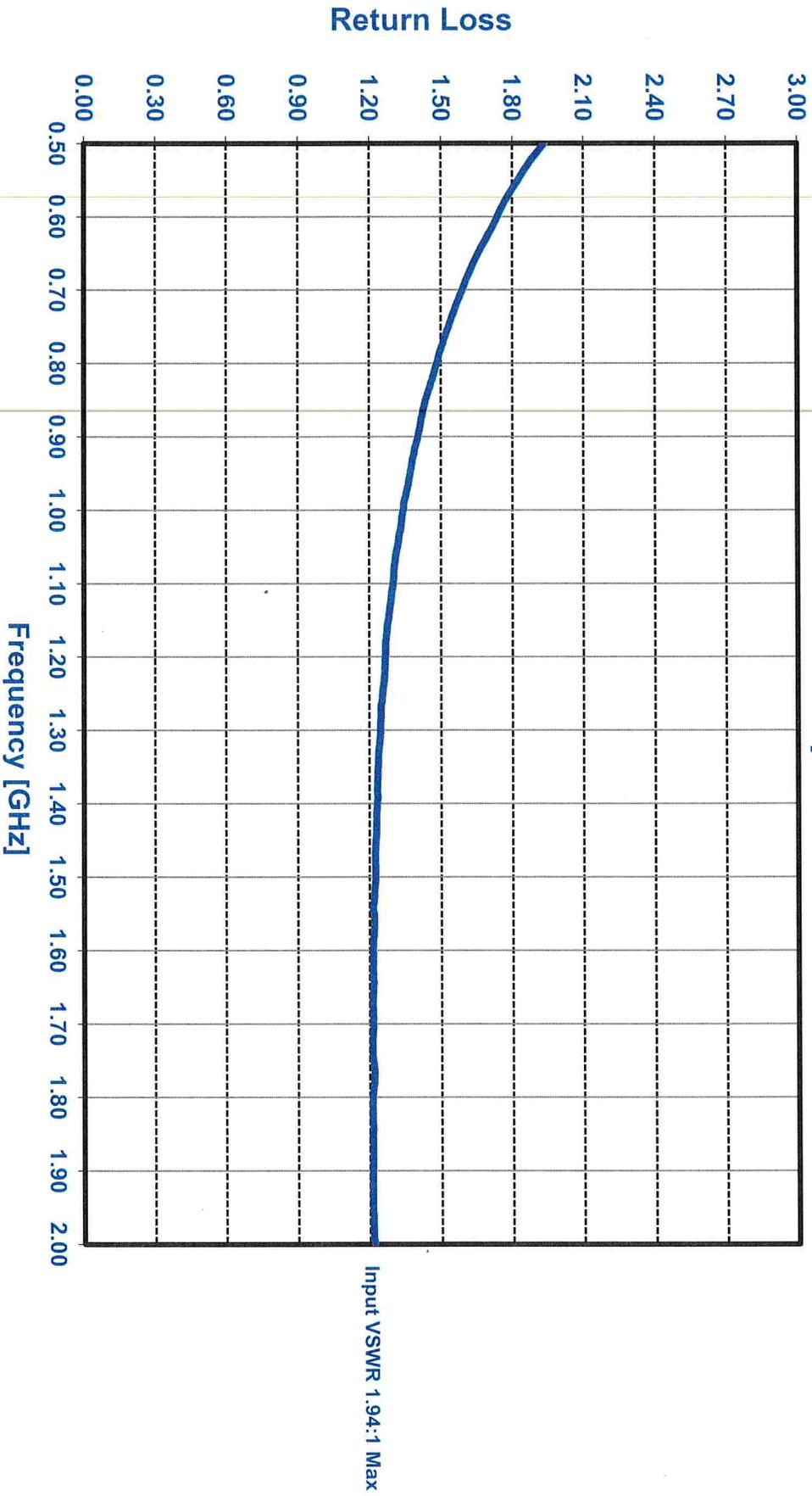
Video Out VS Input Power



Model Number: ERDLVA-OR5G2G-CW-75MV-93
Serial Number: PL45755

Temperature: +25C

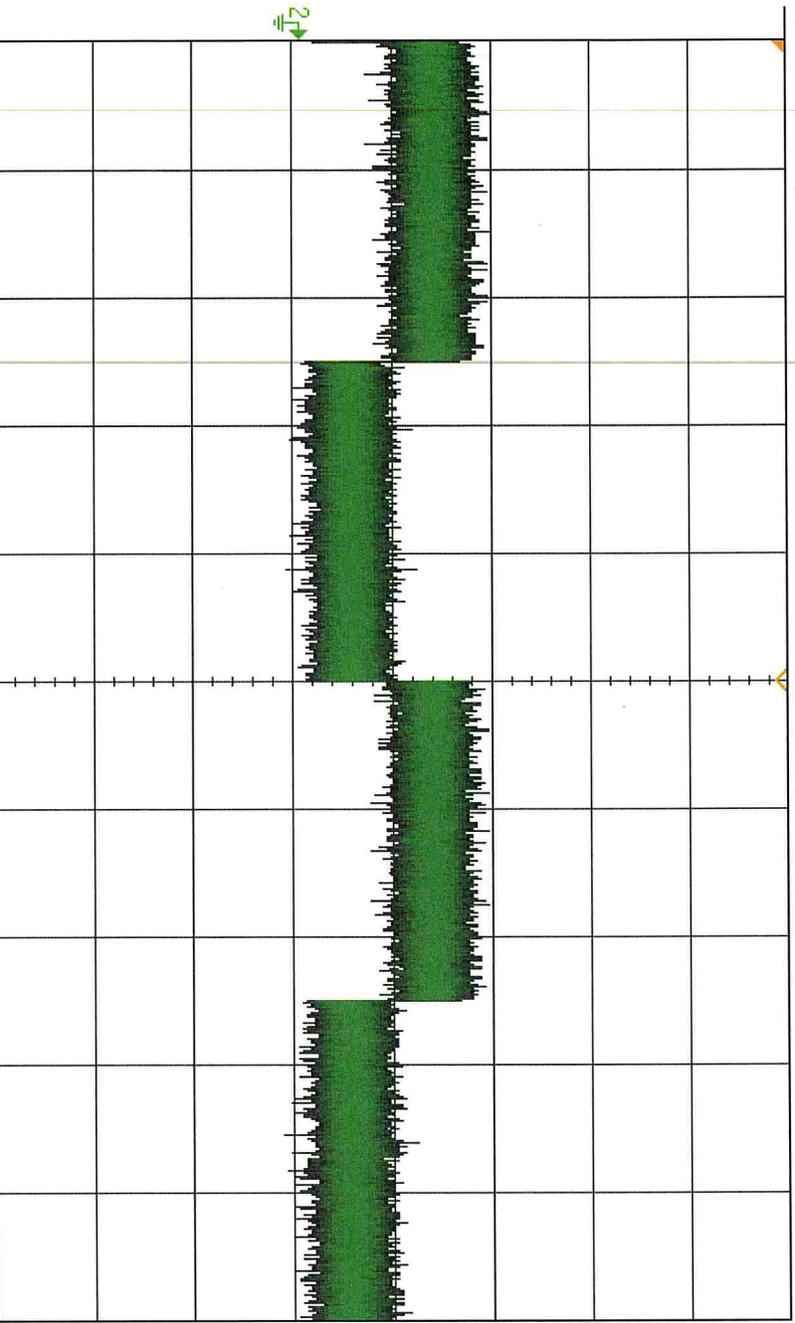
VSWR Graph



PL45755
TSS - 45 dbm

DSO-X 3034A, MW52394003, Mon Apr 29 14:00:52 2024

1 2 100% / 3 4 2.000ms 20.00ns / Auto f 4 3.38V



KEYSIGHT TECHNOLOGIES	Acquisition	:
	Normal	:
	4.00GSa/s	:
Channels	:	:
DC	1.00:1	:

Save to file = pl45755_tss_45

Save

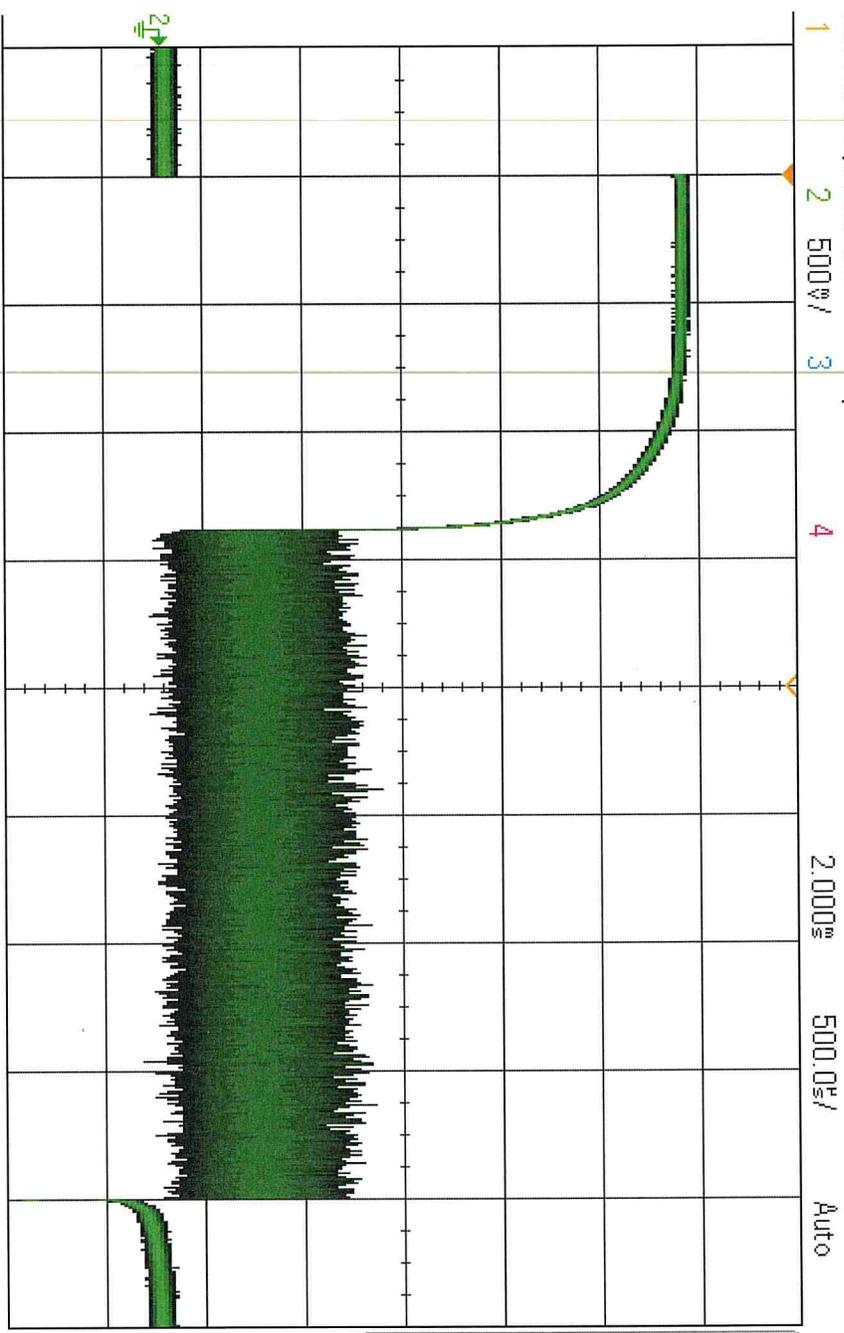
Recall

Default/Erase

Press to Save

DL45755
CW Immune

DSO-X 3034A, MY62394003, Mon Apr 29 14:03:13 2024



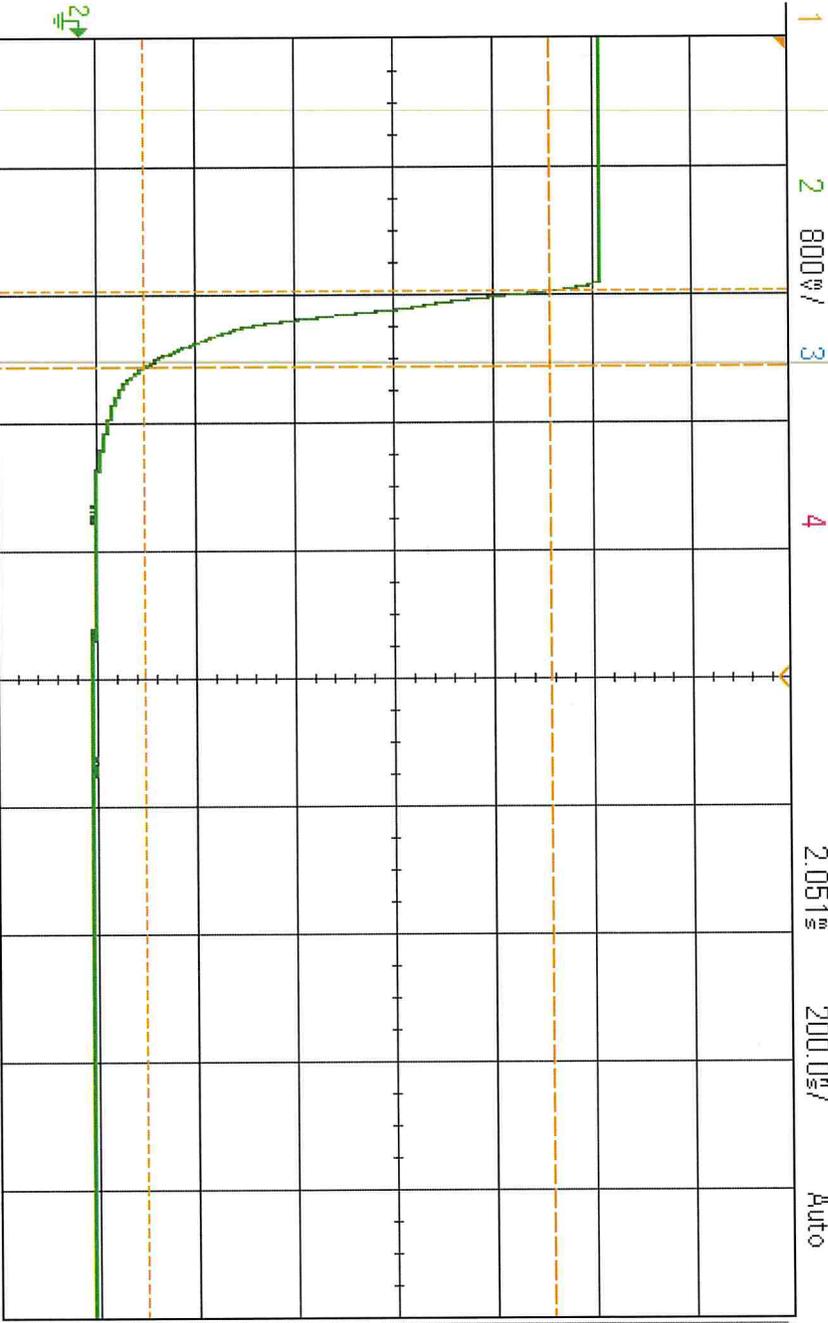
KEYSIGHT TECHNOLOGIES	
Acquisition	Normal
Channels	400MSa/s
DC	1.00:1

Cursors Menu
Mode
Off

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

PL45755
Recovery/Fall

DSO-X 3034A, MW52394003, Mon Apr 29 14:06:06 2024



2.051 ns 200.0 mV/div Auto

f 4 3.00V

KEYSIGHT TECHNOLOGIES

Acquisition
Averaging: B4
4.00GSa/s

Channels

DC	1.00:1

Measurements

AC RMS - FS(2): 1.6400V

Rise(2): No edges

Fall(2): 118.8ns

Measurement Menu

Source 2

Type: Fall

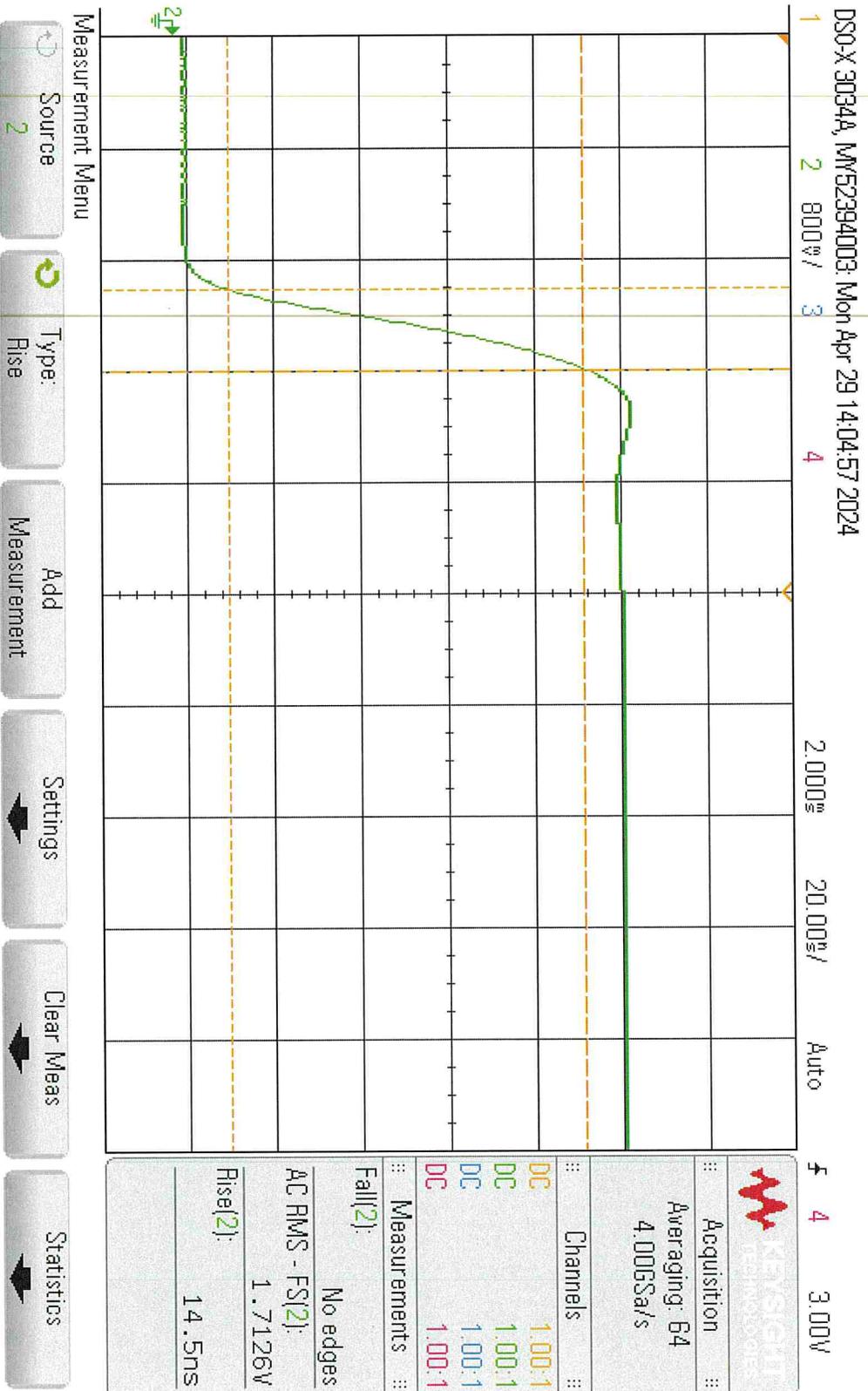
Add Measurement

Settings

Clear Meas

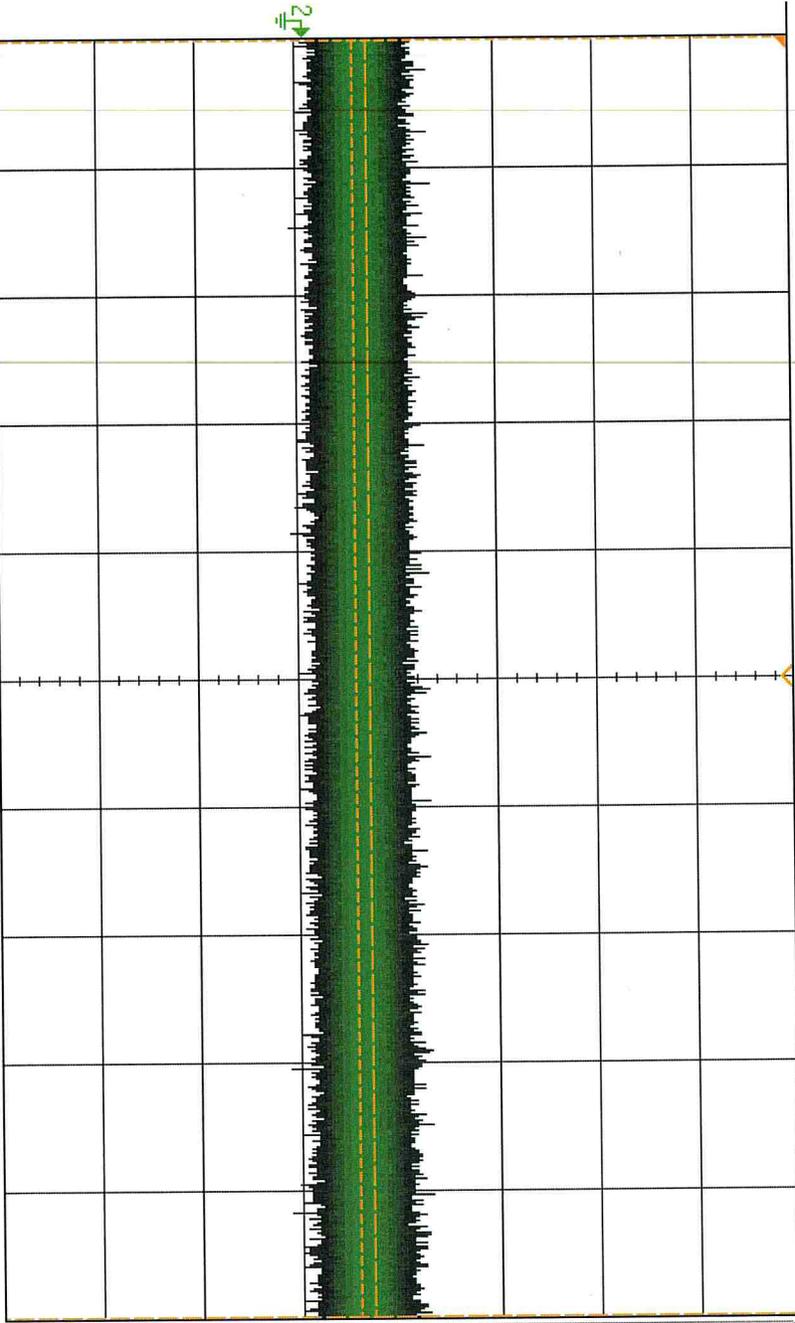
Statistics

PL45755
Settle / Risetime



PL45755
RMS noise

DSO-X 3034A, MW52394003, Mon Apr 29 14:01:46 2024
1 2 100% / 3 4 2.000µs 200.0µV Auto F 4 3.00V



KEYSIGHT TECHNOLOGIES	
Acquisition	Normal
	1.00GSa/s
Channels	
DC	1.00:1
DC	1.00:1
DC	1.00:1
Measurements	
Fall(2):	<93ns
Rise(2):	<93ns
AC RMS - FS(2):	14.30mV

Measurement Menu

Source 2

Type: AC RMS - FS

Add Measurement

Settings

Clear Meas

Statistics