

FCC Part15.247 Test Report

Product Name : Home Gateway
Model No. : EchoLife HG620
FCC ID : QISHG620

Applicant : Huawei Technologies Co., Ltd.
Address : Administration Building, Huawei Base, Bantian,
Longgang District, Shenzhen 518129 P.R.C.

Date of Receipt : 2009/08/14
Issued Date : 2009/08/24
Report No. : 098S044R-RF-US-P05V01
Report Version : V2.1

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by CNLA, NVLAP or any agency of the Government.
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : 2009/08/24

Report No. : 098S044R-RF-US-P05V01



Product Name : Home Gateway
 Applicant : Huawei Technologies Co., Ltd.
 Address : Administration Building, Huawei Base, Bantian,
 Longgang District, Shenzhen 518129 P.R.C.
 Manufacturer : Huawei Technologies Co., Ltd.
 Model No. : EchoLife HG620
 FCC ID : QISHG620
 Rated Voltage : AC 100~240V 50/60Hz
 EUT Voltage : DC 12 V
 Trade Name : HUAWEI
 Applicable Standard : FCC CFR Title 47 Part 15 Subpart C: 2008
 ANSI C63.4: 2003
 Test Result : Complied
 Performed Location : SuZhou EMC laboratory
 No.99 Hongye Rd., Suzhou Industrial Park Loufeng
 Hi-Tech Development Zone., SuZhou, China
 TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
 FCC Registration Number: 800392

Documented By : Alice Ni
 (Alice Ni)

Reviewed By : Marlin Chen
 (Marlin Chen)

Approved By : Gene Chang
 (Gene Chang)

Laboratory Information

We , **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

| | |
|---------------|-------------------|
| Taiwan R.O.C. | : BSMI, DGT, CNLA |
| Germany | : TUV Rheinland |
| Norway | : Nemko, DNV |
| USA | : FCC, NVLAP |
| Japan | : VCCI |

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://tw.quietek.com/modules/myalbum/>
 The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : <http://www.quietek.com/>
 If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
 TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com



LinKou Testing Laboratory :

No. 5, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C.
 TEL : +886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com



Suzhou Testing Laboratory :

No.99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., SuZhou, China
 TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com



TABLE OF CONTENTS

| Description | Page |
|--|------|
| 1. General Information..... | 6 |
| 1.1. EUT Description..... | 6 |
| 1.2. Mode of Operation..... | 9 |
| 1.3. Tested System Details..... | 10 |
| 1.4. Configuration of Tested System..... | 11 |
| 1.5. EUT Exercise Software | 12 |
| 2. Technical Test..... | 13 |
| 2.1. Summary of Test Result..... | 13 |
| 2.2. Test Environment | 14 |
| 3. Conducted Emission..... | 15 |
| 3.1. Test Equipment..... | 15 |
| 3.2. Test Setup..... | 15 |
| 3.3. Limit..... | 16 |
| 3.4. Test Procedure..... | 16 |
| 3.5. Uncertainty..... | 16 |
| 3.6. Test Result | 17 |
| 4. Radiated Emission..... | 23 |
| 4.1. Test Equipment..... | 23 |
| 4.2. Test Setup..... | 24 |
| 4.3. Limit..... | 25 |
| 4.4. Test Procedure..... | 25 |
| 4.5. Uncertainty..... | 25 |
| 4.6. Test Result | 26 |
| 5. RF Antenna Conducted Spurious..... | 36 |
| 5.1. Test Equipment..... | 36 |
| 5.2. Test Setup..... | 36 |
| 5.3. Limit..... | 36 |
| 5.4. Test Procedure..... | 37 |
| 5.5. Uncertainty..... | 37 |
| 5.6. Test Result..... | 38 |
| 6. Radiated Emission Band Edge..... | 54 |
| 6.1. Test Equipment..... | 54 |
| 6.2. Test Setup..... | 55 |
| 6.3. Limit..... | 55 |
| 6.4. Test Procedure..... | 55 |
| 6.5. Uncertainty..... | 55 |
| 6.6. Test Result..... | 56 |

| | | |
|-------|--|-----|
| 7. | Operation Frequency Range of 20dB Bandwidth..... | 136 |
| 7.1. | Test Equipment..... | 136 |
| 7.2. | Test Setup..... | 136 |
| 7.3. | Limit..... | 136 |
| 7.4. | Test Procedure..... | 136 |
| 7.5. | Uncertainty..... | 137 |
| 7.6. | Test Result..... | 138 |
| 8. | Occupied Bandwidth..... | 146 |
| 8.1. | Test Equipment..... | 146 |
| 8.2. | Test Setup..... | 146 |
| 8.3. | Limit..... | 146 |
| 8.4. | Test Procedure..... | 146 |
| 8.5. | Uncertainty..... | 147 |
| 8.6. | Test Result..... | 148 |
| 9. | Power Output..... | 164 |
| 9.1. | Test Equipment..... | 164 |
| 9.2. | Test Setup..... | 164 |
| 9.3. | Limit..... | 164 |
| 9.4. | Test Procedure..... | 165 |
| 9.5. | Uncertainty..... | 165 |
| 9.6. | Test Result..... | 166 |
| 10. | Power Spectral Density..... | 171 |
| 10.1. | Test Equipment..... | 171 |
| 10.2. | Test Setup..... | 171 |
| 10.3. | Limit..... | 171 |
| 10.4. | Test Procedure..... | 171 |
| 10.5. | Uncertainty..... | 172 |
| 10.6. | Test Result | 173 |

1. General Information

1.1. EUT Description

| | |
|--------------------|---|
| Product Name | Home Gateway |
| Trade Name | HUAWEI |
| Model No. | EchoLife HG620 |
| Working Voltage | DC 12 V |
| Frequency Range | 802.11b/g/n(20MHz): 2412 ~ 2462 MHz 802.11n(40MHz): 2422 ~ 2452 MHz |
| Channel Number | 802.11b/g/n(20MHz): 11 802.11n(40MHz): 7 |
| Type of Modulation | 802.11b: DSSS 802.11g/n: OFDM |
| Data Rate | 802.11b: 1/2/5.5/11 Mbps 802.11g: 6/9/12/18/24/36/48/54 Mbps 802.11n: up to 300Mbps |
| Channel Control | Auto |
| Antenna Delivery | 2*TX + 2*RX |
| Antenna Type | Printed Antenna |
| Antenna Gain | 3dBi |

Note: EchoLife HG620 was used for testing with number 1 adapter listed as follows.

| Component | |
|---------------|---|
| AC Adapter #1 | Manufacturer: ShenZhen Frecom Electronics Co., Ltd. Model: FM120015-US Input: 100-240V~, 50/60Hz, 0.6A Output: 12VDC, 1.5A |
| AC Adapter #2 | Manufacturer: Dongguan Shiling Fuhua Electronic Co., Ltd. Model: UE25L-120150SPAU Input: 100-240V~, 50/60Hz, 600mA MAX Output: 12VDC, 1.5A |

802.11b/g/n(20MHz) Working Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| 01 | 2412 MHz | 02 | 2417 MHz | 03 | 2422 MHz | 04 | 2427 MHz |
| 05 | 2432 MHz | 06 | 2437 MHz | 07 | 2442 MHz | 08 | 2447 MHz |
| 09 | 2452 MHz | 10 | 2457 MHz | 11 | 2462 MHz | N/A | N/A |

802.11n(40MHz) Working Frequency of Each Channel:

| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
| 03 | 2422 MHz | 04 | 2427 MHz | 05 | 2432 MHz | 06 | 2437 MHz |
| 07 | 2442 MHz | 08 | 2447 MHz | 09 | 2452 MHz | N/A | N/A |

1.2. Mode of Operation

Quietek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

| Test Mode |
|-------------------------------------|
| Mode 1: Transmit at 802.11b |
| Mode 2: Transmit at 802.11g |
| Mode 3: Transmit at 802.11n (20MHz) |
| Mode 4: Transmit at 802.11n (40MHz) |

Note:

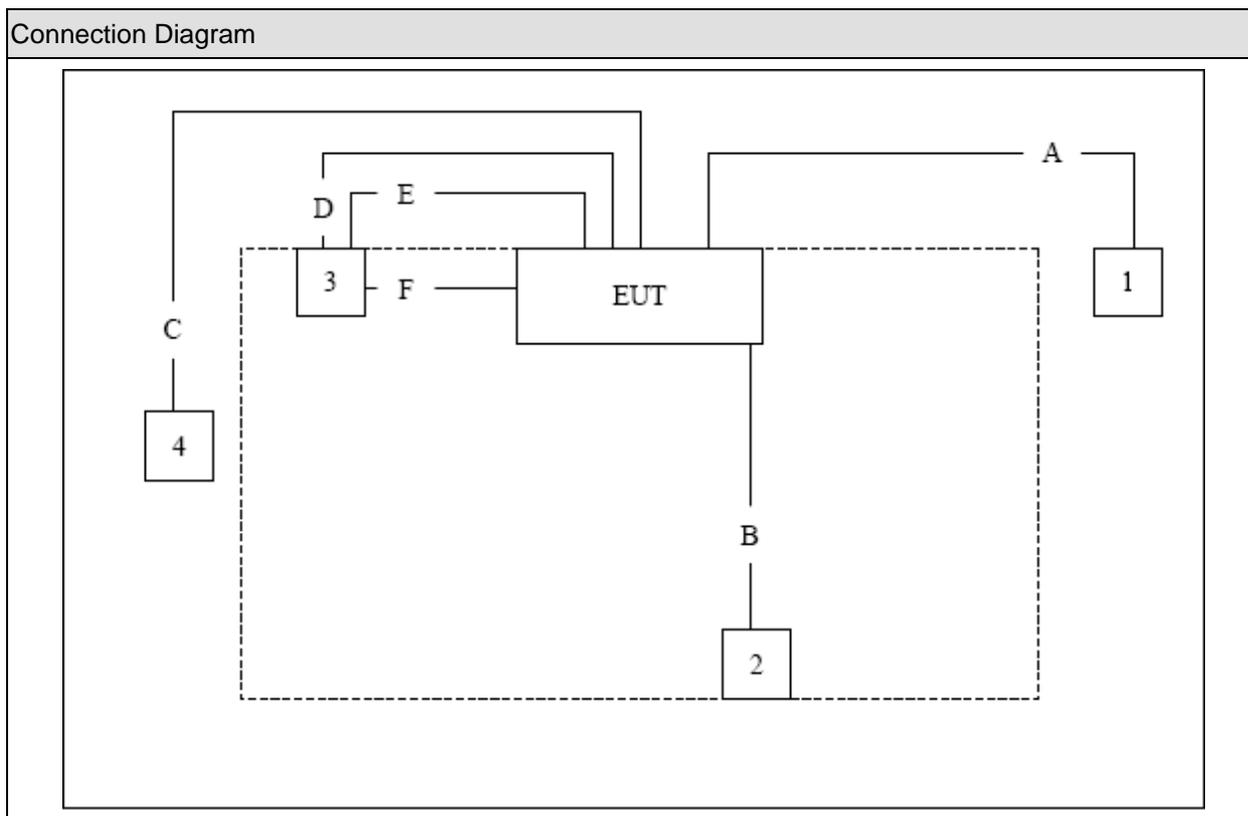
1. Regards to the frequency band operation: the lowest, middle and highest frequency of channel were selected to perform the test, then shown on this report.
2. This device is a composite device in accordance with Part 15 Subpart B regulations. The function for the receiver was measured and made a test report that the report number is 098S044-IT-US-P01V02.

1.3. Tested System Details

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

| Product | | Manufacturer | Model No. | Serial No. | Power Cord |
|---------|------------|--------------|-------------|---------------|--------------------|
| 1 | Notebook | DELL | PP19L | JH097 A01 | Power by adapter |
| 2 | iPod | Apple | A1199 | 6U715YSVVQ5 | Power by PC |
| 3 | Hub | D-Link | DIR-623 | F33M383000011 | Non-Shielded, 1.8m |
| 4 | IP Express | ZyXEL | IES-1248-71 | S523825530 | Non-Shielded, 1.8m |

1.4. Configuration of Tested System



| Signal Cable Type | | Signal cable Description |
|-------------------|---------------|--------------------------|
| A | LAN Cable | Non-Shielded, >10m |
| B | USB Cable | Shielded, 1.0m |
| C | Telecom Cable | Non-Shielded, >10m |
| D | LAN Cable | Non-Shielded, 1.8m |
| E | LAN Cable | Non-Shielded, 1.8m |
| F | LAN Cable | Non-Shielded, 1.8m |

1.5. EUT Exercise Software

| | |
|---|--|
| 1 | Setup the EUT and simulators as shown on above. |
| 2 | Turn on the power of equipment. |
| 3 | Input some command under Terminal in the notebook, make the EUT transmit or receive, start test. |

2. Technical Test

2.1. Summary of Test Result

- No deviations from the test standards
 Deviations from the test standards as below description:

| Performed Test Item | Normative References | Test Performed | Deviation |
|--|--|----------------|-----------|
| Conducted Emission | FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.207 | Yes | No |
| Radiated Emission | FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.209 | Yes | No |
| RF Antenna Conducted Spurious | FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(d) | Yes | No |
| Radiated Emission Band Edge | FCC CFR Title 47 Part 15 Subpart C: 2008 15.247(d) | Yes | No |
| Operation Frequency Range of 20dB Bandwidth | FCC CFR Title 47 Part 15 Subpart C: 2008 15.215(c) | Yes | No |
| Occupied Bandwidth | FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(a)(2) | Yes | No |
| Power Output | FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(b)(3) | Yes | No |
| Power Spectral Density | FCC CFR Title 47 Part 15 Subpart C: 2008 Section 15.247(e) | Yes | No |

2.2. Test Environment

| Items | Required (IEC 68-1) | Actual |
|----------------------------|---------------------|----------|
| Temperature (°C) | 15-35 | 21 |
| Humidity (%RH) | 25-75 | 51 |
| Barometric pressure (mbar) | 860-1060 | 950-1000 |

3. Conducted Emission

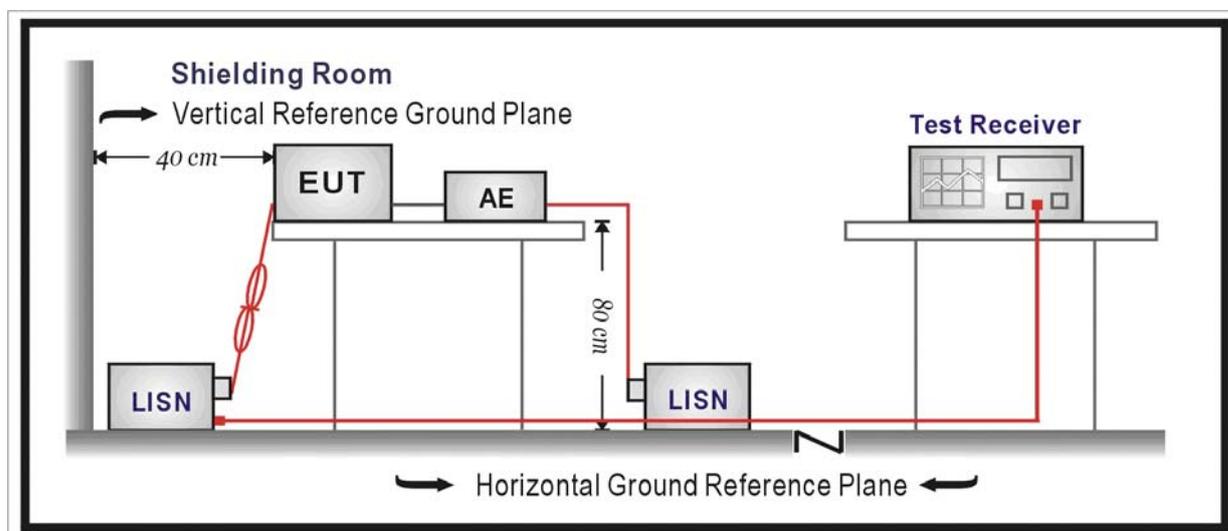
3.1. Test Equipment

Conducted Emission / SR-1

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|----------|------------|------------|
| EMI Test Receiver | R&S | ESCI | 100726 | 2009/04/23 |
| Two-Line V-Network | R&S | ENV216 | 100013 | 2009/06/11 |
| Two-Line V-Network | R&S | ENV216 | 100014 | 2009/04/23 |
| 50ohm Coaxial Switch | Anritsu | MP59B | 6200464462 | 2008/11/24 |
| 50ohm Termination | SHX | TF2 | 07081401 | 2008/09/28 |
| Coaxial Cable | Luthi | RG214 | 519358 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH004 | 2009/03/31 |

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

3.2. Test Setup



3.3. Limit

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

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

3.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)

Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.

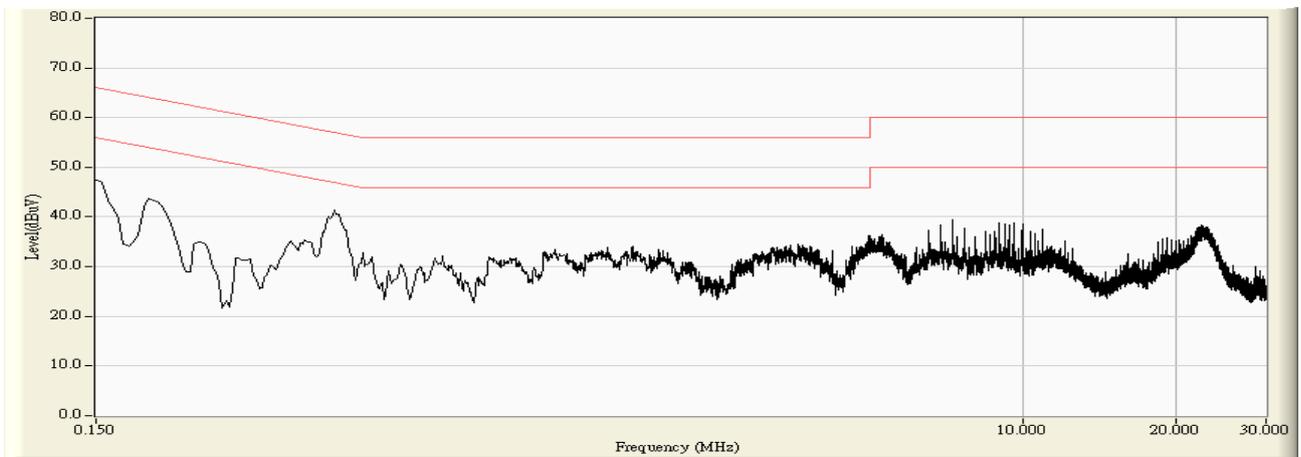
The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length. Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

3.5. Uncertainty

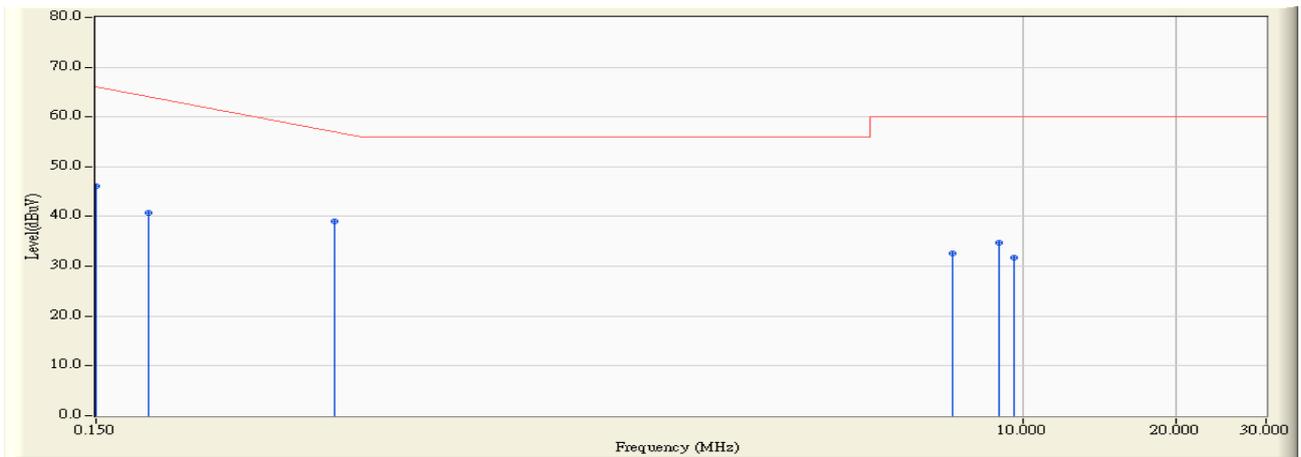
The measurement uncertainty is defined as ± 2.02 dB

3.6. Test Result

| | |
|--|----------------------------------|
| Engineer : Jame | |
| Site : SR-1 (Conducted Emission and Power Disturbance Test) | Time : 2009/08/13 - 21:45 |
| Limit : FCC_Part15.207_00M_QP | Margin : 10 |
| Probe : ENV216_100014(0.009-30MHz) - Line1 | Power : AC 230V/50Hz |
| EUT : Home Gateway | Note : Mode 1 |

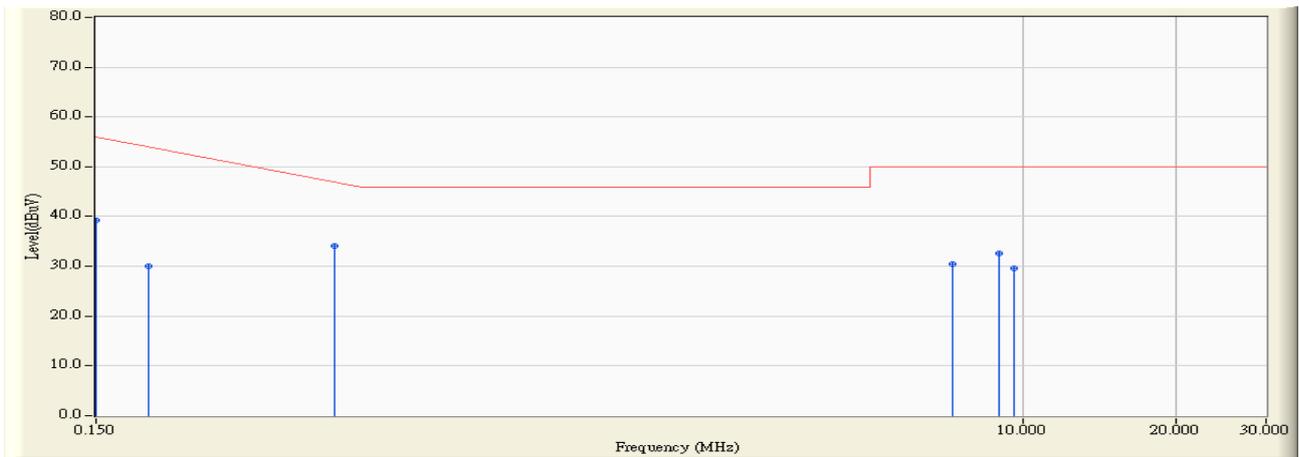


| | |
|---|---------------------------|
| Engineer : Jame | |
| Site : SR-1 (Conducted Emission and Power Disturbance Test) | Time : 2009/08/13 - 21:48 |
| Limit : FCC_Part15.207_00M_QP | Margin : 0 |
| Probe : ENV216_100014(0.009-30MHz) - Line1 | Power : AC 230V/50Hz |
| EUT : Home Gateway | Note : Mode 1 |



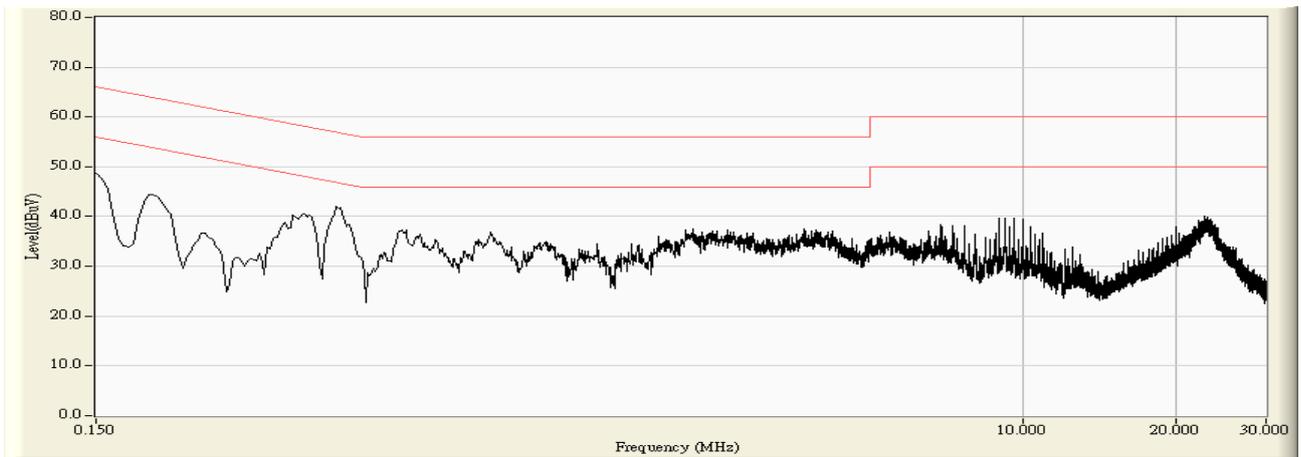
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|-----------------|---------------------|----------------------|----------------------|-------------|--------------|---------------|
| 1 | | 0.150 | 10.160 | 36.000 | 46.160 | -19.840 | 66.000 | QUASPEAK |
| 2 | | 0.190 | 9.633 | 31.100 | 40.733 | -23.304 | 64.037 | QUASPEAK |
| 3 | * | 0.442 | 9.589 | 29.500 | 39.089 | -17.935 | 57.024 | QUASPEAK |
| 4 | | 7.270 | 9.880 | 22.800 | 32.680 | -27.320 | 60.000 | QUASPEAK |
| 5 | | 8.974 | 9.880 | 24.800 | 34.680 | -25.320 | 60.000 | QUASPEAK |
| 6 | | 9.566 | 9.880 | 21.800 | 31.680 | -28.320 | 60.000 | QUASPEAK |

| | |
|--|----------------------------------|
| Engineer : Jame | |
| Site : SR-1 (Conducted Emission and Power Disturbance Test) | Time : 2009/08/13 - 21:48 |
| Limit : FCC_Part15.207_00M_AV | Margin : 0 |
| Probe : ENV216_100014(0.009-30MHz) - Line1 | Power : AC 230V/50Hz |
| EUT : Home Gateway | Note : Mode 1 |

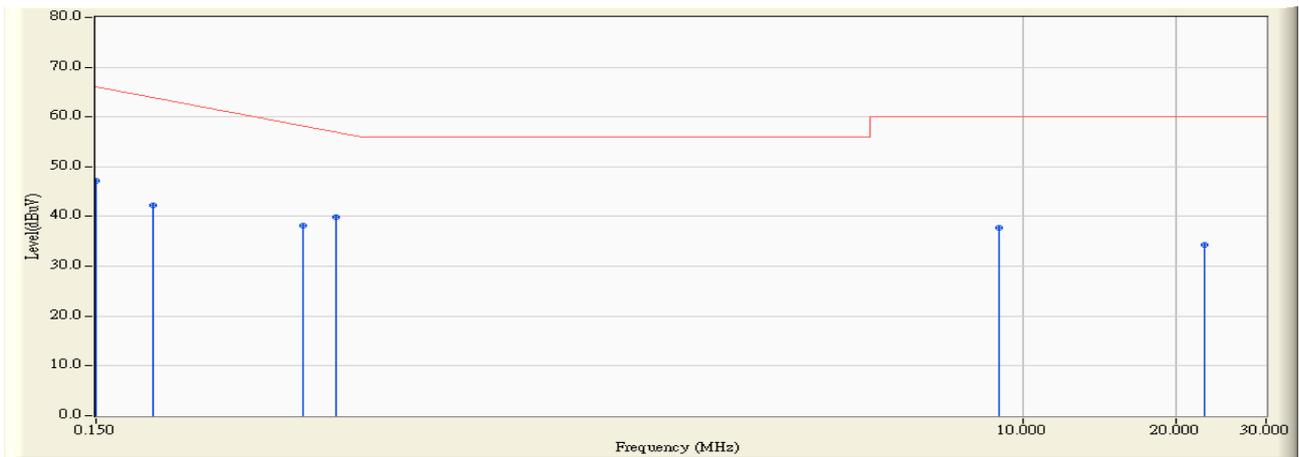


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|-----------------|---------------------|----------------------|----------------------|-------------|--------------|---------------|
| 1 | | 0.150 | 10.160 | 29.000 | 39.160 | -16.840 | 56.000 | AVERAGE |
| 2 | | 0.190 | 9.633 | 20.500 | 30.133 | -23.904 | 54.037 | AVERAGE |
| 3 | * | 0.442 | 9.589 | 24.500 | 34.089 | -12.935 | 47.024 | AVERAGE |
| 4 | | 7.270 | 9.880 | 20.600 | 30.480 | -19.520 | 50.000 | AVERAGE |
| 5 | | 8.974 | 9.880 | 22.800 | 32.680 | -17.320 | 50.000 | AVERAGE |
| 6 | | 9.566 | 9.880 | 19.800 | 29.680 | -20.320 | 50.000 | AVERAGE |

| | |
|--|----------------------------------|
| Engineer : Jame | |
| Site : SR-1 (Conducted Emission and Power Disturbance Test) | Time : 2009/08/13 - 21:51 |
| Limit : FCC_Part15.207_00M_QP | Margin : 10 |
| Probe : ENV216_100014(0.009-30MHz) - Line2 | Power : AC 230V/50Hz |
| EUT : Home Gateway | Note : Mode 1 |

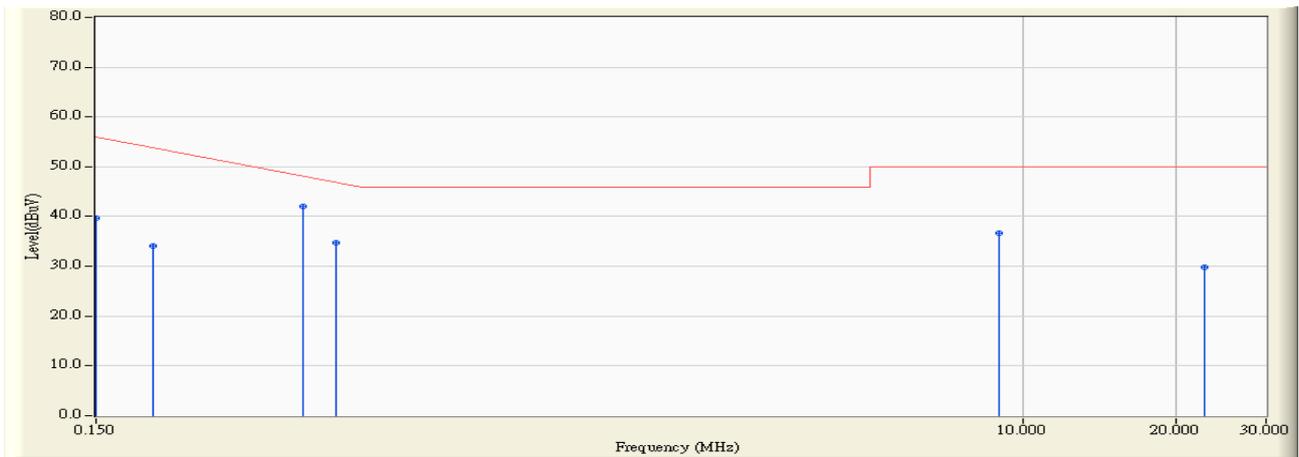


| | |
|--|----------------------------------|
| Engineer : Jame | |
| Site : SR-1 (Conducted Emission and Power Disturbance Test) | Time : 2009/08/13 - 21:54 |
| Limit : FCC_Part15.207_00M_QP | Margin : 0 |
| Probe : ENV216_100014(0.009-30MHz) - Line2 | Power : AC 230V/50Hz |
| EUT : Home Gateway | Note : Mode 1 |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|-----------------|---------------------|----------------------|----------------------|-------------|--------------|---------------|
| 1 | | 0.150 | 10.006 | 37.200 | 47.206 | -18.794 | 66.000 | QUASPEAK |
| 2 | | 0.194 | 9.680 | 32.500 | 42.180 | -21.684 | 63.864 | QUASPEAK |
| 3 | | 0.382 | 9.610 | 28.500 | 38.110 | -20.126 | 58.236 | QUASPEAK |
| 4 | * | 0.446 | 9.616 | 30.200 | 39.816 | -17.133 | 56.949 | QUASPEAK |
| 5 | | 8.978 | 9.860 | 27.900 | 37.760 | -22.240 | 60.000 | QUASPEAK |
| 6 | | 22.714 | 10.290 | 24.000 | 34.290 | -25.710 | 60.000 | QUASPEAK |

| | |
|--|----------------------------------|
| Engineer : Jame | |
| Site : SR-1 (Conducted Emission and Power Disturbance Test) | Time : 2009/08/13 - 21:54 |
| Limit : FCC_Part15.207_00M_AV | Margin : 0 |
| Probe : ENV216_100014(0.009-30MHz) - Line2 | Power : AC 230V/50Hz |
| EUT : Home Gateway | Note : Mode 1 |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|---|---|-----------------|---------------------|----------------------|----------------------|-------------|--------------|---------------|
| 1 | | 0.150 | 10.006 | 29.600 | 39.606 | -16.394 | 56.000 | AVERAGE |
| 2 | | 0.194 | 9.680 | 24.500 | 34.180 | -19.684 | 53.864 | AVERAGE |
| 3 | * | 0.382 | 9.610 | 32.500 | 42.110 | -6.126 | 48.236 | AVERAGE |
| 4 | | 0.446 | 9.616 | 25.200 | 34.816 | -12.133 | 46.949 | AVERAGE |
| 5 | | 8.978 | 9.860 | 26.800 | 36.660 | -13.340 | 50.000 | AVERAGE |
| 6 | | 22.714 | 10.290 | 19.500 | 29.790 | -20.210 | 50.000 | AVERAGE |

4. Radiated Emission

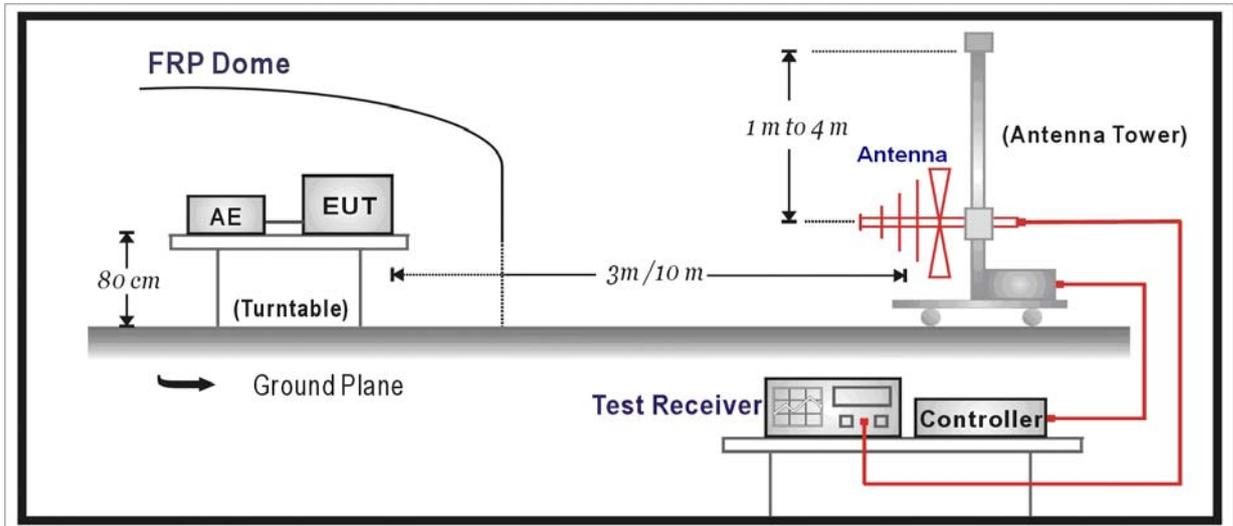
4.1. Test Equipment

Radiated Emission / AC-2

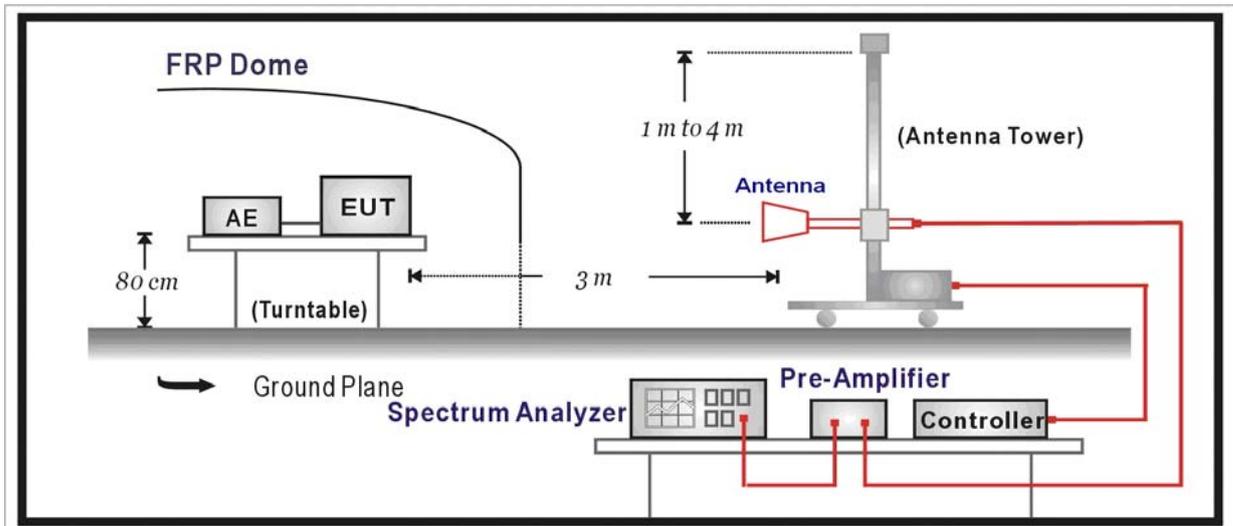
| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|-------------------------------------|-------------|------------|
| Spectrum Analyzer | Agilent | E4408B | MY45102679 | 2008/11/12 |
| EMI Test Receiver | R&S | ESCI | 100573 | 2009/04/23 |
| Preamplifier | Quietek | AP-025C | QT-AP003 | 2008/11/24 |
| Preamplifier | Quietek | AP-180C | CHM-0602012 | 2008/11/24 |
| Bilog Type Antenna | Schaffner | CBL6112B | 2932 | 2009/02/25 |
| Broad-Band Horn Antenna | Schwarzbeck | BBHA9120D | 496 | 2009/06/11 |
| High-Pass Filter | Wainwright | WHKX2.8/18G-12SS | SN1 | 2009/03/03 |
| Band Reject Filter | Wainwright | WRCG2400/2485-2375 /2510-60/11SS | SN9 | 2009/03/03 |
| High-Pass Filter | Wainwright | WHKX7.0/18G-8SS | SN16 | 2009/03/03 |
| Low-Pass Filter | Wainwright | WLKS4500-9SS | SN2 | 2009/03/03 |
| 50ohm Coaxial Switch | Anritsu | MP59B | 6200447304 | 2008/11/24 |
| Coaxial Cable | Huber+Suhner | AC2-C | 04 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH002 | 2009/03/31 |

4.2. Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limit

| FCC Part 15 Subpart C Paragraph 15.209 | | |
|--|--------------|----------------|
| Frequency (MHz) | Distance (m) | Level (dBuV/m) |
| 30 - 88 | 3 | 40 |
| 88 - 216 | 3 | 43.5 |
| 216 - 960 | 3 | 46 |
| Above 960 | 3 | 54 |

Note 1: The lower limit shall apply at the transition frequency.

Note 2: Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

Note 3: E field strength (dBuV/m) = 20 log E field strength (uV/m)

4.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 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 is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

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

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

Note: When measurement above 1GHz, the horn antenna will bend down a little (as horn antenna have the narrow beamwidth) in order to find the maximum emission of EUT.

4.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

below 1G is defined as ± 3.8 dB

4.6. Test Result

802.11b (Chain 0)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤66 @4.8G | PK | 74 |
| | 1000~25000 | ≤52 @4.8G | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤63 | PK | 74 |
| | 1000~25000 | ≤49 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤63 | PK | 74 |
| | 1000~25000 | ≤49 | AV | 54 |

802.11b (Chain 1)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤59 | PK | 74 |
| | 1000~25000 | ≤45 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤61 | PK | 74 |
| | 1000~25000 | ≤47 | AV | 54 |

802.11g (Chain 0)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤63 | PK | 74 |
| | 1000~25000 | ≤49 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤59 | PK | 74 |
| | 1000~25000 | ≤45 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤58 | PK | 74 |
| | 1000~25000 | ≤44 | AV | 54 |

802.11g (Chain 1)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤58 | PK | 74 |
| | 1000~25000 | ≤44 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤52 | PK | 74 |
| | 1000~25000 | ≤38 | AV | 54 |

802.11n (20MHz) (Chain 0)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤63 | PK | 74 |
| | 1000~25000 | ≤49 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤59 | PK | 74 |
| | 1000~25000 | ≤45 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤59 | PK | 74 |
| | 1000~25000 | ≤45 | AV | 54 |

802.11n (20MHz) (Chain 1)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |

802.11n (20MHz) (Chain 0+1)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 1 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤59 | PK | 74 |
| | 1000~25000 | ≤44 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |
| 11 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤60 | PK | 74 |
| | 1000~25000 | ≤46 | AV | 54 |

802.11n (40MHz) (Chain 0)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 3 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤51 | PK | 74 |
| | 1000~25000 | ≤37 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤52 | PK | 74 |
| | 1000~25000 | ≤38 | AV | 54 |
| 9 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤50 | PK | 74 |
| | 1000~25000 | ≤36 | AV | 54 |

802.11n (40MHz) (Chain 1)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 3 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤50 | PK | 74 |
| | 1000~25000 | ≤36 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤50 | PK | 74 |
| | 1000~25000 | ≤36 | AV | 54 |
| 9 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤52 | PK | 74 |
| | 1000~25000 | ≤38 | AV | 54 |

802.11n (40MHz) (Chain 0+1)

| Channel | Frequency Range (MHz) | Measure Level (dBuV/m) | Detector Type | Limit (dBuV/m) |
|---------|-----------------------|------------------------|---------------|----------------|
| 3 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤52 | PK | 74 |
| | 1000~25000 | ≤38 | AV | 54 |
| 6 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤54 | PK | 74 |
| | 1000~25000 | ≤40 | AV | 54 |
| 9 | 30~88 | ≤31 | QP | 40 |
| | 88~216 | ≤34 | QP | 43.5 |
| | 216~960 | ≤35 | QP | 46 |
| | 960~1000 | ≤38 | QP | 54 |
| | 1000~25000 | ≤53 | PK | 74 |
| | 1000~25000 | ≤39 | AV | 54 |

5. RF Antenna Conducted Spurious

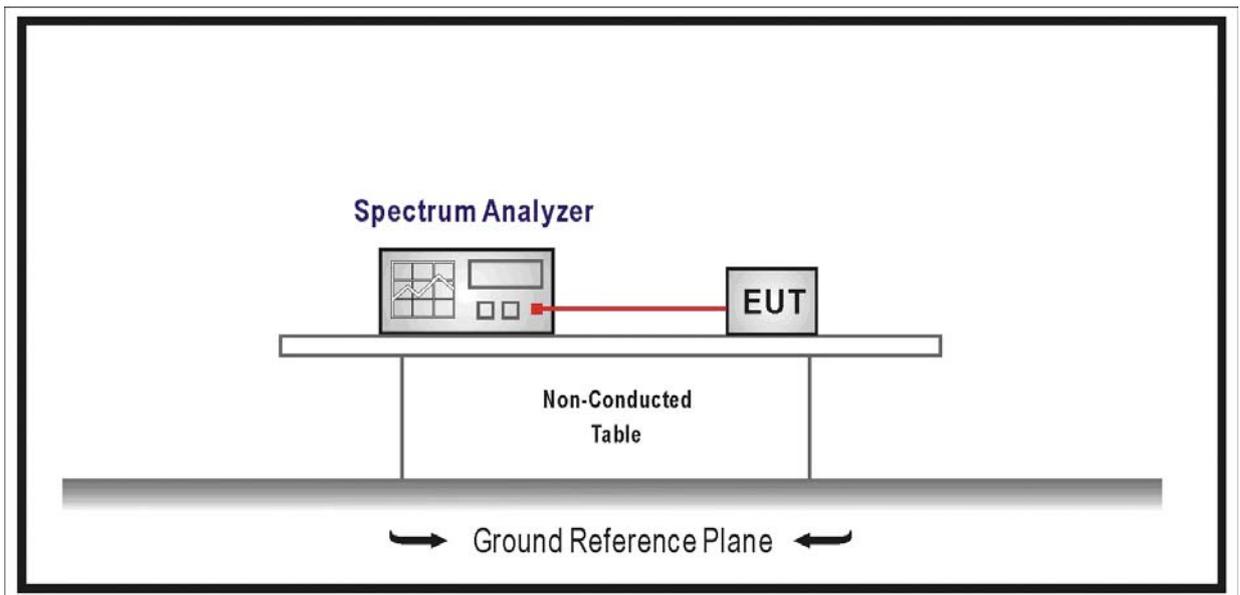
5.1. Test Equipment

RF Antenna Conducted Spurious / AC-6

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|----------|------------|------------|
| Spectrum Analyzer | Agilent | E4446A | MY45300103 | 2009/06/11 |
| Coaxial Cable | Huber+Suhner | AC4-RF | 09 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH007 | 2009/03/31 |

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

5.2. Test Setup



5.3. Limit

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.

5.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Set VBW > RBW, scan up through 10th harmonic.

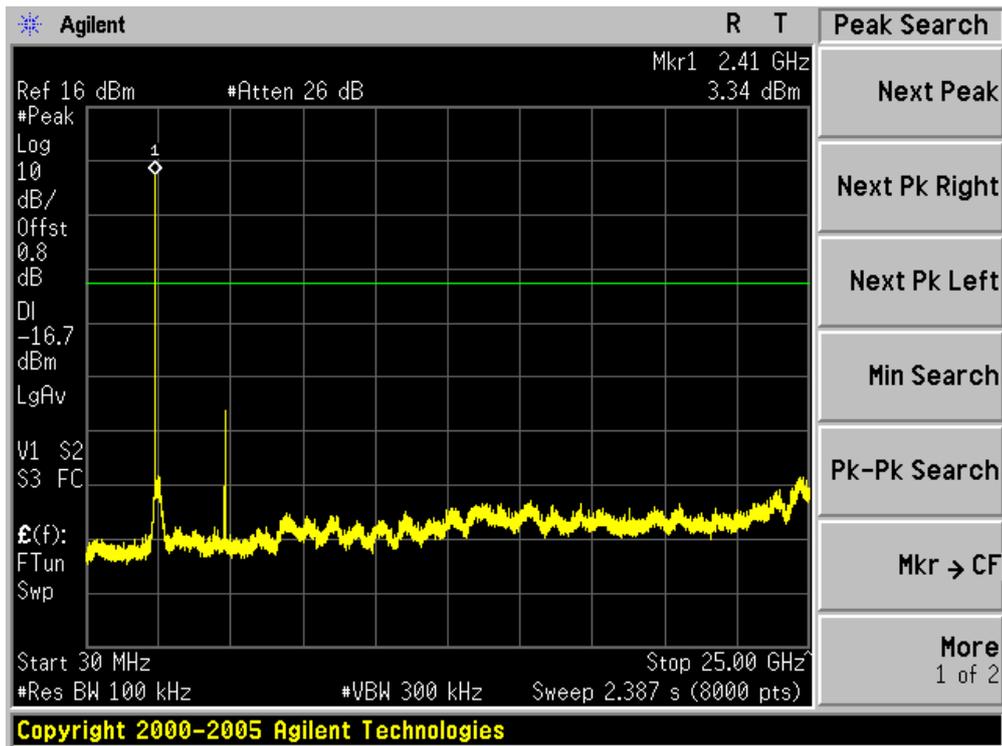
5.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

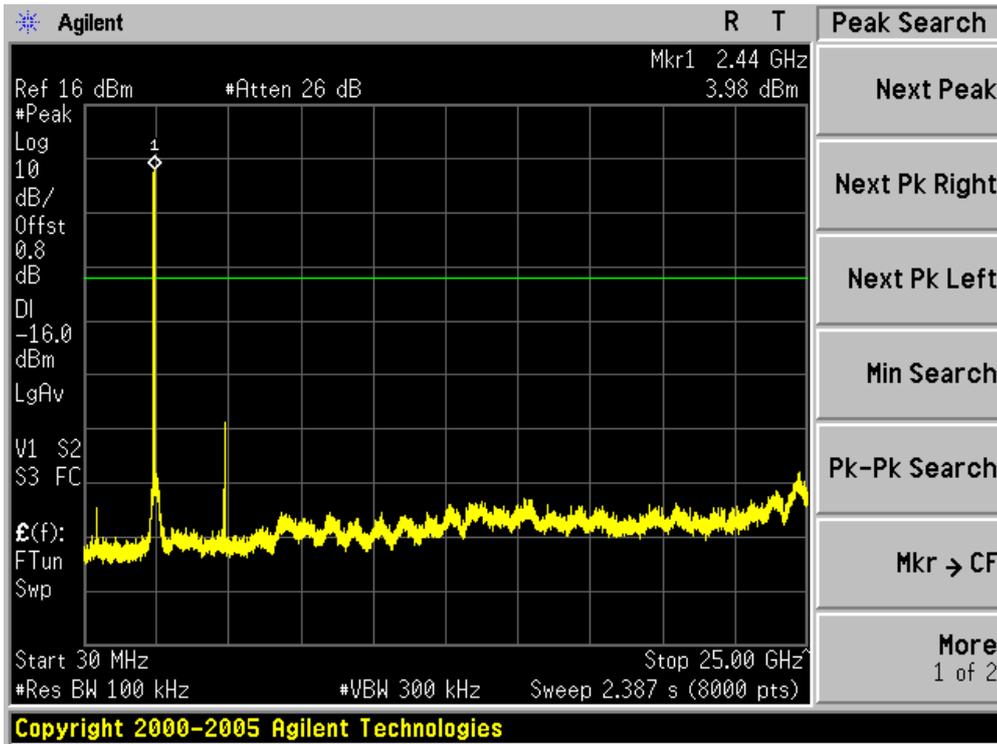
5.6. Test Result

| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit by 802.11b (Chain 0) |

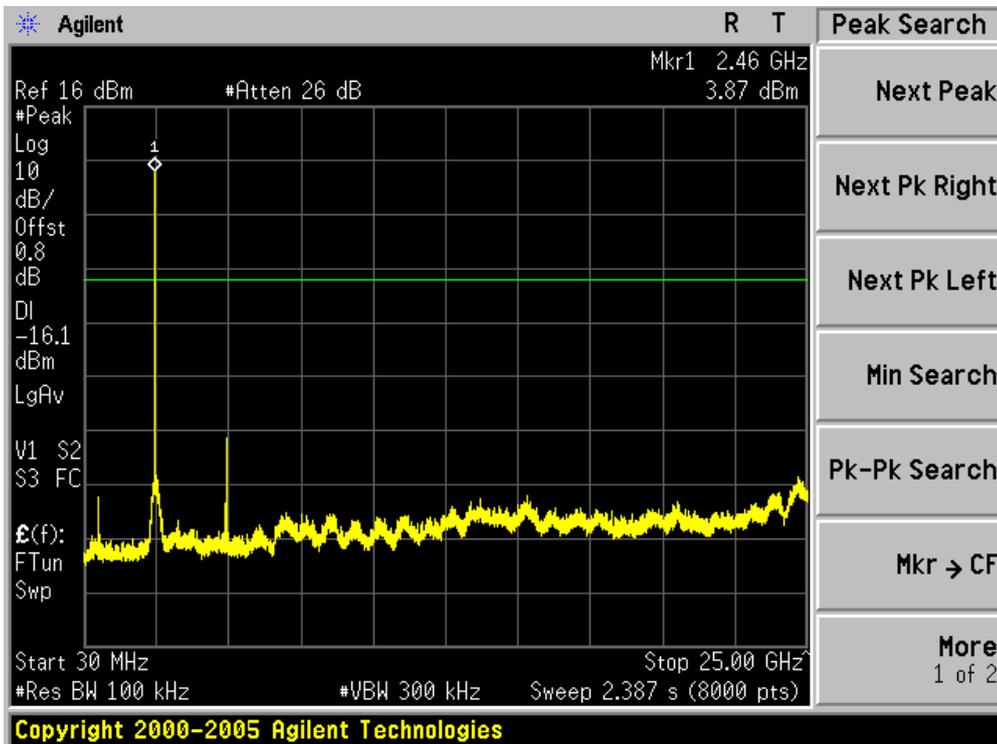
Channel 01 (2412MHz)



Channel 06 (2437MHz)

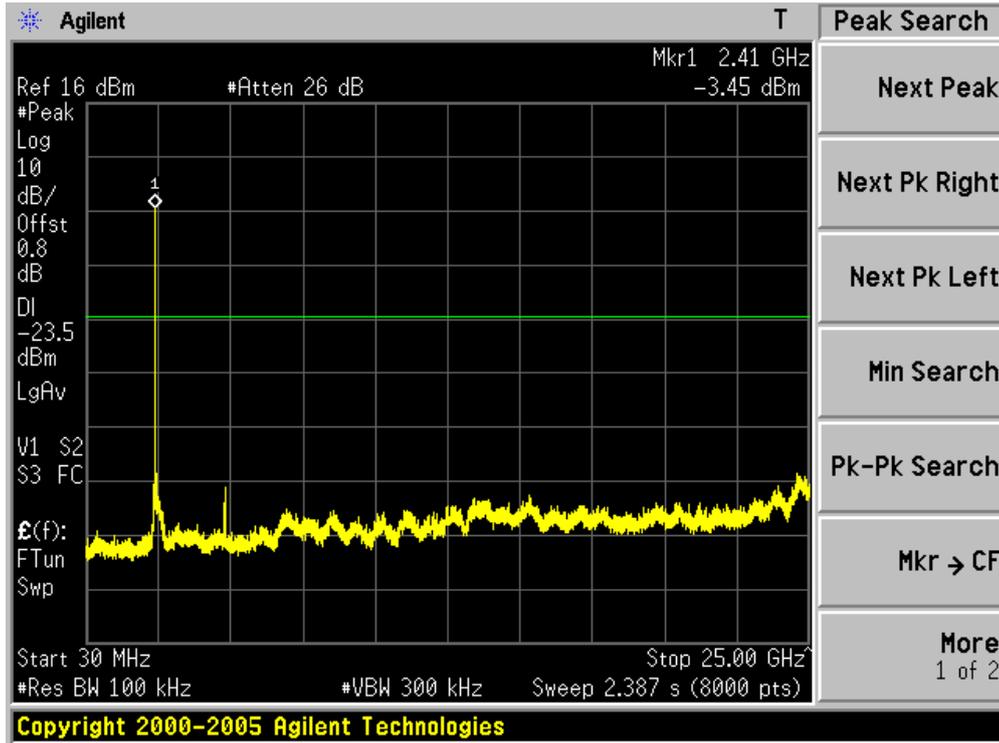


Channel 11 (2462MHz)

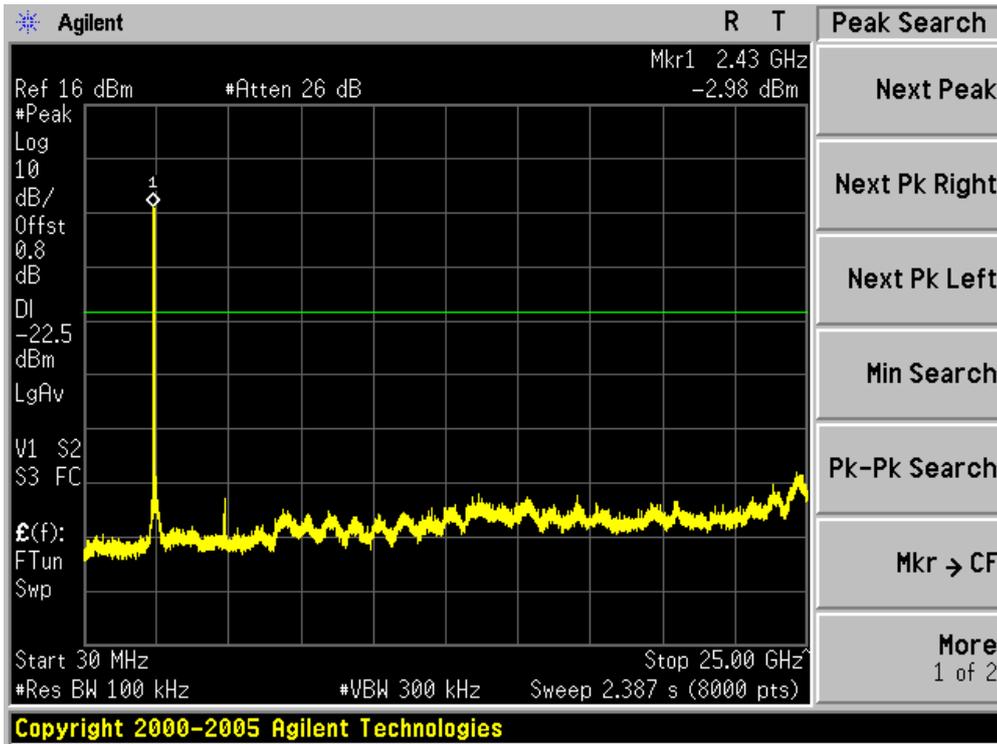


| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit by 802.11g (Chain 0) |

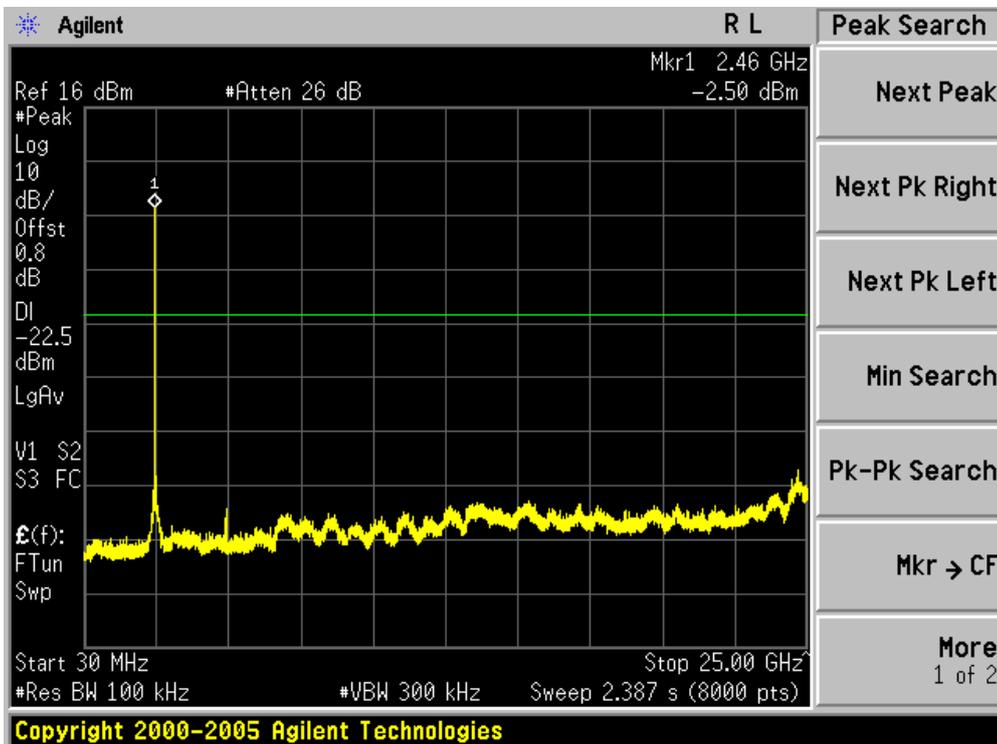
Channel 01 (2412MHz)



Channel 06 (2437MHz)

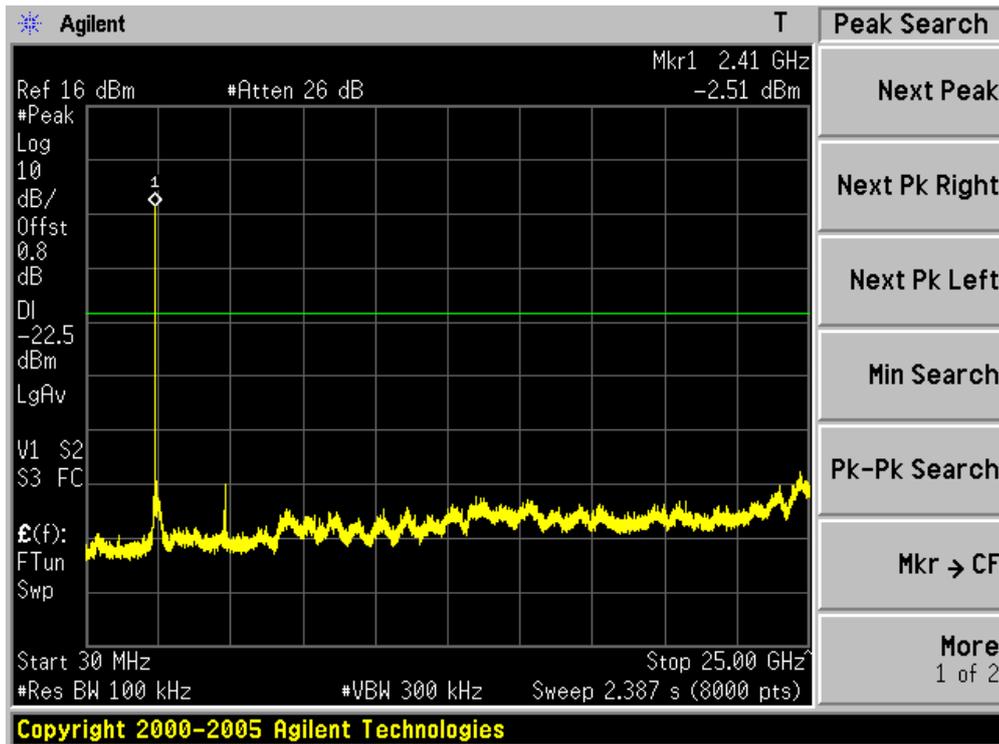


Channel 11 (2462MHz)

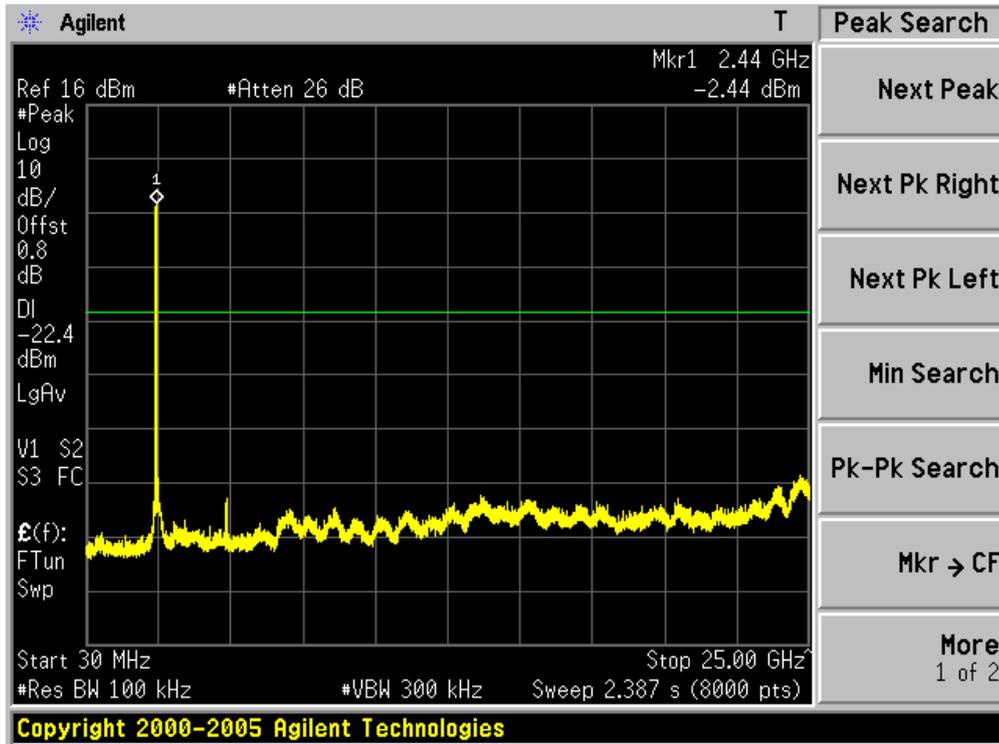


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 0) |

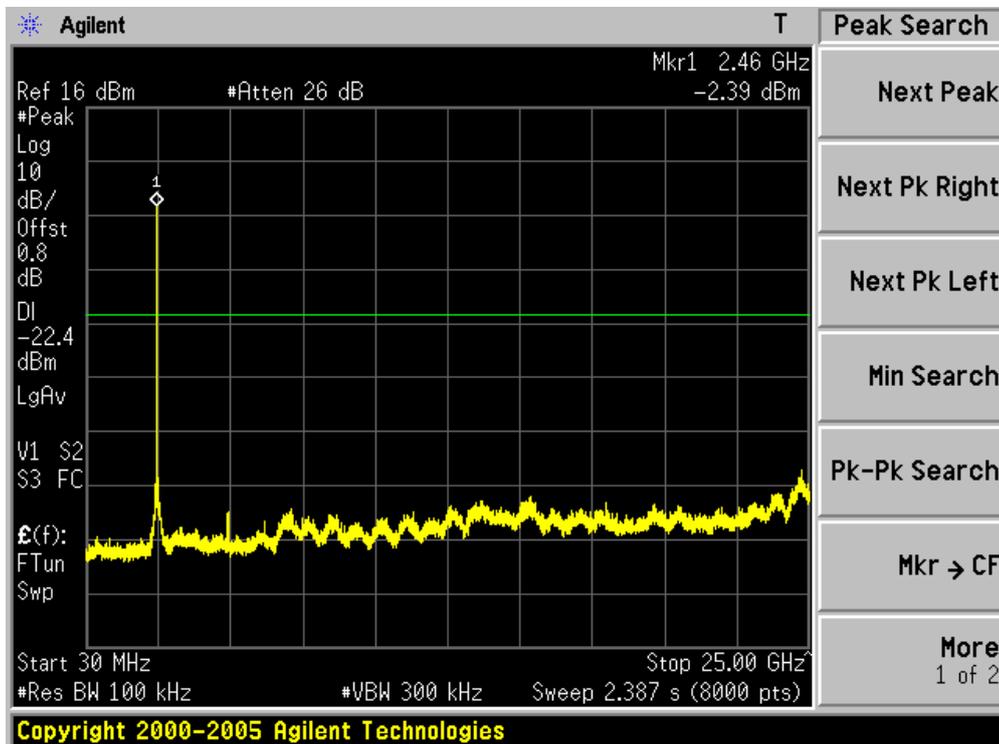
Channel 01 (2412MHz)



Channel 06 (2437MHz)

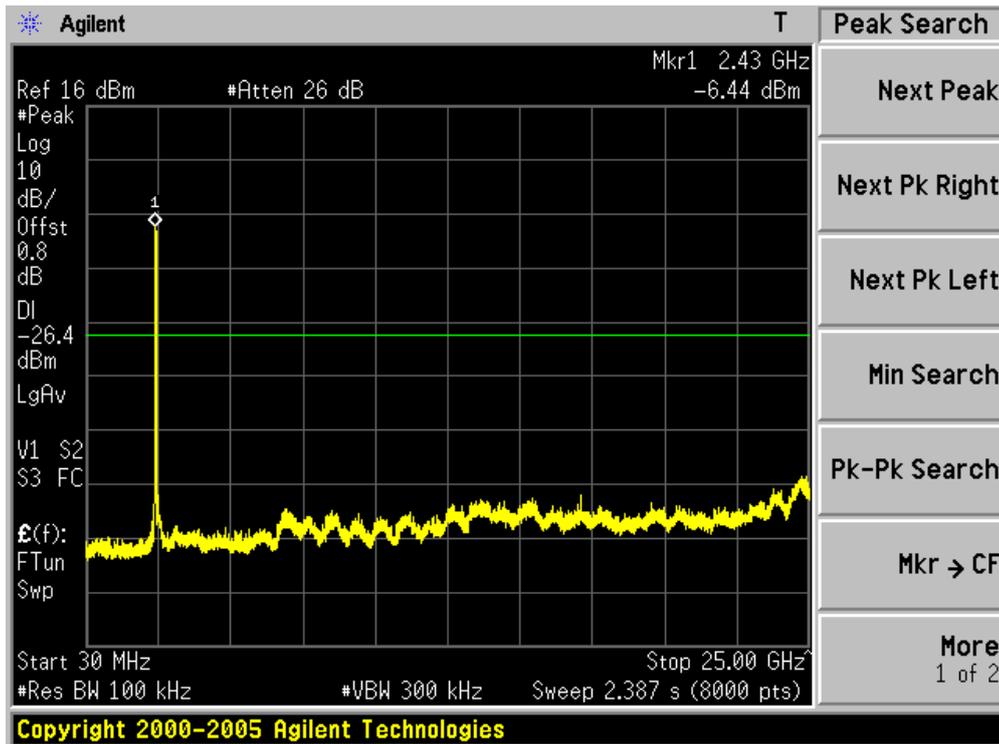


Channel 11 (2462MHz)

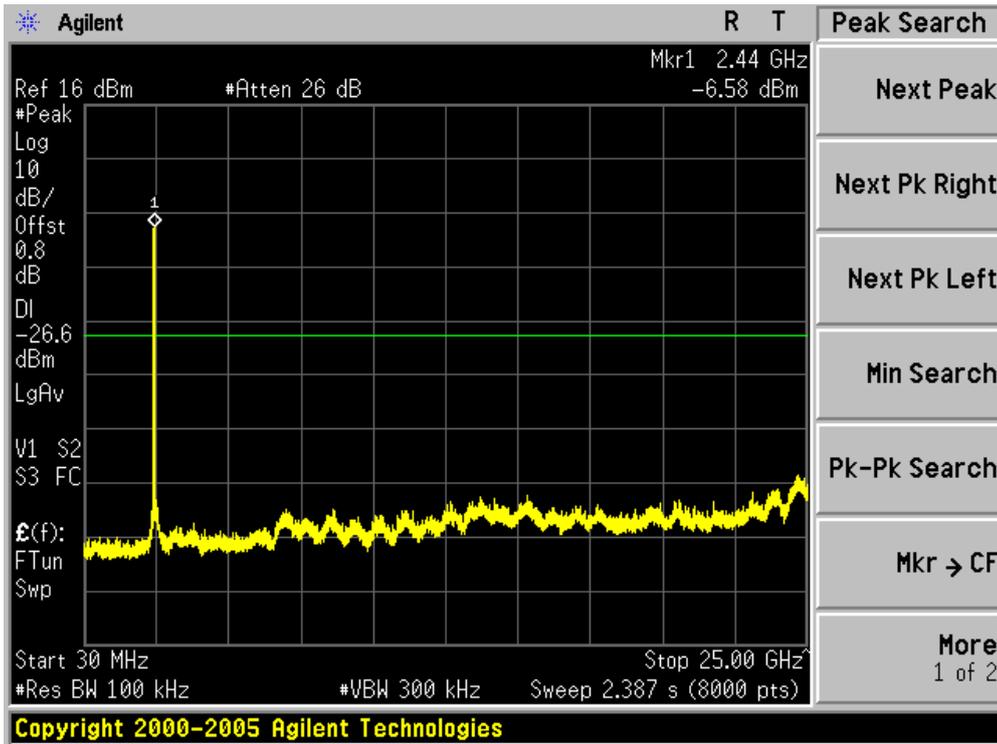


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 0) |

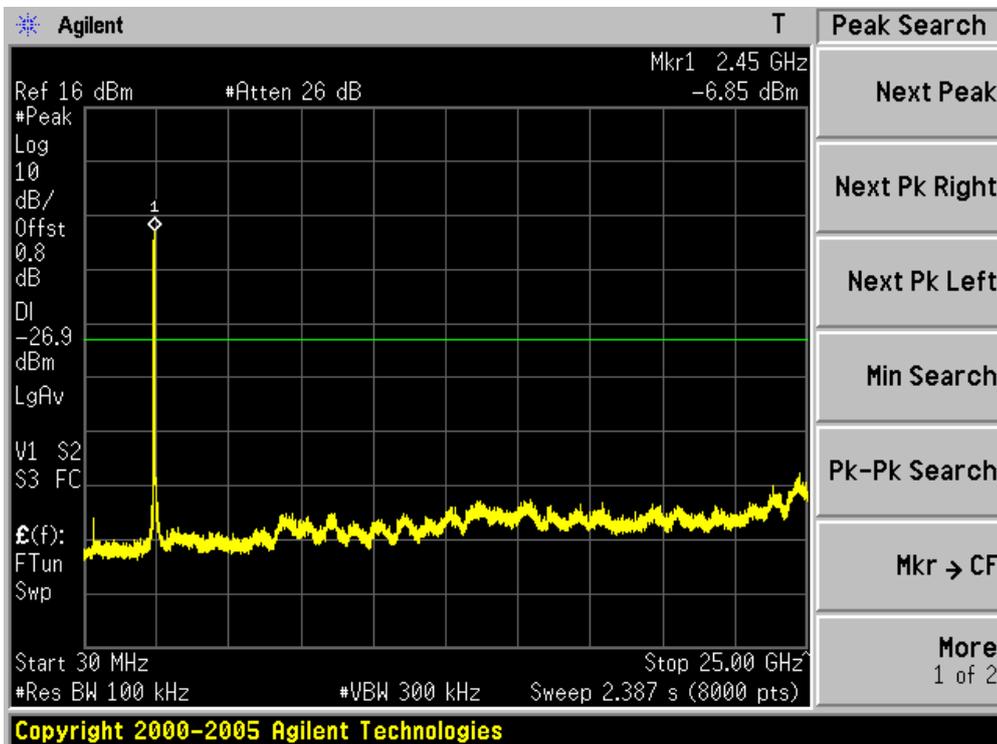
Channel 03 (2422MHz)



Channel 06 (2437MHz)

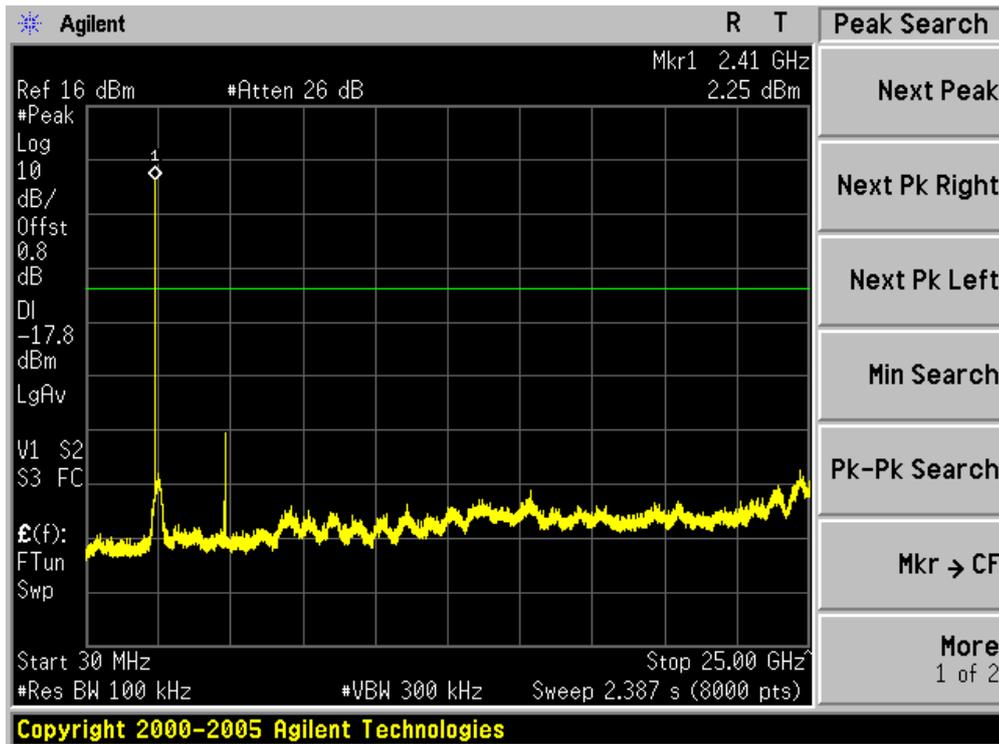


Channel 09 (2452MHz)

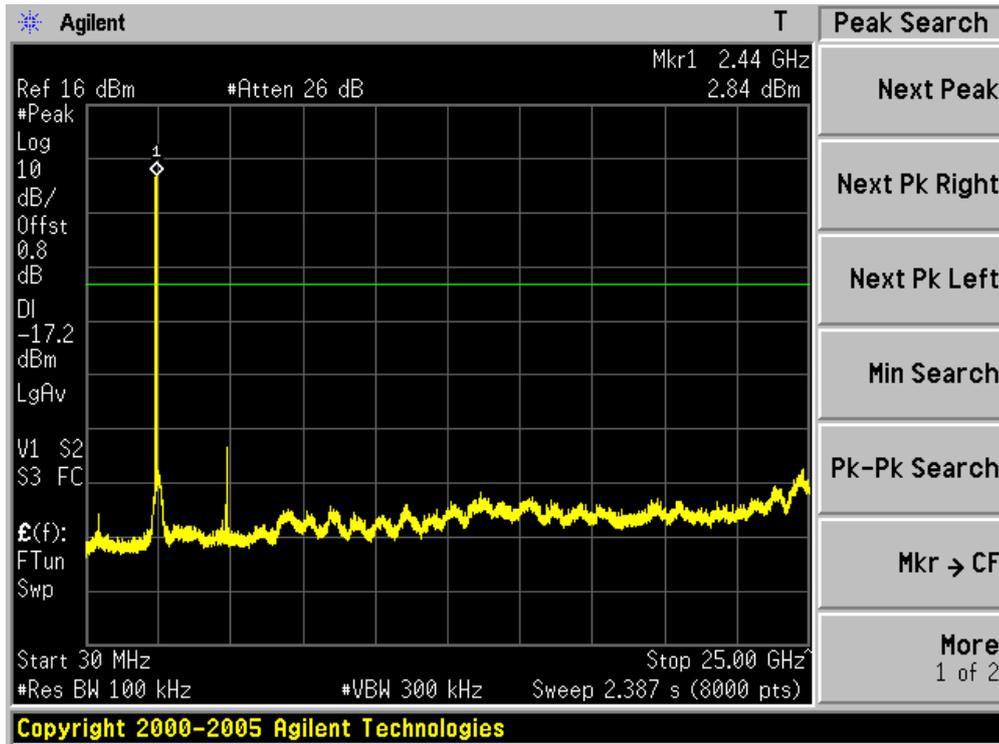


| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit at 802.11b (Chain 1) |

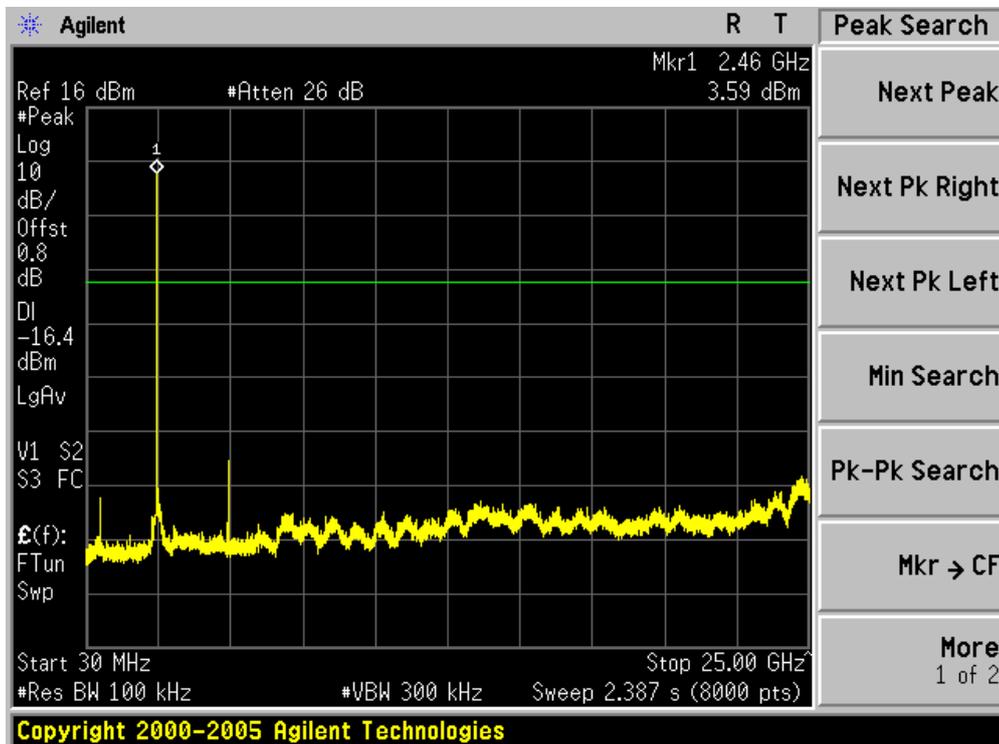
Channel 01 (2412MHz)



Channel 06 (2437MHz)

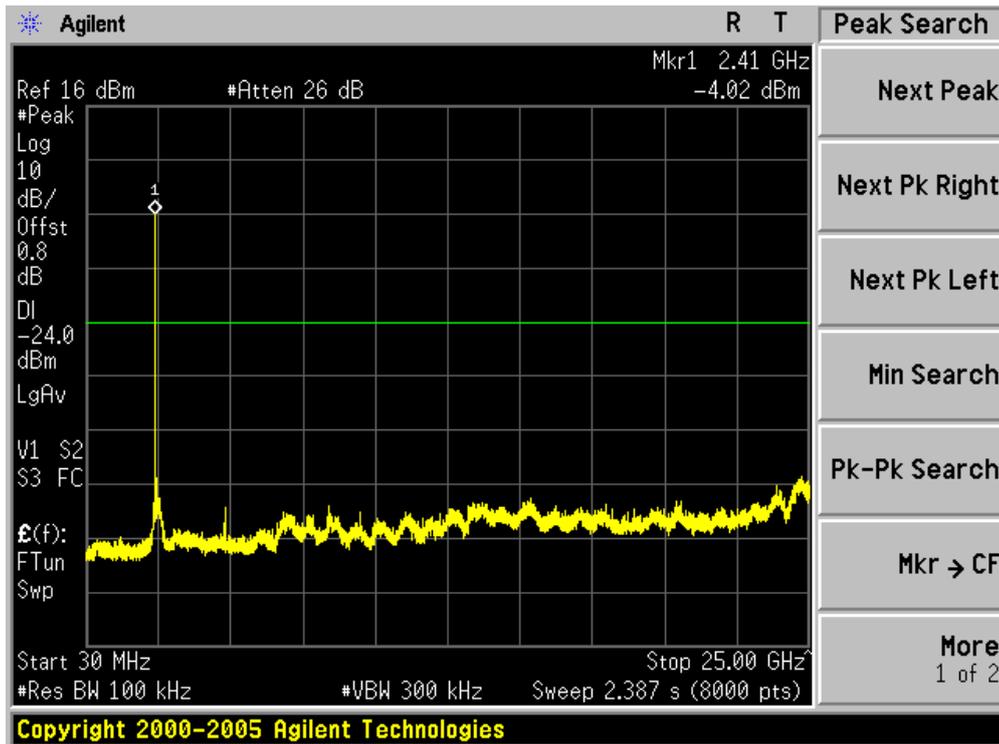


Channel 11 (2462MHz)

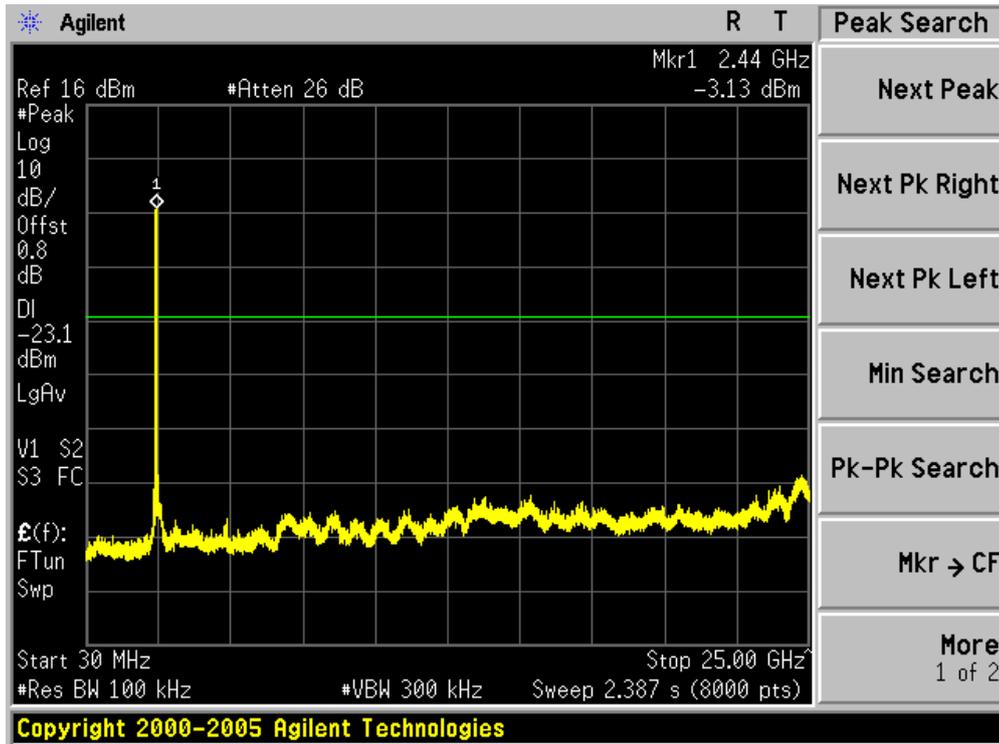


| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit at 802.11g (Chain 1) |

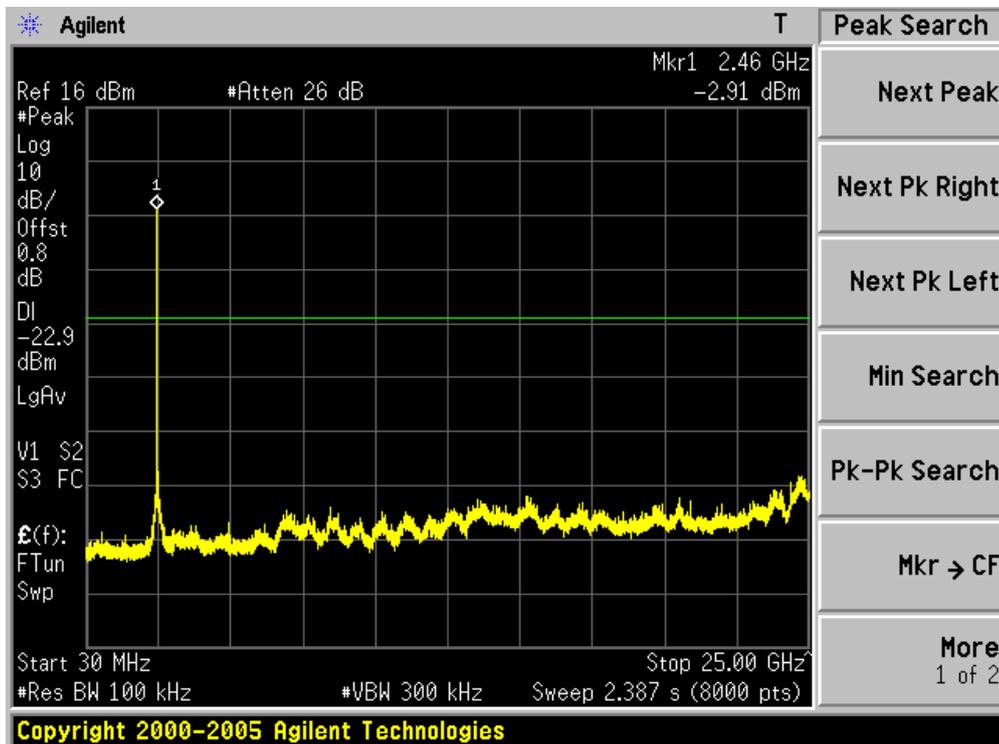
Channel 01 (2412MHz)



Channel 06 (2437MHz)

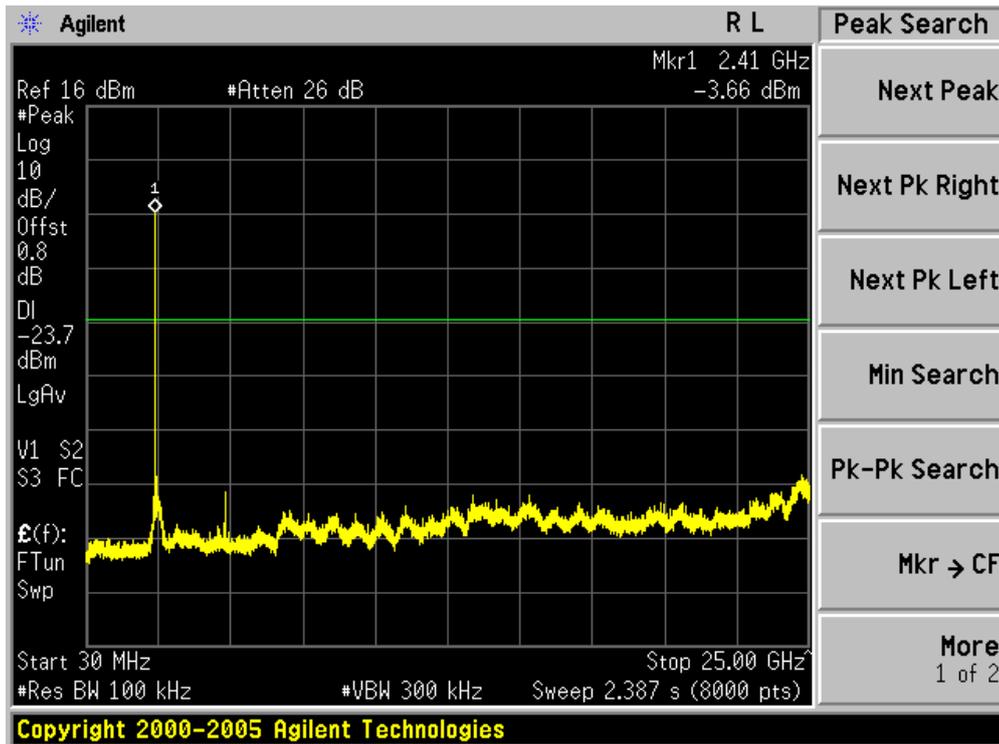


Channel 11 (2462MHz)

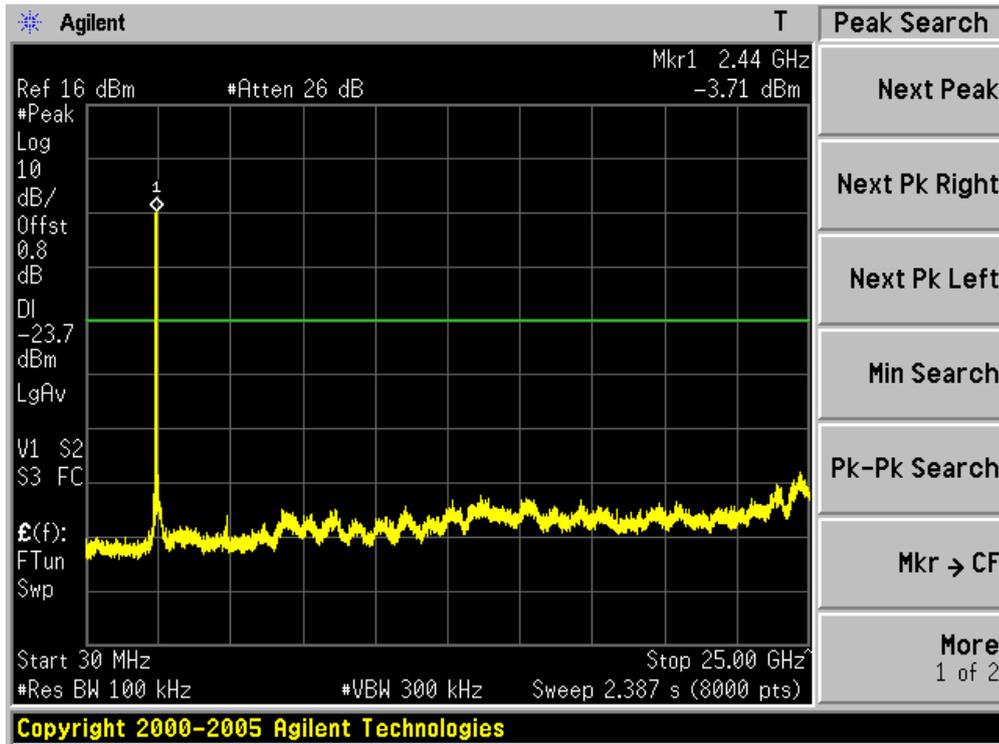


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 1) |

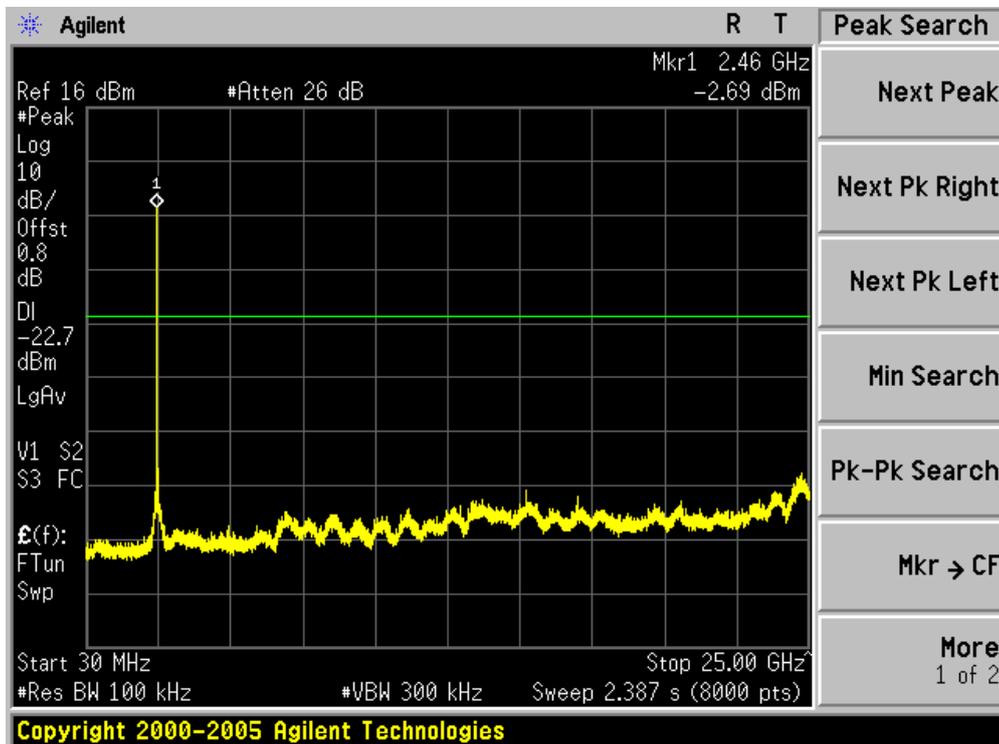
Channel 01 (2412MHz)



Channel 06 (2437MHz)

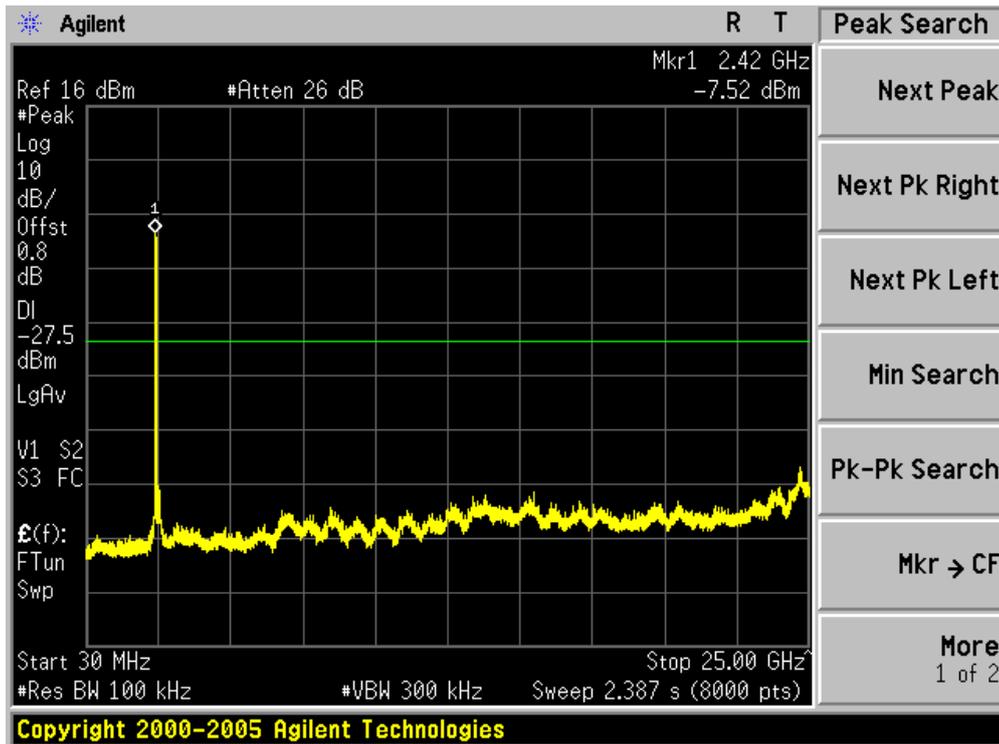


Channel 11 (2462MHz)

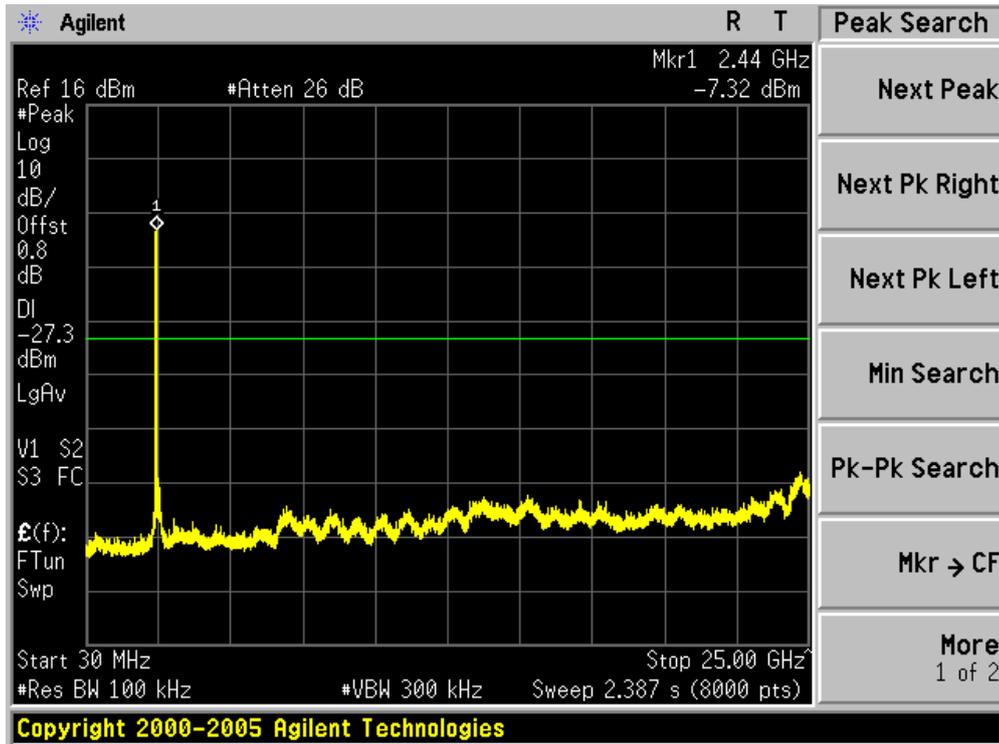


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | RF Antenna Conducted Spurious |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 1) |

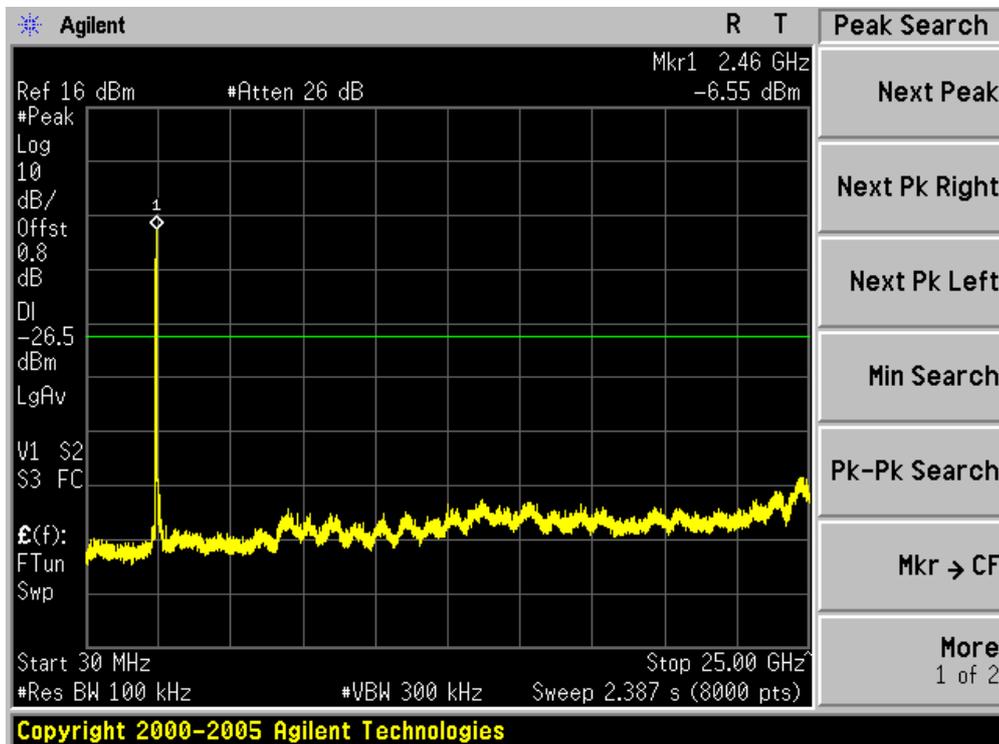
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



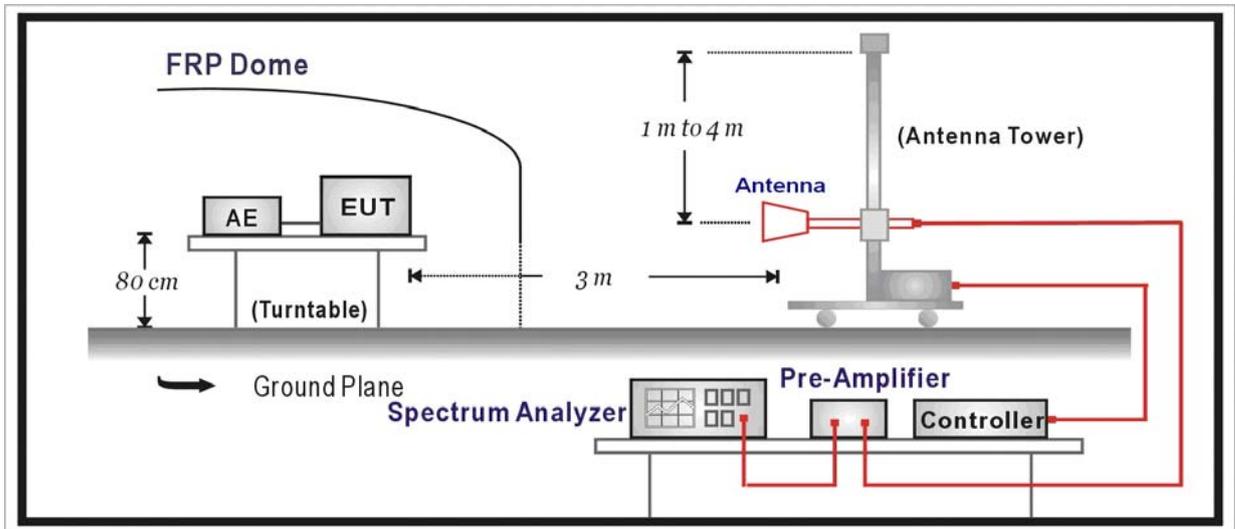
6. Radiated Emission Band Edge

6.1. Test Equipment

Radiated Emission / AC-2

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|-----------|-------------|------------|
| Spectrum Analyzer | Agilent | E4408B | MY45102679 | 2009/04/23 |
| EMI Test Receiver | R&S | ESCI | 100573 | 2009/04/23 |
| Preamplifier | Quietek | AP-025C | QT-AP003 | 2008/11/24 |
| Preamplifier | Quietek | AP-180C | CHM-0602012 | 2009/05/05 |
| Bilog Type Antenna | Schaffner | CBL6112B | 2932 | 2009/02/25 |
| Broad-Band Horn Antenna | Schwarzbeck | BBHA9120D | 496 | 2009/06/11 |
| 50ohm Coaxial Switch | Anritsu | MP59B | 6200447304 | 2008/11/24 |
| Coaxial Cable | Huber+Suhner | AC2-C | 04 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH002 | 2009/03/31 |

6.2. Test Setup



6.3. Limit

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

6.4. Test Procedure

The EUT was setup according to ANSI C63.4, 2003 and tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements. The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 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 is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.4:2003 on radiated measurement.

Note:

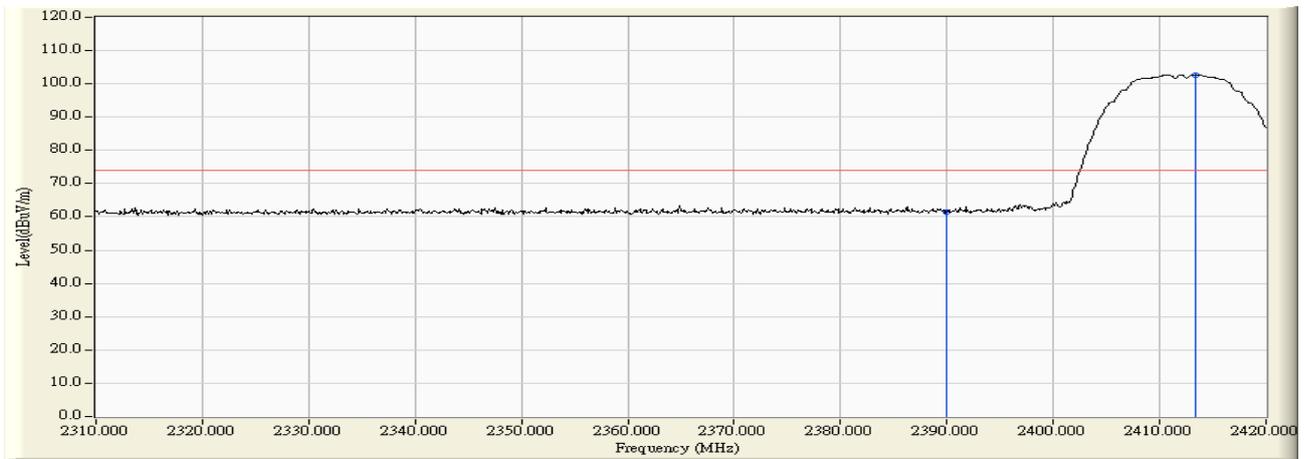
Peak detector set as follows, RBW = 1MHz, VBW = 3MHz, sweep time = 500ms;
 Average detector set as follows, RBW = 1MHz, VBW = 10Hz, sweep time = auto.

6.5. Uncertainty

The measurement uncertainty above 1G is defined as ± 3.9 dB

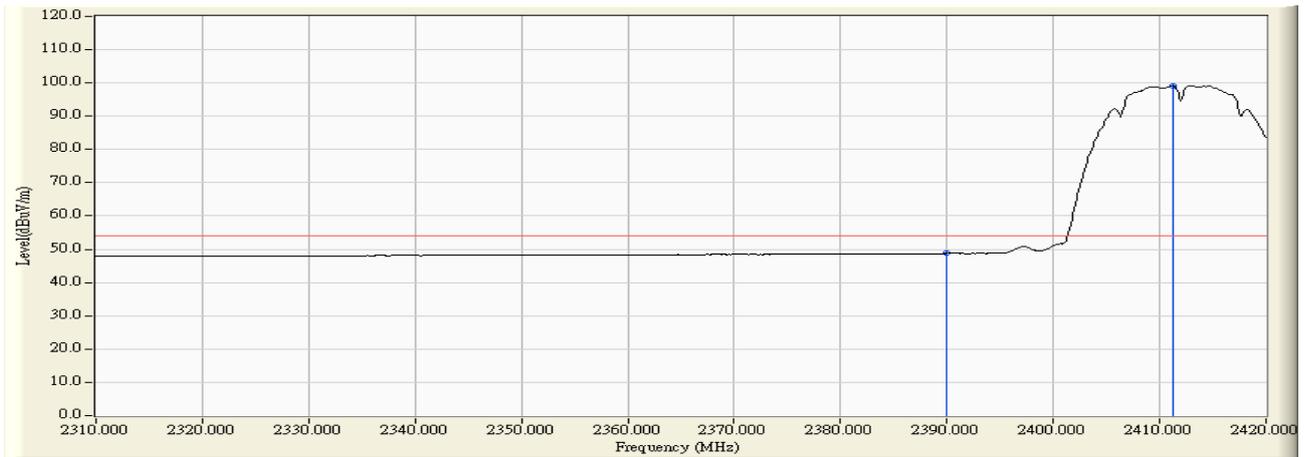
6.6. Test Result

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 16:39 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 0) |



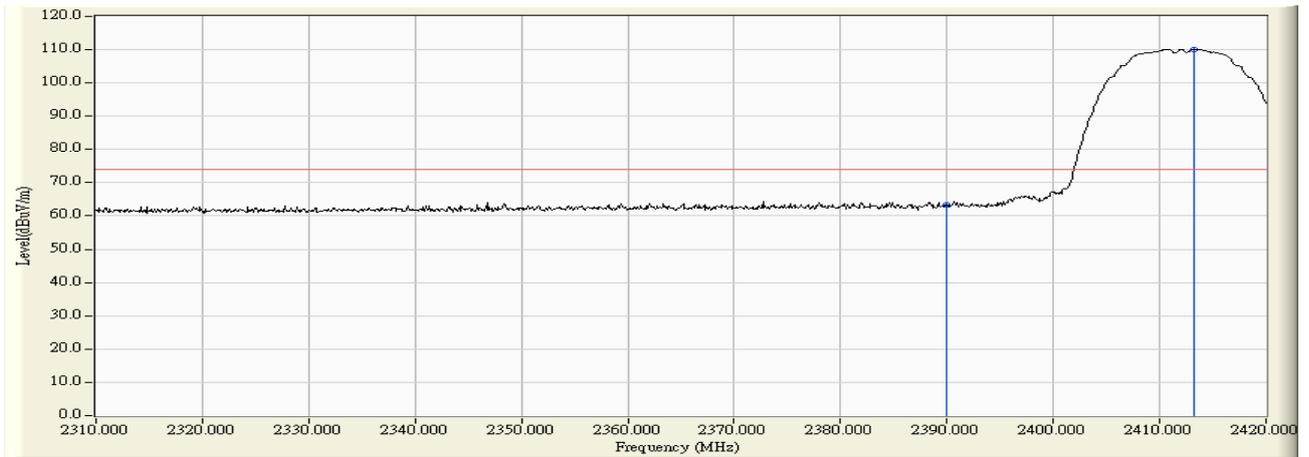
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.398 | 61.582 | -12.388 | 73.970 | PEAK |
| 2 | * | 2413.400 | 31.192 | 71.569 | 102.761 | N/A | N/A | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 16:39 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 0) |



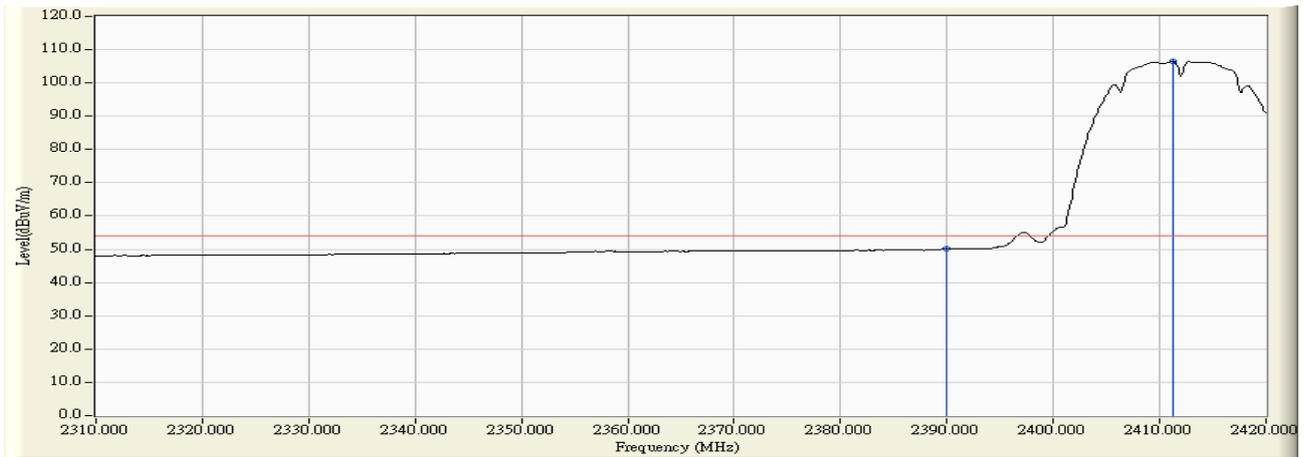
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.575 | 48.759 | -5.211 | 53.970 | AVERAGE |
| 2 | * | 2411.200 | 31.190 | 68.030 | 99.220 | N/A | N/A | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 16:35 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 0) |



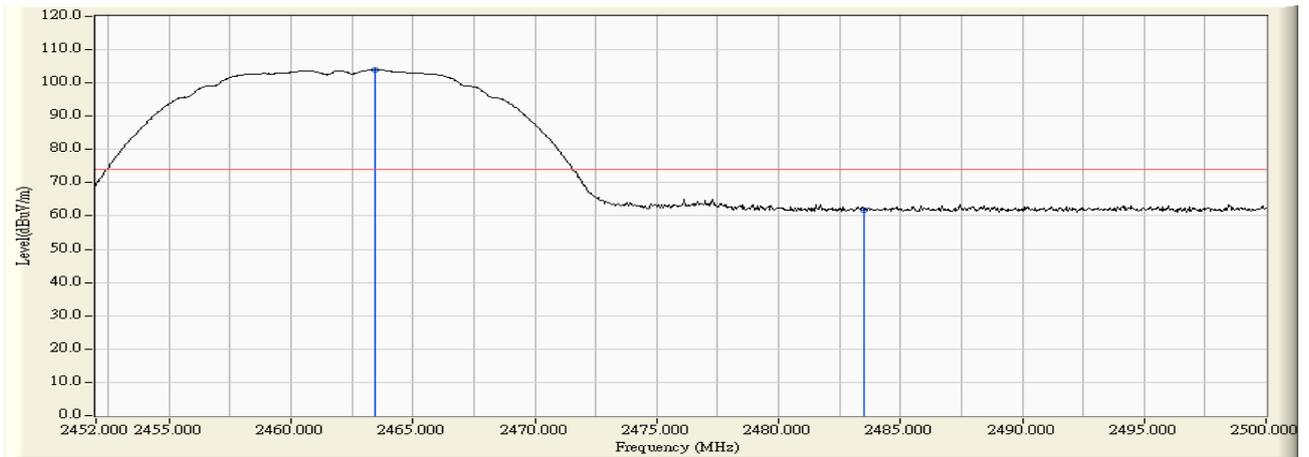
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 32.146 | 63.330 | -10.640 | 73.970 | PEAK |
| 2 | * | 2413.290 | 31.192 | 78.917 | 110.108 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 16:35 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 0) |



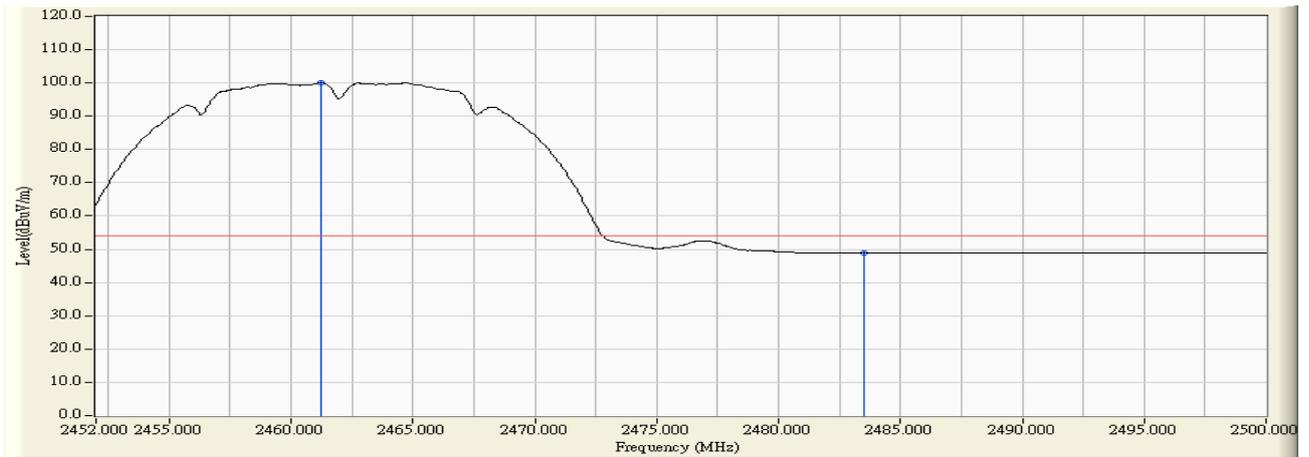
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 18.999 | 50.183 | -3.787 | 53.970 | AVERAGE |
| 2 | * | 2411.200 | 31.190 | 75.347 | 106.537 | N/A | N/A | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 18:59 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 0) |



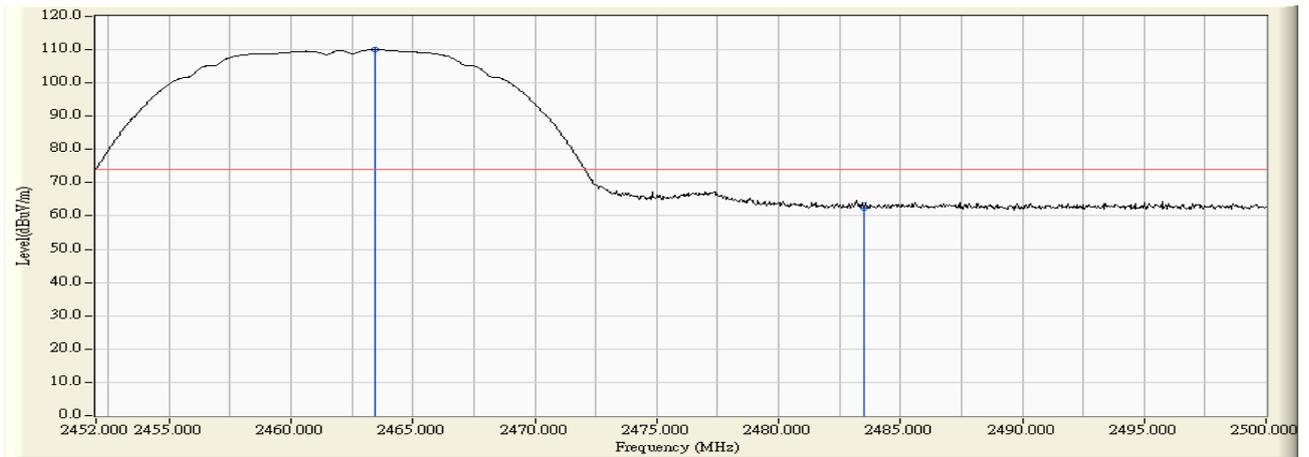
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.472 | 31.224 | 72.631 | 103.855 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.450 | 61.662 | -12.308 | 73.970 | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 18:59 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 0) |



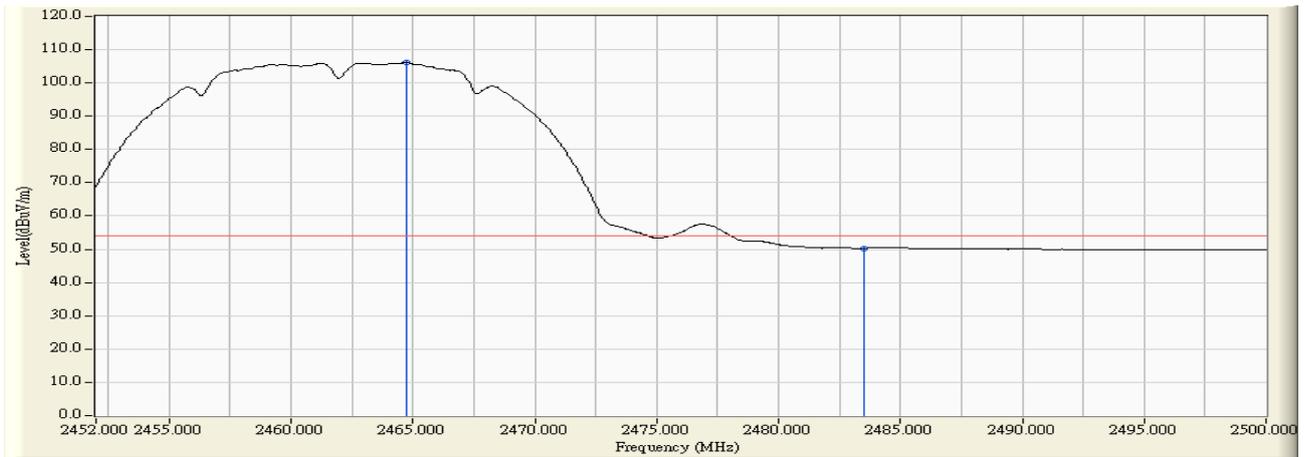
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2461.216 | 31.225 | 68.759 | 99.984 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.723 | 48.935 | -5.035 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:02 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 0) |



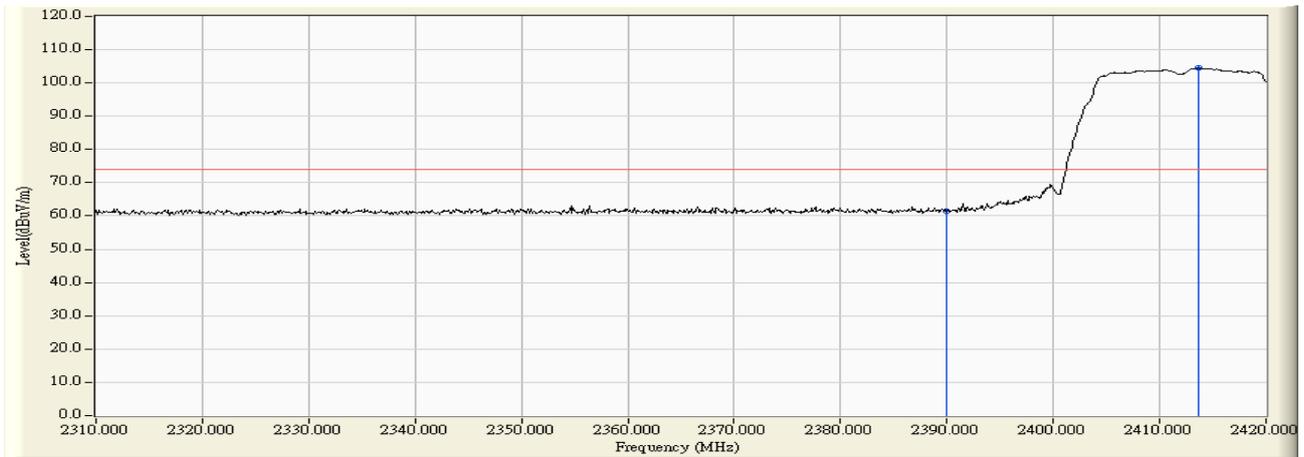
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.424 | 31.224 | 78.752 | 109.976 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 31.223 | 62.435 | -11.535 | 73.970 | PEAK |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:02 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 0) |



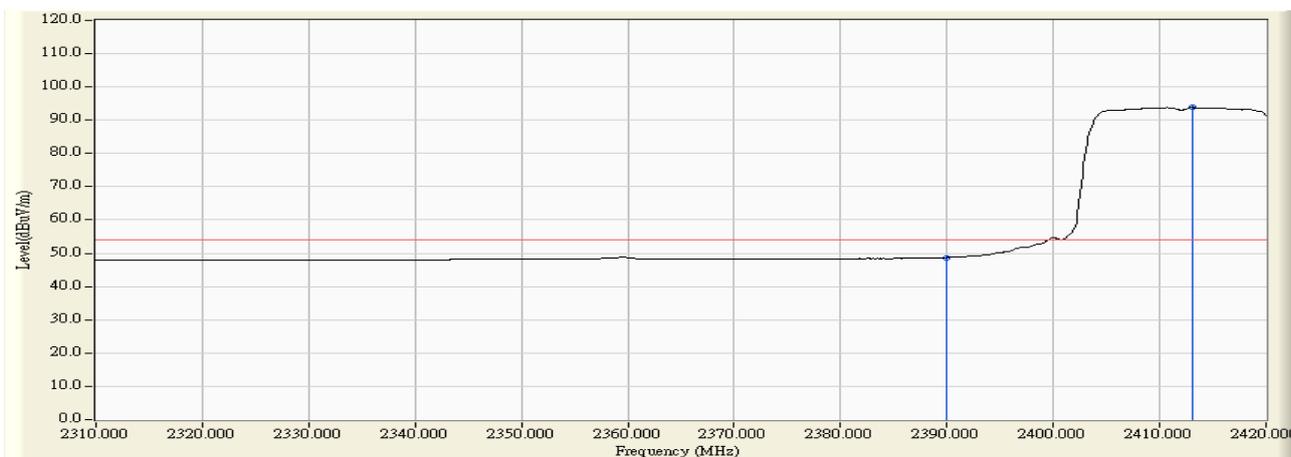
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.720 | 31.223 | 74.847 | 106.071 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 19.122 | 50.334 | -3.636 | 53.970 | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:04 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 0) |



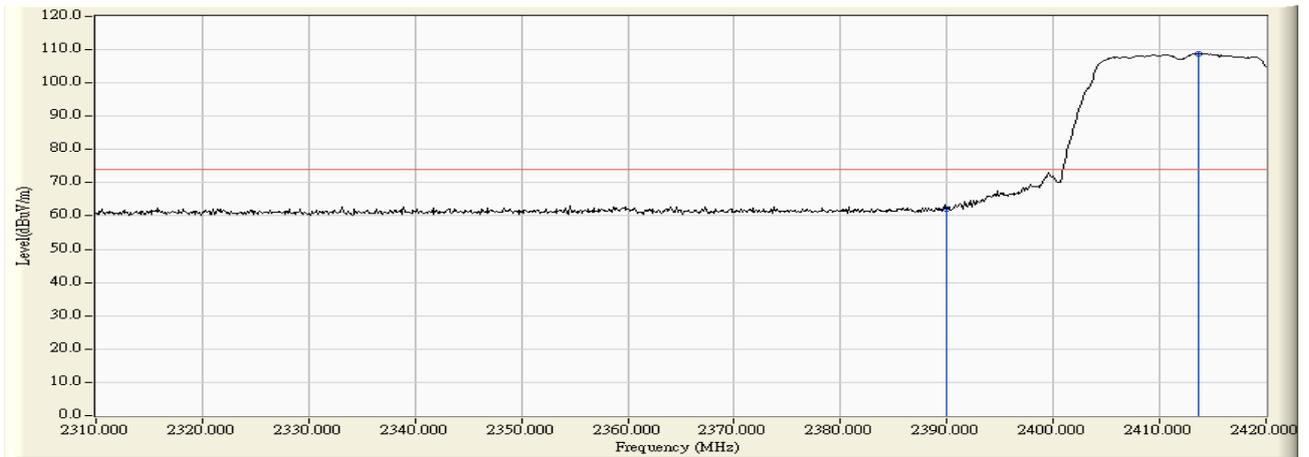
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.159 | 61.343 | -12.627 | 73.970 | PEAK |
| 2 | * | 2413.620 | 31.191 | 73.209 | 104.401 | N/A | N/A | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:05 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 0) |



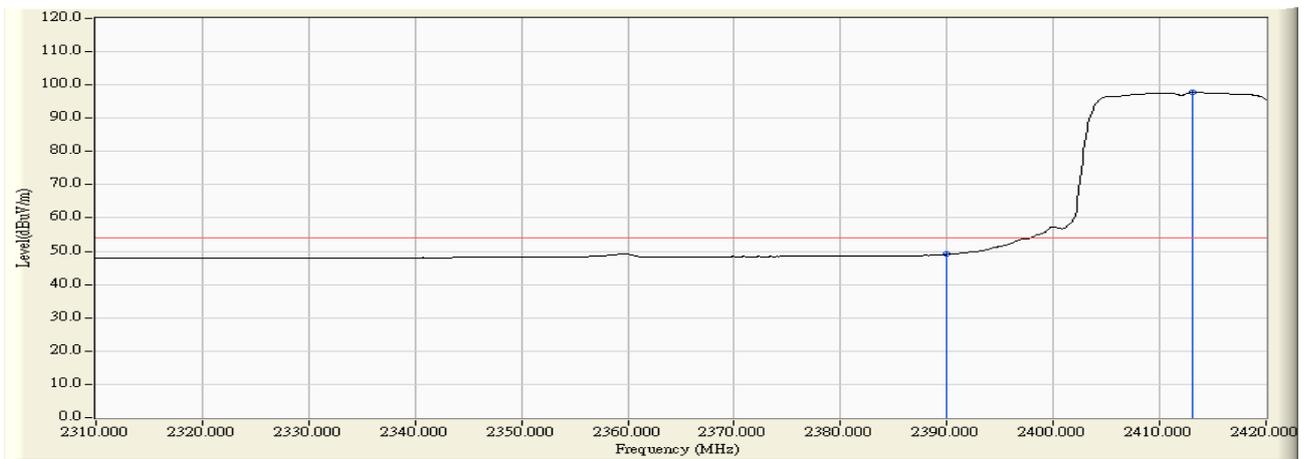
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.536 | 48.720 | -5.250 | 53.970 | AVERAGE |
| 2 | * | 2413.070 | 31.191 | 62.636 | 93.827 | N/A | N/A | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:06 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 0) |



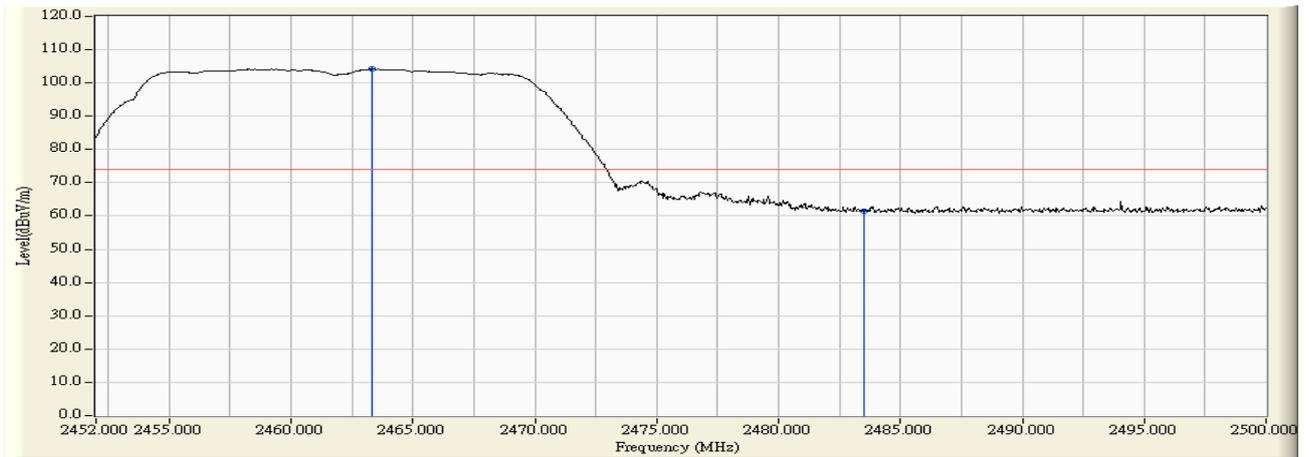
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.780 | 61.964 | -12.006 | 73.970 | PEAK |
| 2 | * | 2413.620 | 31.191 | 77.669 | 108.861 | N/A | N/A | PEAK |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:06 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 0) |



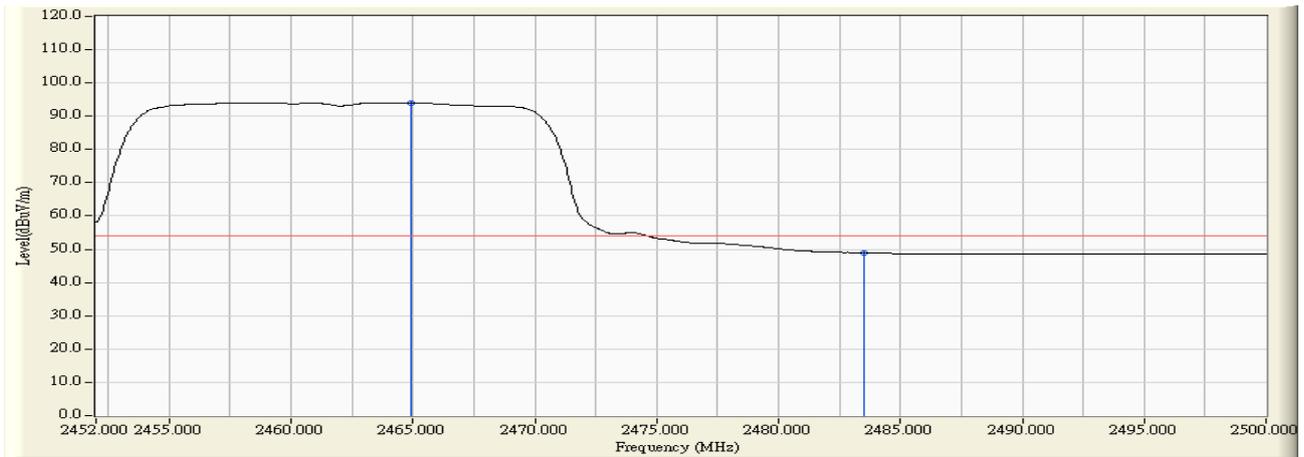
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.881 | 49.065 | -4.905 | 53.970 | AVERAGE |
| 2 | * | 2413.070 | 31.191 | 66.550 | 97.741 | N/A | N/A | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:08 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 0) |



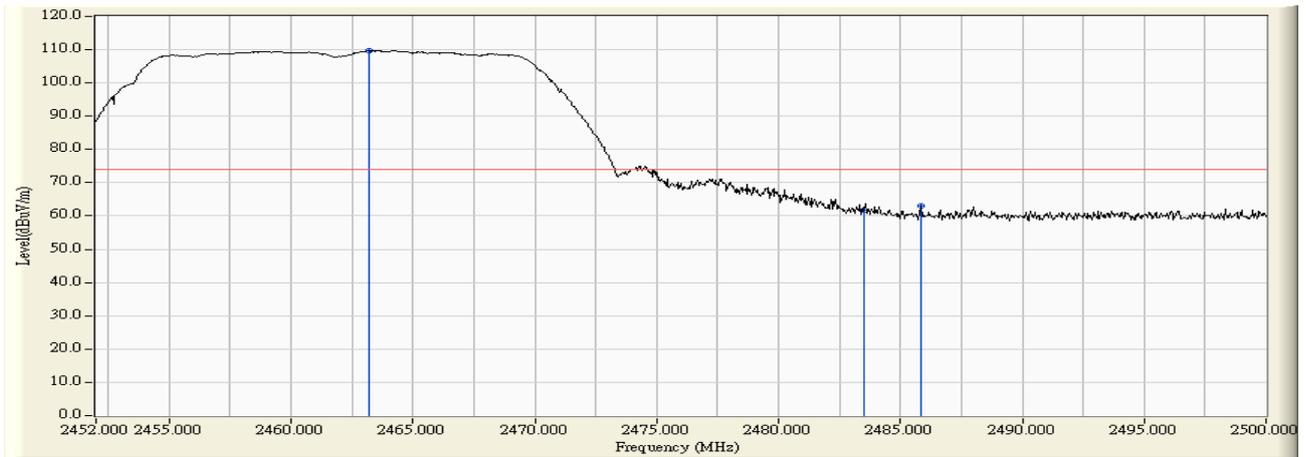
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.328 | 31.224 | 72.898 | 104.122 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.094 | 61.306 | -12.664 | 73.970 | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:09 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 0) |



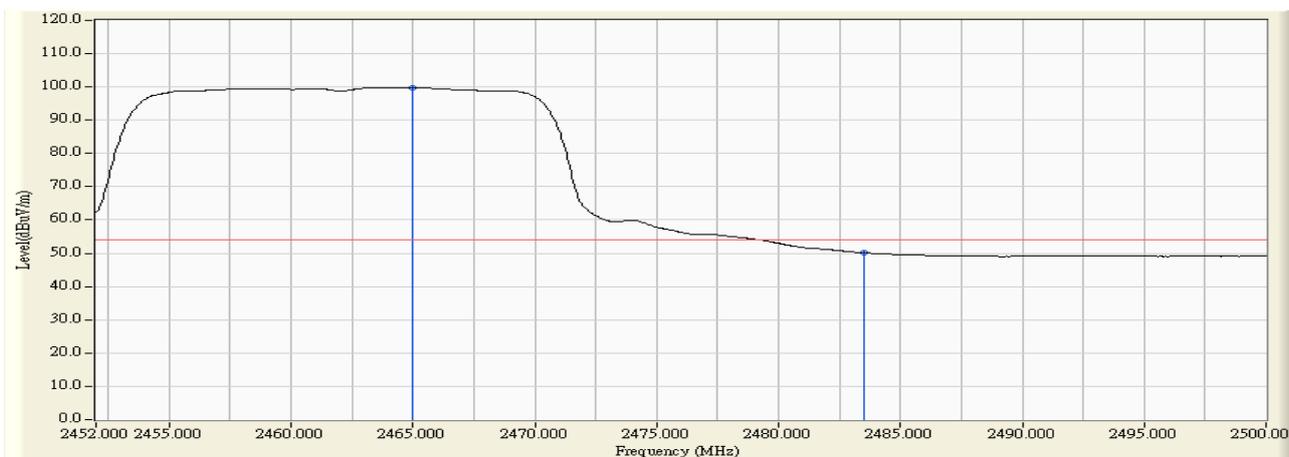
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.912 | 31.223 | 62.870 | 94.094 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.668 | 48.880 | -5.090 | 53.970 | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:13 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 0) |



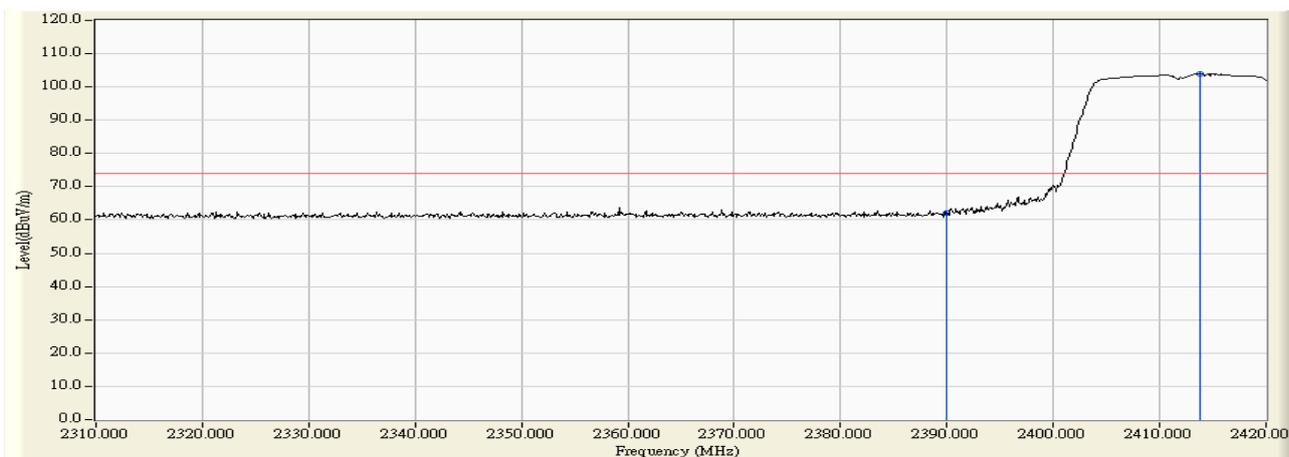
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.184 | 31.224 | 78.379 | 109.604 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.567 | 61.779 | -12.191 | 73.970 | PEAK |
| 3 | | 2485.840 | 31.211 | 31.864 | 63.075 | -10.895 | 73.970 | PEAK |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:13 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 0) |



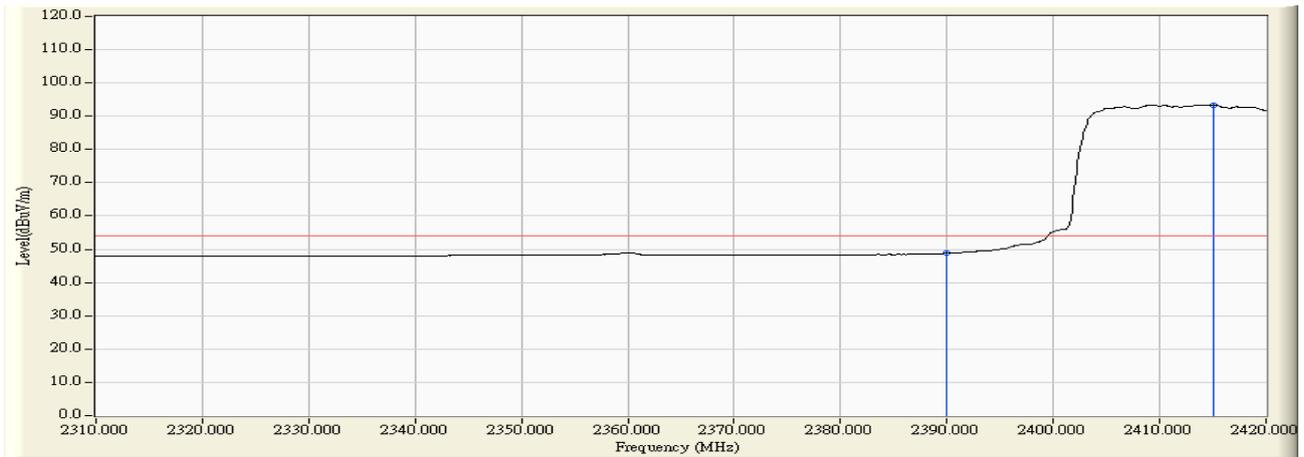
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.960 | 31.223 | 68.648 | 99.871 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 18.905 | 50.117 | -3.853 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:16 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0) |



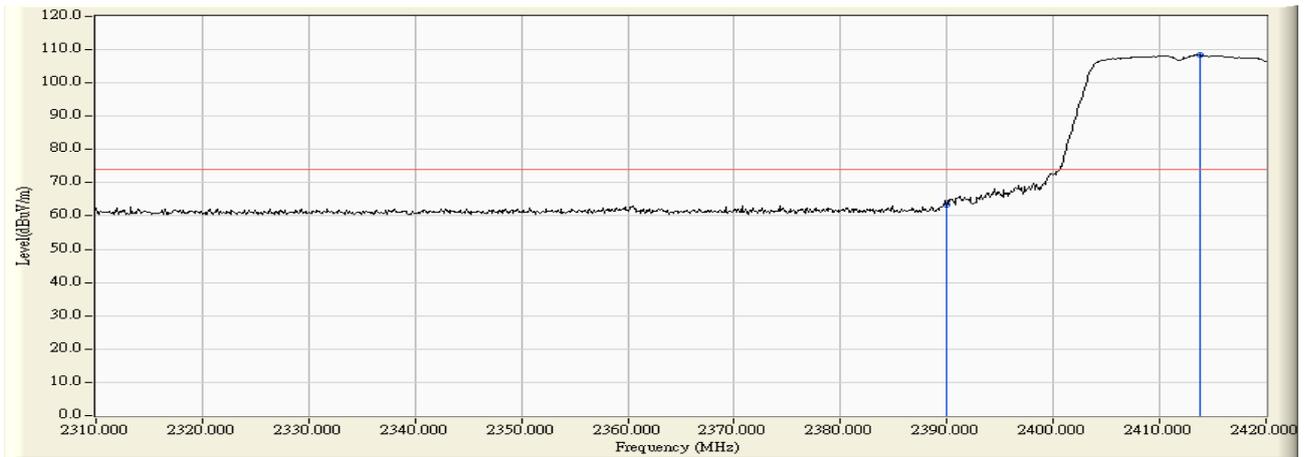
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.855 | 62.039 | -11.931 | 73.970 | PEAK |
| 2 | * | 2413.840 | 31.192 | 72.778 | 103.970 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:16 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0) |



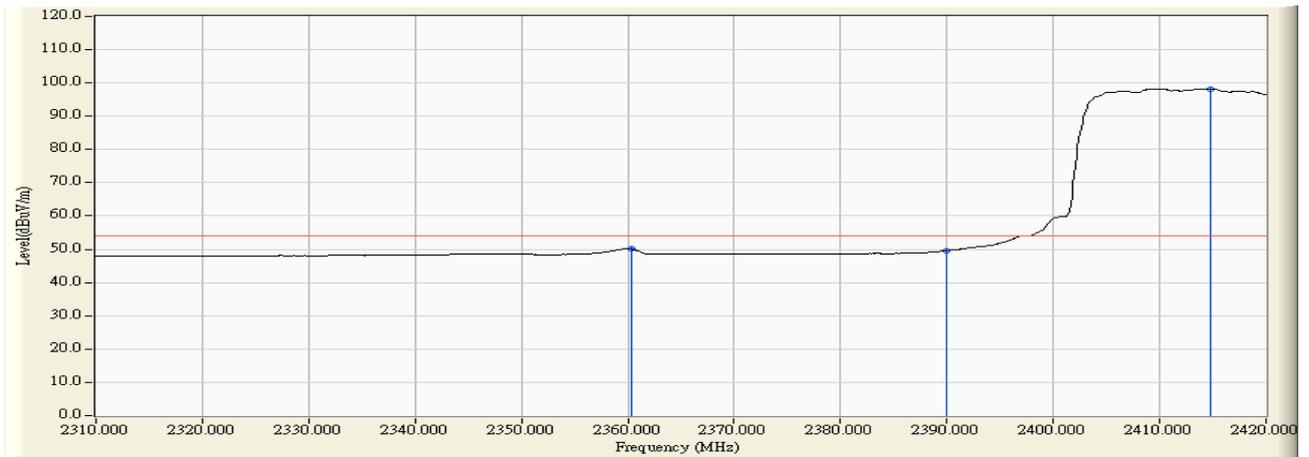
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.626 | 48.810 | -5.160 | 53.970 | AVERAGE |
| 2 | * | 2415.050 | 31.193 | 62.223 | 93.416 | N/A | N/A | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:18 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0) |



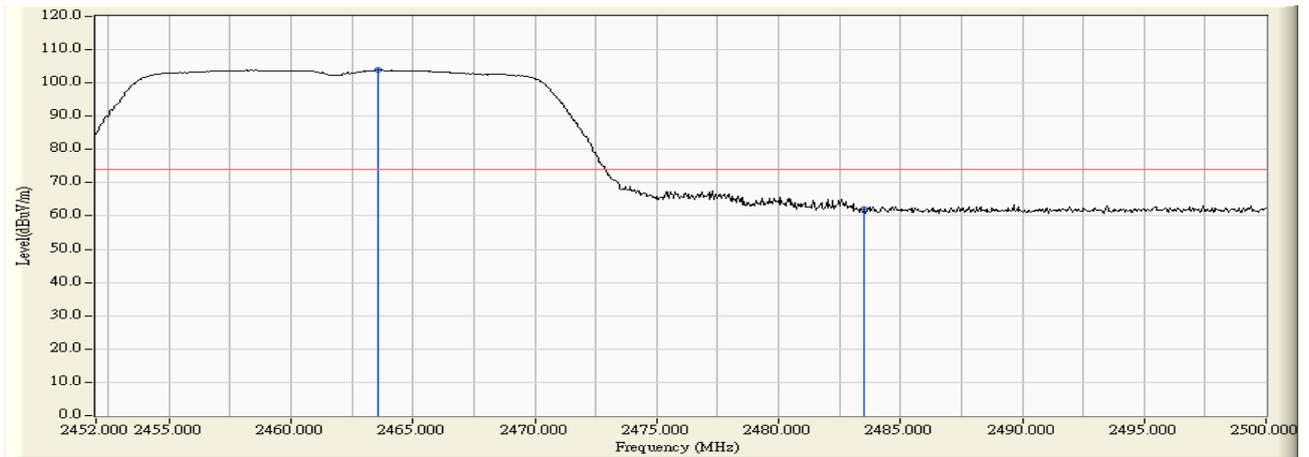
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 32.038 | 63.222 | -10.748 | 73.970 | PEAK |
| 2 | * | 2413.730 | 31.191 | 77.217 | 108.409 | N/A | N/A | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:18 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0) |



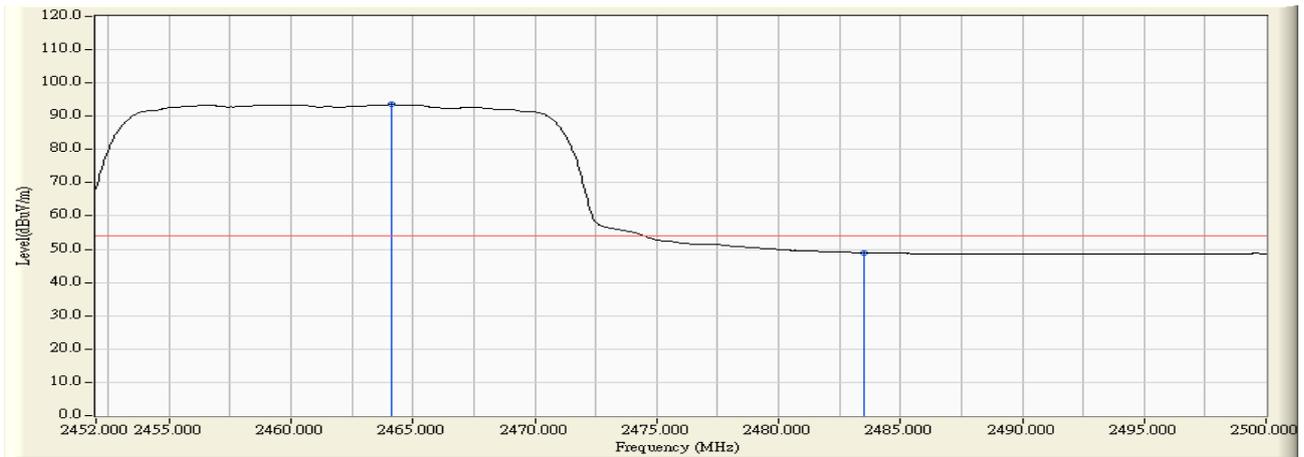
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2360.380 | 31.217 | 18.857 | 50.074 | -3.896 | 53.970 | AVERAGE |
| 2 | | 2390.000 | 31.184 | 18.442 | 49.626 | -4.344 | 53.970 | AVERAGE |
| 3 | * | 2414.720 | 31.193 | 67.078 | 98.271 | N/A | N/A | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:20 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0) |



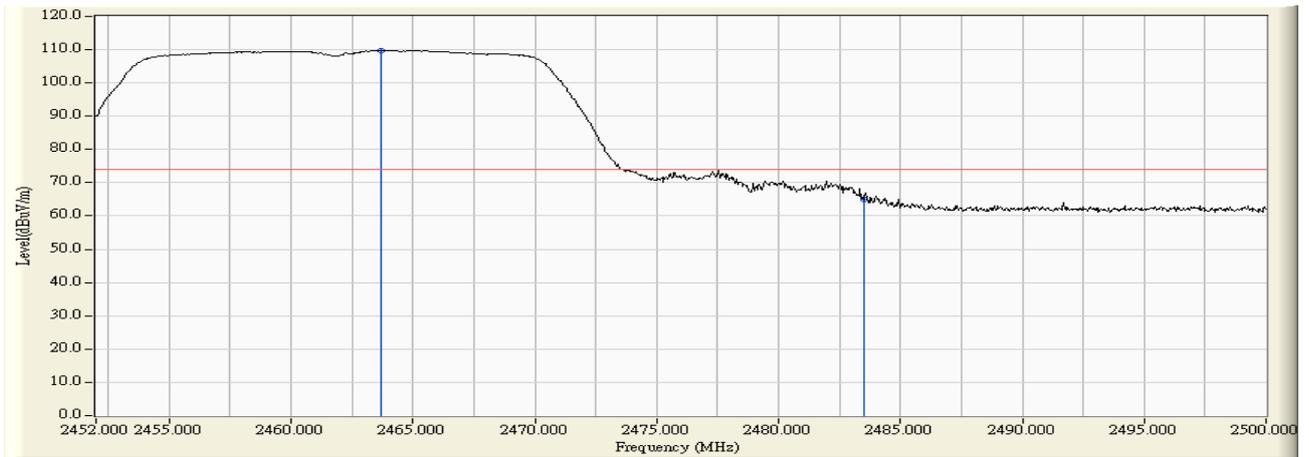
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.568 | 31.224 | 72.575 | 103.799 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.742 | 61.954 | -12.016 | 73.970 | PEAK |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:21 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0) |



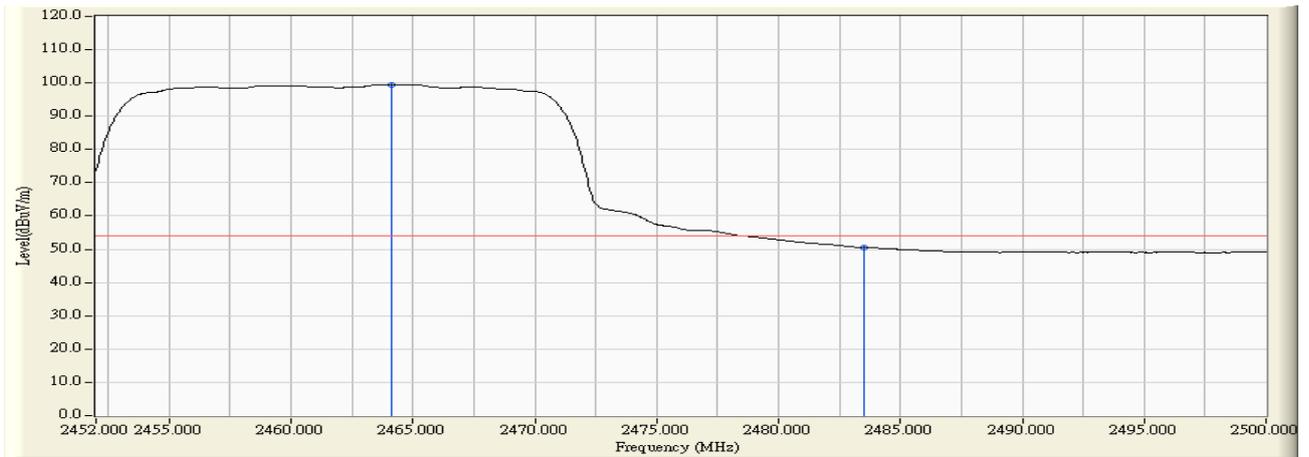
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.144 | 31.224 | 62.244 | 93.468 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.775 | 48.987 | -4.983 | 53.970 | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:23 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0) |



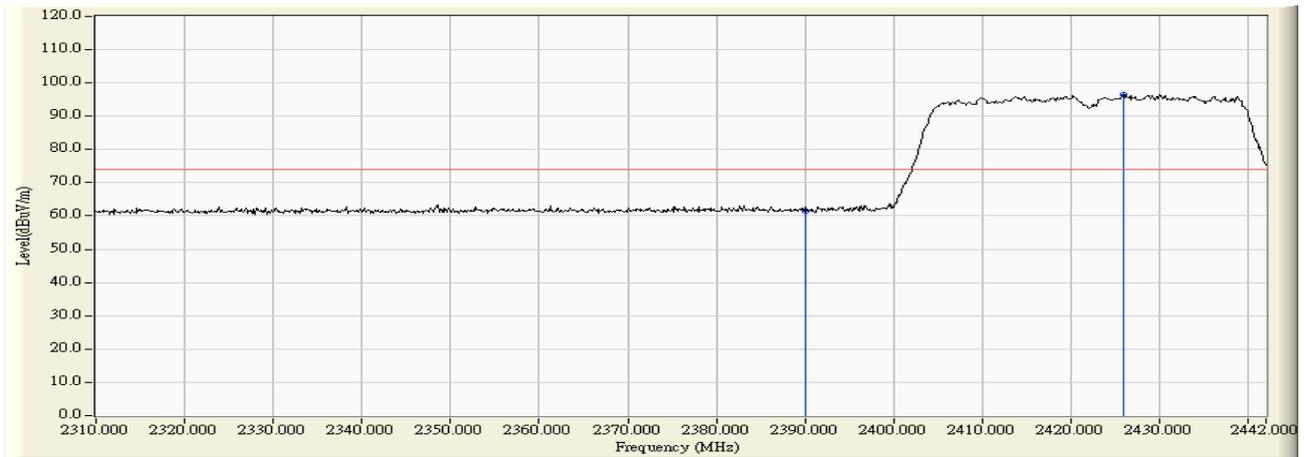
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.712 | 31.224 | 78.553 | 109.777 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 33.784 | 64.996 | -8.974 | 73.970 | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 19:23 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0) |



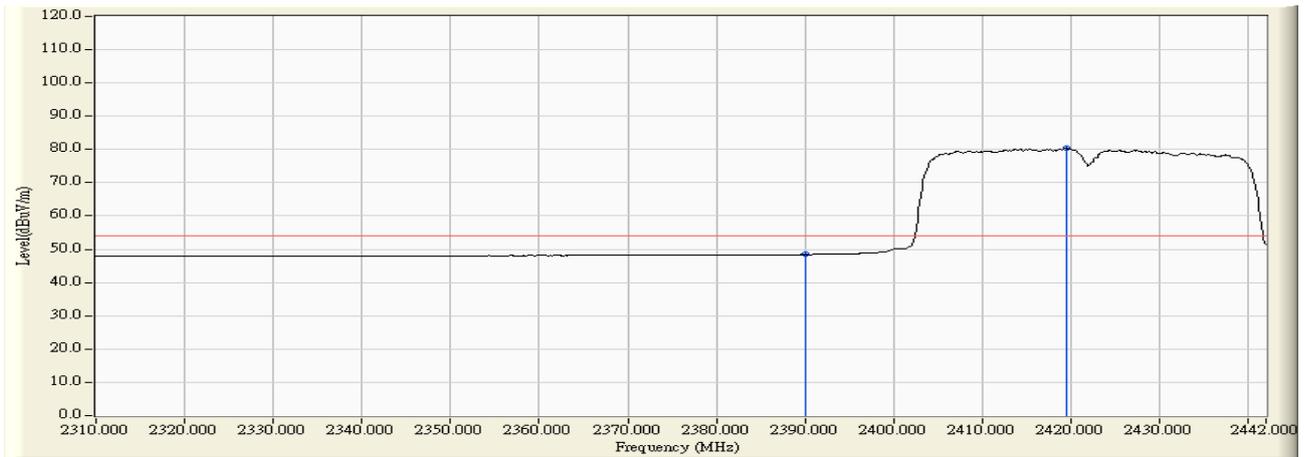
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.144 | 31.224 | 68.214 | 99.438 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 19.341 | 50.553 | -3.417 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:01 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0) |



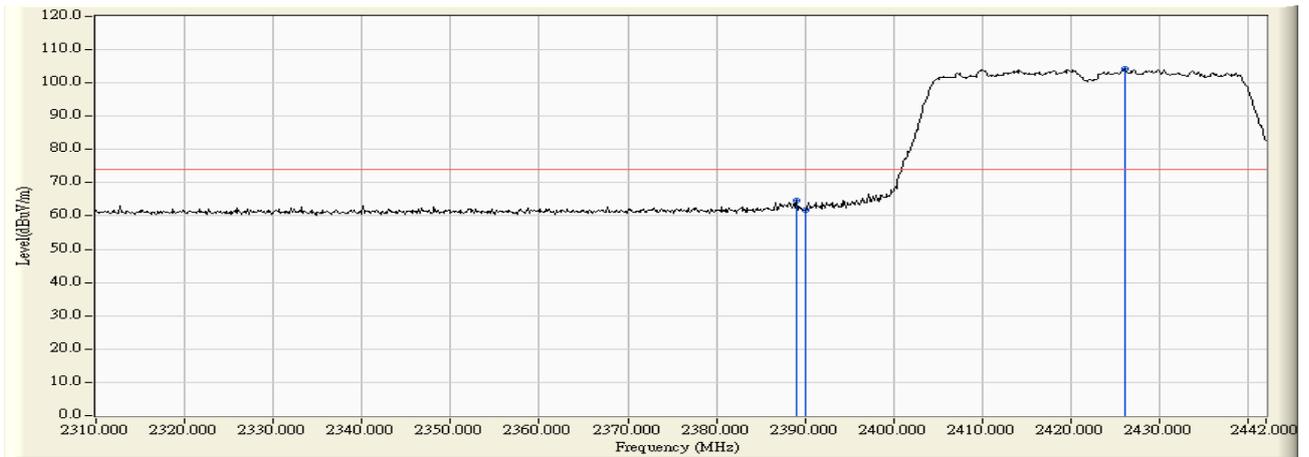
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.120 | 61.304 | -12.666 | 73.970 | PEAK |
| 2 | * | 2425.896 | 31.202 | 65.262 | 96.464 | N/A | N/A | PEAK |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:01 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0) |



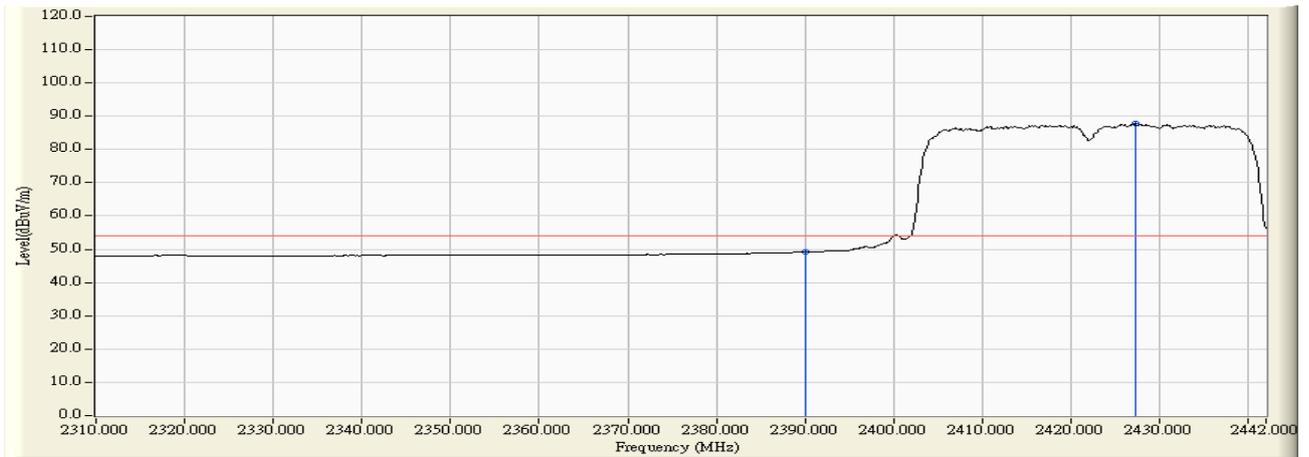
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.248 | 48.432 | -5.538 | 53.970 | AVERAGE |
| 2 | * | 2419.428 | 31.197 | 49.210 | 80.407 | N/A | N/A | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:04 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0) |



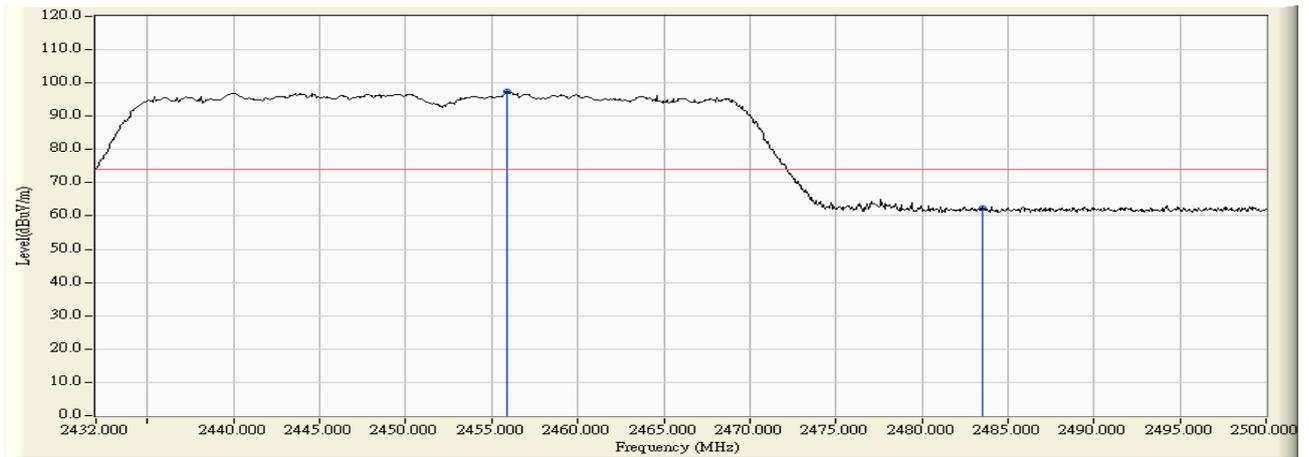
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2389.068 | 31.186 | 33.347 | 64.532 | -9.438 | 73.970 | PEAK |
| 2 | | 2390.000 | 31.184 | 30.576 | 61.760 | -12.210 | 73.970 | PEAK |
| 3 | * | 2426.028 | 31.202 | 73.052 | 104.254 | N/A | N/A | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:05 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0) |



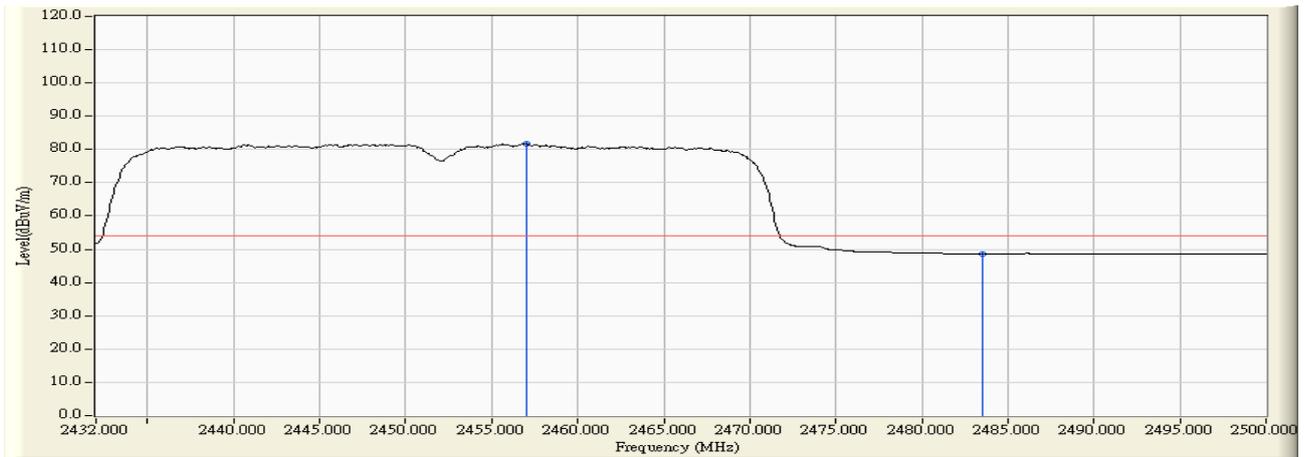
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 18.008 | 49.192 | -4.778 | 53.970 | AVERAGE |
| 2 | * | 2427.216 | 31.203 | 56.481 | 87.684 | N/A | N/A | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:13 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0) |



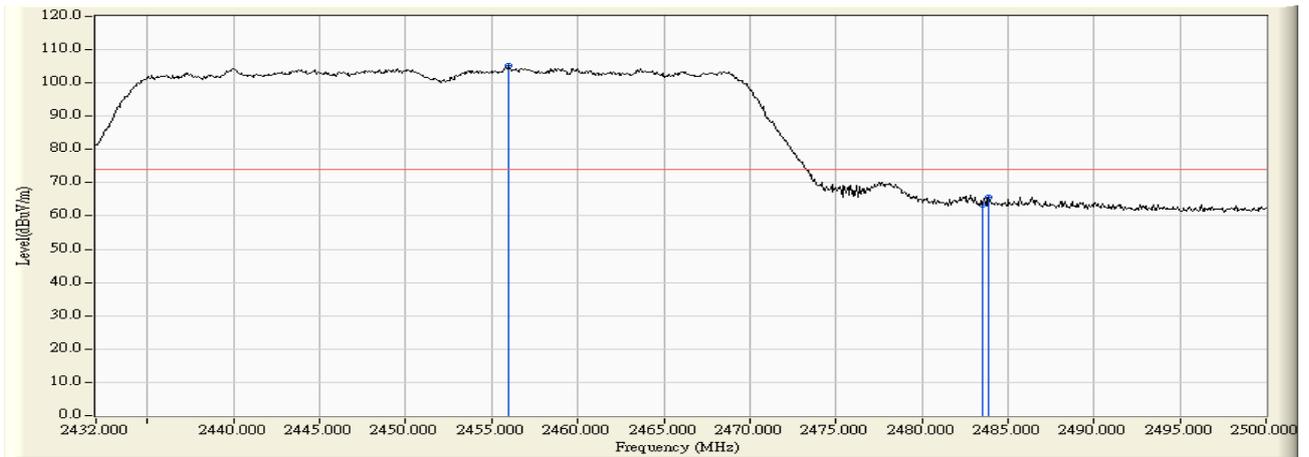
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2455.868 | 31.223 | 66.135 | 97.358 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 31.337 | 62.549 | -11.421 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:13 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0) |



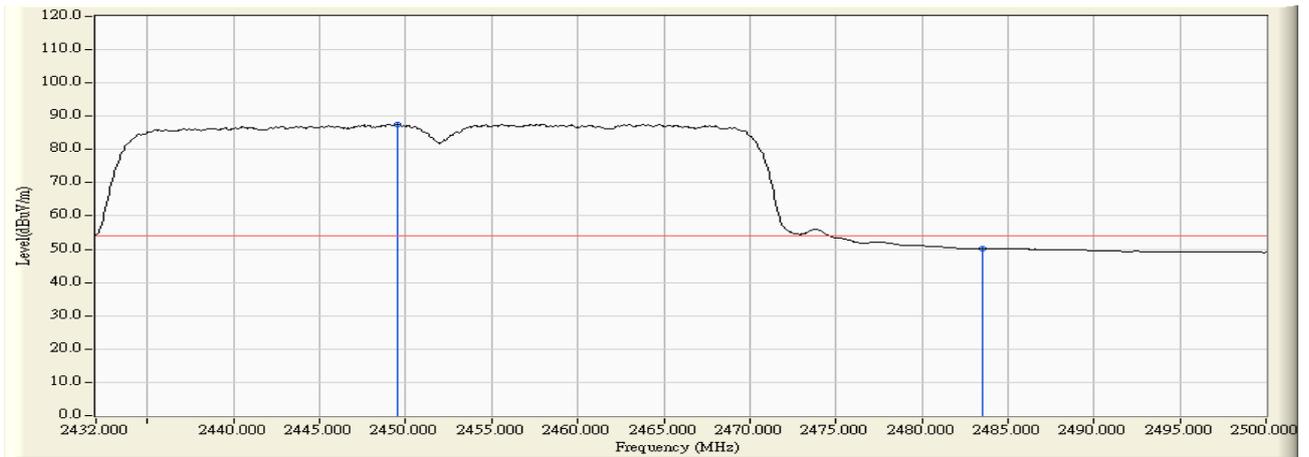
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2457.024 | 31.223 | 50.453 | 81.676 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.507 | 48.719 | -5.251 | 53.970 | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:15 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0) |



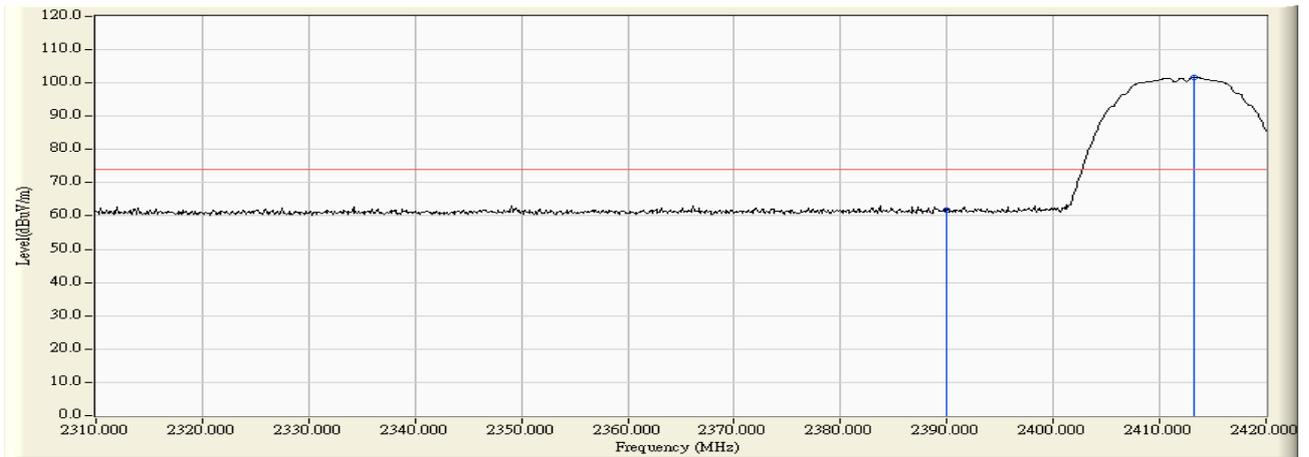
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2456.004 | 31.223 | 73.986 | 105.209 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 32.326 | 63.538 | -10.432 | 73.970 | PEAK |
| 3 | | 2483.884 | 31.212 | 34.501 | 65.713 | -8.257 | 73.970 | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:16 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0) |



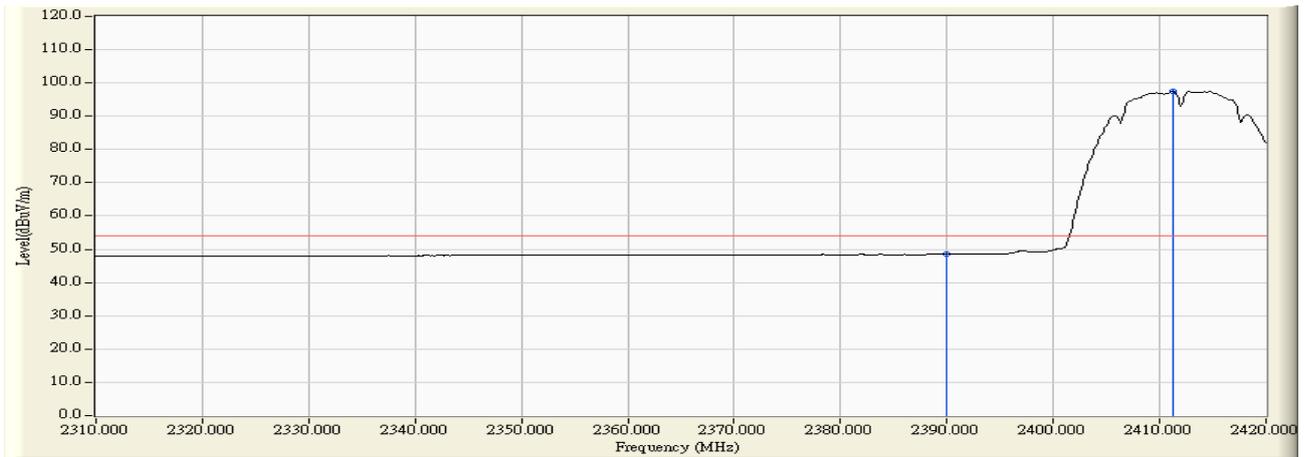
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2449.544 | 31.220 | 56.399 | 87.619 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 19.040 | 50.252 | -3.718 | 53.970 | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:18 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 1) |



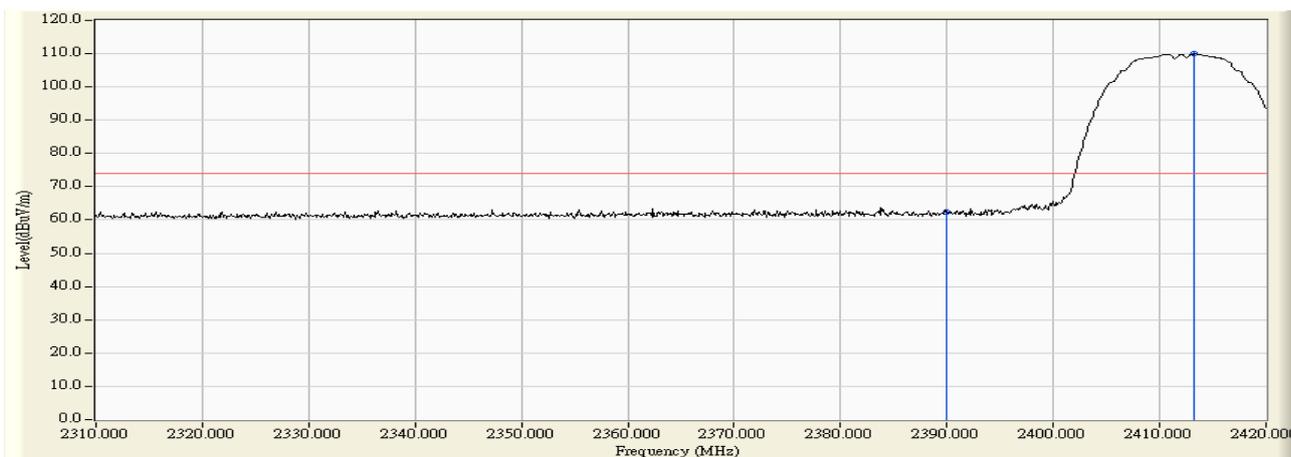
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.694 | 61.878 | -12.092 | 73.970 | PEAK |
| 2 | * | 2413.290 | 31.192 | 70.435 | 101.626 | N/A | N/A | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:19 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 1) |



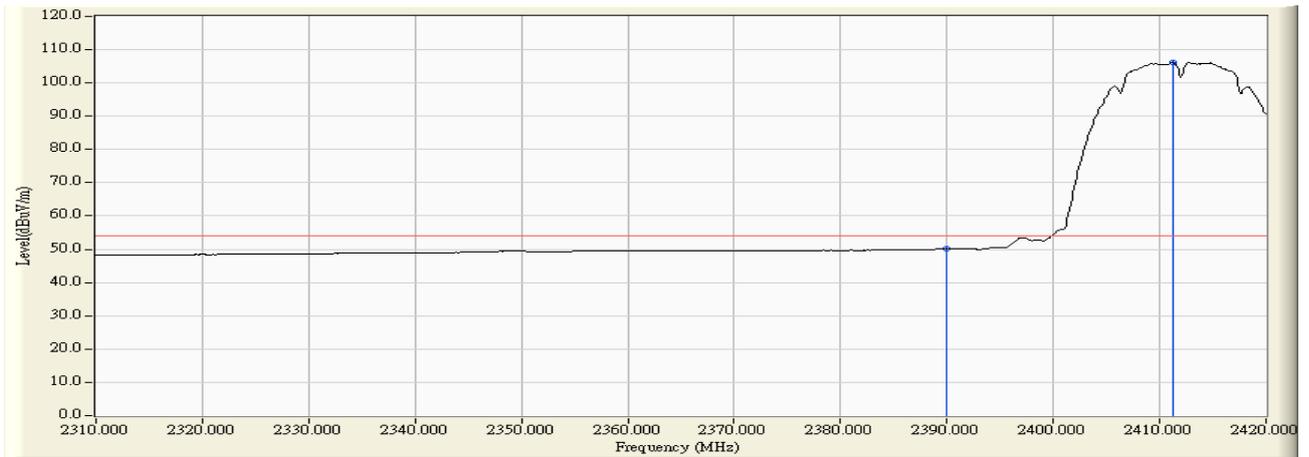
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.335 | 48.519 | -5.451 | 53.970 | AVERAGE |
| 2 | * | 2411.200 | 31.190 | 66.249 | 97.439 | N/A | N/A | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:20 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 1) |



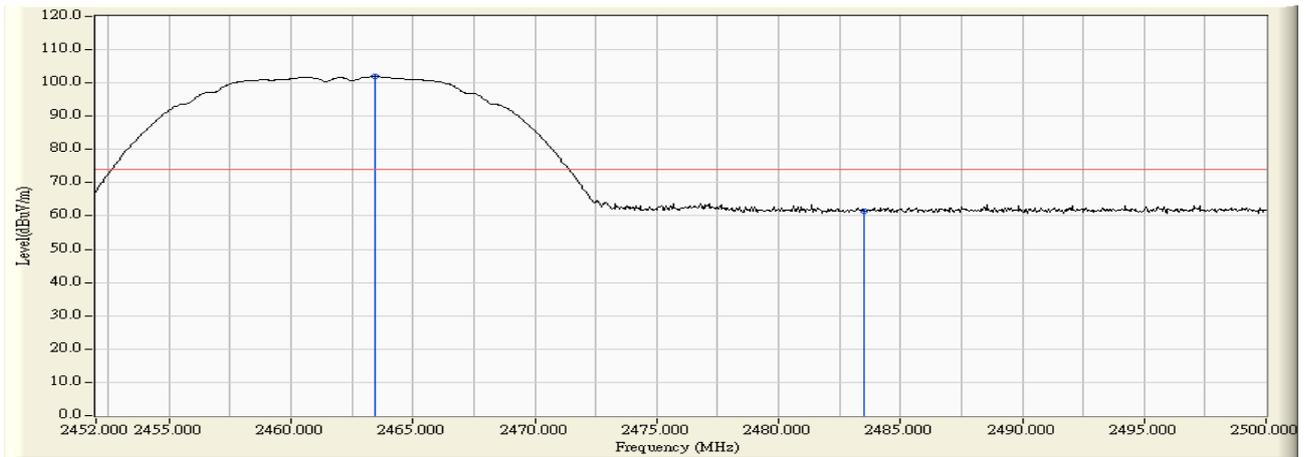
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 31.302 | 62.486 | -11.484 | 73.970 | PEAK |
| 2 | * | 2413.290 | 31.192 | 78.684 | 109.875 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:22 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2412MHz by 802.11b(Chain 1) |



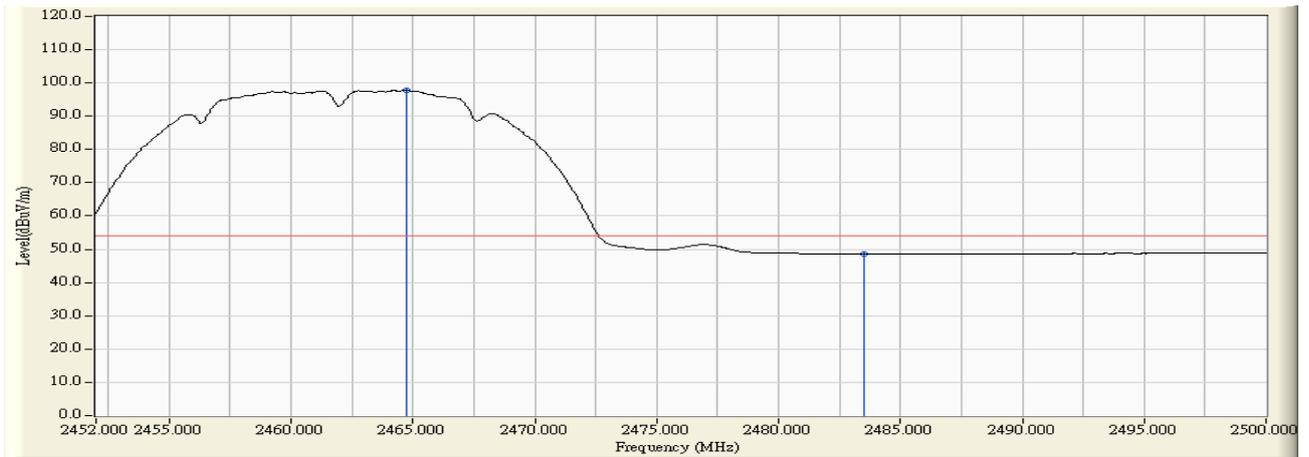
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 18.939 | 50.123 | -3.847 | 53.970 | AVERAGE |
| 2 | * | 2411.200 | 31.190 | 74.957 | 106.147 | N/A | N/A | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:24 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 1) |



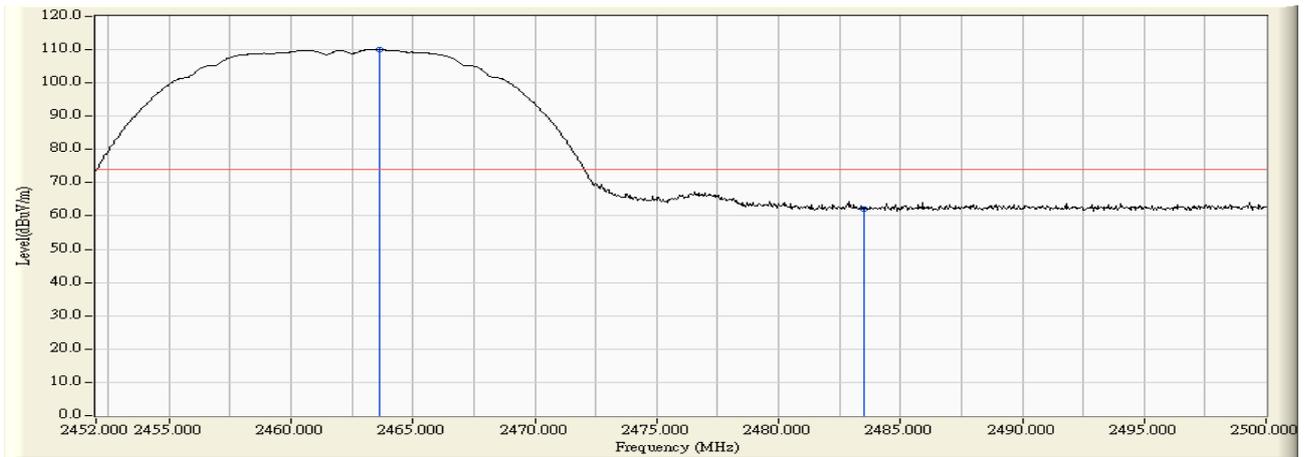
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.424 | 31.224 | 70.667 | 101.891 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.359 | 61.571 | -12.399 | 73.970 | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:24 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 1) |



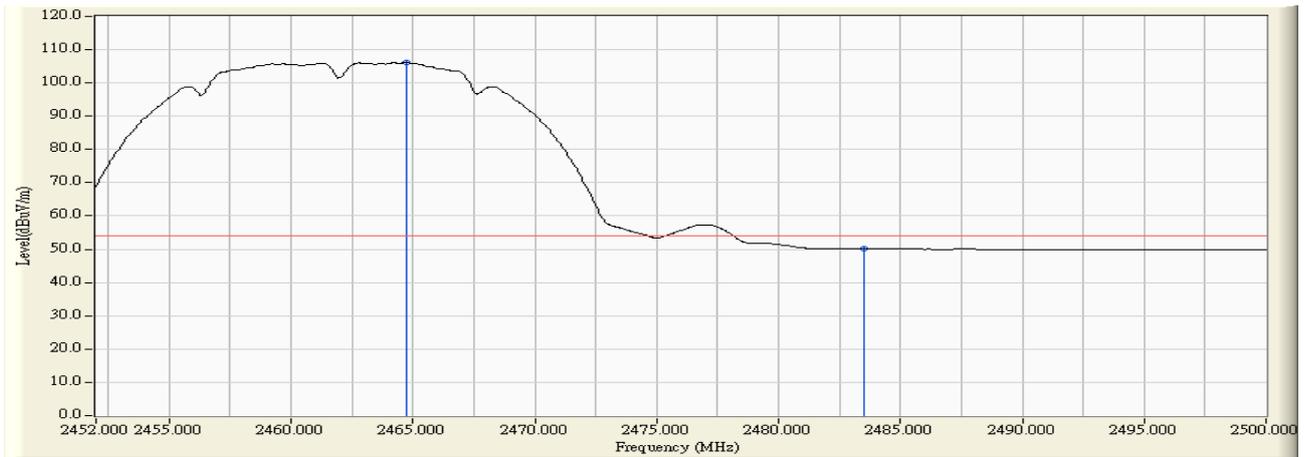
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.720 | 31.223 | 66.560 | 97.784 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.476 | 48.688 | -5.282 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:27 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 1) |



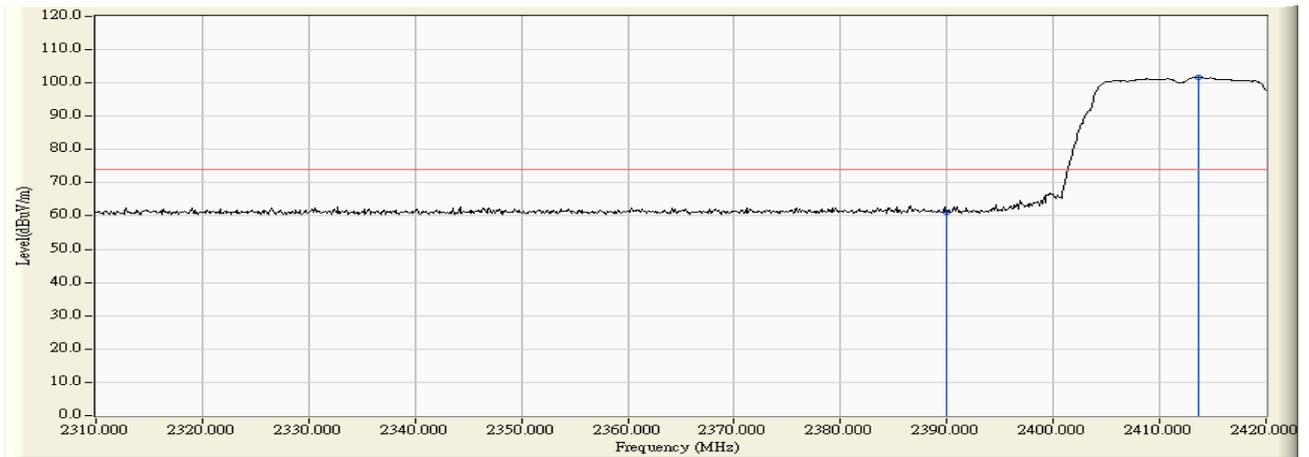
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.616 | 31.224 | 78.793 | 110.017 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.836 | 62.048 | -11.922 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:27 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 1:Transmit at channel 2462MHz by 802.11b(Chain 1) |



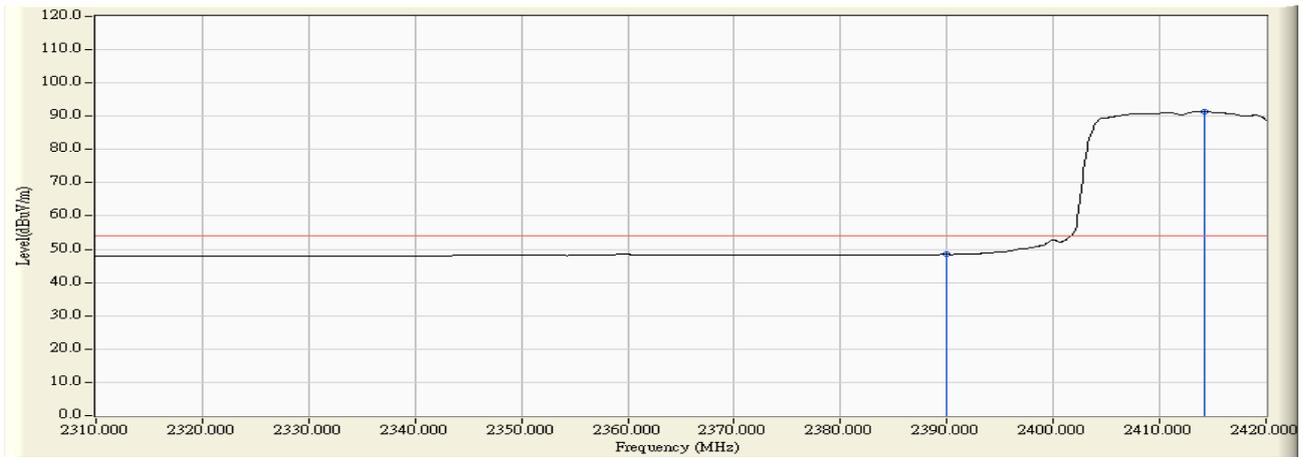
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.720 | 31.223 | 74.908 | 106.132 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 18.931 | 50.143 | -3.827 | 53.970 | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:29 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 1) |



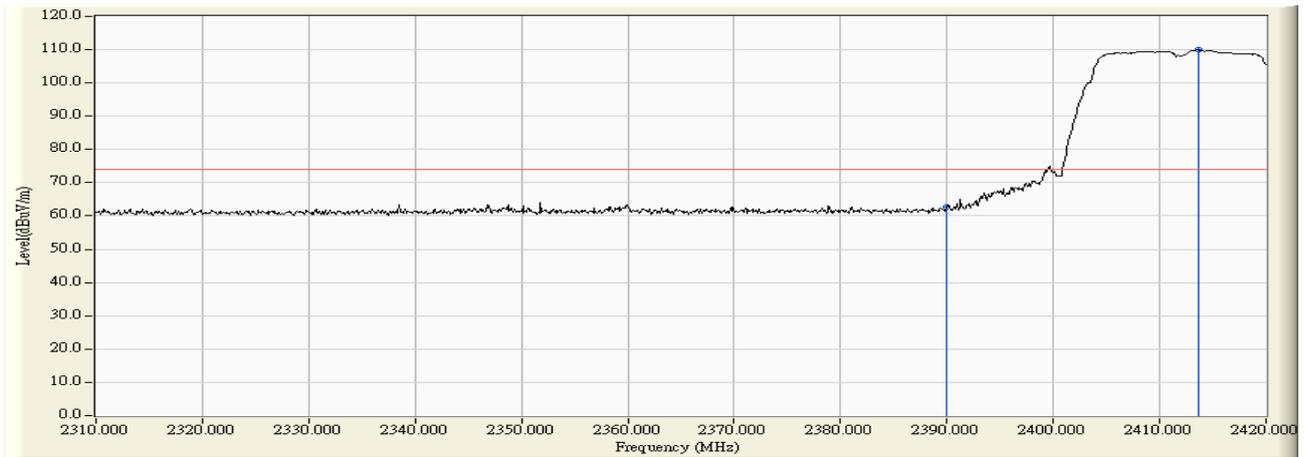
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 29.809 | 60.993 | -12.977 | 73.970 | PEAK |
| 2 | * | 2413.620 | 31.191 | 70.553 | 101.745 | N/A | N/A | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:30 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 1) |



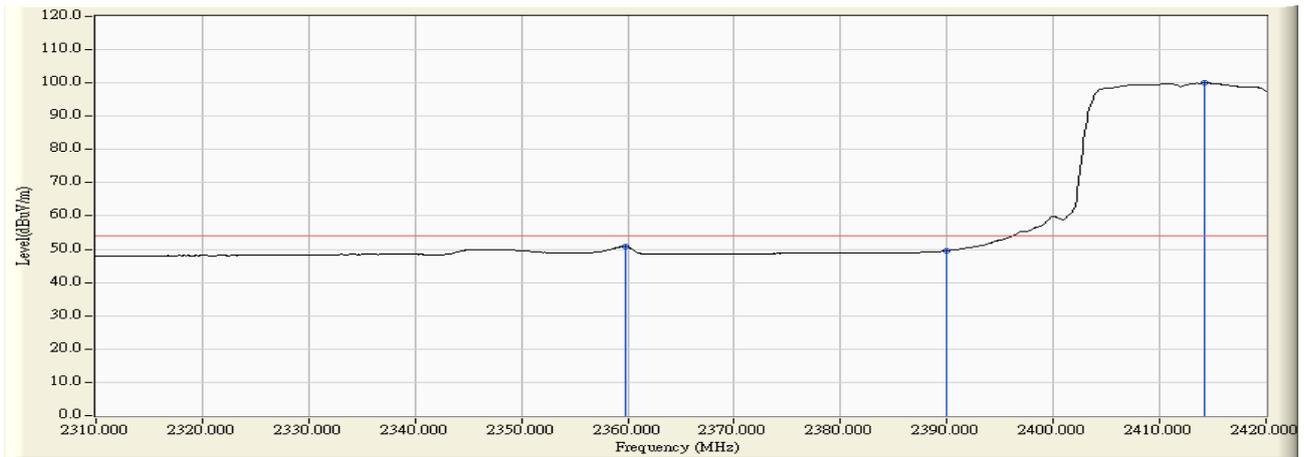
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.258 | 48.442 | -5.528 | 53.970 | AVERAGE |
| 2 | * | 2414.280 | 31.192 | 60.233 | 91.425 | N/A | N/A | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:31 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 1) |



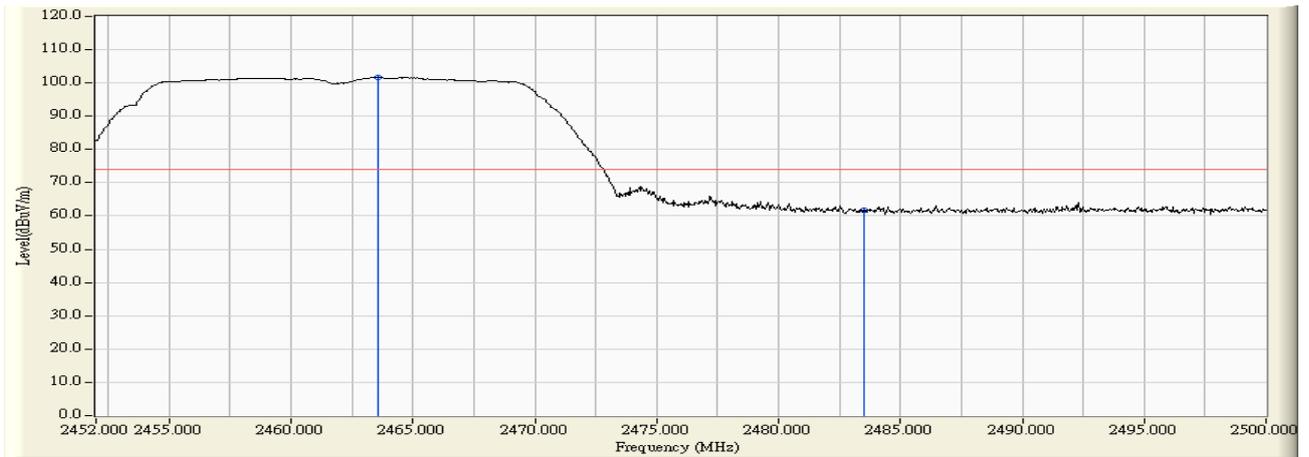
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 31.547 | 62.731 | -11.239 | 73.970 | PEAK |
| 2 | * | 2413.620 | 31.191 | 78.706 | 109.898 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:32 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2412MHz by 802.11g(Chain 1) |



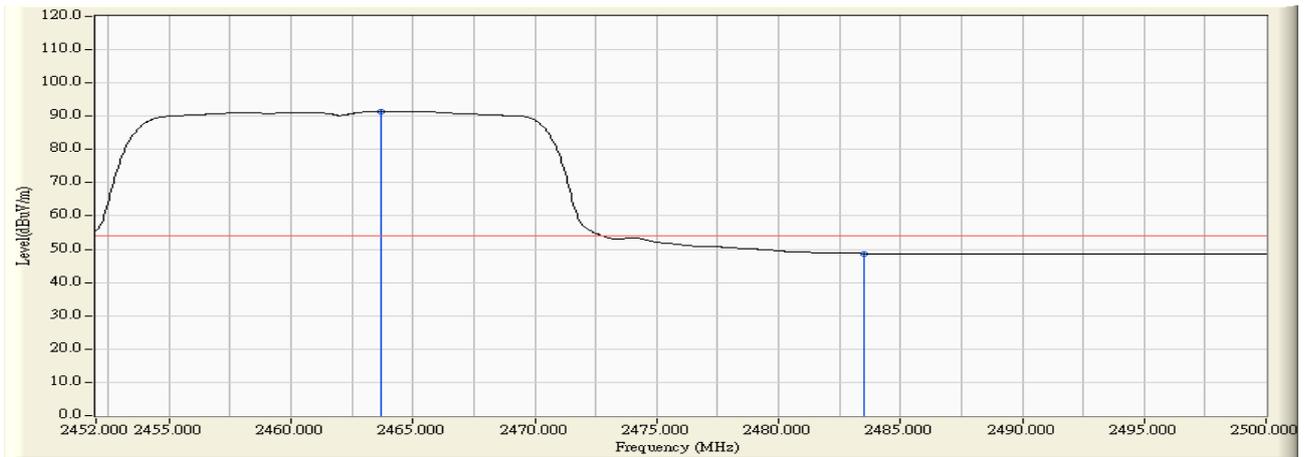
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2359.720 | 31.218 | 19.611 | 50.829 | -3.141 | 53.970 | AVERAGE |
| 2 | | 2390.000 | 31.184 | 18.387 | 49.571 | -4.399 | 53.970 | AVERAGE |
| 3 | * | 2414.280 | 31.192 | 68.838 | 100.030 | N/A | N/A | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:34 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 1) |



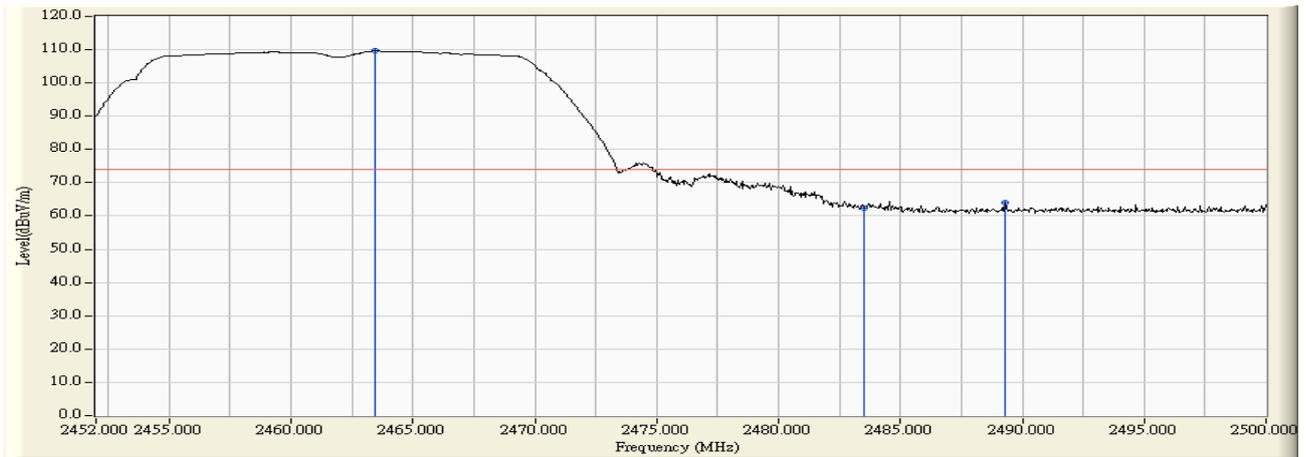
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.568 | 31.224 | 70.476 | 101.700 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.468 | 61.680 | -12.290 | 73.970 | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:35 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 1) |



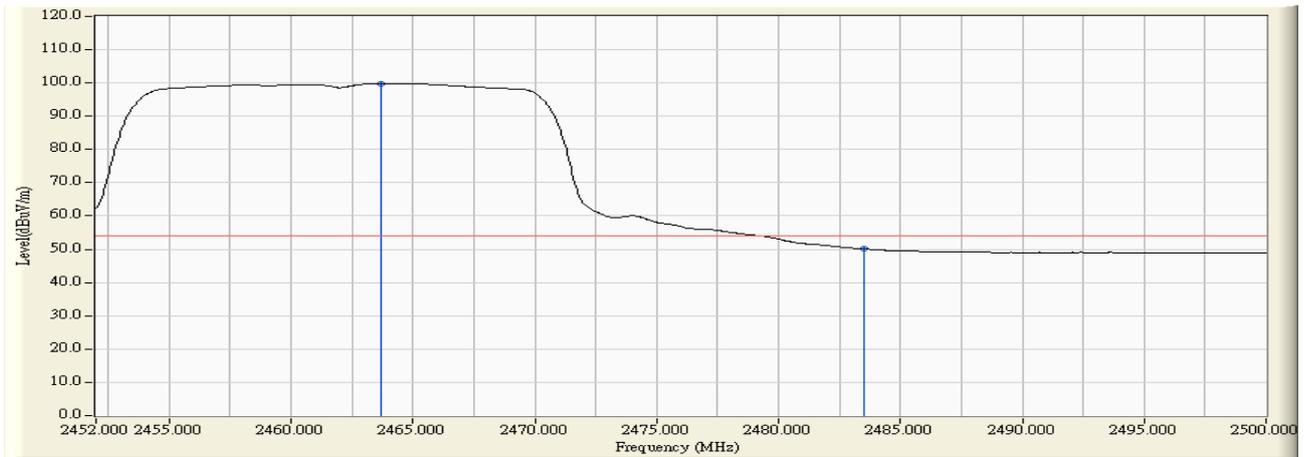
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.664 | 31.224 | 60.198 | 91.422 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.510 | 48.722 | -5.248 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:36 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 1) |



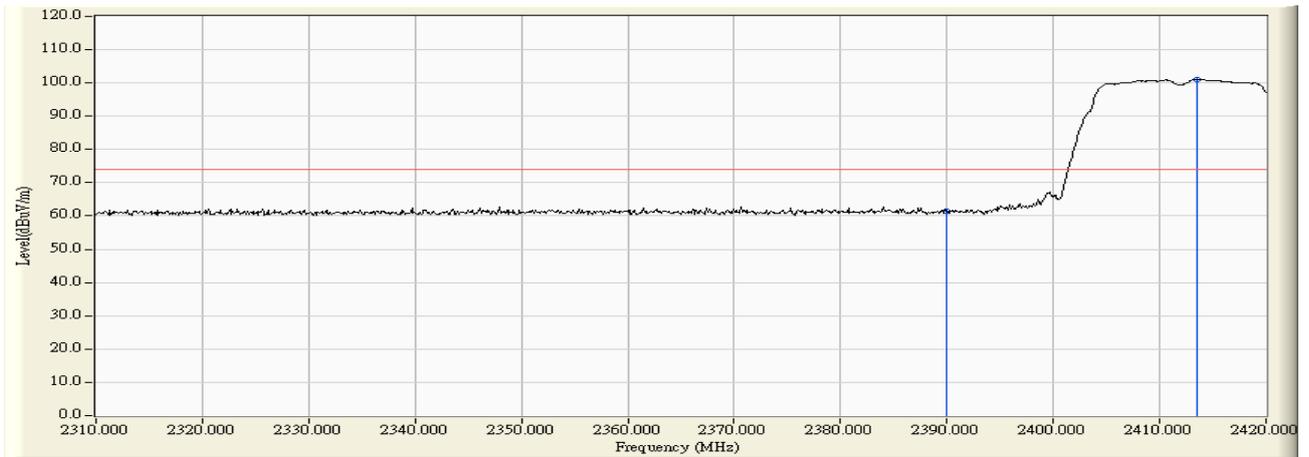
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.472 | 31.224 | 78.363 | 109.587 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 31.322 | 62.534 | -11.436 | 73.970 | PEAK |
| 3 | | 2489.296 | 31.208 | 32.881 | 64.089 | -9.881 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:36 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 2:Transmit at channel 2462MHz by 802.11g(Chain 1) |



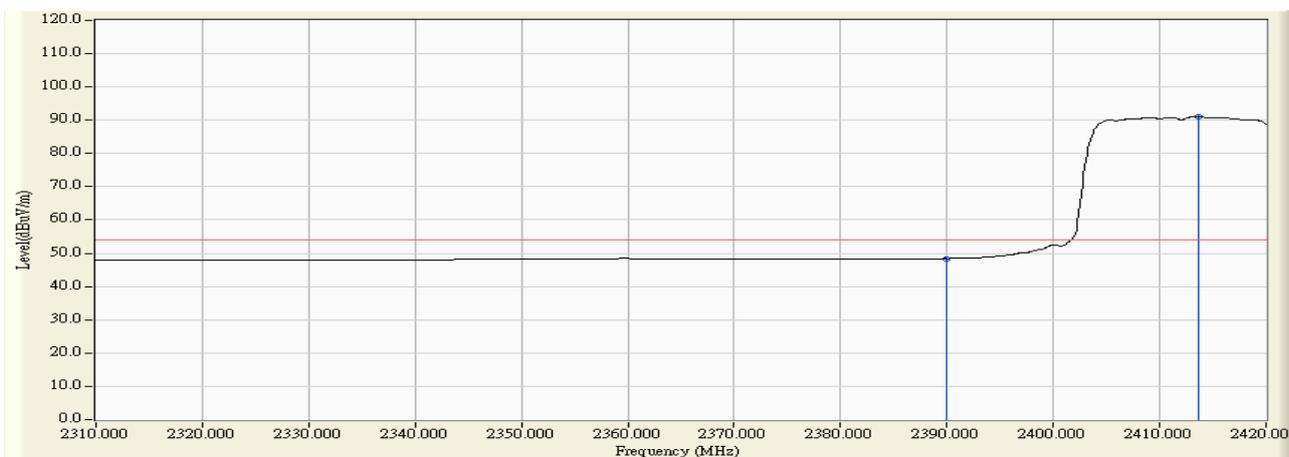
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.712 | 31.224 | 68.535 | 99.759 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 18.935 | 50.147 | -3.823 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:38 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 1) |



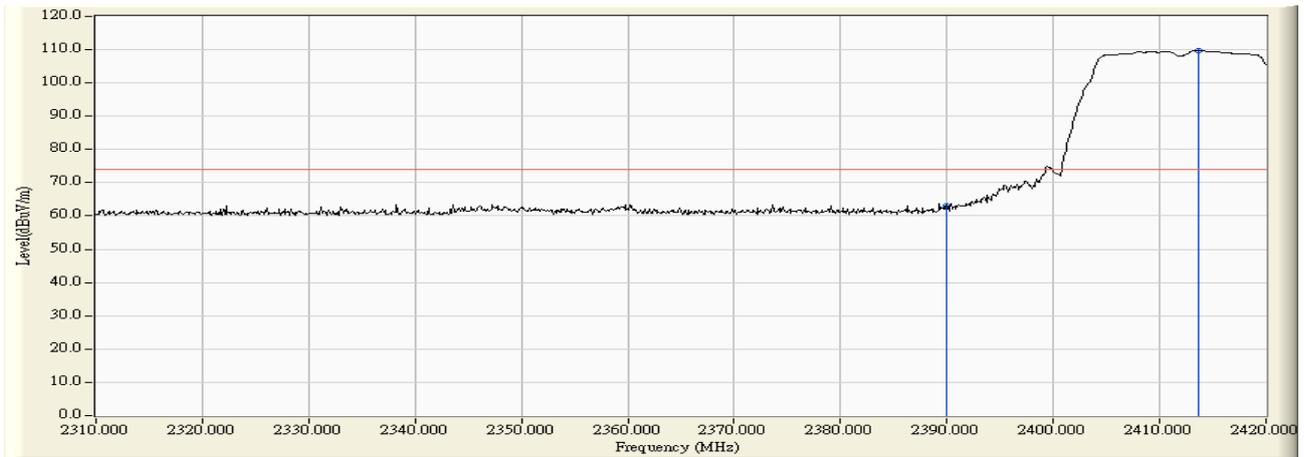
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.308 | 61.492 | -12.478 | 73.970 | PEAK |
| 2 | * | 2413.510 | 31.192 | 69.975 | 101.167 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:38 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 1) |



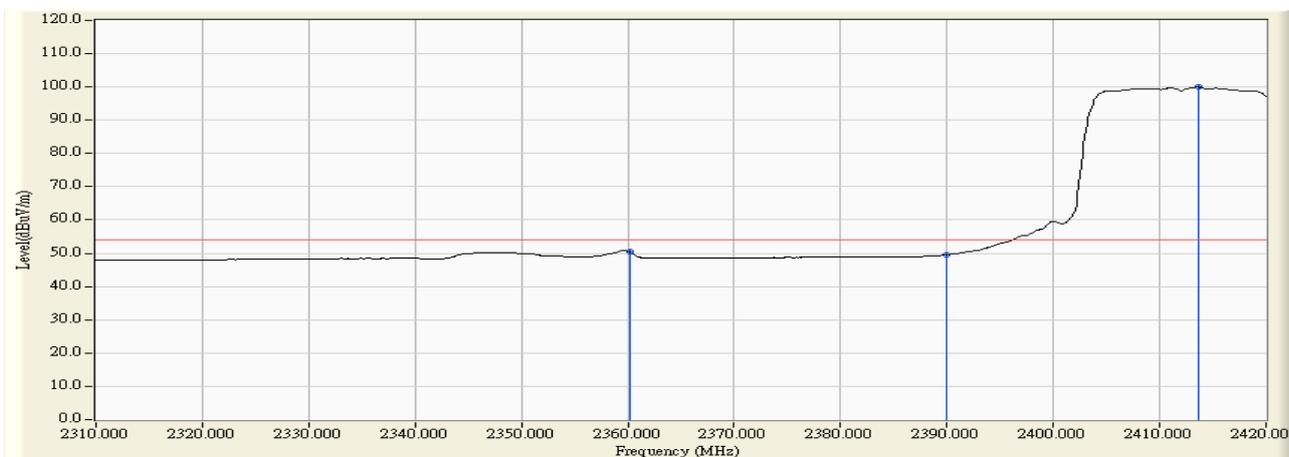
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.230 | 48.414 | -5.556 | 53.970 | AVERAGE |
| 2 | * | 2413.620 | 31.191 | 59.981 | 91.173 | N/A | N/A | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:40 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 1) |



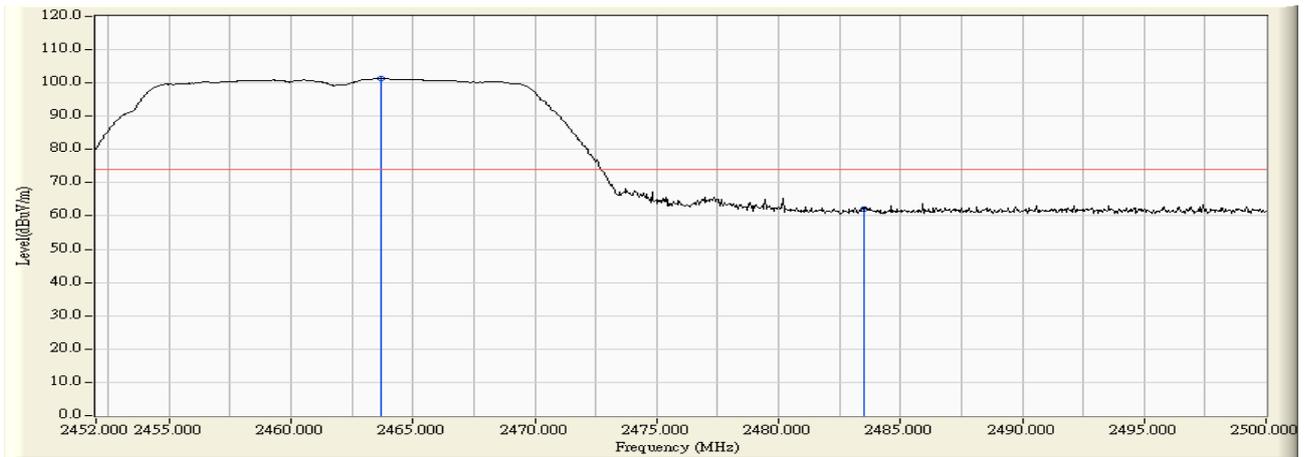
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 32.011 | 63.195 | -10.775 | 73.970 | PEAK |
| 2 | * | 2413.620 | 31.191 | 78.608 | 109.800 | N/A | N/A | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:40 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 1) |



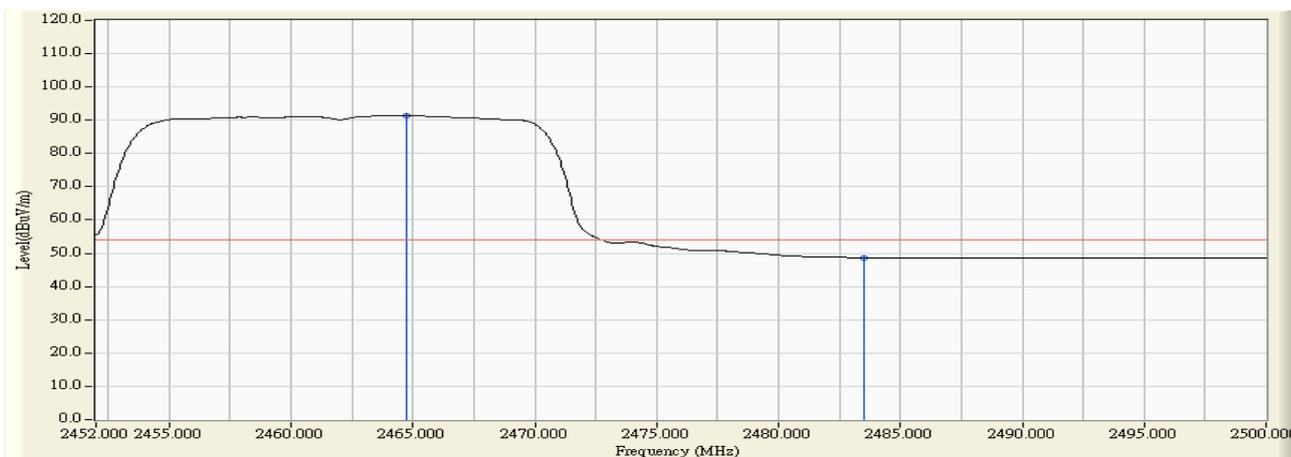
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2360.160 | 31.218 | 19.193 | 50.411 | -3.559 | 53.970 | AVERAGE |
| 2 | | 2390.000 | 31.184 | 18.426 | 49.610 | -4.360 | 53.970 | AVERAGE |
| 3 | * | 2413.620 | 31.191 | 68.747 | 99.939 | N/A | N/A | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:42 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 1) |



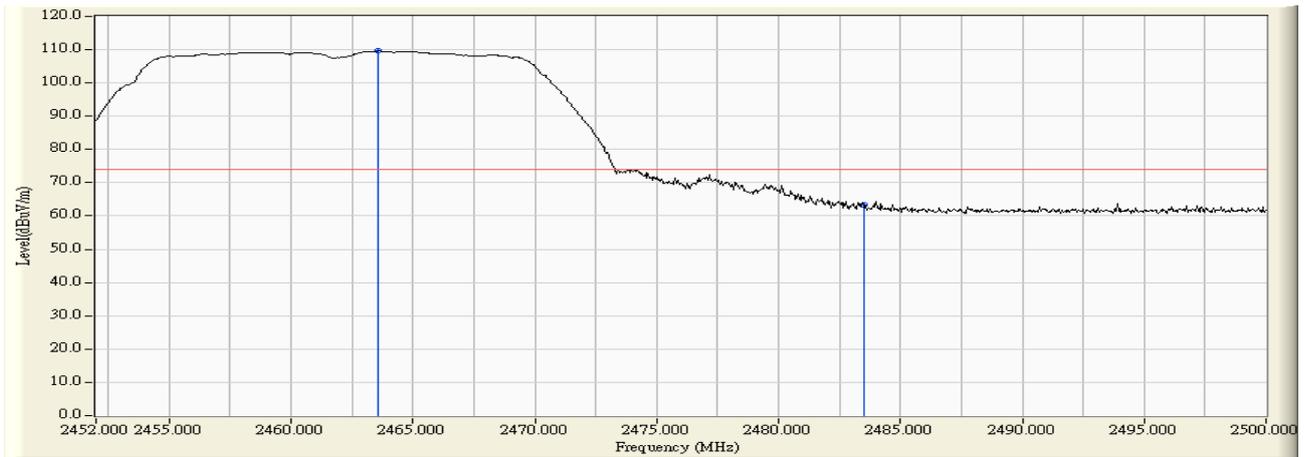
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.664 | 31.224 | 70.097 | 101.321 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 31.026 | 62.238 | -11.732 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:42 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 1) |



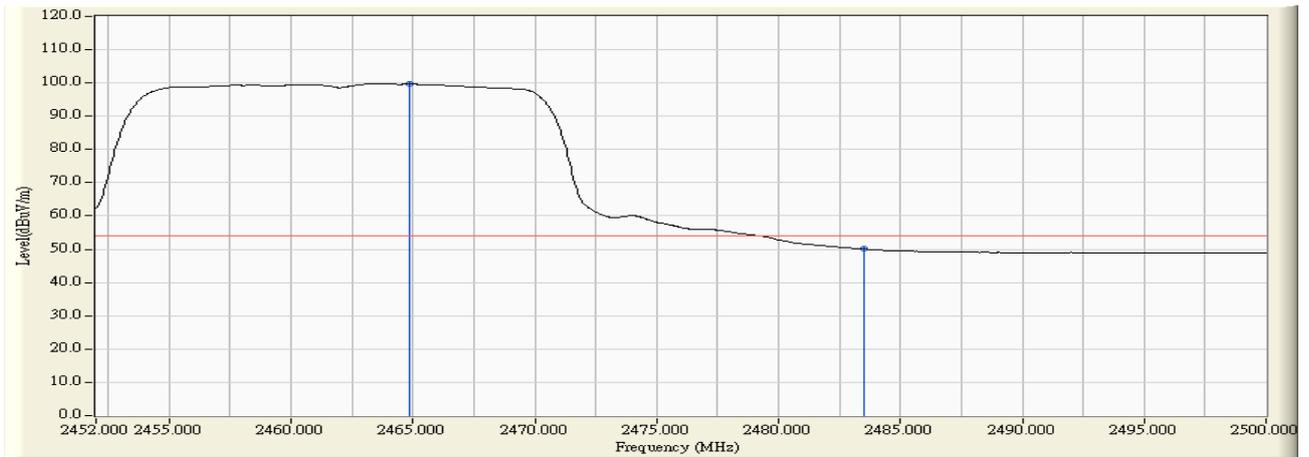
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.768 | 31.223 | 60.102 | 91.326 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.444 | 48.656 | -5.314 | 53.970 | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:43 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 1) |



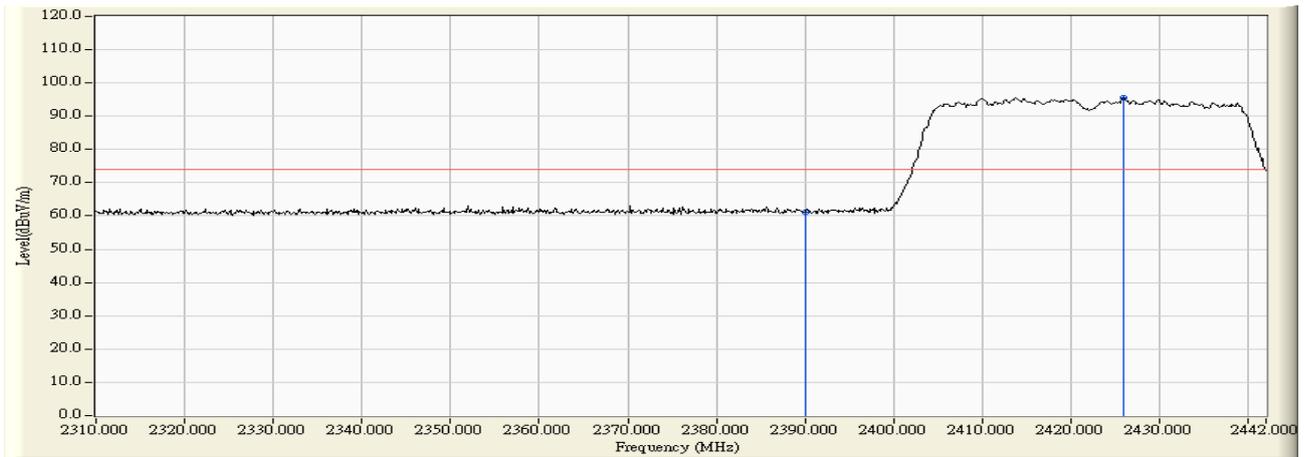
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.568 | 31.224 | 78.330 | 109.554 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 32.023 | 63.235 | -10.735 | 73.970 | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:44 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 1) |



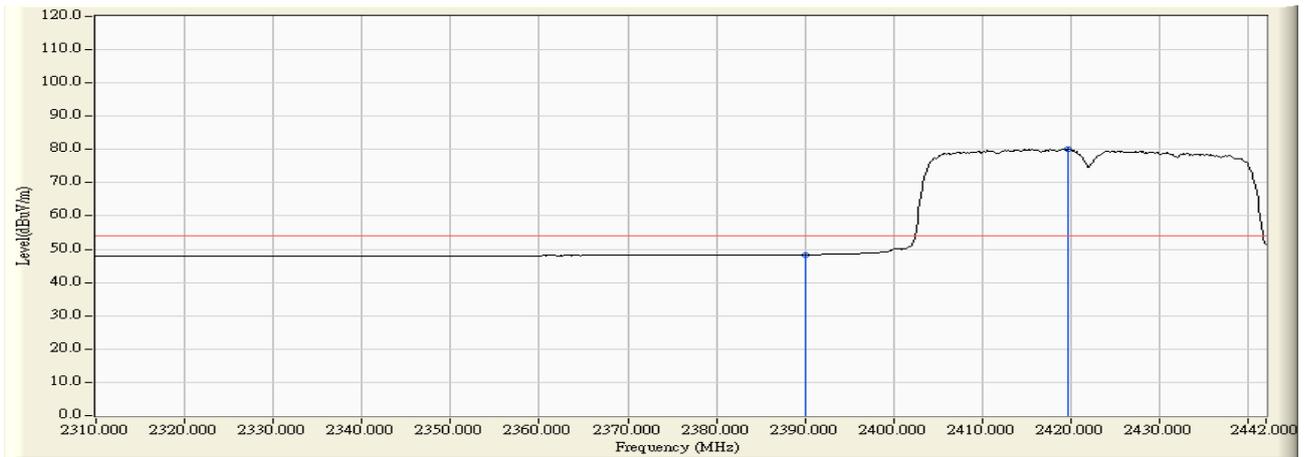
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2464.864 | 31.223 | 68.416 | 99.640 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 18.851 | 50.063 | -3.907 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:46 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 1) |



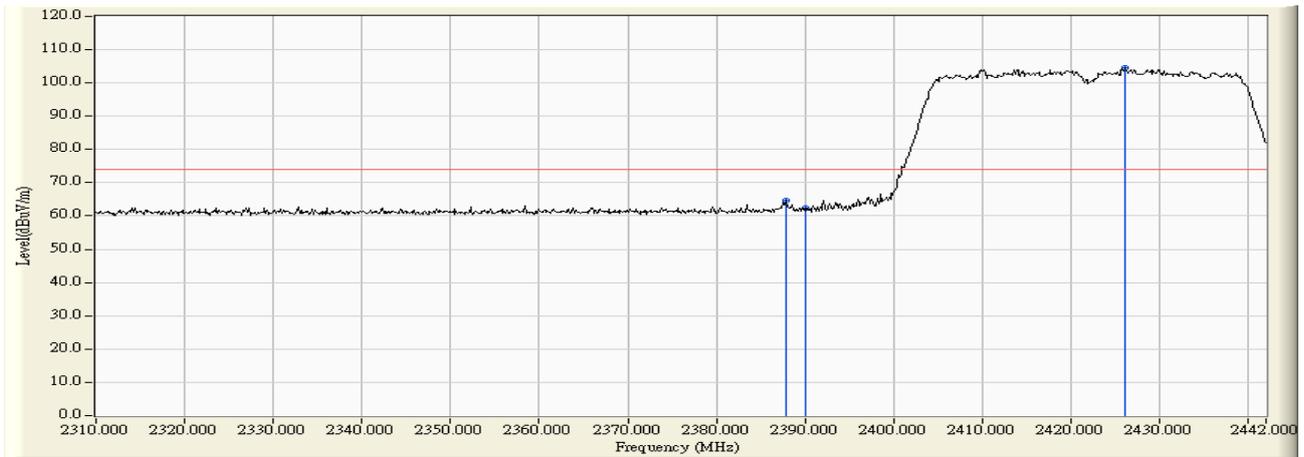
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 29.943 | 61.127 | -12.843 | 73.970 | PEAK |
| 2 | * | 2425.896 | 31.202 | 64.449 | 95.651 | N/A | N/A | PEAK |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:47 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 1) |



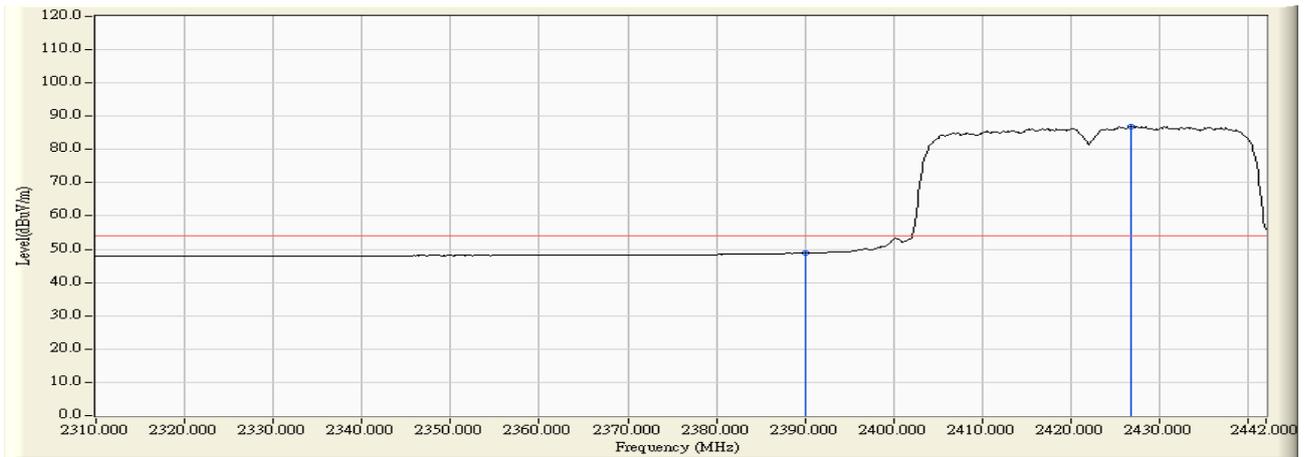
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.174 | 48.358 | -5.612 | 53.970 | AVERAGE |
| 2 | * | 2419.692 | 31.197 | 48.989 | 80.186 | N/A | N/A | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:48 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 1) |



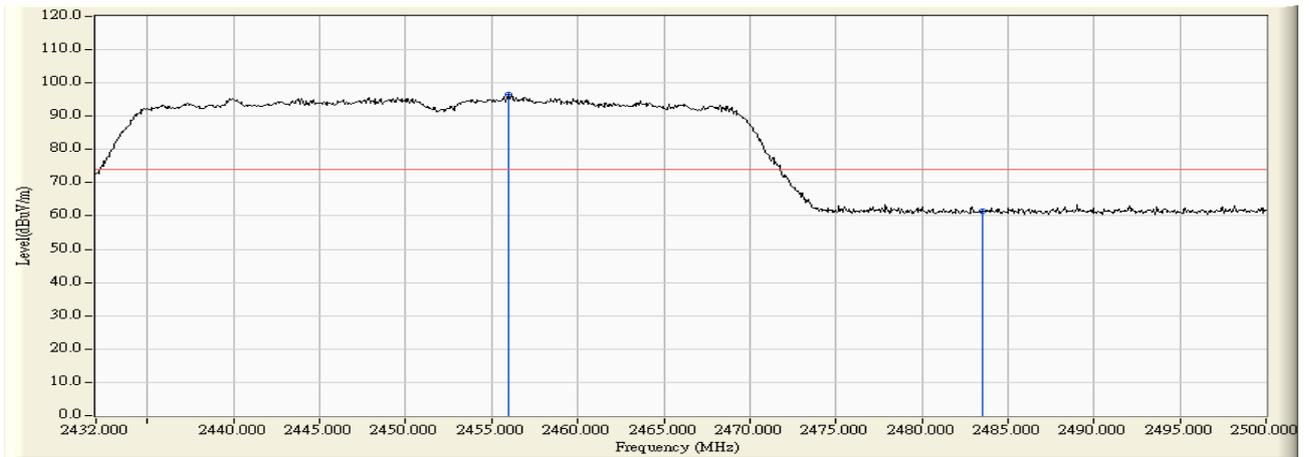
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2387.880 | 31.187 | 33.412 | 64.599 | -9.371 | 73.970 | PEAK |
| 2 | | 2390.000 | 31.184 | 31.148 | 62.332 | -11.638 | 73.970 | PEAK |
| 3 | * | 2426.160 | 31.202 | 73.278 | 104.480 | N/A | N/A | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:49 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 1) |



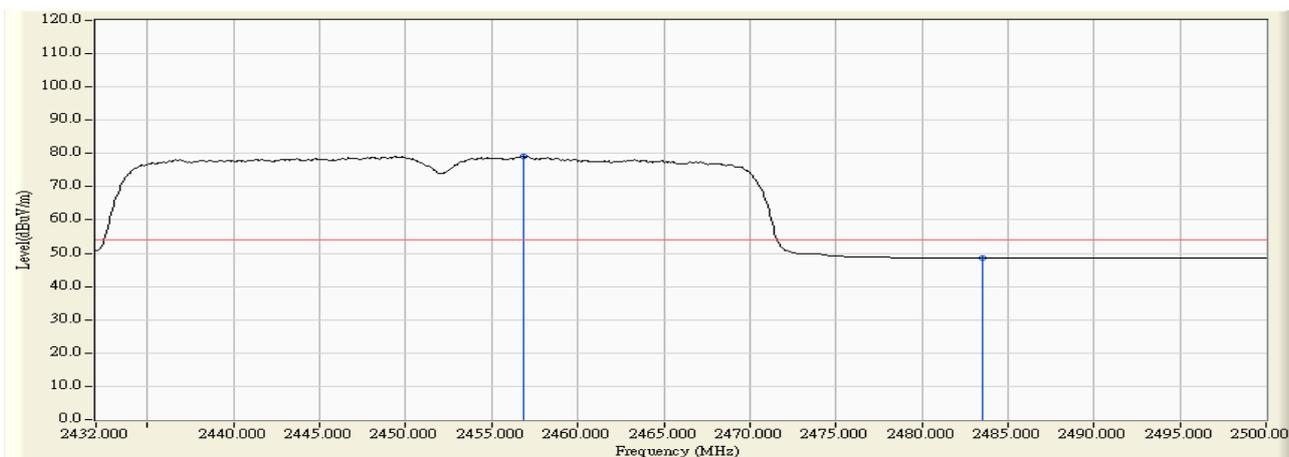
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.623 | 48.807 | -5.163 | 53.970 | AVERAGE |
| 2 | * | 2426.820 | 31.203 | 55.783 | 86.986 | N/A | N/A | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:51 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 1) |



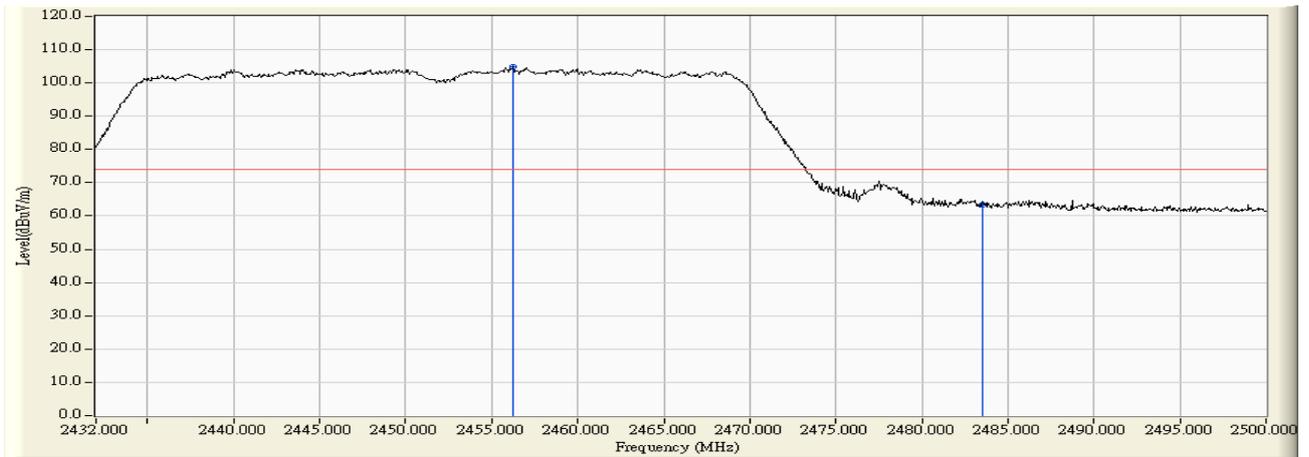
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2455.936 | 31.223 | 65.160 | 96.383 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.105 | 61.317 | -12.653 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:51 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 1) |



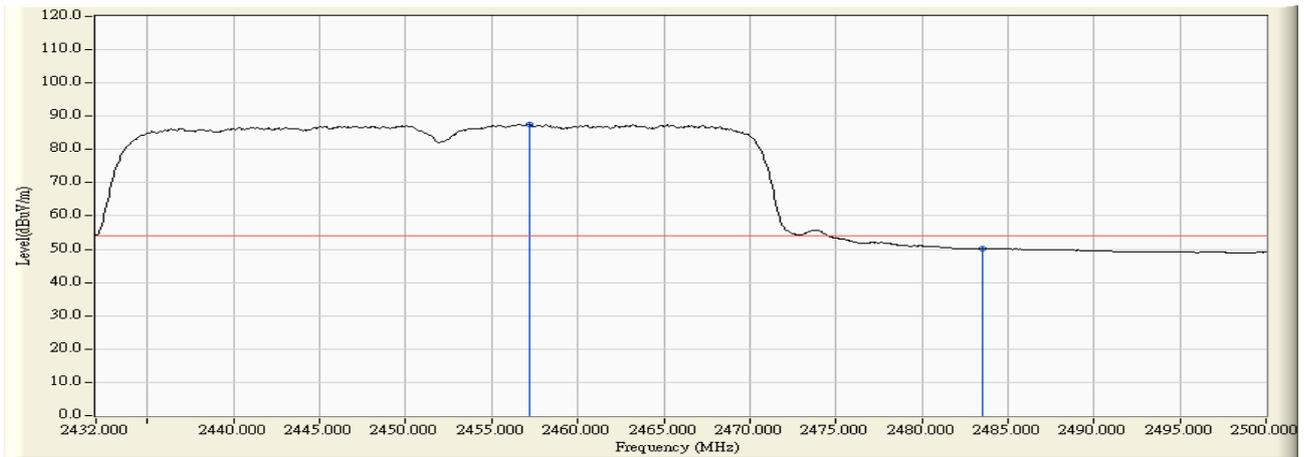
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2456.820 | 31.223 | 47.919 | 79.142 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.342 | 48.554 | -5.416 | 53.970 | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:53 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 1) |



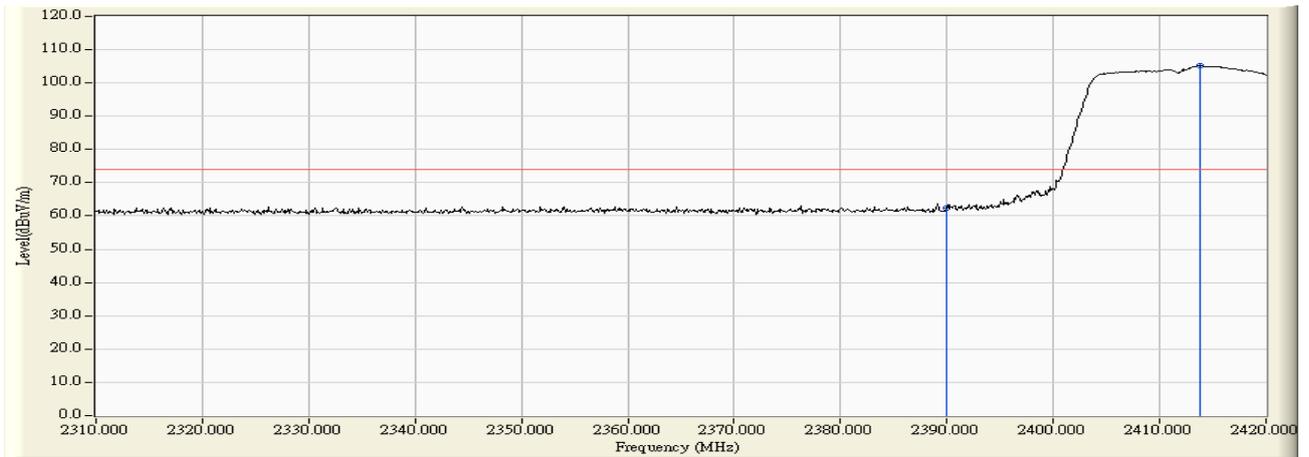
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2456.276 | 31.223 | 73.521 | 104.744 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 32.196 | 63.408 | -10.562 | 73.970 | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 20:53 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 1) |



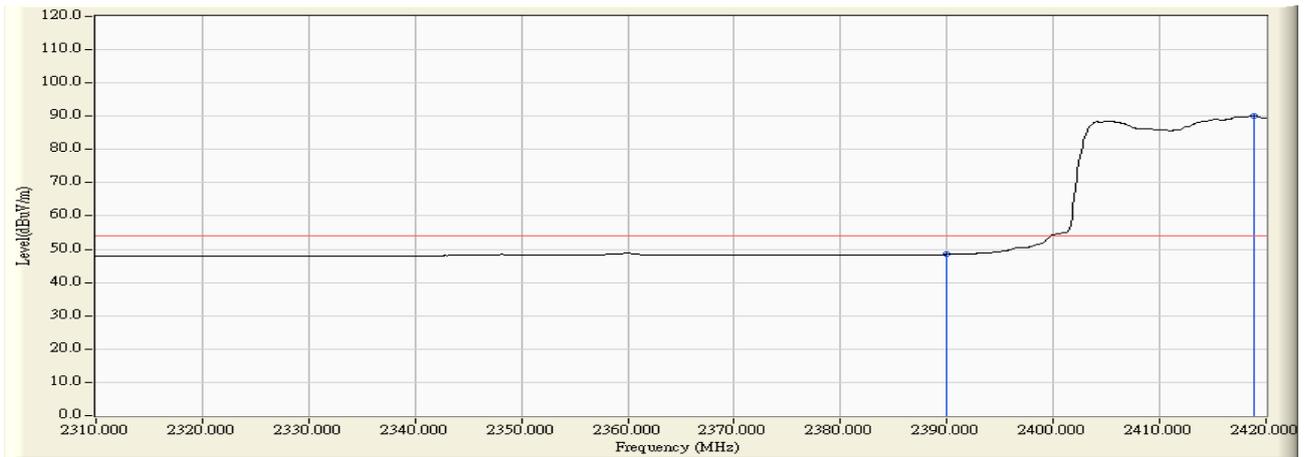
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2457.160 | 31.223 | 56.410 | 87.633 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 18.963 | 50.175 | -3.795 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:03 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0+1) |



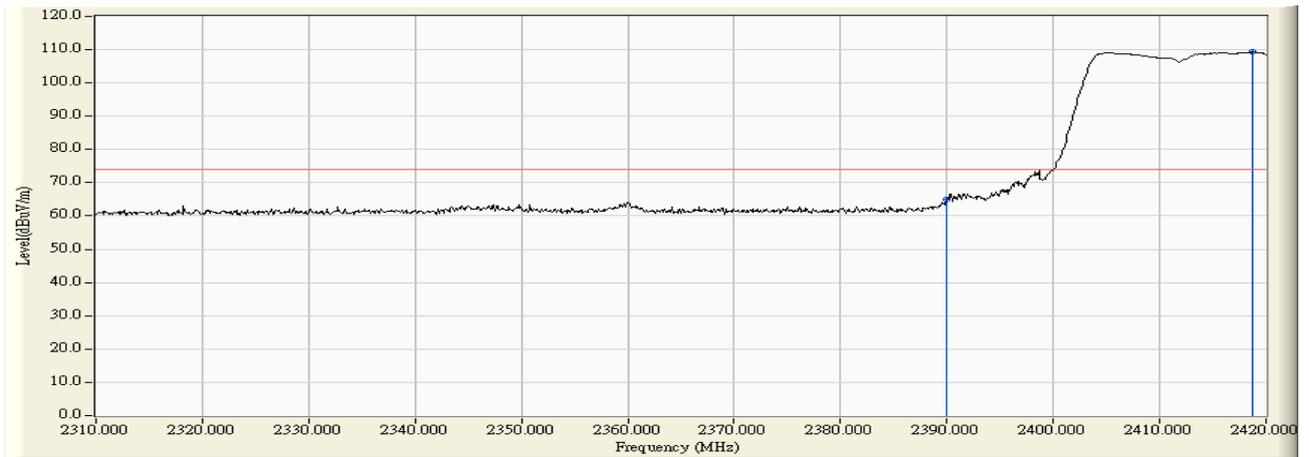
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 31.239 | 62.423 | -11.547 | 73.970 | PEAK |
| 2 | * | 2413.730 | 31.191 | 73.984 | 105.176 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:03 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0+1) |



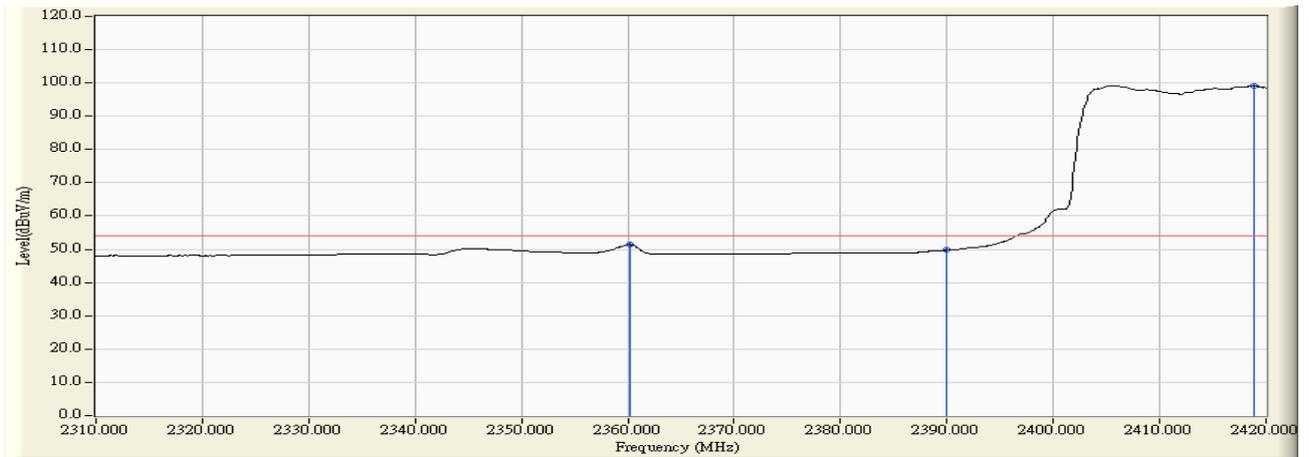
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.251 | 48.435 | -5.535 | 53.970 | AVERAGE |
| 2 | * | 2418.900 | 31.196 | 58.929 | 90.125 | N/A | N/A | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:04 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0+1) |



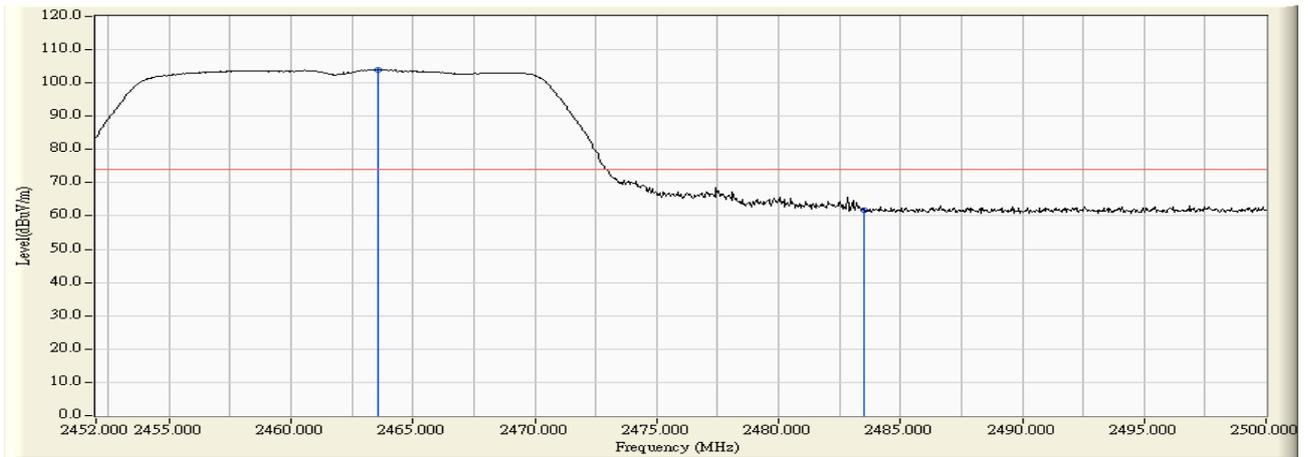
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 33.758 | 64.942 | -9.028 | 73.970 | PEAK |
| 2 | * | 2418.790 | 31.196 | 78.044 | 109.240 | N/A | N/A | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:05 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2412MHz by 802.11n(20MHz)(Chain 0+1) |



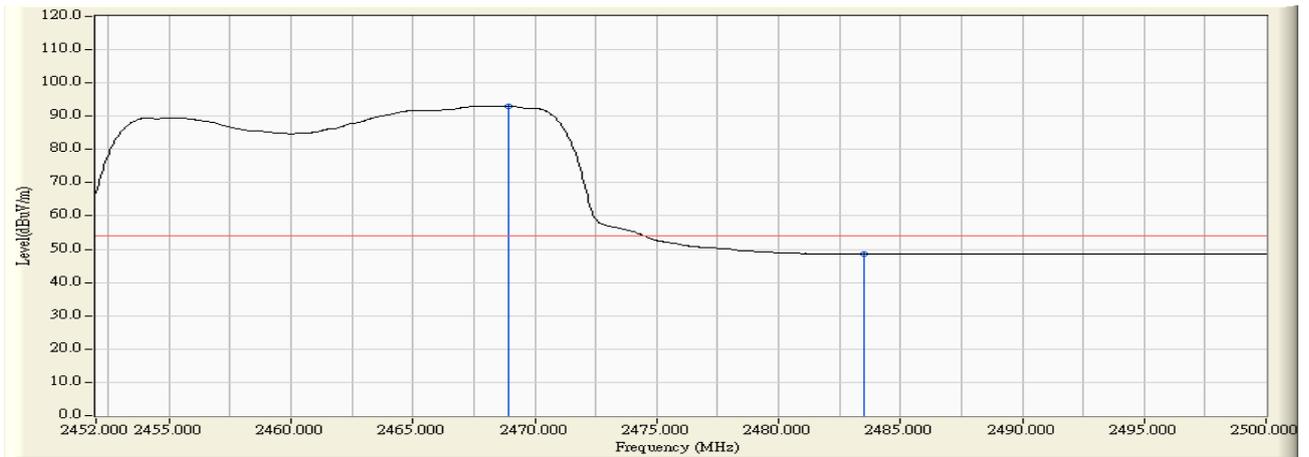
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2360.160 | 31.218 | 20.124 | 51.342 | -2.628 | 53.970 | AVERAGE |
| 2 | | 2390.000 | 31.184 | 18.588 | 49.772 | -4.198 | 53.970 | AVERAGE |
| 3 | * | 2418.900 | 31.196 | 68.034 | 99.230 | N/A | N/A | AVERAGE |

| | |
|--|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:07 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0+1) |



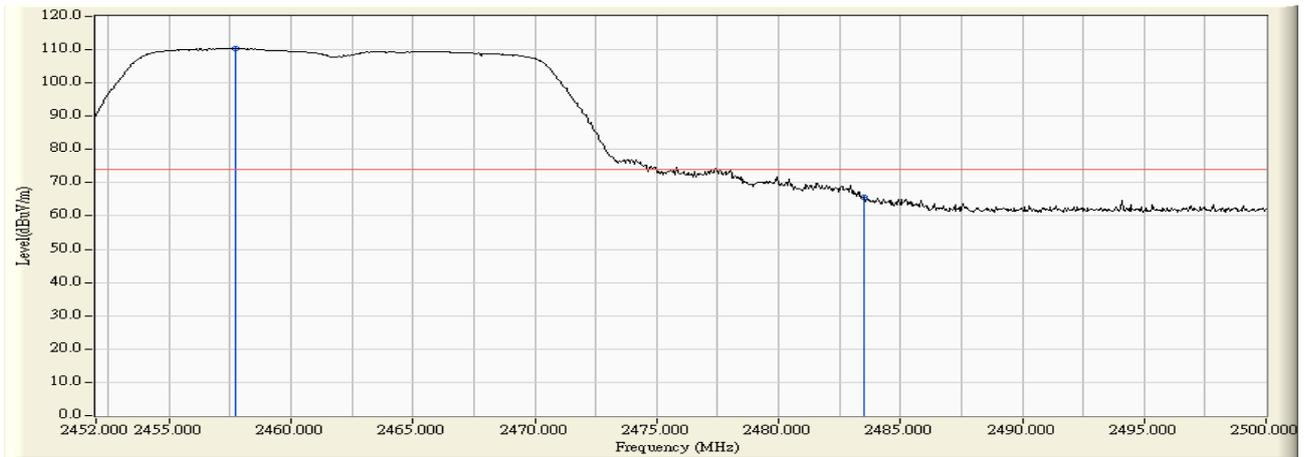
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2463.568 | 31.224 | 72.815 | 104.039 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.710 | 61.922 | -12.048 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:07 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0+1) |



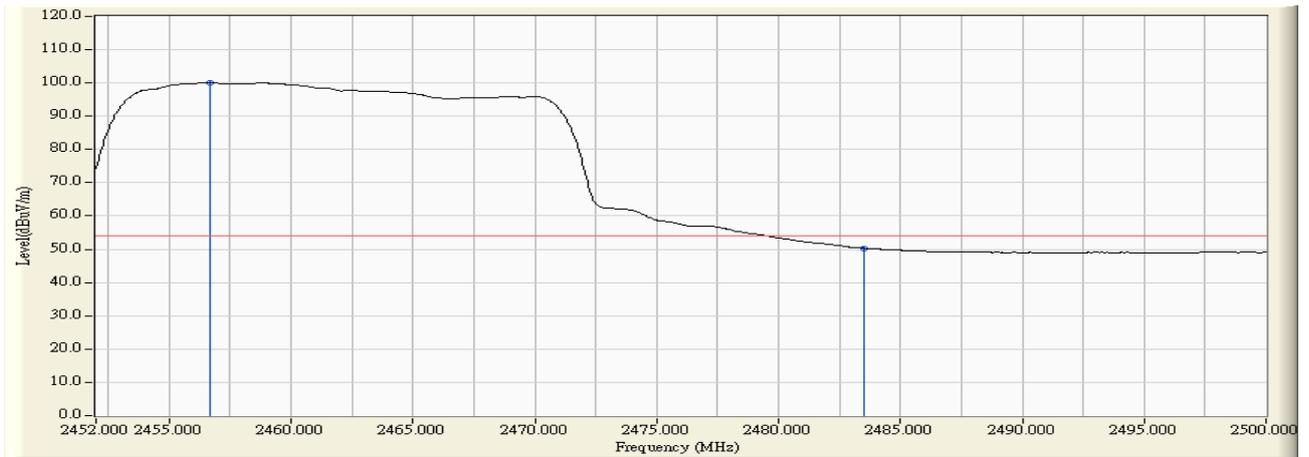
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2468.896 | 31.221 | 61.853 | 93.074 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.449 | 48.661 | -5.309 | 53.970 | AVERAGE |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:08 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0+1) |



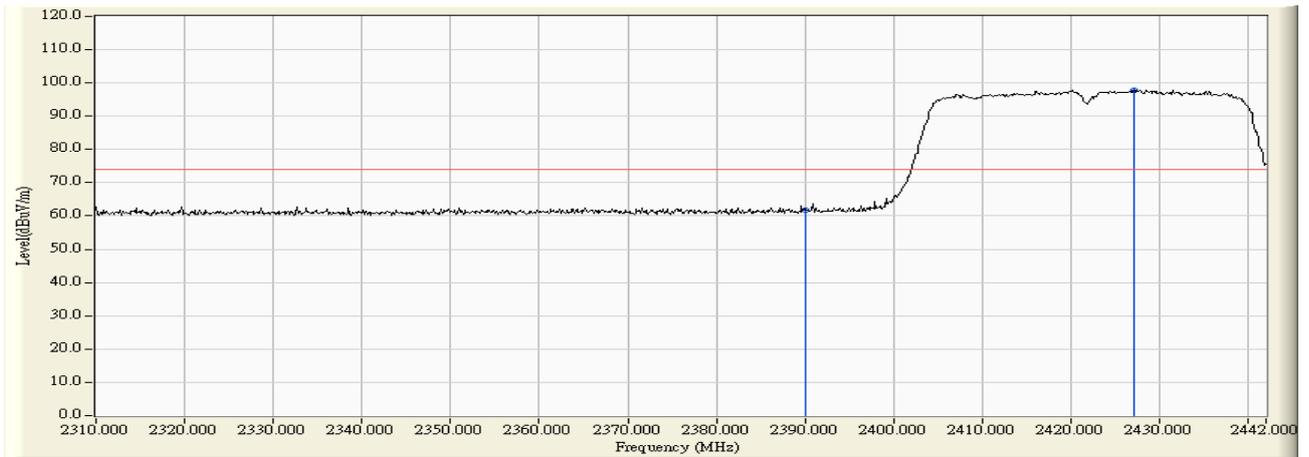
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2457.712 | 31.224 | 79.124 | 110.348 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 34.501 | 65.713 | -8.257 | 73.970 | PEAK |

| | |
|---|---|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:09 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 3:Transmit at channel 2462MHz by 802.11n(20MHz)(Chain 0+1) |



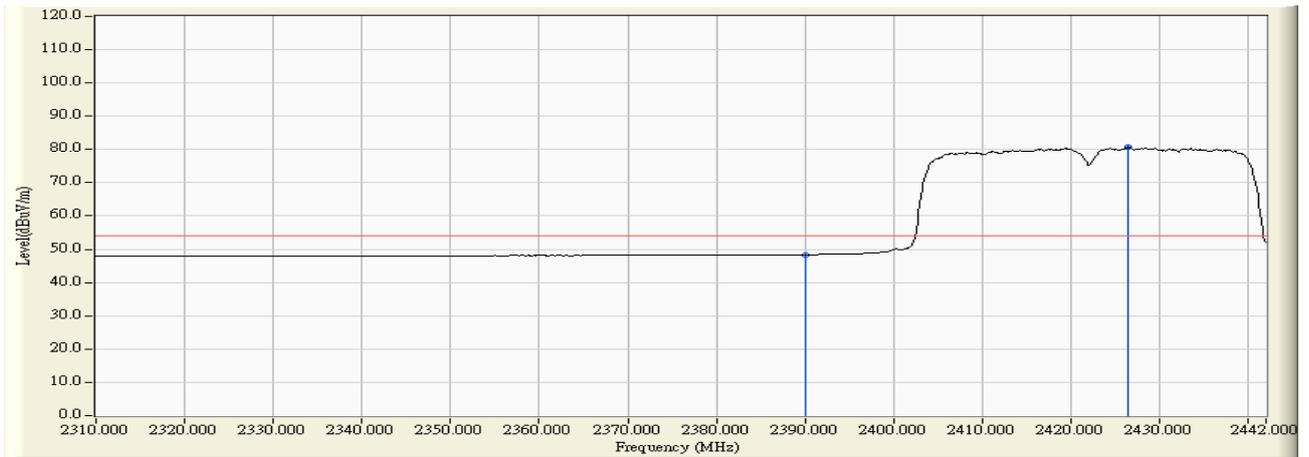
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2456.704 | 31.223 | 68.833 | 100.056 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 19.119 | 50.331 | -3.639 | 53.970 | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:11 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0+1) |



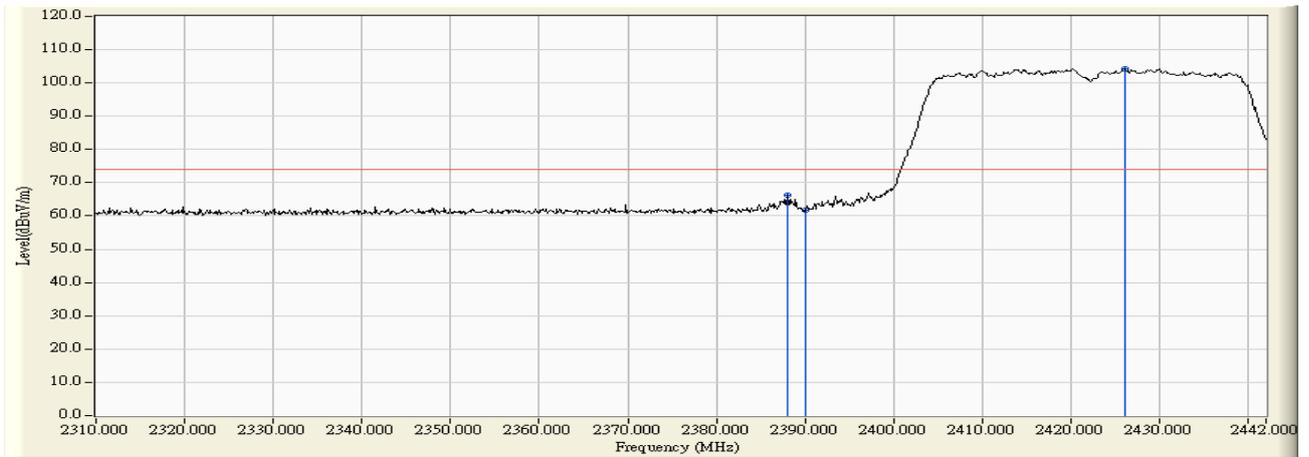
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 30.535 | 61.719 | -12.251 | 73.970 | PEAK |
| 2 | * | 2427.084 | 31.204 | 66.686 | 97.889 | N/A | N/A | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:12 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0+1) |



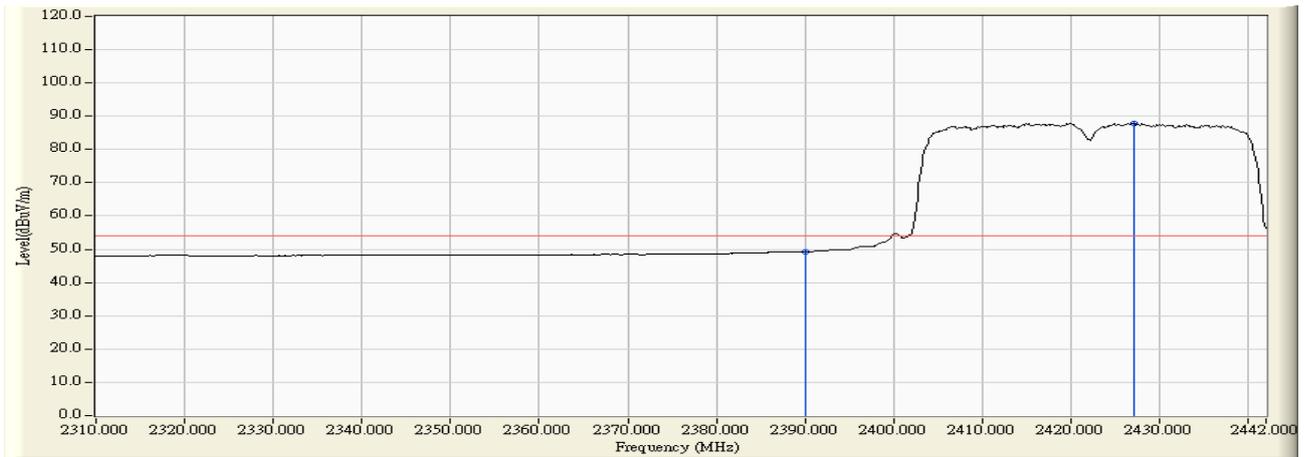
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 17.220 | 48.404 | -5.566 | 53.970 | AVERAGE |
| 2 | * | 2426.424 | 31.203 | 49.431 | 80.634 | N/A | N/A | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:13 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0+1) |



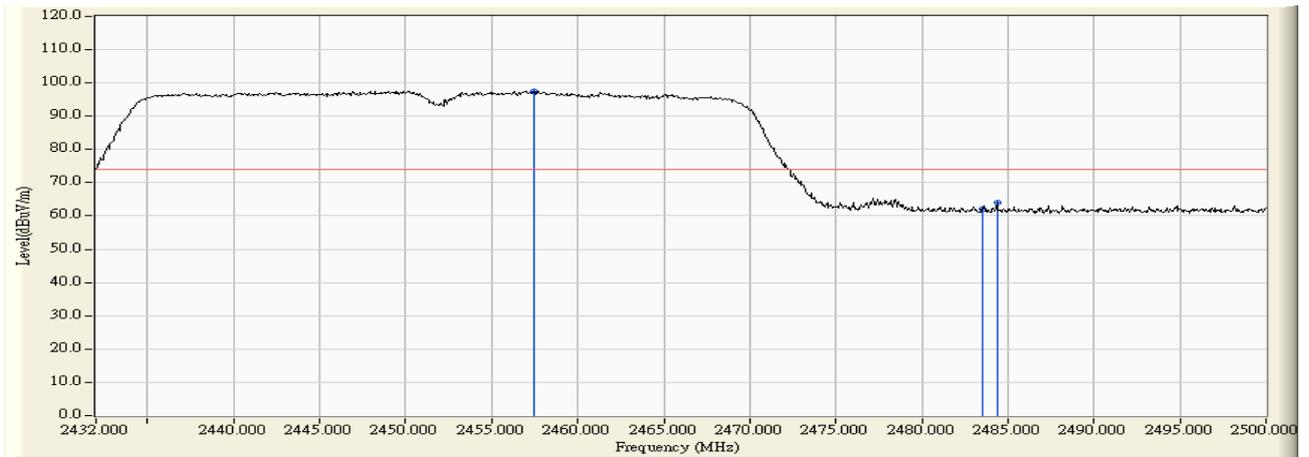
| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2388.012 | 31.187 | 35.068 | 66.254 | -7.716 | 73.970 | PEAK |
| 2 | 2390.000 | 31.184 | 30.677 | 61.861 | -12.109 | 73.970 | PEAK |
| 3 | * 2426.028 | 31.202 | 73.074 | 104.276 | N/A | N/A | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:13 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2422MHz by 802.11n(40MHz)(Chain 0+1) |



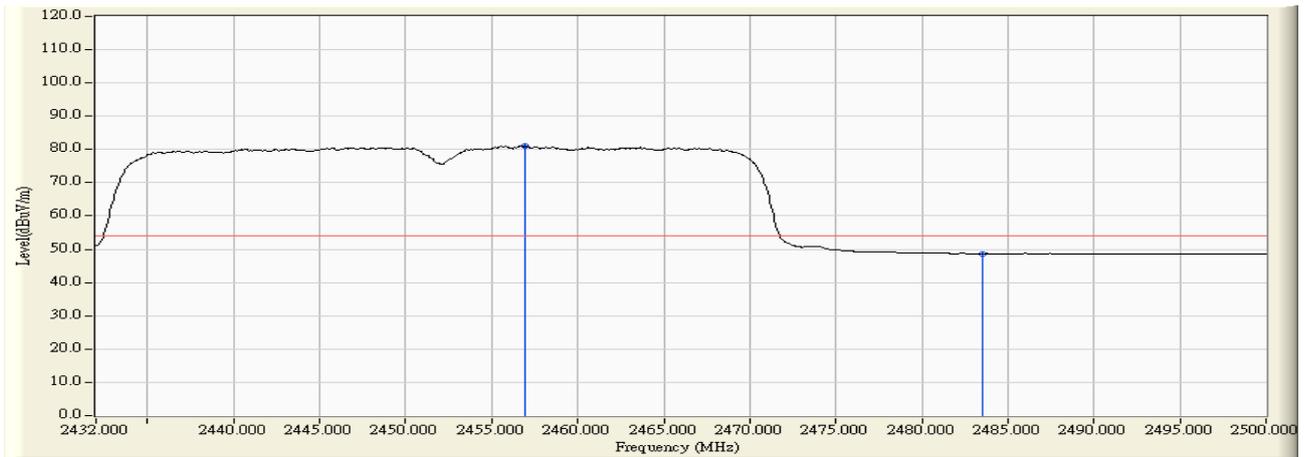
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2390.000 | 31.184 | 18.083 | 49.267 | -4.703 | 53.970 | AVERAGE |
| 2 | * | 2427.084 | 31.204 | 56.706 | 87.909 | N/A | N/A | AVERAGE |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:16 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0+1) |



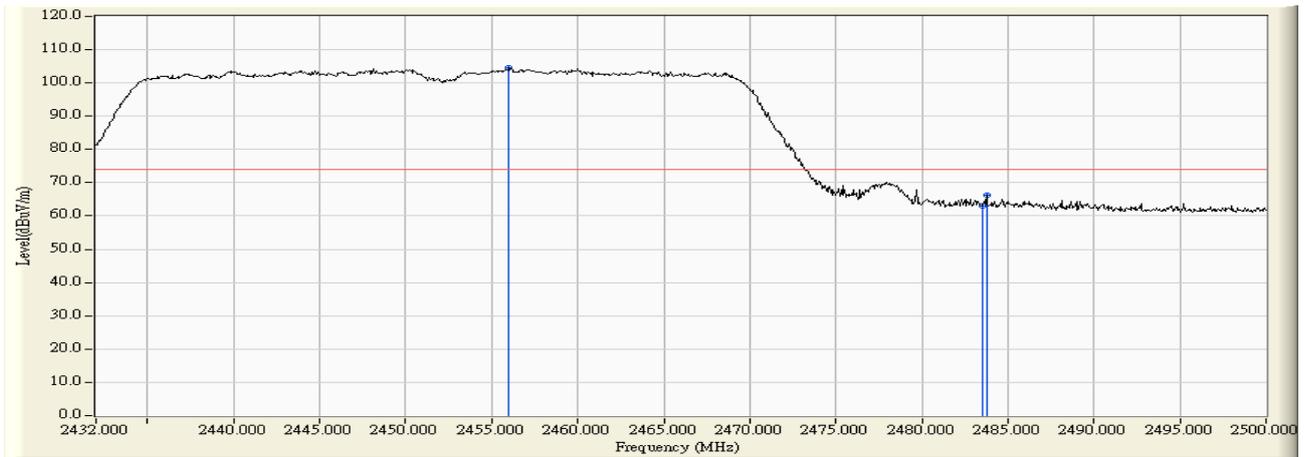
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2457.432 | 31.223 | 66.335 | 97.558 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 30.768 | 61.980 | -11.990 | 73.970 | PEAK |
| 3 | | 2484.360 | 31.212 | 32.901 | 64.112 | -9.858 | 73.970 | PEAK |

| | |
|---|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:16 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0+1) |



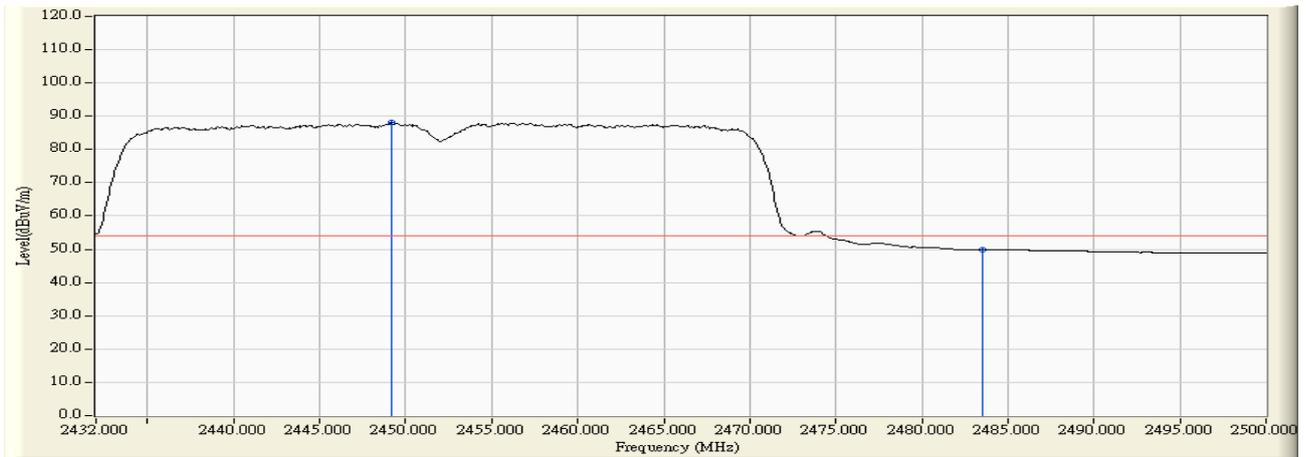
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2456.956 | 31.223 | 49.803 | 81.026 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 17.498 | 48.710 | -5.260 | 53.970 | AVERAGE |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:17 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0+1) |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2456.004 | 31.223 | 73.307 | 104.530 | N/A | N/A | PEAK |
| 2 | | 2483.500 | 31.212 | 31.837 | 63.049 | -10.921 | 73.970 | PEAK |
| 3 | | 2483.748 | 31.212 | 35.109 | 66.321 | -7.649 | 73.970 | PEAK |

| | |
|--|--|
| Engineer : Jame | |
| Site : AC-2 (3m Semi-Anechoic Chamber) | Time : 2009/08/17 - 21:18 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 0 |
| Probe : 9120D_499(1-18GHz) - VERTICAL | Power : AC 120V/60Hz |
| EUT : Home Gateway | Note : Mode 4:Transmit at channel 2452MHz by 802.11n(40MHz)(Chain 0+1) |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2449.204 | 31.220 | 56.805 | 88.025 | N/A | N/A | AVERAGE |
| 2 | | 2483.500 | 31.212 | 18.708 | 49.920 | -4.050 | 53.970 | AVERAGE |

7. Operation Frequency Range of 20dB Bandwidth

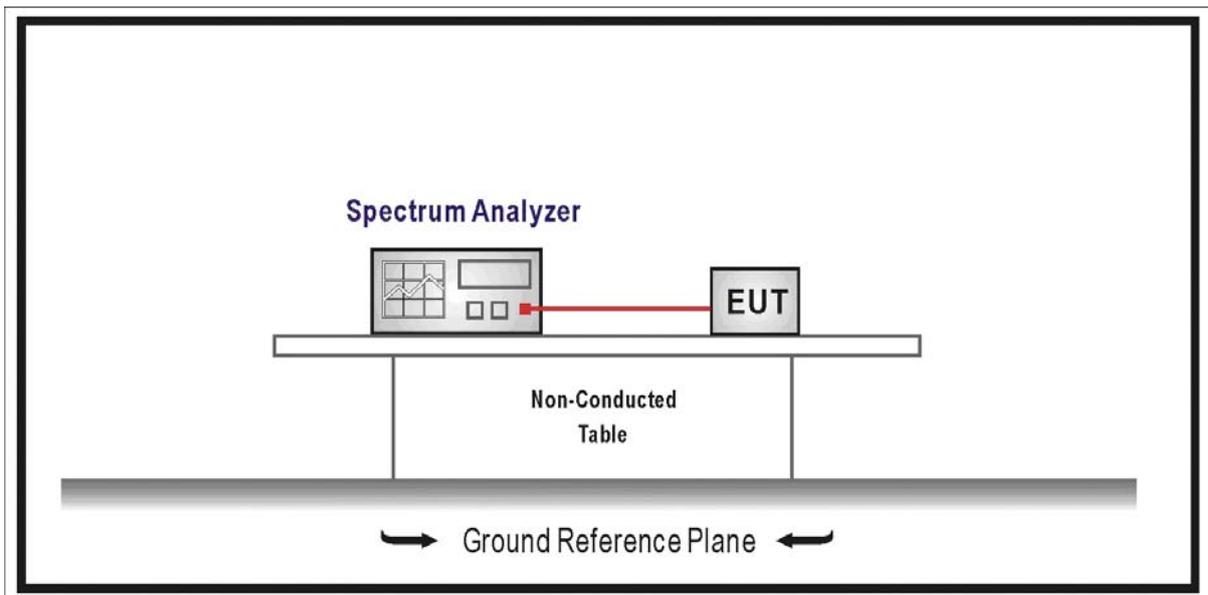
7.1. Test Equipment

Operation Frequency Range of 20dB Bandwidth / AC-6

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|----------|------------|-------------|
| Spectrum Analyzer | Agilent | E4446A | MY45300103 | 2009/06/11 |
| Coaxial Cable | Huber+Suhner | AC4-RF | 09 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH007 | 2009/03/31s |

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

7.2. Test Setup



7.3. Limit

20 dB bandwidth of the emission is contained within the operation frequency band.

7.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

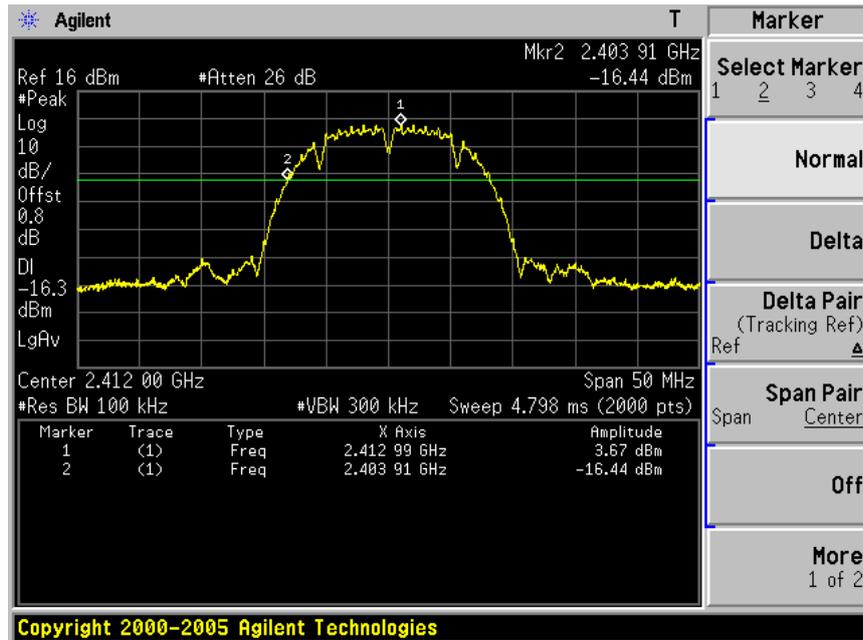
7.5. Uncertainty

The measurement uncertainty is defined as ± 1 kHz

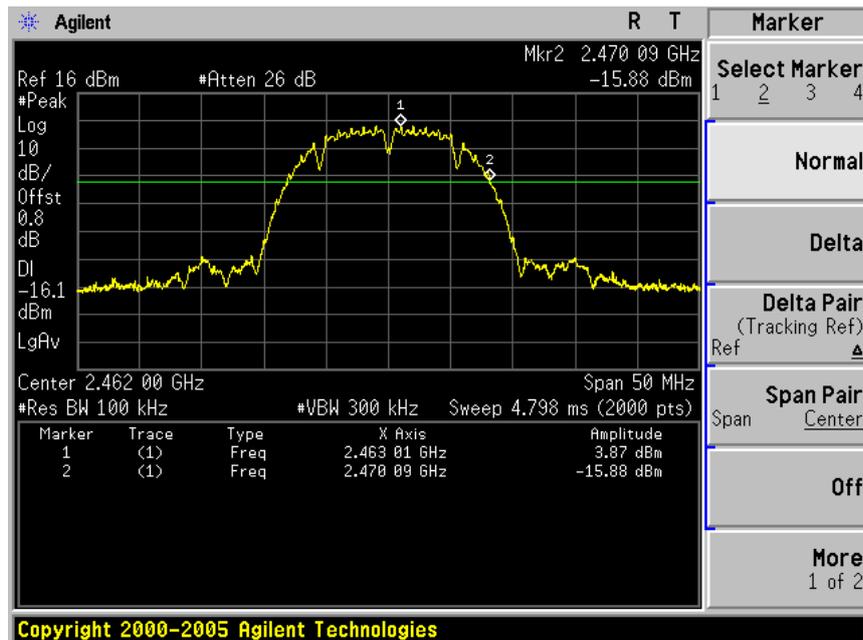
7.6. Test Result

| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit by 802.11b (Chain 0) |

Channel 01 (2412MHz)

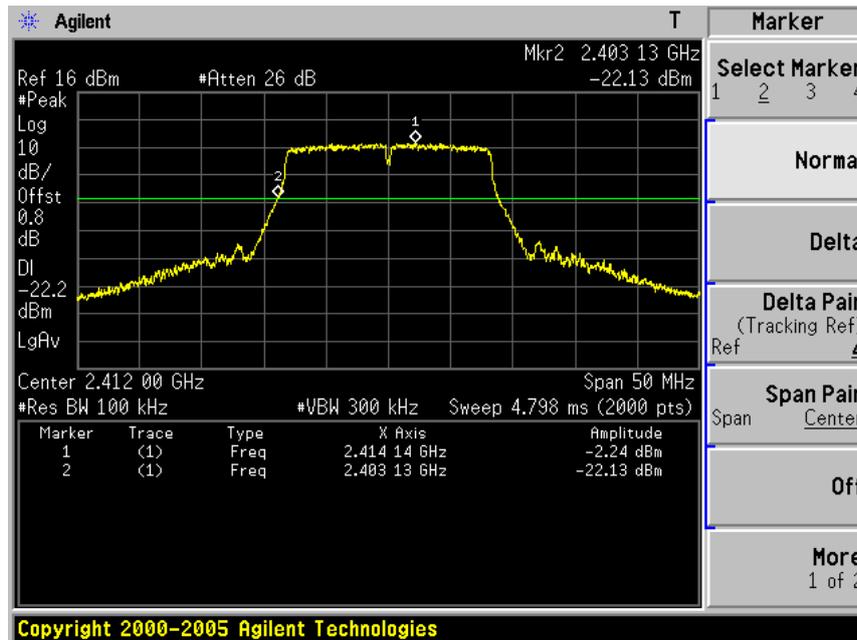


Channel 11 (2462MHz)

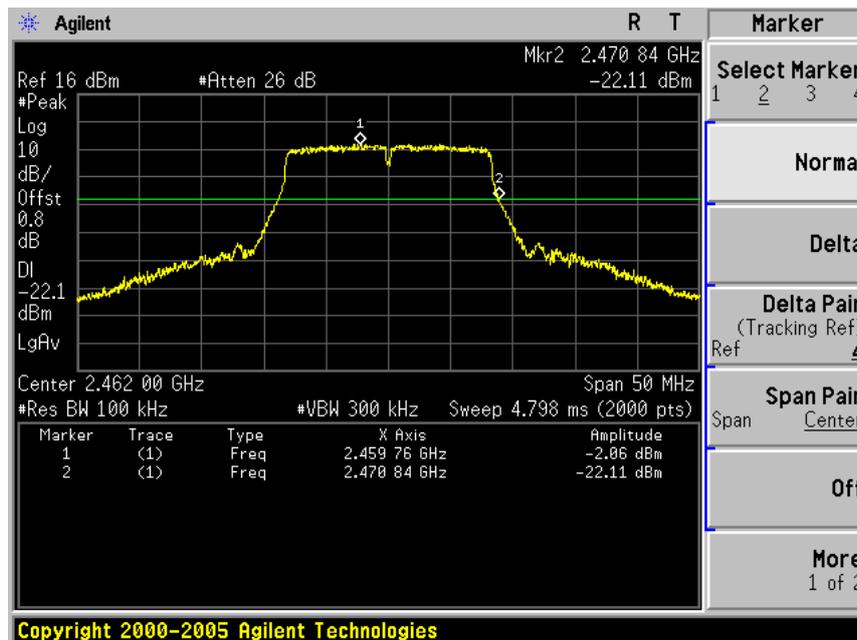


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit by 802.11g (Chain 0) |

Channel 01 (2412MHz)

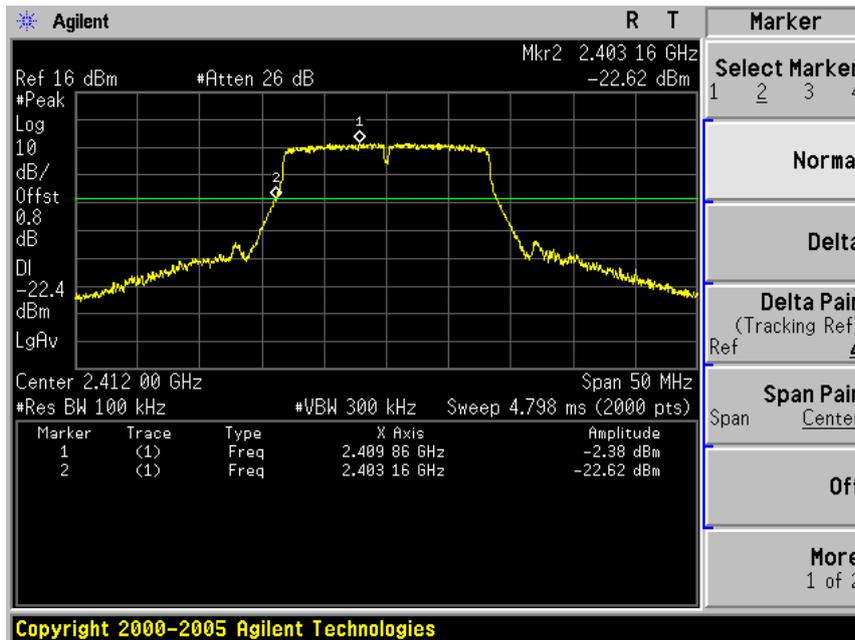


Channel 11 (2462MHz)

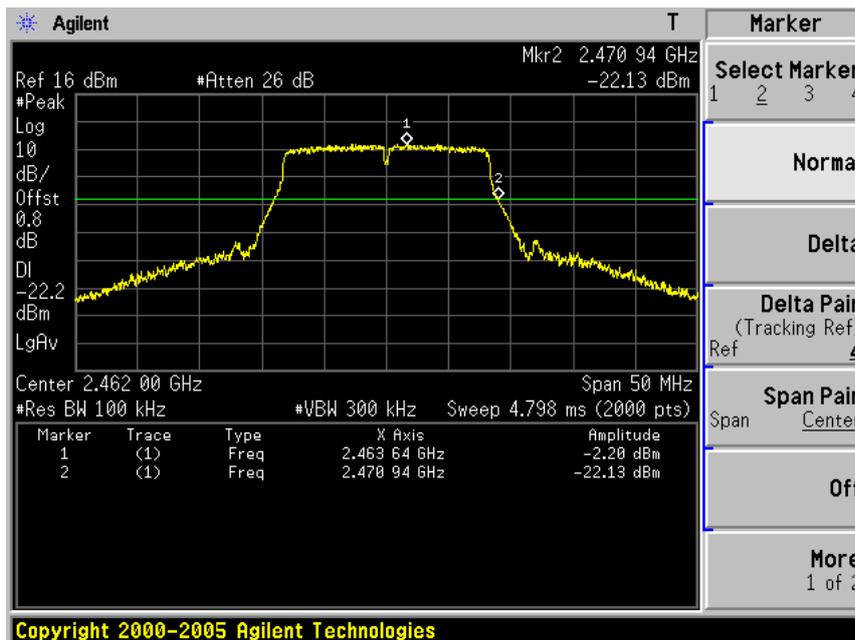


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 0) |

Channel 01 (2412MHz)

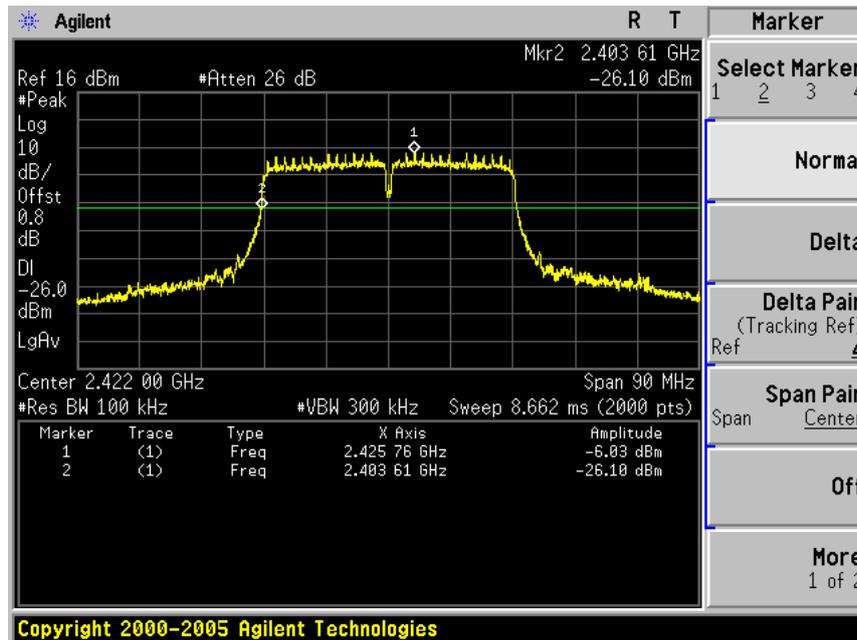


Channel 11 (2462MHz)

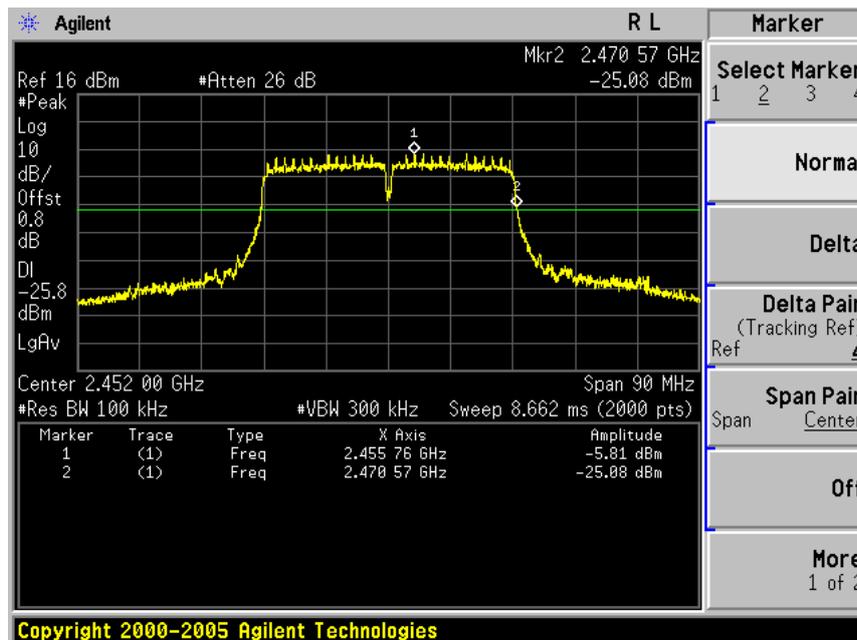


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 0) |

Channel 03 (2422MHz)

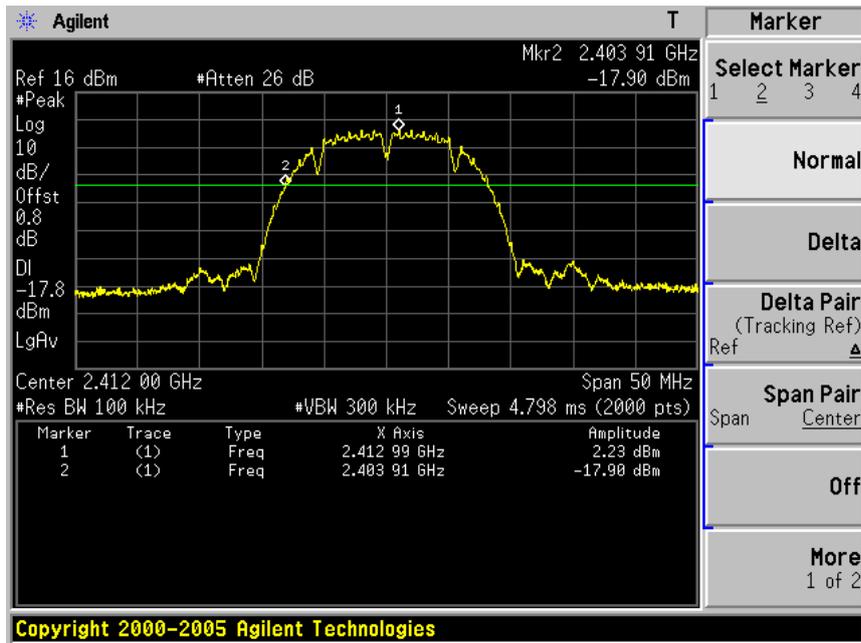


Channel 09 (2452MHz)

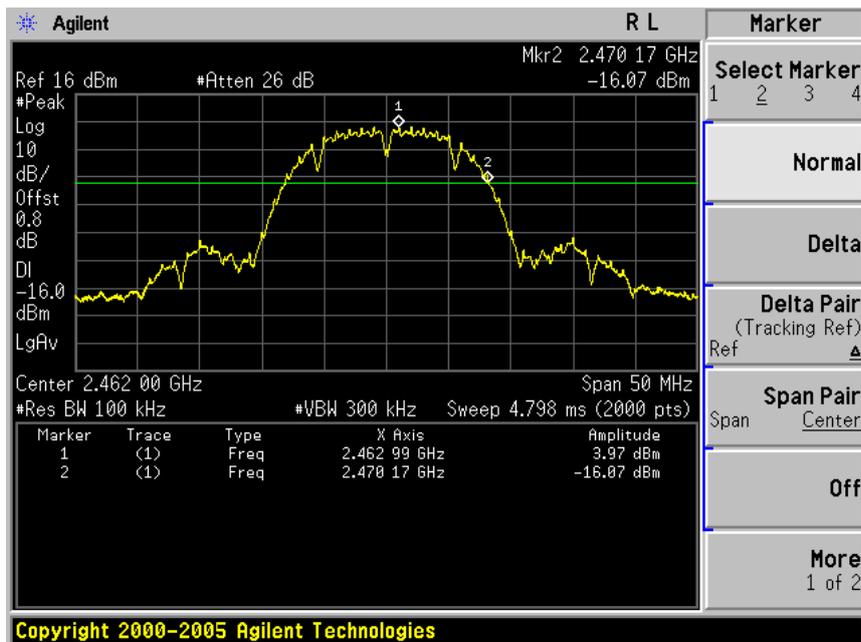


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit at 802.11b (Chain 1) |

Channel 01 (2412MHz)

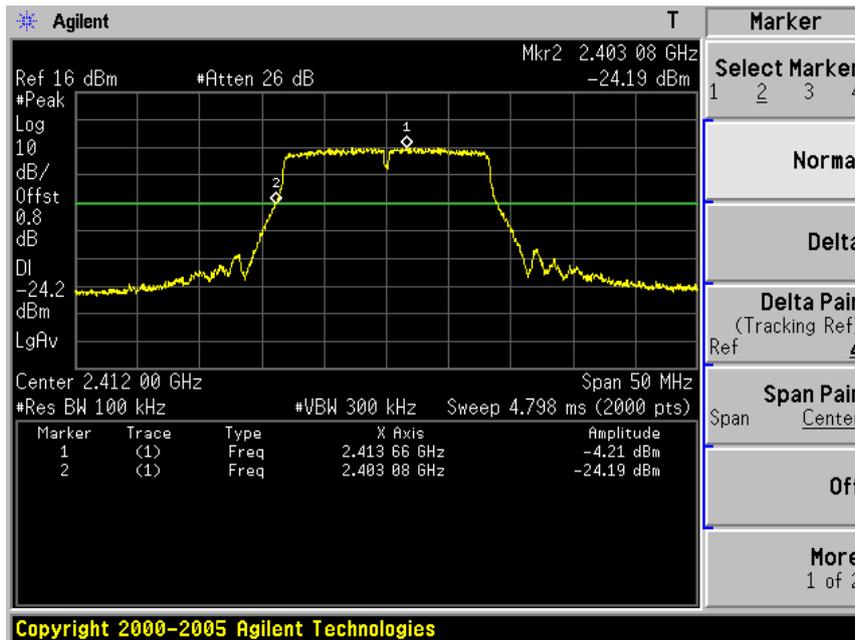


Channel 11 (2462MHz)

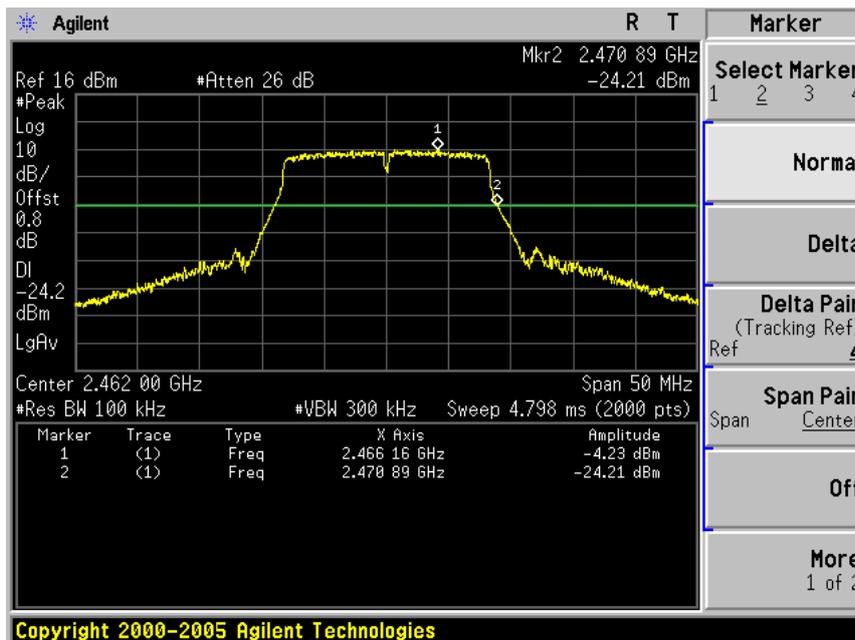


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit at 802.11g (Chain 1) |

Channel 01 (2412MHz)

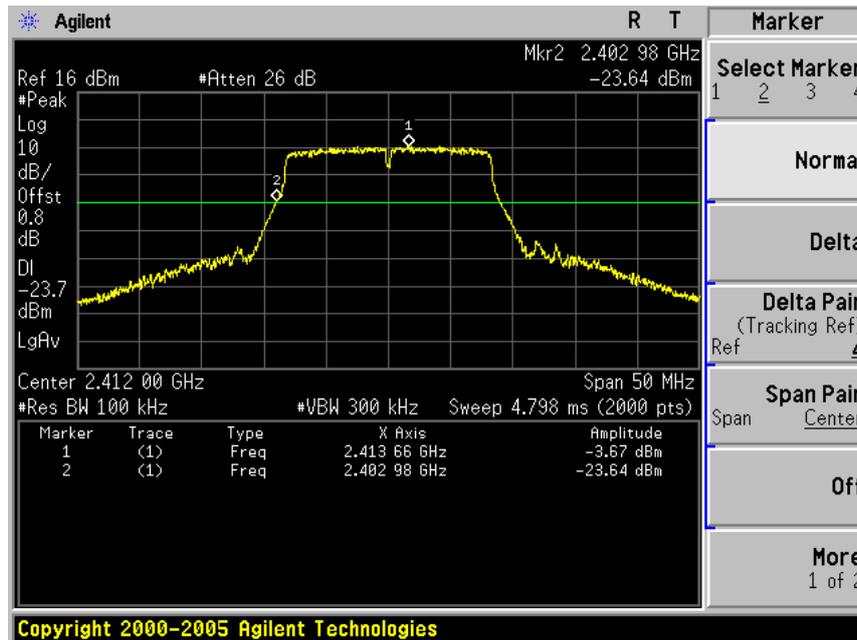


Channel 11 (2462MHz)

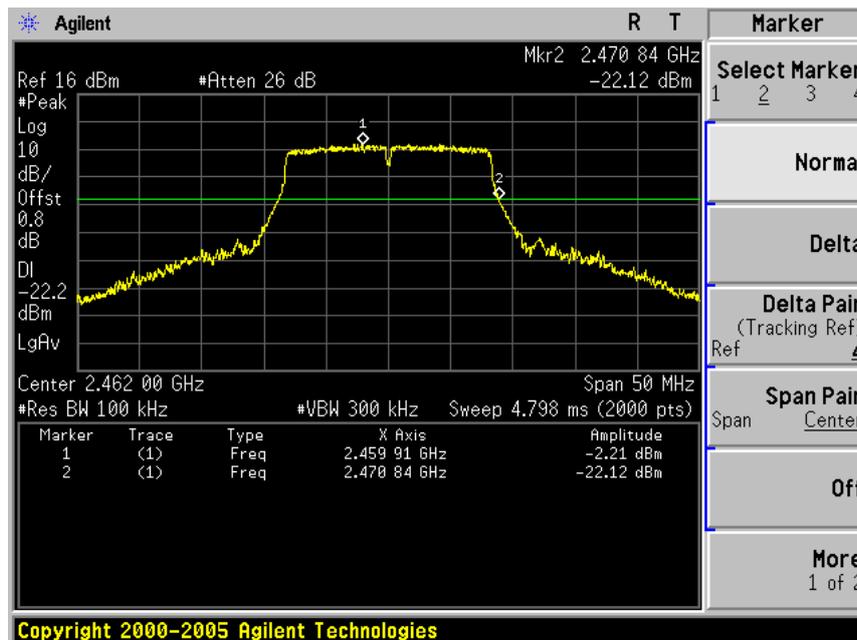


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 1) |

Channel 01 (2412MHz)

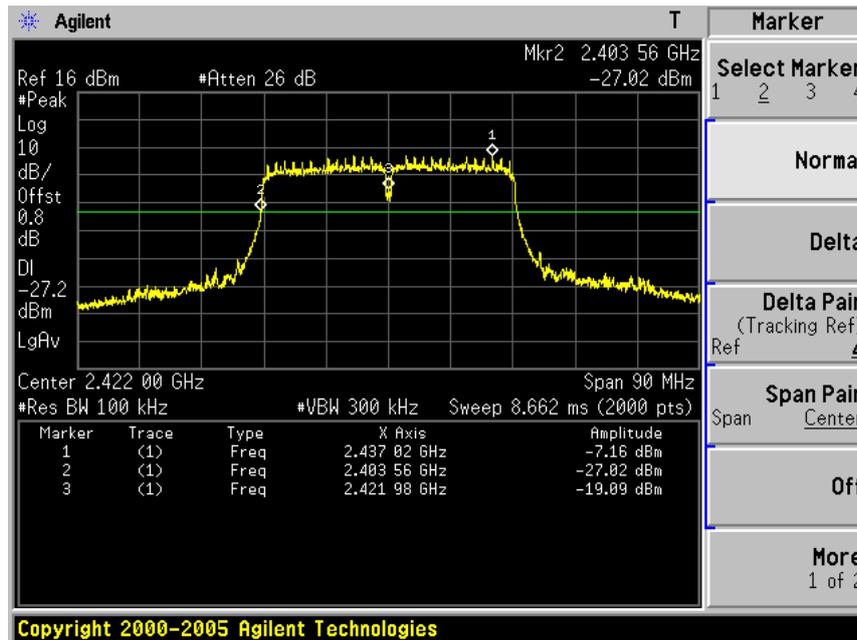


Channel 11 (2462MHz)

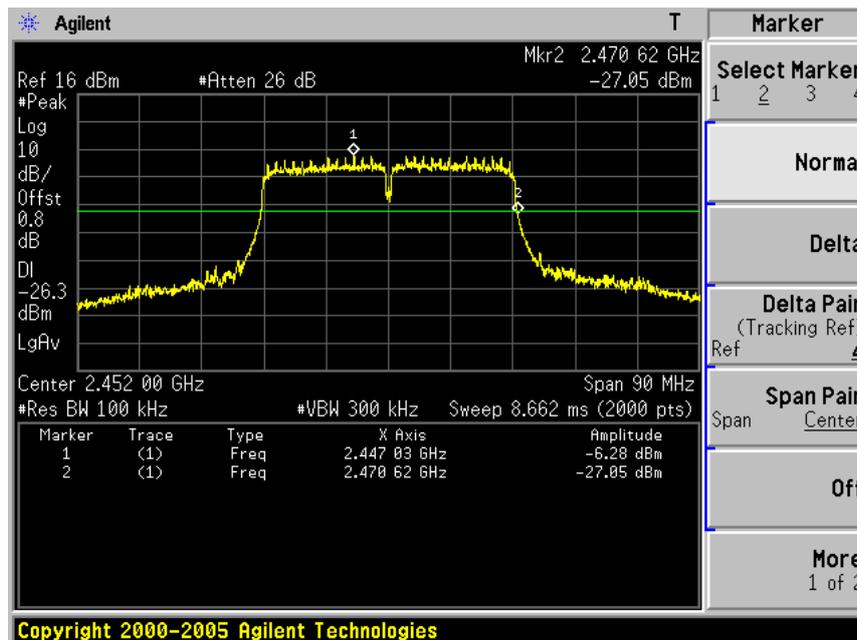


| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Operation Frequency Range of 20dB Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 1) |

Channel 03 (2422MHz)



Channel 09 (2452MHz)



8. Occupied Bandwidth

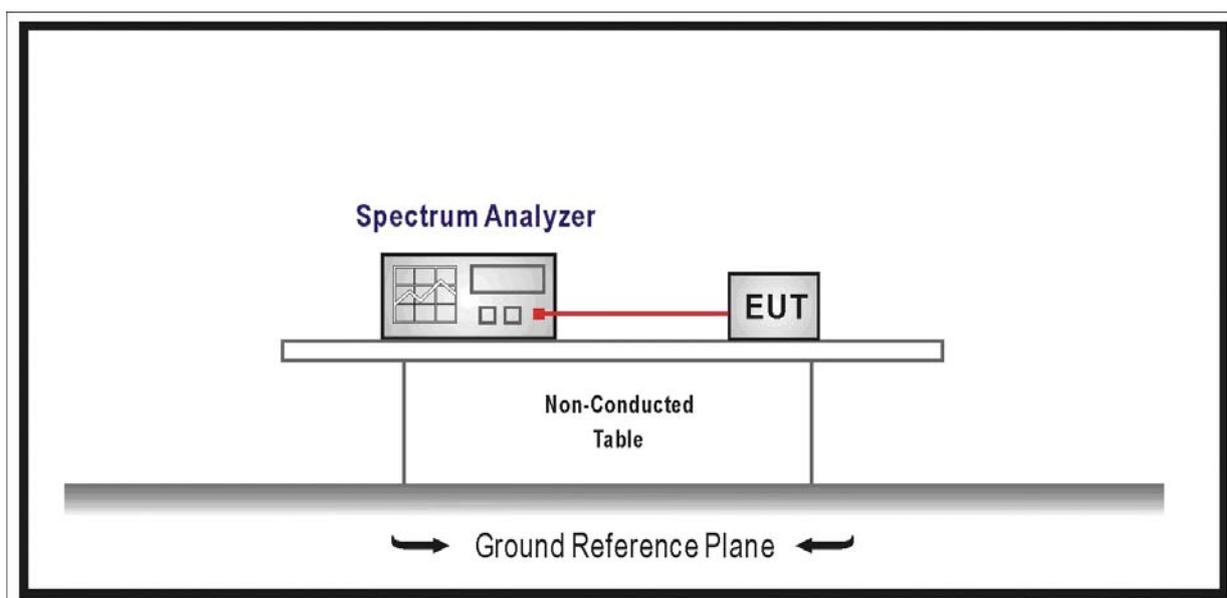
8.1. Test Equipment

Occupied Bandwidth / AC-6

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|----------|------------|------------|
| Spectrum Analyzer | Agilent | E4446A | MY45300103 | 2009/06/11 |
| Coaxial Cable | Huber+Suhner | AC4-RF | 09 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH007 | 2009/03/31 |

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

8.2. Test Setup



8.3. Limit

The minimum 6 dB bandwidth shall be at least 500 kHz.

8.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW = 100 kHz, Span greater than RBW.

8.5. Uncertainty

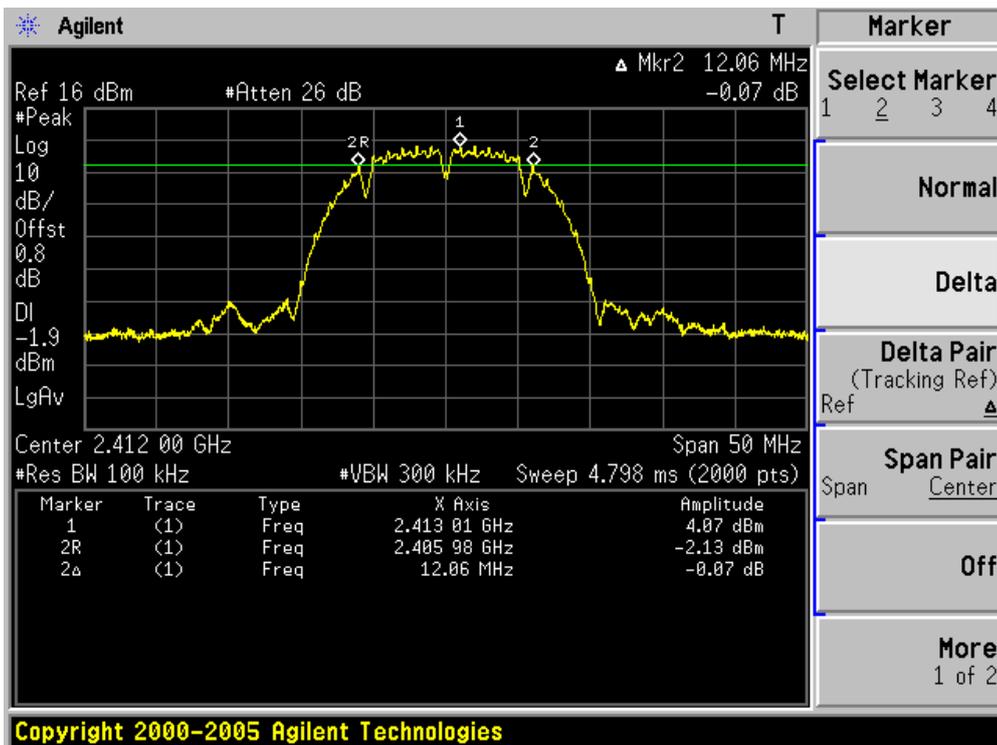
The measurement uncertainty is defined as ± 1 kHz

8.6. Test Result

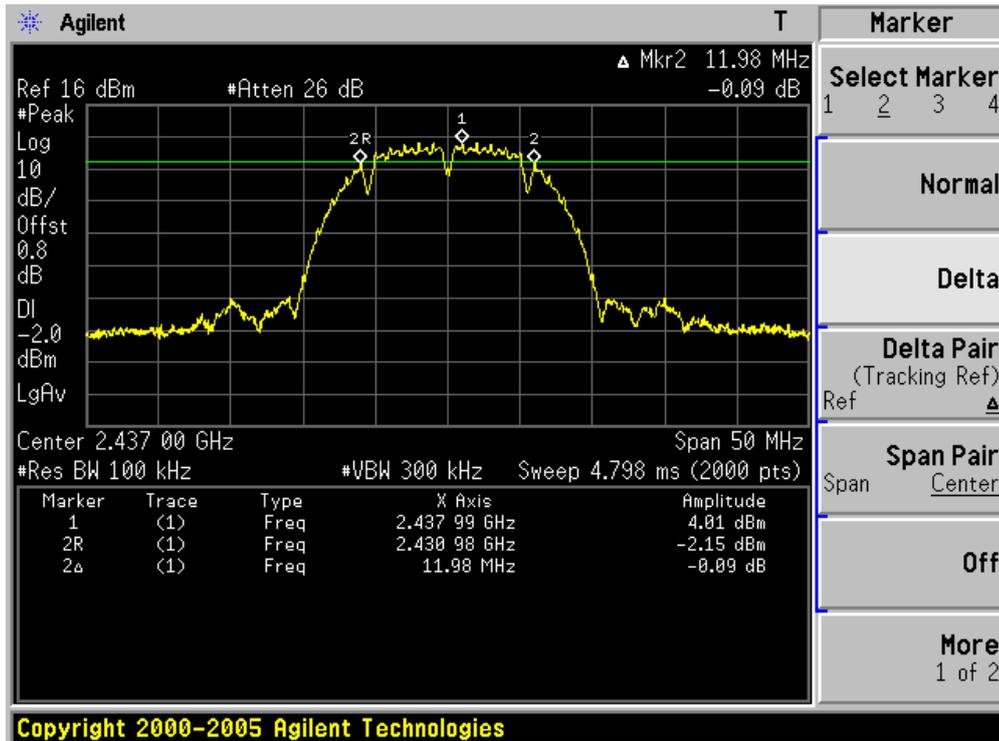
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Occupied Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit by 802.11b (Chain 0) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 01 | 2412 | 12060 | 500 | Pass |
| 06 | 2437 | 11980 | 500 | Pass |
| 11 | 2462 | 11980 | 500 | Pass |

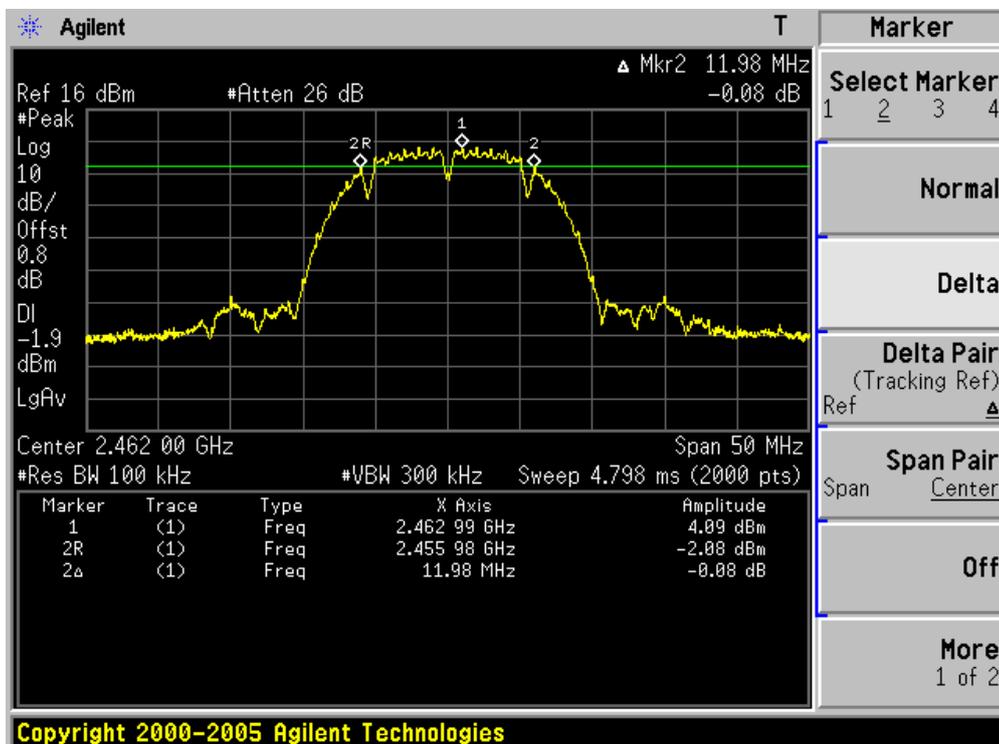
Channel 01 (2412MHz)



Channel 06 (2437MHz)



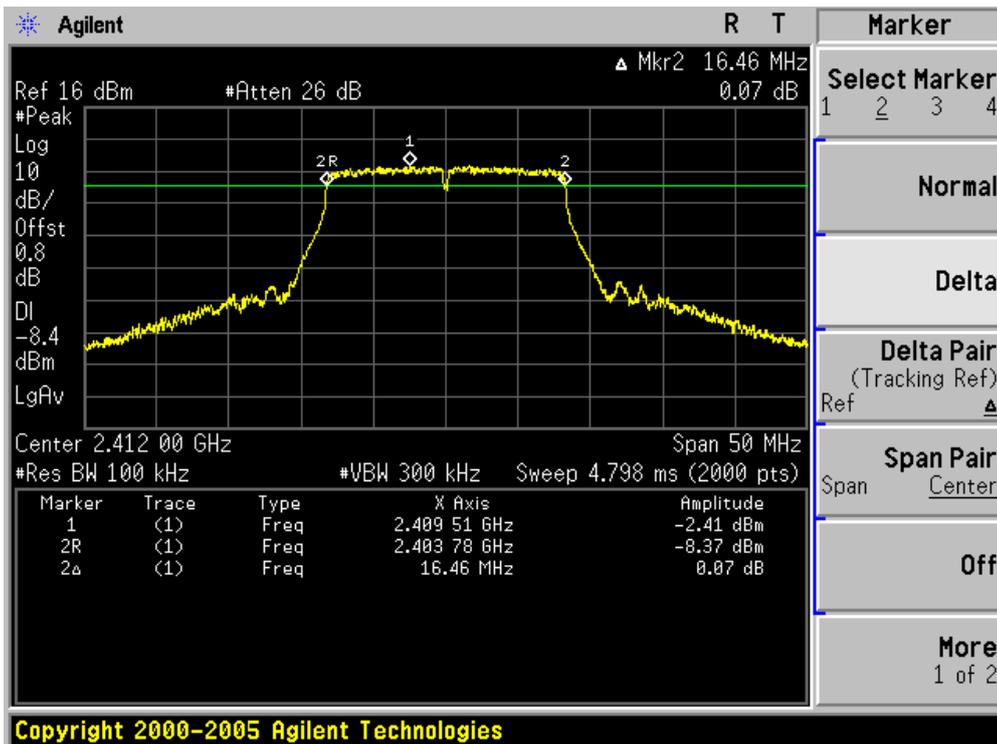
Channel 11 (2462MHz)



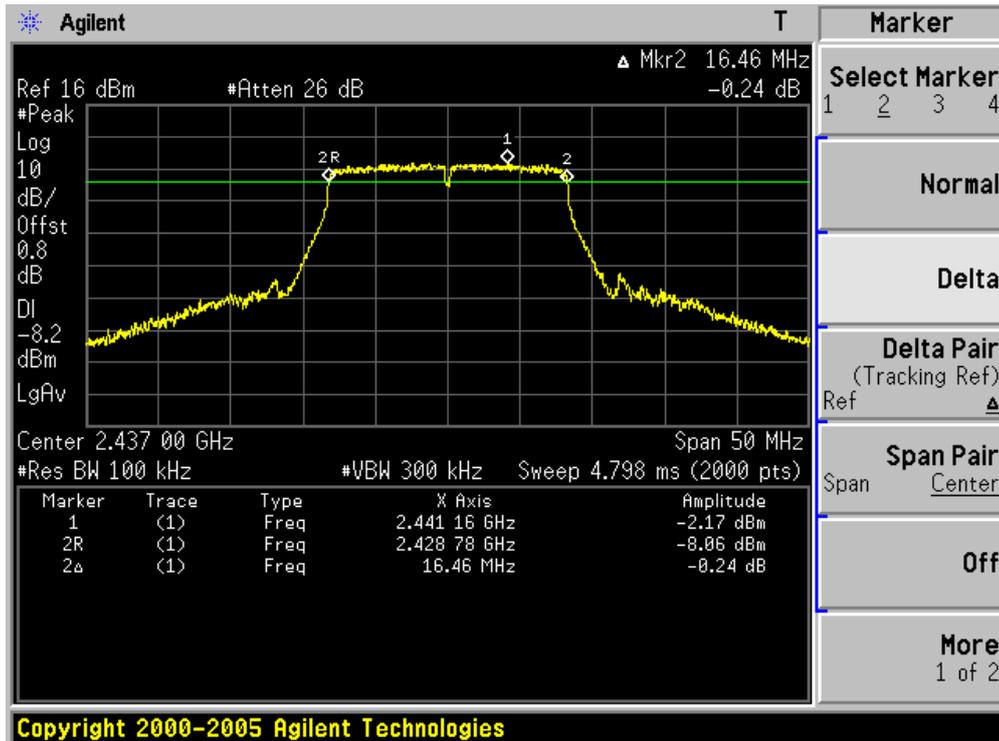
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Occupied Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit at 802.11g (Chain 0) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 01 | 2412 | 16460 | 500 | Pass |
| 06 | 2437 | 16460 | 500 | Pass |
| 11 | 2462 | 16460 | 500 | Pass |

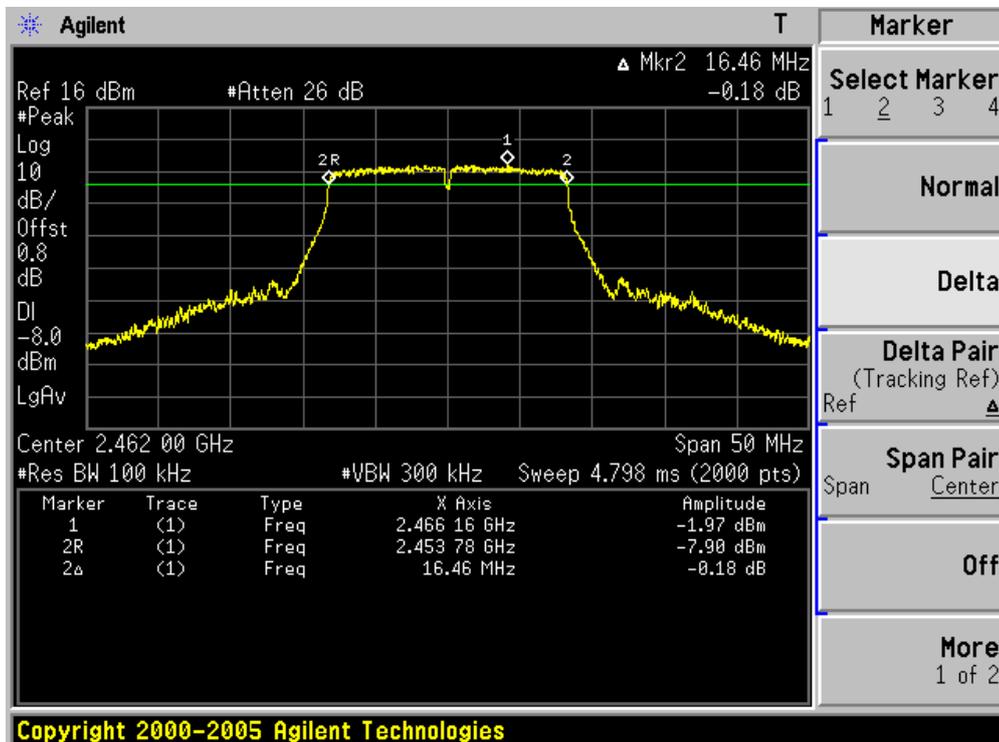
Channel 01 (2412MHz)



Channel 06 (2437MHz)



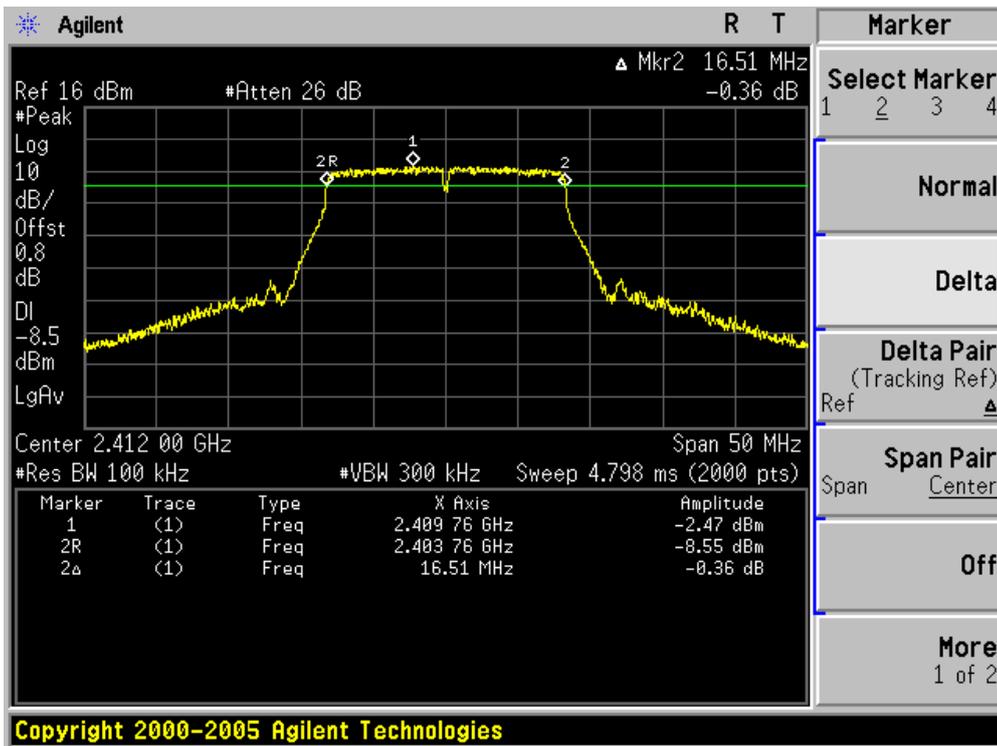
Channel 11 (2462MHz)



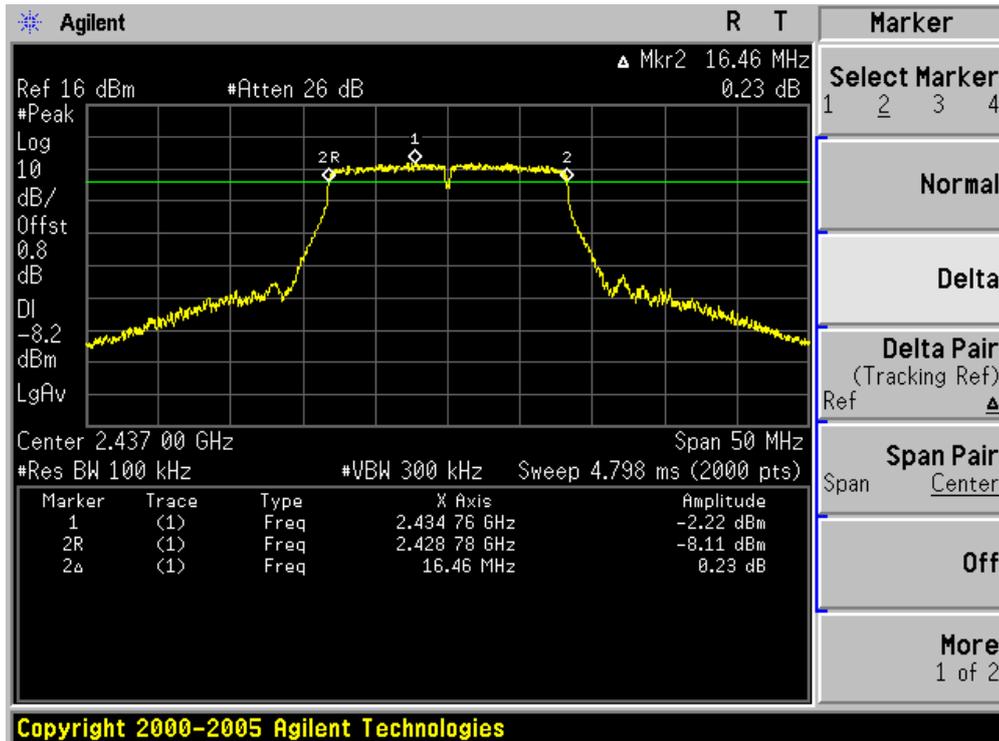
| | |
|-----------|---|
| Product | : Home Gateway |
| Test Item | : Occupied Bandwidth |
| Test Site | : AC-6 |
| Test Mode | : Mode 3: Transmit at 802.11n (20MHz) (Chain 0) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 01 | 2412 | 16510 | 500 | Pass |
| 06 | 2437 | 16460 | 500 | Pass |
| 11 | 2462 | 16510 | 500 | Pass |

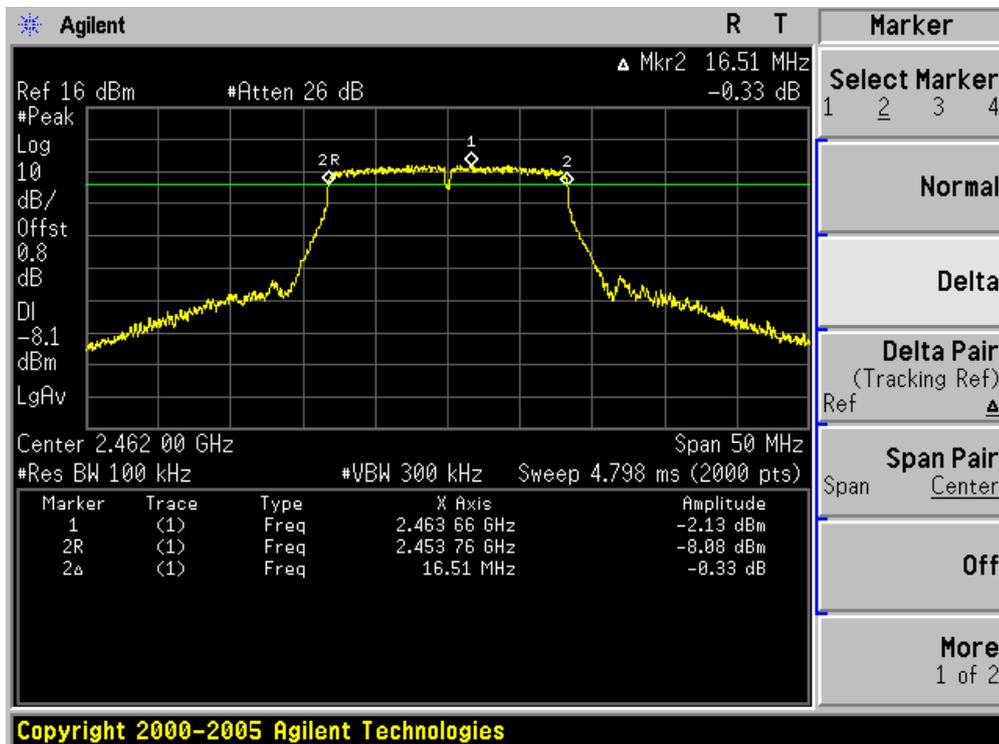
Channel 01 (2412MHz)



Channel 06 (2437MHz)



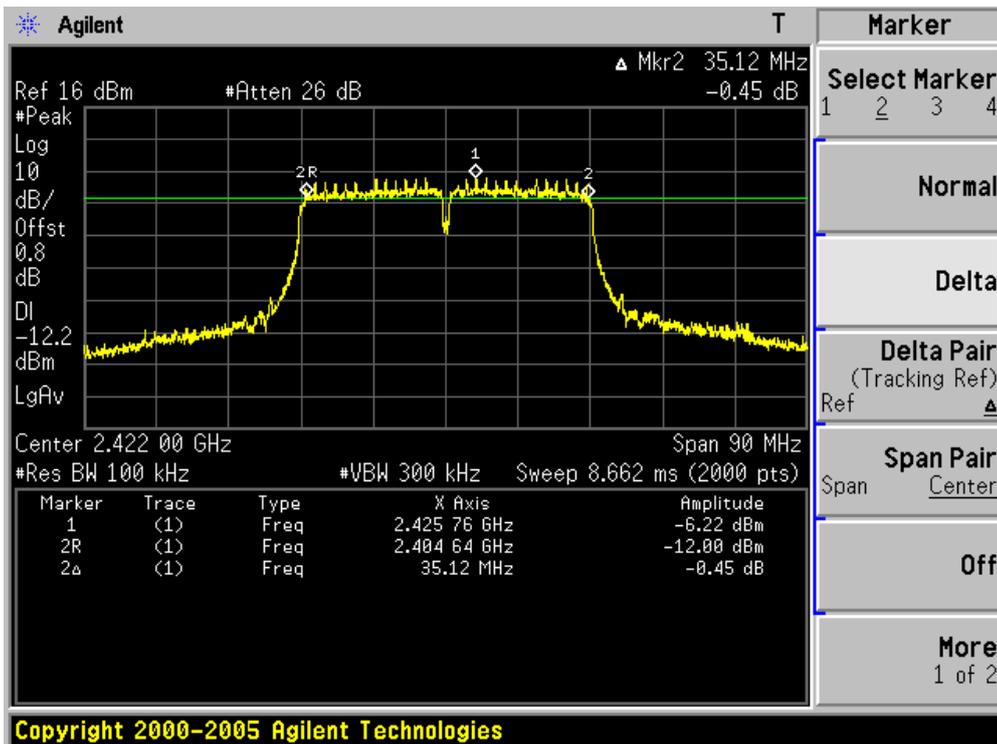
Channel 11 (2462MHz)



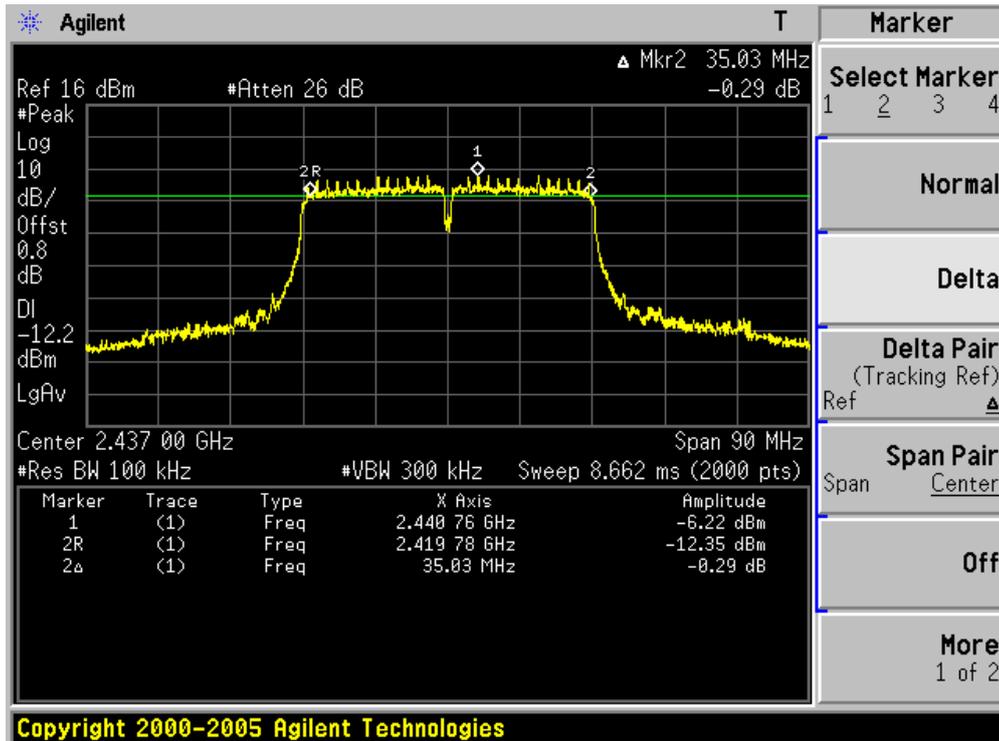
| | |
|-----------|---|
| Product | : Home Gateway |
| Test Item | : Occupied Bandwidth |
| Test Site | : AC-6 |
| Test Mode | : Mode 4: Transmit at 802.11n (40MHz) (Chain 0) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 03 | 2422 | 35120 | 500 | Pass |
| 06 | 2437 | 35030 | 500 | Pass |
| 09 | 2452 | 35160 | 500 | Pass |

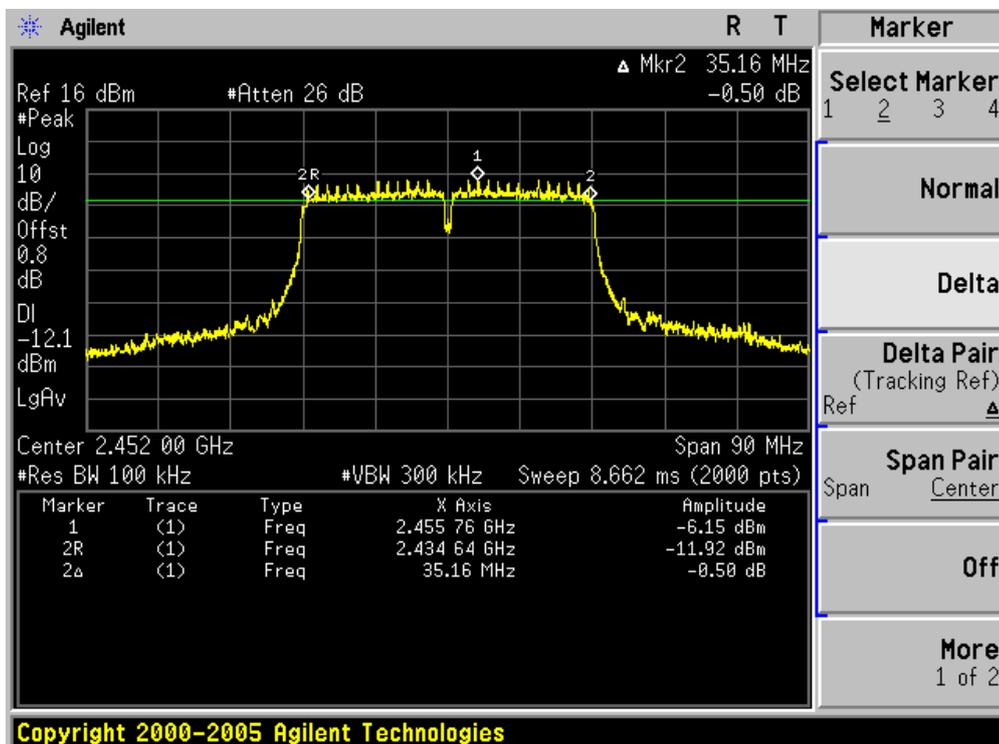
Channel 03 (2422MHz)



Channel 06 (2437MHz)



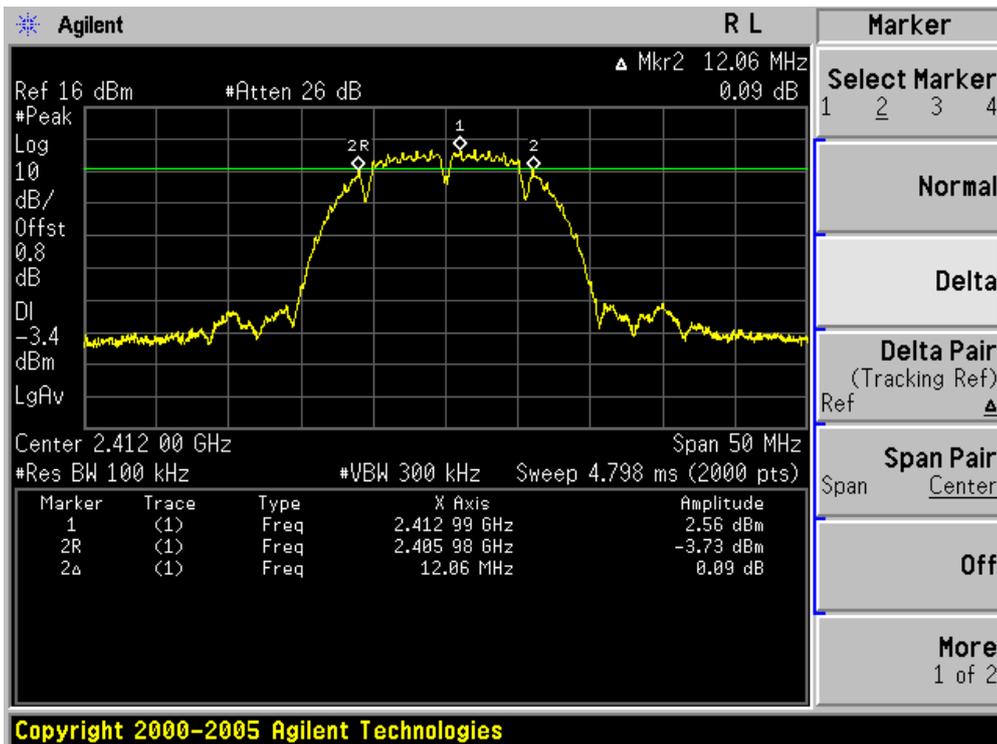
Channel 09 (2452MHz)



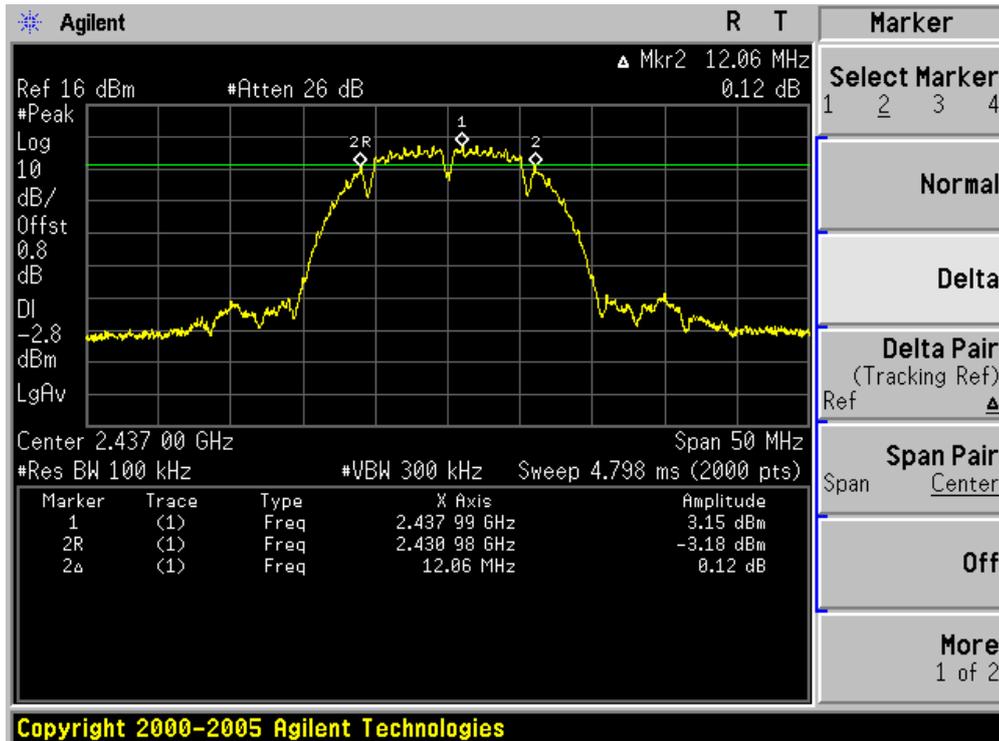
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Occupied Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit by 802.11b (Chain 1) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 01 | 2412 | 12060 | 500 | Pass |
| 06 | 2437 | 12060 | 500 | Pass |
| 11 | 2462 | 12030 | 500 | Pass |

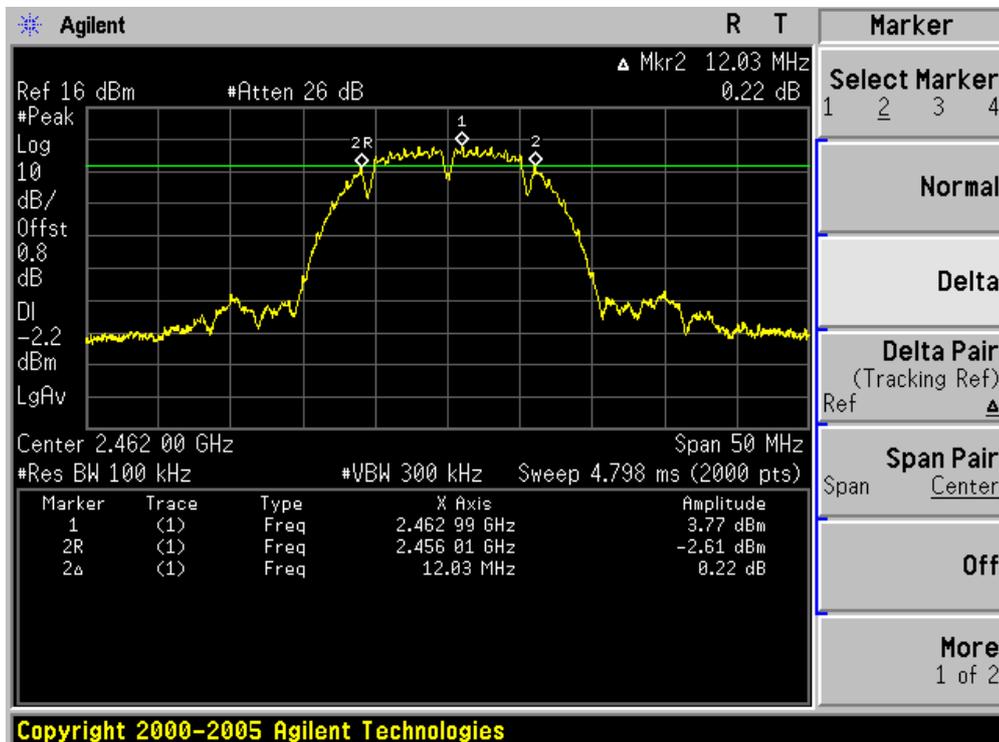
Channel 01 (2412MHz)



Channel 06 (2437MHz)



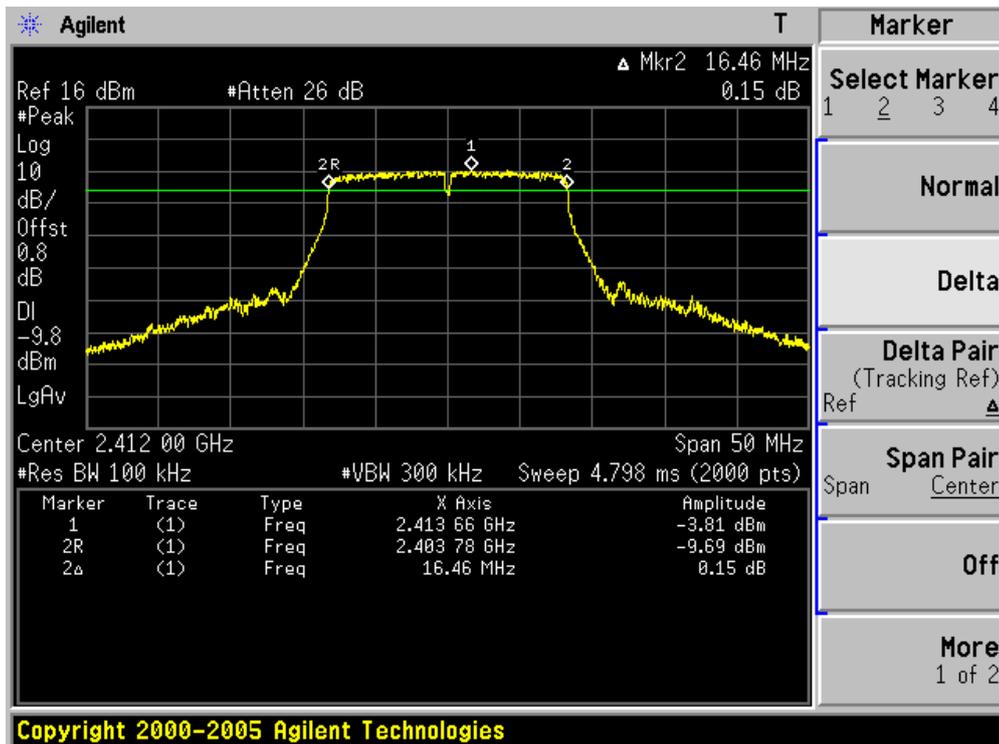
Channel 11 (2462MHz)



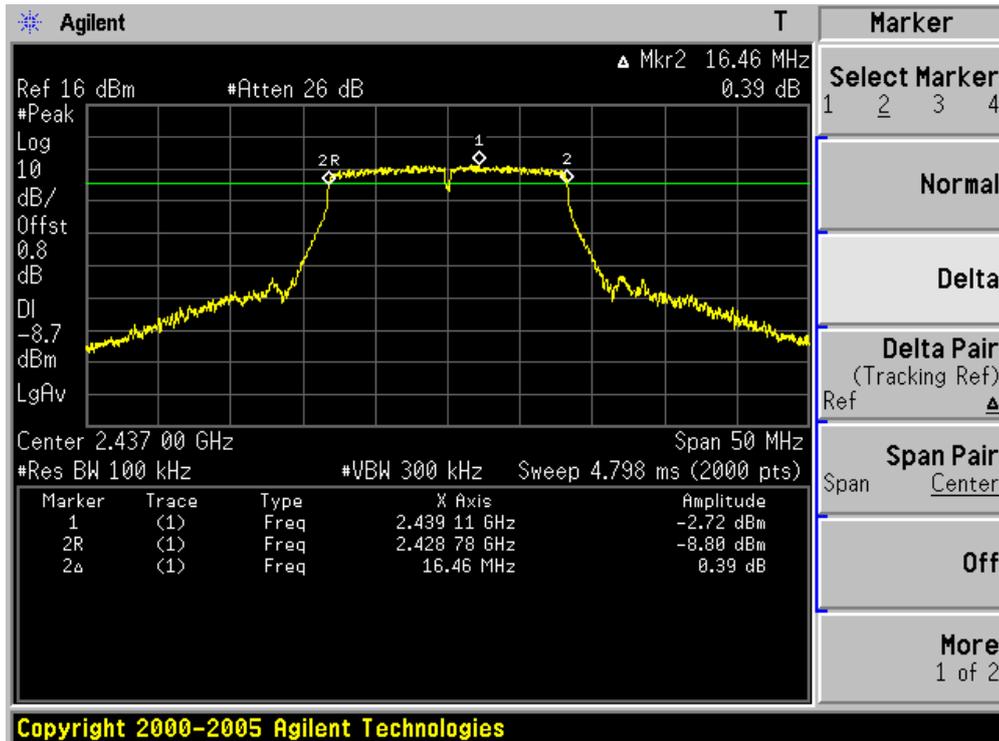
| | |
|-----------|---|
| Product | : Home Gateway |
| Test Item | : Occupied Bandwidth |
| Test Site | : AC-6 |
| Test Mode | : Mode 2: Transmit at 802.11g (Chain 1) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 01 | 2412 | 16460 | 500 | Pass |
| 06 | 2437 | 16460 | 500 | Pass |
| 11 | 2462 | 16480 | 500 | Pass |

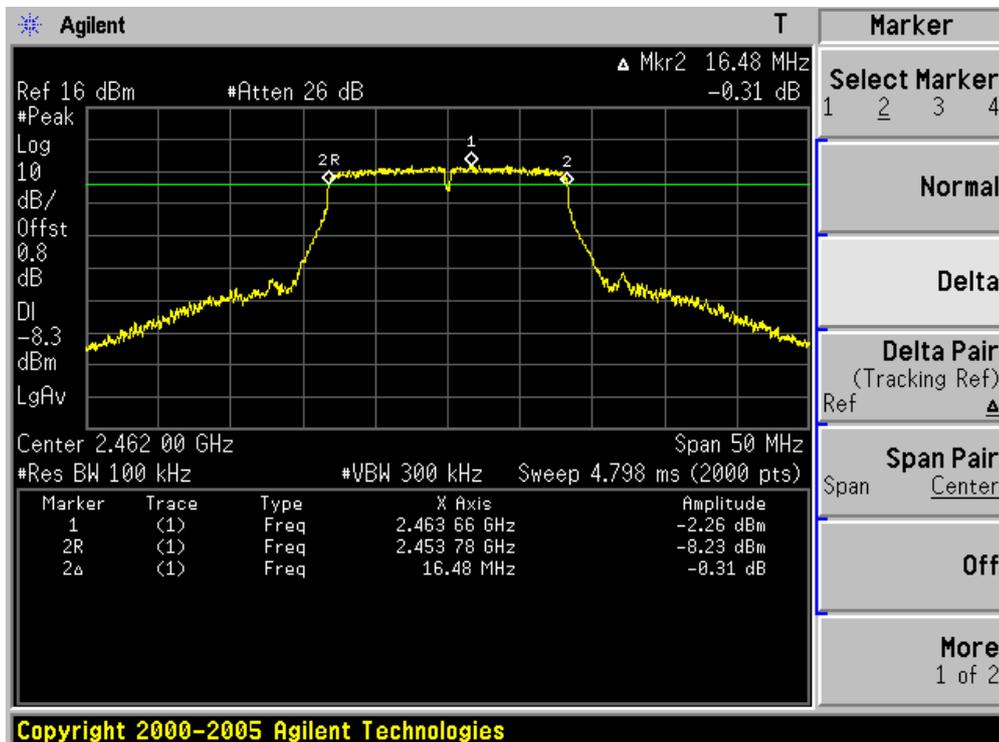
Channel 01 (2412MHz)



Channel 06 (2437MHz)



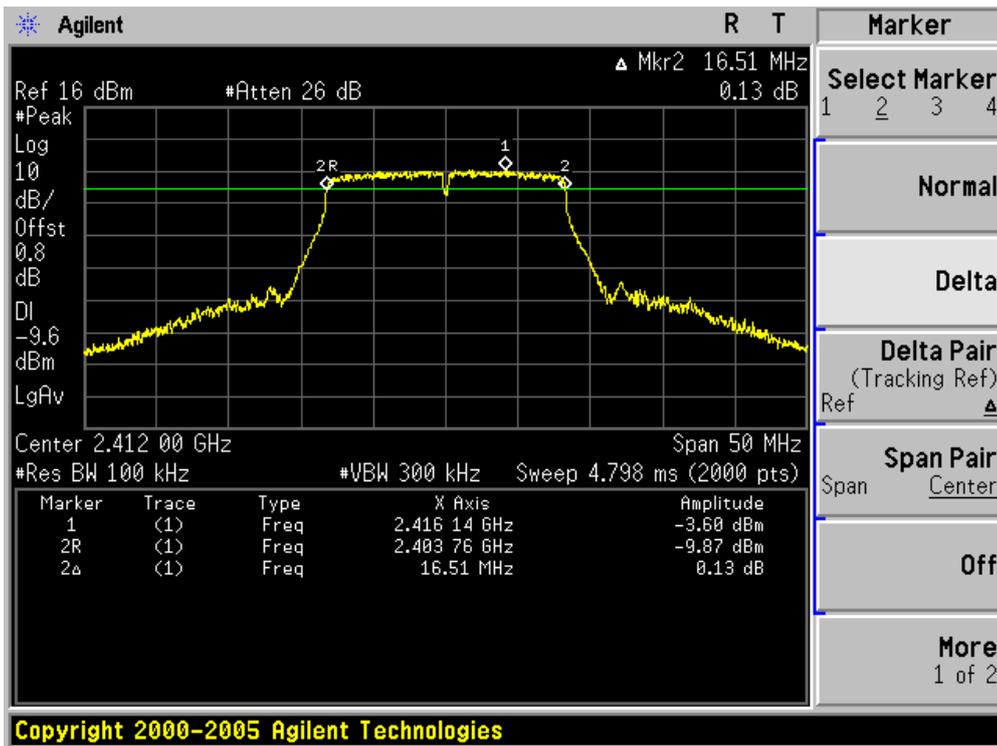
Channel 11 (2462MHz)



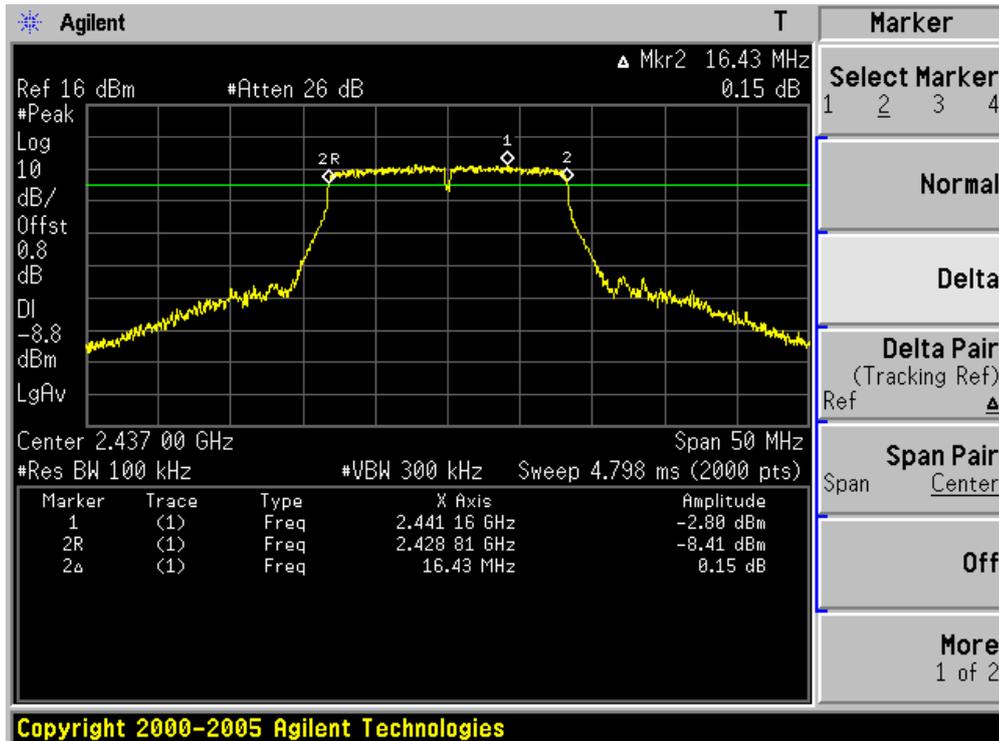
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Occupied Bandwidth |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 1) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 01 | 2412 | 16510 | 500 | Pass |
| 06 | 2437 | 16430 | 500 | Pass |
| 11 | 2462 | 16460 | 500 | Pass |

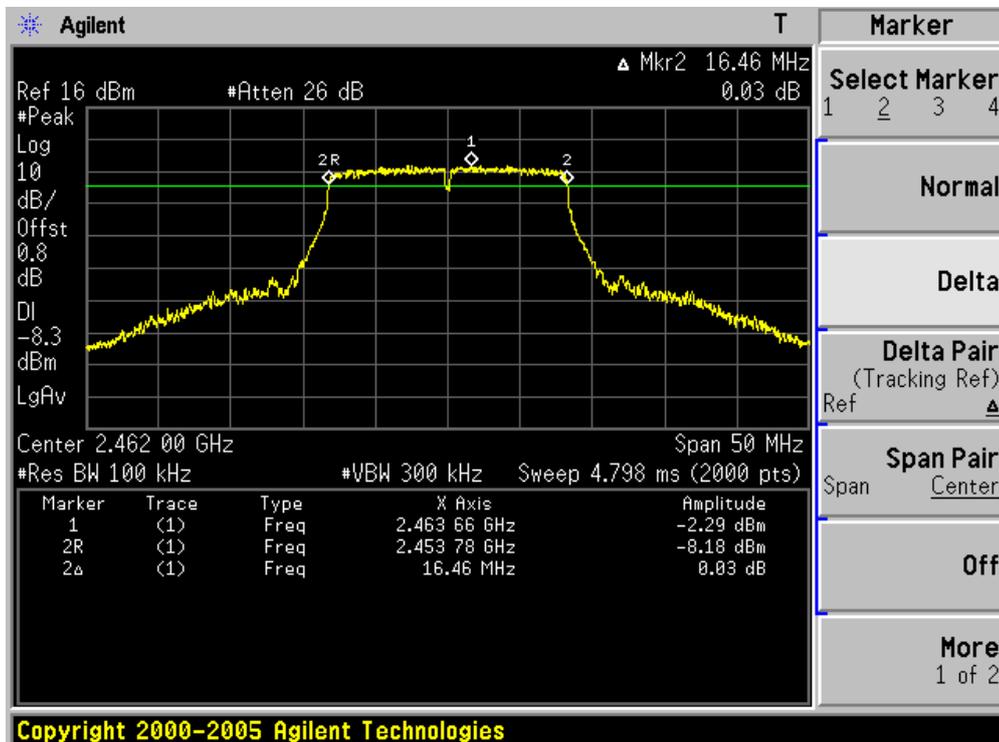
Channel 01 (2412MHz)



Channel 06 (2437MHz)



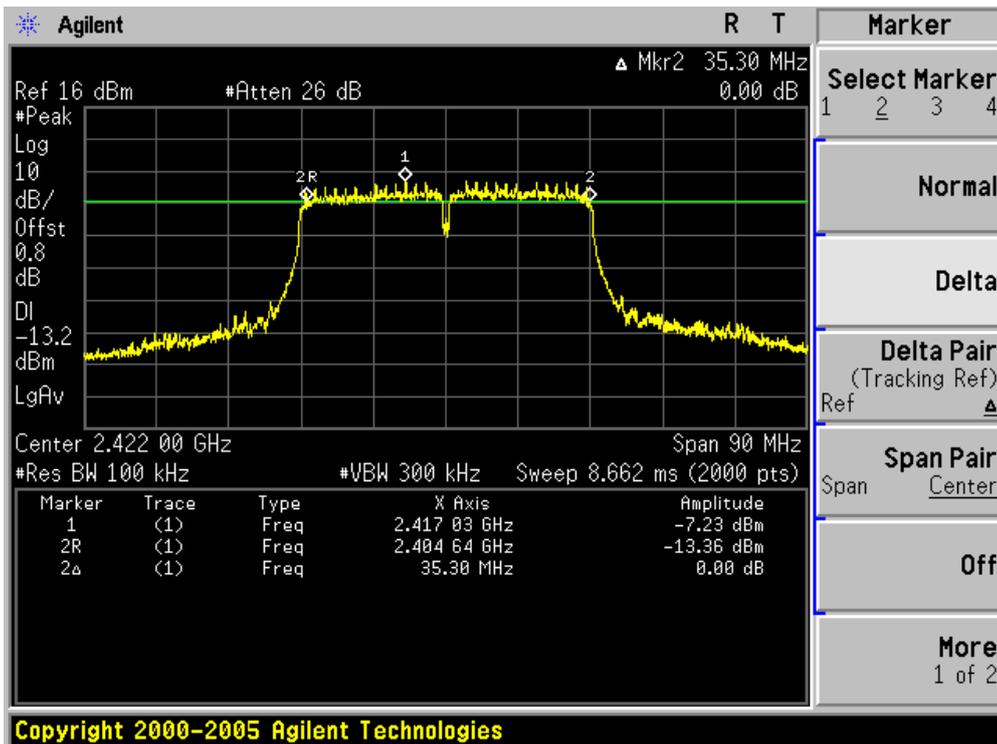
Channel 11 (2462MHz)



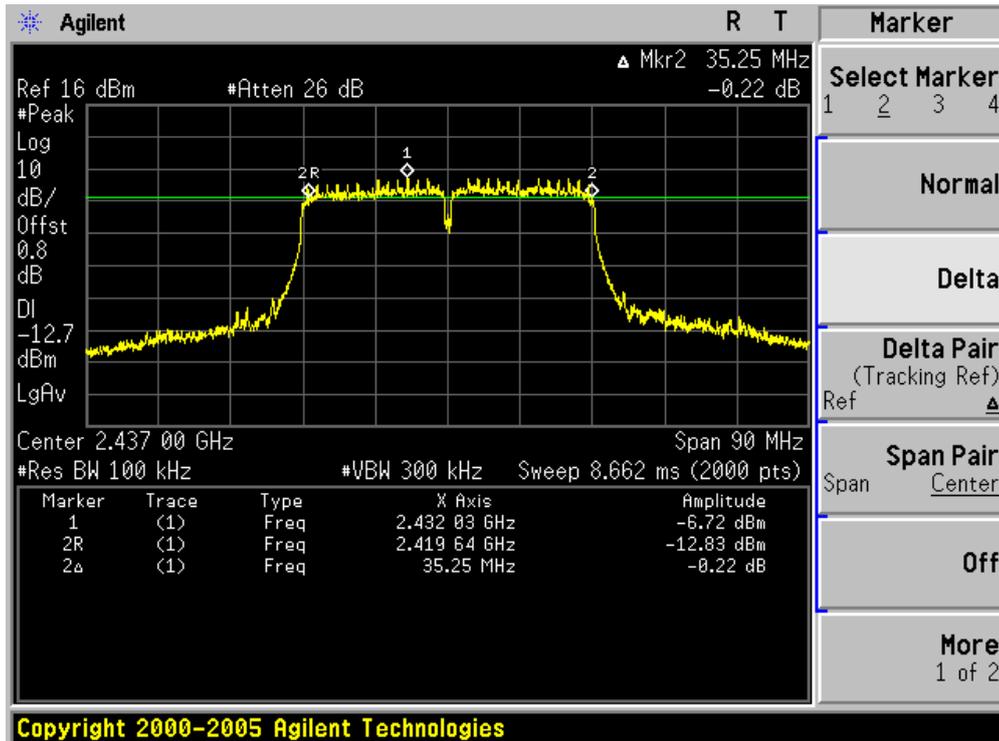
| | |
|-----------|---|
| Product | : Home Gateway |
| Test Item | : Occupied Bandwidth |
| Test Site | : AC-6 |
| Test Mode | : Mode 4: Transmit at 802.11n (40MHz) (Chain 1) |

| Channel No. | Frequency (MHz) | Occupied Bandwidth (kHz) | Limit (kHz) | Result |
|-------------|-----------------|--------------------------|-------------|--------|
| 03 | 2422 | 35300 | 500 | Pass |
| 06 | 2437 | 35250 | 500 | Pass |
| 09 | 2452 | 34800 | 500 | Pass |

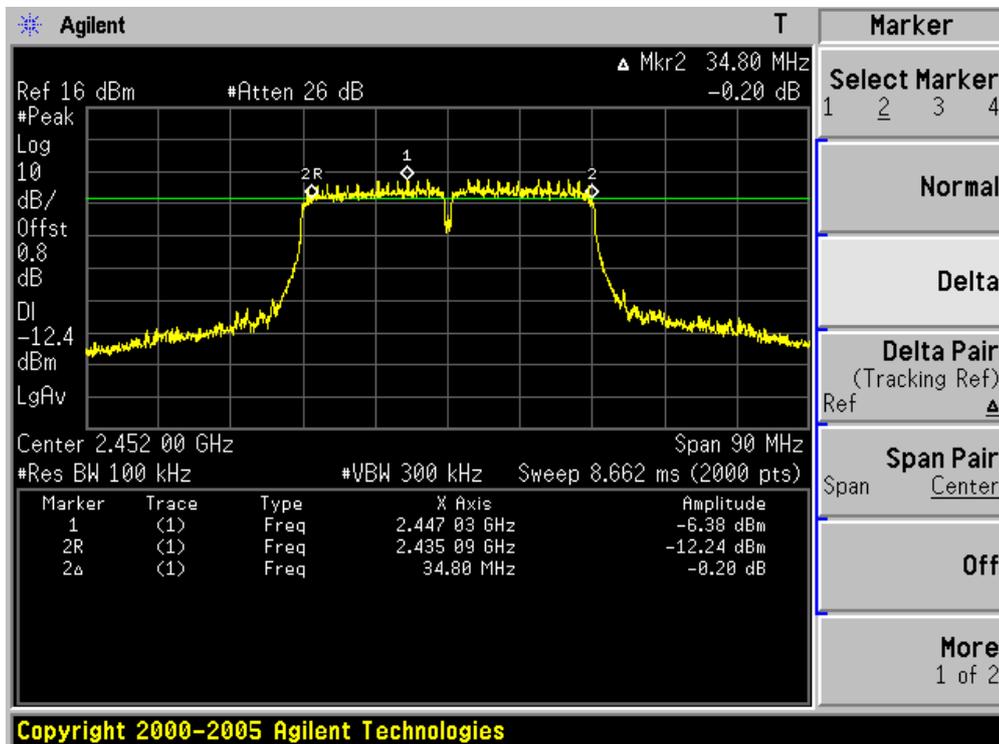
Channel 03 (2422MHz)



Channel 06 (2437MHz)



Channel 09 (2452MHz)



9. Power Output

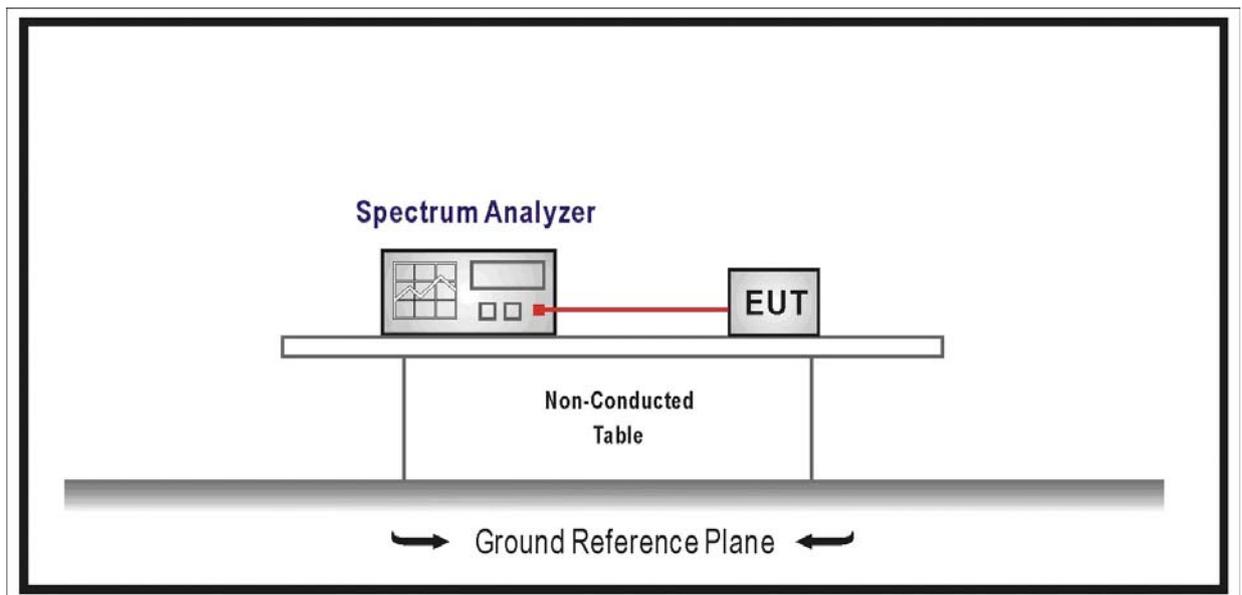
9.1. Test Equipment

Power Output / AC-6

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|----------|------------|------------|
| Wideband Peak Power Meter | Anritsu | ML2495A | 0905006 | 2009/02/12 |
| Power Sensor | Anritsu | MA2411B | 0846014 | 2009/01/12 |
| Coaxial Cable | Huber+Suhner | AC4-RF | 09 | 2008/11/24 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH007 | 2009/03/01 |

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

9.2. Test Setup



9.3. Limit

The maximum peak power shall be less 1 Watt (30dBm).

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

9.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Power output measurement allowed per Section 15.247(b)(3).

Use the wideband power meter to test peak power and record the result.

9.5. Uncertainty

The measurement uncertainty is defined as ± 1.27 dB

9.6. Test Result

Power output test was verified over all data rates of each mode shown as below, and then choose the maximum power output (blue marker) for final test of each channel.

| MCS Index for 802.11n | Spatial Streams | Data Rate (Mbps) | | | | | |
|--------------------------|--------------------|------------------|---------|-----------------|----------|-----------------|----------|
| | | 802.11b | 802.11g | 20MHz Bandwidth | | 40MHz Bandwidth | |
| | | | | 800ns GI | 400ns GI | 800ns GI | 400ns GI |
| 0 | 1 | 1 | 6 | 6.5 | 7.2 | 13.5 | 15.0 |
| 1 | 1 | 2 | 9 | 13.0 | 14.4 | 27.0 | 30.0 |
| 2 | 1 | 5.5 | 12 | 19.5 | 21.7 | 40.5 | 45.0 |
| 3 | 1 | 11 | 18 | 26.0 | 28.9 | 54.0 | 60.0 |
| 4 | 1 | --- | 24 | 39.0 | 43.3 | 81.0 | 90.0 |
| 5 | 1 | --- | 36 | 52.0 | 57.8 | 108.0 | 120.0 |
| 6 | 1 | --- | 48 | 58.5 | 65.0 | 121.5 | 135.0 |
| 7 | 1 | --- | 54 | 65.0 | 72.2 | 135.0 | 150.0 |
| 8 | 2 | --- | --- | 13.0 | 14.4 | 27.0 | 30.0 |
| 9 | 2 | --- | --- | 26.0 | 28.9 | 54.0 | 60.0 |
| 10 | 2 | --- | --- | 39.0 | 43.3 | 81.0 | 90.0 |
| 11 | 2 | --- | --- | 52.0 | 57.8 | 108.0 | 120.0 |
| 12 | 2 | --- | --- | 78.0 | 86.7 | 162.0 | 180.0 |
| 13 | 2 | --- | --- | 104.0 | 115.6 | 216.0 | 240.0 |
| 14 | 2 | --- | --- | 117.0 | 130.0 | 243.0 | 270.0 |
| 15 | 2 | --- | --- | 130.0 | 144.0 | 270.0 | 300.0 |

| | | |
|-----------|---|--------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit by 802.11b(Chain 0) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 1 | 2412 | 18.61 | 0.8 | 19.41 | 30.00 | Pass |
| 6 | 2437 | 20.09 | 0.8 | 20.89 | 30.00 | Pass |
| 11 | 2462 | 18.96 | 0.8 | 19.76 | 30.00 | Pass |

| | | |
|-----------|---|--------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit by 802.11b(Chain 1) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 1 | 2412 | 18.62 | 0.8 | 19.42 | 30.00 | Pass |
| 6 | 2437 | 19.22 | 0.8 | 20.02 | 30.00 | Pass |
| 11 | 2462 | 18.79 | 0.8 | 19.59 | 30.00 | Pass |

| | | |
|-----------|---|--------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit by 802.11g(Chain 0) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 1 | 2412 | 19.20 | 0.8 | 20.00 | 30.00 | Pass |
| 6 | 2437 | 19.29 | 0.8 | 20.09 | 30.00 | Pass |
| 11 | 2462 | 20.37 | 0.8 | 21.17 | 30.00 | Pass |

| | | |
|-----------|---|--------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit by 802.11g(Chain 1) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 1 | 2412 | 17.76 | 0.8 | 18.56 | 30.00 | Pass |
| 6 | 2437 | 18.62 | 0.8 | 19.42 | 30.00 | Pass |
| 11 | 2462 | 19.06 | 0.8 | 19.86 | 30.00 | Pass |

| | | |
|-----------|---|--|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit by 802.11n(20MHz) (Chain 0) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 1 | 2412 | 20.19 | 0.8 | 20.99 | 30.00 | Pass |
| 6 | 2437 | 19.33 | 0.8 | 20.13 | 30.00 | Pass |
| 11 | 2462 | 20.42 | 0.8 | 21.22 | 30.00 | Pass |

| | | |
|-----------|---|--|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit by 802.11n(20MHz) (Chain 1) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 1 | 2412 | 19.07 | 0.8 | 19.87 | 30.00 | Pass |
| 6 | 2437 | 18.55 | 0.8 | 19.35 | 30.00 | Pass |
| 11 | 2462 | 19.11 | 0.8 | 19.91 | 30.00 | Pass |

| | | |
|-----------|---|--|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit by 802.11n(20MHz) (Chain 0+1) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|---------|-----------------|-------------------|-------------|--------|
| | | Chain 0 | Chain 1 | | | | |
| 1 | 2412 | 20.07 | 17.82 | 0.8 | 22.90 | 30.00 | Pass |
| 6 | 2437 | 20.13 | 18.53 | 0.8 | 23.21 | 30.00 | Pass |
| 11 | 2462 | 19.29 | 18.75 | 0.8 | 22.84 | 30.00 | Pass |

| | | |
|-----------|---|--|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit by 802.11n(40MHz) (Chain 0) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 3 | 2422 | 17.01 | 0.8 | 17.81 | 30.00 | Pass |
| 6 | 2437 | 16.85 | 0.8 | 17.65 | 30.00 | Pass |
| 9 | 2452 | 16.88 | 0.8 | 17.68 | 30.00 | Pass |

| | | |
|-----------|---|--|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit by 802.11n(40MHz) (Chain 1) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|-----------------|-------------------|-------------|--------|
| 3 | 2422 | 16.20 | 0.8 | 17.00 | 30.00 | Pass |
| 6 | 2437 | 16.50 | 0.8 | 17.30 | 30.00 | Pass |
| 9 | 2452 | 16.74 | 0.8 | 17.54 | 30.00 | Pass |

| | | |
|-----------|---|--|
| Product | : | Home Gateway |
| Test Item | : | Power Output |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit by 802.11n(40MHz) (Chain 0+1) |

| Channel No. | Frequency (MHz) | Measurement Power Output (dBm) | | Cable Loss (dB) | Total Power (dBm) | Limit (dBm) | Result |
|-------------|-----------------|--------------------------------|---------|-----------------|-------------------|-------------|--------|
| | | Chain 0 | Chain 1 | | | | |
| 3 | 2422 | 16.89 | 16.16 | 0.8 | 20.35 | 30.00 | Pass |
| 6 | 2437 | 16.76 | 16.40 | 0.8 | 20.39 | 30.00 | Pass |
| 9 | 2452 | 16.73 | 16.69 | 0.8 | 20.52 | 30.00 | Pass |

10. Power Spectral Density

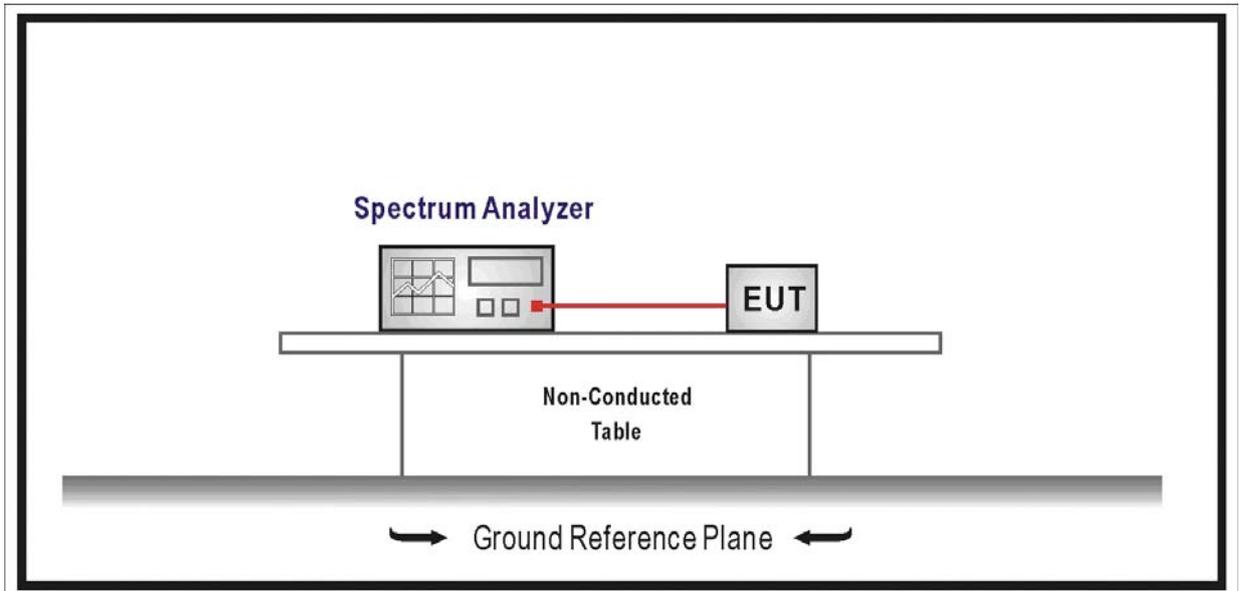
10.1. Test Equipment

Power Spectral Density / AC-6

| Instrument | Manufacturer | Type No. | Serial No. | Cal. Date |
|----------------------------|--------------|----------|------------|------------|
| Spectrum Analyzer | Agilent | E4446A | MY45300103 | 2009/06/11 |
| Coaxial Cable | Huber+Suhner | AC4-RF | 09 | 2009/05/25 |
| Temperature/Humidity Meter | zhicheng | ZC1-2 | QT-TH007 | 2009/03/31 |

Note: All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

10.2. Test Setup



10.3. Limit

For digitally modulated systems, the power spectral density conducted from the intentional radiated to the antenna shall not be greater than 8dBm in any 3kHz band during any time interval of continuous transmission.

10.4. Test Procedure

The EUT was tested according to DTS test procedure of Oct 2002 KDB558074 for compliance to FCC 47CFR 15.247 requirements.

Set RBW= 3 kHz, Set VBW \geq 9 kHz, Sweep time=100s, Set detector=Peak detector.

10.5. Uncertainty

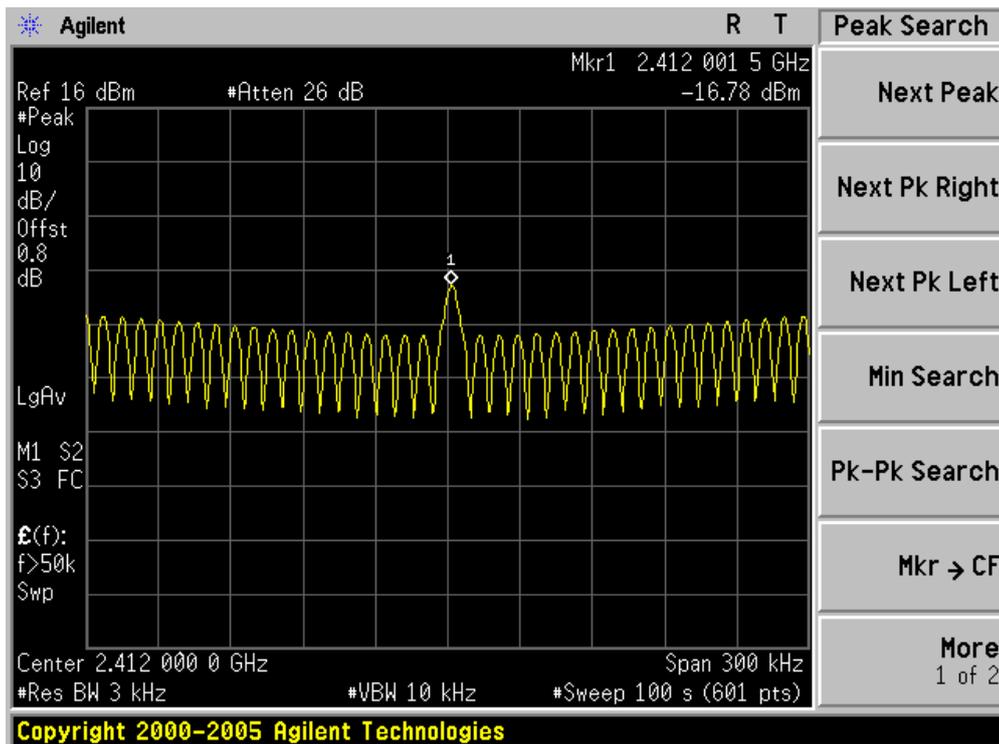
The measurement uncertainty is defined as ± 1.27 dB

10.6. Test Result

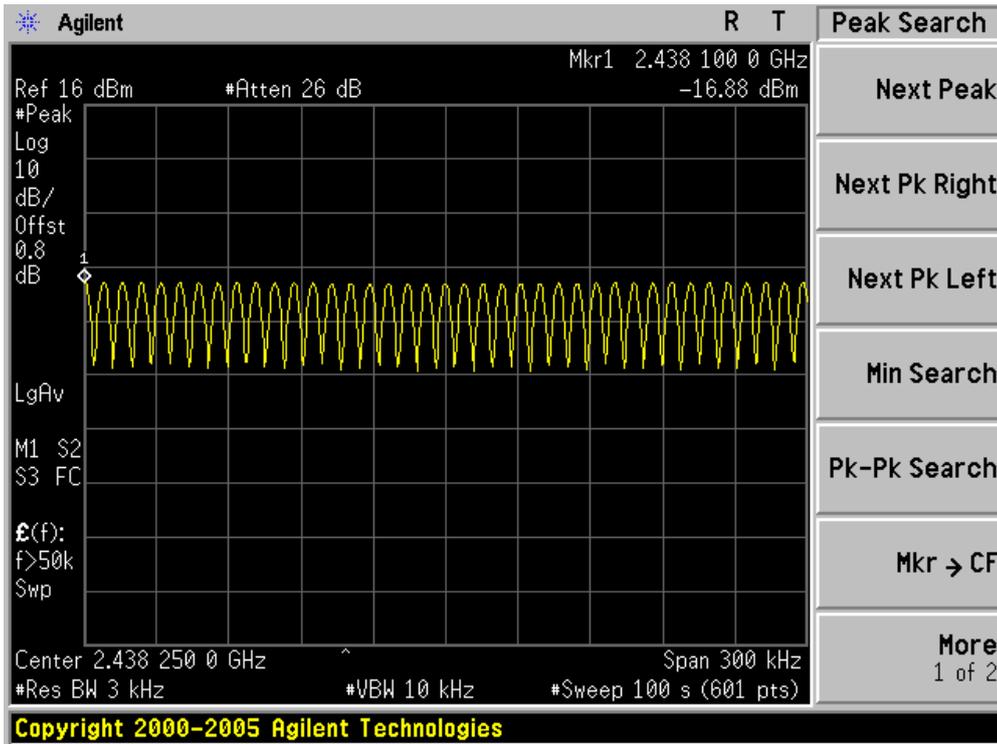
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit at 802.11b (Chain 0) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | -16.78 | N/A | -16.78 | 8 | Pass |
| 06 | 2437 | -16.88 | N/A | -16.88 | 8 | Pass |
| 11 | 2462 | -16.51 | N/A | -16.51 | 8 | Pass |

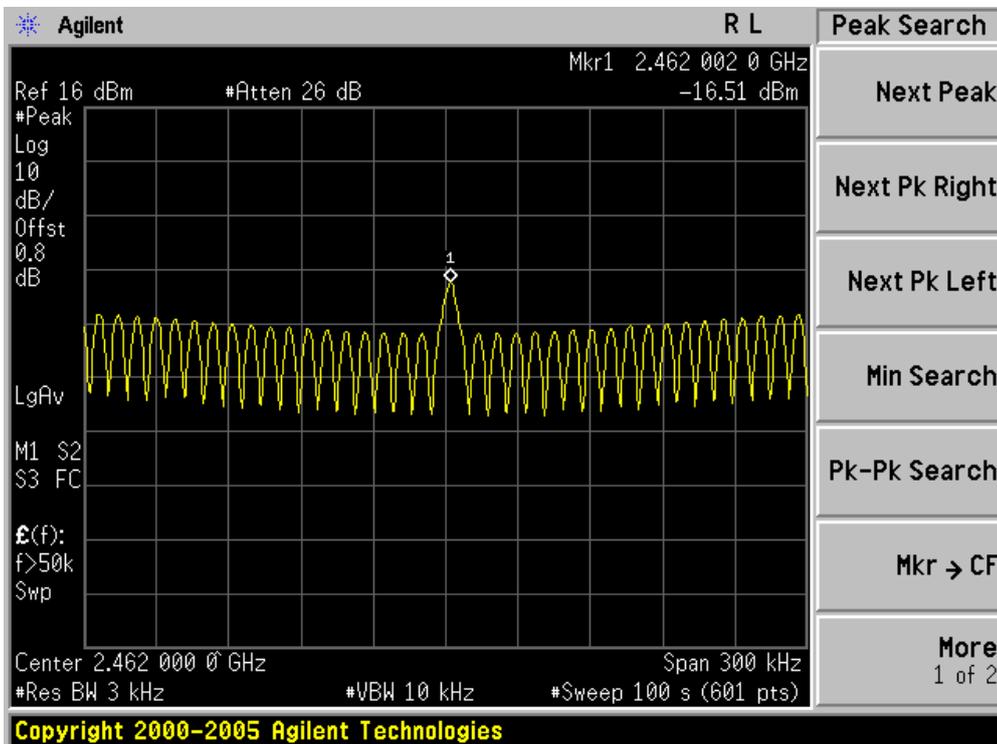
Channel 01 (2412MHz)



Channel 06 (2437MHz)



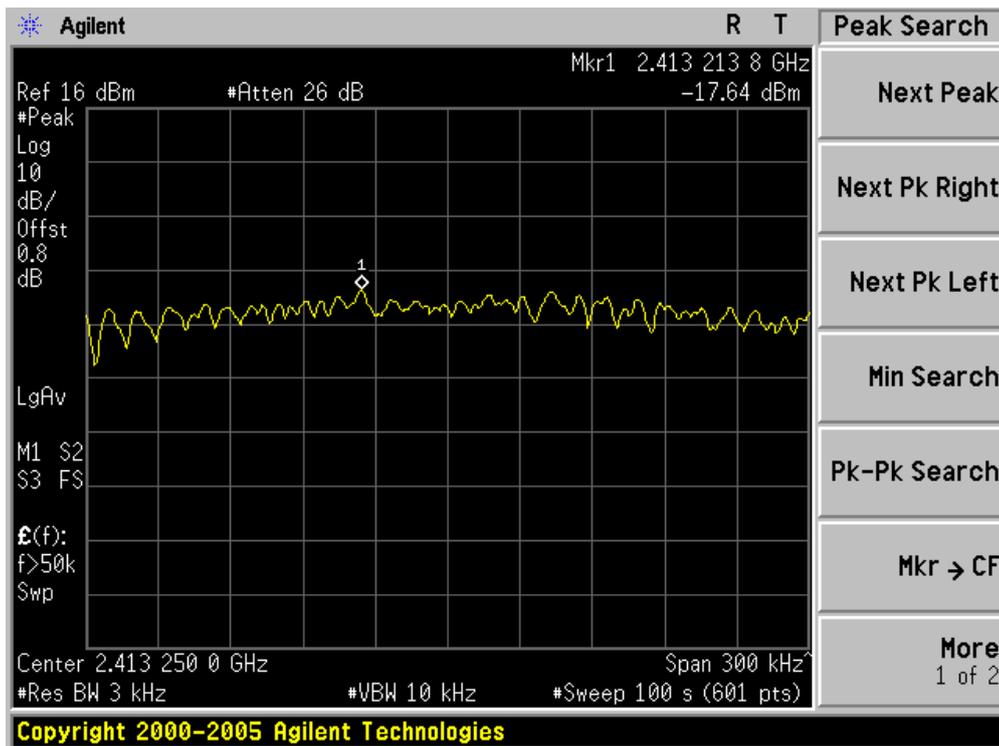
Channel 11 (2462MHz)



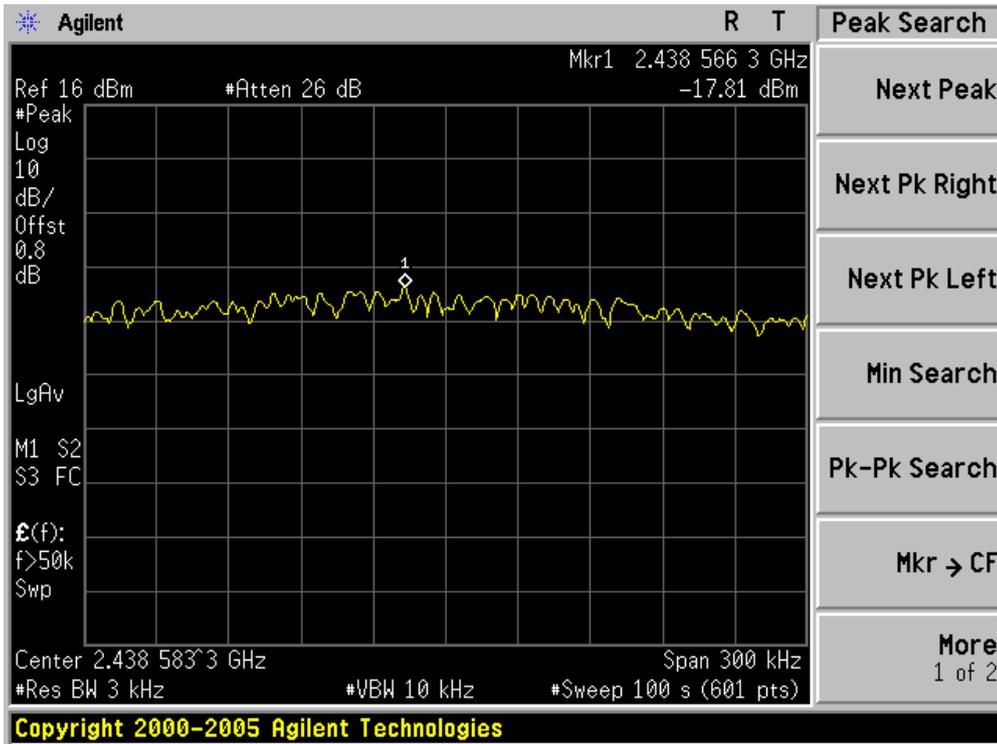
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit at 802.11g (Chain 0) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | -17.64 | N/A | -17.64 | 8 | Pass |
| 06 | 2437 | -17.81 | N/A | -17.81 | 8 | Pass |
| 11 | 2462 | -17.59 | N/A | -17.59 | 8 | Pass |

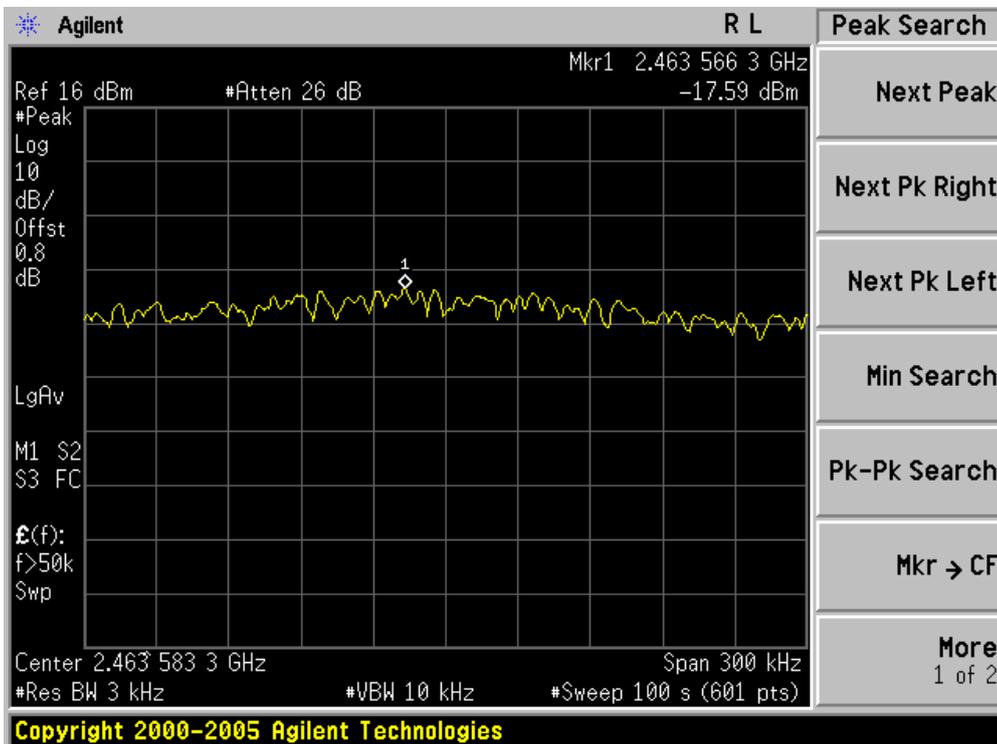
Channel 01 (2412MHz)



Channel 06 (2437MHz)



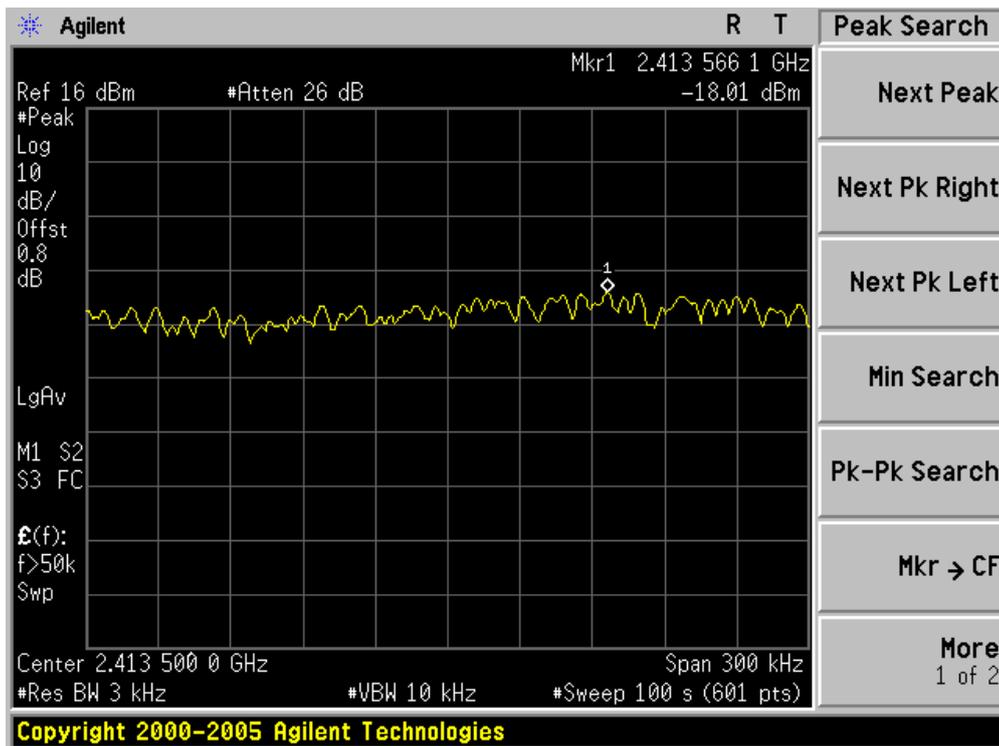
Channel 11 (2462MHz)



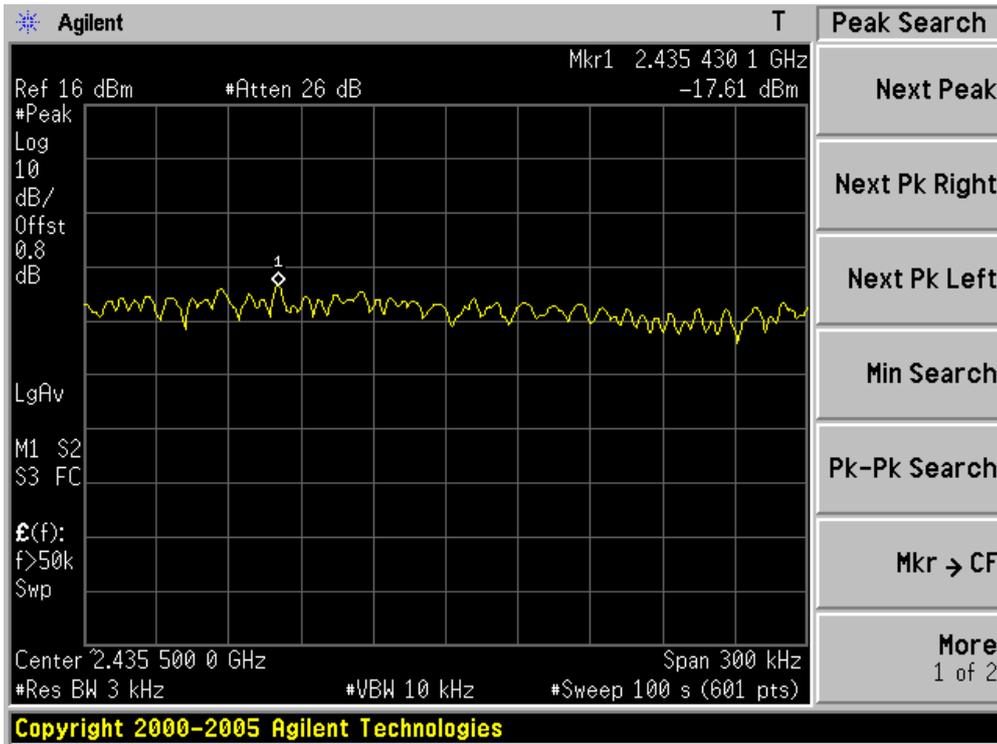
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 0) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | -18.01 | N/A | -18.01 | 8 | Pass |
| 06 | 2437 | -17.61 | N/A | -17.61 | 8 | Pass |
| 11 | 2462 | -17.52 | N/A | -17.52 | 8 | Pass |

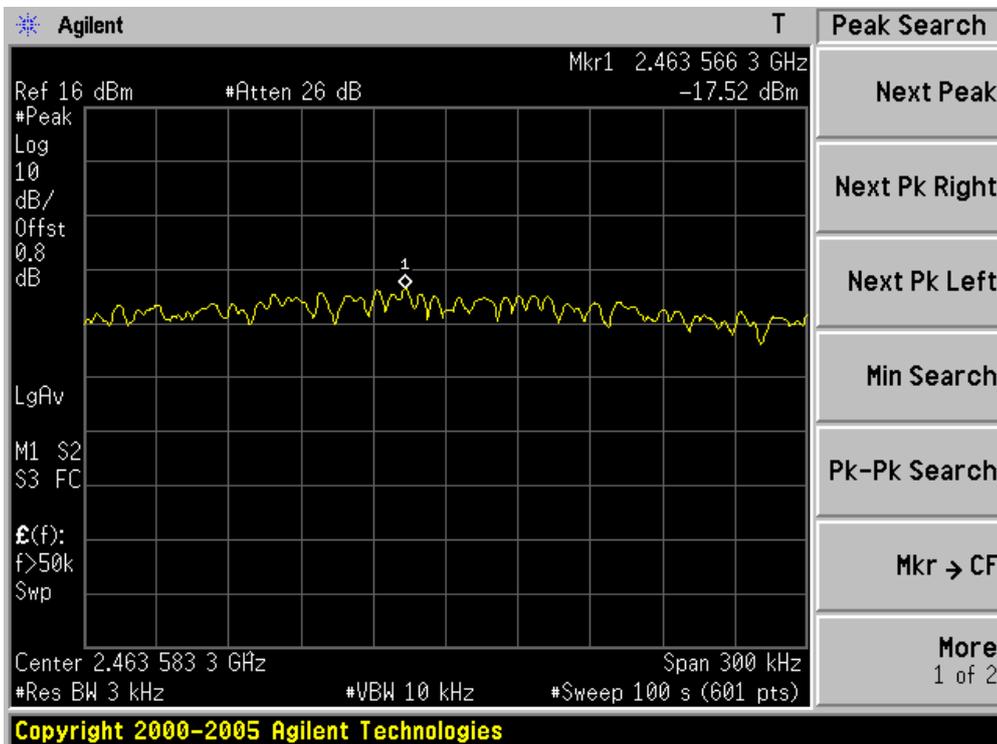
Channel 01 (2412MHz)



Channel 06 (2437MHz)



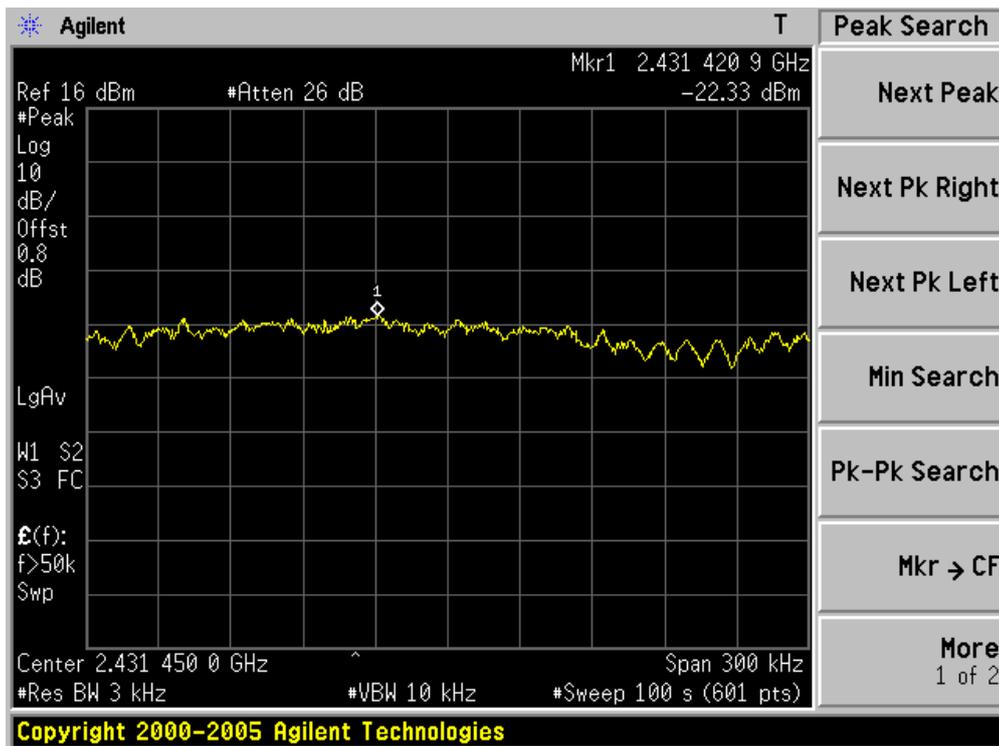
Channel 11 (2462MHz)



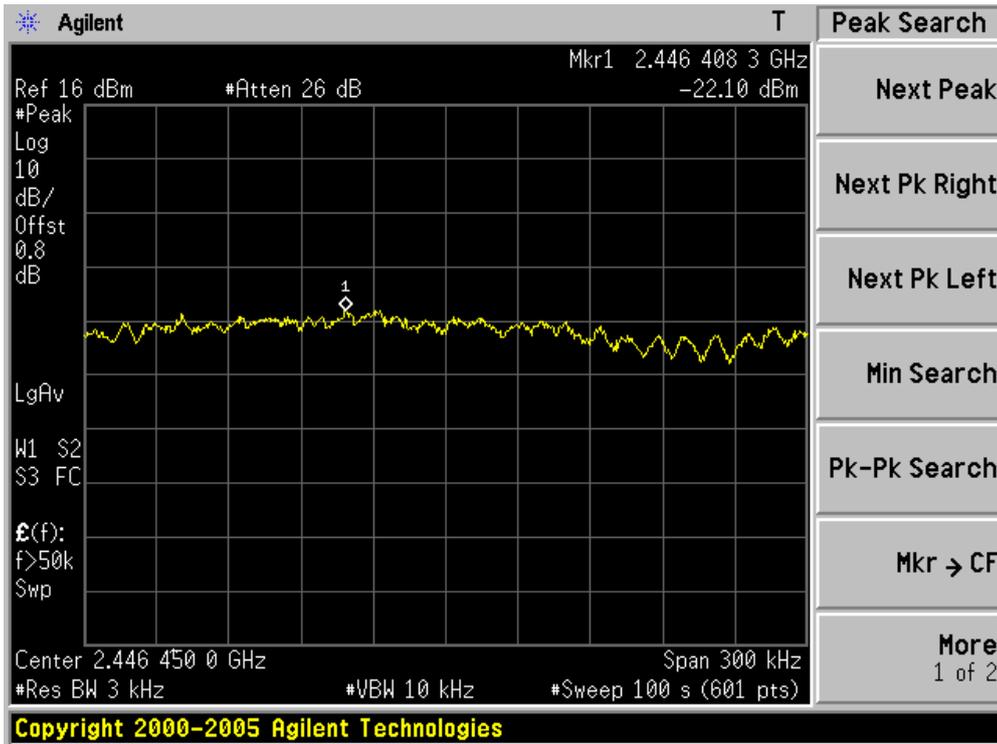
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 0) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 03 | 2422 | -22.33 | N/A | -22.33 | 8 | Pass |
| 06 | 2437 | -22.10 | N/A | -22.10 | 8 | Pass |
| 09 | 2452 | -21.92 | N/A | -21.92 | 8 | Pass |

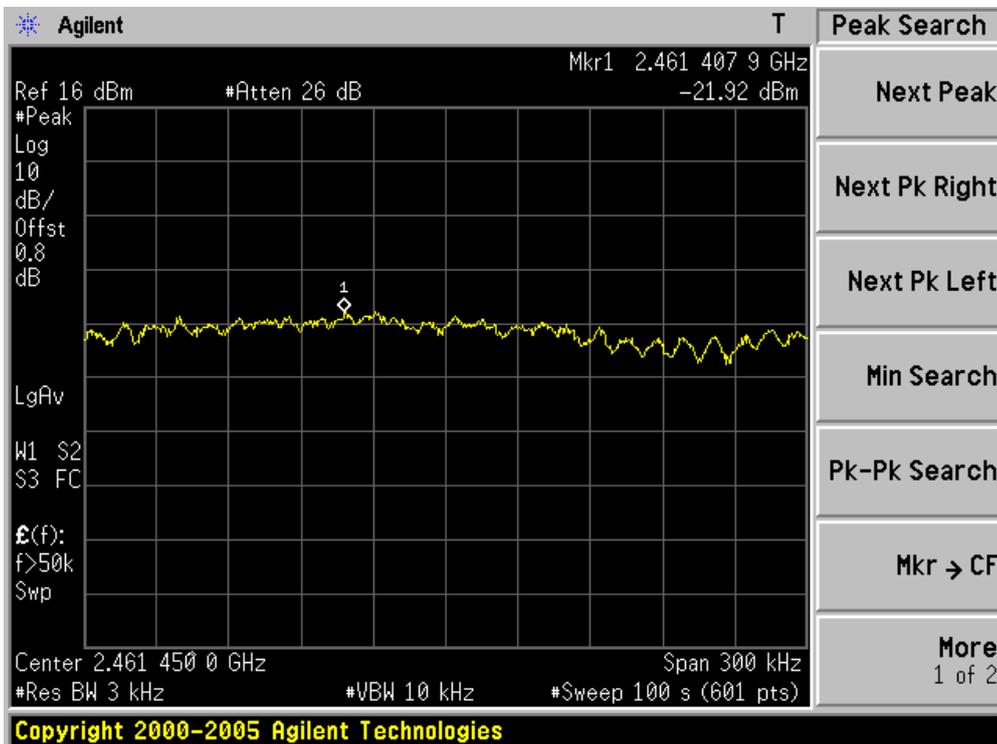
Channel 03 (2422MHz)



Channel 06 (2437MHz)



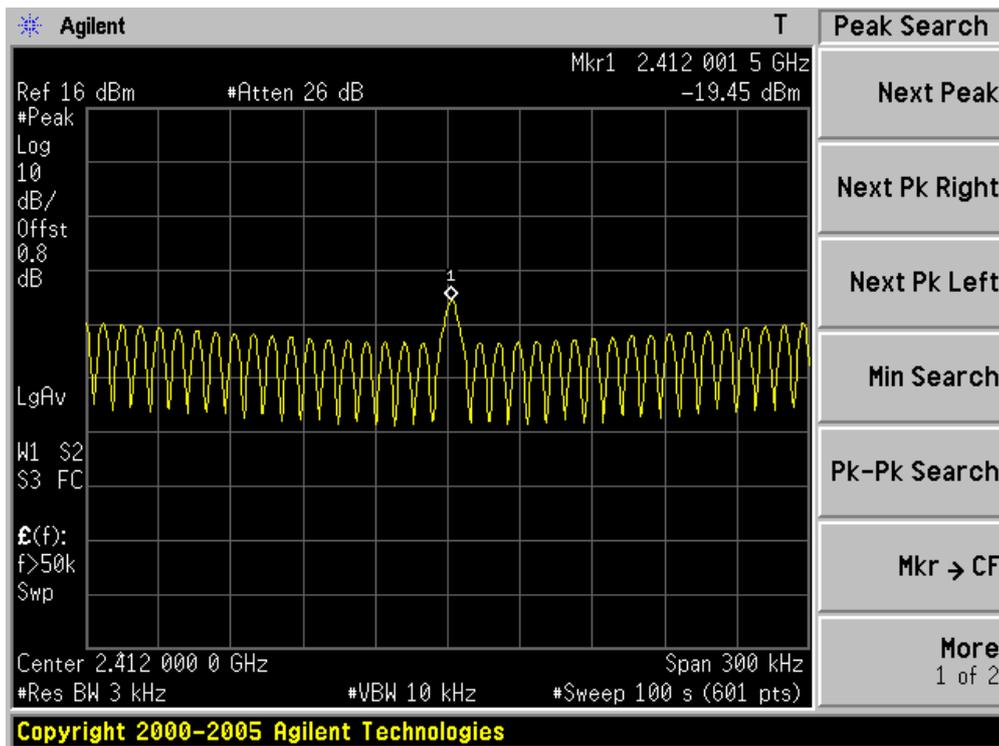
Channel 09 (2452MHz)



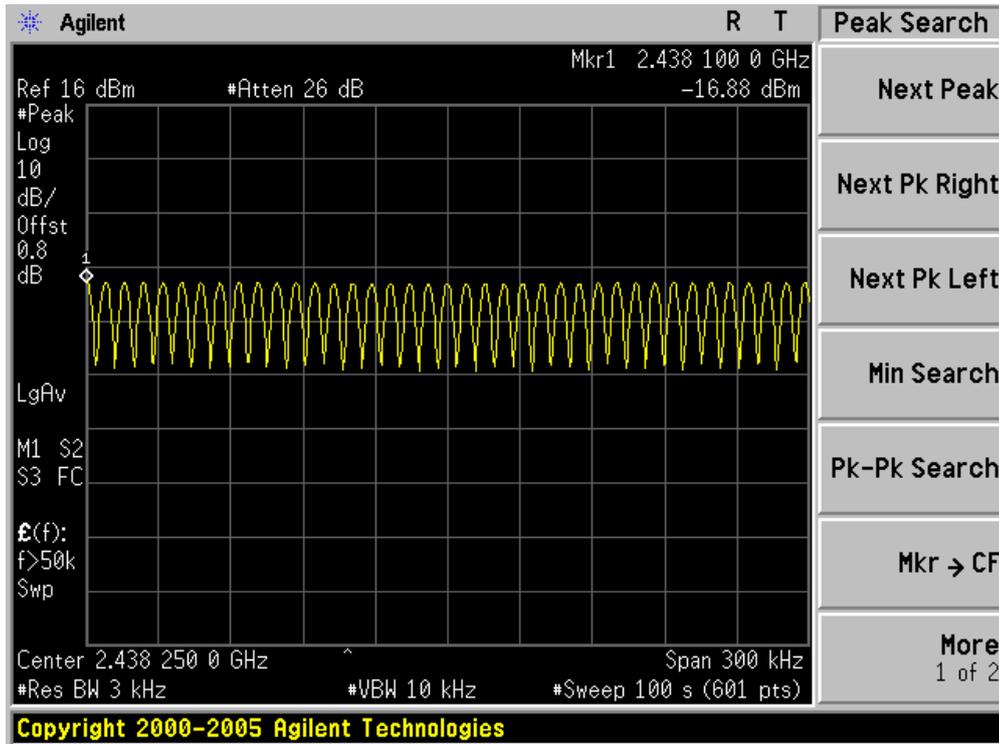
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 1: Transmit at 802.11b (Chain 1) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | N/A | -19.45 | -19.45 | 8 | Pass |
| 06 | 2437 | N/A | -16.88 | -16.88 | 8 | Pass |
| 11 | 2462 | N/A | -15.91 | -15.91 | 8 | Pass |

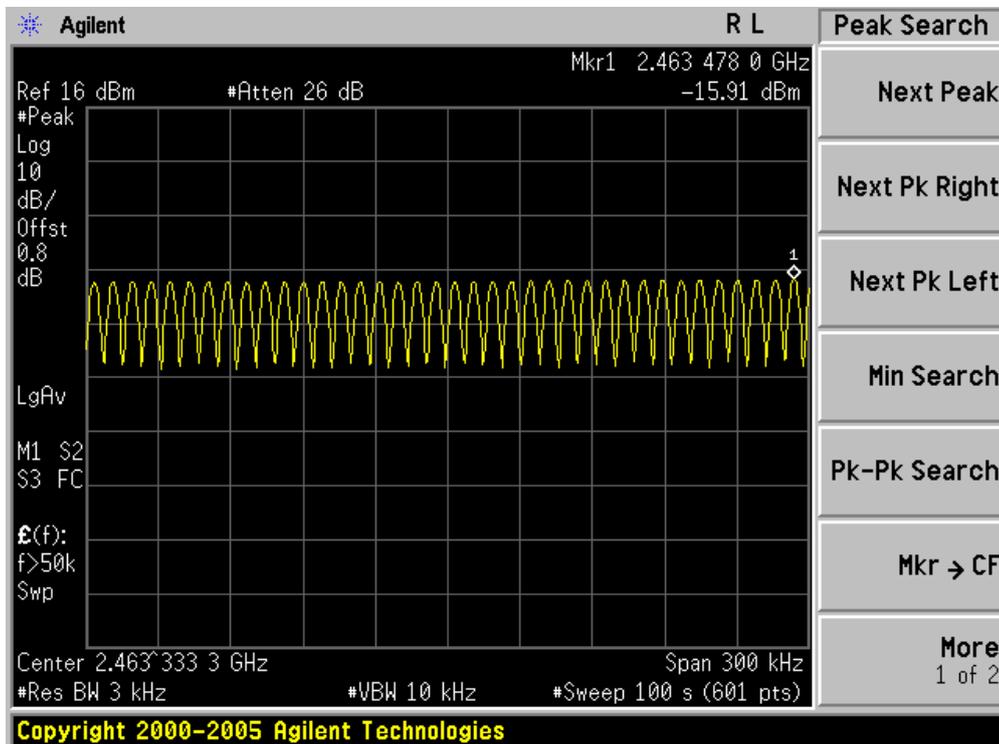
Channel 01 (2412MHz)



Channel 06 (2437MHz)



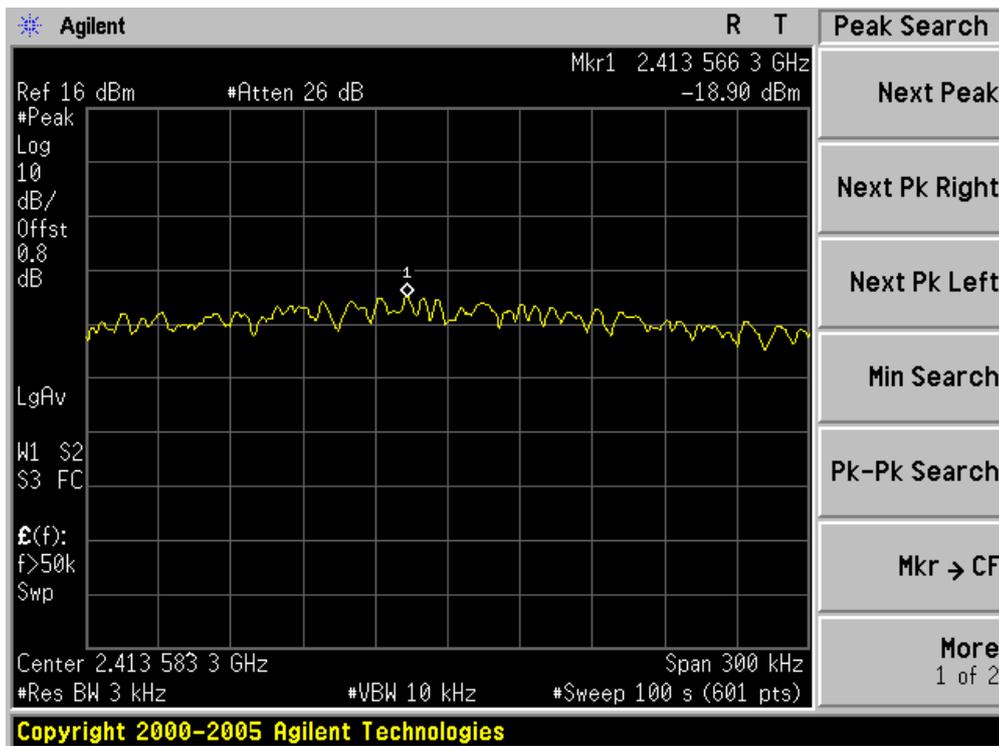
Channel 11 (2462MHz)



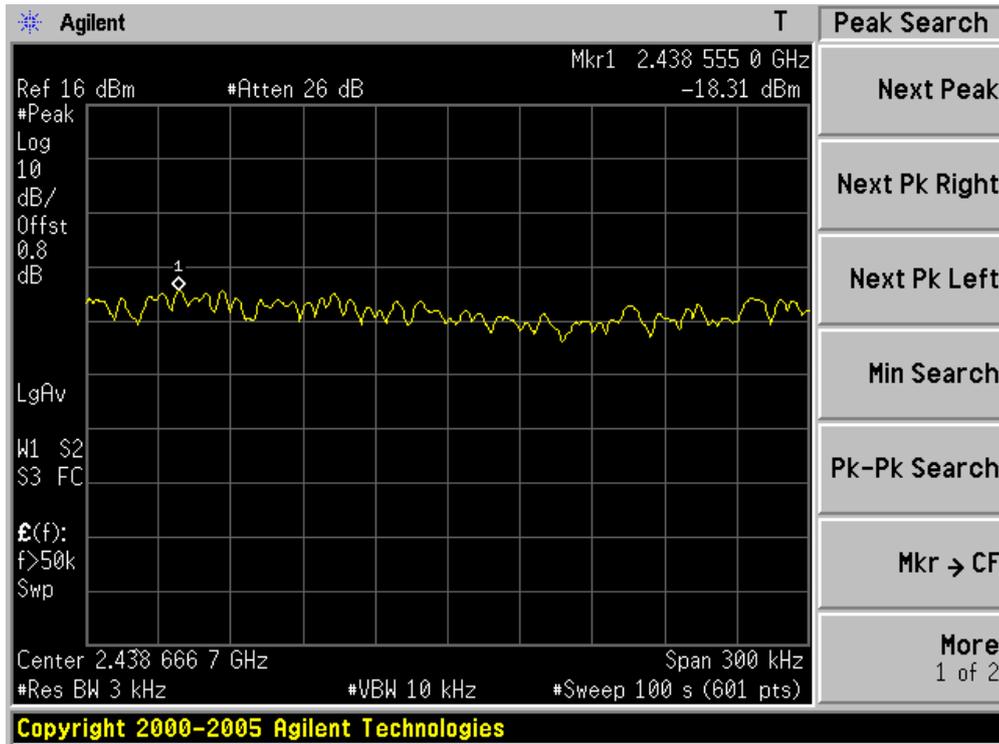
| | | |
|-----------|---|---------------------------------------|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 2: Transmit at 802.11g (Chain 1) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | N/A | -18.90 | -18.90 | 8 | Pass |
| 06 | 2437 | N/A | -18.31 | -18.31 | 8 | Pass |
| 11 | 2462 | N/A | -17.58 | -17.58 | 8 | Pass |

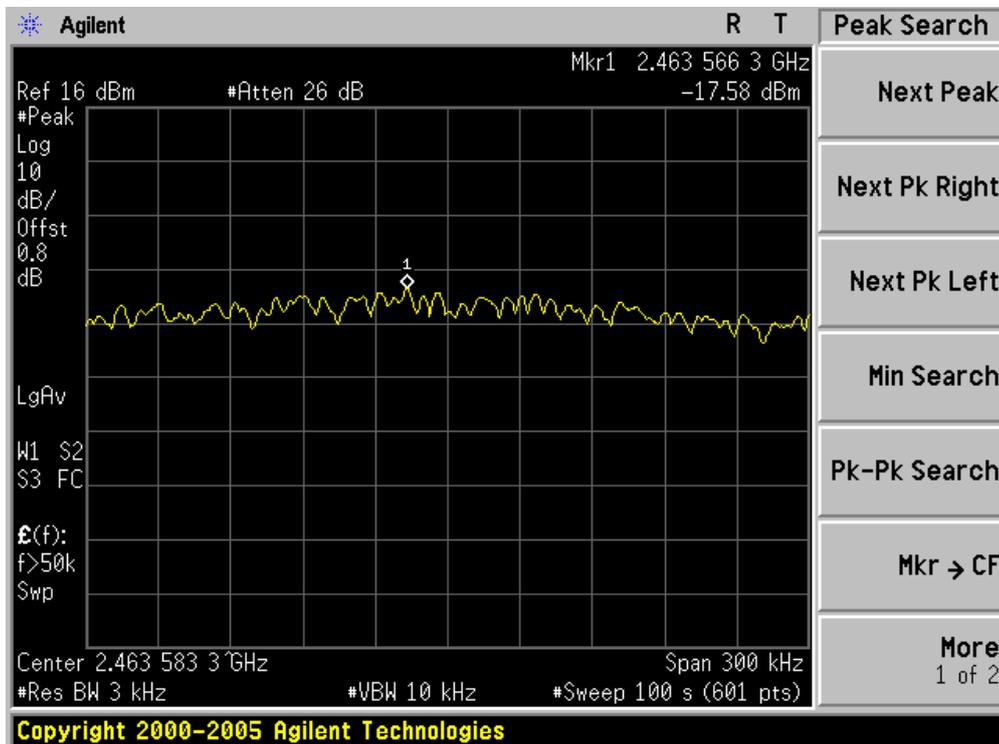
Channel 01 (2412MHz)



Channel 06 (2437MHz)



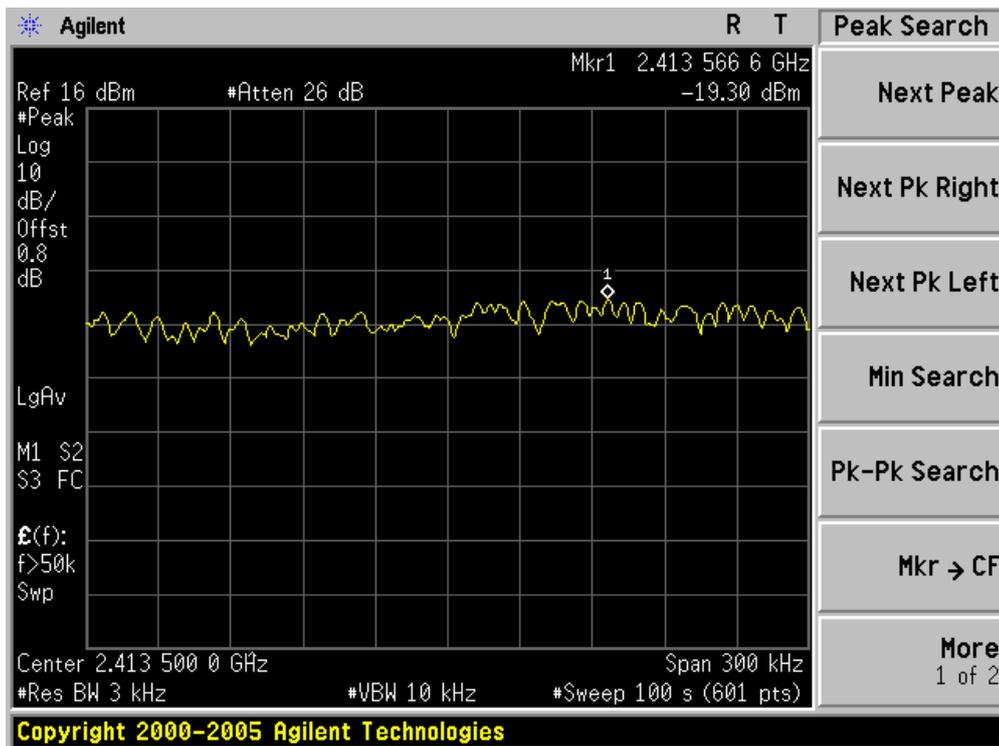
Channel 11 (2462MHz)



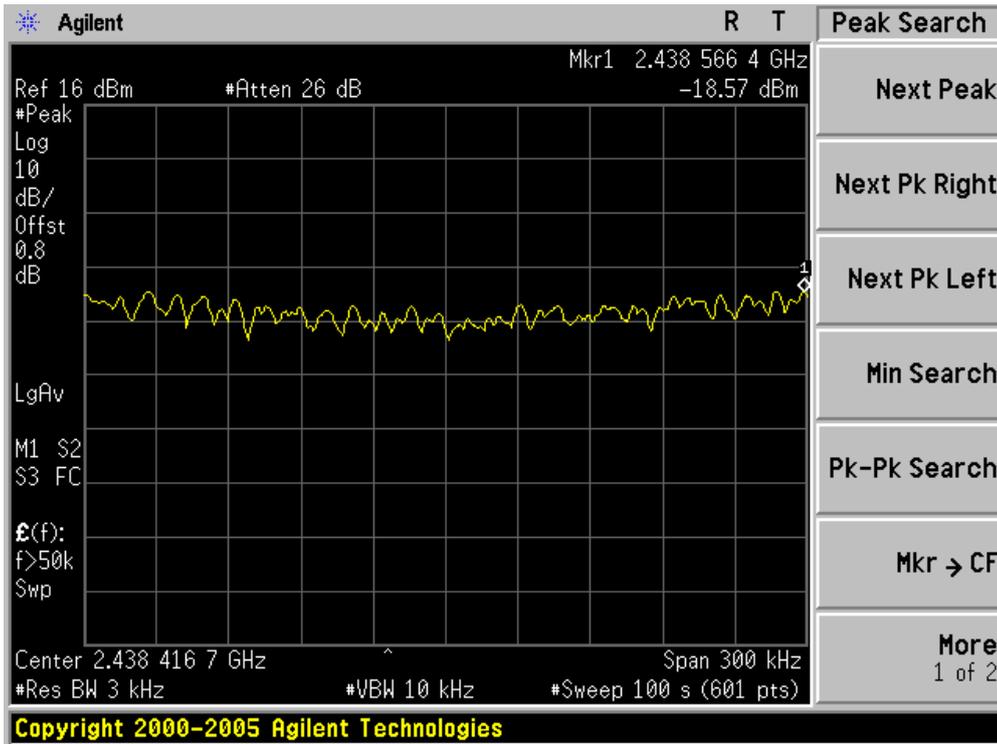
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 1) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | N/A | -19.30 | -19.30 | 8 | Pass |
| 06 | 2437 | N/A | -18.57 | -18.57 | 8 | Pass |
| 11 | 2462 | N/A | -17.27 | -17.27 | 8 | Pass |

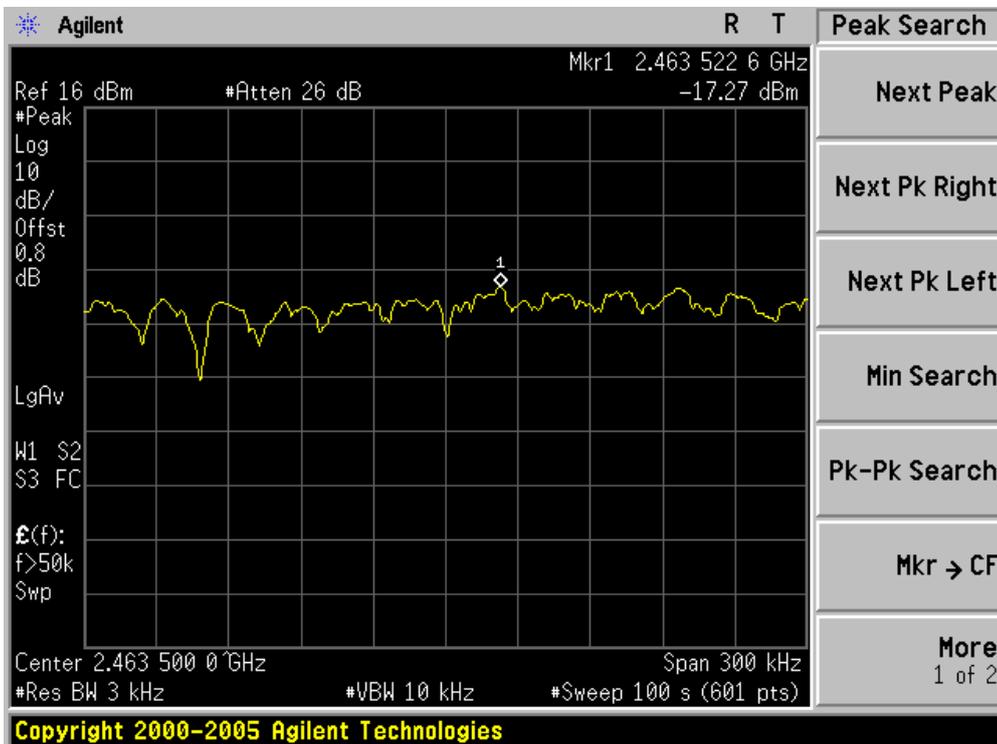
Channel 01 (2412MHz)



Channel 06 (2437MHz)



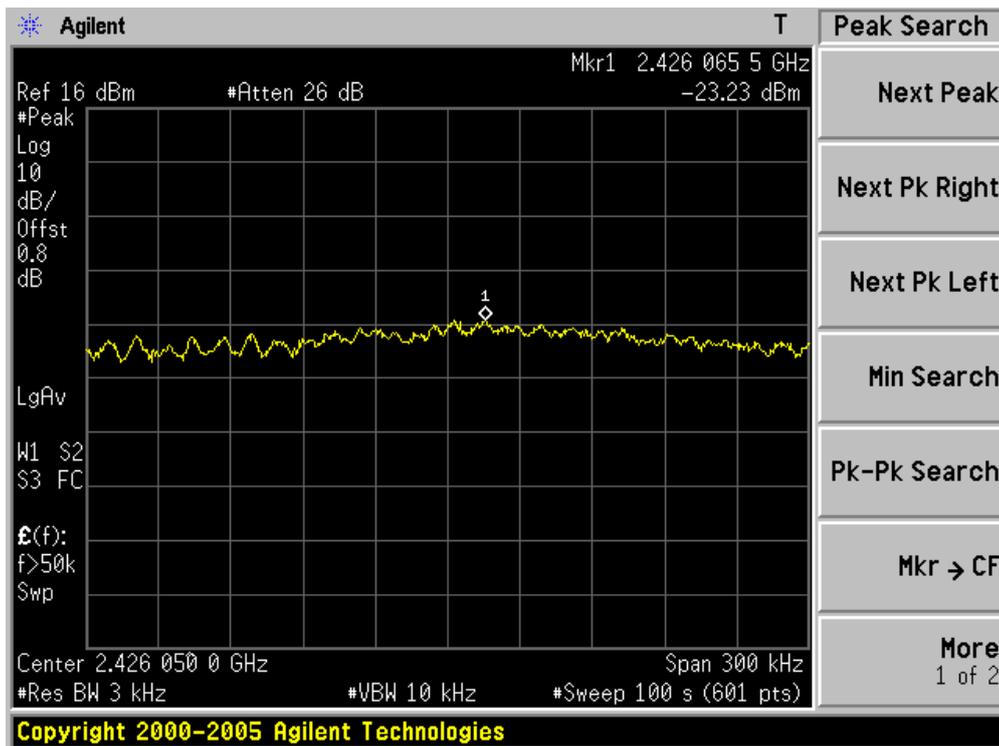
Channel 11 (2462MHz)



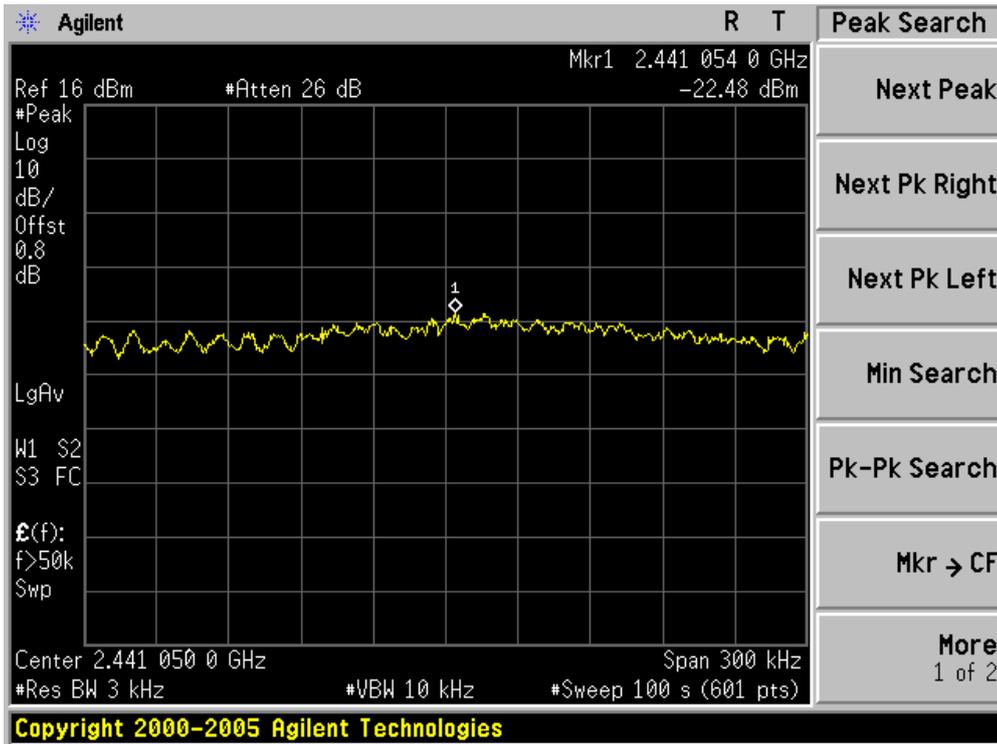
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 1) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 03 | 2422 | N/A | -23.23 | -23.23 | 8 | Pass |
| 06 | 2437 | N/A | -22.48 | -22.48 | 8 | Pass |
| 09 | 2452 | N/A | -22.32 | -22.32 | 8 | Pass |

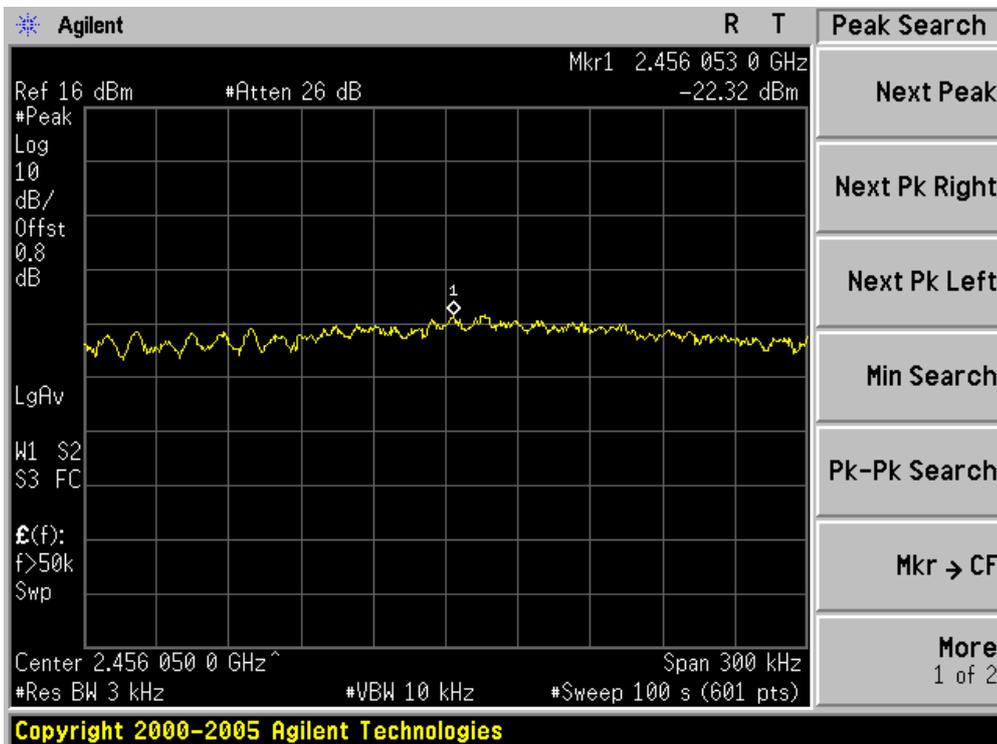
Channel 03 (2422MHz)



Channel 06 (2437MHz)



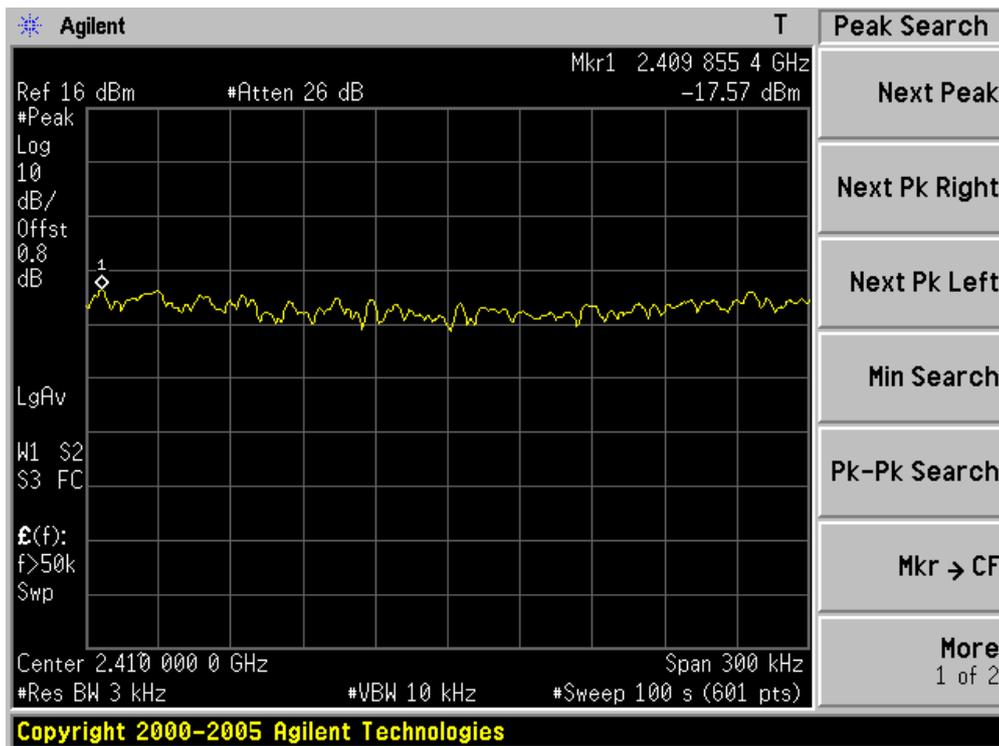
Channel 09 (2452MHz)



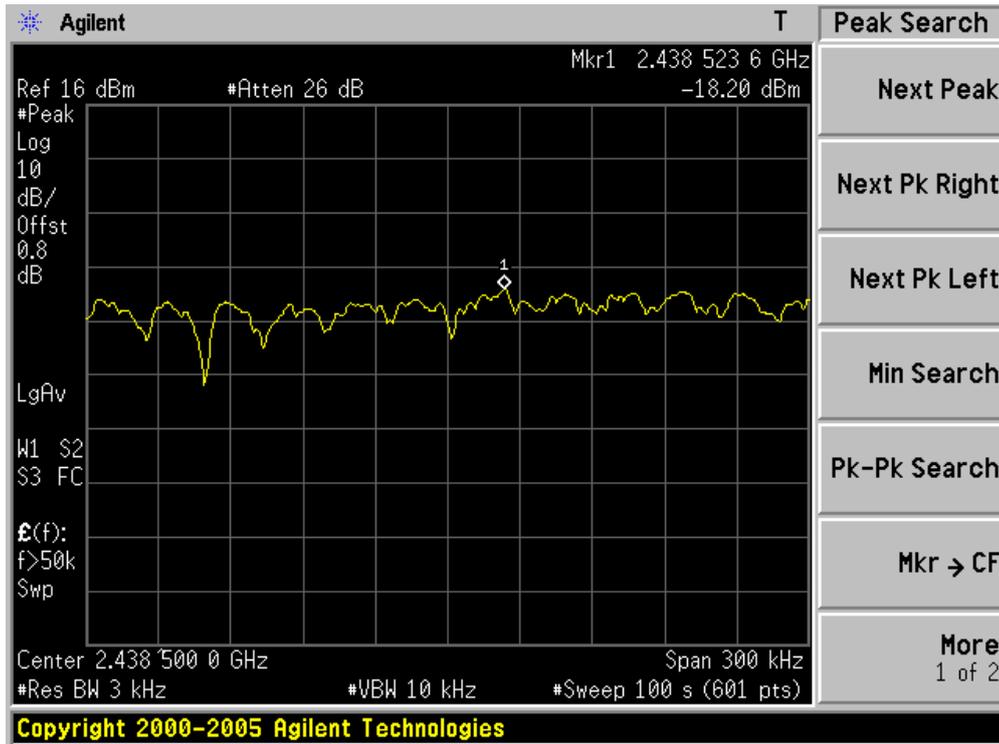
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 3: Transmit at 802.11n (20MHz) (Chain 0+1) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 01 | 2412 | -17.57 | -19.77 | -15.52 | 8 | Pass |
| 06 | 2437 | -18.20 | -18.53 | -15.35 | 8 | Pass |
| 11 | 2462 | -17.83 | -18.19 | -15.00 | 8 | Pass |

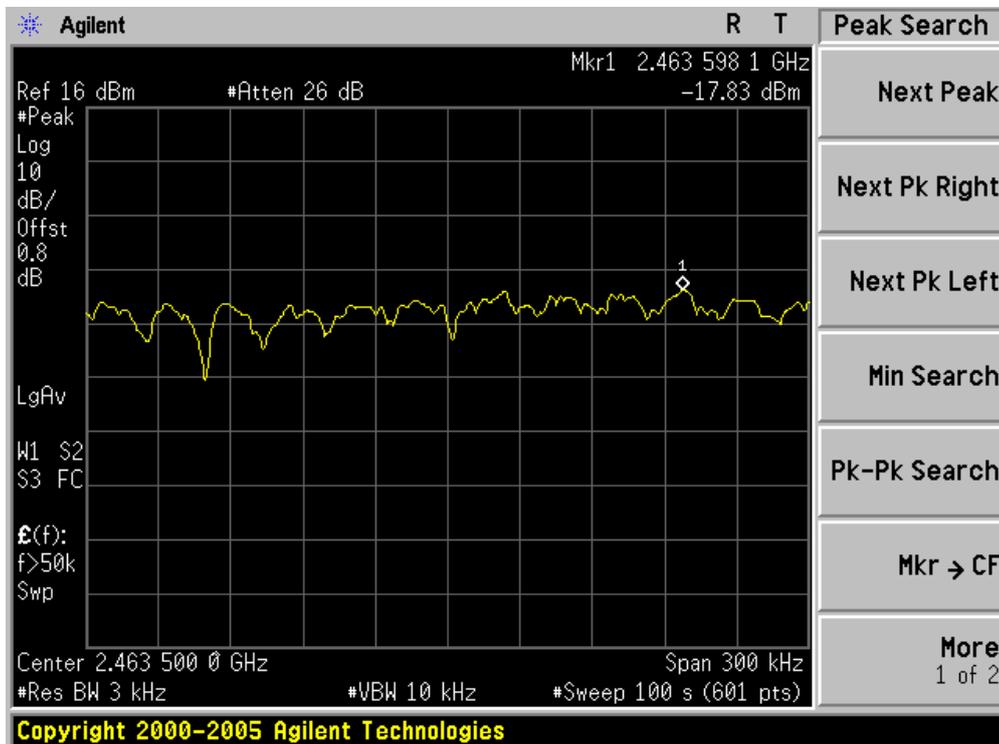
Channel 01 (2412MHz) – Chain 0



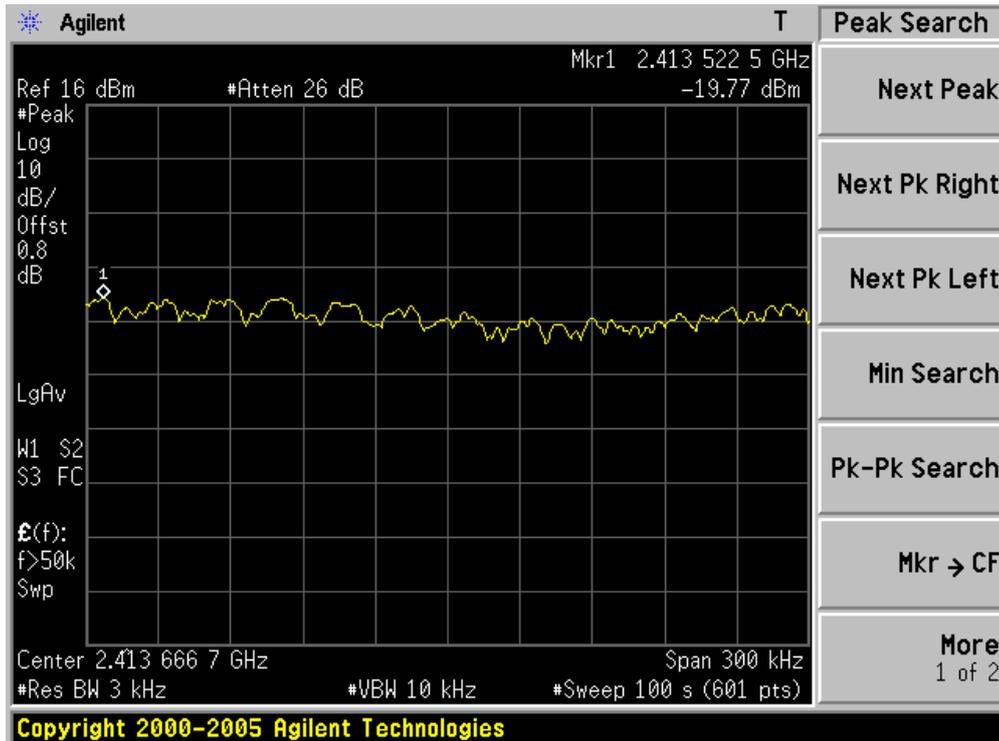
Channel 06 (2437MHz) – Chain 0



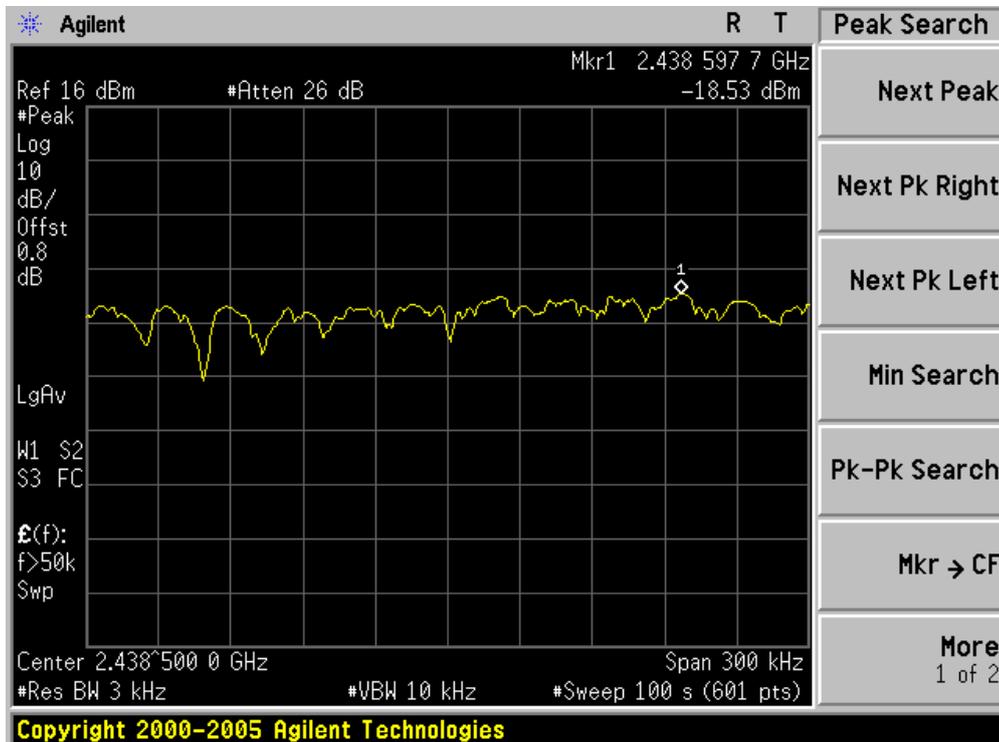
Channel 11 (2462MHz) – Chain 0



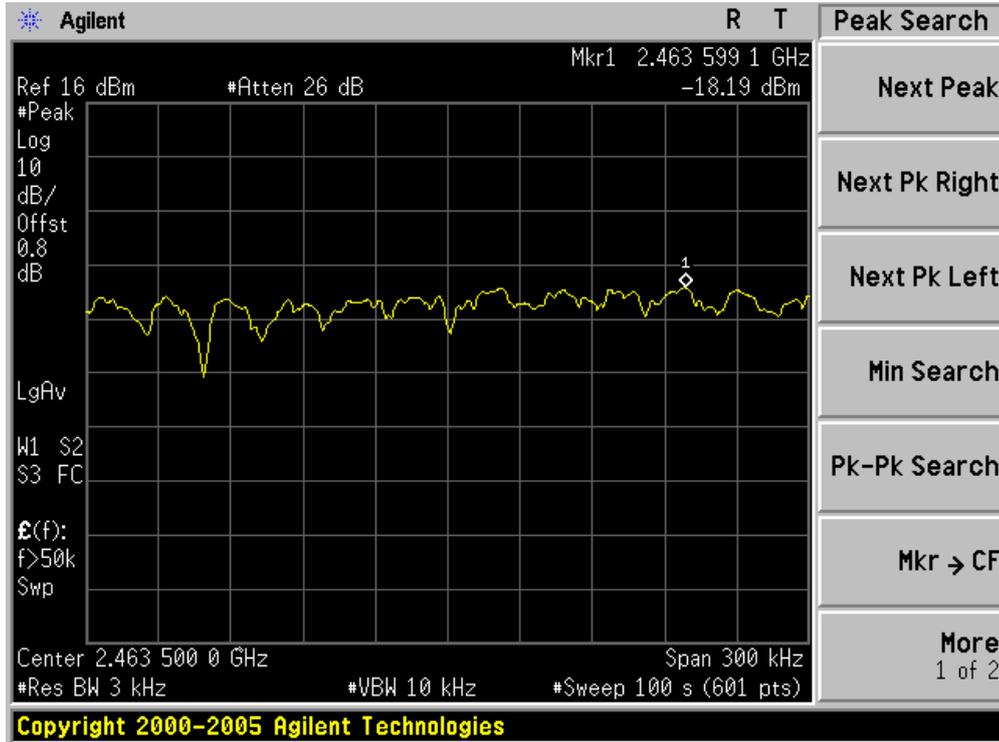
Channel 01 (2412MHz) – Chain 1



Channel 06 (2437MHz) – Chain 1



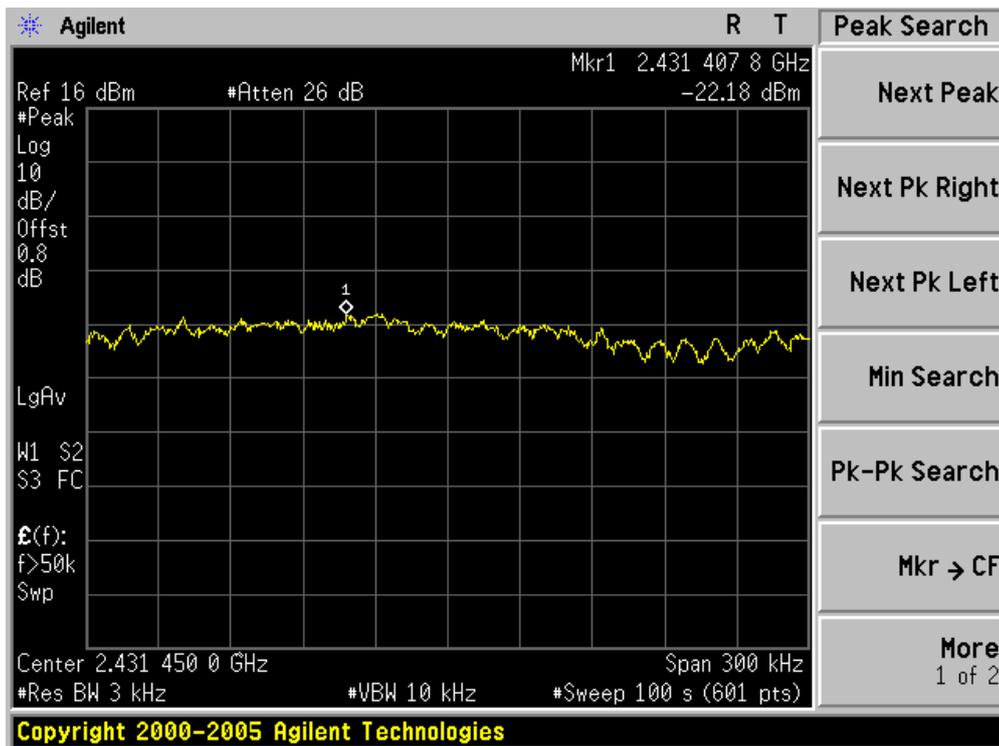
Channel 11 (2462MHz) – Chain 1



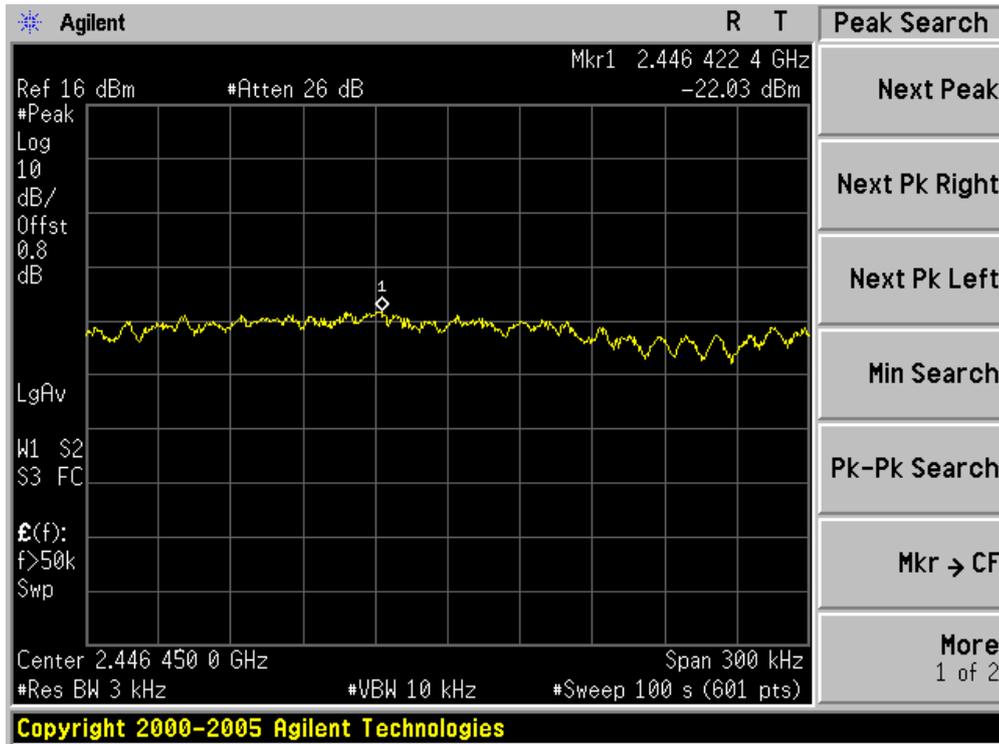
| | | |
|-----------|---|---|
| Product | : | Home Gateway |
| Test Item | : | Power Spectral Density |
| Test Site | : | AC-6 |
| Test Mode | : | Mode 4: Transmit at 802.11n (40MHz) (Chain 0+1) |

| Channel No. | Frequency (MHz) | Measurement PPSD (dBm) | | Total PPSD (dBm) | Limit (dBm/3kHz) | Result |
|-------------|-----------------|------------------------|---------|------------------|------------------|--------|
| | | Chain 0 | Chain 1 | | | |
| 03 | 2422 | -22.18 | -23.11 | -19.61 | 8 | Pass |
| 06 | 2437 | -22.03 | -22.40 | -19.20 | 8 | Pass |
| 09 | 2452 | -21.88 | -22.08 | -18.97 | 8 | Pass |

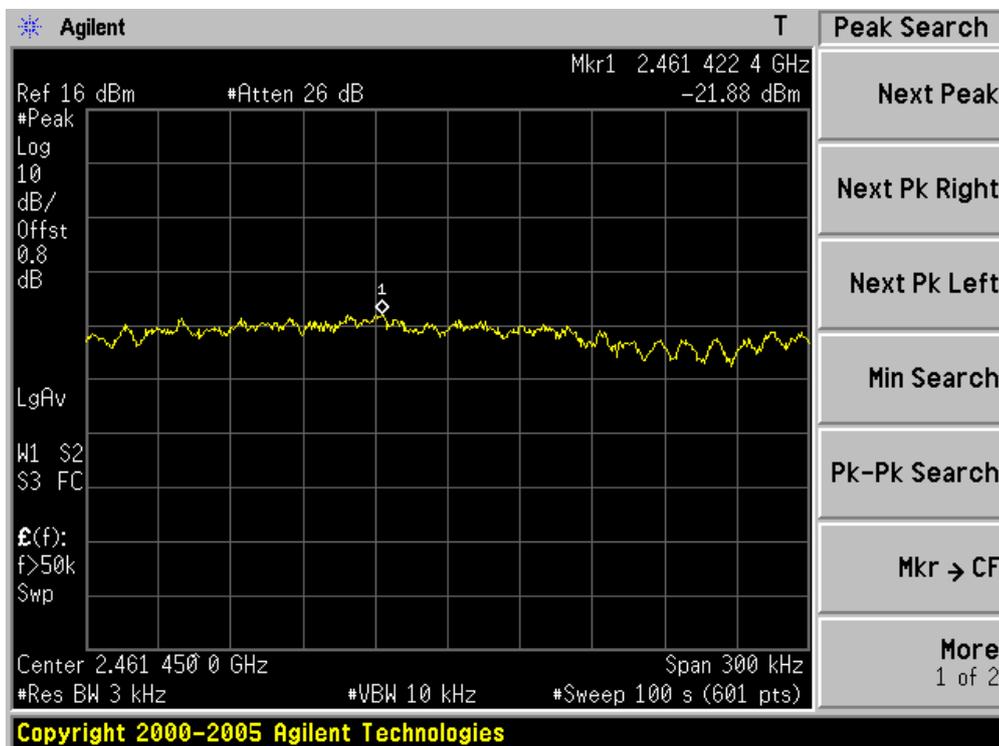
Channel 03 (2422MHz) – Chain 0



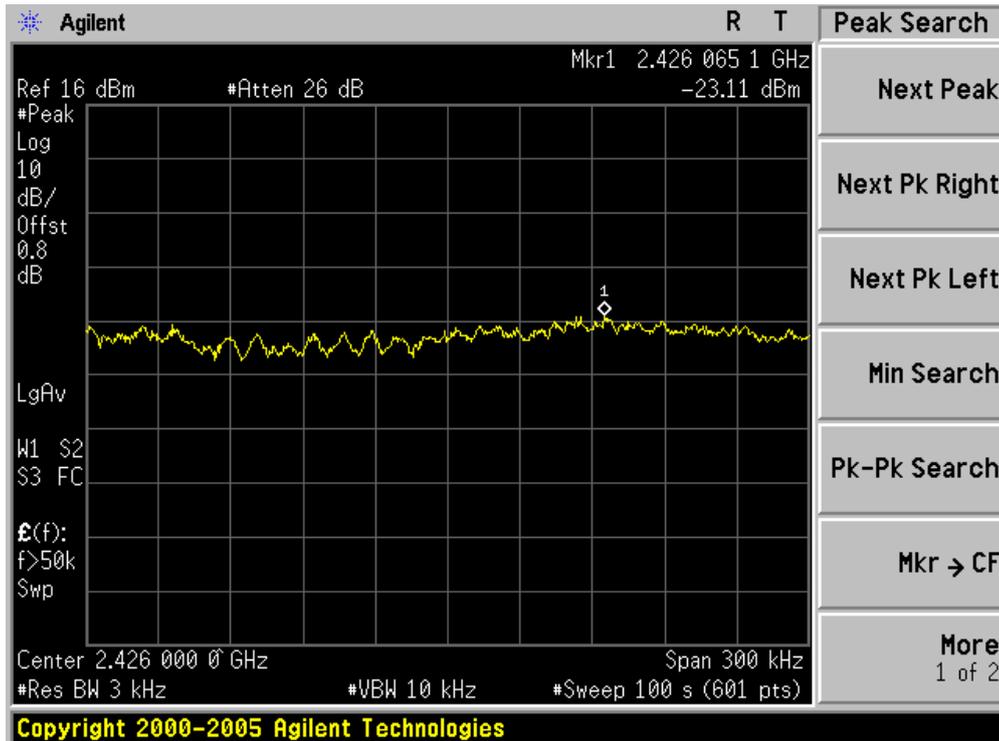
Channel 06 (2437MHz) – Chain 0



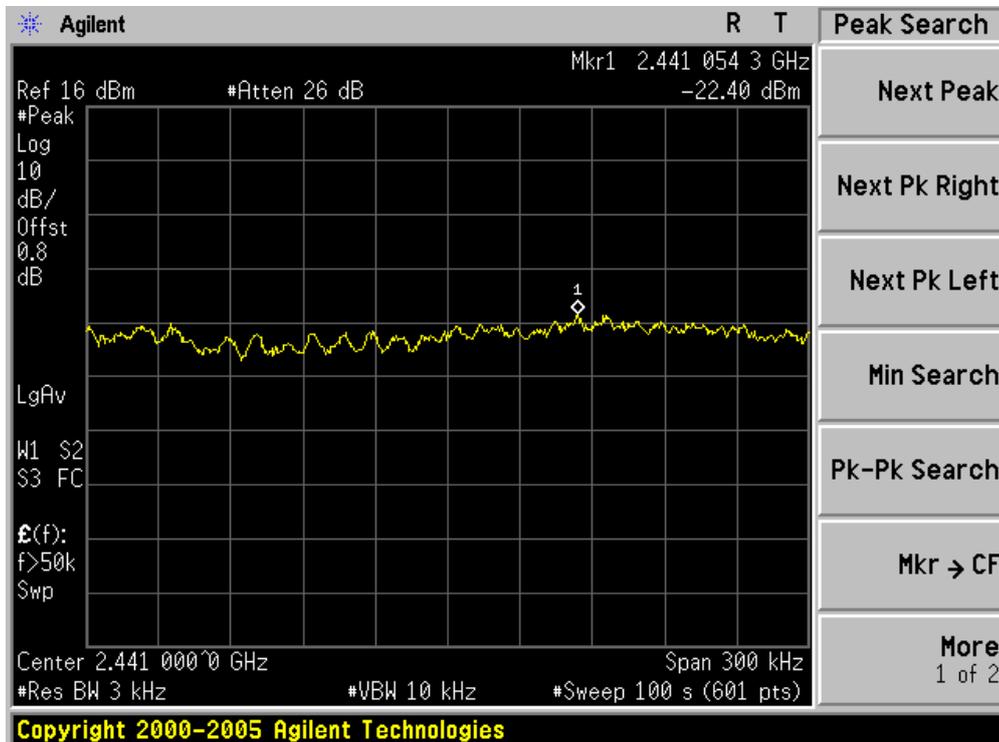
Channel 09 (2452MHz) – Chain 0



Channel 03 (2422MHz) – Chain 1



Channel 06 (2437MHz) – Chain 1



Channel 09 (2452MHz) – Chain 1

