



**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

Customer: _____	Tested By: <b>J. Hopson</b>
SO No: _____	Temperature: <b>-25°C +25C +85C</b>
Model No: <b>ERDLVA-218-CW-75MV-93</b>	Date: <b>11/29/2022</b>
Serial No: <b>PL38406/2248</b>	Drawing No: <b>27642440</b> Rev: <b>A1</b>

*Q.A. K. Nant...* 11-29-22

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz	<b>PMI QA3</b>
2	VSWR:	2.5:1 MAX @ -20 dBm	1.26:1 MAX	
3	Input Power:	23 dBm Max.	Pass	
4	VIDEO OUT TSS:	-42 dBm MAX	-43dBm	
5	VIDEO OUT Dynamic Range:	-40 to +20 dBm	-40 to +20 dBm	
6	VIDEO OUT Log Slope Fixed:	75 ± 10mV/dB	73.7-77.8mV/dB	
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	55mV	
9	VIDEO OUT Rise Time (10% to 90%):	25 ns MAX	15.8ns	
10	VIDEO OUT Settling Time:	±0.5dB within 25ns from 90%	<0.5dB	

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11	VIDEO OUT Recovery	500ns MAX	410ns	<b>PMI QA3</b>
12	Video Frequency Flatness:	3.0 dB p-p MAX @ -20dBm	1.80dB p-p MAX @ -20dBm	
13	VIDEO OUT CW Immunity:	CW Immune Power -50 to -10 dBm	<b>Pass</b>	
		CW Attack Time 1500us	<b>1460us</b>	
		CW Release Time 250us	<b>30us</b>	
17	Pulse droop	1dB Max for 250us pulses	<b>&lt;1dB</b>	
18	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	<b>100 ns to 300 us</b>	
19	VIDEO LOAD Impedance:	93 ±1 Ω	<b>93Ω</b>	
21	VIDEO OUT Noise Level (RMS):	102 mV max	<b>36.2mV</b>	
22	VIDEO OUT Propagation Delay:	35 ns MAX from RF 10% to 10% video (excluding cable)	<b>17ns</b>	
23	Power Supply	+12 V @ 250 mA MAX -12 V @ 250 mA MAX	<b>+12 V @ 220 mA -12 V @ 70 mA</b>	

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## SUMMARY TEST DATA ON ERDLVA-218-CW-75MV-93

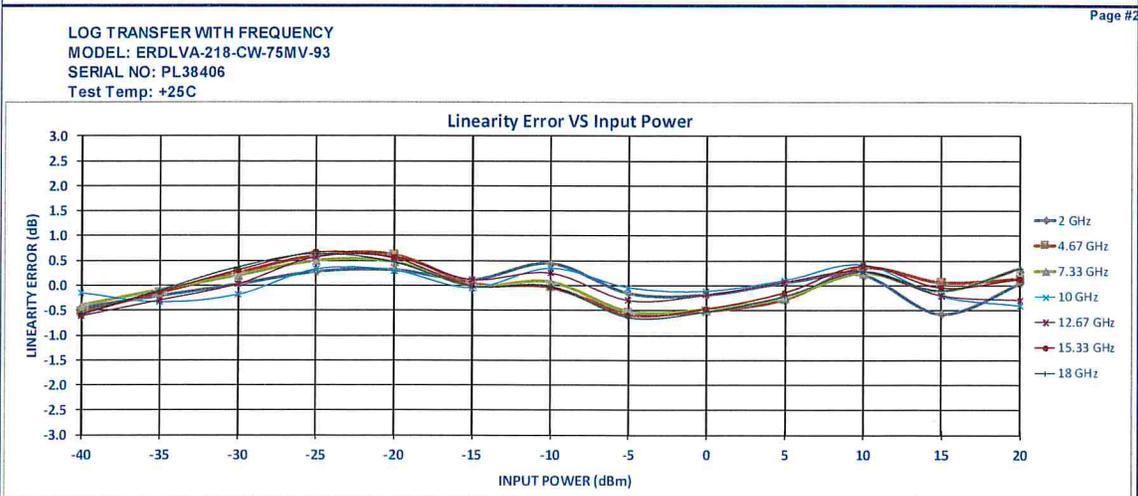
PL38406/2248

LOG TRANSFER WITH FREQUENCY  
 MODEL: ERDLVA-218-CW-75MV-93  
 TESTED BY: J. Merriner  
 DATE: 11-23-22  
 SERIAL NO: PL38406  
 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-

Page #1

Frequency		-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
2 GHz	INTERCEPT (mV)	3433												
	SLOPE (mV/dB)	76.5												
		340	741	1141	1543	1928	2295	2703	3039	3419	3820	4214	4537	4967
		-34	-15	2	22	25	9	35	-12	-14	5	16	-43	5
		-0.44	-0.20	0.03	0.29	0.32	0.12	0.45	-0.15	-0.18	0.06	0.21	-0.56	0.06
4.67 GHz	INTERCEPT (mV)	3346												
	SLOPE (mV/dB)	74.1												
		343	741	1141	1537	1909	2237	2602	2935	3308	3696	4113	4462	4838
		-39	-11	18	44	45	3	-3	-40	-38	-20	26	5	10
		-0.52	-0.15	0.25	0.59	0.61	0.04	-0.04	-0.54	-0.51	-0.27	0.35	0.06	0.14
7.33 GHz	INTERCEPT (mV)	3383												
	SLOPE (mV/dB)	75.4												
		339	739	1138	1537	1912	2252	2635	2967	3347	3742	4156	4505	4917
		-30	-7	15	38	36	-1	5	-39	-36	-18	19	-8	27
		-0.40	-0.09	0.20	0.50	0.48	-0.01	0.07	-0.52	-0.48	-0.24	0.26	-0.11	0.36
10 GHz	INTERCEPT (mV)	3336												
	SLOPE (mV/dB)	76.7												
		258	627	1022	1445	1826	2182	2596	2949	3327	3727	4135	4469	4838
		-12	-26	-14	26	23	-4	27	-4	-9	8	33	-17	-31
		-0.15	-0.34	-0.19	0.33	0.30	-0.05	0.35	-0.05	-0.12	0.10	0.42	-0.22	-0.40
12.67 GHz	INTERCEPT (mV)	3365												
	SLOPE (mV/dB)	74.6												
		337	733	1130	1543	1916	2255	2638	2970	3351	3743	4132	4469	4835
		-45	-22	2	42	42	8	19	-22	-14	5	21	-15	-22
		-0.61	-0.30	0.03	0.57	0.57	0.11	0.25	-0.30	-0.19	0.07	0.28	-0.20	-0.29
15.33 GHz	INTERCEPT (mV)	3379												
	SLOPE (mV/dB)	74.2												
		369	774	1177	1575	1937	2266	2635	2963	3344	3739	4150	4488	4872
		-44	-10	23	50	41	-1	-3	-45	-35	-11	29	-4	10
		-0.59	-0.13	0.30	0.67	0.55	-0.01	-0.04	-0.61	-0.47	-0.15	0.39	-0.05	0.13
18 GHz	INTERCEPT (mV)	3411												
	SLOPE (mV/dB)	74.3												
		395	802	1208	1600	1959	2295	2667	2992	3372	3767	4176	4519	4924
		-42	-7	28	48	35	-1	0	-47	-39	-16	22	-7	26
		-0.56	-0.09	0.37	0.64	0.47	-0.01	-0.01	-0.63	-0.52	-0.21	0.29	-0.09	0.35
Flatness P-P		1.8	2.4	2.4	2.0	1.8	1.6	1.4	1.4	1.4	1.6	1.4	1.0	1.8
Slope Avg(mV/dB)		75.1												



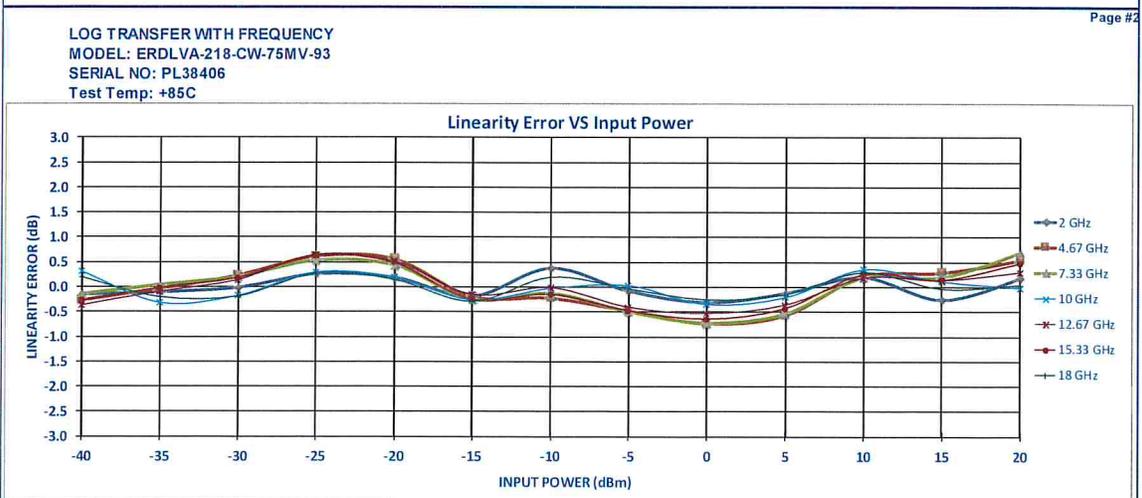
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## SUMMARY TEST DATA ON ERDLVA-218-CW-75MV-93

**PL38406/2248**

LOG TRANSFER WITH FREQUENCY																Page #1
MODEL: ERDLVA-218-CW-75MV-93																 PLANAR MONOLITHICS INDUSTRIES 4921 Robert J. Mathews Parkway, Suite 1 El Dorado Hills, CA 95762 Phone: 916-542-1401 Fax: 301-662-
TESTED BY: J.Merriner																
DATE: 11-29-22																
SERIAL NO: PL38406																
Test Temp: +85C																
Frequency		-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	RF Input Power (dBm)	
2 GHz	INTERCEPT (mV)	3339														Measured Value (mV)
	SLOPE (mV/dB)	75.9														Error (mV)
		-11	-8	-1	20	14	-14	29	-6	-23	-9	15	-19	13	LINEARITY ERROR (dB)	
		-0.15	-0.10	-0.01	0.26	0.19	-0.18	0.38	-0.08	-0.30	-0.12	0.20	-0.25	0.18		
4.67 GHz	INTERCEPT (mV)	3246														Measured Value (mV)
	SLOPE (mV/dB)	73.2														Error (mV)
		-19	-2	17	45	41	-14	-16	-35	-53	-41	16	21	39	LINEARITY ERROR (dB)	
		-0.26	-0.03	0.23	0.61	0.56	-0.19	-0.22	-0.48	-0.72	-0.56	0.22	0.29	0.54		
7.33 GHz	INTERCEPT (mV)	3281														Measured Value (mV)
	SLOPE (mV/dB)	74.4														Error (mV)
		-11	3	15	39	32	-19	-10	-37	-54	-40	14	14	51	LINEARITY ERROR (dB)	
		-0.15	0.04	0.20	0.53	0.43	-0.25	-0.13	-0.49	-0.72	-0.53	0.19	0.19	0.69		
10 GHz	INTERCEPT (mV)	3209														Measured Value (mV)
	SLOPE (mV/dB)	75.5														Error (mV)
		24	-24	-13	23	15	-19	-2	3	-26	-15	27	9	-1	LINEARITY ERROR (dB)	
		0.32	-0.31	-0.17	0.30	0.20	-0.26	-0.03	0.03	-0.34	-0.20	0.36	0.12	-0.01		
12.67 GHz	INTERCEPT (mV)	3285														Measured Value (mV)
	SLOPE (mV/dB)	73.6														Error (mV)
		-27	-7	10	47	38	-11	-1	-30	-39	-26	14	10	22	LINEARITY ERROR (dB)	
		-0.37	-0.09	0.14	0.65	0.51	-0.15	-0.01	-0.41	-0.53	-0.36	0.19	0.13	0.30		
15.33 GHz	INTERCEPT (mV)	3275														Measured Value (mV)
	SLOPE (mV/dB)	73.7														Error (mV)
		-20	-1	14	46	36	-18	-10	-35	-47	-31	19	11	36	LINEARITY ERROR (dB)	
		-0.27	-0.01	0.19	0.63	0.49	-0.25	-0.14	-0.47	-0.64	-0.43	0.26	0.15	0.49		
18 GHz	INTERCEPT (mV)	3288														Measured Value (mV)
	SLOPE (mV/dB)	76.4														Error (mV)
		15	-16	-15	21	11	-23	15	-3	-20	-12	23	-3	3	LINEARITY ERROR (dB)	
		0.20	-0.20	-0.19	0.28	0.15	-0.30	0.20	-0.04	-0.26	-0.15	0.30	-0.04	0.04		
Flatness P-P		1.4	2.2	2.2	2.0	1.8	1.8	2.2	1.6	1.8	1.8	1.6	1.4	2.0		
Slope Avg(mv/dB)		74.7														



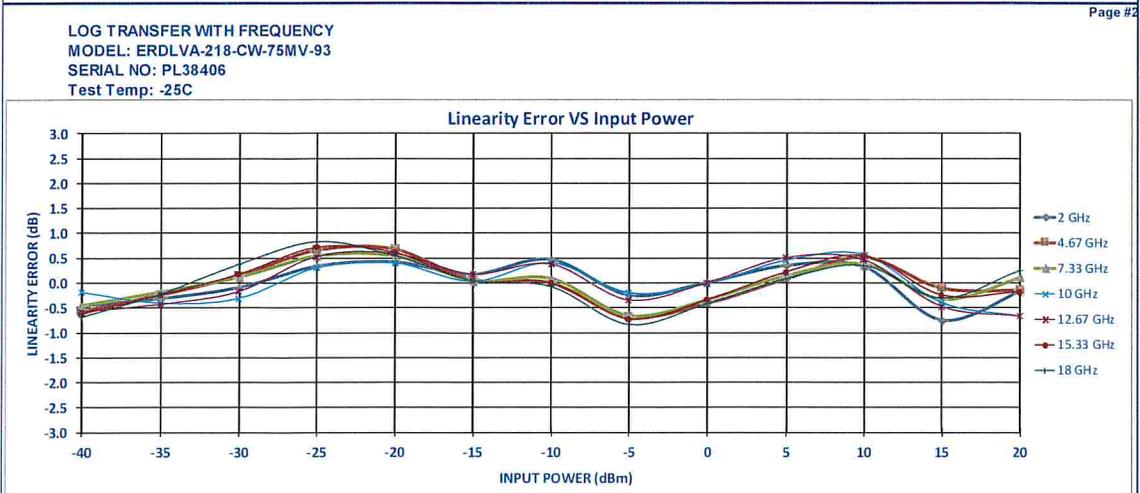
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**PL38406/2248**

LOG TRANSFER WITH FREQUENCY															Page #1
MODEL: ERDLVA-218-CW-75MV-93															 PLANAR MONOLITHICS INDUSTRIES 4921 Robert J. Mathews Parkway, Suite 1 El Dorado Hills, CA 95762 Phone: 916-542-1401 Fax: 301-662-
TESTED BY: J. Merriner															
DATE: 11-29-22															
SERIAL NO: PL38406															
Test Temp: -25C															
Frequency		-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	338	736	1140	1560	1953	2321	2731	3062	3469	3882	4267	4571	5003	Measured Value (mV)
	SLOPE (mV/dB)	-36	-24	-7	26	32	13	36	-20	0	27	25	-58	-13	Error (mV)
		-0.46	-0.32	-0.09	0.33	0.41	0.17	0.47	-0.25	0.01	0.34	0.32	-0.75	-0.17	LINEARITY ERROR (dB)
4.67 GHz	INTERCEPT (mV)	340	740	1145	1560	1937	2267	2638	2963	3359	3772	4181	4510	4883	Measured Value (mV)
	SLOPE (mV/dB)	-42	-18	11	50	51	5	0	-51	-31	6	39	-8	-11	Error (mV)
		-0.56	-0.24	0.14	0.66	0.68	0.07	0.00	-0.68	-0.41	0.08	0.52	-0.11	-0.15	LINEARITY ERROR (dB)
7.33 GHz	INTERCEPT (mV)	343	746	1151	1566	1948	2292	2678	3003	3410	3829	4229	4557	4973	Measured Value (mV)
	SLOPE (mV/dB)	-35	-14	9	42	41	3	7	-50	-26	11	29	-25	8	Error (mV)
		-0.45	-0.18	0.12	0.54	0.54	0.04	0.09	-0.66	-0.34	0.14	0.38	-0.33	0.11	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	263	635	1031	1468	1864	2224	2642	2984	3387	3813	4210	4524	4892	Measured Value (mV)
	SLOPE (mV/dB)	-14	-31	-24	24	31	2	31	-15	-1	36	44	-31	-52	Error (mV)
		-0.18	-0.40	-0.31	0.31	0.40	0.03	0.40	-0.20	-0.02	0.46	0.57	-0.40	-0.67	LINEARITY ERROR (dB)
12.67 GHz	INTERCEPT (mV)	321	714	1115	1550	1936	2286	2683	3009	3417	3837	4215	4525	4892	Measured Value (mV)
	SLOPE (mV/dB)	-44	-33	-13	41	45	14	29	-26	0	39	35	-36	-51	Error (mV)
		-0.58	-0.43	-0.17	0.53	0.59	0.18	0.38	-0.34	0.00	0.51	0.46	-0.47	-0.66	LINEARITY ERROR (dB)
15.33 GHz	INTERCEPT (mV)	365	771	1179	1597	1966	2300	2674	2996	3402	3821	4223	4540	4922	Measured Value (mV)
	SLOPE (mV/dB)	-47	-18	13	54	46	3	0	-54	-25	17	42	-18	-13	Error (mV)
		-0.62	-0.24	0.18	0.72	0.61	0.05	0.01	-0.72	-0.34	0.22	0.55	-0.24	-0.17	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	427	835	1253	1660	2013	2349	2714	3031	3436	3847	4240	4565	4980	Measured Value (mV)
	SLOPE (mV/dB)	-50	-16	28	62	41	3	-5	-62	-31	7	26	-23	19	Error (mV)
		-0.67	-0.21	0.38	0.83	0.55	0.05	-0.07	-0.83	-0.41	0.09	0.35	-0.30	0.25	LINEARITY ERROR (dB)
Flatness P-P		2.2	2.6	3.0	2.6	2.0	1.6	1.2	1.2	1.4	1.4	1.2	0.8	1.6	
Slope Avg(mv/dB)		76.2													



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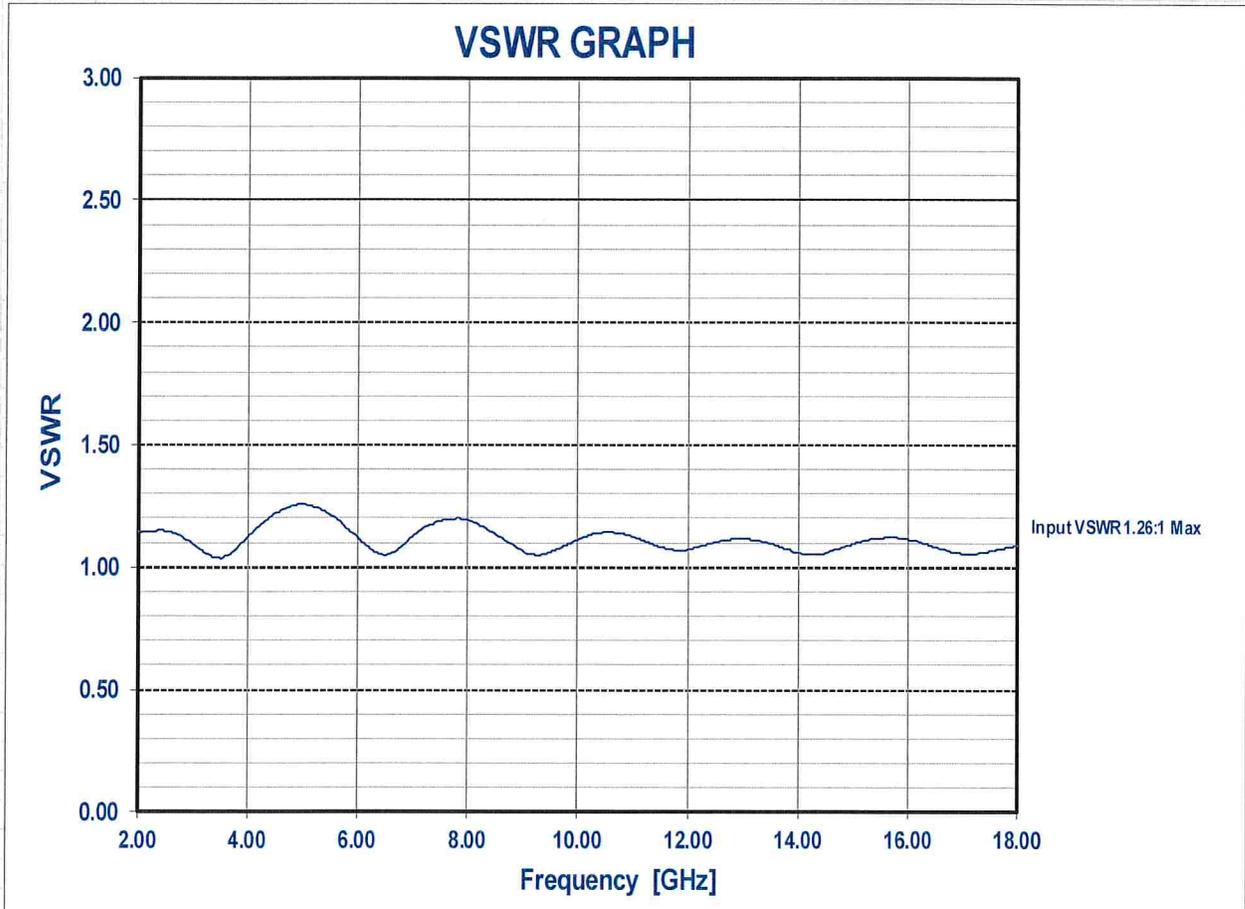
**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**SWR**

Model Number: ERDLVA-2G18G-CW-75MV-93  
Serial Number: PL38406  
Date: 11/29/2022

Temperature: +25C



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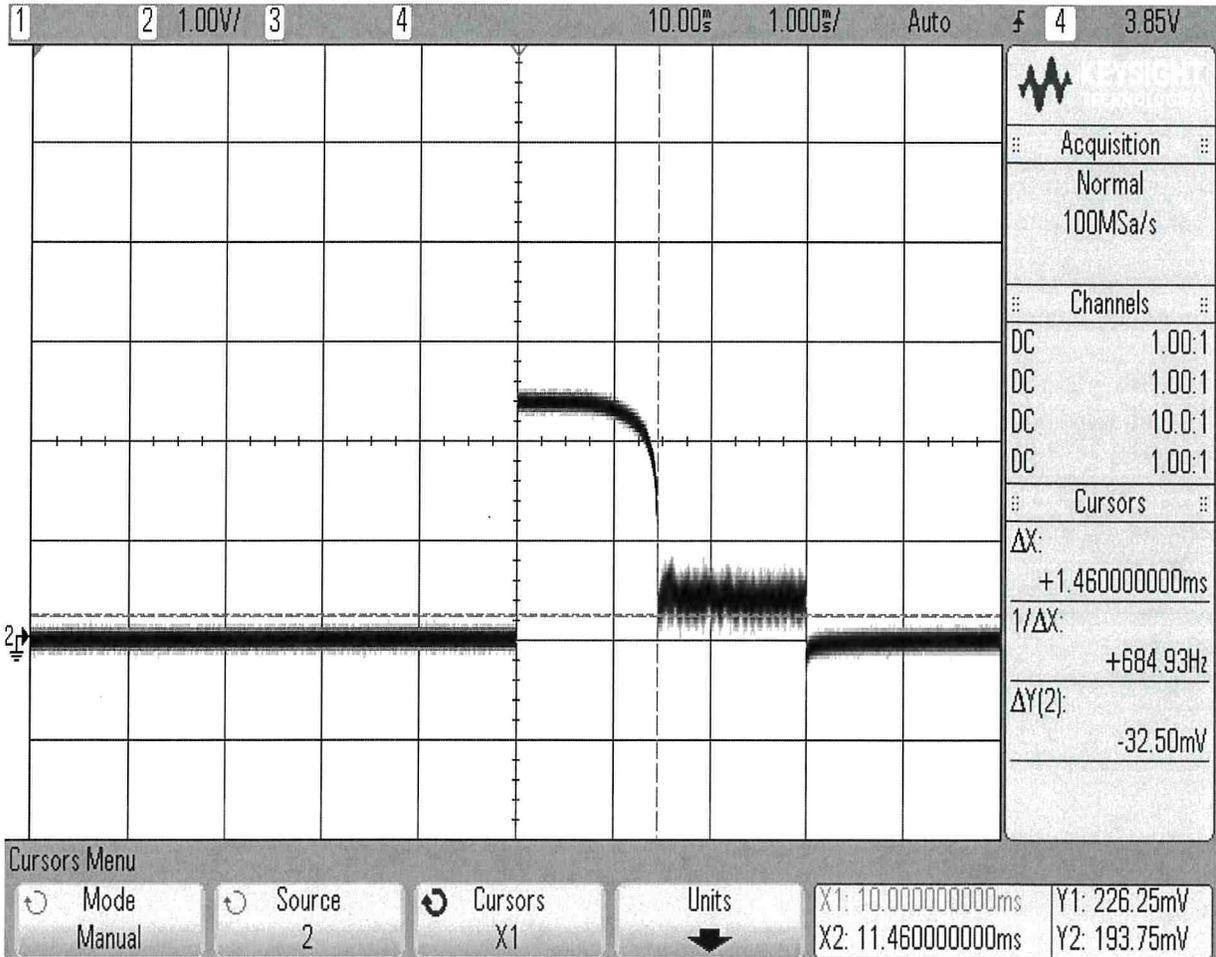


**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**CW ATTACK**

M50-X 3054A, MY53400180: Wed Nov 23 10:00:44 2022



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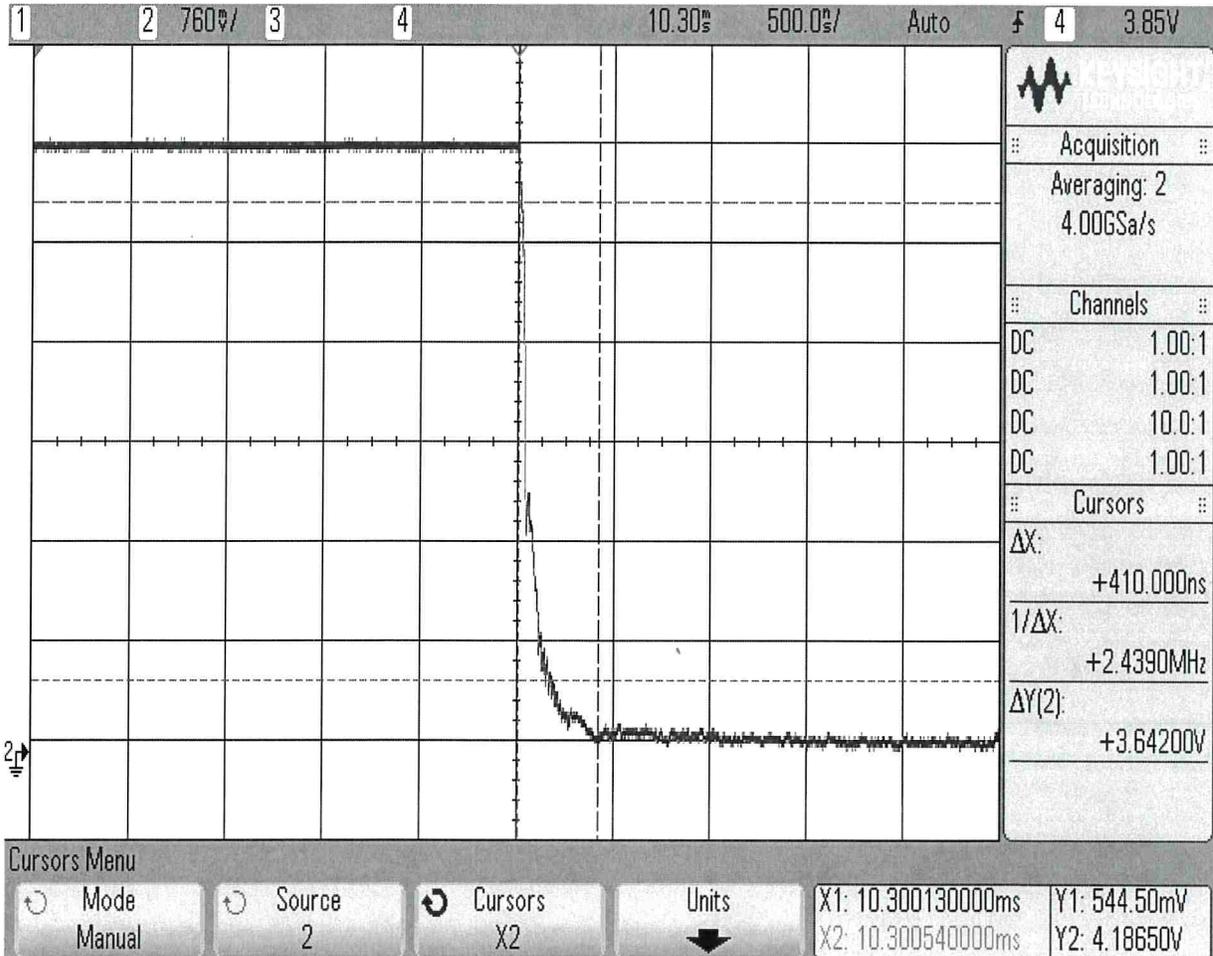


**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**RECOVERY TIME**

M50-X 3054A, MY53400180: Wed Nov 23 15:14:25 2022



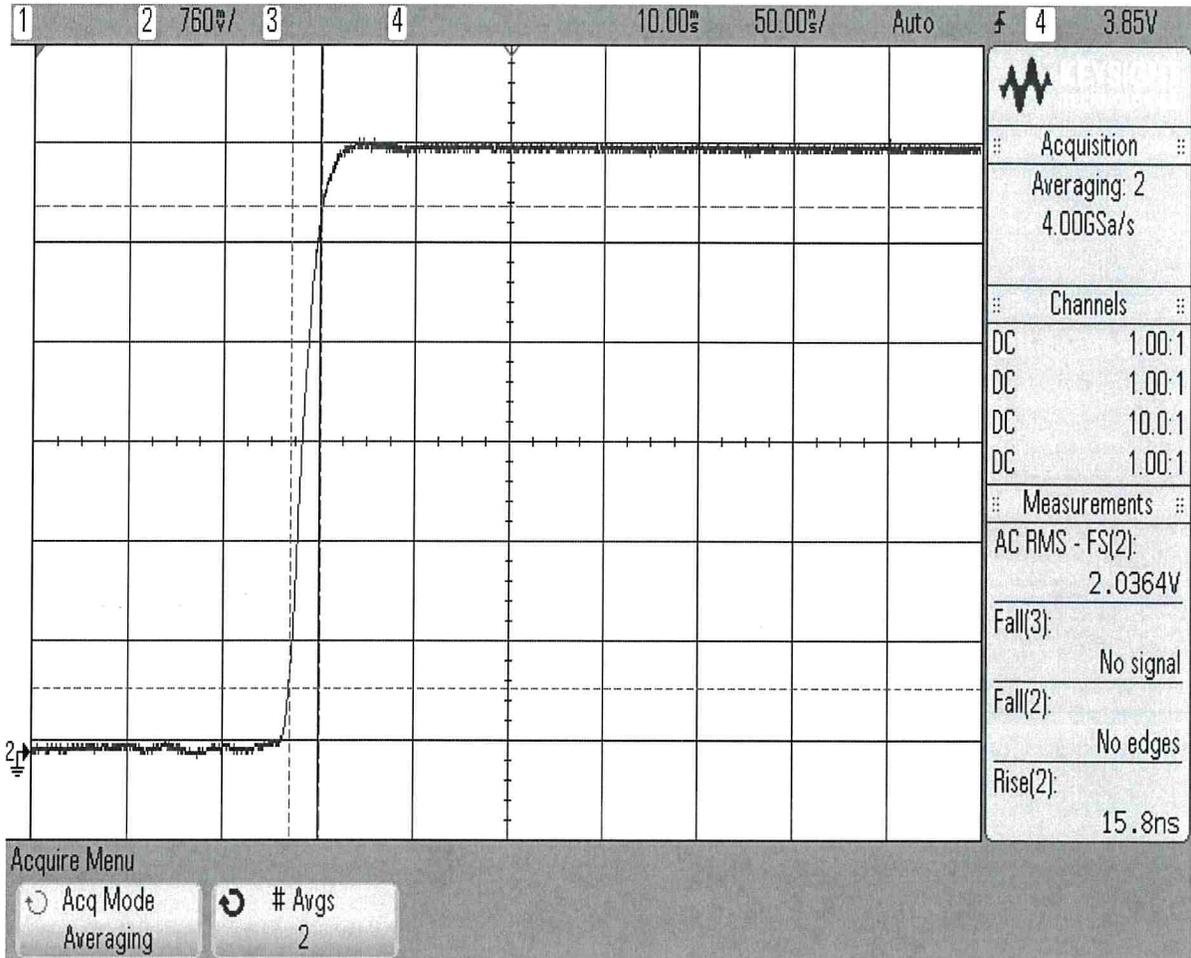


**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**RISE TIME**

MSO-X 3054A, MY53400180: Wed Nov 23 15:08:23 2022



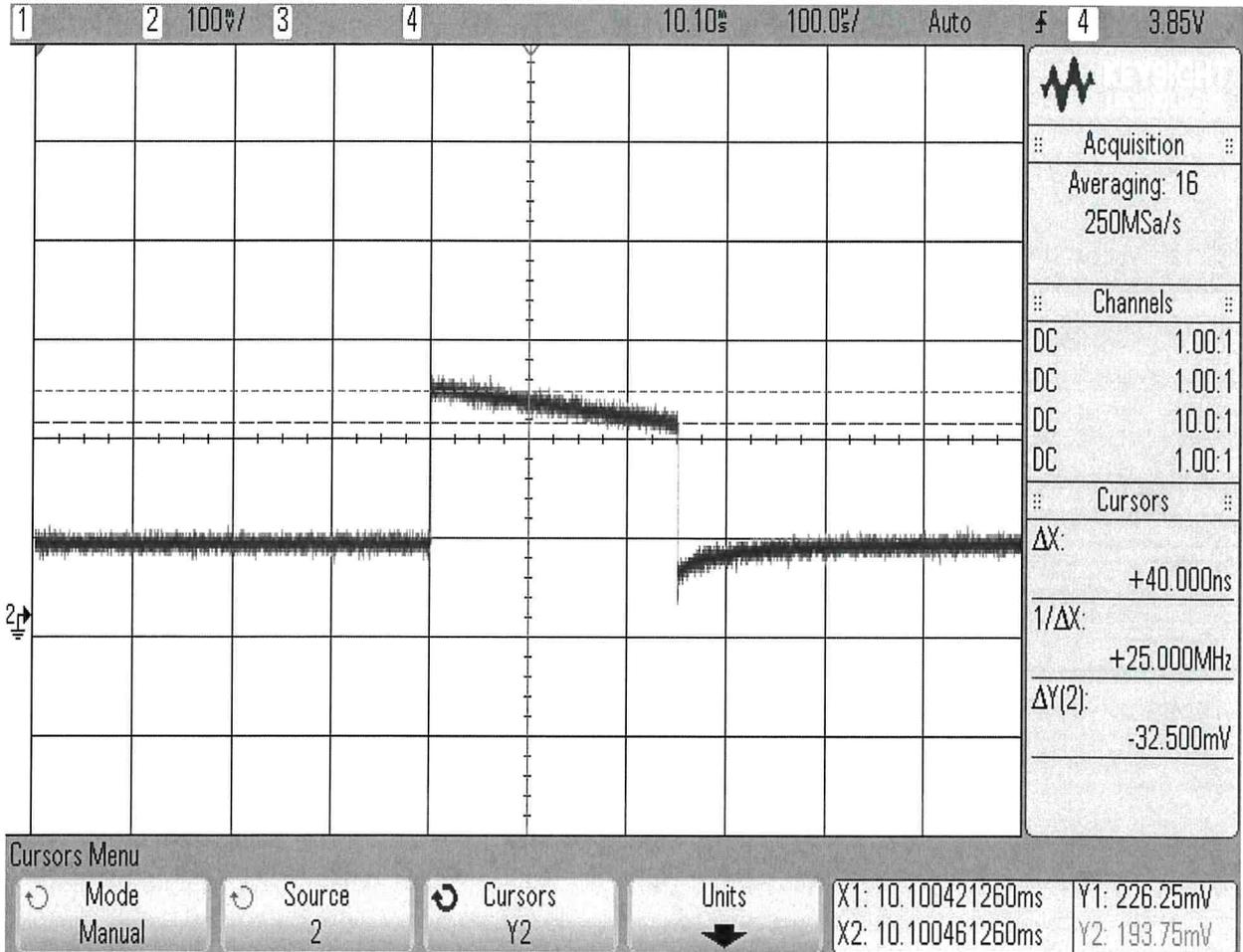


**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**DROOP**

M50-X 3054A, MY53400180: Wed Nov 16 17:04:58 2022



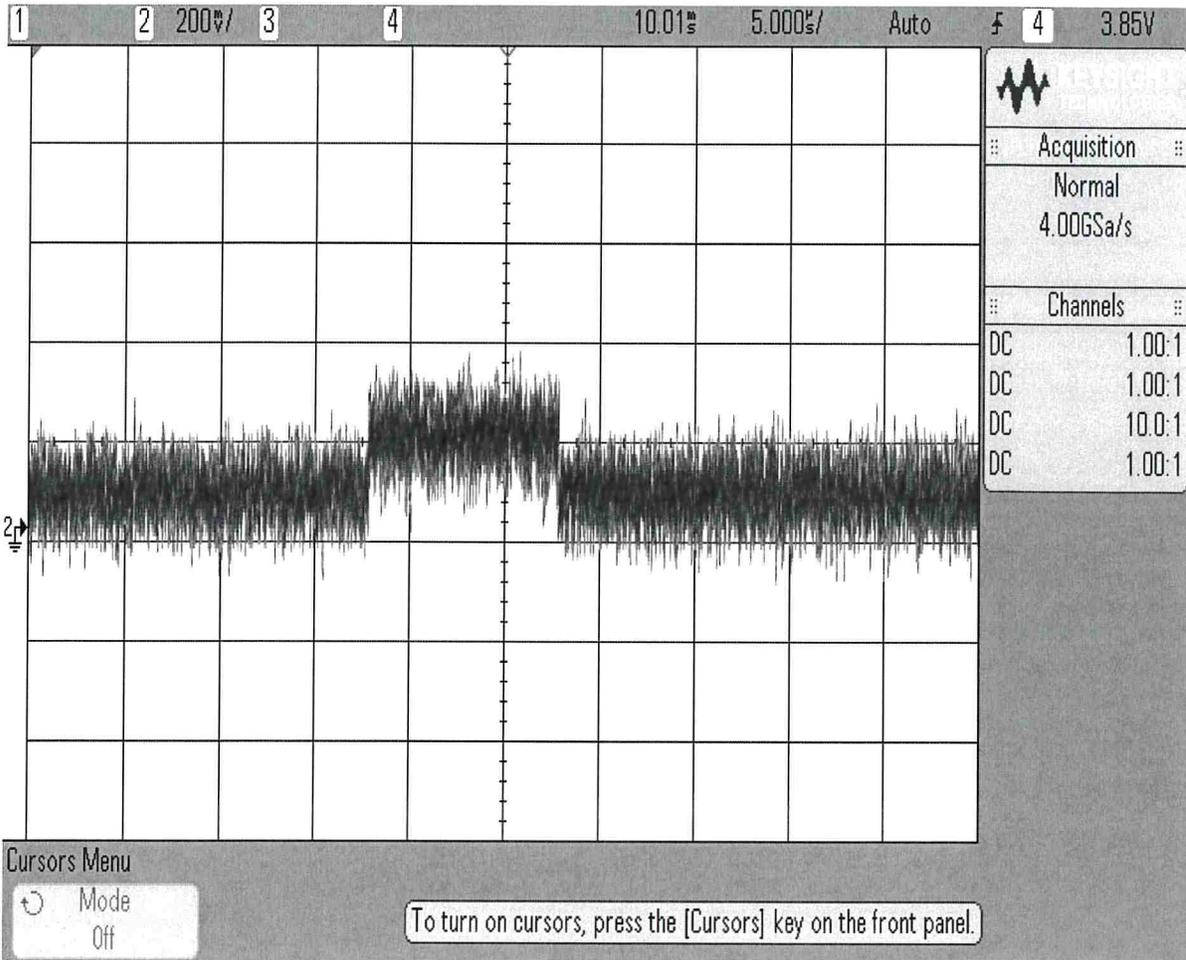


**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**TSS - 43 dbm**

M50-X 3054A, MY53400180: Wed Nov 16 17:01:27 2022



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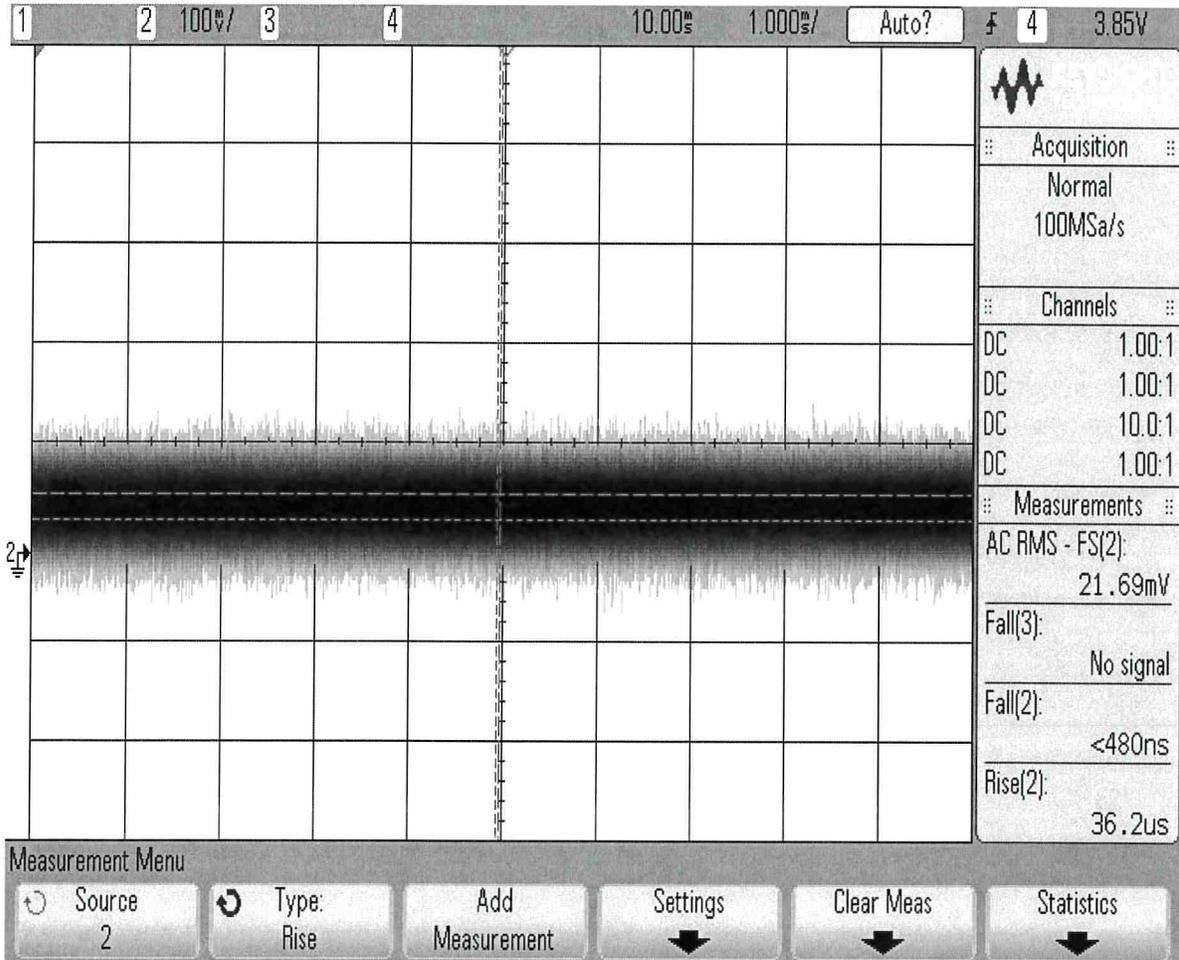


**SUMMARY TEST DATA  
ON  
ERDLVA-218-CW-75MV-93**

**PL38406/2248**

**RMS NOISE**

MSO-X 3054A, MY53400180: Wed Nov 23 10:03:17 2022



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