

Summary Data
For
ERDLVA-2G18G-65-70MV-85C

Customer: _____

Tested By: Jim Hopson

SO No: _____

Temperature: -10°C TO +85°C

Model No: ERDLVA-2G18G-65-70MV-85C

Date 8/7/2024

Serial No: PL39778 /2317

Drawing No: 27642020

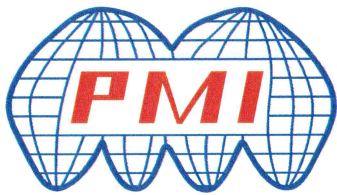
Rev: B1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz	PMI QA3
2	VSWR:	2.2:1 MAX @ 50 Ω	2.13:1 MAX	
3	Input Power:	(1) 1 W CW, Max. (2) 100 W Peak @ PW = 1 us & Duty Cycle = 1%, Max.	Pass	
4	VIDEO OUT TSS:	-71 dBm MAX	-71 dBm	
5	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
6	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	71.9/67.7 db	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	.75/- .66 db	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	1.06/-1.21 db	
9	VIDEO OUT Absolute Log Accuracy:	±2.6 dB MAX Over Freq & temp	±1.9 dB MAX Over Freq & temp	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	51 mV	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	27.3 ns	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	111.6 ns	
13	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value @-10 dBm	< 50ns	

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-2G18G-65-70MV-85C

14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	< 1us	PMI QA3
15	VIDEO OUT Video Frequency Flatness:	±2.0 dB MAX @25C	±0.99 dB MAX @25C	
16	VIDEO OUT CW Immunity:	CW Immune Power TSS to -40 dBm	Pass	
		Pulse Peak Amplitude Loss; 2 dB MAX @ -40dBm CW	< 2dB	
		Baseline shift 200mV @-40dBm CW	< 200mV	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	1.2 ms	
		CW Recovery Time at CW = -40 dBm, ≤ 20 us	< 20 us	
17	Pulse droop	1dB Max for 300us pulse at or above -65dBm	< 1dB	
18	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
19	VIDEO LOAD Impedance:	75 ±1 Ω	75Ω	
20	VIDEO driver capability	100 ft RG11 into 75 ohm load	Pass	
21	Pulse density capability	10% duty cycle 100 ns, 70% duty cycle 300 us at peak power -10 dBm with 1 dB variable for pulse amplitude and baseline	Pass	
22	VIDEO OUT Noise Level (Vp-p):	160 mV max	153 mV	



Summary Data
For
ERDLVA-2G18G-65-70MV-85C

23	VIDEO OUT Propagation Delay:	50 ns MAX from RF 50% to 10% video (excluding cable)	< 50 ns	PMI QA3
24	Power Supply	+15 V @ 500 mA MAX -15 V @ 100 mA MAX	+15 V @ 320 mA -15 V @ 80 mA	
25	Power Supply Ripple From DC to 10 MHz	100 mV MAX	Pass	

QA/QC Approval: _____

H. Luther

Date: _____

8-9-24



LOG TRANSFER VS. FREQUENCY
 Model: ERDLVA-218-65-70MV-85
 Tested By: Jim Hopson
 Date: 8-7-24
 Serial Number: PL39718
 Test Temp: +25°C

Frequency	Intercept (mV)	Slope (mV/dB)	2 GHz	3 GHz	4 GHz	5 GHz	6 GHz	7 GHz	8 GHz	9 GHz	10 GHz	11 GHz	12 GHz	13 GHz	14 GHz	15 GHz	16 GHz	17 GHz	18 GHz	Output Vos:
2 GHz	4754	67.73	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
3 GHz	4743	68.32	28	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
4 GHz	4813	68.82	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
5 GHz	4791	68.89	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
6 GHz	4792	68.56	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
7 GHz	4785	68.89	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
8 GHz	4793	69.08	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
9 GHz	4805	70.11	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
10 GHz	4808	71.05	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
11 GHz	4856	70.98	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
12 GHz	4856	71.87	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
13 GHz	4781	69.63	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
14 GHz	4791	68.62	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
15 GHz	4769	68.82	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
16 GHz	4840	69.97	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
17 GHz	4800	69.43	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV
18 GHz	4708	68.36	328	289	289	289	320	298	296	281	232	271	232	271	287	286	286	287	271	51.0 mV

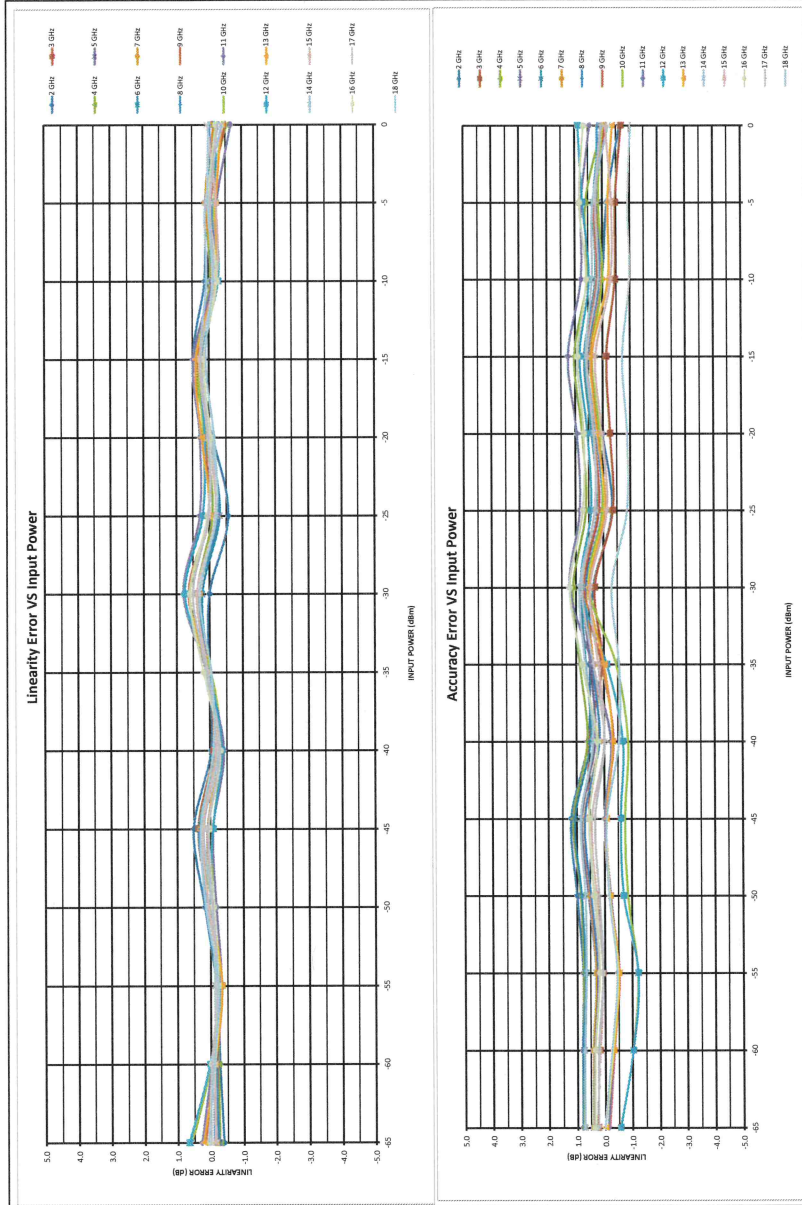
RF Input Power (dBm)

Measured Value (mV)	Linearity Error (dB)	Accuracy Error (dB)	2 GHz	3 GHz	4 GHz	5 GHz	6 GHz	7 GHz	8 GHz	9 GHz	10 GHz	11 GHz	12 GHz	13 GHz	14 GHz	15 GHz	16 GHz	17 GHz	18 GHz
0.56	1.21	0.56	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.60	1.21	0.60	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.64	1.21	0.64	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.68	1.21	0.68	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.72	1.21	0.72	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.76	1.21	0.76	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.80	1.21	0.80	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.84	1.21	0.84	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.88	1.21	0.88	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.92	1.21	0.92	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
0.96	1.21	0.96	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.00	1.21	1.00	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.04	1.21	1.04	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.08	1.21	1.08	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.12	1.21	1.12	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.16	1.21	1.16	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.20	1.21	1.20	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.24	1.21	1.24	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.28	1.21	1.28	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.32	1.21	1.32	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.36	1.21	1.36	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.40	1.21	1.40	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.44	1.21	1.44	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.48	1.21	1.48	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.52	1.21	1.52	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.56	1.21	1.56	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.60	1.21	1.60	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.64	1.21	1.64	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.68	1.21	1.68	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.72	1.21	1.72	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.76	1.21	1.76	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.80	1.21	1.80	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.84	1.21	1.84	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.88	1.21	1.88	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.92	1.21	1.92	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
1.96	1.21	1.96	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
2.00	1.21	2.00	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11

Max Measured (mV)
 Min Measured (mV)
 Flatness Error (±/dB)

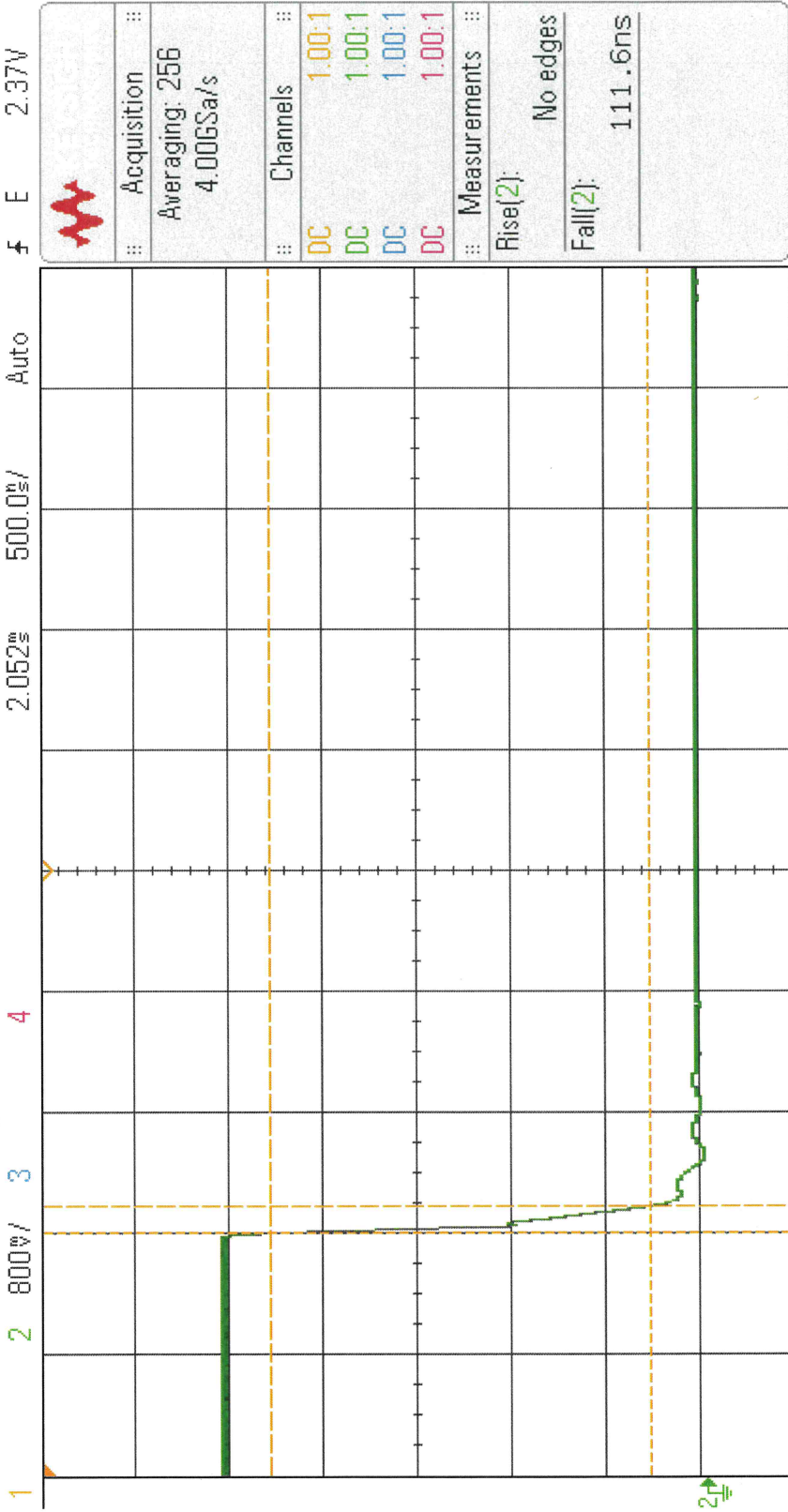
PL 39778

25°C



PL39778 Recovery

DSO-X 3034A, MY52394003, Mon Aug 05 11:17:02 2024



Save to file = pl39778_recovery

Save

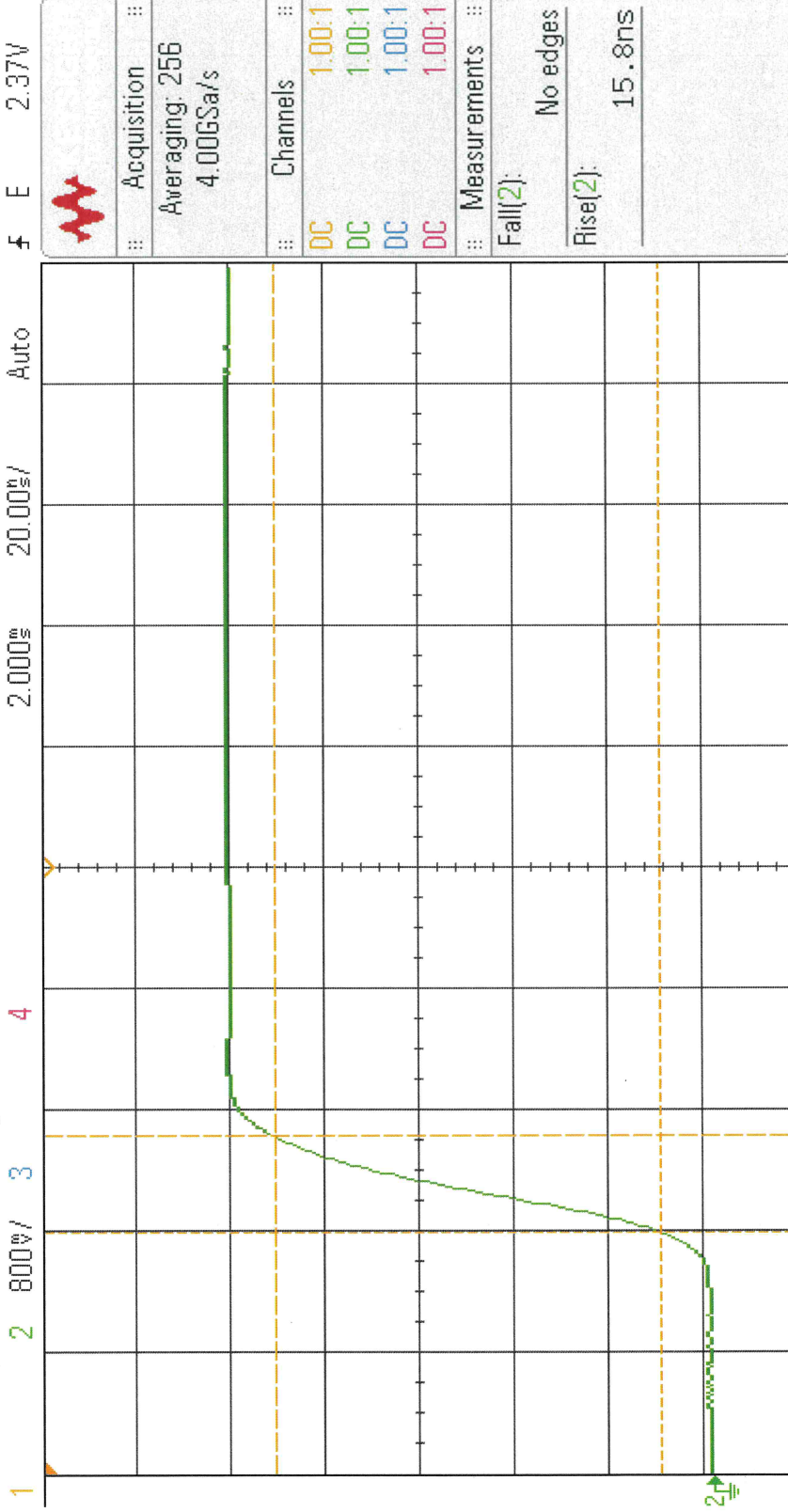
Recall

Default/Erase

Press to Save

PL39778
settle

DSO-X 3034A, MW52394003, Mon Aug 05 11:18:01 2024



Measurement Menu

Source 2

Type: Rise

Add Measurement

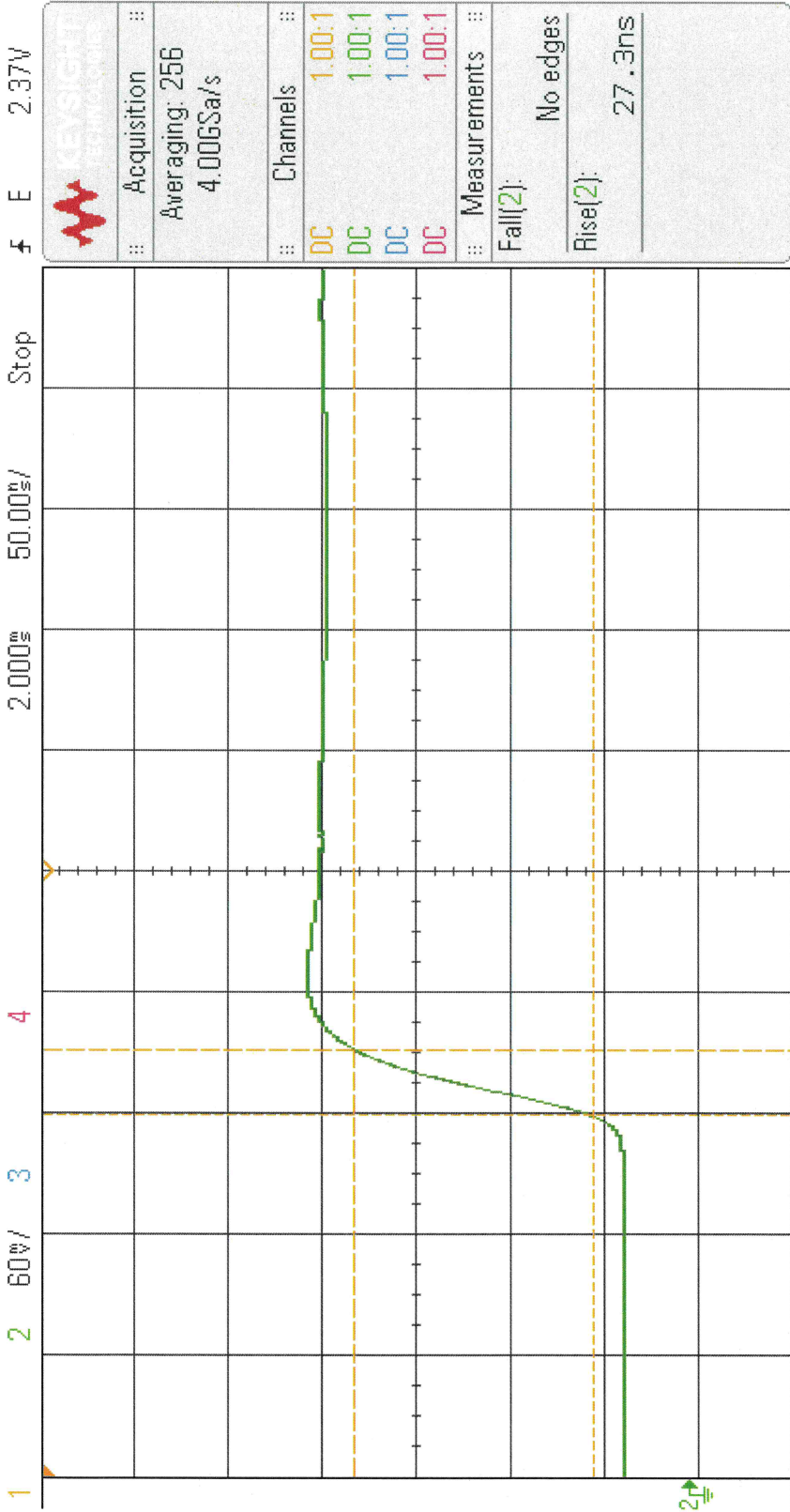
Settings

Clear Meas

Statistics

PL39778
RiseTime

DSO-X 9034A, MV52394003: Mon Aug 05 11:19:17 2024



KEYSIGHT
TECHNOLOGIES

Acquisition
Averaging: 256
4.00GSa/s

Channels
DC 1.00:1
DC 1.00:1
DC 1.00:1
DC 1.00:1

Measurements
Fall(2): No edges
Rise(2): 27.3ns

Save to file = pl39778_rise_time

Save

Recall

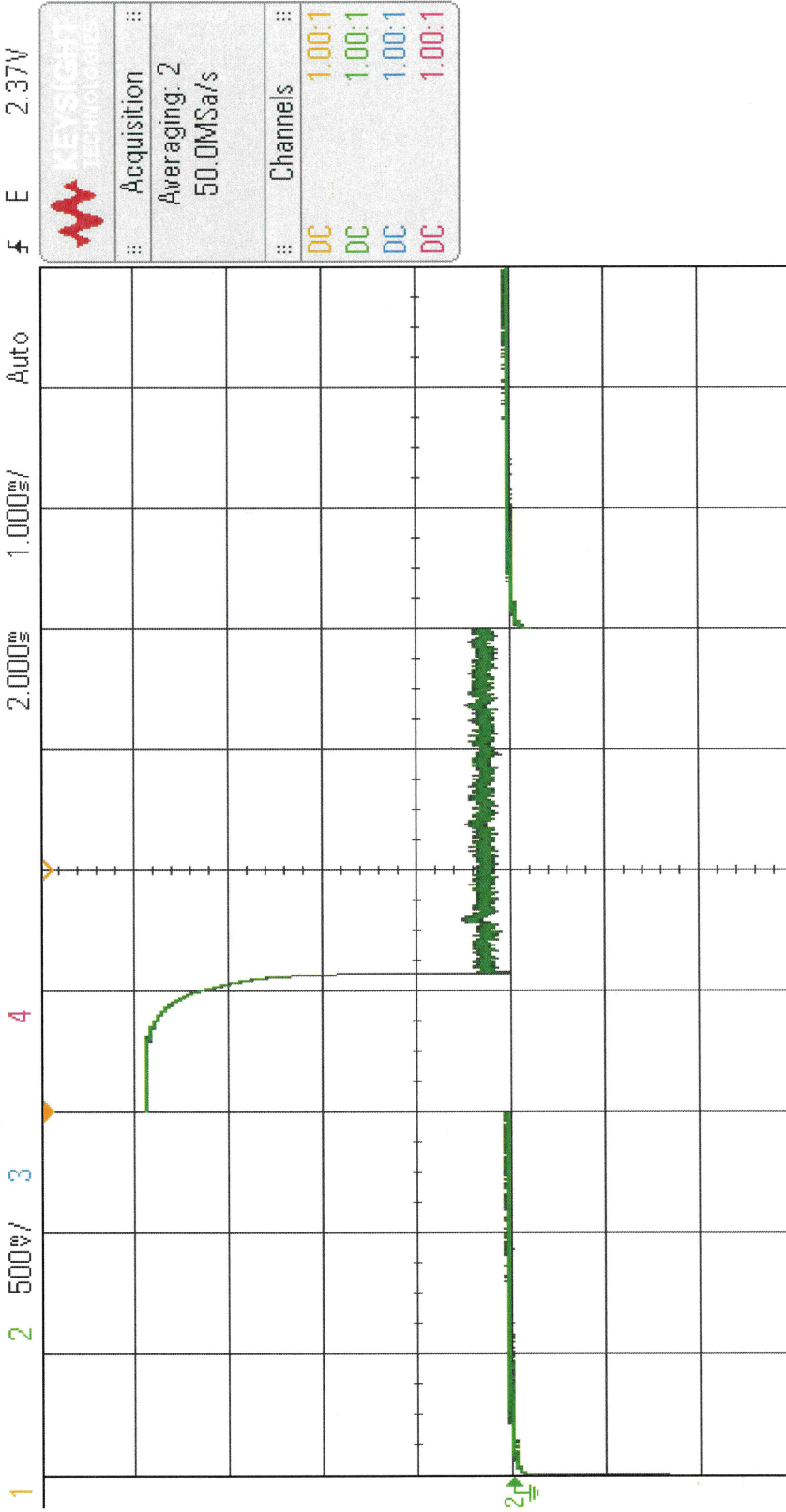
Default/Erse

Press to Save

PL39778

cw Immune

DSO-X 3034A, MW52394003, Mon Aug 05 11:23:45 2024



Save to file = pl39778_cw Immune

Save

Recall

Default/Erase

Press to Save

