



Tested By: Joshua Monley

Temperature: 0°C TO +85°C

Date 6/27/2024

Drawing No: 27637945 Rev: A1

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
EWDM-2G6G-65-70MV-1**

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+13.27 dB MAX +11.35 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±1 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+8.35 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-29 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-51 dBc	
18	VIDEO OUT TSS:	-71 dBm MAX	-71 dBm	
19	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
20	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	69.4 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.34 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±0.7 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.2 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	41 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	24.8 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	142.8 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	<50 ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	0.45 us	



Summary Data
For
EWDM-2G6G-65-70MV-1

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.52 dB	PMI QA ₃
30	VIDEO OUT CW Immunity:	A. CW Immune Power TSS to -40 dBm Baseline Shift: 200 mV MAX	< 200 mV	
		B. Pulse Peak Amplitude Loss; 2 dB MAX	< 2 dB	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	1.9 ms	
		CW Recovery Time at CW = -40 dBm, ≤ 50 us	< 50 us	
31	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
32	VIDEO OUT load Impedance:	$75 \pm 1 \Omega$	75 Ω	
33	VIDEO OUT Video Output driver capability	150 ft. RG11 into 75 ohm load	PASS	
34	Pulse density capability:	10% duty cycle 100ns; 70% duty cycle 300us at peak power -10 dBm with 1 dB variable for pulse amplitude and baseline	PASS	
35	VIDEO OUT Noise Level (Vp-p):	150 mV TYP	< 150 mV	



Summary Data
For
EWDM-2G6G-65-70MV-1

36	Droop of the Output Video Pulse @ 300us & - 65 dBm	70mV (1 dB) MAX	< 70 mV	PMI QA3
37	VIDEO OUT Propagation Delay:	50 ns MAX Excluding cable	40 ns	
38	Power Supply	+15 V @ 1000 mA MAX -15 V @ 500 mA MAX	+15 V @ 631 mA -15 V @ 136 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval: 14. [Signature]

Date: 6-28-24



Summary Data For EWDM-2G6G-65-70MV-1

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42350
Date: 06/27/24
Tested By: F. Cortes
Test Temp: +25°C
Input Port: RF Port

DC Offset: -40 mV



Frequency

2 GHz	INTERCEPT (mV)	4817
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.50
	MAX ACC ERROR	0.48

3 GHz	INTERCEPT (mV)	4866
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.19
	MAX ACC ERROR	0.66

4 GHz	INTERCEPT (mV)	4844
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.34
	MAX ACC ERROR	0.52

5 GHz	INTERCEPT (mV)	4844
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.47

6 GHz	INTERCEPT (mV)	4829
	SLOPE (mV/dB)	70.4
	MAX LIN ERROR	0.55
	MAX ACC ERROR	0.5

AVG. SLOPE: 70 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
300	648	1000	1354	1713	2051	2396	2700	3064	3419	3789	4138	4486	4803
-6	-5	0	7	19	10	8	-35	-18	-10	13	15	16	-14
-0.08	-0.07	0.00	0.10	0.28	0.15	0.12	-0.50	-0.26	-0.15	0.18	0.21	0.22	-0.21
0.21	0.19	0.22	0.28	0.41	0.25	0.18	-0.48	-0.27	-0.20	0.09	0.08	0.05	-0.41

312	662	1018	1371	1730	2072	2427	2754	3114	3470	3822	4161	4508	4871
-6	-6	0	3	12	4	10	-13	-3	3	5	-5	-8	5
-0.09	-0.09	0.00	0.04	0.18	0.06	0.14	-0.19	-0.04	0.05	0.08	-0.08	-0.12	0.07
0.39	0.39	0.48	0.52	0.66	0.55	0.62	0.30	0.44	0.53	0.56	0.41	0.37	0.56

299	647	999	1352	1714	2053	2412	2743	3100	3445	3791	4133	4476	4868
-4	-6	-3	1	13	3	13	-5	2	-2	-5	-12	-19	24
-0.06	-0.08	-0.04	0.01	0.19	0.05	0.19	-0.08	0.03	-0.03	-0.07	-0.18	-0.27	0.34
0.20	0.17	0.21	0.25	0.43	0.27	0.41	0.14	0.24	0.17	0.12	0.01	-0.09	0.52

283	632	981	1335	1698	2042	2405	2740	3098	3441	3787	4127	4473	4865
-3	-5	-6	-3	10	3	16	0	7	0	-5	-15	-20	21
-0.04	-0.07	-0.09	-0.04	0.14	0.04	0.22	0.00	0.10	0.00	-0.07	-0.22	-0.28	0.31
-0.03	-0.04	-0.05	0.01	0.20	0.12	0.31	0.10	0.21	0.12	0.06	-0.08	-0.13	0.47

258	607	951	1305	1668	2008	2372	2712	3073	3406	3758	4111	4465	4867
6	3	-5	-3	8	-4	8	-4	5	-14	-14	-13	-11	38
0.09	0.05	-0.07	-0.04	0.12	-0.06	0.11	-0.06	0.07	-0.20	-0.20	-0.19	-0.16	0.55
-0.39	-0.40	-0.48	-0.42	-0.23	-0.37	-0.17	-0.31	-0.14	-0.38	-0.35	-0.31	-0.25	0.50

0.39	0.39	0.48	0.47	0.44	0.46	0.39	0.39	0.36	0.46	0.46	0.36	0.31	0.49
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RF Input Power (dBm)

Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

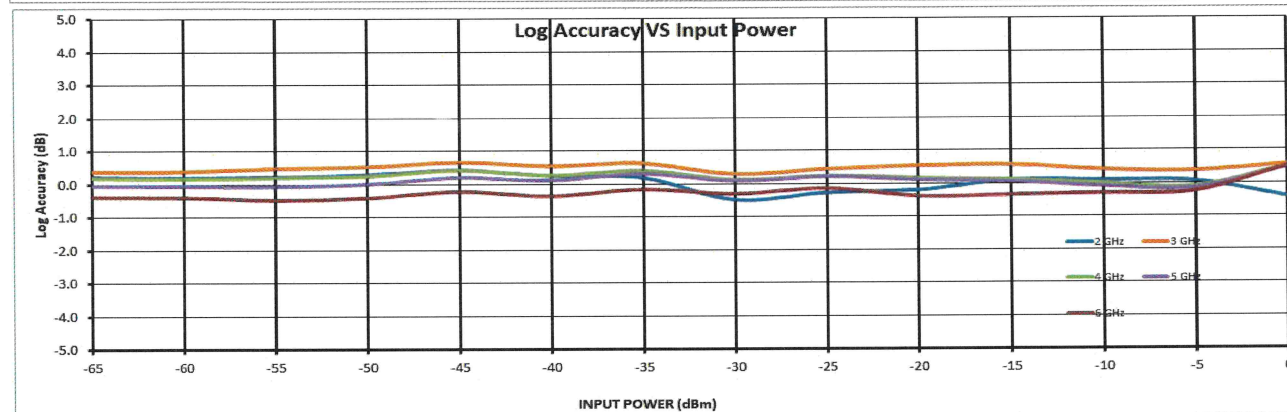
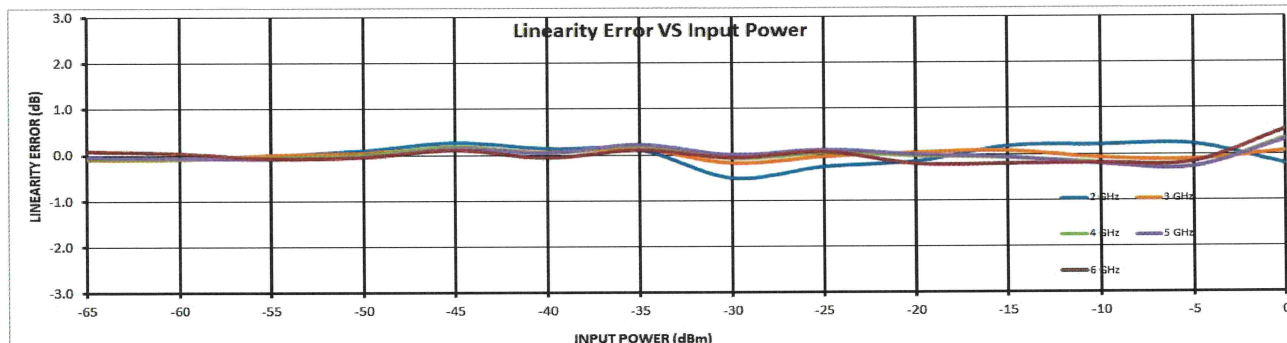
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ERROR (mV)
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ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

Flatness dB: ±0.49 dB





Summary Data For EWDM-2G6G-65-70MV-1

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42350
Date: 06/27/24
Tested By: F. Cortes
Test Temp: +25°C
Input Port: BIT Port

DC Offset: -41 mV



Frequency

2 GHz	INTERCEPT (mV)	4814
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.60
	MAX ACC ERROR	0.60

3 GHz	INTERCEPT (mV)	4862
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.7

4 GHz	INTERCEPT (mV)	4839
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.33
	MAX ACC ERROR	0.53

5 GHz	INTERCEPT (mV)	4838
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.6

6 GHz	INTERCEPT (mV)	4819
	SLOPE (mV/dB)	70.4
	MAX LIN ERROR	0.62
	MAX ACC ERROR	0.63

AVG. SLOPE: 69.9 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
300	648	1002	1353	1713	2049	2395	2699	3062	3417	3788	4136	4484	4798	
-6	-5	2	6	20	9	8	-35	-18	-10	14	15	16	-16	
-0.09	-0.07	0.03	0.09	0.28	0.13	0.12	-0.50	-0.27	-0.15	0.20	0.22	0.24	-0.24	
0.30	0.28	0.34	0.36	0.50	0.31	0.26	-0.40	-0.21	-0.13	0.17	0.15	0.12	-0.39	
310	659	1014	1367	1727	2068	2423	2749	3111	3466	3818	4158	4504	4865	
-5	-6	-1	2	13	4	9	-14	-2	3	6	-4	-8	3	
-0.08	-0.09	-0.01	0.03	0.18	0.06	0.13	-0.21	-0.03	0.05	0.08	-0.06	-0.11	0.05	
0.44	0.43	0.51	0.56	0.70	0.58	0.66	0.32	0.49	0.57	0.60	0.46	0.41	0.57	
293	643	994	1348	1711	2048	2407	2738	3096	3440	3787	4129	4471	4862	
-6	-5	-3	1	16	3	13	-6	3	-2	-4	-12	-19	23	
-0.08	-0.07	-0.05	0.02	0.22	0.04	0.18	-0.08	0.04	-0.03	-0.06	-0.17	-0.27	0.33	
0.20	0.20	0.22	0.28	0.48	0.29	0.43	0.16	0.28	0.20	0.16	0.05	-0.06	0.53	
274	627	975	1330	1692	2036	2399	2734	3092	3435	3781	4121	4467	4860	
-6	-3	-6	-2	10	3	16	0	7	0	-5	-16	-20	22	
-0.08	-0.05	-0.08	-0.02	0.14	0.05	0.22	0.00	0.10	-0.01	-0.07	-0.22	-0.29	0.31	
-0.07	-0.02	-0.06	0.03	0.20	0.12	0.31	0.10	0.22	0.13	0.07	-0.07	-0.12	0.60	
248	597	941	1297	1659	1999	2363	2702	3065	3397	3750	4102	4455	4856	
6	3	-5	-2	8	-4	8	-5	6	-14	-13	-13	-12	37	
0.08	0.04	-0.08	-0.02	0.12	-0.06	0.12	-0.07	0.09	-0.20	-0.18	-0.19	-0.17	0.62	
-0.44	-0.45	-0.53	-0.44	-0.27	-0.41	-0.20	-0.36	-0.16	-0.42	-0.37	-0.34	-0.29	0.44	
0.44	0.44	0.52	0.50	0.49	0.49	0.43	0.36	0.35	0.49	0.49	0.40	0.35	0.48	

RF Input Power (dBm)

Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

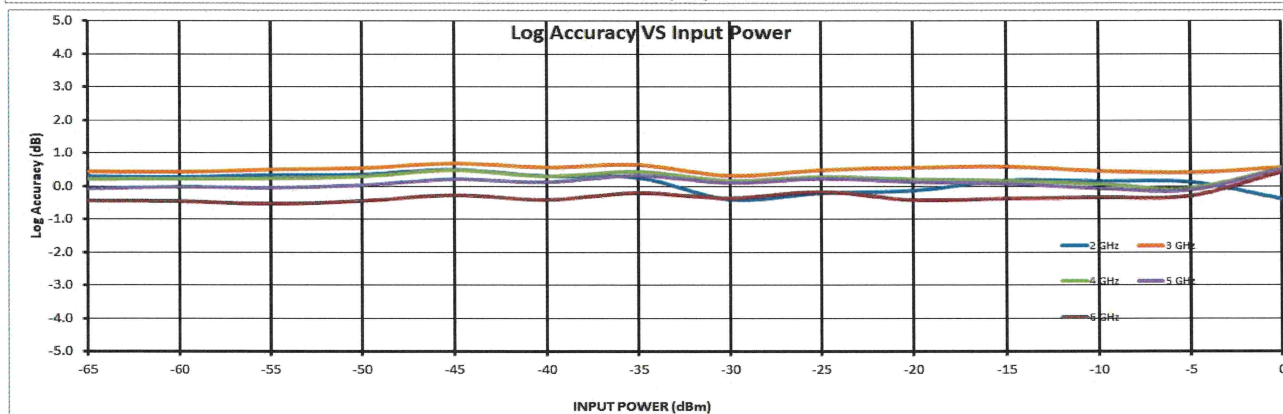
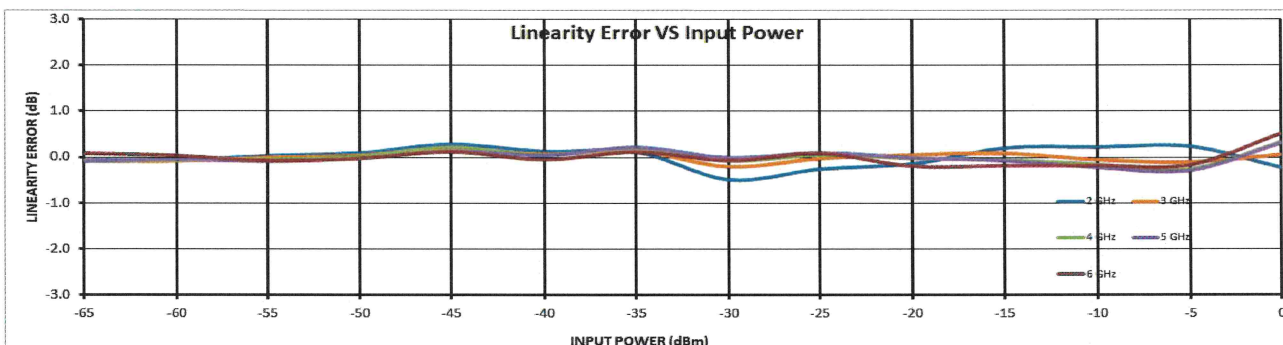
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ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

Flatness dB: ±0.52 dB





Summary Data For EWDM-2G6G-65-70MV-1

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42350
Date:: 06/27/24
Tested By: F. Cortes
Test Temp: 0°C
Input Port: RF Port

DC Offset: -21 mV



Frequency

2 GHz	INTERCEPT (mV)	4898
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.66
	MAX ACC ERROR	0.63

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
347	682	1038	1396	1760	2106	2448	2755	3123	3480	3854	4205	4560	4905	
8	-7	-2	4	18	14	5	-39	-22	-15	8	8	13	7	
0.12	-0.11	-0.03	0.06	0.26	0.20	0.07	-0.65	-0.31	-0.22	0.11	0.12	0.18	0.10	
0.17	-0.07	-0.02	0.05	0.24	0.15	0.01	-0.63	-0.40	-0.33	-0.02	-0.04	0.00	-0.10	

RF Input Power (dBm)

Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

3 GHz	INTERCEPT (mV)	4937
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.22
	MAX ACC ERROR	0.5

362	696	1067	1415	1778	2129	2479	2808	3171	3531	3887	4227	4573	4947	
5	-13	-5	1	12	10	8	-15	-5	3	7	-6	-12	10	
0.07	-0.19	-0.07	0.01	0.17	0.15	0.11	-0.22	-0.07	0.04	0.10	-0.08	-0.17	0.14	
0.38	0.13	0.25	0.34	0.49	0.48	0.45	0.12	0.28	0.39	0.45	0.27	0.19	0.50	

Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

4 GHz	INTERCEPT (mV)	4907
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.33
	MAX ACC ERROR	0.36

346	680	1036	1396	1762	2107	2461	2793	3163	3501	3850	4195	4535	4930	
4	-13	-8	-1	15	9	12	-7	2	-1	-4	-10	-21	23	
0.06	-0.19	-0.12	-0.01	0.22	0.13	0.17	-0.10	0.02	-0.02	-0.05	-0.14	-0.30	0.33	
0.16	-0.10	-0.04	0.05	0.27	0.17	0.19	-0.09	0.02	-0.04	-0.08	-0.18	-0.35	0.26	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

5 GHz	INTERCEPT (mV)	4907
	SLOPE (mV/dB)	70.5
	MAX LIN ERROR	0.34
	MAX ACC ERROR	0.41

328	664	1017	1375	1744	2094	2453	2789	3150	3497	3845	4186	4531	4931	
8	-11	-11	-5	11	8	15	-2	6	1	-4	-15	-23	24	
0.08	-0.16	-0.15	-0.08	0.16	0.12	0.21	-0.03	0.09	0.01	-0.05	-0.22	-0.33	0.34	
-0.10	-0.33	-0.31	-0.23	0.01	-0.02	0.08	-0.15	-0.02	-0.09	-0.15	-0.31	-0.41	0.27	

Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

6 GHz	INTERCEPT (mV)	4890
	SLOPE (mV/dB)	70.7
	MAX LIN ERROR	0.56
	MAX ACC ERROR	0.64

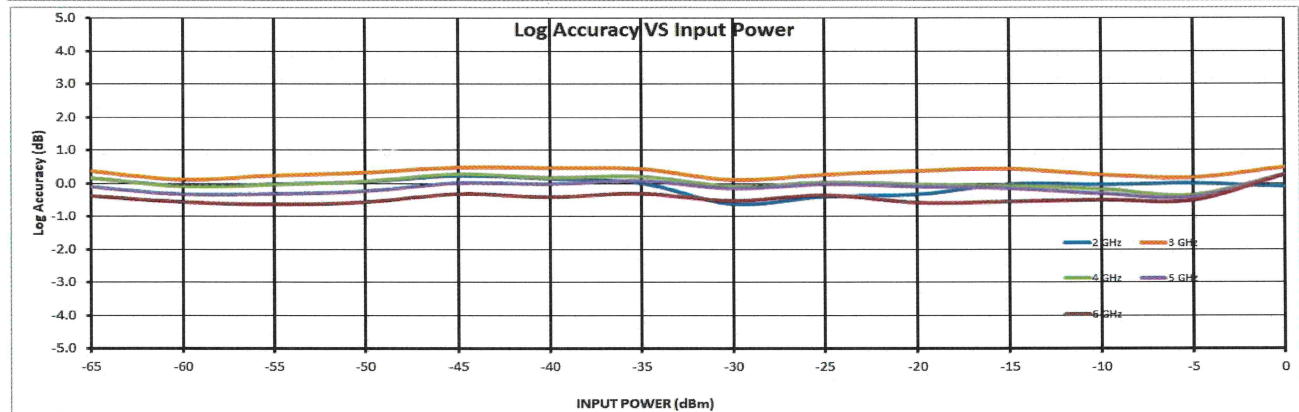
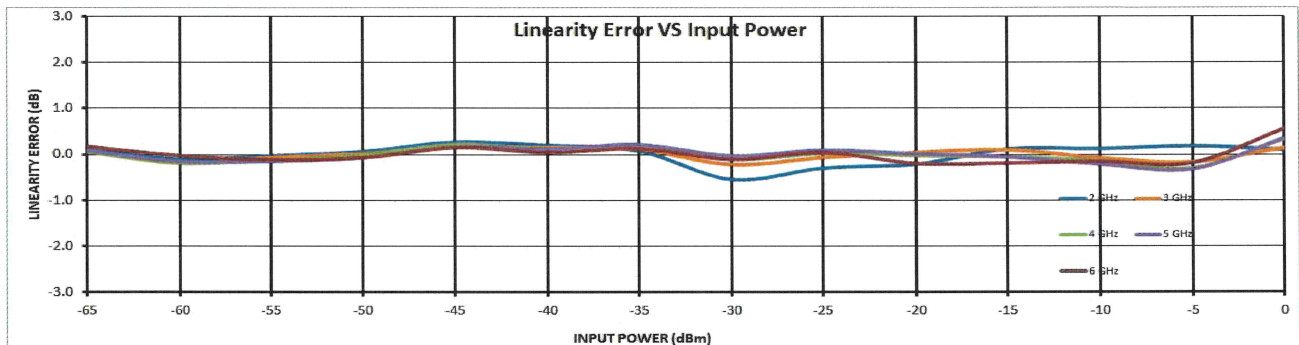
308	647	994	1351	1720	2066	2425	2762	3126	3462	3816	4172	4523	4930	
12	-2	-9	-5	11	3	9	-8	3	-15	-14	-11	-14	40	
0.17	-0.03	-0.12	-0.07	0.15	0.04	0.12	-0.11	0.04	-0.21	-0.20	-0.16	-0.20	0.68	
-0.38	-0.57	-0.64	-0.57	-0.33	-0.42	-0.32	-0.53	-0.36	-0.59	-0.56	-0.51	-0.52	0.28	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

AVG. SLOPE: 70.4 mV/dB

0.38	0.35	0.45	0.45	0.41	0.45	0.38	0.38	0.34	0.49	0.50	0.39	0.36	0.30	
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Flatness dB: ±0.5 dB





Summary Data For EWDM-2G6G-65-70MV-1

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42350
Date: 06/27/2024
Tested By: F. Cortes
Test Temp: +85°C
Input Port: RF Port

DC Offset: -66 mV



Frequency

2 GHz	INTERCEPT (mV)	4549
	SLOPE (mV/dB)	67.4
	MAX LIN ERROR	0.61
	MAX ACC ERROR	1.20

3 GHz	INTERCEPT (mV)	4613
	SLOPE (mV/dB)	68.1
	MAX LIN ERROR	0.32
	MAX ACC ERROR	0.64

4 GHz	INTERCEPT (mV)	4588
	SLOPE (mV/dB)	68.4
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.38

5 GHz	INTERCEPT (mV)	4587
	SLOPE (mV/dB)	68.5
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.48

6 GHz	INTERCEPT (mV)	4569
	SLOPE (mV/dB)	69
	MAX LIN ERROR	0.47
	MAX ACC ERROR	1.14

AVG. SLOPE: 68.3 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	170	497	826	1174	1526	1856	2202	2509	2863	3201	3560	3902	4216	4508
3 GHz	189	525	855	1203	1557	1889	2244	2570	2923	3258	3597	3935	4273	4591
4 GHz	164	481	809	1160	1514	1846	2207	2543	2897	3222	3566	3896	4236	4594
5 GHz	149	474	802	1153	1507	1843	2206	2544	2896	3221	3556	3892	4233	4588
6 GHz	115	426	757	1106	1457	1796	2157	2505	2863	3178	3519	3869	4221	4594
AVG. SLOPE	0.54	0.72	0.72	0.71	0.73	0.68	0.64	0.48	0.44	0.59	0.57	0.48	0.42	0.63

RF Input Power (dBm)

Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

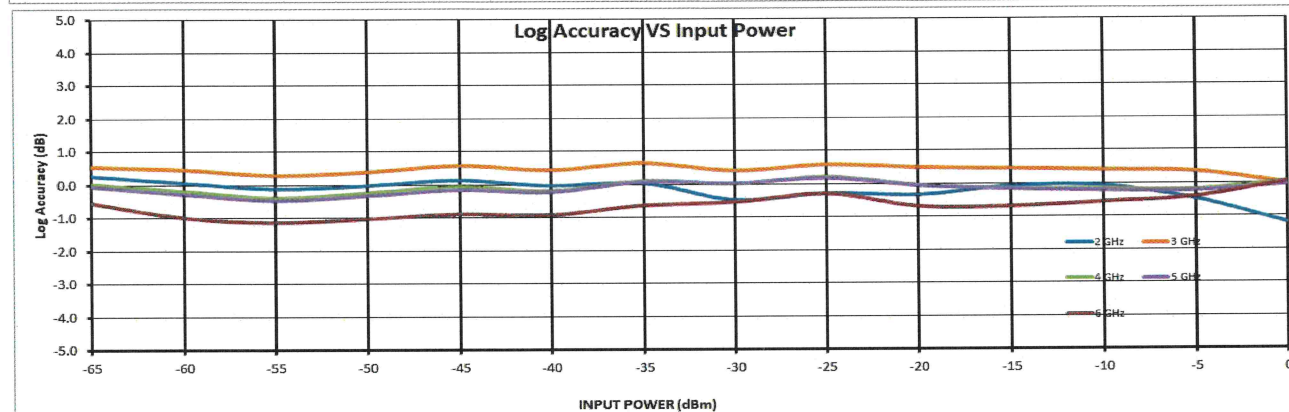
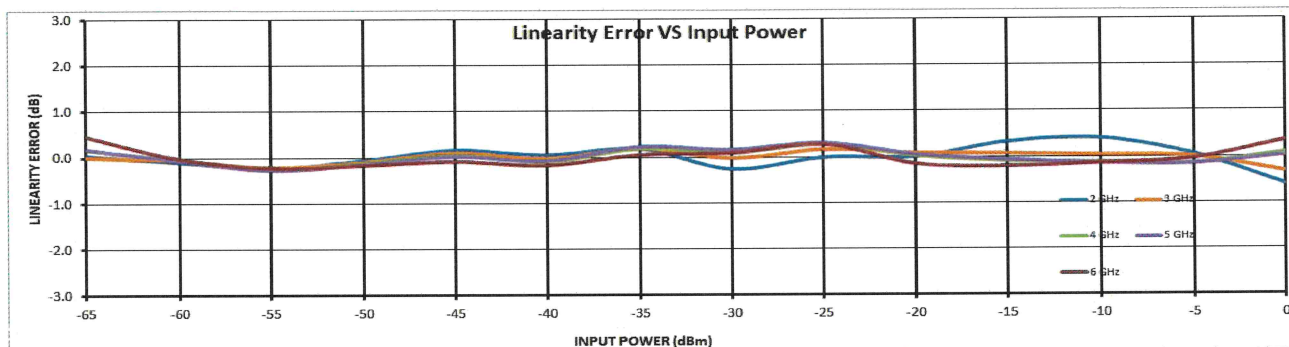
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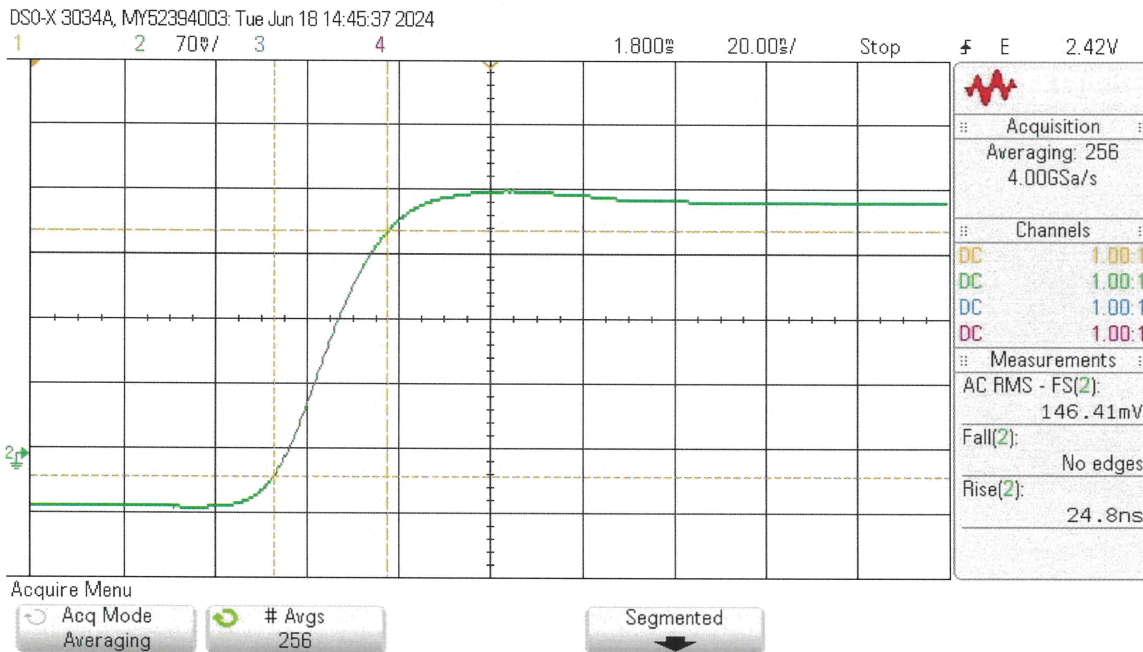
Flatness dB: ±0.73 dB



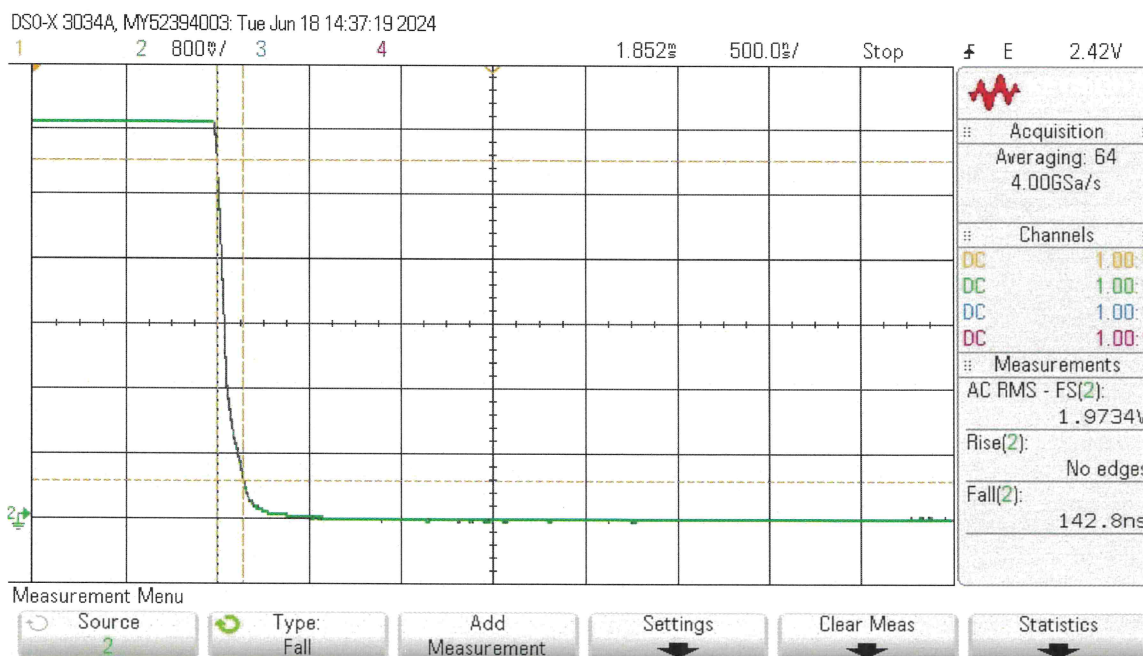


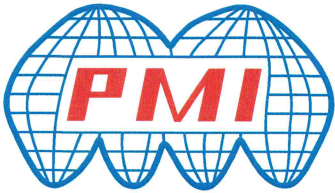
Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





Summary Data
For
EWDM-2G6G-65-70MV-1

Settling Time

