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

Customer: [redacted]
SO No: [redacted]
Model No: ERDLVA-2G18G-65-70MV-70C
Serial No: PL47588/2444

Tested By: Anton L.
Temperature: -40°C TO +70°C
Date 10/30/2024
Drawing No: 27642020 **Rev:** A1

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	**1.75 :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	**- 71.5 dBm**	
5	VIDEO OUT Dynamic Range:	-65 to 0 dBm	**-65 to 0 dBm**	
6	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	**71.1 mV/dB** **69.6 mV/dB**	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	**0.46 dB** **-0.51 dB**	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	**1.14 dB** **-1.07 dB**	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	**1.35 dB** **-1.09 dB**	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	**41 mV**	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	**21.3 ns**	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	**227.8 ns**	

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13	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value @-10 dBm	**22.3 ns**	PMI QA3
14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	**0.67 us**	
15	VIDEO OUT Video Frequency Flatness:	±2.0 dB MAX @25C	**± 0.87 dB**	
16	VIDEO OUT CW Immunity:	CW Immune Power TSS to -40 dBm	**Pass**	
		Pulse Peak Amplitude Loss; 2 dB MAX @ -40dBm CW	**< 2 dB**	
		Baseline shift 200mV @-40dBm CW	**< 200 mV**	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	**1.25 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**	

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22	VIDEO OUT Noise Level (Vp-p):	160 mV max	**148.5 mV**	PMI QA3
23	VIDEO OUT Propagation Delay:	50 ns MAX from RF 50% to 10% video (excluding cable)	**< 50 ns**	
24	Power Supply	+15 V @ 500 mA MAX -15 V @ 100 mA MAX	**+15 V @ 310 mA** **-15 V @ 80 mA**	
25	Power Supply Ripple From DC to 10 MHz	100 mV MAX	**Pass**	

QA/QC Approval: K. Klumpp **Date:** 11-1-24

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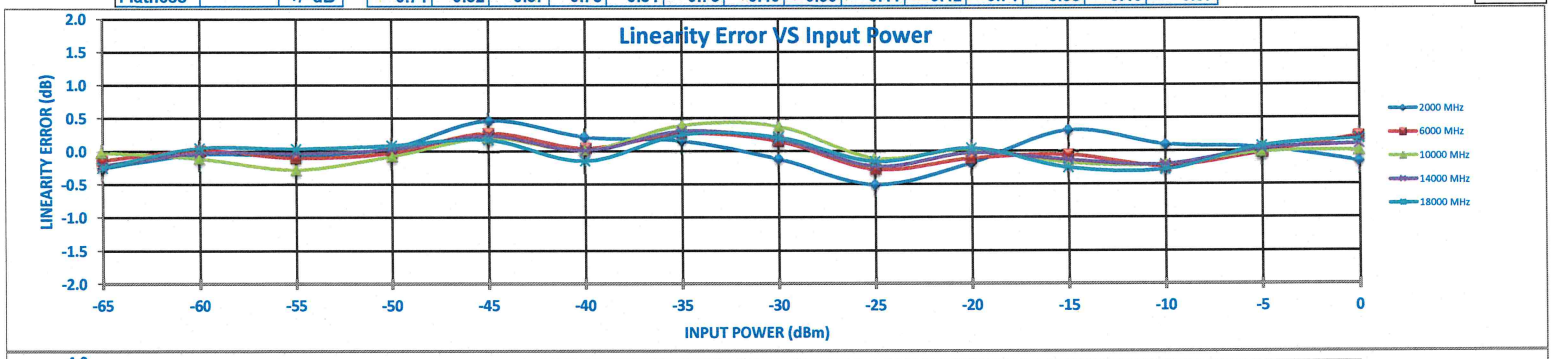
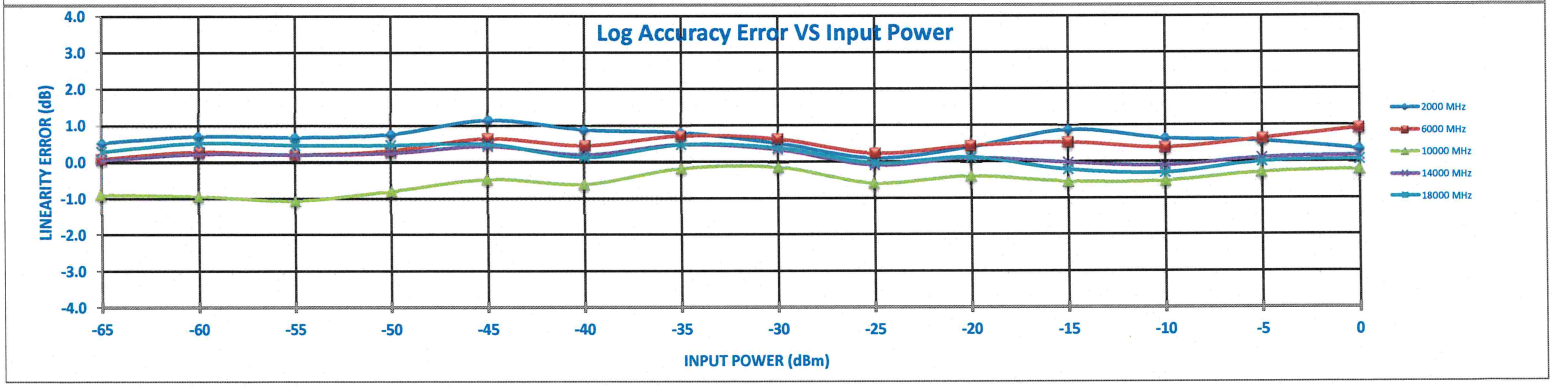
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL47588/2444
DATE: 10/30/2024

Test Temp: 25 °C
Video Offset: 41 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
2000 MHz	INTERCEPT (mV)	4946	375	740	1089	1447	1826	2159	2505	2836	3159	3532	3917	4252	4599	4935	Measured Value (mV)	
	SLOPE (mV/dB)	70.0	-18	-3	-4	3	32	15	11	-8	-36	-13	22	7	3	-11	Error (mV)	
			-0.26	-0.05	-0.06	0.05	0.46	0.21	0.15	-0.12	-0.51	-0.18	0.31	0.10	0.05	-0.15	LINEARITY ERROR (dB)	-0.51
			0.51	0.70	0.66	0.75	1.14	0.87	0.79	0.50	0.09	0.39	0.86	0.63	0.56	0.34	ACCURACY ERROR (dB)	1.14
6000 MHz	INTERCEPT (mV)	4960	345	710	1056	1416	1791	2129	2499	2845	3169	3535	3893	4235	4604	4976	Measured Value (mV)	
	SLOPE (mV/dB)	70.8	-10	1	-7	-2	19	3	19	11	-20	-8	-4	-16	-2	16	Error (mV)	
			-0.14	0.01	-0.10	-0.02	0.27	0.04	0.26	0.15	-0.28	-0.11	-0.06	-0.23	-0.02	0.23	LINEARITY ERROR (dB)	-0.28
			0.09	0.27	0.19	0.31	0.64	0.45	0.71	0.62	0.23	0.43	0.52	0.38	0.63	0.92	ACCURACY ERROR (dB)	0.92
10000 MHz	INTERCEPT (mV)	4896	275	624	967	1337	1712	2054	2436	2790	3111	3476	3817	4170	4539	4896	Measured Value (mV)	
	SLOPE (mV/dB)	71.1	-1	-8	-20	-5	14	1	28	26	-8	2	-13	-15	-1	0	Error (mV)	
			-0.02	-0.11	-0.28	-0.08	0.20	0.01	0.39	0.37	-0.11	0.02	-0.18	-0.21	-0.02	0.01	LINEARITY ERROR (dB)	0.39
			-0.91	-0.95	-1.07	-0.81	-0.48	-0.62	-0.19	-0.16	-0.59	-0.41	-0.56	-0.54	-0.29	-0.22	ACCURACY ERROR (dB)	-1.07
14000 MHz	INTERCEPT (mV)	4916	342	706	1056	1411	1776	2111	2482	2824	3146	3511	3854	4200	4567	4923	Measured Value (mV)	
	SLOPE (mV/dB)	70.1	-15	-2	-2	2	16	1	21	12	-16	-2	-10	-14	2	7	Error (mV)	
			-0.22	-0.03	-0.04	0.03	0.23	0.01	0.30	0.18	-0.23	-0.03	-0.14	-0.20	0.03	0.11	LINEARITY ERROR (dB)	0.30
			0.04	0.22	0.19	0.24	0.43	0.19	0.46	0.33	-0.10	0.09	-0.03	-0.11	0.10	0.16	ACCURACY ERROR (dB)	0.46
18000 MHz	INTERCEPT (mV)	4902	358	727	1074	1426	1780	2106	2482	2827	3150	3512	3840	4186	4559	4915	Measured Value (mV)	
	SLOPE (mV/dB)	69.6	-17	3	2	6	12	-10	17	14	-11	3	-17	-20	5	13	Error (mV)	
			-0.25	0.05	0.03	0.09	0.17	-0.15	0.25	0.20	-0.16	0.04	-0.25	-0.28	0.07	0.19	LINEARITY ERROR (dB)	-0.28
			0.27	0.52	0.45	0.45	0.48	0.12	0.46	0.37	-0.04	0.11	-0.23	-0.31	-0.01	0.05	ACCURACY ERROR (dB)	0.52
	Flatness	+/- dB	0.71	0.82	0.87	0.78	0.81	0.75	0.49	0.39	0.41	0.42	0.71	0.58	0.46	0.57		0.87





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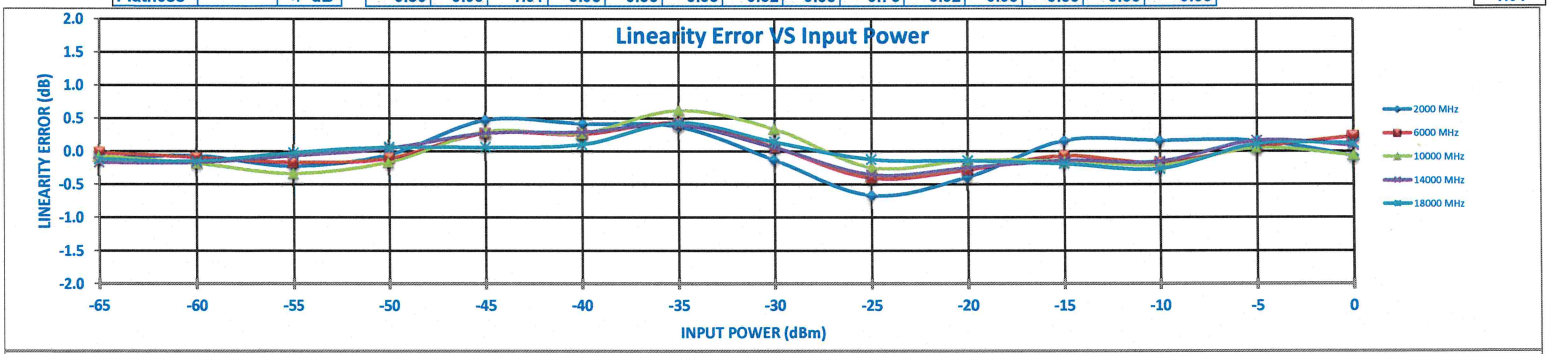
ERDLVA-2G18G-65-70MV-70C

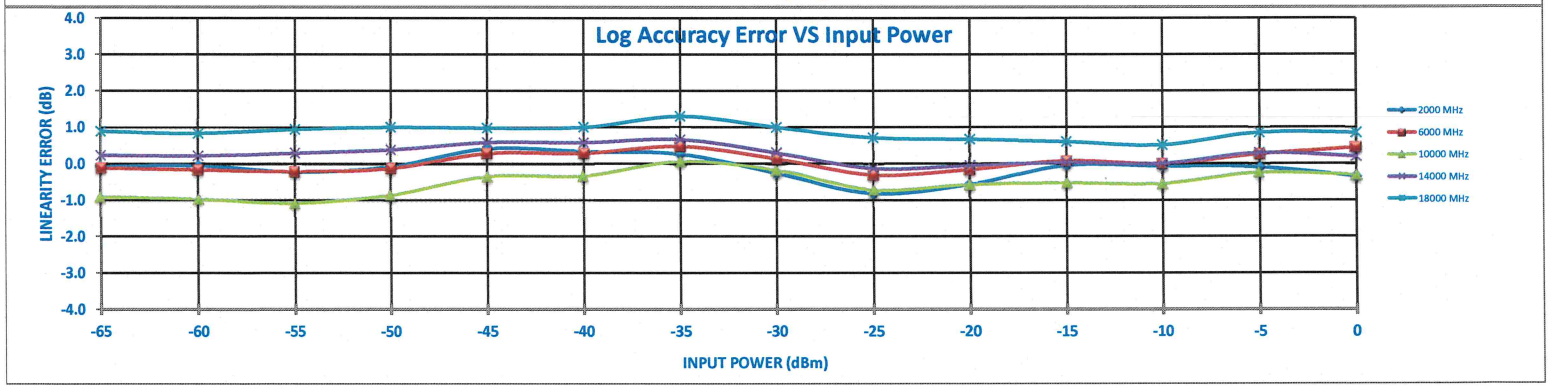
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL47588/2444
DATE: 10/30/2024

Test Temp: -40 °C
Video Offset: 26 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
2000 MHz	INTERCEPT (mV)	4809	317	665	999	1356	1737	2078	2420	2730	3038	3402	3785	4130	4475	4804	Measured Value (mV)	
	SLOPE (mV/dB)	69.0	-8	-5	-16	-4	32	29	26	-9	-46	-27	11	11	11	-5	Error (mV)	
			-0.11	-0.07	-0.23	-0.05	0.47	0.41	0.37	-0.14	-0.67	-0.39	0.16	0.16	0.16	-0.07	LINEARITY ERROR (dB)	-0.67
			-0.07	-0.06	-0.24	-0.09	0.41	0.32	0.26	-0.27	-0.83	-0.58	-0.06	-0.08	-0.11	-0.36	ACCURACY ERROR (dB)	-0.83
6000 MHz	INTERCEPT (mV)	4844	314	657	1000	1353	1728	2075	2435	2758	3074	3431	3794	4135	4500	4860	Measured Value (mV)	
	SLOPE (mV/dB)	69.7	-1	-7	-12	-7	19	18	30	4	-28	-19	-5	-12	4	16	Error (mV)	
			-0.02	-0.09	-0.17	-0.10	0.28	0.26	0.43	0.06	-0.40	-0.28	-0.07	-0.18	0.06	0.23	LINEARITY ERROR (dB)	0.43
			-0.12	-0.17	-0.22	-0.13	0.28	0.28	0.47	0.13	-0.31	-0.16	0.07	-0.01	0.26	0.45	ACCURACY ERROR (dB)	0.47
10000 MHz	INTERCEPT (mV)	4811	259	601	940	1302	1684	2032	2406	2736	3045	3402	3752	4097	4465	4807	Measured Value (mV)	
	SLOPE (mV/dB)	70.0	-5	-13	-24	-11	21	19	43	23	-17	-10	-10	-15	3	-4	Error (mV)	
			-0.07	-0.18	-0.34	-0.16	0.30	0.27	0.62	0.33	-0.25	-0.15	-0.14	-0.21	0.05	-0.06	LINEARITY ERROR (dB)	0.62
			-0.91	-0.98	-1.09	-0.87	-0.36	-0.34	0.05	-0.19	-0.73	-0.58	-0.53	-0.56	-0.25	-0.32	ACCURACY ERROR (dB)	-1.09
14000 MHz	INTERCEPT (mV)	4836	338	683	1035	1388	1749	2095	2448	2769	3086	3438	3791	4135	4502	4842	Measured Value (mV)	
	SLOPE (mV/dB)	69.0	-12	-12	-5	3	19	20	28	4	-24	-18	-10	-11	11	6	Error (mV)	
			-0.17	-0.17	-0.07	0.04	0.27	0.29	0.40	0.05	-0.35	-0.25	-0.14	-0.16	0.16	0.09	LINEARITY ERROR (dB)	0.40
			0.23	0.20	0.28	0.37	0.58	0.57	0.66	0.29	-0.14	-0.06	0.03	-0.01	0.28	0.19	ACCURACY ERROR (dB)	0.66
18000 MHz	INTERCEPT (mV)	4879	383	726	1080	1431	1776	2124	2492	2817	3144	3488	3830	4170	4541	4887	Measured Value (mV)	
	SLOPE (mV/dB)	69.0	-8	-10	-2	4	4	7	30	9	-9	-10	-13	-18	7	8	Error (mV)	
			-0.12	-0.15	-0.02	0.06	0.06	0.10	0.43	0.14	-0.13	-0.14	-0.19	-0.27	0.11	0.12	LINEARITY ERROR (dB)	0.43
			0.88	0.82	0.93	0.99	0.97	0.99	1.29	0.98	0.70	0.66	0.59	0.50	0.85	0.84	ACCURACY ERROR (dB)	1.29
	Flatness	+/- dB	0.89	0.90	1.01	0.93	0.66	0.66	0.62	0.63	0.76	0.62	0.56	0.53	0.55	0.60		1.01





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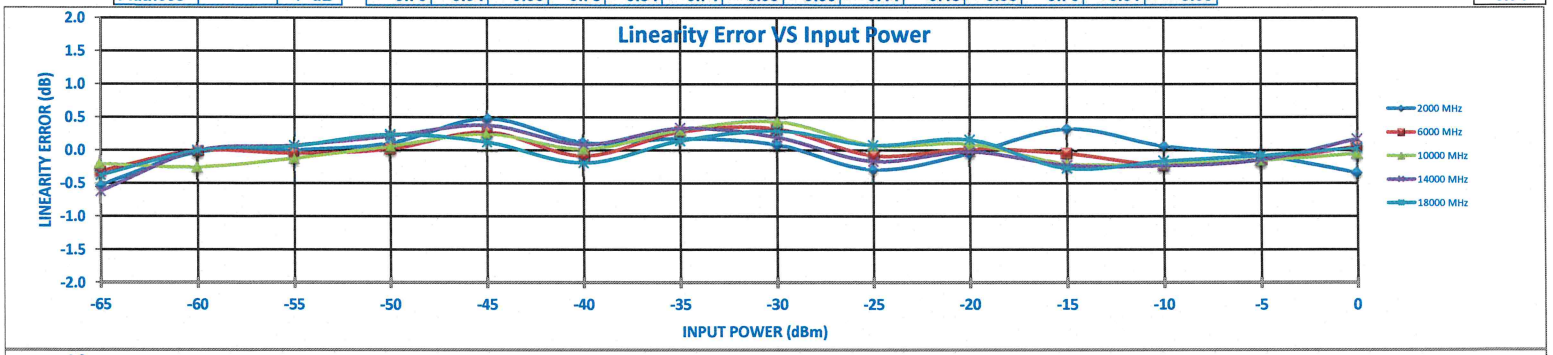
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

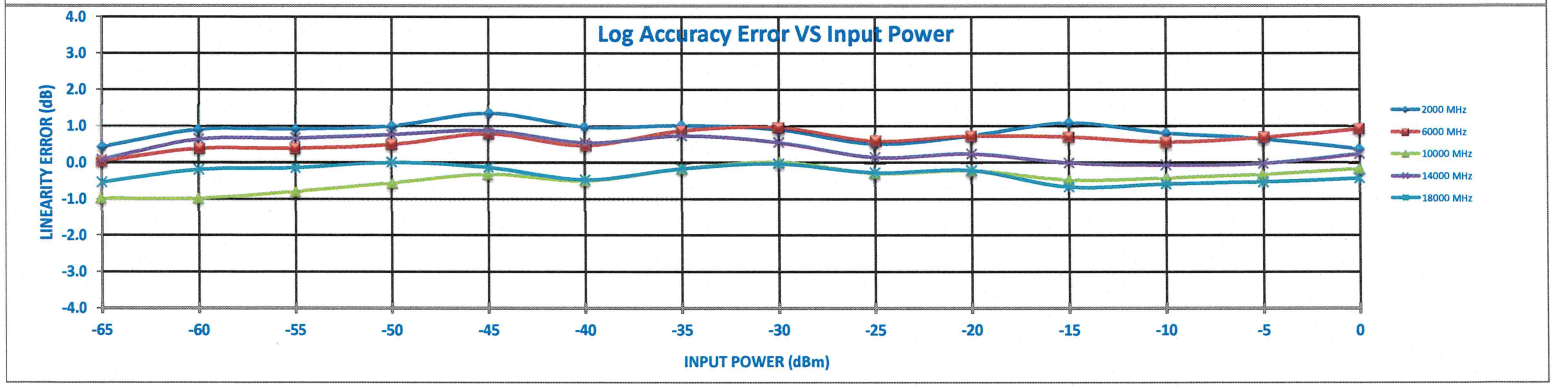
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL47588/2444
DATE: 10/30/2024

Test Temp: 70 °C
Video Offset: 28 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
2000 MHz	INTERCEPT (mV)	4965	330	719	1075	1436	1816	2144	2502	2849	3176	3547	3927	4262	4606	4941	Measured Value (mV)	
	SLOPE (mV/dB)	70.7	-38	-2	0	7	34	8	12	6	-21	-4	23	4	-6	-24	Error (mV)	
			-0.53	-0.03	0.00	0.10	0.48	0.11	0.18	0.08	-0.30	-0.05	0.32	0.06	-0.08	-0.34	LINEARITY ERROR (dB)	-0.53
			0.42	0.90	0.91	1.00	1.35	0.97	1.01	0.90	0.50	0.73	1.08	0.80	0.64	0.36	ACCURACY ERROR (dB)	1.35
6000 MHz	INTERCEPT (mV)	4977	302	682	1037	1400	1776	2108	2492	2853	3182	3547	3900	4245	4609	4981	Measured Value (mV)	
	SLOPE (mV/dB)	71.6	-23	-1	-4	2	20	-6	20	23	-6	1	-4	-16	-10	4	Error (mV)	
			-0.32	-0.01	-0.05	0.02	0.28	-0.09	0.28	0.32	-0.08	0.02	-0.05	-0.23	-0.14	0.05	LINEARITY ERROR (dB)	0.32
			0.03	0.38	0.38	0.49	0.79	0.46	0.87	0.96	0.59	0.73	0.70	0.56	0.69	0.92	ACCURACY ERROR (dB)	0.96
10000 MHz	INTERCEPT (mV)	4907	230	585	953	1325	1697	2039	2418	2786	3119	3479	3816	4175	4537	4903	Measured Value (mV)	
	SLOPE (mV/dB)	71.7	-15	-18	-9	4	18	1	21	31	5	7	-15	-15	-11	-4	Error (mV)	
			-0.21	-0.26	-0.13	0.06	0.25	0.02	0.30	0.43	0.07	0.09	-0.21	-0.20	-0.16	-0.05	LINEARITY ERROR (dB)	0.43
			-0.99	-0.99	-0.80	-0.56	-0.33	-0.51	-0.17	0.01	-0.30	-0.23	-0.48	-0.43	-0.33	-0.17	ACCURACY ERROR (dB)	-0.99
14000 MHz	INTERCEPT (mV)	4920	305	700	1057	1419	1782	2113	2482	2824	3150	3512	3849	4200	4558	4932	Measured Value (mV)	
	SLOPE (mV/dB)	70.3	-44	-1	5	15	27	6	23	14	-12	-2	-16	-17	-10	12	Error (mV)	
			-0.62	-0.01	0.07	0.22	0.38	0.08	0.33	0.19	-0.17	-0.02	-0.23	-0.24	-0.15	0.17	LINEARITY ERROR (dB)	-0.62
			0.07	0.63	0.66	0.76	0.87	0.53	0.73	0.55	0.14	0.24	-0.02	-0.07	-0.03	0.23	ACCURACY ERROR (dB)	0.87
18000 MHz	INTERCEPT (mV)	4882	261	641	999	1365	1710	2041	2418	2782	3120	3479	3802	4163	4522	4884	Measured Value (mV)	
	SLOPE (mV/dB)	70.7	-27	0	4	17	9	-14	10	21	5	11	-19	-12	-6	2	Error (mV)	
			-0.38	-0.01	0.06	0.24	0.12	-0.19	0.14	0.29	0.07	0.15	-0.28	-0.17	-0.09	0.04	LINEARITY ERROR (dB)	-0.38
			-0.55	-0.20	-0.16	0.00	-0.14	-0.48	-0.17	-0.04	-0.28	-0.23	-0.68	-0.60	-0.54	-0.44	ACCURACY ERROR (dB)	-0.68
	Flatness	+/- dB	0.70	0.94	0.86	0.78	0.84	0.74	0.59	0.50	0.44	0.48	0.88	0.70	0.61	0.68		0.94





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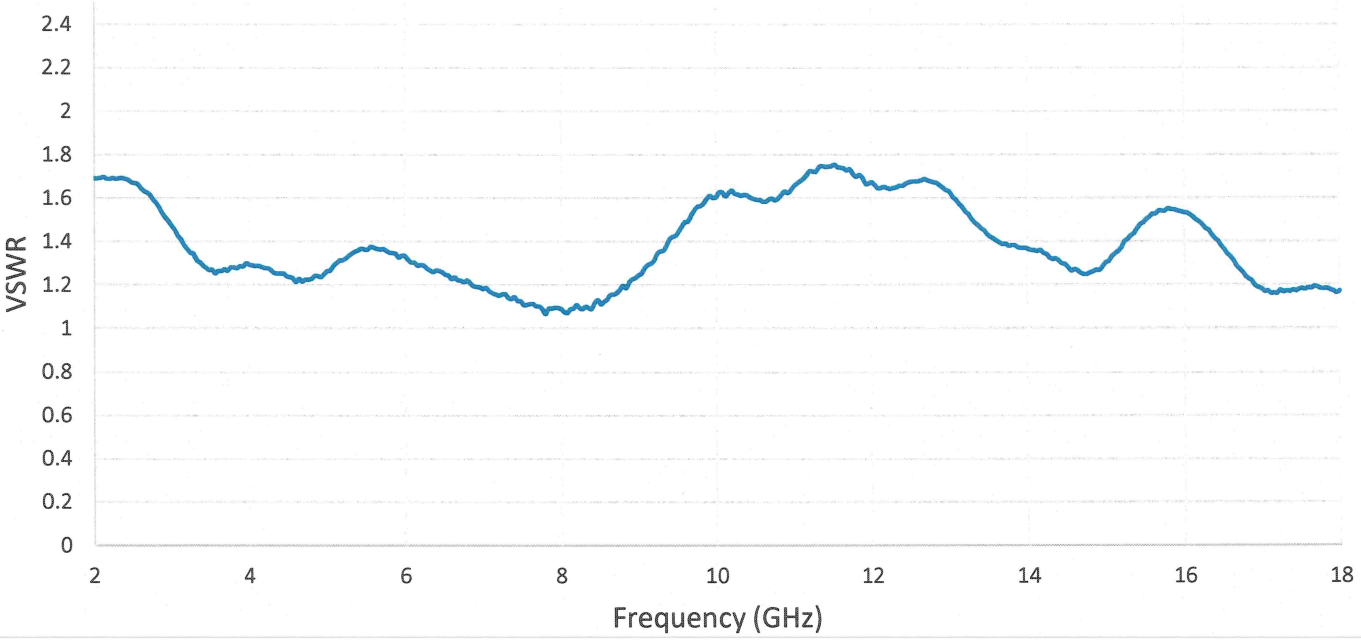
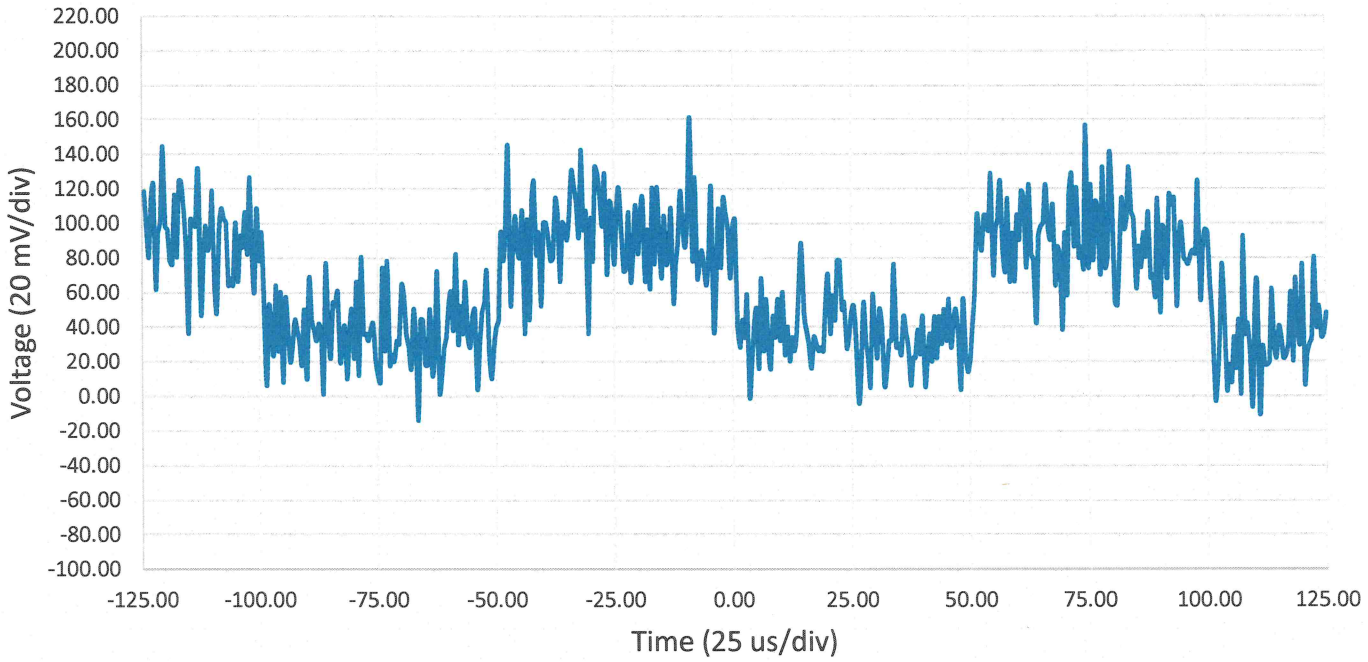
VSWR 1.75:1



TSS @ -71.5 dBm



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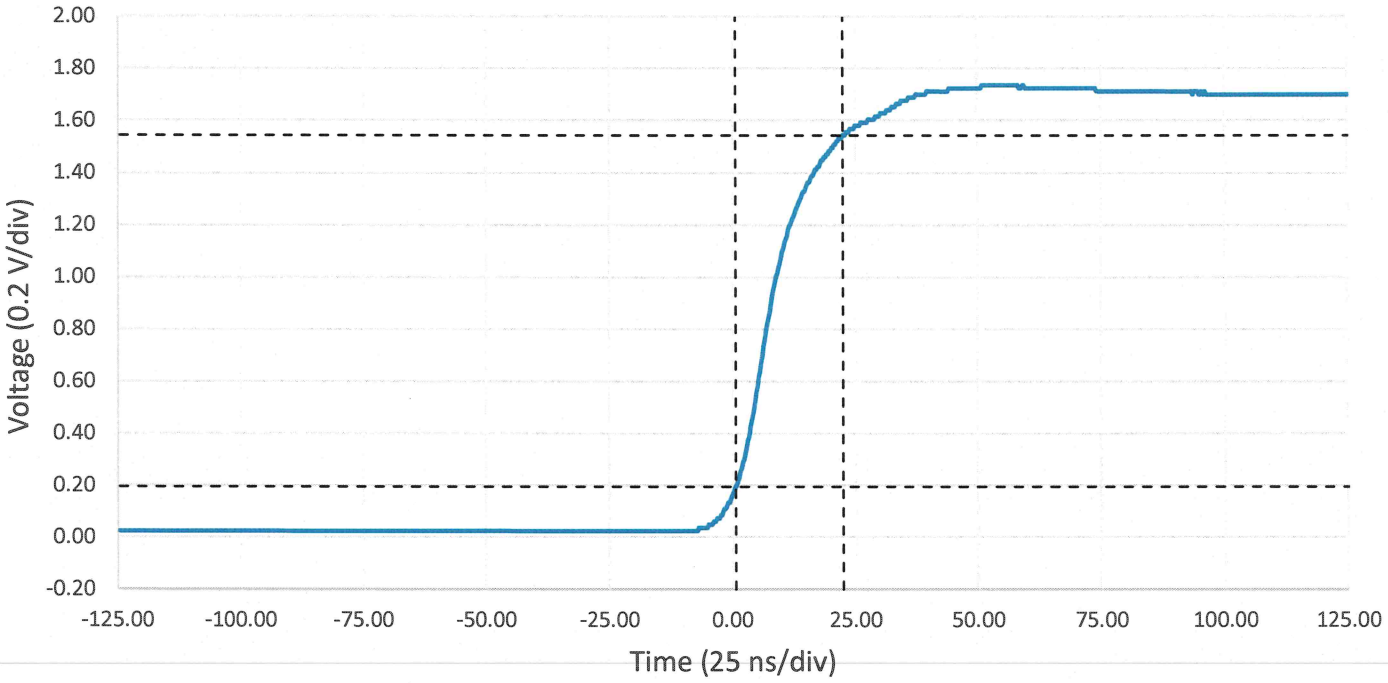
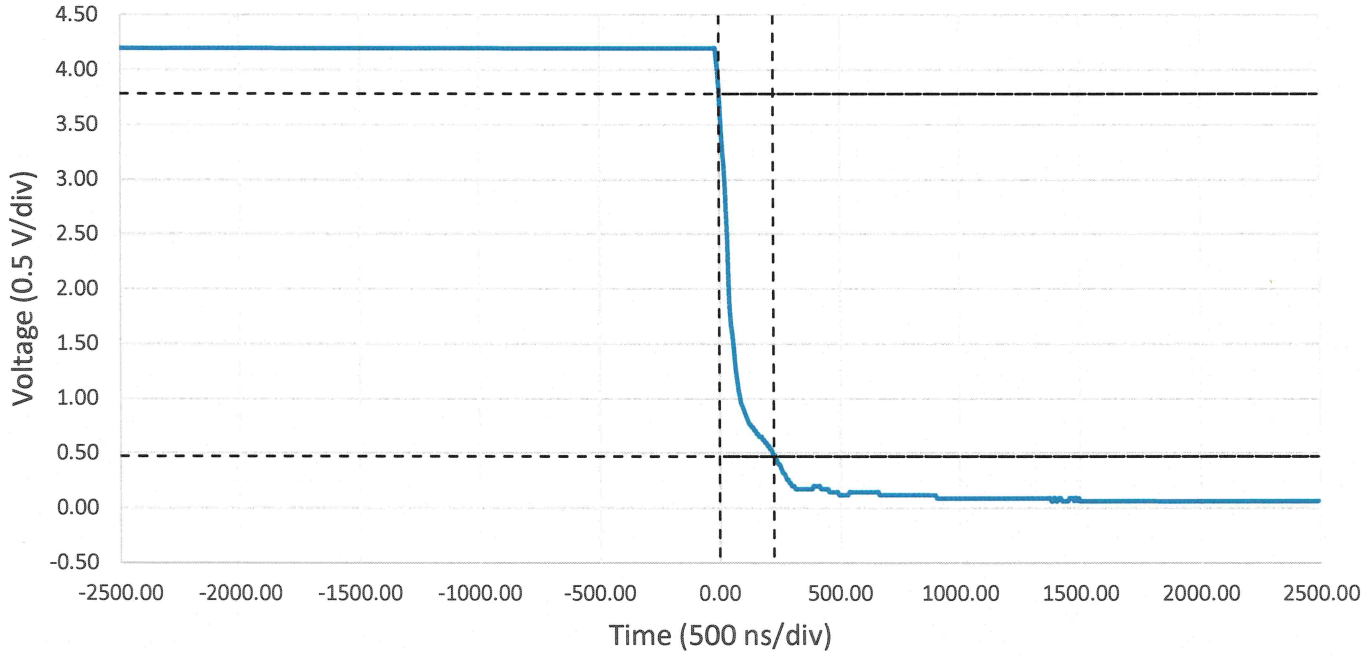
Rise time 21.3 ns



Fall time 227.8 ns



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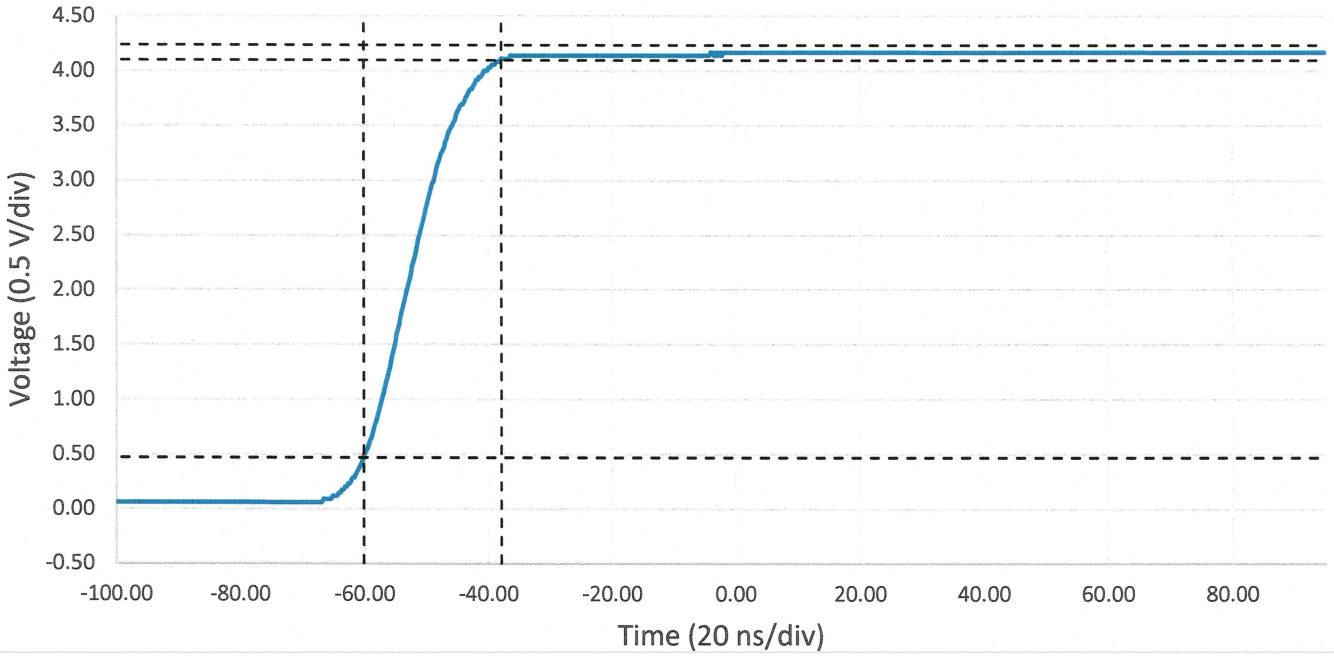
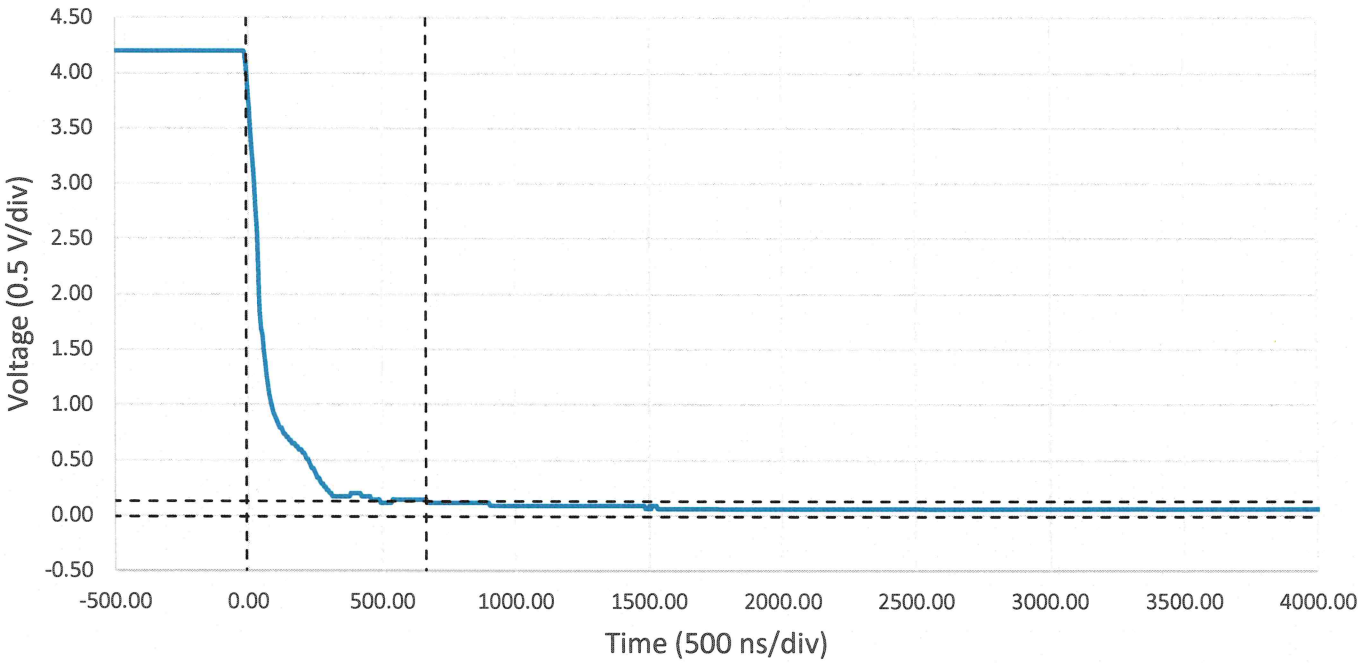
Settle time 22.3 ns



Recovery time 670 ns



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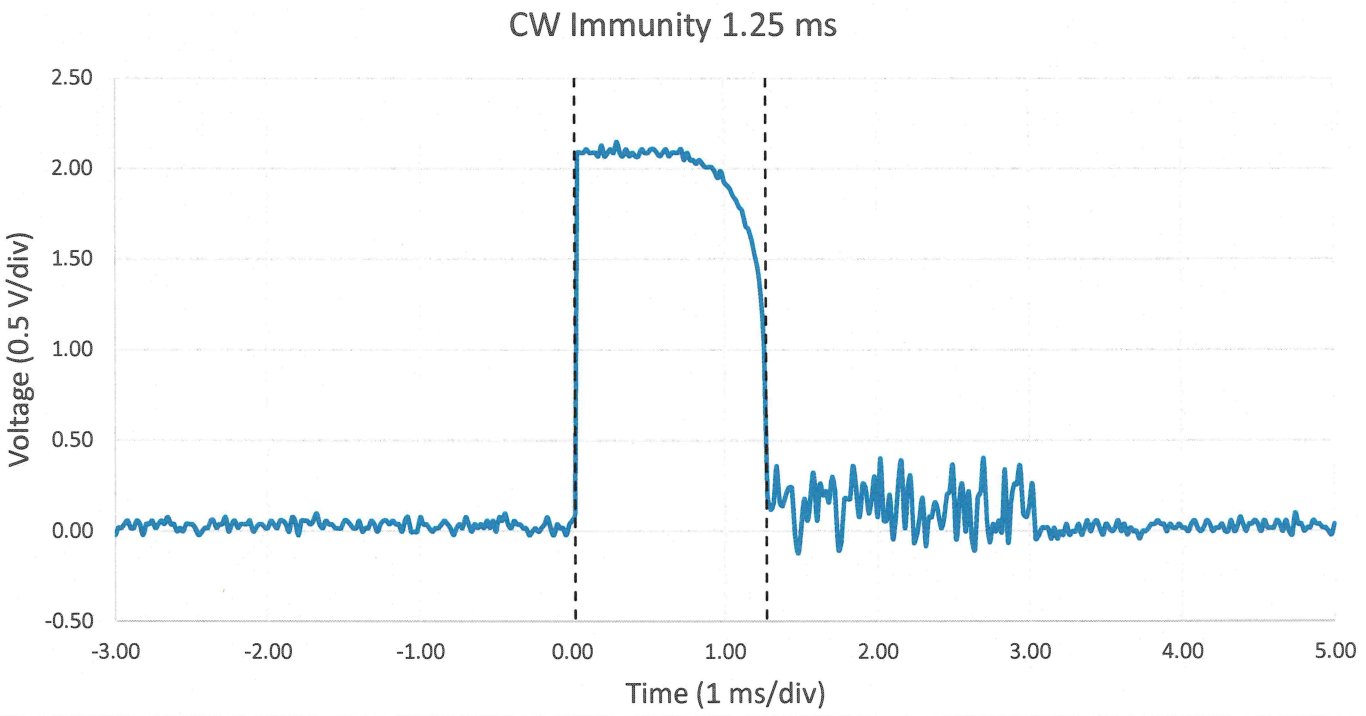
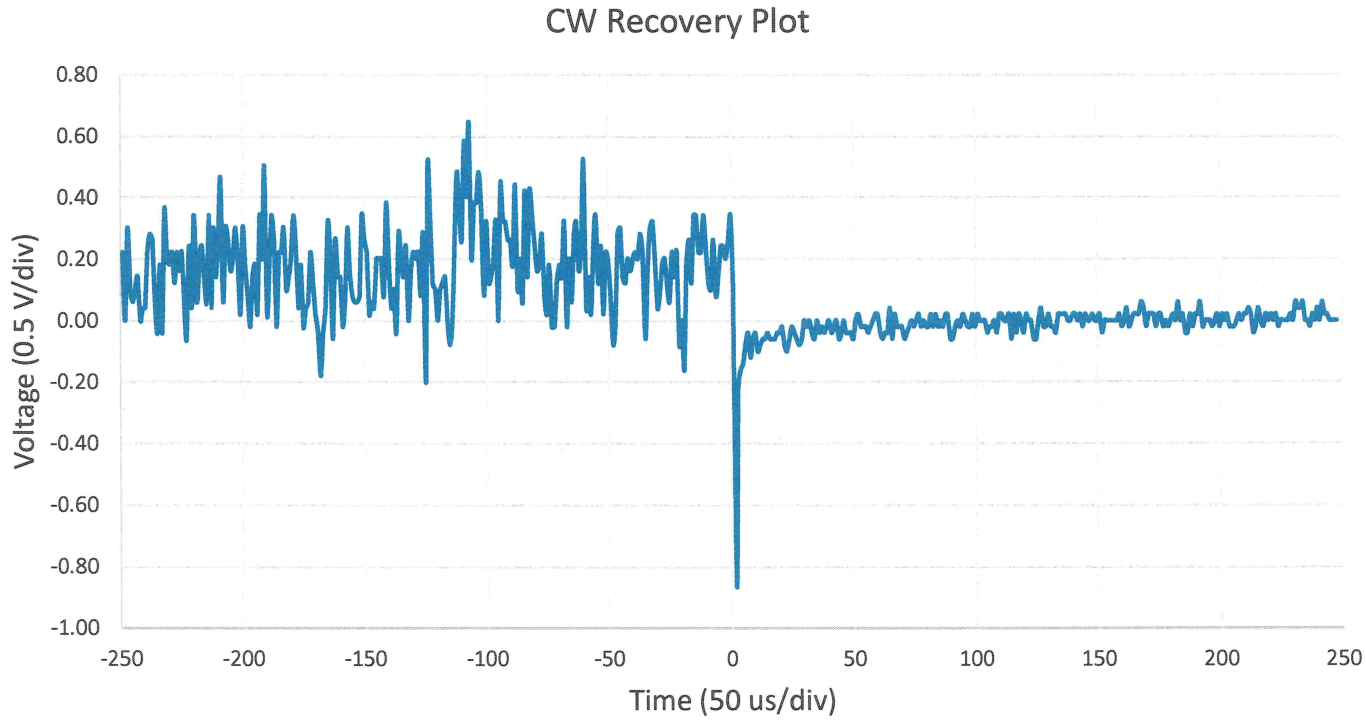
PL47588/2444

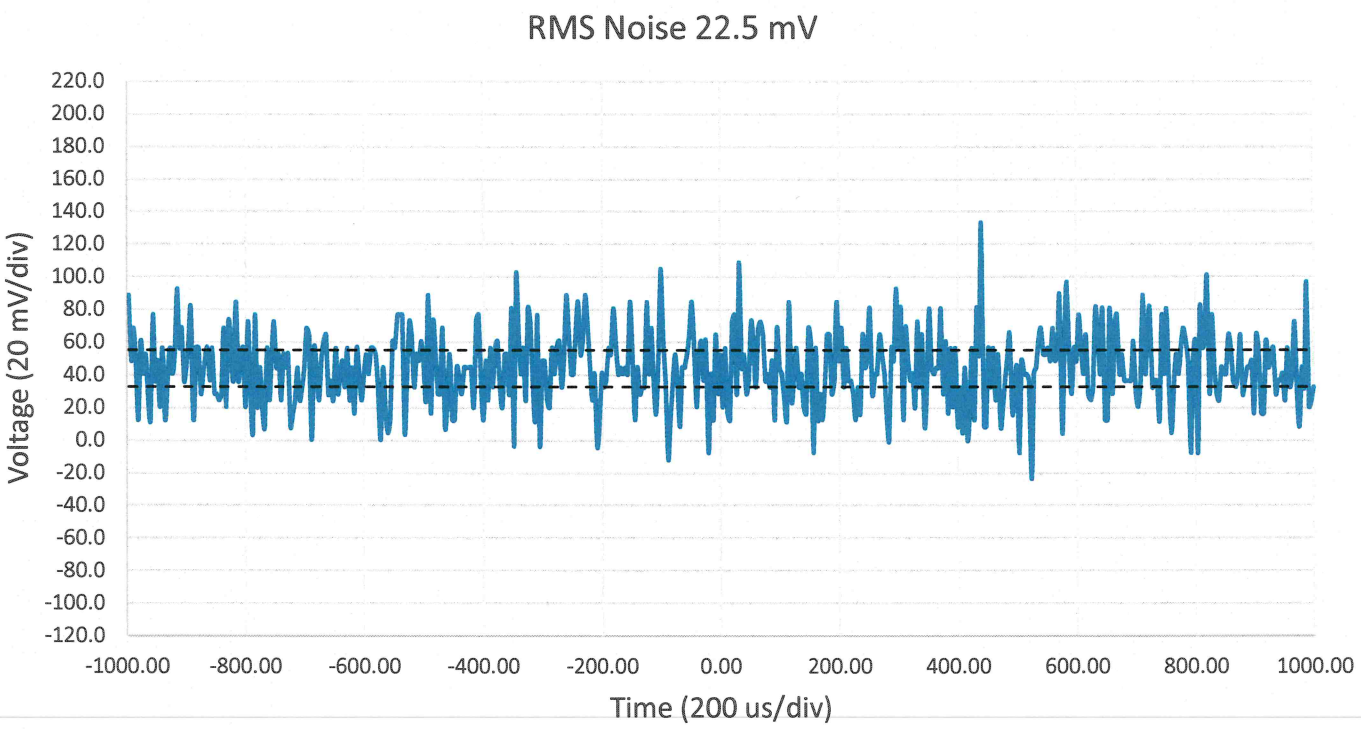




7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

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

PL47588/2444



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