



Tested By: Joshua Monley

Temperature: 0°C TO +85°C

Date 7/29/2024

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	PMI QA3
2	VSWR:	2.0:1 MAX @ 50 Ω	1.28:1 @ 50 Ω (RF IN) 1.19:1 @ 50 Ω (BIT IN) 1.23:1 @ 50 Ω (RF OUT) 1.49:1 @ 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	+37.25 dB MAX +35.24 dB MIN	
9	RF OUT Frequency Flatness:	±2.0 dB MAX	±1 dB	
10	RF OUT 1 dB Compression Point:	+3 dBm MIN	+10.13 dBm	
11	RF OUT Second Harmonic:	-9 dBc MIN	-37 dBc	
12	RF OUT Third Harmonic:	-12 dBc MIN	-48 dBc	

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

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+13.18 dB MAX +11.26 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±1 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+6.64 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-23 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-43 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	69.1 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.23 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±0.86 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±0.93 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-30 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	142.5 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	0.445 us	



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

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	± 0.77 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	1.48 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:	$75 \pm 1 \Omega$	75Ω	
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 @ 621 mA -15 V @ 133 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval: K. Inte Date: 7-30-24



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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42371
Date: 07/29/2024
Tested By: F. Cortes
Test Temp: +25°C
Input Port: RF Port

DC Offset: -27 mV



Frequency

2 GHz	INTERCEPT (mV)	4808
	SLOPE (mV/dB)	69.1
	MAX LIN ERROR	0.76
	MAX ACC ERROR	0.71

3 GHz	INTERCEPT (mV)	4870
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.36
	MAX ACC ERROR	0.76

4 GHz	INTERCEPT (mV)	4836
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.21
	MAX ACC ERROR	0.37

5 GHz	INTERCEPT (mV)	4817
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.42

6 GHz	INTERCEPT (mV)	4786
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.44
	MAX ACC ERROR	0.86

AVG. SLOPE: 69.9 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
315	664	1013	1360	1728	2061	2390	2696	3029	3420	3780	4141	4489	4801	
-3	0	4	6	28	16	-1	-40	-62	-7	8	23	26	-7	
-0.05	0.00	0.06	0.08	0.41	0.23	-0.01	-0.58	-0.76	-0.10	0.11	0.34	0.38	-0.11	
0.50	0.49	0.49	0.45	0.71	0.48	0.18	-0.44	-0.68	-0.08	0.07	0.23	0.21	-0.33	
310	664	1013	1361	1731	2070	2419	2756	3092	3471	3824	4170	4524	4871	
-2	1	-1	-3	16	5	3	-10	-25	3	6	1	5	1	
-0.03	0.01	-0.01	-0.04	0.23	0.07	0.04	-0.15	-0.36	0.05	0.08	0.02	0.07	0.02	
0.43	0.49	0.49	0.46	0.76	0.61	0.60	0.42	0.23	0.65	0.70	0.65	0.71	0.67	
269	618	960	1314	1682	2023	2381	2732	3064	3434	3777	4128	4473	4850	
4	1	-8	-6	10	0	6	6	-14	5	-4	-4	-11	15	
0.05	0.01	-0.12	-0.09	0.15	0.00	0.09	0.08	-0.19	0.07	-0.05	-0.06	-0.15	0.21	
-0.16	-0.16	-0.27	-0.21	0.06	-0.07	0.05	0.08	-0.18	0.12	0.02	0.04	-0.02	0.37	
260	608	950	1306	1674	2020	2377	2719	3047	3414	3757	4112	4459	4831	
1	-2	-10	-5	12	8	14	6	-17	-1	8	-4	-7	14	
0.01	-0.03	-0.15	-0.07	0.18	0.11	0.20	0.08	-0.24	-0.01	-0.12	-0.05	-0.11	0.20	
-0.29	-0.31	-0.42	-0.32	-0.06	-0.11	0.00	-0.11	-0.42	-0.17	-0.26	-0.18	-0.22	0.10	
245	593	933	1288	1653	1999	2350	2686	3016	3377	3717	4084	4434	4817	
4	2	-8	-2	13	10	11	-3	-22	-11	-20	-3	-2	31	
0.05	0.03	-0.11	-0.03	0.19	0.14	0.16	-0.04	-0.32	-0.15	-0.29	-0.04	-0.03	0.44	
-0.50	-0.52	-0.66	-0.58	-0.36	-0.41	-0.39	-0.58	-0.86	-0.70	-0.83	-0.58	-0.58	-0.10	
0.50	0.51	0.57	0.52	0.56	0.51	0.49	0.50	0.54	0.67	0.77	0.62	0.64	0.50	

RF Input Power (dBm)

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

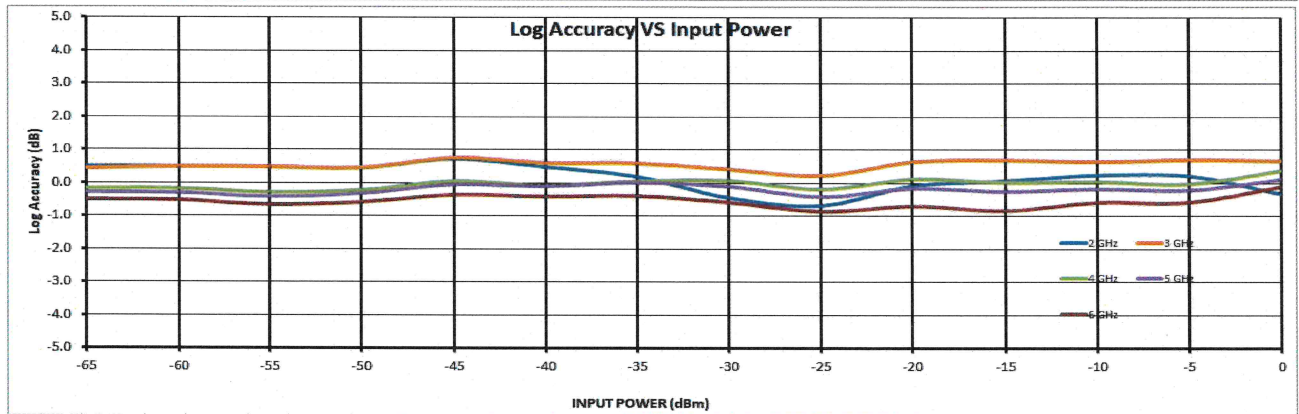
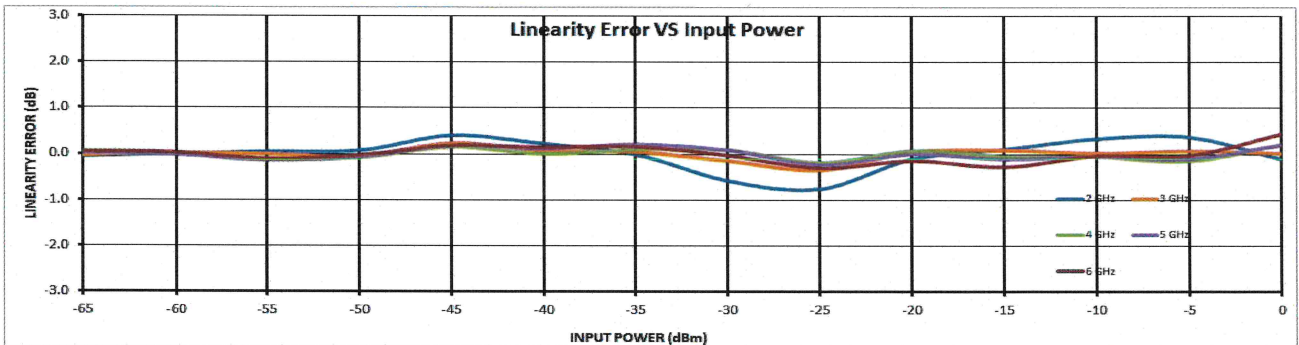
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ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

Flatness dB: ±0.77 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42371
Date: 07/29/2024
Tested By: F. Cortes
Test Temp: +25°C
Input Port: BIT Port

DC Offset: -30 mV



Frequency

2 GHz	INTERCEPT (mV)	4791
	SLOPE (mV/dB)	69.2
	MAX LIN ERROR	0.75
	MAX ACC ERROR	0.82

3 GHz	INTERCEPT (mV)	4857
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.34
	MAX ACC ERROR	0.73

4 GHz	INTERCEPT (mV)	4820
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.23
	MAX ACC ERROR	0.34

5 GHz	INTERCEPT (mV)	4806
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.25
	MAX ACC ERROR	0.4

6 GHz	INTERCEPT (mV)	4782
	SLOPE (mV/dB)	70
	MAX LIN ERROR	0.49
	MAX ACC ERROR	0.78

AVG. SLOPE: 70 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
289	640	987	1335	1701	2035	2368	2673	3008	3395	3754	4119	4474	4791
-1	3	4	6	26	14	0	-41	-52	-11	2	21	29	0
-0.02	0.06	0.06	0.09	0.37	0.20	0.01	-0.59	-0.75	-0.16	0.02	0.30	0.42	0.00
0.31	0.33	0.29	0.27	0.50	0.27	0.03	-0.61	-0.82	-0.29	-0.15	0.06	0.14	-0.33

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
297	652	1000	1349	1717	2056	2406	2743	3080	3458	3808	4156	4510	4862
-2	2	-1	-2	15	4	3	-10	-24	3	3	0	4	5
-0.03	0.03	-0.01	-0.03	0.22	0.05	0.04	-0.15	-0.34	0.05	0.04	0.00	0.05	0.07
0.43	0.50	0.48	0.47	0.73	0.57	0.58	0.39	0.21	0.62	0.62	0.59	0.65	0.69

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
254	601	943	1299	1665	2007	2364	2716	3049	3418	3759	4113	4457	4836
5	0	-9	-5	10	0	5	6	-13	5	-6	-4	-11	16
0.07	0.01	-0.13	-0.07	0.14	0.00	0.08	0.08	-0.18	0.07	-0.08	-0.05	-0.16	0.23
-0.19	-0.23	-0.34	-0.25	-0.02	-0.13	-0.02	0.01	-0.23	0.04	-0.08	-0.02	-0.10	0.31

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
249	597	940	1295	1662	2009	2366	2708	3037	3403	3744	4100	4447	4824
1	-2	-9	-5	11	8	14	5	-16	-1	-10	-5	-9	18
0.01	-0.02	-0.13	-0.07	0.16	0.11	0.20	0.08	-0.23	-0.01	-0.15	-0.07	-0.12	0.25
-0.26	-0.28	-0.38	-0.30	-0.06	-0.10	0.01	-0.11	-0.40	-0.17	-0.30	-0.21	-0.25	0.14

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
237	586	925	1282	1645	1991	2343	2680	3011	3370	3710	4078	4429	4816
4	3	-8	-1	12	8	11	-2	-21	-12	-22	-4	-3	34
0.06	0.04	-0.11	-0.01	0.18	0.12	0.15	-0.03	-0.30	-0.17	-0.31	-0.05	-0.04	0.49
-0.43	-0.44	-0.59	-0.49	-0.30	-0.36	-0.32	-0.51	-0.77	-0.64	-0.78	-0.52	-0.50	0.03

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
0.43	0.47	0.54	0.48	0.51	0.46	0.45	0.50	0.51	0.63	0.70	0.56	0.58	0.51

RF Input Power (dBm)

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

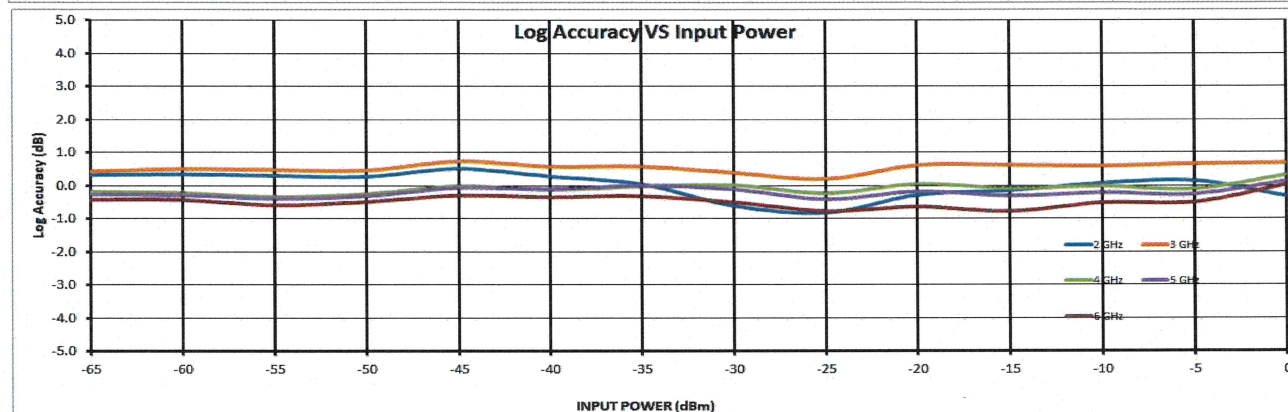
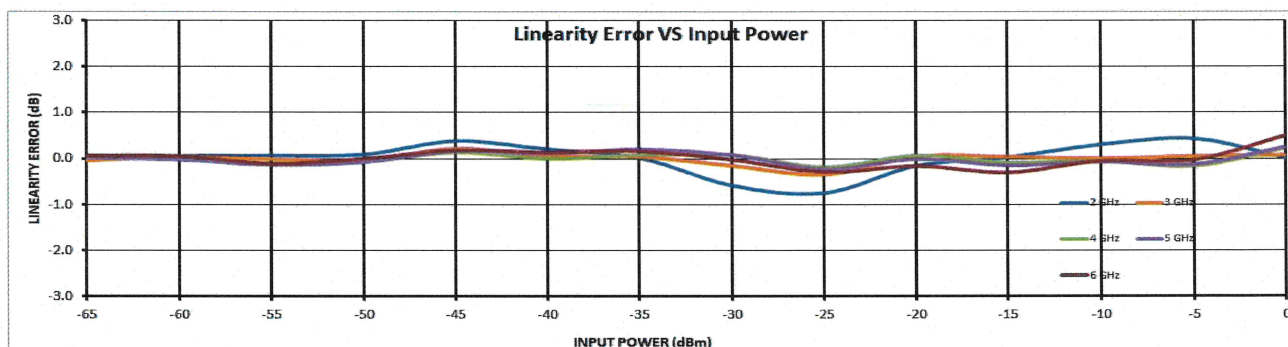
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LOG ACCURACY (dB)	

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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: ±0.7 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42371
Date: 07/29/2024
Tested By: J. Monley
Test Temp: 0°C
Input Port: RF Port

DC Offset: -16 mV



Frequency

2 GHz	INTERCEPT (mV)	4878
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.74
	MAX ACC ERROR	0.74

3 GHz	INTERCEPT (mV)	4934
	SLOPE (mV/dB)	71.2
	MAX LIN ERROR	0.32
	MAX ACC ERROR	0.72

4 GHz	INTERCEPT (mV)	4896
	SLOPE (mV/dB)	71.1
	MAX LIN ERROR	0.22
	MAX ACC ERROR	0.29

5 GHz	INTERCEPT (mV)	4880
	SLOPE (mV/dB)	71
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.44

6 GHz	INTERCEPT (mV)	4846
	SLOPE (mV/dB)	70.6
	MAX LIN ERROR	0.47
	MAX ACC ERROR	0.84

AVG. SLOPE: 70.8 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
307	664	1018	1369	1743	2075	2412	2732	3068	3463	3825	4189	4554	4884	
-1	4	7	6	29	9	-5	-37	-52	-9	2	14	28	6	
-0.02	0.06	0.09	0.09	0.41	0.13	-0.08	-0.52	-0.74	-0.12	0.03	0.20	0.40	0.09	
0.28	0.32	0.32	0.28	0.56	0.24	0.00	-0.48	-0.74	-0.16	-0.05	0.09	0.24	-0.10	
312	668	1019	1371	1744	2083	2442	2794	3132	3520	3874	4220	4575	4942	
3	4	-1	-5	12	-4	-1	-5	-23	9	8	-2	-3	8	
0.05	0.05	-0.02	-0.07	0.17	-0.06	-0.02	-0.07	-0.32	0.13	0.11	-0.03	-0.04	0.12	
0.35	0.38	0.33	0.30	0.57	0.36	0.42	0.39	0.17	0.64	0.64	0.53	0.54	0.72	
275	631	975	1332	1704	2048	2415	2772	3105	3482	3828	4177	4524	4910	
2	3	-9	-8	9	-3	9	10	-13	9	-1	-7	-16	15	
0.03	0.04	-0.13	-0.11	0.12	-0.04	0.12	0.14	-0.18	0.13	-0.01	-0.10	-0.22	0.21	
-0.17	-0.14	-0.29	-0.25	0.01	-0.14	0.04	0.08	-0.21	0.11	-0.01	-0.08	-0.18	0.27	
265	621	965	1323	1695	2040	2407	2761	3089	3462	3809	4164	4512	4897	
1	2	-9	-8	10	0	12	11	-16	2	-8	-6	-13	17	
0.01	0.02	-0.13	-0.09	0.15	0.01	0.17	0.16	-0.22	0.03	-0.08	-0.08	-0.18	0.24	
-0.31	-0.28	-0.43	-0.37	-0.12	-0.25	-0.07	-0.07	-0.44	-0.17	-0.28	-0.26	-0.35	0.09	
262	615	958	1316	1681	2024	2386	2730	3061	3431	3769	4133	4487	4879	
3	4	-6	-1	11	1	10	1	-21	-4	-18	-7	-6	33	
0.05	0.05	-0.09	-0.02	0.15	0.01	0.14	0.02	-0.29	-0.05	-0.26	-0.10	-0.09	0.47	
-0.35	-0.37	-0.53	-0.47	-0.32	-0.48	-0.37	-0.51	-0.84	-0.61	-0.84	-0.70	-0.70	-0.17	
0.35	0.37	0.43	0.39	0.44	0.42	0.40	0.45	0.50	0.63	0.74	0.61	0.62	0.44	

RF Input Power (dBm)

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

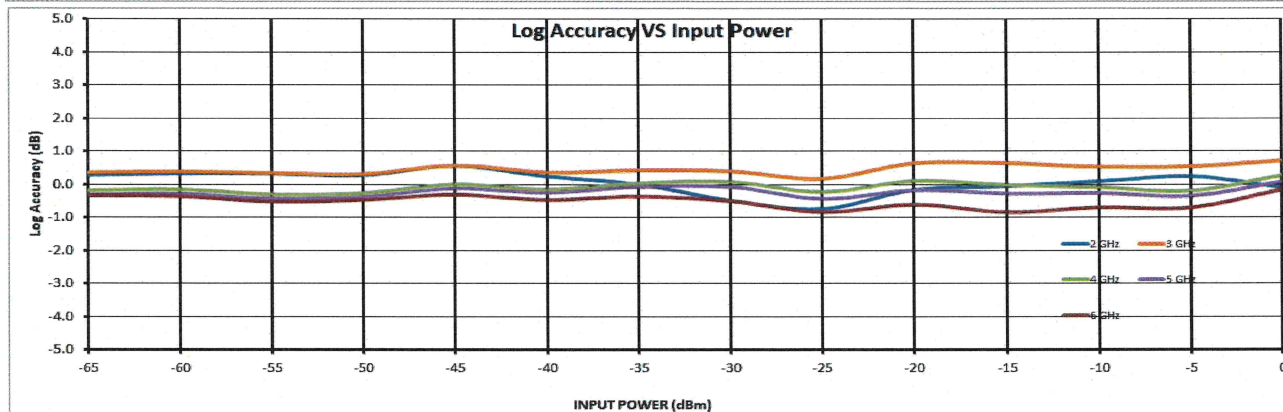
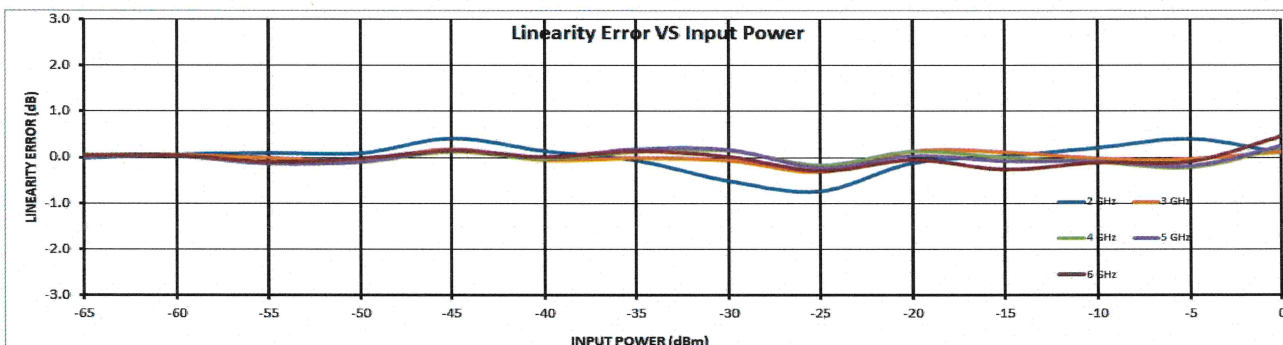
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ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

Flatness dB: ±0.74 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42371
Date: 07/29/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: 1 mV



Frequency

2 GHz	INTERCEPT (mV)	4653
	SLOPE (mV/dB)	67.8
	MAX LIN ERROR	0.60
	MAX ACC ERROR	0.93

3 GHz	INTERCEPT (mV)	4727
	SLOPE (mV/dB)	68.8
	MAX LIN ERROR	0.43
	MAX ACC ERROR	0.86

4 GHz	INTERCEPT (mV)	4696
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.38
	MAX ACC ERROR	0.47

5 GHz	INTERCEPT (mV)	4680
	SLOPE (mV/dB)	69
	MAX LIN ERROR	0.37
	MAX ACC ERROR	0.37

6 GHz	INTERCEPT (mV)	4646
	SLOPE (mV/dB)	69
	MAX LIN ERROR	0.3
	MAX ACC ERROR	0.89

AVG. SLOPE: 68.8 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	228	579	918	1263	1614	1953	2283	2607	2944	3306	3651	4000	4310	4619
	-15	-4	-4	2	14	14	4	-11	-13	10	18	25	-4	-34
	-0.23	-0.05	-0.06	0.03	0.20	0.20	0.06	-0.16	-0.19	0.14	0.23	0.37	-0.06	-0.50
	0.25	0.36	0.28	0.30	0.40	0.32	0.12	-0.17	-0.28	-0.01	0.00	0.07	-0.42	-0.93
3 GHz	246	602	937	1281	1633	1975	2323	2675	3011	3366	3701	4048	4382	4698
	-9	3	-6	-6	2	0	4	12	4	15	6	9	-1	-29
	-0.13	0.04	-0.09	-0.09	0.02	0.00	0.05	0.17	0.05	0.21	0.08	0.13	-0.02	-0.43
	0.52	0.69	0.56	0.56	0.67	0.64	0.70	0.82	0.70	0.86	0.73	0.77	0.62	0.21
4 GHz	192	527	866	1217	1560	1914	2274	2640	2980	3325	3648	3997	4336	4687
	8	-4	-12	-8	-13	-6	7	26	19	17	-7	-5	-13	-9
	0.11	-0.06	-0.18	-0.12	-0.18	-0.08	0.11	0.38	0.28	0.25	-0.10	-0.07	-0.19	-0.13
	-0.27	-0.40	-0.47	-0.37	-0.39	-0.24	-0.01	0.31	0.25	0.26	-0.04	0.03	-0.05	0.05
5 GHz	195	531	873	1224	1567	1920	2278	2635	2970	3313	3636	3988	4321	4667
	1	-8	-11	-5	-7	1	14	25	15	13	-9	-2	-14	-13
	0.01	-0.12	-0.17	-0.08	-0.11	0.01	0.20	0.37	0.22	0.20	-0.12	-0.02	-0.20	-0.18
	-0.23	-0.34	-0.37	-0.27	-0.29	-0.16	0.06	0.23	0.10	0.09	-0.22	-0.10	-0.26	-0.24
6 GHz	175	499	842	1192	1527	1883	2239	2594	2935	3273	3590	3949	4294	4655
	14	-7	-9	-4	-14	-3	8	18	14	7	-21	-7	-7	9
	0.20	-0.10	-0.13	-0.06	-0.20	-0.04	0.12	0.26	0.20	0.10	-0.30	-0.10	-0.10	0.13
	-0.52	-0.81	-0.82	-0.74	-0.87	-0.69	-0.52	-0.36	-0.41	-0.49	-0.89	-0.67	-0.66	-0.41
AVG. SLOPE: 68.8 mV/dB	0.52	0.75	0.69	0.65	0.77	0.67	0.61	0.59	0.55	0.68	0.81	0.72	0.64	0.57

RF Input Power (dBm)

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

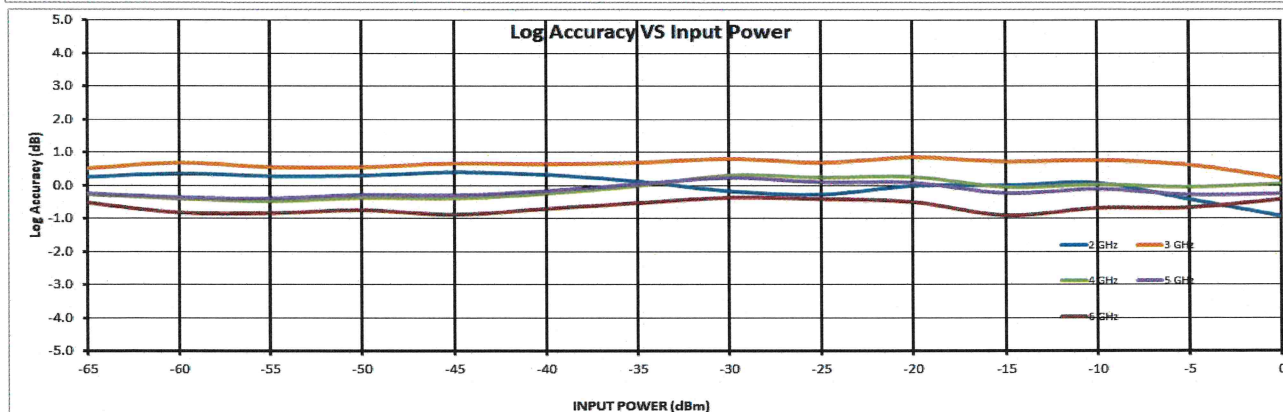
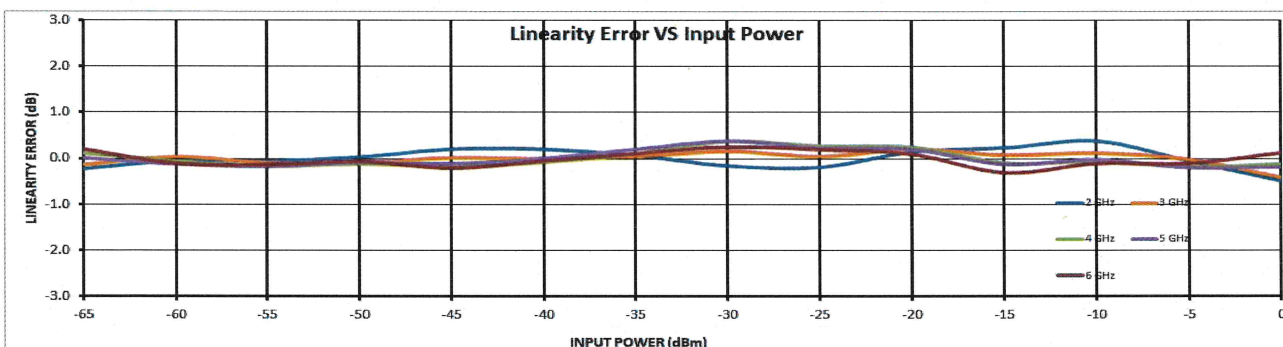
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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)	

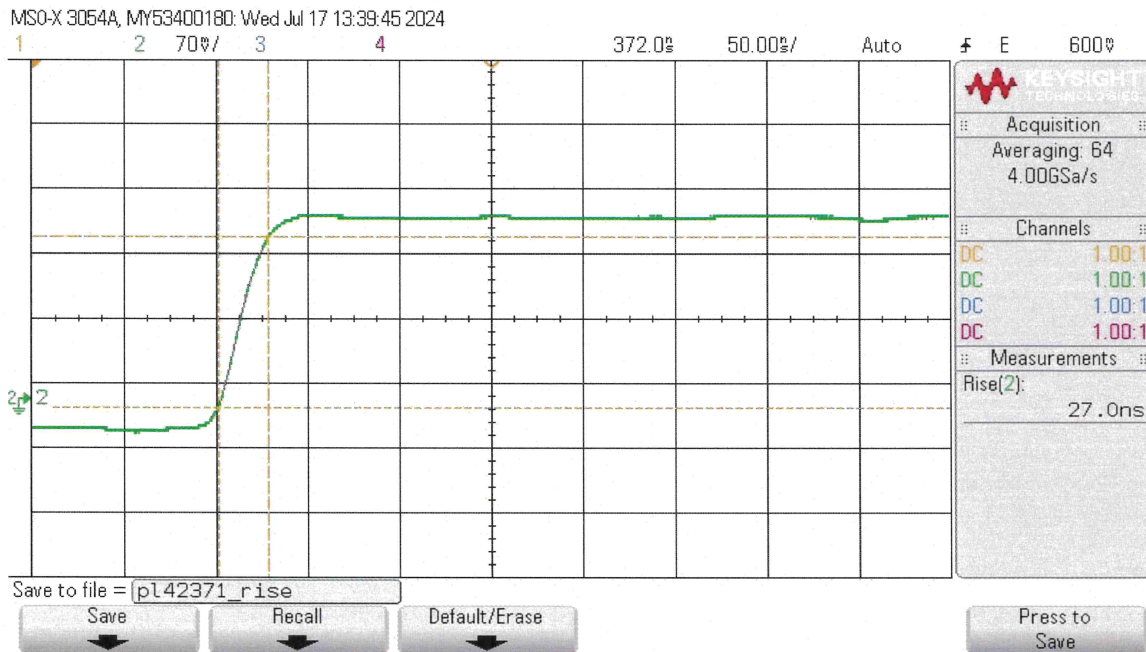
Flatness dB: ±0.81 dB



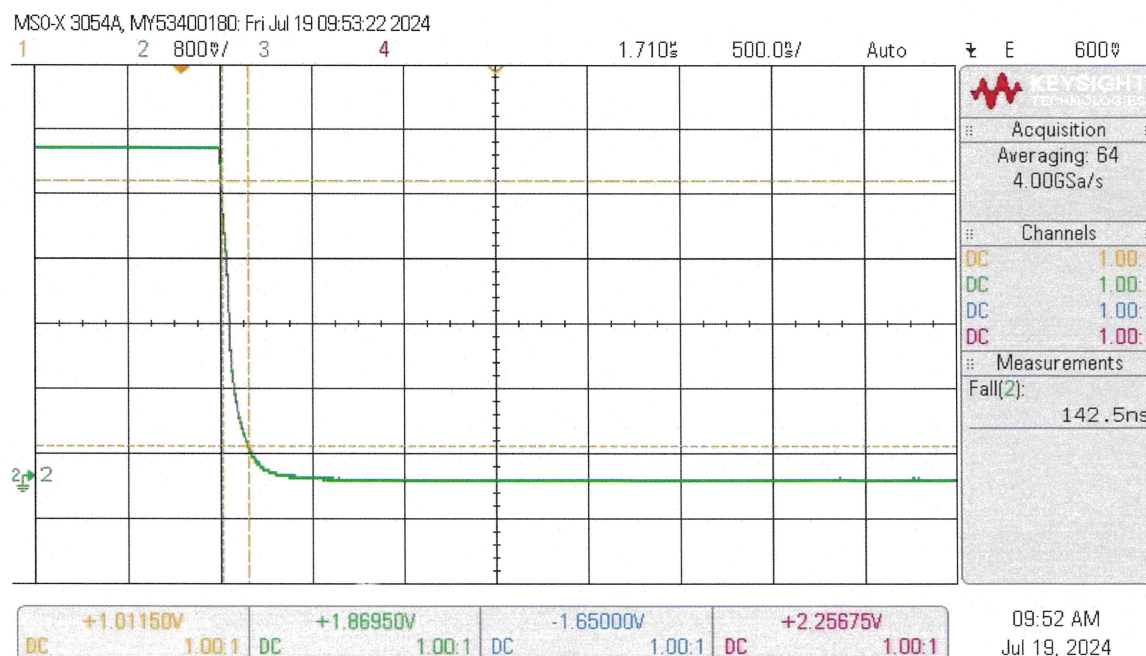


Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

MSO-X 3054A, MY53400180: Wed Jul 17 12:03:02 2024

