

FCC Test Report

Report No.: RF150202C14D

FCC ID: MSQ-RT1D00

Test Model: RT-AC1200

Series Model: RT-N600

Received Date: Nov. 10, 2015

Test Date: Nov. 13 ~ Nov. 23, 2015

Issued Date: Dec. 25, 2015

Applicant: ASUSTeK COMPUTER INC.

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33383, TAIWAN (R.O.C.)





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Release Control Record

| Issue No. | Description | Date Issued |
|--------------|-------------------|---------------|
| RF150202C14D | Original release. | Dec. 25, 2015 |

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1 Certificate of Conformity

Product: Wireless-AC1200 Dual Band USB Router

Brand: ASUS

Test Model: RT-AC1200

Series Model: RT-N600

Sample Status: Engineering sample

Applicant: ASUSTeK COMPUTER INC.

Test Date: Nov. 13 ~ Nov. 23, 2015

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10:2013

This report is issued as a supplementary report of RF150202C14. This report shall be used combined together with its original report.

Prepared by : , Date: Dec. 25, 2015

Pettie Chen / Senior Specialist

Approved by: Dec. 25, 2015

Ken Liu / Senior Manager

Note: Radiated emission below 1GHz and conducted emission items are performed for the addendum. Refer to original report for the other test data.



2 Summary of Test Results

| 47 CFR FCC Part 15, Subpart C (SECTION 15.247) | | | | |
|--|---|------|--|--|
| FCC Clause | Test Item | | Remarks | |
| 15.207 | AC Power Conducted Emission | PASS | Meet the requirement of limit. Minimum passing margin is -14.18dB at 0.36526MHz. | |
| 15.205 / 15.209 / 15.247(d) | Radiated Emissions and Band Edge Measurement | PASS | Meet the requirement of limit. Minimum passing margin is -6.6dB at 43.58MHz. | |
| 15.247(d) | 15.247(d) Antenna Port Emission N/ | | Refer to Note | |
| 15.247(a)(2) | 5.247(a)(2) 6dB bandwidth | | Refer to Note | |
| 15.247(b) | 15.247(b) Conducted power | | Refer to Note | |
| 15.247(e) | Power Spectral Density | N/A | Refer to Note | |
| 15.203 | Antenna Requirement | PASS | Antenna connector is RSMA not a standard connector. | |

Note: Radiated emission below 1GHz and conducted emission items are performed for the addendum. Refer to original report for the other test data.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement | Frequency | Expended Uncertainty (k=2) (±) |
|------------------------------------|-----------------|--------------------------------|
| Conducted Emissions at mains ports | 150kHz ~ 30MHz | 2.44 dB |
| Dedicted Emissions up to 1 CHz | 30MHz ~ 200MHz | 3.63 dB |
| Radiated Emissions up to 1 GHz | 200MHz ~1000MHz | 3.64 dB |

2.2 Modification Record

There were no modifications required for compliance.



3 General Information

3.1 General Description of EUT

| Product | Wireless-AC1200 Dual Band USB Router | |
|------------------------------------|---|--|
| Brand | ASUS | |
| Test Model | RT-AC1200 | |
| Series Model | RT-N600 | |
| Model Difference | Marketing purpose | |
| Status of EUT | Engineering sample | |
| Power Supply Rating | 12Vdc (adapter) | |
| Modulation Type | CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM | |
| Modulation Technology | DSSS, OFDM | |
| Modulation reciniology | 802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps | |
| Transfer Rate | 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps | |
| | 802.11n: up to 300.0Mbps | |
| Operating Frequency 2412 ~ 2462MHz | | |
| Number of Channel | 11 for 802.11b, 802.11g, 802.11n (HT20) | |
| Number of Chairles | 7 for 802.11n (HT40) | |
| | 802.11b: | |
| | Chain 0: 125.314mW, Chain 1: 113.763mW, Total Power: 239.077mW | |
| | 802.11g: | |
| Output Power | Chain 0: 122.462mW, Chain 1: 103.514mW, Total Power: 225.976mW | |
| Output i Owei | 802.11n (HT20): | |
| | Chain 0: 121.060mW, Chain 1: 102.329mW, Total Power: 223.389mW | |
| | 802.11n (HT40): | |
| | Chain 0: 32.285mW, Chain 1: 28.314mW, Total Power: 60.599mW | |
| Antenna Type | Dipole antenna with 5dBi gain | |
| Antenna Connector | RSMA | |
| Accessory Device | Adapter | |
| Data Cable Supplied | NA | |

Note:

- 1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of BV ADT report no.: RF150202C14. The differences compared with the original design are adding 1 adapter and updating standard to the latest version. Therefore, AC Power Conducted Emission and Radiated Emissions tests (Frequency range below 1GHz) were retested in this report.
- 2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

| Modulation Mode | TX Function |
|-----------------|-------------|
| 802.11b | 2TX |
| 802.11g | 2TX |
| 802.11n (HT20) | 2TX |
| 802.11n (HT40) | 2TX |



3. All models are listed as below.

| Brand | Model | Difference |
|-------|-----------|--|
| ASUS | RT-AC1200 | All models are electrically identical, different model names are for |
| A303 | RT-N600 | marketing purpose. |

^{*}Model: RT-AC1200 is for the final tests.

4. The EUT uses following adapters. (Adapter 3 is new)

| The same and the same transfer of the same transfer | | |
|--|--------------------------------|--|
| Adapter 1 | | |
| Brand Shenzhen Gongjin Electronics Co., Ltd. | | |
| Model S18B72-120A150-0K | | |
| Input Power 100-240Vac~ 50/60Hz, Max.0.7A | | |
| Output Power | 12Vdc/ 1.5A | |
| Power Line | 1.4m non-shielded without core | |

| Adapter 2 | Adapter 2 | | |
|--|--------------------------------|--|--|
| Brand Ruide Electronical Industrial Shenzhen Co., Ltd. | | | |
| Model RD1201500-C55-1MG | | | |
| Input Power | 100-240Vac~ 50/60Hz, 0.6A Max | | |
| Output Power | 12Vdc/ 1.5A | | |
| Power Line | 1.5m non-shielded without core | | |

| Adapter 3 (New) | | |
|--|--------------------------------|--|
| Brand Shenzhen Gongjin Electronics CO., LTD. | | |
| Model | S18B72-120A150-C4 | |
| Input Power 100-240Vac~50/60Hz Max. 0.7A | | |
| Output Power 12Vdc / 1.5A | | |
| Power Line | 1.4m non-shielded without core | |

5. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.



3.2 Description of Test Modes

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

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

7 channels are provided for 802.11n (HT40):

| Channel | Frequency | Channel | Frequency |
|---------|-----------|---------|-----------|
| 3 | 2422MHz | 7 | 2442MHz |
| 4 | 2427MHz | 8 | 2447MHz |
| 5 | 2432MHz | 9 | 2452MHz |
| 6 | 2437MHz | | |



3.2.1 Test Mode Applicability and Tested Channel Detail

| EUT CONFIGURE | APPLICA | ABLE TO | DESCRIPTION |
|------------------|---------|---------|----------------------|
| MODE | RE<1G | PLC | DESCRIPTION |
| - | √ | √ | Power from adapter 3 |

Where **RE<1G**: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

NOTE:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.

Radiated Emission Test (Below 1GHz):

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

| EUT CONFIGURE MODE | MODE | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|--------------------------|---------|----------------------|-------------------|--------------------------|--------------------|---------------------|
| - | 802.11g | 1 to 11 | 1 | OFDM | BPSK | 6.0 |

Power Line Conducted Emission Test:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

| EUT CONFIGURE MODE | MODE | AVAILABLE CHANNEL | TESTED CHANNEL | MODULATION TECHNOLOGY | MODULATION TYPE | DATA RATE (Mbps) |
|--------------------------|---------|----------------------|-------------------|--------------------------|--------------------|---------------------|
| - | 802.11g | 1 to 11 | 1 | OFDM | BPSK | 6.0 |

Test Condition:

| APPLICABLE TO | ENVIRONMENTAL CONDITIONS | INPUT POWER | TESTED BY |
|---------------|--------------------------|--------------|-----------|
| RE<1G | 25deg. C, 65%RH | 120Vac, 60Hz | Bayu Chen |
| PLC | 25deg. C, 65%RH | 120Vac, 60Hz | Chris Lin |

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3.3 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.

| | • | | | | | |
|----|----------|---------|------------|------------------------------|--------------|---------|
| ID | Product | Brand | Model No. | Serial No. | FCC ID | Remarks |
| A. | Notebook | DELL | D531 | CN-0XM006-48643-81 U-2973 | QDS-BRCM1020 | - |
| B. | Dongle | SANDISK | SDCZ6-1024 | N/A | NA | - |
| C. | Load | NA | NA | NA | NA | - |

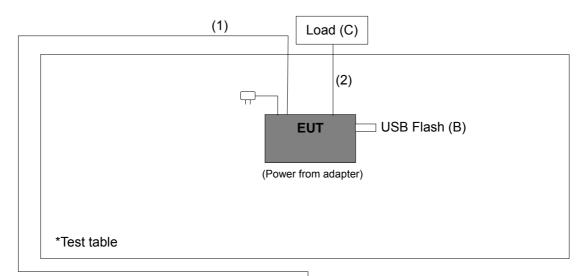
Note:

- 1. All power cords of the above support units are non-shielded (1.8m).
- 2. Items A acted as communication partners to transfer data.

| ID | Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks |
|----|--------------|------|------------|-----------------------|--------------|---------|
| 1. | RJ45 | 1 | 10 | N | 0 | - |
| 2. | RJ45 | 4 | 1.8 | N | 0 | - |

Note: The core(s) is(are) originally attached to the cable(s).

3.3.1 Configuration of System under Test



Notebook
(A)

*Kept in a remote area

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3.4 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C (15.247) 558074 D01 DTS Meas Guidance v03r04 662911 D01 Multiple Transmitter Output v02r01 ANSI C63.10-2013

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

NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30dB below the highest level of the desired power:

| power: | | |
|----------------------|--------------------------------------|-------------------------------|
| Frequencies (MHz) | Field Strength (microvolts/meter) | Measurement Distance (meters) |
| 0.009 ~ 0.490 | 2400/F(kHz) | 300 |
| 0.490 ~ 1.705 | 24000/F(kHz) | 30 |
| 1.705 ~ 30.0 | 30 | 30 |
| 30 ~ 88 | 100 | 3 |
| 88 ~ 216 | 150 | 3 |
| 216 ~ 960 | 200 | 3 |
| Above 960 | 500 | 3 |

NOTE:

- 1. The lower limit shall apply at the transition frequencies.
- 2. Emission level $(dBuV/m) = 20 \log Emission level (uV/m)$.
- 3. 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 30dB under any condition of modulation.

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4.1.2 Test Instruments

| DESCRIPTION & MANUFACTURER | MODEL NO. | SERIAL NO. | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|-----------------------------------|------------------------------|----------------------------------|------------------------|-------------------------|
| Test Receiver ROHDE & SCHWARZ | ESCI | 100424 | Oct. 12, 2015 | Oct. 11, 2016 |
| Spectrum Analyzer ROHDE & SCHWARZ | FSP40 | 100269 | Mar. 30, 2015 | Mar. 29, 2016 |
| BILOG Antenna SCHWARZBECK | VULB9168 | 9168-148 | Feb. 02, 2015 | Feb. 01, 2016 |
| HORN Antenna SCHWARZBECK | BBHA 9120 D | 9120D-1169 | Feb. 09, 2015 | Feb. 08, 2016 |
| HORN Antenna SCHWARZBECK | BBHA 9170 | BBHA9170241 | Feb. 09, 2015 | Feb. 08, 2016 |
| Preamplifier Agilent | 8449B | 3008A01911 | Aug. 09, 2015 | Aug. 08, 2016 |
| Preamplifier Agilent | 8447D | 2944A10638 | Aug. 09, 2015 | Aug. 08, 2016 |
| RF signal cable HUBER+SUHNER | SUCOFLEX 104 | CABLE-CH9-02(3 09222 +248780) | Aug. 09, 2015 | Aug. 08, 2016 |
| RF signal cable HUBER+SUHNER | SUCOFLEX 104 | CABLE-CH9-03(2 74092) | Aug. 09, 2015 | Aug. 08, 2016 |
| RF signal cable Woken | 8D-FB | Cable-CH9-01 | Aug. 11, 2015 | Aug. 10, 2016 |
| Software BV ADT | ADT_Radiated_ V7.6.15.9.4 | NA | NA | NA |
| Antenna Tower EMCO | 2070/2080 | 512.835.4684 | NA | NA |
| Turn Table EMCO | 2087-2.03 | NA | NA | NA |
| Antenna Tower &Turn BV ADT | AT100 | AT93021705 | NA | NA |
| Turn Table BV ADT | TT100 | TT93021705 | NA | NA |
| Turn Table Controller BV ADT | SC100 | SC93021705 | 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 HwaYa Chamber 9.
- 3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 215374.
- 5. The IC Site Registration No. is IC 7450F-9.



4.1.3 Test Procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

- The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
- 3. All modes of operation were investigated and the worst-case emissions are reported.

| 4.1.4 | Deviation | from 7 | Test | Standard |
|--------|-----------|--------|------|-----------|
| T. I.T | Deviation | 110111 | IUUL | Otaridard |

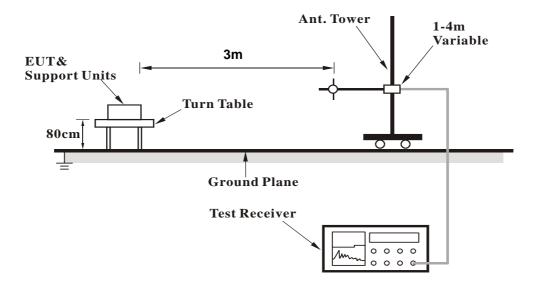
No deviation.

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4.1.5 Test Set Up

<Frequency Range below 1GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

- a. Placed the EUT on the testing table.
- b. Prepared a notebook to act as communication partner and placed it outside of testing area.
- c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- d. The communication partner sent data to EUT by command "PING".
- e. The necessary accessories enable the system in full functions.



4.1.7 Test Results

Below 1GHz Data:

802.11g

| CHANNEL | TX Channel 1 | DETECTOR | Overi Book (OB) |
|-----------------|--------------|----------|-----------------|
| FREQUENCY RANGE | 30MHz ~ 1GHz | FUNCTION | Quasi-Peak (QP) |

| | 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 | 30.00 | 29.9 QP | 40.0 | -10.1 | 1.99 H | 314 | 45.50 | -15.60 |
| 2 | 109.54 | 28.3 QP | 43.5 | -15.2 | 1.49 H | 111 | 45.60 | -17.30 |
| 3 | 140.58 | 33.3 QP | 43.5 | -10.2 | 1.99 H | 276 | 47.70 | -14.40 |
| 4 | 208.48 | 29.8 QP | 43.5 | -13.7 | 1.49 H | 15 | 46.40 | -16.60 |
| 5 | 249.22 | 26.2 QP | 46.0 | -19.8 | 1.00 H | 117 | 40.60 | -14.40 |
| 6 | 516.94 | 29.2 QP | 46.0 | -16.8 | 1.49 H | 129 | 37.10 | -7.90 |
| | | ANTENNA | POLARITY | / & TEST DI | STANCE: V | ERTICAL A | T 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 | 43.58 | 33.4 QP | 40.0 | -6.6 | 1.00 V | 8 | 47.80 | -14.40 |
| 2 | 111.48 | 35.6 QP | 43.5 | -7.9 | 1.26 V | 237 | 52.70 | -17.10 |
| 3 | 125.06 | 28.6 QP | 43.5 | -14.9 | 1.00 V | 168 | 44.50 | -15.90 |
| 4 | 249.22 | 29.9 QP | 46.0 | -16.1 | 1.50 V | 248 | 44.30 | -14.40 |
| 5 | 507.24 | 26.5 QP | 46.0 | -19.5 | 1.00 V | 150 | 34.30 | -7.80 |
| 6 | 730.34 | 32.0 QP | 46.0 | -14.0 | 1.26 V | 322 | 36.10 | -4.10 |

REMARKS:

- 1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- 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



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

| Frequency (MHz) | Conducted Limit (dBuV) | | | | |
|-------------------|------------------------|---------|--|--|--|
| Frequency (wiriz) | Quasi-peak | Average | | | |
| 0.15 - 0.5 | 66 - 56 | 56 - 46 | | | |
| 0.50 - 5.0 | 56 | 46 | | | |
| 5.0 - 30.0 | 60 | 50 | | | |

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

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

| Description & Manufacturer | Model No. | Serial No. | Date Of Calibration | Due Date Of Calibration |
|---|--------------------------|----------------|---------------------|----------------------------|
| Test Receiver ROHDE & SCHWARZ | ESCS 30 | 100288 | Apr. 27, 2015 | Apr. 26, 2016 |
| RF signal cable (with 10dB PAD) Woken | 5D-FB | Cable-cond1-01 | Dec. 26, 2014 | Dec. 25, 2015 |
| LISN ROHDE & SCHWARZ (EUT) | ESH3-Z5 | 835239/001 | Feb. 26, 2015 | Feb. 25, 2016 |
| LISN ROHDE & SCHWARZ (Peripheral) | ESH3-Z5 | 100311 | Jul. 24, 2015 | Jul. 23, 2016 |
| Software ADT | BV ADT_Cond_ V7.3.7.3 | NA | 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 HwaYa Shielded Room 1.
- 3. The VCCI Site Registration No. is C-2040.

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4.2.3 Test Procedures

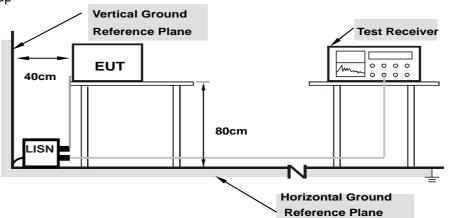
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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 150kHz to 30MHz was searched. Emission levels under (Limit 20dB) was not recorded.

NOTE: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

Same as 4.1.6.

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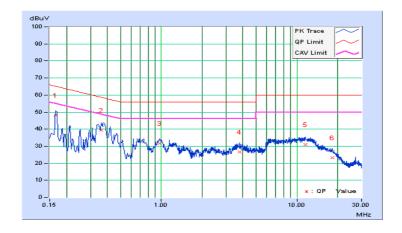
4.2.7 Test Results

| Phase Line | e (L) | Detector Function | Quasi-Peak (QP) / Average (AV) |
|------------|-------|-------------------|-----------------------------------|
|------------|-------|-------------------|-----------------------------------|

| | Erog Corr. | | Reading Value | | Emission Level | | Limit | | Margin | | |
|----|------------|--------|---------------|-----------|----------------|-----------|-------|-----------|--------|--------|--|
| No | Freq. | Factor | | [dB (uV)] | | [dB (uV)] | | [dB (uV)] | | (dB) | |
| | [MHz] | (dB) | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | |
| 1 | 0.16569 | 9.83 | 38.41 | 28.45 | 48.24 | 38.28 | 65.17 | 55.17 | -16.94 | -16.90 | |
| 2 | 0.36143 | 9.87 | 29.45 | 23.80 | 39.32 | 33.67 | 58.70 | 48.70 | -19.37 | -15.02 | |
| 3 | 0.97084 | 9.93 | 21.82 | 16.80 | 31.75 | 26.73 | 56.00 | 46.00 | -24.25 | -19.27 | |
| 4 | 3.79803 | 10.12 | 16.43 | 10.87 | 26.55 | 20.99 | 56.00 | 46.00 | -29.45 | -25.01 | |
| 5 | 11.54374 | 10.60 | 20.35 | 15.38 | 30.95 | 25.98 | 60.00 | 50.00 | -29.05 | -24.02 | |
| 6 | 18.25330 | 10.99 | 12.09 | 7.26 | 23.08 | 18.25 | 60.00 | 50.00 | -36.92 | -31.75 | |

REMARKS:

- 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
- 2. The emission levels of other frequencies were very low against the limit.
- 3. Margin value = Emission level Limit value
- 4. Correction factor = Insertion loss + Cable loss
- 5. Emission Level = Correction Factor + Reading Value.



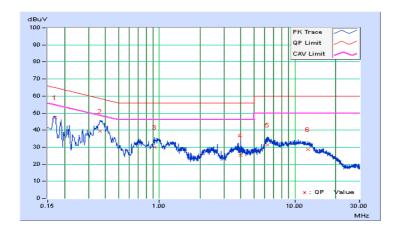


| Phase | Neutral (N) | i Delecior Elinciion | Quasi-Peak (QP) / Average (AV) |
|-------|-------------|----------------------|-----------------------------------|

| | Erog Corr. | | Reading Value | | Emission Level | | Limit | | Margin | |
|----|------------|--------|---------------|-------|----------------|-------|-----------|-------|--------|--------|
| No | Freq. | Factor | [dB (uV)] | | [dB (uV)] | | [dB (uV)] | | (dB) | |
| | [MHz] | (dB) | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. | Q.P. | AV. |
| 1 | 0.16955 | 9.82 | 37.73 | 28.92 | 47.55 | 38.74 | 64.98 | 54.98 | -17.43 | -16.24 |
| 2 | 0.36526 | 9.87 | 29.63 | 24.56 | 39.50 | 34.43 | 58.61 | 48.61 | -19.11 | -14.18 |
| 3 | 0.92831 | 9.92 | 20.19 | 15.50 | 30.11 | 25.42 | 56.00 | 46.00 | -25.89 | -20.58 |
| 4 | 3.99744 | 10.13 | 15.10 | 8.91 | 25.23 | 19.04 | 56.00 | 46.00 | -30.77 | -26.96 |
| 5 | 6.30825 | 10.26 | 21.11 | 16.22 | 31.37 | 26.48 | 60.00 | 50.00 | -28.63 | -23.52 |
| 6 | 12.53297 | 10.59 | 18.07 | 13.13 | 28.66 | 23.72 | 60.00 | 50.00 | -31.34 | -26.28 |

REMARKS:

- 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
- 2. The emission levels of other frequencies were very low against the limit.
- 3. Margin value = Emission level Limit value
- 4. Correction factor = Insertion loss + Cable loss
- 5. Emission Level = Correction Factor + Reading Value.





| 5 Pictures of Test Arrangements | | | | | | | |
|---|--|--|--|--|--|--|--|
| Please refer to the attached file (Test Setup Photo). | | | | | | | |
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Appendix - Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-2-26052180 Fax: 886-2-26051924 Tel: 886-3-6668565 Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232 Fax: 886-3-3270892

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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