



Tested By: Fred Cortes

Temperature: 0°C TO +85°C

Date 6/27/2024

Drawing No: 27637945

Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 6 GHz	2 to 6 GHz	QA3
2	VSWR:	2.0:1 MAX @ 50 Ω	1.24:1 @ 50 Ω (RF IN) 1.19:1 @ 50 Ω (BIT IN) 1.21:1 @ 50 Ω (RF OUT) 1.54:1 @ 50 Ω (SW OUT)	
3	Noise Figure:	6 dB MAX	4.6 dB	
4	Input Power:	(1) 1 W CW, Max. (2) 100 W Peak @ PW = 1 us & Duty Cycle = 1%, Max.	PASS	
5	TTL Control	See Logic Table	PASS	
6	SP3T Switch Isolation	60 dB MIN (All Ports)	> 60 dB	
7	SP3T Switching Speed:	100 ns MAX	50 ns	
8	RF OUT Linear Gain	+33 dB MIN, 39 dB MAX	+36.57 dB MAX +34.75 dB MIN	
9	RF OUT Frequency Flatness:	±2.0 dB MAX	±0.9 dB	
10	RF OUT 1 dB Compression Point:	+3 dBm MIN	+10.77 dBm	
11	RF OUT Second Harmonic:	-9 dBc MIN	-43 dBc	
12	RF OUT Third Harmonic:	-12 dBc MIN	-54 dBc	



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

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+13.28 dB MAX +11.22 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±1 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+7.13 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-27 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	70.4 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.29 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±0.99 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.22 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-59 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	24.5 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	143.8 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	

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**

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.88 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	2.2 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

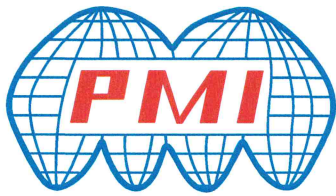
36	Droop of the Output Video Pulse @ 300us & - 65 dBm	70mV (1 dB) MAX	< 70 mV	PMI QA3
37	VIDEO OUT Propagation Delay:	50 ns MAX Excluding cable	40 ns	
38	Power Supply	+15 V @ 1000 mA MAX -15 V @ 500 mA MAX	+15 V @ 626 mA -15 V @ 134 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval:

H. Kuter

Date:

6-27-24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL46503
Date: 06/27/24
Tested By: F. Cortes
Test Temp: +25°C
Input Port: RF Port

DC Offset: -57 mV



Frequency

2 GHz	INTERCEPT (mV)	4810
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.49
	MAX ACC ERROR	0.96

3 GHz	INTERCEPT (mV)	4796
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.77

4 GHz	INTERCEPT (mV)	4760
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.29
	MAX ACC ERROR	0.42

5 GHz	INTERCEPT (mV)	4759
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.32
	MAX ACC ERROR	0.52

6 GHz	INTERCEPT (mV)	4742
	SLOPE (mV/dB)	70.4
	MAX LIN ERROR	0.64
	MAX ACC ERROR	0.95

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
274	621	984	1333	1688	2023	2381	2727	3064	3439	3771	4123	4466	4776
-12	-13	2	3	10	-3	7	5	-6	21	5	9	4	-34
-0.17	-0.18	0.03	0.05	0.15	-0.04	0.10	0.07	-0.09	0.30	0.07	0.13	0.06	-0.49
0.69	0.66	0.85	0.84	0.92	0.71	0.83	0.78	0.60	0.96	0.71	0.74	0.65	0.08

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
258	608	969	1322	1678	2013	2372	2720	3055	3416	3739	4092	4441	4794
-14	-12	1	6	14	1	12	12	-1	12	-13	-8	-7	-2
-0.21	-0.18	0.01	0.08	0.20	0.01	0.17	0.17	-0.01	0.17	-0.19	-0.11	-0.10	-0.03
0.46	0.47	0.63	0.68	0.77	0.56	0.70	0.68	0.47	0.63	0.25	0.30	0.29	0.34

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
214	561	914	1273	1628	1963	2326	2676	3015	3371	3692	4061	4401	4775
-6	-8	-4	6	11	-3	10	11	1	8	-20	-11	-10	15
-0.08	-0.11	-0.06	0.08	0.16	-0.04	0.14	0.16	0.02	0.11	-0.29	-0.15	-0.14	0.21
-0.16	-0.20	-0.15	-0.02	0.06	-0.15	0.03	0.05	-0.10	-0.01	-0.42	-0.29	-0.28	0.07

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
200	547	897	1258	1614	1954	2316	2664	3004	3358	3685	4047	4403	4778
-2	-5	-6	4	10	-1	11	8	-2	1	-22	-11	-5	19
-0.03	-0.08	-0.09	0.06	0.14	-0.01	0.16	0.12	-0.03	0.02	-0.32	-0.15	-0.07	0.27
-0.36	-0.40	-0.40	-0.23	-0.14	-0.28	-0.10	-0.12	-0.26	-0.20	-0.62	-0.34	-0.25	0.11

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
177	514	863	1226	1576	1919	2277	2631	2974	3323	3655	4028	4393	4780
14	-1	-5	6	4	-5	1	2	-7	-10	-30	-9	3	38
0.19	-0.02	-0.07	0.09	0.06	-0.07	0.01	0.03	-0.10	-0.14	-0.43	-0.13	0.05	0.54
-0.69	-0.87	-0.88	-0.69	-0.69	-0.78	-0.66	-0.60	-0.69	-0.70	-0.95	-0.62	-0.40	0.14

AVG. SLOPE: 69.9 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
0.69	0.77	0.87	0.77	0.80	0.74	0.74	0.69	0.64	0.83	0.83	0.68	0.52	0.14

RF Input Power (dBm)

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

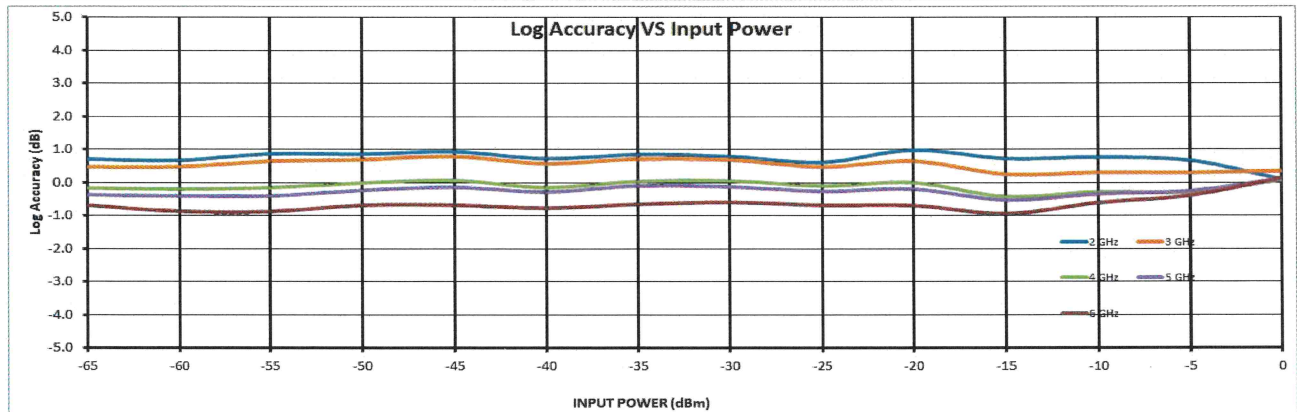
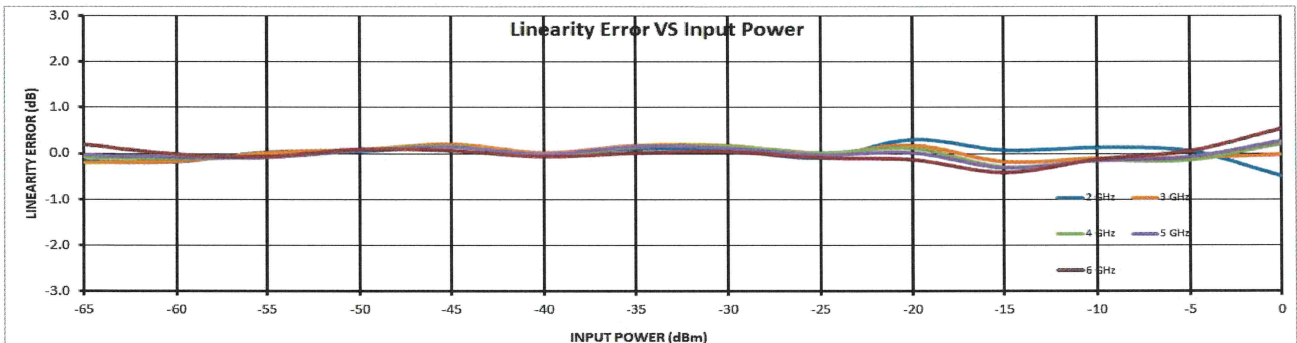
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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: ±0.87 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL46503
Date: 06/27/24
Tested By: F. Cortes
Test Temp: +25°C
Input Port: BIT Port



DC Offset: -59 mV

Frequency

2 GHz	INTERCEPT (mV)	4801
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.66
	MAX ACC ERROR	0.96

3 GHz	INTERCEPT (mV)	4791
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.2
	MAX ACC ERROR	0.73

4 GHz	INTERCEPT (mV)	4765
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.28
	MAX ACC ERROR	0.42

5 GHz	INTERCEPT (mV)	4751
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.3
	MAX ACC ERROR	0.66

6 GHz	INTERCEPT (mV)	4733
	SLOPE (mV/dB)	70.4
	MAX LIN ERROR	0.53
	MAX ACC ERROR	0.99

AVG. SLOPE: 69.9 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
268	619	975	1319	1678	2017	2376	2722	3059	3433	3764	4115	4455	4763
-11	-8	0	-4	7	-1	9	8	-3	23	7	10	2	-38
-0.16	-0.12	0.00	-0.05	0.11	-0.02	0.13	0.11	-0.04	0.34	0.09	0.14	0.03	-0.55
0.68	0.70	0.79	0.71	0.85	0.69	0.81	0.78	0.60	0.95	0.68	0.70	0.56	-0.03
255	610	963	1310	1670	2007	2369	2717	3050	3413	3736	4088	4437	4788
-13	-6	-1	-2	10	-1	13	14	-1	14	-11	-7	-6	-3
-0.18	-0.08	-0.01	-0.02	0.16	-0.01	0.19	0.19	-0.02	0.20	-0.16	-0.11	-0.09	-0.05
0.49	0.57	0.62	0.58	0.73	0.55	0.73	0.71	0.47	0.66	0.28	0.31	0.31	0.33
209	568	905	1260	1617	1955	2319	2672	3010	3366	3687	4045	4395	4768
-3	-3	-6	0	7	-4	10	14	3	9	-19	-11	-10	13
-0.04	-0.05	-0.08	0.00	0.10	-0.06	0.15	0.20	0.04	0.13	-0.28	-0.15	-0.14	0.19
-0.16	-0.17	-0.21	-0.13	-0.03	-0.19	0.01	0.06	-0.10	-0.01	-0.42	-0.30	-0.29	0.04
195	541	888	1245	1601	1945	2308	2658	2997	3352	3678	4040	4396	4768
1	-3	-7	0	5	-1	11	10	-1	3	-21	-10	-4	17
0.02	-0.04	-0.10	0.00	0.07	-0.02	0.16	0.15	-0.02	0.05	-0.30	-0.14	-0.06	0.24
-0.36	-0.42	-0.45	-0.35	-0.26	-0.34	-0.14	-0.14	-0.29	-0.21	-0.55	-0.37	-0.28	0.04
173	508	852	1212	1563	1909	2268	2623	2967	3314	3647	4020	4384	4770
19	1	-7	1	0	-6	1	3	-5	-10	-29	-8	3	37
0.26	0.02	-0.10	0.01	0.00	-0.09	0.01	0.05	-0.07	-0.14	-0.41	-0.12	0.05	0.53
-0.68	-0.89	-0.97	-0.82	-0.80	-0.85	-0.72	-0.64	-0.72	-0.76	-0.99	-0.66	-0.45	0.07
0.68	0.79	0.88	0.77	0.82	0.77	0.77	0.71	0.66	0.85	0.84	0.68	0.51	0.18

RF Input Power (dBm)

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

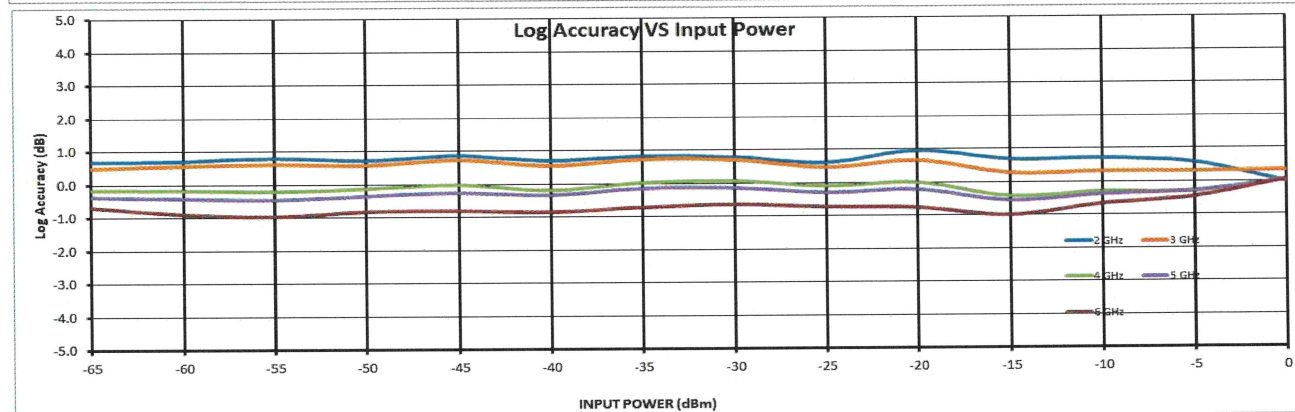
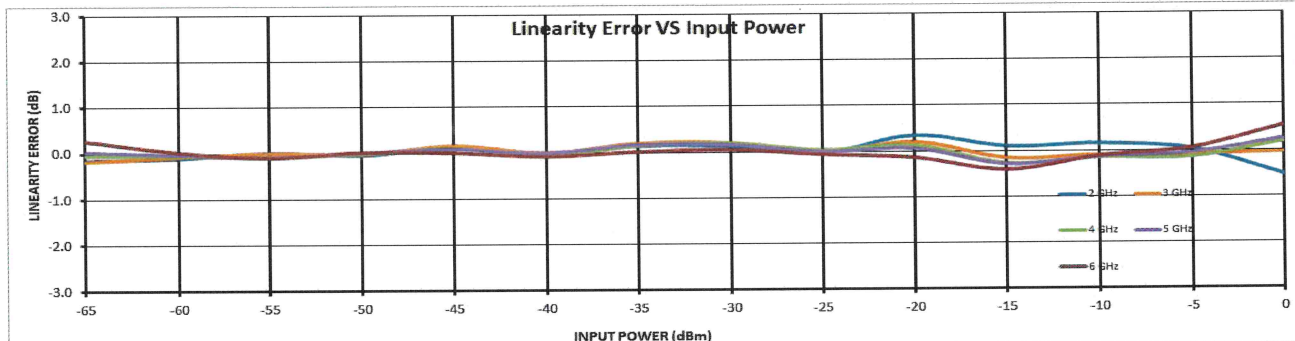
Measured Value (mV)
ERROR (mV)
LINEARITY ERROR (dB)
LOG ACCURACY (dB)

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: ±0.88 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL46503
Date:: 06/27/24
Tested By: F. Cortes
Test Temp: 0°C
Input Port: RF Port

DC Offset: -22 mV



Frequency

2 GHz	INTERCEPT (mV)	4894
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.79

3 GHz	INTERCEPT (mV)	4873
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.63

4 GHz	INTERCEPT (mV)	4832
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.58

5 GHz	INTERCEPT (mV)	4831
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.37
	MAX ACC ERROR	0.69

6 GHz	INTERCEPT (mV)	4812
	SLOPE (mV/dB)	70.5
	MAX LIN ERROR	0.6
	MAX ACC ERROR	1.15

AVG. SLOPE: 70.1 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	344	677	1040	1387	1753	2094	2452	2791	3129	3508	3847	4198	4547	4877
	3	-14	-1	-5	11	2	10	-2	-14	15	4	4	3	-17
	0.04	-0.20	-0.02	-0.07	0.16	0.03	0.14	-0.02	-0.20	0.21	0.05	0.06	0.05	-0.24
	0.68	0.43	0.61	0.55	0.77	0.63	0.73	0.57	0.39	0.79	0.62	0.63	0.60	0.30
3 GHz	329	666	1026	1376	1743	2083	2444	2784	3119	3485	3815	4168	4515	4875
	-2	-15	-4	-3	14	5	17	7	-7	10	-10	-6	-8	2
	-0.03	-0.21	-0.06	-0.05	0.21	0.07	0.24	0.10	-0.10	0.14	-0.14	-0.09	-0.12	0.03
	0.47	0.27	0.41	0.40	0.63	0.47	0.62	0.47	0.24	0.46	0.17	0.20	0.14	0.28
4 GHz	284	620	970	1326	1695	2033	2395	2739	3076	3436	3763	4124	4472	4849
	4	-10	-10	-4	15	2	14	8	-5	5	-19	-8	-10	17
	0.06	-0.14	-0.14	-0.06	0.21	0.03	0.20	0.11	-0.07	0.07	-0.26	-0.11	-0.14	0.24
	-0.17	-0.38	-0.39	-0.32	-0.06	-0.24	-0.08	-0.17	-0.37	-0.24	-0.68	-0.43	-0.47	-0.09
5 GHz	273	607	955	1312	1679	2022	2386	2727	3065	3424	3755	4120	4474	4857
	11	-7	-10	-5	11	2	15	4	-9	-1	-22	-8	-6	26
	0.15	-0.10	-0.15	-0.07	0.15	0.03	0.21	0.06	-0.13	-0.02	-0.31	-0.12	-0.08	0.37
	-0.33	-0.57	-0.61	-0.52	-0.28	-0.39	-0.21	-0.34	-0.53	-0.41	-0.69	-0.49	-0.44	0.02
6 GHz	248	583	924	1284	1648	1992	2351	2694	3035	3387	3723	4101	4462	4854
	19	1	-10	-3	9	0	7	-3	-14	-15	-31	-6	3	42
	0.27	0.02	-0.15	-0.04	0.12	0.00	0.10	-0.04	-0.20	-0.21	-0.44	-0.08	0.04	0.60
	-0.68	-0.91	-1.05	-0.92	-0.73	-0.82	-0.70	-0.82	-0.95	-0.94	-1.15	-0.76	-0.61	-0.02
AVG. SLOPE: 70.1 mV/dB	0.68	0.67	0.83	0.73	0.75	0.73	0.72	0.69	0.67	0.86	0.88	0.69	0.61	0.20

RF Input Power (dBm)

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

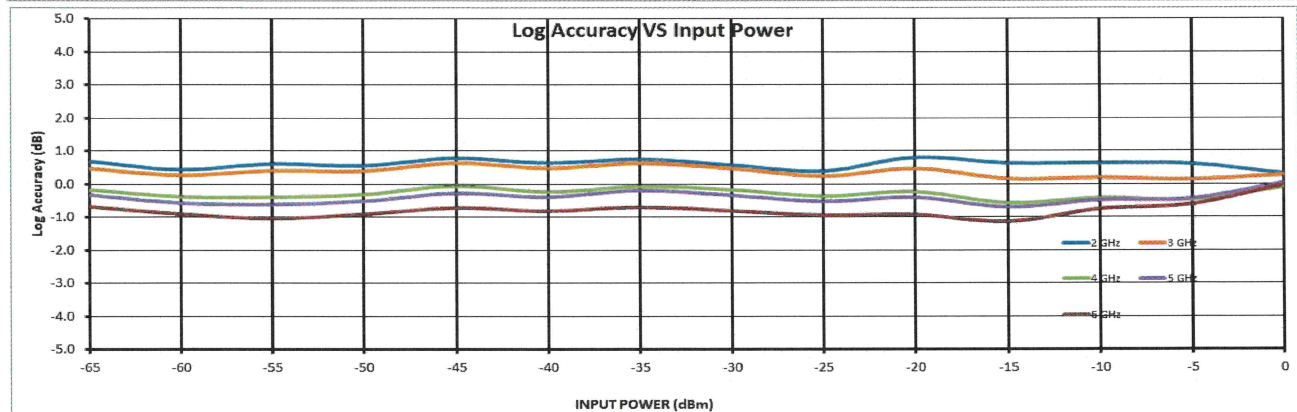
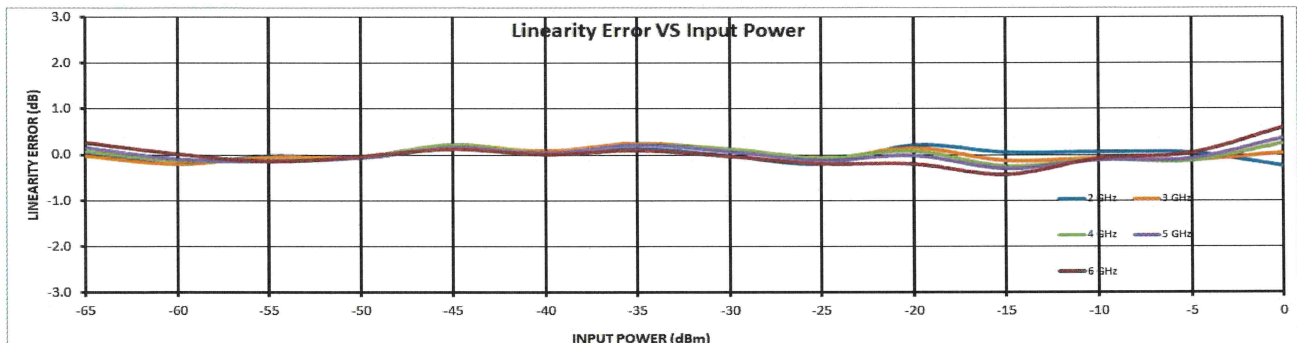
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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: ±0.88 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL46503
Date: 06/27/2024
Tested By: F. Cortes
Test Temp: +85°C
Input Port: RF Port

DC Offset: -35 mV



Frequency

2 GHz	INTERCEPT (mV)	4688
	SLOPE (mV/dB)	68.7
	MAX LIN ERROR	0.88
	MAX ACC ERROR	1.09

3 GHz	INTERCEPT (mV)	4687
	SLOPE (mV/dB)	68.7
	MAX LIN ERROR	0.37
	MAX ACC ERROR	1.05

4 GHz	INTERCEPT (mV)	4650
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.34
	MAX ACC ERROR	0.43

5 GHz	INTERCEPT (mV)	4649
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.28
	MAX ACC ERROR	0.46

6 GHz	INTERCEPT (mV)	4631
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.38
	MAX ACC ERROR	1.22

AVG. SLOPE: 69.2 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
200	568	905	1253	1603	1941	2294	2649	2988	3346	3669	4016	4337	4628	
-24	-9	-6	-1	5	0	9	21	17	31	11	14	-8	-60	
-0.35	-0.14	-0.08	-0.02	0.08	0.00	0.14	0.31	0.24	0.45	0.16	0.21	-0.12	-0.88	
0.64	0.81	0.83	0.86	0.91	0.79	0.89	1.02	0.92	1.09	0.76	0.77	0.41	-0.39	
198	557	904	1255	1606	1943	2297	2651	2985	3331	3646	3994	4338	4662	
-24	-9	-5	2	10	3	14	24	15	18	-11	-6	-6	-25	
-0.35	-0.13	-0.08	0.03	0.14	0.05	0.20	0.36	0.22	0.26	-0.16	-0.09	-0.08	-0.37	
0.61	0.80	0.81	0.88	0.96	0.82	0.94	1.05	0.88	0.88	0.43	0.45	0.42	0.10	
141	472	828	1185	1530	1873	2228	2593	2939	3277	3592	3945	4295	4644	
-1	-16	-7	3	1	-3	6	24	23	14	-18	-11	-8	-8	
-0.01	-0.24	-0.10	0.04	0.02	-0.04	0.08	0.34	0.33	0.20	-0.25	-0.16	-0.12	-0.09	
-0.21	-0.43	-0.28	-0.13	-0.14	-0.19	-0.06	0.21	0.21	0.10	-0.35	-0.25	-0.20	-0.16	
140	470	825	1182	1526	1874	2228	2585	2931	3269	3589	3946	4300	4647	
2	-15	-7	3	0	1	8	18	17	8	-19	-9	-2	-2	
0.03	-0.22	-0.10	0.04	0.00	0.01	0.11	0.26	0.24	0.11	-0.28	-0.14	-0.03	-0.04	
-0.22	-0.46	-0.33	-0.17	-0.20	-0.17	-0.06	0.10	0.10	-0.02	-0.40	-0.24	-0.12	-0.11	
111	417	781	1136	1475	1828	2177	2542	2895	3227	3555	3922	4287	4653	
27	-17	-3	3	-8	-5	-6	10	13	-5	-27	-10	6	22	
0.38	-0.24	-0.04	0.04	-0.12	-0.07	-0.08	0.14	0.18	-0.07	-0.38	-0.14	0.08	0.31	
-0.64	-1.22	-0.96	-0.83	-0.94	-0.84	-0.80	-0.52	-0.42	-0.63	-0.89	-0.59	-0.31	-0.03	
0.64	1.02	0.90	0.86	0.95	0.83	0.87	0.79	0.67	0.86	0.82	0.68	0.37	0.25	

RF Input Power (dBm)

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

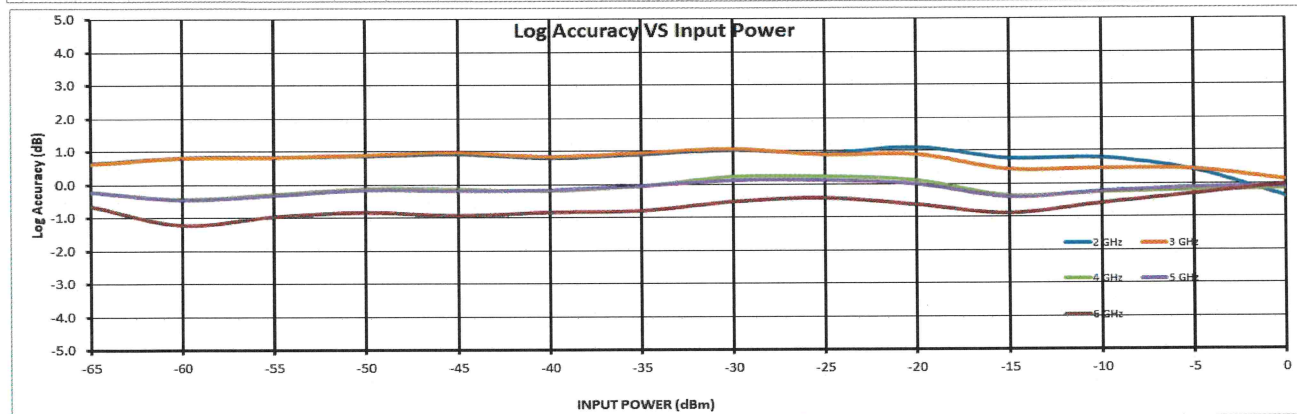
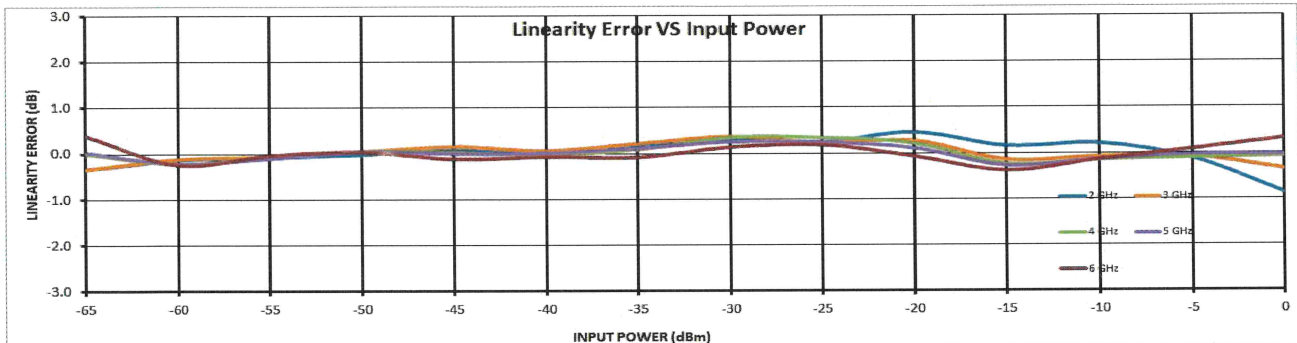
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

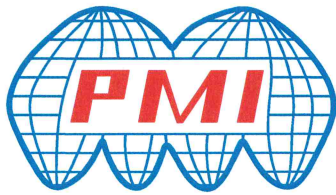
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

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

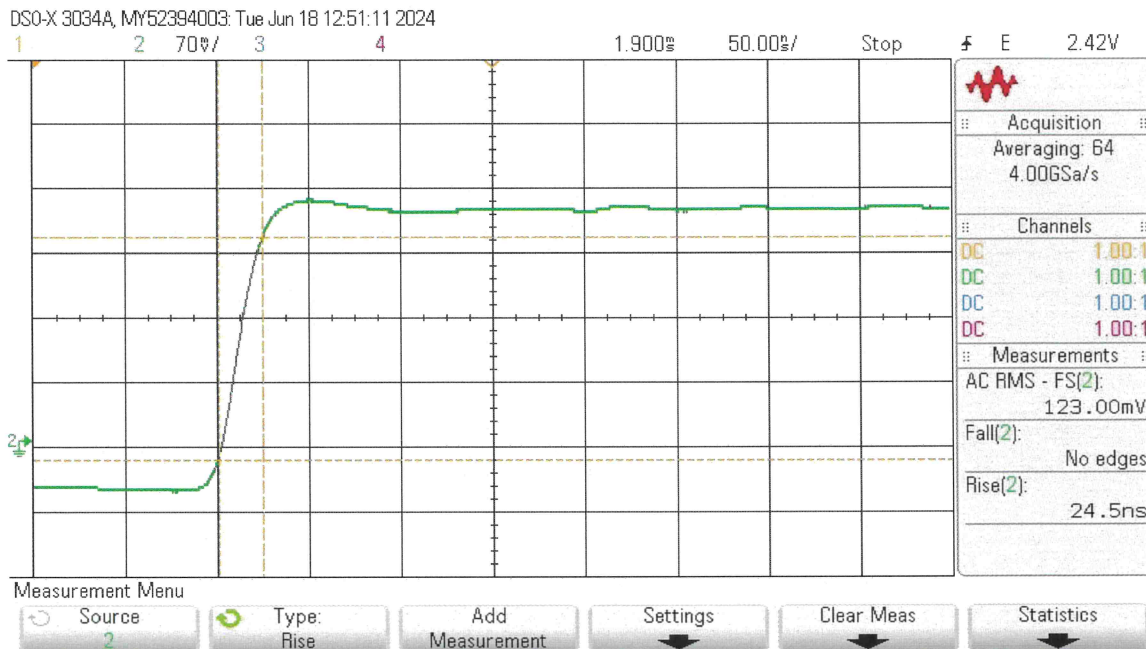
Flatness dB: ±1.02 dB



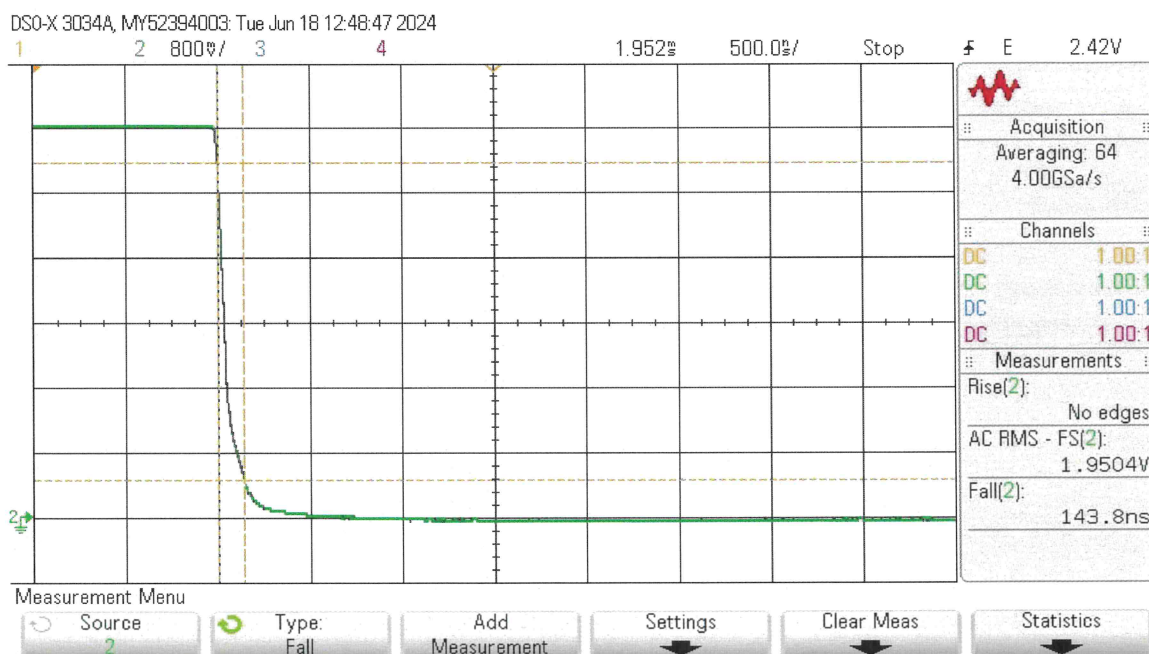


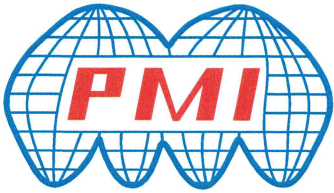
Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

