



Tested By: Joshua Monley

Temperature: 0°C TO +85°C

Date 5/30/2024

Drawing No: 27637945 **Rev: A1**

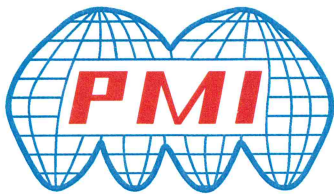
Rev: A1

PMI
QA3



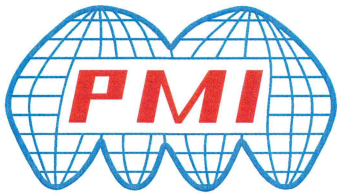
**Summary Data
For
EWDM-2G6G-65-70MV-1**

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+12.03 dB MAX +10.54 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±0.7 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+6.46 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-28 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-47 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	68.3 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	±0.82 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.11 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	36 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	26.3 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	168.1 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	32.48 ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	0.36 us	



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

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.8 dB	PMI QA3
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	1.58 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 @ 625 mA -15 V @ 140 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval: *K. Luter*

Date: 5-31-24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42372
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: RF Port

DC Offset: 32 mV



Frequency

2 GHz	INTERCEPT (mV)	4879
	SLOPE (mV/dB)	69.3
	MAX LIN ERROR	0.44
	MAX ACC ERROR	0.76

3 GHz	INTERCEPT (mV)	4835
	SLOPE (mV/dB)	68.3
	MAX LIN ERROR	0.44
	MAX ACC ERROR	0.81

4 GHz	INTERCEPT (mV)	4798
	SLOPE (mV/dB)	68.6
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.77

5 GHz	INTERCEPT (mV)	4855
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.38
	MAX ACC ERROR	0.56

6 GHz	INTERCEPT (mV)	4890
	SLOPE (mV/dB)	71
	MAX LIN ERROR	0.53
	MAX ACC ERROR	0.82

AVG. SLOPE: 69.4 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	362	724	1067	1403	1767	2107	2473	2813	3134	3502	3853	4193	4536	4849
	-13	2	-1	-12	6	-1	19	12	-13	8	13	7	3	-30
	-0.19	0.03	-0.02	-0.17	0.08	-0.01	0.27	0.18	-0.19	0.12	0.19	0.09	0.04	-0.44
	0.35	0.57	0.51	0.35	0.59	0.49	0.76	0.65	0.28	0.58	0.63	0.53	0.47	-0.02
3 GHz	383	741	1087	1420	1779	2114	2463	2778	3098	3457	3802	4151	4500	4851
	-14	3	7	-1	17	10	18	-9	-30	-13	-9	-1	6	16
	-0.20	0.04	0.11	-0.02	0.24	0.15	0.26	-0.13	-0.44	-0.18	-0.13	-0.02	0.09	0.23
	0.66	0.81	0.79	0.59	0.76	0.59	0.61	0.15	-0.24	-0.07	-0.10	-0.06	-0.05	0.01
4 GHz	329	687	1025	1365	1721	2057	2418	2743	3063	3417	3766	4111	4454	4812
	-10	5	0	-3	10	3	21	3	-20	-9	-13	-1	-1	14
	-0.15	0.07	0.00	-0.04	0.15	0.04	0.31	0.05	-0.29	-0.13	-0.19	-0.01	-0.10	0.21
	-0.12	0.03	-0.10	-0.20	-0.07	-0.24	-0.04	-0.36	-0.75	-0.65	-0.77	-0.65	-0.71	-0.56
5 GHz	304	661	995	1340	1698	2042	2421	2781	3103	3462	3806	4153	4498	4845
	0	7	-9	-14	-6	-12	17	27	-1	8	2	-2	-7	-10
	0.00	0.10	-0.13	-0.20	-0.09	-0.17	0.24	0.38	-0.02	0.11	0.02	-0.02	-0.10	-0.14
	-0.48	-0.34	-0.53	-0.56	-0.41	-0.45	0.01	0.19	-0.17	0.00	-0.05	-0.05	-0.08	-0.08
6 GHz	292	645	976	1322	1672	2021	2416	2799	3128	3488	3828	4176	4530	4878
	16	13	-11	-19	-24	-30	10	38	12	17	2	-5	-6	-12
	0.21	0.19	-0.15	-0.27	-0.34	-0.43	0.14	0.53	0.17	0.24	0.03	-0.07	-0.08	-0.18
	-0.56	-0.57	-0.80	-0.82	-0.78	-0.75	-0.06	0.45	0.19	0.37	0.27	0.28	0.38	0.39
AVG. SLOPE	0.66	0.69	0.80	0.71	0.77	0.67	0.41	0.50	0.51	0.61	0.70	0.59	0.59	0.48

RF Input Power (dBm)

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

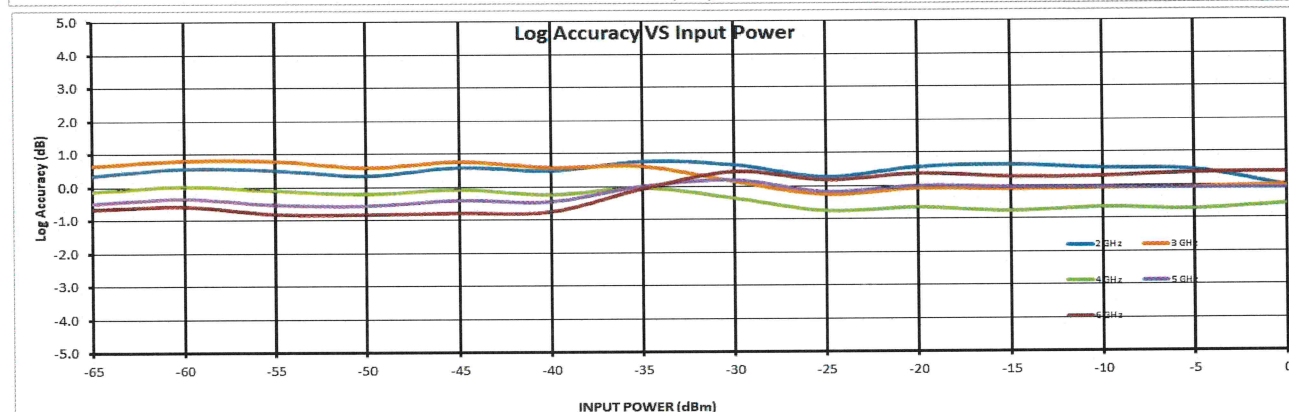
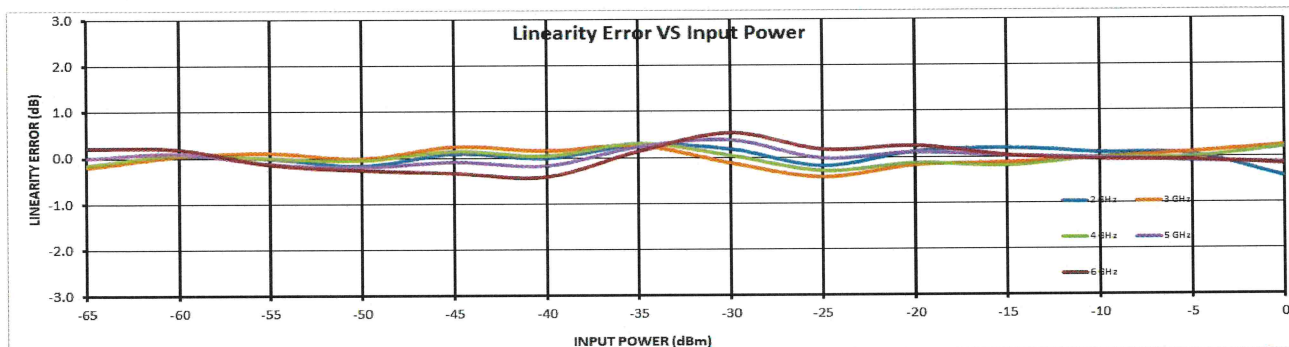
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

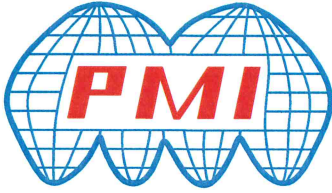
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

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

Flatness dB: ±0.8 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42372
Date: 06/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: BIT Port

DC Offset: 36 mV



Frequency

2 GHz	INTERCEPT (mV)	4905
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.71

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
381	741	1087	1422	1786	2126	2492	2833	3155	3522	3875	4212	4563	4884
-11	2	1	-11	8	-2	17	11	-14	5	11	1	5	-21
-0.15	0.03	0.01	-0.16	0.08	-0.02	0.25	0.18	-0.21	0.08	0.16	0.01	0.07	-0.31
0.35	0.53	0.51	0.32	0.56	0.45	0.71	0.62	0.25	0.53	0.60	0.45	0.50	0.12

RF Input Power (dBm)

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

3 GHz	INTERCEPT (mV)	4855
	SLOPE (mV/dB)	68.3
	MAX LIN ERROR	0.48
	MAX ACC ERROR	0.82

400	761	1106	1438	1797	2131	2479	2796	3114	3475	3821	4168	4520	4878
-14	6	9	-1	17	9	15	-9	-33	-14	-9	-4	6	23
-0.20	0.08	0.13	-0.01	0.24	0.13	0.22	-0.14	-0.48	-0.20	-0.14	-0.06	0.09	0.33
0.63	0.82	0.78	0.55	0.72	0.52	0.53	0.09	-0.34	-0.15	-0.17	-0.18	-0.12	0.03

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

4 GHz	INTERCEPT (mV)	4828
	SLOPE (mV/dB)	68.7
	MAX LIN ERROR	0.34
	MAX ACC ERROR	0.73

348	712	1053	1389	1747	2083	2444	2770	3087	3444	3784	4136	4485	4847
-14	7	4	-3	11	3	21	3	-23	-10	-13	-5	0	19
-0.20	0.10	0.06	-0.05	0.16	0.05	0.30	0.06	-0.34	-0.14	-0.20	-0.07	0.01	0.27
-0.12	0.11	0.02	-0.15	0.00	-0.17	0.02	-0.29	-0.73	-0.59	-0.70	-0.64	-0.62	-0.42

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

5 GHz	INTERCEPT (mV)	4890
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.39
	MAX ACC ERROR	0.42

330	693	1032	1370	1730	2073	2454	2814	3134	3494	3840	4183	4533	4884
-4	9	-3	-15	-6	-13	18	27	-3	6	2	-6	-6	-6
-0.05	0.12	-0.04	-0.22	-0.08	-0.19	0.25	0.39	-0.05	0.09	0.02	-0.08	-0.09	-0.08
-0.38	-0.16	-0.28	-0.42	-0.25	-0.31	0.17	0.35	-0.05	0.13	0.10	0.03	0.07	0.12

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

6 GHz	INTERCEPT (mV)	4922
	SLOPE (mV/dB)	71.1
	MAX LIN ERROR	0.64
	MAX ACC ERROR	0.74

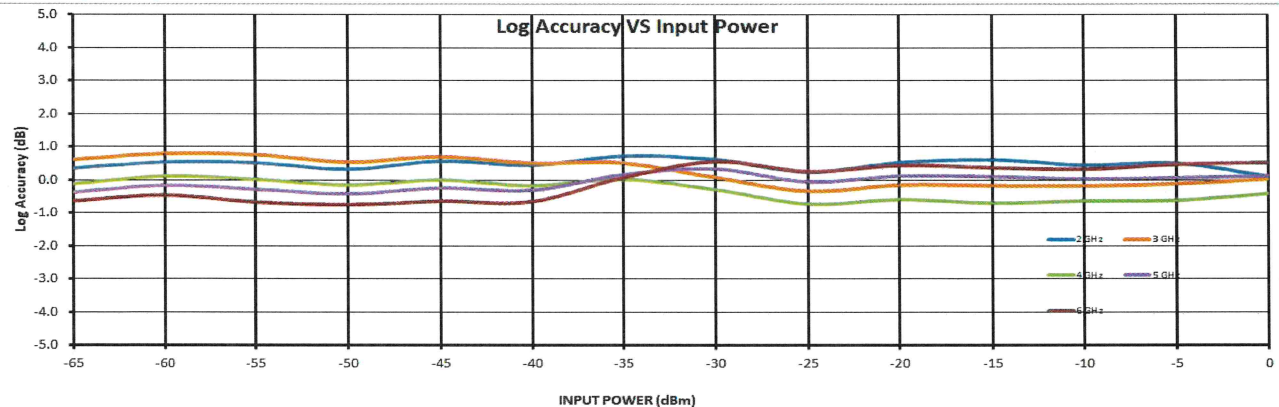
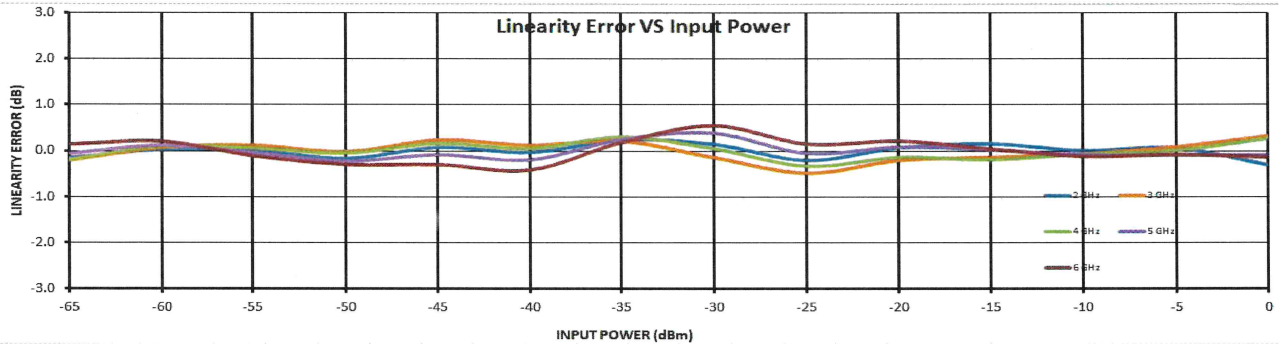
313	673	1006	1348	1703	2050	2448	2829	3156	3516	3859	4203	4561	4912
10	15	-8	-21	-21	-30	13	39	10	15	3	-9	-6	-10
0.14	0.21	-0.11	-0.30	-0.30	-0.42	0.18	0.54	0.15	0.21	0.04	-0.12	-0.08	-0.14
-0.63	-0.45	-0.66	-0.74	-0.63	-0.64	0.08	0.56	0.26	0.44	0.37	0.32	0.47	0.52

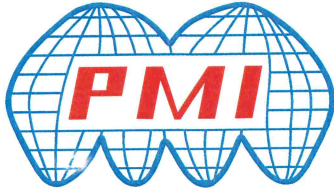
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

AVG. SLOPE: 69.5 mV/dB

0.63	0.63	0.72	0.65	0.68	0.58	0.35	0.45	0.50	0.56	0.65	0.55	0.56	0.47
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Flatness dB: ±0.72 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42372
Date: 5/30/2024
Tested By: F. Cortes
Test Temp: 0°C
Input Port: RF Port

DC Offset: 32 mV



Frequency

2 GHz	INTERCEPT (mV)	4928
	SLOPE (mV/dB)	69.5
	MAX LIN ERROR	0.33
	MAX ACC ERROR	0.59

3 GHz	INTERCEPT (mV)	4873
	SLOPE (mV/dB)	68.4
	MAX LIN ERROR	0.58
	MAX ACC ERROR	0.7

4 GHz	INTERCEPT (mV)	4842
	SLOPE (mV/dB)	68.8
	MAX LIN ERROR	0.45
	MAX ACC ERROR	1.05

5 GHz	INTERCEPT (mV)	4897
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.29
	MAX ACC ERROR	0.79

6 GHz	INTERCEPT (mV)	4933
	SLOPE (mV/dB)	71.2
	MAX LIN ERROR	0.39
	MAX ACC ERROR	1.11

AVG. SLOPE: 69.6 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
416	750	1097	1434	1804	2153	2507	2839	3166	3546	3901	4241	4586	4907	
9	-5	-6	-17	6	7	13	-3	-23	9	16	8	6	-21	
0.13	-0.07	-0.08	-0.24	0.08	0.10	0.19	-0.04	-0.33	0.13	0.23	0.12	0.08	-0.30	
0.53	0.33	0.31	0.15	0.47	0.48	0.57	0.33	0.03	0.49	0.59	0.47	0.43	0.04	
428	762	1111	1450	1817	2157	2491	2798	3123	3493	3843	4194	4540	4887	
1	-7	0	-3	22	20	12	-23	-40	-12	-4	5	9	14	
0.02	-0.10	0.01	-0.04	0.33	0.30	0.18	-0.33	-0.58	-0.17	-0.05	0.08	0.14	0.21	
0.70	0.50	0.51	0.38	0.66	0.54	0.34	-0.25	-0.59	-0.27	-0.24	-0.20	-0.23	-0.25	
376	712	1054	1393	1763	2101	2447	2765	3091	3455	3800	4162	4505	4855	
6	-2	-4	-9	17	11	13	-13	-31	-11	-10	8	7	13	
0.09	-0.02	-0.05	-0.13	0.25	0.17	0.19	-0.18	-0.45	-0.15	-0.14	0.12	0.11	0.19	
-0.04	-0.22	-0.30	-0.44	-0.12	-0.27	-0.30	-0.73	-1.05	-0.82	-0.86	-0.66	-0.74	-0.71	
347	688	1025	1368	1739	2087	2456	2804	3135	3505	3852	4198	4541	4883	
11	1	-13	-20	0	-3	15	12	-7	12	8	3	-5	-14	
0.16	0.02	-0.18	-0.29	0.00	-0.04	0.22	0.18	-0.11	0.17	0.11	0.04	-0.07	-0.19	
-0.46	-0.56	-0.72	-0.79	-0.47	-0.47	-0.17	-0.17	-0.41	-0.10	-0.11	-0.14	-0.22	-0.31	
330	670	1003	1346	1716	2068	2451	2823	3155	3520	3872	4226	4576	4918	
24	8	-15	-28	-14	-18	9	25	2	11	7	5	-1	-16	
0.34	0.11	-0.21	-0.39	-0.19	-0.25	0.13	0.36	0.02	0.15	0.09	0.07	-0.02	-0.21	
-0.70	-0.82	-1.04	-1.11	-0.80	-0.74	-0.24	0.11	-0.13	0.12	0.17	0.26	0.28	0.20	
0.70	0.66	0.78	0.75	0.73	0.64	0.43	0.53	0.54	0.65	0.73	0.57	0.58	0.45	

RF Input Power (dBm)

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

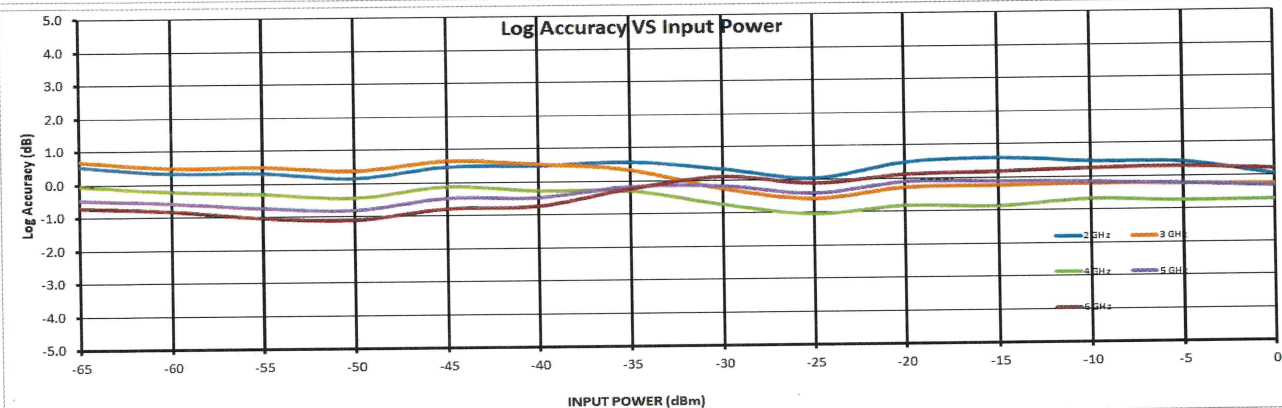
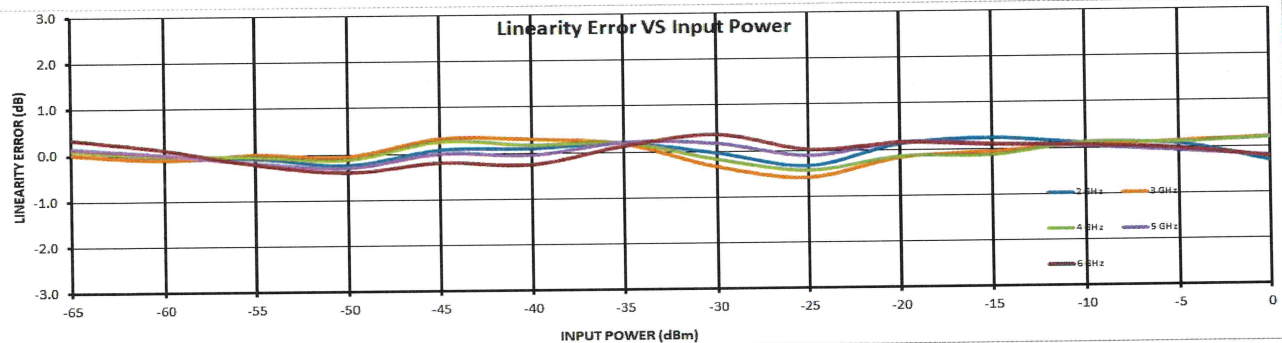
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

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

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

Flatness dB: ±0.78 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42372
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: 32 mV



Frequency

2 GHz	INTERCEPT (mV)	4844
	SLOPE (mV/dB)	69.1
	MAX LIN ERROR	0.46
	MAX ACC ERROR	0.64

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
341	701	1039	1374	1734	2073	2440	2785	3107	3472	3821	4162	4500	4812	
-9	5	-3	-13	1	-5	16	15	-9	11	14	9	2	-32	
-0.13	0.07	-0.04	-0.19	0.01	-0.08	0.23	0.22	-0.13	0.15	0.20	0.13	0.02	-0.46	
0.37	0.56	0.44	0.27	0.46	0.35	0.64	0.62	0.26	0.53	0.56	0.48	0.36	-0.14	

RF Input Power (dBm)

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

3 GHz	INTERCEPT (mV)	4804
	SLOPE (mV/dB)	68.2
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.88

360	723	1062	1394	1751	2083	2434	2754	3073	3430	3773	4123	4469	4818	
-14	8	6	-2	14	5	15	-5	-27	-11	-9	0	6	14	
-0.21	0.12	0.09	-0.04	0.20	0.07	0.22	-0.08	-0.40	-0.16	-0.13	0.01	0.08	0.21	
0.64	0.88	0.77	0.56	0.71	0.49	0.56	0.17	-0.23	-0.08	-0.13	-0.08	-0.09	-0.06	

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

4 GHz	INTERCEPT (mV)	4769
	SLOPE (mV/dB)	68.6
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.78

306	663	997	1337	1689	2024	2388	2717	3039	3390	3728	4083	4426	4782	
-7	8	-1	-4	5	-2	19	5	-16	-7	-12	0	-1	13	
-0.10	0.11	-0.02	-0.06	0.08	-0.04	0.27	0.07	-0.23	-0.11	-0.18	0.00	-0.01	0.20	
-0.14	0.01	-0.17	-0.27	-0.19	-0.36	-0.11	-0.36	-0.72	-0.65	-0.78	-0.66	-0.72	-0.58	

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

5 GHz	INTERCEPT (mV)	4824
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.4
	MAX ACC ERROR	0.6

286	638	972	1314	1668	2011	2390	2755	3079	3435	3778	4125	4469	4813	
5	9	-9	-15	-11	-17	12	28	2	9	2	0	-6	-11	
0.08	0.11	-0.11	-0.22	-0.15	-0.24	0.18	0.40	0.03	0.13	0.03	0.00	-0.08	-0.16	
-0.43	-0.35	-0.53	-0.60	-0.49	-0.54	-0.08	0.19	-0.14	0.00	-0.06	-0.05	-0.09	-0.13	

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

6 GHz	INTERCEPT (mV)	4860
	SLOPE (mV/dB)	70.9
	MAX LIN ERROR	0.56
	MAX ACC ERROR	0.88

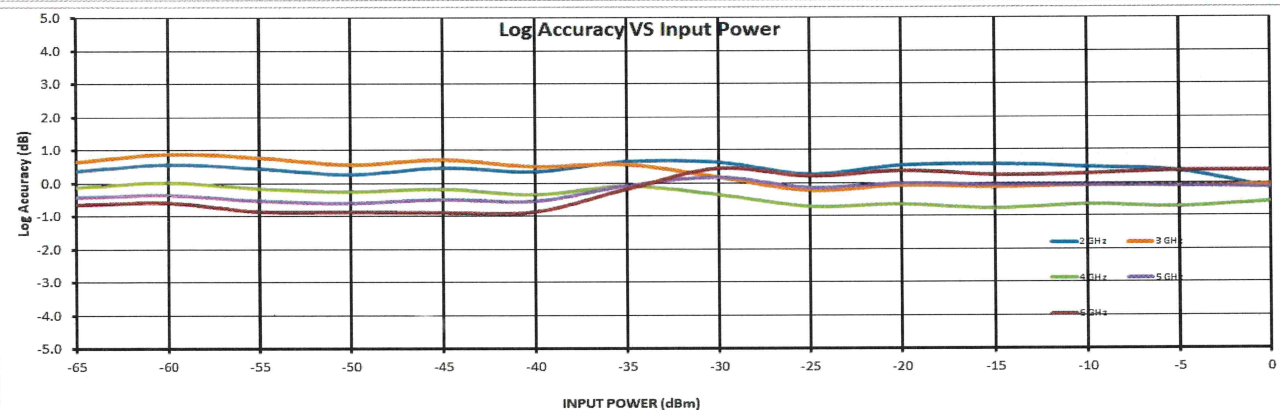
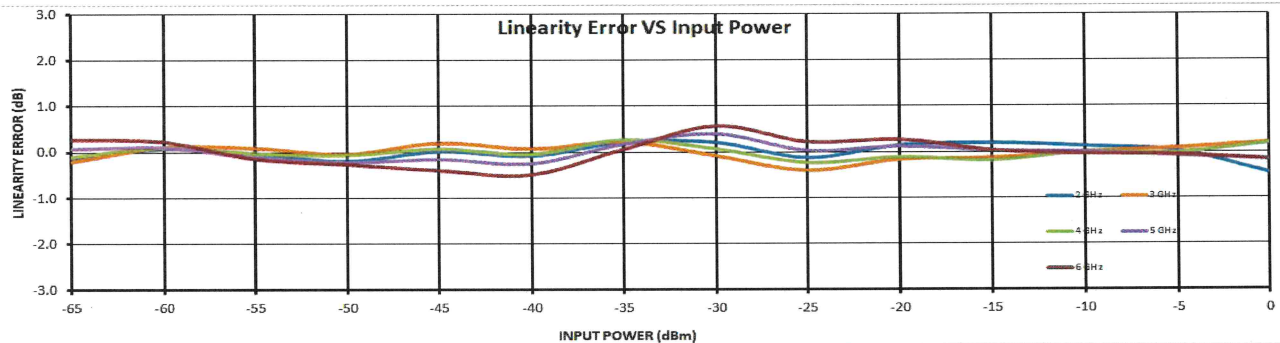
271	622	950	1296	1641	1989	2383	2773	3103	3461	3799	4148	4501	4848	
19	16	-11	-19	-29	-35	4	40	15	19	2	-3	-5	-12	
0.27	0.22	-0.15	-0.27	-0.41	-0.50	0.06	0.56	0.21	0.26	0.03	-0.05	-0.07	-0.18	
-0.64	-0.58	-0.85	-0.86	-0.88	-0.86	-0.18	0.45	0.21	0.37	0.25	0.28	0.37	0.38	

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

AVG. SLOPE: 69.3 mV/dB

0.64	0.73	0.81	0.71	0.79	0.68	0.41	0.49	0.49	0.59	0.67	0.57	0.55	0.48	
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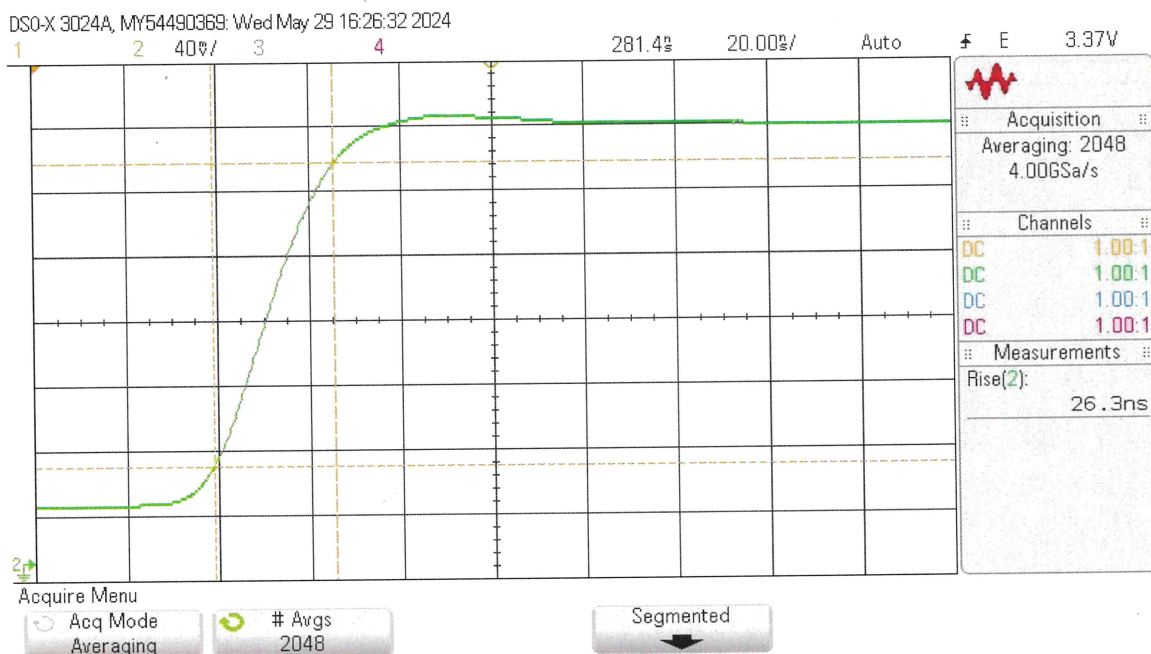
Flatness dB: ±0.81 dB



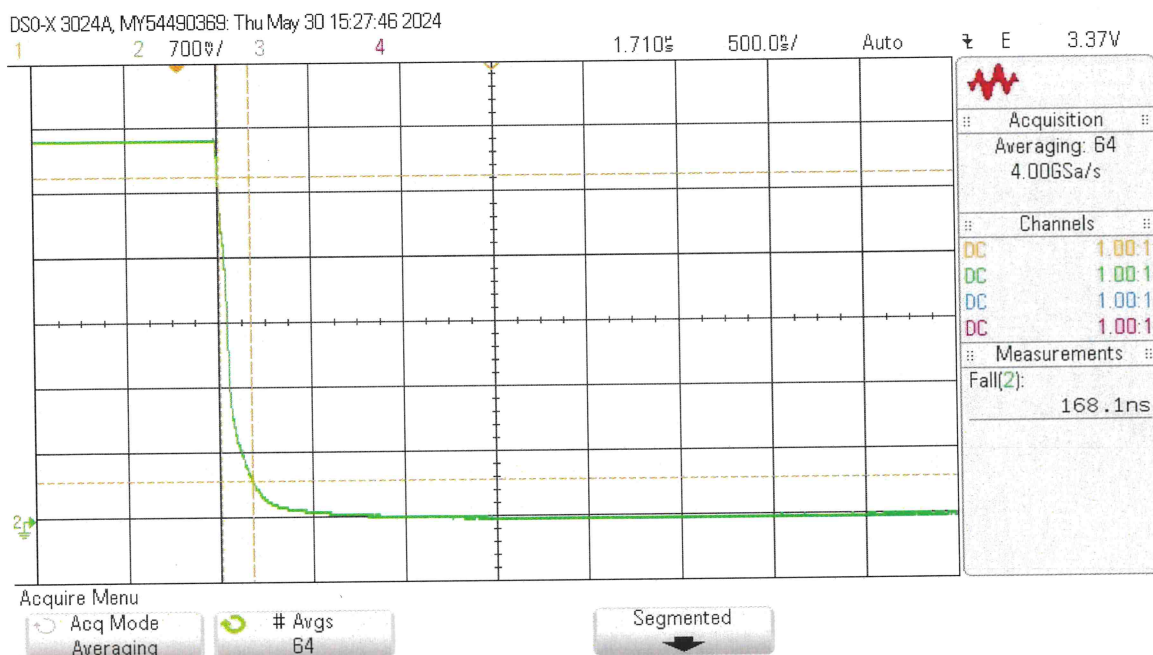


Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

