

TEST REPORT

of

FCC Part 15 Subpart B & C

<Class II Permissive Change>

Product : 802.11 bg Wireless Mini Card

Model(s): VNT6656GEV00

Brand: VIA

Applicant: VIA Technologies, Inc.

**Address: 8F,533,Chung-Cheng Road,
Hsin-Tien,Taipei 231,
Taiwan, R. O. C.**

Test Performed by:

International Standards Laboratory

<Lung-Tan LAB>

*Site Registration No.

BSMI: SL2-IN-E-0013; TAF: 0997; NVLAP: 200234-0; IC: IC4164-1;
VCCI: R-1435, C-1440, T-299, R-2598, C-2845; NEMKO: ELA 113B

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Report No.: **ISL-07LR031FC**

Issue Date : **2008/02/04**

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1. General

1.1 Certification of Accuracy of Test Data

Standards: CFR 47 Part 15 Subpart B Class B
CFR 47 Part 15 Subpart C (Section 15.247)

Test Procedure: ANSI C63.4:2003

Equipment Tested: 802.11 BG Wireless Module

Model: VNT6656GEV00

Applied by: VIA Technologies, Inc.

Sample received Date: 2007/11/08

Final test Date : 2007/11/09-2007/11/23

Test Result PASS

Test Site: Chamber 02, Conduction 02

Temperature Refer to each site test data

Humidity: Refer to each site test data

Test Engineer:



Jerry Chiou

All the tests in this report have been performed and recorded in accordance with the standards described above and performed by an independent electromagnetic compatibility consultant, International Standards Laboratory.

The test results contained in this report accurately represent the measurements of the characteristics and the energy generated by sample equipment under test at the time of the test. The sample equipment tested as described in this report is in compliance with the limits of above standards.

Approve & Signature


Eddy Hsiung/Director

Test results given in this report apply only to the specific sample(s) tested under stated test conditions. This report shall not be reproduced other than in full without the explicit written consent of ISL. This report totally contains 67 pages, including 1 cover page, 2 contents page, and 64 pages for the test description. This report must not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

This test data shown below is traceable to NIST or national or international standard. International Standards Laboratory certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 853(a).

2. Test Results Summary

The 802.11b functions of EUT has been tested according to the FCC regulations listed below:

| Tested Standards: 47 CFR Part 15 Subpart C | | | |
|--|-----------------------------------|--------|---------------------|
| Standard Section | Test Type | Result | Remarks |
| 15.207 | AC Power Line Emissions | Pass | |
| 15.247(a)(2) | Spectrum Bandwidth Of DSSS device | Pass | |
| 15.247(b) | Max. Peak Output Power | Pass | |
| 15.247(c) | Radiated Emissions 30MHz – 25 GHz | Pass | |
| 15.247(c) | Band Edge Measurement | Pass | |
| 15.247(b)(4) | Radiation Exposure | Pass | MPE report attached |
| 15.247(d) | Power Spectral Density | Pass | |

The 802.11g functions of EUT has been tested according to the FCC regulations listed below:

| Tested Standards: 47 CFR Part 15 Subpart C | | | |
|--|-----------------------------------|--------|---------------------|
| Standard Section | Test Type | Result | Remarks |
| 15.207 | AC Power Line Emissions | Pass | |
| 15.247(a)(2) | Spectrum Bandwidth Of DSSS device | Pass | |
| 15.247(b) | Max. Peak Output Power | Pass | |
| 15.247(c) | Radiated Emissions 30MHz – 25 GHz | Pass | |
| 15.247(c) | Band Edge Measurement | Pass | |
| 15.247(b)(4) | Radiation Exposure | Pass | MPE report attached |
| 15.247(d) | Power Spectral Density | Pass | |

3. Description of Equipment Under Test (EUT)

Description: 802.11 BG Wireless Module

Model No.: VNT6656GEV00

Brand: VIA

Frequency Range 802.11b/g: 2400~2483.5 MHz

Support channel:

802.11b/g 11 Channels

Modulation Skill:

802.11b DBPSK(1Mbps), DQPSK(2Mbps),
CCK(5.5/11Mbps)

802.11g OFDM (6M - 54Mbps)

Antenna List:

| No. | Manufacturer | Model or P/N | Type | Connector | Length | Max. Gain | New |
|-----|-----------------------|----------------|------|-----------|---------------|-------------------|-----|
| 1 | FAVORTRON CO., LTD | 6-23-7M59K-021 | PIFA | IPX-MHF | 576mm±3mm | -0.01dBi (2.4GHz) | No |
| 2 | FAVORTRON CO., LTD | 6-23-7M59K-011 | PIFA | IPX-MHF | 896mm±3mm | -0.97dBi (2.4GHz) | No |
| 3 | VSO ELECTRIC CO., LTD | 13-130-F14911 | PIFA | IPX-MHF | 383mm±2mm | -4.4dBi (2.4GHz) | No |
| 4 | VSO ELECTRIC CO., LTD | 13-130-F14931 | PIFA | IPX-MHF | 398mm±3mm | -4.4dBi (2.4GHz) | No |
| 5 | VSO ELECTRIC CO., LTD | 13-130-F53021 | PIFA | IPX-MHF | Black 860±3mm | -6.03dBi (2.4GHz) | No |
| | | | | | Grey 1065±3mm | -3.37dBi (2.4GHz) | |
| 6 | VSO ELECTRIC CO., LTD | 13-130-F62011 | PIFA | IPX-MHF | 543mm±5mm | -0.22dBi (2.4GHz) | No |
| 7 | VSO ELECTRIC CO., LTD | 13-130-F62021 | PIFA | IPX-MHF | 688.5mm±5mm | -0.22dBi (2.4GHz) | No |
| 8 | VSO ELECTRIC CO., LTD | 14-211-F66021 | PIFA | IPX-MHF | 550mm±5mm | -0.31dBi (2.4GHz) | No |
| 9 | VSO ELECTRIC CO., LTD | 14-211-F66041 | PIFA | IPX-MHF | 570mm±5mm | -1.55dBi (2.4GHz) | No |
| 10 | FAVORTRON CO., LTD | K05008004451 | PIFA | IPX-MHF | 750mm±2mm | 0.79dBi (2.4GHz) | No |
| 11 | FAVORTRON CO., LTD | K05008004351 | PIFA | IPX-MHF | 530mm±2mm | -0.80dBi (2.4GHz) | No |
| 12 | FAVORTRON CO., LTD | K05008003651 | PIFA | IPX-MHF | 820mm±2mm | 0.74dBi (2.4GHz) | No |
| 13 | FAVORTRON CO., LTD | K05008003751 | PIFA | IPX-MHF | 570mm±2mm | 0.18dBi (2.4GHz) | No |
| 14 | FAVORTRON CO., LTD | K05004002251 | PIFA | IPX-MHF | Black 500±3mm | 2.80dBi (2.4GHz) | No |
| | | | | | Grey 710±3mm | 1.68dBi (2.4GHz) | |

| No. | Manufacturer | Model or P/N | Type | Connector | Length | Max. Gain | New |
|-----|---|------------------|------|-----------|---------------|-------------------|-----|
| 15 | FAVORTRON CO., LTD | K05004002351 | PIFA | IPX-MHF | Black 525±3mm | 0.93dBi (2.4GHz) | No |
| | | | | | Grey 843±3mm | 1.26dBi (2.4GHz) | |
| 16 | Hon Hai Precision Industry Co.,Ltd (Brand:FOXCONN) | WDAN-U1L41001-DF | PIFA | IPX-MHF | Black 745±3mm | -1.38dBi (2.4GHz) | No |
| | | | | | Grey 530±3mm | 0dBi (2.4GHz) | |
| 17 | Hon Hai Precision Industry Co.,Ltd (Brand:FOXCONN) | WDAN-U1L51002-DF | PIFA | IPX-MHF | Black 820±3mm | -1.99dBi (2.4GHz) | No |
| | | | | | Grey 570±3mm | -1.4dBi (2.4GHz) | |
| 18 | Well Green Technology Co., Ltd | H12V-R | PIFA | IPX-MHF | Black 533±3mm | 0.03dBi (2.4GHz) | Yes |
| | | H12V-L | | | Brown 653±3mm | -0.42dBi (2.4GHz) | |
| 19 | Well Green Technology Co., Ltd | S14Y-R | PIFA | IPX-MHF | Black 315±3mm | -1.13dBi (2.4GHz) | Yes |
| | | S14Y-L | | | Grey 505±3mm | -4.29dBi (2.4GHz) | |
| 20 | Tyco Electronics | S-37 | PIFA | IPX-MHF | 400mm±3mm | 0.61dBi (2.4GHz) | Yes |
| 21 | FAVORTRON CO., LTD | M73XT | PIFA | IPX-MHF | Black 585±3mm | -1.47dBi (2.4GHz) | Yes |
| | | | | | Grey 500±3mm | 0.42dBi (2.4GHz) | |
| 22 | FAVORTRON CO., LTD | M76XT | PIFA | IPX-MHF | Black 650±3mm | 2.01dBi (2.4GHz) | Yes |
| | | | | | Grey 385±3mm | -2.39dBi (2.4GHz) | |
| 23 | FAVORTRON CO., LTD | 6-23-7M54S-010 | PIFA | IPX-MHF | Black 545±3mm | -0.23dBi (2.4GHz) | Yes |
| | | 6-23-7M54S-020 | | | Grey 440±3mm | 0.15dBi (2.4GHz) | |

Antenna Connected:

The antenna is connected to the RF connector of the WLAN adapter.

WLAN Power Type :

3.3V DC from the EUT

The channel and the operation frequency of 802.11b and 802.11g is listed below:

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

During the test, the EUT was tested as a modular device of a notebook PC using a USB extender board to extend the EUT outside the notebook PC enclosure.

The reason of change on this application is the EUT was added 6 new antennas. and modified some circuits and component under no influence on radio frequency characteristic

There are 23 PIFA antennas in the EUT:

The antenna 1~17 has already been tested in the original application. Please refer to ISL report-07LR001FC. The antenna 18~23 are newly-increased.

All of antennas have been tested. Only the worst data as following configuration is listed in this test report:

| | |
|--------------|--------------|
| VNT6656GEV00 | PIFA Antenna |
| 802.11b/g | Antenna 14 |

4. TEST RESULTS

4.1 Powerline Conducted Emissions [Section 15.207]

4.1.1 EUT Configuration

The EUT was set up on the non-conductive table that is 1.0 by 1.5 meter, 80cm above ground. The wall of the shielded room was located 40cm to the rear of the EUT.

Power to the EUT was provided through the LISN. The impedance vs. frequency characteristic of the LISN is complied with the limit used.

Both lines (neutral and hot) were connected to the LISN in series at testing. A coaxial-type connector which provides one 50 ohms terminating impedance was provided for connecting the test instrument. The excess length of the power cord was folded back and forth at the center of the lead so as to form a bundle not exceeding 40cm in length.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

If the EUT is a Personal Computer or a peripheral of personal computer, and the personal computer has an auxiliary AC outlet which can be used for providing power to an external monitor, then all measurements will be made with the monitor power from first the computer-mounted AC outlet and then a floor-mounted AC outlet.

4.1.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. The main power line conducted EMI tests were run on the hot and neutral conductors of the power cord and the results were recorded. The effect of varying the position of the interface cables has been investigated to find the configuration that produces maximum emission.

At the frequencies where the peak values of the emissions were higher than 6dB below the applicable limits, the emissions were also measured with the quasi-peak detectors. At the frequencies where the quasi-peak values of the emissions were higher than 6dB below the applicable average limits, the emissions were also measured with the average detectors.

The highest emissions were analyzed in details by operating the spectrum analyzer in fixed tuned mode to determine the nature of the emissions and to provide information which could be useful in reducing their amplitude.

4.1.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

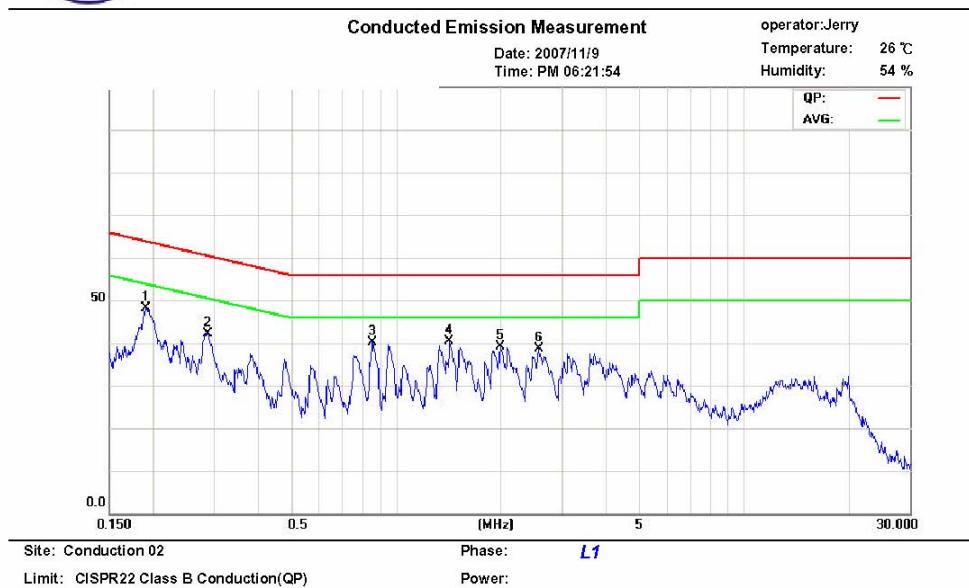
| | |
|-------------------|--------------------|
| Frequency Range | 150 KHz--30MHz |
| Detector Function | Quasi-Peak/Average |
| Bandwidth (RBW) | 9KHz |

4.1.4 802.11b Test Data:

802.11b Power Line Conducted Emissions (Hot) Channel 1, 6, 11



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road, Lung-Tan Hsiang,
 Tao Yuan Conty, Taiwan R.O.C.
 Tel: 03-4071718



| Frequency MHz | LISN Loss dB | Cable Loss dB | QP Correct. dBuV | QP Limit dBuV | QP Margin dB | Avg Correct. dBuV | Avg Limit dBuV | Avg Margin dB | Note |
|------------------|--------------------|---------------------|------------------------|---------------------|--------------------|-------------------------|----------------------|---------------------|------|
| 0.1914 | 0.1 | 0.04 | 45.90 | 63.9 | -18.0 | 36.70 | 53.9 | -17.2 | |
| 0.2878 | 0.14 | 0.09 | 42.50 | 60.5 | -18.0 | 36.40 | 50.5 | -14.1 | |
| 0.8573 | 0.2 | 0.07 | 38.50 | 56.0 | -17.5 | 33.60 | 46.0 | -12.4 | |
| * 1.4256 | 0.2 | 0.08 | 39.00 | 56.0 | -17.0 | 33.80 | 46.0 | -12.2 | |
| 1.9906 | 0.2 | 0.09 | 38.20 | 56.0 | -17.8 | 31.70 | 46.0 | -14.3 | |
| 2.5671 | 0.26 | 0.1 | 35.20 | 56.0 | -20.8 | 28.10 | 46.0 | -17.9 | |

*:Maximum data x:Over limit

802.11b Power Line Conducted Emissions (Neutral) Channel 1, 6, 11

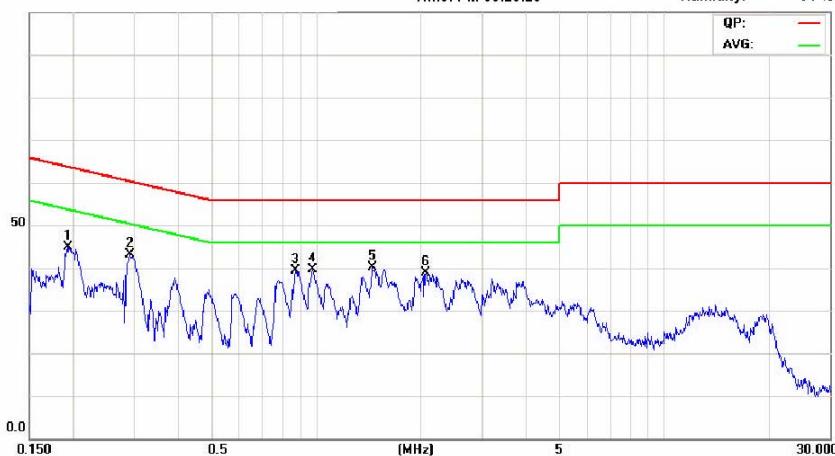


Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road, Lung-Tan Hsiang,
 Tao Yuan Conty, Taiwan R.O.C.
 Tel: 03-4071718

Conducted Emission Measurement

operator: Jerry

 Date: 2007/11/9
 Time: PM 06:29:20

 Temperature: 26 °C
 Humidity: 54 %

 Site: Conduction 02
 Limit: CISPR22 Class B Conduction(QP)

 Phase: N
 Power:

| Frequency MHz | LISN Loss dB | Cable Loss dB | QP Correct. dBuV | QP Limit dBuV | QP Margin dB | AVG Correct. dBuV | AVG Limit dBuV | AVG Margin dB | Note |
|------------------|--------------------|---------------------|------------------------|---------------------|--------------------|-------------------------|----------------------|---------------------|------|
| 0.1934 | 0.1 | 0.04 | 42.40 | 63.8 | -21.4 | 34.70 | 53.8 | -19.1 | |
| 0.2924 | 0.15 | 0.1 | 36.50 | 60.4 | -23.9 | 29.50 | 50.4 | -20.9 | |
| * 0.8710 | 0.2 | 0.07 | 37.30 | 56.0 | -18.7 | 31.70 | 46.0 | -14.3 | |
| 0.9787 | 0.2 | 0.07 | 37.00 | 56.0 | -19.0 | 31.00 | 46.0 | -15.0 | |
| 1.4485 | 0.2 | 0.08 | 36.60 | 56.0 | -19.4 | 30.00 | 46.0 | -16.0 | |
| 2.0660 | 0.2 | 0.09 | 35.60 | 56.0 | -20.4 | 29.20 | 46.0 | -16.8 | |

*Maximum data x:Over limit

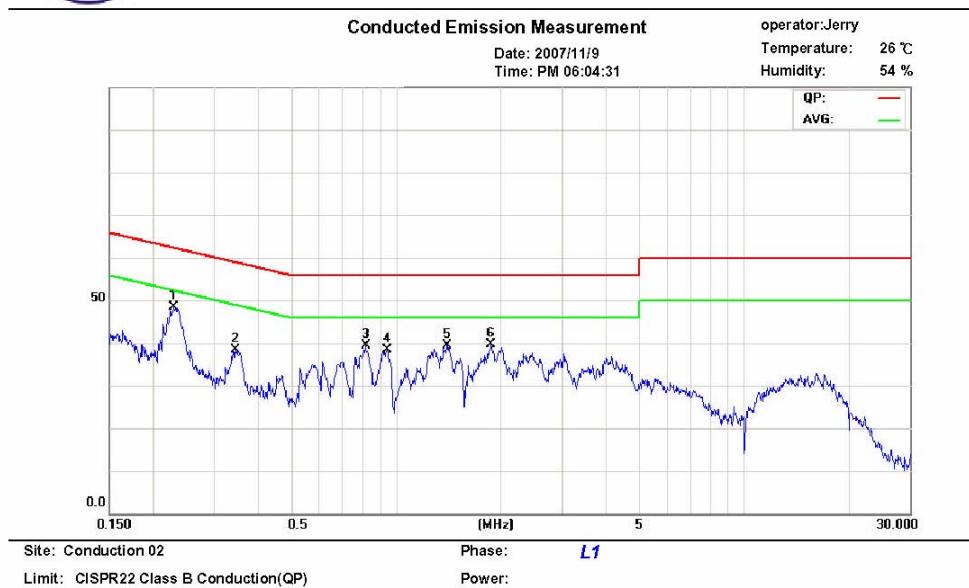
* NOTE: During the test, the EMI receiver was set to Max. Hold then switch the EUT Channel between 1, 6, 11 to get the maximum reading of all these channels.
 Margin = Amplitude + Insertion Loss- Limit
 A margin of -8dB means that the emission is 8dB below the limit

4.1.5 802.11g Test Data:

802.11g Power Line Conducted Emissions (Hot) Channel 1, 6, 11



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road, Lung-Tan Hsiang,
 Tao Yuan Conty, Taiwan R.O.C.
 Tel: 03-4071718



| Frequency MHz | LISN Loss dB | Cable Loss dB | QP Correct. dBuV | QP Limit dBuV | QP Margin dB | Avg Correct. dBuV | Avg Limit dBuV | Avg Margin dB | Note |
|------------------|--------------------|---------------------|------------------------|---------------------|--------------------|-------------------------|----------------------|---------------------|------|
| 0.2292 | 0.11 | 0.06 | 40.90 | 62.4 | -21.5 | 32.90 | 52.4 | -19.5 | |
| 0.3465 | 0.17 | 0.09 | 31.40 | 59.0 | -27.6 | 25.00 | 49.0 | -24.0 | |
| * 0.8174 | 0.2 | 0.07 | 38.50 | 56.0 | -17.5 | 34.40 | 46.0 | -11.6 | |
| 0.9431 | 0.2 | 0.07 | 37.80 | 56.0 | -18.2 | 33.50 | 46.0 | -12.5 | |
| 1.4032 | 0.2 | 0.08 | 40.00 | 56.0 | -16.0 | 33.60 | 46.0 | -12.4 | |
| 1.8780 | 0.2 | 0.09 | 38.80 | 56.0 | -17.2 | 33.60 | 46.0 | -12.4 | |

*:Maximum data x:Over limit

802.11g Power Line Conducted Emissions (Neutral) Channel 1, 6, 11

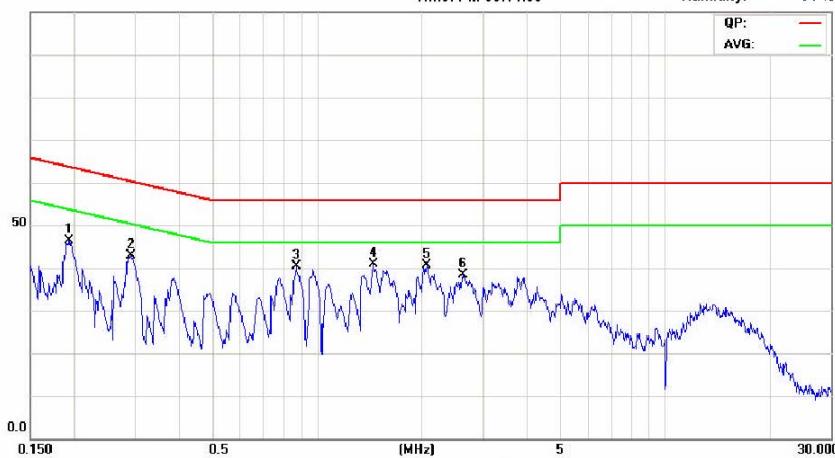


Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road, Lung-Tan Hsiang,
 Tao Yuan Conty, Taiwan R.O.C.
 Tel: 03-4071718

Conducted Emission Measurement

operator: Jerry

 Date: 2007/11/9
 Time: PM 06:14:00

 Temperature: 26 °C
 Humidity: 54 %

 Site: Conduction 02
 Limit: CISPR22 Class B Conduction(QP)

 Phase: N
 Power:

| Frequency MHz | LISN Loss dB | Cable Loss dB | QP Correct. dBuV | QP Limit dBuV | QP Margin dB | AVG Correct. dBuV | AVG Limit dBuV | AVG Margin dB | Note |
|------------------|--------------------|---------------------|------------------------|---------------------|--------------------|-------------------------|----------------------|---------------------|------|
| 0.1945 | 0.1 | 0.04 | 28.90 | 63.8 | -34.9 | 17.30 | 53.8 | -36.5 | |
| 0.2924 | 0.15 | 0.1 | 41.20 | 60.4 | -19.2 | 27.90 | 50.4 | -22.5 | |
| * 0.8710 | 0.2 | 0.07 | 38.30 | 56.0 | -17.7 | 32.30 | 46.0 | -13.7 | |
| 1.4485 | 0.2 | 0.08 | 35.90 | 56.0 | -20.1 | 30.10 | 46.0 | -15.9 | |
| 2.0660 | 0.2 | 0.09 | 32.10 | 56.0 | -23.9 | 19.70 | 46.0 | -26.3 | |
| 2.6360 | 0.2 | 0.11 | 32.10 | 56.0 | -23.9 | 25.80 | 46.0 | -20.2 | |

*Maximum data x:Over limit

* NOTE: During the test, the EMI receiver was set to Max. Hold then switch the EUT Channel between 1, 6, 11 to get the maximum reading of all these channels.
 Margin = Amplitude + Insertion Loss- Limit
 A margin of -8dB means that the emission is 8dB below the limit

4.2 Bandwidth for DSSS [Section 15.247 (a)(2)]

4.2.1 Test Procedure

The Transmitter output of EUT was connected to the spectrum analyzer. The 6 dB bandwidth of the fundamental frequency was measured. The setting of spectrum analyzer is as follows

| | |
|-------------------|-------------------|
| Equipment mode | Spectrum analyzer |
| Detector function | Peak mode |
| RBW | 100KHz |
| VBW | 100KHz |

4.2.2 Test Setup



4.2.3 802.11b Test Data:

This item has already been tested in original report.
Please refer to ISL report 06LR016FC.

4.2.4 802.11g Test Data:

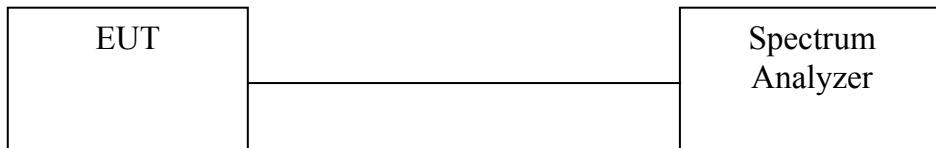
This item has already been tested in original report.
Please refer to ISL report 06LR016FC.

4.3 DSSS Maximum Peak Output Power [Section 15.247 (b)(1)]

4.3.1 Test Procedure

The Transmitter output of EUT was connected to the Spectrum analyzer.

4.3.2 Test Setup



4.3.3 802.11b Test Data

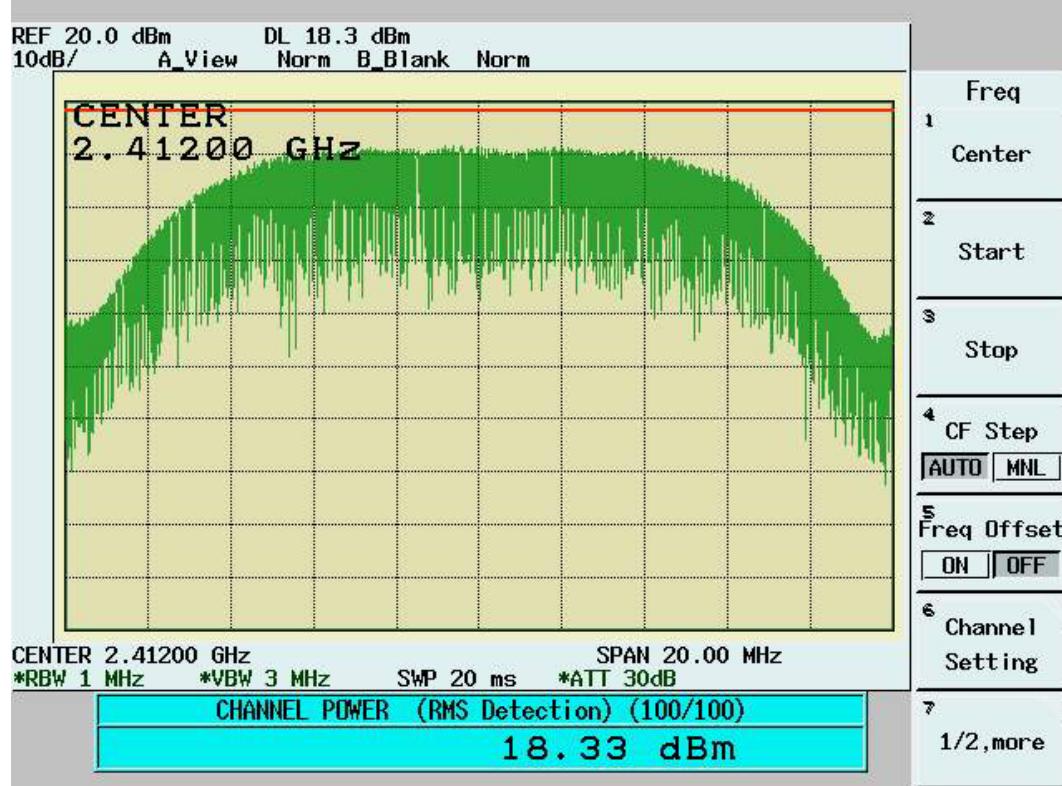
802.11b Maximum Peak Output Power

| | | | |
|------------|-------|---------------|----|
| Test Engr: | Jerry | Temp. (° C): | 25 |
| | | Humidity (%): | 55 |

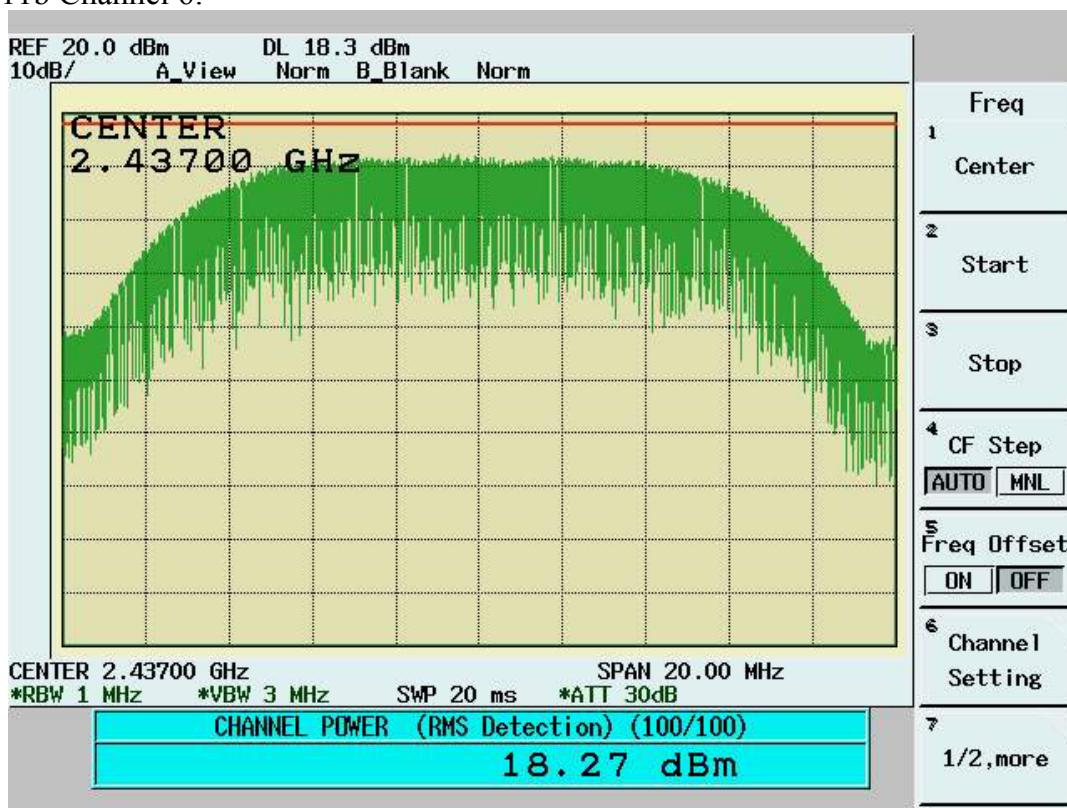
| Channel | Frequency (MHz) | Analyzer Reading (dBm) | Cable Loss (dB) | Peak Power Output (mW) | Peak Power Output (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|------------------------|-----------------|------------------------|-------------------------|-------------|-----------|
| 1 | 2412 | 18.33 | 1.1 | 87.70 | 19.43 | 30 | Pass |
| 6 | 2437 | 18.27 | 1.1 | 86.50 | 19.37 | 30 | Pass |
| 11 | 2462 | 17.99 | 1.1 | 81.10 | 19.09 | 30 | Pass |

Note: Two RF output(MAIN & AUX) have been test, the worse data shown above.

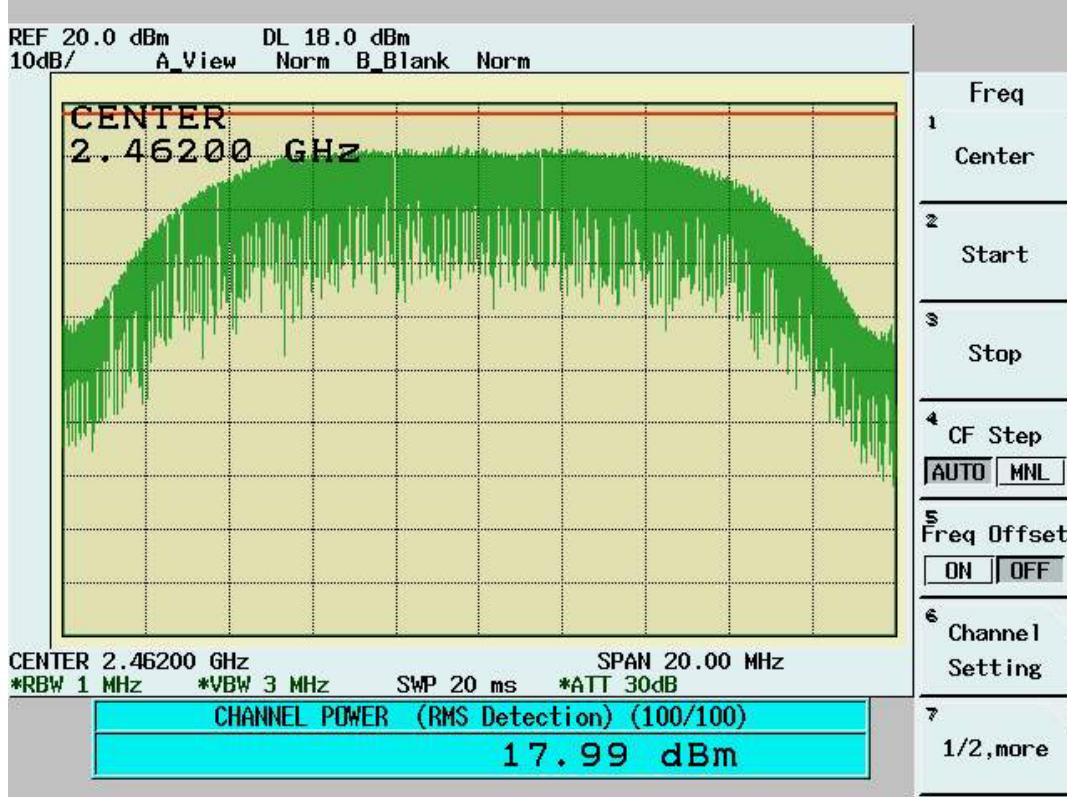
802.11b Channel 1:



802.11b Channel 6:



802.11b Channel 11:



802.11b Maximum Peak Output Power Measured by Peak Power Analyzer
Test result form original report(ISL report 06LR016FC)

| Channel | Frequency (Mhz) | Analyzer Reading (dBm) | Cable Loss (dB) | Peak Power Output (mW) | Peak Power Output (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|------------------------|-----------------|------------------------|-------------------------|-------------|-----------|
| 1 | 2412 | 18.031 | 1.1 | 81.87 | 19.131 | 30 | Pass |
| 6 | 2437 | 18.124 | 1.1 | 83.64 | 19.224 | 30 | Pass |
| 11 | 2462 | 17.812 | 1.1 | 77.84 | 18.912 | 30 | Pass |

Test result by new WLAN card

| Channel | Frequency (MHz) | Analyzer Reading (dBm) | Cable Loss (dB) | Peak Power Output (mW) | Peak Power Output (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|------------------------|-----------------|------------------------|-------------------------|-------------|-----------|
| 1 | 2412 | 18.12 | 1.1 | 83.56 | 19.22 | 30 | Pass |
| 6 | 2437 | 18.23 | 1.1 | 85.70 | 19.33 | 30 | Pass |
| 11 | 2462 | 18.18 | 1.1 | 84.72 | 19.28 | 30 | Pass |

4.3.4 802.11g Test Data

802.11g Maximum Peak Output Power

Test Engr: Jerry

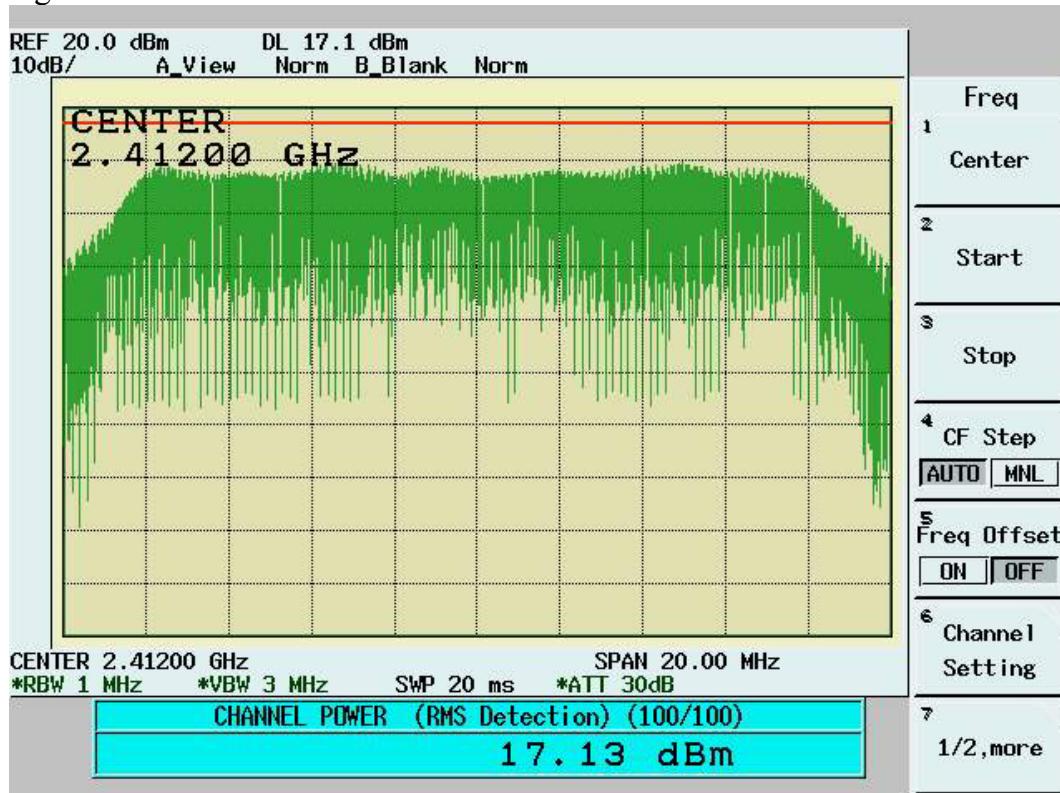
Temp. (° C): 25

Humidity (%): 55

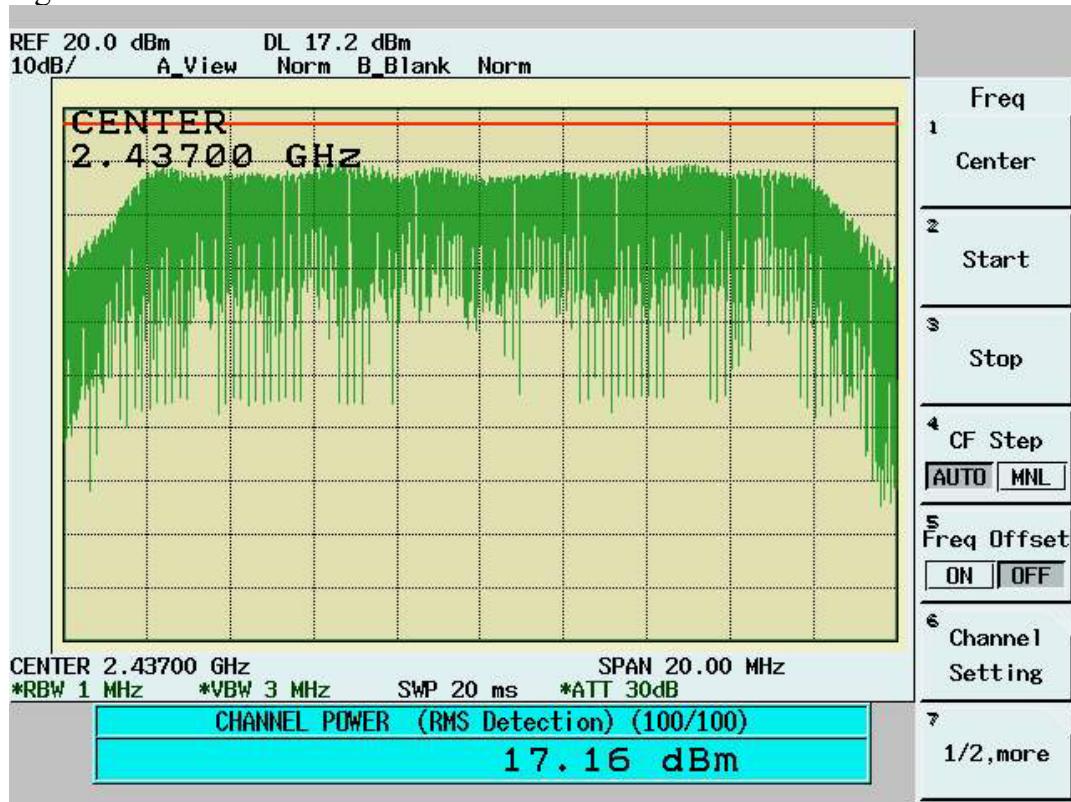
| Channel | Frequency (MHz) | Analyzer Reading (dBm) | Cable Loss (dB) | Peak Power Output (mW) | Peak Power Output (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|------------------------|-----------------|------------------------|-------------------------|-------------|-----------|
| 1 | 2412 | 17.13 | 1.1 | 66.53 | 18.23 | 30 | Pass |
| 6 | 2437 | 17.16 | 1.1 | 66.99 | 18.26 | 30 | Pass |
| 11 | 2462 | 16.99 | 1.1 | 64.42 | 18.09 | 30 | Pass |

Note: Two RF output(MAIN & AUX) have been test, the worse data shown above.

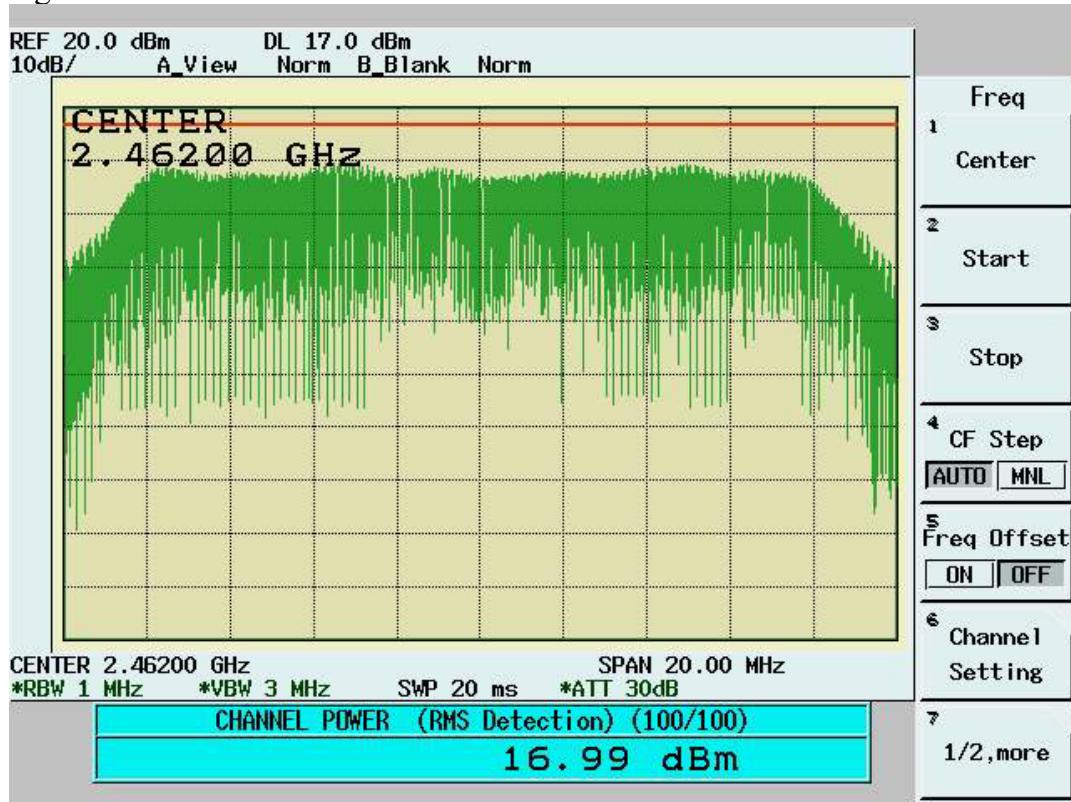
802.11g Channel 1:



802.11g Channel 6:



802.11g Channel 11:



802.11g Maximum Peak Output Power Measured by Peak Power Analyzer
Test result form original report(ISL report 06LR016FC)

| Channel | Frequency (Mhz) | Analyzer Reading (dBm) | Cable Loss (dB) | Peak Power Output (mW) | Peak Power Output (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|------------------------|-----------------|------------------------|-------------------------|-------------|-----------|
| 1 | 2412 | 21.375 | 1.1 | 176.81 | 22.475 | 30 | Pass |
| 6 | 2437 | 20.937 | 1.1 | 159.85 | 22.037 | 30 | Pass |
| 11 | 2462 | 20.781 | 1.1 | 154.21 | 21.881 | 30 | Pass |

Test result by new WLAN card

| Channel | Frequency (MHz) | Analyzer Reading (dBm) | Cable Loss (dB) | Peak Power Output (mW) | Peak Power Output (dBm) | Limit (dBm) | Pass/Fail |
|---------|-----------------|------------------------|-----------------|------------------------|-------------------------|-------------|-----------|
| 1 | 2412 | 20.94 | 1.1 | 159.96 | 22.04 | 30 | Pass |
| 6 | 2437 | 20.75 | 1.1 | 153.11 | 21.85 | 30 | Pass |
| 11 | 2462 | 20.69 | 1.1 | 151.01 | 21.79 | 30 | Pass |

4.4 Radiated Emission Measurement [Section [15.247(c)(4)]]

4.4.1 EUT Configuration

The equipment under test was set up on the 10 meter chamber with measurement distance of 3 meters. The EUT was placed on a non-conductive table 80cm above ground.

Any changes made to the configuration, or modifications made to the EUT, during testing are noted in the following test record.

4.4.2 Test Procedure

The system was set up as described above, with the EMI diagnostic software running. We found the maximum readings by varying the height of antenna and then rotating the turntable. Both polarization of antenna, horizontal and vertical, are measured.

30M to 1GHz: The highest emissions between 30 MHz to 1000 MHz were also analyzed in details by operating the spectrum analyzer and/or EMI receiver in quasi-peak mode to determine the precise amplitude of the emissions. While doing so, the interconnecting cables and major parts of the system were moved around, the antenna height was varied between one and four meters, its polarization was varied between vertical and horizontal, and the turntable was slowly rotated, to maximize the emission.

1GHz – 25GHz: The highest emissions were also analyzed in details by operating the spectrum analyzer and/or EMI receiver in peak mode to determine the precise amplitude of the emission. While doing so, the interconnecting cables and major parts of the system were moved around, the antenna height was varied between one and four meters, its polarization was varied between vertical and horizontal, and the turntable was slowly rotated, to maximize the emission. During test the EMI receiver and spectrum was setup according to *EMI Receiver/Spectrum Analyzer Configuration*.

For the test of 2nd to 10th harmonics frequencies , the equipment setup was also refer to *EMI Receiver/Spectrum Analyzer Configuration*. The frequencies were tested using Peak mode first, if the test data is higher than the emissions limit, an additional measurement using Average mode will be performed and the average reading will be compared to the limit and record in test report.

4.4.3 EMI Receiver/Spectrum Analyzer Configuration (for the frequencies tested)

Frequency Range Tested: 30MHz~1000MHz

Detector Function: Quasi-Peak Mode

Resolution Bandwidth (RBW): 120KHz

Video Bandwidth (VBW) 360KHz

Frequency Range Tested: 1GHz – 25 GHz

Detector Function: Peak Mode

Resolution Bandwidth (RBW): 1MHz

Video Bandwidth (VBW) 3MHz

Frequency Range Tested: 1GHz – 25 GHz

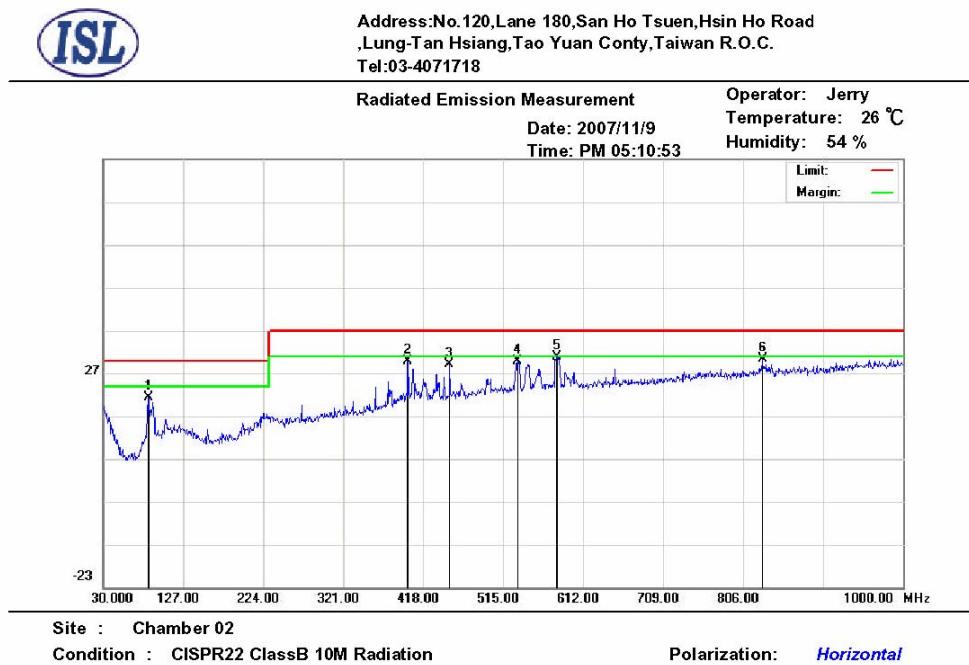
Detector Function: Average Mode

Resolution Bandwidth (RBW): 1MHz

Video Bandwidth (VBW) 10 Hz

4.4.4 802.11b Test Data:

30M – 1GHz Open Field Radiated Emissions (Horizontal) Channel 1, 6, 11



| Mk. | Frequency (MHz) | RX_R (dBuV/m) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|---------------|------------|------------|-------------|-------------------|----------------|-------------|--------------|----------------|----------|
| | 84.3200 | 12.54 | 7.38 | 1.44 | 0 | 21.36 | 30.00 | -8.64 | 200 | 235 | peak |
| | 399.5700 | 10.25 | 15.99 | 3.65 | 0 | 29.89 | 37.00 | -7.11 | 150 | 143 | peak |
| | 450.0100 | 9.09 | 16.3 | 3.85 | 0 | 29.24 | 37.00 | -7.76 | 150 | 262 | peak |
| | 532.4600 | 7.18 | 18.38 | 4.25 | 0 | 29.81 | 37.00 | -7.19 | 250 | 32 | peak |
| * | 579.9900 | 7.54 | 18.86 | 4.54 | 0 | 30.94 | 37.00 | -6.06 | 250 | 336 | peak |
| | 829.2800 | 4.23 | 20.35 | 5.73 | 0 | 30.31 | 37.00 | -6.69 | 250 | 240 | peak |

*:Maximum data x:Over limit !:over margin

30M – 1GHz Open Field Radiated Emissions (Vertical) Channel 1, 6, 11



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road
 ,Lung-Tan Hsiang, Tao Yuan Conty, Taiwan R.O.C.
 Tel: 03-4071718

Radiated Emission Measurement

Operator: Jerry

Date: 2007/11/9

Temperature: 26 °C

Time: PM 05:15:54

Humidity: 54 %



Site : Chamber 02

Condition : CISPR22 ClassB 10M Radiation

Polarization: Vertical

| Mk. | Frequency (MHz) | RX_R (dBuV/m) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|---------------|------------|------------|-------------|-------------------|----------------|-------------|--------------|----------------|----------|
| * | 88.2000 | 14.32 | 8.08 | 1.47 | 0 | 23.87 | 30.00 | -6.13 | 101 | 72 | peak |
| | 405.3900 | 5.81 | 16.03 | 3.68 | 0 | 25.52 | 37.00 | -11.48 | 101 | 238 | peak |
| | 499.4800 | 4.69 | 17.59 | 4.05 | 0 | 26.33 | 37.00 | -10.67 | 150 | 42 | peak |
| | 535.3700 | 7.55 | 18.45 | 4.27 | 0 | 30.27 | 37.00 | -6.73 | 150 | 268 | peak |
| | 579.0200 | 7.45 | 18.86 | 4.54 | 0 | 30.85 | 37.00 | -6.15 | 101 | 2 | peak |
| | 832.1900 | 4.09 | 20.39 | 5.73 | 0 | 30.21 | 37.00 | -6.79 | 101 | 335 | peak |

*:Maximum data x:Over limit !:over margin

NOTE:

- During the Pre-test, the EUT has been tested for Channel 1, 6, 11 transmit from Main and Aux antenna respectively to get all the critical emission frequencies. In the final test all the critical emission frequencies has been tested and the test data are listed above.
- Margin = Corrected Amplitude – Limit
 Corrected Amplitude = Radiated Amplitude + Antenna Correction Factor + Cable Loss - Pre-Amplifier Gain

A margin of -8dB means that the emission is 8dB below the limit

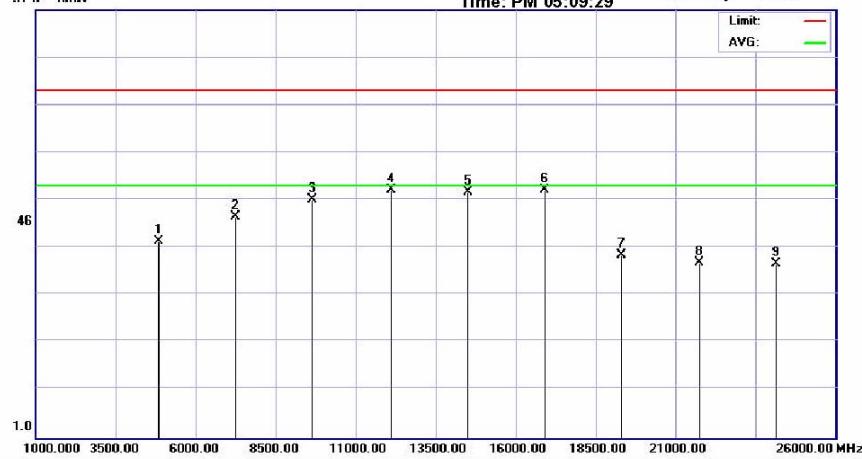
All frequencies from 30MHz to 1GHz have been tested

1GHz~ 25 GHz (Horizontal), Channel 1: 2412 MHz



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road
 , Lung-Tan Hsiang, Tao Yuan County, Taiwan R.O.C.
 Tel: 03-4071718

Radiated Emission Measurement Operator: Jerry
 Date: 2008-11-17 Temperature: 26 °C
 Time: PM 05:09:29 Humidity: 54 %



Site : Chamber 02

Condition : FCC Class B 3M(Peak)

Polarization: Horizontal

| Mk. | Frequency (MHz) | RX_R (dBuV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV) | Limit (dBuV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4824.000 | 32.37 | 34.66 | 2.83 | 27.48 | 42.38 | 74.00 | -31.62 | 285 | 80 | peak |
| | 7236.000 | 31.82 | 38.82 | 3.37 | 26.59 | 47.42 | 74.00 | -26.58 | 100 | 140 | peak |
| | 9646.000 | 31.63 | 40.19 | 4 | 24.84 | 50.98 | 74.00 | -23.02 | 296 | 99 | peak |
| * | 12060.000 | 34.89 | 42.15 | 4.49 | 28.45 | 53.08 | 74.00 | -20.92 | 347 | 302 | peak |
| | 14472.000 | 31.51 | 44.8 | 4.86 | 28.49 | 52.68 | 74.00 | -21.32 | 381 | 39 | peak |
| | 16884.000 | 31.02 | 44.38 | 5.39 | 27.79 | 53.00 | 74.00 | -21.00 | 322 | 73 | peak |
| | 19296.000 | 28.05 | 32.42 | 5.68 | 26.77 | 39.38 | 74.00 | -34.62 | 397 | 319 | peak |
| | 21708.000 | 25.14 | 33.1 | 6.03 | 26.58 | 37.69 | 74.00 | -36.31 | 319 | 128 | peak |
| | 24120.000 | 25.25 | 33.35 | 5.78 | 26.8 | 37.58 | 74.00 | -36.42 | 100 | 257 | peak |

*:Maximum data x:Over limit !:over margin

1GHz~ 25 GHz (Vertical), Channel 1: 2412 MHz



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road
 ,Lung-Tan Hsiang, Tao Yuan Conty, Taiwan R.O.C.
 Tel: 03-4071718

Radiated Emission Measurement

Operator: Jerry

Temperature: 26 °C

Date: 2008-11-17

Time: PM 05:12:10

Humidity: 54 %

91.0 dBuV



Site : Chamber 02

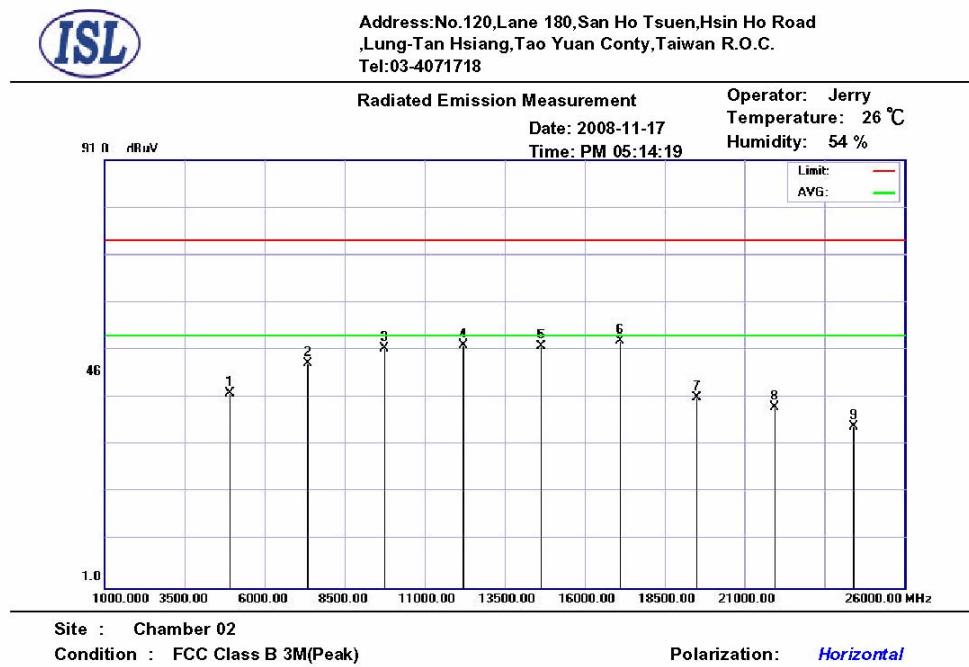
Condition : FCC Class B 3M(Peak)

Polarization: Vertical

| Mk. | Frequency (MHz) | RX_R (dBuV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV) | Limit (dBuV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4824.000 | 31.35 | 34.66 | 2.83 | 27.48 | 41.36 | 74.00 | -32.64 | 100 | 134 | peak |
| | 7236.000 | 31.31 | 38.82 | 3.37 | 26.59 | 46.91 | 74.00 | -27.09 | 125 | 219 | peak |
| | 9646.000 | 32.75 | 40.19 | 4 | 24.84 | 52.10 | 74.00 | -21.90 | 211 | 89 | peak |
| | 12060.000 | 33.59 | 42.15 | 4.49 | 28.45 | 51.78 | 74.00 | -22.22 | 338 | 13 | peak |
| | 14472.000 | 31.18 | 44.8 | 4.86 | 28.49 | 52.35 | 74.00 | -21.65 | 254 | 337 | peak |
| * | 16884.000 | 30.49 | 44.38 | 5.39 | 27.79 | 52.47 | 74.00 | -21.53 | 317 | 230 | peak |
| | 19296.000 | 27.44 | 32.42 | 5.68 | 26.77 | 38.77 | 74.00 | -35.23 | 100 | 194 | peak |
| | 21708.000 | 25.30 | 33.1 | 6.03 | 26.58 | 37.85 | 74.00 | -36.15 | 350 | 330 | peak |
| | 24120.000 | 24.81 | 33.35 | 5.78 | 26.8 | 37.14 | 74.00 | -36.86 | 192 | 169 | peak |

*:Maximum data x:Over limit !:over margin

1GHz~ 25 GHz (Horizontal) , Channel 6 : 2437 MHz



| Mk. | Frequency (MHz) | RX_R (dBuV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV) | Limit (dBuV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4874.000 | 31.55 | 34.87 | 2.82 | 27.41 | 41.83 | 74.00 | -32.17 | 398 | 254 | peak |
| | 7311.000 | 32.36 | 38.96 | 3.38 | 26.56 | 48.14 | 74.00 | -25.86 | 236 | 142 | peak |
| | 9748.000 | 31.83 | 40.25 | 4.03 | 24.77 | 51.34 | 74.00 | -22.66 | 282 | 72 | peak |
| | 12185.000 | 33.39 | 42.25 | 4.52 | 28.29 | 51.87 | 74.00 | -22.13 | 100 | 20 | peak |
| | 14622.000 | 30.12 | 45.07 | 4.87 | 28.41 | 51.65 | 74.00 | -22.35 | 257 | 297 | peak |
| * | 17059.000 | 29.85 | 45.28 | 5.43 | 27.79 | 52.77 | 74.00 | -21.23 | 342 | 48 | peak |
| | 19496.000 | 29.55 | 32.5 | 5.71 | 26.86 | 40.90 | 74.00 | -33.10 | 233 | 340 | peak |
| | 21933.000 | 26.39 | 33.1 | 6.07 | 26.54 | 39.02 | 74.00 | -34.98 | 359 | 138 | peak |
| | 24370.000 | 22.68 | 33.45 | 5.56 | 26.73 | 34.96 | 74.00 | -39.04 | 311 | 352 | peak |

*:Maximum data x:Over limit !:over margin

1GHz~ 25 GHz (Vertical), Channel 6 : 2437 MHz



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road
 , Lung-Tan Hsiang, Tao Yuan County, Taiwan R.O.C.
 Tel: 03-4071718

Radiated Emission Measurement

Operator: Jerry

Temperature: 26 °C

Date: 2008-11-17

Time: PM 05:16:40

Humidity: 54 %

91.0 dBuV



Site : Chamber 02

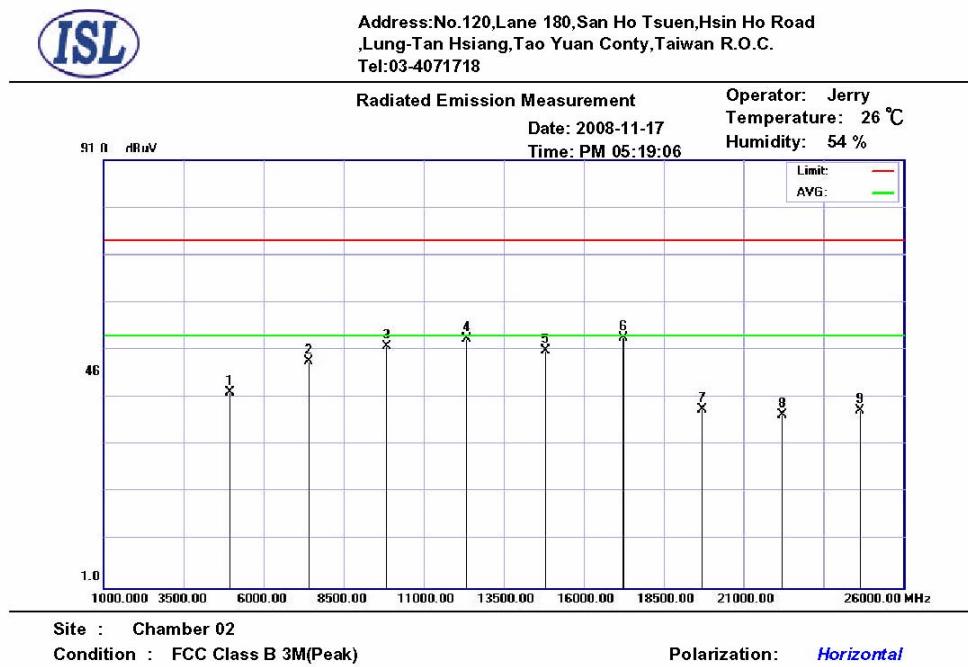
Condition : FCC Class B 3M(Peak)

Polarization: Vertical

| Mk. | Frequency (MHz) | RX_R (dBuV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV) | Limit (dBuV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4874.000 | 31.12 | 34.87 | 2.82 | 27.41 | 41.40 | 74.00 | -32.60 | 288 | 94 | peak |
| | 7311.000 | 31.40 | 38.96 | 3.38 | 26.56 | 47.18 | 74.00 | -26.82 | 281 | 48 | peak |
| | 9748.000 | 32.42 | 40.25 | 4.03 | 24.77 | 51.93 | 74.00 | -22.07 | 100 | 331 | peak |
| | 12185.000 | 34.16 | 42.25 | 4.52 | 28.29 | 52.64 | 74.00 | -21.36 | 357 | 189 | peak |
| | 14622.000 | 30.72 | 45.07 | 4.87 | 28.41 | 52.25 | 74.00 | -21.75 | 204 | 7 | peak |
| * | 17059.000 | 31.00 | 45.28 | 5.43 | 27.79 | 53.92 | 74.00 | -20.08 | 100 | 156 | peak |
| | 19496.000 | 28.09 | 32.5 | 5.71 | 26.86 | 39.44 | 74.00 | -34.56 | 179 | 7 | peak |
| | 21933.000 | 25.16 | 33.1 | 6.07 | 26.54 | 37.79 | 74.00 | -36.21 | 293 | 253 | peak |
| | 24370.000 | 23.41 | 33.45 | 5.56 | 26.73 | 35.69 | 74.00 | -38.31 | 228 | 187 | peak |

*:Maximum data x:Over limit !:over margin

1GHz~ 25 GHz (Horizontal), Channel 11: 2462 MHz



| Mk. | Frequency (MHz) | RX_R (dBuV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV) | Limit (dBuV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4924.000 | 31.61 | 35.08 | 2.81 | 27.34 | 42.16 | 74.00 | -31.84 | 116 | 197 | peak |
| | 7386.000 | 32.62 | 39.09 | 3.39 | 26.53 | 48.57 | 74.00 | -25.43 | 271 | 348 | peak |
| | 9848.000 | 32.05 | 40.31 | 4.06 | 24.7 | 51.72 | 74.00 | -22.28 | 369 | 146 | peak |
| | 12310.000 | 34.48 | 42.35 | 4.56 | 28.14 | 53.25 | 74.00 | -20.75 | 395 | 177 | peak |
| | 14772.000 | 29.01 | 45.28 | 4.88 | 28.27 | 50.90 | 74.00 | -23.10 | 100 | 226 | peak |
| * | 17234.000 | 29.91 | 45.8 | 5.44 | 27.64 | 53.51 | 74.00 | -20.49 | 205 | 16 | peak |
| | 19696.000 | 27.05 | 32.5 | 5.74 | 26.79 | 38.50 | 74.00 | -35.50 | 212 | 284 | peak |
| | 22158.000 | 24.52 | 33.35 | 6.11 | 26.56 | 37.42 | 74.00 | -36.58 | 256 | 178 | peak |
| | 24620.000 | 25.71 | 33.84 | 5.43 | 26.73 | 38.25 | 74.00 | -35.75 | 207 | 187 | peak |

*:Maximum data x:Over limit !:over margin

1GHz~ 25 GHz (Vertical), Channel 11 : 2462 MHz



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road
 , Lung-Tan Hsiang, Tao Yuan County, Taiwan R.O.C.
 Tel: 03-4071718

Radiated Emission Measurement

Operator: Jerry

Date: 2008-11-17

Temperature: 26 °C

Time: PM 05:20:50

Humidity: 54 %



Site : Chamber 02

Condition : FCC Class B 3M(Peak)

Polarization: Vertical

| Mk. | Frequency (MHz) | RX_R (dBmV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBmV) | Limit (dBmV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4924.000 | 31.01 | 35.08 | 2.81 | 27.34 | 41.56 | 74.00 | -32.44 | 340 | 303 | peak |
| | 7386.000 | 33.07 | 39.09 | 3.39 | 26.53 | 49.02 | 74.00 | -24.98 | 322 | 183 | peak |
| | 9848.000 | 32.59 | 40.31 | 4.06 | 24.7 | 52.26 | 74.00 | -21.74 | 384 | 250 | peak |
| | 12310.000 | 33.89 | 42.35 | 4.56 | 28.14 | 52.66 | 74.00 | -21.34 | 399 | 49 | peak |
| | 14772.000 | 28.88 | 45.28 | 4.88 | 28.27 | 50.77 | 74.00 | -23.23 | 100 | 190 | peak |
| * | 17234.000 | 29.94 | 45.8 | 5.44 | 27.64 | 53.54 | 74.00 | -20.46 | 198 | 77 | peak |
| | 19696.000 | 27.55 | 32.5 | 5.74 | 26.79 | 39.00 | 74.00 | -35.00 | 321 | 39 | peak |
| | 22158.000 | 25.33 | 33.35 | 6.11 | 26.56 | 38.23 | 74.00 | -35.77 | 100 | 229 | peak |
| | 24620.000 | 24.41 | 33.84 | 5.43 | 26.73 | 36.95 | 74.00 | -37.05 | 123 | 92 | peak |

*:Maximum data x:Over limit !:over margin

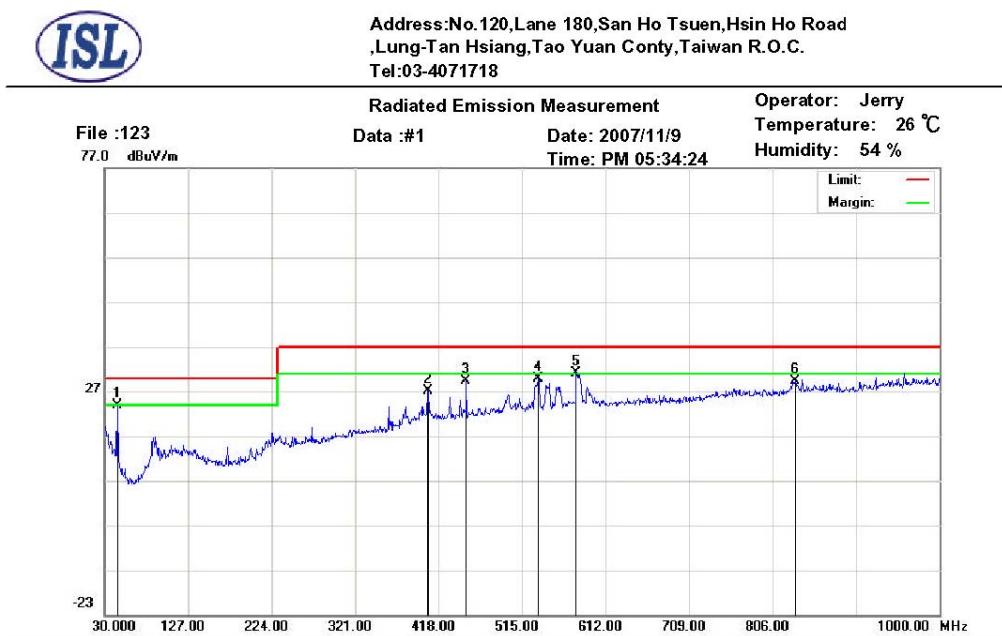
Note:

- According to the standards used, Where limits are specified by agencies for both average and peak (or quasi-peak) detection , if the peak (or quasi-peak) measured value complies with the average limit , it is unnecessary to perform an average measurement.
- “pk”: peak mode
- “av”: average mode
- The Spectrum noise level+Correction Factor < Limit - 6 dB
- Margin=Corrected Amplitude – Limit
- Corrected Amplitude=Radiated Amplitude+Antenna Correction Factor+Cable Loss-Pre-Amplifier Gain
- A margin of -8dB means that the emission is 8dB below the limit.

All frequencies from 1GHz to 25 GHz have been tested.

4.4.5 802.11g Test Data.

30M – 1GHz Open Field Radiated Emissions (Horizontal) Channel 1, 6, 11



Site : Chamber 02

Condition : CISPR22 ClassB 10M Radiation

Polarization: Horizontal

Company : VIA

Power :

EUT Model: VNT6656GEV00

Witness:

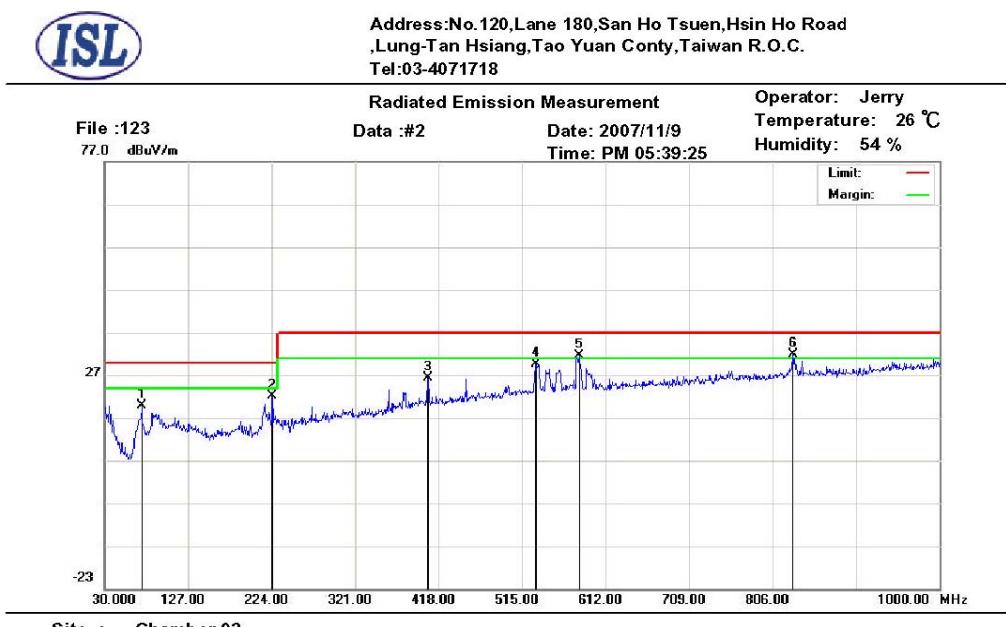
Execute Program :

Note :

| Mk. | Frequency (MHz) | RX_R (dBuV/m) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|---------------|------------|------------|-------------|-------------------|----------------|-------------|--------------|----------------|----------|
| | 44.5500 | 12.69 | 10.03 | 1.08 | 0 | 23.80 | 30.00 | -6.20 | 252 | 248 | peak |
| | 405.3900 | 7.43 | 16.03 | 3.68 | 0 | 27.14 | 37.00 | -9.86 | 150 | 135 | peak |
| | 450.0100 | 9.18 | 16.3 | 3.85 | 0 | 29.33 | 37.00 | -7.67 | 252 | 31 | peak |
| | 533.4300 | 7.21 | 18.4 | 4.25 | 0 | 29.86 | 37.00 | -7.14 | 200 | 5 | peak |
| * | 578.0500 | 7.70 | 18.86 | 4.54 | 0 | 31.10 | 37.00 | -5.90 | 200 | 85 | peak |
| | 832.1900 | 3.16 | 20.39 | 5.73 | 0 | 29.28 | 37.00 | -7.72 | 252 | 15 | peak |

*:Maximum data x:Over limit !:over margin

30M – 1GHz Open Field Radiated Emissions (Vertical) Channel 1, 6, 11



Site : Chamber 02
 Condition : CISPR22 ClassB 10M Radiation
 Company : VIA
 EUT Model: VNT6656GEV00
 Execute Program :
 Note :

Polarization: Vertical

Power :

Witness:

| Mk. | Frequency (MHz) | RX_R (dBuV/m) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|---------------|------------|------------|-------------|-------------------|----------------|-------------|--------------|----------------|----------|
| | 72.6800 | 12.84 | 5.72 | 1.33 | 0 | 19.89 | 30.00 | -10.11 | 100 | 21 | peak |
| | 224.9700 | 11.09 | 8.7 | 2.44 | 0 | 22.23 | 30.00 | -7.77 | 100 | 8 | peak |
| | 405.3900 | 6.56 | 16.03 | 3.68 | 0 | 26.27 | 37.00 | -10.73 | 153 | 21 | peak |
| | 531.4900 | 7.04 | 18.36 | 4.24 | 0 | 29.64 | 37.00 | -7.36 | 100 | 139 | peak |
| ! | 580.9600 | 8.16 | 18.86 | 4.54 | 0 | 31.56 | 37.00 | -5.44 | 153 | 271 | peak |
| * | 829.2800 | 5.92 | 20.35 | 5.73 | 0 | 32.00 | 37.00 | -5.00 | 100 | 257 | peak |

*:Maximum data x:Over limit !:over margin

NOTE:

- During the Pre-test, the EUT has been tested for Channel 1 , 6, 11 transmit from Main and Aux antenna respectively to get all the critical emission frequencies. In the final test all the critical emission frequencies has been tested and the test data are listed above.
- Margin = Corrected Amplitude – Limit

$$\text{Corrected Amplitude} = \text{Radiated Amplitude} + \text{Antenna Correction Factor} + \text{Cable Loss} - \text{Pre-Amplifier Gain}$$
 A margin of -8dB means that the emission is 8dB below the limit

All frequencies from 30MHz to 1GHz have been tested

1GHz~ 25 GHz (Horizontal), Channel 1: 2412 MHz



Address: No.120, Lane 180, San Ho Tsuen, Hsin Ho Road
 , Lung-Tan Hsiang, Tao Yuan County, Taiwan R.O.C.
 Tel: 03-4071718

Radiated Emission Measurement Operator: Jerry
 Date: 2008-11-17 Temperature: 26 °C
 Time: PM 05:25:34 Humidity: 54 %



Site : Chamber 02

Condition : FCC Class B 3M(Peak)

Polarization: Horizontal

| Mk. | Frequency (MHz) | RX_R (dBuV) | Ant_F (dB) | Cab_L (dB) | PreAmp (dB) | Emission (dBuV) | Limit (dBuV) | Margin (dB) | Ant.Pos (cm) | Tab.Pos (deg.) | Detector |
|-----|-----------------|-------------|------------|------------|-------------|-----------------|--------------|-------------|--------------|----------------|----------|
| | 4824.000 | 31.14 | 34.66 | 2.83 | 27.48 | 41.15 | 74.00 | -32.85 | 216 | 12 | peak |
| | 7236.000 | 30.99 | 38.82 | 3.37 | 26.59 | 46.59 | 74.00 | -27.41 | 100 | 250 | peak |
| | 9646.000 | 31.43 | 40.19 | 4 | 24.84 | 50.78 | 74.00 | -23.22 | 126 | 110 | peak |
| | 12060.000 | 33.58 | 42.15 | 4.49 | 28.45 | 51.77 | 74.00 | -22.23 | 108 | 79 | peak |
| * | 14472.000 | 31.35 | 44.8 | 4.86 | 28.49 | 52.52 | 74.00 | -21.48 | 197 | 278 | peak |
| | 16884.000 | 29.79 | 44.38 | 5.39 | 27.79 | 51.77 | 74.00 | -22.23 | 296 | 201 | peak |
| | 19296.000 | 26.95 | 32.42 | 5.68 | 26.77 | 38.28 | 74.00 | -35.72 | 125 | 68 | peak |
| | 21708.000 | 24.63 | 33.1 | 6.03 | 26.58 | 37.18 | 74.00 | -36.82 | 175 | 38 | peak |
| | 24120.000 | 25.06 | 33.35 | 5.78 | 26.8 | 37.39 | 74.00 | -36.61 | 215 | 169 | peak |

*:Maximum data x:Over limit !:over margin