



Tested By: Melvin Ayala

Temperature: 0°C TO +85°C

Date 3/15/2022

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	
2	VSWR:	2.0:1 MAX @ 50 Ω	1.41:1 @ 50 Ω (RF IN) 1.35:1 @ 50 Ω (BIT IN) 1.24:1 @ 50 Ω (RF OUT) 1.39:1 @ 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 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	35.0 dB	
9	RF OUT Frequency Flatness:	±2.0 dB MAX	0.9 dB	
10	RF OUT 1 dB Compression Point:	+3 dBm MIN	11.0 dBm	
11	RF OUT Second Harmonic:	-9 dBc MIN	-21.4dBc	
12	RF OUT Third Harmonic:	-12 dBc MIN	-28.2 dBc	

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

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	10.7 dB	PMI QA3
14	SW Frequency Flatness:	±1.2 dB MAX	0.7 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	4.3 dBm	
16	SW Second Harmonic:	-9 dBc MIN	-23.8dBc	
17	SW Third Harmonic:	-12 dBc MIN	-33.0 dBc	
18	VIDEO OUT TSS:	-71 dBm MAX	-70.4 dBm	
19	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
20	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	72 mV/dB	
21	VIDEO OUT Log Linearity:	±0.75 dB MAX @ 4 GHZ	0.36 dB	
22	VIDEO OUT Log Accuracy:	±1.25 dB MAX	1.22 dB	
23	VIDEO OUT Absolute Log Accuracy:	±1.5 dB MAX	1.25 dB	
24	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-51 mV	
25	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	20.0 ns	
26	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	128 ns	
27	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	15.6 ns	
28	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	368 ns	



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

29	VIDEO OUT Video Frequency Flatness:	± 1.0 dB MAX	0.96 dB	PMI QA3
30	VIDEO OUT CW Immunity:	A. CW Immune Power TSS to -40 dBm Baseline Shift: 200 mV MAX	160 mV	
		B. Pulse Peak Amplitude Loss; 2 dB MAX	< 2 dB	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	3 ms	
		CW Recovery Time at CW = -40 dBm, ≤ 50 us	40 us	
31	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	Pass	
32	VIDEO OUT load Impedance:	$75 \pm 1 \Omega$	Pass	
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	123 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	<50 ns	
38	Power Supply	+15 V @ 1000 mA MAX -15 V @ 500 mA MAX	+15 V @ 640 mA -15 V @ 140 mA	
39	Power Supply Ripple From DC to 10 MHz	100 mV MAX	Pass	

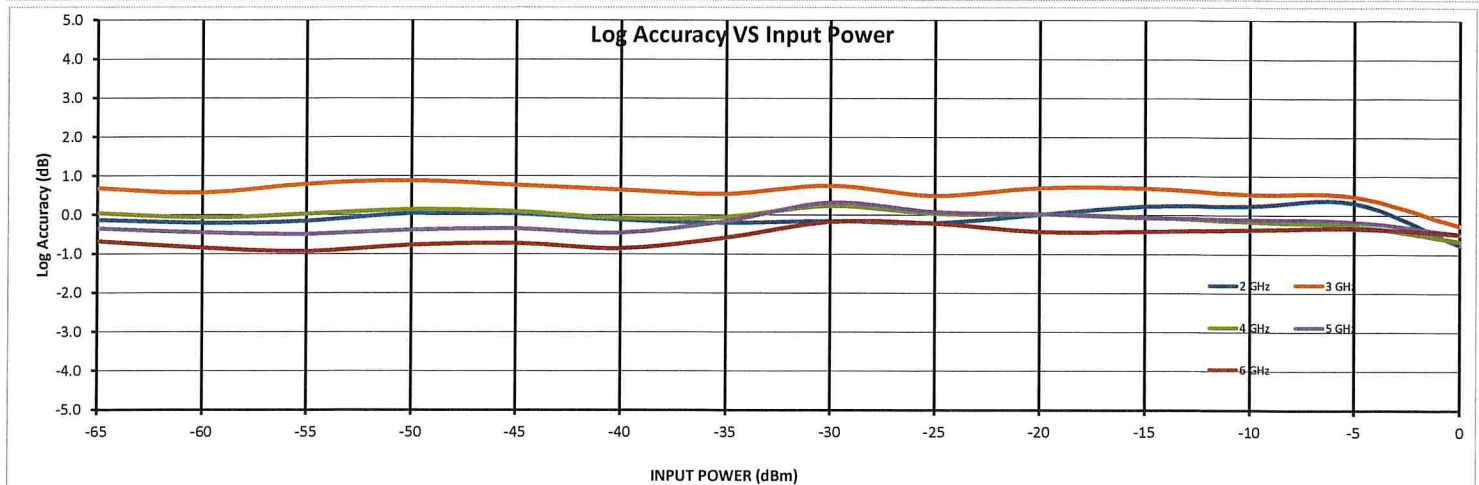
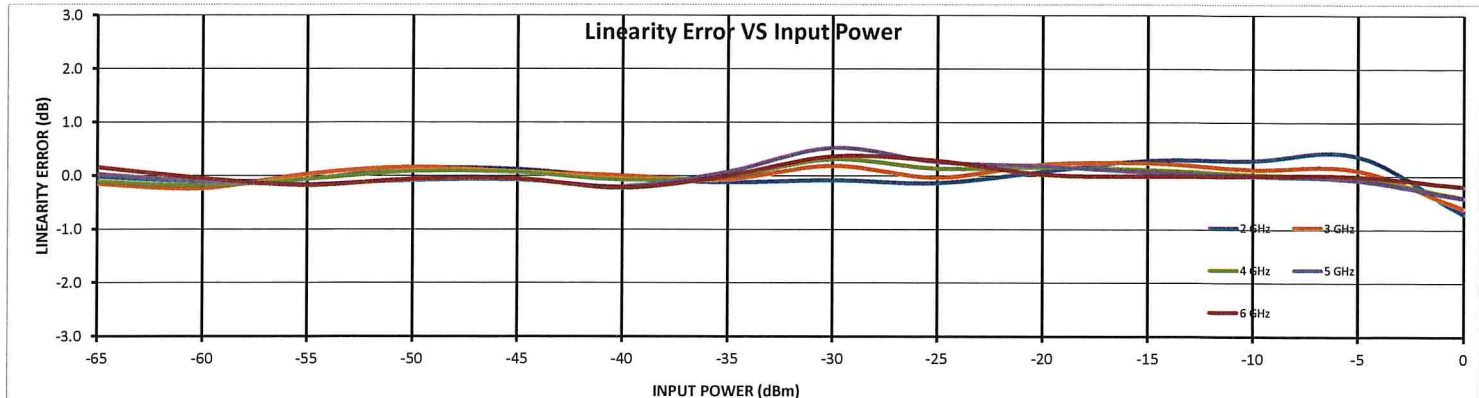
QA/QC Approval: K. Mortimer MGR Date: 3.29.22

Model: EWDM-2G6G-65-70MV-1
 Serial No: PL35304
 Date:: 03/18/22
 Tested By: J. Monley
 Test Temp: 0°C
 Input Port: RF Port

DC Offset: -51 mV



Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	274	628	991	1365	1724	2072	2426	2789	3145	3520	3895	4255	4621	4903	Measured Value (mV)
	SLOPE (mV/dB)	-2	-7	-4	10	9	-3	-9	-6	-10	5	21	21	27	-51	Error (mV)
	MAX LIN ERROR	-0.02	-0.10	-0.06	0.14	0.12	-0.04	-0.12	-0.08	-0.13	0.08	0.29	0.29	0.37	-0.71	LINEARITY ERROR (dB)
	MAX ACC ERROR	-0.13	-0.20	-0.16	0.05	0.04	-0.12	-0.20	-0.15	-0.20	0.01	0.23	0.23	0.32	-0.76	LOG ACCURACY (dB)
3 GHz	INTERCEPT (mV)	332	683	1059	1425	1776	2127	2479	2854	3195	3569	3928	4276	4632	4938	Measured Value (mV)
	SLOPE (mV/dB)	-11	-17	2	11	6	0	-5	13	-3	15	17	8	7	-43	Error (mV)
	MAX LIN ERROR	-0.16	-0.24	0.03	0.16	0.08	0.00	-0.07	0.19	-0.04	0.21	0.24	0.11	0.10	-0.61	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.68	0.56	0.79	0.88	0.76	0.64	0.54	0.75	0.49	0.69	0.68	0.52	0.47	-0.27	LOG ACCURACY (dB)
4 GHz	INTERCEPT (mV)	286	638	1004	1372	1728	2075	2437	2817	3162	3521	3875	4226	4578	4910	Measured Value (mV)
	SLOPE (mV/dB)	-8	-13	-4	6	5	-5	-1	22	10	11	8	2	-4	-29	Error (mV)
	MAX LIN ERROR	-0.11	-0.18	-0.06	0.09	0.07	-0.08	-0.01	0.31	0.14	0.16	0.11	0.02	-0.05	-0.40	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.04	-0.06	0.03	0.14	0.09	-0.08	-0.05	0.24	0.03	0.02	-0.05	-0.17	-0.28	-0.66	LOG ACCURACY (dB)
5 GHz	INTERCEPT (mV)	258	610	967	1334	1696	2048	2429	2823	3165	3521	3874	4230	4586	4923	Measured Value (mV)
	SLOPE (mV/dB)	2	-7	-12	-6	-5	-15	5	38	18	13	5	0	-6	-30	Error (mV)
	MAX LIN ERROR	0.03	-0.10	-0.16	-0.08	-0.07	-0.20	0.07	0.52	0.26	0.18	0.07	-0.01	-0.08	-0.42	LINEARITY ERROR (dB)
	MAX ACC ERROR	-0.35	-0.45	-0.49	-0.39	-0.35	-0.46	-0.16	0.32	0.07	0.02	-0.07	-0.12	-0.17	-0.48	LOG ACCURACY (dB)
6 GHz	INTERCEPT (mV)	234	582	935	1306	1669	2019	2398	2787	3144	3488	3848	4211	4573	4922	Measured Value (mV)
	SLOPE (mV/dB)	11	-3	-13	-5	-4	-17	0	26	20	2	-1	0	-1	-15	Error (mV)
	MAX LIN ERROR	0.15	-0.05	-0.18	-0.06	-0.06	-0.23	-0.01	0.36	0.28	0.02	-0.01	-0.01	-0.01	-0.20	LINEARITY ERROR (dB)
	MAX ACC ERROR	-0.68	-0.84	-0.93	-0.77	-0.73	-0.86	-0.59	-0.18	-0.22	-0.43	-0.43	-0.38	-0.35	-0.49	LOG ACCURACY (dB)
AVG. SLOPE: 71.9 mV/dB		0.68	0.70	0.86	0.83	0.74	0.75	0.56	0.47	0.35	0.56	0.56	0.45	0.41	0.24	Flatness dB: ±0.86 dB

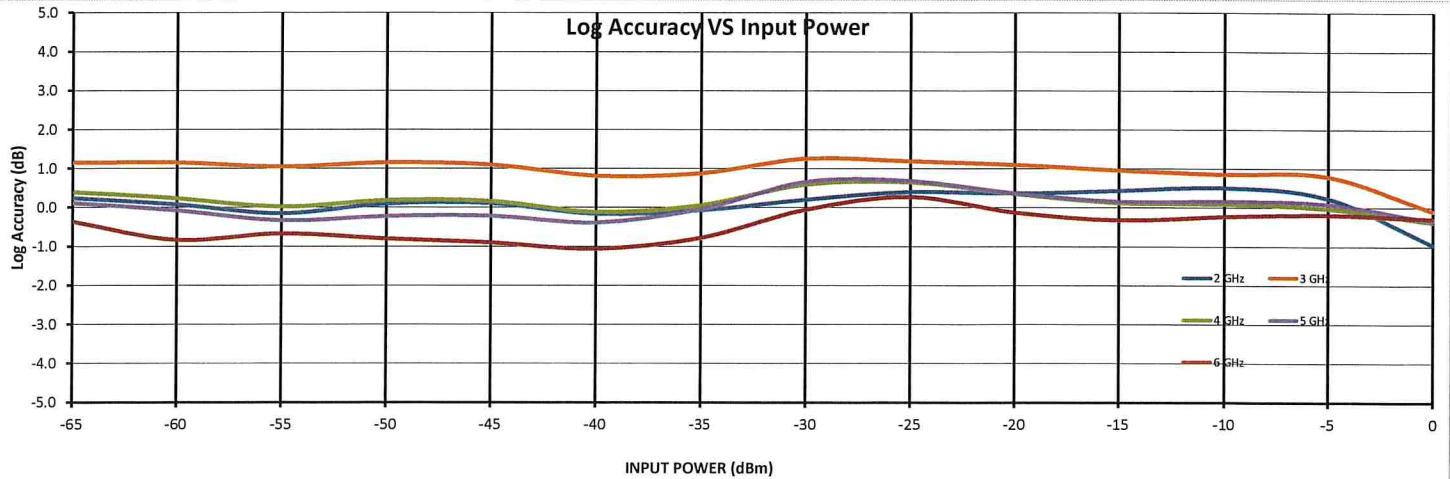
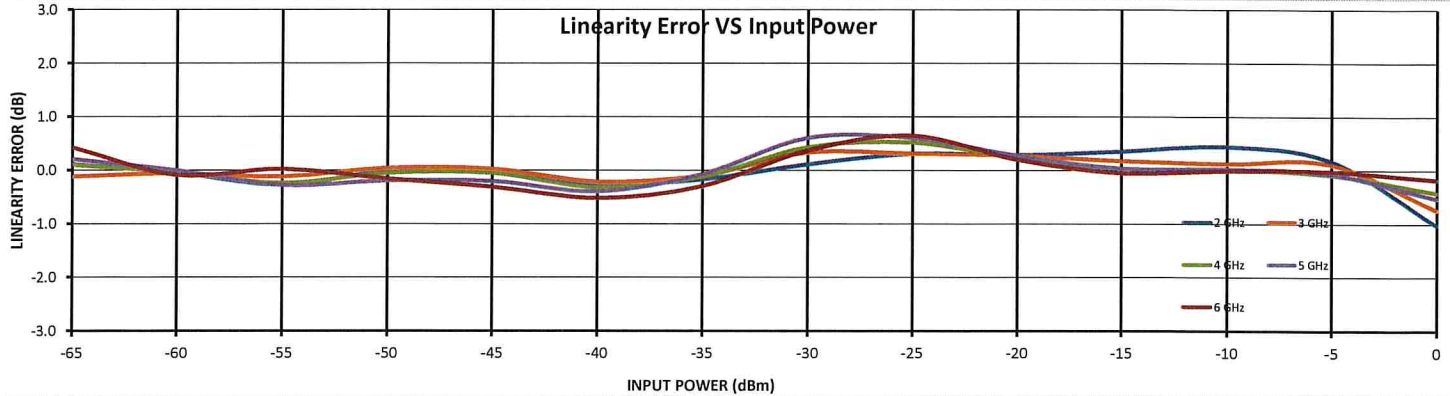


Model: EWDM-2G6G-65-70MV-1
Serial No: PL35304
Date:: 03/18/22
Tested By: J. Monley
Test Temp: +85°C
Input Port: RF Port

DC Offset: -96 mV



Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	4716	109	453	792	1165	1521	1857	2219	2594	2963	3316	3676	4037	4373	4643	Measured Value (mV)
	SLOPE (mV/dB)	70.99	8	-3	-19	-1	0	-19	-12	8	22	20	25	31	12	-73	ERROR (mV)
	MAX LIN ERROR	1.02	0.11	-0.04	-0.27	-0.01	0.00	-0.27	-0.17	0.11	0.31	0.28	0.35	0.44	0.17	-1.02	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.96	0.24	0.08	-0.15	0.10	0.11	-0.16	-0.07	0.21	0.40	0.37	0.43	0.51	0.24	-0.96	LOG ACCURACY (dB)
3 GHz	INTERCEPT (mV)	4757	173	529	877	1240	1591	1926	2286	2668	3019	3368	3713	4061	4412	4704	Measured Value (mV)
	SLOPE (mV/dB)	70.39	-9	-4	-8	3	2	-15	-7	23	22	19	12	8	7	-53	ERROR (mV)
	MAX LIN ERROR	0.748	-0.12	-0.06	-0.12	0.04	0.02	-0.22	-0.10	0.33	0.31	0.27	0.17	0.12	0.10	-0.75	LINEARITY ERROR (dB)
	MAX ACC ERROR	1.247	1.14	1.15	1.05	1.15	1.09	0.81	0.87	1.25	1.19	1.10	0.95	0.85	0.79	-0.10	LOG ACCURACY (dB)
4 GHz	INTERCEPT (mV)	4714	120	464	804	1171	1525	1860	2228	2621	2981	3315	3654	4007	4354	4684	Measured Value (mV)
	SLOPE (mV/dB)	70.79	7	-3	-17	-4	-4	-23	-8	31	37	17	2	1	-6	-30	Error (mV)
	MAX LIN ERROR	0.518	0.10	-0.04	-0.24	-0.05	-0.05	-0.32	-0.12	0.43	0.52	0.24	0.03	0.01	-0.09	-0.42	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.651	0.39	0.23	0.02	0.18	0.16	-0.12	0.06	0.59	0.65	0.35	0.12	0.09	-0.03	-0.39	LOG ACCURACY (dB)
5 GHz	INTERCEPT (mV)	4724	100	442	779	1142	1498	1841	2221	2626	2983	3316	3656	4012	4362	4686	Measured Value (mV)
	SLOPE (mV/dB)	71.36	15	0	-20	-14	-15	-28	-5	43	43	19	3	2	-5	-38	ERROR (mV)
	MAX LIN ERROR	0.605	0.21	0.00	-0.28	-0.19	-0.20	-0.40	-0.07	0.60	0.61	0.27	0.04	0.02	-0.07	-0.53	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.68	0.11	-0.08	-0.33	-0.23	-0.22	-0.39	-0.04	0.66	0.68	0.37	0.15	0.16	0.08	-0.36	LOG ACCURACY (dB)
6 GHz	INTERCEPT (mV)	4703	66	388	755	1101	1449	1793	2168	2575	2954	3281	3622	3984	4342	4690	Measured Value (mV)
	SLOPE (mV/dB)	71.81	31	-6	2	-11	-23	-38	-22	26	46	14	-4	-1	-2	-13	Error (mV)
	MAX LIN ERROR	0.645	0.43	-0.09	0.02	-0.16	-0.31	-0.52	-0.30	0.37	0.64	0.20	-0.05	-0.01	-0.03	-0.18	LINEARITY ERROR (dB)
	MAX ACC ERROR	1.065	-0.37	-0.83	-0.67	-0.80	-0.91	-1.07	-0.79	-0.06	0.27	-0.13	-0.33	-0.24	-0.20	-0.30	LOG ACCURACY (dB)
AVG. SLOPE: 71.1 mV/dB			0.75	0.99	0.86	0.98	1.00	0.94	0.83	0.65	0.46	0.61	0.64	0.54	0.49	0.43	Flatness dB: ±1 dB

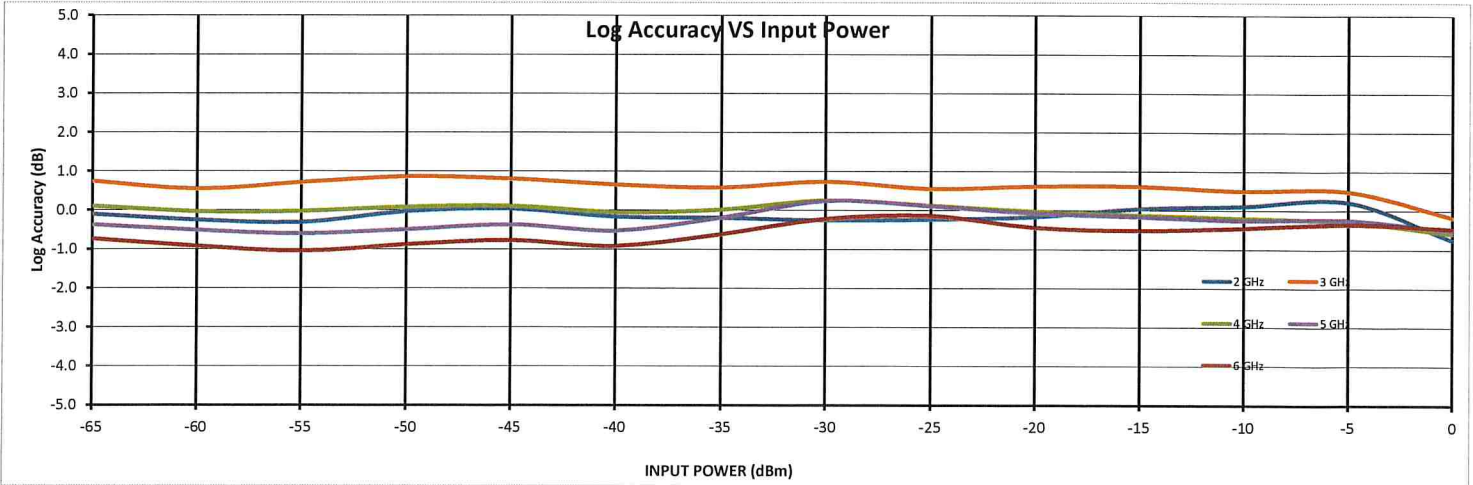
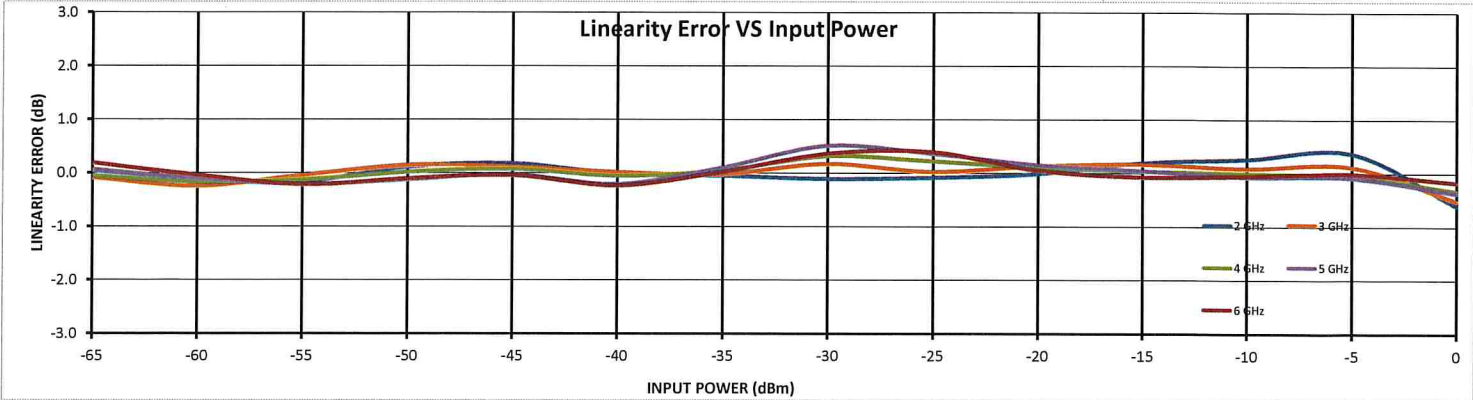


Model: EWDM-2G6G-65-70MV-1
Serial No: PL35304
Date:: 3/16/22
Tested By: J. Boze
Test Temp: +25°C
Input Port: RF Port



DC Offset: -59 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	4866	251	596	947	1322	1682	2023	2376	2727	3084	3444	3814	4174	4537	4823	Measured Value (mV)
	SLOPE (mV/dB)	71.04	3	-8	-12	8	13	-1	-4	-8	-6	-1	14	18	26	-43	Error (mV)
	MAX LIN ERROR	0.60	0.04	-0.11	-0.17	0.11	0.18	-0.02	-0.05	-0.11	-0.08	-0.02	0.19	0.26	0.37	-0.60	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.76	-0.11	-0.25	-0.31	-0.03	0.03	-0.17	-0.20	-0.26	-0.23	-0.17	0.04	0.11	0.22	-0.76	LOG ACCURACY (dB)
3 GHz	INTERCEPT (mV)	4900	311	652	1019	1385	1736	2081	2431	2797	3139	3499	3854	4201	4556	4864	Measured Value (mV)
	SLOPE (mV/dB)	70.51	-6	-18	-3	10	8	1	-2	12	1	9	11	6	8	-36	Error (mV)
	MAX LIN ERROR	0.517	-0.09	-0.25	-0.05	0.14	0.12	0.01	-0.02	0.17	0.02	0.12	0.16	0.08	0.11	-0.52	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.855	0.74	0.54	0.70	0.85	0.79	0.65	0.58	0.73	0.54	0.61	0.60	0.49	0.48	-0.18	LOG ACCURACY (dB)
4 GHz	INTERCEPT (mV)	4858	266	611	967	1330	1687	2031	2391	2763	3109	3454	3802	4152	4501	4835	Measured Value (mV)
	SLOPE (mV/dB)	70.59	-4	-12	-9	1	5	-4	3	22	15	7	2	-1	-4	-23	Error (mV)
	MAX LIN ERROR	0.332	-0.06	-0.17	-0.13	0.02	0.07	-0.05	0.05	0.32	0.22	0.10	0.03	-0.01	-0.06	-0.33	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.588	0.11	-0.04	-0.03	0.08	0.11	-0.05	0.01	0.25	0.12	-0.03	-0.13	-0.20	-0.29	-0.59	LOG ACCURACY (dB)
5 GHz	INTERCEPT (mV)	4867	232	577	926	1289	1653	1997	2376	2762	3108	3450	3799	4148	4504	4840	Measured Value (mV)
	SLOPE (mV/dB)	71.37	4	-7	-15	-9	-2	-15	7	36	25	11	3	-5	-6	-27	Error (mV)
	MAX LIN ERROR	0.509	0.06	-0.10	-0.21	-0.13	-0.03	-0.21	0.10	0.51	0.36	0.15	0.04	-0.07	-0.08	-0.38	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.605	-0.37	-0.52	-0.61	-0.50	-0.37	-0.53	-0.20	0.24	0.11	-0.08	-0.17	-0.26	-0.25	-0.52	LOG ACCURACY (dB)
6 GHz	INTERCEPT (mV)	4856	206	548	894	1261	1624	1969	2346	2729	3090	3424	3774	4134	4496	4843	Measured Value (mV)
	SLOPE (mV/dB)	71.74	13	-3	-16	-8	-3	-17	1	26	28	3	-6	-4	-1	-13	Error (mV)
	MAX LIN ERROR	0.388	0.19	-0.05	-0.22	-0.11	-0.05	-0.24	0.02	0.36	0.39	0.04	-0.08	-0.06	-0.01	-0.18	LINEARITY ERROR (dB)
	MAX ACC ERROR	1.056	-0.74	-0.93	-1.06	-0.89	-0.78	-0.93	-0.62	-0.23	-0.15	-0.45	-0.52	-0.45	-0.36	-0.48	LOG ACCURACY (dB)
AVG. SLOPE: 71.1 mV/dB			0.74	0.73	0.88	0.87	0.79	0.79	0.60	0.49	0.39	0.53	0.56	0.47	0.42	0.29	Flatness dB: ±0.88 dB



Model: EWDM-2G6G-65-70MV-1
Serial No: PL35304
Date:: 3/16/22
Tested By: J. Boze
Test Temp: +25°C
Input Port: BIT Port



DC Offset: -52 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	4868	250	592	944	1319	1679	2020	2374	2722	3082	3439	3811	4170	4535	4842	Measured Value (mV)
	SLOPE (mV/dB)	71.16	7	-7	-11	9	13	-2	-4	-12	-7	-6	10	13	23	-26	Error (mV)
	MAX LIN ERROR	0.37	0.10	-0.10	-0.15	0.12	0.18	-0.03	-0.05	-0.16	-0.10	-0.09	0.14	0.19	0.32	-0.37	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.37	0.00	-0.19	-0.23	0.05	0.11	-0.09	-0.11	-0.21	-0.14	-0.12	0.12	0.17	0.31	-0.37	LOG ACCURACY (dB)
3 GHz	INTERCEPT (mV)	4891	304	647	1011	1377	1730	2075	2425	2787	3132	3490	3846	4192	4547	4853	Measured Value (mV)
	SLOPE (mV/dB)	70.45	-7	-17	-5	9	10	2	0	10	2	8	12	6	8	-38	Error (mV)
	MAX LIN ERROR	0.538	-0.11	-0.24	-0.07	0.12	0.14	0.03	0.00	0.14	0.03	0.12	0.17	0.08	0.12	-0.54	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.862	0.76	0.59	0.71	0.86	0.83	0.69	0.61	0.71	0.56	0.60	0.61	0.48	0.48	-0.22	LOG ACCURACY (dB)
4 GHz	INTERCEPT (mV)	4849	258	603	957	1323	1681	2022	2383	2752	3102	3445	3794	4143	4490	4825	Measured Value (mV)
	SLOPE (mV/dB)	70.56	-4	-12	-11	2	7	-4	4	20	17	7	4	0	-6	-24	Error (mV)
	MAX LIN ERROR	0.338	-0.06	-0.17	-0.15	0.03	0.11	-0.06	0.05	0.28	0.24	0.10	0.05	0.00	-0.09	-0.34	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.61	0.11	-0.03	-0.05	0.10	0.14	-0.06	0.02	0.21	0.14	-0.03	-0.12	-0.21	-0.32	-0.61	LOG ACCURACY (dB)
5 GHz	INTERCEPT (mV)	4854	220	564	910	1277	1642	1985	2363	2746	3097	3436	3786	4135	4489	4829	Measured Value (mV)
	SLOPE (mV/dB)	71.37	5	-8	-18	-8	0	-14	7	33	28	10	3	-5	-8	-25	Error (mV)
	MAX LIN ERROR	0.467	0.07	-0.11	-0.26	-0.12	0.00	-0.20	0.10	0.47	0.39	0.14	0.04	-0.07	-0.11	-0.35	LINEARITY ERROR (dB)
	MAX ACC ERROR	0.711	-0.42	-0.58	-0.71	-0.55	-0.41	-0.58	-0.26	0.13	0.07	-0.16	-0.23	-0.32	-0.34	-0.55	LOG ACCURACY (dB)
6 GHz	INTERCEPT (mV)	4841	196	534	877	1248	1611	1955	2330	2711	3079	3408	3759	4120	4480	4830	Measured Value (mV)
	SLOPE (mV/dB)	71.71	17	-4	-19	-7	-2	-17	-1	22	31	2	-6	-3	-2	-11	Error (mV)
	MAX LIN ERROR	0.436	0.24	-0.05	-0.27	-0.10	-0.03	-0.24	-0.01	0.30	0.44	0.02	-0.08	-0.05	-0.03	-0.15	LINEARITY ERROR (dB)
	MAX ACC ERROR	1.175	-0.76	-1.00	-1.18	-0.95	-0.84	-1.00	-0.73	-0.36	-0.18	-0.55	-0.61	-0.53	-0.47	-0.54	LOG ACCURACY (dB)
AVG. SLOPE: 71.1 mV/dB			0.76	0.80	0.94	0.91	0.84	0.84	0.67	0.53	0.37	0.58	0.61	0.51	0.47	0.20	Flatness dB: ±0.94 dB

