



FCC TEST REPORT

REPORT NO.: RF920501R02

MODEL NO.: G11FNF-PC

RECEIVED: May 01, 2003

TESTED: May 08 to 15, 2003

APPLICANT: Proxim Corporation

ADDRESS: 935 Stewart Drive, Sunnyvale, CA 94085, USA

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen,
Chiung Lin Hsiang, Hsin Chu Hsien,
Taiwan, R.O.C.

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Lab Code: 200376-0



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1 CERTIFICATION

PRODUCT : 802.11b/g Cardbus
BRAND NAME : Proxim
MODEL NO. : G11FNF-PC
APPLICANT : Proxim Corporation
STANDARDS : 47 CFR Part 15, Subpart C (Section 15.247),
ANSI C63.4-1992

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility from May 08 to 15, 2003. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

CHECKED BY: Amanda Chu , **DATE:** May 16, 2003
(Amanda Chu)

APPROVED BY: Eric Lin , **DATE:** May 16, 2003
(Eric Lin, Manager)



2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

| APPLIED STANDARD: 47 CFR Part 15, Subpart C | | | |
|--|---|---------------|---|
| Standard Section | Test Type and Limit | Result | REMARK |
| 15.207 | AC Power Conducted Emission Limit: 48dBuV | PASS | Meet the requirement of limit Minimum passing margin is -16.17 dBuV at 0.170 MHz |
| 15.247(a)(2) | Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz | PASS | Meet the requirement of limit |
| 15.247(b) | Maximum Peak Output Power Limit: max. 30dBm | PASS | Meet the requirement of limit |
| 15.247(c) | Transmitter Radiated Emissions Limit: Table 15.209 | PASS | Meet the requirement of limit Minimum passing margin is -1.5 dBuV at 2484.00MHz |
| 15.247(d) | Power Spectral Density Limit: max. 8dBm | PASS | Meet the requirement of limit |
| 15.247(c) | Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency | PASS | Meet the requirement of limit |



3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

| | |
|---------------------------|---|
| PRODUCT | 802.11b/g Cardbus |
| MODEL NO. | G11FNF-PC |
| POWER SUPPLY | 3.3VDC from host equipment |
| MODULATION TYPE | CCK, OFDM, DBPSK, DQPSK |
| RADIO TECHNOLOGY | DSSS, OFDM |
| TRANSFER RATE | 1/2/5.5/6/9/11/12/18/24/36/48/54Mbps |
| FREQUENCY RANGE | 2412MHz ~ 2462MHz |
| NUMBER OF CHANNEL | 11 |
| OUTPUT POWER | 15.92dBm |
| ANTENNA TYPE | Integral antenna & Omni directional (mono-pole) Antenna & Omni directional (dipole) Antenna |
| DATA CABLE | NA |
| I/O PORTS | NA |
| ASSOCIATED DEVICES | NA |

NOTE:

1. There are three types of antennas provided to this EUT, please refer to the following table:

| No. | Model No. | Gain (dBi) | Antenna Type / Connector |
|------------|------------------|-------------------|---|
| 1 | NA | 1 | Integral antenna / without connector |
| 2 | AOU24-OD-55-B | 5 | Omni directional (mono-pole) Antenna / MMCX connector |
| 3 | AIN24-OC-0202 | 3 | Omni directional (dipole) Antenna / MMCX connector |

2. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
3. The EUT complies with IEEE 802.11g draft standards, and backwards compatible with IEEE 802.11b products.
4. For a more detailed features description, please refer to the manufacturer's specifications or User's Manual.



3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided in this EUT.

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

NOTE:

1. Below 1 GHz, for Antenna 1&3, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
2. Below 1 GHz, for Antenna 2, the channel 2, 6, and 10 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
3. Above 1 GHz, for Antenna 1&3, the channel 1, 6, and 11 were tested individually.
4. Above 1 GHz, for Antenna 2, the channel 2, 6, and 10 were tested individually.
5. Test result (A) is for antenna 1, test result (B) is for antenna 2 and test result (C) is for antenna 3, which were mentioned on section 3.1.
6. Transfer rate, 11Mbps with CCK technique and 54Mbps with OFDM technique, the worst case, were chosen for final test.
7. These antennas shall be tested in combination with 20 FT extension cable (LMR400) + surge_arrester (010997)+EUT. After pre-tested in chamber, the EUT + antenna is the worst case.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 802.11b/g Cardbus. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC CFR 47 Part 15, Subpart C. (15.247)
ANSI C63.4 : 1992

All tests have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.



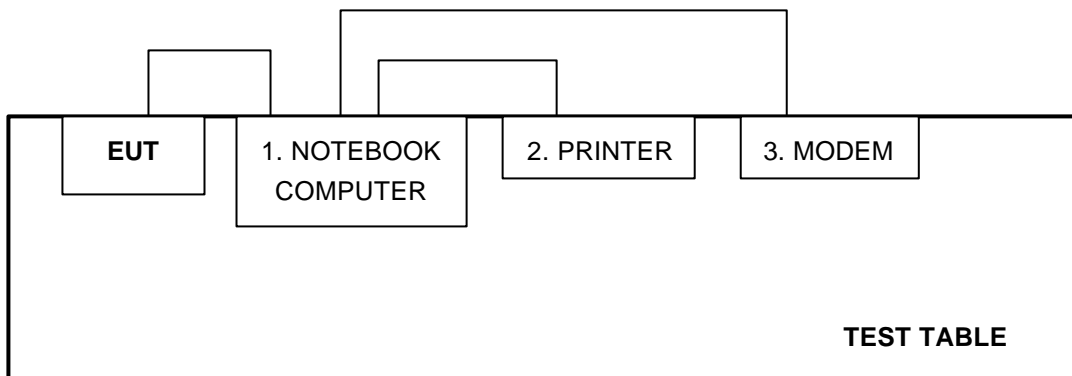
3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| No. | Product | Brand | Model No. | Serial No. | FCC ID |
|-----|-------------------|-------|-----------|--------------------------|------------|
| 1 | NOTEBOOK COMPUTER | DELL | PP01L | TW-09C748-12800-17Q-C504 | FCC DoC |
| 2 | PRINTER | HP | C2642A | MY7961C1M2 | B94C2642X |
| 3 | MODEM | ACEEX | 1414 | 0206026777 | IFAXDM1414 |

| No. | Signal cable description |
|-----|--|
| 1 | NA |
| 2 | 1.8m braid shielded wire, terminated with DB25 and Centronics connector via metallic frame, w/o core |
| 3 | 1.0 m braid shielded wire, terminated with DB25 and DB9 connector via metallic frame, w/o core. |

Note: 1. All power cords of the above support units are unshielded (1.8m).



NOTE: 1. Please refer to the photos of test configuration in Item 5 also.



4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

| FREQUENCY OF EMISSION (MHz) | CONDUCTED LIMIT (dB μ V) | |
|-----------------------------|------------------------------|----------|
| | Quasi-peak | Average |
| 0.15-0.5 | 66 to 56 | 56 to 46 |
| 0.5-5 | 56 | 46 |
| 5-30 | 60 | 50 |

NOTE

1. The lower limit shall apply at the transition frequencies.
2. All emanations from a class B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

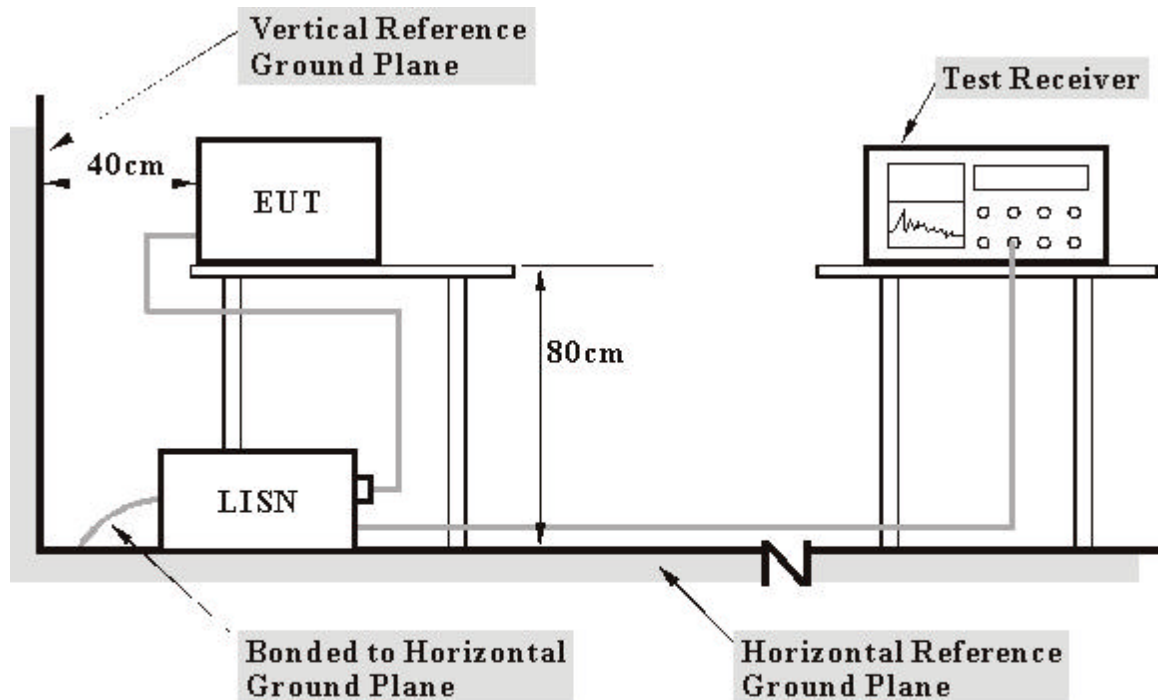
| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATION DATE |
|-----------------------------------|-----------|-------------|------------------|
| ROHDE & SCHWARZ Test Receiver | ESCS 30 | 847124/029 | Nov. 17, 2003 |
| ROHDE & SCHWARZ LISN (for EUT) | ESHS-Z5 | 848773/004 | Nov. 13, 2003 |
| KYORITSU LISN (for peripheral) | KNW-407 | 8/1395/12 | Jul. 23, 2003 |
| RF Cable (JETBAO) | RG233/U | Cable_CA_01 | Jul. 03, 2003 |
| Terminator(for KYORITSU) | 50 | #1 | Apr. 11, 2004 |
| Software | Cond-V2e | NA | NA |

- NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in ADT Shielded Room No. A.
3. The VCCI Con A Registration No. is C-817.

3. TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.3 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.



4.1.4 EUT OPERATING CONDITIONS

- a. Connected the EUT to support unit 1 (Notebook Computer) and placed on a testing table.
- b. The Notebook Computer ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.

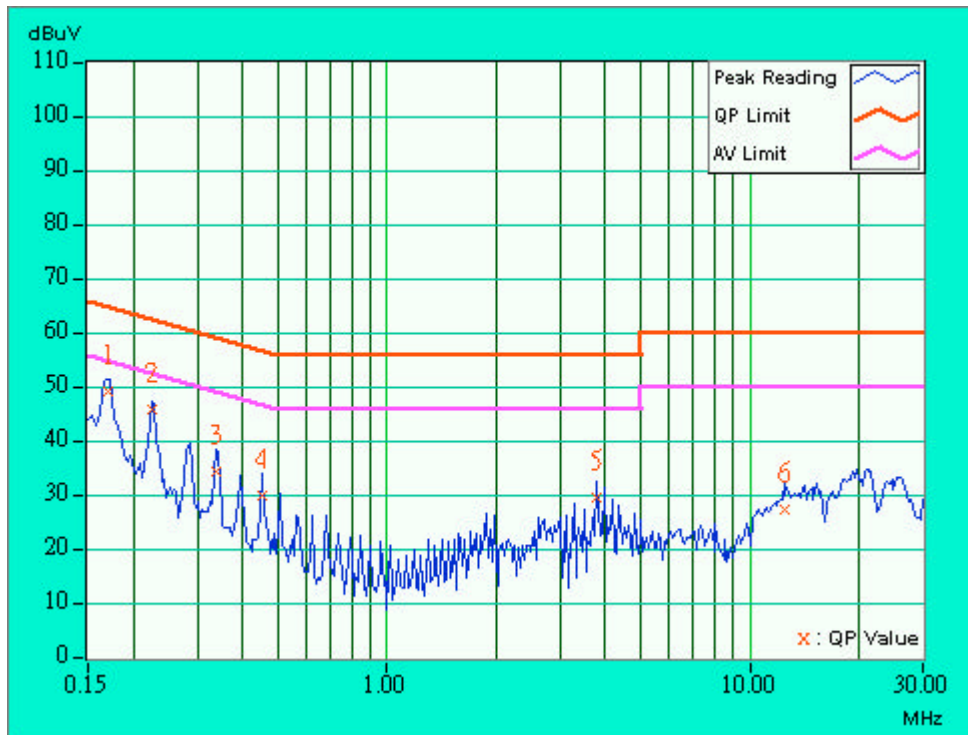


4.1.5 TEST RESULTS

| | | | |
|---------------------------------|---------------------------|----------------------|-----------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 1 | 6dB BANDWIDTH | 9 kHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | PHASE | Line (L) |
| ENVIRONMENTAL CONDITIONS | 26 deg. C, 59%RH, 979 hPa | TESTED BY | Tony Chen |

| No | Freq. [MHz] | Corr. Factor (dB) | Reading Value [dB (uV)] | | Emission Level [dB (uV)] | | Limit [dB (uV)] | | Margin (dB) | |
|----|-------------|-------------------|-------------------------|-----|--------------------------|-----|-----------------|-------|-------------|-----|
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.170 | 0.10 | 48.71 | - | 48.81 | - | 64.98 | 54.98 | -16.17 | - |
| 2 | 0.224 | 0.10 | 45.06 | - | 45.16 | - | 62.66 | 52.66 | -17.50 | - |
| 3 | 0.338 | 0.10 | 33.64 | - | 33.74 | - | 59.26 | 49.26 | -25.52 | - |
| 4 | 0.455 | 0.10 | 29.40 | - | 29.50 | - | 56.79 | 46.79 | -27.29 | - |
| 5 | 3.785 | 0.19 | 29.07 | - | 29.26 | - | 56.00 | 46.00 | -26.74 | - |
| 6 | 12.435 | 0.70 | 26.73 | - | 27.43 | - | 60.00 | 50.00 | -32.57 | - |

- NOTES: (1) "*": Undetectable
 (2) Q.P. and AV. are abbreviations of quasi-peak and average.
 (3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
 (4) The emission levels of other frequencies were very low against the limit.
 (5) Correction Factor = Insertion loss + Cable loss
 (6) Margin value = Emission level - Limit value

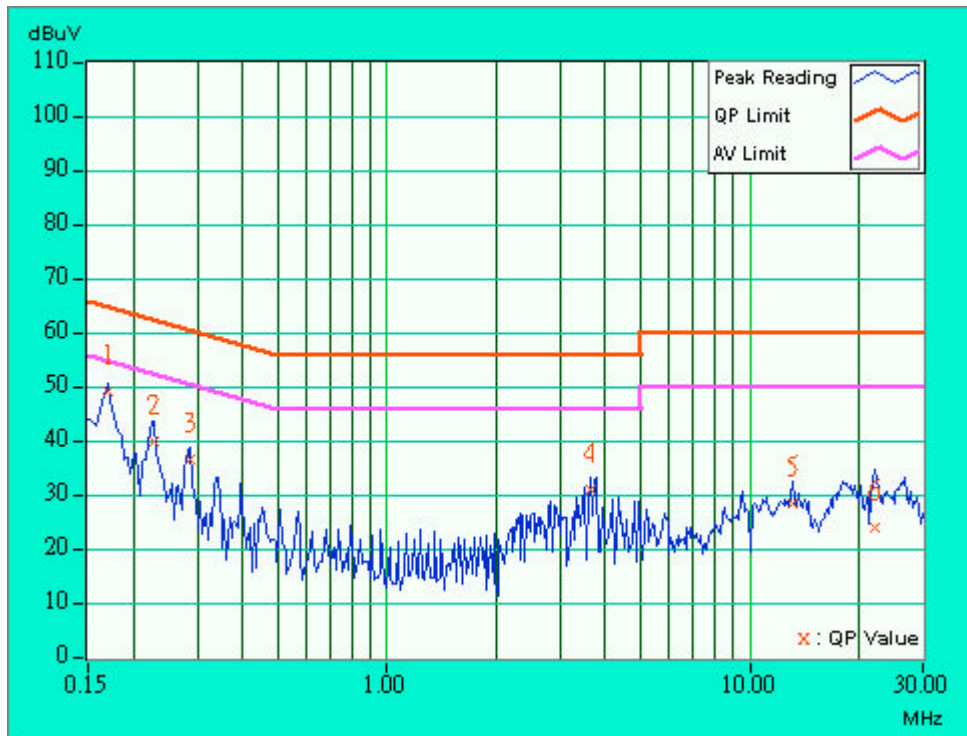




| | | | |
|---------------------------------|------------------------------|----------------------|-------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 1 | 6dB BANDWIDTH | 9 kHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | PHASE | Neutral (N) |
| ENVIRONMENTAL CONDITIONS | 26 deg. C, 59%RH, 979 hPa | TESTED BY | Tony Chen |

| No | Freq. [MHz] | Corr. Factor (dB) | Reading Value [dB (uV)] | | Emission Level [dB (uV)] | | Limit [dB (uV)] | | Margin (dB) | |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.170 | 0.10 | 48.53 | - | 48.63 | - | 64.98 | 54.98 | -16.35 | - |
| 2 | 0.228 | 0.10 | 39.08 | - | 39.18 | - | 62.52 | 52.52 | -23.34 | - |
| 3 | 0.287 | 0.10 | 35.78 | - | 35.88 | - | 60.62 | 50.62 | -24.74 | - |
| 4 | 3.617 | 0.18 | 30.21 | - | 30.39 | - | 56.00 | 46.00 | -25.61 | - |
| 5 | 13.188 | 0.56 | 27.62 | - | 28.18 | - | 60.00 | 50.00 | -31.82 | - |
| 6 | 22.168 | 0.79 | 23.22 | - | 24.01 | - | 60.00 | 50.00 | -35.99 | - |

- NOTES: (1) "-": Undetectable
 (2) Q.P. and AV. are abbreviations of quasi-peak and average.
 (3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
 (4) The emission levels of other frequencies were very low against the limit.
 (5) Correction Factor = Insertion loss + Cable loss
 (6) Margin value = Emission level - Limit value

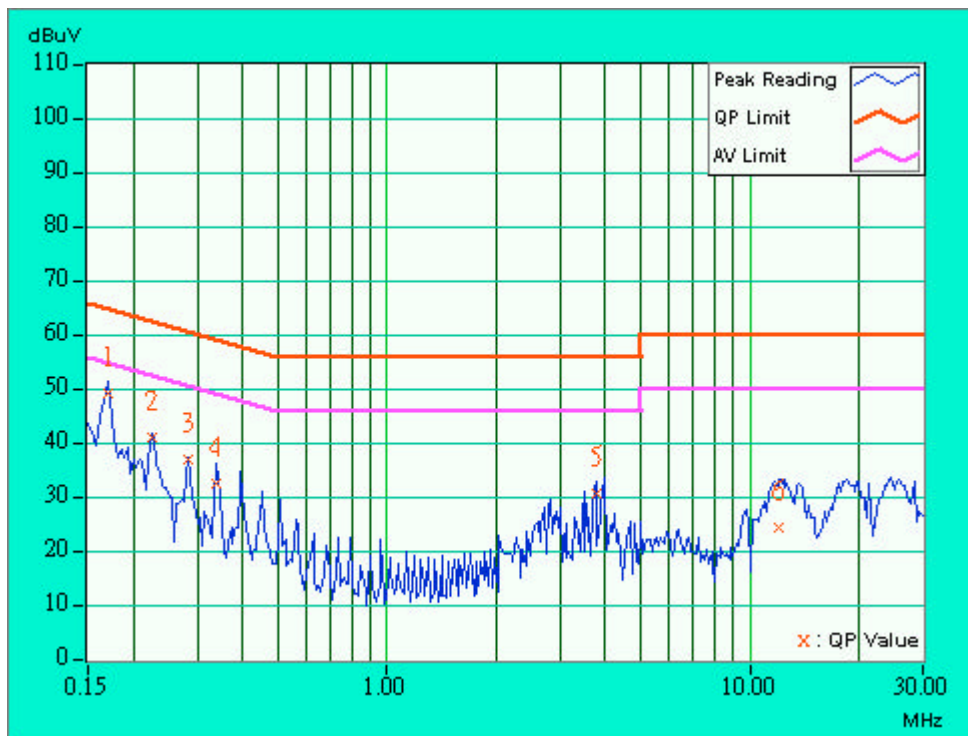




| | | | |
|---------------------------------|---------------------------|----------------------|-----------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | 6dB BANDWIDTH | 9 kHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | PHASE | Line (L) |
| ENVIRONMENTAL CONDITIONS | 26 deg. C, 59%RH, 979 hPa | TESTED BY | Tony Chen |

| No | Freq. [MHz] | Corr. Factor (dB) | Reading Value [dB (uV)] | | Emission Level [dB (uV)] | | Limit [dB (uV)] | | Margin (dB) | |
|----|-------------|-------------------|-------------------------|-----|--------------------------|-----|-----------------|-------|-------------|-----|
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.170 | 0.10 | 48.53 | - | 48.63 | - | 64.98 | 54.98 | -16.35 | - |
| 2 | 0.224 | 0.10 | 40.59 | - | 40.69 | - | 62.66 | 52.66 | -21.97 | - |
| 3 | 0.283 | 0.10 | 36.22 | - | 36.32 | - | 60.73 | 50.73 | -24.41 | - |
| 4 | 0.338 | 0.10 | 32.05 | - | 32.15 | - | 59.26 | 49.26 | -27.11 | - |
| 5 | 3.793 | 0.19 | 29.96 | - | 30.15 | - | 56.00 | 46.00 | -25.85 | - |
| 6 | 12.063 | 0.68 | 23.89 | - | 24.57 | - | 60.00 | 50.00 | -35.43 | - |

- NOTES: (1) "*": Undetectable
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 (3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
 (4) The emission levels of other frequencies were very low against the limit.
 (5) Correction Factor = Insertion loss + Cable loss
 (6) Margin value = Emission level - Limit value

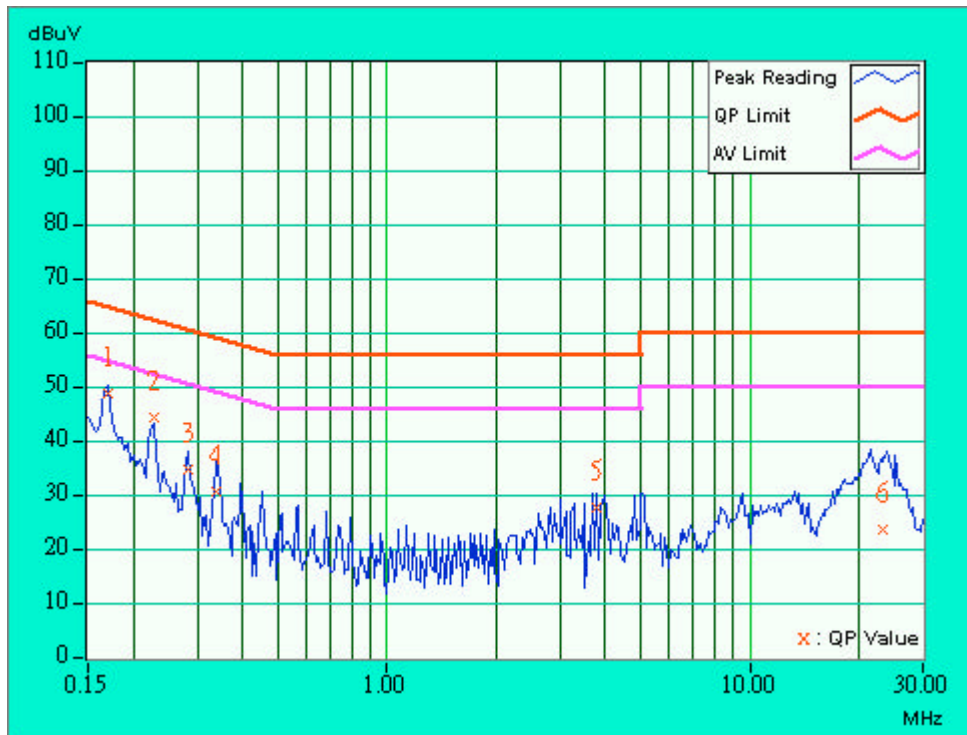




| | | | |
|---------------------------------|------------------------------|----------------------|-------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | 6dB BANDWIDTH | 9 kHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | PHASE | Neutral (N) |
| ENVIRONMENTAL CONDITIONS | 26 deg. C, 59%RH, 979 hPa | TESTED BY | Tony Chen |

| No | Freq. [MHz] | Corr. Factor (dB) | Reading Value [dB (uV)] | | Emission Level [dB (uV)] | | Limit [dB (uV)] | | Margin (dB) | |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.170 | 0.10 | 47.91 | - | 48.01 | - | 64.98 | 54.98 | -16.97 | - |
| 2 | 0.228 | 0.10 | 43.75 | - | 43.85 | - | 62.52 | 52.52 | -18.67 | - |
| 3 | 0.283 | 0.10 | 34.00 | - | 34.10 | - | 60.73 | 50.73 | -26.63 | - |
| 4 | 0.338 | 0.10 | 30.05 | - | 30.15 | - | 59.26 | 49.26 | -29.11 | - |
| 5 | 3.785 | 0.19 | 27.00 | - | 27.19 | - | 56.00 | 46.00 | -28.81 | - |
| 6 | 23.203 | 0.83 | 22.96 | - | 23.79 | - | 60.00 | 50.00 | -36.21 | - |

- NOTES: (1) "-": Undetectable
 (2) Q.P. and AV. are abbreviations of quasi-peak and average.
 (3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
 (4) The emission levels of other frequencies were very low against the limit.
 (5) Correction Factor = Insertion loss + Cable loss
 (6) Margin value = Emission level - Limit value

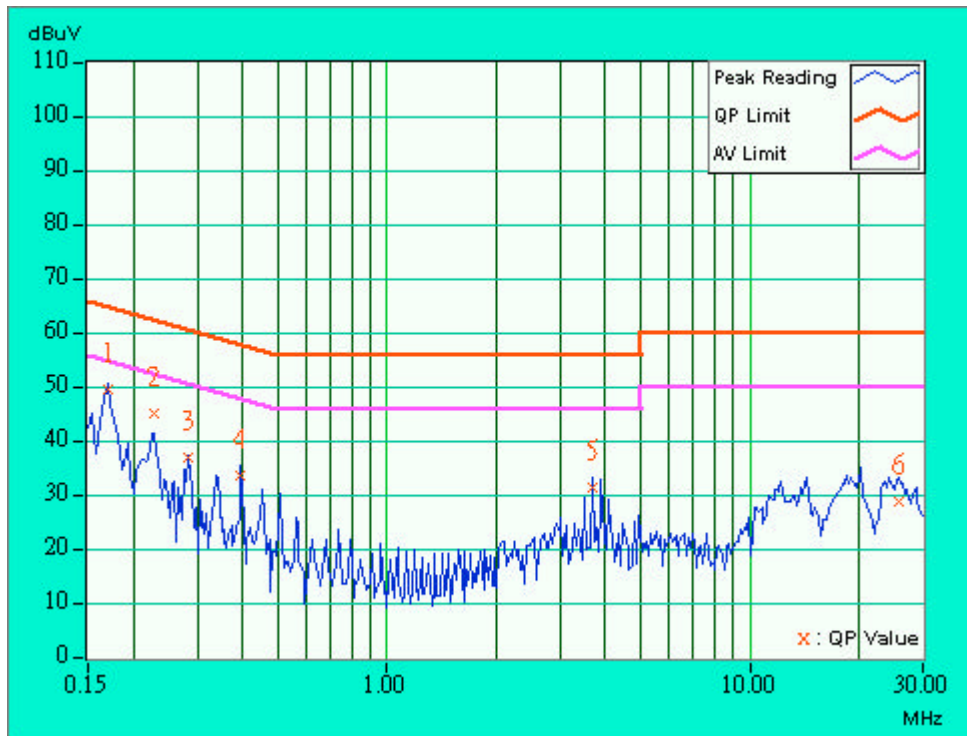




| | | | |
|---------------------------------|------------------------------|----------------------|-----------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | 6dB BANDWIDTH | 9 kHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | PHASE | Line (L) |
| ENVIRONMENTAL CONDITIONS | 26 deg. C, 59%RH, 979 hPa | TESTED BY | Tony Chen |

| No | Freq. [MHz] | Corr. Factor (dB) | Reading Value [dB (uV)] | | Emission Level [dB (uV)] | | Limit [dB (uV)] | | Margin (dB) | |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.170 | 0.10 | 48.31 | - | 48.41 | - | 64.98 | 54.98 | -16.57 | - |
| 2 | 0.228 | 0.10 | 43.85 | - | 43.95 | - | 62.52 | 52.52 | -18.57 | - |
| 3 | 0.283 | 0.10 | 36.00 | - | 36.10 | - | 60.73 | 50.73 | -24.63 | - |
| 4 | 0.396 | 0.10 | 32.44 | - | 32.54 | - | 57.93 | 47.93 | -25.39 | - |
| 5 | 3.676 | 0.18 | 30.19 | - | 30.37 | - | 56.00 | 46.00 | -25.63 | - |
| 6 | 25.801 | 1.20 | 27.81 | - | 29.01 | - | 60.00 | 50.00 | -30.99 | - |

- NOTES: (1) "-": Undetectable
 (2) Q.P. and AV. are abbreviations of quasi-peak and average.
 (3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
 (4) The emission levels of other frequencies were very low against the limit.
 (5) Correction Factor = Insertion loss + Cable loss
 (6) Margin value = Emission level - Limit value

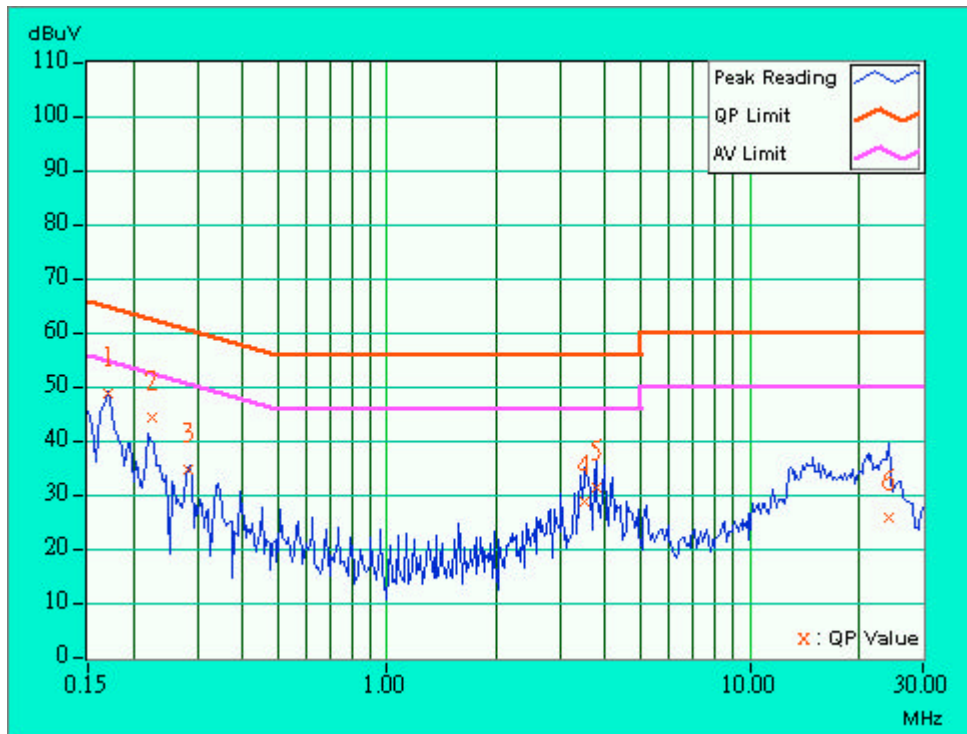




| | | | |
|---------------------------------|------------------------------|----------------------|-------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | 6dB BANDWIDTH | 9 kHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | PHASE | Neutral (N) |
| ENVIRONMENTAL CONDITIONS | 26 deg. C, 59%RH, 979 hPa | TESTED BY | Tony Chen |

| No | Freq. [MHz] | Corr. Factor (dB) | Reading Value [dB (uV)] | | Emission Level [dB (uV)] | | Limit [dB (uV)] | | Margin (dB) | |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
| | | | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.170 | 0.10 | 47.86 | - | 47.96 | - | 64.98 | 54.98 | -17.02 | - |
| 2 | 0.224 | 0.10 | 43.45 | - | 43.55 | - | 62.66 | 52.66 | -19.11 | - |
| 3 | 0.283 | 0.10 | 33.94 | - | 34.04 | - | 60.73 | 50.73 | -26.69 | - |
| 4 | 3.512 | 0.18 | 27.91 | - | 28.09 | - | 56.00 | 46.00 | -27.91 | - |
| 5 | 3.791 | 0.19 | 30.57 | - | 30.76 | - | 56.00 | 46.00 | -25.24 | - |
| 6 | 24.082 | 0.86 | 25.00 | - | 25.86 | - | 60.00 | 50.00 | -34.14 | - |

- NOTES: (1) "-": Undetectable
 (2) Q.P. and AV. are abbreviations of quasi-peak and average.
 (3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.
 (4) The emission levels of other frequencies were very low against the limit.
 (5) Correction Factor = Insertion loss + Cable loss
 (6) Margin value = Emission level - Limit value





4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Field strength limits are at the distance of 3 meters, emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

| Frequencies (MHz) | Field Strength of Fundamental | |
|----------------------|-------------------------------|--------|
| | uV/m | dBuV/m |
| 30-88 | 100 | 40.0 |
| 88-216 | 150 | 43.5 |
| 216-960 | 200 | 46.0 |
| Above 960 | 500 | 54.0 |

NOTE

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



4.2.2 TEST INSTRUMENTS

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | CALIBRATED UNTIL |
|---------------------------------------|-------------|-------------------------|------------------|
| HP Spectrum Analyzer | 8594ER | 3829U04676 | Jul. 14, 2003 |
| ADVANTEST Spectrum Analyzer | R3271A | 85060311 | May 21, 2003 |
| CHASE RF Pre_Amplifier | CPA9232 | 1057 | Apr. 24, 2004 |
| HP Pre_Amplifier | 8449B | 3008A01281 | June 27, 2004 |
| ROHDE & SCHWARZ Test Receiver | ESVS 10 | 849231 /019 | Nov. 03, 2003 |
| CHASE Broadband Antenna | CBL6111c | 2730 | Jul 17, 2003 |
| Schwarzbeck Horn_Antenna | BBHA9120-D1 | D123 | Jul. 31, 2003 |
| SCHWARZBECK Tunable Dipole Antenna | UHAP | 897 | Mar. 07, 2005 |
| SCHWARZBECK Tunable Dipole Antenna | VHAP | 880 | Mar. 07, 2005 |
| RF Switches (ARNITSU) | CS-201 | 1565157 | Jul. 29, 2003 |
| RF CABLE (Chaintek) 1GHz-20GHz | Ak 9515-D | 001 | Aug, 20.2003 |
| RF Cable(RICHTEC) | 9913-30M | STCCAB-30M- 1GHz-021 | Nov. 5, 2003 |
| Software | AS60P8 | NA | NA |
| CHANCE MOST Antenna Tower | AT-100 | 0203 | NA |
| CHANCE MOST Turn Table | TT-100 | 0203 | NA |

Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Dipole Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.

2. * = These equipment are used for the final measurement.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The test was performed in ADT Open Site No. C.
5. The FCC Site Registration No. is 656396.
6. The VCCI Site Registration No. is R-1626.



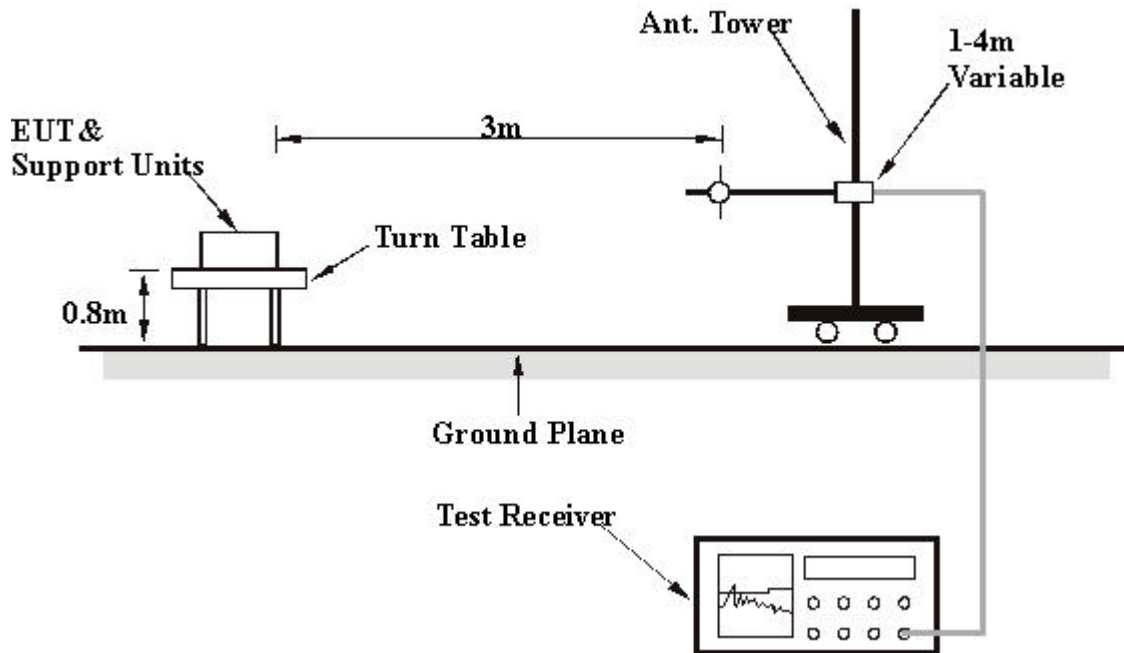
4.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

4.2.5 EUT OPERATING CONDITIONS

Same as 4.1.5.



4.2.6 TEST RESULTS (A)

| | | | |
|---------------------------------|--------------------------------|--------------------------|-------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | FREQUENCY RANGE | 30-1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Quasi-Peak |
| ENVIRONMENTAL CONDITIONS | 20 deg. C, 84 % RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 67.25 | 22.8 QP | 40.00 | -17.20 | 1.14 H | 8 | 17.10 | 5.70 |
| 2 | 132.10 | 27.8 QP | 43.50 | -15.70 | 1.54 H | 360 | 15.90 | 11.90 |
| 3 | 138.10 | 33.8 QP | 43.50 | -9.70 | 1.09 H | 181 | 22.00 | 11.80 |
| 4 | 224.09 | 31.2 QP | 46.00 | -14.80 | 1.55 H | 24 | 21.30 | 9.90 |
| 5 | 249.65 | 29.5 QP | 46.00 | -16.50 | 1.26 H | 264 | 16.30 | 13.20 |
| 6 | 352.02 | 39.0 QP | 46.00 | -7.00 | 1.24 H | 60 | 23.40 | 15.60 |
| 7 | 384.02 | 28.5 QP | 46.00 | -17.50 | 1.43 H | 335 | 12.00 | 16.50 |
| 8 | 480.03 | 31.7 QP | 46.00 | -14.30 | 1.63 H | 119 | 12.80 | 18.90 |
| 9 | 492.00 | 32.0 QP | 46.00 | -14.00 | 1.74 H | 199 | 12.90 | 19.10 |
| 10 | 544.00 | 34.9 QP | 46.00 | -11.10 | 1.35 H | 159 | 13.90 | 21.00 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 67.74 | 30.2 QP | 40.00 | -9.80 | 1.49 V | 97 | 24.50 | 5.70 |
| 2 | 138.00 | 25.7 QP | 43.50 | -17.80 | 1.24 V | 192 | 13.90 | 11.80 |
| 3 | 200.00 | 36.3 QP | 43.50 | -7.20 | 1.43 V | 295 | 27.30 | 9.00 |
| 4 | 224.62 | 26.7 QP | 46.00 | -19.30 | 1.54 V | 111 | 16.70 | 10.00 |
| 5 | 250.00 | 26.1 QP | 46.00 | -19.90 | 1.11 V | 54 | 12.90 | 13.20 |
| 6 | 350.00 | 29.8 QP | 46.00 | -16.20 | 1.52 V | 229 | 14.20 | 15.60 |
| 7 | 384.00 | 22.5 QP | 46.00 | -23.50 | 1.04 V | 113 | 6.00 | 16.50 |
| 8 | 480.00 | 36.0 QP | 46.00 | -10.00 | 1.25 V | 91 | 17.10 | 18.90 |
| 9 | 492.00 | 30.1 QP | 46.00 | -15.90 | 1.57 V | 41 | 11.00 | 19.10 |
| 10 | 512.05 | 32.8 QP | 46.00 | -13.20 | 1.08 V | 275 | 13.40 | 19.40 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247



4.2.7 TEST RESULTS (A) - DSSS

| | | | |
|---------------------------------|------------------------------|--------------------------|-------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 1 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average(AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 61.3 PK | 74.00 | -12.70 | 1.11 H | 324 | 32.10 | 29.20 |
| 1 | 2390.00 | 47.9 AV | 54.00 | -6.10 | 1.11 H | 324 | 18.70 | 29.20 |
| 2 | *2412.00 | 98.8 PK | | | 1.28 H | 239 | 68.90 | 29.90 |
| 2 | *2412.00 | 93.3 AV | | | 1.28 H | 239 | 63.40 | 29.90 |
| 3 | 2484.00 | 56.9 PK | 74.00 | -17.10 | 1.29 H | 279 | 26.80 | 30.10 |
| 3 | 2484.00 | 44.2 AV | 54.00 | -9.80 | 1.29 H | 279 | 14.10 | 30.10 |
| 4 | 4824.00 | 38.7 PK | 74.00 | -35.30 | 1.00 H | 24 | 3.10 | 35.60 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 61.3 PK | 74.00 | -12.70 | 1.10 V | 21 | 32.10 | 29.20 |
| 1 | 2390.00 | 49.0 AV | 54.00 | -5.00 | 1.10 V | 21 | 19.80 | 29.20 |
| 2 | *2412.00 | 97.0 PK | | | 1.21 V | 148 | 67.10 | 29.90 |
| 2 | *2412.00 | 92.8 AV | | | 1.21 V | 148 | 62.90 | 29.90 |
| 3 | 2484.00 | 56.4 PK | 74.00 | -17.60 | 1.26 V | 239 | 26.30 | 30.10 |
| 3 | 2484.00 | 45.1 AV | 54.00 | -8.90 | 1.26 V | 239 | 15.00 | 30.10 |
| 4 | 4824.00 | 39.2 PK | 74.00 | -34.80 | 1.01 V | 32 | 3.60 | 35.60 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 54.5 PK | 74.00 | -19.50 | 1.15 H | 247 | 25.30 | 29.20 |
| 1 | 2390.00 | 43.3 AV | 54.00 | -10.70 | 1.15 H | 247 | 14.10 | 29.20 |
| 2 | 2437.00 | 98.0 PK | | | 1.24 H | 51 | 68.00 | 30.00 |
| 2 | 2437.00 | 93.4 AV | | | 1.24 H | 51 | 63.40 | 30.00 |
| 3 | 2484.00 | 56.8 PK | 74.00 | -17.20 | 1.30 H | 122 | 26.70 | 30.10 |
| 3 | 2484.00 | 44.4 AV | 54.00 | -9.60 | 1.30 H | 122 | 14.30 | 30.10 |
| 4 | 4874.00 | 39.3 PK | 74.00 | -34.70 | 1.01 H | 352 | 3.60 | 35.70 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 54.5 PK | 74.00 | -19.50 | 1.24 V | 14 | 25.20 | 29.20 |
| 1 | 2390.00 | 44.5 AV | 54.00 | -9.50 | 1.24 V | 14 | 15.20 | 29.20 |
| 2 | 2437.00 | 96.9 PK | | | 1.20 V | 150 | 66.90 | 30.00 |
| 2 | 2437.00 | 92.4 AV | | | 1.20 V | 150 | 62.40 | 30.00 |
| 3 | 2484.00 | 58.6 PK | 74.00 | -15.40 | 1.62 V | 248 | 28.50 | 30.10 |
| 3 | 2484.00 | 46.4 AV | 54.00 | -7.60 | 1.62 V | 248 | 16.20 | 30.10 |
| 4 | 4874.00 | 38.7 PK | 74.00 | -35.30 | 1.00 V | 21 | 3.00 | 35.70 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.8 PK | 74.00 | -18.20 | 1.01 H | 340 | 26.60 | 29.20 |
| 1 | 2390.00 | 43.7 AV | 54.00 | -10.30 | 1.01 H | 340 | 14.50 | 29.20 |
| 2 | 2462.00 | 97.0 PK | | | 1.30 H | 298 | 66.90 | 30.10 |
| 2 | 2462.00 | 92.8 AV | | | 1.30 H | 298 | 62.70 | 30.10 |
| 3 | 2484.00 | 55.5 PK | 74.00 | -18.50 | 1.22 H | 49 | 25.40 | 30.10 |
| 3 | 2484.00 | 49.8 AV | 54.00 | -4.20 | 1.22 H | 49 | 19.70 | 30.10 |
| 4 | 4924.00 | 38.9 PK | 74.00 | -35.10 | 1.09 H | 50 | 3.00 | 35.90 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 57.2 PK | 74.00 | -16.80 | 1.02 V | 23 | 28.00 | 29.20 |
| 1 | 2390.00 | 45.5 AV | 54.00 | -8.50 | 1.02 V | 23 | 16.20 | 29.20 |
| 2 | 2462.00 | 97.1 PK | | | 1.25 V | 146 | 67.00 | 30.10 |
| 2 | 2462.00 | 93.9 AV | | | 1.25 V | 146 | 63.80 | 30.10 |
| 3 | 2484.00 | 56.0 PK | 74.00 | -18.00 | 1.25 V | 351 | 25.90 | 30.10 |
| 3 | 2484.00 | 48.1 AV | 54.00 | -5.90 | 1.25 V | 351 | 18.00 | 30.10 |
| 4 | 4924.00 | 38.6 PK | 74.00 | -35.40 | 1.03 V | 251 | 2.70 | 35.90 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



4.2.8 TEST RESULTS (A) -OFDM

| | | | |
|---------------------------------|------------------------------|--------------------------|-------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 1 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average(AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 59.7 PK | 74.00 | -14.30 | 1.09 H | 309 | 30.50 | 29.20 |
| 1 | 2390.00 | 48.9 AV | 54.00 | -5.10 | 1.09 H | 309 | 19.70 | 29.20 |
| 2 | *2412.00 | 98.6 PK | | | 1.04 H | 203 | 68.70 | 29.90 |
| 2 | *2412.00 | 90.6 AV | | | 1.04 H | 203 | 60.70 | 29.90 |
| 3 | 2484.00 | 55.5 PK | 74.00 | -18.50 | 1.24 H | 41 | 25.40 | 30.10 |
| 3 | 2484.00 | 44.6 AV | 54.00 | -9.40 | 1.24 H | 41 | 14.50 | 30.10 |
| 4 | 4824.00 | 38.6 PK | 74.00 | -35.40 | 1.25 H | 41 | 3.00 | 35.60 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 58.3 PK | 74.00 | -15.70 | 1.01 V | 199 | 29.00 | 29.20 |
| 1 | 2390.00 | 47.9 AV | 54.00 | -6.10 | 1.01 V | 199 | 18.60 | 29.20 |
| 2 | *2412.00 | 99.0 PK | | | 1.00 V | 204 | 69.10 | 29.90 |
| 2 | *2412.00 | 90.8 AV | | | 1.00 V | 204 | 60.90 | 29.90 |
| 3 | 2484.00 | 58.4 PK | 74.00 | -15.60 | 1.42 V | 241 | 28.20 | 30.10 |
| 3 | 2484.00 | 46.7 AV | 54.00 | -7.30 | 1.42 V | 241 | 16.60 | 30.10 |
| 4 | 4824.00 | 38.5 PK | 74.00 | -35.50 | 1.24 V | 315 | 2.90 | 35.60 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|--|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1 | 2336.00 | 48.3 PK | 74.00 | -25.70 | 1.02 H | 333 | 19.20 | 29.10 |
| 2 | *2437.00 | 99.1 PK | | | 1.01 H | 300 | 69.10 | 30.00 |
| 2 | *2437.00 | 91.0 AV | | | 1.01 H | 300 | 61.00 | 29.10 |
| 3 | 2496.00 | 52.2 PK | 74.00 | -21.80 | 1.09 H | 279 | 22.40 | 29.80 |
| 3 | 2496.00 | 44.7 AV | 54.00 | -9.30 | 1.09 H | 279 | 14.90 | 30.00 |
| 4 | 4874.00 | 40.8 PK | 74.00 | -33.20 | 1.00 H | 24 | 5.10 | 35.70 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|--|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1 | 2390.00 | 57.6 PK | 74.00 | -16.40 | 1.02 V | 218 | 28.40 | 29.20 |
| 1 | 2390.00 | 46.2 AV | 54.00 | -7.80 | 1.02 V | 218 | 17.00 | 29.20 |
| 2 | *2437.00 | 98.9 PK | | | 1.00 V | 130 | 68.90 | 30.00 |
| 2 | *2437.00 | 90.3 AV | | | 1.00 V | 130 | 60.30 | 30.00 |
| 3 | 2484.00 | 58.2 PK | 74.00 | -15.80 | 1.03 V | 247 | 28.10 | 30.10 |
| 3 | 2484.00 | 47.0 AV | 54.00 | -7.00 | 1.03 V | 247 | 16.90 | 30.10 |
| 4 | 4874.00 | 40.7 PK | 74.00 | -33.30 | 1.21 V | 20 | 5.00 | 35.70 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.5 PK | 74.00 | -18.50 | 1.01 H | 360 | 26.20 | 29.20 |
| 1 | 2390.00 | 43.8 AV | 54.00 | -10.20 | 1.01 H | 360 | 14.50 | 29.20 |
| 2 | *2462.00 | 98.9 PK | | | 1.09 H | 351 | 68.80 | 30.10 |
| 2 | *2462.00 | 90.3 AV | | | 1.09 H | 351 | 60.20 | 30.10 |
| 3 | 2496.00 | 59.6 PK | 74.00 | -14.40 | 1.06 H | 302 | 29.80 | 29.80 |
| 3 | 2496.00 | 48.7 AV | 54.00 | -5.30 | 1.06 H | 302 | 18.90 | 29.80 |
| 4 | 4924.00 | 40.7 PK | 74.00 | -33.30 | 1.11 H | 23 | 4.80 | 35.90 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 58.2 PK | 74.00 | -15.80 | 1.04 V | 245 | 28.90 | 29.20 |
| 1 | 2390.00 | 45.5 AV | 54.00 | -8.50 | 1.04 V | 245 | 16.20 | 29.20 |
| 2 | *2462.00 | 99.1 PK | | | 1.01 V | 123 | 69.00 | 30.10 |
| 2 | *2462.00 | 90.2 AV | | | 1.01 V | 123 | 60.10 | 30.10 |
| 3 | 2484.00 | 60.7 PK | 74.00 | -13.30 | 1.21 V | 352 | 30.60 | 30.10 |
| 3 | 2484.00 | 48.7 AV | 54.00 | -5.30 | 1.21 V | 352 | 18.60 | 30.10 |
| 4 | 4924.00 | 40.8 PK | 74.00 | -33.20 | 1.09 V | 301 | 4.90 | 35.90 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



4.2.9 TEST RESULTS (B)

| | | | |
|---------------------------------|--------------------------------|--------------------------|-------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 10 | FREQUENCY RANGE | 30-1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Quasi-Peak |
| ENVIRONMENTAL CONDITIONS | 20 deg. C, 84 % RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 68.00 | 27.2 QP | 40.00 | -12.80 | 1.50 H | 39 | -74.60 | 101.80 |
| 2 | 132.05 | 26.9 QP | 43.50 | -16.60 | 1.28 H | 298 | -74.90 | 101.80 |
| 3 | 138.01 | 35.2 QP | 43.50 | -8.30 | 1.47 H | 57 | -66.60 | 101.80 |
| 4 | 224.02 | 20.3 QP | 46.00 | -25.70 | 1.22 H | 329 | -81.50 | 101.80 |
| 5 | 249.50 | 30.1 QP | 46.00 | -15.90 | 1.54 H | 24 | -71.70 | 101.80 |
| 6 | 251.09 | 30.0 QP | 46.00 | -16.00 | 1.25 H | 48 | -71.80 | 101.80 |
| 7 | 384.03 | 29.1 QP | 46.00 | -16.90 | 1.00 H | 0 | -72.70 | 101.80 |
| 8 | 480.02 | 35.1 QP | 46.00 | -10.90 | 1.44 H | 191 | -66.70 | 101.80 |
| 9 | 491.06 | 32.1 QP | 46.00 | -13.90 | 1.57 H | 297 | -69.70 | 101.80 |
| 10 | 544.01 | 34.0 QP | 46.00 | -12.00 | 1.22 H | 254 | -67.80 | 101.80 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 66.24 | 30.2 QP | 40.00 | -9.80 | 1.00 V | 24 | -71.60 | 101.80 |
| 2 | 138.00 | 25.3 QP | 43.50 | -18.20 | 1.26 V | 21 | -76.50 | 101.80 |
| 3 | 200.00 | 35.2 QP | 43.50 | -8.30 | 1.03 V | 224 | -66.60 | 101.80 |
| 4 | 224.70 | 27.3 QP | 46.00 | -18.70 | 1.21 V | 353 | -74.50 | 101.80 |
| 5 | 249.10 | 26.1 QP | 46.00 | -19.90 | 1.05 V | 249 | -75.70 | 101.80 |
| 6 | 250.00 | 23.9 QP | 46.00 | -22.10 | 1.54 V | 27 | -77.90 | 101.80 |
| 7 | 350.08 | 30.4 QP | 46.00 | -15.60 | 1.24 V | 33 | -71.40 | 101.80 |
| 8 | 384.01 | 26.9 QP | 46.00 | -19.10 | 1.57 V | 347 | -74.90 | 101.80 |
| 9 | 480.01 | 36.1 QP | 46.00 | -9.90 | 1.24 V | 21 | -65.70 | 101.80 |
| 10 | 512.09 | 33.1 QP | 46.00 | -12.90 | 1.10 V | 209 | -68.70 | 101.80 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247



4.2.10 TEST RESULTS (B) - DSSS

| | | | |
|---------------------------------|------------------------------|--------------------------|-------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 2 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average(AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 56.1 PK | 74.00 | -17.90 | 1.12 H | 354 | 25.70 | 30.40 |
| 1 | 2390.00 | 46.4 AV | 54.00 | -7.60 | 1.12 H | 354 | 16.00 | 30.40 |
| 2 | *2417.00 | 99.5 PK | | | 1.54 H | 82 | 68.90 | 30.60 |
| 2 | *2417.00 | 91.0 AV | | | 1.54 H | 82 | 60.40 | 30.60 |
| 3 | 2484.00 | 56.1 PK | 74.00 | -17.90 | 1.07 H | 59 | 25.10 | 31.00 |
| 3 | 2484.00 | 45.6 AV | 54.00 | -8.40 | 1.07 H | 59 | 14.70 | 31.00 |
| 4 | 4834.00 | 43.8 PK | 74.00 | -30.20 | 1.15 H | 129 | 7.50 | 36.30 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 59.7 PK | 74.00 | -14.30 | 1.06 V | 323 | 29.30 | 30.40 |
| 1 | 2390.00 | 48.4 AV | 54.00 | -5.60 | 1.06 V | 323 | 18.00 | 30.40 |
| 2 | *2417.00 | 110.9 PK | | | 1.01 V | 148 | 80.30 | 30.60 |
| 2 | *2417.00 | 99.8 AV | | | 1.01 V | 148 | 69.20 | 30.60 |
| 3 | 2484.00 | 57.9 PK | 74.00 | -16.10 | 1.45 V | 239 | 26.90 | 31.00 |
| 3 | 2484.00 | 46.2 AV | 54.00 | -7.80 | 1.45 V | 239 | 15.20 | 31.00 |
| 4 | 4834.00 | 44.5 PK | 74.00 | -29.50 | 1.32 V | 51 | 8.20 | 36.30 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. " * " : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

| ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M | | | | | | | | |
|--|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1 | 2390.00 | 56.0 PK | 74.00 | -18.00 | 1.12 H | 303 | 25.60 | 30.40 |
| 1 | 2390.00 | 45.4 AV | 54.00 | -8.60 | 1.12 H | 303 | 15.00 | 30.40 |
| 2 | *2437.00 | 100.6 PK | | | 1.59 H | 127 | 69.90 | 30.70 |
| 2 | *2437.00 | 92.6 AV | | | 1.59 H | 127 | 61.90 | 30.70 |
| 3 | 2484.00 | 57.3 PK | 74.00 | -16.70 | 1.02 H | 47 | 26.30 | 31.00 |
| 3 | 2484.00 | 45.8 AV | 54.00 | -8.20 | 1.02 H | 47 | 14.90 | 31.00 |
| 4 | 4874.00 | 46.3 PK | 74.00 | -27.70 | 1.23 H | 64 | 9.80 | 36.50 |

| ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M | | | | | | | | |
|--|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1 | 2390.00 | 57.0 PK | 74.00 | -17.00 | 1.33 V | 25 | 26.60 | 30.40 |
| 1 | 2390.00 | 46.4 AV | 54.00 | -7.60 | 1.33 V | 25 | 16.00 | 30.40 |
| 2 | *2437.00 | 111.9 PK | | | 1.03 V | 50 | 81.20 | 30.70 |
| 2 | *2437.00 | 99.0 AV | | | 1.03 V | 50 | 68.30 | 30.70 |
| 3 | 2484.00 | 57.8 PK | 74.00 | -16.20 | 1.54 V | 159 | 26.80 | 31.00 |
| 3 | 2484.00 | 47.7 AV | 54.00 | -6.30 | 1.54 V | 159 | 16.70 | 31.00 |
| 4 | 4874.00 | 45.4 PK | 74.00 | -28.60 | 1.36 V | 63 | 8.90 | 36.50 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 10 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.0 PK | 74.00 | -19.00 | 1.00 H | 2 | 24.60 | 30.40 |
| 1 | 2390.00 | 46.2 AV | 54.00 | -7.80 | 1.00 H | 2 | 15.80 | 30.40 |
| 2 | *2457.00 | 99.4 PK | | | 1.50 H | 39 | 68.60 | 30.80 |
| 2 | *2457.00 | 92.6 AV | | | 1.50 H | 39 | 61.80 | 30.80 |
| 3 | 2484.00 | 57.0 PK | 74.00 | -17.00 | 1.62 H | 36 | 26.00 | 31.00 |
| 3 | 2484.00 | 47.3 AV | 54.00 | -6.70 | 1.62 H | 36 | 16.30 | 31.00 |
| 4 | 4914.00 | 45.4 PK | 74.00 | -28.60 | 1.34 H | 68 | 8.80 | 36.60 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.7 PK | 74.00 | -18.30 | 1.50 V | 24 | 25.30 | 30.40 |
| 1 | 2390.00 | 46.5 AV | 54.00 | -7.50 | 1.50 V | 24 | 16.10 | 30.40 |
| 2 | *2457.00 | 111.2 PK | | | 1.68 V | 72 | 80.30 | 30.80 |
| 2 | *2457.00 | 99.8 AV | | | 1.68 V | 72 | 69.00 | 30.80 |
| 3 | 2484.00 | 59.2 PK | 74.00 | -14.80 | 1.72 V | 223 | 28.20 | 31.00 |
| 3 | 2484.00 | 50.8 AV | 54.00 | -3.20 | 1.72 V | 223 | 19.80 | 31.00 |
| 4 | 4914.00 | 45.5 PK | 74.00 | -28.50 | 1.26 V | 84 | 8.90 | 36.60 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



4.2.11 TEST RESULTS (B) -OFDM

| | | | |
|---------------------------------|------------------------------|--------------------------|-------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 2 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average(AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 58.7 PK | 74.00 | -15.30 | 1.29 H | 332 | 28.30 | 30.40 |
| 1 | 2390.00 | 48.2 AV | 54.00 | -5.80 | 1.29 H | 332 | 17.80 | 30.40 |
| 2 | *2417.00 | 97.0 PK | | | 1.24 H | 184 | 66.50 | 30.60 |
| 2 | *2417.00 | 87.5 AV | | | 1.24 H | 184 | 56.90 | 30.60 |
| 3 | 2484.00 | 56.1 PK | 74.00 | -17.90 | 1.03 H | 237 | 25.10 | 31.00 |
| 3 | 2484.00 | 45.2 AV | 54.00 | -8.80 | 1.03 H | 237 | 14.20 | 31.00 |
| 4 | 4834.00 | 43.5 PK | 74.00 | -30.50 | 1.30 H | 300 | 7.20 | 36.30 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 62.2 PK | 74.00 | -11.80 | 1.09 V | 247 | 31.80 | 30.40 |
| 1 | 2390.00 | 51.2 AV | 54.00 | -2.80 | 1.09 V | 247 | 20.80 | 30.40 |
| 2 | *2417.00 | 106.9 PK | | | 1.01 V | 150 | 76.30 | 30.60 |
| 2 | *2417.00 | 95.8 AV | | | 1.01 V | 150 | 65.20 | 30.60 |
| 3 | 2484.00 | 57.9 PK | 74.00 | -16.10 | 1.24 V | 328 | 27.00 | 31.00 |
| 3 | 2484.00 | 46.2 AV | 54.00 | -7.80 | 1.24 V | 328 | 15.20 | 31.00 |
| 4 | 4834.00 | 44.6 PK | 74.00 | -29.40 | 1.39 V | 359 | 8.30 | 36.30 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 54.5 PK | 74.00 | -19.50 | 1.00 H | 277 | 24.10 | 30.40 |
| 1 | 2390.00 | 44.6 AV | 54.00 | -9.40 | 1.00 H | 277 | 14.20 | 30.40 |
| 2 | *2437.00 | 96.0 PK | | | 1.39 H | 263 | 65.40 | 30.70 |
| 2 | *2437.00 | 87.0 AV | | | 1.39 H | 263 | 56.30 | 30.70 |
| 3 | 2484.00 | 56.3 PK | 74.00 | -17.70 | 1.35 H | 142 | 25.30 | 31.00 |
| 3 | 2484.00 | 45.2 AV | 54.00 | -8.80 | 1.35 H | 142 | 14.20 | 31.00 |
| 4 | 4874.00 | 44.4 PK | 74.00 | -29.60 | 1.12 H | 2 | 7.90 | 36.50 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 56.8 PK | 74.00 | -17.20 | 1.00 V | 17 | 26.30 | 30.40 |
| 1 | 2390.00 | 45.7 AV | 54.00 | -8.30 | 1.00 V | 17 | 15.20 | 30.40 |
| 2 | *2437.00 | 107.6 PK | | | 1.00 V | 136 | 76.90 | 30.70 |
| 2 | *2437.00 | 97.6 AV | | | 1.00 V | 136 | 66.90 | 30.70 |
| 3 | 2484.00 | 47.8 PK | 74.00 | -26.20 | 1.43 V | 269 | 16.90 | 31.00 |
| 4 | 4874.00 | 45.7 PK | 74.00 | -28.30 | 1.53 V | 342 | 9.20 | 36.50 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 10 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.4 PK | 74.00 | -18.60 | 1.03 H | 57 | 25.00 | 30.40 |
| 1 | 2390.00 | 44.7 AV | 54.00 | -9.30 | 1.03 H | 57 | 14.20 | 30.40 |
| 2 | *2457.00 | 96.0 PK | | | 1.52 H | 112 | 65.20 | 30.80 |
| 2 | *2457.00 | 87.2 AV | | | 1.52 H | 112 | 56.40 | 30.80 |
| 3 | 2484.00 | 61.2 PK | 74.00 | -12.80 | 1.11 H | 267 | 30.20 | 31.00 |
| 3 | 2484.00 | 49.6 AV | 54.00 | -4.40 | 1.11 H | 267 | 18.70 | 31.00 |
| 4 | 4914.00 | 43.9 PK | 74.00 | -30.10 | 1.09 H | 38 | 7.30 | 36.60 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 56.1 PK | 74.00 | -17.90 | 1.04 V | 79 | 25.70 | 30.40 |
| 1 | 2390.00 | 45.7 AV | 54.00 | -8.30 | 1.04 V | 79 | 15.20 | 30.40 |
| 2 | *2457.00 | 108.6 PK | | | 1.03 V | 139 | 77.80 | 30.80 |
| 2 | *2457.00 | 96.9 AV | | | 1.03 V | 139 | 66.10 | 30.80 |
| 3 | 2484.00 | 64.6 PK | 74.00 | -9.40 | 1.03 V | 240 | 33.70 | 31.00 |
| 3 | 2484.00 | 51.8 AV | 54.00 | -2.20 | 1.03 V | 240 | 20.80 | 31.00 |
| 4 | 4914.00 | 45.5 PK | 74.00 | -28.50 | 1.61 V | 49 | 8.90 | 36.60 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



4.2.12 TEST RESULTS (C)

| | | | |
|---------------------------------|--------------------------------|--------------------------|-------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | FREQUENCY RANGE | 30-1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Quasi-Peak |
| ENVIRONMENTAL CONDITIONS | 20 deg. C, 84 % RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 66.85 | 30.4 QP | 40.00 | -9.60 | 1.42 H | 92 | 24.80 | 5.60 |
| 2 | 132.03 | 25.1 QP | 43.50 | -18.40 | 1.23 H | 0 | 13.20 | 11.90 |
| 3 | 137.75 | 33.1 QP | 43.50 | -10.40 | 1.51 H | 235 | 21.30 | 11.80 |
| 4 | 224.01 | 29.9 QP | 46.00 | -16.10 | 1.48 H | 214 | 19.90 | 9.90 |
| 5 | 249.65 | 29.5 QP | 46.00 | -16.50 | 1.26 H | 264 | 16.30 | 13.20 |
| 6 | 351.99 | 34.7 QP | 46.00 | -11.30 | 1.12 H | 292 | 19.10 | 15.60 |
| 7 | 384.02 | 28.5 QP | 46.00 | -17.50 | 1.43 H | 335 | 12.00 | 16.50 |
| 8 | 480.00 | 34.3 QP | 46.00 | -11.70 | 1.87 H | 25 | 15.40 | 18.90 |
| 9 | 491.59 | 30.7 QP | 46.00 | -15.30 | 1.77 H | 191 | 11.60 | 19.10 |
| 10 | 544.02 | 33.8 QP | 46.00 | -12.20 | 1.22 H | 238 | 12.80 | 21.00 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 60.40 | 25.9 QP | 40.00 | -14.10 | 1.00 V | 67 | 20.60 | 5.30 |
| 2 | 137.75 | 24.7 QP | 43.50 | -18.80 | 1.27 V | 192 | 12.90 | 11.80 |
| 3 | 199.24 | 35.2 QP | 43.50 | -8.30 | 1.03 V | 264 | 26.10 | 9.00 |
| 4 | 224.69 | 25.3 QP | 46.00 | -20.70 | 1.62 V | 230 | 15.30 | 10.00 |
| 5 | 249.40 | 24.5 QP | 46.00 | -21.50 | 1.26 V | 38 | 11.40 | 13.10 |
| 6 | 251.96 | 29.0 QP | 46.00 | -17.00 | 1.15 V | 197 | 15.50 | 13.50 |
| 7 | 350.23 | 29.3 QP | 46.00 | -16.70 | 1.44 V | 224 | 13.70 | 15.60 |
| 8 | 384.01 | 22.0 QP | 46.00 | -24.00 | 1.58 V | 239 | 5.50 | 16.50 |
| 9 | 480.01 | 35.3 QP | 46.00 | -10.70 | 1.28 V | 91 | 16.30 | 18.90 |
| 10 | 512.05 | 32.1 QP | 46.00 | -13.90 | 1.06 V | 125 | 12.70 | 19.40 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247



4.2.13 TEST RESULTS (C) - DSSS

| | | | |
|---------------------------------|------------------------------|--------------------------|-------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 1 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average(AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 62.8 PK | 74.00 | -11.20 | 1.62 H | 269 | 33.60 | 29.20 |
| 1 | 2390.00 | 49.3 AV | 54.00 | -4.70 | 1.62 H | 269 | 20.10 | 29.20 |
| 2 | *2412.00 | 102.8 PK | | | 1.24 H | 257 | 72.90 | 29.90 |
| 2 | *2412.00 | 95.3 AV | | | 1.24 H | 257 | 65.40 | 29.90 |
| 3 | 2484.00 | 55.2 PK | 74.00 | -18.80 | 1.02 H | 2 | 25.10 | 30.10 |
| 3 | 2484.00 | 44.3 AV | 54.00 | -9.70 | 1.02 H | 2 | 14.20 | 30.10 |
| 4 | 4824.00 | 42.0 PK | 74.00 | -32.00 | 1.13 H | 103 | 6.40 | 35.60 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 65.1 PK | 74.00 | -8.90 | 1.13 V | 103 | 35.90 | 29.20 |
| 1 | 2390.00 | 50.5 AV | 54.00 | -3.50 | 1.13 V | 103 | 21.30 | 29.20 |
| 2 | *2412.00 | 105.9 PK | | | 1.05 V | 147 | 76.00 | 29.90 |
| 2 | *2412.00 | 95.8 AV | | | 1.05 V | 147 | 65.90 | 29.90 |
| 3 | 2484.00 | 56.1 PK | 74.00 | -17.90 | 1.02 V | 47 | 25.90 | 30.10 |
| 3 | 2484.00 | 45.4 AV | 54.00 | -8.60 | 1.02 V | 47 | 15.20 | 30.10 |
| 4 | 4824.00 | 42.5 PK | 74.00 | -31.50 | 1.34 V | 51 | 6.90 | 35.60 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. " * " : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 54.4 PK | 74.00 | -19.60 | 1.36 H | 328 | 25.10 | 29.20 |
| 1 | 2390.00 | 44.5 AV | 54.00 | -9.50 | 1.36 H | 328 | 15.20 | 29.20 |
| 2 | *2437.00 | 106.1 PK | | | 1.30 H | 160 | 76.10 | 30.00 |
| 2 | *2437.00 | 97.9 AV | | | 1.30 H | 160 | 67.90 | 30.00 |
| 3 | 2484.00 | 54.4 PK | 74.00 | -19.60 | 1.21 H | 13 | 24.30 | 30.10 |
| 3 | 2484.00 | 45.0 AV | 54.00 | -9.00 | 1.21 H | 13 | 14.90 | 30.10 |
| 4 | 4874.00 | 43.3 PK | 74.00 | -30.70 | 1.62 H | 321 | 7.60 | 35.70 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.8 PK | 74.00 | -18.20 | 1.32 V | 187 | 26.60 | 29.20 |
| 1 | 2390.00 | 45.4 AV | 54.00 | -8.60 | 1.32 V | 187 | 16.20 | 29.20 |
| 2 | *2437.00 | 106.1 PK | | | 1.03 V | 154 | 76.10 | 30.00 |
| 2 | *2437.00 | 96.5 AV | | | 1.03 V | 154 | 66.50 | 30.00 |
| 3 | 2484.00 | 57.5 PK | 74.00 | -16.50 | 1.57 V | 49 | 27.30 | 30.10 |
| 3 | 2484.00 | 46.4 AV | 54.00 | -7.60 | 1.57 V | 49 | 16.20 | 30.10 |
| 4 | 4874.00 | 39.8 PK | 74.00 | -34.20 | 1.06 V | 112 | 4.10 | 35.70 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 54.3 PK | 74.00 | -19.70 | 1.03 H | 2 | 25.10 | 29.20 |
| 1 | 2390.00 | 44.1 AV | 54.00 | -9.90 | 1.03 H | 2 | 14.90 | 29.20 |
| 2 | *2462.00 | 106.2 PK | | | 1.24 H | 150 | 76.10 | 30.10 |
| 2 | *2462.00 | 96.5 AV | | | 1.24 H | 150 | 66.40 | 30.10 |
| 3 | 2484.00 | 61.3 PK | 74.00 | -12.70 | 1.00 H | 251 | 31.20 | 30.10 |
| 3 | 2484.00 | 48.4 AV | 54.00 | -5.60 | 1.00 H | 251 | 18.30 | 30.10 |
| 4 | 4924.00 | 38.3 PK | 74.00 | -35.70 | 1.63 H | 325 | 2.40 | 35.90 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 58.2 PK | 74.00 | -15.80 | 1.40 V | 222 | 29.00 | 29.20 |
| 1 | 2390.00 | 45.8 AV | 54.00 | -8.20 | 1.40 V | 222 | 16.60 | 29.20 |
| 2 | *2462.00 | 107.2 PK | | | 1.00 V | 20 | 77.10 | 30.10 |
| 2 | *2462.00 | 97.0 AV | | | 1.00 V | 20 | 66.90 | 30.10 |
| 3 | 2484.00 | 60.1 PK | 74.00 | -13.90 | 1.00 V | 247 | 30.00 | 30.10 |
| 3 | 2484.00 | 49.5 AV | 54.00 | -4.50 | 1.00 V | 247 | 19.40 | 30.10 |
| 4 | 4924.00 | 39.0 PK | 74.00 | -35.00 | 1.25 V | 41 | 3.10 | 35.90 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



4.2.14 TEST RESULTS (C) -OFDM

| | | | |
|---------------------------------|------------------------------|--------------------------|-------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 1 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average(AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 64.3 PK | 74.00 | -9.70 | 1.64 H | 298 | 35.10 | 29.20 |
| 1 | 2390.00 | 52.1 AV | 54.00 | -1.90 | 1.64 H | 298 | 22.90 | 29.20 |
| 2 | *2412.00 | 101.1 PK | | | 1.22 H | 154 | 71.20 | 29.90 |
| 2 | *2412.00 | 93.4 AV | | | 1.22 H | 154 | 63.50 | 29.90 |
| 3 | 2484.00 | 55.7 PK | 74.00 | -18.30 | 1.02 H | 47 | 25.60 | 30.10 |
| 3 | 2484.00 | 45.0 AV | 54.00 | -9.00 | 1.02 H | 47 | 14.90 | 30.10 |
| 4 | 4824.00 | 41.5 PK | 74.00 | -32.50 | 1.33 H | 301 | 5.90 | 35.60 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 64.2 PK | 74.00 | -9.80 | 1.29 V | 264 | 35.00 | 29.20 |
| 1 | 2390.00 | 52.1 AV | 54.00 | -1.90 | 1.29 V | 264 | 22.90 | 29.20 |
| 2 | *2412.00 | 102.9 PK | | | 1.01 V | 148 | 73.00 | 29.90 |
| 2 | *2412.00 | 93.8 AV | | | 1.01 V | 148 | 63.90 | 29.90 |
| 3 | 2484.00 | 56.7 PK | 74.00 | -17.30 | 1.57 V | 41 | 26.60 | 30.10 |
| 3 | 2484.00 | 45.4 AV | 54.00 | -8.60 | 1.57 V | 41 | 15.20 | 30.10 |
| 4 | 4824.00 | 41.5 PK | 74.00 | -32.50 | 1.33 V | 301 | 5.90 | 35.60 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 6 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 55.7 PK | 74.00 | -18.30 | 1.28 H | 264 | 26.50 | 29.20 |
| 1 | 2390.00 | 43.0 AV | 54.00 | -11.00 | 1.28 H | 264 | 13.80 | 29.20 |
| 2 | *2437.00 | 102.7 PK | | | 1.33 H | 168 | 72.70 | 30.00 |
| 2 | *2437.00 | 94.0 AV | | | 1.33 H | 168 | 64.00 | 30.00 |
| 3 | 2484.00 | 55.2 PK | 74.00 | -18.80 | 1.25 H | 320 | 25.10 | 30.10 |
| 3 | 2484.00 | 44.1 AV | 54.00 | -9.90 | 1.25 H | 320 | 14.00 | 30.10 |
| 4 | 4874.00 | 41.6 PK | 74.00 | -32.40 | 1.55 H | 247 | 5.90 | 35.70 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 54.4 PK | 74.00 | -19.60 | 1.30 V | 272 | 25.20 | 29.20 |
| 1 | 2390.00 | 42.1 AV | 54.00 | -11.90 | 1.30 V | 272 | 12.90 | 29.20 |
| 2 | *2437.00 | 103.3 PK | | | 1.01 V | 136 | 73.30 | 30.00 |
| 2 | *2437.00 | 94.1 AV | | | 1.01 V | 136 | 64.10 | 30.00 |
| 3 | 2484.00 | 58.6 PK | 74.00 | -15.40 | 1.57 V | 254 | 28.50 | 30.10 |
| 3 | 2484.00 | 46.7 AV | 54.00 | -7.30 | 1.57 V | 254 | 16.60 | 30.10 |
| 4 | 4874.00 | 42.0 PK | 74.00 | -32.00 | 1.39 V | 100 | 6.30 | 35.70 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



| | | | |
|---------------------------------|------------------------------|--------------------------|--------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| MODE | Channel 11 | FREQUENCY RANGE | Above 1000 MHz |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | DETECTOR FUNCTION | Peak(PK) Average (AV) |
| ENVIRONMENTAL CONDITIONS | 19 deg. C, 76%RH, 979 hPa | TESTED BY | Eric Lee |

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 58.4 PK | 74.00 | -15.60 | 1.65 H | 298 | 29.20 | 29.20 |
| 1 | 2390.00 | 44.1 AV | 54.00 | -9.90 | 1.65 H | 298 | 14.90 | 29.20 |
| 2 | *2462.00 | 104.0 PK | | | 1.23 H | 190 | 74.00 | 30.10 |
| 2 | *2462.00 | 93.3 AV | | | 1.23 H | 190 | 63.20 | 30.10 |
| 3 | 2484.00 | 66.1 PK | 74.00 | -7.90 | 1.44 H | 10 | 36.00 | 30.10 |
| 3 | 2484.00 | 52.5 AV | 54.00 | -1.50 | 1.44 H | 10 | 22.40 | 30.10 |
| 4 | 4924.00 | 41.8 PK | 74.00 | -32.20 | 1.62 H | 247 | 5.90 | 35.90 |

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

| No. | Freq. (MHz) | Emission Level (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
|-----|-------------|-------------------------|----------------|-------------|--------------------|----------------------|------------------|--------------------------|
| 1 | 2390.00 | 56.1 PK | 74.00 | -17.90 | 1.32 V | 288 | 26.90 | 29.20 |
| 1 | 2390.00 | 43.1 AV | 54.00 | -10.90 | 1.32 V | 288 | 13.90 | 29.20 |
| 2 | *2462.00 | 104.0 PK | | | 1.01 V | 129 | 74.00 | 30.10 |
| 2 | *2462.00 | 93.1 AV | | | 1.01 V | 129 | 63.00 | 30.10 |
| 3 | 2484.00 | 64.5 PK | 74.00 | -9.50 | 1.01 V | 158 | 34.40 | 30.10 |
| 3 | 2484.00 | 52.2 AV | 54.00 | -1.80 | 1.01 V | 158 | 22.10 | 30.10 |
| 4 | 4924.00 | 41.3 PK | 74.00 | -32.70 | 1.28 V | 54 | 5.40 | 35.90 |

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
 2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
 3. The other emission levels were very low against the limit.
 4. Margin value = Emission level – Limit value.
 5. The limit value is defined as per 15.247
 6. “ * “ : Fundamental frequency



4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

| Description & Manufacturer | Model No. | Serial No. | Calibrated Until |
|----------------------------|-----------|--------------|------------------|
| R&S SPECTRUM ANALYZER | FSP | 1093.4495.30 | Dec. 19, 2003 |

NOTE:

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.3.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100 kHz RBW and 100 kHz VBW. The 6 dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6 dB.

4.3.4 TEST SETUP



For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

4.3.5 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



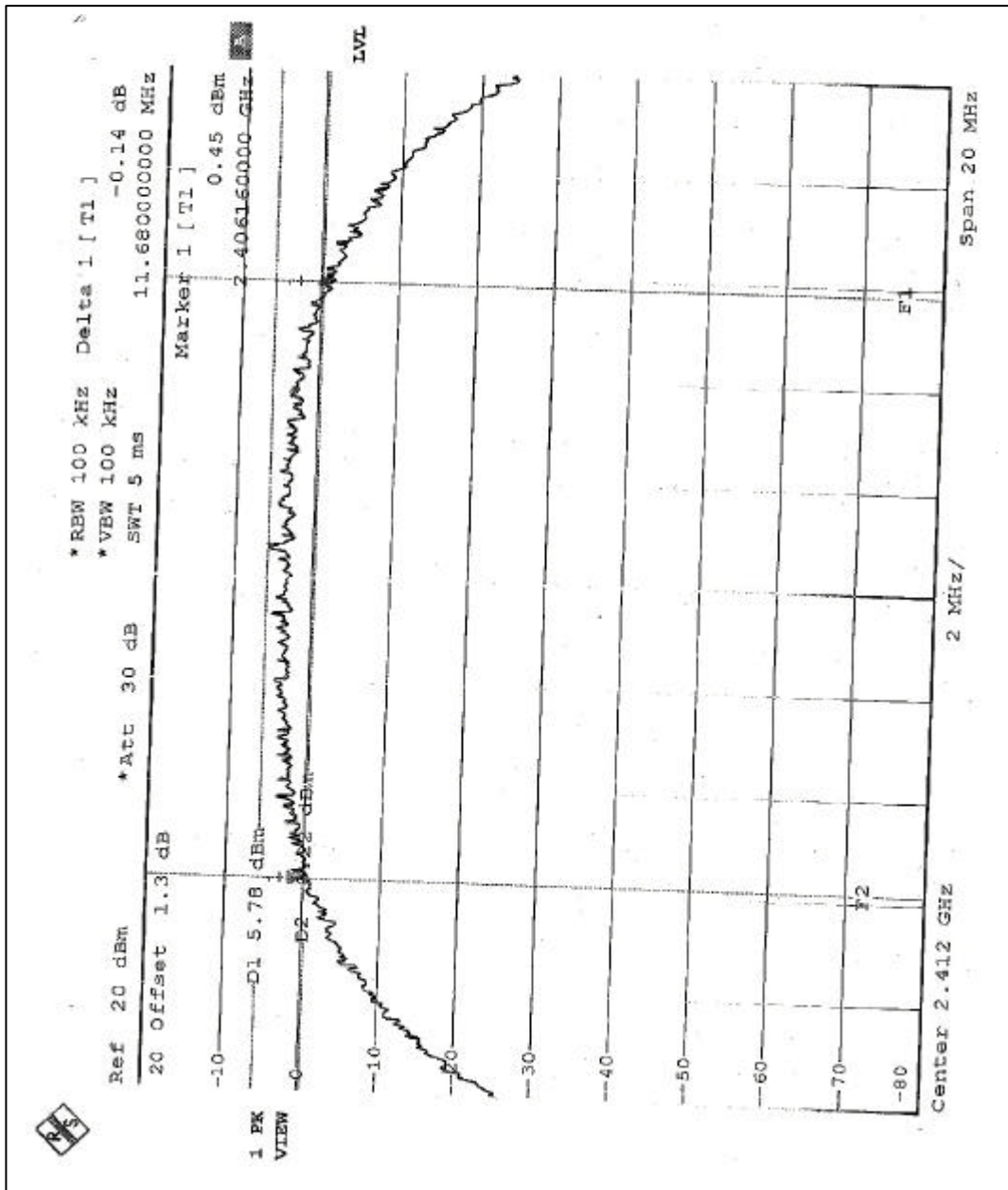
4.3.6 TEST RESULTS-DSSS

| | | | |
|-----------------------------|-------------------|---------------------------------|----------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 21 deg. C, 62 %RH, 979 hPa |
| TEST MODE | Antenna 1 & 3 | TESTED BY | Hunk Chung |

| CHANNEL | CHANNEL FREQUENCY (MHz) | 6 dB BANDWIDTH (MHz) | MINIMUM LIMIT (MHz) | PASS/FAIL |
|----------------|--------------------------------|-----------------------------|----------------------------|------------------|
| 1 | 2412 | 11.68 | 0.5 | PASS |
| 6 | 2437 | 11.64 | 0.5 | PASS |
| 11 | 2462 | 11.88 | 0.5 | PASS |

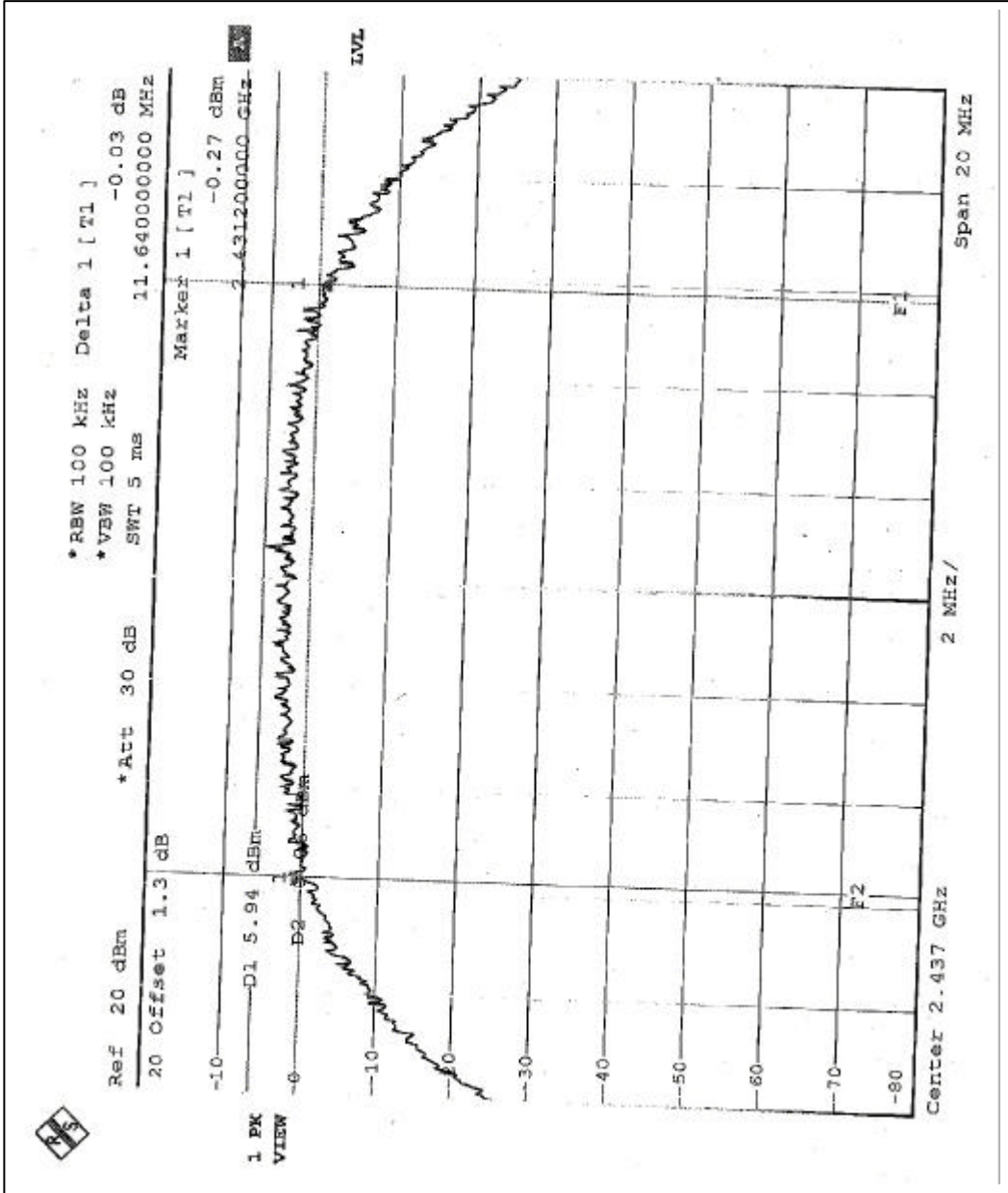


CH1



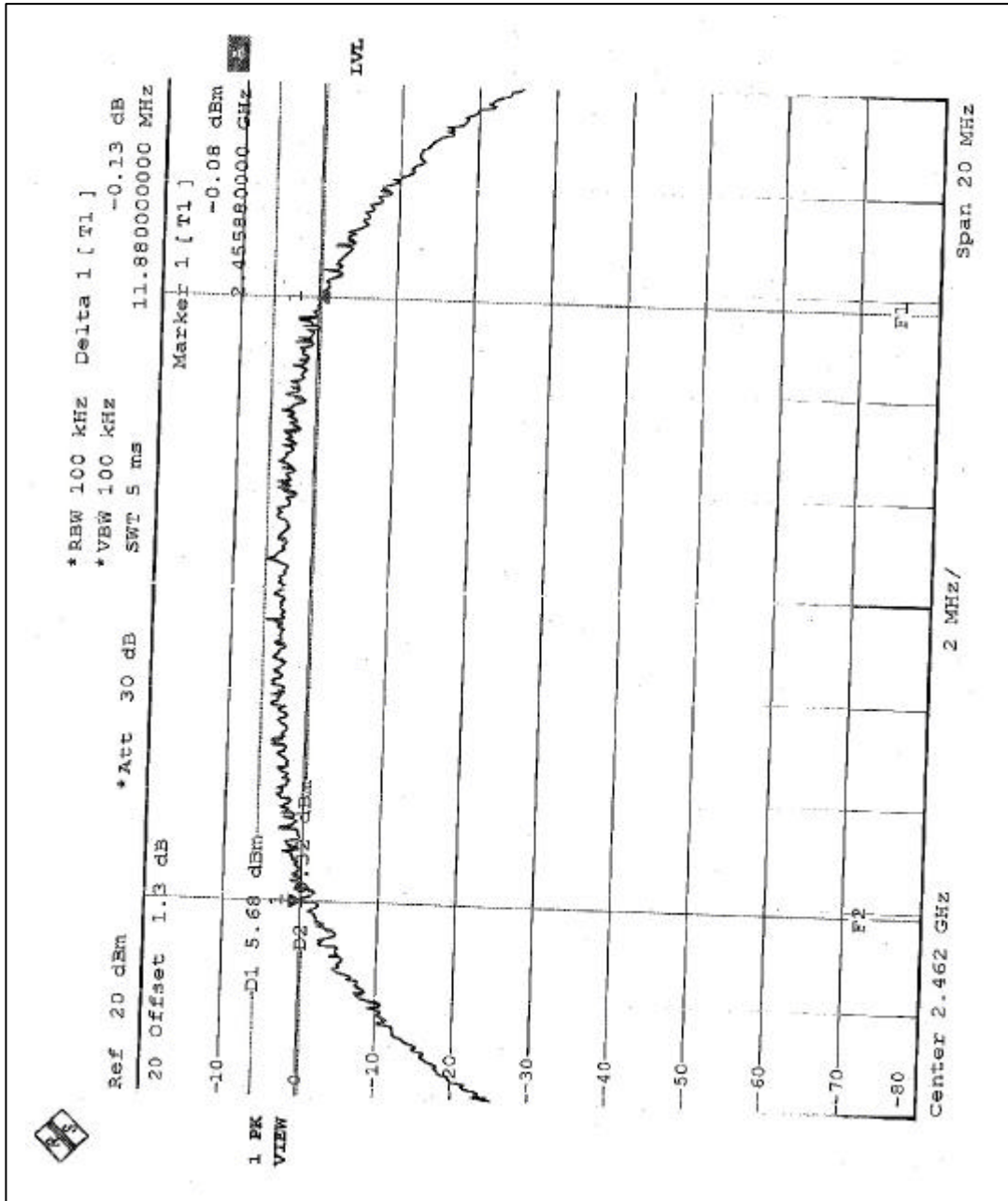


CH6





CH11





| | | | |
|-----------------------------|-------------------|---------------------------------|----------------------------|
| EUT | 802.11b/g Cardbus | MODEL | G11FNF-PC |
| INPUT POWER (SYSTEM) | 120Vac, 60 Hz | ENVIRONMENTAL CONDITIONS | 21 deg. C, 62 %RH, 979 hPa |
| TEST MODE | Antenna 2 | TESTED BY | Hunk Chung |

| CHANNEL | CHANNEL FREQUENCY (MHz) | 6 dB BANDWIDTH (MHz) | MINIMUM LIMIT (MHz) | PASS/FAIL |
|----------------|--------------------------------|-----------------------------|----------------------------|------------------|
| 2 | 2417 | 11.68 | 0.5 | PASS |
| 6 | 2437 | 11.64 | 0.5 | PASS |
| 10 | 2457 | 12.08 | 0.5 | PASS |



CH2

