



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	+11.37 dB MAX +10.93 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±0.2 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+8.82 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-28 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-49 dBc	
18	VIDEO OUT TSS:	-71 dBm MAX	-71.5 dBm	
19	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
20	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	71.5 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.22 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±1.04 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.07 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-32 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	26 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	165.9 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	40.66 ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	0.456 us	



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

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.74 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	1.44 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: 3.31.24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42349
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: RF Port

DC Offset: -20 mV



Frequency

2 GHz	INTERCEPT (mV)	4863
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.20
	MAX ACC ERROR	0.66

3 GHz	INTERCEPT (mV)	4843
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.37

4 GHz	INTERCEPT (mV)	4830
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.22
	MAX ACC ERROR	0.58

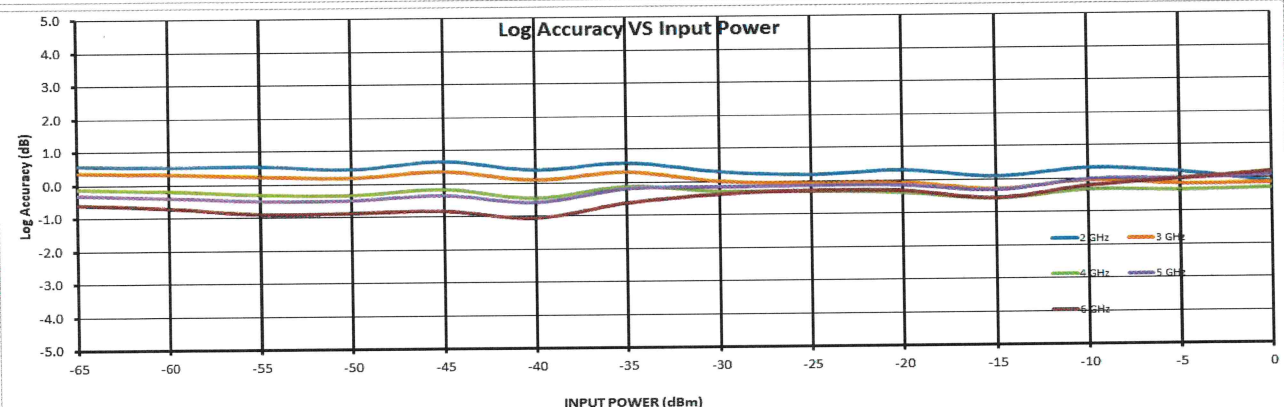
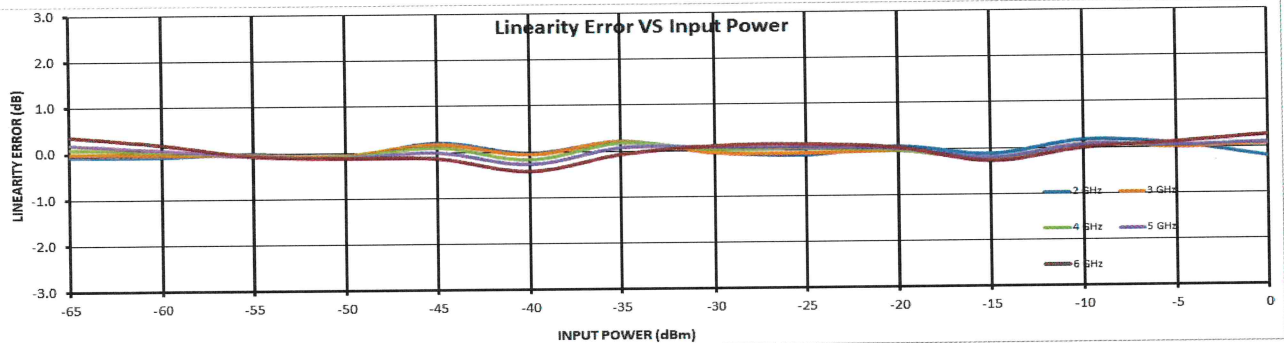
5 GHz	INTERCEPT (mV)	4859
	SLOPE (mV/dB)	70.9
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.67

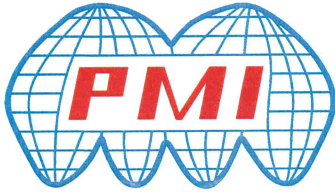
6 GHz	INTERCEPT (mV)	4854
	SLOPE (mV/dB)	71.3
	MAX LIN ERROR	0.43
	MAX ACC ERROR	1.04

AVG. SLOPE: 70.4 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	325	673	1026	1371	1738	2071	2436	2768	3112	3472	3809	4177	4520	4849
	-4	-5	-1	-5	14	-2	14	-3	-7	4	-8	11	6	-14
	-0.06	-0.07	-0.01	-0.07	0.20	-0.03	0.20	-0.04	-0.11	0.06	-0.11	0.16	0.08	-0.20
	0.58	0.53	0.54	0.45	0.66	0.39	0.58	0.30	0.19	0.30	0.09	0.32	0.19	-0.13
3 GHz	310	658	1005	1353	1717	2050	2417	2748	3095	3446	3783	4151	4495	4848
	-1	-1	-3	-4	12	-4	14	-3	-5	-2	-14	5	1	5
	-0.01	-0.02	-0.04	-0.05	0.17	-0.06	0.21	-0.05	-0.07	-0.04	-0.20	0.07	0.01	0.07
	0.37	0.31	0.25	0.19	0.36	0.09	0.31	0.01	-0.06	-0.07	-0.28	-0.05	-0.16	-0.15
4 GHz	275	622	966	1316	1679	2011	2386	2726	3077	3424	3762	4131	4481	4836
	6	2	-5	-6	7	-12	12	1	1	-2	-15	3	2	6
	0.08	0.03	-0.07	-0.08	0.09	-0.17	0.17	0.02	0.02	-0.03	-0.22	0.04	0.03	0.09
	-0.13	-0.20	-0.31	-0.34	-0.18	-0.46	-0.13	-0.30	-0.31	-0.38	-0.58	-0.34	-0.36	-0.32
5 GHz	263	609	954	1306	1667	2003	2382	2737	3090	3441	3781	4154	4507	4865
	13	5	-5	-7	-1	-19	5	6	4	0	-14	4	3	6
	0.19	0.07	-0.07	-0.10	-0.01	-0.27	0.07	0.08	0.06	0.01	-0.20	0.06	0.04	0.09
	-0.30	-0.38	-0.48	-0.48	-0.35	-0.57	-0.19	-0.14	-0.13	-0.14	-0.31	-0.01	0.01	0.09
6 GHz	243	587	926	1279	1634	1970	2352	2721	3079	3429	3764	4140	4505	4872
	25	13	-6	-9	-10	-31	-6	7	8	2	-20	-1	8	18
	0.35	0.18	-0.07	-0.12	-0.14	-0.43	-0.08	0.10	0.12	0.02	-0.28	-0.01	0.11	0.25
	-0.58	-0.69	-0.88	-0.86	-0.82	-1.04	-0.61	-0.37	-0.28	-0.31	-0.55	-0.21	-0.02	0.19
AVG. SLOPE	0.58	0.61	0.71	0.65	0.74	0.72	0.60	0.33	0.25	0.34	0.33	0.33	0.28	0.26

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: ±0.74 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42349
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: BIT Port

DC Offset: -32 mV



Frequency

2 GHz	INTERCEPT (mV)	4852
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.29
	MAX ACC ERROR	0.49

3 GHz	INTERCEPT (mV)	4836
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.17
	MAX ACC ERROR	0.35

4 GHz	INTERCEPT (mV)	4826
	SLOPE (mV/dB)	70.4
	MAX LIN ERROR	0.22
	MAX ACC ERROR	0.49

5 GHz	INTERCEPT (mV)	4853
	SLOPE (mV/dB)	71.1
	MAX LIN ERROR	0.33
	MAX ACC ERROR	0.66

6 GHz	INTERCEPT (mV)	4851
	SLOPE (mV/dB)	71.5
	MAX LIN ERROR	0.46
	MAX ACC ERROR	0.95

AVG. SLOPE: 70.7 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
288	642	994	1341	1705	2037	2404	2742	3095	3458	3798	4166	4508	4832
-4	-1	1	-3	10	-9	7	-6	-3	9	-2	15	6	-20
-0.05	-0.01	0.01	-0.05	0.14	-0.13	0.10	-0.08	-0.05	0.13	-0.03	0.22	0.09	-0.29
0.43	0.44	0.42	0.33	0.49	0.18	0.38	0.16	0.16	0.29	0.11	0.31	0.15	-0.26
282	635	984	1329	1693	2024	2392	2726	3082	3434	3773	4142	4487	4841
0	3	1	-4	10	-9	8	-8	-2	-1	-12	7	2	5
0.00	0.04	0.02	-0.05	0.14	-0.13	0.12	-0.11	-0.03	-0.01	-0.17	0.10	0.02	0.08
0.35	0.34	0.28	0.16	0.32	0.00	0.21	-0.07	-0.03	-0.05	-0.25	-0.03	-0.14	-0.13
254	605	949	1300	1660	1993	2367	2712	3069	3417	3756	4125	4476	4833
6	5	-3	-4	4	-18	6	-1	4	0	-13	3	2	7
0.09	0.07	-0.04	-0.06	0.05	-0.22	0.09	-0.01	0.05	0.00	-0.19	0.05	0.03	0.10
-0.05	-0.08	-0.21	-0.25	-0.15	-0.44	-0.15	-0.26	-0.21	-0.29	-0.49	-0.27	-0.30	-0.25
244	594	938	1290	1651	1985	2363	2722	3081	3433	3773	4147	4502	4860
14	8	-3	-7	-2	-23	-1	3	5	2	-13	5	4	7
0.20	0.12	-0.05	-0.10	-0.02	-0.33	-0.01	0.04	0.08	0.03	-0.19	0.07	0.06	0.09
-0.19	-0.24	-0.37	-0.39	-0.28	-0.65	-0.20	-0.12	-0.04	-0.06	-0.25	0.04	0.07	0.14
227	574	914	1268	1622	1957	2338	2710	3072	3423	3760	4137	4500	4869
25	14	-3	-7	-11	-33	-10	5	9	3	-18	1	7	18
0.35	0.20	-0.05	-0.10	-0.15	-0.46	-0.14	0.07	0.13	0.04	-0.25	0.02	0.09	0.25
-0.43	-0.52	-0.71	-0.70	-0.69	-0.95	-0.56	-0.29	-0.17	-0.20	-0.43	-0.10	0.04	0.26
0.43	0.48	0.57	0.52	0.59	0.57	0.47	0.23	0.18	0.29	0.30	0.29	0.23	0.26

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

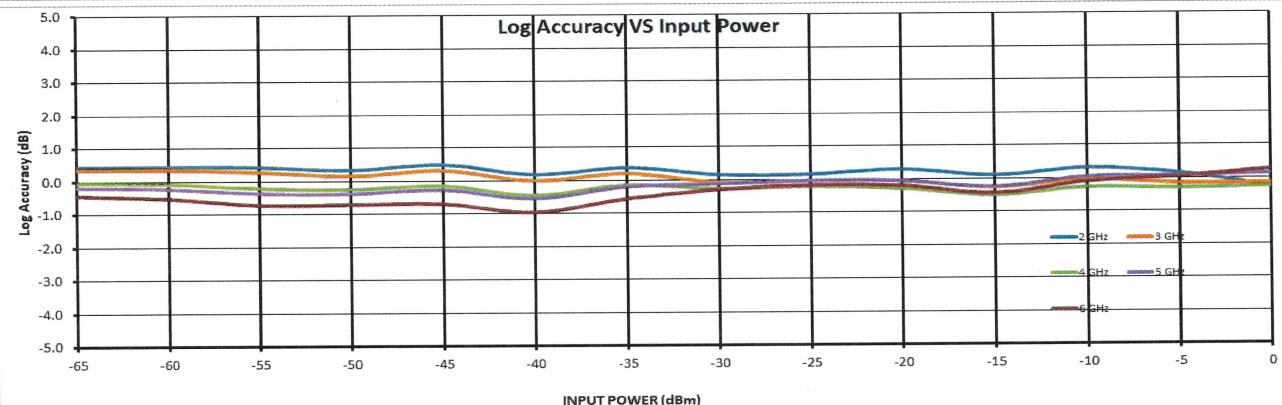
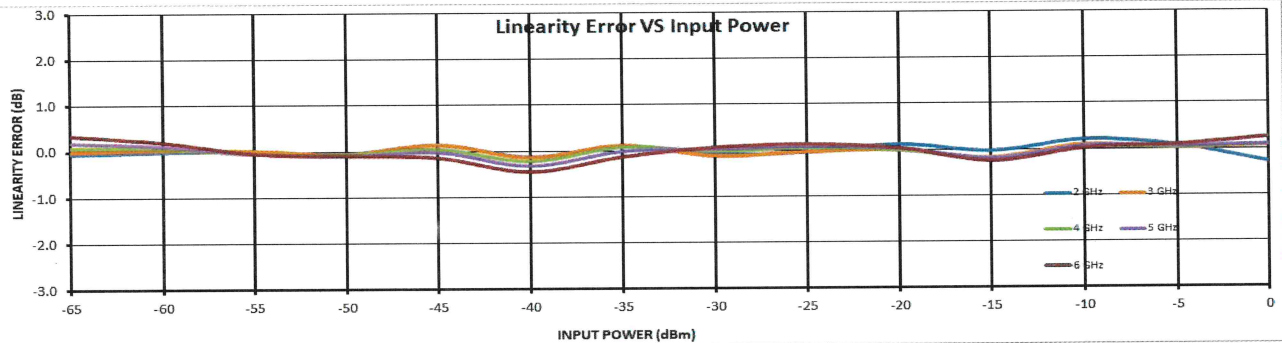
Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

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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: ±0.59 dB





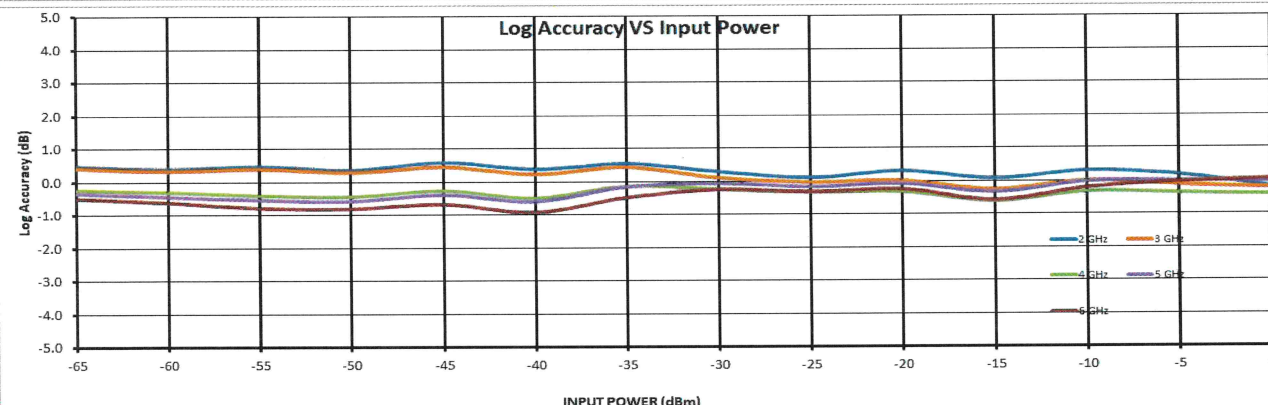
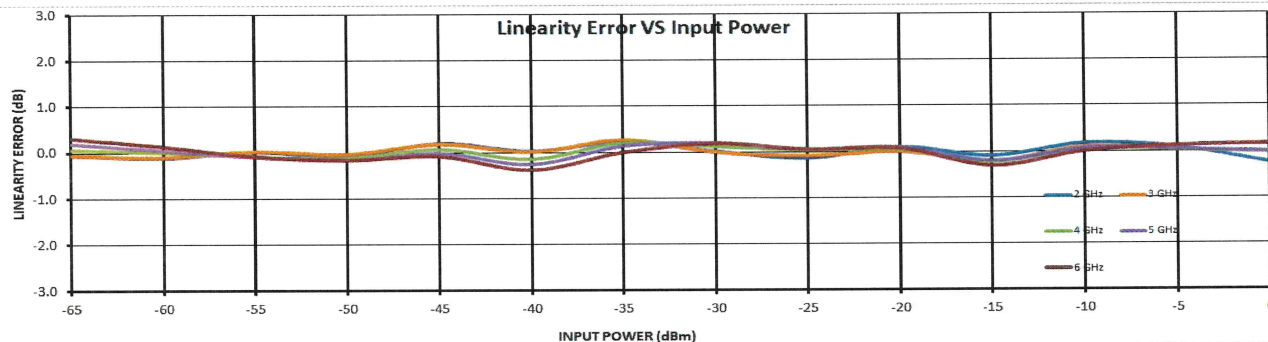
Summary Data For EWDM-2G6G-65-70MV-1

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42349
Date: 05/30/2024
Tested By: J. Monley
Test Temp: 0°C
Input Port: RF Port

DC Offset: 3 mV



Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	4960	367	716	1078	1425	1797	2138	2505	2843	3185	3555	3894	4266	4613	4942
	SLOPE (mV/dB)	70.6	-5	-9	0	-6	13	1	15	1	-10	7	-7	12	6	-18
	MAX LIN ERROR	0.26	-0.07	-0.13	0.00	-0.08	0.19	0.02	0.22	0.01	-0.15	0.09	-0.10	0.17	0.08	-0.26
	MAX ACC ERROR	0.60	0.49	0.40	0.49	0.37	0.60	0.39	0.55	0.30	0.11	0.32	0.08	0.31	0.19	-0.18
3 GHz	INTERCEPT (mV)	4941	361	710	1071	1419	1786	2126	2496	2829	3175	3533	3870	4244	4591	4940
	SLOPE (mV/dB)	70.4	-5	-8	1	-3	12	0	18	-1	-7	-1	-16	6	2	-1
	MAX LIN ERROR	0.26	-0.07	-0.11	0.02	-0.04	0.17	0.00	0.26	-0.01	-0.09	-0.01	-0.22	0.09	0.02	-0.02
	MAX ACC ERROR	0.44	0.41	0.31	0.39	0.28	0.44	0.22	0.43	0.11	-0.03	0.01	-0.26	0.00	-0.12	-0.21
4 GHz	INTERCEPT (mV)	4926	314	665	1014	1367	1735	2075	2455	2804	3153	3509	3845	4220	4573	4925
	SLOPE (mV/dB)	71	4	0	-6	-8	5	-10	14	8	2	3	-16	4	2	-1
	MAX LIN ERROR	0.23	0.06	0.00	-0.09	-0.12	0.07	-0.15	0.20	0.12	0.03	0.04	-0.23	0.05	0.02	-0.02
	MAX ACC ERROR	0.61	-0.25	-0.32	-0.41	-0.45	-0.27	-0.49	-0.15	-0.24	-0.34	-0.33	-0.61	-0.33	-0.37	-0.42
5 GHz	INTERCEPT (mV)	4955	307	655	1004	1357	1726	2067	2454	2817	3165	3527	3864	4242	4599	4953
	SLOPE (mV/dB)	71.7	13	3	-7	-12	-2	-19	9	14	3	7	-15	5	3	-2
	MAX LIN ERROR	0.27	0.19	0.04	-0.09	-0.17	-0.02	-0.27	0.13	0.19	0.04	0.09	-0.21	0.06	0.04	-0.02
	MAX ACC ERROR	0.61	-0.35	-0.46	-0.55	-0.59	-0.40	-0.61	-0.16	-0.06	-0.17	-0.08	-0.34	-0.03	-0.01	-0.03
6 GHz	INTERCEPT (mV)	4949	297	644	988	1342	1707	2045	2432	2805	3155	3516	3848	4230	4598	4960
	SLOPE (mV/dB)	71.9	22	9	-6	-12	-6	-28	0	13	4	5	-22	0	9	11
	MAX LIN ERROR	0.38	0.31	0.13	-0.08	-0.16	-0.09	-0.38	0.00	0.19	0.05	0.07	-0.31	0.00	0.12	0.16
	MAX ACC ERROR	0.92	-0.49	-0.61	-0.78	-0.80	-0.67	-0.92	-0.47	-0.23	-0.31	-0.23	-0.57	-0.19	-0.02	0.07
AVG. SLOPE: 71.1 mV/dB		0.49	0.51	0.63	0.58	0.63	0.65	0.51	0.27	0.22	0.32	0.34	0.32	0.28	0.25	Flatness dB: ±0.65 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42349
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port



DC Offset: -3 mV

Frequency

2 GHz	INTERCEPT (mV)	4667
	SLOPE (mV/dB)	68
	MAX LIN ERROR	0.37
	MAX ACC ERROR	0.64

3 GHz	INTERCEPT (mV)	4671
	SLOPE (mV/dB)	68
	MAX LIN ERROR	0.35
	MAX ACC ERROR	0.73

4 GHz	INTERCEPT (mV)	4658
	SLOPE (mV/dB)	69.1
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.68

5 GHz	INTERCEPT (mV)	4692
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.29
	MAX ACC ERROR	0.55

6 GHz	INTERCEPT (mV)	4692
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.56
	MAX ACC ERROR	1.07

AVG. SLOPE: 69 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
228	584	924	1270	1623	1948	2295	2612	2964	3299	3645	4009	4336	4642	
-16	-1	-1	5	18	3	9	-14	-2	-7	-1	22	9	-25	
-0.24	-0.01	-0.01	0.07	0.26	0.04	0.14	-0.20	-0.03	-0.10	-0.02	0.33	0.14	-0.37	
0.40	0.56	0.48	0.50	0.61	0.32	0.35	-0.06	0.04	-0.10	-0.09	0.18	-0.08	-0.64	
238	596	935	1280	1630	1955	2303	2612	2961	3287	3633	3998	4344	4683	
-14	4	4	9	19	4	12	-19	-10	-24	-18	7	13	12	
-0.20	0.07	0.05	0.13	0.28	0.06	0.17	-0.28	-0.15	-0.35	-0.26	0.11	0.20	0.18	
0.54	0.73	0.64	0.64	0.71	0.42	0.45	-0.06	0.00	-0.28	-0.26	0.02	0.04	-0.05	
180	609	852	1203	1546	1882	2235	2572	2933	3260	3604	3969	4323	4669	
16	0	-3	3	0	-9	-2	-11	5	-14	-15	4	13	13	
0.24	0.00	-0.04	0.04	0.00	-0.14	-0.03	-0.15	0.07	-0.20	-0.22	0.06	0.18	0.19	
-0.30	-0.53	-0.56	-0.47	-0.50	-0.64	-0.52	-0.64	-0.41	-0.67	-0.68	-0.40	-0.27	-0.25	
184	613	859	1210	1554	1888	2246	2596	2960	3290	3632	4004	4355	4700	
20	1	-2	1	-3	-17	-8	-6	10	-9	-15	9	11	8	
0.29	0.01	-0.02	0.02	-0.05	-0.25	-0.11	-0.09	0.14	-0.12	-0.21	0.13	0.16	0.12	
-0.24	-0.47	-0.46	-0.37	-0.39	-0.65	-0.36	-0.29	-0.02	-0.23	-0.28	0.11	0.20	0.20	
163	478	828	1178	1513	1852	2212	2577	2947	3279	3618	3992	4357	4715	
39	3	1	0	-18	-29	-20	-6	12	-7	-20	3	17	23	
0.56	0.04	0.02	0.00	-0.23	-0.41	-0.29	-0.09	0.17	-0.10	-0.28	0.04	0.24	0.33	
-0.54	-0.98	-0.91	-0.84	-0.98	-1.07	-0.85	-0.57	-0.20	-0.39	-0.48	-0.06	0.23	0.41	
0.54	0.85	0.78	0.74	0.85	0.75	0.66	0.29	0.22	0.28	0.30	0.29	0.25	0.53	

RF Input Power (dBm)

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

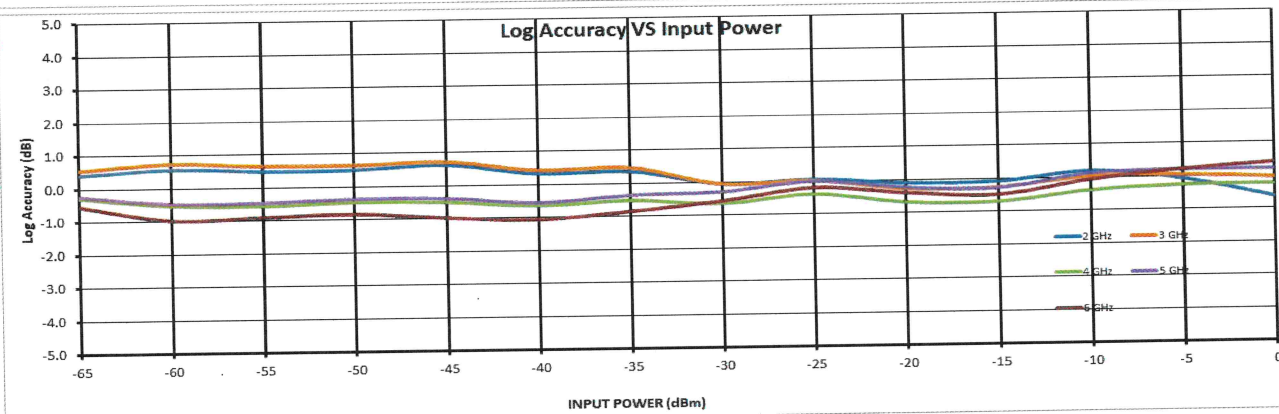
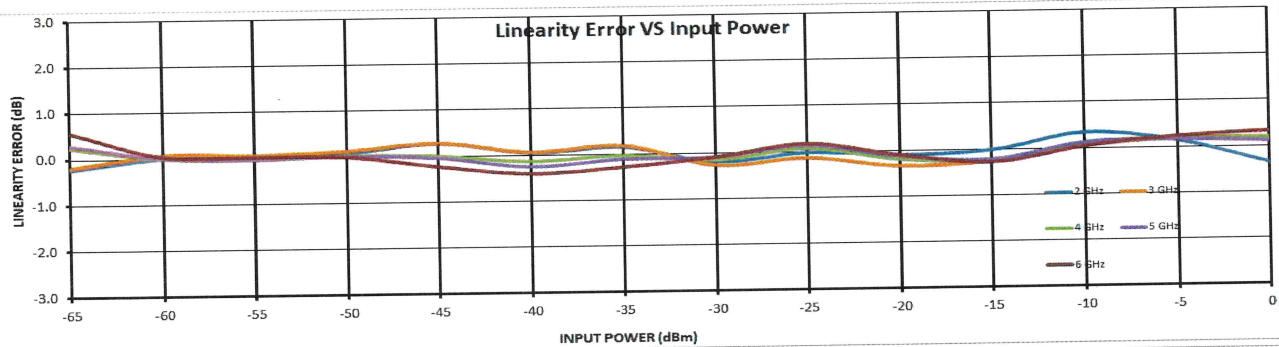
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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)	

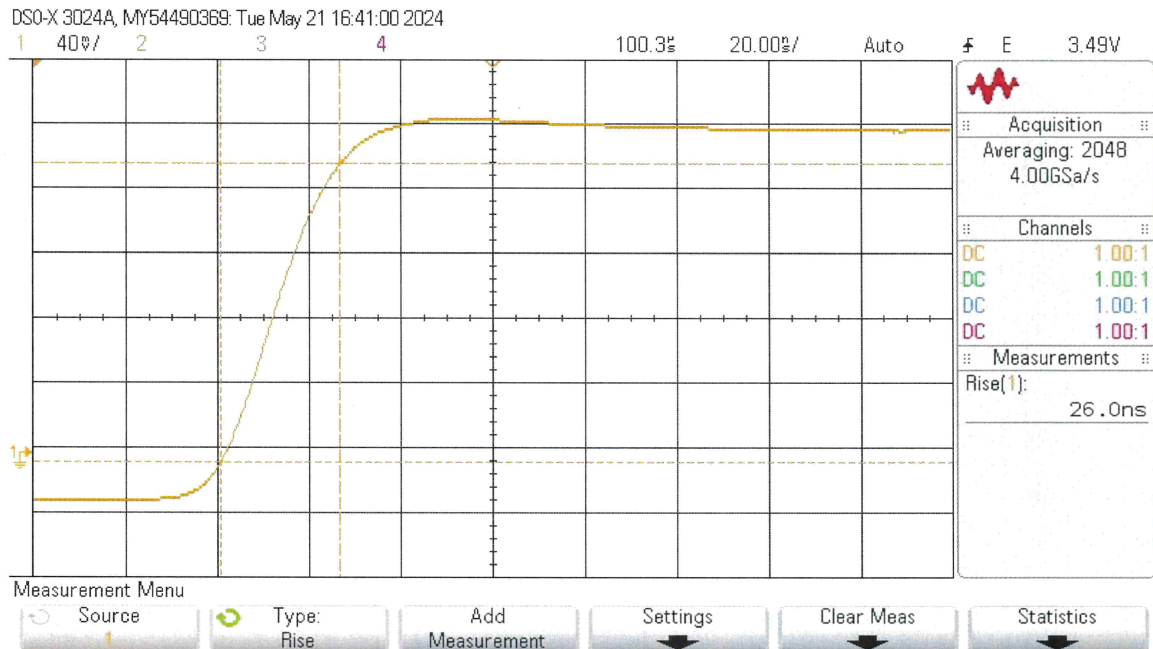
Flatness dB: ±0.85 dB



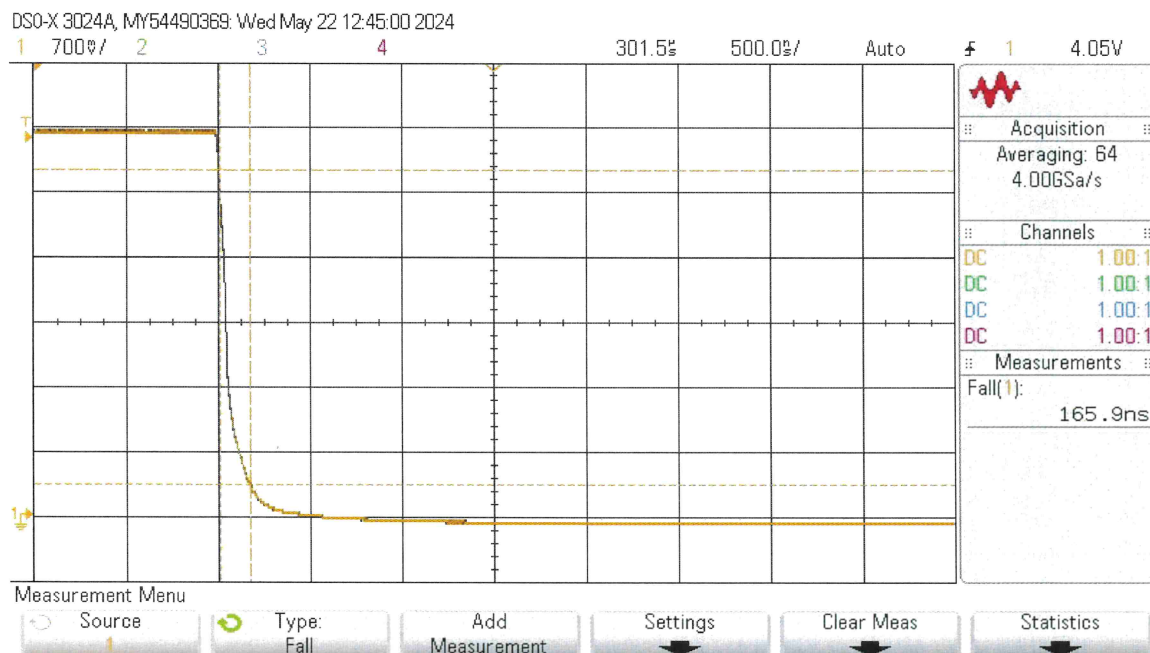


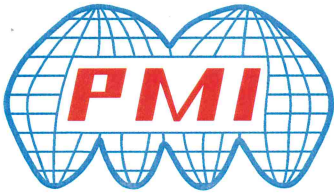
Summary Data For EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

