



Tested By: Joshua Monley

Temperature: 0°C TO +85°C

Date 5/30/2024

Drawing No: 27637945

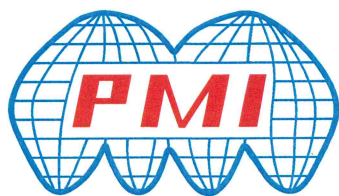
Rev: A1

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

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+14.1 dB MAX +11.9 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±1.1 dB	PMI QA3
15	SW 1 dB Compression Point:	+3 dBm MIN	+7.8 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-26 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-46 dBc	
18	VIDEO OUT TSS:	-71 dBm MAX	-71.7 dBm	
19	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
20	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	71.4 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.33 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±90 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.1 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	31 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	123.8 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	41.14 ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	0.205 us	



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

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.81 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	1.74 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	

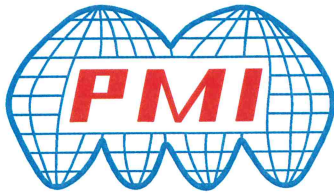


**Summary Data
For
EWDM-2G6G-65-70MV-1**

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. Hutter

Date: 5-31-24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42354
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: RF Port

DC Offset: 31 mV



Frequency

2 GHz	INTERCEPT (mV)	4971
	SLOPE (mV/dB)	71.2
	MAX LIN ERROR	0.16
	MAX ACC ERROR	0.82

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
344	697	1052	1403	1768	2119	2490	2842	3180	3552	3900	4259	4615	4969
2	-1	-2	-7	2	-3	12	8	-11	5	-3	0	0	-2
0.03	-0.01	-0.03	-0.10	0.03	-0.05	0.16	0.11	-0.15	0.08	-0.04	0.00	0.00	-0.03
0.45	0.44	0.46	0.42	0.58	0.54	0.78	0.76	0.54	0.80	0.71	0.79	0.82	0.82

RF Input Power (dBm)

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

3 GHz	INTERCEPT (mV)	4937
	SLOPE (mV/dB)	70.9
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.61

332	687	1037	1391	1751	2101	2470	2815	3153	3517	3861	4225	4578	4954
1	2	-2	-3	3	-1	13	4	-12	-2	-13	-3	-4	17
0.02	0.03	-0.03	-0.04	0.04	-0.02	0.19	0.06	-0.17	-0.03	-0.18	-0.04	-0.06	0.25
0.28	0.30	0.25	0.25	0.34	0.29	0.50	0.38	0.16	0.30	0.16	0.31	0.30	0.61

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

4 GHz	INTERCEPT (mV)	4888
	SLOPE (mV/dB)	70.8
	MAX LIN ERROR	0.33
	MAX ACC ERROR	0.6

294	641	986	1348	1701	2054	2428	2775	3112	3468	3807	4175	4526	4911
7	0	-9	-1	-2	-3	17	10	-6	-4	-19	-5	-8	23
0.10	0.00	-0.13	-0.01	-0.03	-0.04	0.25	0.15	-0.09	-0.06	-0.27	-0.07	-0.11	0.33
-0.25	-0.35	-0.47	-0.36	-0.37	-0.38	-0.09	-0.19	-0.42	-0.39	-0.60	-0.40	-0.44	0.00

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

5 GHz	INTERCEPT (mV)	4864
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.28
	MAX ACC ERROR	0.88

280	623	968	1331	1684	2038	2412	2760	3095	3446	3787	4156	4504	4879
7	-3	-12	-2	-2	-1	20	15	-4	-6	-18	-2	-7	16
0.10	-0.05	-0.16	-0.02	-0.03	-0.01	0.28	0.21	-0.05	-0.08	-0.25	-0.03	-0.10	0.21
-0.45	-0.60	-0.73	-0.60	-0.61	-0.60	-0.32	-0.40	-0.66	-0.70	-0.88	-0.67	-0.75	-0.45

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

6 GHz	INTERCEPT (mV)	4862
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.32
	MAX ACC ERROR	0.9

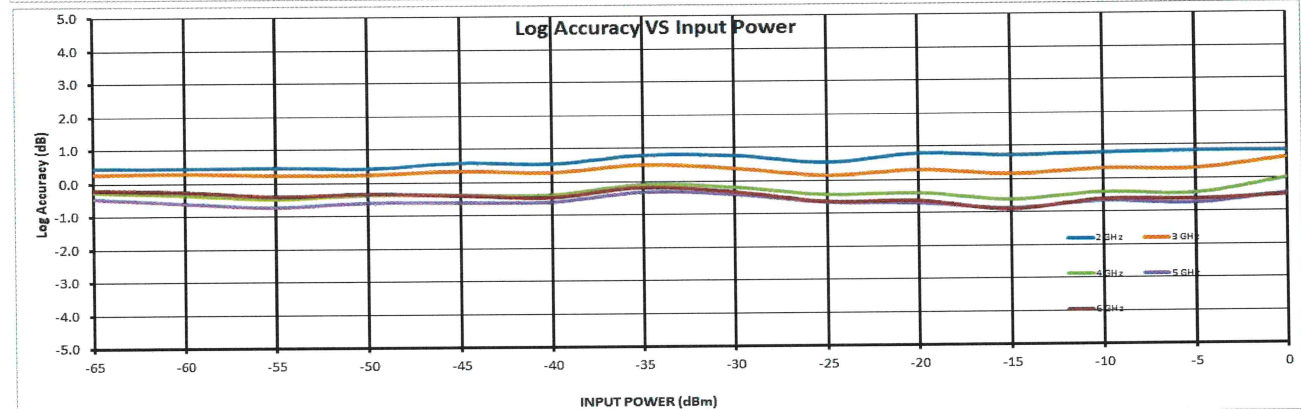
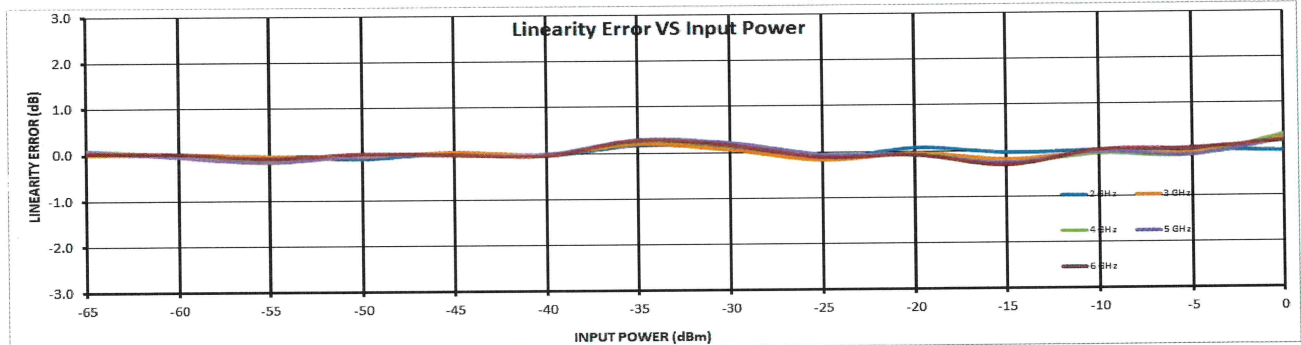
298	648	992	1350	1699	2048	2422	2765	3097	3451	3786	4160	4513	4875
2	1	-6	1	-2	-4	19	11	-9	-6	-22	0	2	13
0.03	0.02	-0.09	0.01	-0.02	-0.06	0.27	0.15	-0.12	-0.09	-0.32	0.01	0.03	0.18
-0.20	-0.25	-0.39	-0.33	-0.40	-0.46	-0.18	-0.33	-0.64	-0.63	-0.90	-0.61	-0.62	-0.50

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

AVG. SLOPE: 70.7 mV/dB

0.45	0.52	0.59	0.51	0.59	0.57	0.55	0.58	0.60	0.75	0.81	0.73	0.78	0.66
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Flatness dB: ±0.81 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42354
Date:: 06/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: BIT Port

DC Offset: 28 mV



Frequency

2 GHz	INTERCEPT (mV)	4957
	SLOPE (mV/dB)	71.4
	MAX LIN ERROR	0.13
	MAX ACC ERROR	0.85

3 GHz	INTERCEPT (mV)	4922
	SLOPE (mV/dB)	70.9
	MAX LIN ERROR	0.25
	MAX ACC ERROR	0.66

4 GHz	INTERCEPT (mV)	4876
	SLOPE (mV/dB)	70.8
	MAX LIN ERROR	0.32
	MAX ACC ERROR	0.52

5 GHz	INTERCEPT (mV)	4851
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.82

6 GHz	INTERCEPT (mV)	4849
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.82

AVG. SLOPE: 70.8 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
319	676	1030	1384	1745	2096	2468	2824	3164	3537	3884	4244	4600	4953	
1	1	-2	-5	0	-5	9	8	-9	8	-2	1	0	-4	
0.01	0.01	-0.02	-0.06	-0.01	-0.09	0.13	0.11	-0.12	0.11	-0.03	0.01	0.00	-0.05	
0.37	0.42	0.42	0.42	0.52	0.48	0.73	0.76	0.57	0.84	0.74	0.82	0.85	0.84	
317	673	1022	1376	1734	2084	2452	2800	3139	3503	3846	4212	4564	4940	
2	4	-2	-2	1	-3	10	4	-11	-2	-13	-2	-4	18	
0.03	0.05	-0.03	-0.03	0.02	-0.04	0.15	0.06	-0.16	-0.02	-0.19	-0.02	-0.06	0.25	
0.35	0.38	0.31	0.31	0.36	0.31	0.51	0.42	0.21	0.36	0.20	0.37	0.34	0.66	
280	629	974	1336	1687	2041	2415	2762	3101	3456	3795	4164	4514	4899	
6	1	-8	0	-3	-3	17	10	-5	-4	-19	-4	-8	23	
0.08	0.01	-0.12	0.00	-0.04	-0.05	0.24	0.14	-0.07	-0.06	-0.27	-0.06	-0.12	0.32	
-0.18	-0.25	-0.37	-0.26	-0.30	-0.30	-0.02	-0.11	-0.32	-0.31	-0.52	-0.31	-0.36	0.08	
266	610	956	1320	1669	2023	2397	2746	3082	3432	3774	4143	4491	4866	
6	-3	-10	1	-3	-3	18	14	-3	-6	-17	-2	-7	15	
0.09	-0.04	-0.14	0.01	-0.05	-0.04	0.26	0.20	-0.04	-0.09	-0.25	-0.02	-0.10	0.21	
-0.37	-0.61	-0.63	-0.48	-0.55	-0.65	-0.27	-0.34	-0.59	-0.65	-0.82	-0.60	-0.69	-0.39	
288	636	979	1339	1685	2034	2408	2752	3084	3438	3774	4147	4501	4863	
5	1	-7	2	-3	-5	17	10	-9	-6	-22	0	3	14	
0.07	0.02	-0.10	0.03	-0.05	-0.08	0.25	0.14	-0.13	-0.09	-0.31	0.00	0.04	0.20	
-0.06	-0.15	-0.30	-0.22	-0.33	-0.40	-0.11	-0.25	-0.56	-0.56	-0.82	-0.55	-0.55	-0.43	
0.37	0.47	0.52	0.45	0.54	0.52	0.50	0.55	0.58	0.74	0.78	0.71	0.77	0.64	

RF Input Power (dBm)

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

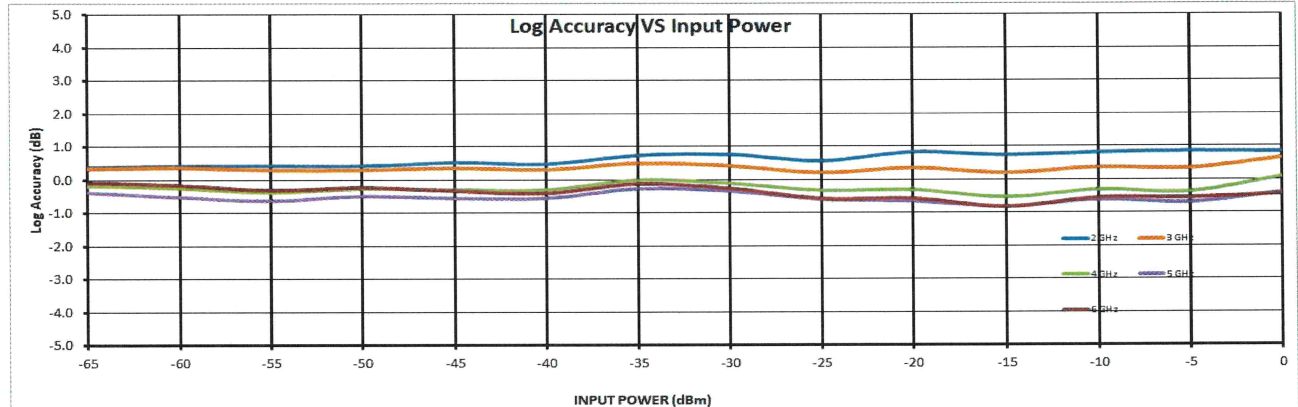
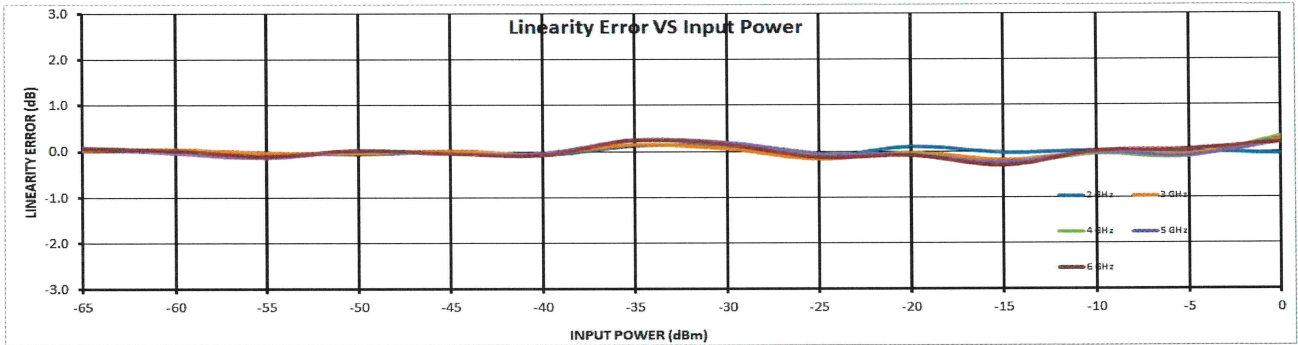
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

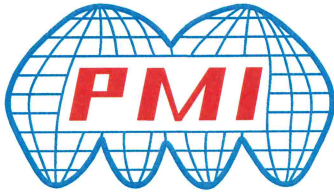
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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: PL42354
Date:: 06/30/2024
Tested By: J. Monley
Test Temp: 0°C
Input Port: RF Port

DC Offset: 28 mV



Frequency

2 GHz	INTERCEPT (mV)	5056
	SLOPE (mV/dB)	72.1
	MAX LIN ERROR	0.16
	MAX ACC ERROR	0.76

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
372	727	1093	1443	1815	2166	2538	2894	3242	3620	3975	4335	4696	5054
3	-2	3	-7	4	-5	6	2	-11	7	1	1	1	-2
0.04	-0.03	0.04	-0.10	0.06	-0.07	0.08	0.02	-0.15	0.09	0.01	0.01	0.01	-0.02
0.56	0.50	0.60	0.47	0.64	0.53	0.70	0.66	0.50	0.76	0.70	0.71	0.73	0.71

RF Input Power (dBm)

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

3 GHz	INTERCEPT (mV)	5026
	SLOPE (mV/dB)	71.8
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.59

366	720	1083	1434	1802	2154	2522	2871	3217	3590	3940	4307	4663	5045
4	-1	4	-4	5	-2	8	-2	-15	-1	-10	-1	-4	19
0.06	-0.01	0.05	-0.06	0.07	-0.02	0.10	-0.03	-0.21	-0.01	-0.13	-0.02	-0.06	0.27
0.48	0.41	0.46	0.34	0.46	0.36	0.48	0.34	0.15	0.34	0.21	0.32	0.27	0.59

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

4 GHz	INTERCEPT (mV)	4977
	SLOPE (mV/dB)	72.1
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.63

305	654	1005	1368	1731	2086	2468	2822	3173	3537	3881	4254	4606	4996
12	1	-8	-6	-3	-8	13	7	-2	2	-15	-2	-10	19
0.17	0.01	-0.12	-0.08	-0.04	-0.11	0.19	0.10	-0.03	0.02	-0.20	-0.03	-0.14	0.27
-0.37	-0.51	-0.63	-0.58	-0.53	-0.59	-0.27	-0.34	-0.46	-0.39	-0.61	-0.42	-0.52	-0.09

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

5 GHz	INTERCEPT (mV)	4950
	SLOPE (mV/dB)	71.9
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.93

291	633	983	1348	1710	2055	2447	2804	3153	3512	3858	4233	4582	4962
15	-2	-12	-6	-4	-9	14	11	1	0	-13	2	-9	12
0.21	-0.03	-0.16	-0.09	-0.06	-0.12	0.19	0.16	0.01	0.00	-0.19	0.03	-0.12	0.16
-0.66	-0.80	-0.93	-0.86	-0.82	-0.88	-0.56	-0.59	-0.74	-0.74	-0.93	-0.71	-0.85	-0.57

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

6 GHz	INTERCEPT (mV)	4954
	SLOPE (mV/dB)	71.5
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.86

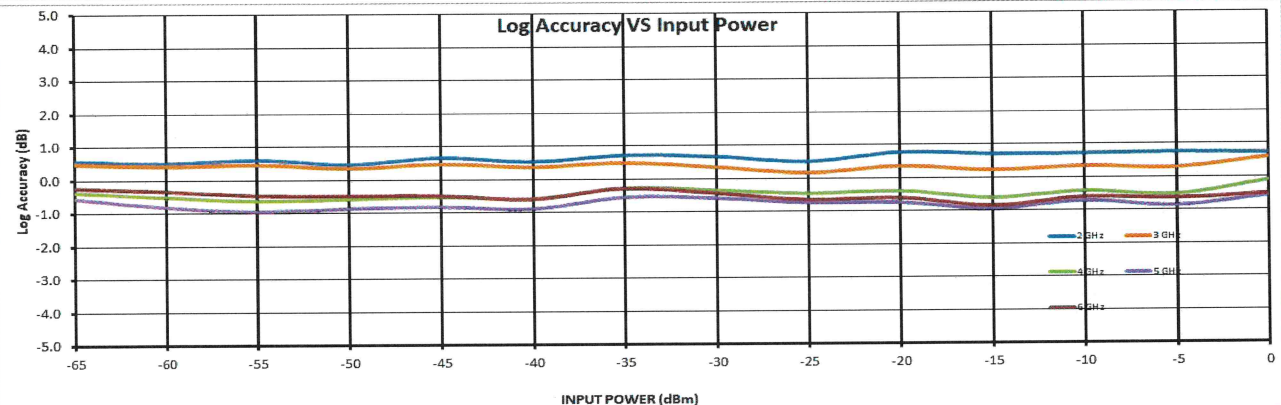
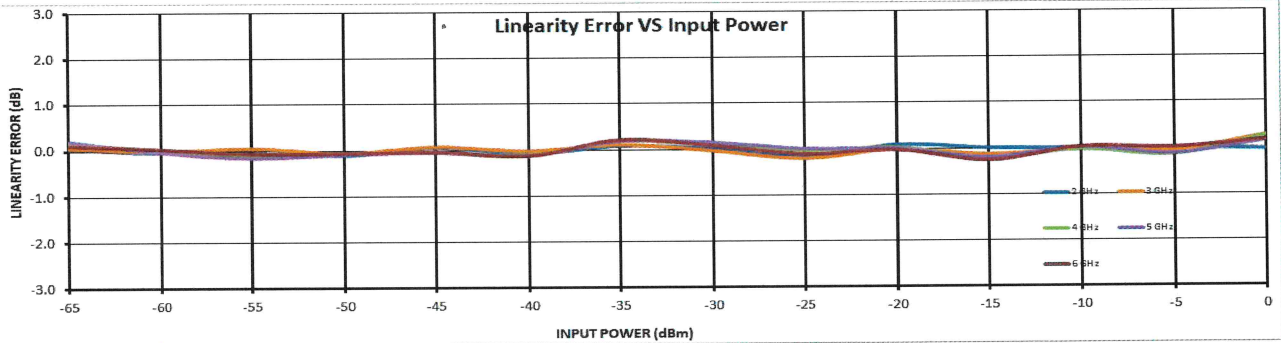
315	667	1017	1375	1734	2085	2467	2815	3159	3522	3863	4241	4597	4966
8	3	-5	-4	-3	-9	16	6	-7	-2	-18	2	1	12
0.11	0.04	-0.07	-0.06	-0.04	-0.13	0.22	0.08	-0.10	-0.03	-0.26	0.03	0.01	0.17
-0.23	-0.33	-0.46	-0.48	-0.48	-0.60	-0.28	-0.44	-0.65	-0.60	-0.86	-0.60	-0.64	-0.51

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

AVG. SLOPE: 71.9 mV/dB

0.56	0.65	0.77	0.66	0.73	0.70	0.63	0.63	0.62	0.75	0.81	0.71	0.79	0.64
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Flatness dB: ±0.81 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42354
Date:: 05/30/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: 19 mV



Frequency

2 GHz	INTERCEPT (mV)	4808
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.90

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
272	629	974	1321	1669	2018	2373	2727	3058	3423	3765	4124	4463	4787
-5	3	-1	-2	-3	-2	4	10	-8	9	2	13	3	-21
-0.08	0.04	-0.01	-0.03	-0.04	-0.03	0.06	0.14	-0.11	0.12	0.03	0.18	0.04	-0.31
0.49	0.62	0.59	0.58	0.59	0.61	0.71	0.81	0.57	0.82	0.74	0.90	0.78	0.44

RF Input Power (dBm)
Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

3 GHz	INTERCEPT (mV)	4778
	SLOPE (mV/dB)	69.1
	MAX LIN ERROR	0.18
	MAX ACC ERROR	0.71

275	635	976	1321	1668	2016	2365	2710	3037	3391	3730	4091	4434	4782
-9	6	1	0	2	4	7	6	-12	-4	-11	4	2	4
-0.12	0.08	0.01	0.00	0.02	0.05	0.10	0.09	-0.18	-0.06	-0.16	0.06	0.03	0.06
0.53	0.71	0.62	0.58	0.57	0.58	0.60	0.56	0.27	0.36	0.23	0.43	0.36	0.37

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

4 GHz	INTERCEPT (mV)	4726
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.28
	MAX ACC ERROR	0.92

202	626	873	1232	1564	1923	2285	2646	2983	3326	3663	4026	4374	4735
19	-5	-9	1	-17	-7	6	17	5	-2	-14	-1	-2	9
0.28	-0.09	-0.12	0.01	-0.24	-0.10	0.08	0.25	0.07	-0.03	-0.20	-0.01	-0.03	0.13
-0.52	-0.86	-0.87	-0.70	-0.92	-0.76	-0.55	-0.36	-0.51	-0.58	-0.73	-0.51	-0.50	-0.31

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

5 GHz	INTERCEPT (mV)	4707
	SLOPE (mV/dB)	69.5
	MAX LIN ERROR	0.29
	MAX ACC ERROR	0.92

201	526	874	1231	1564	1920	2282	2641	2973	3312	3650	4014	4358	4709
14	-8	-8	1	-14	-5	9	20	5	-4	-14	3	-1	2
0.21	-0.12	-0.12	0.02	-0.19	-0.08	0.13	0.29	0.07	-0.06	-0.20	0.04	-0.02	0.03
-0.53	-0.86	-0.86	-0.72	-0.92	-0.80	-0.60	-0.43	-0.66	-0.78	-0.92	-0.68	-0.73	-0.68

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

6 GHz	INTERCEPT (mV)	4693
	SLOPE (mV/dB)	69.3
	MAX LIN ERROR	0.29
	MAX ACC ERROR	1.1

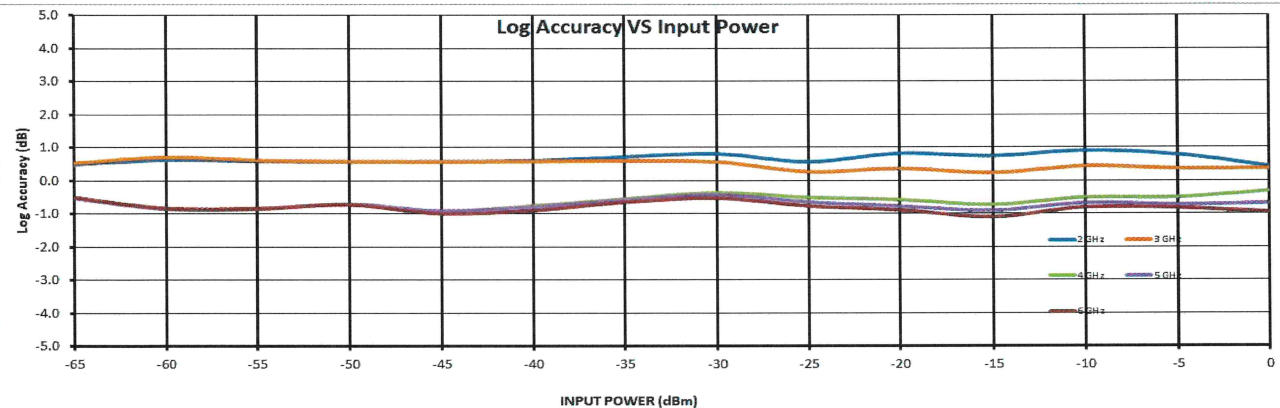
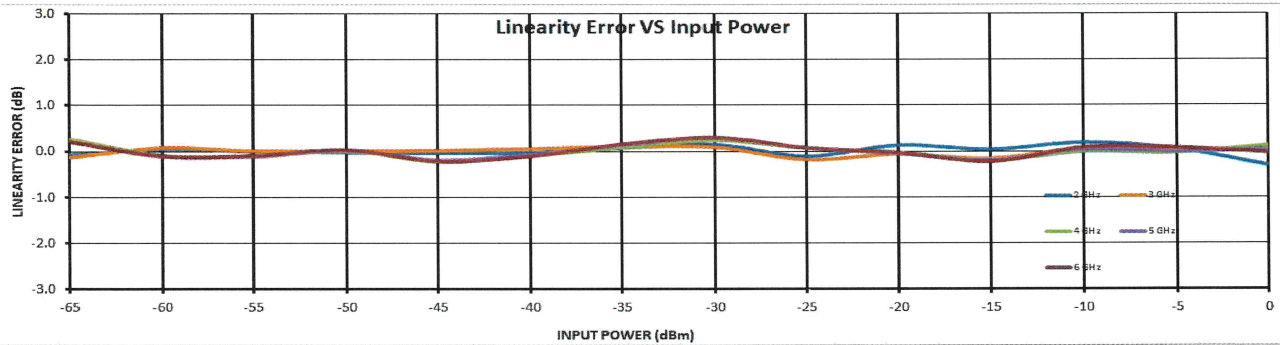
203	528	875	1230	1559	1913	2278	2634	2965	3304	3637	4005	4351	4690
14	-7	-7	2	-16	-8	10	20	4	-3	-16	5	5	-3
0.20	-0.11	-0.10	0.03	-0.23	-0.12	0.16	0.29	0.06	-0.04	-0.24	0.07	0.07	-0.04
-0.50	-0.83	-0.84	-0.73	-1.00	-0.90	-0.65	-0.53	-0.77	-0.89	-1.10	-0.81	-0.83	-0.96

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

AVG. SLOPE: 69.5 mV/dB

0.53	0.78	0.74	0.65	0.79	0.76	0.68	0.67	0.67	0.86	0.92	0.86	0.81	0.70
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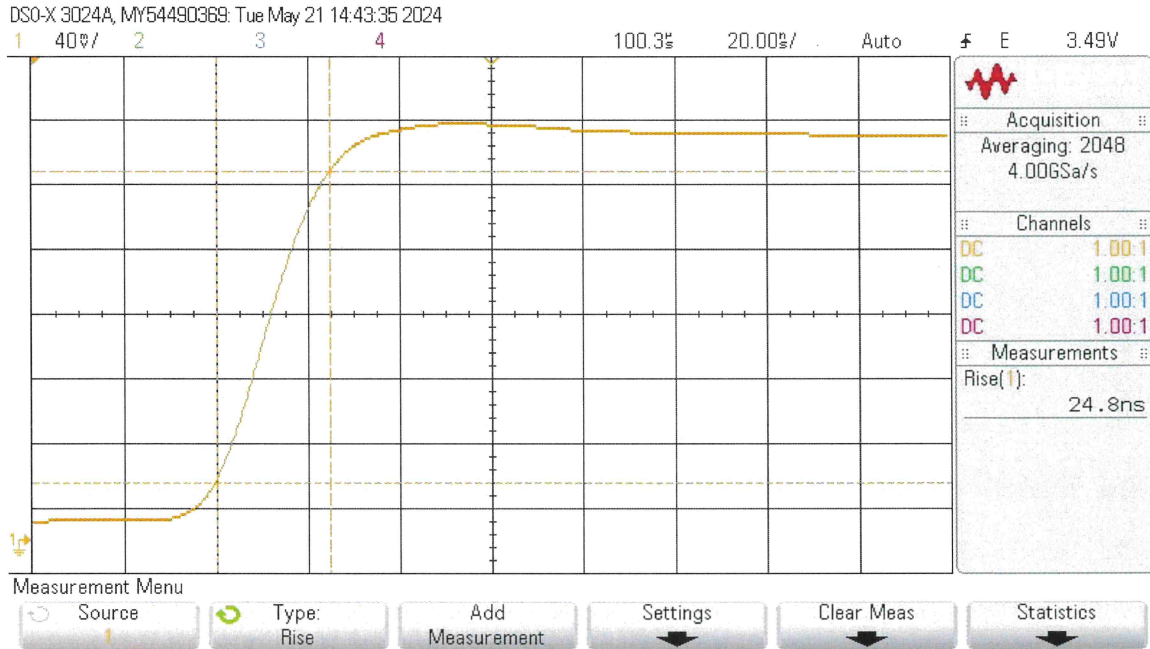
Flatness dB: ±0.92 dB



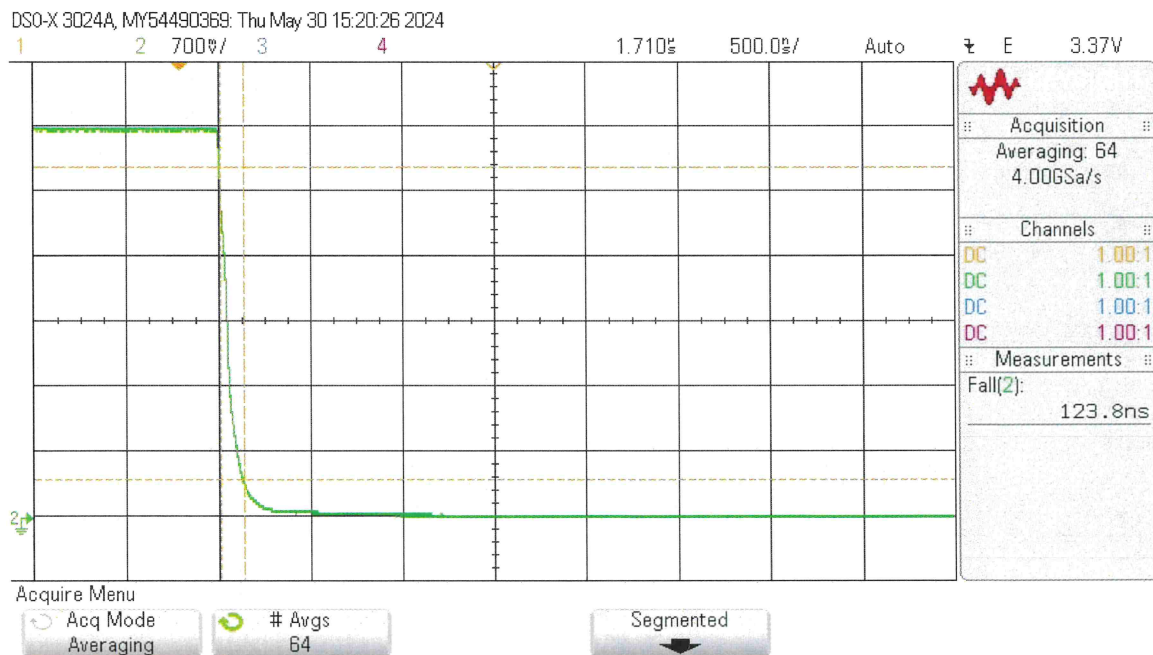


Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

