



Summary Data
For
ERDLVA-18G40G-65-50-1

Customer: _____ Tested By: DA
 SO No: _____ Temperature: +25°C
 Model No: ERDLVA-18G40G-65-50-1 Date: 07/26/24
 Serial No: PL45886/2430 Drawing No: 27643800 Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC	
1	Frequency Range:	18 GHz to 40 GHz	18 GHz to 40 GHz	PMI QA3	
2	Frequency Flatness:	±1.75 dB Typ. ±2.0 dB Max. @ -20dBm	± 1.8 dB	↓	
3	Output Noise Level:	150 mV P-P (Includes offset)	148 mV P-P		
4	Dynamic Range:	68 dB Min.	68 dB		
5	TSS:	-68 dBm @ +85°C	-68.5 dBm		
6	Log Dynamic Range:	-65 dBm to 0 dBm	-65 dBm to + 0 dBm		
7	Log Slope:	50 mV/dB ±4.0 mV/dB	49.1 mV/dB		
8	Log Linearity:	±1.5 dB Max.	See attached Graphs		
9	Log Accuracy:	±1.5 dB Max. ±2.0 dB With Temp	±3.3 dB		
10	Output Stability VS Temp:	±1.0 dB	±X.X dB		
11	Settling Time:	10% to 1 dB, 40 ns Max.	33.0 ns		
12	Recovery Time (1 dB Below Peak to 1 dB)	350 ns Max. (0 dBm is PW= 100 us)	<350ns		
13	VSWR:	2.5:1 Max.	2.20:1		
14	Max Input Level:	+20 dBm CW	20 dBm CW		
15	Propagation Delay:	50% RF to 10% Video	NA ns		
16	DC Offset:	±50 mV Max.	± 30 mV		PMI QA3



**Summary Data
For
ERDLVA-18G40G-65-50-1**

17	Pulse Width Range:	50 ns to 250 us	50 ns to 250 us	PMI QA3	
18	Rise Time:	10 ns Typ., 25 ns Max. (10% to 90%)	17.8 ns	↓	
19	CW Immunity Time:	5ms @ -40dBm	1.4 ms @ -40 dBm		
20	CW Immunity:	TSS to -40 dBm, (-30 dBm Goal)	-40 dBm		
21	CW Immunity Recovery Time:	150 us Max.	128 us		
22	Baseline Shift With CW:	1 dB Max. to -40 dBm	.85 dBm		
23	Pulse Droop:	PW= 100 us, PRI= 1 ms, Pin= -60 dBm 2.5 dB Max.	2.2 dB		
24	Output Matching Unit to Unit:	1.2 dB P-P Max. @ -20 dBm 2.4 dB P-P Max. @ 0 dBm	0.0 dB @ -20 dBm 0.0 dB @ 0 dBm		
25	Power Supply	+9 to +12 V @ 330 mA Max. -11.5 V to -15V @ 120 mA Max.	+10.5 V @ 368mA -12.0 V @ 76mA		PMI QA3

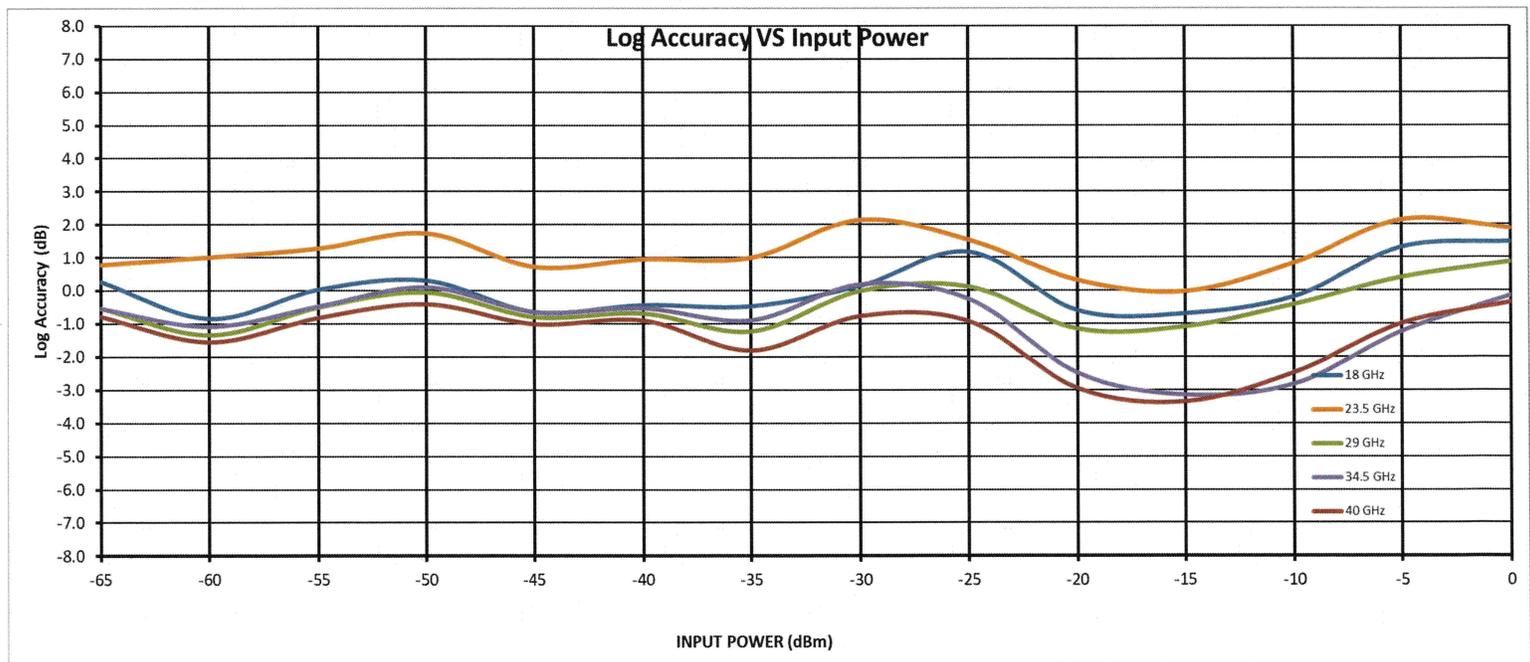
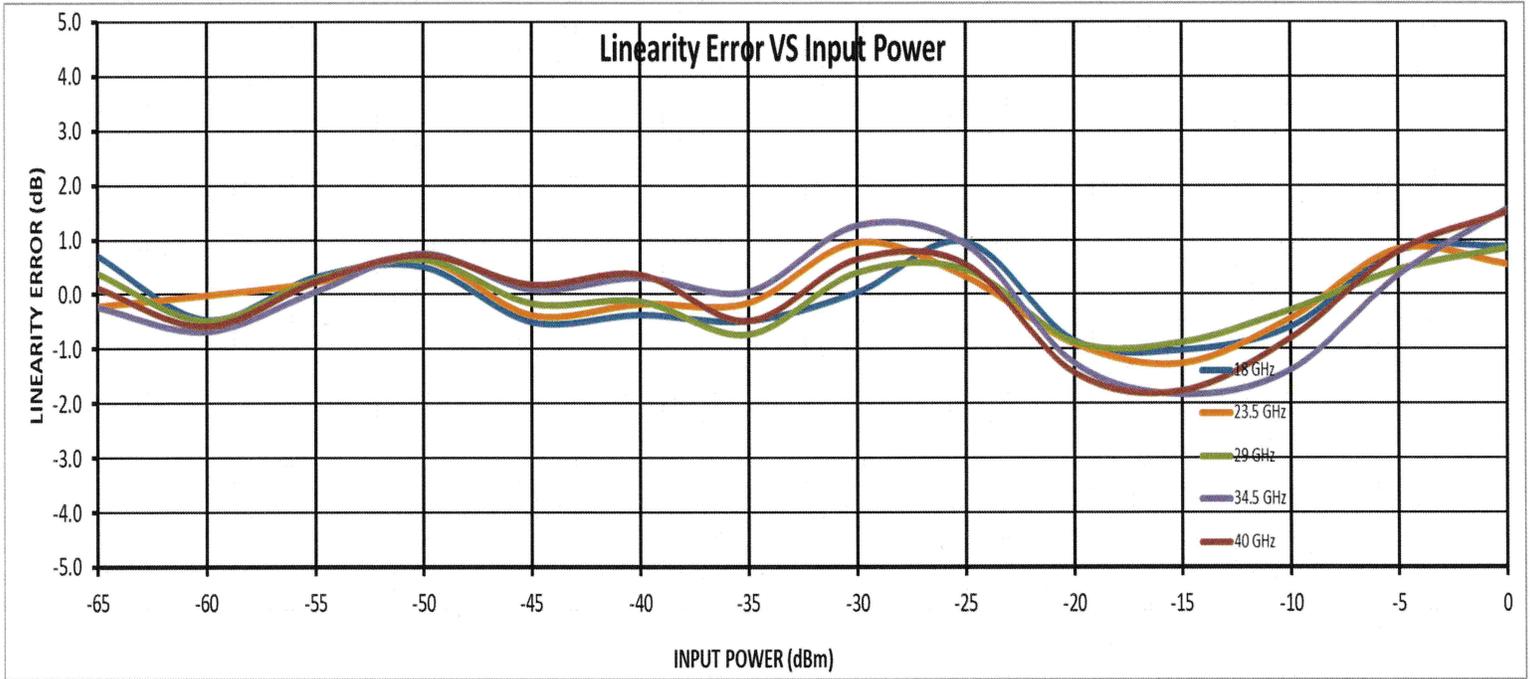
QA/QC Approval: Arthur Zimmerman

Date: 7-26-24



Summary Data
For
ERDLVA-18G40G-65-50-1

LOG LINEARITY & LOGGING ACCURACY GRAPHS





**Summary Data
For
ERDLVA-18G40G-65-50-1**

TRANSFER RESPONSE TABULATED DATA & GRAPH

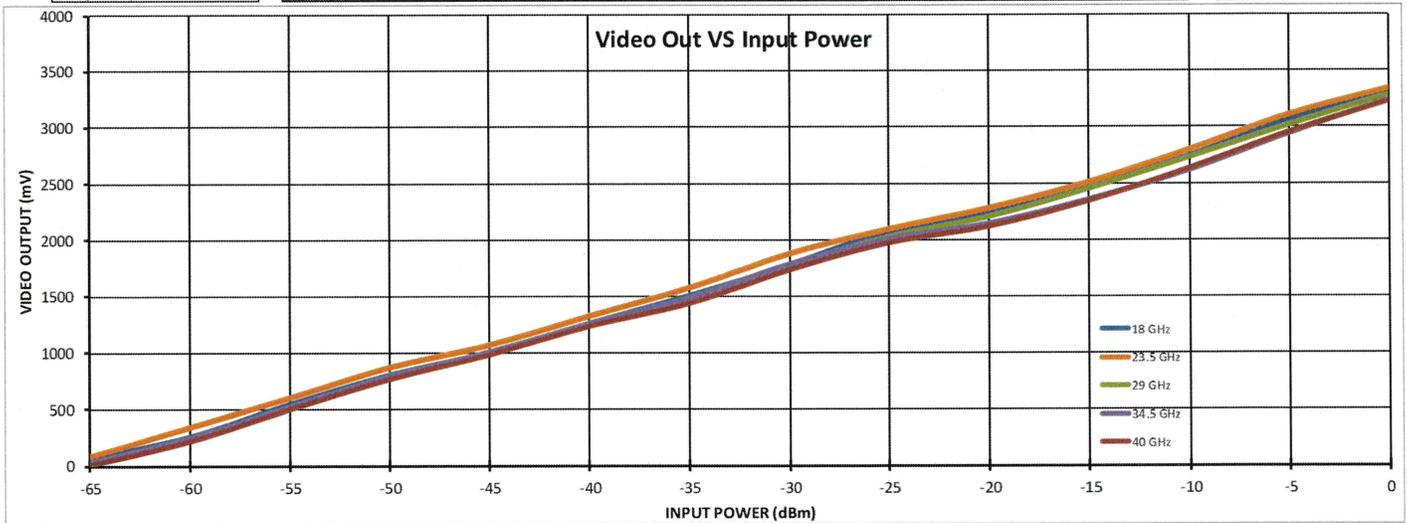
MODEL: ERDLVA-18G40G-65-50-1
 SERIAL NO: PL45886
 DATE: 06-27-2024
 TESTED BY: DA
 TEST TEMP: +25°C



51

47

Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
18 GHz	INTERCEPT (mV)	3275	36	256	545	804	1003	1259	1503	1779	2075	2234	2475	2746	3065	3319	Measured Value (mV)
	SLOPE (mV/dB)	49.9	36	-23	16	26	-25	-19	-24	2	49	-42	-51	-29	40	44	Error (mV)
	LIN. ERR. (dB)	1.0	0.71	-0.46	0.33	0.52	-0.50	-0.37	-0.48	0.04	0.97	-0.84	-1.02	-0.59	0.80	0.89	LINEARITY ERROR (dB)
23.5 GHz	INTERCEPT (mV)	3312	90	347	606	874	1070	1327	1575	1877	2093	2279	2508	2796	3106	3339	Measured Value (mV)
	SLOPE (mV/dB)	49.4	-11	-1	11	32	-19	-9	-8	47	16	-45	-63	-22	41	27	Error (mV)
	LIN. ERR. (dB)	1.27	-0.22	-0.02	0.23	0.65	-0.38	-0.18	-0.16	0.96	0.33	-0.90	-1.27	-0.44	0.84	0.55	LINEARITY ERROR (dB)
29 GHz	INTERCEPT (mV)	3246	25	231	518	786	995	1246	1465	1771	2023	2206	2455	2734	3020	3289	Measured Value (mV)
	SLOPE (mV/dB)	49.9	19	-24	14	33	-8	-6	-36	20	23	-43	-44	-14	23	43	Error (mV)
	LIN. ERR. (dB)	0.87	0.39	-0.48	0.28	0.65	-0.16	-0.12	-0.73	0.41	0.46	-0.87	-0.87	-0.28	0.46	0.85	LINEARITY ERROR (dB)
34.5 GHz	INTERCEPT (mV)	3164	25	244	520	794	1003	1254	1482	1781	2005	2141	2354	2616	2940	3239	Measured Value (mV)
	SLOPE (mV/dB)	48.1	-11	-33	3	36	5	15	2	61	44	-60	-88	-66	17	75	Error (mV)
	LIN. ERR. (dB)	1.83	-0.23	-0.68	0.06	0.75	0.10	0.31	0.05	1.26	0.92	-1.25	-1.83	-1.38	0.35	1.57	LINEARITY ERROR (dB)
40 GHz	INTERCEPT (mV)	3156	13	221	503	769	985	1236	1437	1734	1972	2118	2344	2633	2952	3229	Measured Value (mV)
	SLOPE (mV/dB)	48.4	6	-29	11	35	9	17	-24	31	27	-69	-86	-39	38	73	Error (mV)
	LIN. ERR. (dB)	1.77	0.12	-0.59	0.23	0.72	0.18	0.36	-0.49	0.64	0.55	-1.43	-1.77	-0.80	0.78	1.50	LINEARITY ERROR (dB)
Avg. Slope: 49.1 mV/dB		0.8	1.3	1	1.1	0.9	0.9	1.4	1.5	1.2	1.6	1.7	1.8	1.7	1.1	Flatness dB: ±1.8 dB	

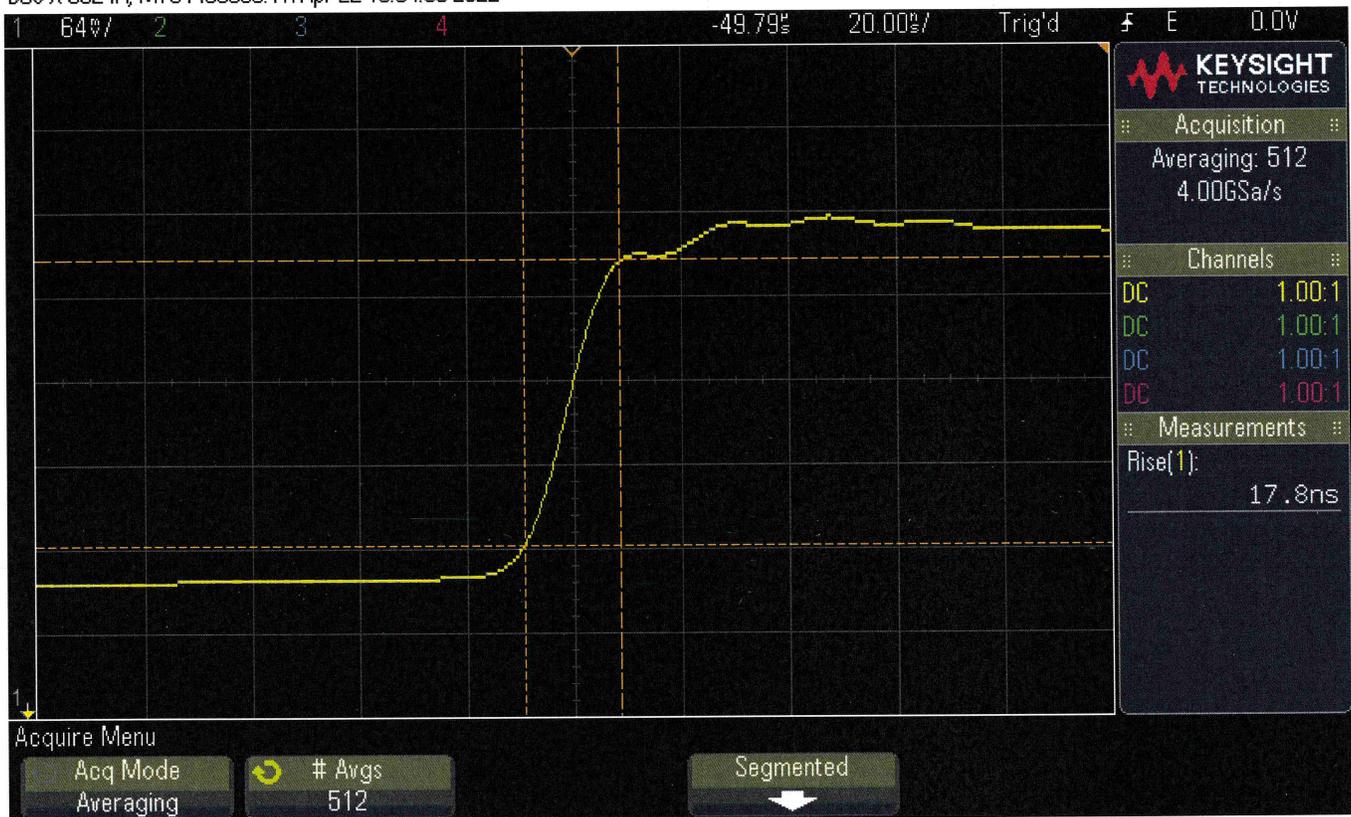




Summary Data
For
ERDLVA-18G40G-65-50-1

RISE TIME PHOTO 17.8nS

DSO-X 3024A, MY54490369: Fri Apr 22 10:54:09 2022





Summary Data
For
ERDLVA-18G40G-65-50-1

TSS PHOTO -68.5dBm

DSO-X 3024A, MY54490369: Thu May 12 12:54:43 2022

