



Test Report

| | |
|--------------|--------------------------------------------|
| Product Name | Wireless ADSL2/2+ Ethernet Router |
| Model No. | DSL-2600B, DSL-2640B, DSL-2600U, DSL-2640U |
| FCC ID | KA2SL2600UT |

| | |
|-----------|----------------------------------------------------------------------|
| Applicant | D-Link Corporation |
| Address | 17595 Mt.Herrmann Street , Fountain Valley, CA 92708 nited States |

| | |
|-----------------|----------------------|
| Date of Receipt | Nov. 02, 2006 |
| Issued Date | Dec. 11, 2006 |
| Report No. | 06BL040-RF-US-P05V01 |

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quietek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Test Report Certification

Issued Date: Dec. 11, 2006

Report No.: 06BL040-RF-US-P05V01



Accredited by NIST (NVLAP)
NVLAP Lab Code: 200533-0

| | |
|---------------------|--------------------------------------------------------------------------------|
| Product Name | Wireless ADSL2/2+ Ethernet Router |
| Applicant | D-Link Corporation |
| Address | 17595 Mt.Herrmann Street , Fountain Valley, CA 92708 nited States |
| Manufacturer | D-Link Corporation |
| Model No. | DSL-2600B, DSL-2640B, DSL-2600U, DSL-2640U |
| Rated Voltage | AC 120V/60Hz |
| Working Voltage | AC 120V/60Hz |
| Trade Name | D-LINK |
| Applicable Standard | FCC CFR Title 47 Part 15 Subpart C: 2005 CISPR 22: 2005 ANSI C63.4: 2003 |
| Test Result | Complied |



Test results relate only to the samples tested.

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(Michelle Lin)



Tested By : Dino Chen
(Dino Chen)



Approved By : George Chen
(George Chen)

0914

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Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

| | |
|--------------------|----------------------------------------------------------------------------------------------------------------------------|
| Product Name | Wireless ADSL2/2+ Ethernet Router |
| Trade Name | D-LINK |
| Model No. | DSL-2600B, DSL-2640B, DSL-2600U, DSL-2640U |
| FCC ID | KA2SL2600UT |
| Frequency Range | 2412-2462MHz |
| Channel Number | 11 |
| Data Speed | IEEE 802.11b – 1, 2, 5.5, 11Mbps IEEE 802.11g – 6, 9, 12, 18, 24, 36 48, 54Mbps |
| Type of Modulation | DSSS/OFDM |
| Antenna Type | Dipole |
| Antenna Gain | Refer to the table “Antenna List” |
| Channel Control | Auto |
| Channel Separation | 5MHz |
| Power Adapter 1 | MFR: UMEC, M/N: UP0181B-12PE Input: AC 100-240V, 50/60Hz Output: DC 12V, 1A Cable In: Non-Shielded, 1.7m. |
| Power Adapter 2 | MFR: OEM, M/N: ADS18B-B 120100 Input: AC 100-240V, 50/60Hz, 0.5A Output: DC 12V, 1A Cable In: Non-Shielded, 1.8m. |

Antenna List

| No. | Manufacturer | Part No. | Peak Gain |
|-----|--------------|--------------|--------------------|
| F1 | WHA YU | 14G156015010 | 1.8dBi for 2.4 GHz |

Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency |
|------------|-----------|------------|-----------|-------------|-----------|
| Channel 1: | 2412 MHz | Channel 5: | 2432 MHz | Channel 9: | 2452 MHz |
| Channel 2: | 2417 MHz | Channel 6: | 2437 MHz | Channel 10: | 2457 MHz |
| Channel 3: | 2422 MHz | Channel 7: | 2442 MHz | Channel 11: | 2462 MHz |
| Channel 4: | 2427 MHz | Channel 8: | 2447 MHz | | |

Note:

1. The EUT is an Wireless ADSL2/2+ Ethernet Router with a built-in 2.4GHz transceiver.
2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
3. Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11b is 1Mbps and 802.11g is 6Mbps)
4. These tests are conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.247 for spread spectrum devices.
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

1.2. Operational Description

The EUT is an Wireless ADSL2/2+ Ethernet Router with a built-in 2.4GHz transceiver. There are 11 channels in 2412 – 2462MHz. The channels are separated by 5MHz. This device supports the data rates of 1, 2, 5.5, 11Mbps in 802.11b mode and 6, 9, 12, 18, 24, 36, 48, 54Mbps in 802.11g mode. The signals are modulated by DSSS in 802.11b mode and OFDM in 802.11g mode. The antenna is dipole.

This Wireless ADSL2/2+ Ethernet Router, complied with IEEE 802.11b and IEEE 802.11g, is a high-efficiency Wireless ADSL router. It allows computers connecting to wired networks and Internet wirelessly and sharing network resources, such as files or printers. Wired Equivalent Protection (WEP) algorithm is used. In addition, its standard compliance ensures that it can communicate with any IEEE 802.11b and IEEE 802.11g network.

| | |
|-----------|-----------------------------------------|
| Test Mode | Mode 1: Transmitter 802.11b (Adapter 1) |
| | Mode 2: Transmitter 802.11g (Adapter 1) |
| | Mode 1: Transmitter 802.11b (Adapter 2) |
| | Mode 2: Transmitter 802.11g (Adapter 2) |

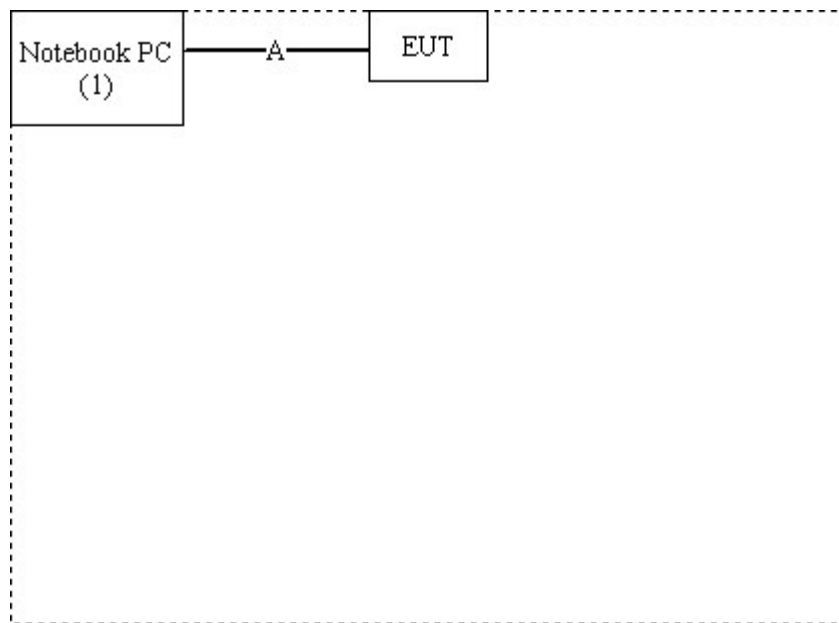
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

| | Product | Manufacturer | Model No. | Serial No. | FCC ID | Power Cord |
|----|-------------|--------------|-----------|------------|--------|--------------------|
| 1. | Notebook PC | DELL | PPT | N/A | DoC | Non-Shielded, 0.8m |

| Signal Cable Type | Signal Cable Description |
|-------------------|--------------------------|
| LAN Cable | Non-Shielded, 1.2m |

1.4. Configuration of Test System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in section 1.4.
- (2) Connect the EUT to a notebook via LAN.
- (3) Open the browser and login to <http://192.168.1.1>.
- (4) Select “Advanced” in wireless setting.
- (5) Setup the test mode, the test channel, and the data rate.
- (6) Execute LanEval.exe on the notebook to start the continuous transmission.

1.6. Test Facility

Ambient conditions in the laboratory:

| Items | Required (IEC 68-1) | Actual |
|----------------------------|---------------------|----------|
| Temperature (°C) | 15-35 | 20-35 |
| Humidity (%RH) | 25-75 | 50-65 |
| Barometric pressure (mbar) | 860-1060 | 950-1000 |

Site Description: File on
 Federal Communications Commission
 FCC Engineering Laboratory
 7435 Oakland Mills Road
 Columbia, MD 21046
 Reference 31040/SIT1300F2



Accreditation on NVLAP
 NVLAP Lab Code: 200533-0



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2. Conducted Emission

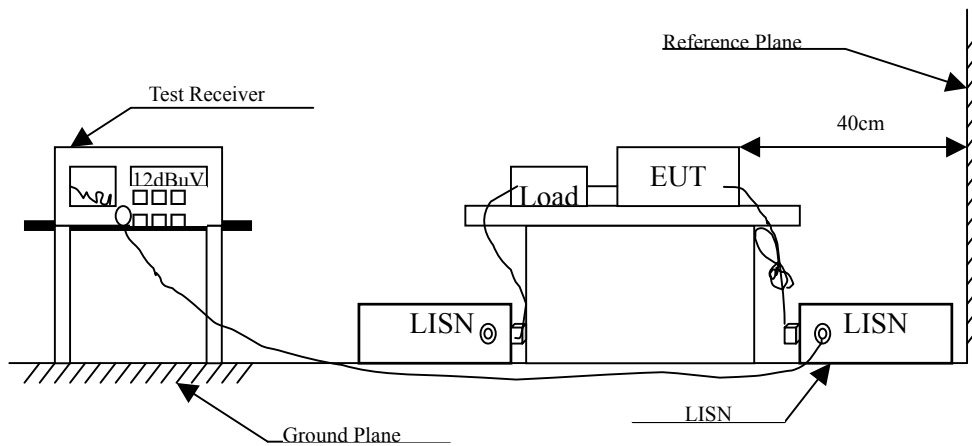
2.1. Test Equipment

The following test equipment are used during the conducted emission test:

| Item | Instrument | Manufacturer | Type No./Serial No | Last Cal. | Remark |
|------|--------------------|--------------|--------------------|-----------|-------------|
| 1 | Test Receiver | R & S | ESCS 30/825442/17 | May, 2006 | |
| 2 | L.I.S.N. | R & S | ESH3-Z5/825016/6 | May, 2006 | EUT |
| 3 | L.I.S.N. | Kyoritsu | KNW-407/8-1420-3 | May, 2006 | Peripherals |
| 4 | Pulse Limiter | R & S | ESH3-Z2 | May, 2006 | |
| 5 | No.1 Shielded Room | | | N/A | |

Note: All instruments are calibrated every one year.

2.2. Test Setup



2.3. Limits

| FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit | | |
|-----------------------------------------------------|----------------------|----------------------|
| Frequency MHz | Limits | |
| | QP | AVG |
| 0.15 - 0.50 | 66-56 _(註) | 56-46 _(註) |
| 0.50-5.0 | 56 | 46 |
| 5.0 - 30 | 60 | 50 |

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter 802.11b (Adapter1)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 1 | | | | | |
| Quasi-Peak | | | | | |
| 0.216 | 0.533 | 52.290 | 52.823 | -11.291 | 64.114 |
| 0.287 | 0.300 | 44.200 | 44.500 | -17.586 | 62.086 |
| 0.431 | 0.300 | 36.790 | 37.090 | -20.881 | 57.971 |
| 3.013 | 0.370 | 32.660 | 33.030 | -22.970 | 56.000 |
| 4.877 | 0.430 | 34.140 | 34.570 | -21.430 | 56.000 |
| 19.951 | 1.100 | 43.480 | 44.580 | -15.420 | 60.000 |
| Average | | | | | |
| 0.216 | 0.533 | 44.440 | 44.973 | -9.141 | 54.114 |
| 0.287 | 0.300 | 39.170 | 39.470 | -12.616 | 52.086 |
| 0.431 | 0.300 | 33.600 | 33.900 | -14.071 | 47.971 |
| 3.013 | 0.370 | 31.950 | 32.320 | -13.680 | 46.000 |
| 4.877 | 0.430 | 33.110 | 33.540 | -12.460 | 46.000 |
| 19.951 | 1.100 | 35.520 | 36.620 | -13.380 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter 802.11b (Adapter1)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 2 | | | | | |
| Quasi-Peak | | | | | |
| 0.216 | 0.300 | 52.090 | 52.390 | -11.724 | 64.114 |
| 0.287 | 0.300 | 44.460 | 44.760 | -17.326 | 62.086 |
| 0.685 | 0.310 | 34.260 | 34.570 | -21.430 | 56.000 |
| 3.873 | 0.400 | 34.580 | 34.980 | -21.020 | 56.000 |
| 5.521 | 0.420 | 35.500 | 35.920 | -24.080 | 60.000 |
| 20.232 | 0.910 | 38.460 | 39.370 | -20.630 | 60.000 |
| Average | | | | | |
| 0.216 | 0.300 | 47.710 | 48.010 | -6.104 | 54.114 |
| 0.287 | 0.300 | 43.480 | 43.780 | -8.306 | 52.086 |
| 0.685 | 0.310 | 30.390 | 30.700 | -15.300 | 46.000 |
| 3.873 | 0.400 | 32.970 | 33.370 | -12.630 | 46.000 |
| 5.521 | 0.420 | 34.530 | 34.950 | -15.050 | 50.000 |
| 20.232 | 0.910 | 18.590 | 19.500 | -30.500 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmitter 802.11g (Adapter1)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 1 | | | | | |
| Quasi-Peak | | | | | |
| 0.216 | 0.533 | 50.440 | 50.973 | -13.141 | 64.114 |
| 0.287 | 0.300 | 42.760 | 43.060 | -19.026 | 62.086 |
| 0.431 | 0.300 | 36.270 | 36.570 | -21.401 | 57.971 |
| 1.505 | 0.330 | 32.870 | 33.200 | -22.800 | 56.000 |
| 5.091 | 0.435 | 33.200 | 33.635 | -26.365 | 60.000 |
| 19.568 | 1.090 | 40.080 | 41.170 | -18.830 | 60.000 |
| Average | | | | | |
| 0.216 | 0.533 | 48.570 | 49.103 | -5.011 | 54.114 |
| 0.287 | 0.300 | 41.270 | 41.570 | -10.516 | 52.086 |
| 0.431 | 0.300 | 32.730 | 33.030 | -14.941 | 47.971 |
| 1.505 | 0.330 | 31.040 | 31.370 | -14.630 | 46.000 |
| 5.091 | 0.435 | 31.890 | 32.325 | -17.675 | 50.000 |
| 19.568 | 1.090 | 40.070 | 41.160 | -8.840 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmitter 802.11g (Adapter1) (2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 2 | | | | | |
| Quasi-Peak | | | | | |
| 0.216 | 0.300 | 50.560 | 50.860 | -13.254 | 64.114 |
| 0.287 | 0.300 | 43.250 | 43.550 | -18.536 | 62.086 |
| 0.505 | 0.310 | 35.460 | 35.770 | -20.230 | 56.000 |
| 5.373 | 0.420 | 35.260 | 35.680 | -24.320 | 60.000 |
| 7.955 | 0.470 | 30.400 | 30.870 | -29.130 | 60.000 |
| 19.716 | 0.900 | 40.080 | 40.980 | -19.020 | 60.000 |
| Average | | | | | |
| 0.216 | 0.300 | 39.100 | 39.400 | -14.714 | 54.114 |
| 0.287 | 0.300 | 40.380 | 40.680 | -11.406 | 52.086 |
| 0.505 | 0.310 | 30.350 | 30.660 | -15.340 | 46.000 |
| 5.373 | 0.420 | 31.950 | 32.370 | -17.630 | 50.000 |
| 7.955 | 0.470 | 27.130 | 27.600 | -22.400 | 50.000 |
| 19.716 | 0.900 | 30.990 | 31.890 | -18.110 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. "█" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 1: Transmitter 802.11b (Adapter2)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 1 | | | | | |
| Quasi-Peak | | | | | |
| 0.154 | 0.202 | 63.030 | 63.232 | -2.654 | 65.886 |
| 0.205 | 0.202 | 54.210 | 54.412 | -10.017 | 64.429 |
| 0.252 | 0.204 | 39.920 | 40.124 | -22.962 | 63.086 |
| 0.361 | 0.214 | 39.070 | 39.284 | -20.687 | 59.971 |
| 2.466 | 0.292 | 26.750 | 27.042 | -28.958 | 56.000 |
| 19.709 | 0.963 | 39.350 | 40.313 | -19.687 | 60.000 |
| Average | | | | | |
| 0.154 | 0.202 | 52.580 | 52.782 | -3.104 | 55.886 |
| 0.205 | 0.202 | 43.710 | 43.912 | -10.517 | 54.429 |
| 0.252 | 0.204 | 31.190 | 31.394 | -21.692 | 53.086 |
| 0.361 | 0.214 | 30.800 | 31.014 | -18.957 | 49.971 |
| 2.466 | 0.292 | 16.560 | 16.852 | -29.148 | 46.000 |
| 19.709 | 0.963 | 34.770 | 35.733 | -14.267 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 1: Transmitter 802.11b (Adapter2)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 2 | | | | | |
| Quasi-Peak | | | | | |
| 0.158 | 0.202 | 60.580 | 60.782 | -4.989 | 65.771 |
| 0.205 | 0.202 | 53.740 | 53.942 | -10.487 | 64.429 |
| 0.310 | 0.214 | 40.270 | 40.484 | -20.945 | 61.429 |
| 3.904 | 0.352 | 23.780 | 24.132 | -31.868 | 56.000 |
| 12.834 | 0.681 | 23.380 | 24.061 | -35.939 | 60.000 |
| 21.662 | 0.789 | 38.860 | 39.649 | -20.351 | 60.000 |
| Average | | | | | |
| 0.158 | 0.202 | 51.280 | 51.482 | -4.289 | 55.771 |
| 0.205 | 0.202 | 43.450 | 43.652 | -10.777 | 54.429 |
| 0.310 | 0.214 | 33.210 | 33.424 | -18.005 | 51.429 |
| 3.904 | 0.352 | 19.690 | 20.042 | -25.958 | 46.000 |
| 12.834 | 0.681 | 16.860 | 17.541 | -32.459 | 50.000 |
| 21.662 | 0.789 | 36.200 | 36.989 | -13.011 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 1
 Test Mode : Mode 2: Transmitter 802.11g (Adapter2)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 1 | | | | | |
| Quasi-Peak | | | | | |
| 0.158 | 0.202 | 59.310 | 59.512 | -6.259 | 65.771 |
| 0.205 | 0.202 | 52.760 | 52.962 | -11.467 | 64.429 |
| 0.255 | 0.205 | 44.200 | 44.405 | -18.595 | 63.000 |
| 2.041 | 0.277 | 24.620 | 24.897 | -31.103 | 56.000 |
| 4.783 | 0.393 | 20.530 | 20.923 | -35.077 | 56.000 |
| 20.259 | 0.970 | 39.070 | 40.040 | -19.960 | 60.000 |
| Average | | | | | |
| 0.158 | 0.202 | 39.580 | 39.782 | -15.989 | 55.771 |
| 0.205 | 0.202 | 38.320 | 38.522 | -15.907 | 54.429 |
| 0.255 | 0.205 | 27.590 | 27.795 | -25.205 | 53.000 |
| 2.041 | 0.277 | 19.180 | 19.457 | -26.543 | 46.000 |
| 4.783 | 0.393 | 13.770 | 14.163 | -31.837 | 46.000 |
| 20.259 | 0.970 | 36.590 | 37.560 | -12.440 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ ” means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Conducted Emission Test
 Power Line : Line 2
 Test Mode : Mode 2: Transmitter 802.11g (Adapter2)(2437MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV | Margin dB | Limit dBuV |
|-------------------|-------------------------|--------------------------|------------------------------|--------------|---------------|
| LINE 2 | | | | | |
| Quasi-Peak | | | | | |
| 0.154 | 0.202 | 60.730 | 60.932 | -4.954 | 65.886 |
| 0.209 | 0.202 | 51.020 | 51.222 | -13.092 | 64.314 |
| 0.255 | 0.203 | 44.200 | 44.403 | -18.597 | 63.000 |
| 2.212 | 0.279 | 22.930 | 23.209 | -32.791 | 56.000 |
| 13.252 | 0.707 | 24.560 | 25.267 | -34.733 | 60.000 |
| 19.709 | 0.773 | 39.780 | 40.553 | -19.447 | 60.000 |
| Average | | | | | |
| 0.154 | 0.202 | 29.060 | 29.262 | -26.624 | 55.886 |
| 0.209 | 0.202 | 46.560 | 46.762 | -7.552 | 54.314 |
| 0.255 | 0.203 | 38.520 | 38.723 | -14.277 | 53.000 |
| 2.212 | 0.279 | 16.320 | 16.599 | -29.401 | 46.000 |
| 13.252 | 0.707 | 17.960 | 18.667 | -31.333 | 50.000 |
| 19.709 | 0.773 | 37.340 | 38.113 | -11.887 | 50.000 |

Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ “ means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

3. Peak Power Output

3.1. Test Equipment

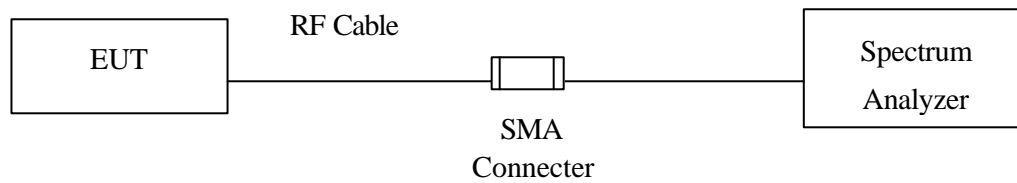
The following test equipments are used during the radiated emission tests:

| Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---------------------|--------------|----------------------|-----------|
| X Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2006 |

- Note:
1. All instruments are calibrated every one year.
 2. The test instruments marked by “X” are used to measure the final test results.

3.2. Test Setup

Conducted Measurement



3.3. Limits

The maximum peak power shall be less 1 Watt.

3.4. Uncertainty

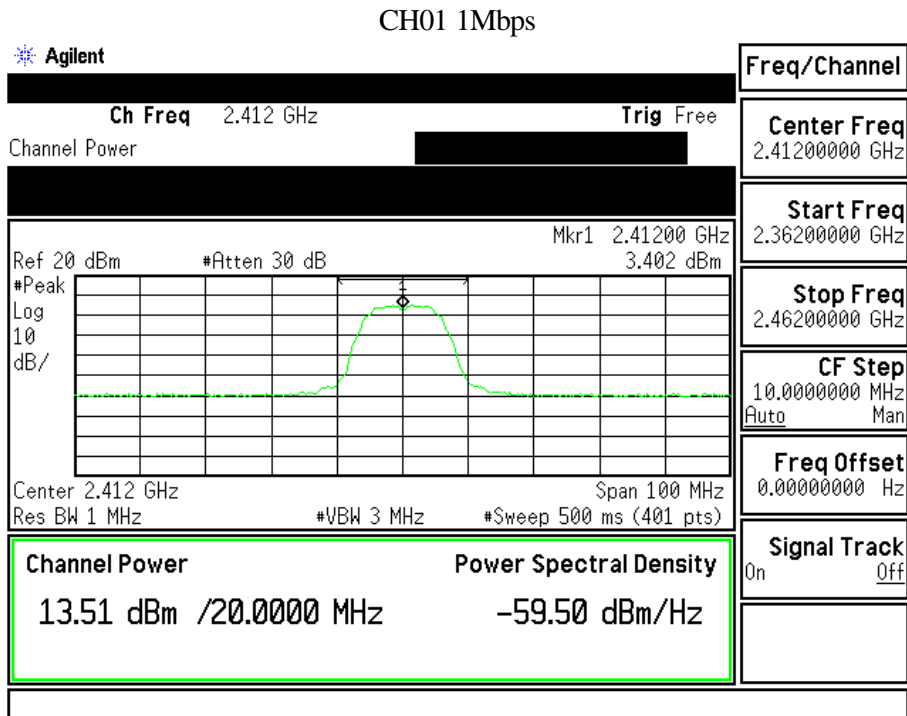
± 1.27 dB

3.5. Test Result of Peak Power Output

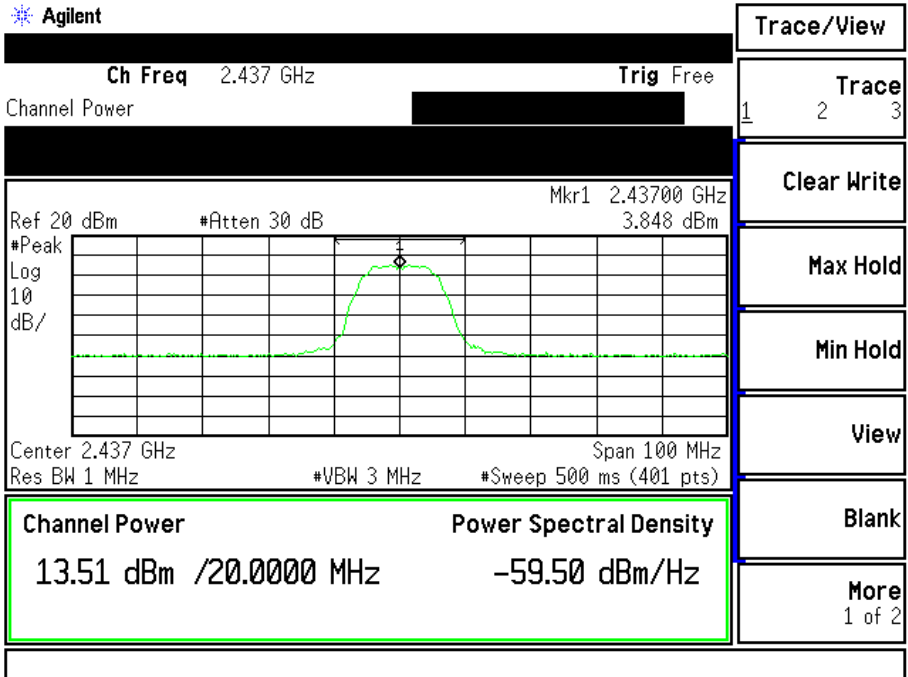
Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b

Data Speed: 1Mbps

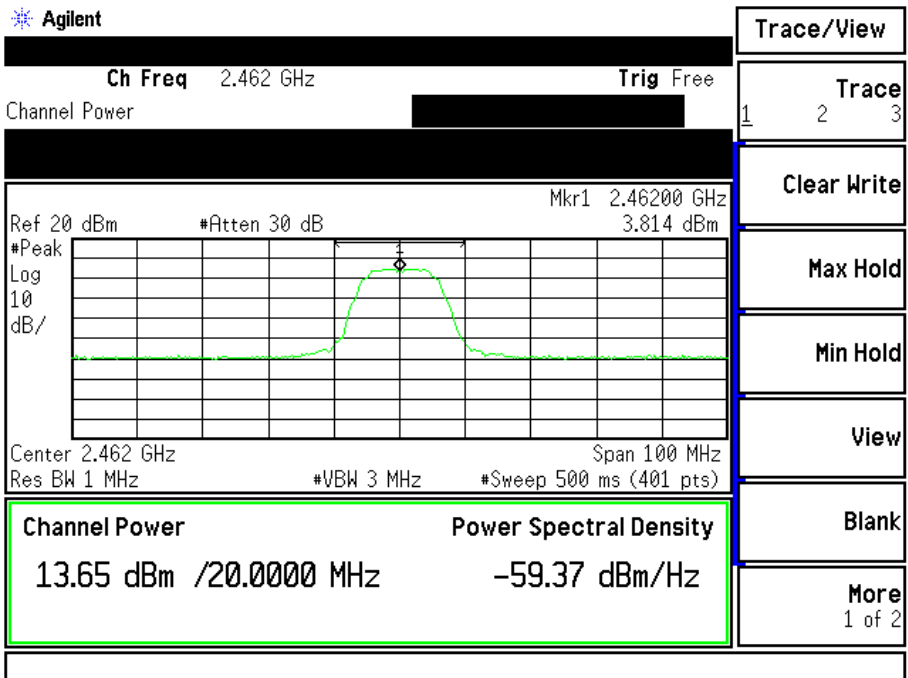
| Channel No. | Frequency (MHz) | Measurement | Required Limit | Result |
|-------------|-----------------|-------------|----------------|--------|
| 1 | 2412.00 | 13.51dBm | 1Watt= 30 dBm | Pass |
| 6 | 2437.00 | 13.51dBm | 1Watt= 30 dBm | Pass |
| 11 | 2462.00 | 13.65dBm | 1Watt= 30 dBm | Pass |



CH06 1Mbps



CH11 1Mbps

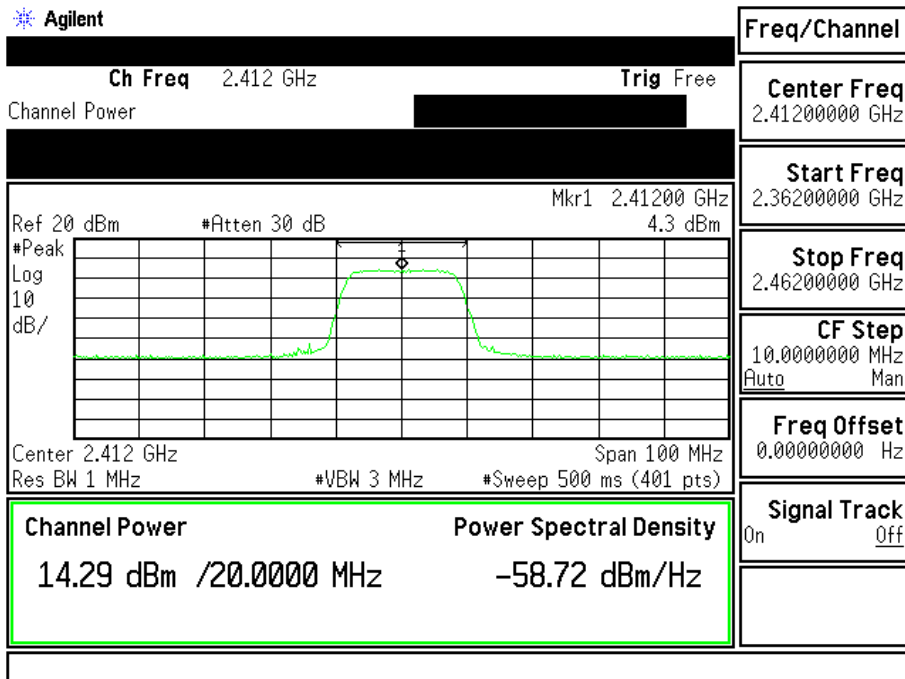


Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Peak Power Output Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g

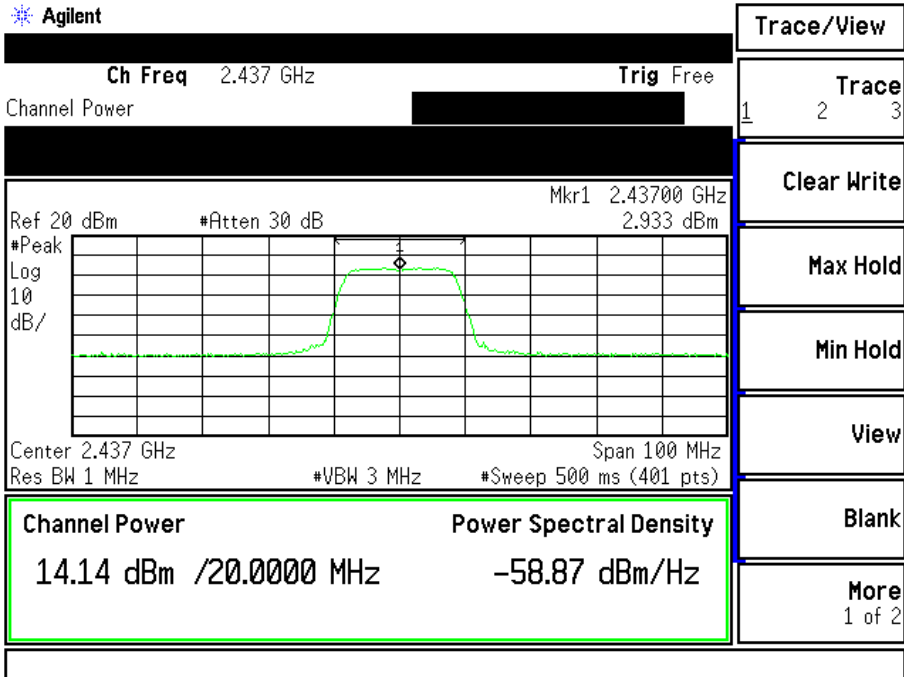
Data Speed: 6Mbps

| Channel No. | Frequency (MHz) | Measurement | Required Limit | Result |
|-------------|-----------------|-------------|----------------|--------|
| 1 | 2412.00 | 14.29dBm | 1Watt= 30 dBm | Pass |
| 6 | 2437.00 | 14.14dBm | 1Watt= 30 dBm | Pass |
| 11 | 2462.00 | 14.01dBm | 1Watt= 30 dBm | Pass |

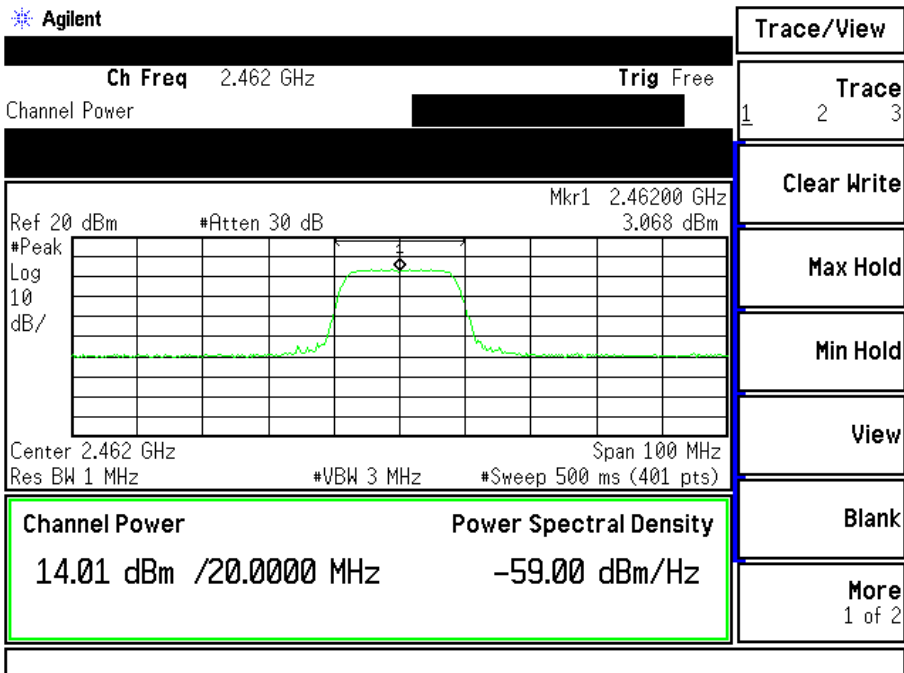
CH01 6Mbps



CH06 6Mbps



CH11 6Mbps



4. Radiated Emission

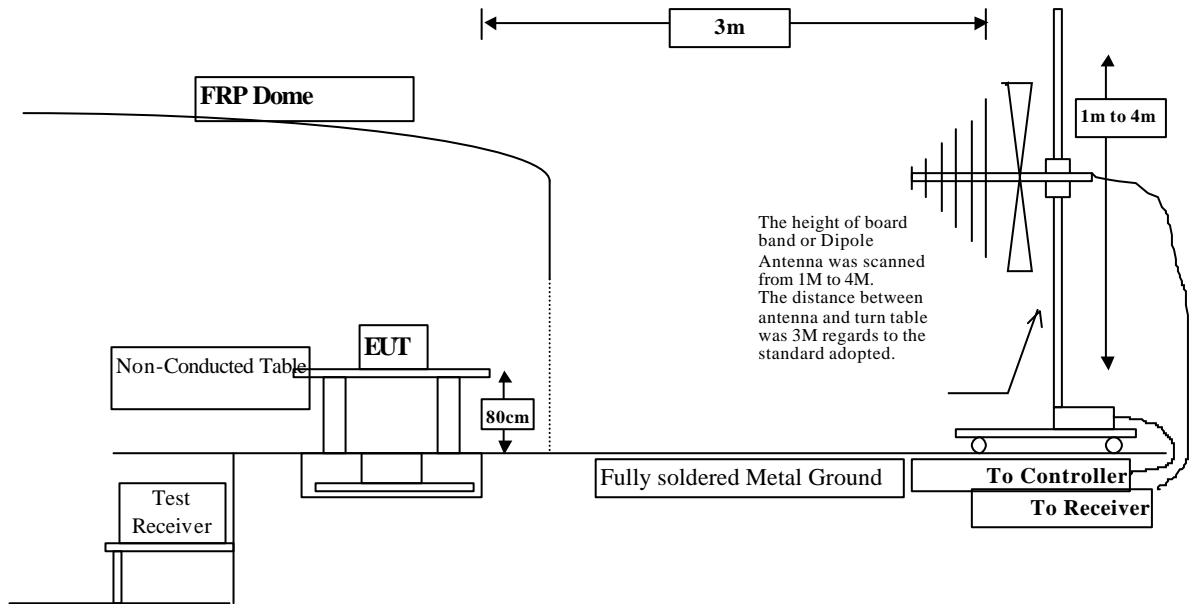
4.1. Test Equipment

The following test equipment are used during the radiated emission test:

| Test Site | | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|----------------------------------------------|---|-------------------|--------------|------------------------|------------|
| <input type="checkbox"/> Site # 1 | | Test Receiver | R & S | ESVS 10 / 834468/003 | May, 2006 |
| | | Spectrum Analyzer | Advantest | R3162/ 00803480 | May, 2006 |
| | | Pre-Amplifier | Advantest | BB525C/ 3307A01812 | May, 2006 |
| | | Bilog Antenna | SCHAFFNER | CBL6112B / 2697 | Sep., 2006 |
| <input type="checkbox"/> Site # 2 | | Test Receiver | R & S | ESCS 30 / 836858 / 022 | May, 2006 |
| | | Spectrum Analyzer | Advantest | R3162 / 100803466 | May, 2006 |
| | | Pre-Amplifier | Advantest | BB525C/3307A01814 | May, 2006 |
| | | Bilog Antenna | SCHAFFNER | CBL6112B / 2705 | May, 2006 |
| | | Horn Antenna | ETS | 3115 / 0005-6160 | Sep., 2006 |
| | | Pre-Amplifier | QTK | QTK-AMP-01/ 0001 | May, 2006 |
| <input checked="" type="checkbox"/> Site # 3 | X | Test Receiver | R & S | ESI 26 / 838786/004 | May, 2006 |
| | X | Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2006 |
| | X | Bilog Antenna | SCHAFFNER | CBL6112B / 2697 | May, 2006 |
| | X | Horn Antenna | Schwarzbeck | BBHA9120D / 305, 306 | July, 2006 |
| | X | Horn Antenna | Schwarzbeck | BBHA9170 / 208, 209 | July, 2006 |
| | X | Pre-Amplifier | QTK | QTK-AMP-01 / 0001 | July, 2006 |
| | X | Pre-Amplifier | QTK | QTK-AMP-03 / 0003 | May, 2006 |
| | X | Pre-Amplifier | HP | 8449B / 3008A01123 | July, 2006 |

- Note:
1. All equipments are calibrated every one year.
 2. Test equipments marked by "X" are used to measure the final test results.

4.2. Test Setup



4.3. Limits

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

| FCC Part 15 Subpart C Paragraph 15.209(a) Limits | | |
|--------------------------------------------------|----------|-----------|
| Frequency MHz | uV/m @3m | dBuV/m@3m |
| 30-88 | 100 | 40 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46 |
| Above 960 | 500 | 54 |

- Remarks :
1. RF Voltage (dBuV) = 20 log RF Voltage (uV)
 2. In the Above Table, the tighter limit applies at the band edges.
 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The additional latch filter below 1GHz was used to measure the level of harmonics radiated emission during field strength of harmonics measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz.

The frequency range from 30MHz to 10th harmonics is checked.

4.5. Uncertainty

± 3.9 dB above 1GHz

± 3.8 dB below 1GHz

4.6. Test Result of Radiated Emission

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2412MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV/m | Margin dB | Limit dBuV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.781 | 35.448 | 39.229 | -34.771 | 74.000 |
| 7236.000 | 10.969 | 35.813 | 46.782 | -27.218 | 74.000 |
| 9648.000 | 14.882 | 36.081 | 50.963 | -23.037 | 74.000 |
| Average Detector: | | | | | |
| -- | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.781 | 36.194 | 39.975 | -34.025 | 74.000 |
| 7236.000 | 10.969 | 35.395 | 46.364 | -27.636 | 74.000 |
| 9648.000 | 14.882 | 38.756 | 53.638 | -20.362 | 74.000 |
| Average Detector: | | | | | |
| -- | | | | | |

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2437 MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV/m | Margin dB | Limit dBuV/m |
|------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
|------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|

Horizontal
Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4874.000 | 3.913 | 35.135 | 39.048 | -34.952 | 74.000 |
| 7311.000 | 11.547 | 35.552 | 47.099 | -26.901 | 74.000 |
| 9748.000 | 14.260 | 35.103 | 49.363 | -24.637 | 74.000 |

Average
Detector:

--

Vertical
Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4874.000 | 3.913 | 35.191 | 39.104 | -34.896 | 74.000 |
| 7326.000 | 11.645 | 35.619 | 47.264 | -26.736 | 74.000 |
| 9748.000 | 14.260 | 37.326 | 51.586 | -22.414 | 74.000 |

Average
Detector:

--

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2462 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------|---------|---------|-------------|--------|--------|
| MHz | Factor | Level | Level | dB | dBuV/m |
| | dB | dBuV | dBuV/m | | |

Horizontal

Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4924.000 | 4.054 | 34.772 | 38.826 | -35.174 | 74.000 |
| 7386.000 | 11.873 | 35.405 | 47.279 | -26.721 | 74.000 |
| 9848.000 | 13.462 | 35.932 | 49.394 | -24.606 | 74.000 |

Average

Detector:

--

Vertical

Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4924.000 | 4.054 | 34.452 | 38.506 | -35.494 | 74.000 |
| 7386.000 | 11.873 | 35.051 | 46.925 | -27.075 | 74.000 |
| 9848.000 | 13.462 | 36.784 | 50.246 | -23.754 | 74.000 |

Average

Detector:

--

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3OATS
 Test Mode : Mode 2: Transmitter 802.11g (2412 MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV/m | Margin dB | Limit dBuV/m |
|------------------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| Horizontal | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.781 | 36.927 | 40.708 | -33.292 | 74.000 |
| 7236.000 | 10.969 | 35.869 | 46.838 | -27.162 | 74.000 |
| 9648.000 | 14.882 | 35.199 | 50.081 | -23.919 | 74.000 |
| Average Detector: | | | | | |
| -- | | | | | |
| Vertical | | | | | |
| Peak Detector: | | | | | |
| 4824.000 | 3.781 | 36.395 | 40.176 | -33.824 | 74.000 |
| 7236.000 | 10.969 | 35.349 | 46.318 | -27.682 | 74.000 |
| 9648.000 | 14.882 | 37.723 | 52.605 | -21.395 | 74.000 |
| Average Detector: | | | | | |
| -- | | | | | |

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2437 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------|---------|---------|-------------|--------|--------|
| MHz | Factor | Level | Level | dB | dBuV/m |
| | dB | dBuV | dBuV/m | | |

Horizontal

Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4874.000 | 3.913 | 35.296 | 39.209 | -34.791 | 74.000 |
| 7311.000 | 11.547 | 35.870 | 47.417 | -26.583 | 74.000 |
| 9748.000 | 14.260 | 36.096 | 50.356 | -23.644 | 74.000 |

Average

Detector:

--

Vertical

Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4874.000 | 3.913 | 35.164 | 39.077 | -34.923 | 74.000 |
| 7311.000 | 11.547 | 35.584 | 47.131 | -26.869 | 74.000 |
| 9748.000 | 14.260 | 36.729 | 50.989 | -23.011 | 74.000 |

Average

Detector:

--

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Harmonic Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2462 MHz)

| Frequency | Correct | Reading | Measurement | Margin | Limit |
|-----------|---------|---------|-------------|--------|--------|
| MHz | Factor | Level | Level | dB | dBuV/m |
| | dB | dBuV | dBuV/m | | |

Horizontal

Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4924.000 | 4.054 | 34.046 | 38.100 | -35.900 | 74.000 |
| 7386.000 | 11.873 | 34.783 | 46.657 | -27.343 | 74.000 |
| 9848.000 | 13.462 | 35.121 | 48.583 | -25.417 | 74.000 |

Average

Detector:

--

Vertical

Peak Detector:

| | | | | | |
|----------|--------|--------|--------|---------|--------|
| 4924.000 | 4.054 | 34.421 | 38.475 | -35.525 | 74.000 |
| 7386.000 | 11.873 | 34.832 | 46.706 | -27.294 | 74.000 |
| 9848.000 | 13.462 | 36.879 | 50.341 | -23.659 | 74.000 |

Average

Detector:

--

Note:

1. The reading levels below 1GHz and above 1GHz are quasi-peak values and peak/average values, respectively.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz; Span:100MHz.
3. Receiver setting (AVG Detector) : RBW:1MHz; VBW:30Hz; Span:20MHz.
4. Emission Level = Reading Level + Correct Factor.
5. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (Adapter2)(2437 MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV/m | Margin dB | Limit dBuV/m |
|-------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| Horizontal | | | | | |
| 250.675 | 13.535 | 21.972 | 35.507 | -10.493 | 46.000 |
| 384.050 | 6.049 | 31.562 | 37.610 | -8.390 | 46.000 |
| 512.575 | 13.022 | 28.234 | 41.256 | -4.744 | 46.000 |
| 641.100 | 18.245 | 24.195 | 42.440 | -3.560 | 46.000 |
| 767.200 | 24.742 | 17.909 | 42.651 | -3.349 | 46.000 |
| 813.275 | 23.512 | 17.730 | 41.242 | -4.758 | 46.000 |
| Vertical | | | | | |
| 90.625 | 9.138 | 29.274 | 38.412 | -5.088 | 43.500 |
| 250.675 | 6.243 | 30.399 | 36.642 | -9.358 | 46.000 |
| 512.575 | 22.908 | 12.112 | 35.020 | -10.980 | 46.000 |
| 767.200 | 17.736 | 17.249 | 34.985 | -11.015 | 46.000 |
| 813.275 | 20.373 | 16.106 | 36.479 | -9.521 | 46.000 |
| 895.725 | 24.351 | 10.920 | 35.271 | -10.729 | 46.000 |

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : General Radiated Emission Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (Adapter2)(2437 MHz)

| Frequency MHz | Correct Factor dB | Reading Level dBuV | Measurement Level dBuV/m | Margin dB | Limit dBuV/m |
|-------------------|-------------------------|--------------------------|--------------------------------|--------------|-----------------|
| Horizontal | | | | | |
| 250.675 | 13.535 | 20.697 | 34.232 | -11.768 | 46.000 |
| 384.050 | 6.049 | 33.604 | 39.652 | -6.348 | 46.000 |
| 512.575 | 13.022 | 28.076 | 41.098 | -4.902 | 46.000 |
| 641.100 | 18.245 | 21.151 | 39.396 | -6.604 | 46.000 |
| 767.200 | 24.742 | 17.895 | 42.637 | -3.363 | 46.000 |
| 813.275 | 23.512 | 17.239 | 40.751 | -5.249 | 46.000 |
| Vertical | | | | | |
| 90.625 | 9.138 | 28.720 | 37.858 | -5.642 | 43.500 |
| 250.675 | 6.243 | 28.998 | 35.241 | -10.759 | 46.000 |
| 512.575 | 22.908 | 12.187 | 35.095 | -10.905 | 46.000 |
| 767.200 | 17.736 | 16.960 | 34.696 | -11.304 | 46.000 |
| 813.275 | 20.373 | 15.533 | 35.906 | -10.094 | 46.000 |
| 895.725 | 24.351 | 11.665 | 36.016 | -9.984 | 46.000 |

Note:

1. The reading levels below 1GHz are quasi-peak values.
2. "■" means the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The radiated emissions below 1GHz of the lowest, middle, highest frequency are pretested. Only the worst case is shown on the report.

5. Band Edge

5.1. Test Equipment

The following test equipments are used during the band edge tests:

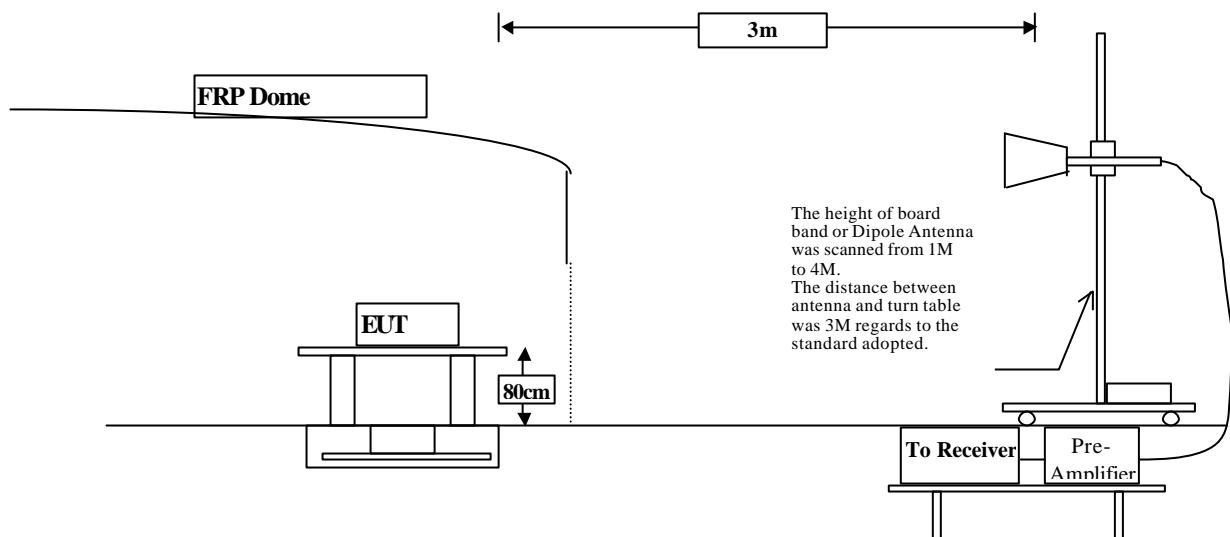
| | Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---|-------------------|--------------|----------------------|------------|
| X | Test Receiver | R & S | ESI 26 / 838786/004 | May, 2006 |
| X | Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2006 |
| X | Bilog Antenna | SCHAFFNER | CBL6112B / 2697 | May, 2006 |
| X | Horn Antenna | Schwarzbeck | BBHA9120D / 305, 306 | July, 2006 |
| X | Horn Antenna | Schwarzbeck | BBHA9170 / 208, 209 | July, 2006 |
| X | Pre-Amplifier | QTK | QTK-AMP-01 / 0001 | July, 2006 |
| X | Pre-Amplifier | QTK | QTK-AMP-03 / 0003 | May, 2006 |
| X | Pre-Amplifier | HP | 8449B / 3008A01123 | July, 2006 |

Test Site: Site3

- Note:
1. All equipments are calibrated every one year.
 2. The test equipments marked by “X” are used to measure the final test results.

5.2. Test Setup

RF Radiated Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2003 on radiated measurement.

The bandwidth setting below 1GHz and above 1GHz on the field strength meter is 120 kHz and 1MHz, respectively.

5.5. Uncertainty

Conducted is ± 1.27 dB

Radiated is ± 3.9 dB

5.6. Test Result of Band Edge

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b

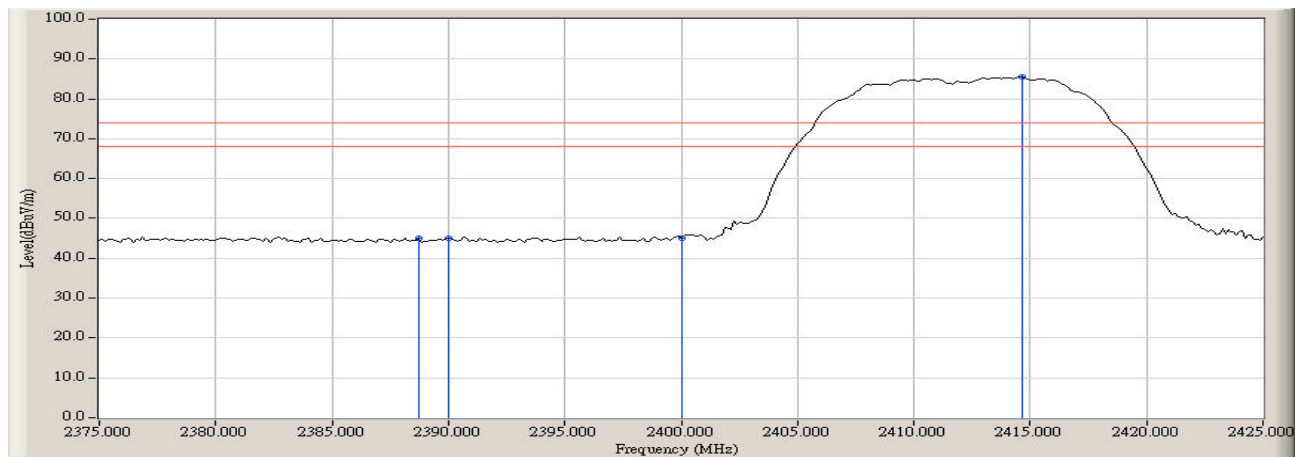
RF Radiated Measurement:

| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|----------------|-----------------|----------------------|--------|
| 1 (Horizontal) | <2400 | >20 | Pass |

RF Radiated Measurement (Horizontal):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 1 (Peak) | 2388.750 | -2.261 | 47.288 | 45.027 | 74.00 | 54.00 | Pass |
| 1 (Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 1: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b

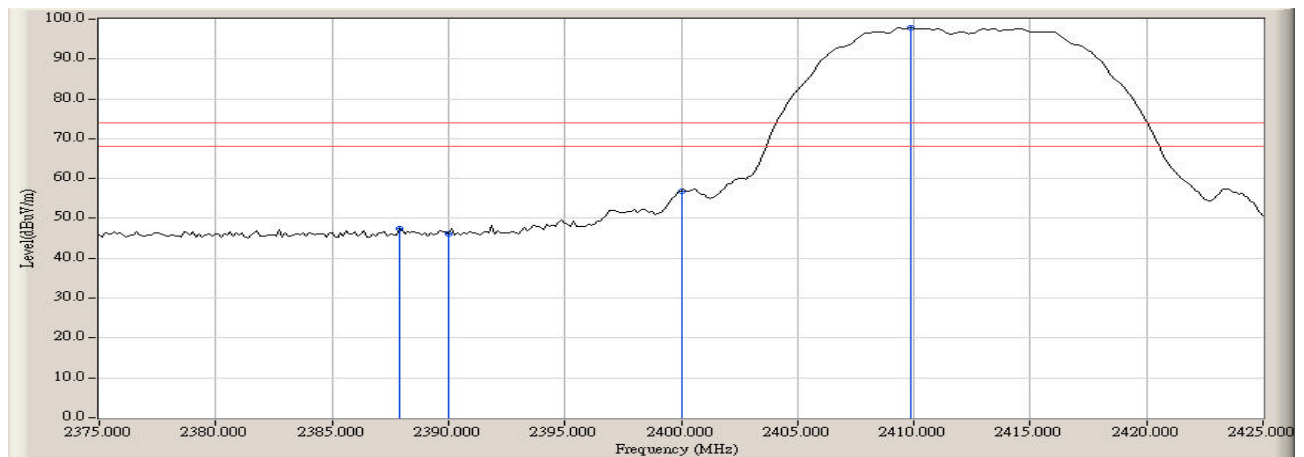
RF Radiated Measurement:

| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|--------------|-----------------|----------------------|--------|
| 1 (Vertical) | <2400 | >20 | Pass |

RF Radiated Measurement (Vertical):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 1 (Peak) | 2387.875 | -2.264 | 49.647 | 47.383 | 74.00 | 54.00 | Pass |
| 1 (Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 1: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b

RF Radiated Measurement:

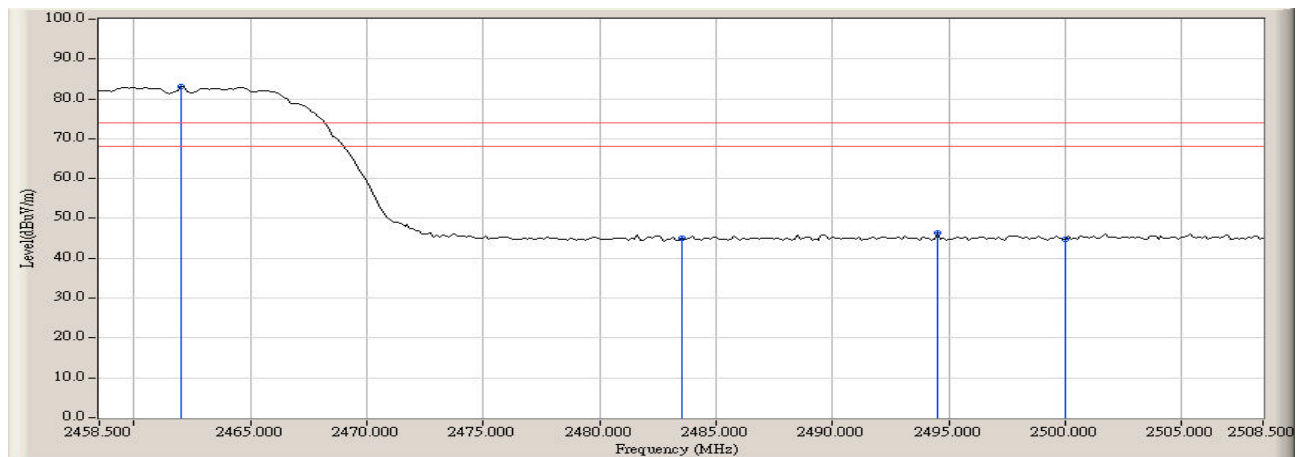
| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|-----------------|-----------------|----------------------|--------|
| 11 (Horizontal) | >2483.5 | >20 | Pass |

RF Radiated Measurement (Horizontal):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 11(Peak) | 2494.500 | -1.857 | 48.196 | 46.339 | 74.00 | 54.00 | Pass |
| 11(Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 11:

Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b

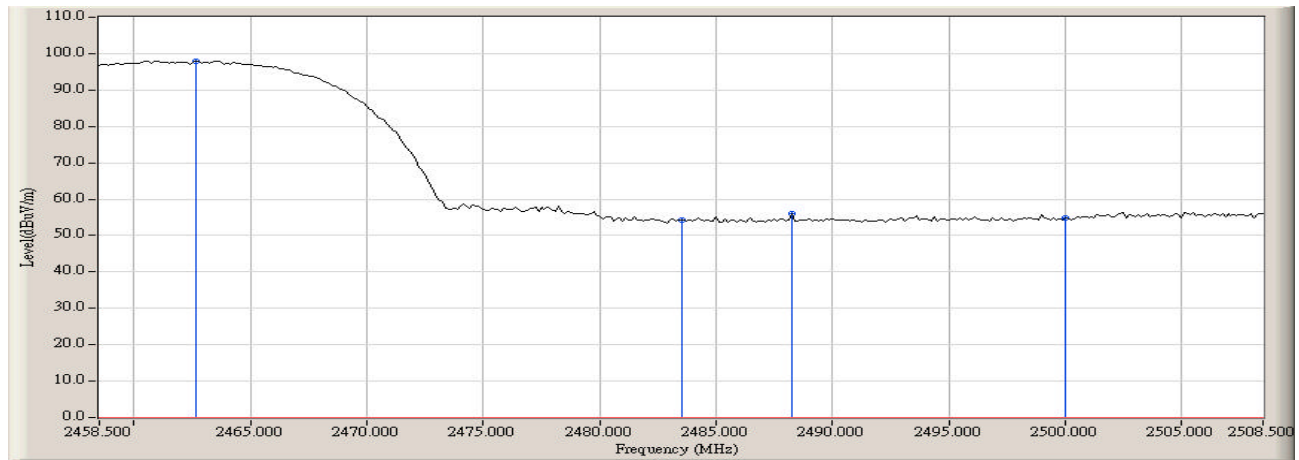
RF Radiated Measurement:

| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|---------------|-----------------|----------------------|--------|
| 11 (Vertical) | >2483.5 | >20 | Pass |

RF Radiated Measurement (Vertical):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 11(Peak) | 2484.750 | -1.891 | 49.228 | 47.337 | 74.00 | 54.00 | Pass |
| 11(Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 11: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g

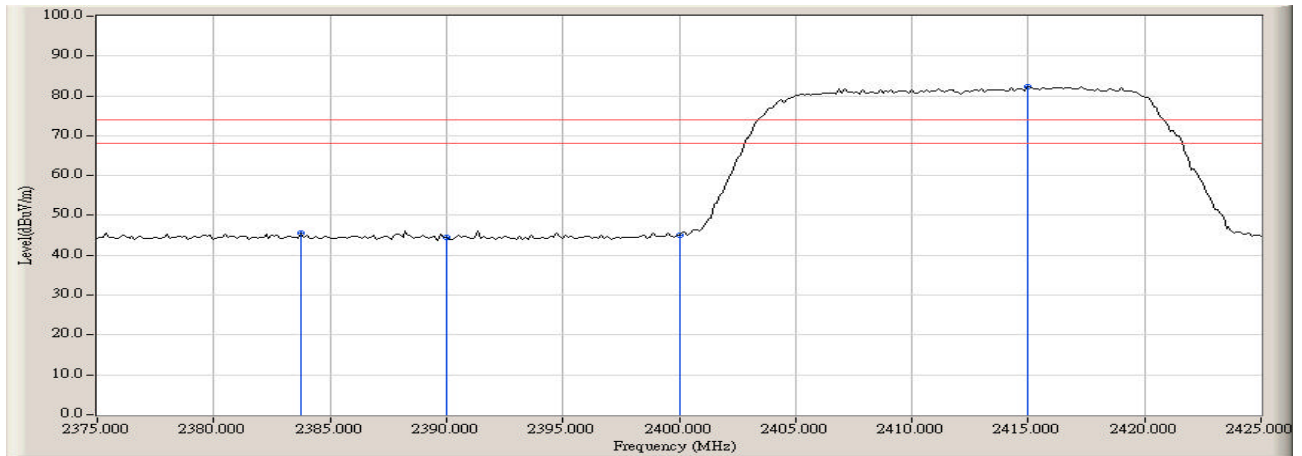
RF Radiated Measurement:

| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|----------------|-----------------|----------------------|--------|
| 1 (Horizontal) | <2400 | >20 | Pass |

RF Radiated Measurement (Horizontal):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 1 (Peak) | 2383.750 | -2.278 | 47.948 | 45.670 | 74.00 | 54.00 | Pass |
| 1 (Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 1: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g

RF Radiated Measurement:

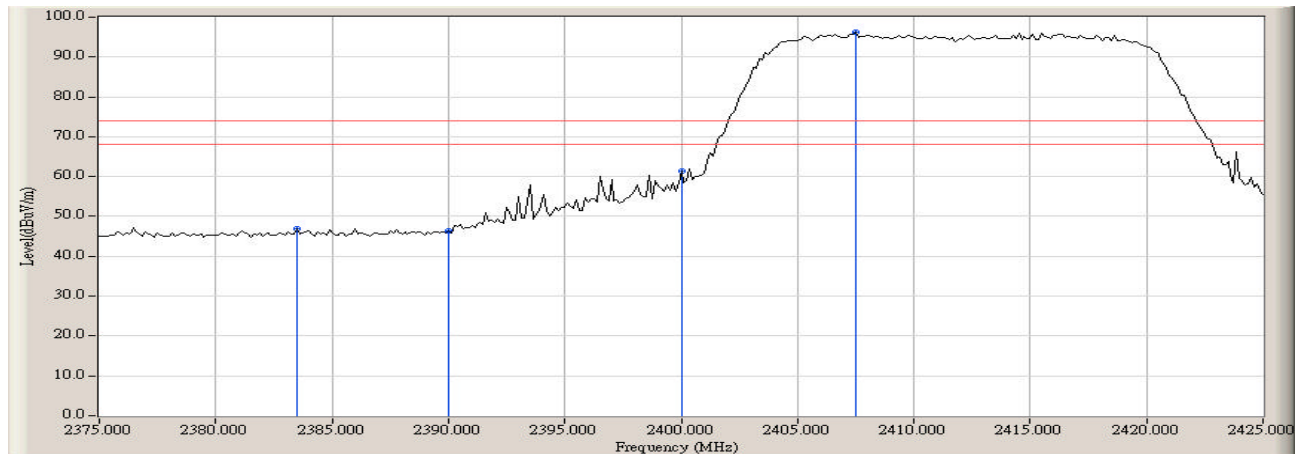
| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|--------------|-----------------|----------------------|--------|
| 1 (Vertical) | <2400 | >20 | Pass |

RF Radiated Measurement (Vertical):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 1 (Peak) | 2383.500 | -2.278 | 49.283 | 47.005 | 74.00 | 54.00 | Pass |
| 1 (Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 1:

Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g

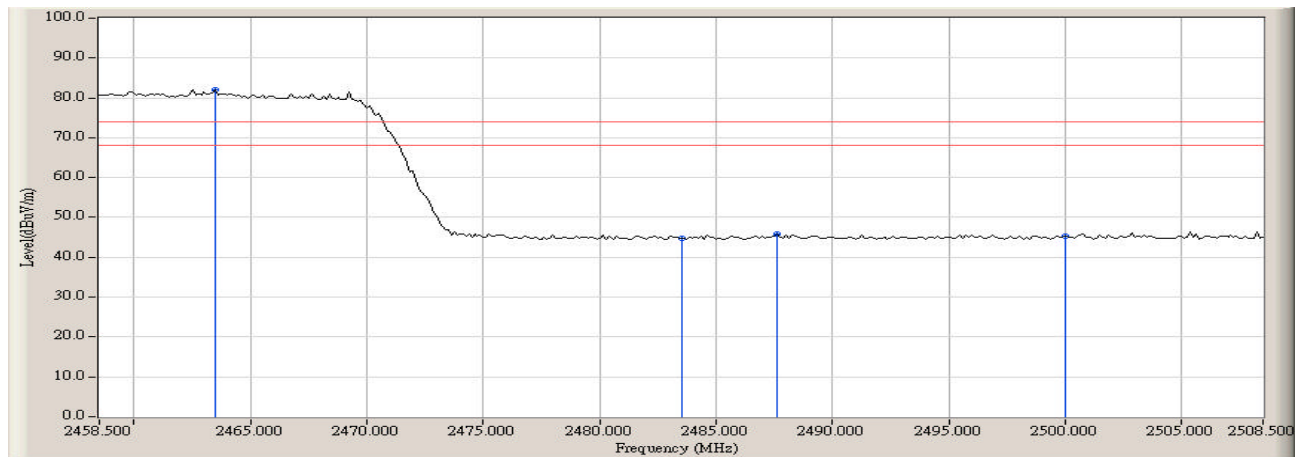
RF Radiated Measurement:

| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|-----------------|-----------------|----------------------|--------|
| 11 (Horizontal) | >2483.5 | >20 | Pass |

RF Radiated Measurement (Horizontal):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 11 (Peak) | 2487.625 | -1.881 | 47.597 | 45.716 | 74.00 | 54.00 | Pass |
| 11(Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 11: Horizontal (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Band Edge Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g

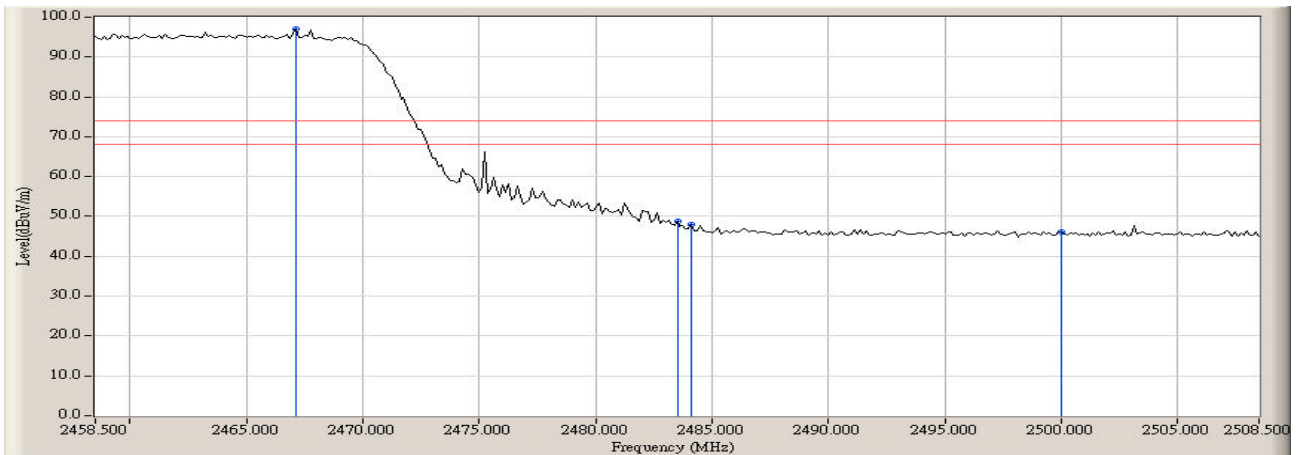
RF Radiated Measurement:

| Channel No. | Frequency (MHz) | Required Limit (dBc) | Result |
|---------------|-----------------|----------------------|--------|
| 11 (Vertical) | >2483.5 | >20 | Pass |

RF Radiated Measurement (Vertical):

| Channel No. | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Emission Level (dBuV/m) | Peak Limit (dBuV/m) | Average Limit (dBuV/m) | Result |
|-------------|-----------------|---------------------|----------------------|-------------------------|---------------------|------------------------|--------|
| 11 (Peak) | 2484.125 | -1.893 | 49.858 | 47.965 | 74.00 | 54.00 | Pass |
| 11(Average) | -- | -- | -- | -- | 74.00 | 54.00 | Pass |

Figure Channel 11: Vertical (Peak)



Note: RBW=1MHz, VBW=1MHz, Sweep=500ms

Note: The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

6. Occupied Bandwidth

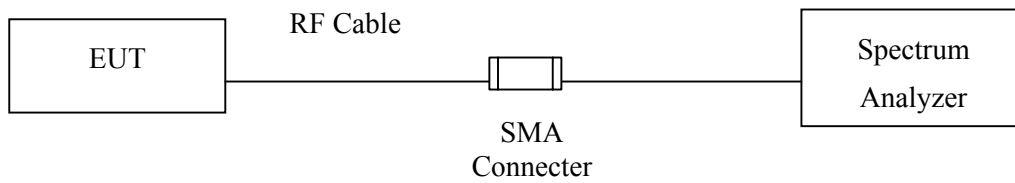
6.1. Test Equipment

The following test equipments are used during the radiated emission tests:

| Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---------------------|--------------|----------------------|-----------|
| X Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2006 |

Note: 1. All instruments are calibrated every one year.
 2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup



6.3. Limits

The minimum bandwidth shall be at least 500kHz.

6.4. Uncertainty

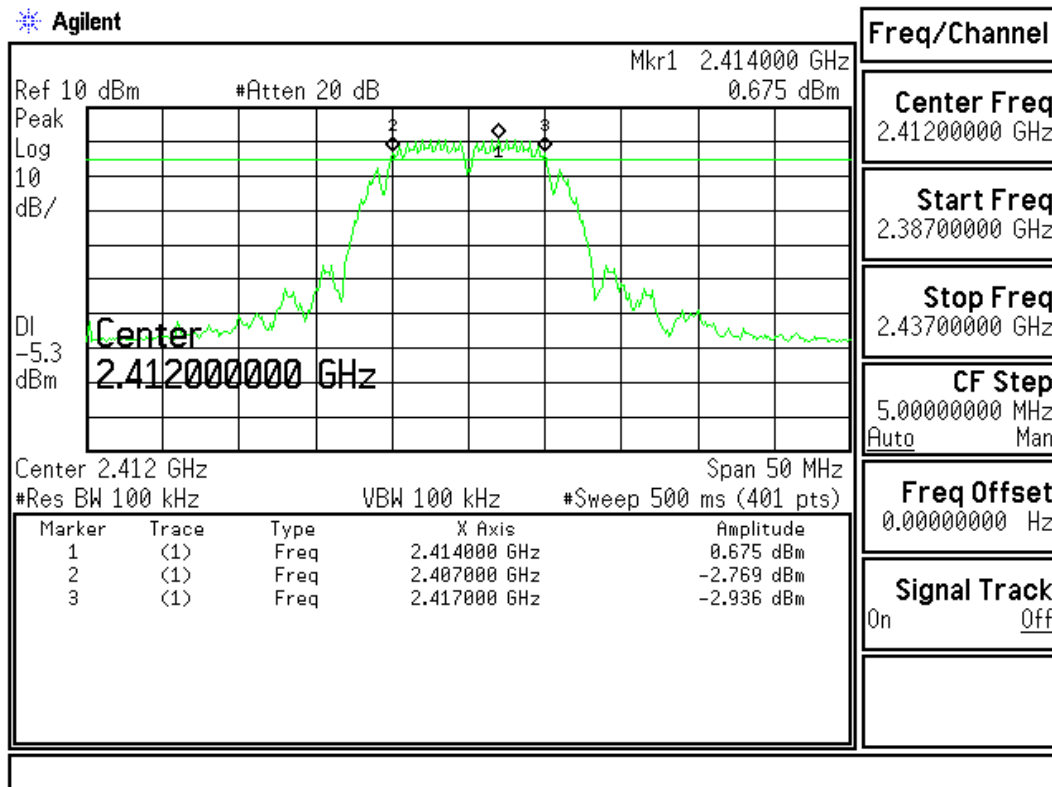
± 150Hz

6.5. Test Result of Occupied Bandwidth

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2412MHz)

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 1 (1Mbps) | 2412.00 | 10000 | >500 | Pass |

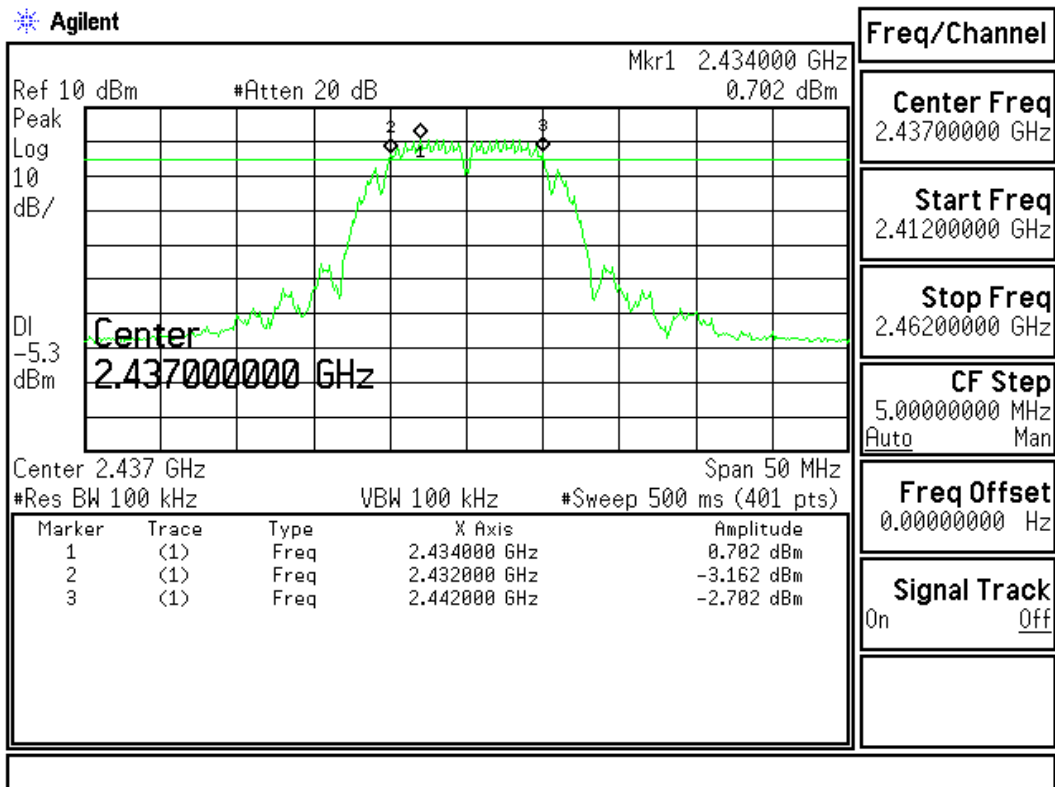
Figure Channel 1:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 6 (1Mbps) | 2437.00 | 10000 | >500 | Pass |

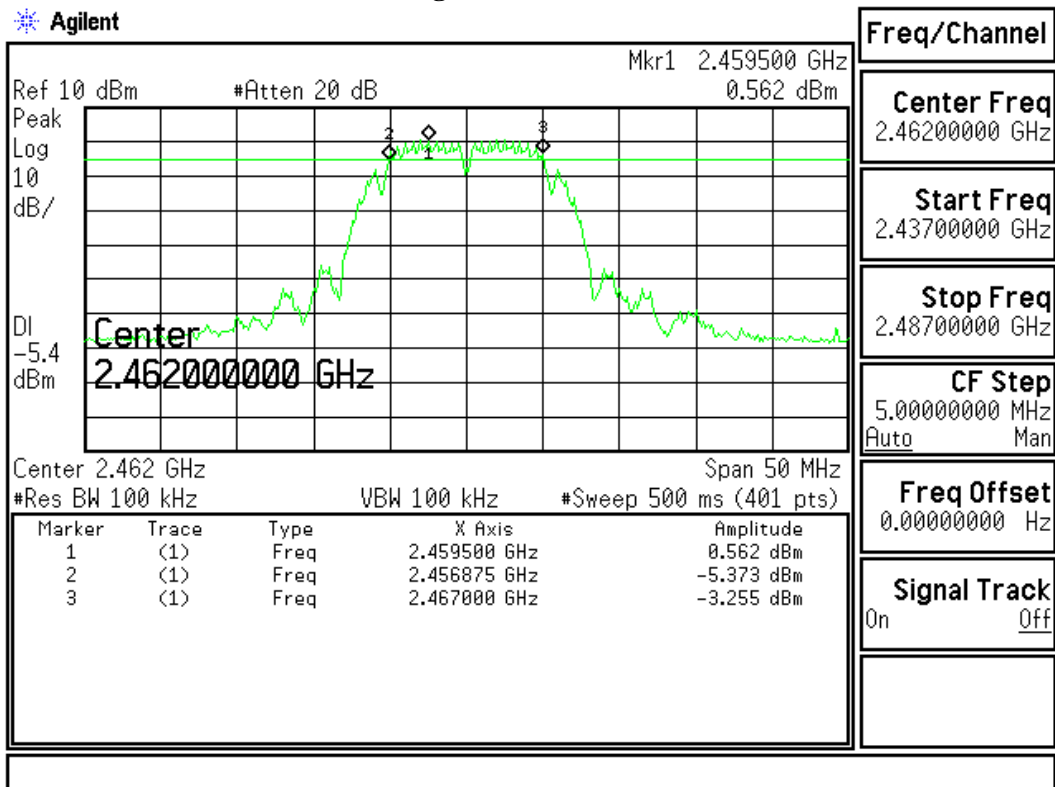
Figure Channel 6:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2462MHz)

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 11 (1Mbps) | 2462.00 | 10000 | >500 | Pass |

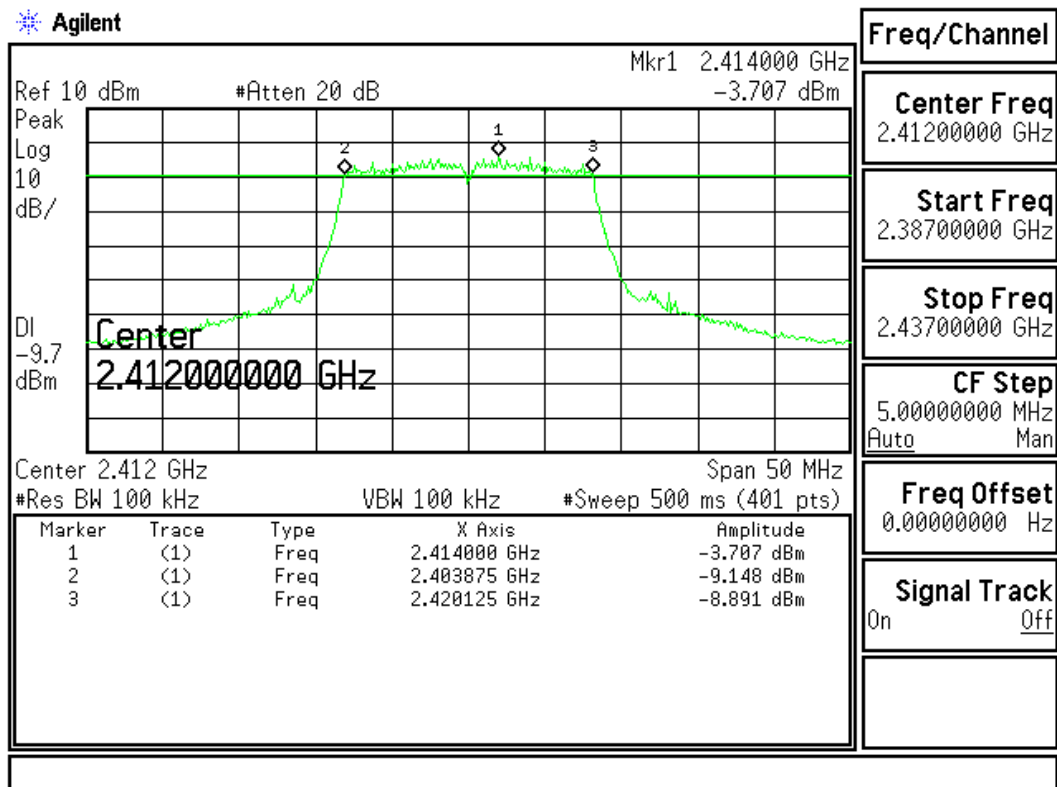
Figure Channel 11:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2412MHz)

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 1 (6Mbps) | 2412.00 | 16250 | >500 | Pass |

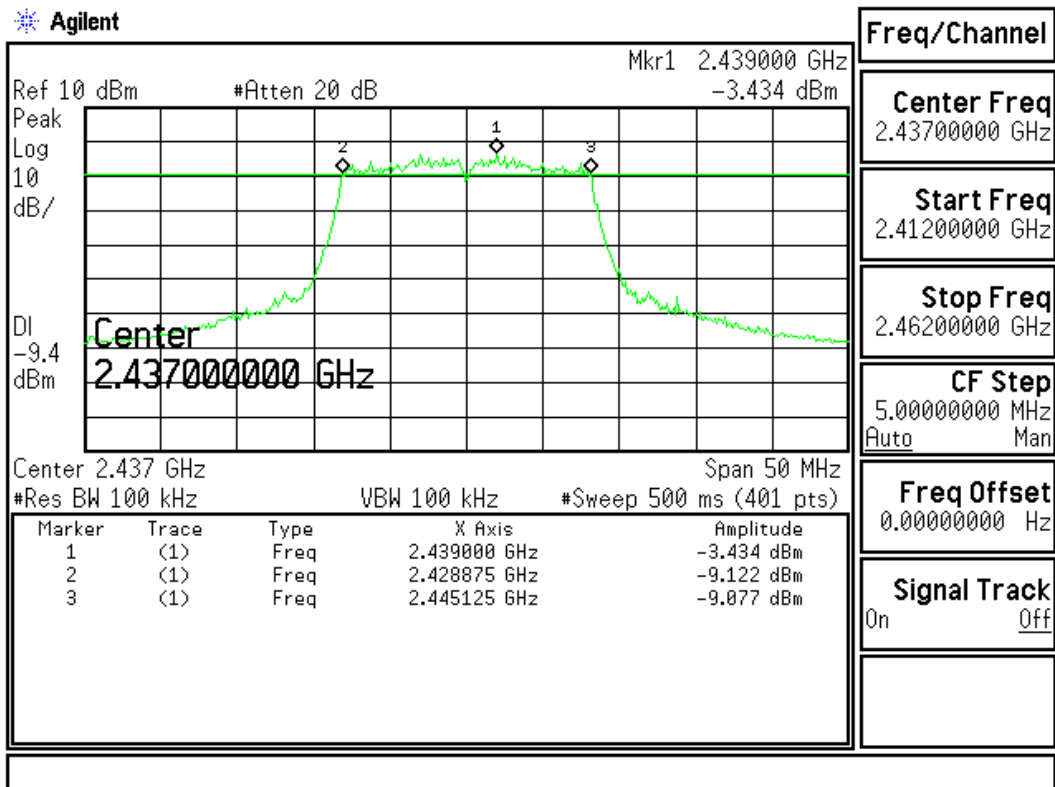
Figure Channel 1:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 6 (6Mbps) | 2437.00 | 16250 | >500 | Pass |

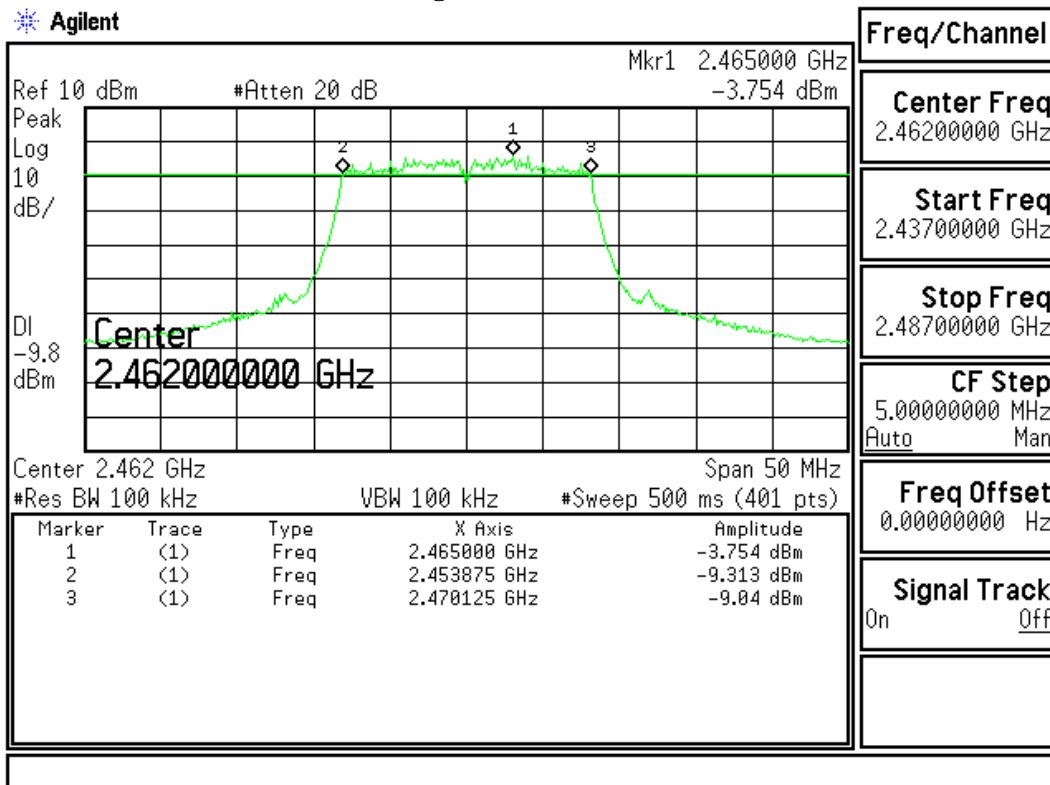
Figure Channel 6:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Occupied Bandwidth Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2462MHz)

| Channel No. | Frequency (MHz) | Measurement Level (kHz) | Required Limit (kHz) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 11 (6Mbps) | 2462.00 | 16250 | >500 | Pass |

Figure Channel 11:



7. Power Density

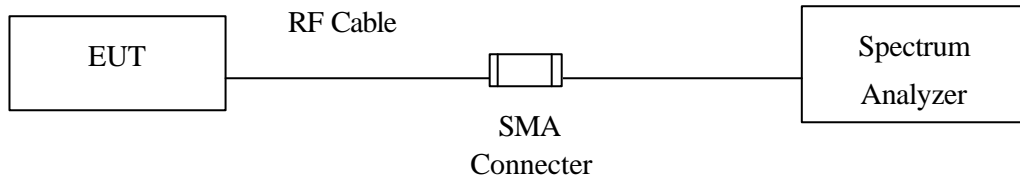
7.1. Test Equipment

The following test equipments are used during the radiated emission tests:

| Equipment | Manufacturer | Model No./Serial No. | Last Cal. |
|---------------------|--------------|----------------------|-----------|
| X Spectrum Analyzer | Agilent | E4407B / US39440758 | May, 2006 |

- Note:
1. All equipments are calibrated every one year.
 2. The test instruments marked by “X” are used to measure the final test results.

7.2. Test Setup



7.3. Limits

The transmitted power density averaged over any 1 second interval shall not be greater +8dBm in any 3kHz bandwidth.

7.4. Uncertainty

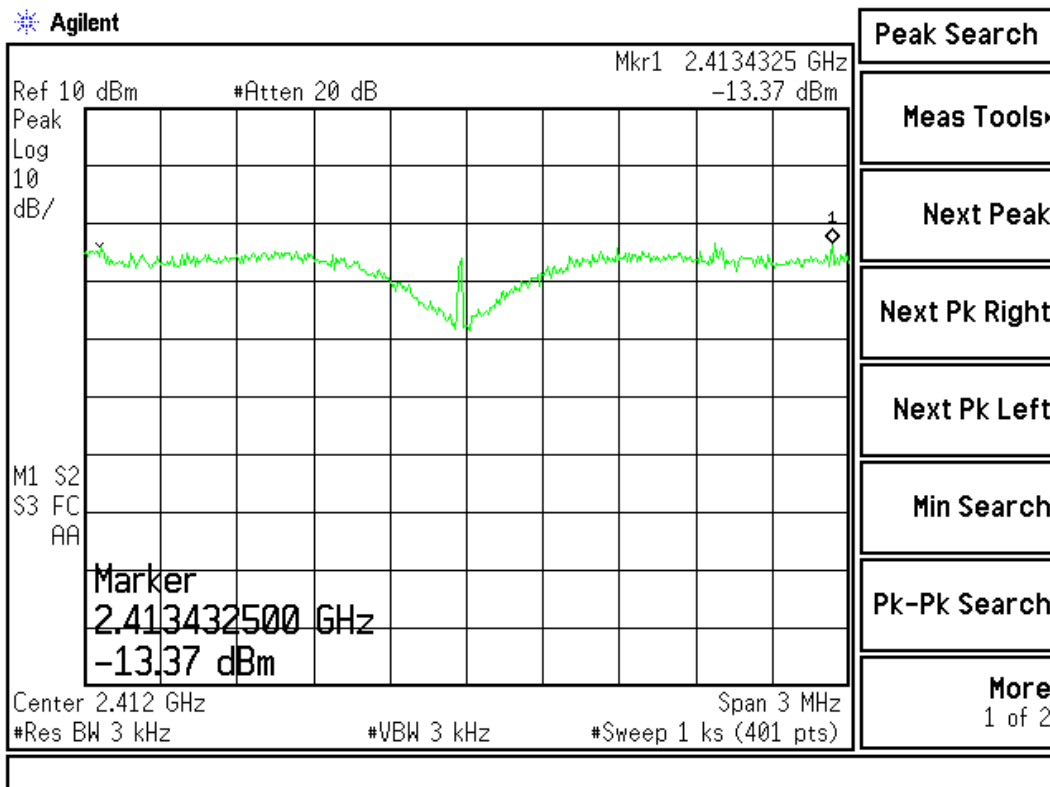
± 1.27 dB

7.5. Test Result of Power Density

Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2412MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 (1Mbps) | 2412.00 | -13.37 | < 8dBm | Pass |

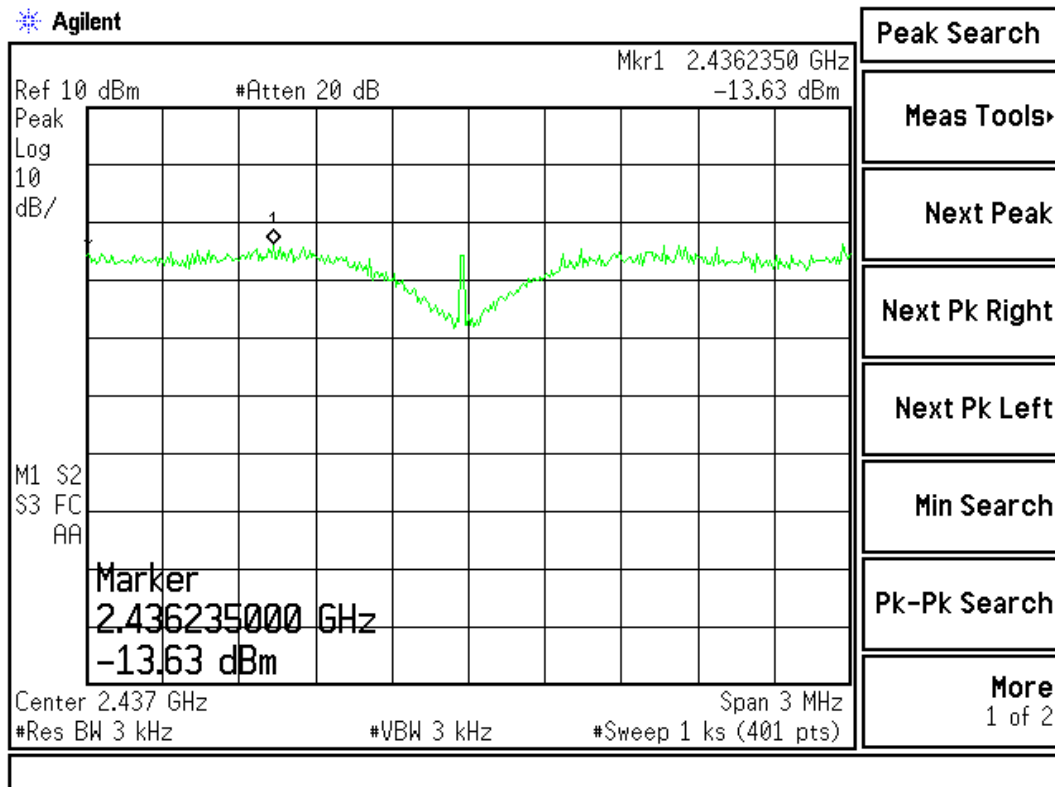
Figure Channel 1:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 1: Transmitter 802.11b (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 6 (1Mbps) | 2437.000 | -13.63 | < 8dBm | Pass |

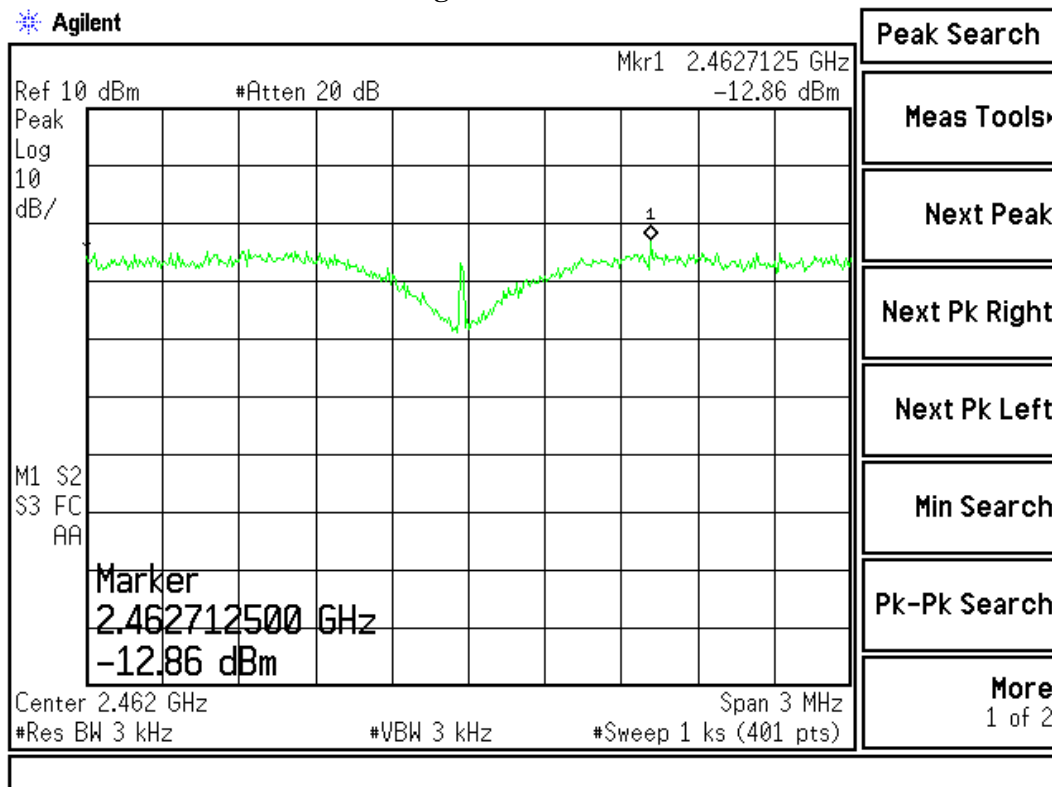
Figure Channel 6:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 1: Transmitter 802.11b (2462MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 11 (1Mbps) | 2462.00 | -12.86 | < 8dBm | Pass |

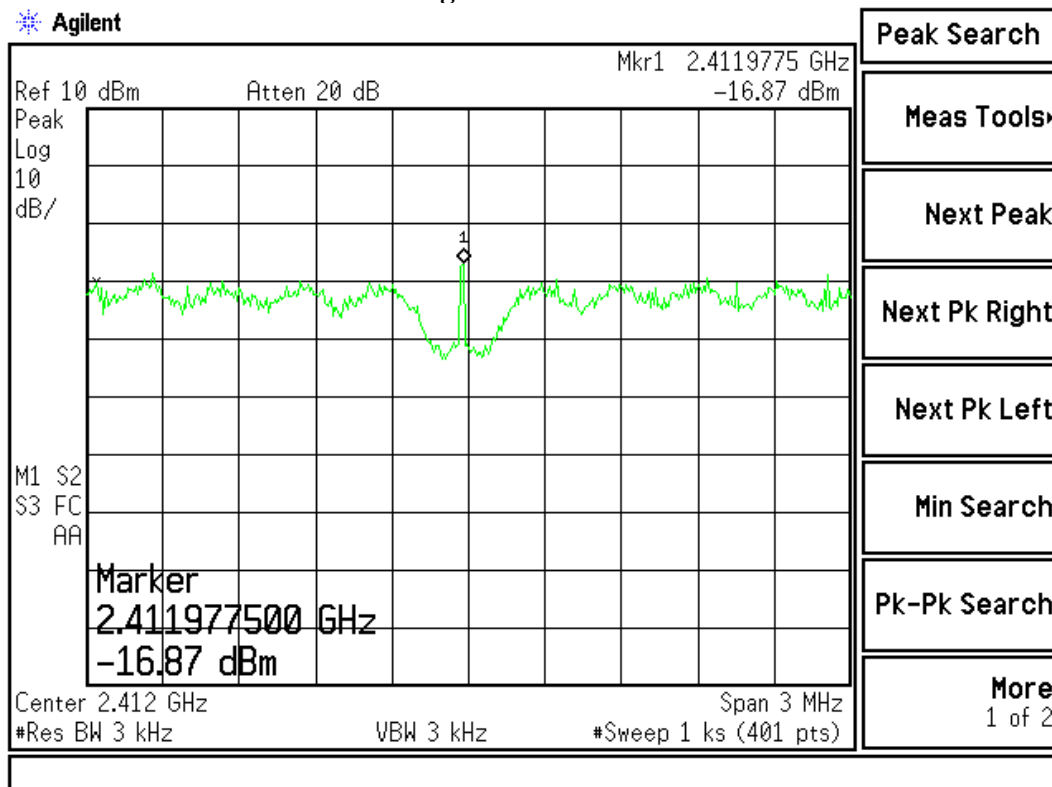
Figure Channel 11:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2412MHz)

| Channel No. | Frequency (MHz) | Measure Level (dBm) | Limit (dBm) | Result |
|-------------|-----------------|---------------------|-------------|--------|
| 1 (6Mbps) | 2412.00 | -16.87 | < 8dBm | Pass |

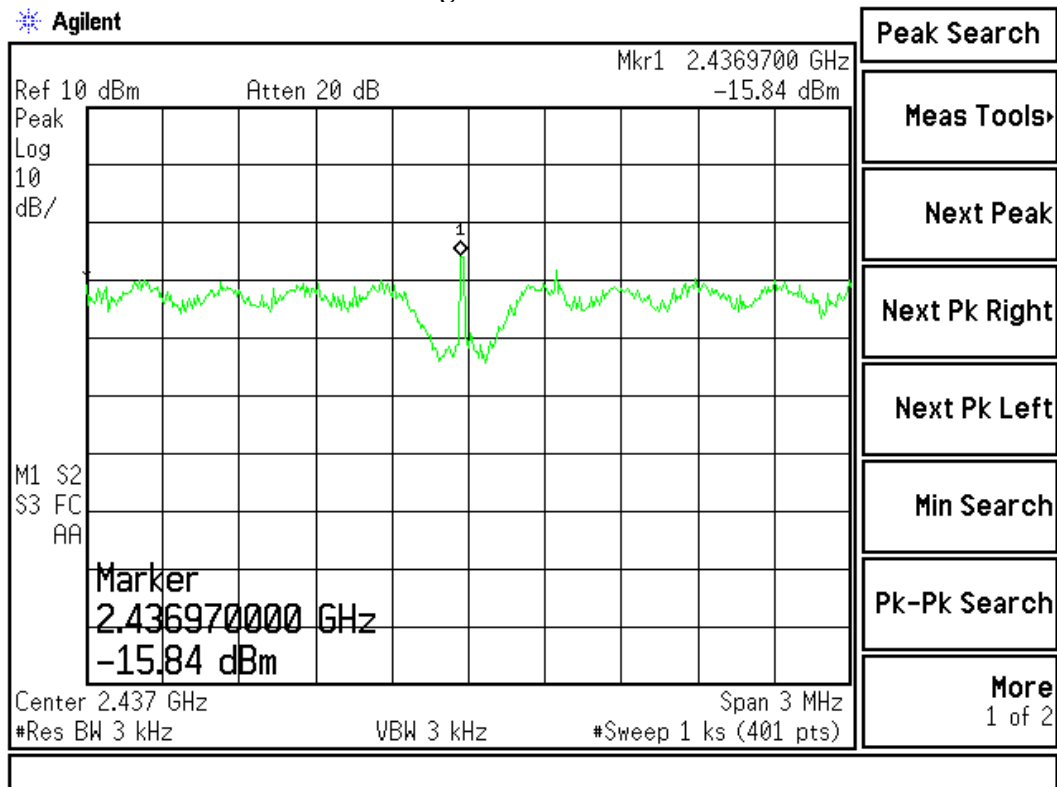
Figure Channel 1:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Power Density Data
 Test Site : No.3OATS
 Test Mode : Mode 2: Transmitter 802.11g (2437MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 6 (6Mbps) | 2437.000 | -15.84 | < 8dBm | Pass |

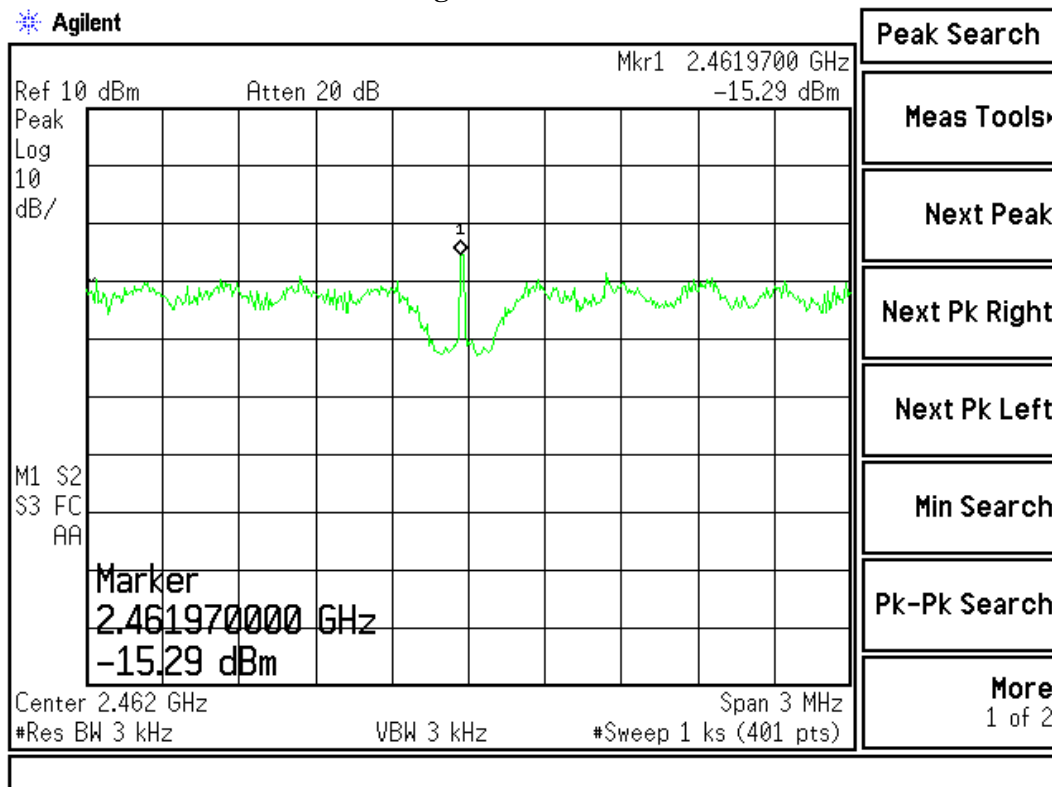
Figure Channel 6:



Product : Wireless ADSL2/2+ Ethernet Router
 Test Item : Power Density Data
 Test Site : No.3 OATS
 Test Mode : Mode 2: Transmitter 802.11g (2462MHz)

| Channel No. | Frequency (MHz) | Measurement Level (dBm) | Required Limit (dBm) | Result |
|-------------|-----------------|-------------------------|----------------------|--------|
| 11 (6Mbps) | 2462.00 | -15.29 | < 8dBm | Pass |

Figure Channel 11:



8. EMI Reduction Method During Compliance Testing

No modification was made during testing.