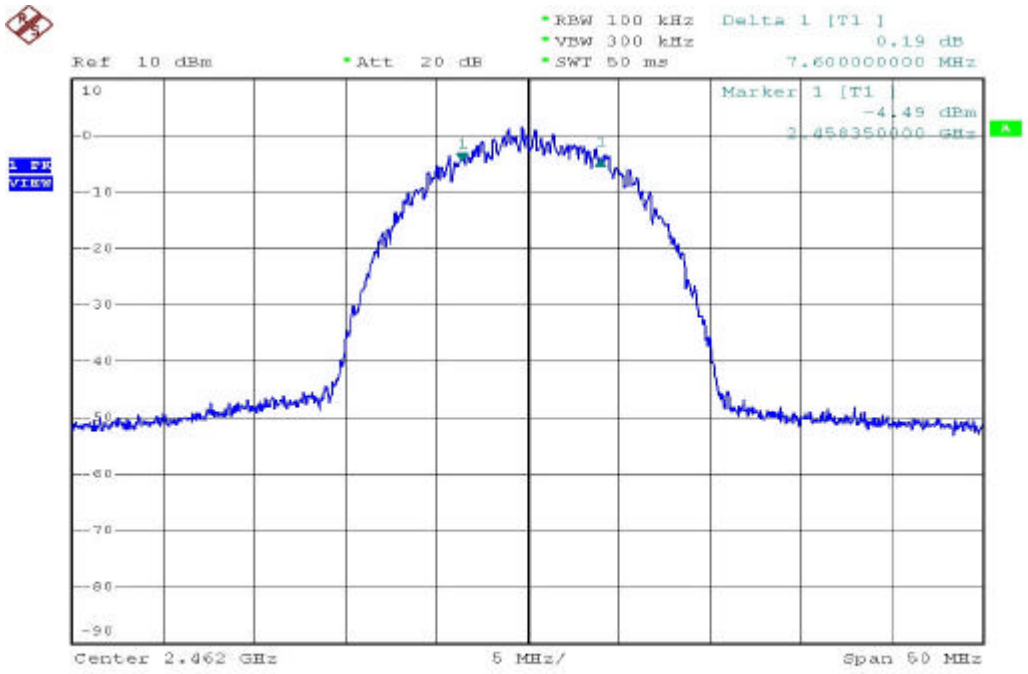
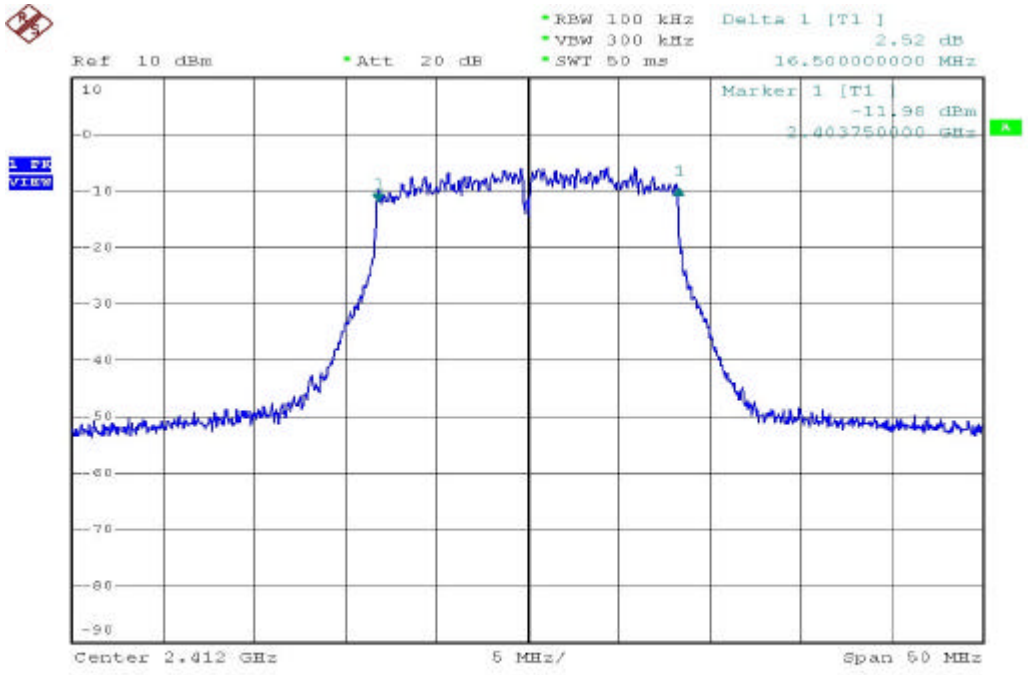
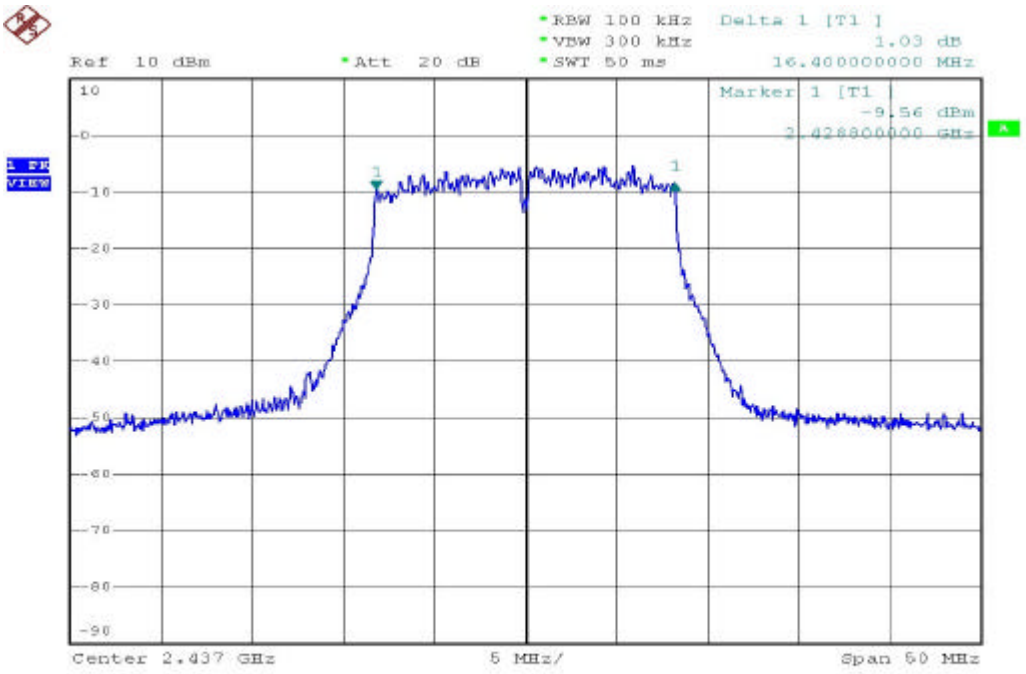
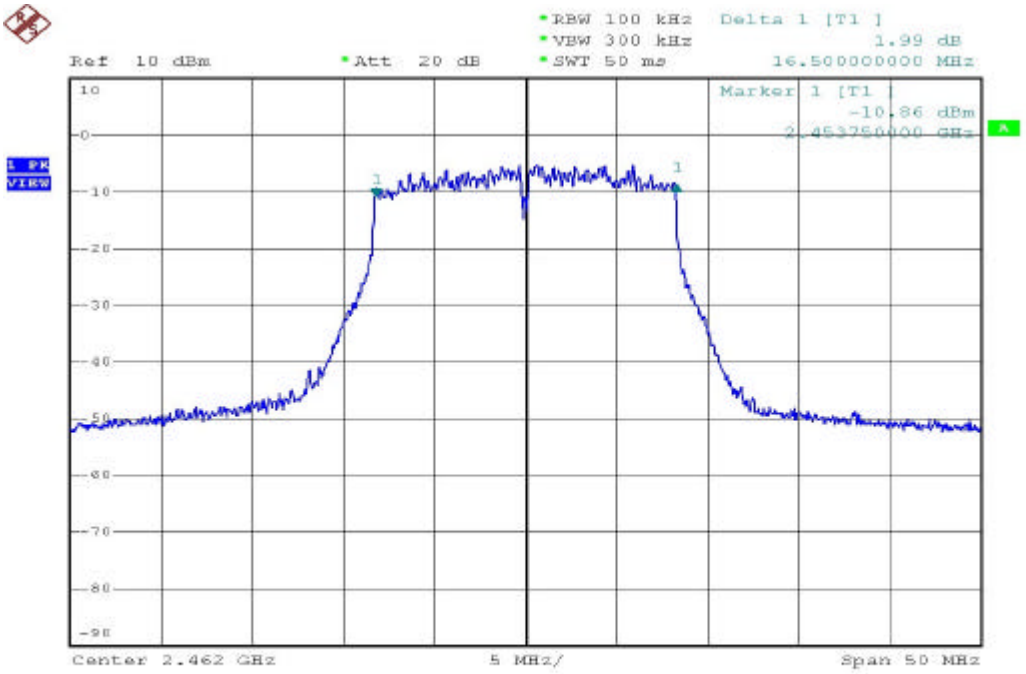

RBW 100 kHz
VBW 300 kHz
SWT 50 ms
Delta 1 [T1 ]
0.19 dB
7.600000000 MHz
Ref 10 dBm
Att 20 dB
Marker 1 [T1 ]
-4.49 dBm
2.458350000 GHz
Center 2.462 GHz
5 MHz/
Span 50 MHz


RBW 100 kHz
VBW 300 kHz
SWT 50 ms
Delta 1 [T1 ]
2.52 dB
16.500000000 MHz
Ref 10 dBm
Att 20 dB
Marker 1 [T1 ]
-11.98 dBm
2.403750000 GHz
Center 2.412 GHz
5 MHz/
Span 50 MHz


RBW 100 kHz
VBW 300 kHz
SWT 50 ms
Delta 1 [T1 ]
1.03 dB
16.400000000 MHz
Ref 10 dBm
Att 20 dB
Marker 1 [T1 ]
-9.56 dBm
2.428800000 GHz
1 PK VIEW
Center 2.437 GHz
5 MHz/
Span 50 MHz


RBW 100 kHz
VBW 300 kHz
SWT 50 ms
Delta 1 [T1 ]
1.99 dB
16.500000000 MHz
Ref 10 dBm
Att 20 dB
Marker 1 [T1 ]
-10.86 dBm
2.453750000 GHz
1 PK VIEW
Center 2.462 GHz
5 MHz/
Span 50 MHz

## 4.5. Peak Output Power Measurement Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Jul. 02. 2004 Temperature: 24℃ Humidity: 58%

a) Channel 01: Output Peak Power is 16.87 dBm or 48.640 mW

b) Channel 06: Output Peak Power is 16.35 dBm or 43.152 mW

c) Channel 11: Output Peak Power is 16.26 dBm or 42.267 mW

(2) Modulation Standard: IEEE 802.11g

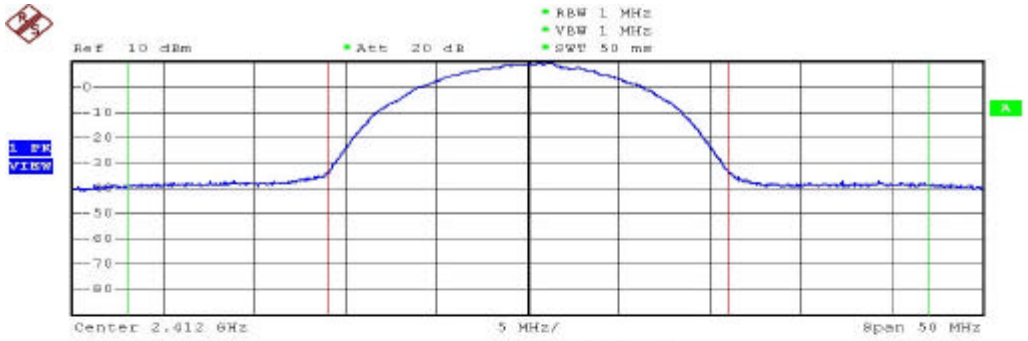
Test Date: Jul. 02. 2004 Temperature: 24℃ Humidity: 58%

a) Channel 01: Output Peak Power is 14.70 dBm or 29.512 mW

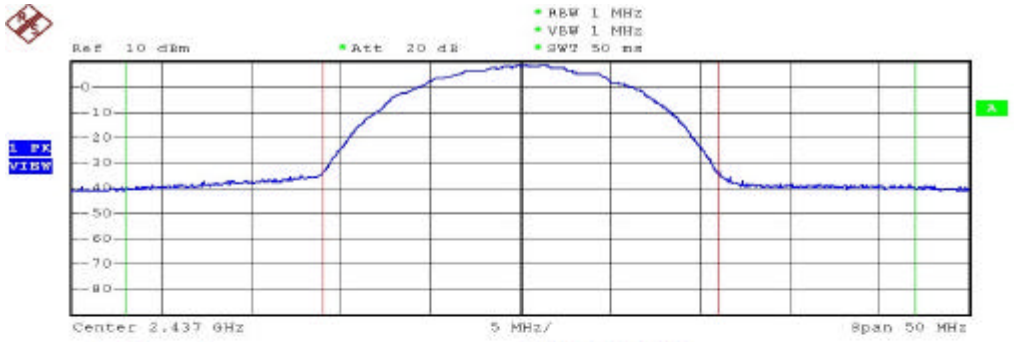
b) Channel 06: Output Peak Power is 15.19 dBm or 33.037 mW

c) Channel 11: Output Peak Power is 15.35 dBm or 34.277 mW

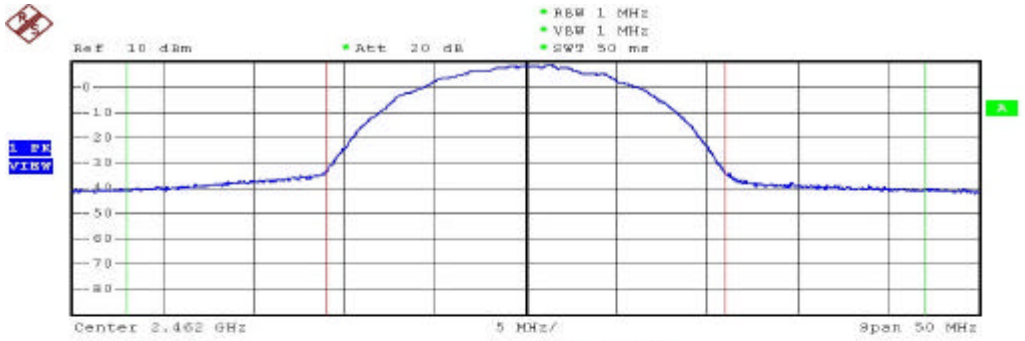
Note: Conducted Power = Reading Value + Cable Loss



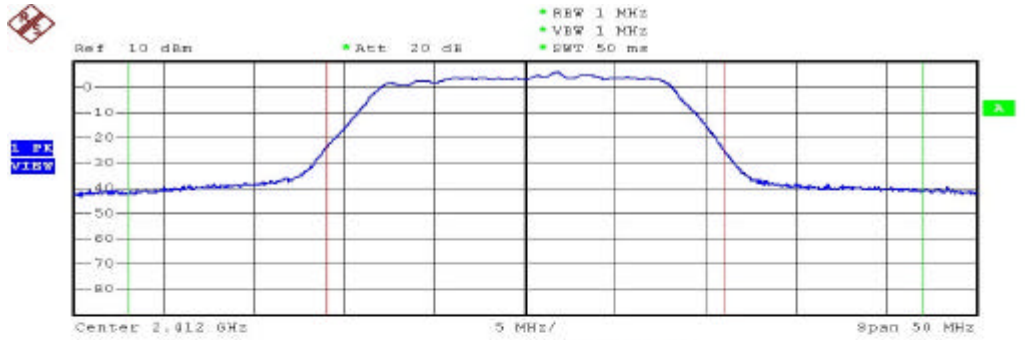

| | | | |
|---|---|---|---|
| **Tx Channel** | | **WLAN 802.11B** | |
| Bandwidth | 22 MHz | Power | 16.87 dBm |
| **Adjacent Channel** | | | |
| Bandwidth | 11 MHz | Lower | -44.97 dB |
| Spacing | 16.5 MHz | Upper | -45.18 dB |
| **Alternate Channel** | | | |
| Bandwidth | 11 MHz | Lower | ----- |
| Spacing | 27.5 MHz | Upper | ----- |



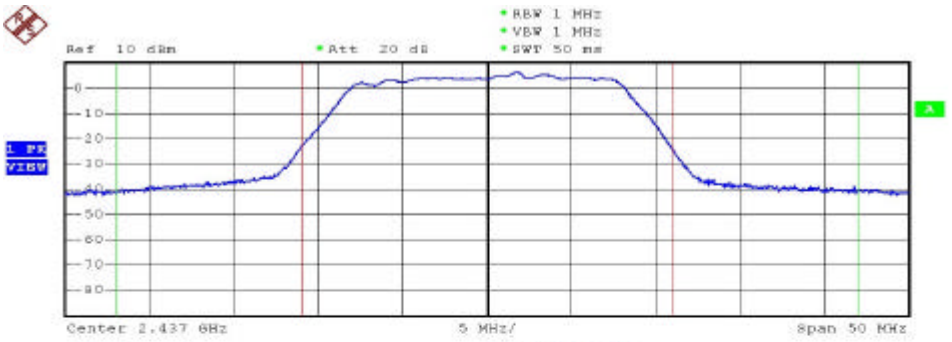

| | | | |
|---|---|---|---|
| **Tx Channel** | | **WLAN 802.11B** | |
| Bandwidth | 22 MHz | Power | 16.35 dBm |
| **Adjacent Channel** | | | |
| Bandwidth | 11 MHz | Lower | -44.35 dB |
| Spacing | 16.5 MHz | Upper | -45.38 dB |
| **Alternate Channel** | | | |
| Bandwidth | 11 MHz | Lower | ----- |
| Spacing | 27.5 MHz | Upper | ----- |



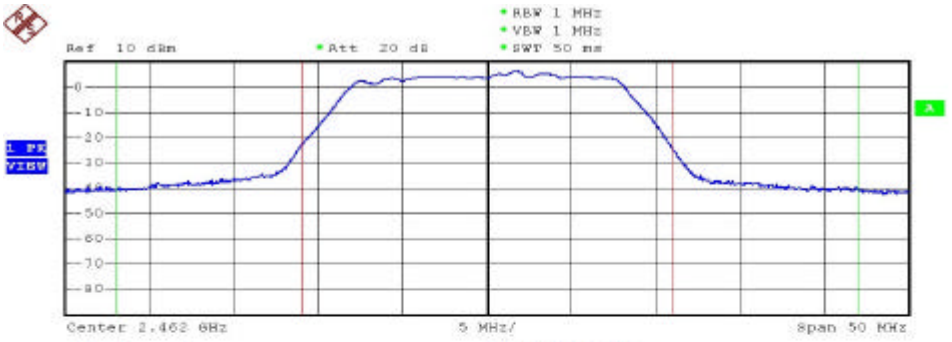

| | | | |
|---|---|---|---|
| **Tx Channel** | | **WLAN 802.11B** | |
| Bandwidth | 22 MHz | Power | 16.26 dBm |
| **Adjacent Channel** | | | |
| Bandwidth | 11 MHz | Lower | -44.24 dB |
| Spacing | 16.5 MHz | Upper | -45.47 dB |
| **Alternate Channel** | | | |
| Bandwidth | 11 MHz | Lower | ----- |
| Spacing | 27.5 MHz | Upper | ----- |




| | | | |
|---|---|---|---|
| **Tx Channel** | | **WLAN 802.11B** | |
| Bandwidth | 22 MHz | Power | 14.70 dBm |
| **Adjacent Channel** | | | |
| Bandwidth | 11 MHz | Lower | -40.34 dB |
| Spacing | 16.5 MHz | Upper | -40.77 dB |
| **Alternate Channel** | | | |
| Bandwidth | 11 MHz | Lower | ----- |
| Spacing | 27.5 MHz | Upper | ----- |




| | | | |
|---|---|---|---|
| **Tx Channel** | | **WLAN 802.11B** | |
| Bandwidth | 22 MHz | Power | 15.19 dBm |
| **Adjacent Channel** | | | |
| Bandwidth | 11 MHz | Lower | -40.00 dB |
| Spacing | 16.5 MHz | Upper | -40.83 dB |
| **Alternate Channel** | | | |
| Bandwidth | 11 MHz | Lower | ----- |
| Spacing | 27.5 MHz | Upper | ----- |




| | | | |
|---|---|---|---|
| **Tx Channel** | | **WLAN 802.11B** | |
| Bandwidth | 22 MHz | Power | 15.35 dBm |
| **Adjacent Channel** | | | |
| Bandwidth | 11 MHz | Lower | -39.96 dB |
| Spacing | 16.5 MHz | Upper | -40.92 dB |
| **Alternate Channel** | | | |
| Bandwidth | 11 MHz | Lower | ----- |
| Spacing | 27.5 MHz | Upper | ----- |

## 4.6. Band Edges Measurement Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Jul. 02. 2004 Temperature: 24℃ Humidity: 58%

a) Lower Band Edge: maximum value is -28.12 dBm that is attenuated more than 20dB

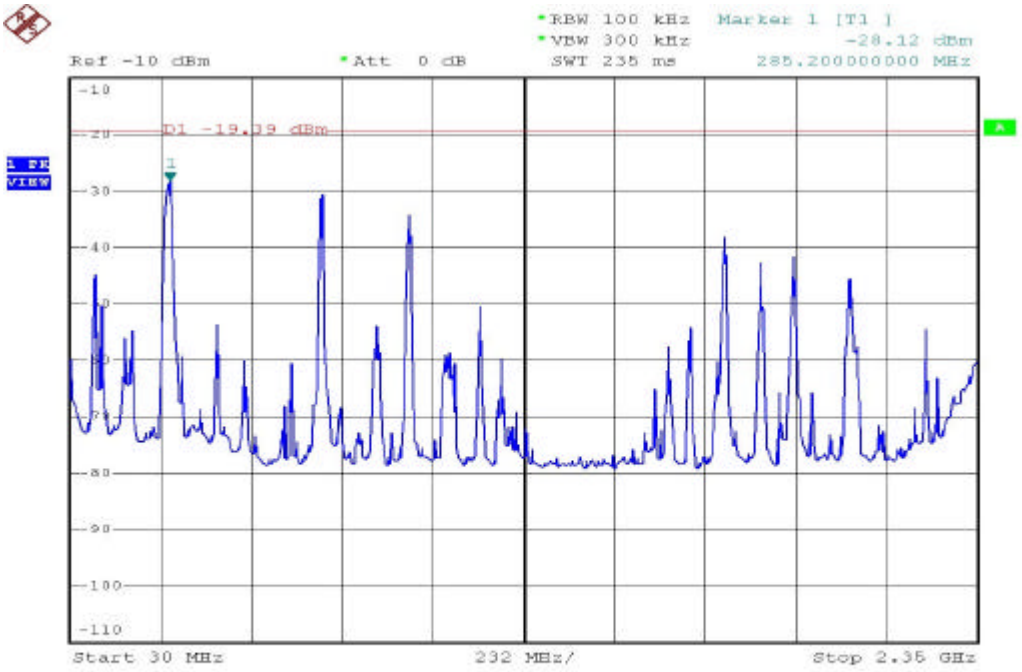
b) Upper Band Edge: maximum value is -24.56 dBm that is attenuated more than 20dB

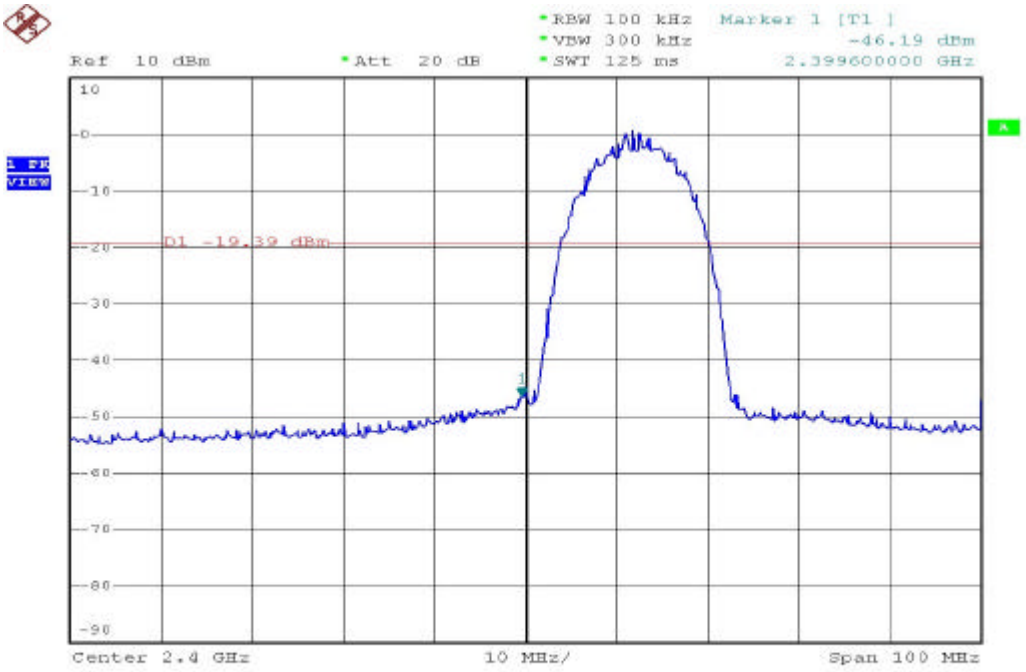
(2) Modulation Standard: IEEE 802.11g

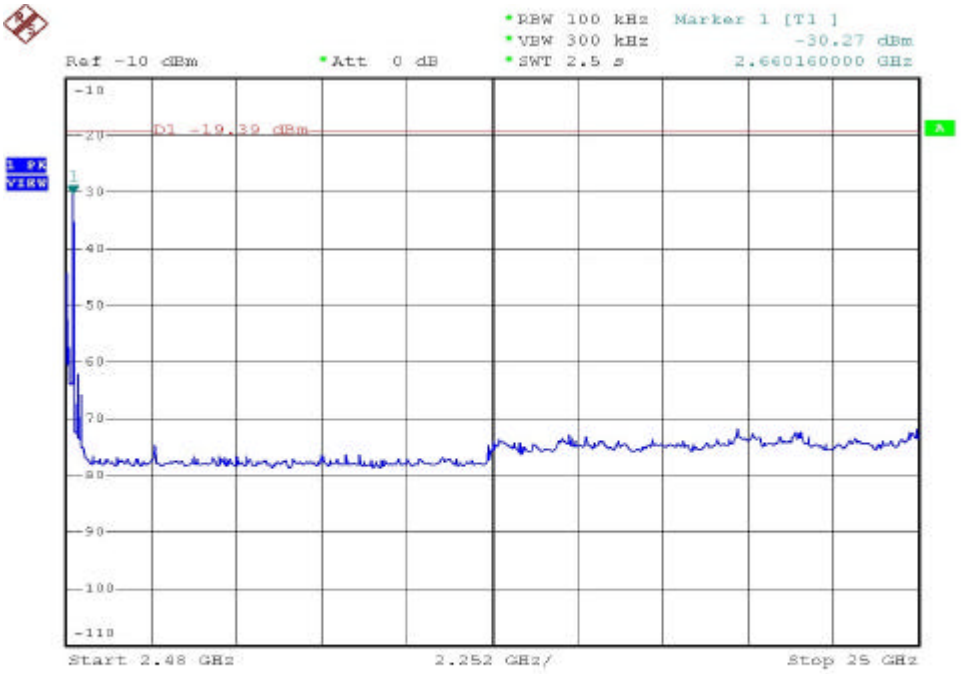
Test Date: Jul. 02. 2004 Temperature: 24℃ Humidity: 58%

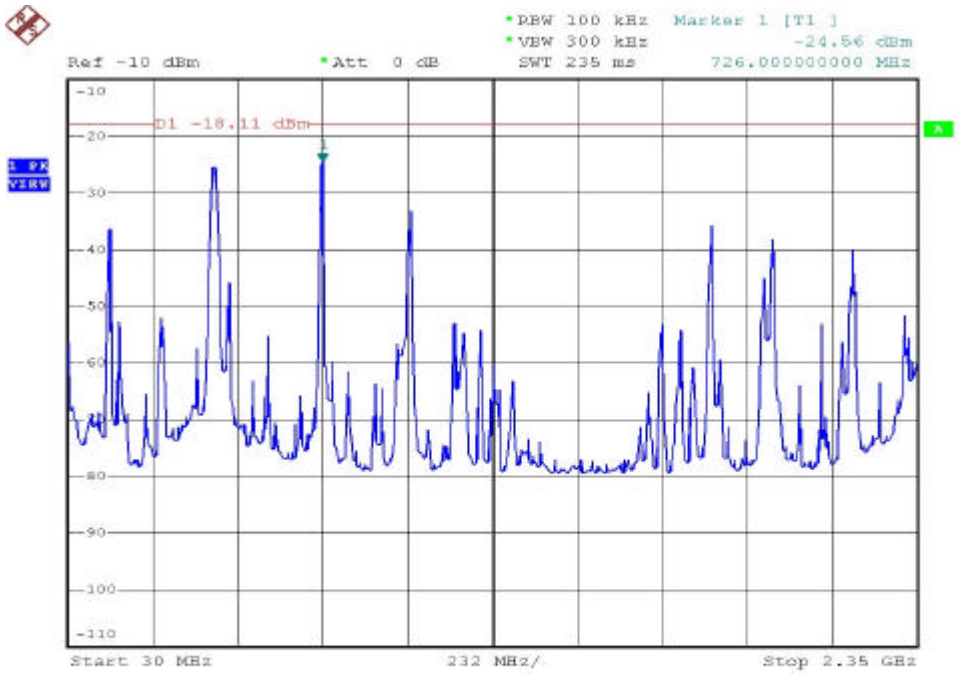
a) Lower Band Edge: maximum value is -32.88 dBm that is attenuated more than 20dB

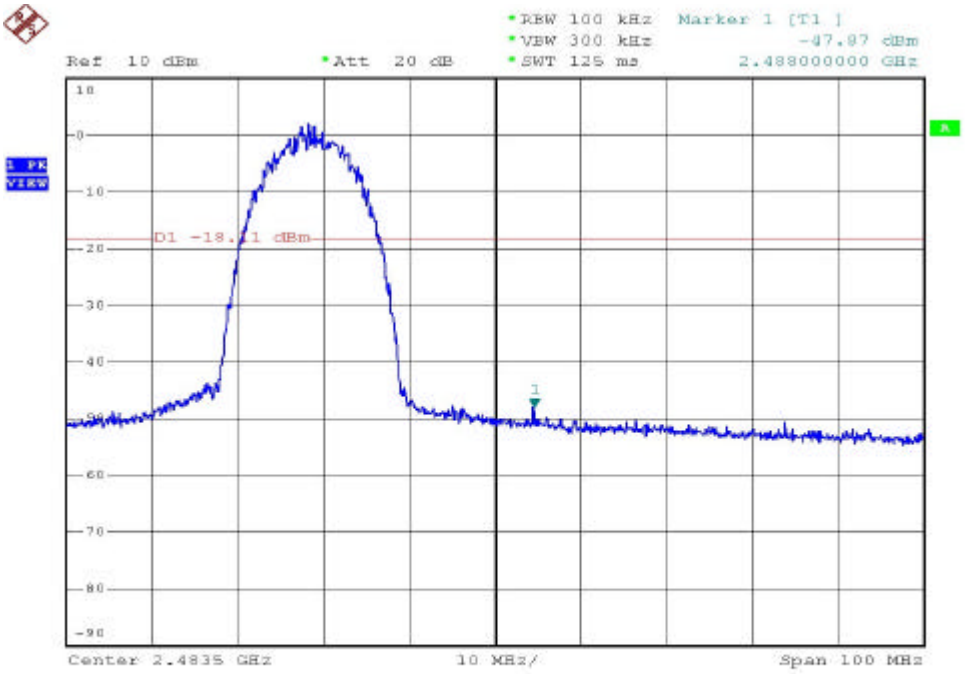
b) Upper Band Edge: maximum value is -31.46 dBm that is attenuated more than 20dB

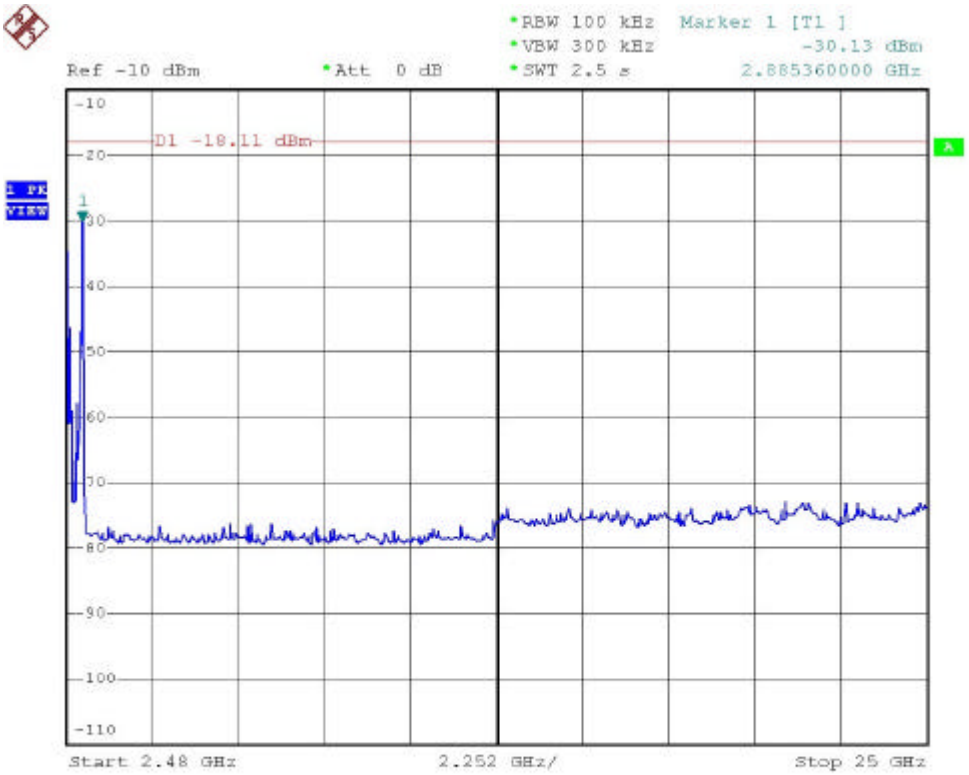

RBW 100 kHz
VBW 300 kHz
SWT 235 ms
Marker 1 [T1 ]
-28.12 dBm
285.200000000 MHz
Ref -10 dBm
Att 0 dB
D1 -19.39 dBm
Start 30 MHz
232 MHz/
Stop 2.35 GHz

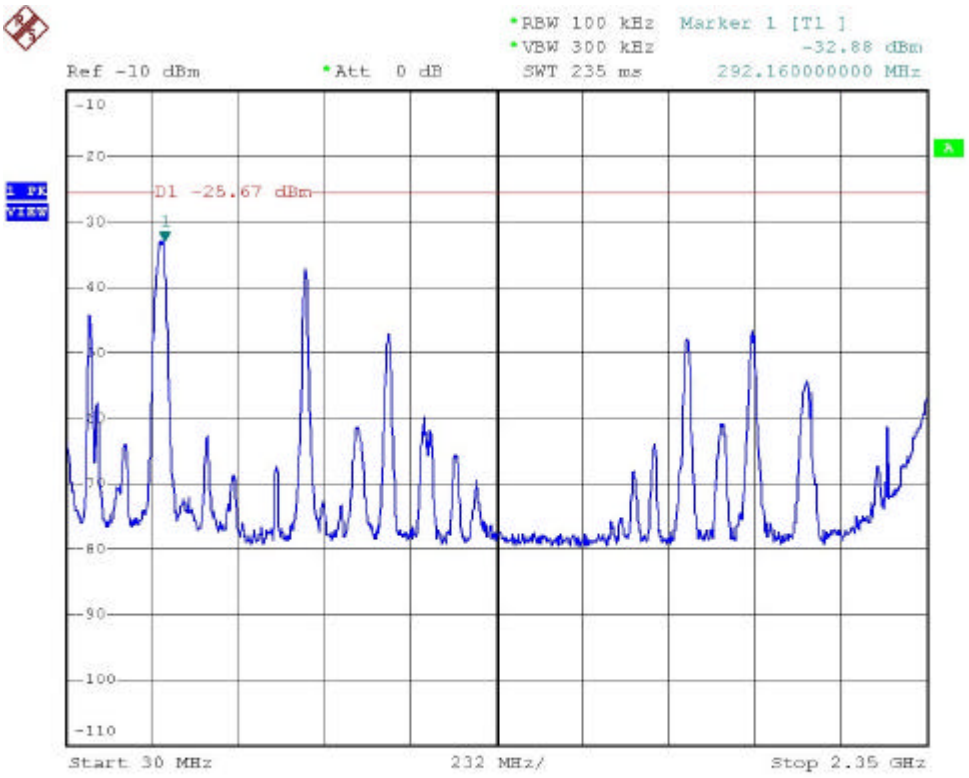

RBW 100 kHz
VBW 300 kHz
SWT 125 ms
Marker 1 [T1 ]
-46.19 dBm
2.399600000 GHz
Ref 10 dBm
Att 20 dB
D1 -19.39 dBm
Center 2.4 GHz
10 MHz/
Span 100 MHz

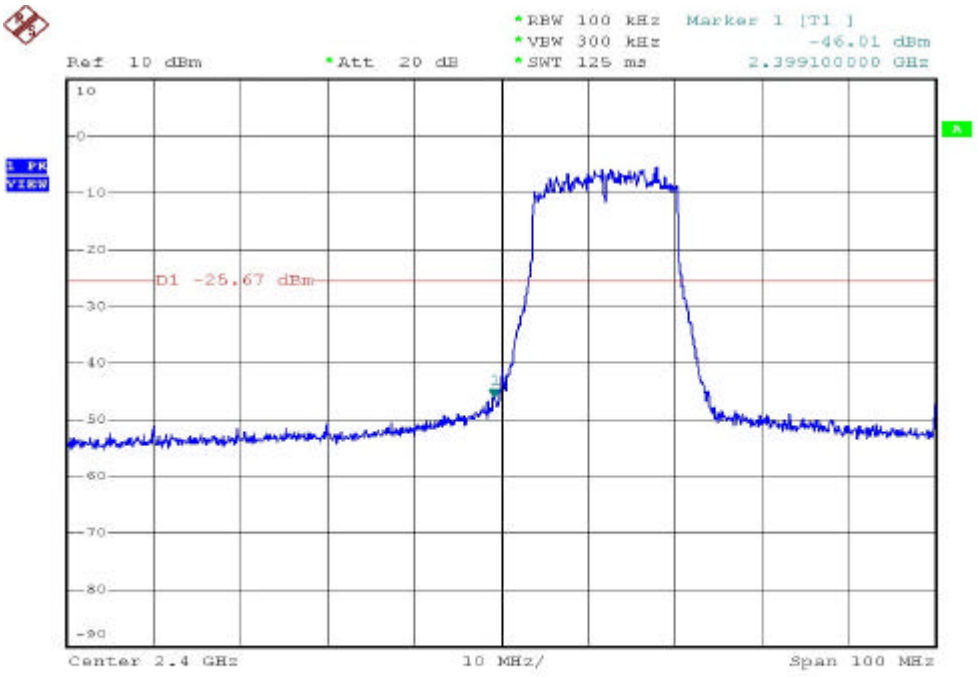

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
Marker 1 [T1 ]
-30.27 dBm
2.660160000 GHz
Ref -10 dBm
Att 0 dB
D1 -19.39 dBm
Start 2.48 GHz
2.252 GHz/
Stop 25 GHz

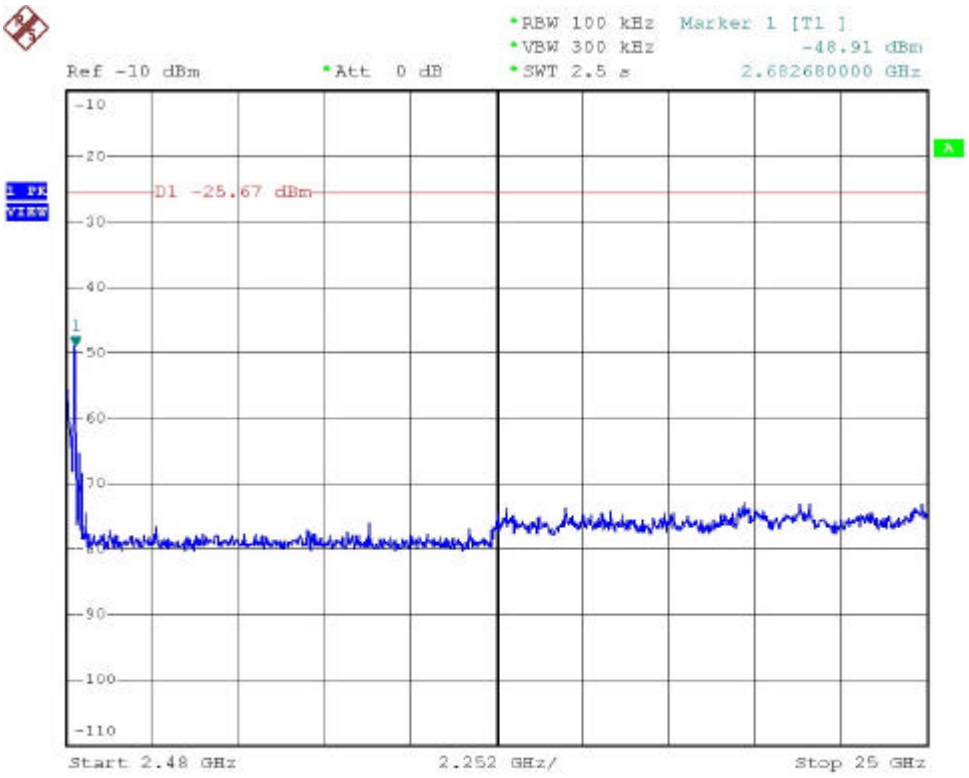

RBW 100 kHz
VBW 300 kHz
SWT 235 ms
Marker 1 [T1 ]
-24.56 dBm
726.000000000 MHz
Ref -10 dBm
Att 0 dB
D1 -18.11 dBm
Start 30 MHz
232 MHz/
Stop 2.35 GHz

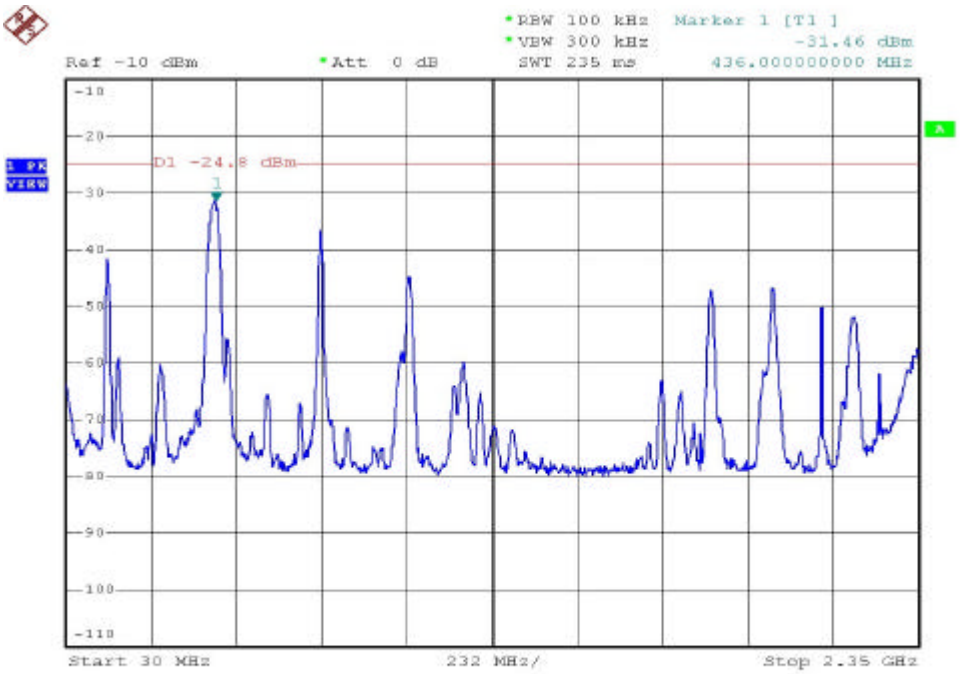

RBW 100 kHz
VBW 300 kHz
SWT 125 ms
Marker 1 [T1 ]
-47.97 dBm
2.488000000 GHz
Ref 10 dBm
Att 20 dB
D1 -18.11 dBm
Center 2.4835 GHz
10 MHz/
Span 100 MHz

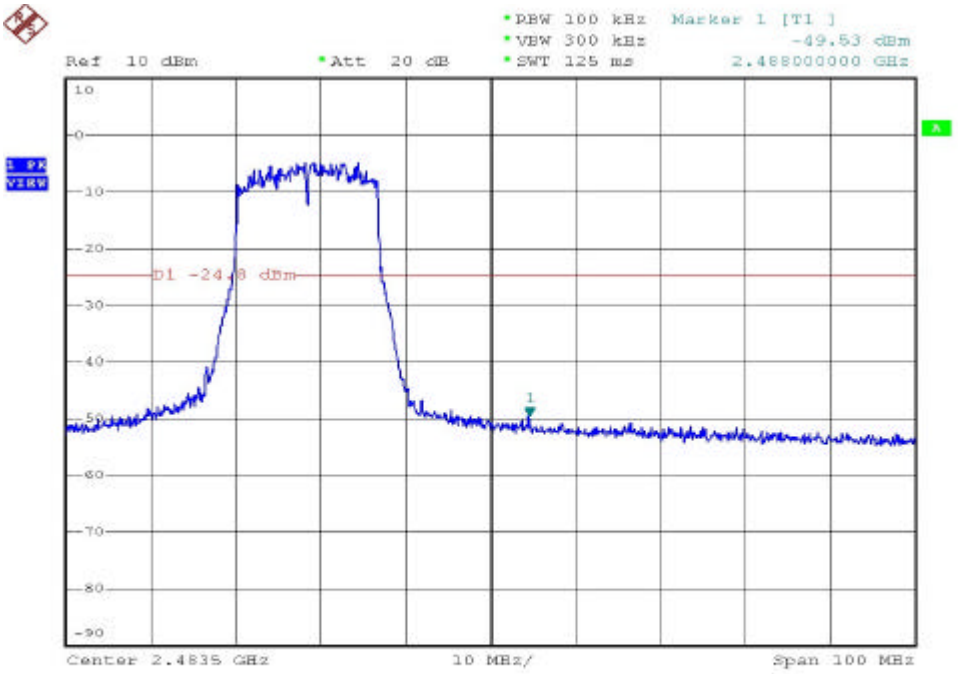

RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
Marker 1 [T1 ]
-30.13 dBm
2.885360000 GHz
Ref -10 dBm
Att 0 dB
D1 -18.11 dBm
Start 2.48 GHz
2.252 GHz/
Stop 25 GHz

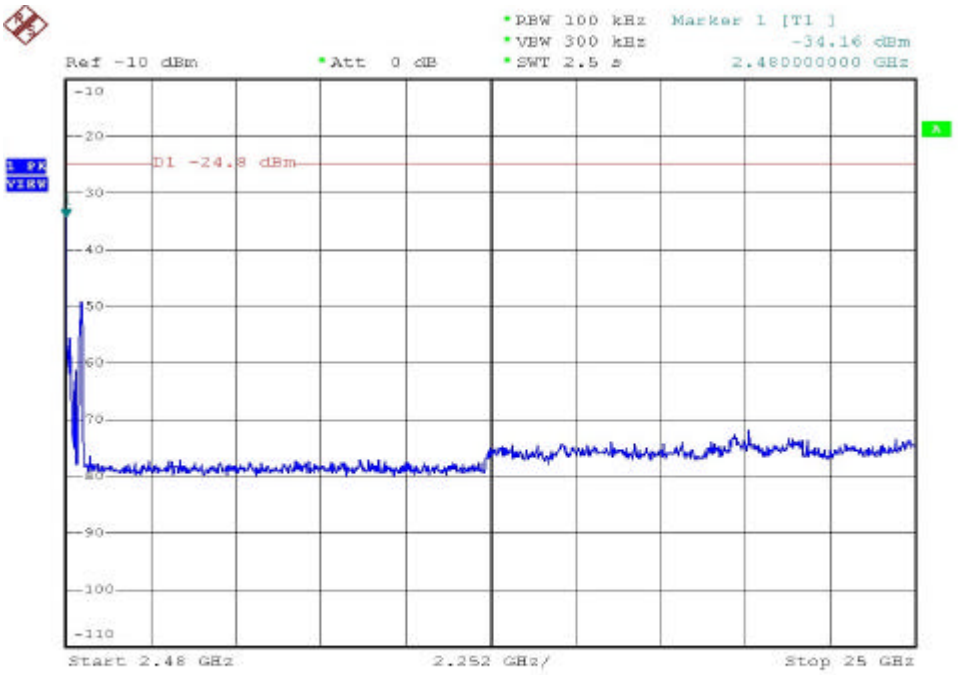

RBW 100 kHz
VBW 300 kHz
SWT 235 ms
Marker 1 [T1 ]
-32.88 dBm
292.160000000 MHz
Ref -10 dBm
Att 0 dB
D1 -25.67 dBm
Start 30 MHz
232 MHz/
Stop 2.35 GHz


RBW 100 kHz
VBW 300 kHz
SWT 125 ms
Marker 1 [T1 ]
-46.01 dBm
2.399100000 GHz
Ref 10 dBm
Att 20 dB
D1 -25.67 dBm
Center 2.4 GHz
10 MHz/
Span 100 MHz


RBW 100 kHz
VBW 300 kHz
SWT 2.5 s
Marker 1 [T1 ]
-48.91 dBm
2.682680000 GHz
Ref -10 dBm
Att 0 dB
D1 -25.67 dBm
Start 2.48 GHz
2.252 GHz/
Stop 25 GHz


RBW 100 kHz
VBW 300 kHz
SWT 235 ms
Marker 1 [T1 ]
-31.46 dBm
436.000000000 MHz
Ref -10 dBm
Att 0 dB
D1 -24.8 dBm
Start 30 MHz
232 MHz/
Stop 2.35 GHz


PBW 100 kHz
VBW 300 kHz
SWT 125 ms
Marker 1 [T1 ]
-49.53 dBm
2.488000000 GHz
Ref 10 dBm
Att 20 dB
D1 -24.8 dBm
Center 2.4835 GHz
10 MHz/
Span 100 MHz


PBW 100 kHz
VBW 300 kHz
SWT 2.5 s
Marker 1 [T1 ]
-34.16 dBm
2.480000000 GHz
Ref -10 dBm
Att 0 dB
D1 -24.8 dBm
Start 2.48 GHz
2.252 GHz/
Stop 25 GHz

4.6.1. Note on Band edge Emission

Modulation Standard: IEEE 802.11b
Operation Mode: Normal Operating
Test Date: Jul. 02, 2004 Temperature: 24 ℃ Humidity: 58%

a) Channel 1

Fundamental Frequency: 2412 MHz

| Frequency (MHz) | Level (dBuV) | polarization | Remark | Limit@3m (dBuV/m) | | Margin (dB) | Table Deg. (Deg.) | Ant High (m) |
|---|---|---|---|---|---|---|---|---|
| | | | | Peak | Ave. | | | |
| 2359.980 | 35.34 | H | Peak | 74 | 54 | -38.66 | 270 | 1.5 |
| 2359.980 | --- | H | Ave | 74 | 54 | --- | --- | --- |
| 2389.764 | 32.70 | V | Peak | 74 | 54 | -41.30 | 270 | 1.5 |
| 2389.764 | --- | V | Ave | 74 | 54 | --- | --- | --- |

b) Channel 11

Fundamental Frequency: 2462 MHz

| Frequency (MHz) | Level (dBuV) | polarization | Remark | Limit@3m (dBuV/m) | | Margin (dB) | Table Deg. (Deg.) | Ant High (m) |
|---|---|---|---|---|---|---|---|---|
| | | | | Peak | Ave. | | | |
| 2483.660 | 34.03 | H | Peak | 74 | 54 | -39.97 | 270 | 1.5 |
| 2483.660 | --- | H | Ave | 74 | 54 | --- | --- | --- |
| 2490.956 | 32.37 | V | Peak | 74 | 54 | -41.63 | 270 | 1.5 |
| 2490.956 | --- | V | Ave | 74 | 54 | --- | --- | --- |

4.6.2. Modulation Standard: IEEE 802.11g

Operation Mode: Normal Operating

Test Date: Jul. 02, 2004 Temperature: 24 ℃ Humidity: 58%

c) Channel 1

Fundamental Frequency: 2412 MHz

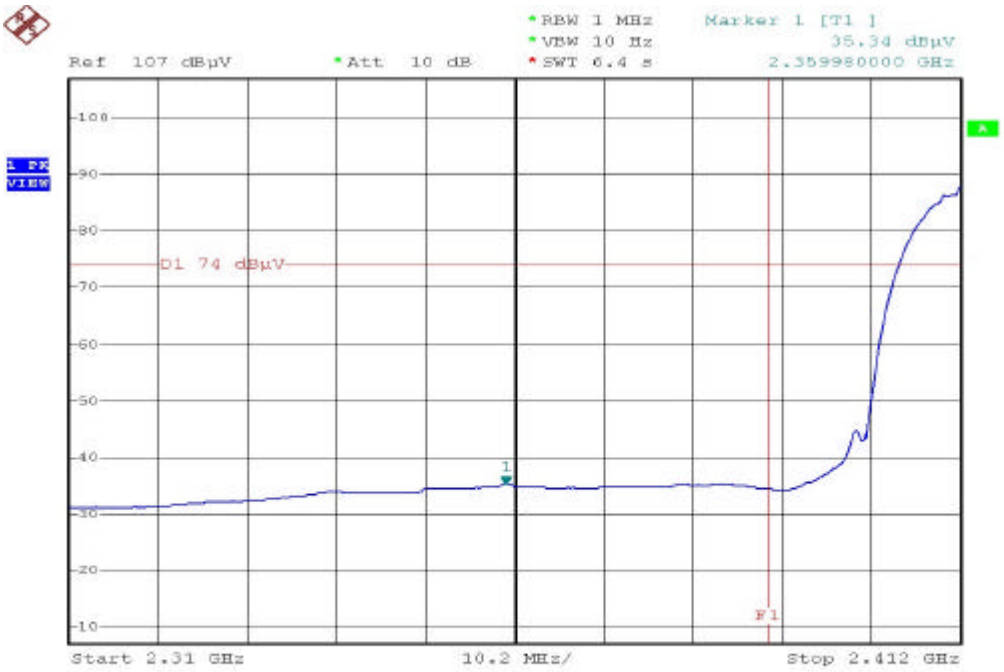
| Frequency (MHz) | Level (dBuV) | polarization | Remark | Limit@3m (dBuV/m) | | Margin (dB) | Table Deg. (Deg.) | Ant High (m) |
|---|---|---|---|---|---|---|---|---|
| | | | | Peak | Ave. | | | |
| 2360.184 | 34.89 | H | Peak | 74 | 54 | -39.11 | 270 | 1.5 |
| 2360.184 | --- | H | Ave | 74 | 54 | --- | --- | --- |
| 2384.868 | 33.03 | V | Peak | 74 | 54 | -40.97 | 270 | 1.5 |
| 2384.868 | --- | V | Ave | 74 | 54 | --- | --- | --- |

d) Channel 11

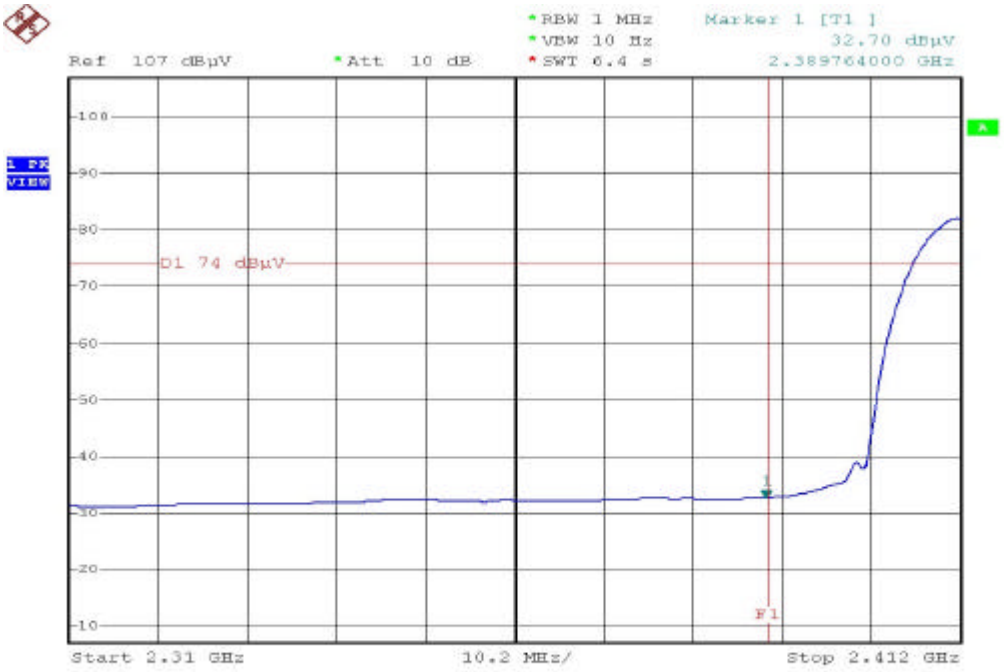
Fundamental Frequency: 2462 MHz

| Frequency (MHz) | Level (dBuV) | polarization | Remark | Limit@3m (dBuV/m) | | Margin (dB) | Table Deg. (Deg.) | Ant High (m) |
|---|---|---|---|---|---|---|---|---|
| | | | | Peak | Ave. | | | |
| 2494.224 | 34.89 | H | Peak | 74 | 54 | -39.11 | 270 | 1.5 |
| 2494.224 | --- | H | Ave | 74 | 54 | --- | --- | --- |
| 2492.552 | 32.23 | V | Peak | 74 | 54 | -41.77 | 270 | 1.5 |
| 2492.552 | --- | V | Ave | 74 | 54 | --- | --- | --- |

Modulation Standard: IEEE 802.11b
Channel 1
Pol/Phase: Horizontal

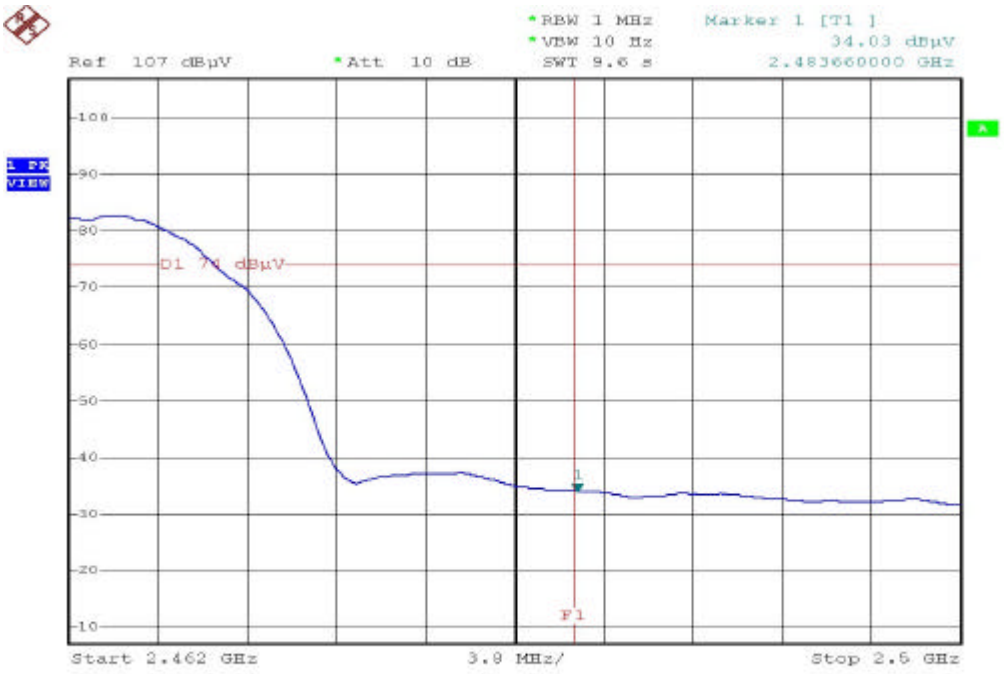



Pol/Phase: Vertical

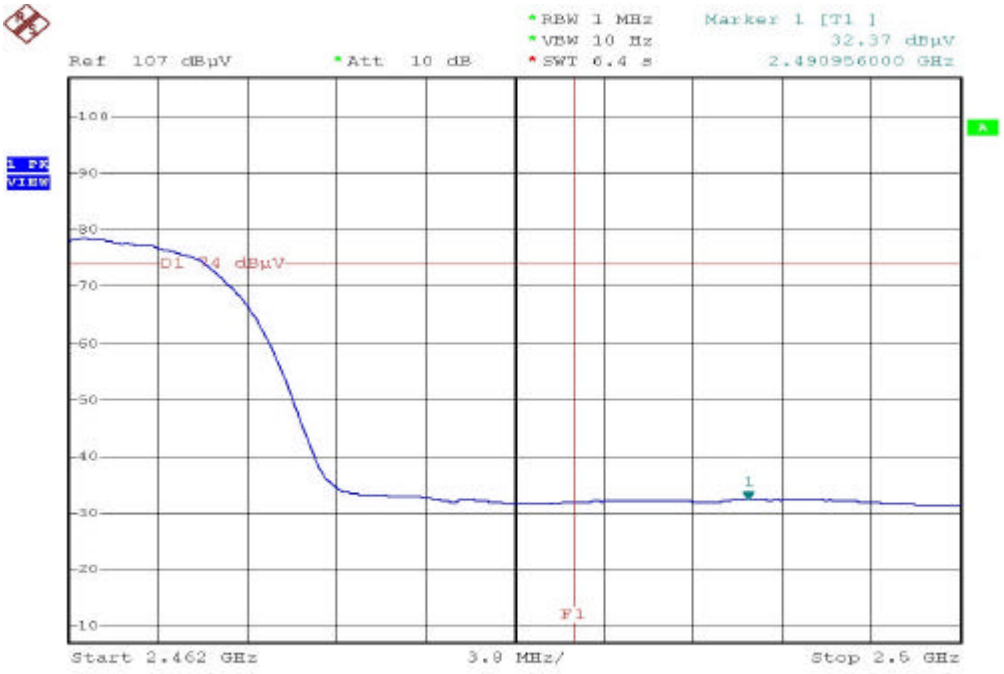


Channel 11

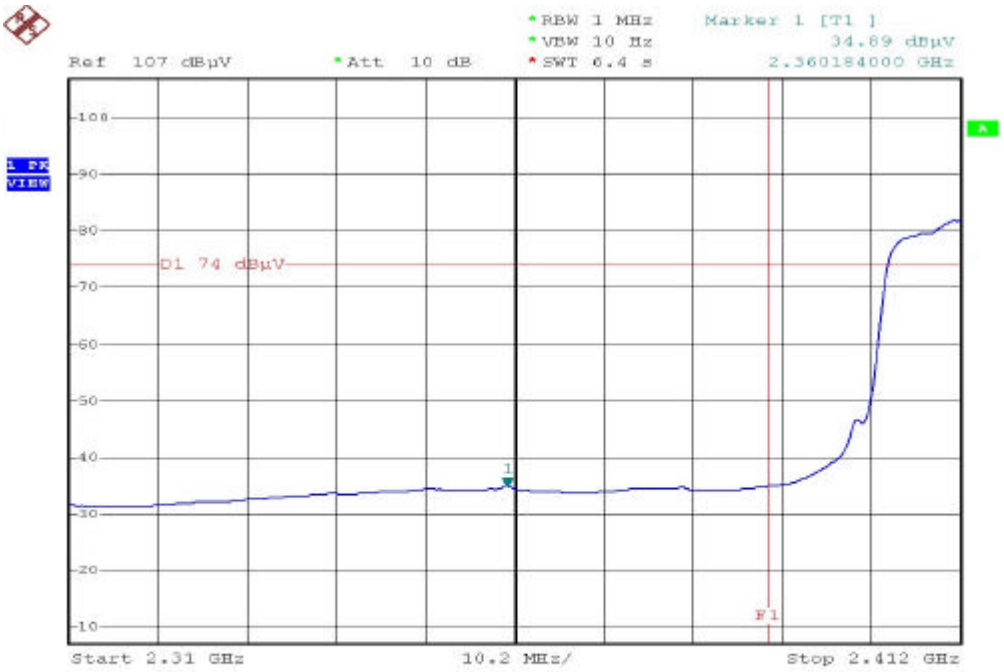
Pol/Phase: Horizontal



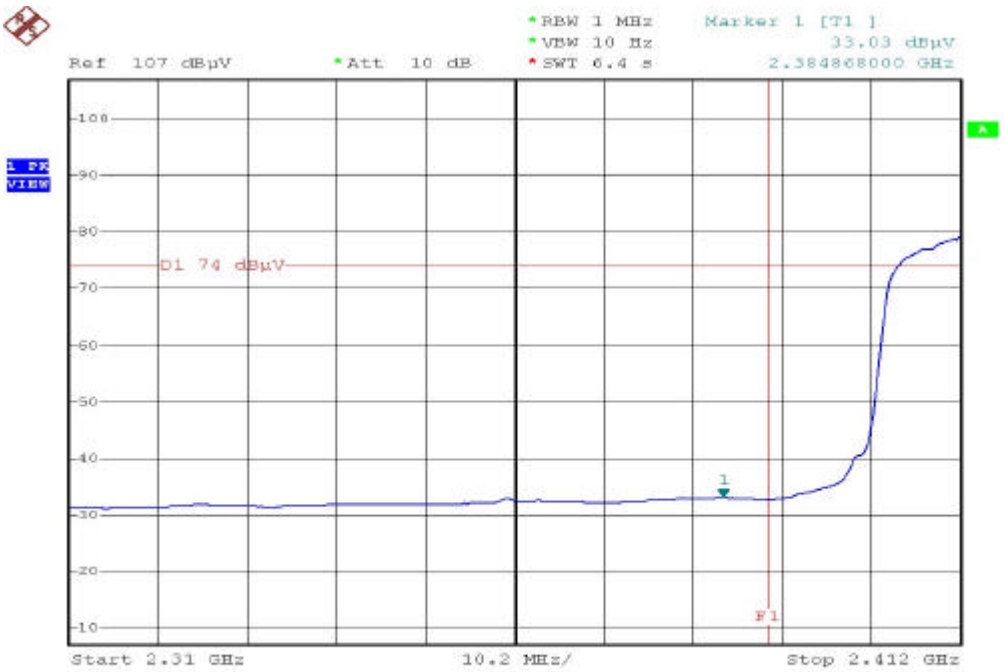

Pol/Phase: Vertical



Modulation Standard: IEEE 802.11g
Channel 1
Pol/Phase: Horizontal

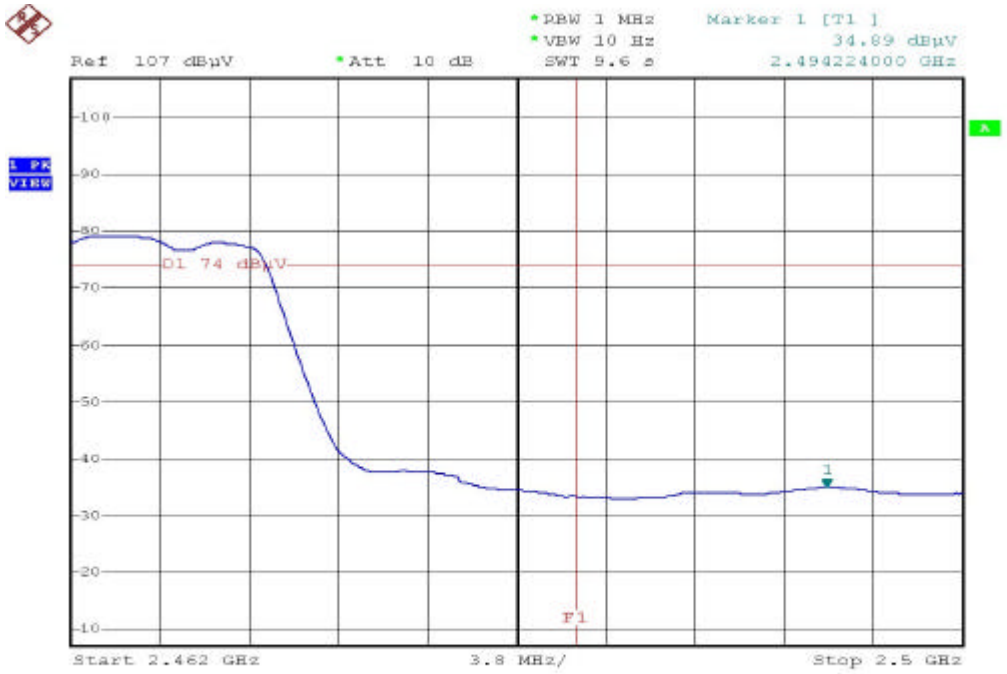



Pol/Phase: Vertical

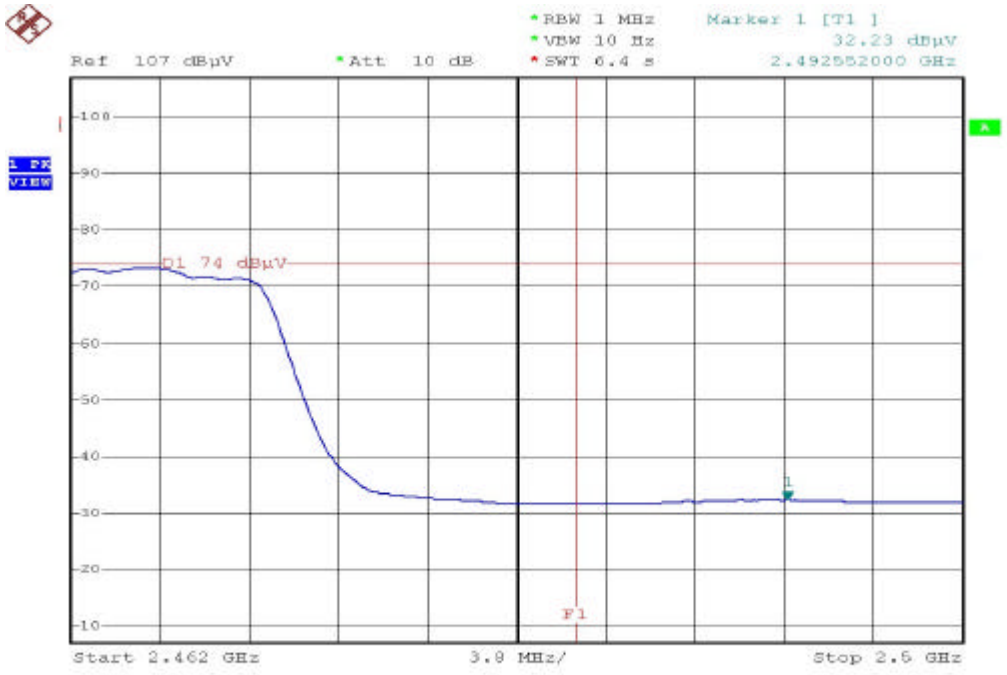


Channel 11

Pol/Phase: Horizontal




Pol/Phase: Vertical



## 4.7. Power Spectral Density Measurement Data

(1) Modulation Standard: IEEE 802.11b

Test Date: Jul. 02, 2004 Temperature: 24℃ Humidity: 58%

a) Channel 01: Maximum Power Density of 3 kHz Bandwidth is -13.78 dBm

b) Channel 06: Maximum Power Density of 3 kHz Bandwidth is -13.06 dBm

c) Channel 11: Maximum Power Density of 3 kHz Bandwidth is -12.77 dBm

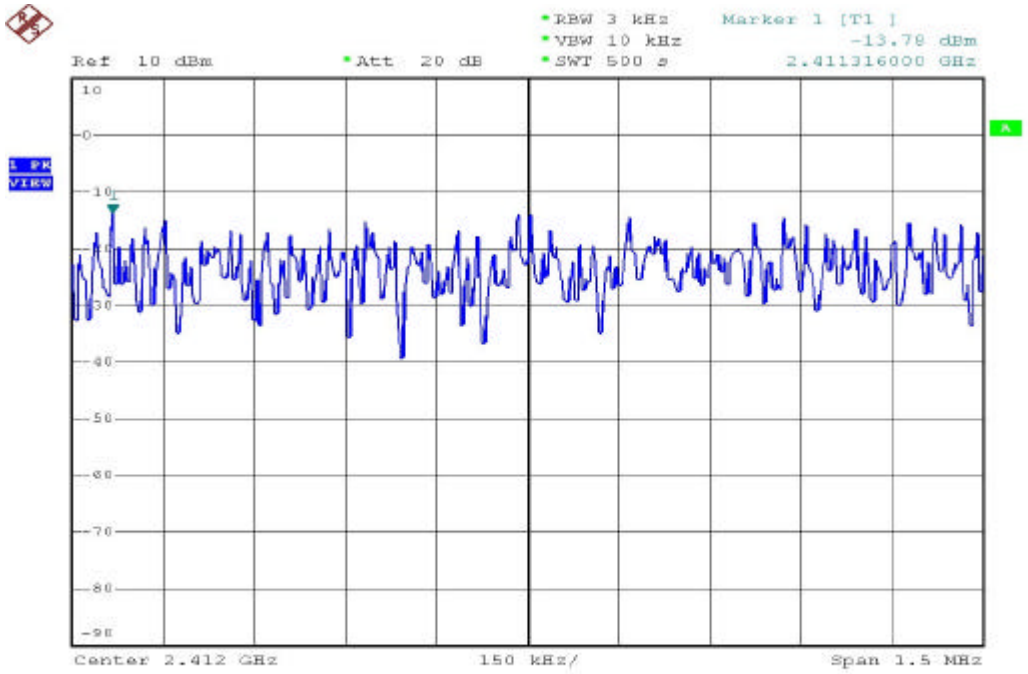
(2) Modulation Standard: IEEE 802.11g

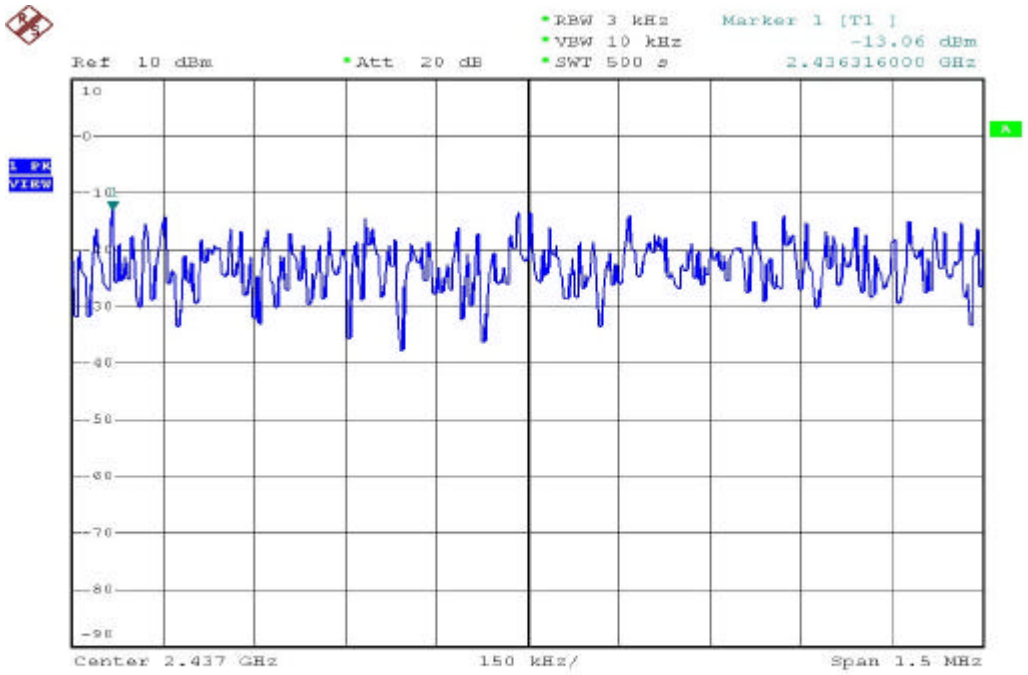
Test Date: Jul. 02, 2004 Temperature: 24℃ Humidity: 58%

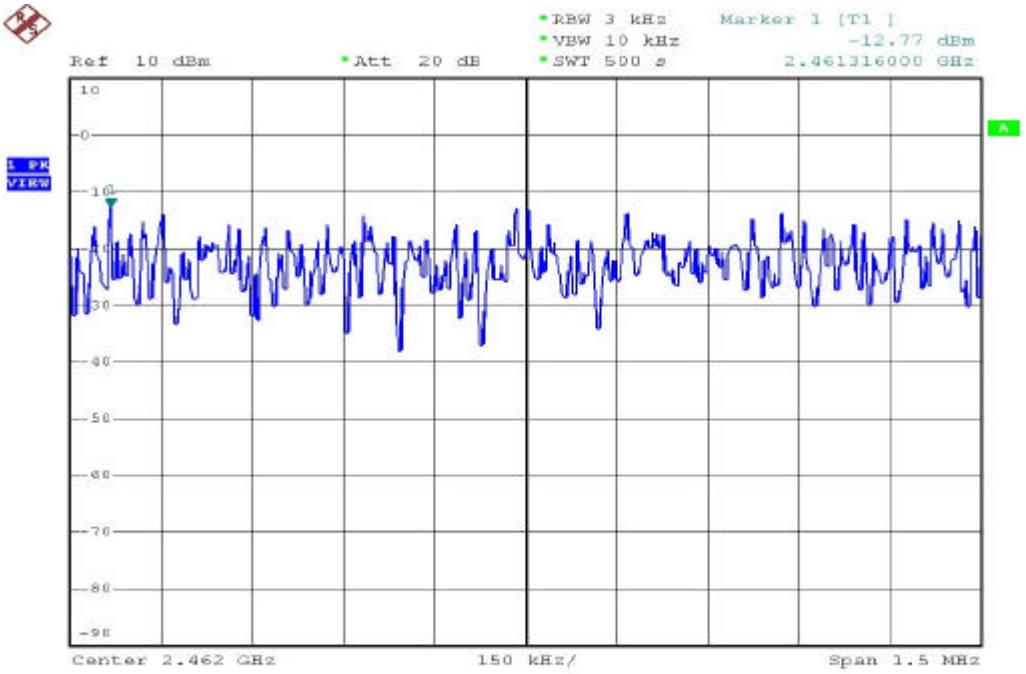
a) Channel 01: Maximum Power Density of 3 kHz Bandwidth is -17.50 dBm

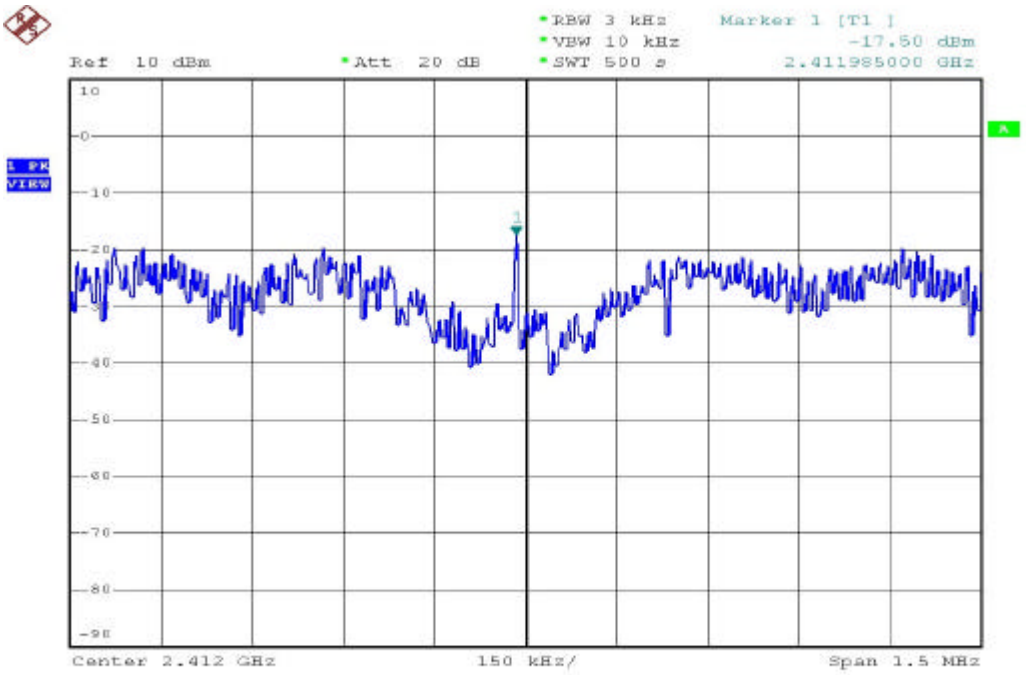
b) Channel 06: Maximum Power Density of 3 kHz Bandwidth is -17.12 dBm

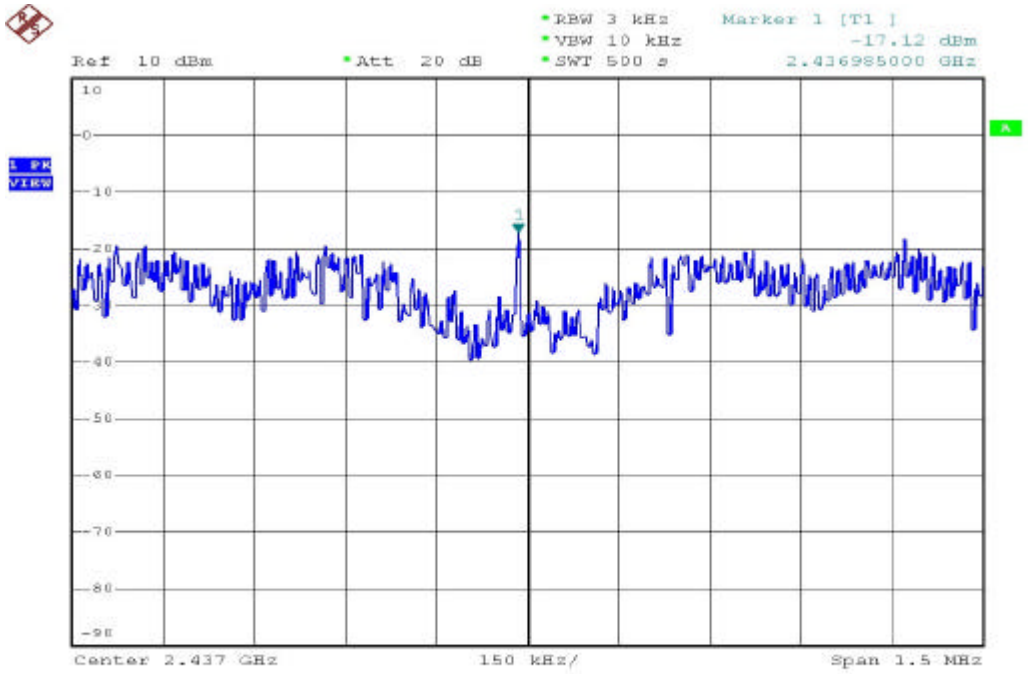
c) Channel 11: Maximum Power Density of 3 kHz Bandwidth is -17.02 dBm

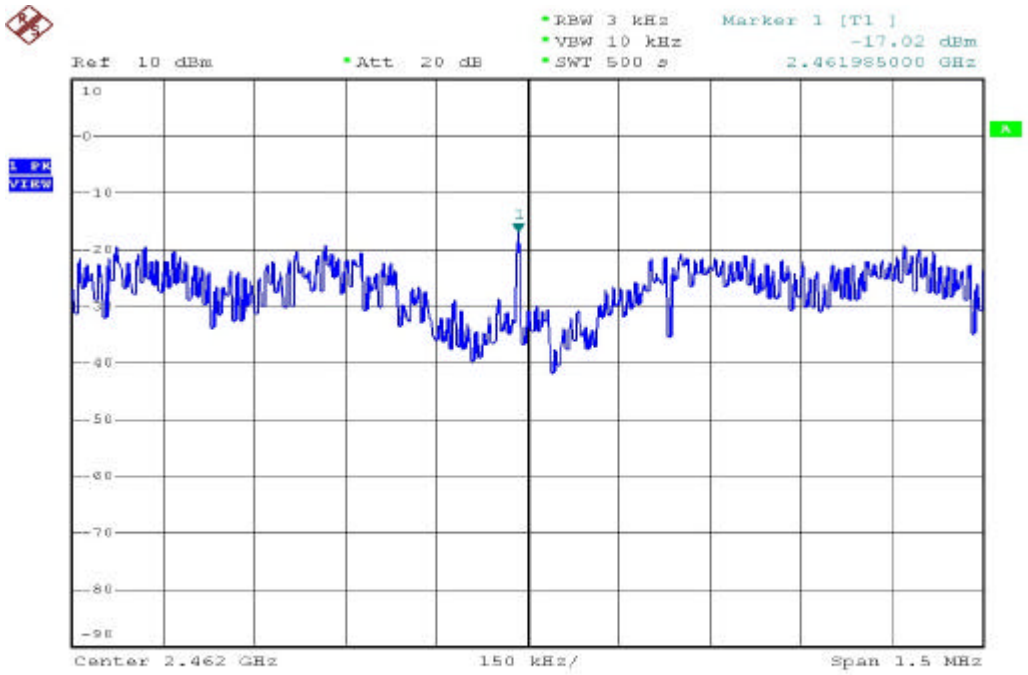

RBW 3 kHz
VBW 10 kHz
SWT 500 s
Marker 1 [T1 ]
-13.78 dBm
2.411316000 GHz
Ref 10 dBm
Att 20 dB
1 PK VIEW
A
10
0
-10
-30
-40
-50
-60
-70
-80
-90
Center 2.412 GHz
150 kHz/
Span 1.5 MHz


RBW 3 kHz
VBW 10 kHz
SWT 500 s
Marker 1 [T1 ]
-13.06 dBm
2.436316000 GHz
Ref 10 dBm
Att 20 dB
1 PK VIEW
A
10
0
-10
-30
-40
-50
-60
-70
-80
-90
Center 2.437 GHz
150 kHz/
Span 1.5 MHz


RBW 3 kHz
VBW 10 kHz
SWT 500 s
Marker 1 [T1 ]
-12.77 dBm
2.461316000 GHz
Ref 10 dBm
Att 20 dB
1 PK VIEW
Center 2.462 GHz
150 kHz/
Span 1.5 MHz


RBW 3 kHz
VBW 10 kHz
SWT 500 s
Marker 1 [T1 ]
-17.50 dBm
2.411985000 GHz
Ref 10 dBm
Att 20 dB
1 PK VIEW
Center 2.412 GHz
150 kHz/
Span 1.5 MHz

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## 5. List of Measuring Equipment Used

| No | Instrument/Ancillary | Type | Manufacturer | Serial No. | Valid Date. |
|---|---|---|---|---|---|
| 1 | Bilog Antenna | CBL6111C | Schaffner | 2762 | 2004/11/03 |
| 2 | Preamplifier | RFP4002 | Schaffner | 010 | 2004/11/03 |
| 3 | Receiver | SCR3501 | Schaffner | 437 | 2004/11/03 |
| 4 | Signal Generator | 8648B | HP | 3629U00612 | 2006/02/08 |
| 5 | Spectrum Analyzer | 8594E | HP | 3520A01913 | 2005/01/15 |
| 6 | Amplifier | 8447D | Agilent | 2944A10593 | 2004/10/09 |
| 7 | Amplifier | 8447D | Agilent | 2944A10531 | 2005/06/30 |
| 8 | Series Power Meter | E4416A | Agilent | GB41292146 | 2004/11/05 |
| 9 | Power Sensor | E9327A | Agilent | US40441392 | 2004/10/06 |
| 10 | Dipole Antenna | AD-100 | COM-Power | 721011 | 2004/12/02 |
| 11 | Dipole Antenna | AD-100 | COM-Power | 721010 | 2004/12/02 |
| 12 | Spectrum Analyzer | R3131A | Advantest | 131000021 | 2004/11/24 |
| 13 | Spectrum Analyzer | FSP40 | R&S | 100047 | 2004/12/16 |
| 14 | Preamplifier | 8449B | Agilent | 3008A01954 | 2005/01/04 |
| 15 | Horn Antenna | 3115 | EMCO | 31601 | 2005/01/13 |
| 16 | Horn Antenna | 3115 | EMCO | 31589 | 2005/01/14 |
| 17 | Horn Antenna | 3116 | EMCO | 31970 | 2005/01/29 |
| 18 | Horn Antenna | 3116 | EMCO | 31974 | 2005/01/29 |
| 19 | EMI Receiver | 8546A | HP | 3807A00454 | 2005/02/12 |
| 20 | RF Filter Section | 85460A | HP | 3704A00386 | 2005/02/12 |
| 21 | Signal Generator | 83640A | HP | 2927A00107 | 2006/03/16 |
| 22 | Attenuator | 8491B | Agilent | 50703 | 2004/12/16 |
| 23 | Attenuator | 8491B | Agilent | 50705 | 2004/12/16 |
| 24 | Temperature Chamber | TMJ-9712 | T Machine | T-12-040111 | 2005/03/05 |
| 25 | High Pass Filter | 84300-80038 | HP | 002 | N/A |
| 26 | High Pass Filter | 84300-80038 | HP | 006 | N/A |
| 27 | DC Power Supply | GPD-3030 | GM | 7020936 | N/A |
| 28 | AC Power Converter | AFC-11005 | APC | F103120008 | N/A |