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

Customer: [redacted]
SO No: [redacted]
Model No: ERDLVA-0R5G2G-CW-75MV-93
Serial No: PL45757/2419

Tested By: Jim Hopson
Temperature: -25C, 25C, 85C
Date 5/7/2024
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 QAS
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	
5	VIDEO OUT Dynamic Range:	-40 to +20 dBm	**-40 to +20 dBm**	
6	VIDEO OUT Log Slope Fixed:	75 ± 10mV/dB	**75.9 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	**80 mv**	
9	VIDEO OUT Rise Time (10% to 90%):	25 ns MAX	**16.3 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	.8 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

13	VIDEO OUT CW Immunity:	CW Immune Power -50 to -10 dBm	**Pass**	PMI QA3
		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	**19.2 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. Lutton **Date:** 5-7-24

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

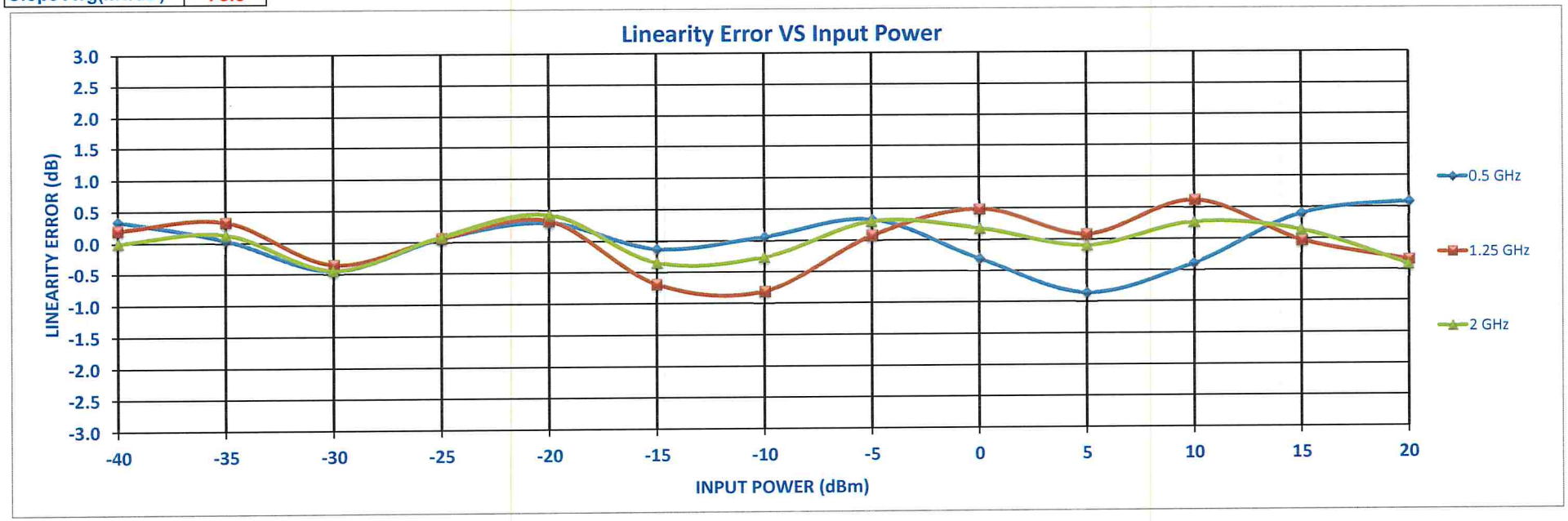
LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
TESTED BY: Jim Hopson
DATE: 05-7-24
SERIAL NO: PL45757
Test Temp: +25C

80mv

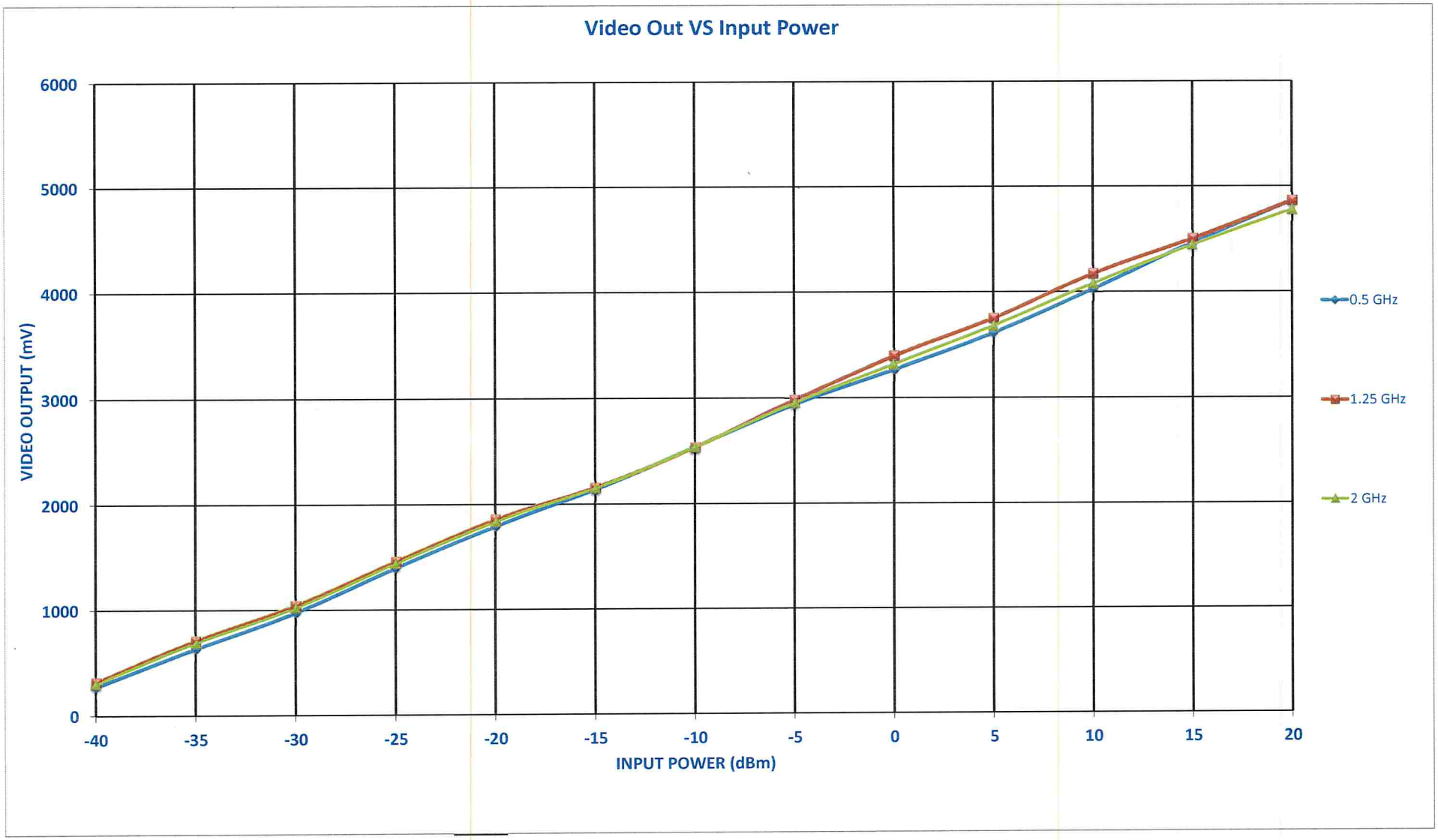
PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway, Suite 1
El Dorado Hills, CA 95762
Phone: 916-542-1401 Fax: 301-662-1731
Email: sales@pmi-rf.com | www.pmi-

Frequency			-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	RF Input Power (dBm)
0.5 GHz	INTERCEPT (mV)	3295	274	632	975	1395	1794	2143	2538	2939	3272	3610	4027	4468	4863	Measured Value (mV)
	SLOPE (mV/dB)	76.2	26	3	-35	5	23	-9	5	25	-23	-66	-30	31	45	Error (mV)
			0.34	0.04	-0.45	0.06	0.30	-0.12	0.06	0.33	-0.30	-0.86	-0.39	0.40	0.59	LINEARITY ERROR (dB)
1.25 GHz	INTERCEPT (mV)	3362	321	713	1043	1457	1859	2163	2536	2986	3400	3751	4174	4507	4865	Measured Value (mV)
	SLOPE (mV/dB)	76.4	16	26	-27	5	25	-53	-62	6	38	7	47	-2	-26	Error (mV)
			0.20	0.33	-0.35	0.07	0.33	-0.69	-0.81	0.08	0.49	0.09	0.62	-0.02	-0.34	LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	3311	305	691	1023	1439	1840	2158	2540	2958	3325	3680	4083	4449	4783	Measured Value (mV)
	SLOPE (mV/dB)	75.2	0	10	-33	7	32	-26	-20	23	14	-7	20	11	-31	Error (mV)
			0.00	0.14	-0.44	0.09	0.43	-0.34	-0.26	0.30	0.19	-0.09	0.27	0.14	-0.41	LINEARITY ERROR (dB)
	Flatness P-P		0.6	1.0	0.8	0.8	0.8	0.2	0.0	0.6	1.6	1.8	2.0	0.8	1.0	

Slope Avg(mv/dB)	75.9



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45757
Test Temp: +25C

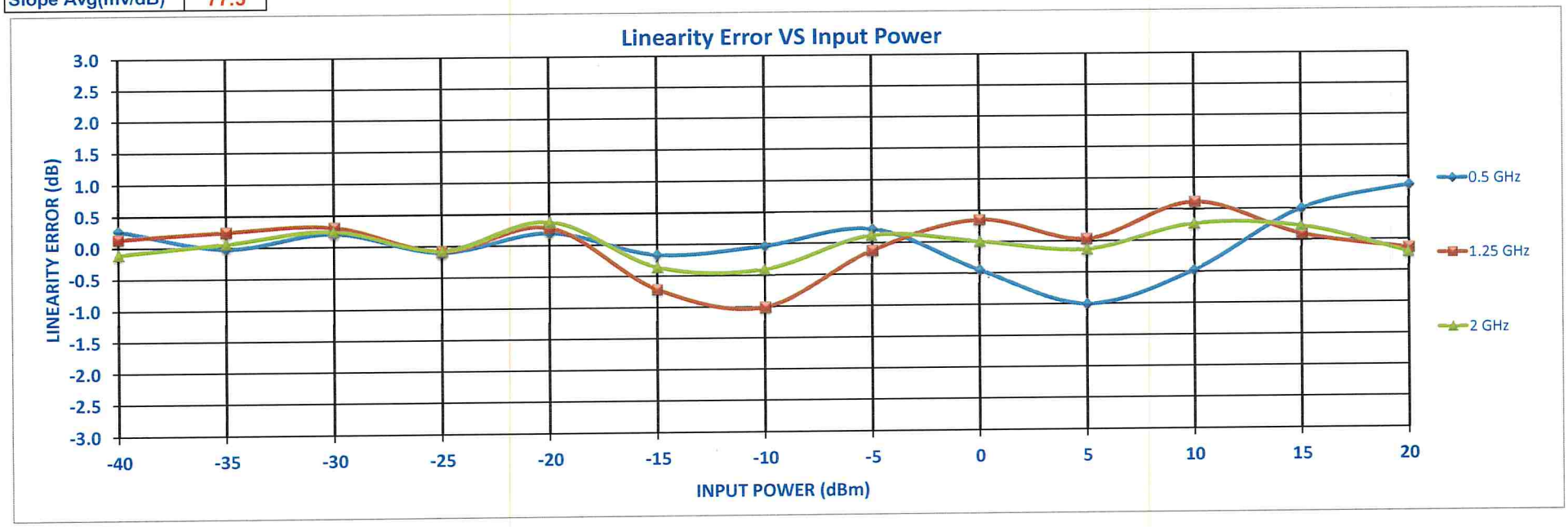


LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
TESTED BY: Jim Hopson
DATE: 05-7-24
SERIAL NO: PL45757
Test Temp: -25C

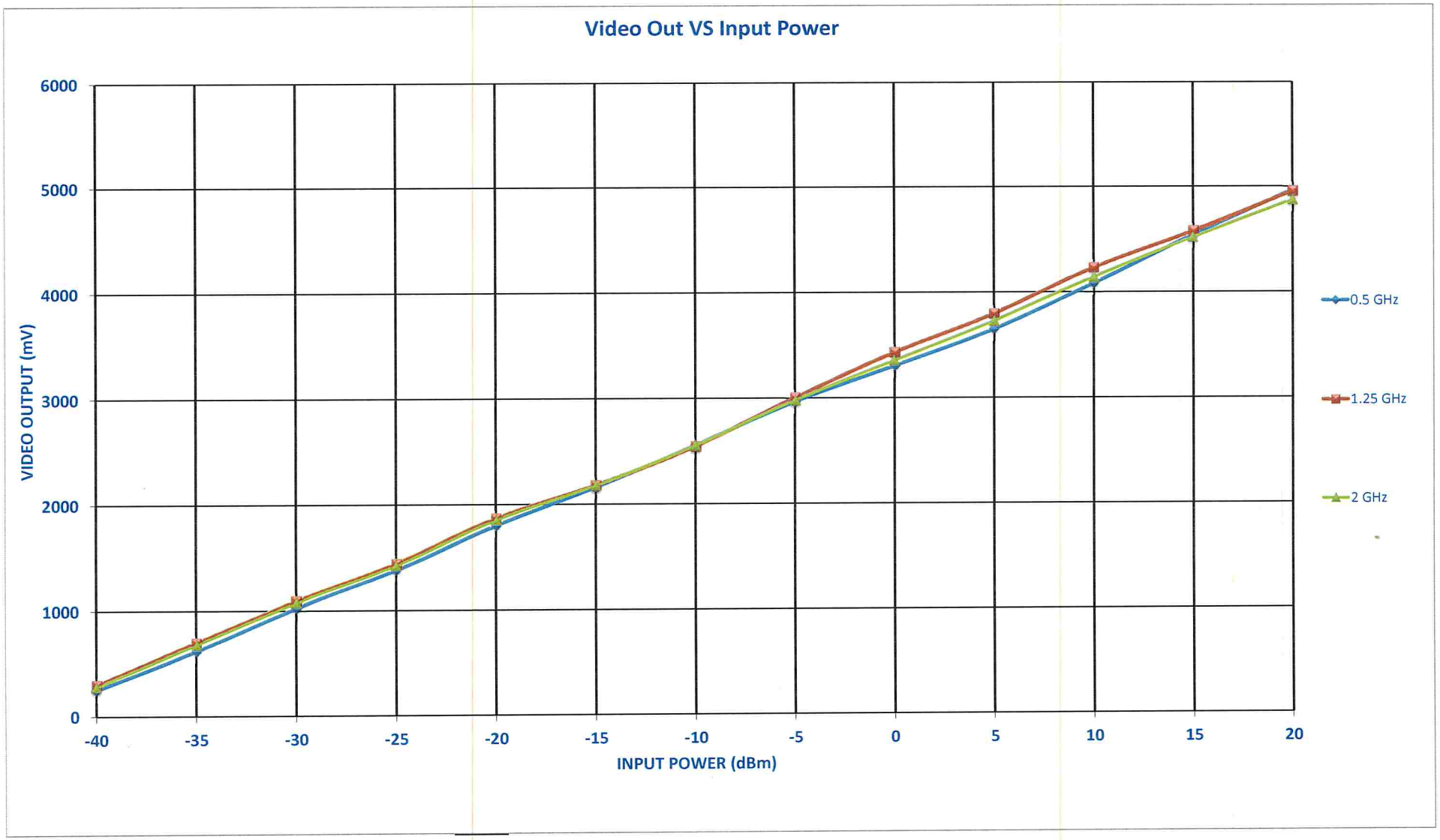
PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway, Suite 1
El Dorado Hills, CA 95762
Phone: 916-542-1401 Fax: 301-662-1731
Email: sales@pmi-rf.com | www.pmi-

Frequency			-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
															RF Input Power (dBm)
0.5 GHz	INTERCEPT (mV)	3341	250	616	1023	1388	1800	2161	2560	2969	3306	3652	4082	4547	4965
	SLOPE (mV/dB)	77.8	21	-2	16	-8	15	-13	-3	17	-35	-78	-37	39	68
			0.27	-0.03	0.20	-0.10	0.19	-0.17	-0.04	0.22	-0.45	-1.00	-0.47	0.50	0.88
															Measured Value (mV)
															Error (mV)
															LINEARITY ERROR (dB)
1.25 GHz	INTERCEPT (mV)	3407	300	698	1093	1452	1870	2182	2549	3008	3435	3800	4235	4584	4956
	SLOPE (mV/dB)	77.9	11	19	24	-7	22	-56	-79	-10	28	3	48	7	-10
			0.14	0.24	0.31	-0.08	0.28	-0.72	-1.01	-0.12	0.35	0.04	0.62	0.10	-0.13
															Measured Value (mV)
															Error (mV)
															LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	3358	282	678	1076	1435	1853	2180	2560	2984	3359	3732	4146	4526	4877
	SLOPE (mV/dB)	76.7	-8	4	19	-6	29	-28	-31	9	1	-10	21	17	-15
			-0.11	0.05	0.24	-0.08	0.37	-0.36	-0.41	0.12	0.01	-0.13	0.27	0.22	-0.20
															Measured Value (mV)
															Error (mV)
															LINEARITY ERROR (dB)
	Flatness P-P		0.6	1.0	1.0	0.8	1.0	0.2	0.2	0.6	1.6	2.0	2.0	0.8	1.2

Slope Avg(mv/dB)	77.5



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45757
Test Temp: -25C

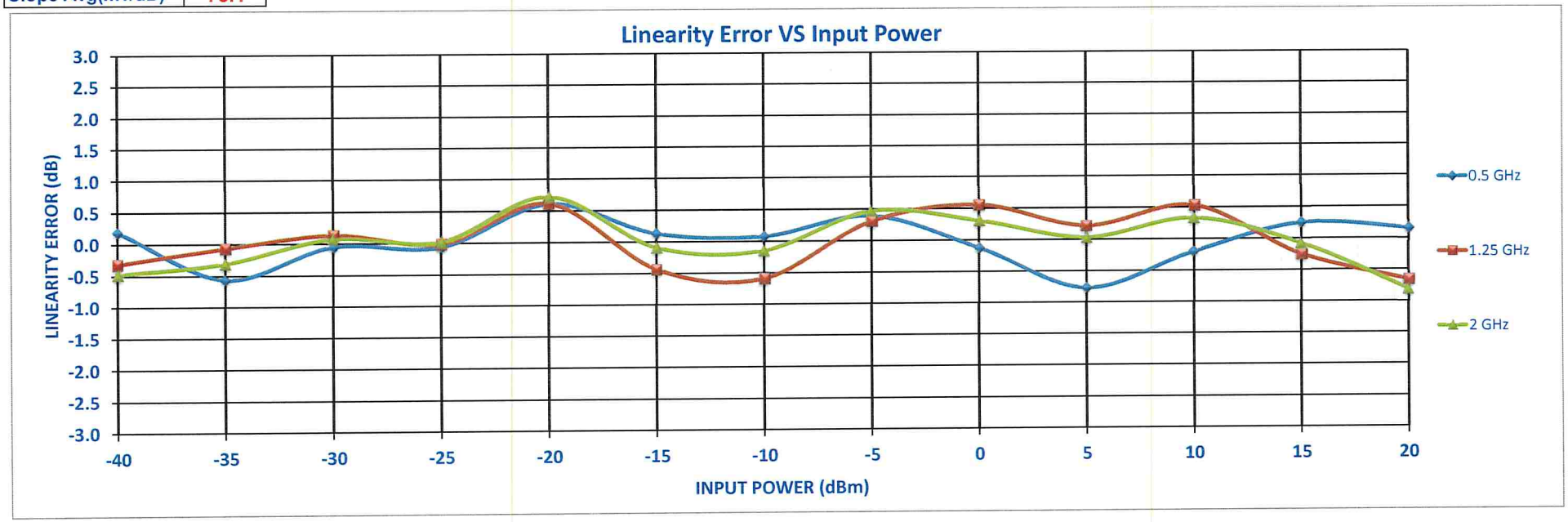


LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
TESTED BY: Jim Hopson
DATE: 05-7-24
SERIAL NO: PL45757
Test Temp: +85C

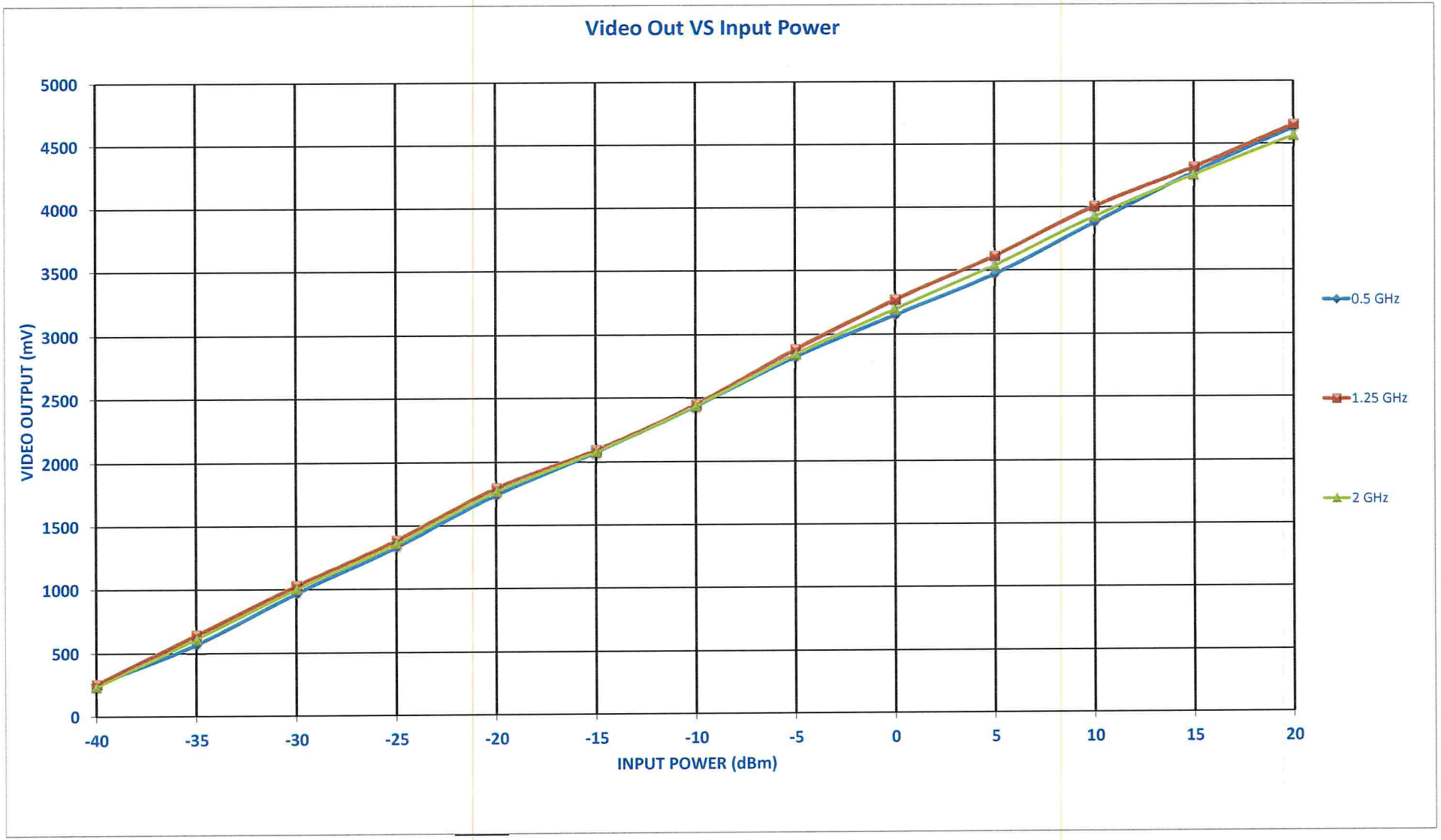
PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway, Suite 1
El Dorado Hills, CA 95762
Phone: 916-542-1401 Fax: 301-662-1731
Email: sales@pmi-rf.com | www.pmi-

Frequency			-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	RF Input Power (dBm)
0.5 GHz	INTERCEPT (mV)	3161	256	566	968	1332	1746	2076	2437	2825	3152	3470	3876	4274	4632	Measured Value (mV)
	SLOPE (mV/dB)	73.0	14	-41	-4	-5	44	9	5	29	-9	-56	-15	18	11	Error (mV)
			0.19	-0.57	-0.06	-0.07	0.61	0.13	0.07	0.39	-0.13	-0.77	-0.20	0.25	0.16	LINEARITY ERROR (dB)
1.25 GHz	INTERCEPT (mV)	3231	257	644	1028	1386	1801	2092	2450	2885	3272	3616	4008	4319	4658	Measured Value (mV)
	SLOPE (mV/dB)	73.8	-24	-5	10	-1	45	-33	-44	23	41	16	39	-19	-48	Error (mV)
			-0.32	-0.07	0.13	-0.01	0.61	-0.44	-0.59	0.31	0.55	0.22	0.53	-0.25	-0.66	LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	3175	236	611	1002	1361	1775	2079	2438	2846	3197	3540	3925	4258	4568	Measured Value (mV)
	SLOPE (mV/dB)	72.6	-35	-23	5	1	52	-7	-11	34	22	2	24	-6	-59	Error (mV)
			-0.48	-0.32	0.07	0.02	0.72	-0.10	-0.15	0.47	0.30	0.03	0.33	-0.08	-0.81	LINEARITY ERROR (dB)
	Flatness P-P		0.2	1.0	0.8	0.8	0.8	0.2	0.2	0.8	1.6	2.0	1.8	0.8	1.2	

Slope Avg(mv/dB)	73.1



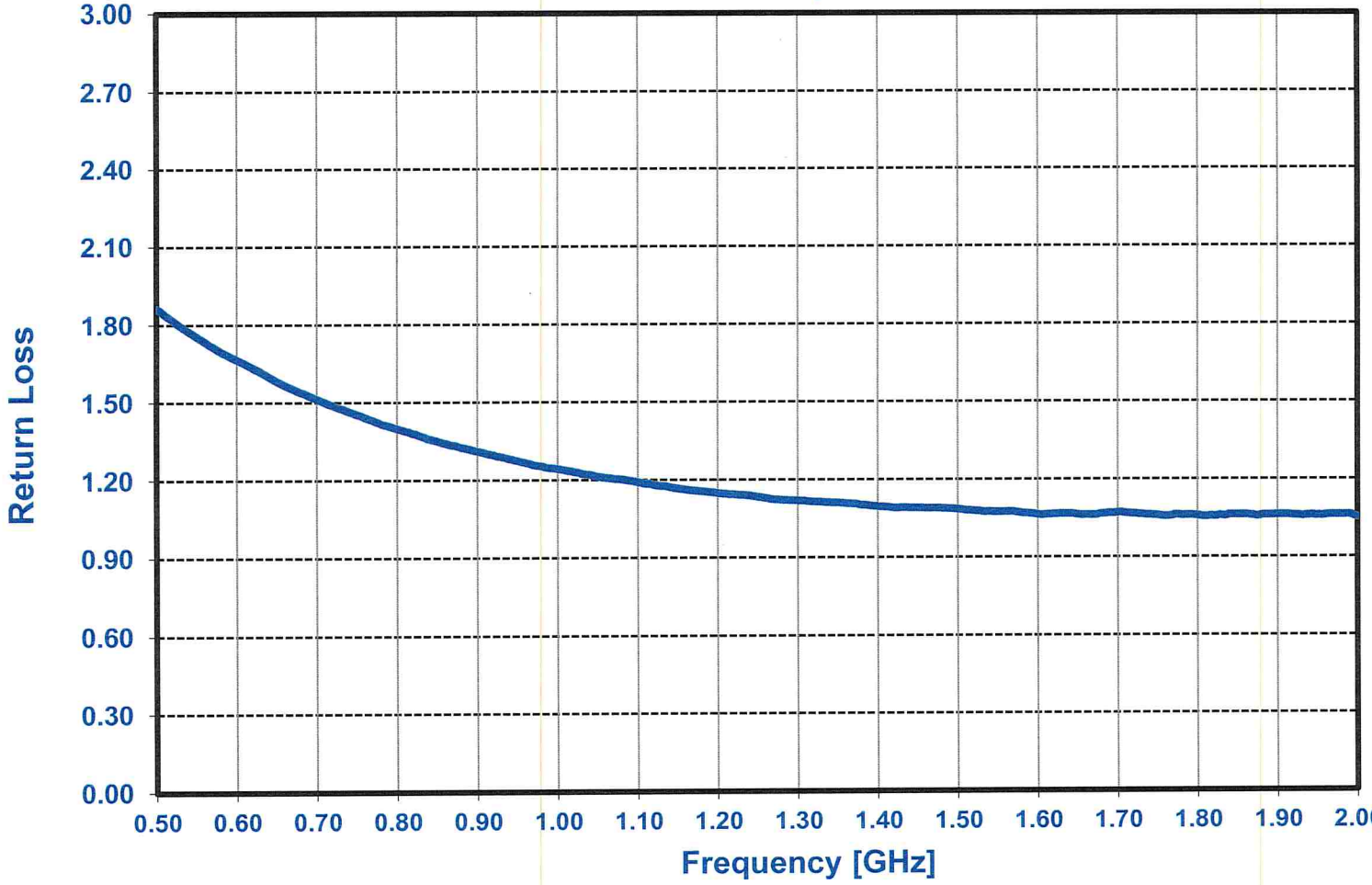
LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45757
Test Temp: +85C



Model Number: ERDLVA-0R5G2G-CW-75MV-93
Serial Number: PL45757

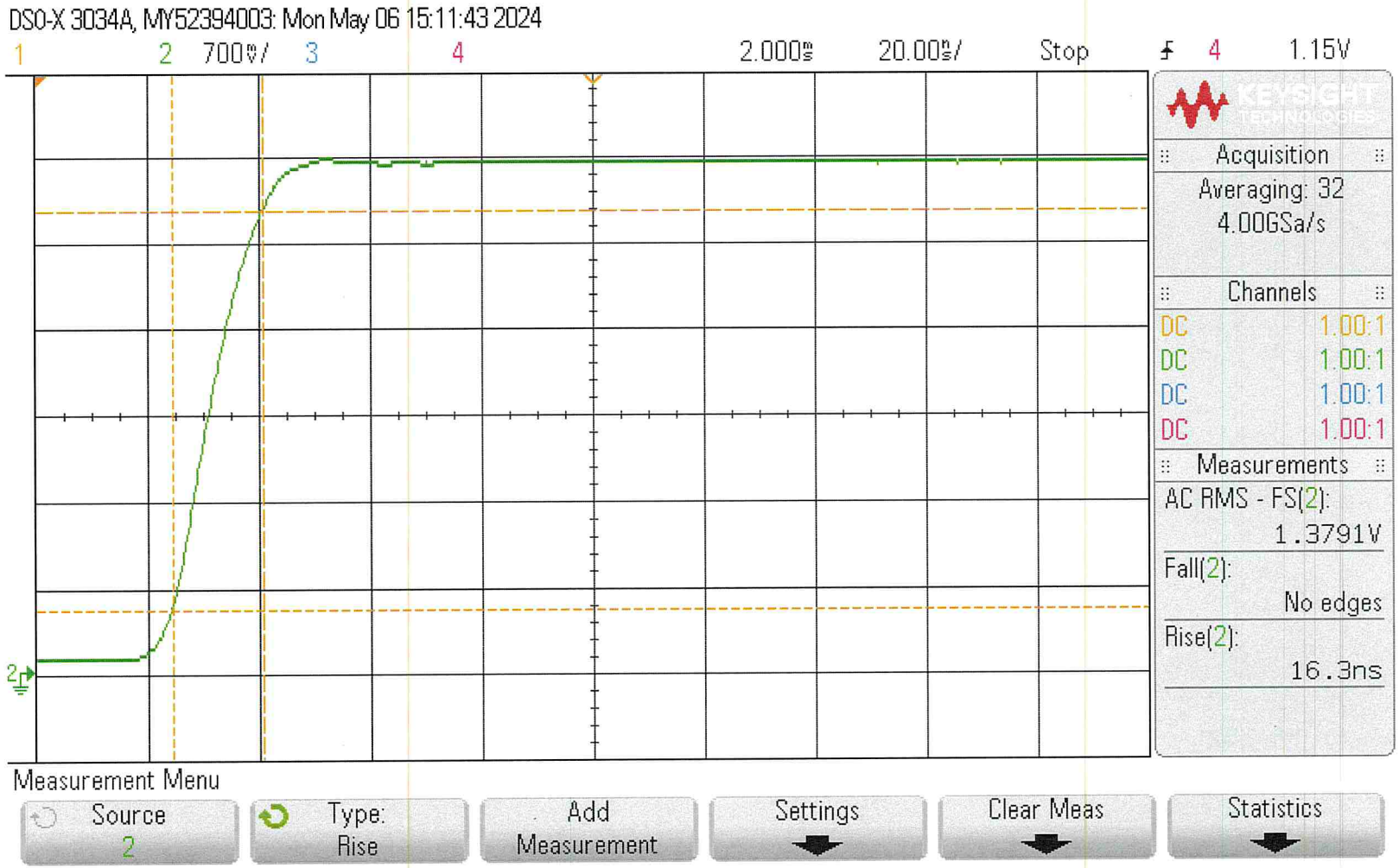
Temperature: +25C

VSWR Graph

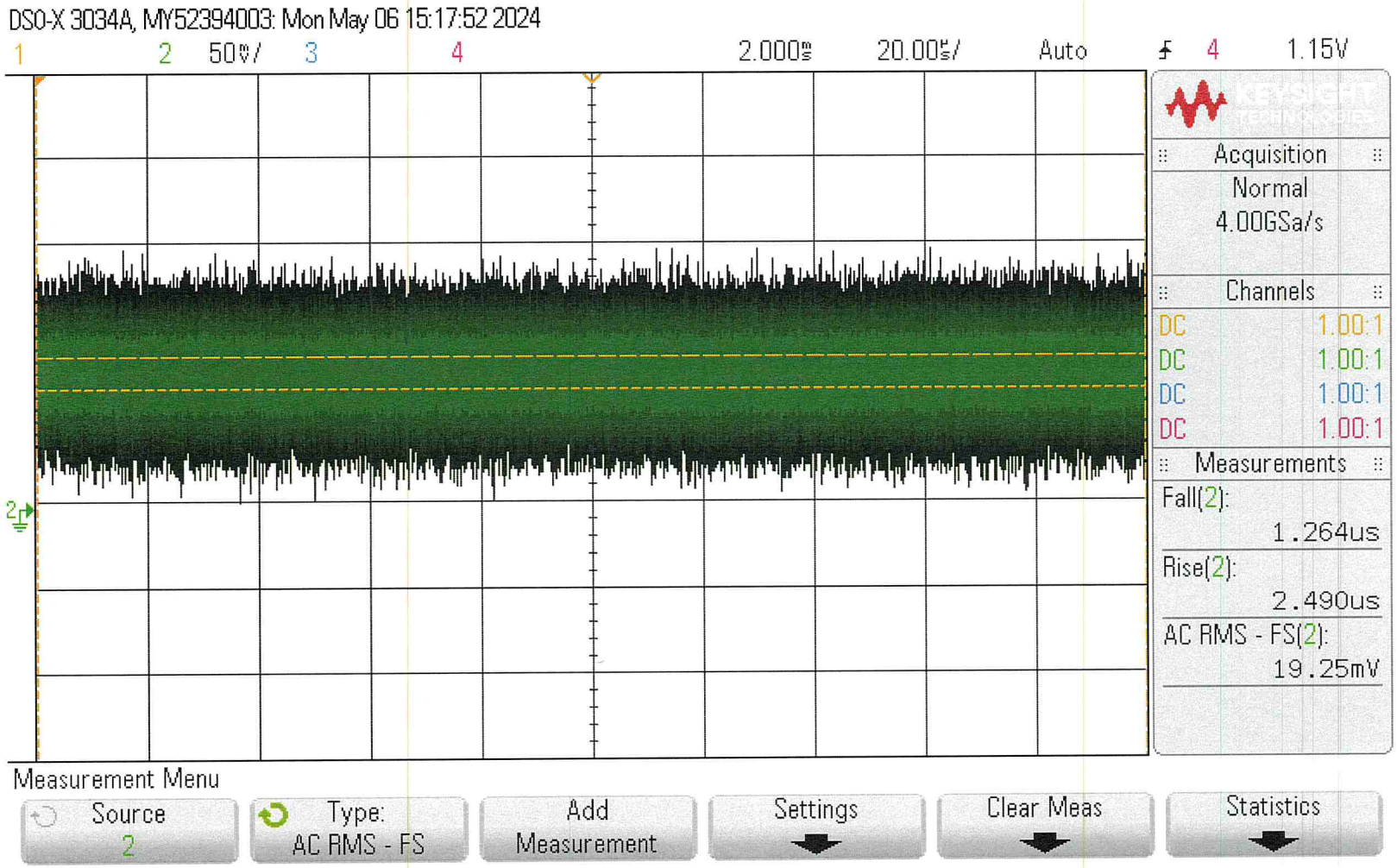


Input VSWR 1.87:1 Max

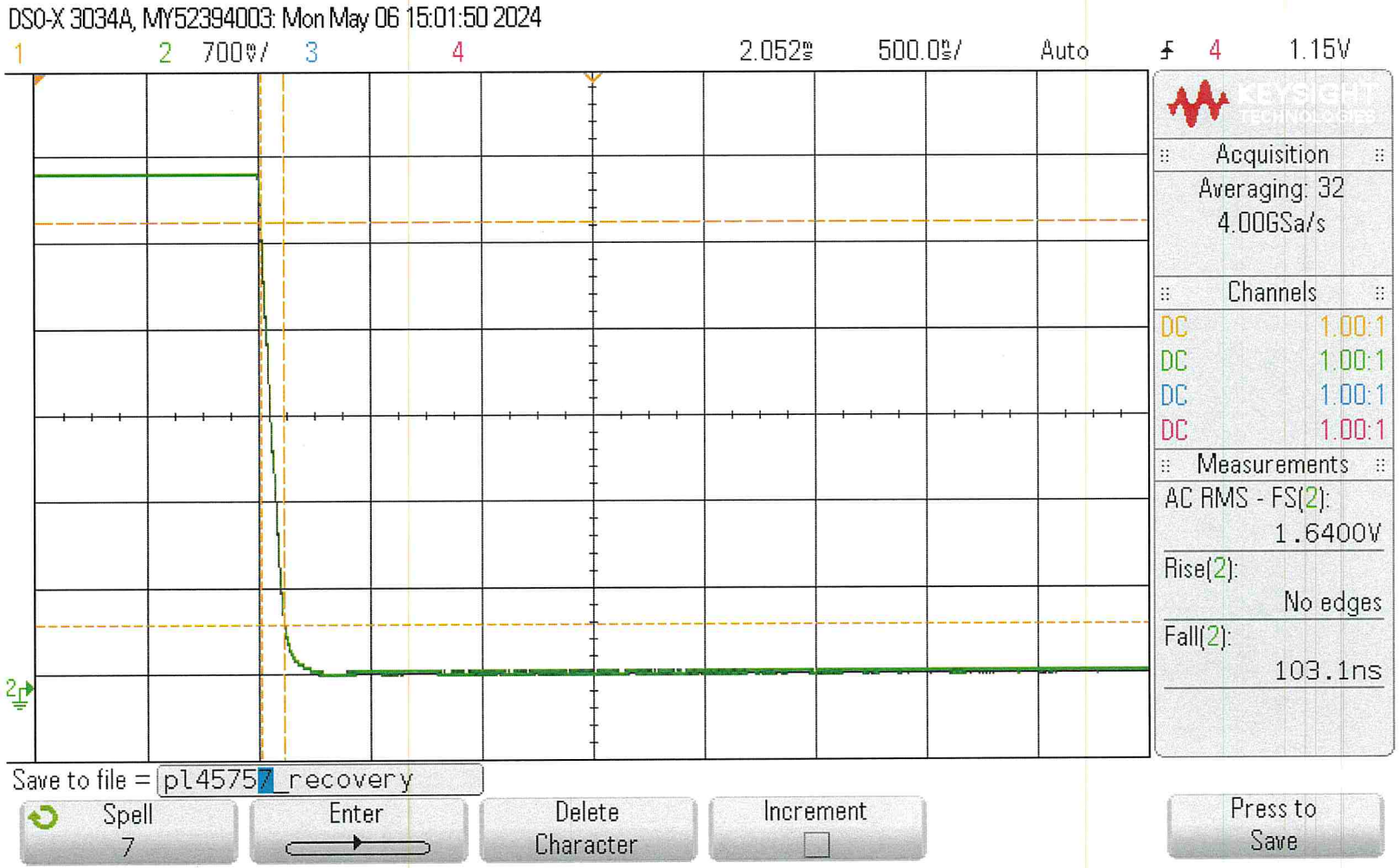
PL45757
settle / RiseTime



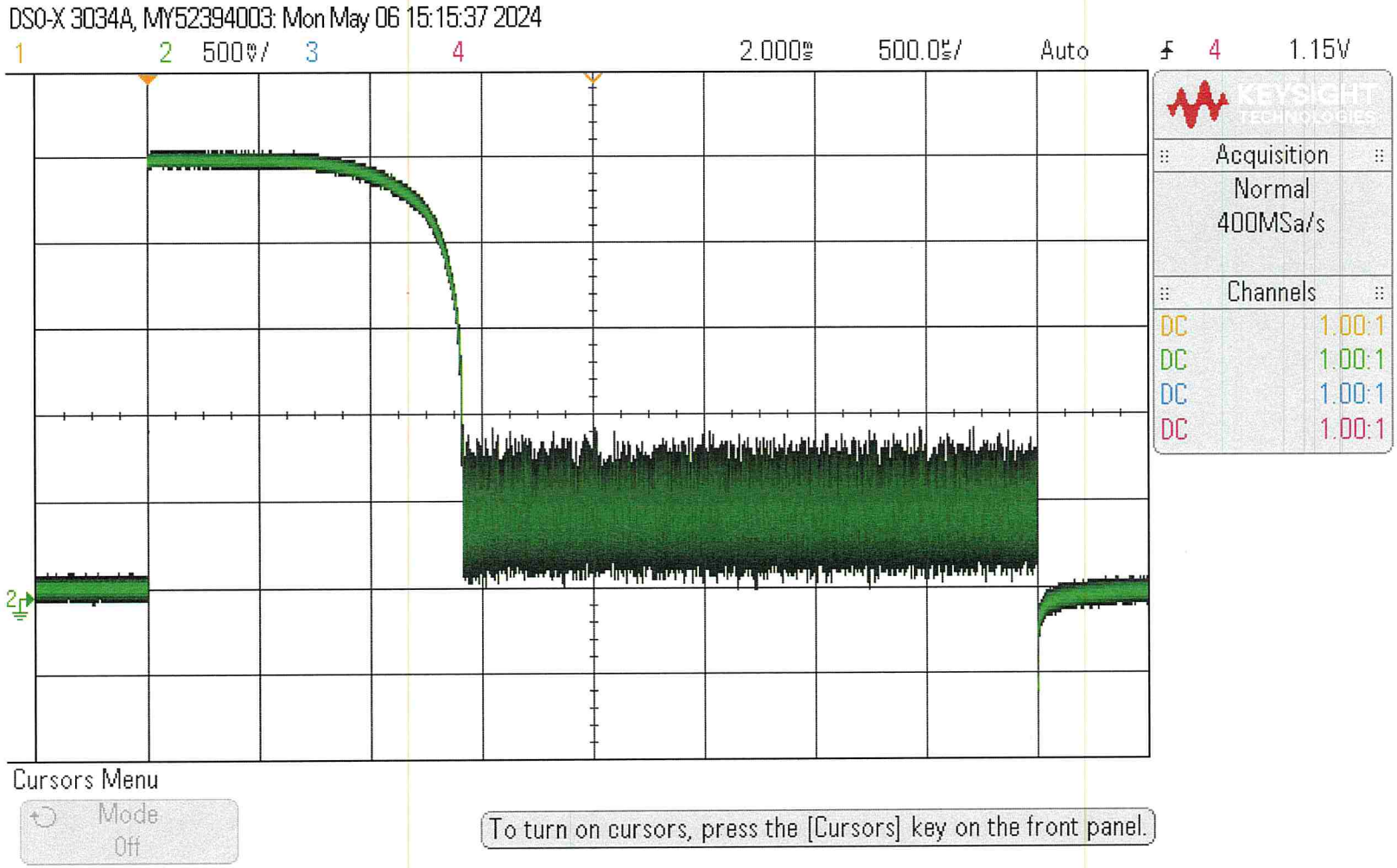
PL45757
Rms noise



PL45757
Recovery/Fall



PL45757
CW Immune



PL45757

TSS -45 dbm