





**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

14	Power Supply:	+12 ± 1VDC @ 125 mA Max -12 ± 1VDC @ 75 mA Max	<b>85 mA</b> <b>40 mA</b>	PMI QA3
15	Warm Up Time:	2 Minutes Max	<b>2 Minutes</b>	

\*Notes: Includes Frequency Flatness. Input Power, Temperature Deviation and Deviation for DC Offset. The test shall be performed using RG-316 (or equivalent), 20cm, 93±0.5 Ohms terminated.

QA/QC Approval: K. Klamm Date: 1-28-25



**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

Log Linearity and Log Accuracy @ +25°C

LOG TRANSFER WITH FREQUENCY  
MODEL: HADA-D2001  
TESTED BY: Joshua Monley  
TEST DATE: 01/23/2025  
SERIAL NO: PL47267  
TEST TEMP: +25C

Graph #1

DC Offset= 0.012 V



PLANAR MONOLITHICS INDUSTRIES  
4921 Robert J. Mathews Parkway Suit 1  
El Dorado Hills, CA 95762  
TEL: 916-542-1401 FAX: 916-265-2597  
EMAIL: SALES@PMI-RF.COM

Frequency		
0.5 GHz	INTERCEPT (mV)	2327
	SLOPE (mV/dB)	50.9

1 GHz	INTERCEPT (mV)	2334
	SLOPE (mV/dB)	50.8

2 GHz	INTERCEPT (mV)	2329
	SLOPE (mV/dB)	50.9

Flatness +/- dB	
Max Video Output Volts	
Min Video Output Volts	

	-40	-35	-30	-25	-20	-15	-10	-5	0
	279	552	804	1050	1327	1576	1798	2083	2317
	-13	5	3	-5	17	12	-20	10	-10
	-0.26	0.11	0.06	-0.10	0.34	0.24	-0.40	0.21	-0.19
	-1.42	-0.96	-0.92	-1.00	-0.46	-0.48	-1.04	-0.34	-0.66
	290	561	814	1059	1336	1586	1807	2094	2319
	-13	4	3	-6	18	14	-19	14	-15
	-0.26	0.08	0.06	-0.11	0.35	0.27	-0.38	0.28	-0.29
	-1.20	-0.78	-0.72	-0.82	-0.28	-0.28	-0.86	-0.12	-0.62
	262	553	803	1048	1324	1577	1789	2089	2319
	-13	4	3	-6	18	14	-19	14	-15
	-0.20	0.13	0.04	-0.15	0.27	0.23	-0.41	0.29	-0.19
	-1.26	-0.84	-0.74	-0.82	-0.24	-0.24	-0.72	-0.22	-0.52
	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00
	0.29	0.56	0.81	1.06	1.34	1.59	1.81	2.09	2.32
	0.28	0.55	0.80	1.05	1.32	1.58	1.80	2.08	2.32

RF Input Power (dBm)

Measured Value (mV)	Error(dB)	
Error (mV)	MAX	MIN
LINEARITY ERROR (dB)	0.34	-0.40
LOGGING ACCURACY (dB)	-0.34	-1.42

Measured Value (mV)	Error(dB)	
Error (mV)	MAX	MIN
LINEARITY ERROR (dB)	0.35	-0.38
LOGGING ACCURACY (dB)	-0.12	-1.20

Measured Value (mV)	Error(dB)	
Error (mV)	MAX	MIN
LINEARITY ERROR (dB)	0.29	-0.41
LOGGING ACCURACY (dB)	-0.22	-1.36

Logging Linearity vs Frequency	Error(dB)	
	MAX	MIN
TOTAL LOG LINEARITY (dB)	0.35	-0.41

Logging Accuracy vs Frequency	Error(dB)	
	MAX	MIN
TOTAL LOGGING ACCURACY (dB)	-0.12	-1.42

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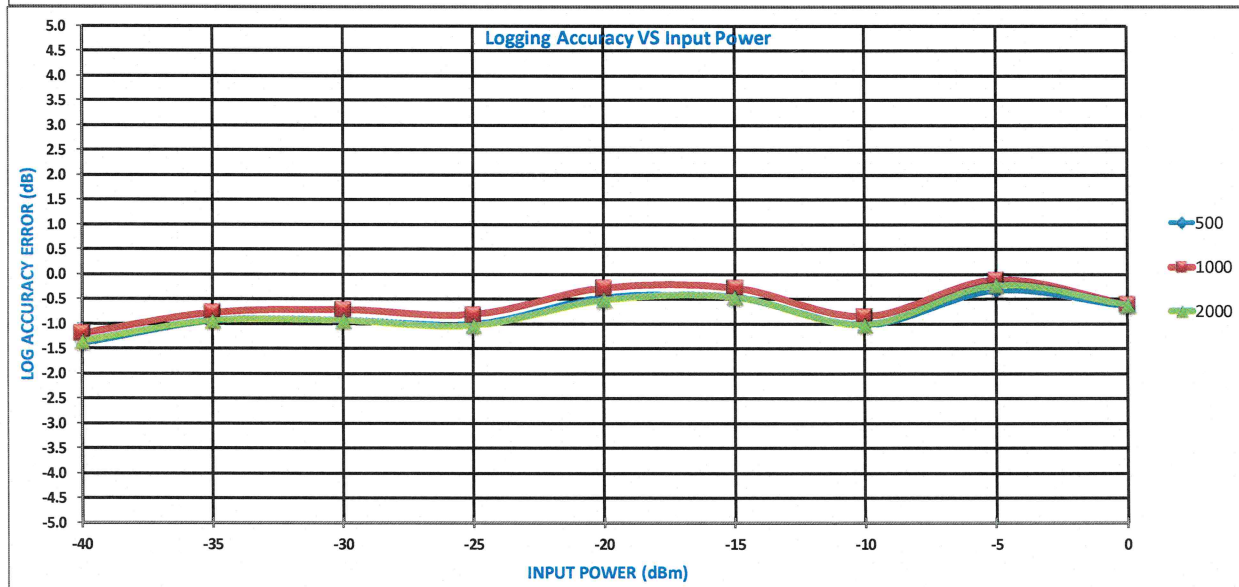
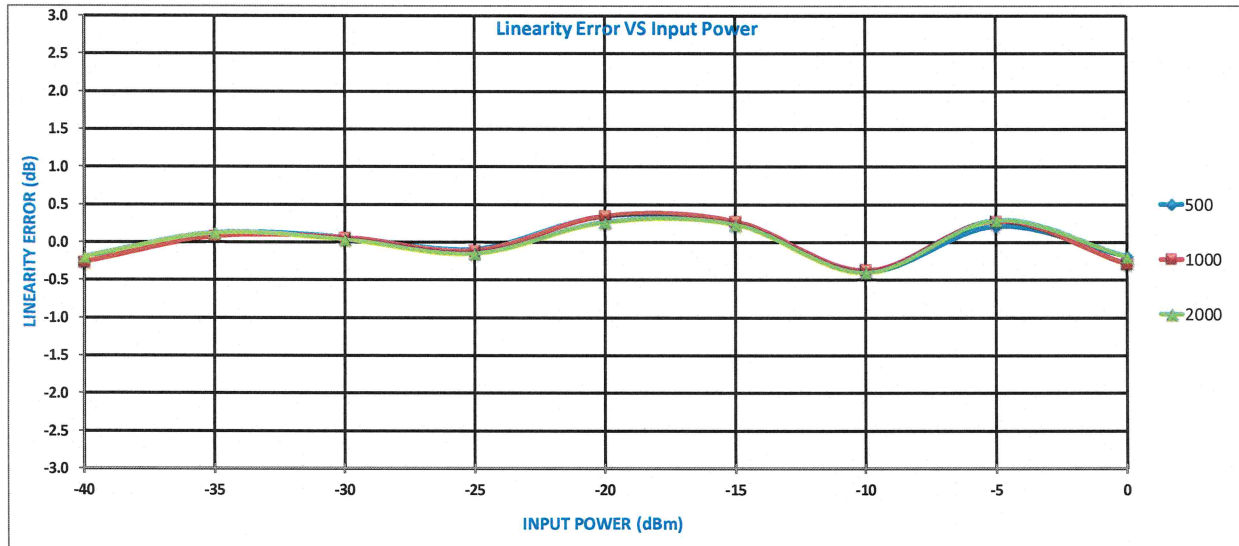


# SUMMARY TEST DATA ON HADA-D2001

PL47267/2504

## Log Linearity and Log Accuracy @ +25°C

LOG TRANSFER WITH FREQUENCY  
MODEL: HADA-D2001  
TESTED BY: Joshua Monley  
SERIAL NO: PL47267  
TEST TEMP: +25C



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**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

Log Linearity and Log Accuracy @ -40°C

LOG TRANSFER WITH FREQUENCY  
MODEL: HADA-D2001  
TESTED BY: Joshua Monley  
TEST DATE: 01/23/2025  
SERIAL NO: PL47267  
TEST TEMP: -40C

Graph #2

DC Offset= 0.013 V



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Frequency		
0.5 GHz	INTERCEPT (mV)	2268
	SLOPE (mV/dB)	49.4

1 GHz	INTERCEPT (mV)	2273
	SLOPE (mV/dB)	49.2

2 GHz	INTERCEPT (mV)	2268
	SLOPE (mV/dB)	49.4

Flatness +/- dB	
Max Video Output Volts	
Min Video Output Volts	

	-40	-35	-30	-25	-20	-15	-10	-5	0
	294	531	781	1028	1302	1546	1763	2040	2243
	0	-10	-6	-6	21	18	-11	19	-25
	0.00	-0.20	-0.13	-0.12	0.43	0.37	-0.23	0.38	-0.50
	-1.12	-1.38	-1.38	-1.44	-0.96	-1.08	-1.74	-1.20	-2.14
	304	539	790	1037	1310	1554	1772	2047	2243
	0	-11	-6	-5	22	20	-8	21	-30
	-0.01	-0.23	-0.13	-0.11	0.44	0.40	-0.17	0.42	-0.60
	-0.92	-1.22	-1.20	-1.26	-0.80	-0.92	-1.56	-1.06	-2.14
	295	530	780	1025	1298	1545	1763	2043	2242
	0	-9	-6	-5	23	18	-11	20	-26
	0.05	-0.19	-0.13	-0.17	0.36	0.36	-0.22	0.45	-0.52
	-1.10	-1.42	-1.40	-1.50	-1.02	-1.10	-1.74	-1.14	-2.15
	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00
	0.30	0.54	0.79	1.04	1.31	1.55	1.77	2.05	2.24
	0.29	0.53	0.78	1.03	1.30	1.55	1.76	2.04	2.24

RF Input Power (dBm)

Measured Value (mV)	Error(dB)	
Error (mV)	MAX	MIN
LINEARITY ERROR (dB)	0.43	-0.50
LOGGING ACCURACY (dB)	-0.96	-2.14

Measured Value (mV)	Error(dB)	
Error (mV)	MAX	MIN
LINEARITY ERROR (dB)	0.44	-0.60
LOGGING ACCURACY (dB)	-0.80	-2.14

Measured Value (mV)	Error(dB)	
Error (mV)	MAX	MIN
LINEARITY ERROR (dB)	0.45	-0.52
LOGGING ACCURACY (dB)	-1.04	-2.16

Logging Linearity vs Frequency	Error(dB)	
	MAX	MIN
TOTAL LOG LINEARITY (dB)	0.45	-0.60

Logging Accuracy vs Frequency	Error(dB)	
	MAX	MIN
TOTAL LOGGING ACCURACY (dB)	-0.80	-2.16

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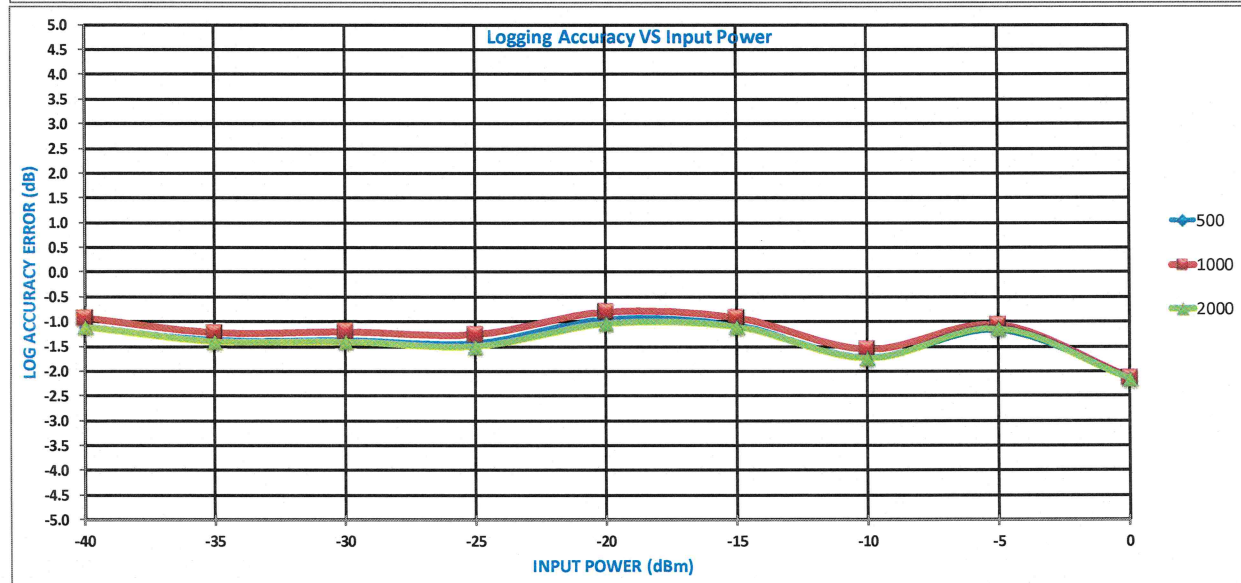
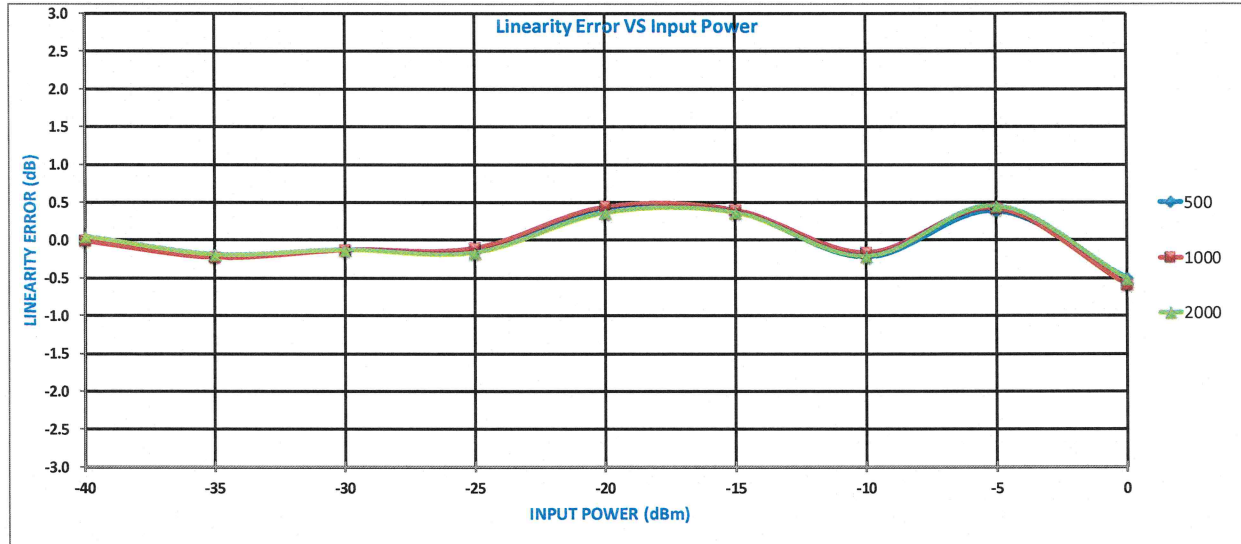


# SUMMARY TEST DATA ON HADA-D2001

PL47267/2504

## Log Linearity and Log Accuracy @ -40°C

LOG TRANSFER WITH FREQUENCY  
MODEL: HADA-D2001  
TESTED BY: Joshua Monley  
SERIAL NO: PL47267  
TEST TEMP: -40C



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**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

Log Linearity and Log Accuracy @ +85°C

LOG TRANSFER WITH FREQUENCY  
MODEL: HADA-D2001  
TESTED BY: Joshua Monley  
TEST DATE: 01/23/2025  
SERIAL NO: PL47267  
TEST TEMP: +85C

Graph #3

DC Offset= 0.057 V



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Frequency		
0.5 GHz	INTERCEPT (mV)	2306
	SLOPE (mV/dB)	50.9

1 GHz	INTERCEPT (mV)	2314
	SLOPE (mV/dB)	50.9

2 GHz	INTERCEPT (mV)	2309
	SLOPE (mV/dB)	51

Flatness +/- dB	
Max Video Output Volts	
Min Video Output Volts	

	-40	-35	-30	-25	-20	-15	-10	-5	0
	281	537	774	1016	1289	1542	1769	2052	2334
	11	13	-5	-19	1	-1	-28	0	28
	0.22	0.25	-0.10	-0.36	0.02	-0.01	-0.55	0.00	0.54
	-1.38	-1.26	-1.52	-1.70	-1.22	-1.16	-1.62	-0.96	-0.32
	289	544	783	1023	1298	1550	1778	2063	2337
	11	11	-4	-19	2	-1	-27	4	23
	0.21	0.22	-0.08	-0.37	0.04	-0.01	-0.53	0.07	0.46
	-1.22	-1.12	-1.34	-1.54	-1.04	-1.00	-1.44	-0.74	-0.26
	282	536	772	1013	1285	1541	1770	2058	2337
	13	13	7	10	1	7	29	1	26
	0.28	0.26	-0.12	-0.39	-0.06	-0.05	-0.56	0.08	0.55
	-1.26	-1.22	-1.56	-1.74	-1.31	-1.26	-1.60	-0.84	-0.26
	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00
	0.29	0.54	0.78	1.02	1.30	1.55	1.78	2.06	2.34
	0.28	0.54	0.77	1.01	1.29	1.54	1.77	2.05	2.33

RF Input Power (dBm)

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.54 -0.55
LOGGING ACCURACY (dB)	-0.32 -1.70

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.46 -0.53
LOGGING ACCURACY (dB)	-0.26 -1.54

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.55 -0.56 x
LOGGING ACCURACY (dB)	-0.26 -1.74

Logging Linearity vs Frequency	Error(dB)
	MAX MIN
TOTAL LOG LINEARITY (dB)	0.55 -0.56

Logging Accuracy vs Frequency	Error(dB)
	MAX MIN
TOTAL LOGGING ACCURACY (dB)	-0.26 -1.74

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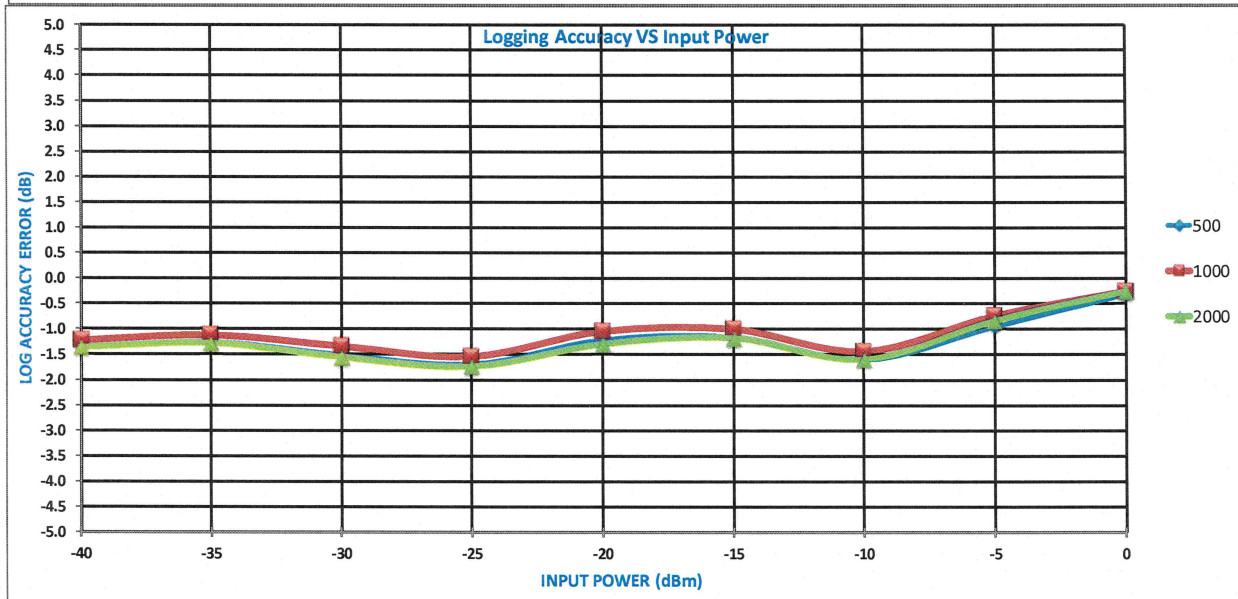
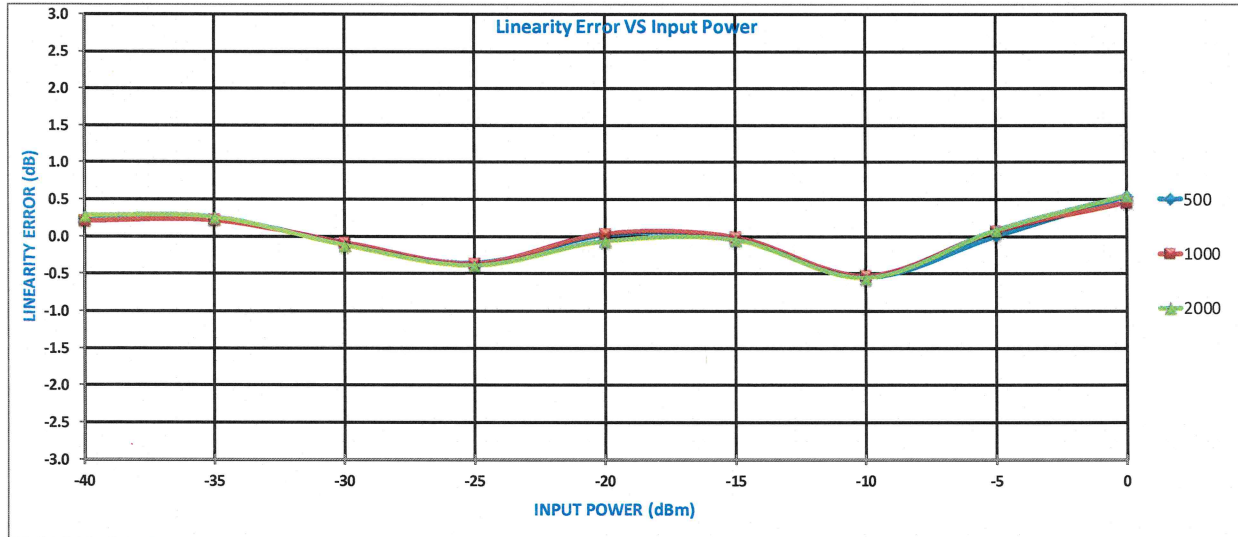


# SUMMARY TEST DATA ON HADA-D2001

PL47267/2504

Log Linearity and Log Accuracy @ +85°C

LOG TRANSFER WITH FREQUENCY  
MODEL: HADA-D2001  
TESTED BY: Joshua Monley  
SERIAL NO: PL47267  
TEST TEMP: +85C



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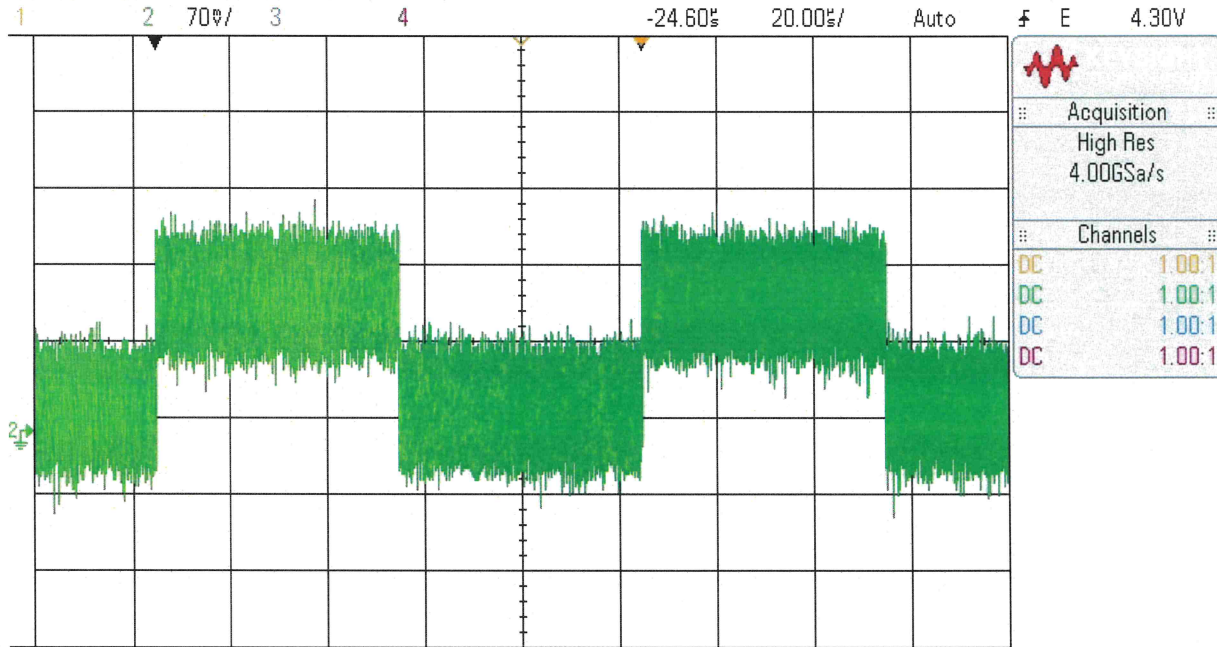


**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

TSS -44.1 dBm

MSO-X 3054A, MY53400180: Tue Jan 21 15:58:16 2025



Cursors Menu

Mode  
Off

To turn on cursors, press the [Cursors] key on the front panel.

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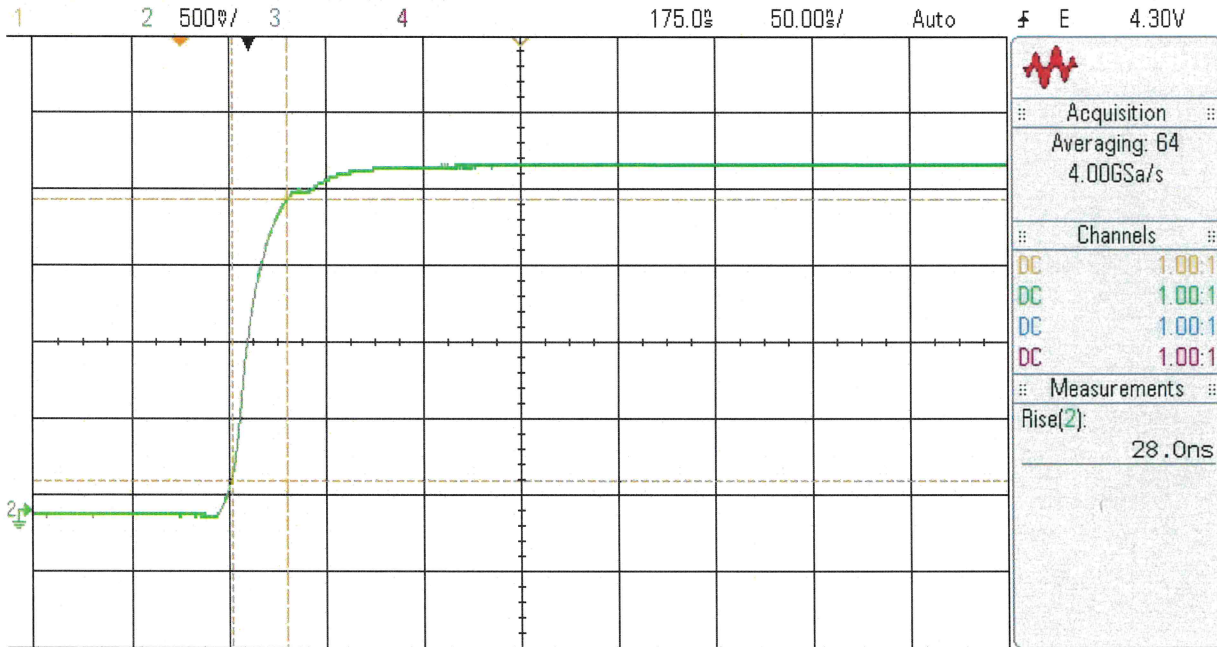


**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

Rise Time

MSO-X 3054A, MY53400180: Tue Jan 21 15:55:52 2025



Clear Measurements Menu

Clear Meas 1 Rise(2)	Clear Meas 2 <None>	Clear Meas 3 <None>	Clear Meas 4 <None>	Clear All
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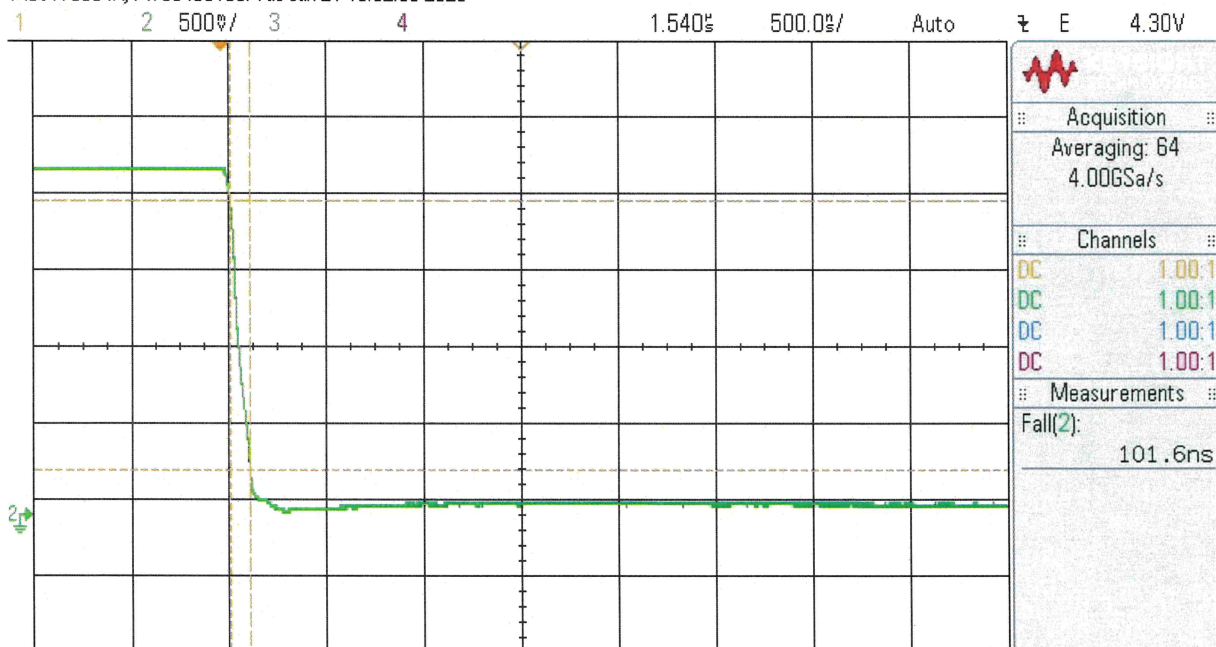


**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

Fall Time

MSO-X 3054A, MY53400180: Tue Jan 21 15:52:05 2025



Clear Measurements Menu

Clear Meas 1 Fall(2)	Clear Meas 2 <None>	Clear Meas 3 <None>	Clear Meas 4 <None>	Clear All
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**SUMMARY TEST DATA  
ON  
HADA-D2001**

PL47267/2504

VSWR

