



## 1.1 PEAK POWER MEASUREMENT OF ACCESS POINT

### LIMIT

The maximum peak output power of the intentional radiator shall not exceed the following:

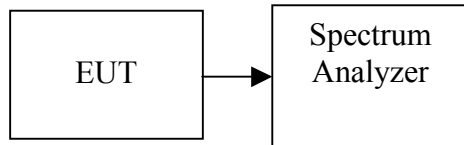
1. For systems using digital modulation in the bands of 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz: 1 watt.
2. Except as shown in paragraphs (b)(3) (i), (ii) and (iii) of this section, if transmitting antennas of directional gain greater than 6 dBi are used the peak output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1) or (b)(2) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

### MEASUREMENT EQUIPMENT USED

Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due
Spectrum Analyzer	Agilent	E4446A	MY43360131	01/10/2005
Spectrum Analyzer	R&S	FSP30	100112	08/03/2005

*Remark: Each piece of equipment is scheduled for calibration once a year.*

### Test Configuration



### TEST PROCEDURE

The transmitter output is connected to the Spectrum analyzer. The Spectrum analyzer is set to the peak power detection.



### TEST RESULTS

No non-compliance noted

#### Test Plot

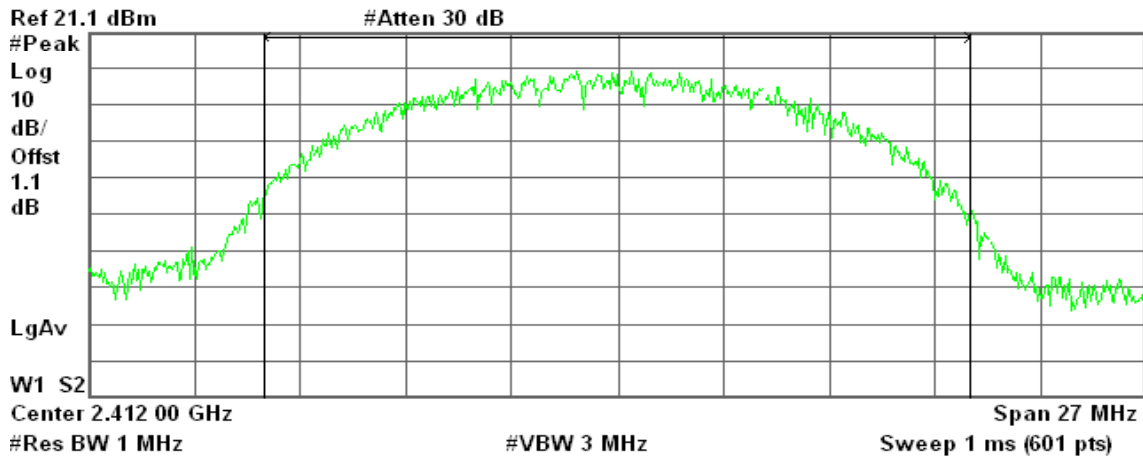
**The output power measured from Access Point's antenna connector**

#### IEEE 802.11b mode

#### Peak power (CH Low)

Agilent 17:39:39 Nov 17, 2004

T



Channel Power

15.80 dBm / 18.0000 MHz

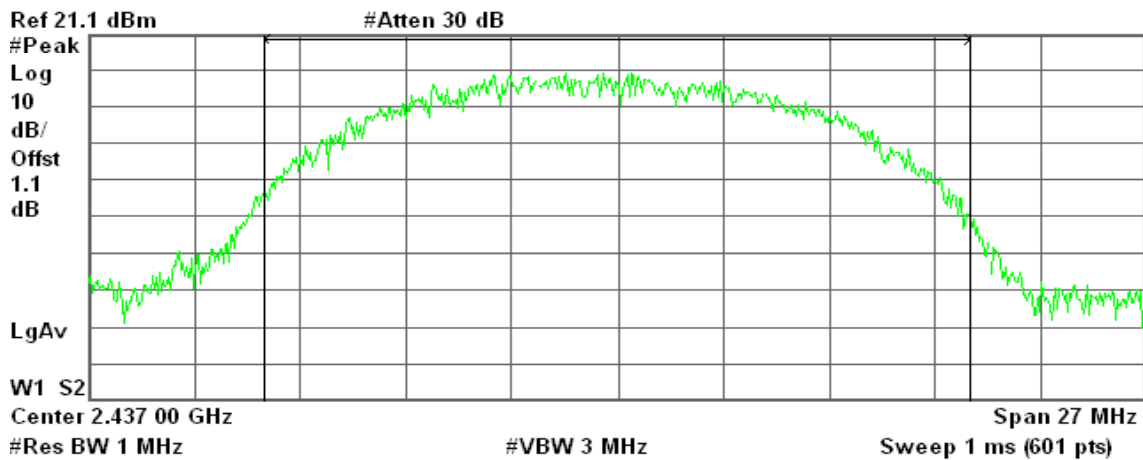
Power Spectral Density

-56.76 dBm/Hz

#### Peak power (CH Mid)

Agilent 17:37:53 Nov 17, 2004

T



Channel Power

16.10 dBm / 18.0000 MHz

Power Spectral Density

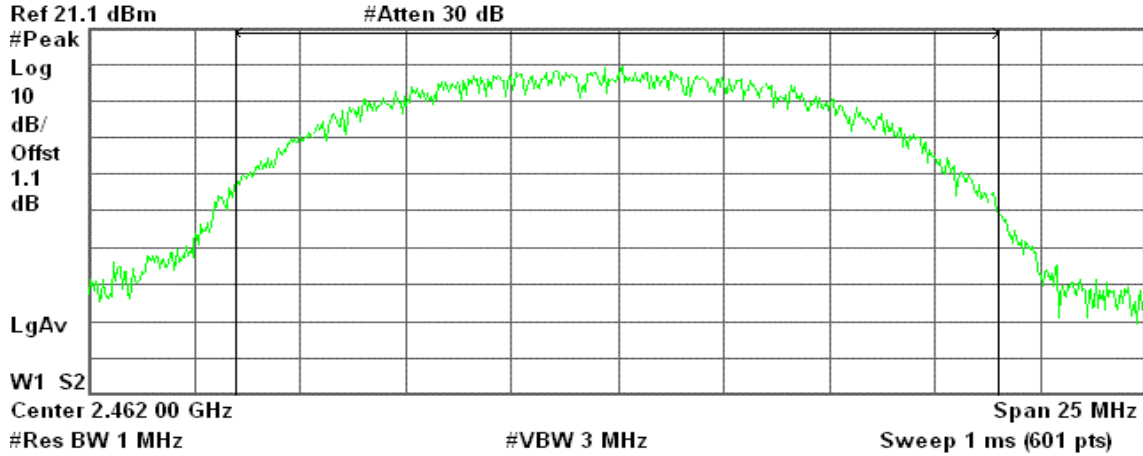
-56.46 dBm/Hz



### Peak power (CH High)

Agilent 19:43:49 Nov 17, 2004

R T



Channel Power

16.19 dBm / 18.0000 MHz

Power Spectral Density

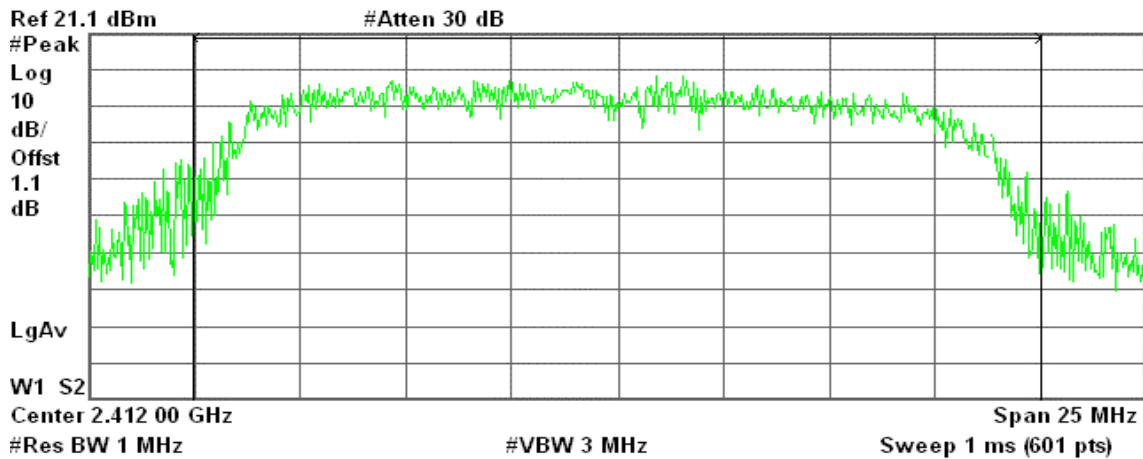
-56.37 dBm/Hz

### IEEE 802.11g mode

#### Peak power (CH Low)

Agilent 19:34:27 Nov 17, 2004

R T



Channel Power

15.43 dBm / 20.0000 MHz

Power Spectral Density

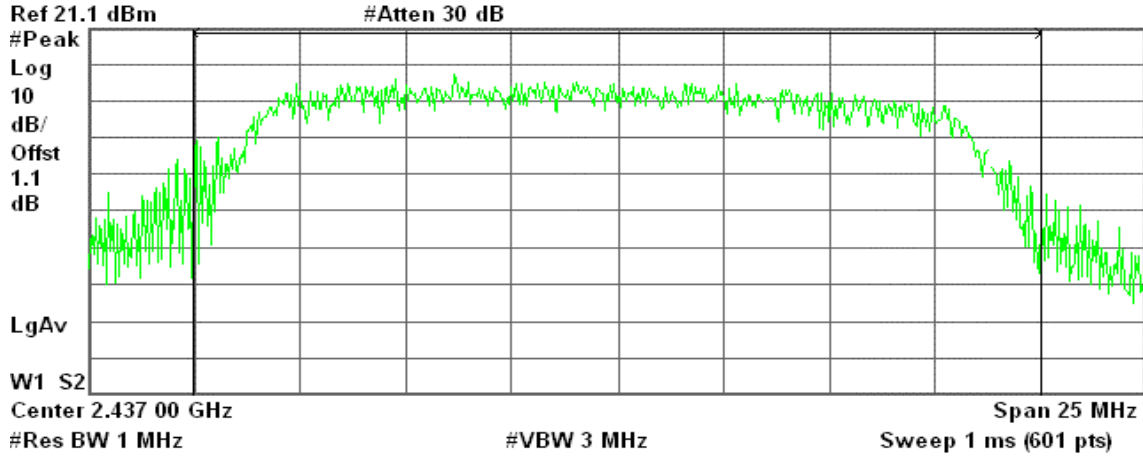
-57.58 dBm/Hz



### Peak power (CH Mid)

Agilent 19:24:53 Nov 17, 2004

R T



Channel Power

14.22 dBm / 20.0000 MHz

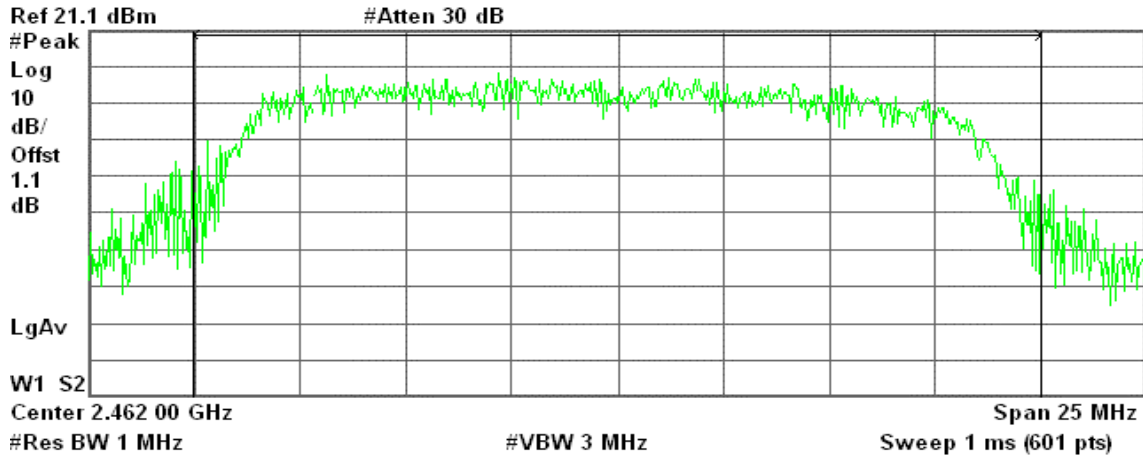
Power Spectral Density

-58.79 dBm/Hz

### Peak power (CH High)

Agilent 19:36:14 Nov 17, 2004

R T



Channel Power

15.53 dBm / 20.0000 MHz

Power Spectral Density

-57.48 dBm/Hz



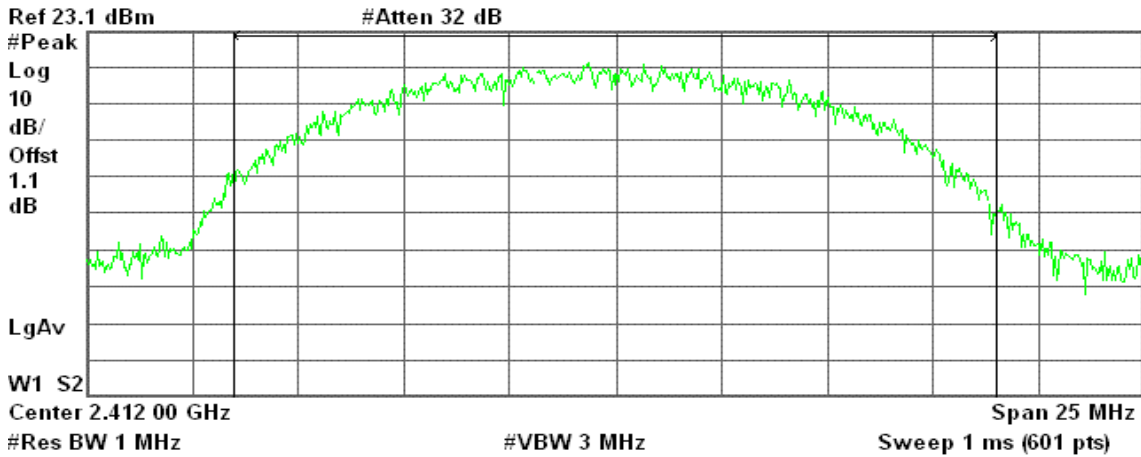
**Access point tuned to the max. output power and measured the booster in three setting :  
100mW, 200mW and 500mW**

**100mW / IEEE 802.11b mode**

**Peak power (CH Low)**

\* Agilent 14:50:26 Nov 17, 2004

R T



Channel Power

Power Spectral Density

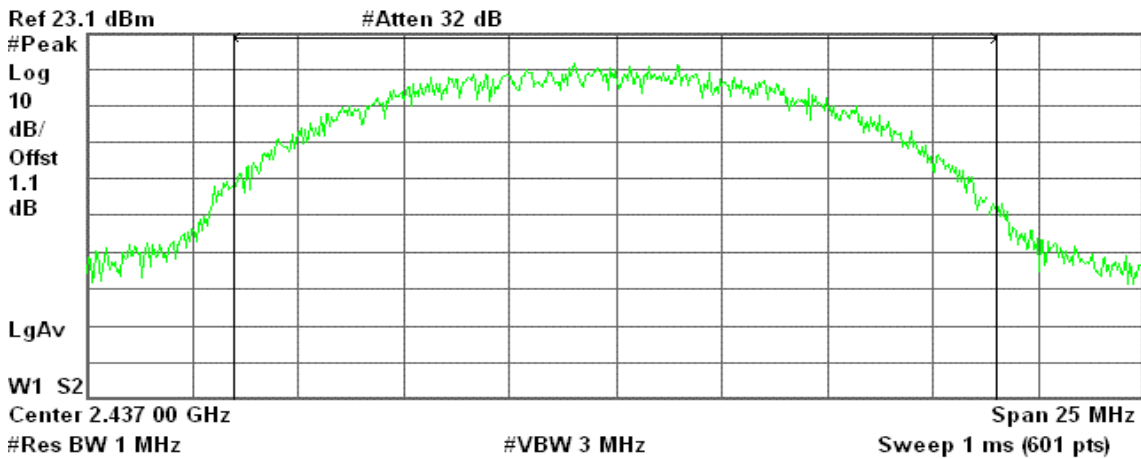
19.69 dBm / 18.0000 MHz

-52.87 dBm/Hz

**Peak power (CH Mid)**

\* Agilent 14:51:12 Nov 17, 2004

R T



Channel Power

Power Spectral Density

19.90 dBm / 18.0000 MHz

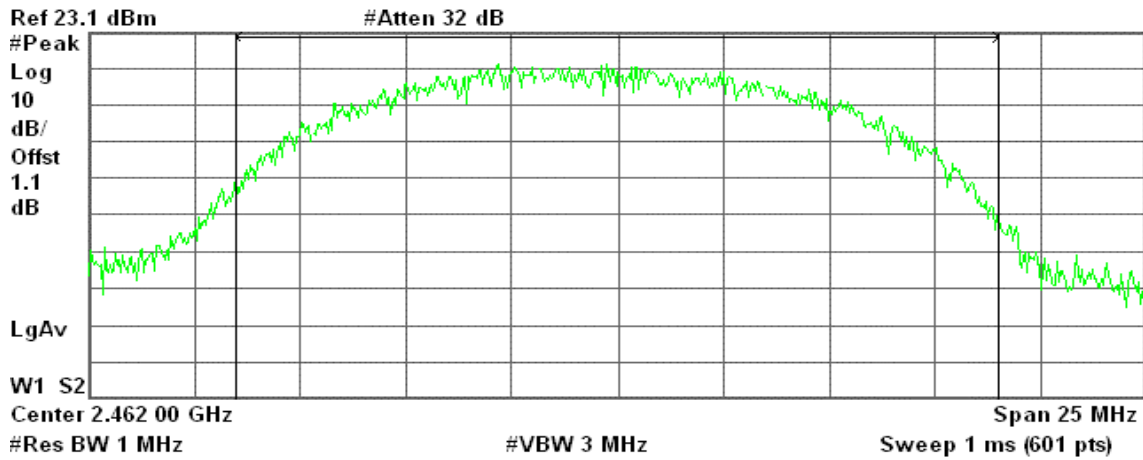
-52.65 dBm/Hz



### Peak power (CH High)

Agilent 14:52:31 Nov 17, 2004

R T



Channel Power

20.07 dBm / 18.0000 MHz

Power Spectral Density

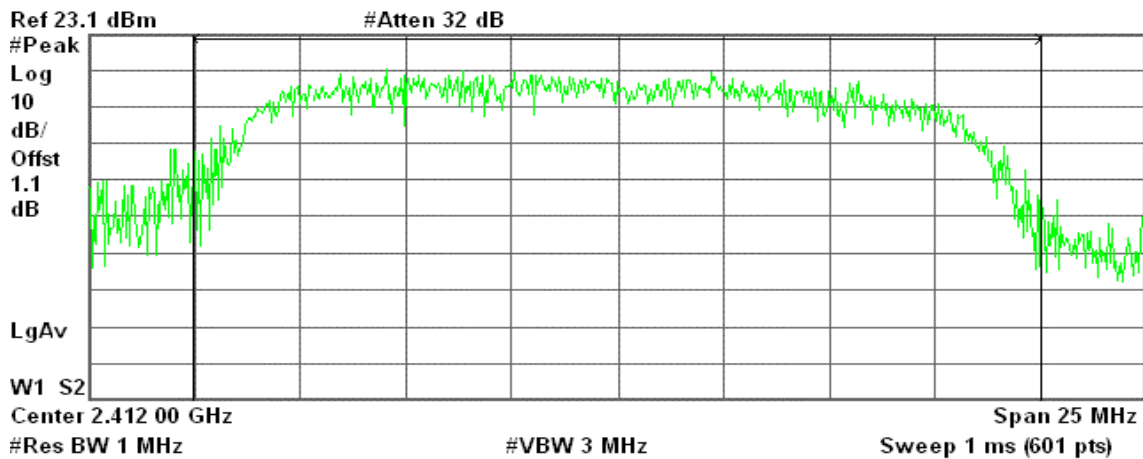
-52.49 dBm/Hz

### 100mW / IEEE 802.11g mode

### Peak power (CH Low)

Agilent 15:02:22 Nov 17, 2004

R T



Channel Power

19.68 dBm / 20.0000 MHz

Power Spectral Density

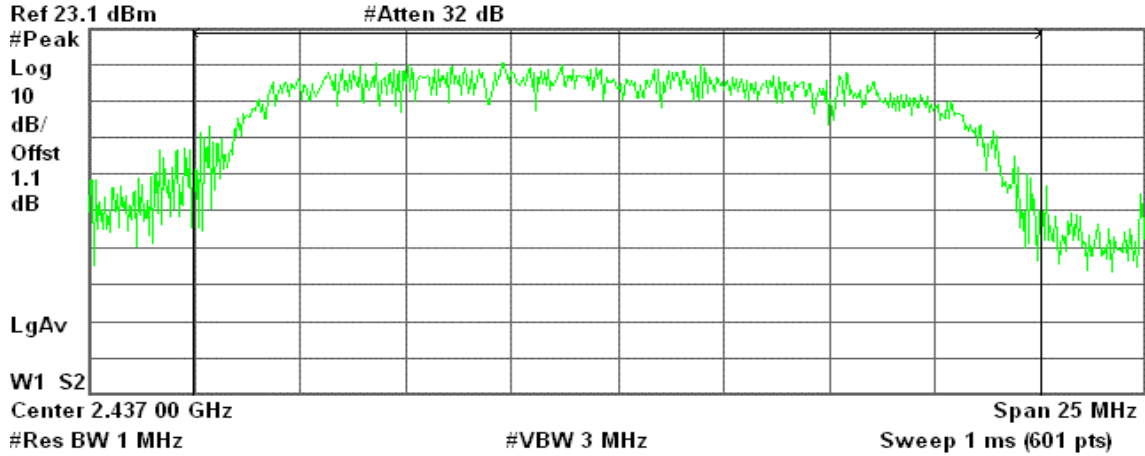
-53.33 dBm/Hz



### Peak power (CH Mid)

Agilent 14:59:58 Nov 17, 2004

R T



Channel Power

20.00 dBm / 20.0000 MHz

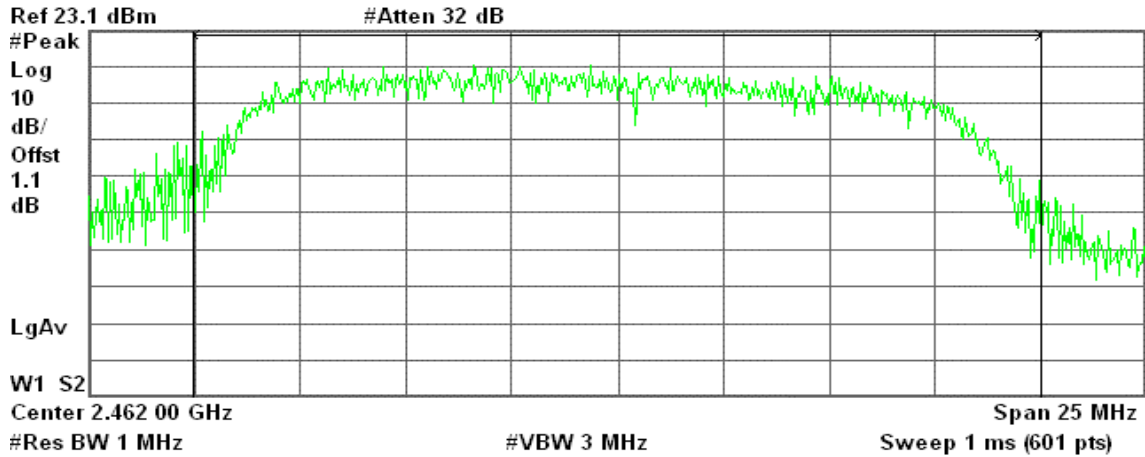
Power Spectral Density

-53.01 dBm/Hz

### Peak power (CH High)

Agilent 14:59:17 Nov 17, 2004

R T



Channel Power

20.23 dBm / 20.0000 MHz

Power Spectral Density

-52.78 dBm/Hz

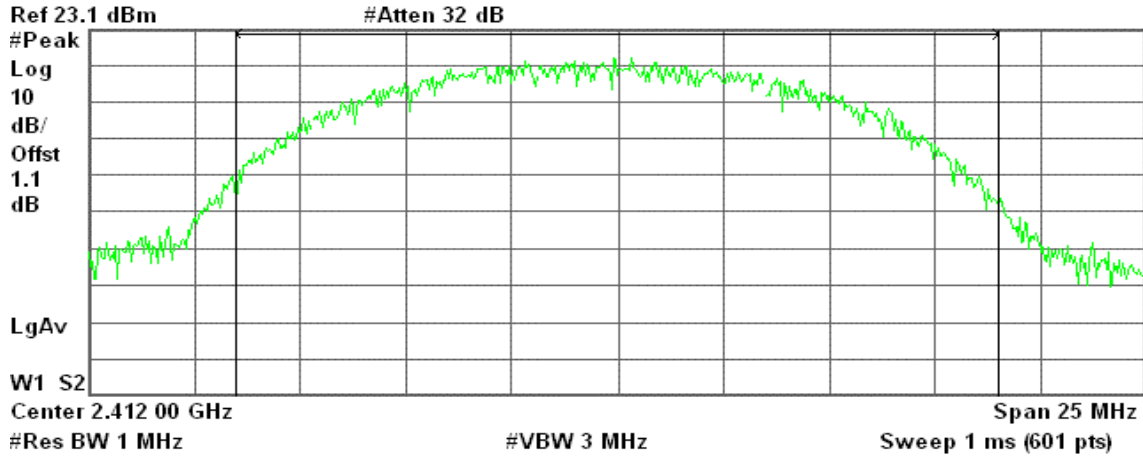


**200mW / IEEE 802.11b mode**

**Peak power (CH Low)**

Agilent 14:54:35 Nov 17, 2004

R T



Channel Power

20.85 dBm / 18.0000 MHz

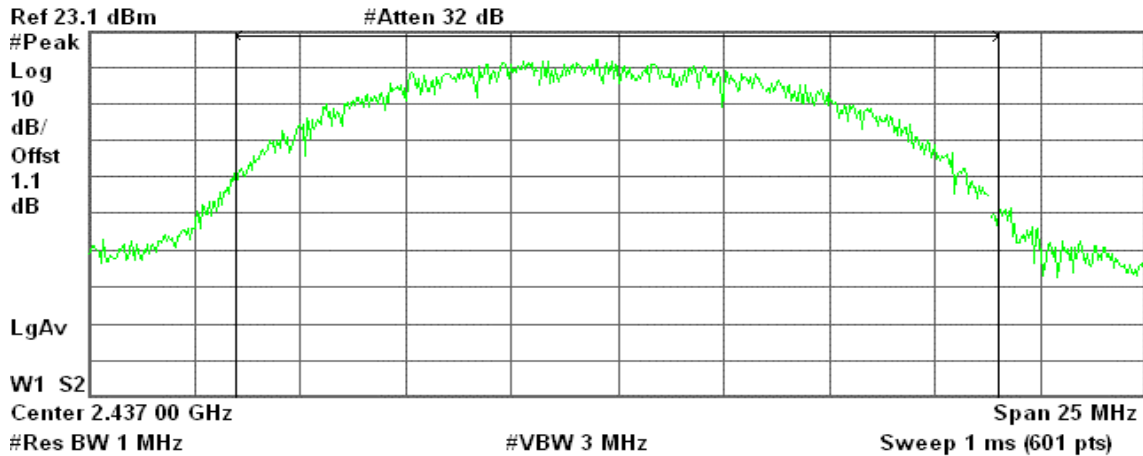
Power Spectral Density

-51.70 dBm/Hz

**Peak power (CH Mid)**

Agilent 14:54:01 Nov 17, 2004

R T



Channel Power

21.14 dBm / 18.0000 MHz

Power Spectral Density

-51.41 dBm/Hz

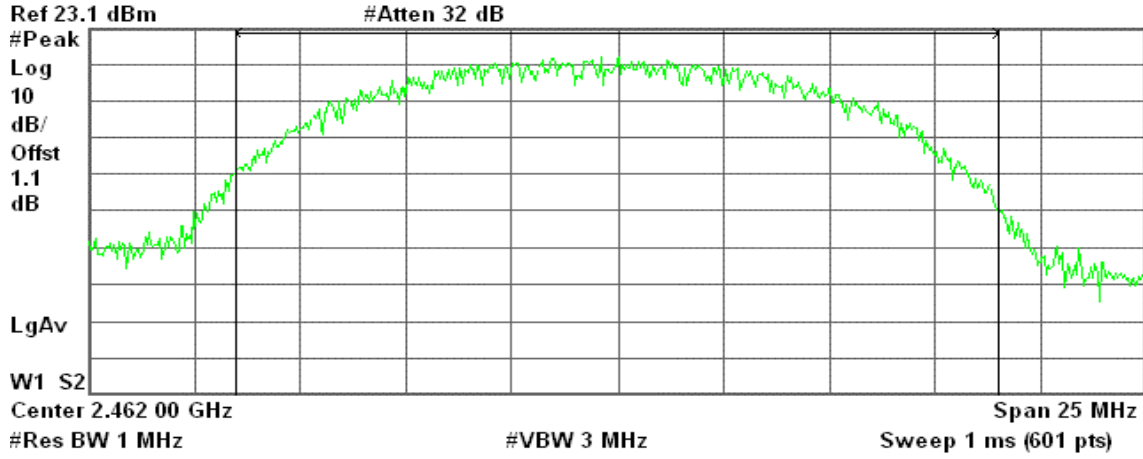




### Peak power (CH High)

Agilent 14:53:15 Nov 17, 2004

R T



Channel Power

21.42 dBm / 18.0000 MHz

Power Spectral Density

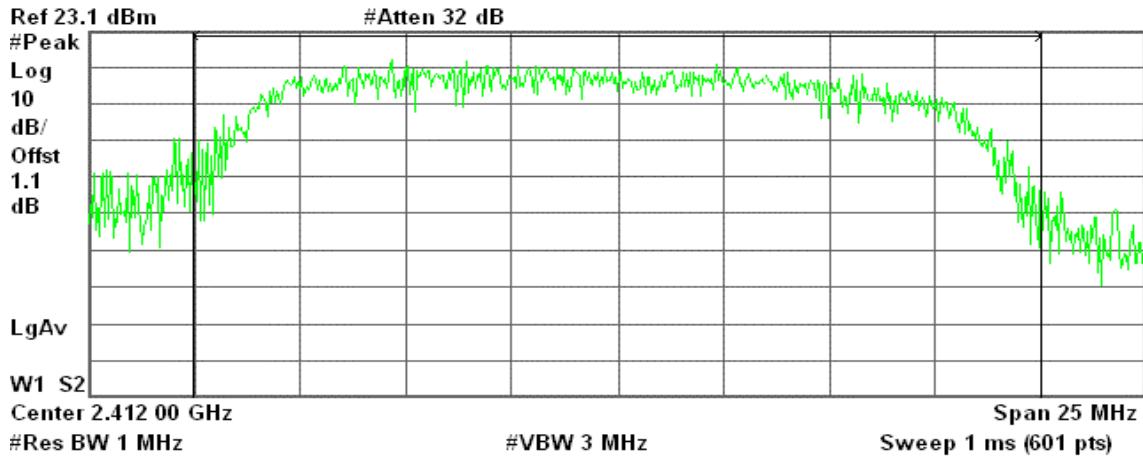
-51.13 dBm/Hz

### 200mW / IEEE 802.11g mode

### Peak power (CH Low)

Agilent 15:01:55 Nov 17, 2004

R T



Channel Power

21.18 dBm / 20.0000 MHz

Power Spectral Density

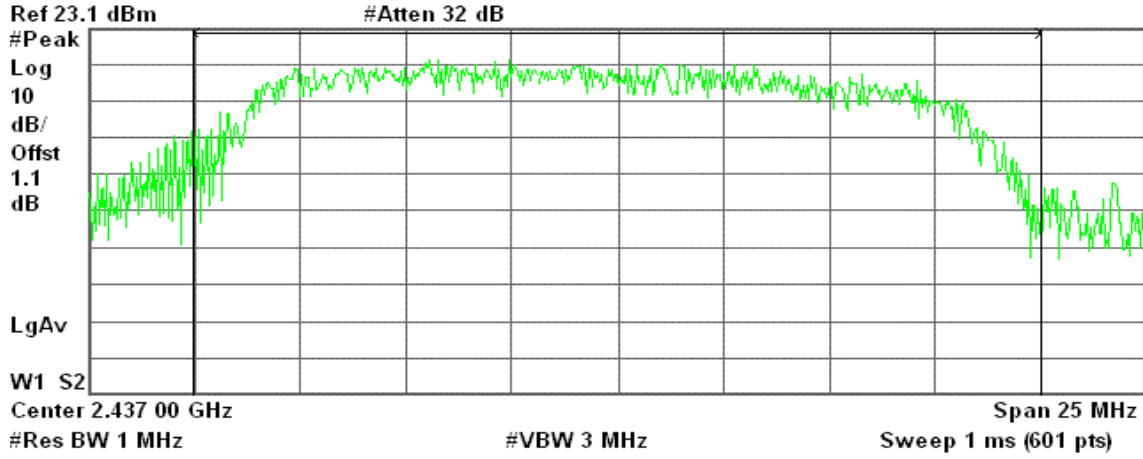
-51.83 dBm/Hz



### Peak power (CH Mid)

Agilent 15:00:24 Nov 17, 2004

R T



Channel Power

21.47 dBm / 20.0000 MHz

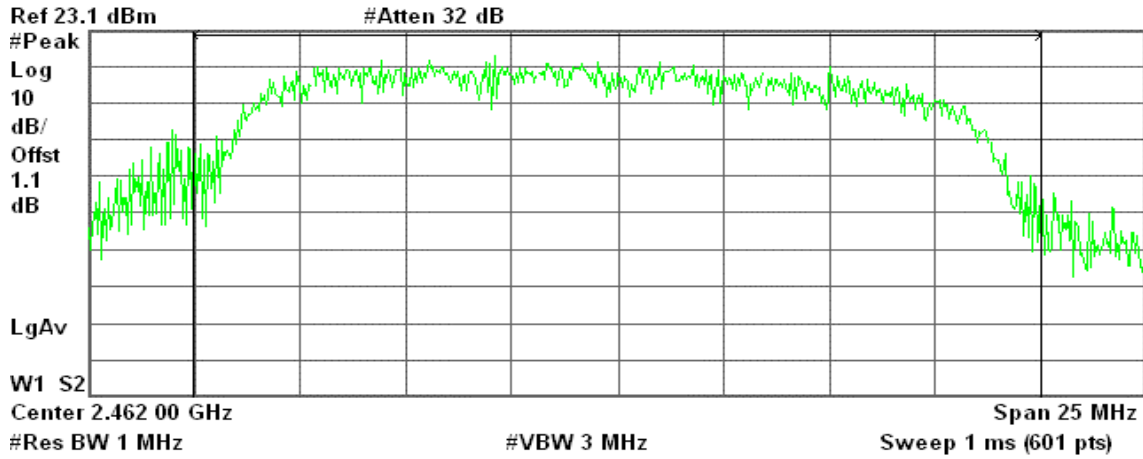
Power Spectral Density

-51.54 dBm/Hz

### Peak power (CH High)

Agilent 14:58:06 Nov 17, 2004

R T



Channel Power

21.71 dBm / 20.0000 MHz

Power Spectral Density

-51.30 dBm/Hz

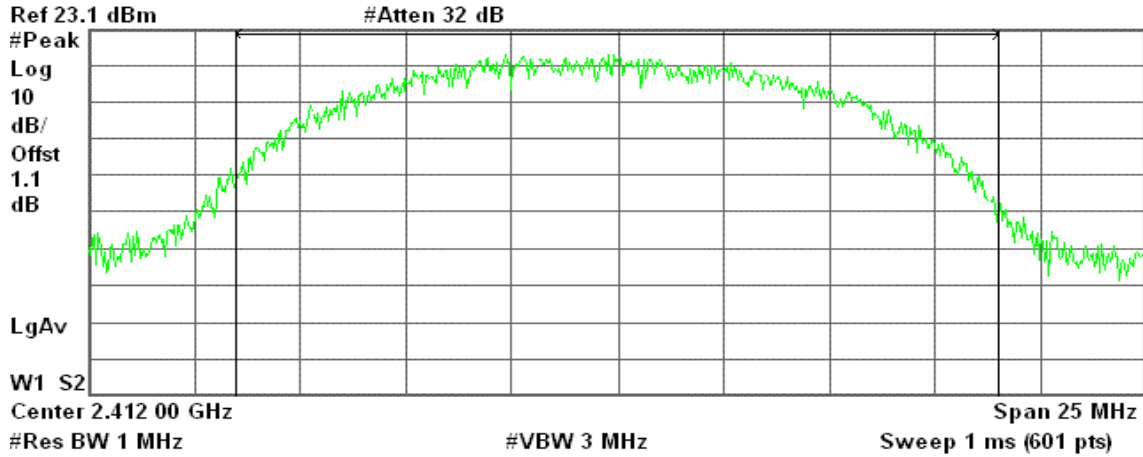


**500mW / IEEE 802.11b mode**

**Peak power (CH Low)**

Agilent 14:55:04 Nov 17, 2004

R T



Channel Power

22.03 dBm / 18.0000 MHz

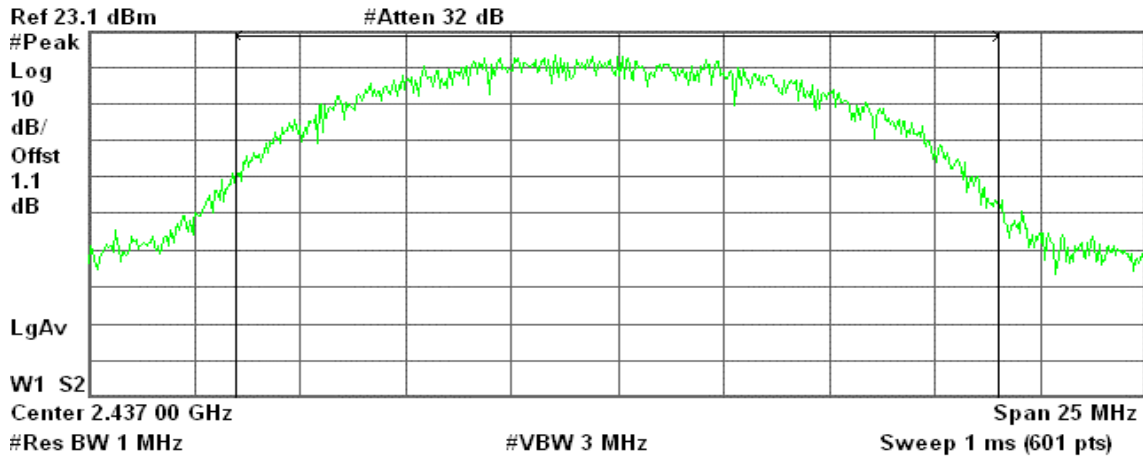
Power Spectral Density

-50.52 dBm/Hz

**Peak power (CH Mid)**

Agilent 14:55:42 Nov 17, 2004

R T



Channel Power

22.28 dBm / 18.0000 MHz

Power Spectral Density

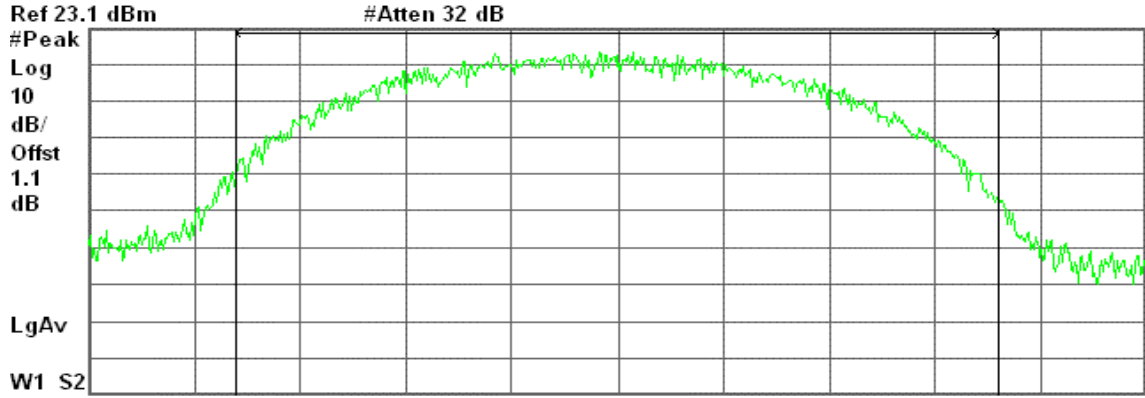
-50.28 dBm/Hz



### Peak power (CH High)

Agilent 14:56:20 Nov 17, 2004

R T



Center 2.462 00 GHz Span 25 MHz  
 #Res BW 1 MHz #VBW 3 MHz Sweep 1 ms (601 pts)

Channel Power

22.51 dBm / 18.0000 MHz

Power Spectral Density

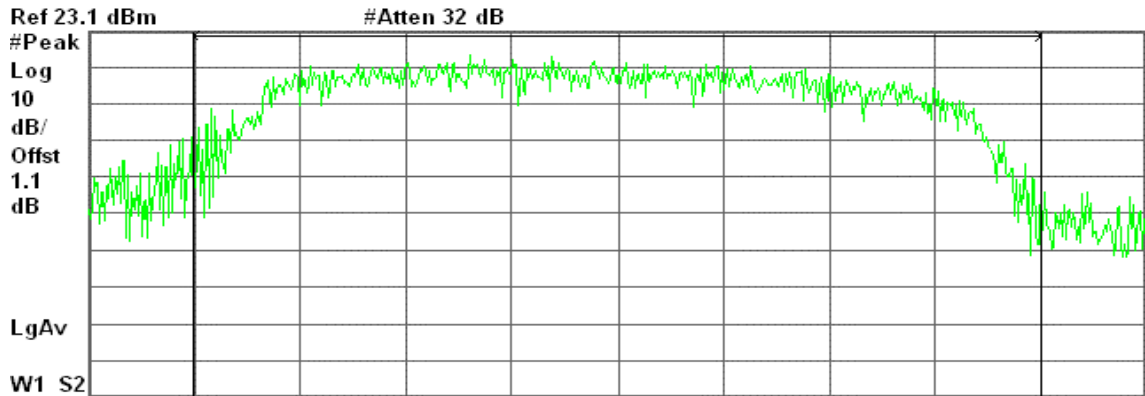
-50.05 dBm/Hz

### 500mW / IEEE 802.11g mode

### Peak power (CH Low)

Agilent 15:01:28 Nov 17, 2004

R T



Center 2.412 00 GHz Span 25 MHz  
 #Res BW 1 MHz #VBW 3 MHz Sweep 1 ms (601 pts)

Channel Power

22.43 dBm / 20.0000 MHz

Power Spectral Density

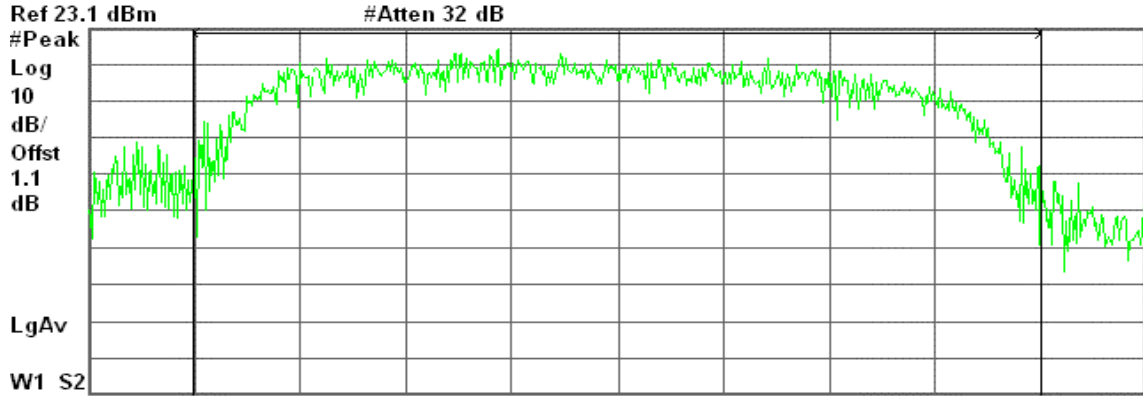
-50.58 dBm/Hz



### Peak power (CH Mid)

Agilent 15:00:56 Nov 17, 2004

R T



Channel Power

22.70 dBm / 20.0000 MHz

Power Spectral Density

-50.31 dBm/Hz

### Peak power (CH High)

Agilent 14:57:23 Nov 17, 2004

R T



Channel Power

22.96 dBm / 20.0000 MHz

Power Spectral Density

-50.05 dBm/Hz

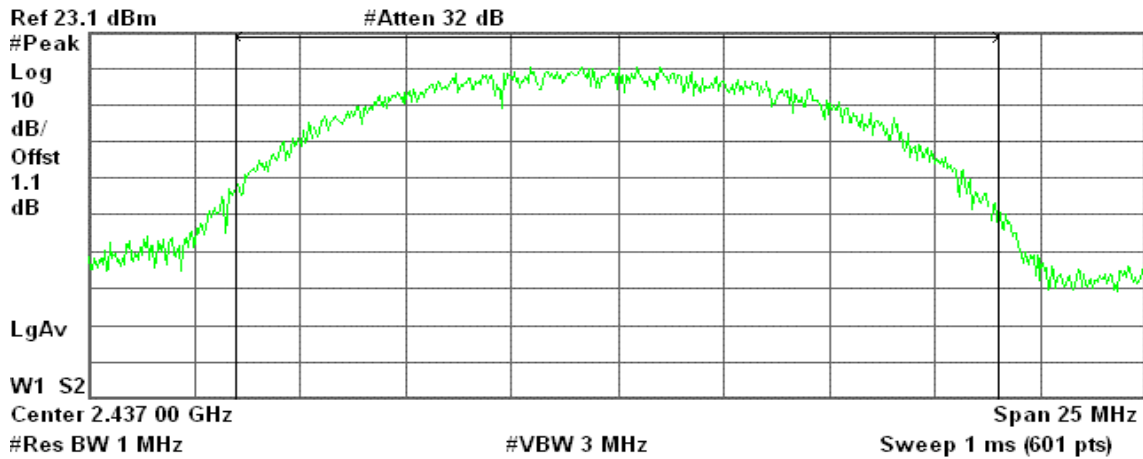


**Access point tuned to the lowest output power 8 dBm at the middle channel and measure the booster peak output power at 100mW, 200mW and 500 mW**

**100mW / IEEE 802.11b mode / Peak power (CH Mid)**

Agilent 15:27:03 Nov 17, 2004

R T



Channel Power

19.61 dBm / 18.0000 MHz

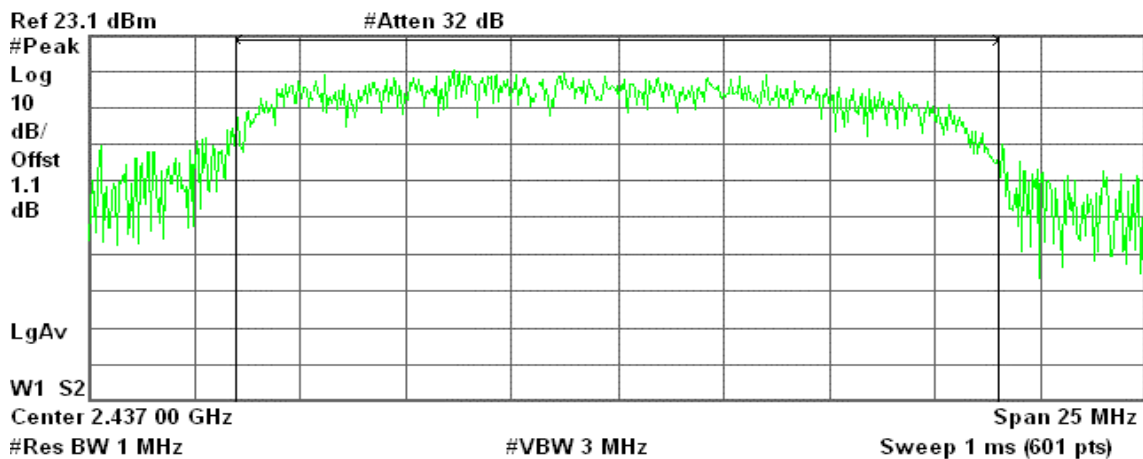
Power Spectral Density

-52.95 dBm/Hz

**100mW / IEEE 802.11g mode / Peak power (CH Mid)**

Agilent 15:31:17 Nov 17, 2004

R T



Channel Power

19.77 dBm / 18.0000 MHz

Power Spectral Density

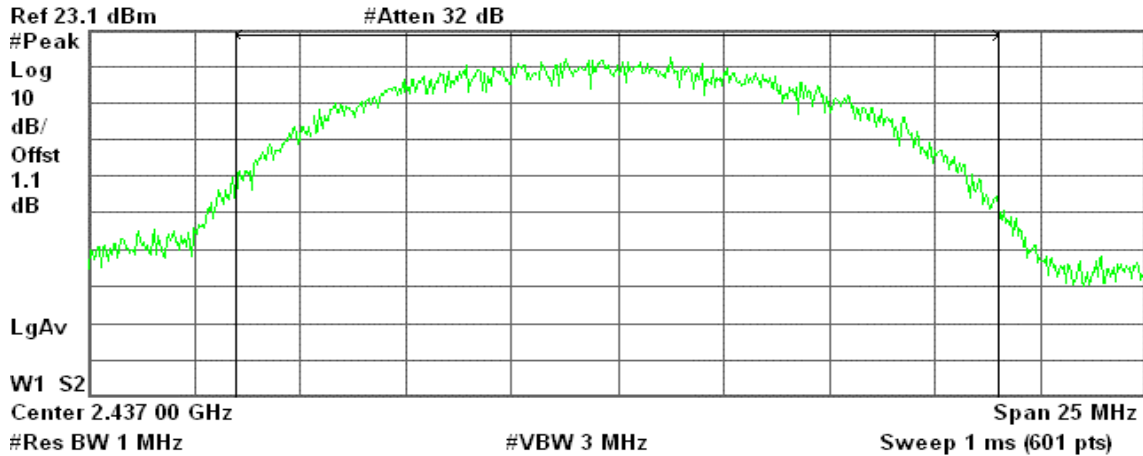
-52.78 dBm/Hz



**200mW / IEEE 802.11b mode / Peak power (CH Mid)**

Agilent 15:27:32 Nov 17, 2004

R T



Channel Power

21.01 dBm / 18.0000 MHz

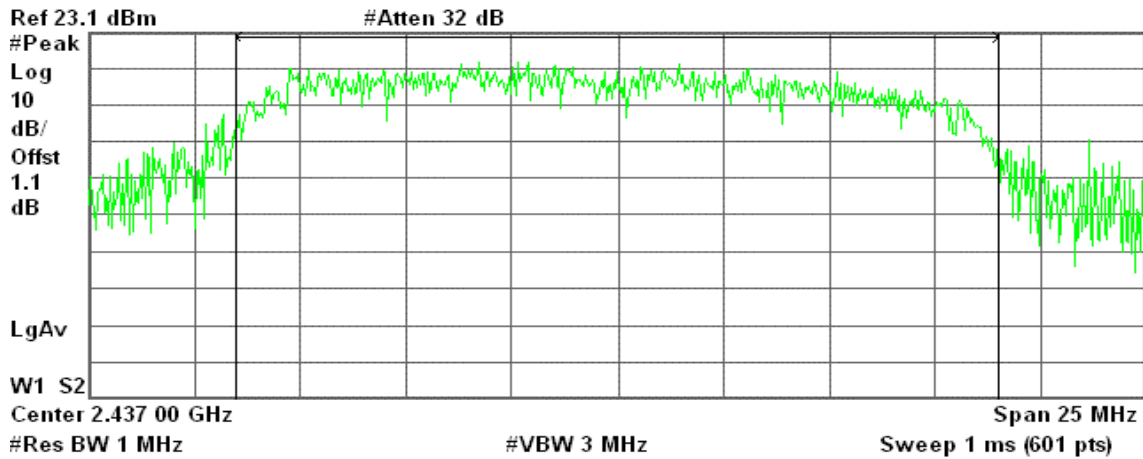
Power Spectral Density

-51.54 dBm/Hz

**200mW / IEEE 802.11g mode / Peak power (CH Mid)**

Agilent 15:30:54 Nov 17, 2004

R T



Channel Power

21.28 dBm / 18.0000 MHz

Power Spectral Density

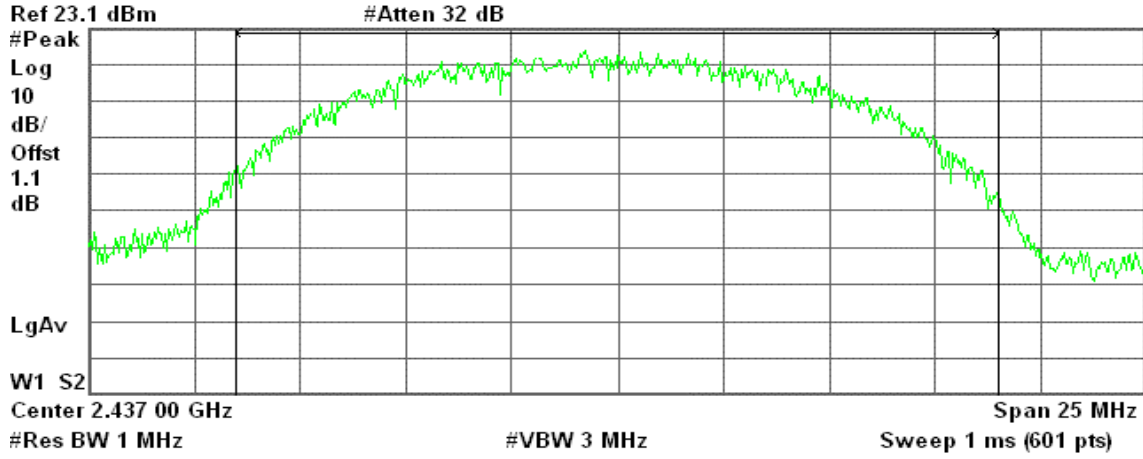
-51.27 dBm/Hz



**500mW / IEEE 802.11b mode / Peak power (CH Mid)**

Agilent 15:28:01 Nov 17, 2004

R T



Channel Power

22.20 dBm / 18.0000 MHz

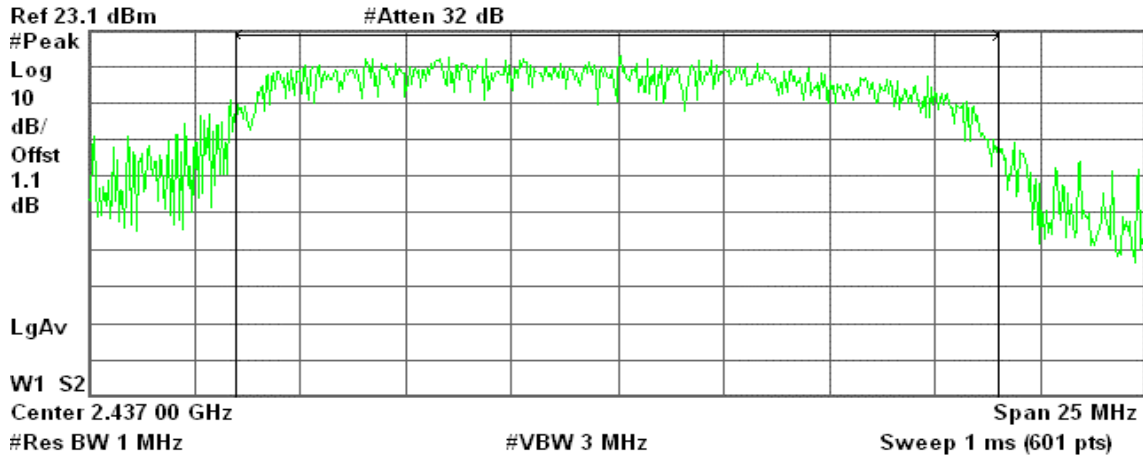
Power Spectral Density

-50.35 dBm/Hz

**500mW / IEEE 802.11g mode / Peak power (CH Mid)**

Agilent 15:30:28 Nov 17, 2004

R T



Channel Power

22.64 dBm / 18.0000 MHz

Power Spectral Density

-49.91 dBm/Hz