



Tested By: Joshua Monley

Temperature: 0°C TO +85°C

Date 5/30/2024

Drawing No: 27637945 **Rev: A1**

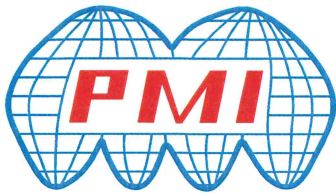
Rev: A1

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

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+12.09 dB MAX +10.58 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±0.8 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+6.77 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-21 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-40 dBc	
18	VIDEO OUT TSS:	-71 dBm MAX	-71.1 dBm	
19	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
20	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	71.9 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.31 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±0.86 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.39 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-27 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	27.3 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	198.4 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	46.48 ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	0.471 us	



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

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.69 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	1.34 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. Huter

Date:

5.31.24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42379
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: RF Port



DC Offset: -25 mV

Frequency

2 GHz	INTERCEPT (mV)	4851
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.44
	MAX ACC ERROR	0.86

3 GHz	INTERCEPT (mV)	4801
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.58

4 GHz	INTERCEPT (mV)	4769
	SLOPE (mV/dB)	69.2
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.52

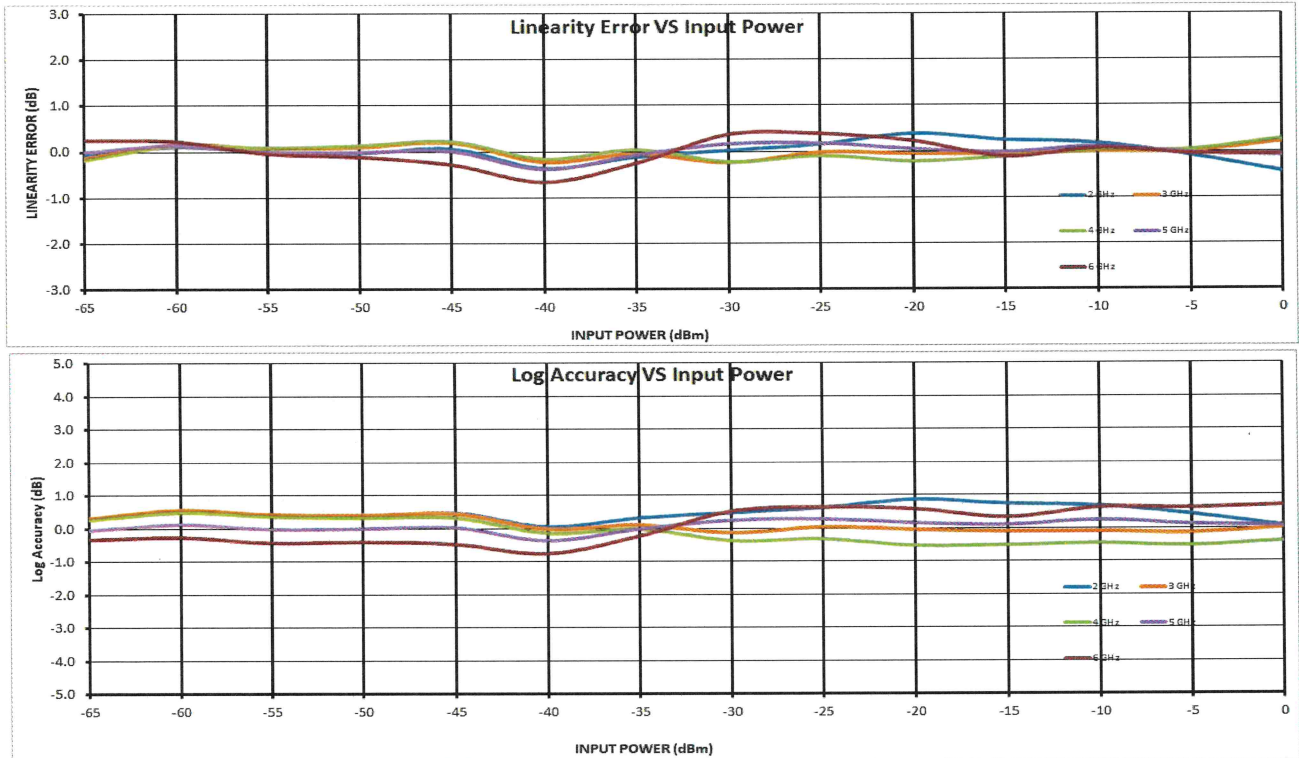
5 GHz	INTERCEPT (mV)	4827
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.4
	MAX ACC ERROR	0.36

6 GHz	INTERCEPT (mV)	4868
	SLOPE (mV/dB)	71.9
	MAX LIN ERROR	0.66
	MAX ACC ERROR	0.75

AVG. SLOPE: 70.4 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	269	625	970	1321	1680	2003	2373	2736	3098	3467	3810	4158	4492	4820
	-6	7	0	-2	4	-26	-9	2	11	27	17	12	-6	-31
	-0.08	0.11	-0.01	-0.03	0.06	-0.37	-0.12	0.02	0.15	0.38	0.24	0.18	-0.09	-0.44
	0.28	0.48	0.38	0.37	0.47	0.06	0.32	0.47	0.62	0.86	0.73	0.67	0.42	0.08
3 GHz	262	632	974	1324	1679	1998	2369	2694	3058	3404	3752	4104	4453	4816
	-10	12	6	7	14	-16	-3	-17	-1	-3	-4	0	0	15
	-0.14	0.17	0.08	0.10	0.20	-0.23	-0.05	-0.24	-0.01	-0.05	-0.06	0.00	0.00	0.21
	0.33	0.58	0.44	0.41	0.46	-0.01	0.12	-0.12	0.05	-0.04	-0.09	-0.09	-0.14	0.02
4 GHz	257	625	968	1317	1669	1989	2349	2677	3032	3370	3723	4079	4426	4788
	-12	10	7	9	15	-11	3	-15	-7	-15	-8	2	3	19
	-0.17	0.14	0.10	0.14	0.22	-0.16	0.04	-0.22	-0.09	-0.21	-0.11	0.03	0.04	0.27
	0.26	0.48	0.36	0.31	0.31	-0.14	-0.02	-0.37	-0.32	-0.52	-0.51	-0.46	-0.52	-0.38
5 GHz	236	600	942	1295	1649	1974	2350	2720	3074	3418	3766	4128	4471	4820
	-1	10	-1	-1	0	-28	-5	12	13	4	-1	7	-3	-7
	-0.01	0.15	-0.01	-0.01	0.00	-0.40	-0.07	0.17	0.18	0.05	-0.02	0.11	-0.04	-0.10
	-0.04	0.13	-0.01	0.00	0.03	-0.35	-0.01	0.25	0.27	0.16	0.11	0.25	0.12	0.08
6 GHz	216	673	913	1267	1614	1946	2335	2739	3099	3447	3782	4154	4505	4883
	19	17	-3	-8	-20	-47	-18	27	28	16	-8	5	-3	-5
	0.26	0.23	-0.04	-0.11	-0.28	-0.66	-0.25	0.38	0.39	0.23	-0.11	0.07	-0.05	-0.06
	-0.33	-0.26	-0.43	-0.40	-0.47	-0.75	-0.22	0.52	0.63	0.57	0.33	0.62	0.60	0.69
AVG. SLOPE	0.33	0.42	0.43	0.40	0.47	0.40	0.27	0.44	0.48	0.69	0.62	0.56	0.56	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: ±0.69 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42379
Date:: 05/30/2024
Tested By: J. Monley
Test Temp: +25°C
Input Port: BIT Port

DC Offset: -27 mV



Frequency

2 GHz	INTERCEPT (mV)	4834
	SLOPE (mV/dB)	70.7
	MAX LIN ERROR	0.37
	MAX ACC ERROR	0.68

3 GHz	INTERCEPT (mV)	4791
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.56

4 GHz	INTERCEPT (mV)	4754
	SLOPE (mV/dB)	69.3
	MAX LIN ERROR	0.31
	MAX ACC ERROR	0.64

5 GHz	INTERCEPT (mV)	4815
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.39
	MAX ACC ERROR	0.37

6 GHz	INTERCEPT (mV)	4854
	SLOPE (mV/dB)	71.9
	MAX LIN ERROR	0.66
	MAX ACC ERROR	0.79

AVG. SLOPE: 70.4 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
238	603	945	1300	1658	1981	2350	2714	3078	3445	3789	4138	4477	4809
-3	9	-2	-1	4	-26	-11	0	10	24	15	10	-4	-25
-0.04	0.13	-0.03	-0.01	0.06	-0.37	-0.15	0.00	0.15	0.34	0.21	0.15	-0.06	-0.36
0.14	0.32	0.18	0.22	0.30	-0.11	0.13	0.30	0.47	0.68	0.56	0.52	0.33	0.04

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
250	619	962	1313	1667	1986	2348	2683	3047	3392	3740	4093	4442	4809
-9	11	6	8	14	-16	-3	-16	-1	-5	-5	-1	-1	18
-0.13	0.16	0.08	0.12	0.19	-0.23	-0.04	-0.24	-0.01	-0.07	-0.08	-0.01	-0.01	0.25
0.31	0.55	0.42	0.41	0.43	-0.04	0.10	-0.14	0.03	-0.08	-0.13	-0.12	-0.17	0.04

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
241	607	949	1300	1653	1972	2332	2661	3017	3353	3707	4062	4409	4776
-10	9	5	10	16	-11	2	-15	-5	-16	-9	0	1	22
-0.15	0.14	0.07	0.14	0.23	-0.16	0.03	-0.22	-0.08	-0.23	-0.12	0.01	0.02	0.31
0.18	0.38	0.24	0.22	0.23	-0.24	-0.13	-0.45	-0.40	-0.63	-0.60	-0.56	-0.64	-0.42

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
228	587	930	1284	1637	1963	2338	2708	3062	3404	3753	4115	4458	4814
3	9	-1	0	0	-27	-6	11	12	1	-3	6	-4	-1
0.04	0.13	-0.02	0.00	-0.01	-0.39	-0.08	0.16	0.17	0.02	-0.04	0.09	-0.06	-0.01
0.00	0.10	-0.03	-0.01	0.01	-0.37	-0.04	0.21	0.24	0.09	0.05	0.19	0.06	0.11

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
206	559	898	1255	1600	1933	2320	2724	3087	3433	3768	4140	4491	4853
22	16	-4	-7	-21	-47	-19	25	29	16	-8	4	-4	-1
0.31	0.22	-0.06	-0.09	-0.29	-0.66	-0.27	0.35	0.40	0.22	-0.12	0.06	-0.06	-0.02
-0.31	-0.30	-0.49	-0.42	-0.52	-0.79	-0.30	0.44	0.59	0.51	0.26	0.54	0.53	0.67

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
0.31	0.43	0.45	0.41	0.48	0.38	0.21	0.45	0.50	0.65	0.58	0.55	0.58	0.55

RF Input Power (dBm)

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

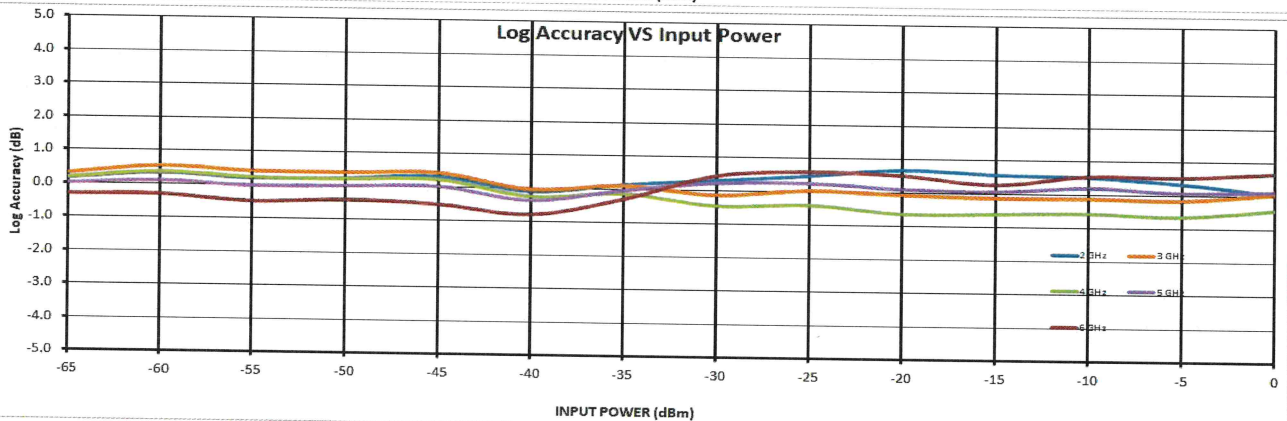
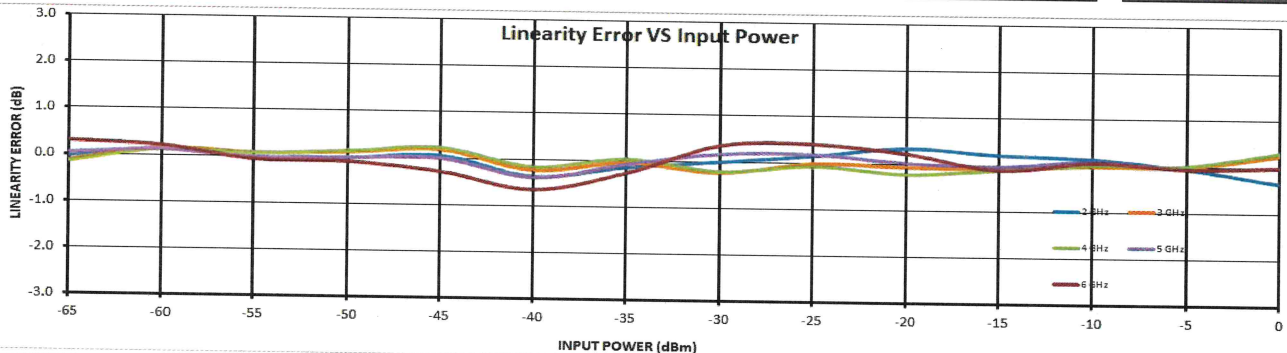
Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

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: ±0.65 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42379
Date: 05/30/2024
Tested By: J. Monley
Test Temp: 0°C
Input Port: RF Port

DC Offset: 44 mV



Frequency

2 GHz	INTERCEPT (mV)	4966
	SLOPE (mV/dB)	71.9
	MAX LIN ERROR	0.67
	MAX ACC ERROR	0.69

3 GHz	INTERCEPT (mV)	4910
	SLOPE (mV/dB)	70.7
	MAX LIN ERROR	0.54
	MAX ACC ERROR	0.9

4 GHz	INTERCEPT (mV)	4874
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.56
	MAX ACC ERROR	1.22

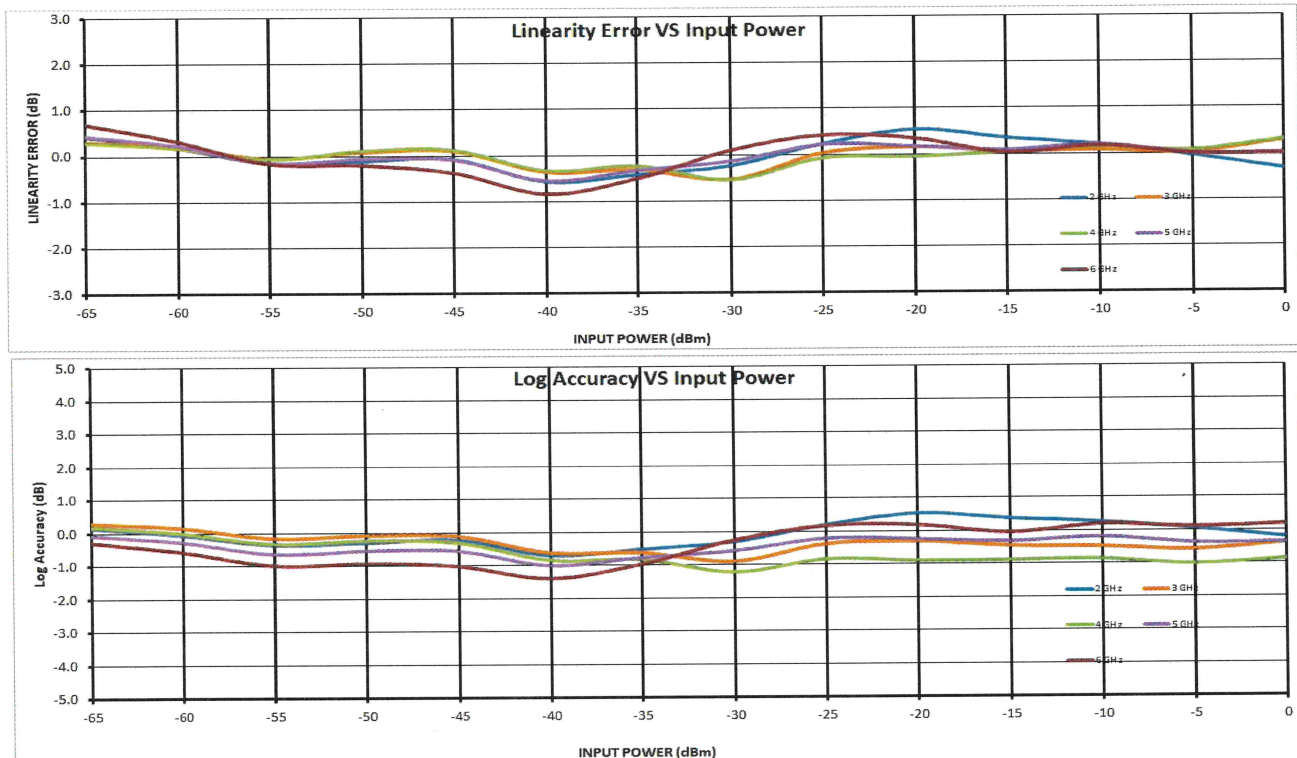
5 GHz	INTERCEPT (mV)	4932
	SLOPE (mV/dB)	71.6
	MAX LIN ERROR	0.56
	MAX ACC ERROR	1

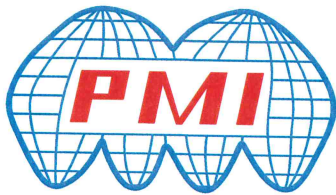
6 GHz	INTERCEPT (mV)	4971
	SLOPE (mV/dB)	72.7
	MAX LIN ERROR	0.84
	MAX ACC ERROR	1.39

AVG. SLOPE: 71.4 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	324	666	1002	1364	1726	2050	2420	2793	3186	3567	3913	4262	4604	4943
	30	13	-11	-8	-5	-41	-30	-17	17	38	25	15	-3	-23
	0.42	0.18	-0.15	-0.11	-0.08	-0.57	-0.42	-0.23	0.23	0.54	0.35	0.20	-0.04	-0.32
	0.15	-0.07	-0.36	-0.30	-0.23	-0.69	-0.51	-0.29	0.21	0.54	0.38	0.27	0.06	-0.20
3 GHz	334	681	1016	1379	1734	2055	2412	2750	3144	3506	3853	4208	4558	4930
	21	15	-4	5	7	-26	-23	-38	2	10	4	5	2	20
	0.30	0.21	-0.06	0.08	0.09	-0.37	-0.32	-0.54	0.03	0.15	0.05	0.07	0.02	0.28
	0.29	0.14	-0.17	-0.09	-0.12	-0.62	-0.63	-0.90	-0.38	-0.31	-0.46	-0.49	-0.59	-0.38
4 GHz	328	671	1005	1369	1721	2040	2398	2727	3112	3465	3823	4182	4528	4896
	21	13	-4	8	9	-23	-17	-39	-5	-4	3	11	5	22
	0.30	0.18	-0.06	0.12	0.13	-0.33	-0.24	-0.56	-0.08	-0.05	0.04	0.15	0.08	0.31
	0.20	0.00	-0.32	-0.23	-0.30	-0.83	-0.82	-1.22	-0.83	-0.89	-0.88	-0.85	-1.01	-0.86
5 GHz	309	652	983	1347	1703	2028	2402	2774	3157	3512	3864	4230	4574	4932
	31	16	-11	-5	-7	-40	-24	-10	15	12	6	14	0	0
	0.44	0.23	-0.15	-0.07	-0.10	-0.56	-0.33	-0.14	0.21	0.17	0.09	0.20	0.00	0.00
	-0.06	-0.26	-0.63	-0.53	-0.55	-1.00	-0.77	-0.56	-0.20	-0.23	-0.30	-0.18	-0.36	-0.35
6 GHz	293	630	958	1319	1670	2000	2388	2796	3183	3541	3882	4256	4607	4970
	50	24	-12	-15	-27	-61	-37	8	31	25	2	13	0	-1
	0.69	0.33	-0.16	-0.20	-0.38	-0.84	-0.51	0.10	0.42	0.35	0.03	0.17	0.00	-0.01
	-0.29	-0.57	-0.98	-0.93	-1.01	-1.39	-0.96	-0.25	0.17	0.18	-0.05	0.18	0.10	0.18
AVG.	0.29	0.36	0.41	0.42	0.45	0.38	0.22	0.48	0.52	0.71	0.63	0.56	0.55	0.52

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: ±0.71 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42379
Date: 05/30/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: 22 mV



Frequency

2 GHz	INTERCEPT (mV)	4771
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.73
	MAX ACC ERROR	0.83

3 GHz	INTERCEPT (mV)	4736
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.46
	MAX ACC ERROR	0.72

4 GHz	INTERCEPT (mV)	4707
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.42
	MAX ACC ERROR	1.08

5 GHz	INTERCEPT (mV)	4769
	SLOPE (mV/dB)	70.7
	MAX LIN ERROR	0.63
	MAX ACC ERROR	0.9

6 GHz	INTERCEPT (mV)	4812
	SLOPE (mV/dB)	72.1
	MAX LIN ERROR	0.89
	MAX ACC ERROR	1.35

AVG. SLOPE: 70.5 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
196	540	888	1239	1583	1905	2264	2648	3048	3405	3749	4090	4402	4720	
13	4	-1	-3	-11	-42	-36	-5	42	48	37	25	-16	-51	
0.19	0.06	-0.01	-0.04	-0.16	-0.60	-0.52	-0.08	0.59	0.65	0.52	0.35	-0.23	-0.73	
0.01	-0.11	-0.18	-0.20	-0.32	-0.75	-0.66	-0.22	0.46	0.52	0.40	0.24	-0.34	-0.83	
216	568	912	1260	1602	1918	2270	2622	3018	3353	3704	4052	4391	4728	
8	11	7	7	0	-32	-28	-25	23	10	12	12	3	-8	
0.11	0.16	0.10	0.10	0.01	-0.46	-0.41	-0.35	0.33	0.14	0.18	0.17	0.04	-0.12	
0.29	0.28	0.16	0.10	-0.05	-0.57	-0.58	-0.58	0.03	-0.22	-0.24	-0.30	-0.49	-0.72	
208	545	894	1244	1581	1900	2250	2602	2991	3323	3673	4022	4367	4702	
14	4	6	9	-1	-29	-27	-22	20	5	8	10	8	-5	
0.21	0.06	0.09	0.13	-0.02	-0.42	-0.38	-0.31	0.29	0.07	0.11	0.14	0.11	-0.07	
0.18	-0.04	-0.09	-0.13	-0.35	-0.82	-0.86	-0.87	-0.35	-0.64	-0.68	-0.73	-0.84	-1.08	
194	528	882	1233	1569	1895	2257	2650	3045	3379	3722	4077	4412	4740	
22	3	3	0	-17	-45	-36	3	44	25	14	16	-3	-29	
0.31	0.04	0.04	0.01	-0.24	-0.63	-0.51	0.04	0.63	0.35	0.20	0.22	-0.04	-0.41	
-0.02	-0.28	-0.26	-0.29	-0.52	-0.90	-0.76	-0.19	0.41	0.15	0.02	0.05	-0.20	-0.54	
175	488	849	1199	1527	1863	2231	2663	3073	3409	3737	4104	4448	4789	
51	3	4	-7	-40	-64	-57	14	64	39	7	13	-4	-23	
0.70	0.04	0.05	-0.10	-0.55	-0.89	-0.79	0.20	0.89	0.54	0.09	0.18	-0.05	-0.32	
-0.29	-0.85	-0.73	-0.77	-1.12	-1.35	-1.13	0.00	0.81	0.58	0.23	0.43	0.31	0.15	
0.29	0.57	0.45	0.43	0.53	0.39	0.28	0.43	0.58	0.61	0.54	0.58	0.57	0.62	

RF Input Power (dBm)

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

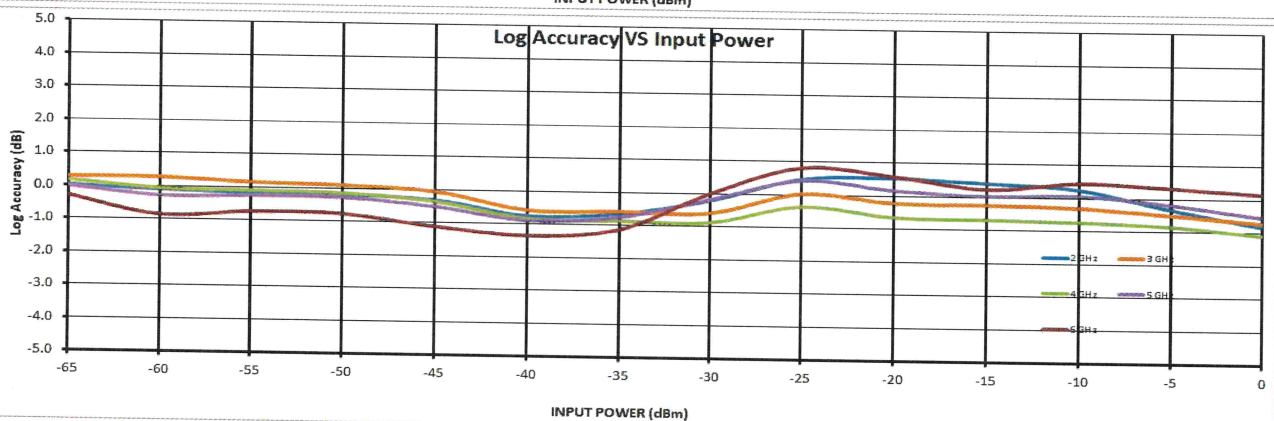
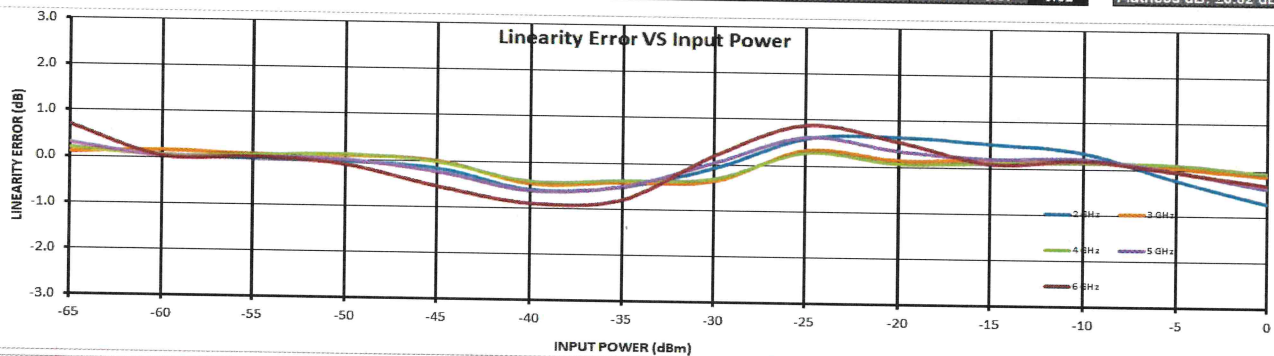
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

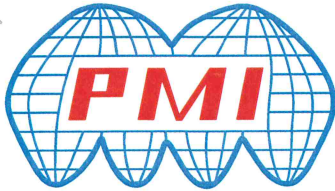
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

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

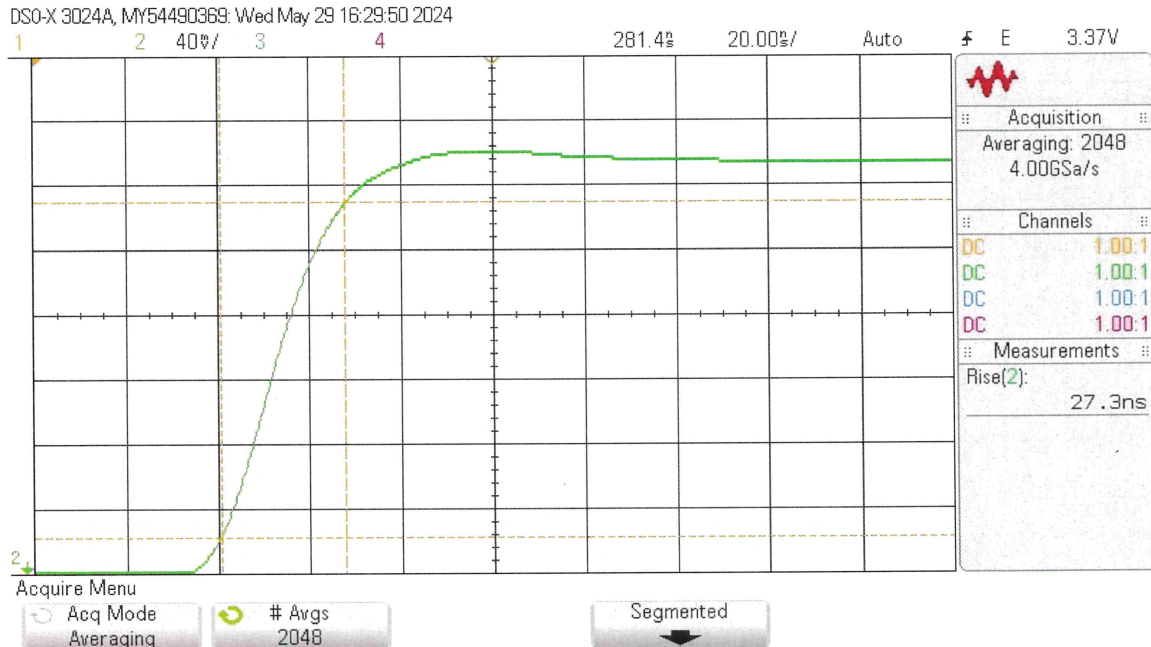
Flatness dB: ±0.62 dB



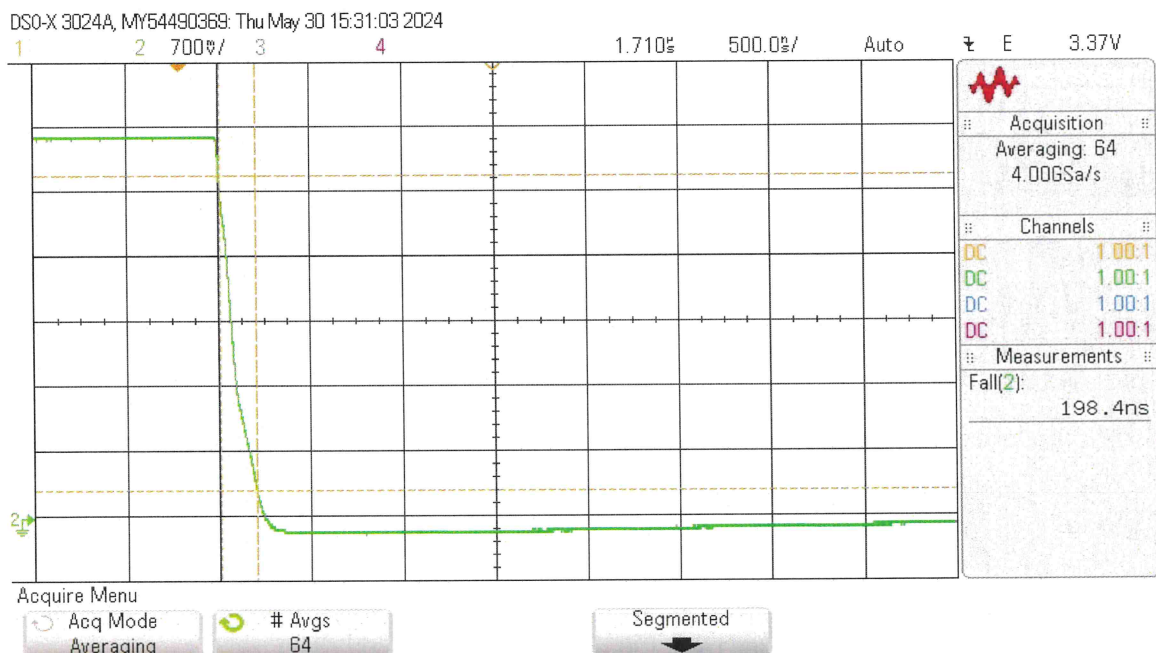


Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

