



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

Customer: Alcatel-Lucent, New

Tested By: Joshua Monley

SO No:

Temperature: 0°C TO +85°C

Model No: EWDM-2G6G-65-70MV-1

Date 7/29/2024

Serial No: PL42373/2431

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	1.56:1 @ 50 Ω (RF IN) 1.45:1 @ 50 Ω (BIT IN) 1.15:1 @ 50 Ω (RF OUT) 1.5:1 @ 50 Ω (SW OUT)	
3	Noise Figure:	6 dB MAX	4.7 dB	
4	Input Power:	(1) 1 W CW, Max. (2) 100 W Peak @ PW = 1 μ s & 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	+37.565 dB MAX +35.505 dB MIN	
9	RF OUT Frequency Flatness:	$\pm$ 2.0 dB MAX	$\pm$ 1 dB	
10	RF OUT 1 dB Compression Point:	+3 dBm MIN	+11.07 dBm	
11	RF OUT Second Harmonic:	-9 dBc MIN	-32 dBc	
12	RF OUT Third Harmonic:	-12 dBc MIN	-46 dBc	



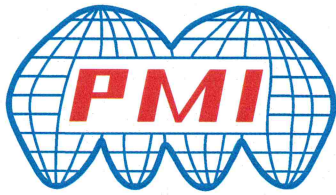
Summary Data
For
EWDM-2G6G-65-70MV-1

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	+12.681 dB MAX +10.627 dB MIN	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	±1 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	+7.28 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-20 dBc	
17	SW Third Harmonic:	-12 dBc MIN	-37 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	69.4 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	±0.27 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	±0.85 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	±1.12 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-13 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	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	0.414 us	



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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	1.42 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	



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36	Droop of the Output Video Pulse @ 300us & - 65 dBm	70mV (1 dB) MAX	< 70 mV	PMI QAS
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 @ 623 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: PL42373
Date: 07/29/2024
Tested By: F. Cortes
Test Temp: +25°C
Input Port: RF Port



DC Offset: -12 mV

Frequency

2 GHz	INTERCEPT (mV)	4831
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.63
	MAX ACC ERROR	0.62

3 GHz	INTERCEPT (mV)	4894
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.37
	MAX ACC ERROR	0.85

4 GHz	INTERCEPT (mV)	4861
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.27
	MAX ACC ERROR	0.71

5 GHz	INTERCEPT (mV)	4846
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.34

6 GHz	INTERCEPT (mV)	4821
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.42
	MAX ACC ERROR	0.64

AVG. SLOPE: 69.7 mV/dB

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
309	659	1008	1356	1714	2052	2393	2716	3054	3423	3791	4157	4512	4822
2	4	5	4	15	5	-2	-27	-37	-16	4	22	29	9
0.03	0.05	0.07	0.06	0.21	0.07	-0.03	-0.39	-0.53	-0.23	0.06	0.32	0.42	-0.12
0.01	0.03	0.04	0.02	0.16	0.01	-0.10	-0.47	-0.62	-0.33	-0.06	0.20	0.29	-0.26

349	700	1057	1402	1762	2102	2451	2793	3122	3494	3853	4198	4549	4898
-4	-2	6	1	12	2	2	-5	-26	-3	7	2	4	4
-0.05	-0.03	0.08	0.02	0.17	0.04	0.03	-0.08	-0.37	-0.04	0.09	0.03	0.06	0.05
0.59	0.62	0.74	0.69	0.85	0.73	0.73	0.64	0.36	0.69	0.84	0.79	0.82	0.83

339	691	1045	1390	1752	2088	2439	2781	3107	3468	3813	4163	4504	4880
-8	-4	3	1	16	5	8	3	-18	-4	-7	-4	-10	19
-0.12	-0.05	0.05	0.01	0.23	0.07	0.12	0.04	-0.26	-0.06	-0.09	-0.05	-0.14	0.27
0.44	0.49	0.57	0.52	0.71	0.53	0.56	0.47	0.14	0.32	0.27	0.29	0.18	0.57

313	665	1014	1362	1722	2066	2423	2768	3095	3454	3795	4141	4482	4864
-7	-3	-2	-3	9	5	14	11	-10	0	-7	-9	-16	18
-0.10	-0.05	-0.03	-0.04	0.13	0.07	0.20	0.15	-0.15	0.01	-0.10	-0.13	-0.23	0.26
0.07	0.12	0.13	0.12	0.28	0.21	0.33	0.28	-0.03	0.12	0.01	-0.03	-0.14	0.34

267	617	961	1314	1670	2016	2375	2727	3061	3410	3750	4116	4459	4850
3	2	-4	-2	4	-1	8	9	-7	-9	-19	-4	-11	29
0.04	0.03	-0.06	-0.02	0.06	-0.01	0.11	0.13	-0.10	-0.12	-0.27	-0.05	-0.16	0.42
-0.59	-0.57	-0.63	-0.57	-0.47	-0.50	-0.36	-0.31	-0.52	-0.51	-0.64	-0.39	-0.47	0.14

0.59	0.60	0.69	0.63	0.66	0.62	0.54	0.55	0.49	0.60	0.74	0.59	0.65	0.54
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RF Input Power (dBm)

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

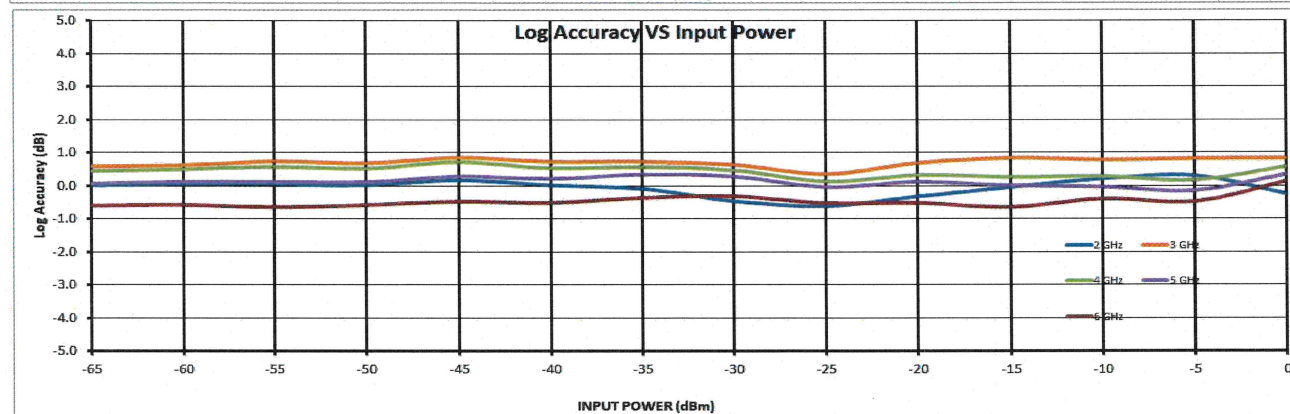
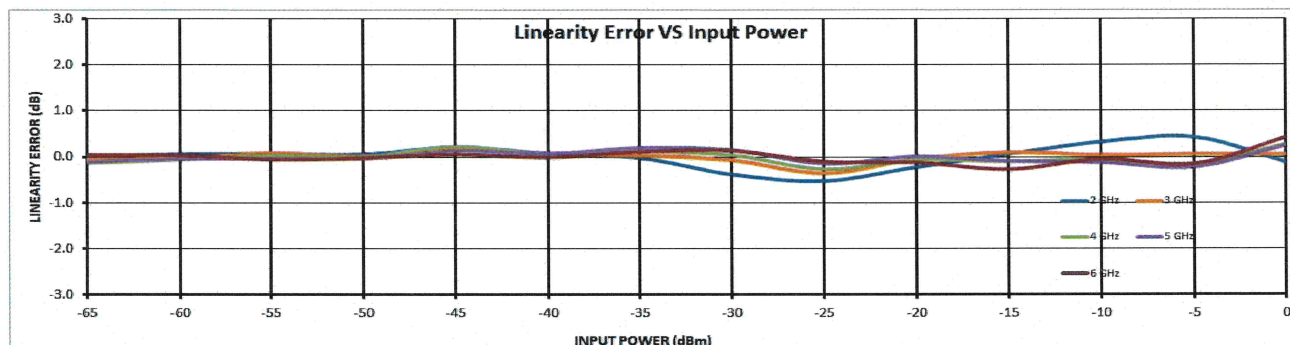
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LOG ACCURACY (dB)

Flatness dB: ±0.74 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42373
Date: 07/29/2024
Tested By: F. Cortes
Test Temp: +25°C
Input Port: BIT Port

DC Offset: -13 mV



Frequency

2 GHz	INTERCEPT (mV)	4813
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.46
	MAX ACC ERROR	0.67

3 GHz	INTERCEPT (mV)	4879
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.33
	MAX ACC ERROR	0.75

4 GHz	INTERCEPT (mV)	4858
	SLOPE (mV/dB)	69.5
	MAX LIN ERROR	0.26
	MAX ACC ERROR	0.74

5 GHz	INTERCEPT (mV)	4843
	SLOPE (mV/dB)	69.7
	MAX LIN ERROR	0.23
	MAX ACC ERROR	0.39

6 GHz	INTERCEPT (mV)	4812
	SLOPE (mV/dB)	70.2
	MAX LIN ERROR	0.41
	MAX ACC ERROR	0.62

AVG. SLOPE: 69.8 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
288	637	986	1335	1691	2029	2372	2699	3040	3409	3775	4142	4492	4798	
2	3	4	4	12	2	-3	-25	-32	-11	7	25	27	-15	
0.03	0.04	0.05	0.06	0.18	0.03	-0.05	-0.35	-0.46	-0.16	0.09	0.36	0.39	-0.22	
-0.09	-0.09	-0.09	-0.09	0.01	-0.15	-0.24	-0.55	-0.67	-0.38	-0.14	0.12	0.13	-0.48	
329	684	1039	1383	1741	2080	2432	2778	3108	3479	3837	4183	4534	4881	
-4	1	6	1	9	-2	1	-3	-23	-2	7	3	4	2	
-0.06	0.02	0.09	0.01	0.13	-0.02	0.01	-0.04	-0.33	-0.02	0.10	0.04	0.06	0.02	
0.49	0.58	0.67	0.59	0.72	0.58	0.62	0.58	0.31	0.62	0.75	0.71	0.74	0.71	
330	684	1038	1382	1742	2078	2431	2777	3104	3465	3809	4158	4500	4876	
-8	-2	4	1	13	1	7	5	-16	-2	-6	-5	-10	18	
-0.12	-0.03	0.06	0.01	0.19	0.02	0.10	0.07	-0.22	-0.03	-0.09	-0.07	-0.15	0.26	
0.51	0.58	0.65	0.58	0.74	0.55	0.61	0.57	0.25	0.42	0.35	0.35	0.25	0.64	
306	656	1006	1354	1712	2056	2414	2763	3091	3449	3790	4137	4480	4859	
-5	-3	-2	-2	7	2	12	12	-9	1	-7	-8	-14	16	
-0.07	-0.05	-0.03	-0.04	0.10	0.03	0.17	0.17	-0.12	0.01	-0.10	-0.12	-0.20	0.23	
0.16	0.18	0.19	0.18	0.31	0.24	0.36	0.36	0.06	0.19	0.08	0.05	-0.04	0.39	
259	605	949	1302	1655	2001	2361	2717	3053	3401	3741	4107	4451	4840	
7	3	-4	-2	0	-4	5	10	-5	-7	-18	-3	-10	28	
0.11	0.04	-0.06	-0.03	0.00	-0.06	0.07	0.14	-0.07	-0.11	-0.26	-0.04	-0.14	0.41	
-0.51	-0.55	-0.62	-0.57	-0.51	-0.55	-0.39	-0.29	-0.48	-0.50	-0.62	-0.38	-0.45	0.12	
0.51	0.57	0.64	0.58	0.62	0.57	0.51	0.57	0.49	0.56	0.69	0.54	0.59	0.59	

RF Input Power (dBm)

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

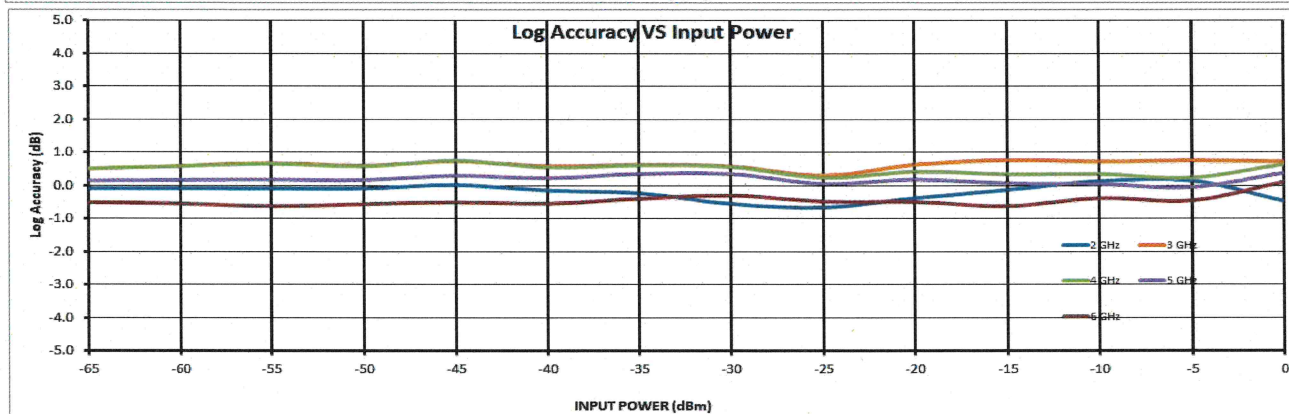
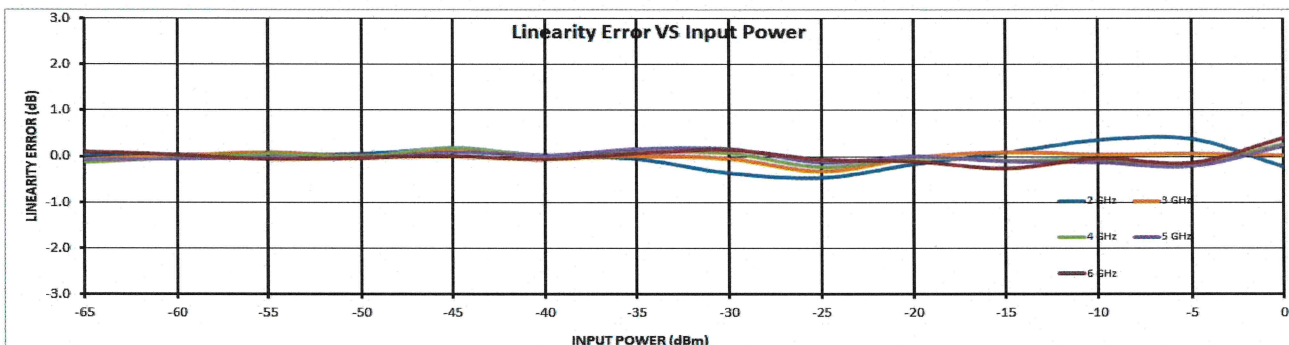
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LOG ACCURACY (dB)	

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: PL42373
Date: 07/29/2024
Tested By: J. Monley
Test Temp: 0°C
Input Port: RF Port

DC Offset: 8 mV



Frequency

2 GHz	INTERCEPT (mV)	4885
	SLOPE (mV/dB)	70.3
	MAX LIN ERROR	0.51
	MAX ACC ERROR	0.54

3 GHz	INTERCEPT (mV)	4942
	SLOPE (mV/dB)	70.4
	MAX LIN ERROR	0.3
	MAX ACC ERROR	0.95

4 GHz	INTERCEPT (mV)	4896
	SLOPE (mV/dB)	69.6
	MAX LIN ERROR	0.23
	MAX ACC ERROR	0.71

5 GHz	INTERCEPT (mV)	4885
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.24
	MAX ACC ERROR	0.3

6 GHz	INTERCEPT (mV)	4852
	SLOPE (mV/dB)	70.1
	MAX LIN ERROR	0.35
	MAX ACC ERROR	0.66

AVG. SLOPE: 70.1 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
312	670	1023	1375	1739	2073	2419	2753	3091	3461	3833	4196	4562	4884	
-2	5	6	6	19	1	-5	-22	-36	-18	3	14	28	-1	
-0.02	0.07	0.09	0.09	0.27	0.02	-0.06	-0.32	-0.51	-0.25	0.04	0.20	0.40	-0.02	
-0.17	-0.07	-0.03	-0.01	0.18	-0.06	-0.12	-0.36	-0.54	-0.26	0.04	0.22	0.44	0.03	
358	718	1078	1424	1785	2124	2478	2831	3161	3534	3897	4237	4589	4944	
-8	0	8	2	11	-2	0	1	-21	0	11	-1	-1	2	
-0.12	0.00	0.11	0.03	0.15	-0.03	0.00	0.01	-0.30	0.00	0.16	-0.01	-0.01	0.03	
0.48	0.62	0.75	0.69	0.83	0.67	0.72	0.75	0.46	0.78	0.95	0.80	0.82	0.88	
356	710	1068	1416	1776	2116	2469	2814	3139	3503	3849	4192	4531	4908	
-14	-7	3	2	15	5	11	8	-15	1	-1	-7	-16	13	
-0.20	-0.10	0.04	0.03	0.21	0.09	0.16	0.12	-0.22	0.01	-0.02	-0.09	-0.23	0.19	
0.44	0.50	0.61	0.66	0.71	0.56	0.59	0.51	0.14	0.33	0.27	0.16	0.00	0.37	
318	677	1027	1378	1743	2085	2447	2799	3122	3481	3827	4176	4518	4902	
-11	-2	-3	-2	12	4	15	17	-11	-2	-7	-8	-17	17	
-0.15	-0.03	-0.04	-0.03	0.17	0.05	0.22	0.24	-0.16	-0.03	-0.10	-0.12	-0.24	0.24	
-0.09	0.03	0.03	0.03	0.24	0.11	0.28	0.30	-0.10	0.02	-0.04	-0.07	-0.19	0.29	
290	647	988	1343	1699	2041	2407	2761	3093	3447	3784	4142	4487	4876	
-2	4	-6	-1	4	-5	11	14	-5	-2	-15	-8	-14	24	
-0.03	0.06	-0.08	-0.02	0.06	-0.07	0.16	0.20	-0.07	-0.02	-0.22	-0.11	-0.20	0.35	
-0.48	-0.39	-0.53	-0.47	-0.39	-0.51	-0.29	-0.25	-0.51	-0.46	-0.66	-0.55	-0.63	-0.08	
0.48	0.51	0.64	0.58	0.61	0.59	0.51	0.56	0.50	0.62	0.81	0.68	0.73	0.48	

RF Input Power (dBm)

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

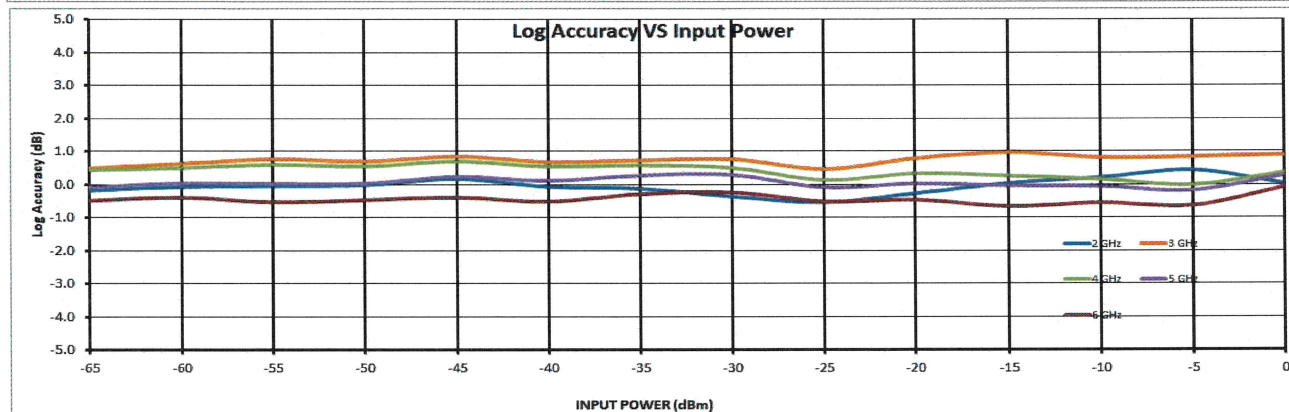
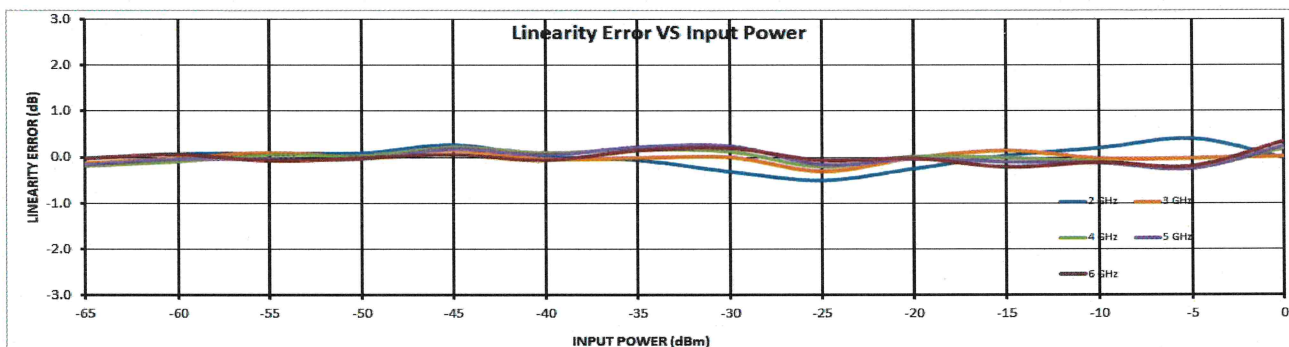
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ERROR (mV)	
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Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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

Flatness dB: ±0.81 dB





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

Model: EWDM-2G6G-65-70MV-1
Serial No: PL42373
Date: 07/29/2024
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: 7 mV



Frequency

2 GHz	INTERCEPT (mV)	4708
	SLOPE (mV/dB)	69
	MAX LIN ERROR	0.62
	MAX ACC ERROR	1.06

3 GHz	INTERCEPT (mV)	4794
	SLOPE (mV/dB)	69.4
	MAX LIN ERROR	0.49
	MAX ACC ERROR	1.06

4 GHz	INTERCEPT (mV)	4761
	SLOPE (mV/dB)	69.3
	MAX LIN ERROR	0.42
	MAX ACC ERROR	0.64

5 GHz	INTERCEPT (mV)	4740
	SLOPE (mV/dB)	69.5
	MAX LIN ERROR	0.48
	MAX ACC ERROR	0.48

6 GHz	INTERCEPT (mV)	4706
	SLOPE (mV/dB)	69.9
	MAX LIN ERROR	0.43
	MAX ACC ERROR	1.12

AVG. SLOPE: 69.4 mV/dB

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2 GHz	220	567	911	1260	1602	1937	2284	2637	2980	3336	3692	4051	4365	4665
	-2	0	-1	3	0	-10	-8	0	-2	9	20	33	2	-43
	-0.03	0.00	-0.02	0.04	0.00	-0.15	-0.12	0.00	-0.03	0.12	0.28	0.49	0.04	-0.62
	-0.07	-0.07	-0.12	-0.10	-0.17	-0.35	-0.35	-0.27	-0.33	-0.20	-0.07	0.10	-0.38	-1.06
3 GHz	269	637	978	1318	1663	1999	2360	2729	3061	3420	3765	4109	4451	4760
	-11	10	3	-4	-6	-17	-3	18	3	15	13	9	4	-34
	-0.16	0.14	0.05	-0.05	-0.09	-0.25	-0.05	0.25	0.04	0.21	0.18	0.14	0.06	-0.49
	0.63	0.93	0.84	0.74	0.71	0.55	0.75	1.06	0.84	1.01	0.98	0.93	0.86	0.31
4 GHz	236	694	937	1282	1623	1964	2330	2700	3031	3378	3709	4063	4392	4741
	-9	3	-1	-3	-8	-14	5	29	13	14	-2	-5	-12	-10
	-0.13	0.04	-0.01	-0.04	-0.12	-0.20	0.08	0.42	0.19	0.20	-0.03	-0.07	-0.18	-0.14
	0.16	0.31	0.25	0.22	0.13	0.04	0.31	0.64	0.41	0.41	0.17	0.13	0.01	0.03
5 GHz	221	571	915	1262	1605	1947	2316	2689	3018	3360	3693	4042	4380	4732
	-3	-1	-4	-4	-9	-14	7	33	15	9	-5	-3	-13	-8
	-0.05	-0.01	-0.06	-0.06	-0.13	-0.20	0.11	0.48	0.21	0.13	-0.07	-0.05	-0.19	-0.12
	-0.06	-0.02	-0.06	-0.07	-0.13	-0.20	0.11	0.48	0.22	0.15	-0.06	-0.03	-0.16	-0.10
6 GHz	181	508	855	1206	1536	1884	2254	2638	2980	3317	3643	3999	4347	4716
	21	-2	-4	-3	-23	-25	-4	30	22	10	-14	-8	-10	10
	0.30	-0.03	-0.06	-0.05	-0.33	-0.35	-0.06	0.43	0.32	0.14	-0.20	-0.11	-0.14	0.14
	-0.63	-0.92	-0.93	-0.87	-1.12	-1.11	-0.78	-0.25	-0.33	-0.47	-0.78	-0.65	-0.64	-0.33
AVG. SLOPE: 69.4 mV/dB	0.63	0.93	0.89	0.81	0.91	0.83	0.76	0.66	0.58	0.74	0.88	0.79	0.75	0.68

RF Input Power (dBm)

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

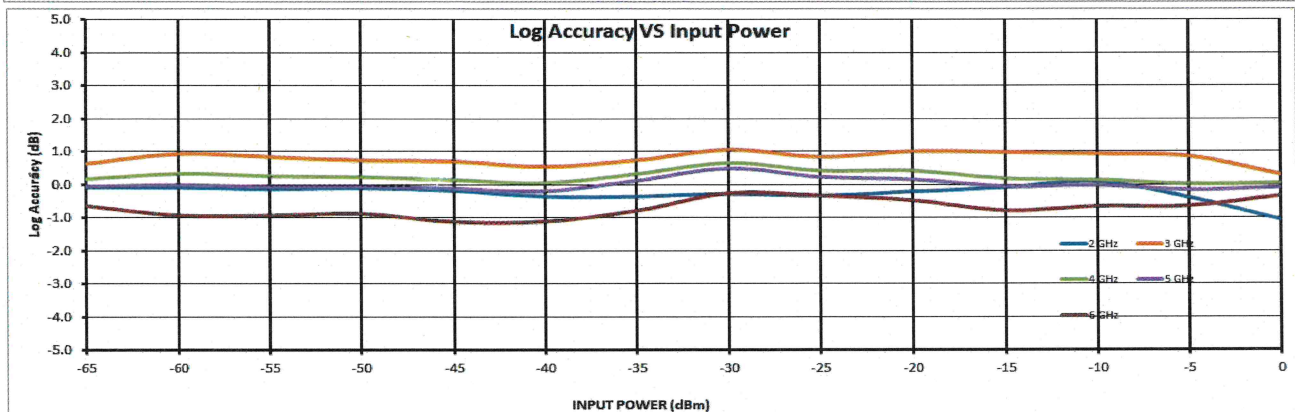
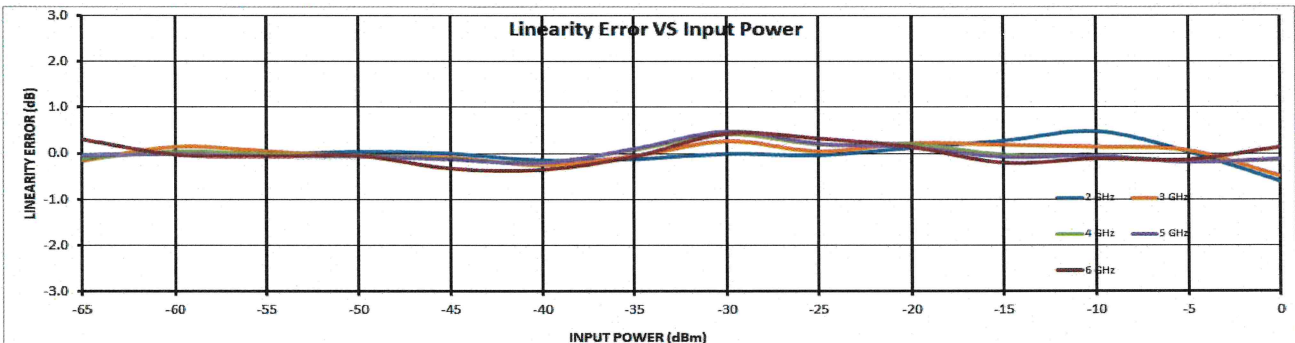
Measured Value (mV)	
ERROR (mV)	
LINEARITY ERROR (dB)	
LOG ACCURACY (dB)	

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)	

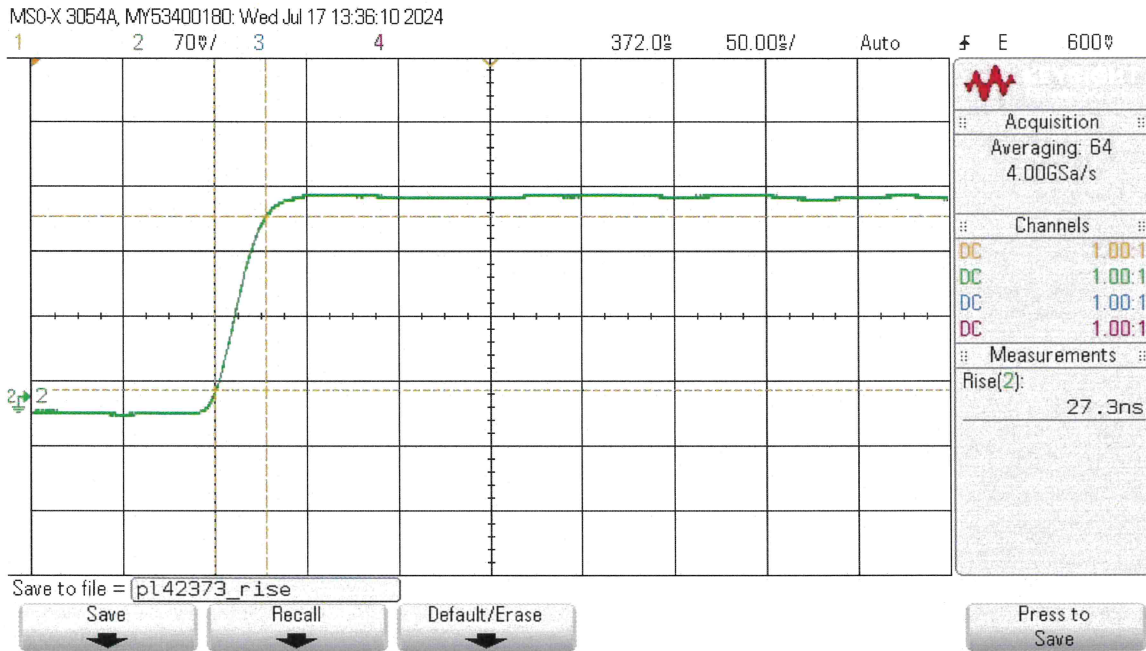
Flatness dB: ±0.93 dB



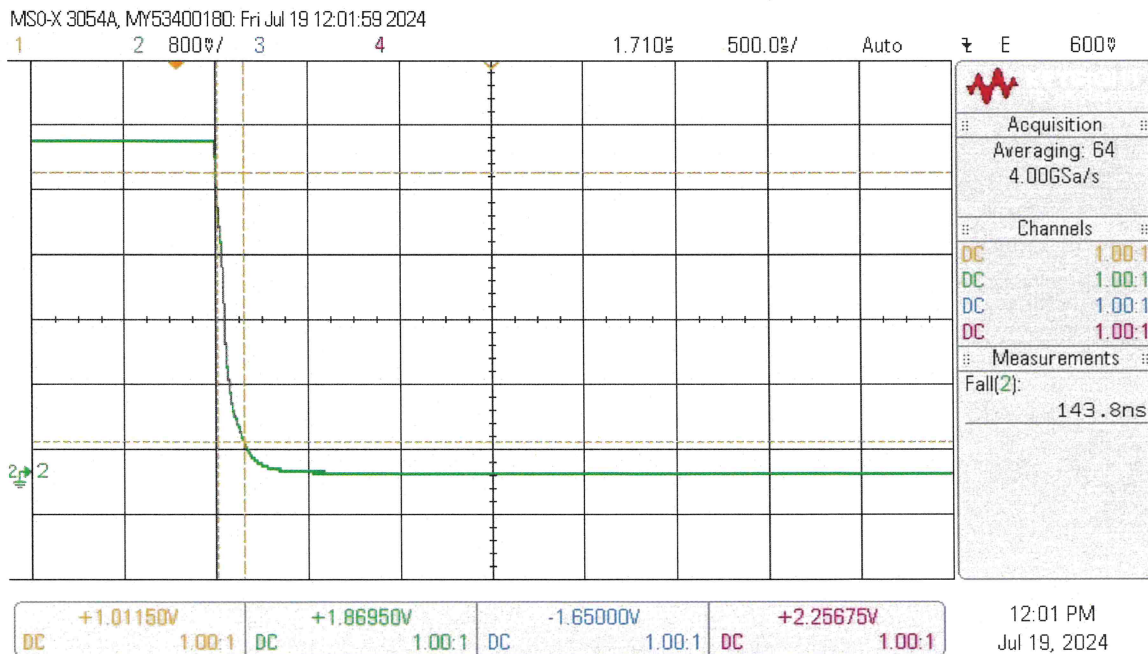


Summary Data
For
EWDM-2G6G-65-70MV-1

Rise Time



Fall and Recovery Time





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

Settling Time

MSO-X 3054A, MY53400180: Wed Jul 17 11:59:58 2024

