***** Step Lock Test from 2000 MHz to 8000 MHz ir MHz Steps *****

Serial Number: 0015
Model Number: MLSP-2080BDG
Time: 3:40:18 PM
Date: 12/13/2011
mum Frequency: 2000 MHz
ximum Frequency: 8000 MHz
Temperature: +29.8C Deg. C
NOVO State: Locked
Power Supply Spec: +5.0 VDC +/- 0.25 V @ < 300 mA
Power Supply Spec: +15.0 VDC +/- 0.50 V @ < 1100 mA

Total Frequency Errors: 0

Finish Time: 3:41:07 PM

Begin Random Step Lock Test from 2000 MHz to 8000 MHz (1000 Frequencies)

Total Ramdom Frequency Errors: 0

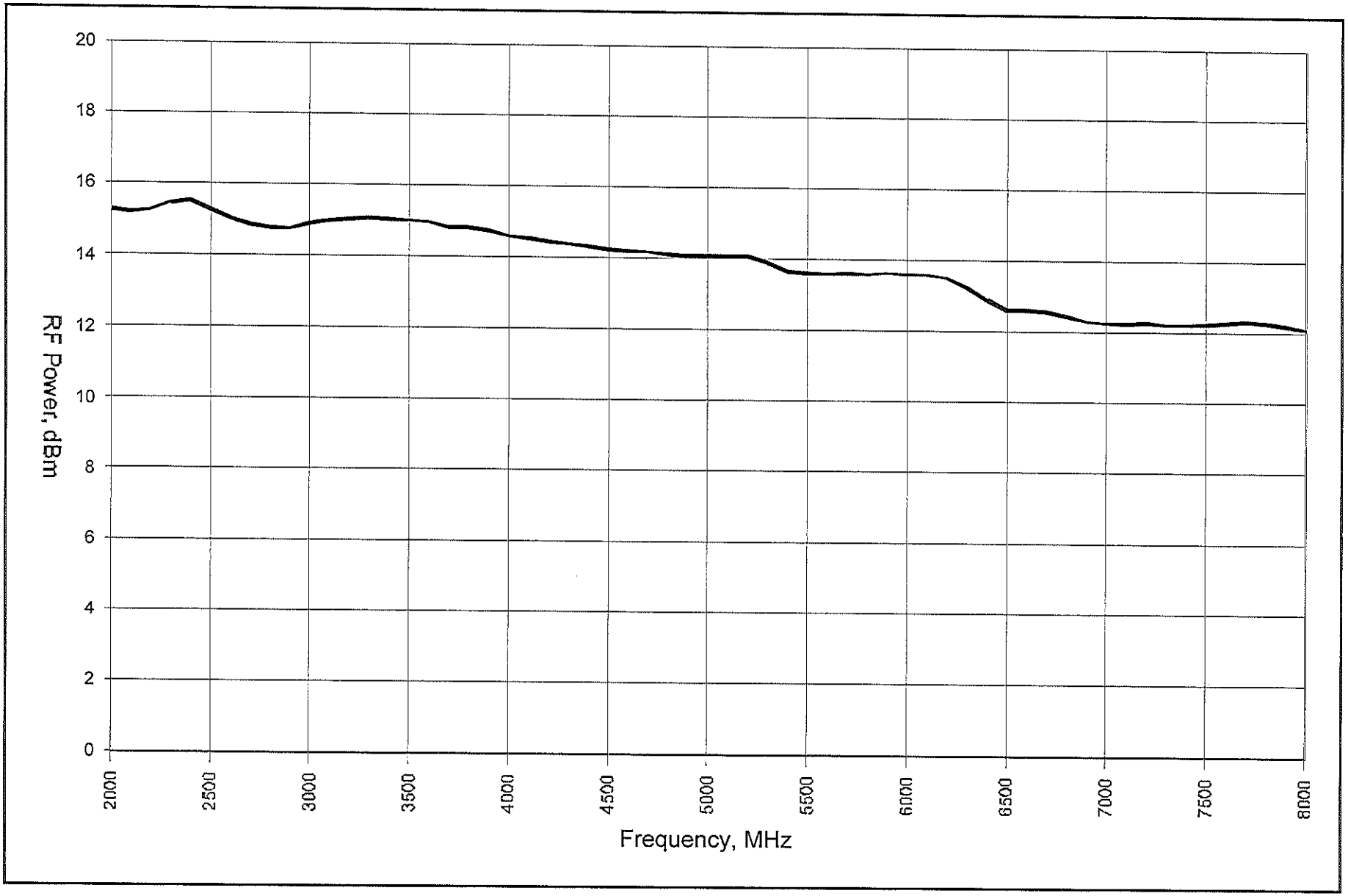
Finish Time: 3:42:29 PM

+5.0 VDC Voltage = 5.001V Pass
+5.0 VDC Current = 273mA Pass
+15.0 VDC Voltage = 14.996V Pass
+15.0 VDC Current = 987mA Pass

Pass

Model #: MLSP-2[illegible]BDG Serial #: 0015 Min Power: 10 dBm Max Power: 16 dBm [illegible]mp. : +31.0C Deg. C Date: 12-14-2011 Time: 10:38:27 Sta : Pass

Maximum RF Output Power vs. Frequency

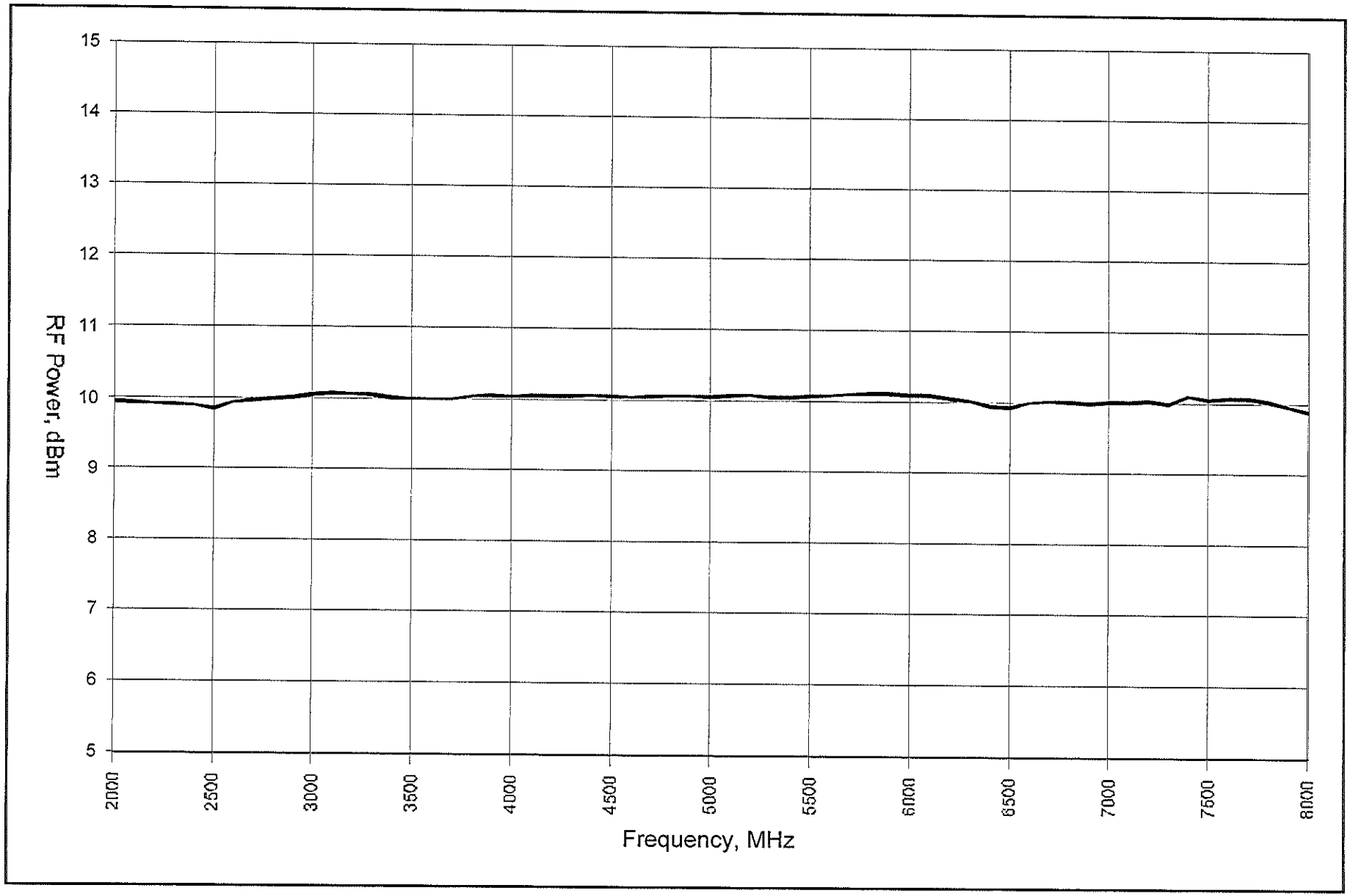


Print

Max Leveled Pwr: +10.0 dBm Min Leveled Pwr: -10.0 dBm Leveled Pwr Set: Max dBm Level Flatness Spec: +/-1.0 dB

Model #: MLSP-2[illegible]BDG Serial #: 0015 Min Power: 10 dBm Max Power: 16 dBm [illegible]emp. : +31.9C Deg. C Date: 12-14-2011 Time: 10:38:59 Sta[illegible] : Pass

Maximum RF Output Power vs. Frequency

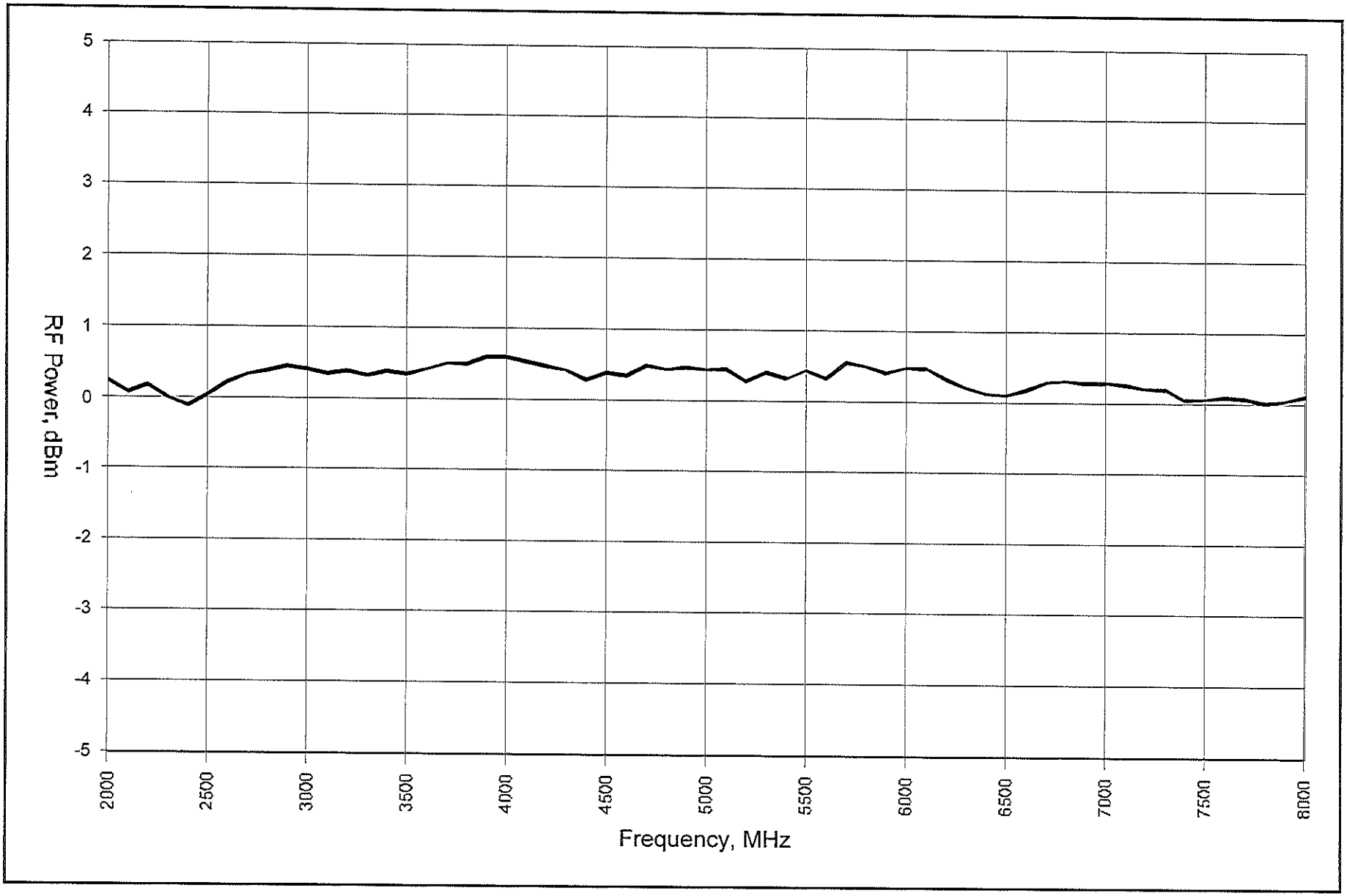


Print

Max Leveled Pwr: +10.0 dBm Min Leveled Pwr: -10.0 dBm Leveled Pwr Set: 10.0 dBm Level Flatness Spec: +/-1.0 dB

Model #: MLSP-2( )G Serial #: 0015 Min Power: 10 dBm Max Power: 16 dBm np. : +35.1C Deg. C Date: 12-14-2011 Time: 10:46:59 Stat Pass

Maximum RF Output Power vs. Frequency

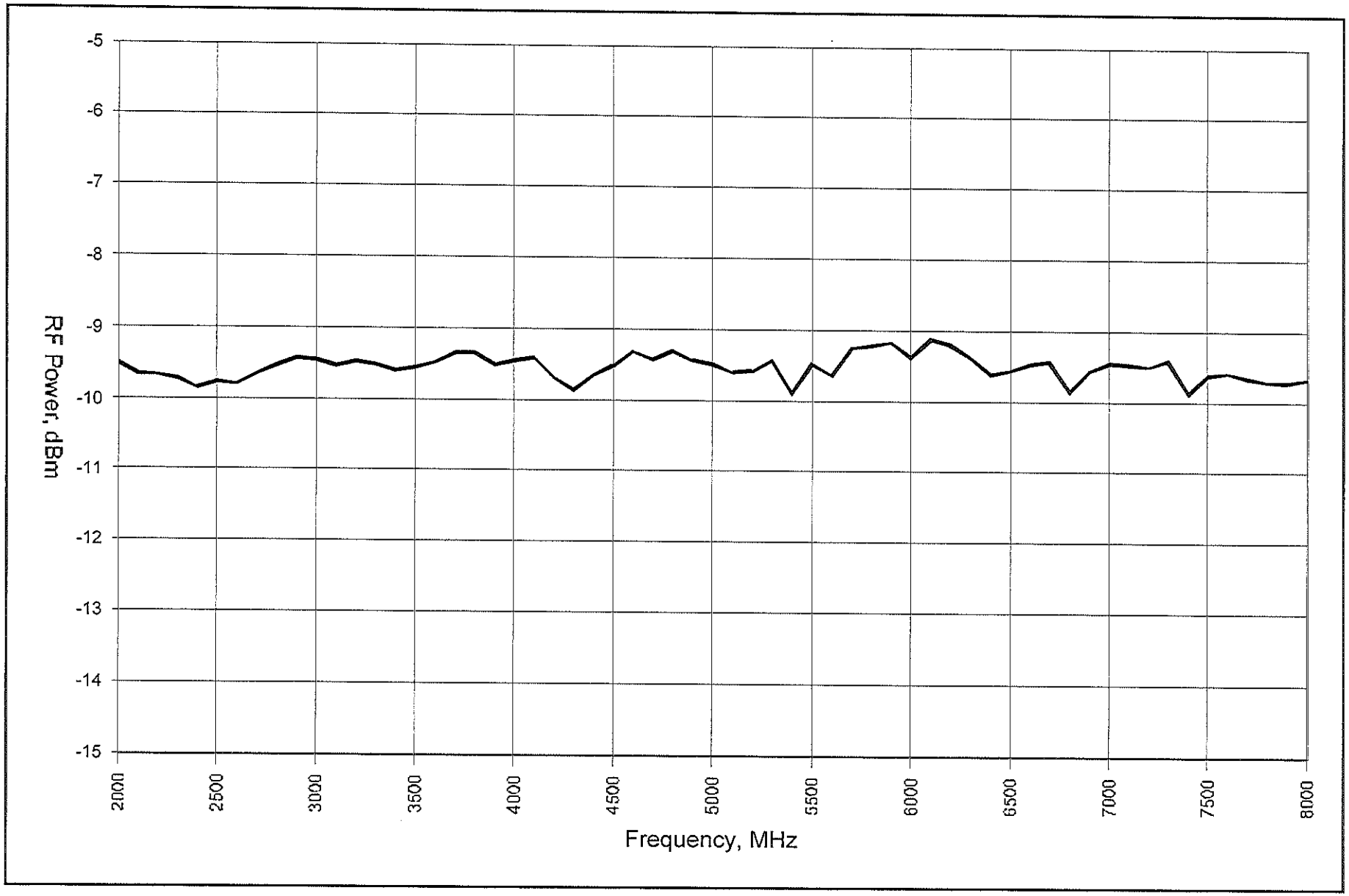


Print

Max Leveled Pwr: +10.0 dBm Min Leveled Pwr: -10.0 dBm Leveled Pwr Set: 0.0 dBm Level Flatness Spec: +/-1.0 dB

Model #: MLSP-2[illegible]DG Serial #: 0015 Min Power: 10 dBm Max Power: 16 dBm mp. : +35.2C Deg. C Date: 12-14-2011 Time: 10:47:40 Stat Pass

Maximum RF Output Power vs. Frequency



Print

Max Leveled Pwr: +10.0 dBm Min Leveled Pwr: -10.0 dBm Leveled Pwr Set: -10.0 dBm Level Flatness Spec: +/-1.0 dB

***** Harmonic Test from 2000.000000 MHz to 8000.000000 MHz in 100 MHz Steps *****

Model Number: MLSP-2080BDG
Serial Number: 0015
Time: 2:48:33 PM
Date: 11/3/2011
Minimum Frequency: 2000.000000 MHz
Maximum Frequency: 8000.000000 MHz
Current Unit Temperature: +32.0C Deg. C
Harmonic Spec Level (In Band): -12.0 dBc

Frequency	Level	Harm #	Status
2000 MHz	-15 dBc	3	PASS
2100 MHz	-15 dBc	3	PASS
2200 MHz	-16 dBc	3	PASS
2300 MHz	-14 dBc	2	PASS
2400 MHz	-14 dBc	2	PASS
2500 MHz	-16 dBc	3	PASS
2600 MHz	-15 dBc	3	PASS
2700 MHz	-15 dBc	3	PASS
2800 MHz	-15 dBc	3	PASS
2900 MHz	-15 dBc	3	PASS
3000 MHz	-15 dBc	3	PASS
3100 MHz	-16 dBc	3	PASS
3200 MHz	-17 dBc	3	PASS
3300 MHz	-17 dBc	2	PASS
3400 MHz	-17 dBc	2	PASS
3500 MHz	-15 dBc	2	PASS
3600 MHz	-15 dBc	2	PASS
3700 MHz	-15 dBc	2	PASS
3800 MHz	-15 dBc	2	PASS
3900 MHz	-16 dBc	2	PASS
4000 MHz	-16 dBc	2	PASS
4100 MHz	-16 dBc	2	PASS
4200 MHz	-17 dBc	2	PASS
4300 MHz	-17 dBc	2	PASS
4400 MHz	-18 dBc	2	PASS
4500 MHz	-18 dBc	2	PASS
4600 MHz	-19 dBc	2	PASS
4700 MHz	-19 dBc	2	PASS
[illegible] MHz	-18 dBc	3	PASS
4900 MHz	-17 dBc	3	PASS
5000 MHz	-17 dBc	3	PASS
5100 MHz	-17 dBc	2	PASS
5200 MHz	-17 dBc	2	PASS
5300 MHz	-18 dBc	2	PASS
5400 MHz	-18 dBc	3	PASS
5500 MHz	-17 dBc	3	PASS
5600 MHz	-18 dBc	3	PASS
5700 MHz	-20 dBc	2	PASS
5800 MHz	-20 dBc	2	PASS
5900 MHz	-19 dBc	2	PASS
6000 MHz	-18 dBc	2	PASS
6100 MHz	-17 dBc	2	PASS
6200 MHz	-17 dBc	2	PASS
6300 MHz	-17 dBc	2	PASS
6400 MHz	-21 dBc	2	PASS
6500 MHz	-23 dBc	3	PASS
6600 MHz	-22 dBc	3	PASS
6700 MHz	-23 dBc	3	PASS
6800 MHz	-22 dBc	3	PASS
6900 MHz	-20 dBc	3	PASS
7000 MHz	-21 dBc	3	PASS
7100 MHz	-22 dBc	3	PASS
7200 MHz	-23 dBc	3	PASS
7300 MHz	-25 dBc	3	PASS
7400 MHz	-26 dBc	3	PASS
7500 MHz	-27 dBc	3	PASS
7600 MHz	-27 dBc	3	PASS
7700 MHz	-28 dBc	3	PASS
7800 MHz	-27 dBc	3	PASS
7900 MHz	-29 dBc	3	PASS
8000 MHz	-27 dBc	3	PASS

Number of Failures: 0

Finish Time: 2:57:33 PM

Harmonic Readings complete

Pass

***** Random Spur Test from 2000 MHz to 8000 MH **

Serial Number: 0015
Model Number: MLSP-2080BDG
Time: 1:30:18 PM
D[illegible]: 11/4/2011
[illegible]ium Frequency: 2000 MHz
Maximum Frequency: 8000 MHz
Analyzer Frequency Span Tested: 2 kHz to 2000 MHz
Spur Level Spec: -60.0 dBc
Number of Frequencies Tested: 50
Temperature: +31.5C Deg. C
NOVO State: UnLocked

Frequency Tested = 5138.562 MHz
Frequency Tested = 7053.498 MHz
Frequency Tested = 5038.805 MHz
Frequency Tested = 3671.002 MHz
Frequency Tested = 7959.745 MHz
Frequency Tested = 4748.63 MHz
Frequency Tested = 6678.91 MHz
Frequency Tested = 3290.539 MHz
Frequency Tested = 6332.211 MHz
Frequency Tested = 2178.97 MHz
Frequency Tested = 6953.209 MHz
Frequency Tested = 4075.118 MHz
Frequency Tested = 6617.647 MHz
Frequency Tested = 7615.672 MHz
Frequency Tested = 4613.448 MHz
Frequency Tested = 6885.936 MHz
Frequency Tested = 2600.692 MHz
Frequency Tested = 5233.498 MHz
Frequency Tested = 4277.858 MHz
Frequency Tested = 2184.814 MHz
Frequency Tested = 4621.204 MHz
Frequency Tested = 7531.661 MHz
Frequency Tested = 6309.507 MHz
Frequency Tested = 4911.527 MHz
F[illegible]uency Tested = 6198.734 MHz
[illegible]iency Tested = 6849.401 MHz
Frequency Tested = 7331.734 MHz
Frequency Tested = 3354.437 MHz
Frequency Tested = 2828.134 MHz
Frequency Tested = 2536.676 MHz
Frequency Tested = 5471.423 MHz
Frequency Tested = 7065.003 MHz
Frequency Tested = 4914.369 MHz
Frequency Tested = 5372.412 MHz
Frequency Tested = 6266.515 MHz
Frequency Tested = 7242.99 MHz
Frequency Tested = 5528.123 MHz
Frequency Tested = 2319.617 MHz
Frequency Tested = 2573.241 MHz
Frequency Tested = 6844.945 MHz
Frequency Tested = 6322.562 MHz
Frequency Tested = 2074.044 MHz
Frequency Tested = 3284.228 MHz
Frequency Tested = 3872.306 MHz
Frequency Tested = 3602.004 MHz
Frequency Tested = 3192.583 MHz
Frequency Tested = 3115.544 MHz
Frequency Tested = 3745.348 MHz
Frequency Tested = 4664.234 MHz
Frequency Tested = 7996.024 MHz

Total Spur Errors: 0

Finish Time: 2:49:12 PM
Pass

***** Phase Noise Test from 2000 MHz to 8000 MH: `00 MHz Steps *****

Model Number: MLSP-2080BDG
Serial Number: 0015
Time: 10:56:34 AM
D.'e: 11/29/2011
(num Frequency: 2000 MHz
Maximum Frequency: 8000 MHz
Number of Frequencies Tested: 11
Current Unit Temperature: +38.3C Deg. C

Phase Noise Spec @ Offset:
@ 100 Hz = -79.0 dBc/Hz
@ 1.0 kHz = -95.0 dBc/Hz
@ 10.0 kHz = -95.0 dBc/Hz
@ 100 Hz = -117.0 dBc/Hz
@ 1.0 MHz = -140.0 dBc/Hz
@ 10.0 MHz = -150 dBc/Hz

Measured:

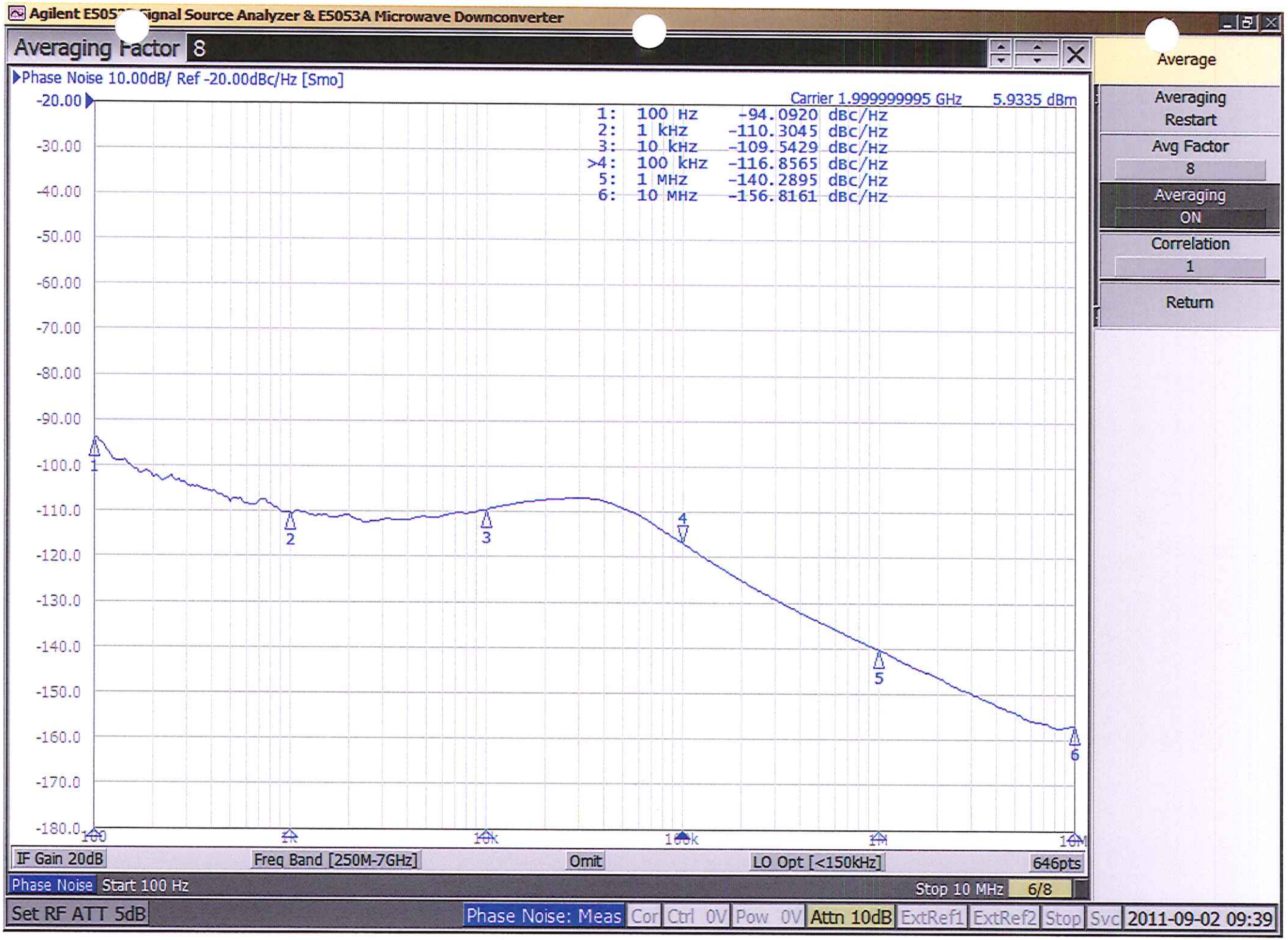
Frequency	100 Hz	1 kHz	10 kHz	100 kHz	1 MHz	10 MHz	Status	RF Power
2000.000	-95.0	-106.6	-108.3	-118.6	-142.8	-158.5	Pass	5.85 dBm
2600.000	-92.1	-105.0	-106.9	-121.4	-145.7	-154.7	Pass	5.73 dBm
3200.000	-90.7	-103.5	-106.3	-123.5	-147.9	-164.1	Pass	5.77 dBm
3800.000	-87.3	-101.9	-104.7	-124.3	-148.5	-166.1	Pass	5.62 dBm
4400.000	-88.1	-100.8	-102.5	-123.8	-148.7	-164.5	Pass	5.04 dBm
5000.000	-84.3	-99.1	-101.5	-124.1	-148.7	-165.1	Pass	5.10 dBm
5600.000	-83.5	-98.4	-100.2	-124.0	-148.2	-164.9	Pass	5.01 dBm
6200.000	-83.1	-97.6	-99.6	-124.4	-148.5	-164.9	Pass	4.42 dBm
6800.000	-84.0	-96.6	-98.5	-124.0	-147.8	-164.7	Pass	4.43 dBm
7400.000	-84.5	-96.2	-97.4	-123.3	-147.4	-165.6	Pass	4.16 dBm
8000.000	-82.3	-95.6	-96.6	-123.1	-147.0	-166.5	Pass	3.71 dBm

Number of Failures: 0

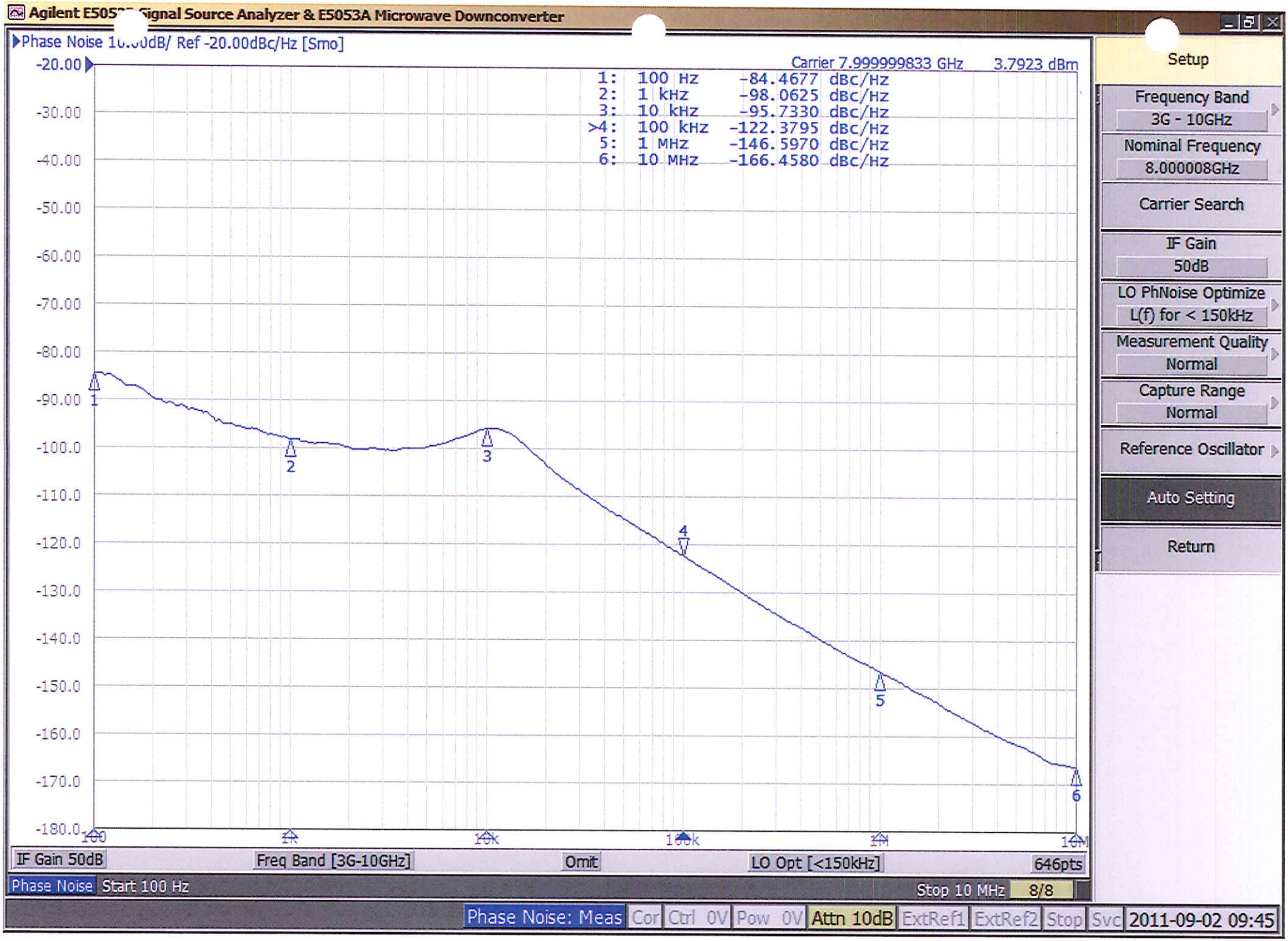
Finish Time: 11:00:33 AM

P' `se Noise Readings Complete

Pass


Agilent E5053A Signal Source Analyzer & E5053A Microwave Downconverter
Averaging Factor 8
Phase Noise 10.00dB/ Ref -20.00dBc/Hz [Smo]
Carrier 1.999999995 GHz 5.9335 dBm
1: 100 Hz -94.0920 dBc/Hz
2: 1 kHz -110.3045 dBc/Hz
3: 10 kHz -109.5429 dBc/Hz
>4: 100 kHz -116.8565 dBc/Hz
5: 1 MHz -140.2895 dBc/Hz
6: 10 MHz -156.8161 dBc/Hz
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
-110.0
-120.0
-130.0
-140.0
-150.0
-160.0
-170.0
-180.0
IF Gain 20dB
Freq Band [250M-7GHz]
Omit
LO Opt [<150kHz]
646pts
Phase Noise Start 100 Hz
Stop 10 MHz 6/8
Set RF ATT 5dB
Phase Noise: Meas
Cor
Ctrl 0V
Pow 0V
Attn 10dB
ExtRef1
ExtRef2
Stop
Svc
2011-09-02 09:39
Average
Averaging Restart
Avg Factor 8
Averaging ON
Correlation 1
Return

Agilent E5053A Signal Source Analyzer & E5053A Microwave Downconverter
Phase Noise 10.00dB/ Ref -20.00dBc/Hz [Smo]
Carrier 4.999999830 GHz 4.9993 dBm
1: 100 Hz -87.5999 dBc/Hz
2: 1 kHz -102.0716 dBc/Hz
3: 10 kHz -103.0746 dBc/Hz
>4: 100 kHz -124.1397 dBc/Hz
5: 1 MHz -148.4443 dBc/Hz
6: 10 MHz -165.3581 dBc/Hz
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
-110.0
-120.0
-130.0
-140.0
-150.0
-160.0
-170.0
-180.0
IF Gain 40dB
Freq Band [3G-10GHz]
Omit
LO Opt [<150kHz]
646pts
Phase Noise Start 100 Hz
Stop 10 MHz
8/8
Setup
Frequency Band
3G - 10GHz
Nominal Frequency
5.000008GHz
Carrier Search
IF Gain
40dB
LO PhNoise Optimize
L(f) for < 150kHz
Measurement Quality
Normal
Capture Range
Normal
Reference Oscillator
Auto Setting
Return
Phase Noise: Meas
Cor
Ctrl 0V
Pow 0V
Attn 10dB
ExtRef1
ExtRef2
Stop
Svc
2011-09-02 09:42


Agilent E5053A Signal Source Analyzer & E5053A Microwave Downconverter
Phase Noise 10.00dB/ Ref -20.00dBc/Hz [Smo]
Carrier 7.999999833 GHz 3.7923 dBm
1: 100 Hz -84.4677 dBc/Hz
2: 1 kHz -98.0625 dBc/Hz
3: 10 kHz -95.7330 dBc/Hz
>4: 100 kHz -122.3795 dBc/Hz
5: 1 MHz -146.5970 dBc/Hz
6: 10 MHz -166.4580 dBc/Hz
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
-100.0
-110.0
-120.0
-130.0
-140.0
-150.0
-160.0
-170.0
-180.0
100
1k
10k
100k
1M
10M
IF Gain 50dB
Freq Band [3G-10GHz]
Omit
LO Opt [<150kHz]
646pts
Phase Noise Start 100 Hz
Stop 10 MHz
8/8
Setup
Frequency Band
3G - 10GHz
Nominal Frequency
8.000008GHz
Carrier Search
IF Gain
50dB
LO PhNoise Optimize
L(f) for < 150kHz
Measurement Quality
Normal
Capture Range
Normal
Reference Oscillator
Auto Setting
Return
Phase Noise: Meas
Cor
Ctrl 0V
Pow 0V
Attn 10dB
ExtRef1
ExtRef2
Stop
Svc
2011-09-02 09:45