



Tested By: Joshua Monley

Temperature: 0°C TO +85°C

Date 7/29/2024

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	+13.23 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	+7.49 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-20 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-23 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	69.6 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.21 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±0.98 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.09 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-19 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	27 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	153.1 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	0.474 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	1.4 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 @ 629 mA -15 V @ 133 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval:

K. Luter

Date:

7.30.24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42375
Date: 07/29/2024
Tested By: F. Cortes
Test Temp: +25°C
Input Port: RF Port

DC Offset: -8 mV



Frequency

2 GHz	INTERCEPT (mV)	4879
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.40
	MAX ACC ERROR	0.65

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
361	696	1049	1393	1763	2107	2446	2774	3111	3486	3839	4206	4552	4855
6	-7	-2	-6	16	12	3	-17	-28	-1	4	23	21	-24
0.08	-0.10	-0.03	-0.09	0.23	0.17	0.04	-0.24	-0.40	-0.01	0.06	0.33	0.30	-0.34
0.59	0.38	0.43	0.35	0.65	0.57	0.42	0.11	-0.06	0.30	0.35	0.61	0.56	-0.11

RF Input Power (dBm)

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

3 GHz	INTERCEPT (mV)	4901
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.19
	MAX ACC ERROR	0.73

361	698	1053	1399	1769	2114	2465	2809	3141	3508	3849	4206	4549	4898
2	-10	-5	-8	13	8	10	4	-13	5	-4	4	-3	-3
0.03	-0.14	-0.06	-0.11	0.18	0.12	0.14	0.06	-0.19	0.06	-0.06	0.05	-0.04	-0.05
0.59	0.41	0.49	0.44	0.73	0.67	0.69	0.62	0.37	0.62	0.50	0.61	0.51	0.51

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

4 GHz	INTERCEPT (mV)	4860
	SLOPE (mV/dB)	69.2
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.26

319	659	1006	1355	1726	2069	2425	2771	3107	3463	3796	4159	4500	4871
3	-6	-9	-9	12	6	12	9	-5	2	-15	-1	-10	11
0.05	-0.09	-0.12	-0.13	0.18	0.08	0.17	0.12	-0.07	0.02	-0.21	-0.02	-0.14	0.16
-0.01	-0.15	-0.18	-0.19	0.12	0.03	0.12	0.07	-0.12	-0.03	-0.26	-0.07	-0.19	0.12

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

5 GHz	INTERCEPT (mV)	4852
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.42

314	654	1000	1349	1719	2066	2420	2759	3096	3450	3785	4151	4497	4870
5	-5	-8	-9	12	9	14	4	-9	-4	-19	-2	-6	18
0.07	-0.07	-0.12	-0.12	0.17	0.14	0.20	0.05	-0.13	-0.06	-0.27	-0.03	-0.08	0.26
-0.09	-0.22	-0.27	-0.28	0.02	-0.02	0.05	-0.10	-0.28	-0.21	-0.42	-0.18	-0.23	0.11

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

6 GHz	INTERCEPT (mV)	4826
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.48
	MAX ACC ERROR	0.98

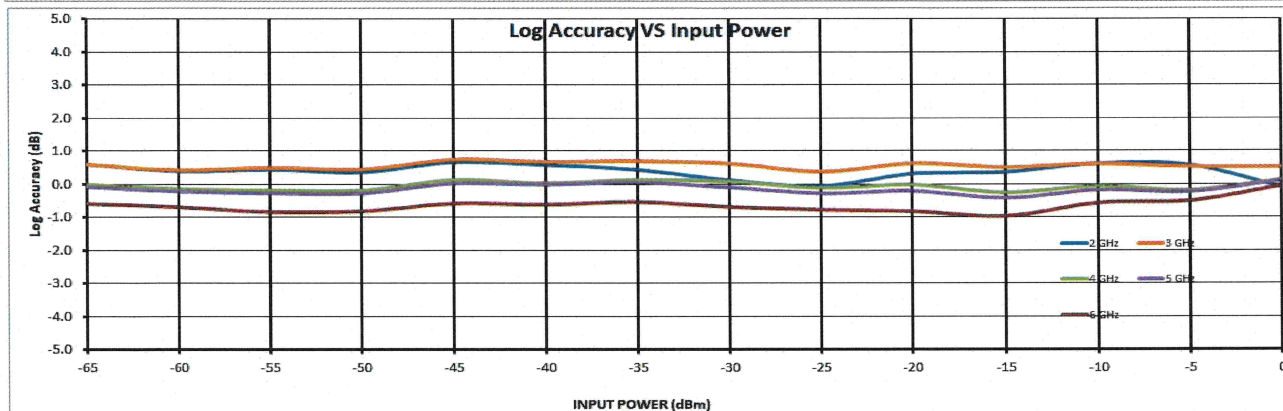
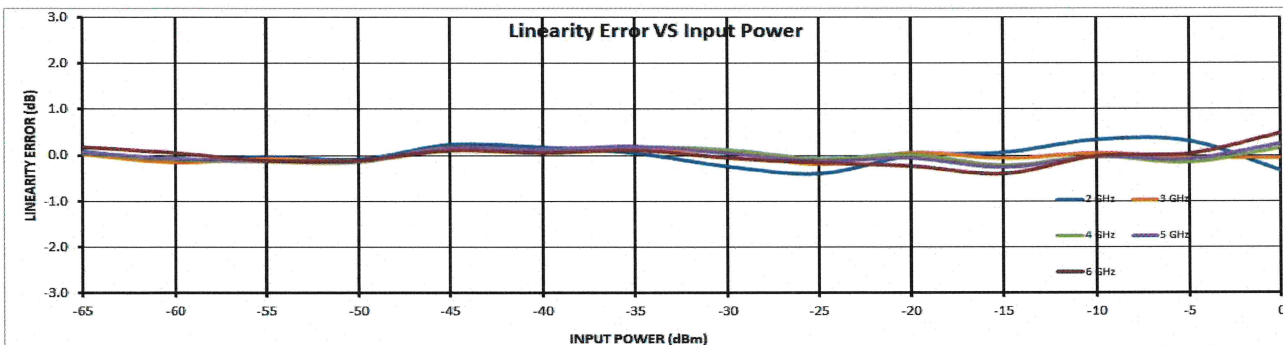
279	621	960	1311	1677	2024	2379	2718	3061	3407	3746	4124	4478	4860
13	4	-8	-7	8	4	8	-3	-11	-16	-28	-1	3	34
0.18	0.06	-0.11	-0.11	0.11	0.08	0.12	-0.05	-0.16	-0.23	-0.40	-0.01	0.04	0.48
-0.59	-0.69	-0.84	-0.82	-0.58	-0.62	-0.54	-0.69	-0.78	-0.83	-0.98	-0.57	-0.50	-0.04

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

AVG. SLOPE: 69.9 mV/dB

0.59	0.55	0.67	0.63	0.66	0.64	0.62	0.65	0.57	0.72	0.74	0.59	0.53	0.31
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Flatness dB: ±0.74 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42375
Date: 07/29/2024
Tested By: F. Cortes
Test Temp: +25°C
Input Port: BIT Port

DC Offset: -19 mV



Frequency

2 GHz	INTERCEPT (mV)	4853
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.42
	MAX ACC ERROR	0.59

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
321	666	1017	1360	1727	2068	2413	2746	3088	3462	3813	4180	4523	4824
1	-2	0	-6	13	5	1	-15	-21	4	5	24	19	-29
0.02	-0.03	0.00	-0.08	0.18	0.07	0.02	-0.21	-0.31	0.06	0.09	0.35	0.27	-0.42
0.45	0.38	0.40	0.30	0.54	0.41	0.34	0.10	-0.01	0.33	0.35	0.59	0.49	-0.21

RF Input Power (dBm)

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

3 GHz	INTERCEPT (mV)	4879
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.15
	MAX ACC ERROR	0.73

327	675	1027	1372	1740	2083	2438	2786	3121	3486	3825	4183	4527	4873
-3	-6	-3	-8	10	3	8	7	-8	7	-4	4	-2	-6
-0.04	-0.07	-0.04	-0.11	0.15	0.05	0.12	0.09	-0.12	0.09	-0.06	0.05	-0.03	-0.09
0.54	0.51	0.54	0.47	0.73	0.63	0.70	0.67	0.46	0.67	0.52	0.63	0.55	0.49

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

4 GHz	INTERCEPT (mV)	4839
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.21

290	635	981	1331	1697	2040	2399	2749	3088	3443	3774	4136	4479	4848
2	-3	-7	-8	8	1	10	10	-1	4	-15	-3	-10	9
0.02	-0.05	-0.11	-0.11	0.12	0.02	0.15	0.15	-0.01	0.06	-0.21	-0.04	-0.14	0.13
0.01	-0.06	-0.12	-0.12	0.11	0.01	0.14	0.14	-0.01	0.06	-0.21	-0.04	-0.14	0.14

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

5 GHz	INTERCEPT (mV)	4832
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.35

290	633	977	1327	1693	2039	2396	2738	3078	3430	3764	4130	4477	4849
5	-2	-8	-8	9	5	12	4	-5	-3	-19	-2	-5	17
0.07	-0.03	-0.11	-0.11	0.12	0.07	0.17	0.06	-0.08	-0.04	-0.27	-0.04	-0.07	0.24
0.01	-0.09	-0.18	-0.18	0.05	0.00	0.10	-0.01	-0.16	-0.13	-0.35	-0.12	-0.17	0.15

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

6 GHz	INTERCEPT (mV)	4804
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.46
	MAX ACC ERROR	0.93

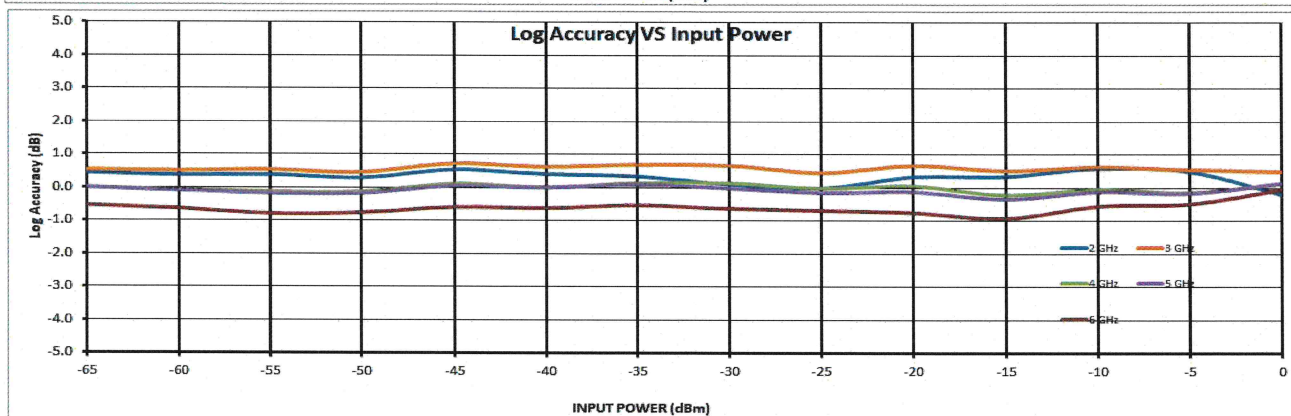
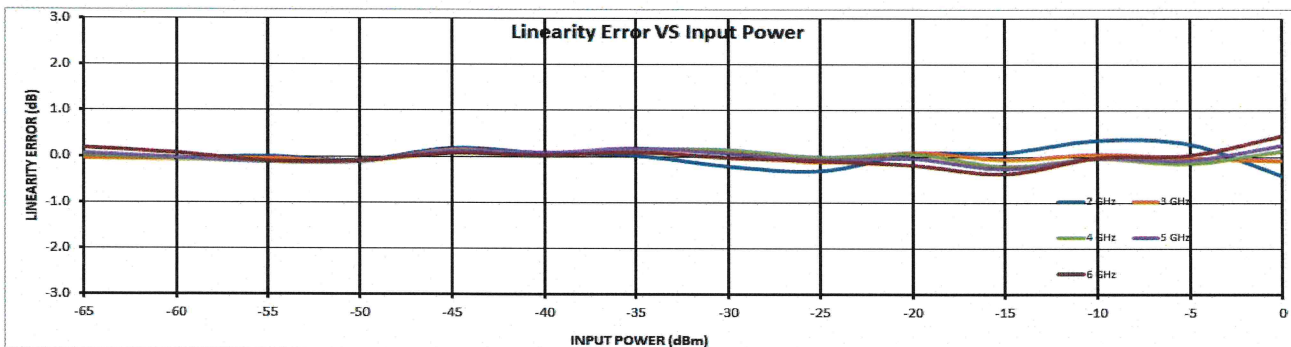
252	595	934	1286	1648	1996	2352	2695	3041	3386	3724	4100	4455	4836
13	5	-7	-6	4	1	6	-2	-7	-13	-27	-2	2	32
0.19	0.07	-0.10	-0.09	0.06	0.02	0.09	-0.03	-0.10	-0.19	-0.38	-0.02	0.03	0.46
-0.54	-0.63	-0.79	-0.76	-0.59	-0.62	-0.53	-0.63	-0.68	-0.75	-0.93	-0.55	-0.48	-0.04

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

AVG. SLOPE: 70 mV/dB

0.54	0.57	0.66	0.61	0.66	0.62	0.61	0.65	0.57	0.71	0.72	0.59	0.51	0.35
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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: PL42375
Date: 07/29/2024
Tested By: J. Monley
Test Temp: 0°C
Input Port: RF Port

DC Offset: 15 mV



Frequency

2 GHz	INTERCEPT (mV)	4949
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.40
	MAX ACC ERROR	0.62

3 GHz	INTERCEPT (mV)	4966
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.23
	MAX ACC ERROR	0.8

4 GHz	INTERCEPT (mV)	4919
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.26

5 GHz	INTERCEPT (mV)	4914
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.29
	MAX ACC ERROR	0.43

6 GHz	INTERCEPT (mV)	4883
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.51
	MAX ACC ERROR	1

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
375	723	1085	1434	1807	2147	2488	2828	3163	3540	3897	4263	4617	4930
-4	-8	3	0	22	10	0	-12	-28	-3	3	17	20	-19
-0.06	-0.11	0.04	0.00	0.31	0.15	0.00	-0.17	-0.40	-0.04	0.04	0.24	0.28	-0.27
0.19	0.15	0.31	0.28	0.59	0.43	0.29	0.14	-0.09	0.28	0.36	0.58	0.62	0.08

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
396	742	1104	1452	1822	2166	2515	2867	3196	3565	3911	4265	4610	4962
-6	-11	0	-3	16	9	7	8	-14	4	-1	2	-6	-4
-0.09	-0.16	0.00	-0.04	0.23	0.13	0.10	0.11	-0.20	0.05	-0.02	0.02	-0.06	-0.05
0.49	0.42	0.58	0.53	0.80	0.71	0.68	0.69	0.38	0.63	0.56	0.61	0.52	0.53

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
353	702	1058	1408	1780	2125	2482	2828	3159	3518	3863	4213	4566	4929
-8	-10	-5	-5	16	11	17	12	-7	1	-14	-6	-13	10
-0.12	-0.14	-0.06	-0.07	0.23	0.15	0.24	0.18	-0.10	0.02	-0.21	-0.07	-0.18	0.14
-0.12	-0.15	-0.08	-0.09	0.21	0.12	0.21	0.14	-0.15	-0.04	-0.26	-0.13	-0.25	0.06

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
345	695	1050	1400	1772	2116	2472	2816	3146	3504	3841	4208	4555	4934
-6	-7	-3	-4	17	10	15	8	-13	-6	-20	-4	-8	20
-0.08	-0.10	-0.04	-0.05	0.24	0.14	0.21	0.11	-0.18	-0.09	-0.29	-0.06	-0.12	0.28
-0.24	-0.25	-0.19	-0.21	0.09	-0.01	0.06	-0.04	-0.33	-0.23	-0.43	-0.21	-0.26	0.14

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
327	676	1022	1372	1739	2081	2440	2777	3114	3467	3801	4176	4534	4919
4	2	-3	-4	13	4	12	-2	-15	-13	-30	-6	2	36
0.05	0.03	-0.04	-0.05	0.18	0.08	0.17	-0.02	-0.22	-0.19	-0.43	-0.08	0.02	0.51
-0.49	-0.52	-0.59	-0.61	-0.38	-0.51	-0.39	-0.59	-0.79	-0.76	-1.00	-0.66	-0.56	-0.08

AVG. SLOPE: 70.2 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
0.49	0.47	0.58	0.57	0.59	0.61	0.63	0.64	0.58	0.70	0.78	0.63	0.59	0.31

RF Input Power (dBm)

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

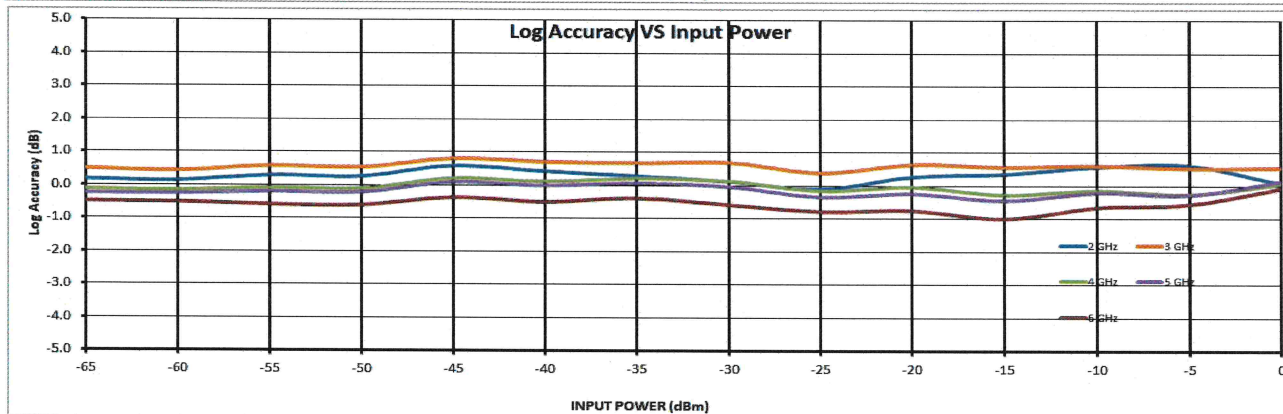
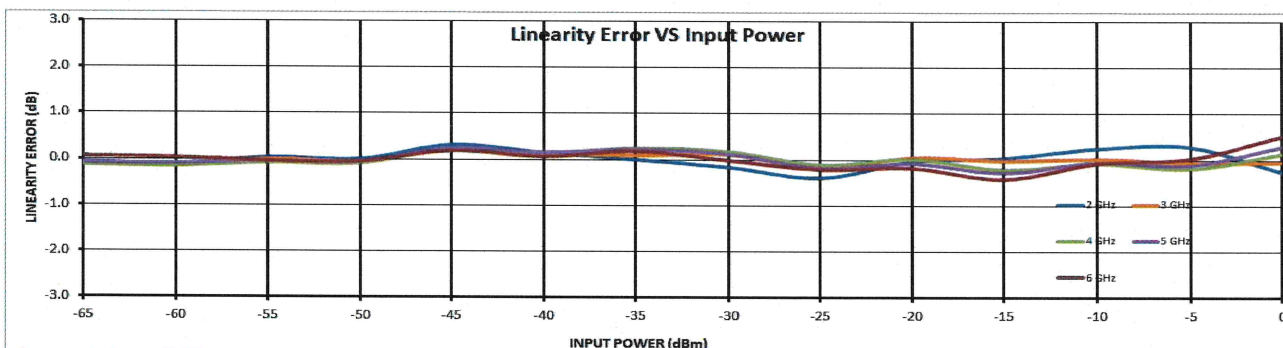
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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: PL42375
Date: 07/29/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: -6 mV



Frequency

2 GHz	INTERCEPT (mV)	4710
	SLOPE (mV/dB)	68.9
	MAX LIN ERROR	0.83
	MAX ACC ERROR	0.81

3 GHz	INTERCEPT (mV)	4750
	SLOPE (mV/dB)	69.2
	MAX LIN ERROR	0.54
	MAX ACC ERROR	1.05

4 GHz	INTERCEPT (mV)	4706
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.47
	MAX ACC ERROR	0.4

5 GHz	INTERCEPT (mV)	4704
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.39
	MAX ACC ERROR	0.33

6 GHz	INTERCEPT (mV)	4675
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.38
	MAX ACC ERROR	1.09

AVG. SLOPE: 69.4 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
213	571	913	1261	1611	1948	2297	2652	3002	3354	3692	4047	4360	4653	
-18	-3	-6	-2	3	-4	0	10	15	23	16	26	-6	-57	
-0.23	-0.04	-0.08	-0.03	0.05	-0.06	0.00	0.15	0.22	0.33	0.23	0.38	-0.08	-0.83	
0.24	0.40	0.33	0.34	0.38	0.23	0.26	0.37	0.41	0.48	0.35	0.46	-0.03	-0.81	
236	599	937	1283	1635	1974	2334	2699	3040	3386	3711	4064	4400	4713	
-15	2	-6	-6	-1	-8	6	25	20	20	-1	6	-4	-37	
-0.22	0.02	-0.09	-0.09	-0.01	-0.11	0.09	0.36	0.29	0.29	-0.02	0.08	-0.06	-0.64	
0.58	0.90	0.67	0.65	0.72	0.61	0.79	1.05	0.96	0.94	0.62	0.70	0.54	0.05	
180	516	863	1213	1557	1905	2272	2647	2995	3330	3649	4001	4346	4689	
5	-8	-9	-8	-12	-13	6	33	32	19	-11	-7	-11	-16	
0.07	-0.11	-0.13	-0.11	-0.17	-0.18	0.09	0.47	0.46	0.27	-0.16	-0.10	-0.15	-0.23	
-0.23	-0.39	-0.39	-0.35	-0.40	-0.39	-0.10	0.30	0.31	0.13	-0.27	-0.20	-0.24	-0.30	
190	534	882	1230	1575	1920	2283	2649	2994	3327	3650	4007	4351	4690	
-3	-6	-5	-4	-6	-8	8	27	25	11	-13	-3	-8	-14	
-0.04	-0.09	-0.07	-0.06	-0.09	-0.12	0.11	0.39	0.36	0.15	-0.19	-0.05	-0.09	-0.21	
-0.09	-0.13	-0.12	-0.11	-0.14	-0.17	0.06	0.33	0.29	0.09	-0.26	-0.12	-0.16	-0.28	
156	472	825	1174	1509	1860	2221	2594	2952	3281	3604	3966	4328	4686	
27	-7	-4	-4	-19	-18	8	17	26	5	-22	-9	3	11	
0.38	-0.10	-0.05	-0.06	-0.27	-0.25	-0.09	0.25	0.36	0.07	-0.31	-0.14	0.04	0.16	
-0.58	-1.03	-0.94	-0.92	-1.09	-1.04	-0.84	-0.47	-0.31	-0.57	-0.92	-0.71	-0.49	-0.34	
0.58	0.91	0.81	0.78	0.91	0.82	0.81	0.76	0.63	0.76	0.77	0.71	0.52	0.43	

RF Input Power (dBm)

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

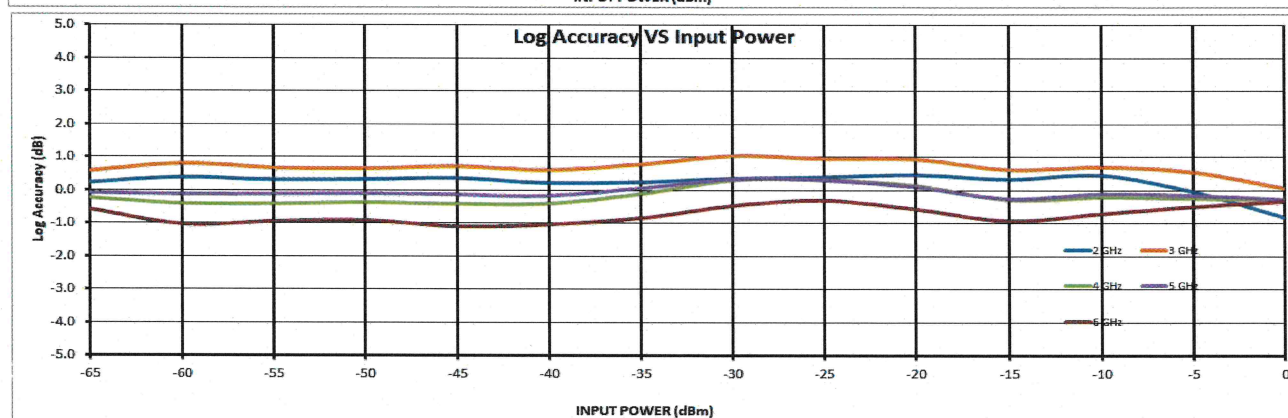
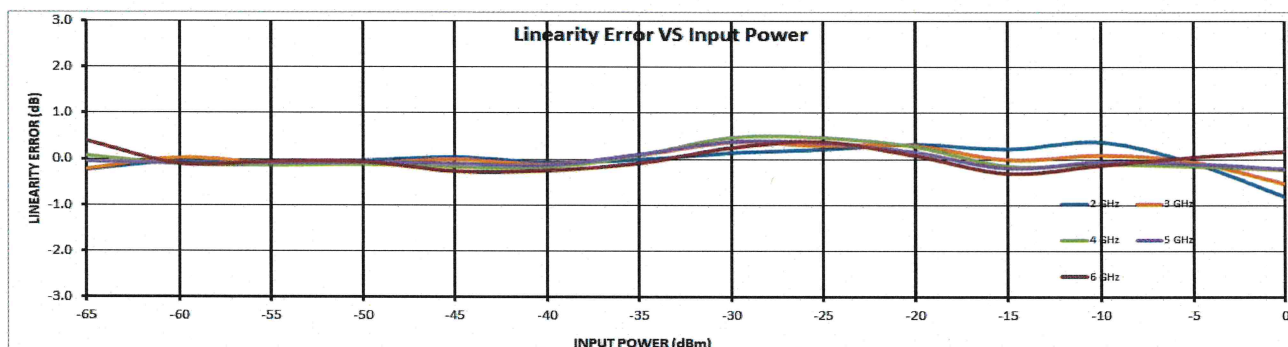
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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)	

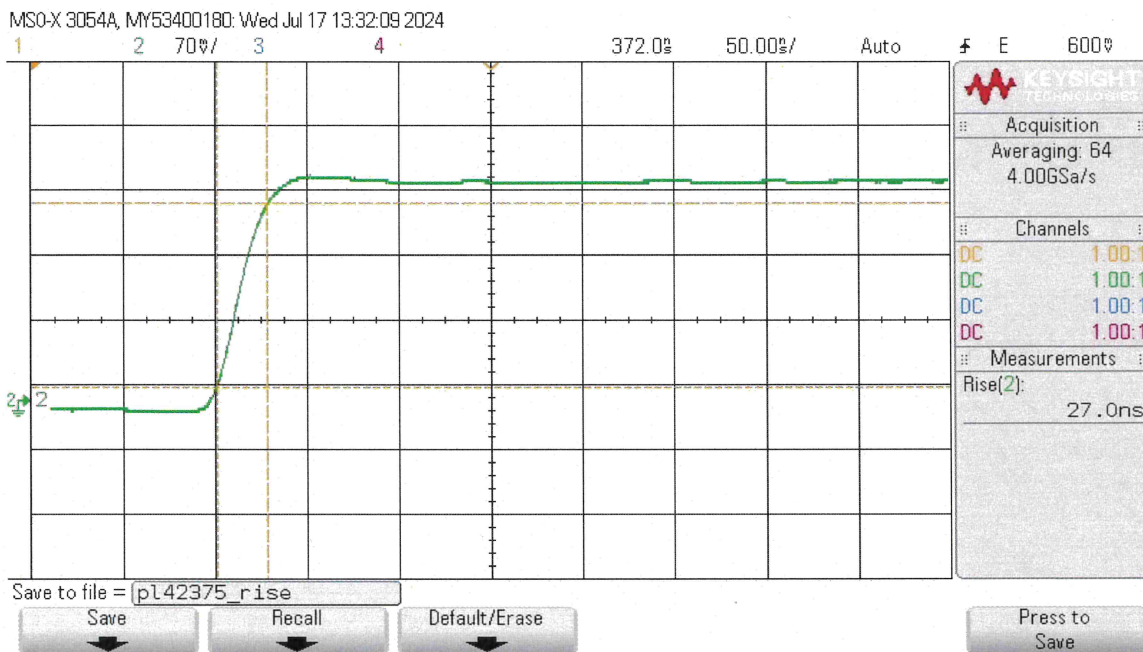
Flatness dB: ±0.91 dB



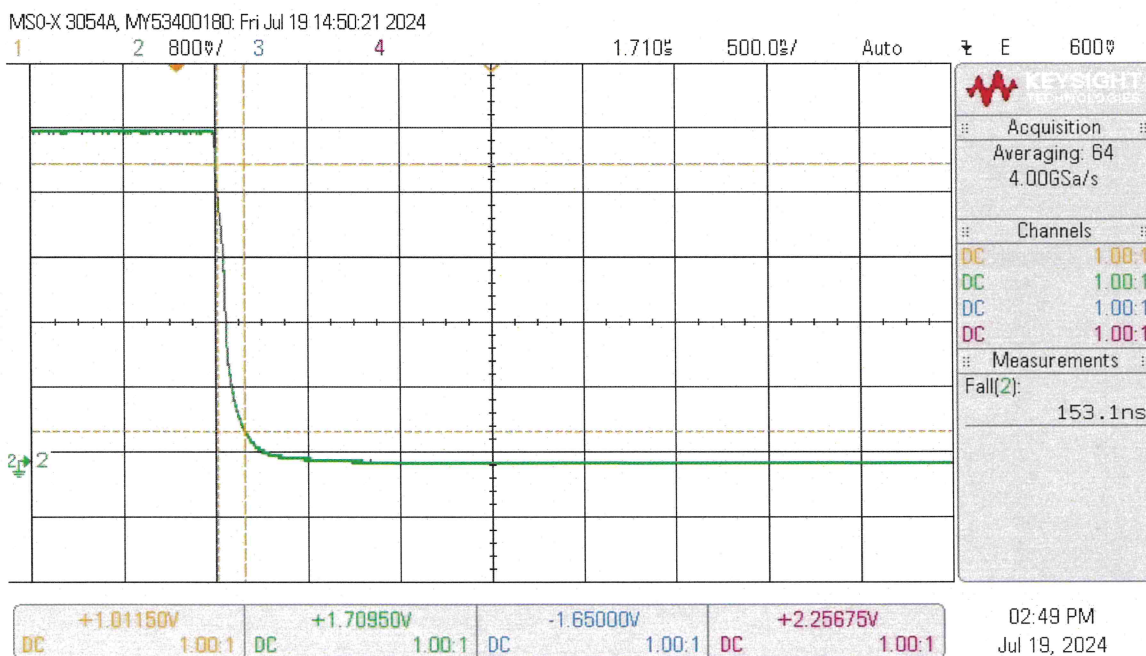


Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

MSO-X 3054A, MY53400180: Wed Jul 17 11:56:53 2024

