



Test Report

Product Name : 2.4GHz Wireless AV SENDER

Model No. : AVS-121, AVS-122, AVS-123,
AVS-221, AVS-222, AVS-223

FCC ID. : V94-AVS-121-221-A

Applicant : ABEL INDUSTRIES INT'L Co., Ltd.

Address : 318, SEC. 3, CHANG NAN RD, CHANG HUA, Taiwan

Date of Receipt : 2011/01/12

Issued Date : 2011/01/27

Report No. : 111350R-RFUSP44V01

Report Version : V1.0

The test results relate only to the samples tested.

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

Test Report Certification

Issued Date : 2011/01/27

Report No. : 111350R-RFUSP44V01

QuieTek

Product Name : 2.4GHz Wireless AV SENDER
Applicant : ABEL INDUSTRIES INT'L Co., Ltd.
Address : 318, SEC. 3, CHANG NAN RD, CHANG HUA, Taiwan
Manufacturer : ABEL INDUSTRIES INT'L Co., Ltd.
Model No. : AVS-121, AVS-122, AVS-123, AVS-221, AVS-222, AVS-223
Trade Name : ABELTECH
FCC ID. : V94-AVS-121-221-A
EUT Voltage : AC 120V/60Hz
Applicable Standard : FCC CFR Title 47 Part 15 Subpart C Section 15.249: 2009
Test Result : Complied

The test results relate only to the samples tested.

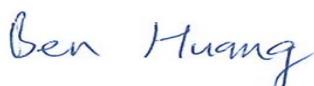
The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Documented By



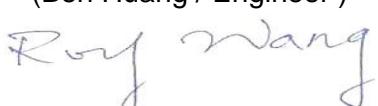
(Sandy Chuang / Adm. Specialist)

Tested By



(Ben Huang / Engineer)

Approved By



(Roy Wang / Manager)

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1. General Information**1.1. EUT Description**

| | |
|--------------------|------------------------------------------------------|
| Product Name | 2.4GHz Wireless AV SENDER |
| Trade Name | ABELTECH |
| Model No. | AVS-121, AVS-122, AVS-123, AVS-221, AVS-222, AVS-223 |
| Frequency Range | 2414 MHz ~ 2468 MHz |
| Antenna Gain | 1dBi |
| Channel Number | 4 |
| Type of Modulation | FM |
| Channel Control | Manual |
| Antenna Type | Soldered on PCB |

| Component | |
|---------------|--------------------------------------------------------------------------------------------------------------|
| IR Antenna | ABEL |
| AV Cable | Non-Shielded, 1.0m |
| Power Adapter | YUYAO CITY ZHONGYU, FY8-001 90300D I/P: 120VAC, 60Hz O/P: 9VDC, 300MA Cable Out: Non-Shielded, 2.0m |

| Working Frequency of Each Channel | | | | | | | |
|-----------------------------------|-----------|---------|-----------|---------|-----------|---------|-----------|
| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 001 | 2414 MHz | 002 | 2432 MHz | 003 | 2450 MHz | 004 | 2468 MHz |

Note:

1. This device is a 2.4GHz Wireless AV SENDER included a 2.4GHz transceiver function and a 433.92MHz transceiver function.
2. The different of the each model is shown as below:

| Model No. | Photo | Description |
|-----------|------------------------------------------------------------------------------------|--------------------------|
| AVS-221 |  | 2 source with U. IR |
| AVS-121 | | Single source with U. IR |
| AVS-222 |  | 2 source with U. IR |
| AVS-122 | | Single source with U. IR |
| AVS-223 |  | 2 source with U. IR |
| AVS-123 | | Single source with U. IR |

3. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.249.
4. Regards to the frequency band operation; the lowest, middle and highest frequency of channel were selected to perform the test, and then shown on this report.
5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.
6. This device is a composite device in accordance with Part 15 regulations. The function receiving was measured and made a test report that the report number is 111350R-RFUSP37V02 under Declaration of Conformity.

1.3. Test Mode

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:

| Pre-Test Mode | |
|-----------------|------------------|
| EMI | Mode 1: Transmit |
| Final Test Mode | |
| TX | Mode 1: Transmit |

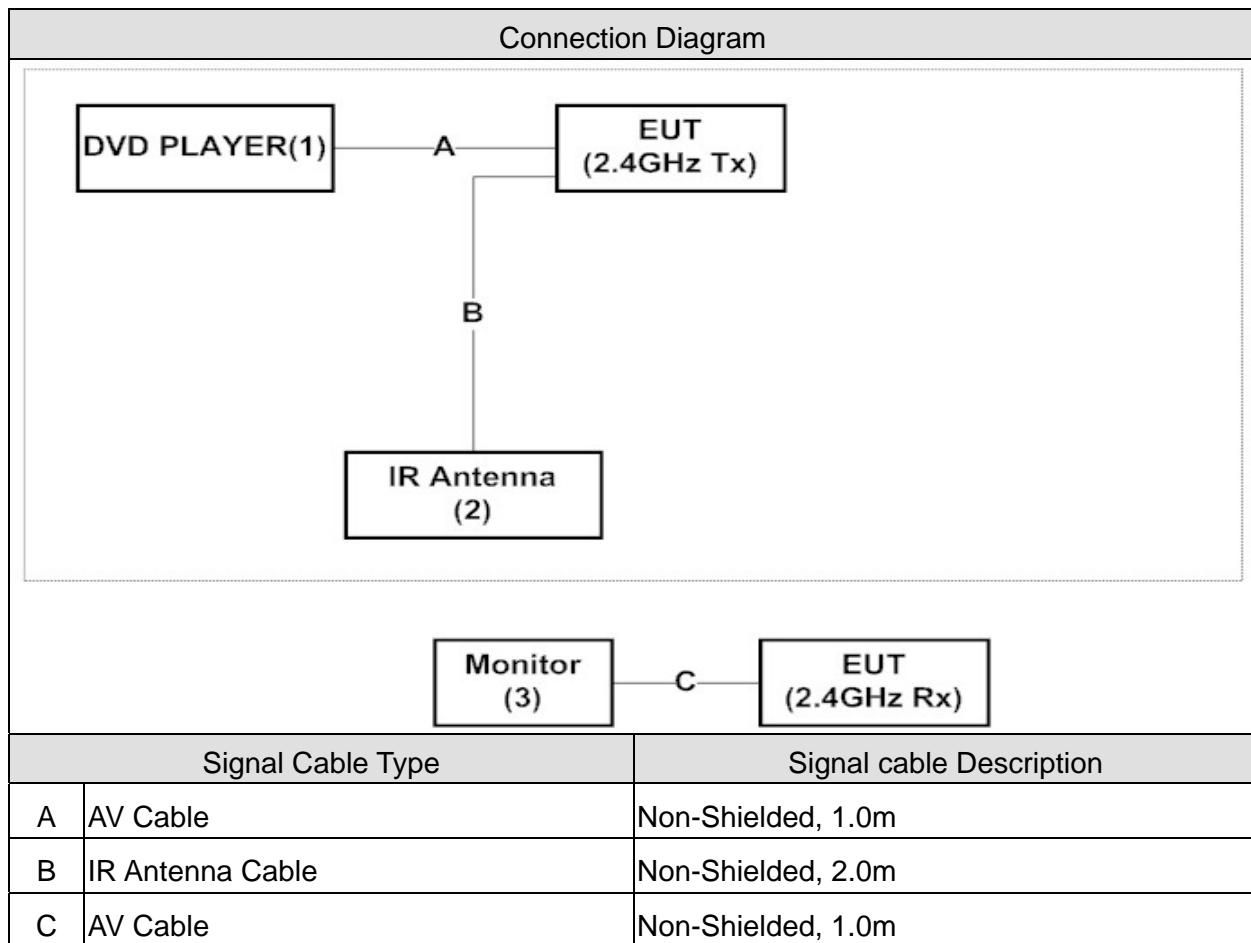
| Emission | |
|--------------------|------|
| Performed Item | Test |
| Conducted Emission | Yes |
| Fundamental Power | Yes |
| Radiated Emission | Yes |
| Band Edge | Yes |

1.4. 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. | FCC ID | Power Cord |
|--------------|---------------------------------------|-----------|------------------|--------|--------------------|
| 1 DVD PLAYER | Pioneer | DV-600AV | GJKD00211 2LS | DoC | Non-Shielded, 1.8m |
| 2 IR Antenna | ABEL INDUSTRIES INT'L Co., Ltd. | N/A | N/A | DoC | -- |
| 3 Monitor | JVC | J20VE6 | N/A | DoC | -- |

1.5. Configuration of tested System



1.6. EUT Exercise Software

| | |
|---|------------------------------------------------------------|
| 1 | Setup the EUT and simulators as shown on 1.4. |
| 2 | Turn on the power. |
| 3 | The RF signal's status will continue transmit through EUT. |
| 4 | Repeat the above procedure (3) |

1.7. Test Facility

Ambient conditions in the laboratory:

| Items | Test Item | Required (IEC 68-1) | Actual |
|----------------------------|--------------------------------------------|---------------------|----------|
| Temperature (°C) | FCC PART 15 C 15.207 Conducted Emission | 15 - 35 | 25 |
| Humidity (%RH) | | 25 - 75 | 50 |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 C 15.209 Fundamental Power | 15 - 35 | 25 |
| Humidity (%RH) | | 25 - 75 | 65 |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 C 15.209 Radiated Emission | 15 - 35 | 25 |
| Humidity (%RH) | | 25 - 75 | 65 |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |
| Temperature (°C) | FCC PART 15 C 15.249 Band Edge | 15 - 35 | 25 |
| Humidity (%RH) | | 25 - 75 | 65 |
| Barometric pressure (mbar) | | 860 - 1060 | 950-1000 |

Site Description: September 27, 2010 File on
Federal Communications Commission
Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046
Registration Number: 365520
Accredited by TAF
Accreditation Number: 1313
Effective through: December 27, 2013



Site Name: Quietek Corporation



Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,
Chiung-Lin, Hsin-Chu County,
Taiwan, R.O.C.
TEL : 886-3-592-8858 / FAX : 886-3-592-8859
E-Mail : service@quietek.com

2. Conducted Emission

2.1. Test Equipment

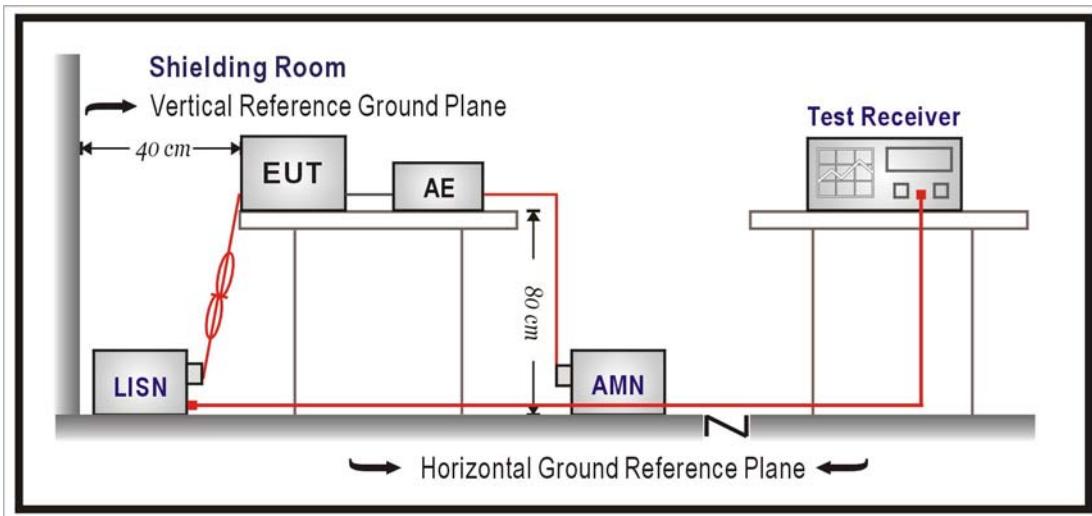
The following test equipments are used during the test:

Conducted Emission/ SR3

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|---------------|--------------|-----------|------------|----------------|
| LISN | R&S | ENV216 | 100096 | 2011/09/20 |
| LISN | R&S | ESH3-Z5 | 836679/022 | 2011/05/30 |
| Test Receiver | R&S | ESCS 30 | 825442/017 | 2011/02/04 |

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

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

Remarks : In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.) Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2009on conducted measurement. Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Test Specification

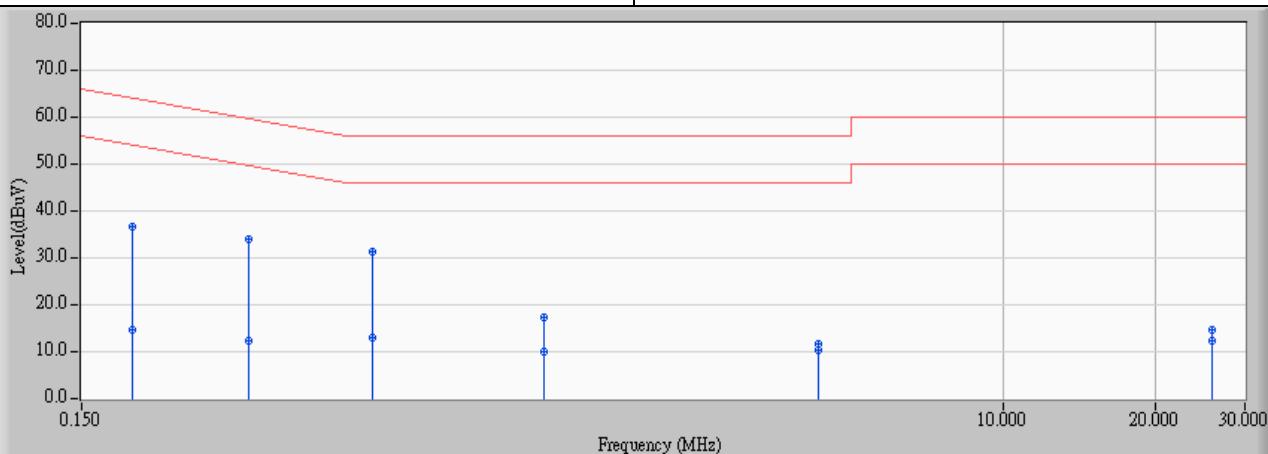
According to FCC Part 15 Subpart C Paragraph 15.207: 2009

2.6. Uncertainty

The measurement uncertainty is defined as \pm 2.26 dB.

2.7. Test Result

| | |
|---------------------------------|---------------------------|
| Site : SR3 | Time : 2011/01/21 - 17:25 |
| Limit : CISPR_B_00M_QP | Margin : 10 |
| Probe : SR3_LISN(16A) - Line1 | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

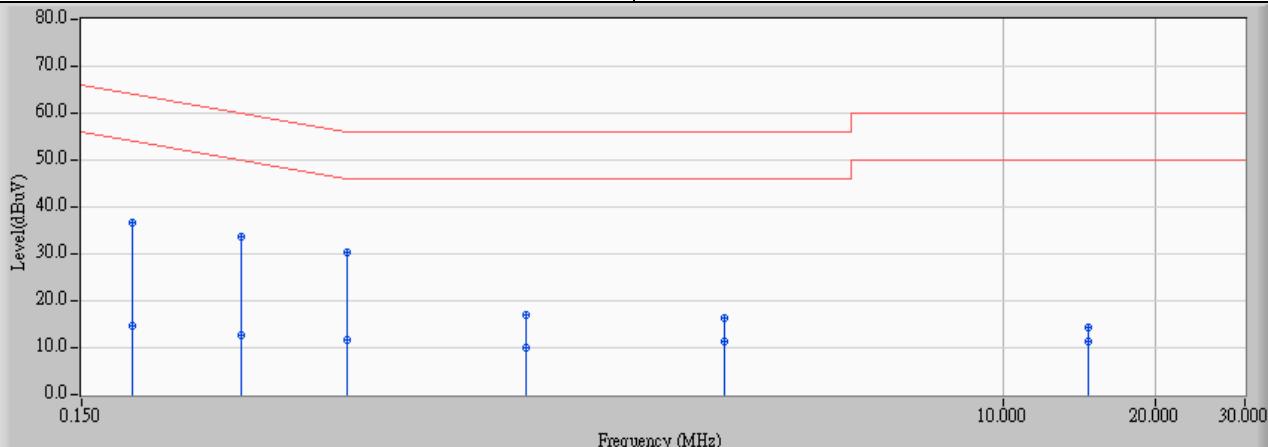


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|----|---|-----------------|---------------------|----------------------|----------------------|-------------|--------------|---------------|
| 1 | | 0.189 | 9.662 | 27.150 | 36.812 | -27.265 | 64.078 | QUASIPEAK |
| 2 | | 0.189 | 9.662 | 4.860 | 14.522 | -39.555 | 54.078 | AVERAGE |
| 3 | | 0.322 | 9.654 | 24.220 | 33.874 | -25.784 | 59.658 | QUASIPEAK |
| 4 | | 0.322 | 9.654 | 2.690 | 12.344 | -37.314 | 49.658 | AVERAGE |
| 5 | * | 0.564 | 9.737 | 21.470 | 31.207 | -24.793 | 56.000 | QUASIPEAK |
| 6 | | 0.564 | 9.737 | 3.320 | 13.057 | -32.943 | 46.000 | AVERAGE |
| 7 | | 1.236 | 9.892 | 7.380 | 17.272 | -38.728 | 56.000 | QUASIPEAK |
| 8 | | 1.236 | 9.892 | 0.100 | 9.992 | -36.008 | 46.000 | AVERAGE |
| 9 | | 4.291 | 10.080 | 1.520 | 11.600 | -44.400 | 56.000 | QUASIPEAK |
| 10 | | 4.291 | 10.080 | 0.210 | 10.290 | -35.710 | 46.000 | AVERAGE |
| 11 | | 25.834 | 10.384 | 4.260 | 14.645 | -45.355 | 60.000 | QUASIPEAK |
| 12 | | 25.834 | 10.384 | 1.810 | 12.195 | -37.805 | 50.000 | AVERAGE |

Note:

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

| | |
|---------------------------------|---------------------------|
| Site : SR3 | Time : 2011/01/21 - 17:22 |
| Limit : CISPR_B_00M_QP | Margin : 10 |
| Probe : SR3_LISN(16A) – Line2 | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |



| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV) | Margin (dB) | Limit (dBuV) | Detector Type |
|----|-----------------|---------------------|----------------------|----------------------|-------------|--------------|---------------|
| 1 | 0.189 | 9.662 | 27.110 | 36.772 | -27.305 | 64.078 | QUASIPEAK |
| 2 | 0.189 | 9.662 | 4.860 | 14.522 | -39.555 | 54.078 | AVERAGE |
| 3 | 0.310 | 9.654 | 24.080 | 33.734 | -26.232 | 59.966 | QUASIPEAK |
| 4 | 0.310 | 9.654 | 2.870 | 12.524 | -37.442 | 49.966 | AVERAGE |
| 5 | * | 9.702 | 20.620 | 30.322 | -25.678 | 56.000 | QUASIPEAK |
| 6 | 0.502 | 9.702 | 1.830 | 11.532 | -34.468 | 46.000 | AVERAGE |
| 7 | 1.138 | 9.885 | 7.050 | 16.936 | -39.064 | 56.000 | QUASIPEAK |
| 8 | 1.138 | 9.885 | 0.070 | 9.956 | -36.044 | 46.000 | AVERAGE |
| 9 | 2.806 | 9.991 | 6.480 | 16.471 | -39.529 | 56.000 | QUASIPEAK |
| 10 | 2.806 | 9.991 | 1.470 | 11.461 | -34.539 | 46.000 | AVERAGE |
| 11 | 14.701 | 10.159 | 4.250 | 14.409 | -45.591 | 60.000 | QUASIPEAK |
| 12 | 14.701 | 10.159 | 1.180 | 11.339 | -38.661 | 50.000 | AVERAGE |

Note:

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

3. Fundamental Power

3.1. Test Equipment

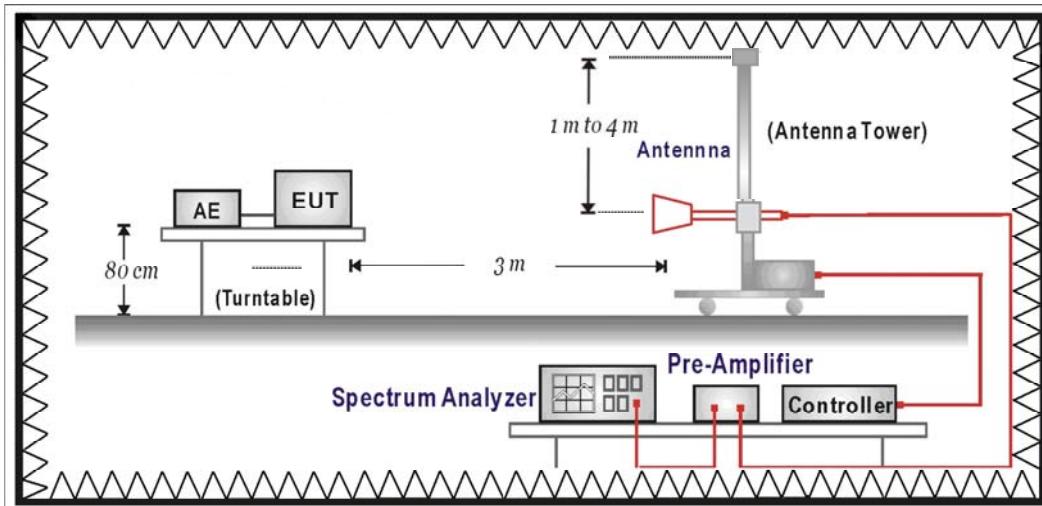
The following test equipments are used during the test:

Fundamental Power / CB1

| Instrument | Manufacturer | Type No. | Serial No | Next Cal. Date |
|-------------------|-----------------|--------------|------------|----------------|
| Horn Antenna | Schwarzback | BBHA 9120D | 743 | 2011/03/14 |
| Spectrum Analyzer | Agilent | E4440A | MY46187335 | 2011/01/14 |
| Coaxial Cable | Huber+Suhner AG | Sucoflex 102 | 25623/2 | 2011/04/07 |

Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

3.2. Test Setup



3.3. Limits

➤ Fundamental and Harmonics Emission Limits

| FCC Part 15 Subpart C Paragraph 15.249 Limits | | | | |
|------------------------------------------------------|----------------------------------|--------|--------------------------------|--------|
| Fundamental Frequency MHz | Field Strength of Fundamental | | Field Strength of Harmonics | |
| | mV/m | dBuV/m | uV/m | dBuV/m |
| 902-928 | 50 | 94 | 500 | 54 |
| 2400-2483.5 | 50 | 94 | 500 | 54 |
| 5725-5875 | 50 | 94 | 500 | 54 |

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

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.
3. The emission limit in this paragraph is based on measurement instrumentation employing an average detector.

3.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

3.5. Test Specification

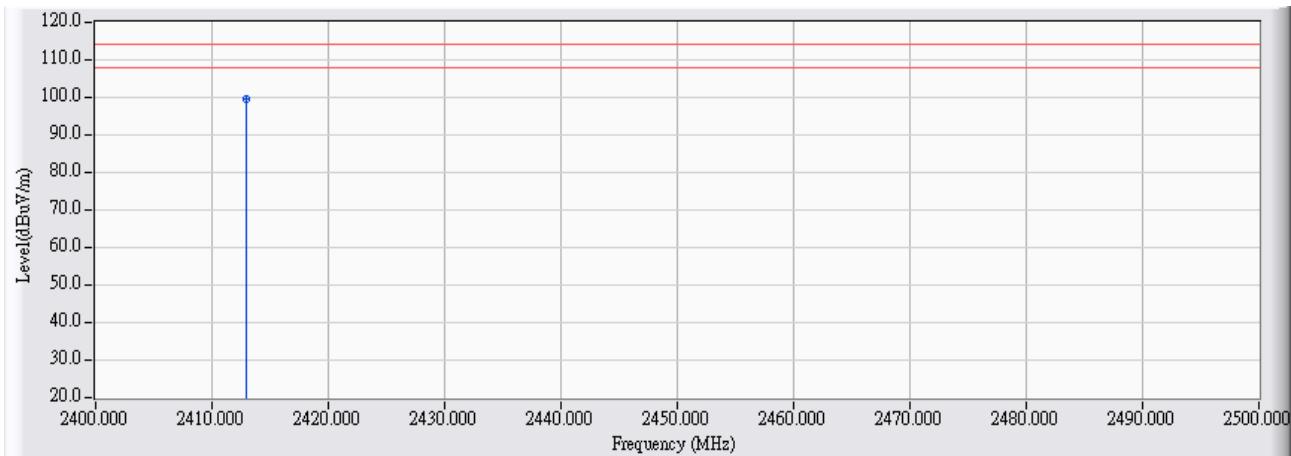
According to FCC Part 15 Subpart C Paragraph 15.249: 2009

3.6. Uncertainty

The measurement uncertainty: 1GHz~26.5GHz as $\pm 3.65\text{dB}$

3.7. Test Result

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:59 |
| Limit : FCC_SpartC_15.249_F_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

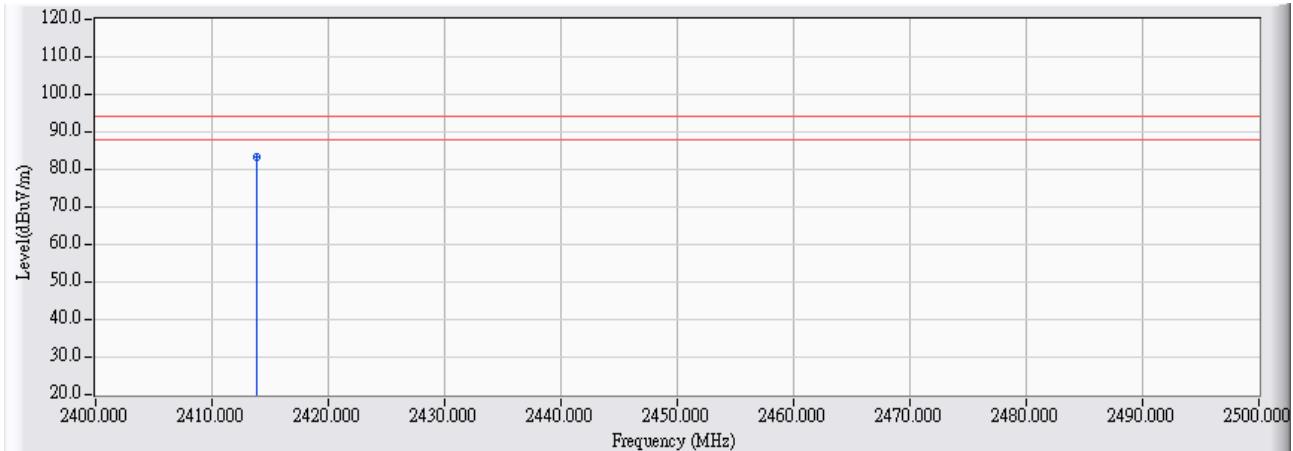


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2412.955 | 27.767 | 71.807 | 99.574 | -14.426 | 114.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:59 |
| Limit : FCC_SpartC_15.249_F_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

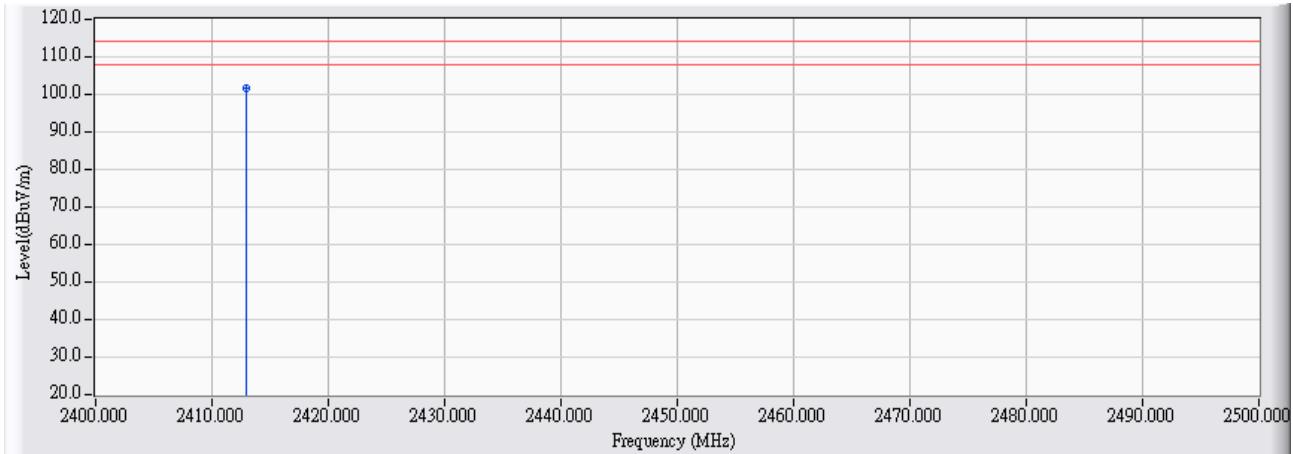


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * | 2413.890 | 27.771 | 55.592 | 83.363 | -10.637 | 94.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 14:05 |
| Limit : FCC_SpartC_15.249_F_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

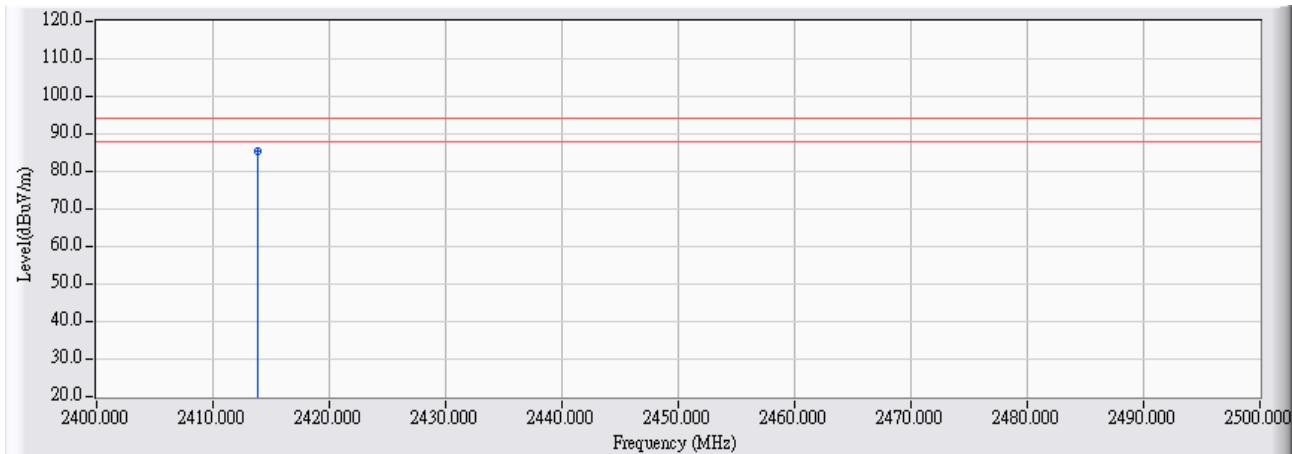


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2412.980 | 27.767 | 73.842 | 101.609 | -12.391 | 114.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 14:05 |
| Limit : FCC_SpartC_15.249_F_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

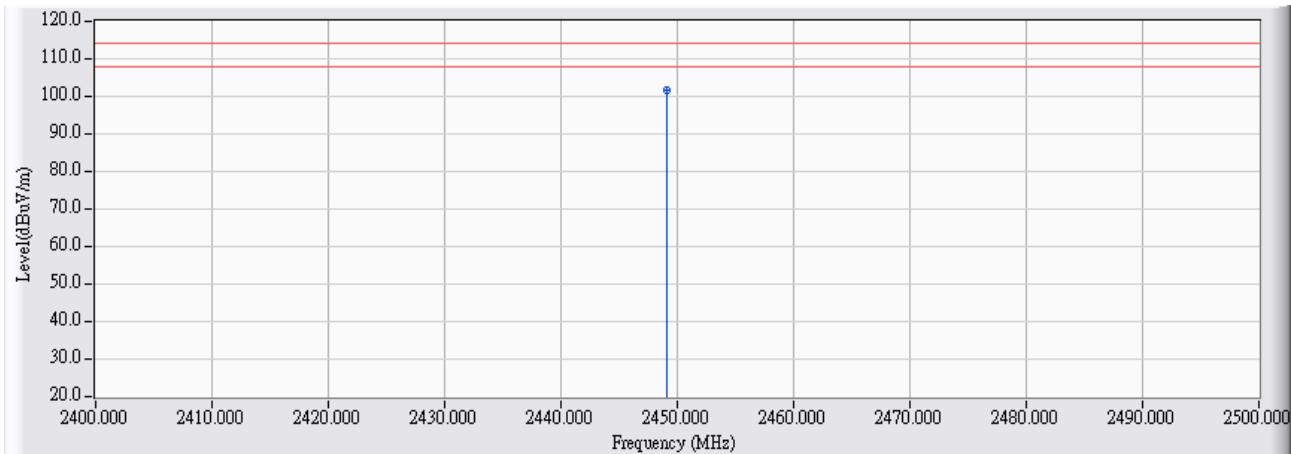


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2413.880 | 27.771 | 57.505 | 85.276 | -8.724 | 94.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/25 - 11:18 |
| Limit : FCC_SpartC_15.249_F_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

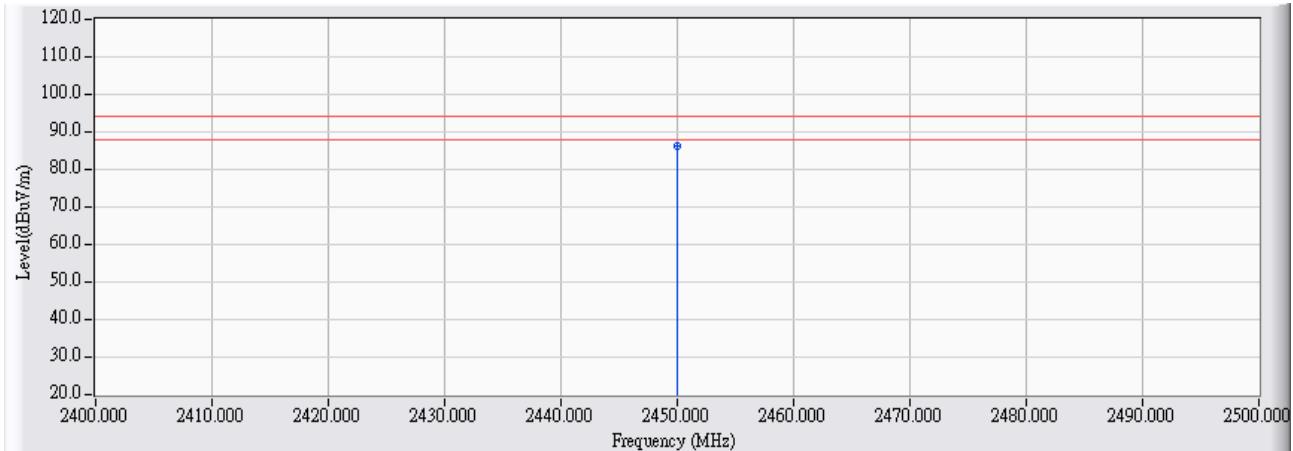


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2449.150 | 27.847 | 74.003 | 101.850 | -12.150 | 114.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/25 - 11:18 |
| Limit : FCC_SpartC_15.249_F_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

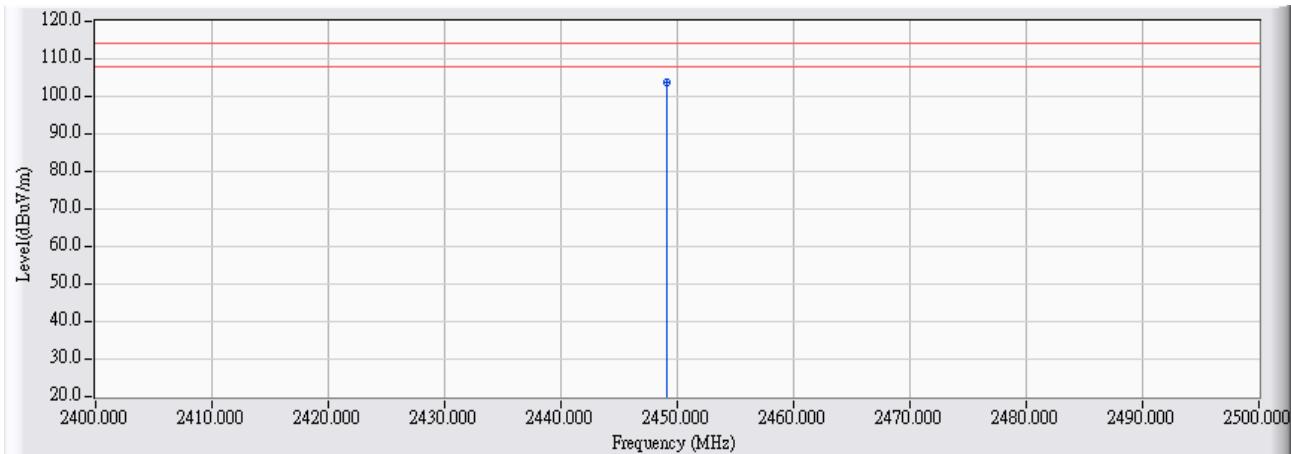


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2450.000 | 27.851 | 58.307 | 86.158 | -7.842 | 94.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/25 - 11:23 |
| Limit : FCC_SpartC_15.249_F_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

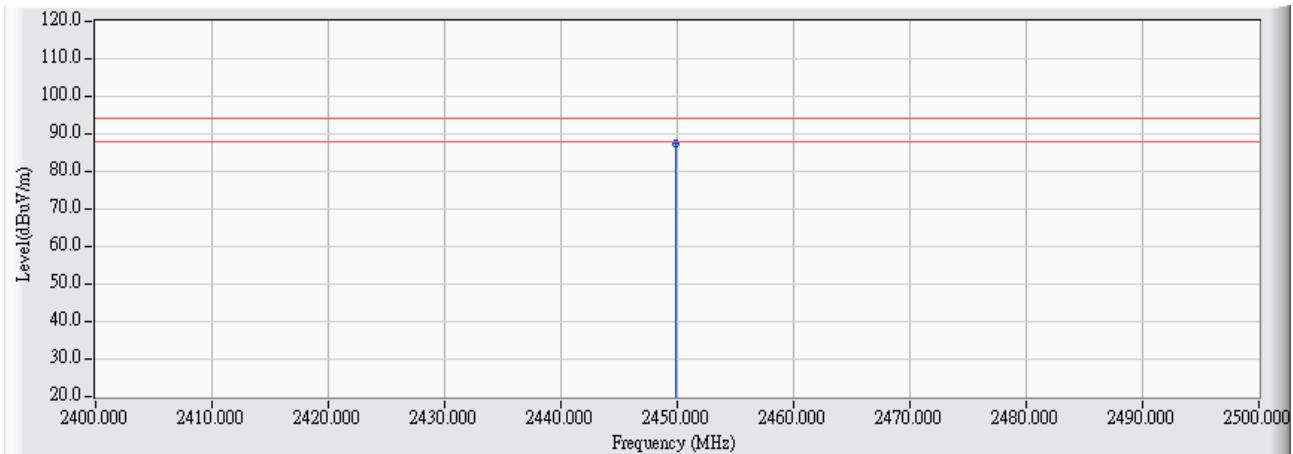


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2449.100 | 27.847 | 76.054 | 103.901 | -10.099 | 114.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/25 - 11:23 |
| Limit : FCC_SpartC_15.249_F_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

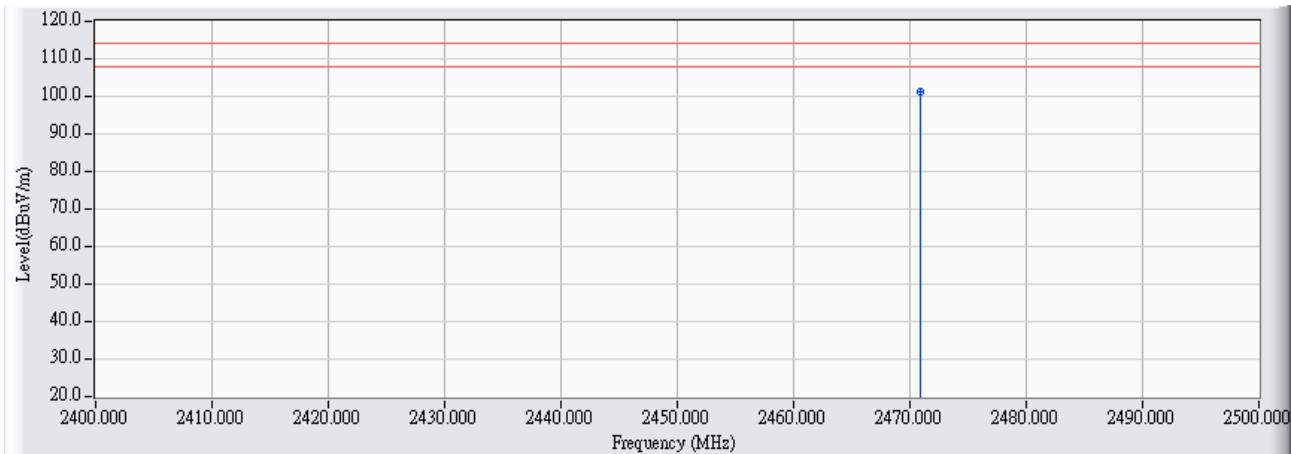


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2449.900 | 27.851 | 59.833 | 87.683 | -6.317 | 94.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:39 |
| Limit : FCC_SpartC_15.249_F_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

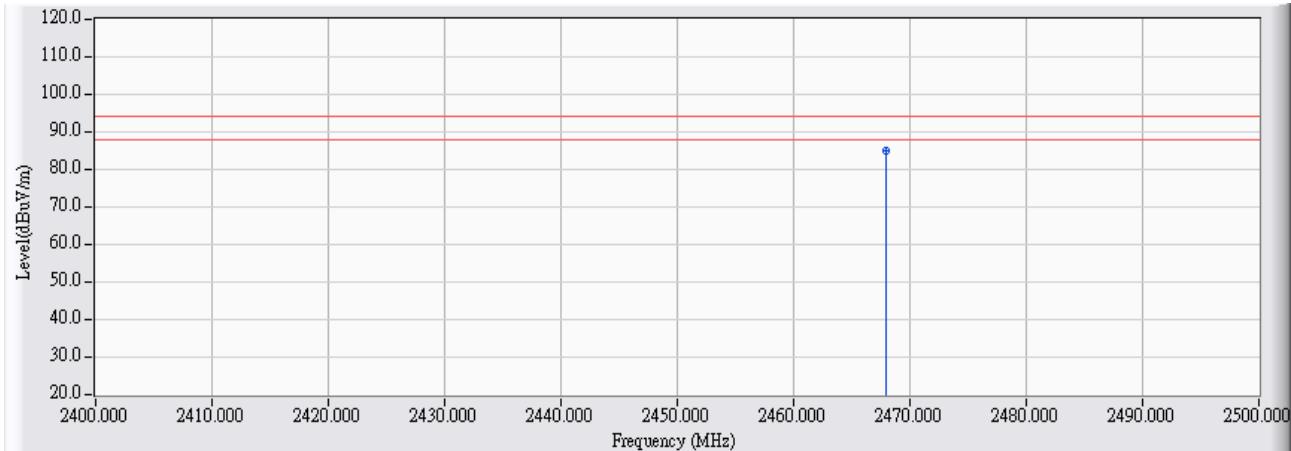


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2470.950 | 28.009 | 73.053 | 101.063 | -12.937 | 114.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:41 |
| Limit : FCC_SpartC_15.249_F_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

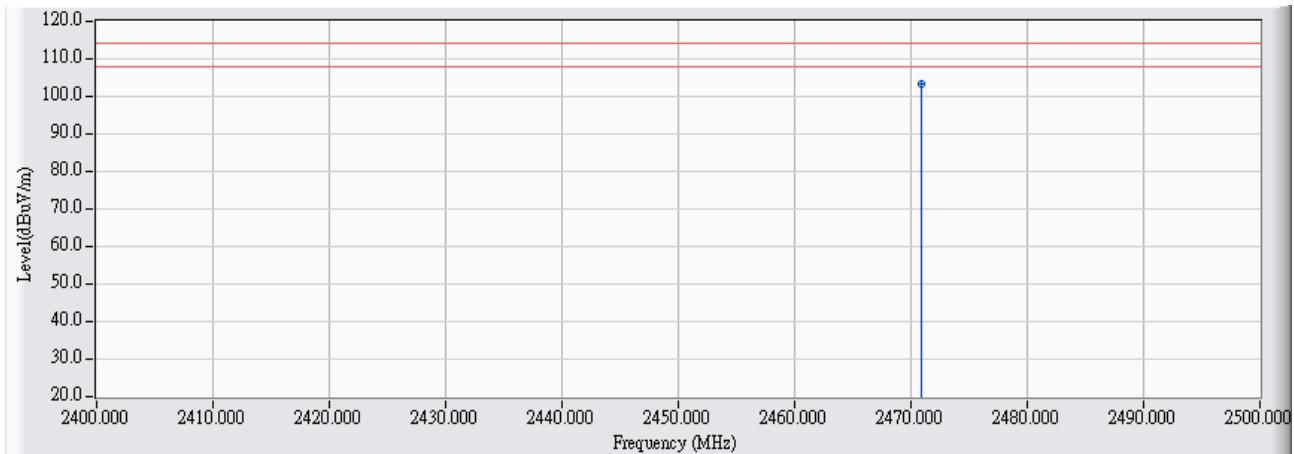


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2467.900 | 27.997 | 57.109 | 85.106 | -8.894 | 94.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:52 |
| Limit : FCC_SpartC_15.249_F_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

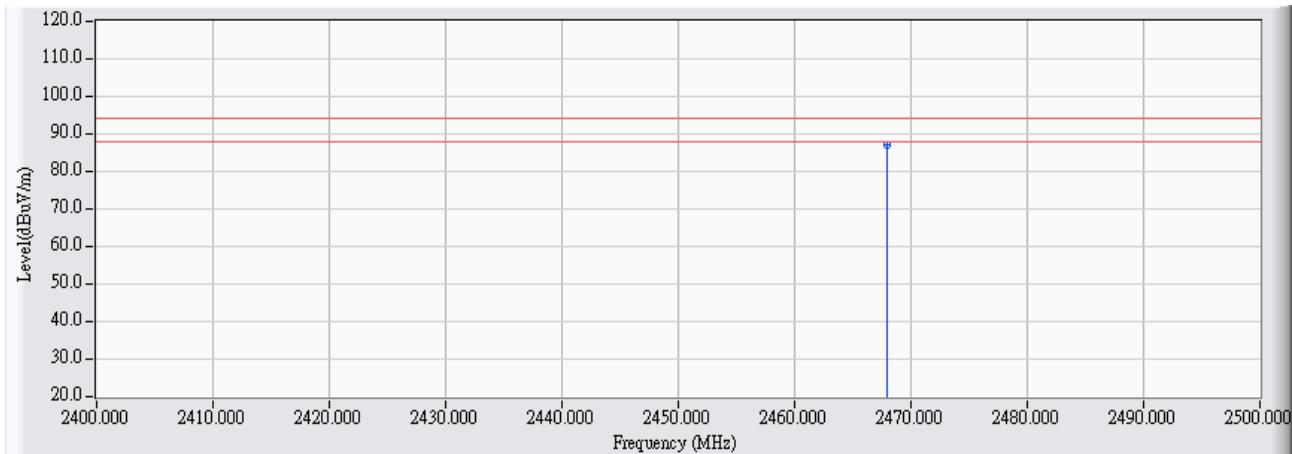


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2470.955 | 28.009 | 75.478 | 103.488 | -10.512 | 114.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:53 |
| Limit : FCC_SpartC_15.249_F_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2467.930 | 27.997 | 58.898 | 86.895 | -7.105 | 94.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

4. Radiated Emission

4.1. Test Equipment

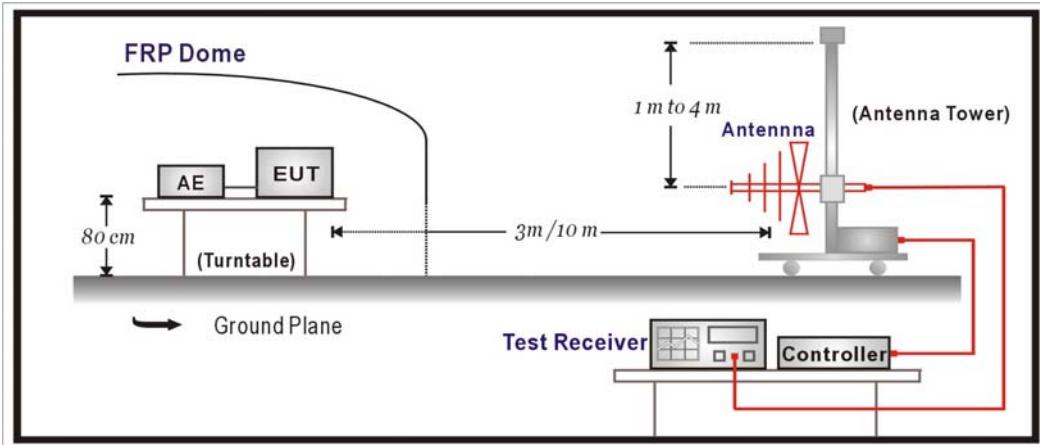
The following test equipments are used during the test:

| Instrument | Manufacturer | Model No. | Serial No | Next Cal. Date |
|-------------------|-----------------|----------------------|-------------|----------------|
| Bilog Antenna | SCHAFFNER | CBL6112B | 2895 | 2011/08/14 |
| Horn Antenna | Schwarzback | BBHA 9120D | 743 | 2011/03/14 |
| Pre-Amplifier | MITEQ | AMF-4D-005180-24-10P | 888003 | 2011/12/03 |
| Pre-Amplifier | QuiTek | AP-025C | CHM-0706049 | 2011/03/25 |
| Spectrum Analyzer | Agilent | E4440A | MY46187335 | 2012/01/14 |
| Coaxial Cable | Huber+Suhner AG | Sucoflex 102 | 25623/2 | 2011/04/07 |

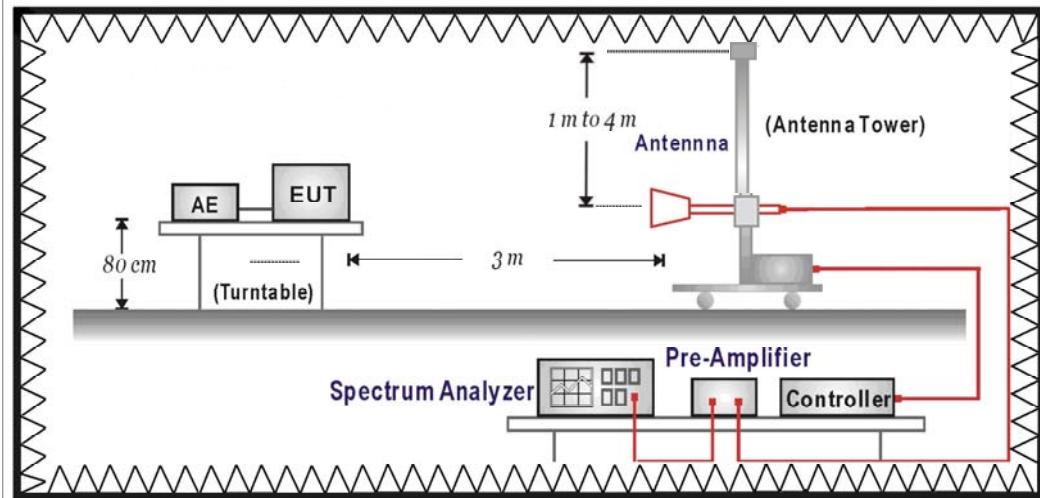
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

4.2. Test Setup

Under 1GHz Test Setup:



Above 1GHz Test Setup:



4.3. Limits

| FCC Part 15 Subpart C Paragraph 15.209 Limits | | | |
|------------------------------------------------------|------|--------|---------------------------------|
| Frequency MHz | uV/m | dBuV/m | Measurement distance (meter) |
| 1.705-30 | 30 | 29.5 | 30 |
| 30-88 | 100 | 40 | 3 |
| 88-216 | 150 | 43.5 | 3 |
| 216-960 | 200 | 46 | 3 |
| Above 960 | 500 | 54 | 3 |

Remarks : 1. RF Voltage (dBuV) = 20 log RF Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.
3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level.

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

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

On any frequency or frequencies below or equal to 1000 MHz, the limits shown are based on measuring equipment employing a quasi-peak detector function and on any frequency or frequencies above 1000 MHz the radiated limits shown are based upon the use of measurement instrumentation employing an average detector function. When average radiated emission measurement are included emission measurement below 1000 MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit. The bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

4.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.209: 2009

4.6. Uncertainty

The measurement uncertainty

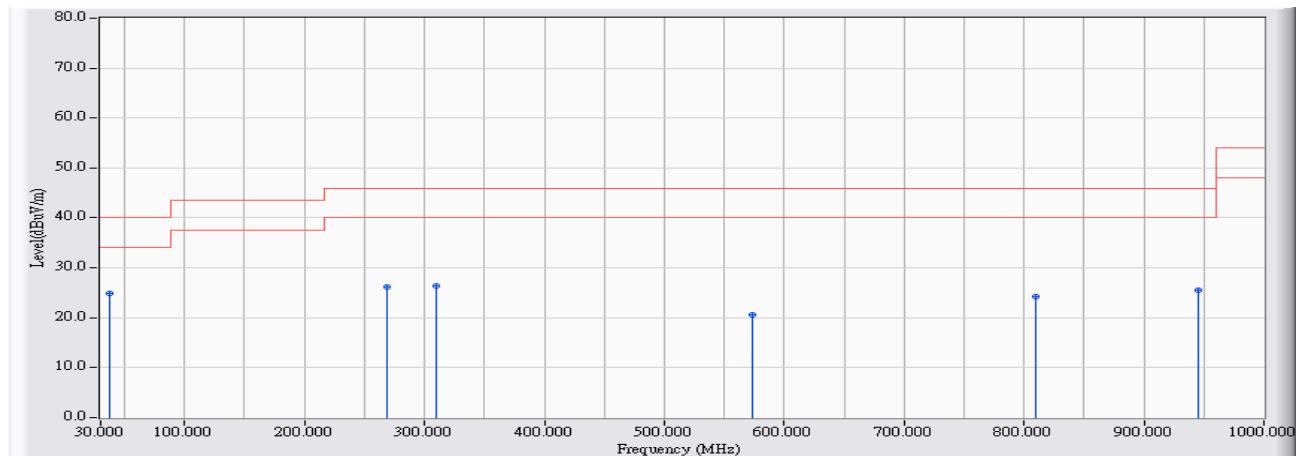
30MHz~1GHz as $\pm 3.43\text{dB}$

1GHz~26.5GHz as $\pm 3.65\text{dB}$

4.7. Test Result

30 MHz-1 GHz Spurious:

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/25 - 09:49 |
| Limit : FCC_CLASS_B_03M_QP | Margin : 6 |
| Probe : CB1_FCC_EFS_30-1G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450 |

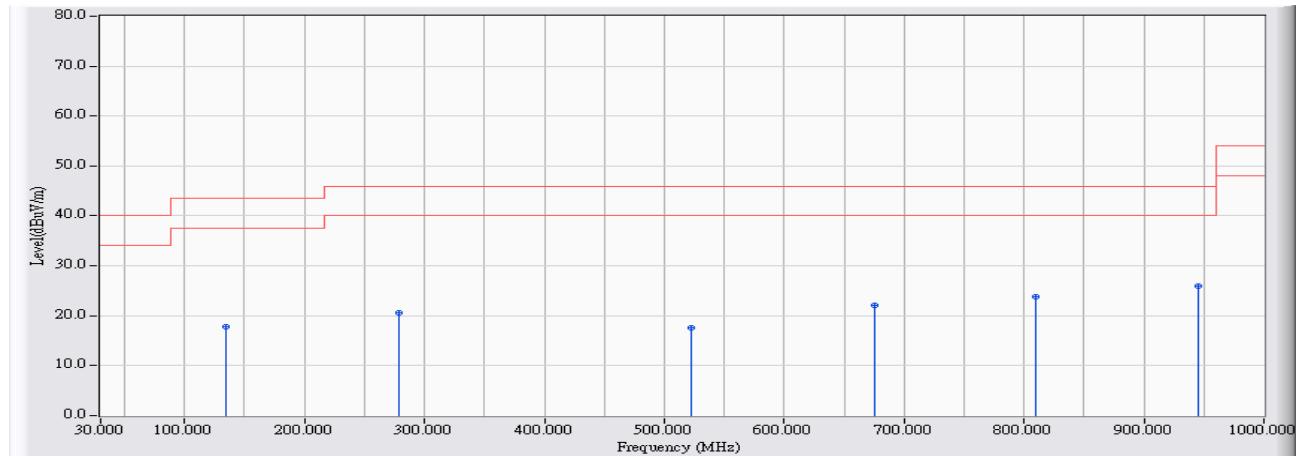


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | * 38.083 | -12.172 | 37.077 | 24.906 | -15.094 | 40.000 | QUASIPEAK |
| 2 | 269.267 | -11.161 | 37.231 | 26.071 | -19.929 | 46.000 | QUASIPEAK |
| 3 | 309.683 | -10.400 | 36.770 | 26.370 | -19.630 | 46.000 | QUASIPEAK |
| 4 | 573.200 | -5.244 | 25.849 | 20.605 | -25.395 | 46.000 | QUASIPEAK |
| 5 | 809.233 | -3.308 | 27.450 | 24.143 | -21.857 | 46.000 | QUASIPEAK |
| 6 | 945.033 | -2.493 | 28.056 | 25.563 | -20.437 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/25 - 09:49 |
| Limit : FCC_CLASS_B_03M_QP | Margin : 6 |
| Probe : CB1_FCC_EFS_30-1G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450 |



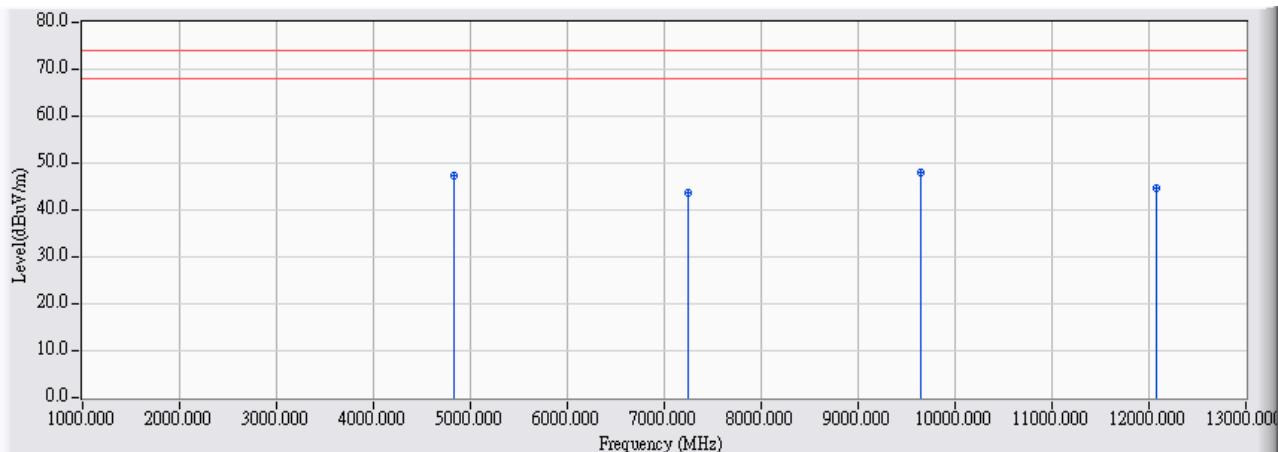
| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 135.083 | -13.062 | 30.892 | 17.831 | -25.669 | 43.500 | QUASIPEAK |
| 2 | | 278.967 | -11.007 | 31.518 | 20.511 | -25.489 | 46.000 | QUASIPEAK |
| 3 | | 523.083 | -5.778 | 23.432 | 17.654 | -28.346 | 46.000 | QUASIPEAK |
| 4 | | 675.050 | -4.635 | 26.672 | 22.037 | -23.963 | 46.000 | QUASIPEAK |
| 5 | | 809.233 | -3.308 | 27.097 | 23.790 | -22.210 | 46.000 | QUASIPEAK |
| 6 | * | 945.033 | -2.493 | 28.541 | 26.048 | -19.952 | 46.000 | QUASIPEAK |

Note:

1. All Reading Levels are Quasi-Peak value.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor

Above 1GHz Spurious :

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 11:48 |
| Limit : FCC_SpartC_15.249_H_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

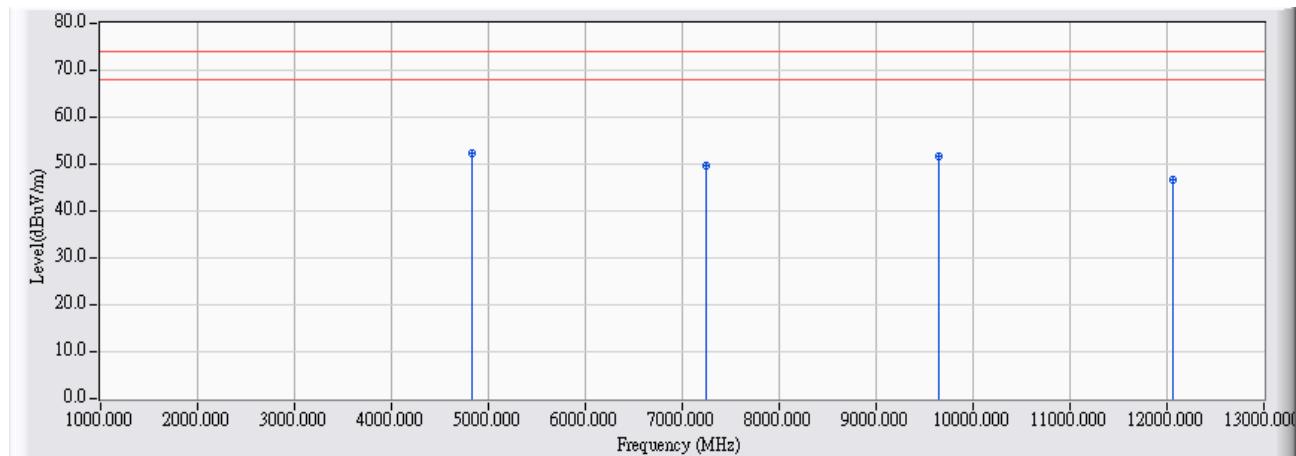


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 4825.950 | -10.821 | 58.026 | 47.205 | -26.765 | 73.970 | PEAK |
| 2 | 7239.050 | -3.765 | 47.384 | 43.619 | -30.351 | 73.970 | PEAK |
| 3 | * | -0.312 | 48.200 | 47.887 | -26.083 | 73.970 | PEAK |
| 4 | 12072.250 | 1.337 | 43.305 | 44.642 | -29.328 | 73.970 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 11:54 |
| Limit : FCC_SpartC_15.249_H_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

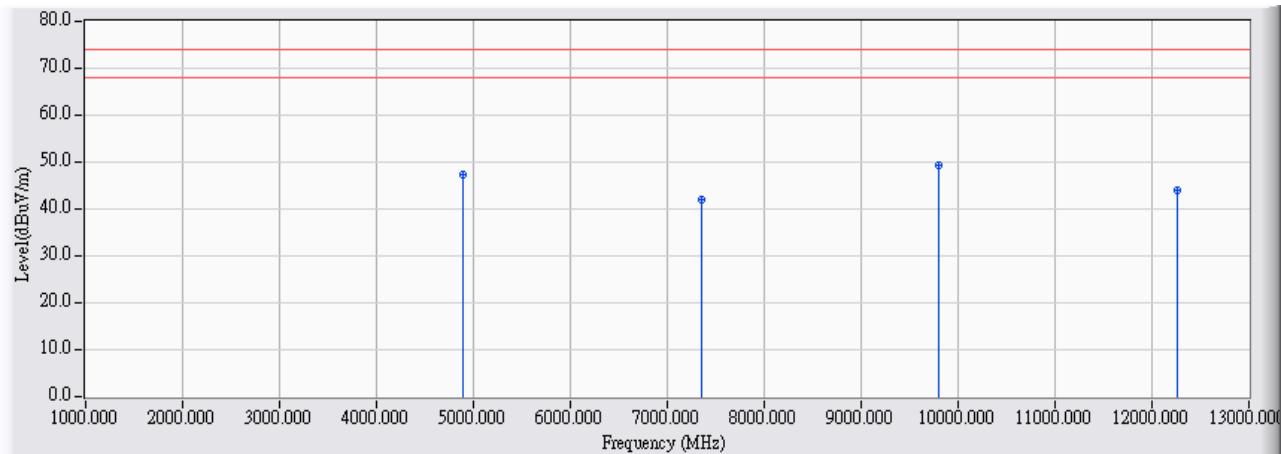


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 4834.200 | -10.797 | 63.216 | 52.419 | -21.551 | 73.970 | PEAK |
| 2 | | 7238.850 | -3.765 | 53.396 | 49.630 | -24.340 | 73.970 | PEAK |
| 3 | | 9651.850 | -0.312 | 52.013 | 51.701 | -22.269 | 73.970 | PEAK |
| 4 | | 12065.350 | 1.340 | 45.403 | 46.743 | -27.227 | 73.970 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 12:01 |
| Limit : FCC_SpartC_15.249_H_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

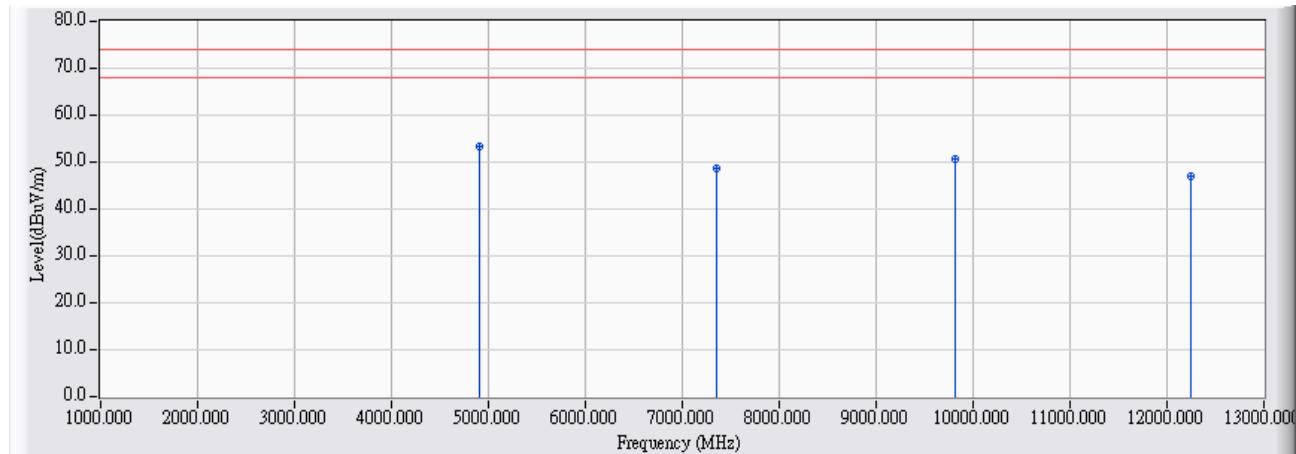


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 4897.800 | -10.611 | 57.892 | 47.281 | -26.689 | 73.970 | PEAK |
| 2 | 7347.450 | -3.469 | 45.460 | 41.991 | -31.979 | 73.970 | PEAK |
| 3 | * | 0.105 | 49.158 | 49.263 | -24.707 | 73.970 | PEAK |
| 4 | 12255.650 | 1.271 | 42.713 | 43.984 | -29.986 | 73.970 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:06 |
| Limit : FCC_SpartC_15.249_H_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

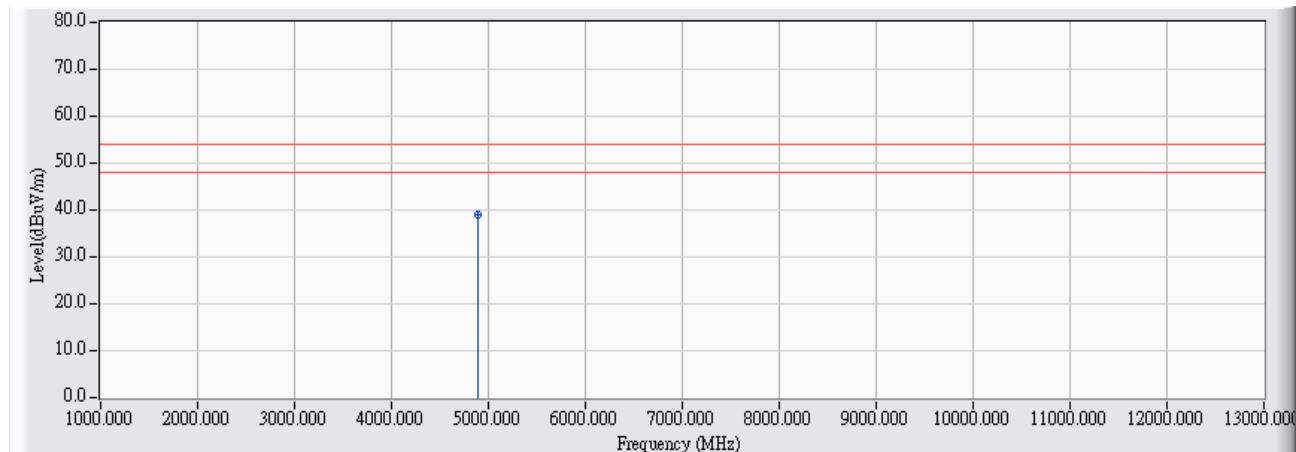


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 4906.050 | -10.587 | 63.877 | 53.290 | -20.680 | 73.970 | PEAK |
| 2 | | 7359.000 | -3.437 | 52.229 | 48.792 | -25.178 | 73.970 | PEAK |
| 3 | | 9812.500 | 0.151 | 50.486 | 50.638 | -23.332 | 73.970 | PEAK |
| 4 | | 12245.450 | 1.275 | 45.808 | 47.083 | -26.887 | 73.970 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:09 |
| Limit : FCC_SpartC_15.249_H_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2450MHz |

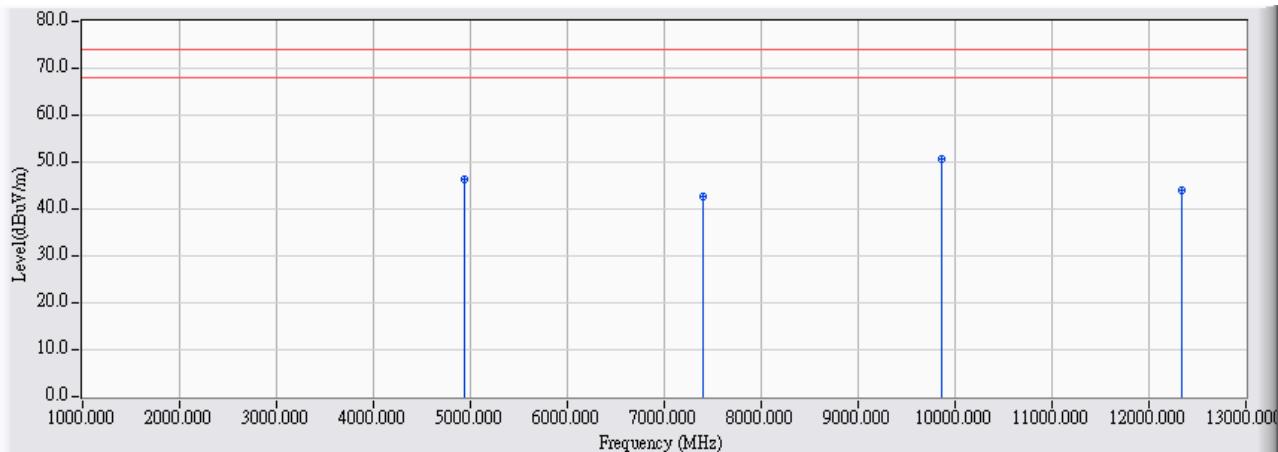


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 4898.100 | -10.611 | 49.533 | 38.923 | -15.047 | 53.970 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:16 |
| Limit : FCC_SpartC_15.249_H_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

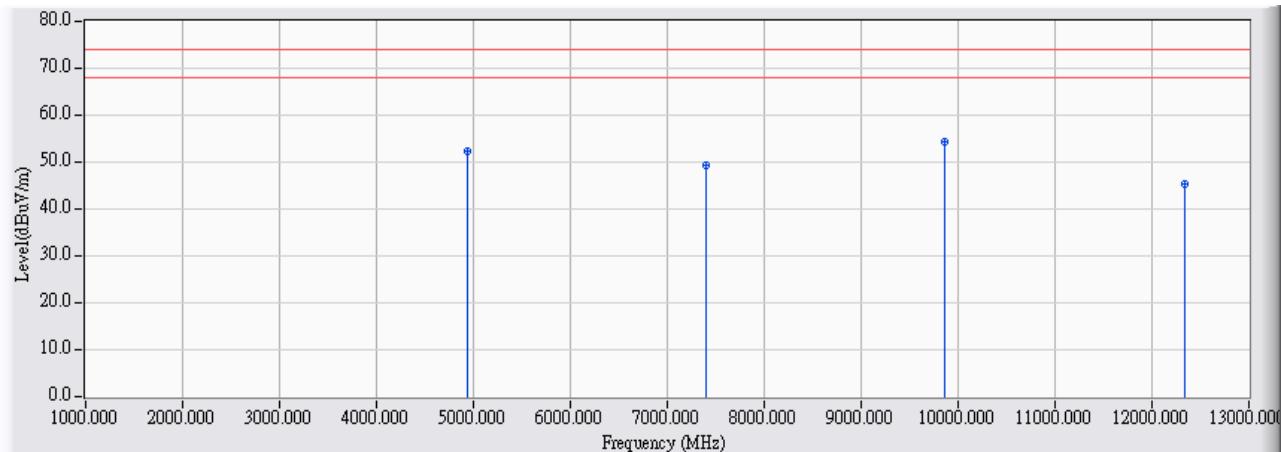


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 4934.000 | -10.505 | 56.789 | 46.283 | -27.687 | 73.970 | PEAK |
| 2 | 7404.700 | -3.313 | 45.902 | 42.590 | -31.380 | 73.970 | PEAK |
| 3 | * | 0.316 | 50.286 | 50.602 | -23.368 | 73.970 | PEAK |
| 4 | 12340.050 | 1.240 | 42.849 | 44.090 | -29.880 | 73.970 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:22 |
| Limit : FCC_SpartC_15.249_H_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

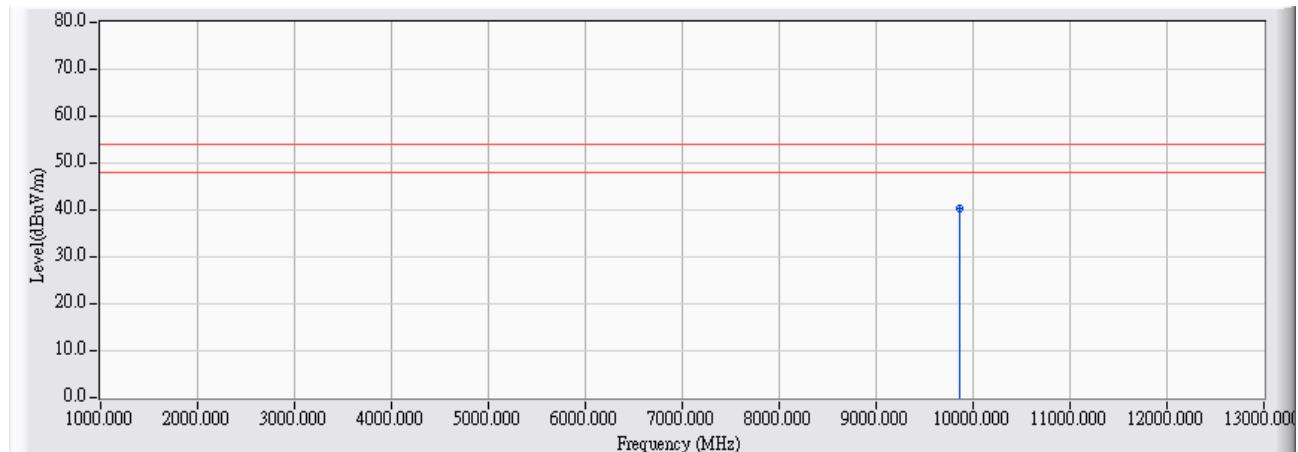


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 4942.000 | -10.482 | 62.671 | 52.189 | -21.781 | 73.970 | PEAK |
| 2 | 7398.150 | -3.330 | 52.556 | 49.226 | -24.744 | 73.970 | PEAK |
| 3 | * | 0.314 | 53.905 | 54.219 | -19.751 | 73.970 | PEAK |
| 4 | 12335.350 | 1.243 | 44.083 | 45.325 | -28.645 | 73.970 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:26 |
| Limit : FCC_SpartC_15.249_H_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 9868.250 | 0.314 | 39.874 | 40.188 | -13.782 | 53.970 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

5. Band Edge

5.1. Test Equipment

The following test equipments are used during the test:

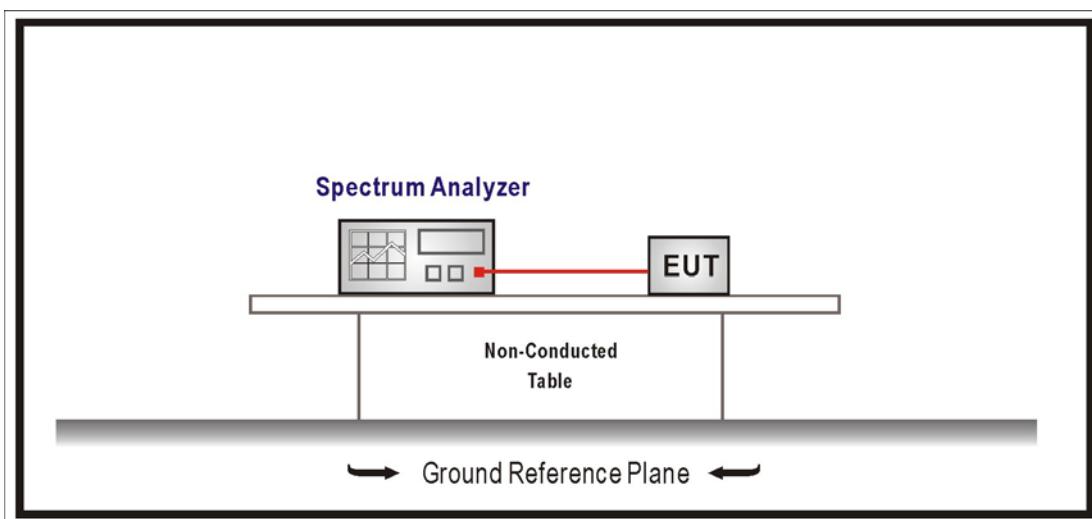
Band Edge / CB1

| Instrument | Manufacturer | Type No. | Serial No | Next Cal. Date |
|-------------------|-----------------|--------------|------------|----------------|
| Horn Antenna | Schwarzback | BBHA 9120D | 743 | 2011/03/14 |
| Spectrum Analyzer | Agilent | E4440A | MY46187335 | 2011/01/14 |
| Coaxial Cable | Huber+Suhner AG | Sucoflex 102 | 25623/2 | 2011/04/07 |

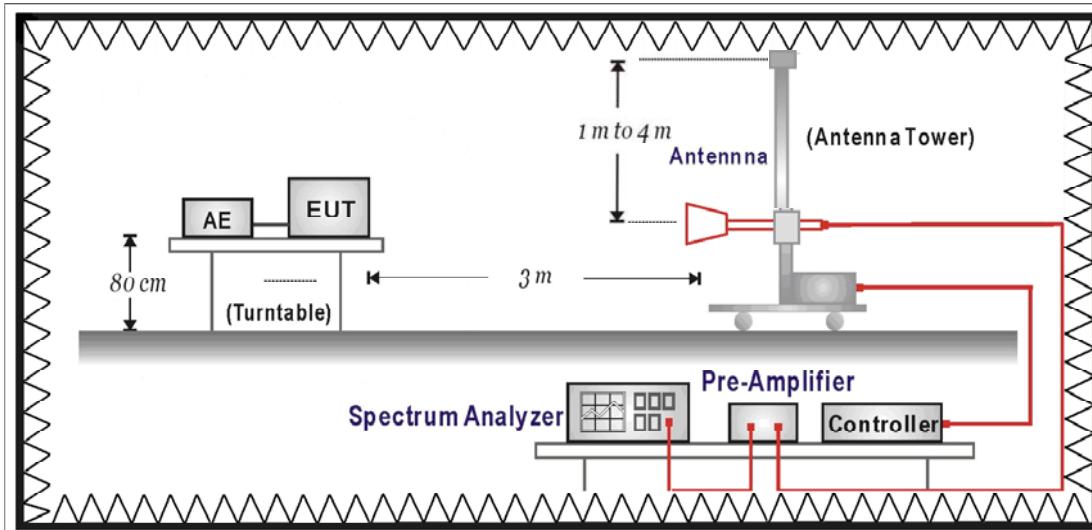
Note: 1. All equipments that need to calibrate are with calibration period of 1 year.

5.2. Test Setup

RF Conducted Measurement:



RF Radiated Measurement:



5.3. Limits

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 50 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

5.4. Test Procedure

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

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

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated measurement.

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

5.5. Test Specification

According to FCC Part 15 Subpart C Paragraph 15.249: 2009

5.6. Uncertainty

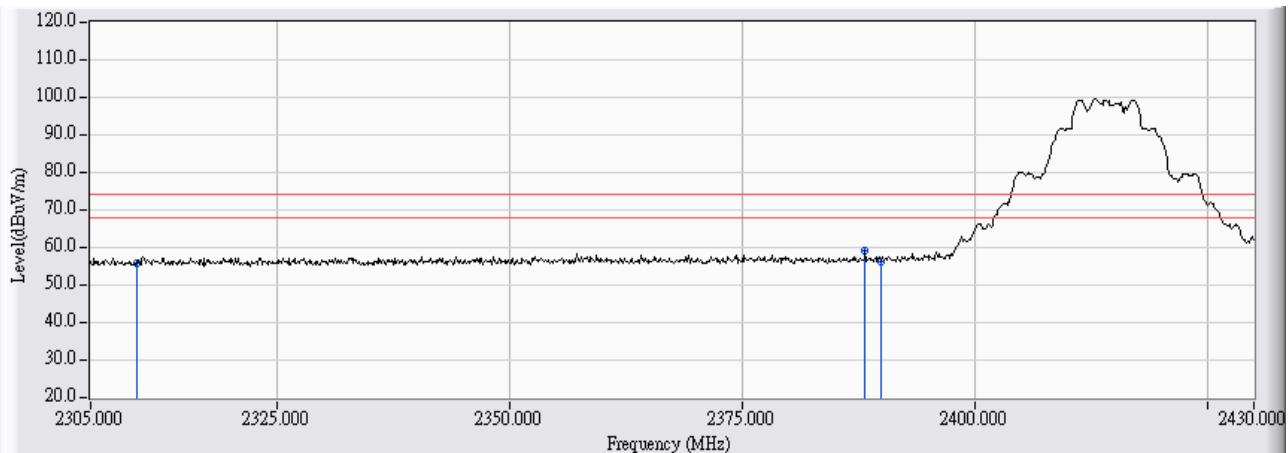
The measurement uncertainty

Conducted is defined as $\pm 1.27\text{dB}$

Radiated is defined as $\pm 3.9\text{dB}$

5.7. Test Result

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 14:00 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

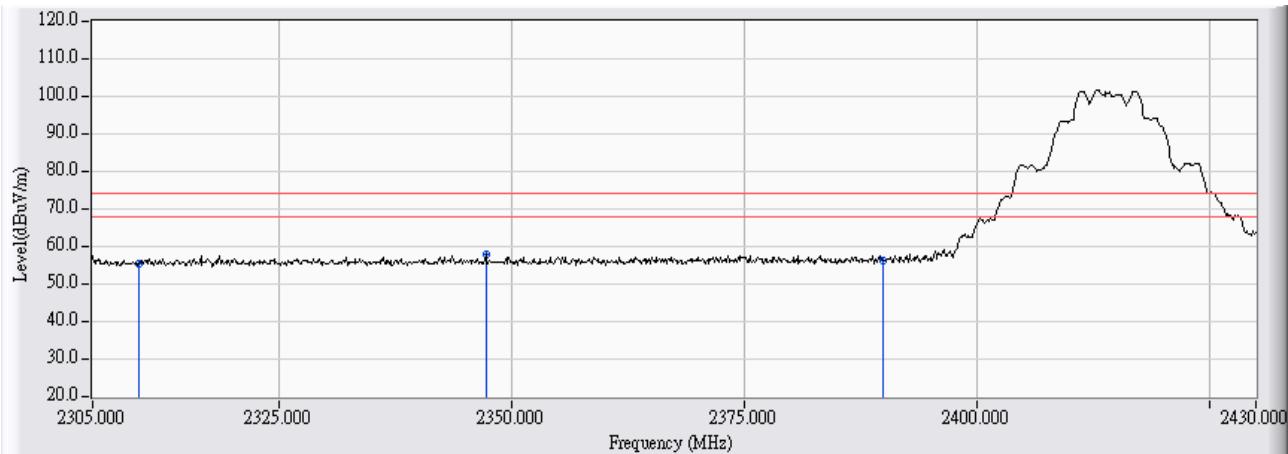


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | | 2310.000 | 27.336 | 28.417 | 55.753 | -18.247 | 74.000 | PEAK |
| 2 | * | 2388.250 | 27.664 | 31.332 | 58.996 | -15.004 | 74.000 | PEAK |
| 3 | | 2390.000 | 27.671 | 28.612 | 56.283 | -17.717 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 14:06 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

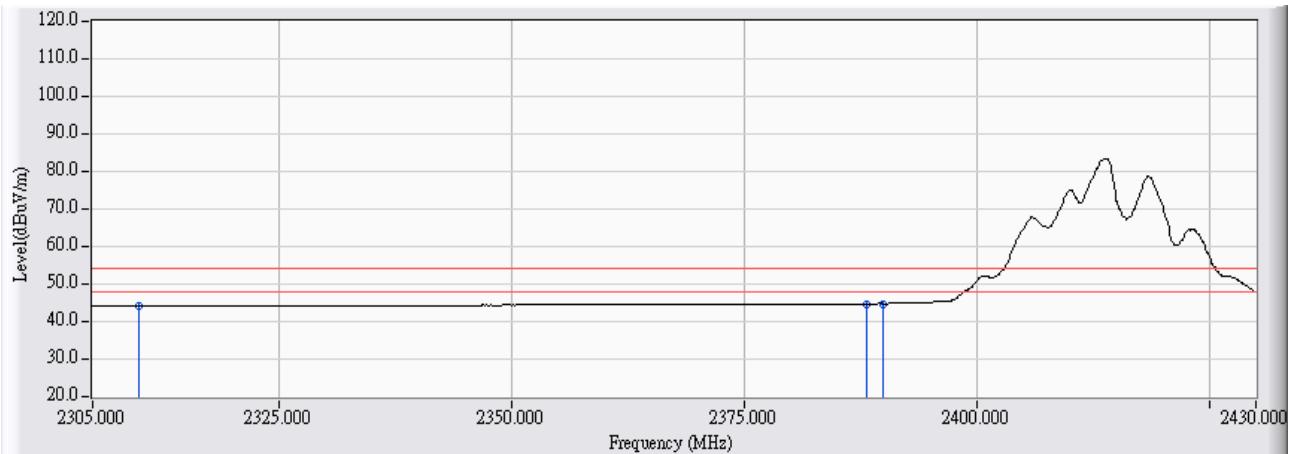


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000 | 27.336 | 28.070 | 55.406 | -18.594 | 74.000 | PEAK |
| 2 | * 2347.250 | 27.493 | 30.488 | 57.980 | -16.020 | 74.000 | PEAK |
| 3 | 2390.000 | 27.671 | 28.527 | 56.198 | -17.802 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 14:01 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

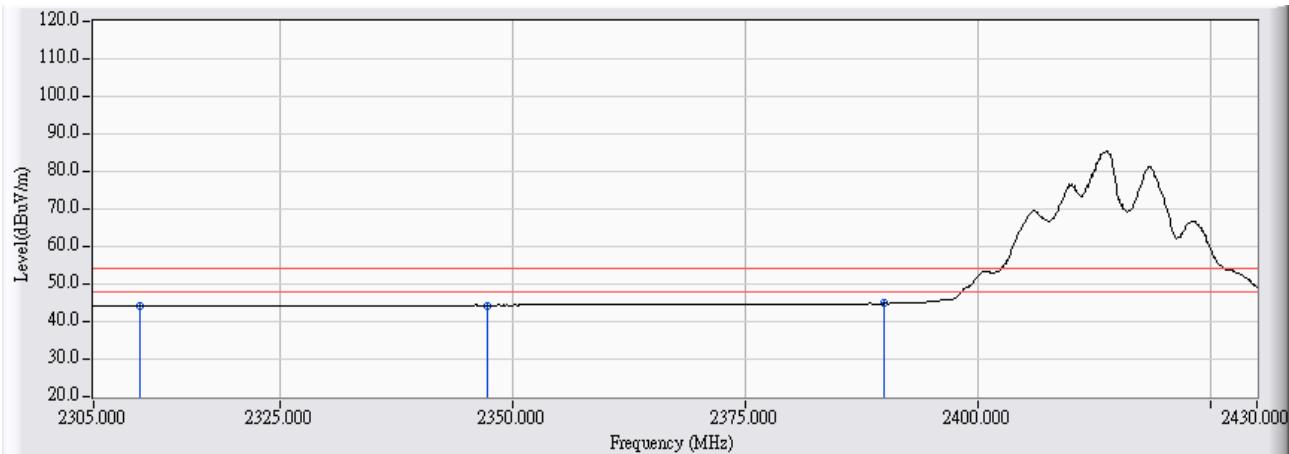


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000 | 27.336 | 16.737 | 44.073 | -9.927 | 54.000 | AVERAGE |
| 2 | 2388.250 | 27.664 | 17.104 | 44.768 | -9.232 | 54.000 | AVERAGE |
| 3 | * 2390.000 | 27.671 | 17.099 | 44.770 | -9.230 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 14:07 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2414MHz |

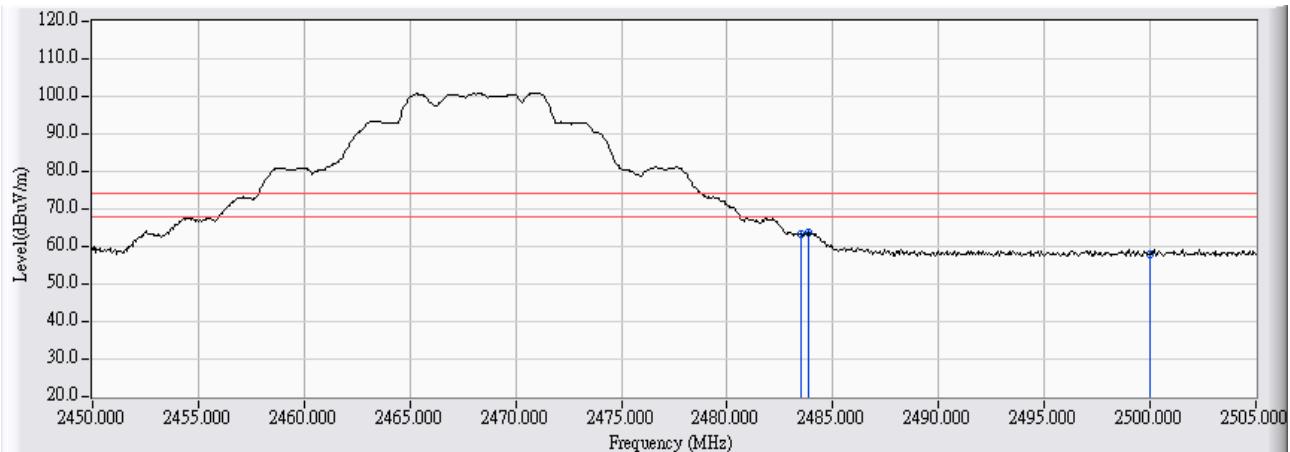


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2310.000 | 27.336 | 16.737 | 44.073 | -9.927 | 54.000 | AVERAGE |
| 2 | 2347.250 | 27.493 | 16.878 | 44.370 | -9.630 | 54.000 | AVERAGE |
| 3 | * 2390.000 | 27.671 | 17.129 | 44.800 | -9.200 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:47 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

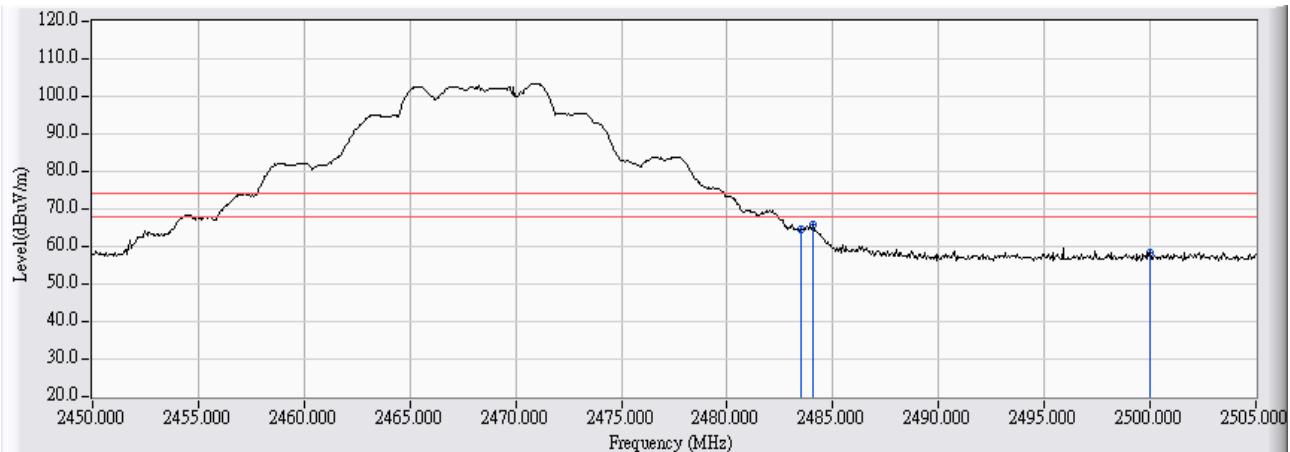


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500 | 28.059 | 35.153 | 63.212 | -10.788 | 74.000 | PEAK |
| 2 | * 2483.825 | 28.060 | 35.536 | 63.596 | -10.404 | 74.000 | PEAK |
| 3 | 2500.000 | 28.115 | 29.867 | 57.982 | -16.018 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:53 |
| Limit : FCC_SpartC_15.209_03M_PK | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

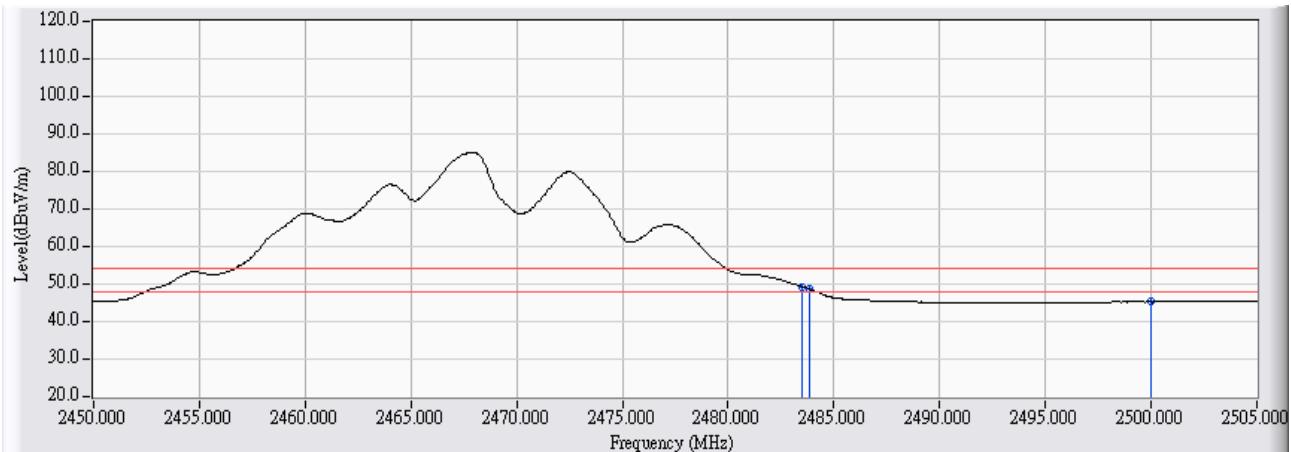


| | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|-----------------|---------------------|----------------------|------------------------|-------------|----------------|---------------|
| 1 | 2483.500 | 28.059 | 36.688 | 64.747 | -9.253 | 74.000 | PEAK |
| 2 | * | 28.061 | 37.701 | 65.762 | -8.238 | 74.000 | PEAK |
| 3 | 2500.000 | 28.115 | 30.287 | 58.402 | -15.598 | 74.000 | PEAK |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-------------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:48 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - HORIZONTAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |

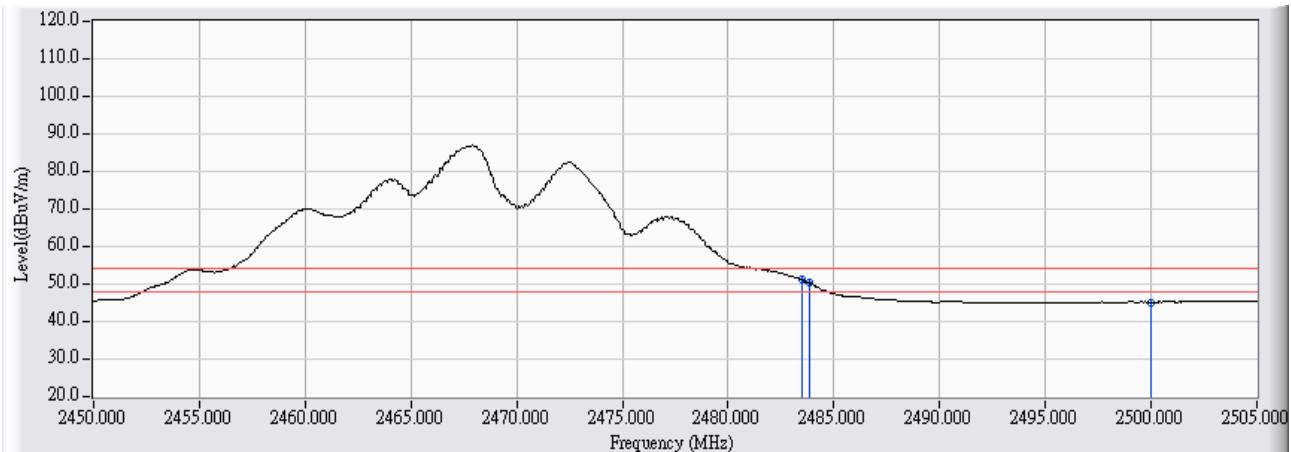


| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2483.500 | 28.059 | 21.303 | 49.362 | -4.638 | 54.000 | AVERAGE |
| 2 | | 2483.825 | 28.060 | 20.625 | 48.685 | -5.315 | 54.000 | AVERAGE |
| 3 | | 2500.000 | 28.115 | 17.106 | 45.221 | -8.779 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.

| | |
|-----------------------------------------------|---------------------------|
| Site : CB1 | Time : 2011/01/13 - 13:54 |
| Limit : FCC_SpartC_15.209_03M_AV | Margin : 6 |
| Probe : CB1_FCC_EFS_1-18G(2010-12) - VERTICAL | Power : AC 120V/60Hz |
| EUT : 2.4GHz Wireless AV SENDER | Note : TX-2468MHz |



| | | Frequency (MHz) | Correct Factor (dB) | Reading Level (dBuV) | Measure Level (dBuV/m) | Margin (dB) | Limit (dBuV/m) | Detector Type |
|---|---|--------------------|------------------------|-------------------------|---------------------------|----------------|-------------------|---------------|
| 1 | * | 2483.500 | 28.059 | 23.044 | 51.103 | -2.897 | 54.000 | AVERAGE |
| 2 | | 2483.825 | 28.060 | 22.245 | 50.305 | -3.695 | 54.000 | AVERAGE |
| 3 | | 2500.000 | 28.115 | 17.084 | 45.199 | -8.801 | 54.000 | AVERAGE |

Note:

1. All Readings below 1GHz are Peak, above are performed with peak and/or average measurements as necessary.
2. “ * ”, means this data is the worst emission level.
3. Measurement Level = Reading Level + Correct Factor.
4. The average measurement was not performed when the peak measured data under the limit of average detection. If the readings given are average, peak measurement should also be supplied.