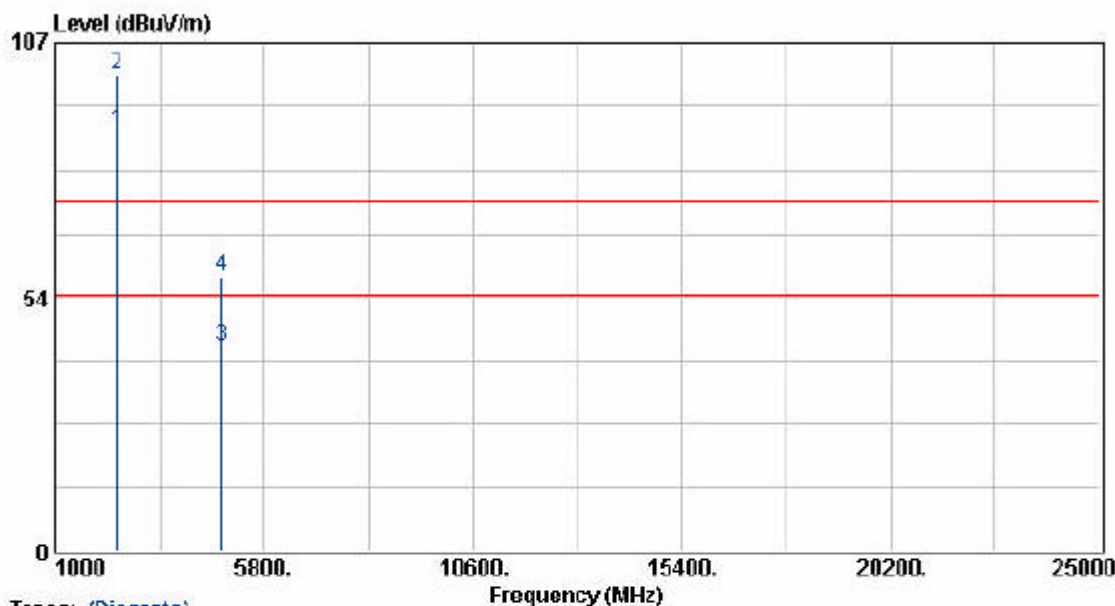


EUT	: IP822LM	Pol/Phase	: HORIZONTAL
Power	: 110V	Temperature	: 25 °C
Test Mode	: Transmit/Receive	Humidity	: 68 %
Operation Channel	: 1	Atmospheric Pressure	: 1018 mmHg
Modulation Type	: 802.11g	Memo	:
Rate	: 54 Mbps		



Trace: (Discrete)

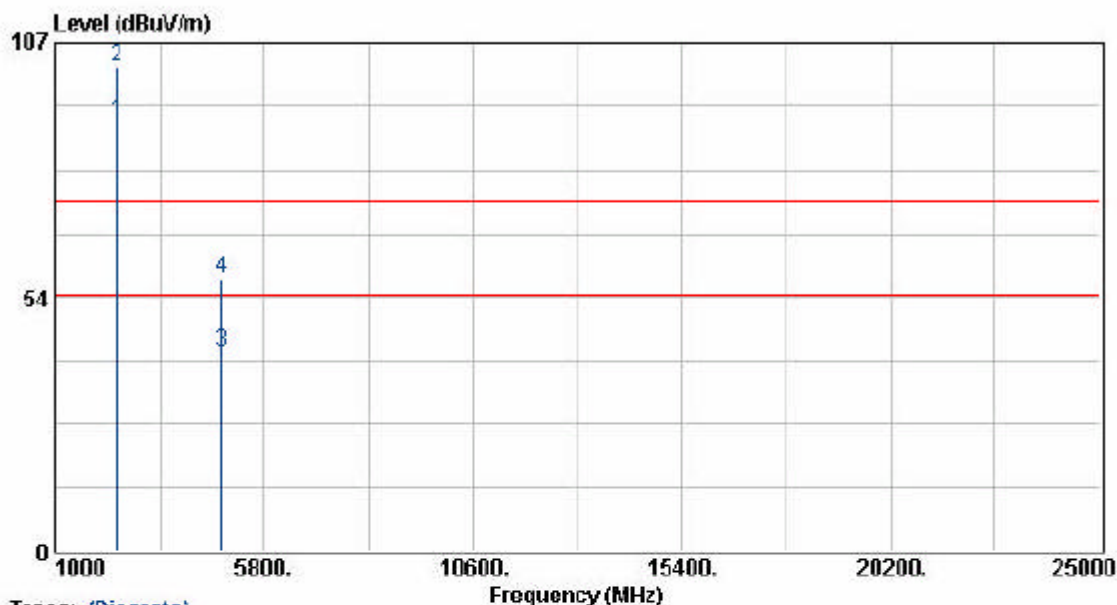
Frequency (MHz)	Meter Reading (dBuV)	Corrected Factor (dBuV/m)	Result (dBuV/m)	Limit (dB)	Margin (dB)	Remark	Table Deg.	Ant High (cm)
2410.20	86.90	1.32	88.22	54.00	34.22	Average	228	100
2410.20	99.03	1.32	100.35	74.00	26.35	Peak	228	100
4822.80	34.90	8.12	43.02	54.00	-10.98	Average	228	100
4822.80	49.99	8.12	58.11	74.00	-15.89	Peak	228	100

Notes:

1. Result = Meter Reading + Corrected Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too below to be measured.
7. 2412,2437,2462 MHz is fundamental frequency.

```

EVT           : IP822LM
Power         : 110V
Test Mode     : Transmit/Receive
Operation Channel: 1
Modulation Type : 802.11g
Rate          : 54 Mbps
Pol/Phase     : VERTICAL
Temperature   : 25 °C
Humidity      : 68 %
Atmospheric Pressure: 1018 mmHg
Memo          :
    
```



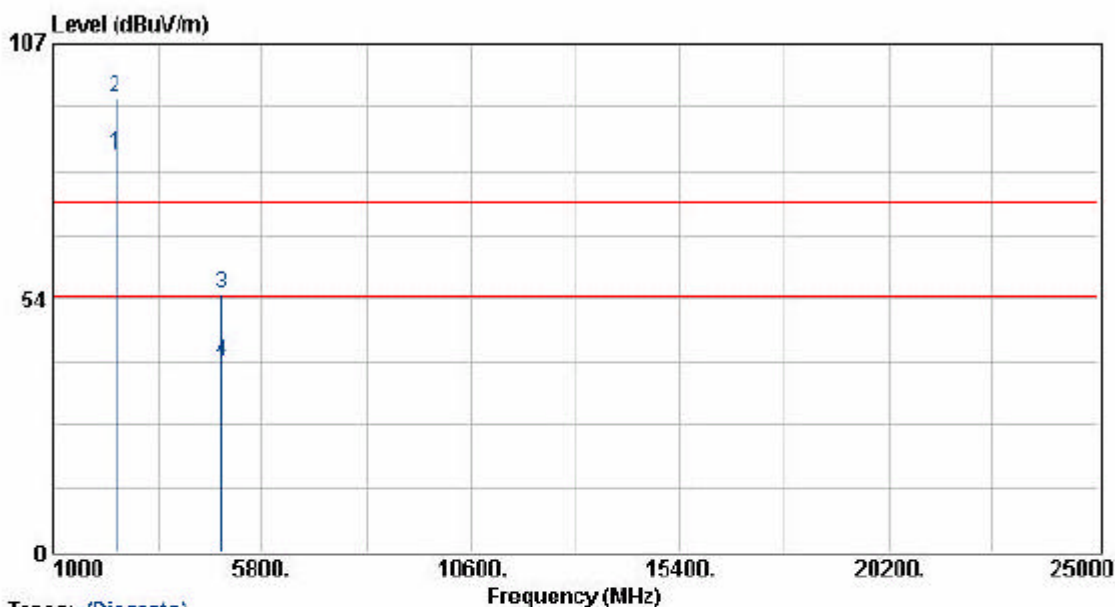
Trace: (Discrete)

Frequency (MHz)	Meter Reading (dBUV)	Corrected Factor (dBUV/m)	Result (dBUV/m)	Limit (dB)	Margin (dB)	Remark	Table Deg.	Ant High (cm)
2407.30	89.54	0.61	90.15	54.00	36.15	Average	86	100
2407.30	101.14	0.61	101.75	74.00	27.75	Peak	86	100
4823.70	34.56	7.36	41.92	54.00	-12.08	Average	86	100
4823.70	50.32	7.36	57.68	74.00	-16.32	Peak	86	100

Notes:

1. Result = Meter Reading + Corrected Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too below to be measured.
7. 2412,2437,2462 MHz is fundamental frequency.

EUT	: IP822LM	Pol/Phase	: HORIZONTAL
Power	: 110V	Temperature	: 25 °C
Test Mode	: Transmit/Receive	Humidity	: 68 %
Operation Channel	: 6	Atmospheric Pressure	: 1018 mmHg
Modulation Type	: 802.11g	Memo	:
Rate	: 54 Mbps		



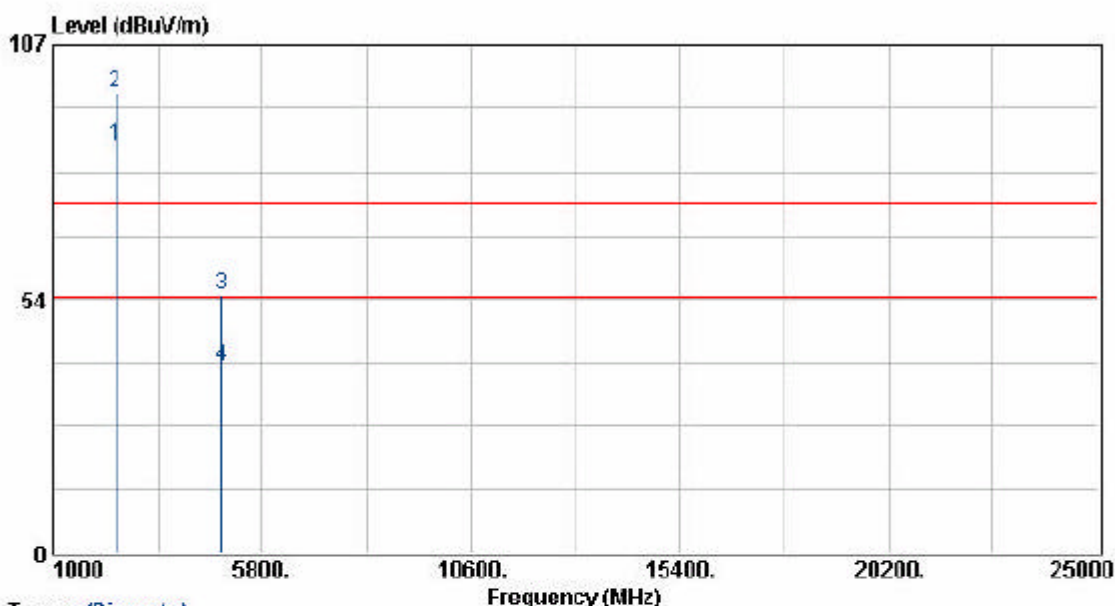
Trace: (Discrete)

Frequency (MHz)	Meter Reading (dBuV)	Corrected Factor (dBuV/m)	Result (dBuV/m)	Limit (dB)	Margin (dB)	Remark	Table Deg.	Ant High (cm)
2432.10	82.27	1.40	83.67	54.00	29.67	Average	228	100
2432.10	94.38	1.40	95.78	74.00	21.78	Peak	228	100
4866.70	46.17	8.29	54.46	74.00	-19.54	Peak	228	100
4866.70	31.64	8.29	39.93	54.00	-14.07	Average	228	100

Notes:

1. Result = Meter Reading + Corrected Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too below to be measured.
7. 2412,2437,2462 MHz is fundamental frequency.

EUT	: IP822LM	Pol/Phase	: VERTICAL
Power	: 110V	Temperature	: 25 °C
Test Mode	: Transmit/Receive	Humidity	: 68 %
Operation Channel	: 6	Atmospheric Pressure	: 1010 mmHg
Modulation Type	: 802.11g	Memo	:
Rate	: 54 Mbps		

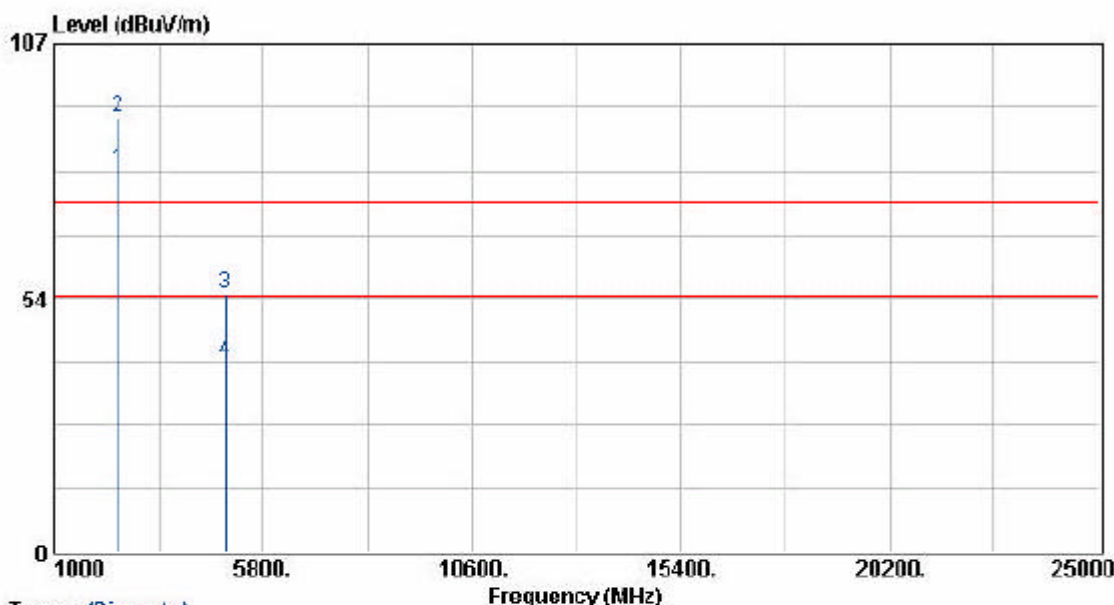


Frequency (MHz)	Meter Reading (dBUV)	Corrected Factor (dBUV/m)	Result (dBUV/m)	Limit (dB)	Margin (dB)	Remark	Table Deg.	Ant High (cm)
2435.30	85.07	0.71	85.78	54.00	31.78	Average	86	100
2435.30	96.24	0.71	96.95	74.00	22.95	Peak	86	100
4858.40	46.84	7.52	54.36	74.00	-19.64	Peak	86	100
4858.40	31.94	7.52	39.46	54.00	-14.54	Average	86	100

Notes:

1. Result = Meter Reading + Corrected Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too below to be measured.
7. 2412,2437,2462 MHz is fundamental frequency.

EUT	: IP822LM	Pol/Phase	: HORIZONTAL
Power	: 110V	Temperature	: 25 °C
Test Mode	: Transmit/Receive	Humidity	: 68 %
Operation Channel	: 11	Atmospheric Pressure	: 1018 mmHg
Modulation Type	: 802.11g	Memo	:
Rate	: 54 Mbps		



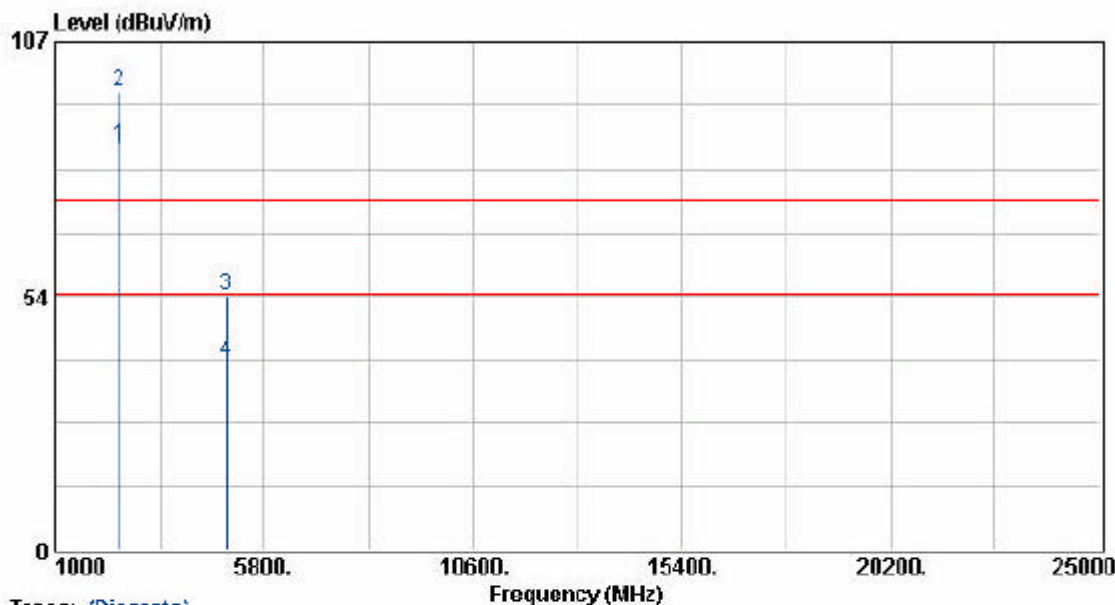
Trace: (Discrete)

Frequency (MHz)	Meter Reading (dBUV)	Corrected Factor (dBUV/m)	Result (dBUV/m)	Limit (dB)	Margin (dB)	Remark	Table Deg.	Ant High (cm)
2457.20	79.07	1.48	80.55	54.00	26.55	Average	228	100
2457.20	90.11	1.48	91.59	74.00	17.59	Peak	228	100
4926.80	46.02	8.52	54.54	74.00	-19.46	Peak	228	100
4926.80	31.75	8.52	40.27	54.00	-13.73	Average	228	100

Notes:

1. Result = Meter Reading + Corrected Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too below to be measured.
7. 2412,2437,2462 MHz is fundamental frequency.

EUT	: IP822LM	Pol/Phase	: VERTICAL
Power	: 110V	Temperature	: 25 °C
Test Mode	: Transmit/Receive	Humidity	: 68 %
Operation Channel	: 11	Atmospheric Pressure	: 1018 mmHg
Modulation Type	: 802.11g	Memo	:
Rate	: 54 Mbps		



Trace: (Discrete)

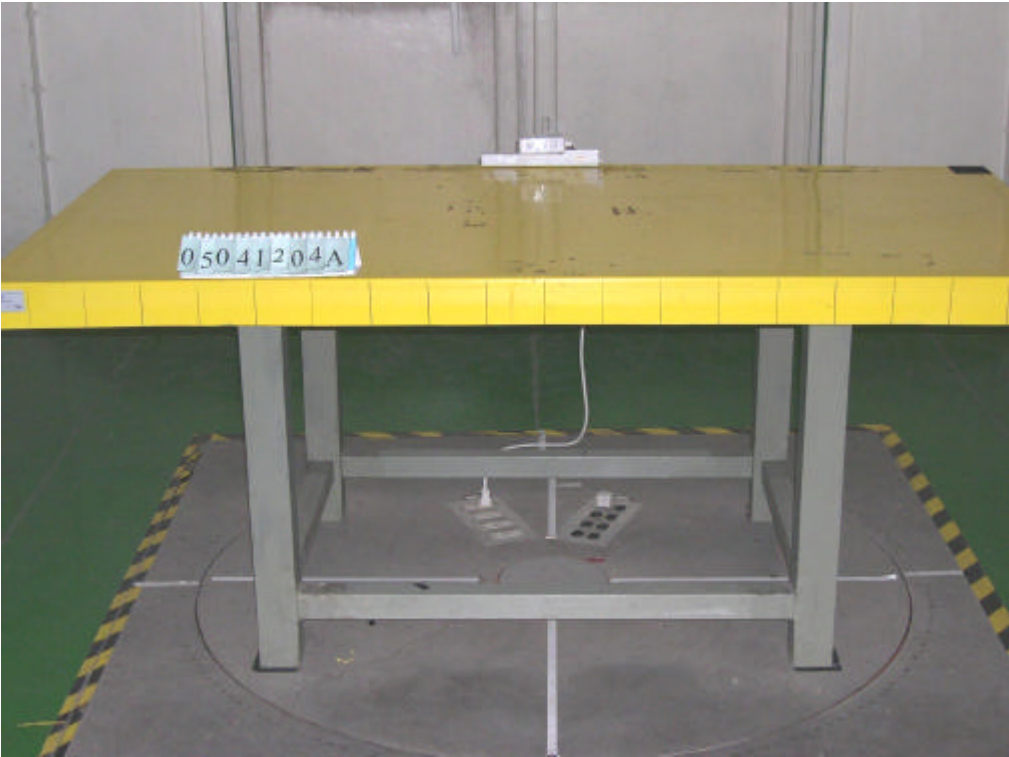
Frequency (MHz)	Meter Reading (dBUV)	Corrected Factor (dBUV/m)	Result (dBUV/m)	Limit (dB)	Margin (dB)	Remark	Table Deg.	Ant High (cm)
2450.70	84.19	0.79	84.98	54.00	30.98	Average	86	100
2450.70	95.89	0.79	96.68	74.00	22.68	Peak	86	100
4923.30	46.16	7.72	53.88	74.00	-20.12	Peak	86	100
4923.30	32.16	7.72	39.88	54.00	-14.12	Average	86	100

Notes:

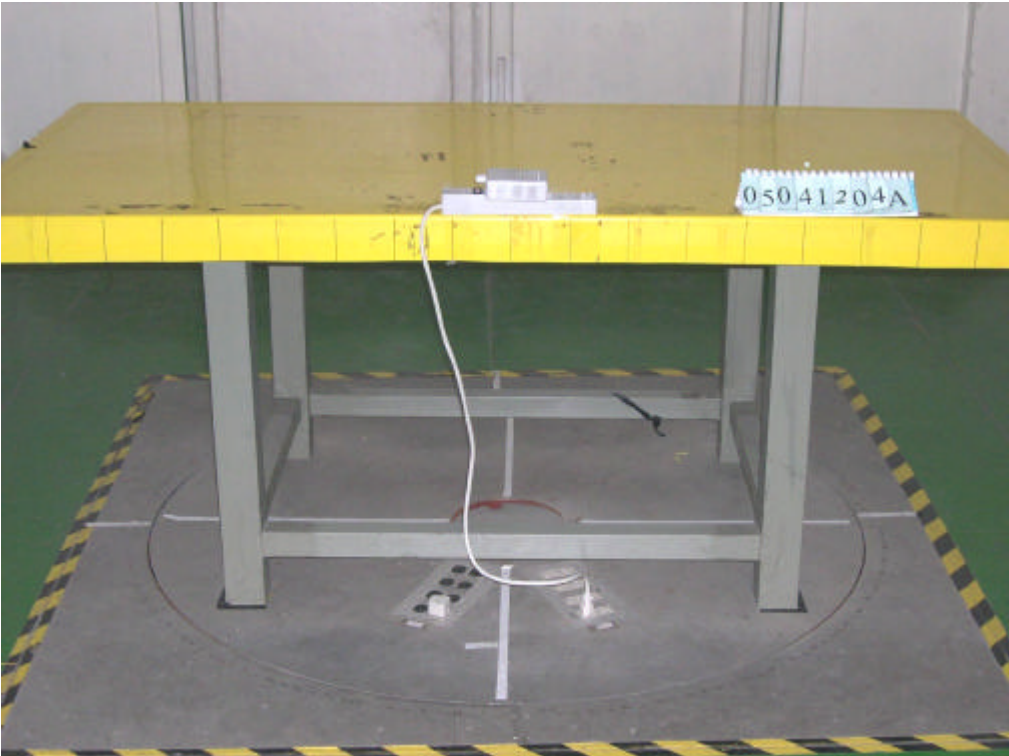
1. Result = Meter Reading + Corrected Factor
2. Corrected Factor = Antenna Factor + Cable Loss - Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 120KHz and video bandwidth is 300kHz for Peak detection and Quasi-peak detection at frequency below 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
5. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz.
6. The other emissions is too below to be measured.
7. 2412,2437,2462 MHz is fundamental frequency.

5.5.1. Test Photographs

FRONT VIEW



REAR VIEW



6. 6dB Bandwidth Measurement Data

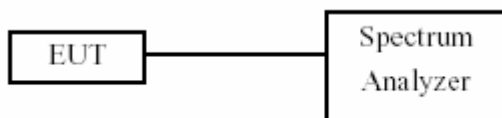
6.1. Test Limit

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

6.2. Test Procedures

1. The transmitter output was connected to the spectrum analyzer.
2. Set RBW of spectrum analyzer to 100 KHz and VBW to 100 KHz.
3. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

6.3. Test Setup Layout



6.4. List of Measuring Equipment Used

Instrument/Ancillary	Type	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2005/12/28

6.5. Test Result and Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Apr. 26, 2005 Temperature: 25 Humidity: 68% Atmospheric pressure: 1023 mmHg

Channel	Frequency (MHz)	6dB Bandwidth (MHz)
01	2412	7.6
06	2437	7.6
11	2462	7.6

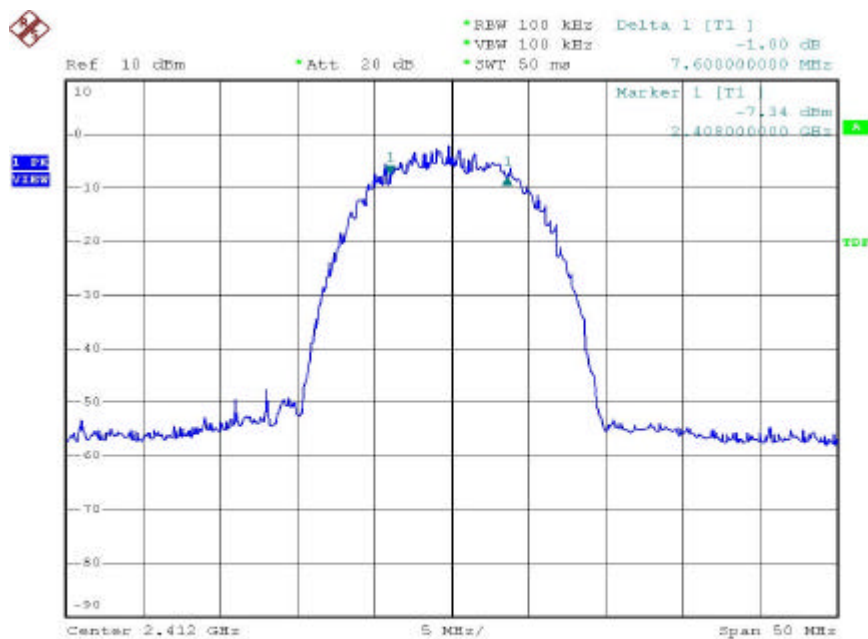
(2) Modulation Standard: IEEE 802.11g

Test Date: Apr. 26, 2005 Temperature: 25 Humidity: 68% Atmospheric pressure: 1023 mmHg

Channel	Frequency (MHz)	6dB Bandwidth (MHz)
01	2412	15.2
06	2437	15.2
11	2462	15.2

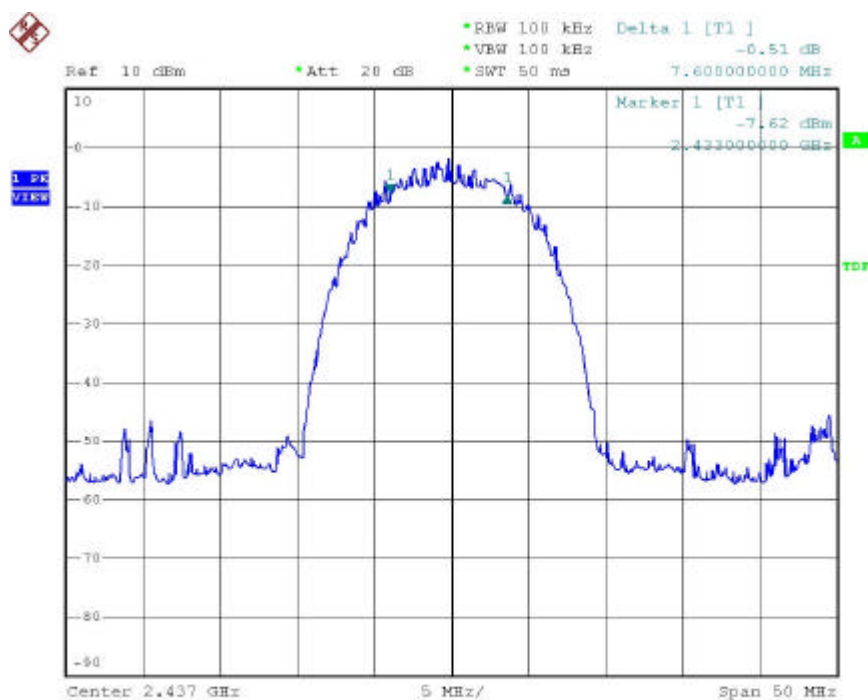
Modulation Standard:802.11b (11Mbps)

Channel:01



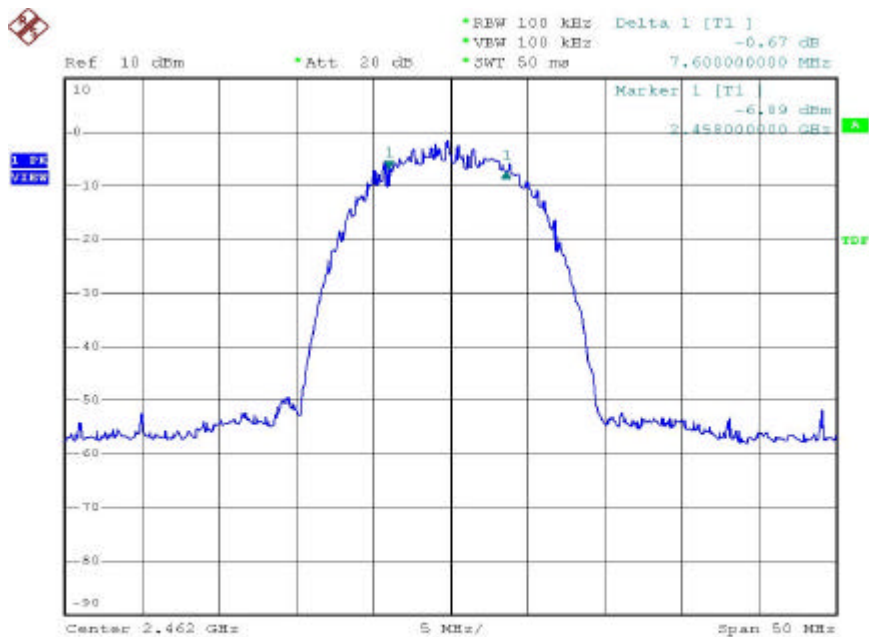
Date: 26.APR.2005 10:55:37

Channel:06



Date: 26.APR.2005 10:57:44

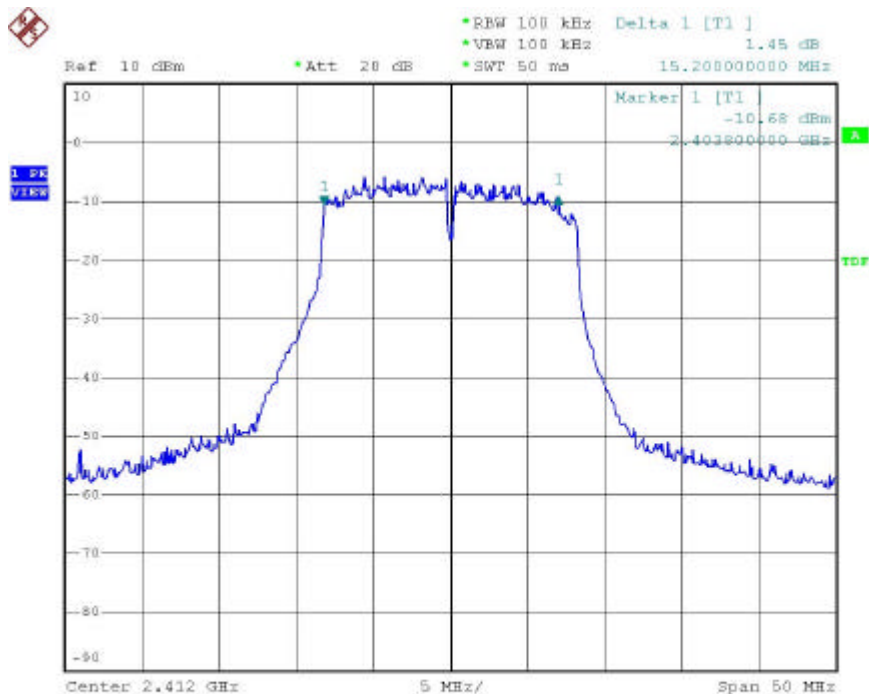
Channel:11



Date: 26.APR.2005 10:59:31

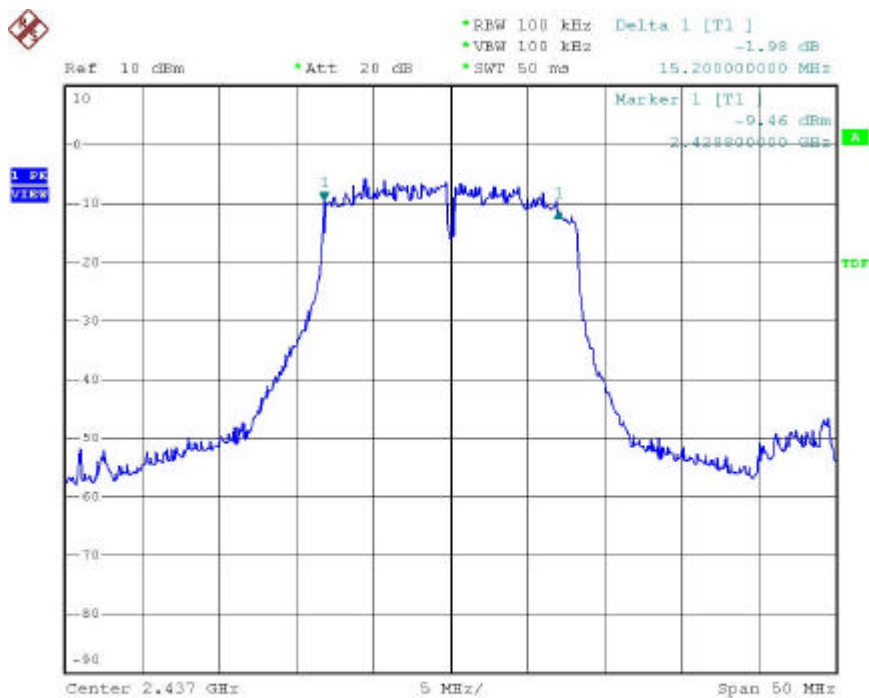
Modulation Standard:802.11g (54Mbps)

Channel:01



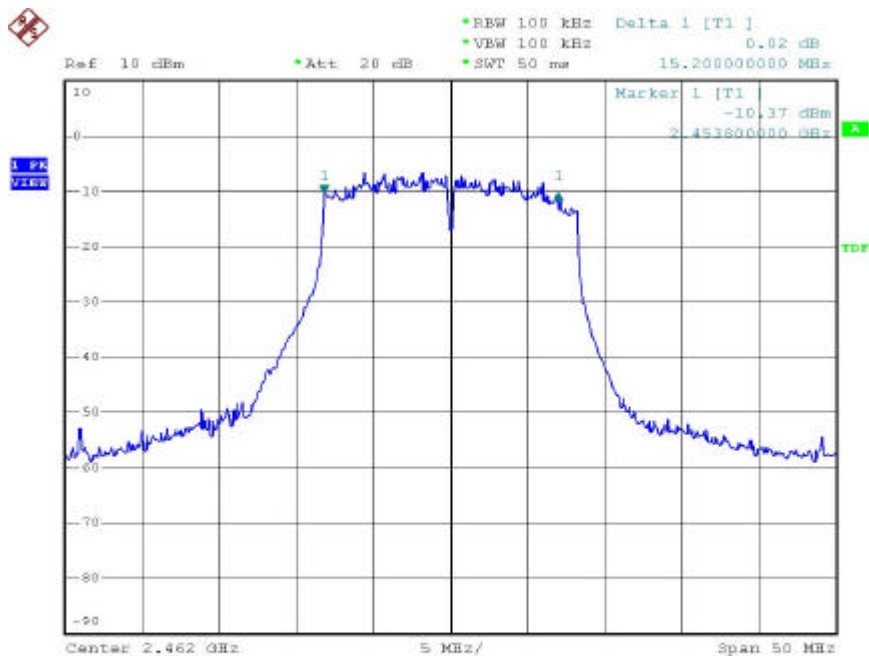
Date: 26.APR.2005 10:53:35

Channel:06



Date: 26.APR.2005 10:51:36

Channel:11



Date: 26.APR.2005 10:49:01

7. Maximum Peak Output Power

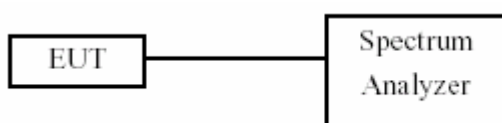
7.1. Test Limit

The Maximum Peak Output Power Measurement is 30dBm.

7.2. Test Procedures

The antenna port (RF output) of the EUT was connected to the input (RF input) of a power meter. Power was read directly from the meter and cable loss connection was added to the reading to obtain power at the EUT antenna terminal. The EUT Output Power was set to maximum to produce the worse case test result.

7.3. Test Setup Layout



7.4. Measurement equipment

Instrument/Ancillary	Type	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2005/12/28

7.5. Test Result and Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Apr. 26, 2005 Temperature: 25 Humidity: 68% Atmospheric pressure: 1023 mmHg

Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (mW)
01	2412	13.01	19.999
06	2437	12.89	19.454
11	2462	12.24	16.749

(2) Modulation Standard: IEEE 802.11g

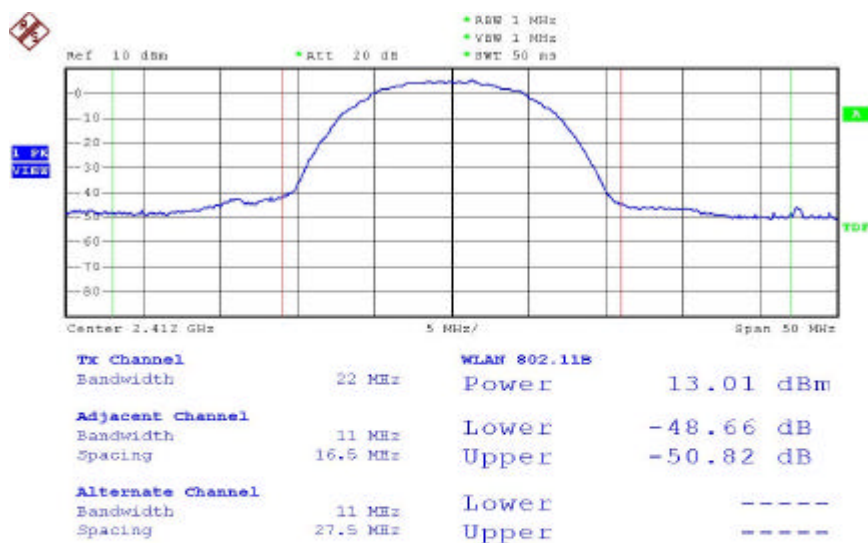
Test Date: Apr. 26, 2005 Temperature: 25 Humidity: 68% Atmospheric pressure: 1023 mmHg

Channel	Frequency (MHz)	Peak Power Output (dBm)	Peak Power Output (mW)
01	2412	12.21	16.634
06	2437	13.18	20.797
11	2462	13.28	21.281

Note: Conducted Power = Reading Value + Cable Loss

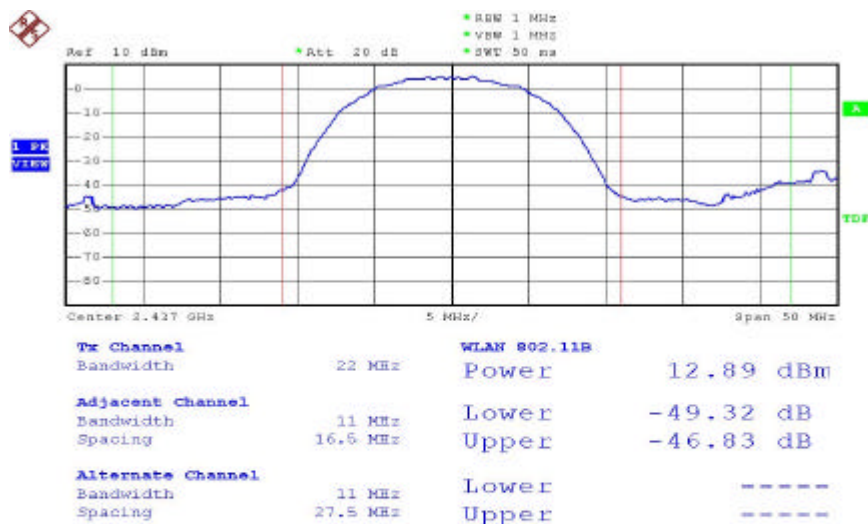
Modulation Standard:802.11b (11Mbps)

Channel:01



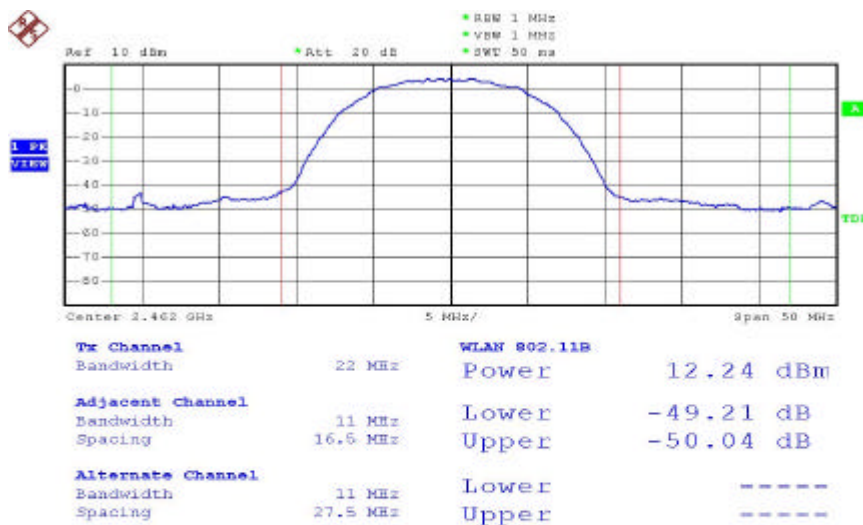
Date: 26.APR.2005 10:27:30

Channel:06



Date: 26.APR.2005 10:28:57

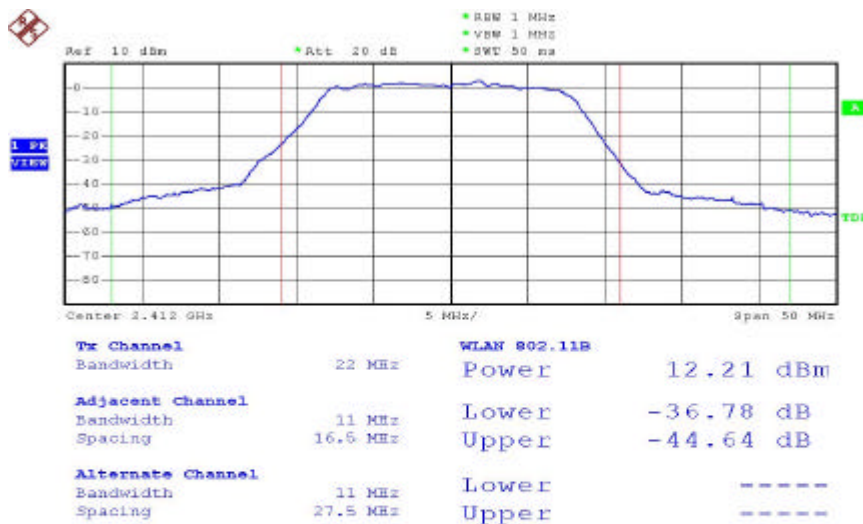
Channel:11



Date: 26.APR.2005 10:43:24

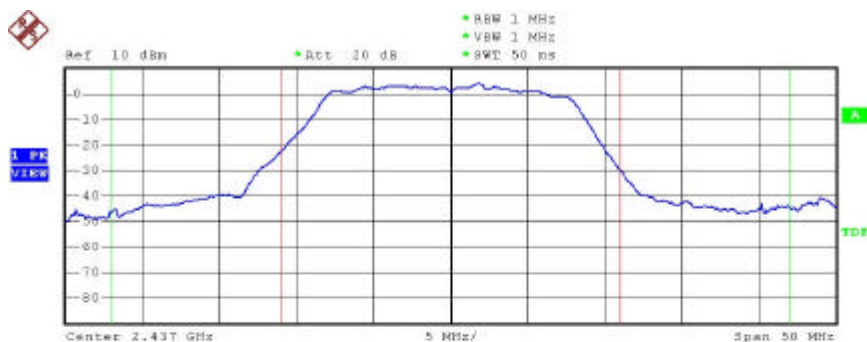
Modulation Standard:802.11g (54Mbps)

Channel:01



Date: 26.APR.2005 10:45:30

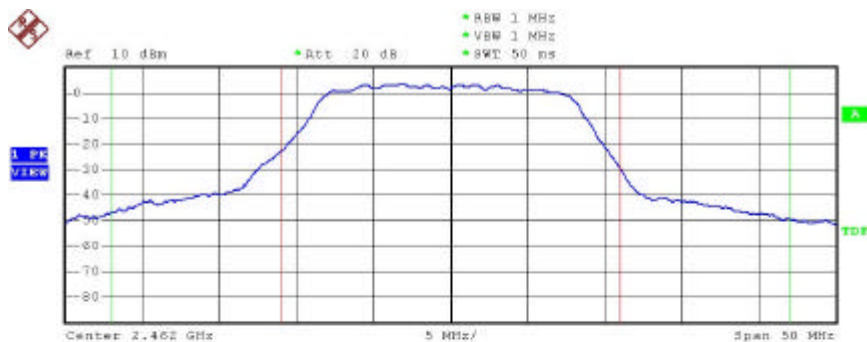
Channel:06



Tx Channel		WLAN 802.11b	
Bandwidth	22 MHz	Power	13.18 dBm
Adjacent Channel		Lower	-36.86 dB
Bandwidth	11 MHz	Upper	-43.70 dB
Spacing	16.5 MHz		
Alternate Channel		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		

Date: 26.APR.2005 10:46:39

Channel:11



Tx Channel		WLAN 802.11b	
Bandwidth	22 MHz	Power	13.28 dBm
Adjacent Channel		Lower	-36.63 dB
Bandwidth	11 MHz	Upper	-43.93 dB
Spacing	16.5 MHz		
Alternate Channel		Lower	-----
Bandwidth	11 MHz	Upper	-----
Spacing	27.5 MHz		

Date: 26.APR.2005 10:47:38

8. Band Edges Measurement

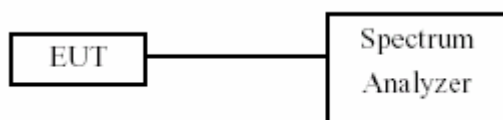
8.1. Test Limit

Below -20dB of the highest emission level of operating band
(in 100kHz Resolution Bandwidth)

8.2. Test Procedure :

1. The transmitter output was connected to the spectrum analyzer via a low lose cable.
2. Set both RBW and VBW of spectrum analyzer to 100 KHz with convenient frequency span including 100 KHz bandwidth from band edge.
3. The band edges was measured and recorded.

8.3. Test Setup Layout



8.4. Measurement equipment

Instrument/Ancillary	Type	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2005/12/28

8.5. Test Result and Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Apr. 27, 2005 Temperature: 25 Humidity: 69% Atmospheric pressure: 1028 mmHg

Channel	Frequency	maximum value in frequency (MHz)	maximum value is (dBm)
01	2412	2500.00	-45.73
11	2462	2500.10	-39.77

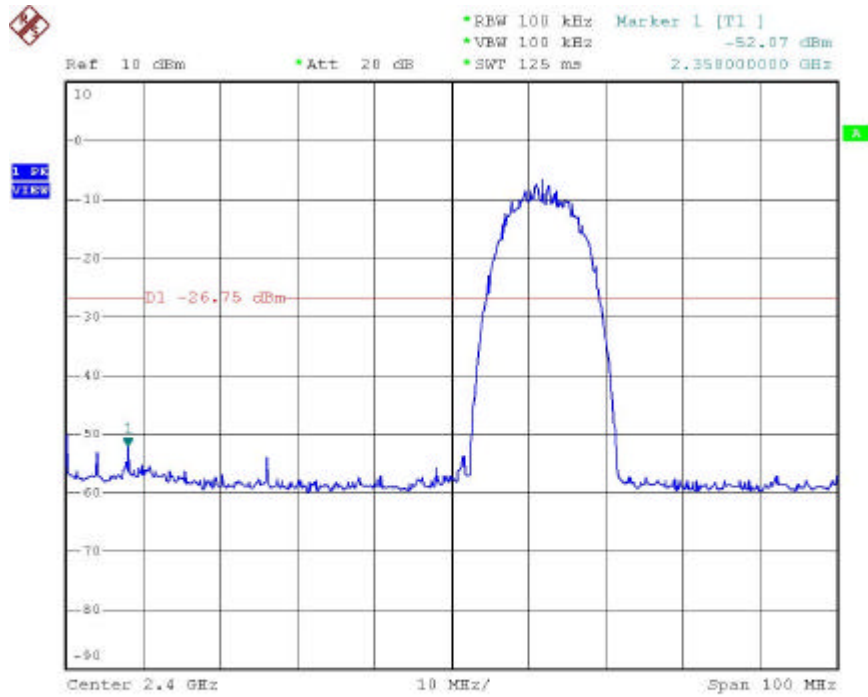
(2) Modulation Standard: IEEE 802.11g

Test Date: Apr. 27, 2005 Temperature: 25 Humidity: 69% Atmospheric pressure: 1028 mmHg

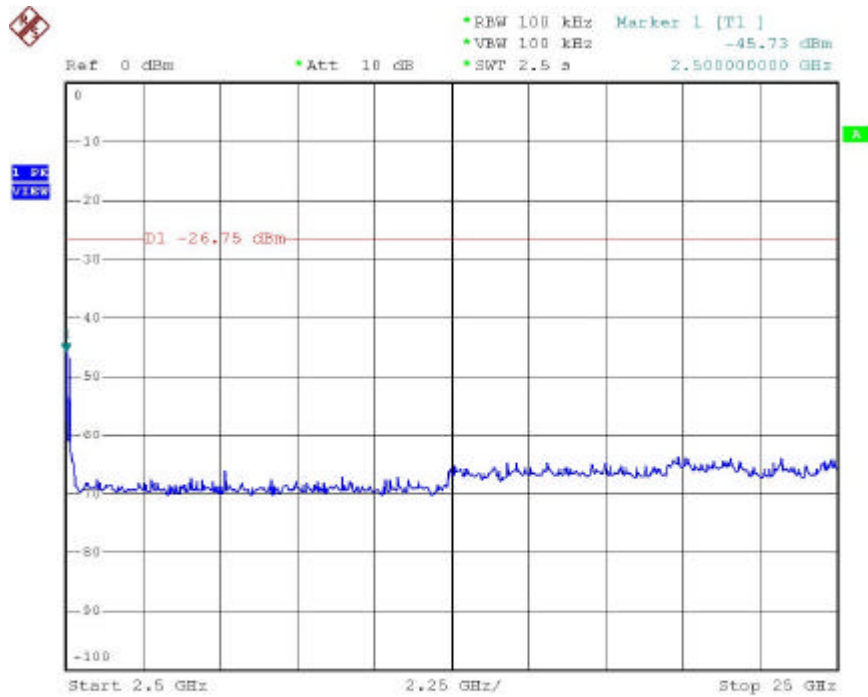
Channel	Frequency	maximum value in frequency (MHz)	maximum value is (dBm)
01	2412	2400.00	-49.99
11	2462	2488.10	-53.93

Modulation Standard:802.11b (11Mbps)

Channel:01

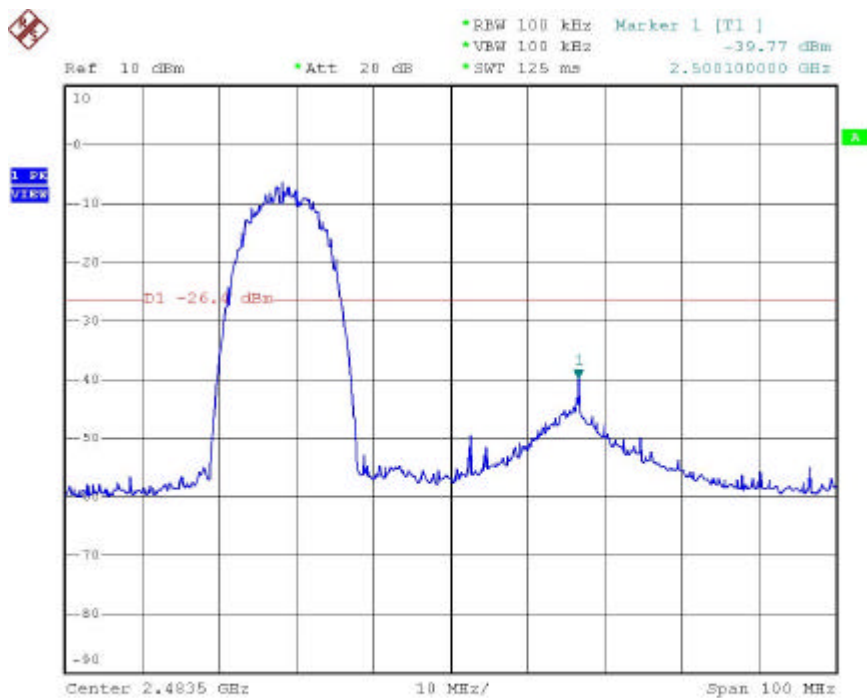


Date: 27.APR.2005 09:50:29

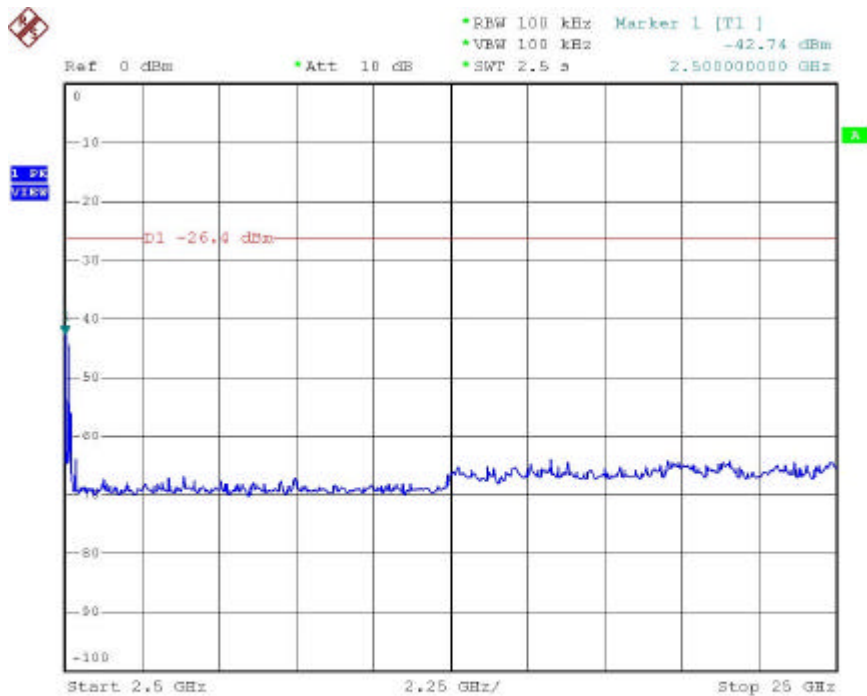


Date: 27.APR.2005 09:51:26

Channel:11



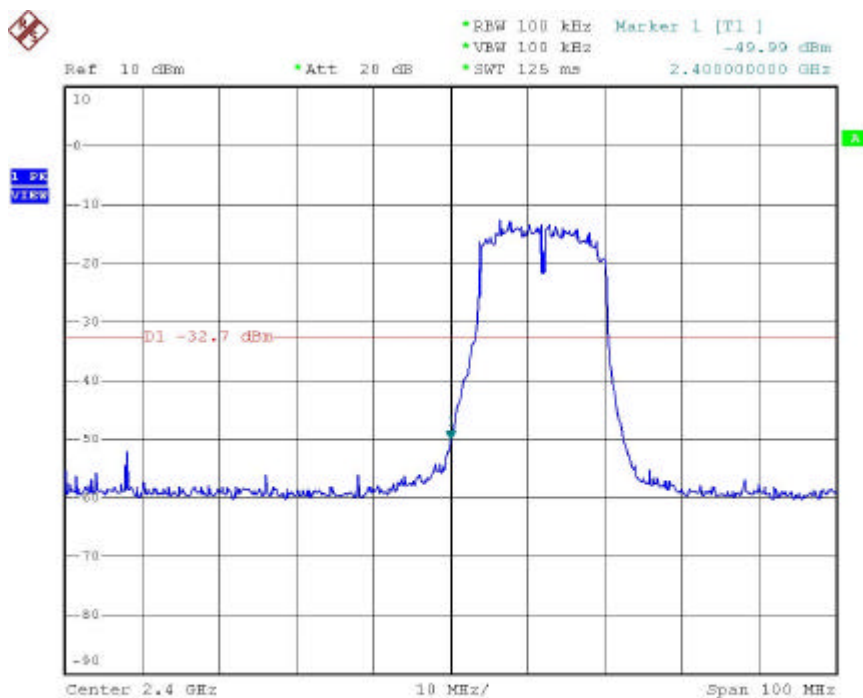
Date: 27.APR.2005 09:53:12



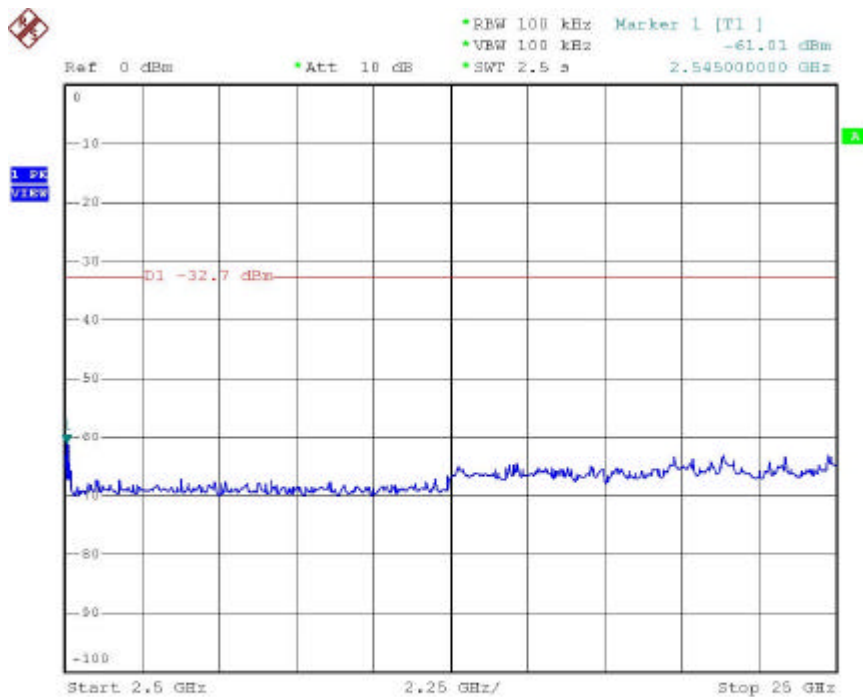
Date: 27.APR.2005 09:53:53

Modulation Standard:802.11g (54Mbps)

Channel:01

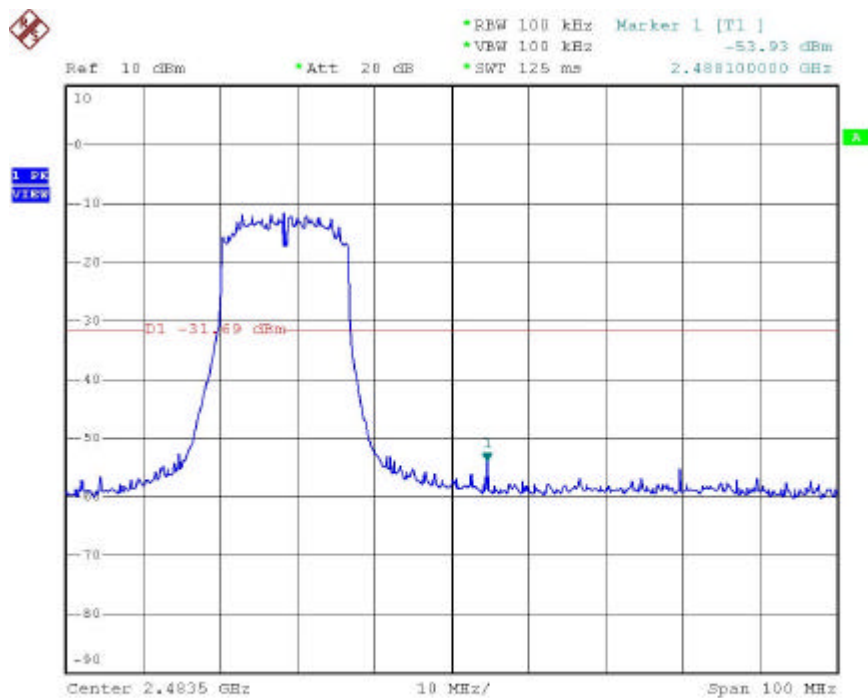


Date: 27.APR.2005 09:56:26

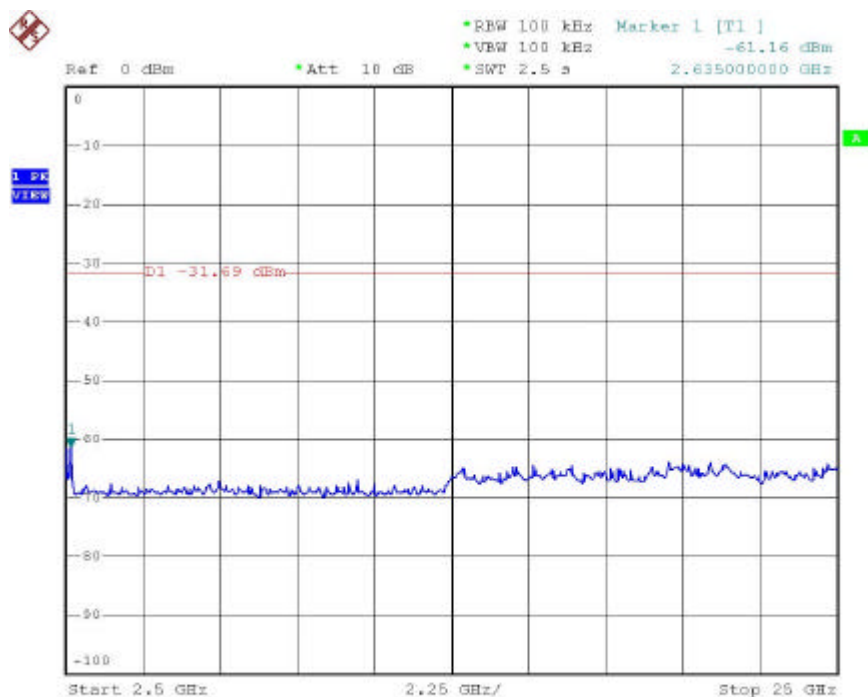


Date: 27.APR.2005 09:57:16

Channel:11



Date: 27.APR.2005 09:58:47



Date: 27.APR.2005 09:59:33

8.6. Restrict band emission Measurement Data

Modulation Standard: IEEE 802.11b

Test Date: May.25, 2005 Temperature: 25 Humidity: 68% Atmospheric pressure: 1018 mmHg

a) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2387.928	H	52.26	1.24	53.50	Peak	74	54	-20.50	228	1.2
2349.984	H	40.83	1.11	41.94	Ave	74	54	-12.06	228	1.2
2376.096	V	54.84	1.20	56.04	Peak	74	54	-17.96	86	1.0
2349.984	V	43.26	1.11	44.37	Ave	74	54	-9.63	86	1.0

b) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2492.628	H	46.99	1.60	48.59	Peak	74	54	-25.41	228	1.2
2491.792	H	32.93	1.60	34.53	Ave	74	54	-19.47	228	1.2
2488.144	V	48.56	1.59	50.15	Peak	74	54	-23.85	86	1.0
2500.000	V	35.73	1.63	37.36	Ave	74	54	-16.64	86	1.0

Modulation Standard: 802.11g (54Mbps)

Test Date: May.25, 2005 Temperature: 25 Humidity: 68% Atmospheric pressure: 1018 mmHg

a) Channel 1

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2388.132	H	52.30	1.24	53.54	Peak	74	54	-20.46	228	1.2
2358.144	H	37.80	1.14	39.84	Ave	74	54	-15.06	228	1.2
2387.928	V	54.18	1.24	55.42	Peak	74	54	-18.58	86	1.0
2388.132	V	40.76	1.24	42.00	Ave	74	54	-12.00	86	1.0

b) Channel 11

Frequency (MHz)	Ant-Pol H/V	Meter Reading	Corrected Factor	Result (dBuV/m)	Remark	Limit@3m (dBuV/m)		Margin (dB)	Table (Deg.)	Ant High (m)
						Peak	Ave.			
2490.120	H	47.39	1.60	48.99	Peak	74	54	-25.01	228	1.2
2491.716	H	32.88	1.60	34.48	Ave	74	54	-19.52	228	1.2
2487.916	V	48.70	1.59	50.29	Peak	74	54	-23.71	86	1.0
2488.068	V	36.08	1.59	37.67	Ave	74	54	-16.33	86	1.0

Notes:

1. Result = Meter Reading + Factor
2. Factor = Antenna Factor + Cable Loss – Amplifier
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3 MHz for Peak detection at frequency above 1GHz.
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average detection at frequency above 1GHz

9. Power Spectral Density

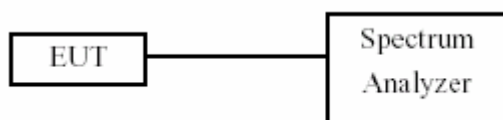
9.1. Test Limit

The Maximum of Power Spectral Density Measurement is 8dBm.

9.2. Test Procedures

1. The transmitter output was connected to spectrum analyzer.
2. The spectrum analyzer's resolution bandwidth were set at 3KHz RBW and 30KHz VBW as that of the fundamental frequency. Set the sweep time=span/3KHz.
3. The power spectral density was measured and recorded.
4. The Sweep time is allowed to be longer than span/3KHz for a full response of the mixer in the spectrum analyzer.

9.3. Test Setup Layout :



9.4. Measurement equipment

Instrument/Ancillary	Type	Manufacturer	Serial No.	Valid Date.
Spectrum Analyzer	FSP40	R&S	100047	2005/12/28

9.5. Test Result and Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Apr. 27, 2005 Temperature: 25 Humidity: 69% Atmospheric pressure: 1028 mmHg

Channel	Frequency	Maximum Power Density of 3 kHz Bandwidth (dBm)
01	2412	-20.36
06	2437	-21.74
11	2462	-21.57

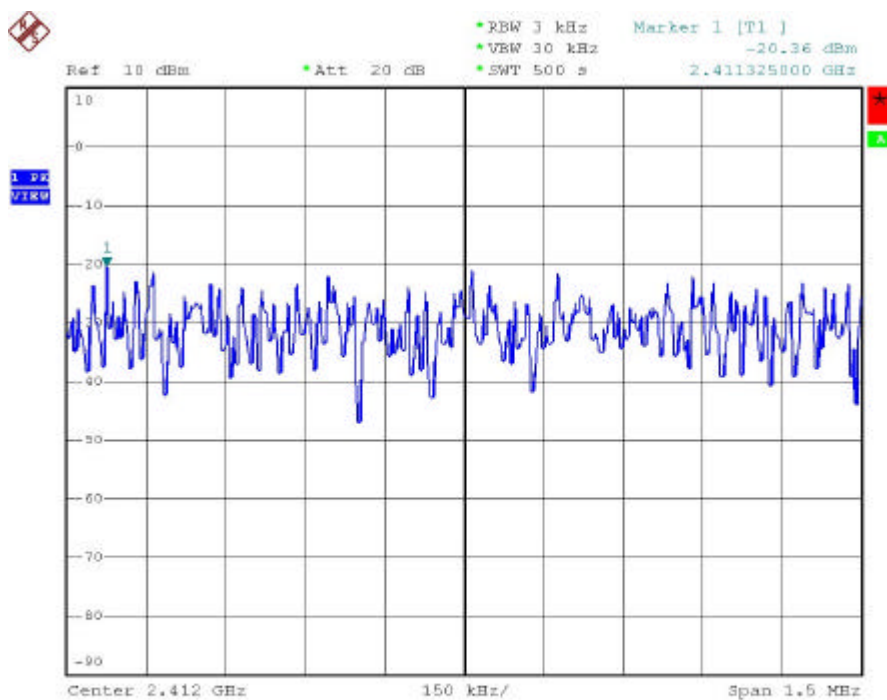
(2) Modulation Standard: IEEE 802.11g

Test Date: Apr. 27, 2005 Temperature: 25 Humidity: 69% Atmospheric pressure: 1028 mmHg

Channel	Frequency	Maximum Power Density of 3 kHz Bandwidth (dBm)
01	2412	-27.39
06	2437	-27.00
11	2462	-26.23

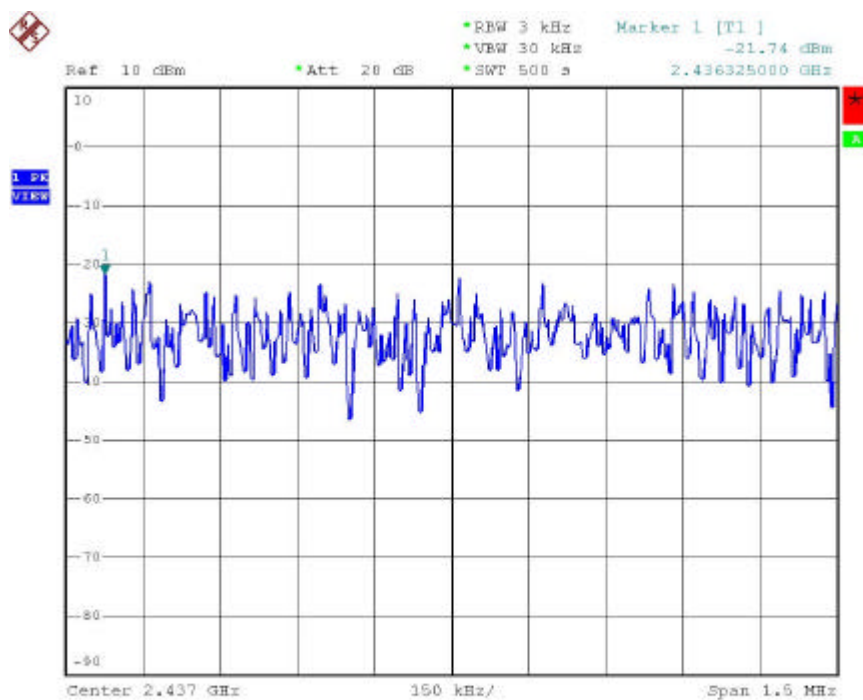
Modulation Standard:802.11b (11Mbps)

Channel:01



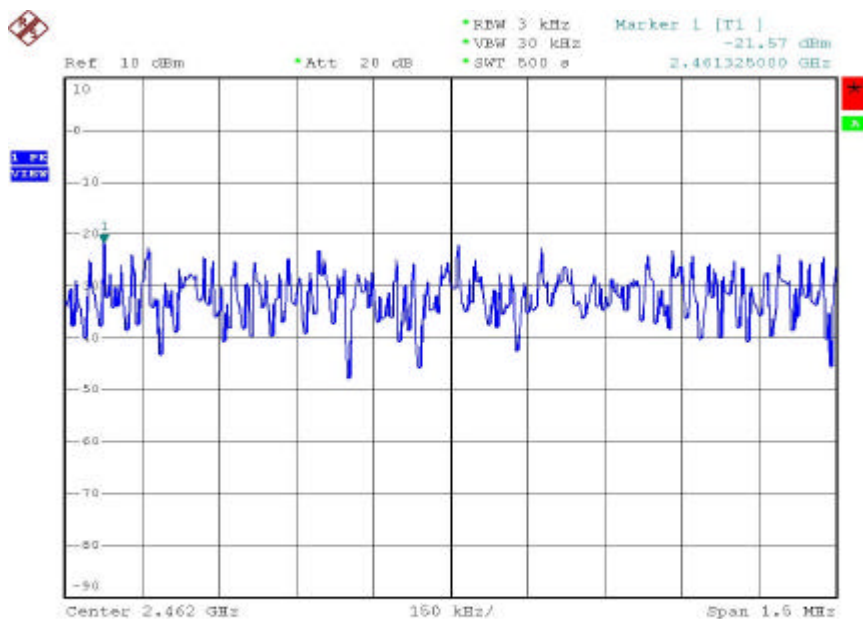
Date: 27.APR.2005 10:01:22

Channel:06



Date: 27.APR.2005 10:02:30

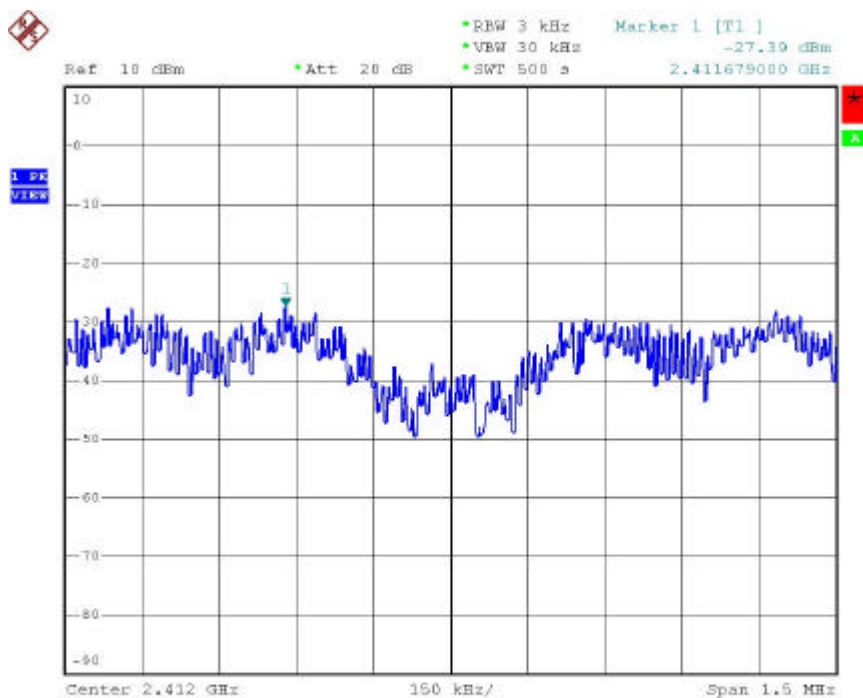
Channel:11



Date: 27.APR.2005 10:03:51

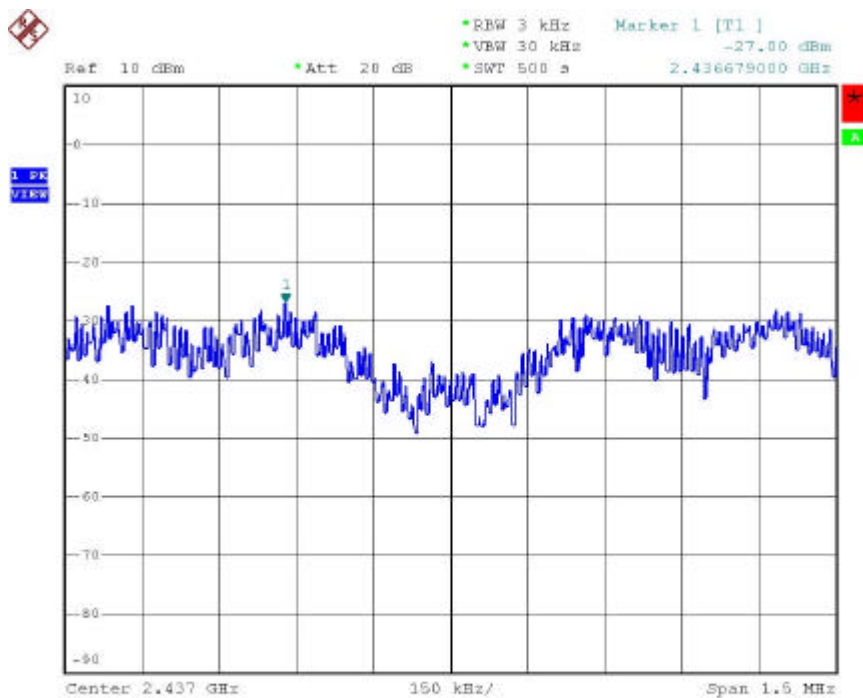
Modulation Standard:802.11g (54Mbps)

Channel:01



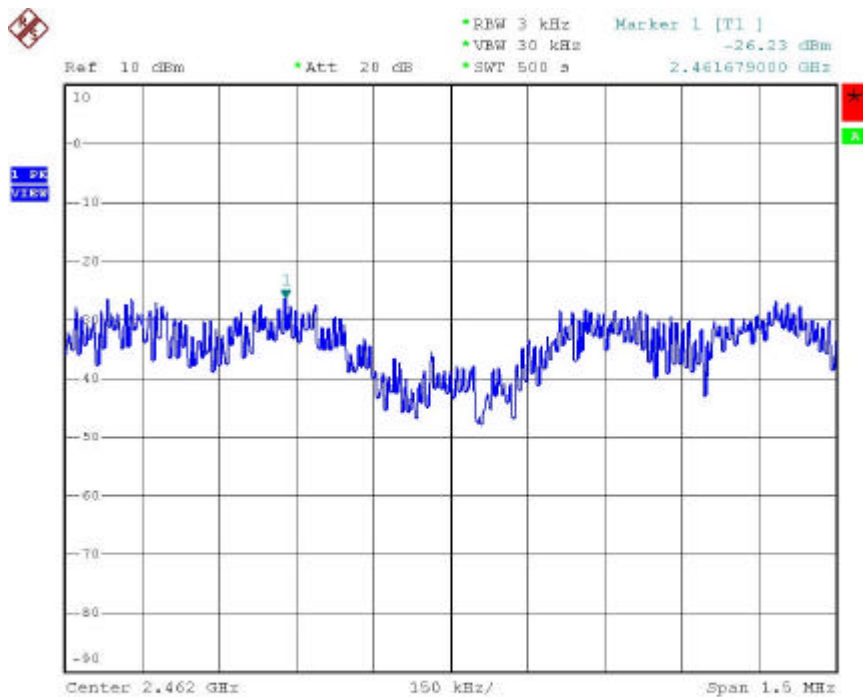
Date: 27.APR.2005 10:06:37

Channel: 06



Date: 27.APR.2005 10:16:13

Channel:11



Date: 27.APR.2005 10:25:50

10. Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below:

MHz	MHz	MHz	GHz
0.09000 – 0.11000	16.42000 – 16.42300	399.9 – 410.0	4.500 – 5.250
0.49500 – 0.505**	16.69475 – 16.69525	608.0 – 614.0	5.350 – 5.460
2.17350 – 2.19050	16.80425 – 16.80475	960.0 – 1240.0	7.250 – 7.750
4.12500 – 4.12800	25.50000 – 25.67000	1300.0 – 1427.0	8.025 – 8.500
4.17725 – 4.17775	37.50000 – 38.25000	1435.0 – 1626.5	9.000 – 9.200
4.20725 – 4.20775	73.00000 – 74.60000	1645.5 – 1646.5	9.300 – 9.500
6.21500 – 6.21800	74.80000 – 75.20000	1660.0 – 1710.0	10.600 – 12.700
6.26775 – 6.26825	108.00000 – 121.94000	1718.8 – 1722.2	13.250 – 13.400
6.31175 – 6.31225	123.00000 – 138.00000	2200.0 – 2300.0	14.470 – 14.500
8.29100 – 8.29400	149.90000 – 150.05000	2310.0 – 2390.0	15.350 – 16.200
8.36200 – 8.36600	156.52475 – 156.52525	2483.5 – 2500.0	17.700 – 21.400
8.37625 – 8.38675	156.70000 – 156.90000	2655.0 – 2900.0	22.010 – 23.120
8.41425 – 8.41475	162.01250 – 167.17000	3260.0 – 3267.0	23.600 – 24.000
12.29000 – 12.29300	167.72000 – 173.20000	3332.0 – 3339.0	31.200 – 31.800
12.51975 – 12.52025	240.00000 – 285.00000	3345.8 – 3358.0	36.430 – 36.500
12.57675 – 12.57725	322.00000 – 335.40000	3600.0 – 4400.0	Above 38.6
13.36000 – 13.41000			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

10.1. Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.