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

Customer: [redacted] **Tested By:** Jim Hopson

SO No: [redacted] **Temperature:** -25C, 25C, 85C

Model No: ERDLVA-0R5G2G-CW-75MV-93 **Date** 4/30/2024

Serial No: PL45754/2418 **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 QA?
2	VSWR:	2.5:1 MAX @ -20 dBm	**1.97:1**	
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	**75.8 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	**60 mv**	
9	VIDEO OUT Rise Time (10% to 90%):	25 ns MAX	**15.5 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	1.4 db	

7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
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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	**16.3 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 @ 170 ma** **-12 V @ 70 ma**	

QA/QC Approval: K. Hutton **Date:** 4-30-24

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LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
TESTED BY: Jim Hopson
DATE: 04-28-24
SERIAL NO: PL45754
Test Temp: +25C

60 mv

PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway, Suite 1
El Dorado Hills, CA 95762
Phone: 916-542-1401 Fax: 301-662-1731
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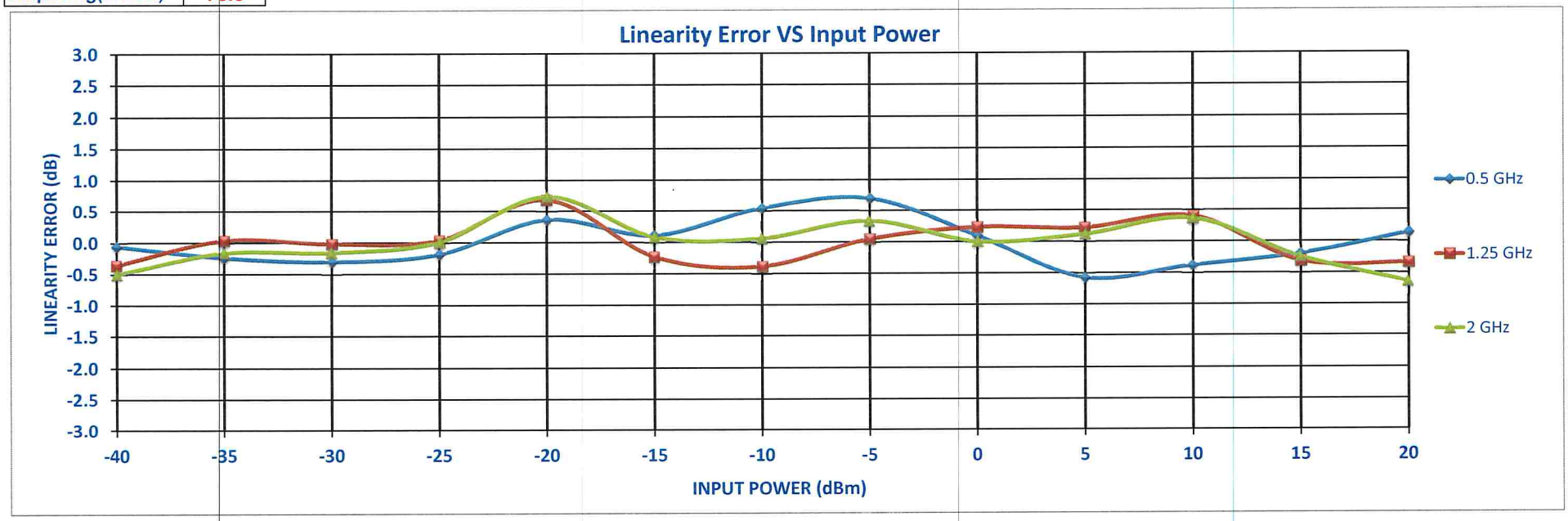
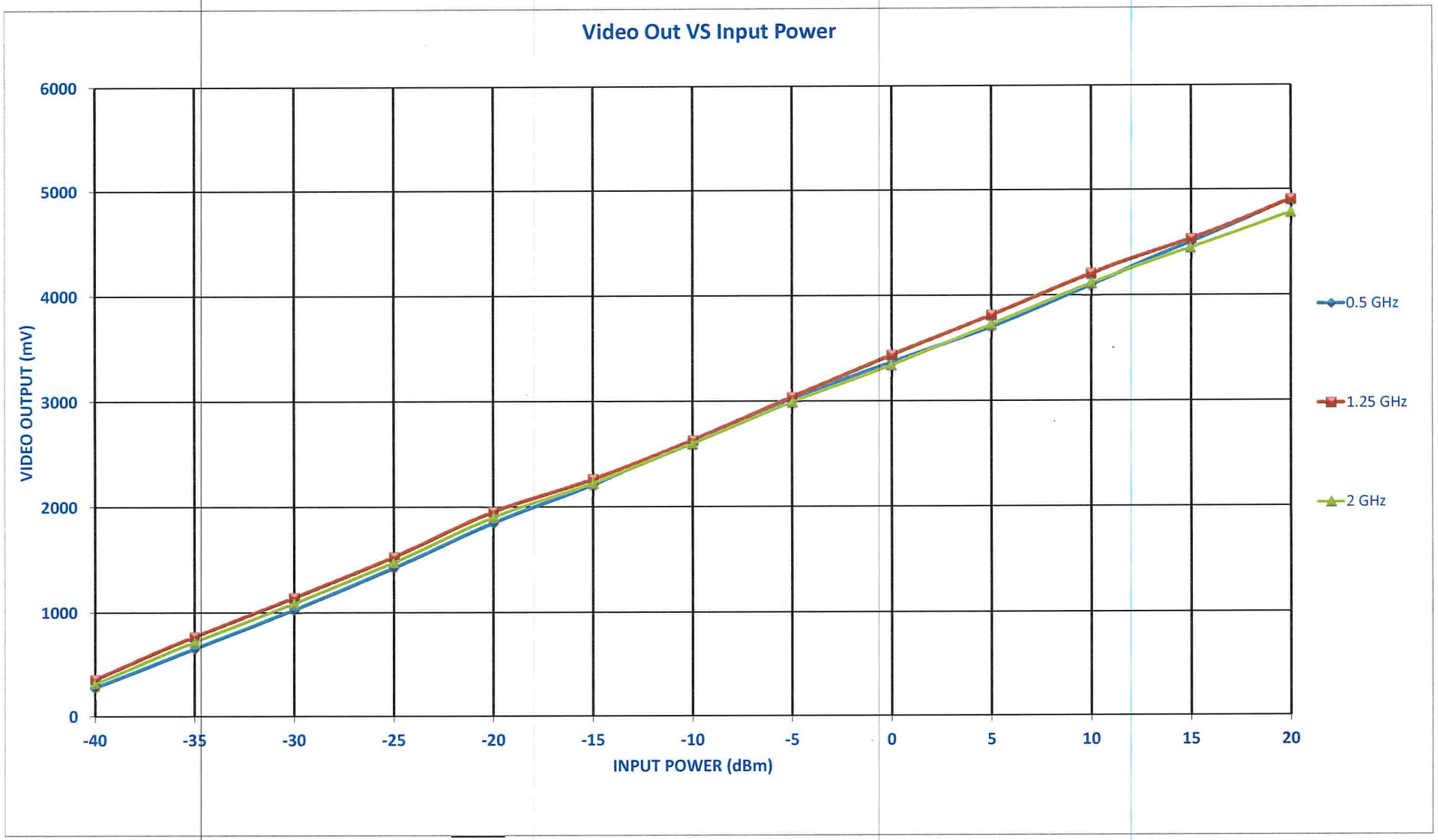
Frequency			-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	RF Input Power (dBm)
0.5 GHz	INTERCEPT (mV)	3360	276	647	1027	1421	1848	2214	2632	3029	3368	3701	4101	4500	4911	Measured Value (mV)
	SLOPE (mV/dB)	77.0	-5	-18	-23	-14	28	9	42	54	8	-44	-29	-15	11	Error (mV)
			-0.06	-0.24	-0.30	-0.19	0.36	0.11	0.54	0.70	0.10	-0.58	-0.38	-0.20	0.14	LINEARITY ERROR (dB)
1.25 GHz	INTERCEPT (mV)	3418	358	767	1142	1525	1953	2263	2630	3042	3435	3813	4206	4531	4908	Measured Value (mV)
	SLOPE (mV/dB)	75.8	-27	3	-1	3	52	-17	-29	4	17	16	30	-24	-26	Error (mV)
			-0.36	0.04	-0.02	0.03	0.68	-0.23	-0.39	0.05	0.23	0.22	0.40	-0.31	-0.34	LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	3342	315	714	1088	1474	1902	2227	2599	2993	3342	3724	4116	4444	4788	Measured Value (mV)
	SLOPE (mV/dB)	74.7	-38	-12	-12	1	55	6	5	25	0	9	27	-18	-48	Error (mV)
			-0.50	-0.16	-0.16	0.01	0.73	0.08	0.06	0.34	0.01	0.12	0.37	-0.25	-0.64	LINEARITY ERROR (dB)
	Flatness P-P		1.0	1.6	1.6	1.4	1.4	0.6	0.4	0.6	1.2	1.4	1.4	1.2	1.6	

Slope Avg(mv/dB)	75.8



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45754
Test Temp: +25C



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
TESTED BY: Jim Hopson
DATE: 04-28-24
SERIAL NO: PL45754
Test Temp: -25C

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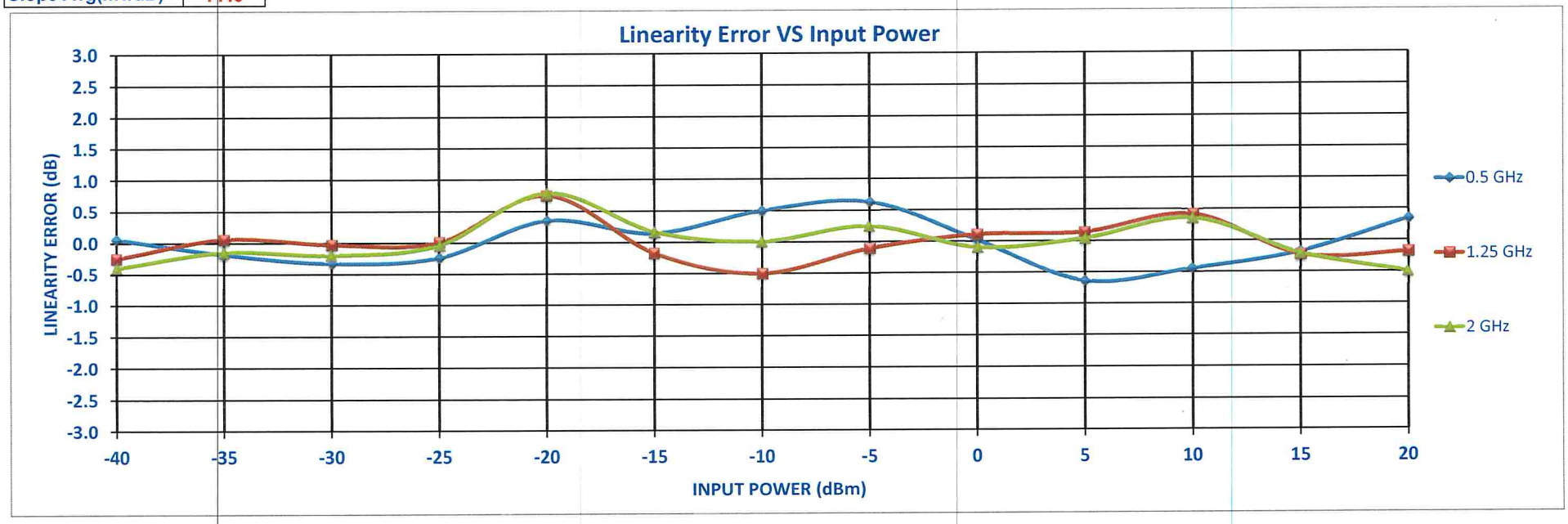
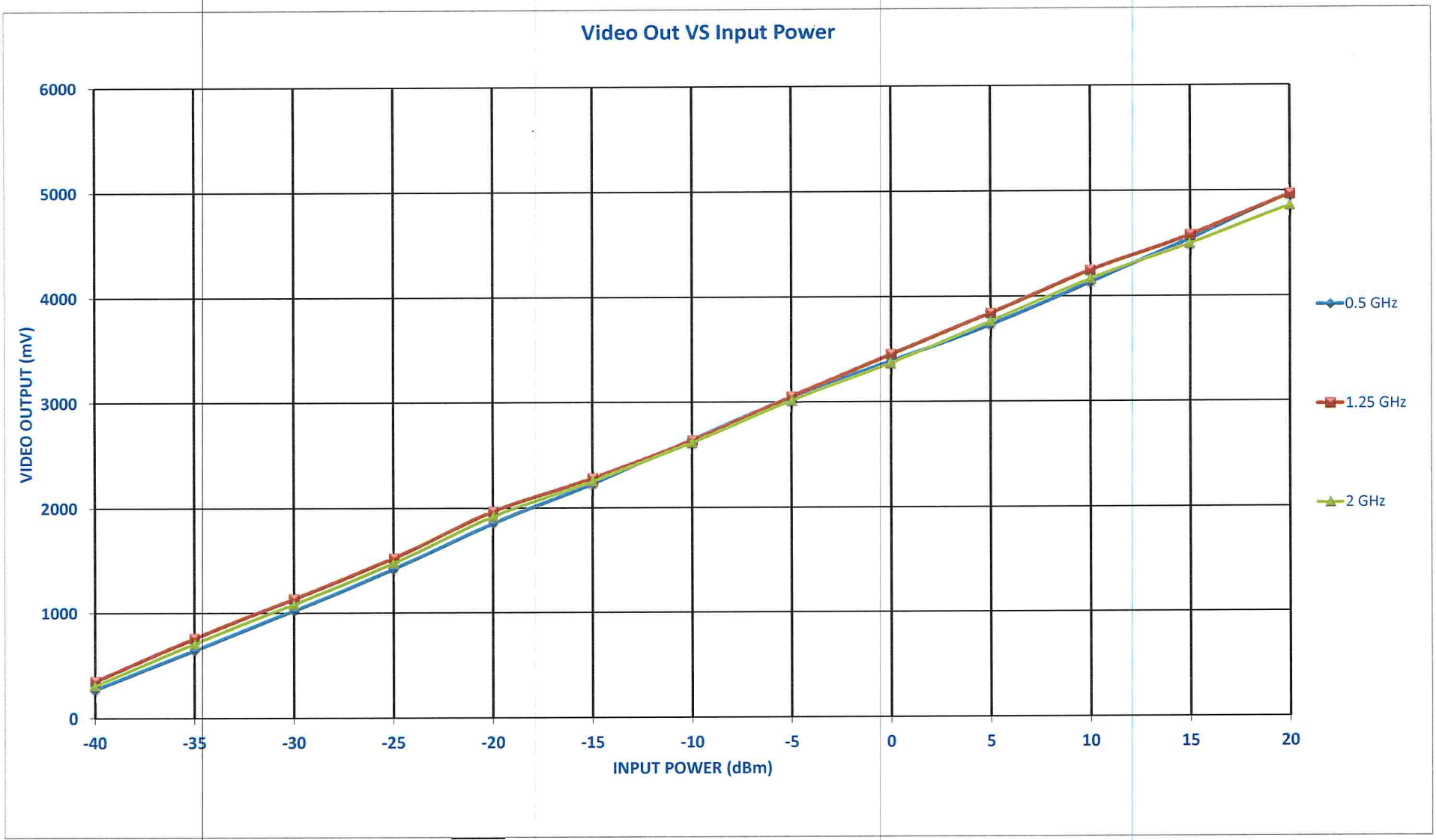
Frequency			-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	RF Input Power (dBm)
0.5 GHz	INTERCEPT (mV)	3388	271	642	1021	1418	1854	2228	2646	3047	3389	3728	4133	4544	4975	Measured Value (mV)
	SLOPE (mV/dB)	78.0	4	-15	-26	-19	27	11	39	50	1	-50	-35	-14	27	Error (mV)
			0.06	-0.19	-0.33	-0.24	0.34	0.14	0.49	0.63	0.02	-0.64	-0.45	-0.18	0.35	LINEARITY ERROR (dB)
1.25 GHz	INTERCEPT (mV)	3446	351	759	1137	1524	1966	2279	2638	3053	3454	3841	4247	4582	4970	Measured Value (mV)
	SLOPE (mV/dB)	76.9	-19	4	-2	0	58	-14	-39	-8	8	11	32	-17	-14	Error (mV)
			-0.25	0.06	-0.03	0.00	0.75	-0.18	-0.51	-0.11	0.11	0.14	0.42	-0.22	-0.18	LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	3378	309	708	1084	1476	1919	2251	2619	3017	3371	3761	4165	4502	4860	Measured Value (mV)
	SLOPE (mV/dB)	76.0	-31	-12	-15	-3	60	12	0	19	-7	3	27	-16	-37	Error (mV)
			-0.41	-0.15	-0.20	-0.04	0.79	0.16	0.01	0.24	-0.10	0.04	0.36	-0.21	-0.49	LINEARITY ERROR (dB)
	Flatness P-P		1.0	1.6	1.6	1.4	1.4	0.6	0.4	0.4	1.0	1.4	1.4	1.0	1.4	
Slope Avg(mv/dB)		77.0														



LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-0R5G2G-CW-75MV-93V
SERIAL NO: PL45754
Test Temp: -25C



LOG TRANSFER WITH FREQUENCY
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TESTED BY: Jim Hopson
DATE: 04-28-24
SERIAL NO: PL45754
Test Temp: +85C

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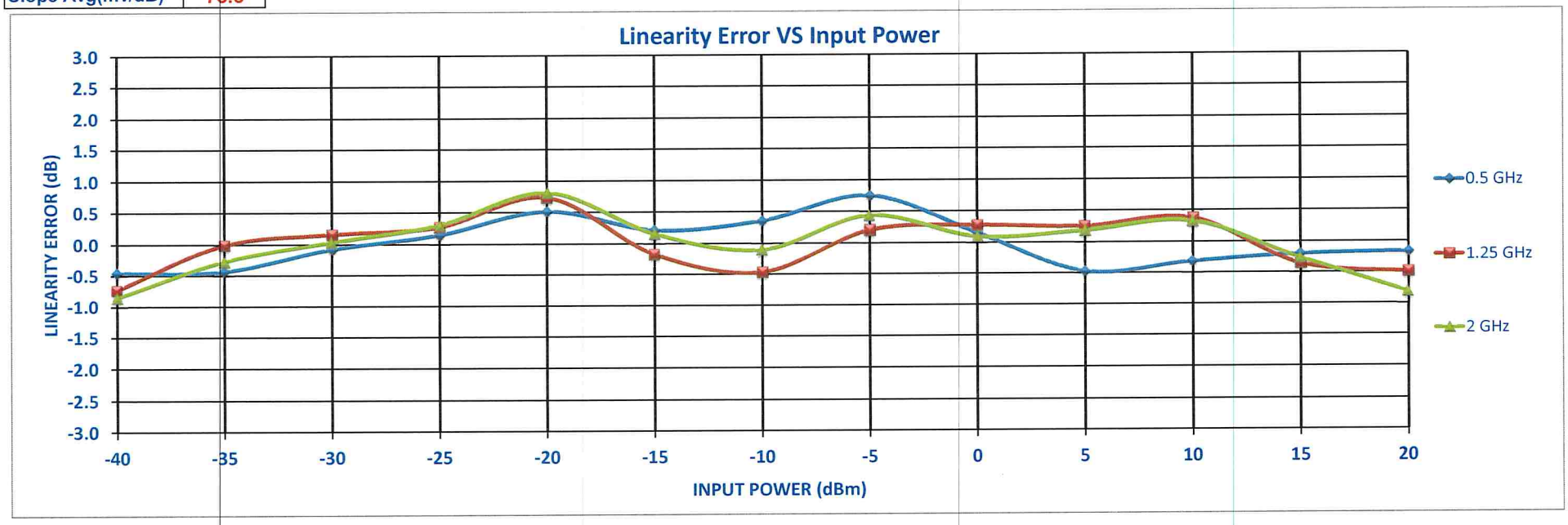
Frequency			-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
															RF Input Power (dBm)
0.5 GHz	INTERCEPT (mV)	3234	228	601	999	1387	1786	2135	2517	2918	3245	3570	3953	4333	4707
	SLOPE (mV/dB)	74.3	-34	-33	-6	11	38	16	26	56	11	-35	-23	-15	-12
			-0.46	-0.44	-0.08	0.14	0.51	0.21	0.35	0.75	0.15	-0.47	-0.32	-0.20	-0.17
															Measured Value (mV)
															Error (mV)
															LINEARITY ERROR (dB)
1.25 GHz	INTERCEPT (mV)	3296	300	721	1101	1477	1879	2180	2526	2943	3316	3682	4059	4373	4731
	SLOPE (mV/dB)	73.5	-54	-1	11	20	54	-13	-35	15	20	18	27	-26	-36
			-0.74	-0.01	0.15	0.27	0.73	-0.17	-0.47	0.20	0.27	0.25	0.37	-0.36	-0.49
															Measured Value (mV)
															Error (mV)
															LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	3220	256	661	1046	1428	1828	2143	2487	2889	3227	3596	3969	4289	4612
	SLOPE (mV/dB)	72.5	-62	-20	2	21	59	11	-8	32	7	13	23	-19	-59
			-0.86	-0.28	0.03	0.30	0.81	0.15	-0.11	0.44	0.09	0.18	0.32	-0.27	-0.81
															Measured Value (mV)
															Error (mV)
															LINEARITY ERROR (dB)
	Flatness P-P		1.0	1.6	1.4	1.2	1.2	0.6	0.6	0.8	1.2	1.6	1.4	1.2	1.6

Slope Avg(mv/dB)	73.5



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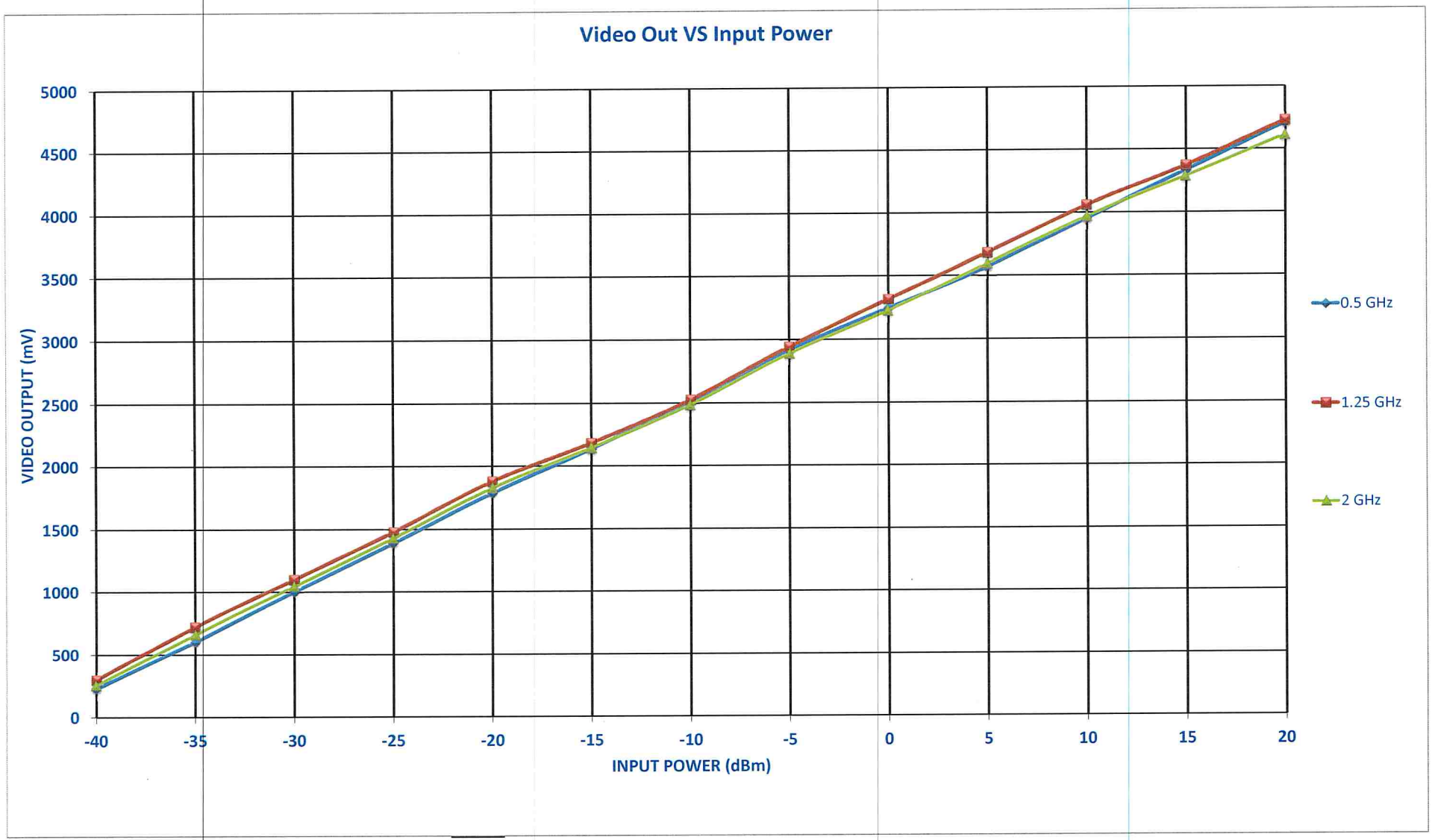
SERIAL NO: PL45754
Test Temp: +85C



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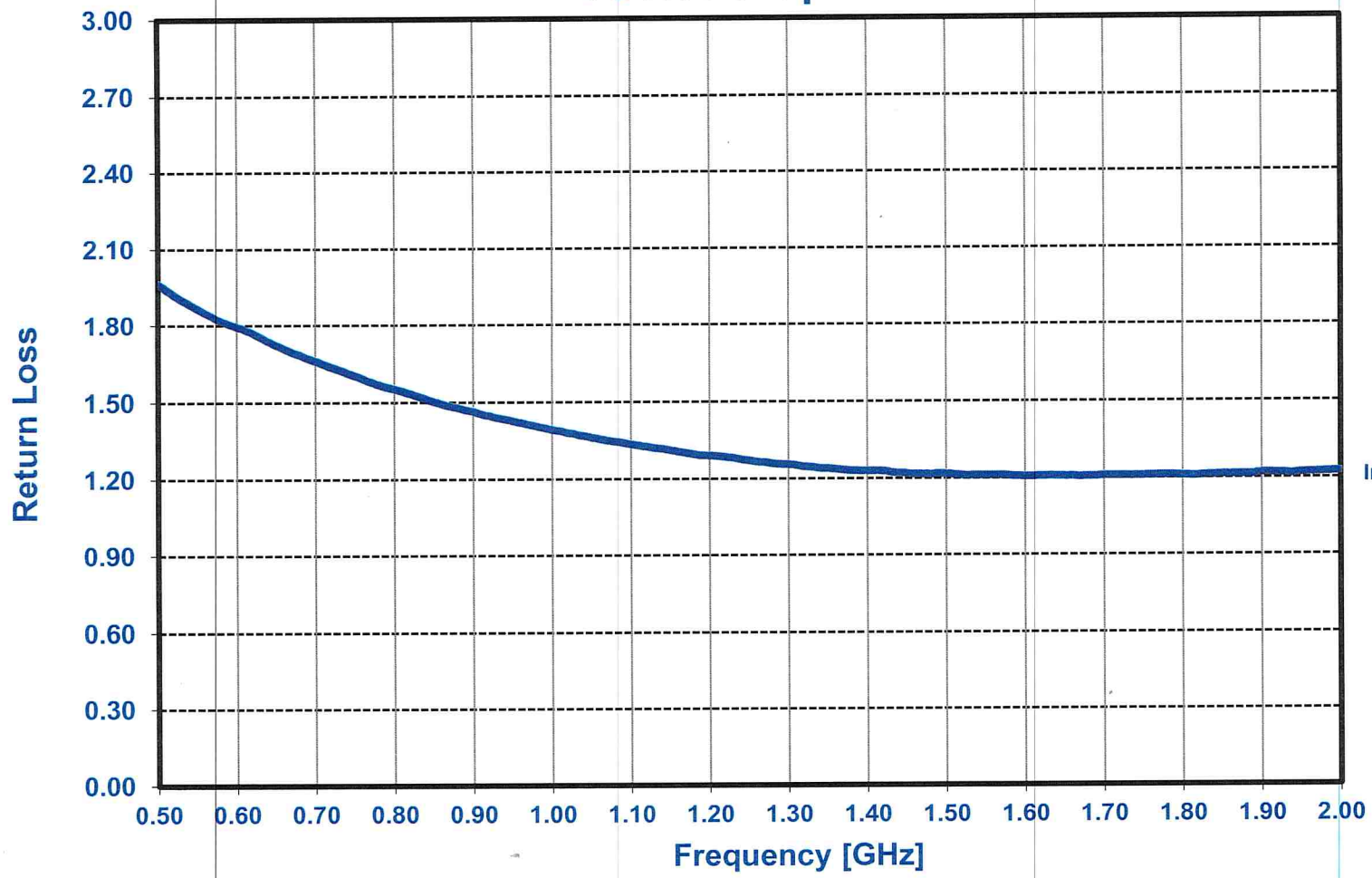
Serial Number: PL45754

Temperature: +25C

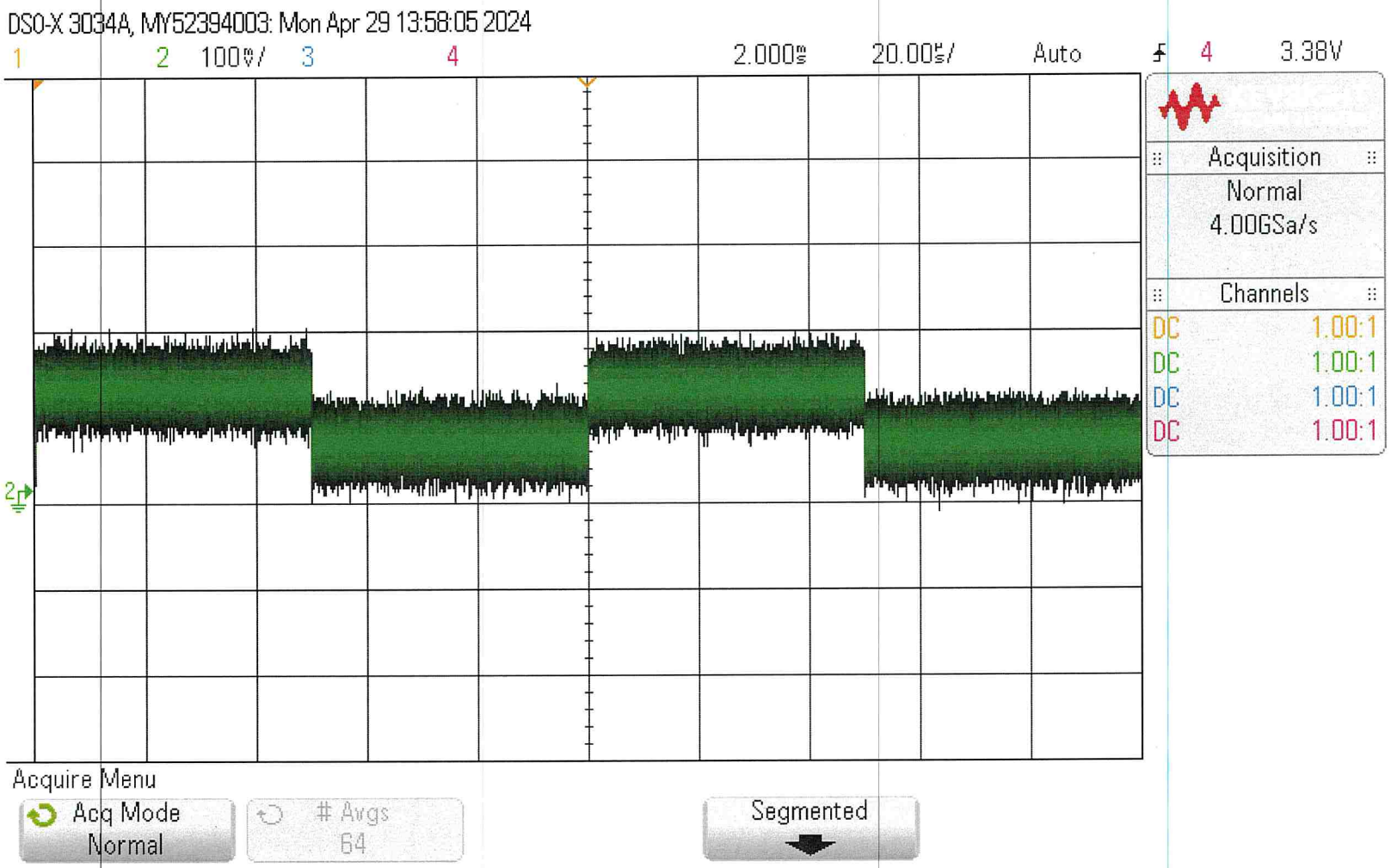
VSWR Graph



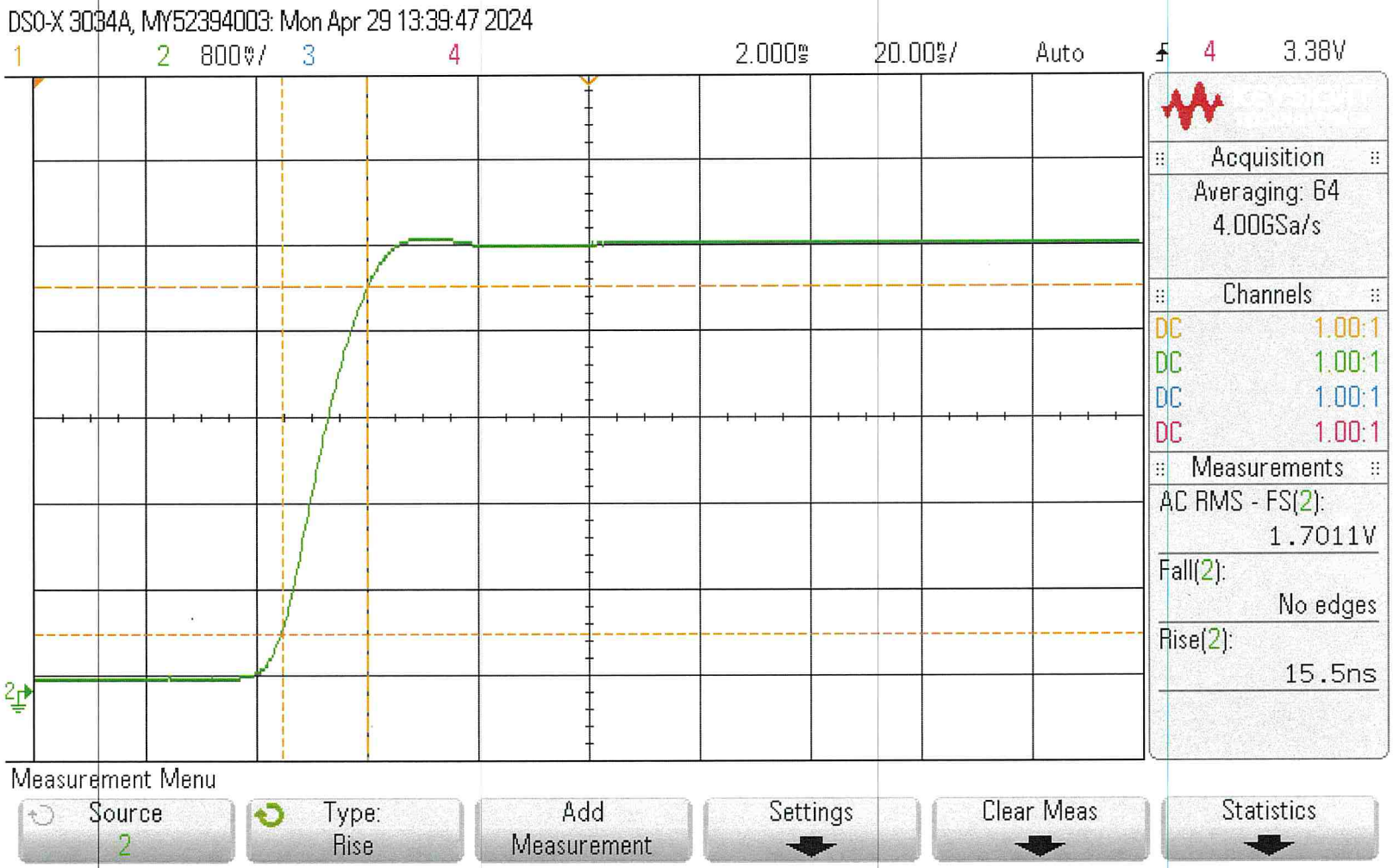
Input VSWR 1.97:1 Max

PL45754

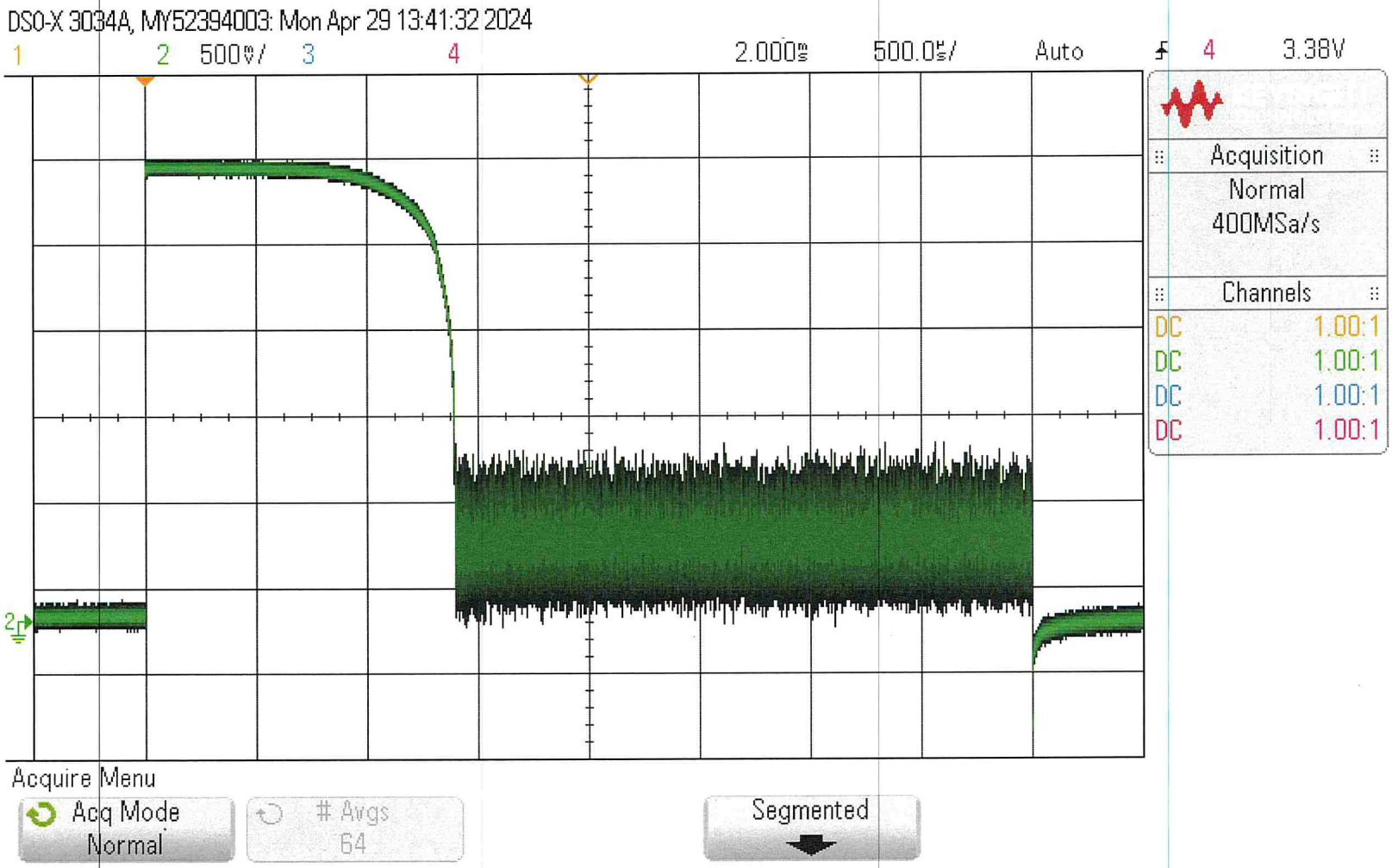
TSS - 45dbm



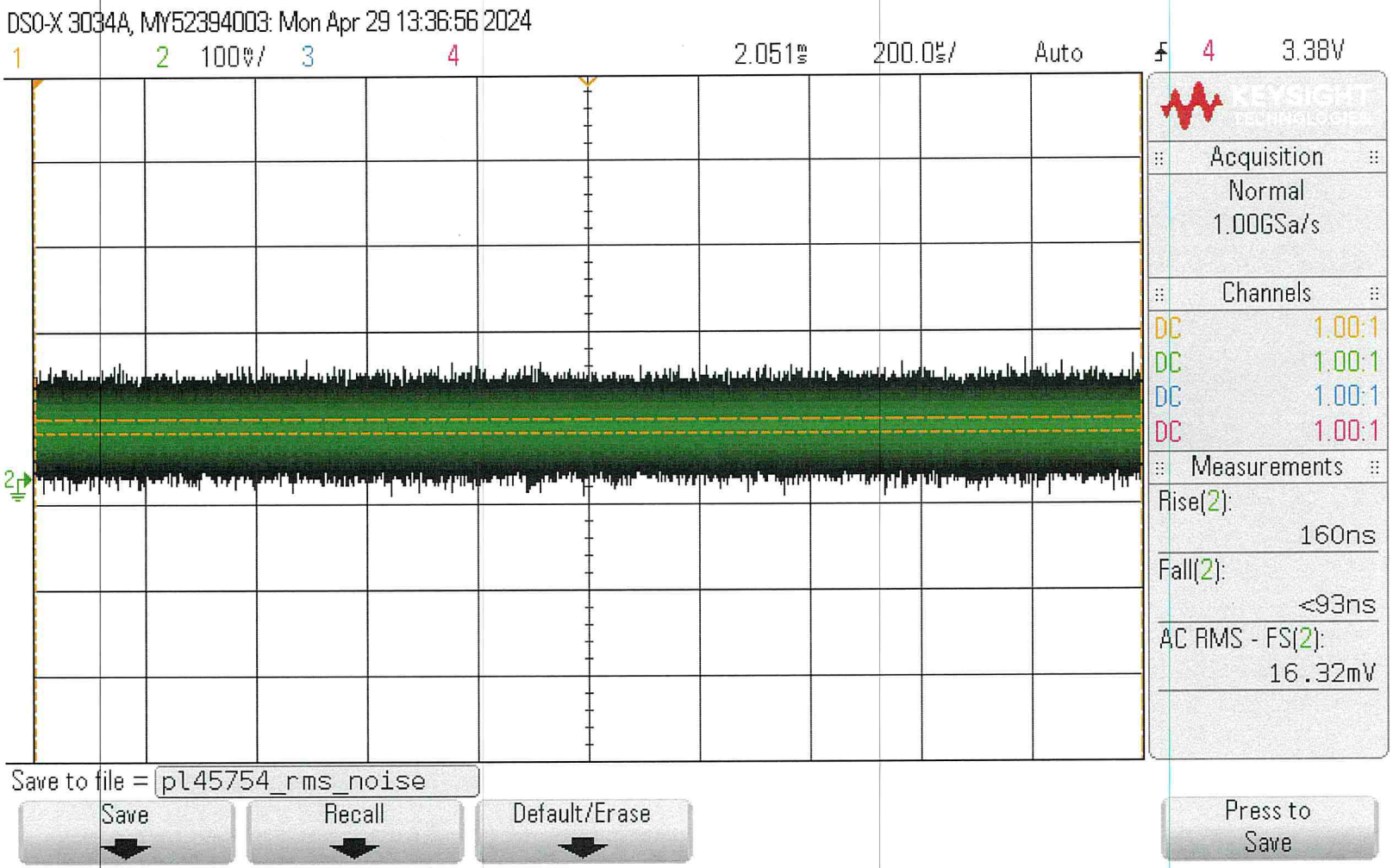
PL45754
Settle / Rise Time



PL45754
CW Immune



PL45754.
RMS noise



PL45754
Recovery/Fall