



Summary Data
For
EWDM-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: PL36731/2305

Drawing No: 27642020

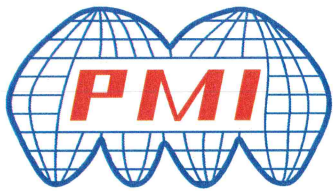
Rev: A2

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	1.88:1 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	71.6/69.1 mV/dB	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	.59/-0.66 dB MAX @25C	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	1.30/-1.17dB MAX @25C	
9	VIDEO OUT Absolute Log Accuracy:	±2.6 dB MAX Over Freq & temp	1.94/-1.80 dB MAX Over Freq & temp	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	46 mV	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	23.5 ns	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	88.1 ns	
13	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value @-10 dBm	< 50 ns	

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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	± .91 @25C	
16	VIDEO OUT CW Immunity:	CW Immune Power TSS to -40 dBm	Pass	
		Pulse Peak Amplitude Loss; 2 dB MAX @ -40dBm CW	< 2.0dB	
		Baseline shift 200mV @-40dBm CW	< 200 mv	
		CW Immunity Time at CW = -40 dBm, ≤ 3 ms	1.3ms	
		CW Recovery Time at CW = -40 dBm, ≤ 20 us	< 20us	
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	< 1dB	



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21	VIDEO OUT Noise Level (Vp-p):	160 mV max	139 mV	PMI QA3
22	VIDEO OUT Propagation Delay:	50 ns MAX from RF 50% to 10% video (excluding cable)	< 50ns	
23	Power Supply	+15 V @ 500 mA MAX -15 V @ 100 mA MAX	+15 V @ 310 mA -15 V @ 80 mA	
24	Power Supply Ripple From DC to 10 MHz	100 mV MAX	Pass	

QA/QC Approval: _____

H. H. H.

Date: _____

8-9-24

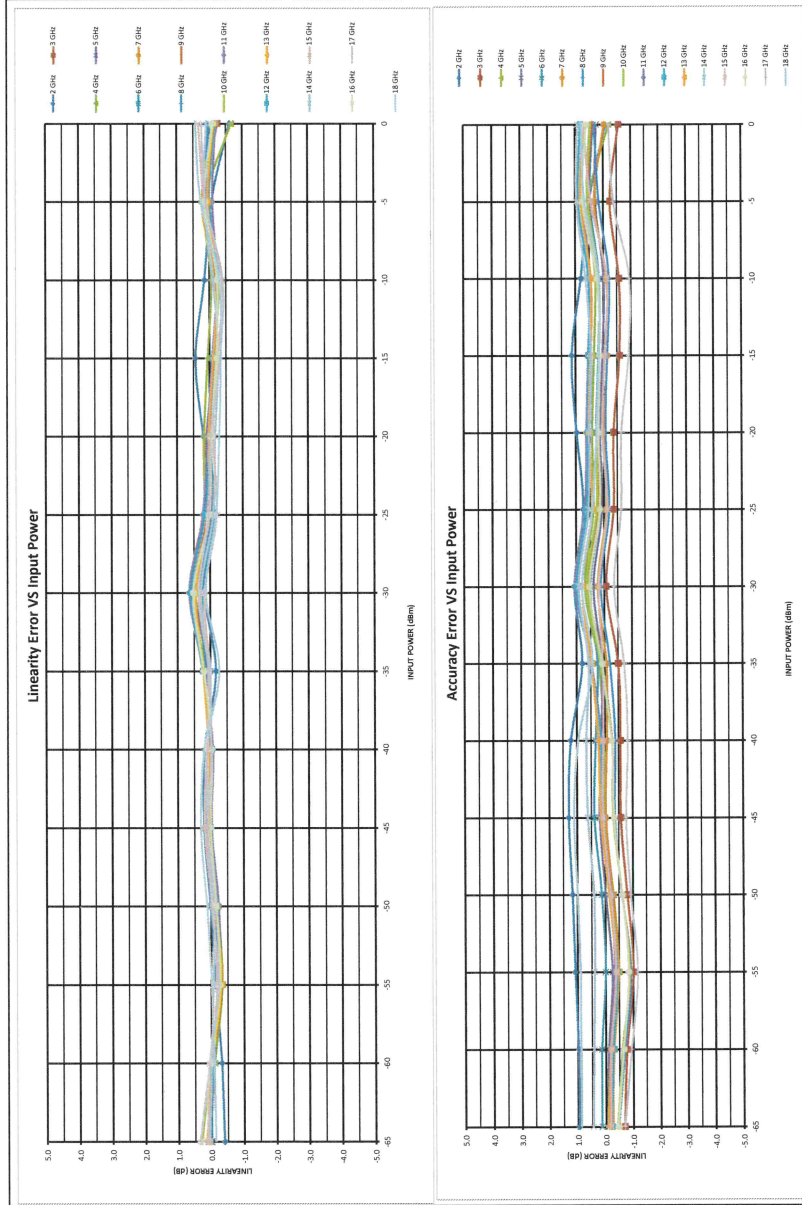


LOG TRANSFER VS. FREQUENCY
 Model: ERLVA-218-65-70MV-85
 Tested By: Jim Hopson
 Date: 08-7-24
 Serial Number: PL36719
 Test Temp: +25°C

Frequency	Intercept (mV)	Slope (mV/dB)	RF Input Power (dBm)	Measured Value (mV)	Linearity Error (dB)	Accuracy Error (dB)
2 GHz	4896	69.11	-65	377	0.81	1.30
	4896	69.11	-55	778	0.46	0.96
	4896	69.11	-45	1442	0.21	0.51
3 GHz	4837	70.50	-65	607	0.46	0.96
	4837	70.50	-55	939	0.21	0.51
	4837	70.50	-45	1305	0.09	0.17
4 GHz	4892	70.76	-65	639	0.09	0.17
	4892	70.76	-55	976	0.09	0.17
	4892	70.76	-45	1339	0.09	0.17
5 GHz	4877	70.35	-65	652	0.09	0.17
	4877	70.35	-55	992	0.09	0.17
	4877	70.35	-45	1359	0.09	0.17
6 GHz	4886	70.24	-65	670	0.09	0.17
	4886	70.24	-55	1010	0.09	0.17
	4886	70.24	-45	1369	0.09	0.17
7 GHz	4869	70.47	-65	639	0.09	0.17
	4869	70.47	-55	976	0.09	0.17
	4869	70.47	-45	1340	0.09	0.17
8 GHz	4877	71.11	-65	612	0.09	0.17
	4877	71.11	-55	946	0.09	0.17
	4877	71.11	-45	1318	0.09	0.17
9 GHz	4903	71.47	-65	618	0.09	0.17
	4903	71.47	-55	949	0.09	0.17
	4903	71.47	-45	1317	0.09	0.17
10 GHz	4905	71.49	-65	617	0.09	0.17
	4905	71.49	-55	951	0.09	0.17
	4905	71.49	-45	1317	0.09	0.17
11 GHz	4923	71.24	-65	648	0.09	0.17
	4923	71.24	-55	986	0.09	0.17
	4923	71.24	-45	1345	0.09	0.17
12 GHz	4928	71.42	-65	640	0.09	0.17
	4928	71.42	-55	980	0.09	0.17
	4928	71.42	-45	1346	0.09	0.17
13 GHz	4919	71.18	-65	647	0.09	0.17
	4919	71.18	-55	983	0.09	0.17
	4919	71.18	-45	1350	0.09	0.17
14 GHz	4917	70.46	-65	690	0.09	0.17
	4917	70.46	-55	1038	0.09	0.17
	4917	70.46	-45	1389	0.09	0.17
15 GHz	4885	70.72	-65	646	0.09	0.17
	4885	70.72	-55	983	0.09	0.17
	4885	70.72	-45	1346	0.09	0.17
16 GHz	4909	71.63	-65	615	0.09	0.17
	4909	71.63	-55	952	0.09	0.17
	4909	71.63	-45	1311	0.09	0.17
17 GHz	4829	70.64	-65	595	0.09	0.17
	4829	70.64	-55	928	0.09	0.17
	4829	70.64	-45	1286	0.09	0.17
18 GHz	4885	69.29	-65	722	0.09	0.17
	4885	69.29	-55	1073	0.09	0.17
	4885	69.29	-45	1429	0.09	0.17
Output Vos: 46.0 mV						
Avg Slope: 70.7 mV/dB						
Min Slope: 68.1 mV/dB						
Max Slope: 73.1 mV/dB						
Flatness Error (+/- dB): 0.81						

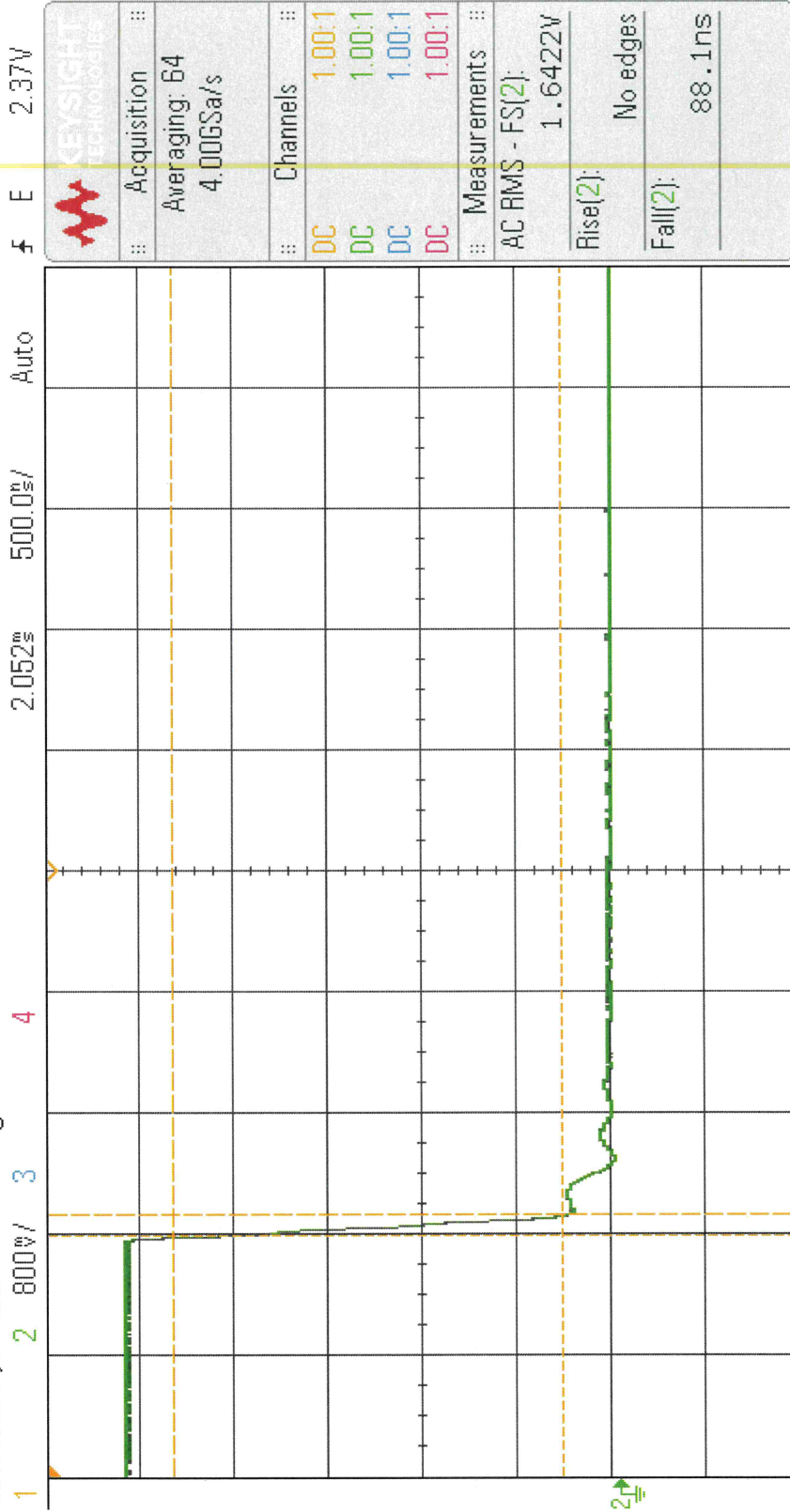
PL 36731

25°C



PL36731
Recovery

DSO-X 3034A, MY52394003, Mon Aug 05 10:16:08 2024



Measurement Menu

Source 2

Type: Fall

Add Measurement

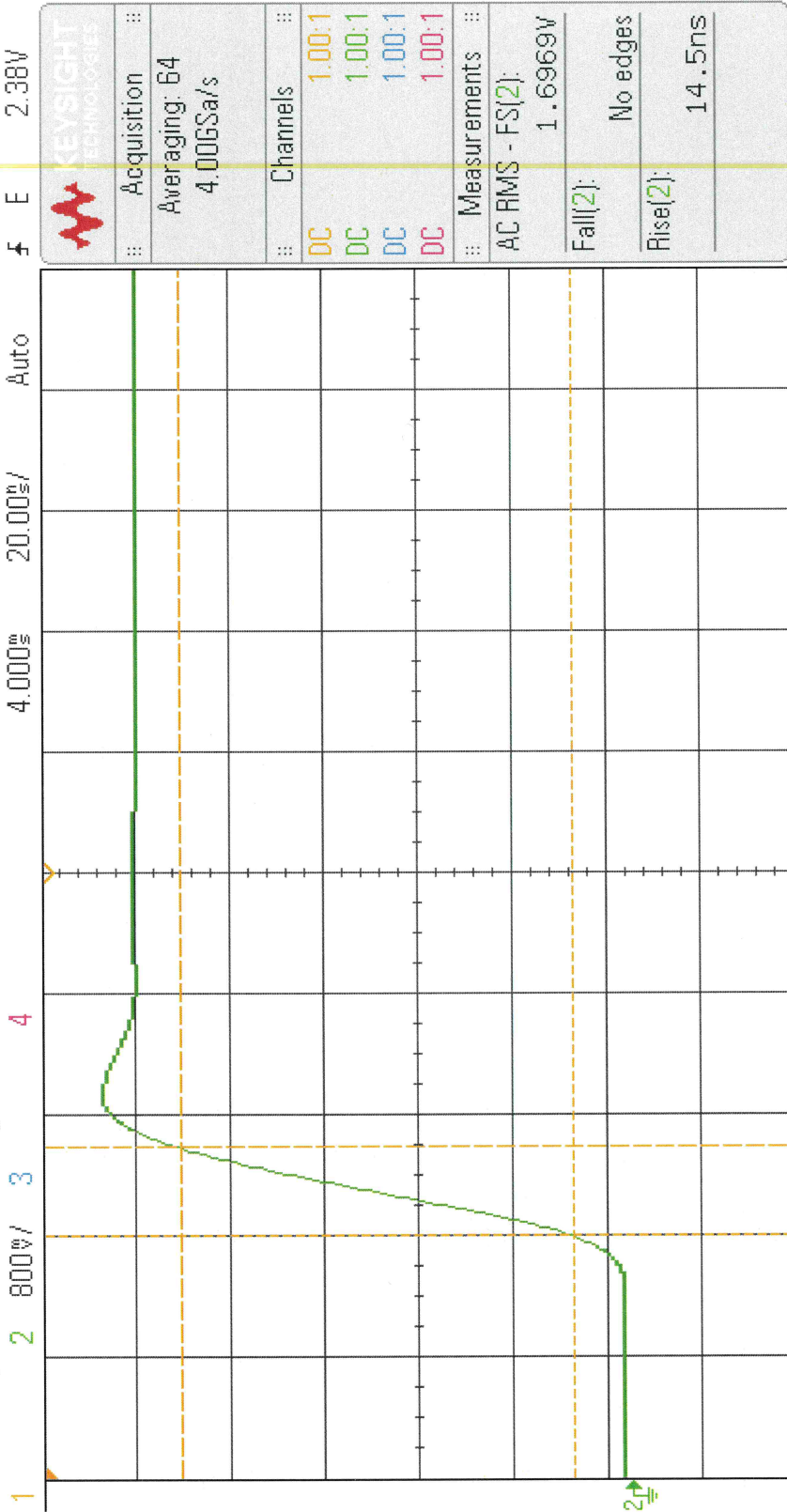
Settings

Clear Meas

Statistics

PL36731
settle

DSO-X 3034A, MV52394003: Mon Aug 05 09:28:47 2024



Measurement Menu

Source 2

Type: Rise

Add Measurement

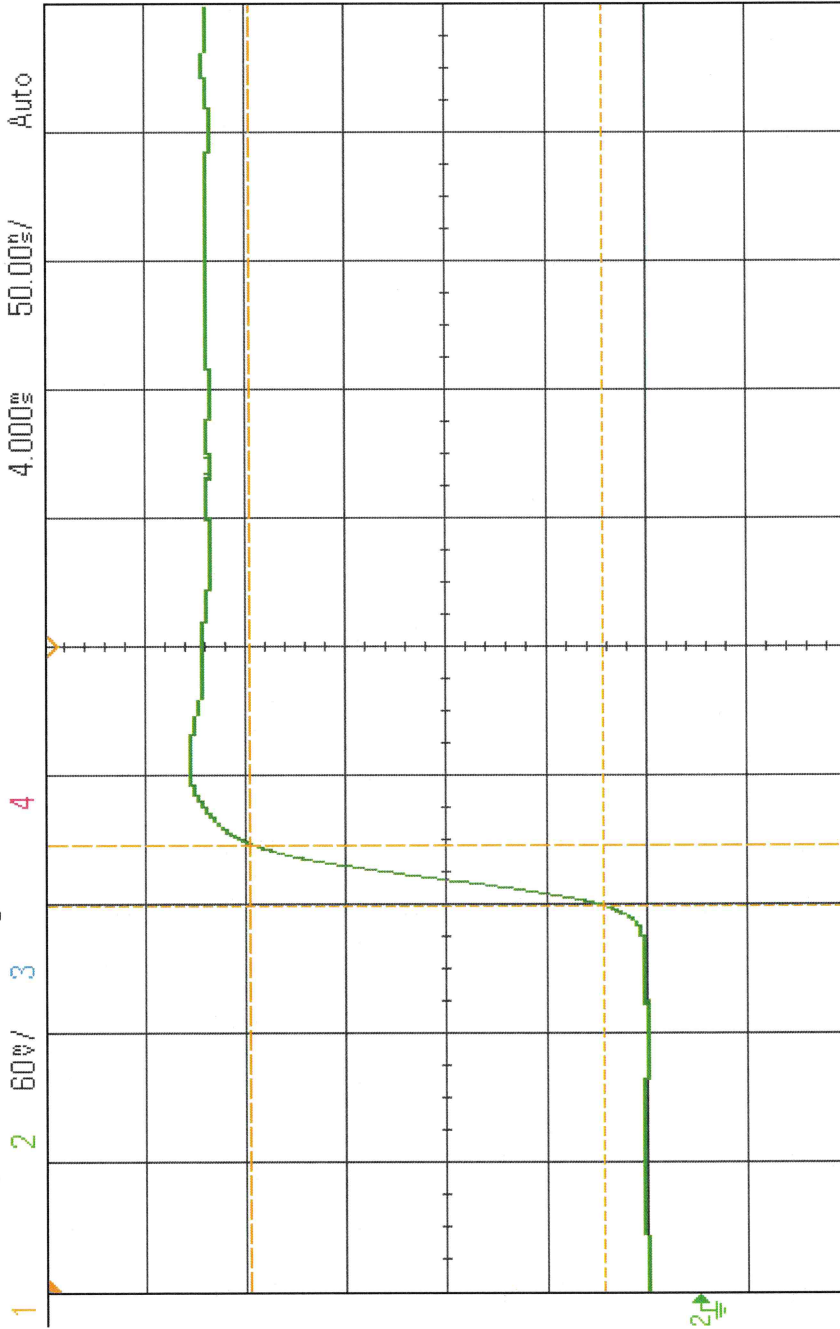
Settings

Clear Meas

Statistics

PL36731
Rise Time

DSO-X 3034A, MW52394003, Mon Aug 05 09:31:57 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	AC RMS - FS(2): 120.77mV
Fall(2):	No edges
Rise(2):	23.5ns

Acquire Menu

Acq Mode
Averaging

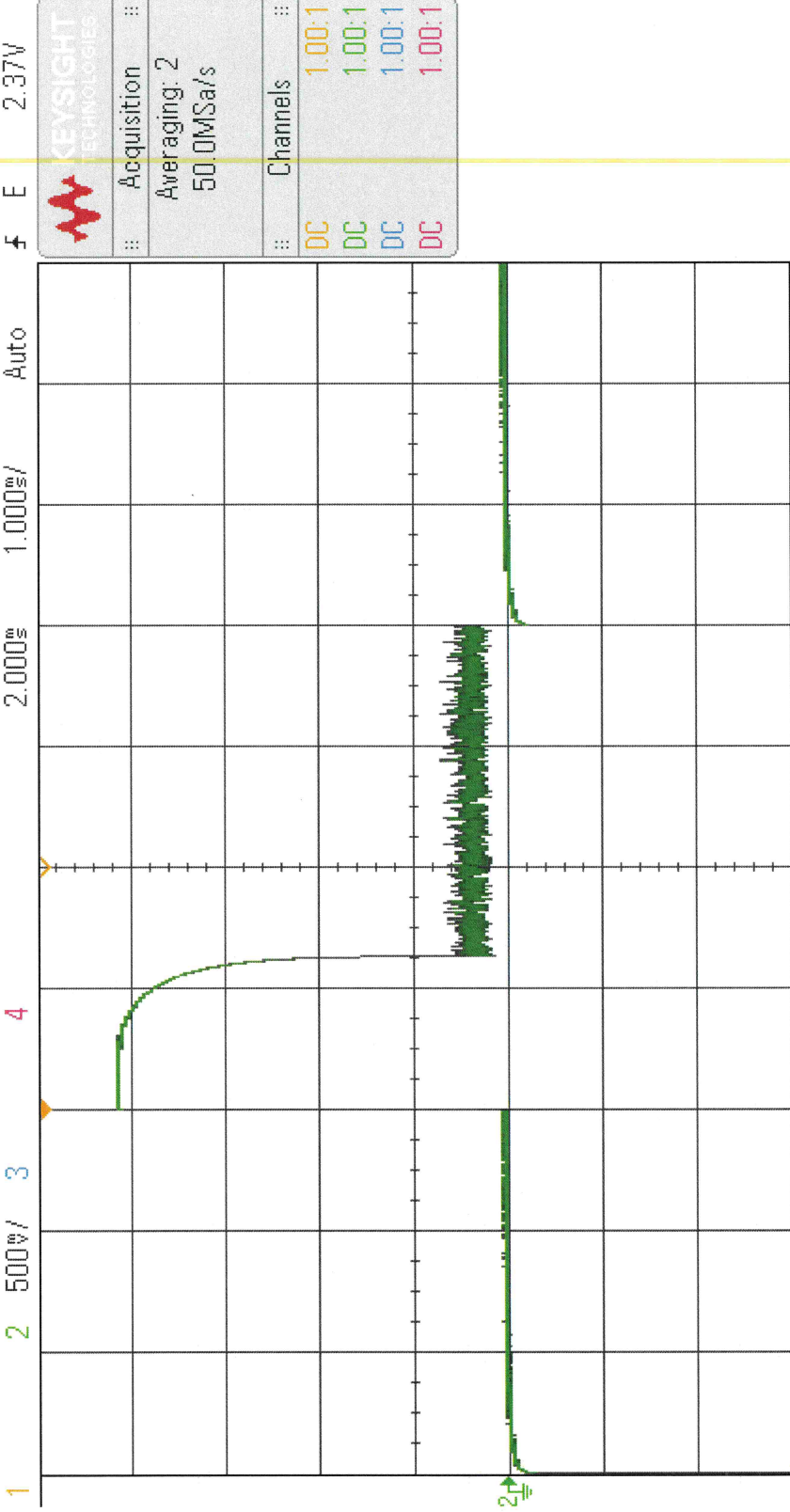
Avgs
256

Segmented

PL36731

CW Immune

DSO-X 3034A, MW52394003, Mon Aug 05 10:11:56 2024



KEYSIGHT TECHNOLOGIES

Acquisition
Averaging: 2
50.0MSa/s

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

Save to file = pl36731_cw Immune

Save →

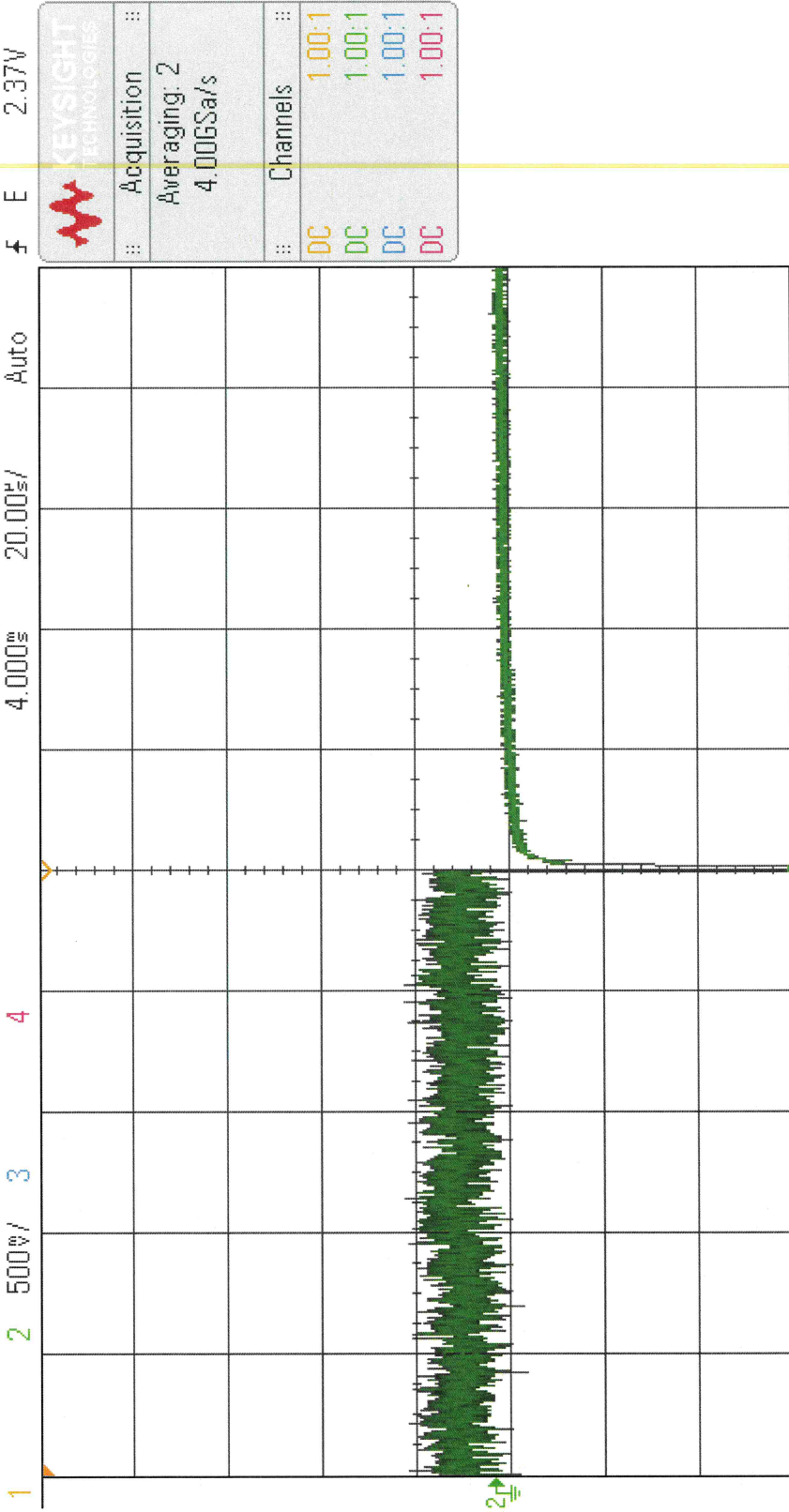
Recall →

Default/Erase →

Press to Save

PL36731
CW Recovery

DSO-X 3034A, MY52394003, Mon Aug 05 10:11:05 2024



Acquire Menu

Acq Mode Averaging

Avgs 2

Segmented