




SUMMARY TEST DATA ON SDLVA-100M18G-CW-70-MAH-OPT0D16

Customer: _____
 SO No: _____
 Model No: SDLVA-100M18G-CW-70-MAH-OPT0D16
 Serial No: PL28129/2012

Tested By: Jim Hopson
 Temperature: +25°C
 Date: 3/20/2020
 Drawing No: 27437920 REV: A1

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	Test Results	QA QC
1	Frequency Range	100 MHz - 6 GHz	100 MHz - 6 GHz	<i>QB</i> 3/24/20  <i>QB</i> 3/24/20
2	Frequency Flatness	±2.0 dB Max.	1.20 dB	
3	TSS	-68 dBm Min., -70 dBm Typ..	-70 dBm	
4	Limited Output Power (Input Power > -65dBm)	+8 dBm ±3.0 dBm Max.	8.6 / 10.1 dBm	
5	VSWR	2.0:1 Max.	1.78:1	
6	Linear Output Gain	43 dB ±3.0 dB Max.	42.2 / 45.8 dB	
7	Linear Output Psat	+3 dBm ±3.0 dBm Max.	1.7 / 0.2 dBm	
8	V0 (Video Comparator Signal Amplitude)	3.3V Typ.	3.30 V	
9	Video Comparator External Threshold Level	Adjustable with Analog Voltage (2 Times V1)	PASS	
10	Video Comparator Delay	50 ns Typ.	< 50 ns	
11	Video Comparator Internal Threshold Level	-60 dBm ±3.0 dB Max.	1.5 dBm	
12	V1 (Log Video Signal Amplitude)	1 Volt Max.	0.816 V	
13	Log Slope	10 mV/dB into a 50 Ω load (±1 mV Max.)	10.5 / 10.7 mV/dB	
14	Log Range	-65 dBm to +5 dBm Min.	PASS	
15	Log Linearity	±1.75 dB Max. (-40°C to +85°C)	1.2 dB typ	
16	Pulse Range	100 ns to 250 μs	100 ns to 250 μs	
17	Rise Time	35 ns Max.	18.3 ns	
18	Settling Time to ±1 dB	50 ns Typ.	< 50 ns	
19	Recovery Time	350 ns Max.	< 300 ns TYP	
20	CW Immunity Range	TSS to -45 dBm	<1.0	



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21	Pulse Considered CW	1 ms Typ.	1 ms	03 3/24/20
22	Rejection Time	1 ms Typ.	1 ms	↓
23	Droop	1 dB Max.	<1.0 dB	
24	SPST Isolation	70 dB Typ.	>70 dB	
25	SPST Switch Speed	20 ns Typ.	<20 ns	
26	Power Supply	±12 VDC to ±15 VDC	+ VDC at 270 mA - VDC at 110 mA	03 3/24/20

QA/QC Approval: Arthur Zimmerman Date: 3/24/2020



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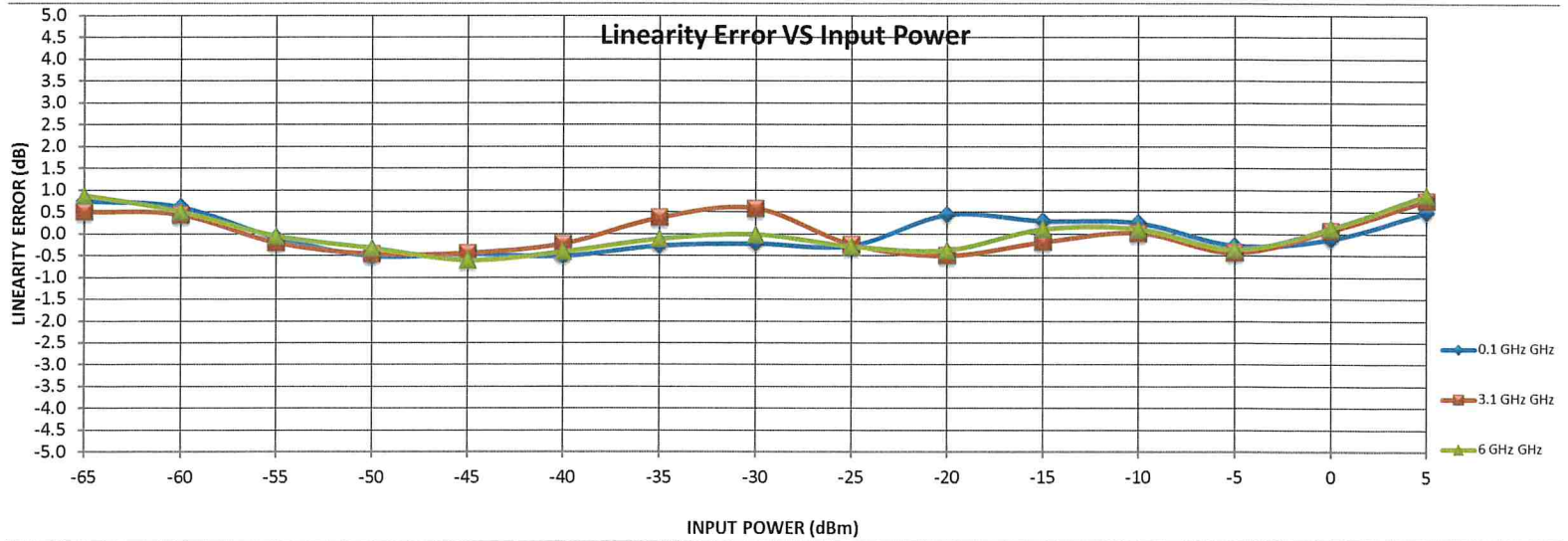
LOGGING LINEARITY

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-100M18G-CW-70-MAH-OPT0D16
 TESTED BY: Jim Hopson
 TEST DATE: 03/20/20
 SERIAL NO: PL28129
 TEST TEMP: 25C



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Pkwy Ste 1
 El Dorado Hills, CA 95762
 Phone: (916)542-1401 Fax: (301)662-1731
 EMAIL: SALES@PMI-RF.COM

Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
0.1 GHz	INTERCEPT (mV)	757																Measured Value (mV)
	SLOPE (mV/dB)	10.7																Error (mV)
			70	122	168	217	271	324	380	434	487	548	600	653	701	756	816	LINEARITY ERROR (dB)
3.1 GHz	INTERCEPT (mV)	745																Measured Value (mV)
	SLOPE (mV/dB)	10.5																Error (mV)
			65	117	163	213	266	321	380	435	479	529	585	640	688	746	806	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	739																Measured Value (mV)
	SLOPE (mV/dB)	10.6																Error (mV)
			60	109	156	206	256	311	367	421	471	523	581	634	682	740	801	LINEARITY ERROR (dB)
Flatness +/-dB		0.5	0.6	0.6	0.5	0.7	0.6	0.6	0.7	0.8	1.2	0.9	0.9	0.9	0.8	0.7		



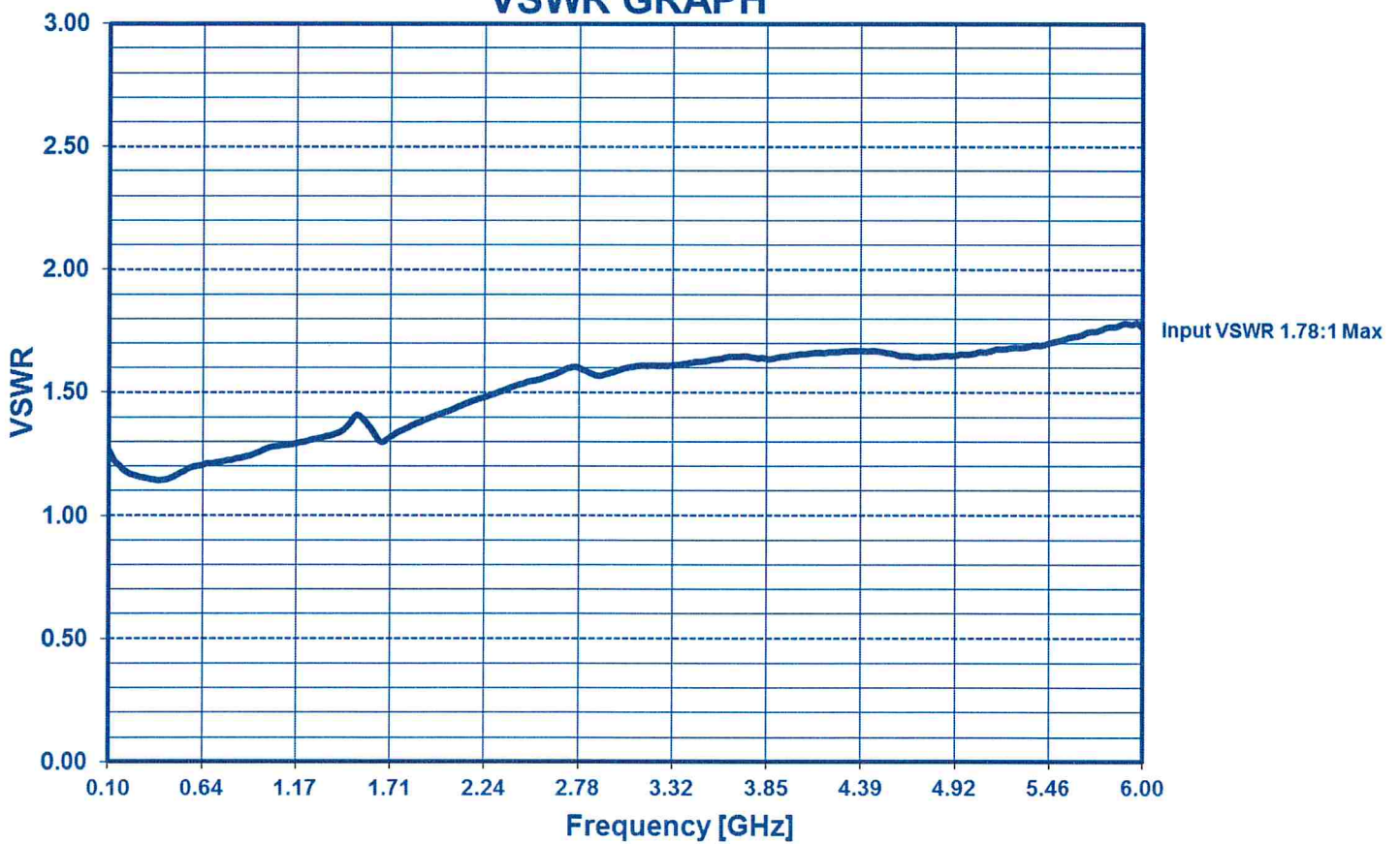


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VSWR

VSWR GRAPH

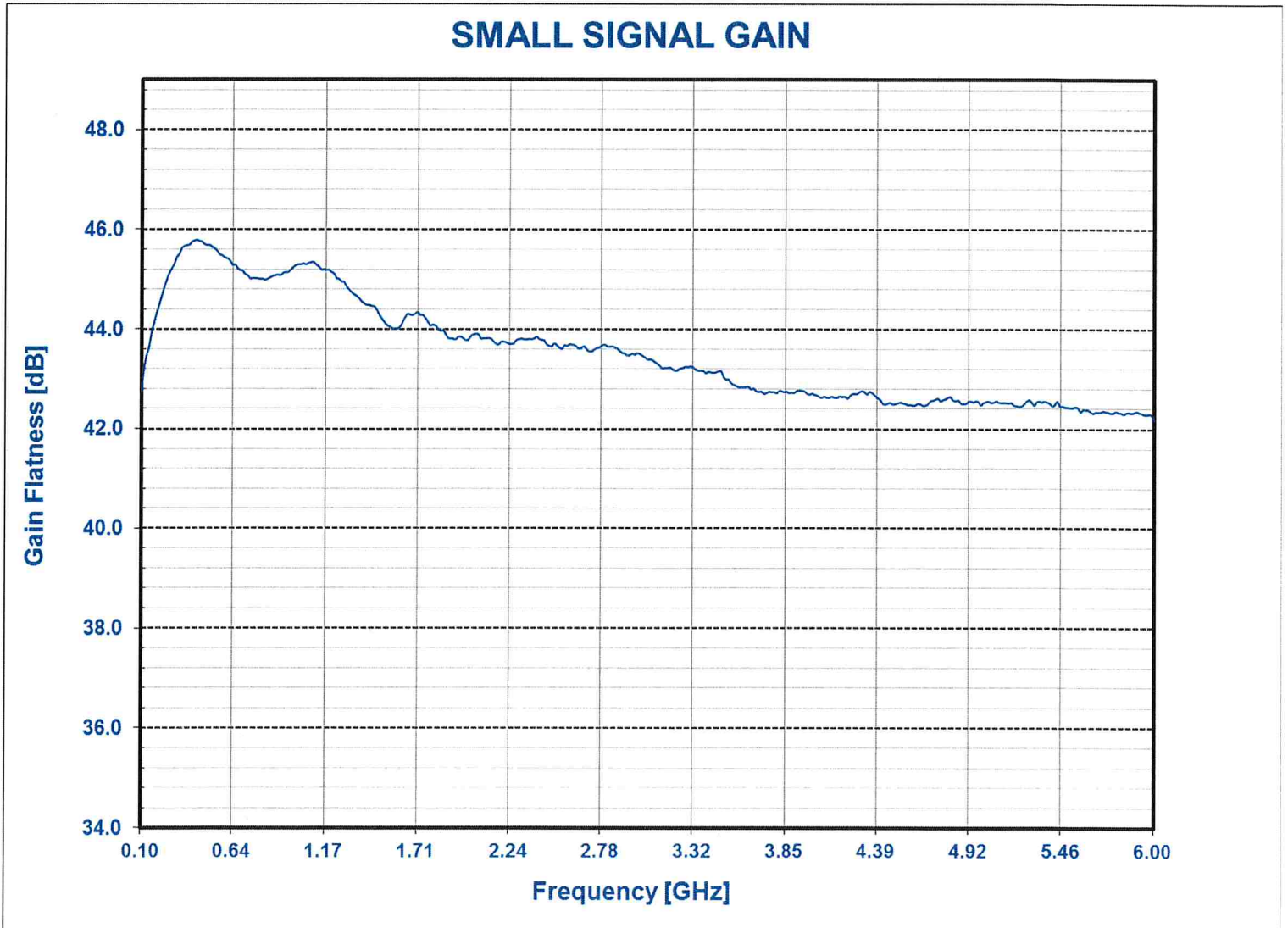




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SMALL SIGNAL GAIN

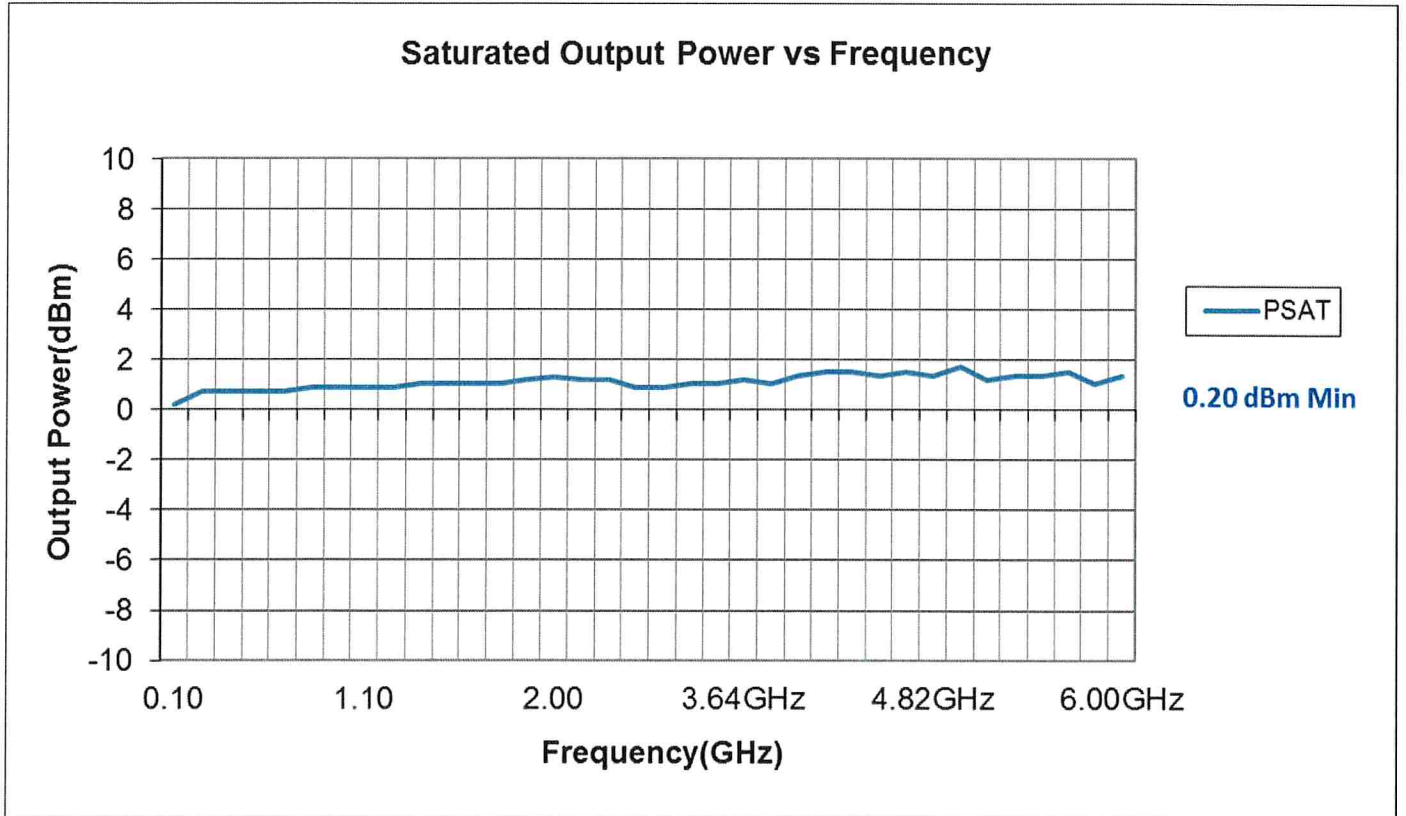




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LINEAR PORT PSAT

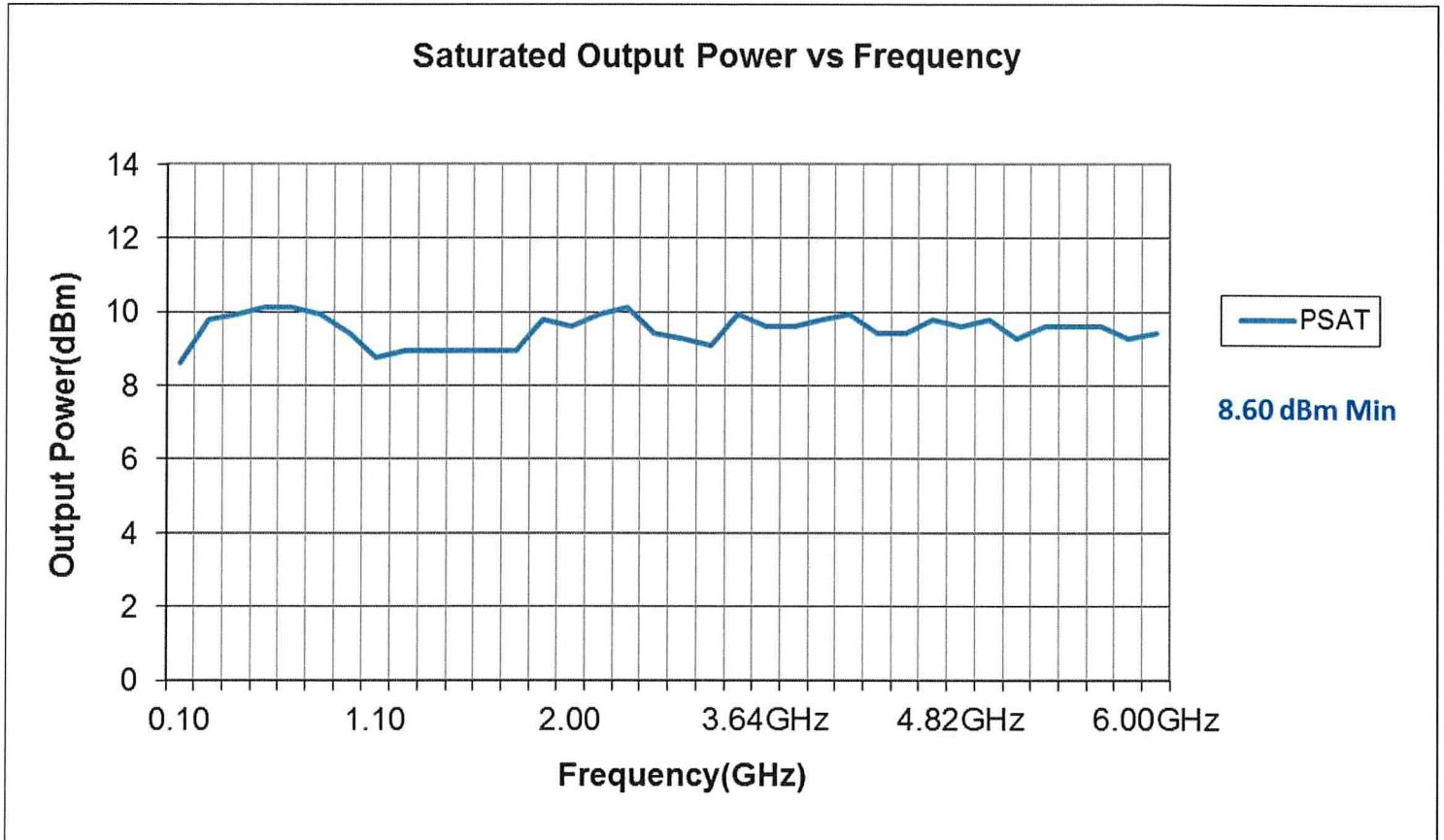




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LIMITED OUTPUT PORT POWER

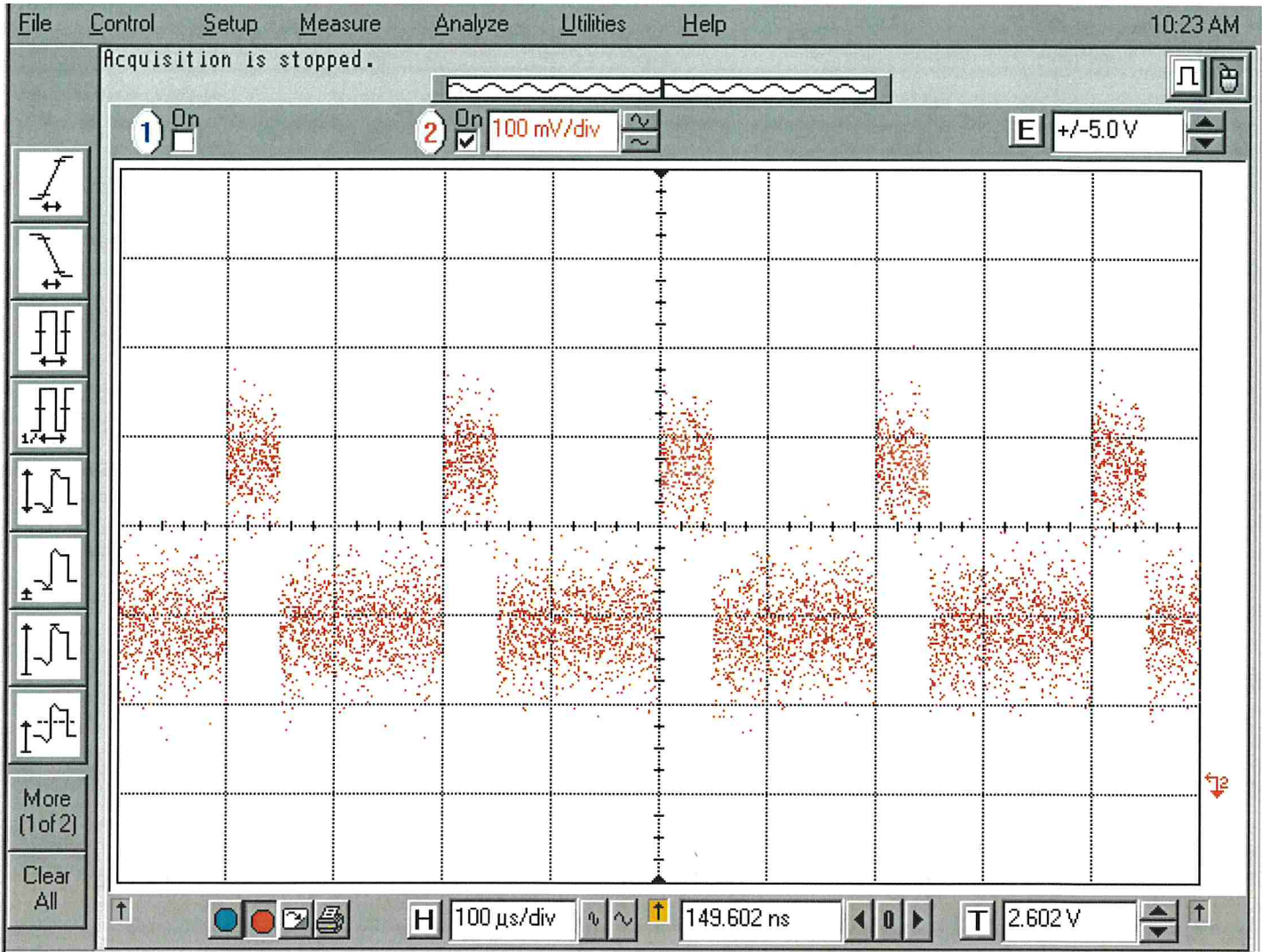




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VIDEO OUTPUT TSS -68.0 dBm

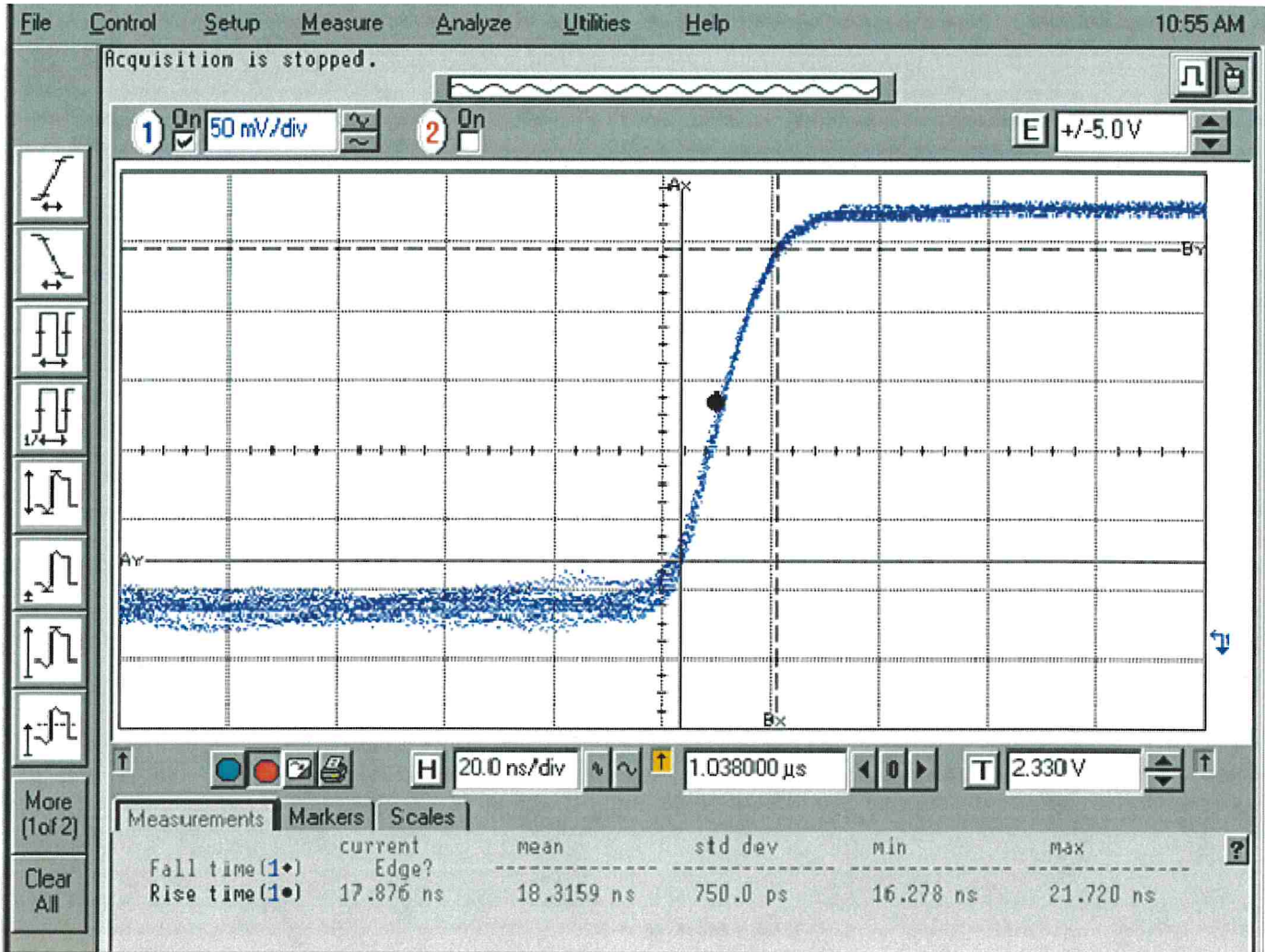




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VIDEO OUTPUT RISE TIME 18.3 ns

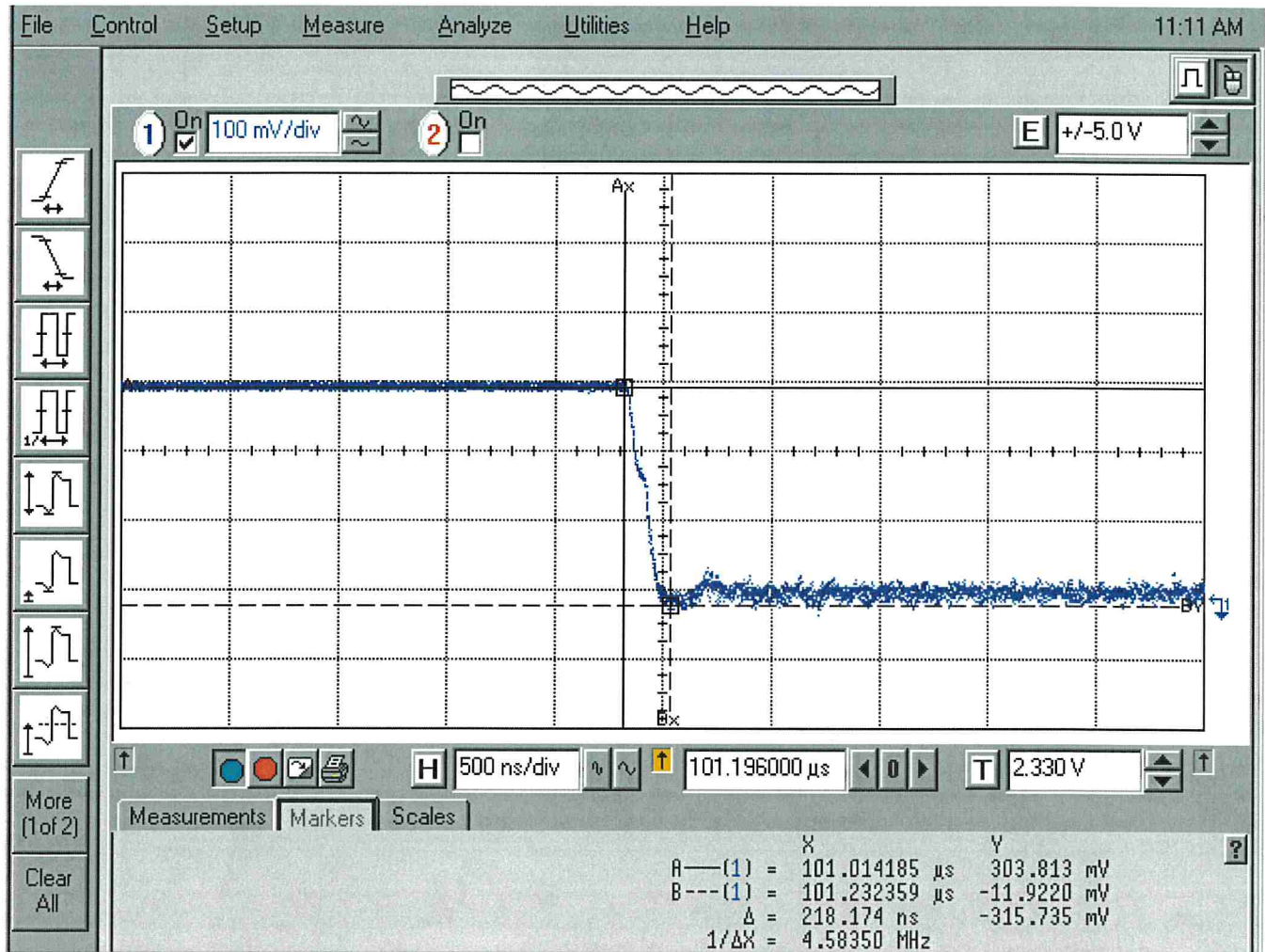




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VIDEO OUTPUT RECOVERY TIME @-40dBm 218 ns





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VIDEO OUTPUT RECOVERY TIME @-10dBm 300 ns

