

# FCC CERTIFICATION TEST REPORT

**REPORT NO.:** FD110823C01A  
**MODEL NO.:** F-08D  
**RECEIVED:** Aug. 23, 2011  
**TESTED:** Sep. 08 ~ Sep. 09, 2011 (Original test)  
Dec. 08, 2011 (GPS Mode)  
**ISSUED:** Dec. 09, 2011

**APPLICANT:** FUJITSU LIMITED

**ADDRESS:** 1-1, Kamikodanaka 4-chome, Nakahara-ku,  
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**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.)  
Ltd., Taoyuan Branch

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New  
Taipei City, Taiwan ( R.O.C )

**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei  
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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## RELEASE CONTROL RECORD

| ISSUE NO.        | REASON FOR CHANGE | DATE ISSUED   |
|------------------|-------------------|---------------|
| Original release | N/A               | Dec. 09, 2011 |

## 1. CERTIFICATION

**PRODUCT:** Mobile Phone

**MODEL:** F-08D

**BRAND:** FOMA

**APPLICANT:** FUJITSU LIMITED

**TEST SAMPLE:** ENGINEERING SAMPLE

**TESTED:** Sep. 08 ~ Sep. 09, 2011 (Original tested)  
Dec. 08, 2011 (GPS Mode)

**STANDARDS:** FCC Part 15, Subpart B, Class B

ANSI C63.4-2003

The above equipment (Model: F-08D) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Andrea Hsia , DATE: Dec. 09, 2011  
Andrea Hsia / Specialist

APPROVED BY : Gary Chang , DATE: Dec. 09, 2011  
Gary Chang / Technical Manager

## 2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

| Standard Section                | Test Type          | Result | Remark   |
|---------------------------------|--------------------|--------|--|
| FCC Part 15, Subpart B, Class B | Conducted Emission | PASS   | Meet the requirement of limit. Minimum passing margin is -14.72dB at 3.477MHz. |
|                                 | Radiated Emission  | PASS   | Meet the requirement of limit. Minimum passing margin is -3.0dB at 148.5MHz.   |

### 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       | UNCERTAINTY |
|---------------------|-----------------|-------------|
| Conducted emissions | 150kHz~30MHz    | 2.44 dB     |
| Radiated emissions  | 30MHz ~ 200MHz  | 3.34 dB     |
|                     | 200MHz ~1000MHz | 3.35 dB     |
|                     | 1GHz ~ 18GHz    | 2.26 dB     |
|                     | 18GHz ~ 40GHz   | 1.94 dB     |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT

|                          |   |   |
|--------------------------|---|---|
| <b>EUT</b>               | Mobile Phone                                |   |
| <b>MODEL NO.</b>         | F-08D                                       |   |
| <b>POWER SUPPLY</b>      | 3.7Vdc (Li-ion battery)<br>5.4Vdc (Adapter) |   |
| <b>MODULATION TYPE</b>   | <b>WLAN</b>                                 | CCK, DQPSK, DBPSK for DSSS<br>64QAM, 16QAM, QPSK, BPSK for OFDM |
|                          | <b>BLUETOOTH</b>                            | GFSK, 1/4-DQPSK, 8DPSK  |
|                          | <b>RFID</b>                                 | ASK   |
|                          | <b>GSM, GPRS</b>                            | GMSK  |
|                          | <b>WCDMA</b>                                | BPSK  |
|                          | <b>GPS</b>                                  | C/A code  |
| <b>FREQUENCY RANGE</b>   | <b>WLAN</b>                                 | 2412 ~ 2462MHz  |
|                          | <b>BLUETOOTH</b>                            | 2402 ~ 2480MHz  |
|                          | <b>RFID</b>                                 | 13.56MHz  |
|                          | <b>WCDMA 850</b>                            | 826.4MHz ~ 846.6MHz   |
|                          | <b>GSM 1900, GPRS 1900</b>                  | 1850.2MHz ~ 1909.8MHz   |
|                          | <b>GPS</b>                                  | 1575.42 MHz   |
| <b>ANTENNA TYPE</b>      | <b>WLAN</b>                                 | $\lambda/4$ Monopole Antenna with -3.2dBi gain                  |
|                          | <b>BLUETOOTH</b>                            | $\lambda/4$ Monopole Antenna with -3.2dBi gain                  |
|                          | <b>RFID</b>                                 | Loop antenna  |
|                          | <b>WCDMA 850</b>                            | $\lambda/4$ Monopole antenna with -4.8dBi gain                  |
|                          | <b>GSM 1900, GPRS 1900</b>                  | $\lambda/4$ Monopole antenna with -1.5dBi gain                  |
|                          | <b>GPS</b>                                  | $\lambda/4$ Monopole antenna                                    |
| <b>DATA CABLE</b>        | NA  |   |
| <b>I/O PORTS</b>         | Refer to user's manual                      |   |
| <b>ACCESSORY DEVICES</b> | Battery                                     |   |

#### NOTE:

- This report is issued as a supplementary report of the original BV ADT report No.: FD110823C01. The differences are changing model name and adding GPS function. Therefore, we tested GPS mode and presented the test result in the test report.
- The EUT use the following internal Li-ion battery:

|               |                        |
|---------------|------------------------|
| <b>BRAND</b>  | Fujitsu Limited        |
| <b>MODEL</b>  | F24                    |
| <b>RATING</b> | 3.7Vdc, 1400mAh, 5.2Wh |

3. The following accessories are for support units only.

| PRODUCT    | BRAND | DESCRIPTION   |
|------------|-------|---|
| Adapter    | SMK   | I/P: 100-240Vac, 50-60Hz, 0.12A<br>O/P: 5.4Vdc, 700mA |
| HDMI cable | Molex | 1.5m non-shielded cable without core                  |
| USB cable  | NA    | 0.8m non-shielded cable without core                  |

4. SW: R13.1.

5. HW: V2.1.0.

6. IMEI Code: 355079040012606, 355079040023561(GPS).

7. The EUT provides one completed transmitter and one receiver for WLAN.

| MODULATION MODE        | TX FUNCTION |
|------------------------|-------------|
| <b>802.11b</b>         | 1TX         |
| <b>802.11g</b>         | 1TX         |
| <b>802.11n (20MHz)</b> | 1TX         |

8. 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

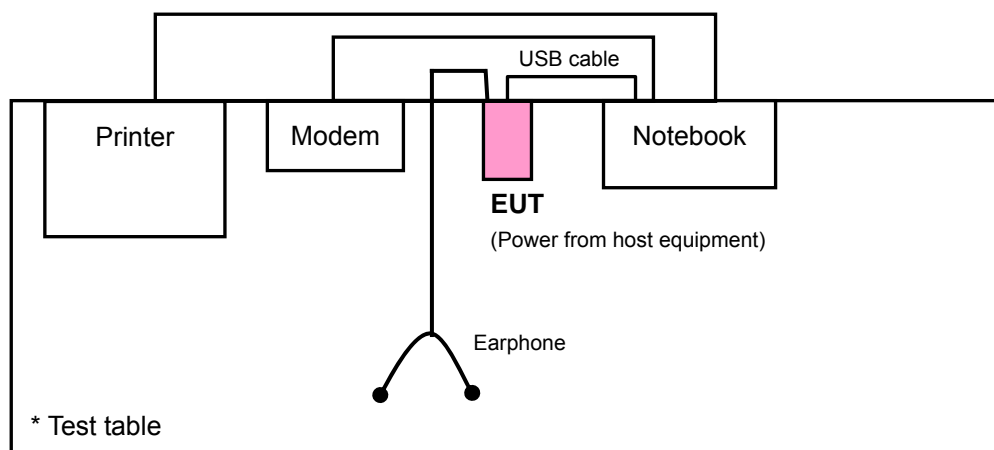
Test modes are presented in the report as below.

| TEST MODE | DESCRIPTION                             |
|-----------|---|
| A         | USB R/W + Idle mode: WiFi/ BT/ WCDMA850 |
| B         | USB R/W + Idle mode: WiFi/ BT/ GSM1900  |
| C         | HDMI + Idle mode: WiFi/ BT/ WCDMA850    |
| D         | HDMI + Idle mode: WiFi/ BT/ GSM1900     |
| E         | GPS Mode                                |

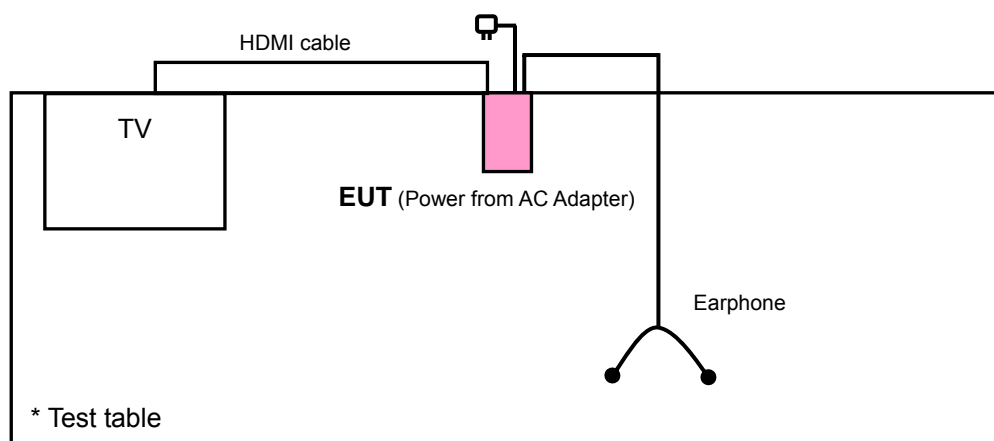
\*For radiated emission test, the EUT has been pre-tested X, Y & Z axis, found USB R/W mode & GPS Mode X axis is the worst mode and for HDMI mode Y axis is the worst mode.

### 3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

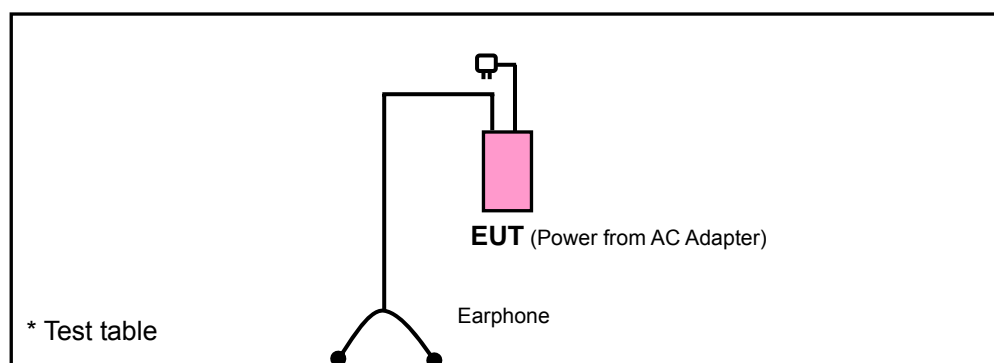
#### TEST MODE A & B



#### TEST MODE C & D



#### TEST MODE E





### 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.

| NO. | PRODUCT  | BRAND | MODEL NO. | SERIAL NO.            | FCC ID     |
|-----|----------|-------|-----------|-----------------------|------------|
| 1   | NOTEBOOK | HP    | n6000     | CNU4110Y6Q            | NA         |
| 2   | MODEM    | ACEEX | 1414V/3   | 0401008270            | IFAXDM1414 |
| 3   | PRINTER  | HP    | hp-1015   | Q2462A<br>-CNFG149502 | NA         |
| 4   | TV       | SANYO | SMT-32KE5 | NA                    | NA         |

| NO. | SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS       |
|-----|---|
| 1   | 0.8m USB cable.   |
| 2   | 1.2m braid shielded wire, DB25 & DB9 connector, w/o core. |
| 3   | 1.8m braid shielded wire, DB25 connector, w/o core.       |
| 4   | 1.5m HDMI cable.  |

**NOTE:**

1. All power cords of the above support units are non shielded (1.8m).
2. The USB cable & HDMI cable were supplied from the client.

### 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 B, Class B**

**ANSI C63.4-2003**

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

## 4. TEST TYPES AND RESULTS

### 4.1 RADIATED EMISSION MEASUREMENT

#### 4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.109 as following:

| FREQUENCIES (MHz) | FIELD STRENGTH (microvolts/meter) | MEASUREMENT DISTANCE (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 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. 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.

#### 4.1.2 TEST INSTRUMENTS

##### FOR TEST MODE A, B, C & D

| DESCRIPTION & MANUFACTURER              | MODEL NO.                    | SERIAL NO.  | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|---|------------------------------|-------------|---------------------|-------------------------|
| Test Receiver<br>ROHDE & SCHWARZ        | ESIB7                        | 100212      | Aug. 02, 2011       | Aug. 01, 2012           |
| Spectrum Analyzer<br>ROHDE & SCHWARZ    | FSP 40                       | 100041      | Jul. 21, 2011       | Jul. 20, 2012           |
| BILOG Antenna<br>SCHWARZBECK            | VULB9168                     | 9168-160    | Apr. 13, 2011       | Apr. 12, 2012           |
| HORN Antenna<br>SCHWARZBECK             | 9120D                        | 209         | Aug. 25, 2011       | Aug. 24, 2012           |
| HORN Antenna<br>SCHWARZBECK             | BBHA 9170                    | BBHA9170243 | Dec. 27, 2010       | Dec. 26, 2011           |
| Preamplifier<br>Agilent                 | 8447D                        | 2944A10633  | Nov. 02, 2010       | Nov. 01, 2011           |
| Preamplifier<br>Agilent                 | 8449B                        | 3008A01964  | Nov. 02, 2010       | Nov. 01, 2011           |
| RF signal cable<br>HUBER+SUHNNER        | SUCOFLEX 104                 | 295014/4    | Aug. 19, 2011       | Aug. 18, 2012           |
| RF signal cable<br>HUBER+SUHNNER        | SUCOFLEX 104                 | 12738/6     | Aug. 19, 2011       | Aug. 18, 2012           |
| Software<br>ADT.                        | ADT_Radiated_<br>V7.6.15.9.2 | NA          | NA                  | NA                      |
| Antenna Tower<br>inn-co GmbH            | MA 4000                      | 013303      | NA                  | NA                      |
| Antenna Tower Controller<br>inn-co GmbH | CO2000                       | 017303      | NA                  | NA                      |
| Turn Table<br>ADT.                      | TT100.                       | TT93021703  | NA                  | NA                      |
| Turn Table Controller<br>ADT.           | SC100.                       | SC93021703  | 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 3.
  3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
  4. The FCC Site Registration No. is 988962.
  5. The IC Site Registration No. is IC 7450F-3.

# FOR TEST MODE E

| DESCRIPTION & MANUFACTURER              | MODEL NO.                    | SERIAL NO.  | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|---|------------------------------|-------------|---------------------|-------------------------|
| Test Receiver<br>ROHDE & SCHWARZ        | ESIB7                        | 100212      | Aug. 02, 2011       | Aug. 01, 2012           |
| Spectrum Analyzer<br>ROHDE & SCHWARZ    | FSP 40                       | 100041      | Jul. 21, 2011       | Jul. 20, 2012           |
| BILOG Antenna<br>SCHWARZBECK            | VULB9168                     | 9168-160    | Apr. 13, 2011       | Apr. 12, 2012           |
| HORN Antenna<br>SCHWARZBECK             | 9120D                        | 209         | Aug. 25, 2011       | Aug. 24, 2012           |
| HORN Antenna<br>SCHWARZBECK             | BBHA 9170                    | BBHA9170243 | Dec. 27, 2010       | Dec. 26, 2011           |
| Preamplifier<br>Agilent                 | 8447D                        | 2944A10633  | Oct. 29, 2011       | Oct. 28, 2012           |
| Preamplifier<br>Agilent                 | 8449B                        | 3008A01964  | Oct. 29, 2011       | Oct. 28, 2012           |
| RF signal cable<br>HUBER+SUHNNER        | SUCOFLEX 104                 | 295014/4    | Aug. 19, 2011       | Aug. 18, 2012           |
| RF signal cable<br>HUBER+SUHNNER        | SUCOFLEX 104                 | 12738/6     | Aug. 19, 2011       | Aug. 18, 2012           |
| Software<br>ADT.                        | ADT_Radiated_<br>V7.6.15.9.2 | NA          | NA                  | NA                      |
| Antenna Tower<br>inn-co GmbH            | MA 4000                      | 013303      | NA                  | NA                      |
| Antenna Tower Controller<br>inn-co GmbH | CO2000                       | 017303      | NA                  | NA                      |
| Turn Table<br>ADT.                      | TT100.                       | TT93021703  | NA                  | NA                      |
| Turn Table Controller<br>ADT.           | SC100.                       | SC93021703  | 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 3.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The FCC Site Registration No. is 988962.
5. The IC Site Registration No. is IC 7450F-3.

#### 4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. 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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

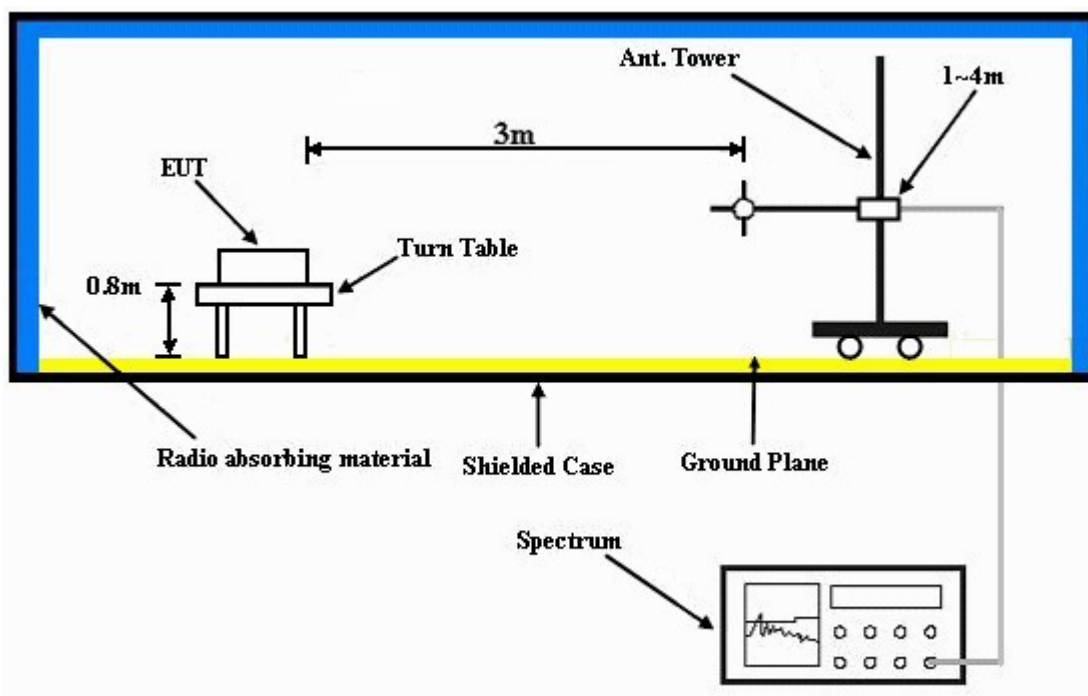
**NOTE:**

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

#### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.1.5 TEST SETUP



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

#### 4.1.6 EUT OPERATING CONDITIONS

##### TEST MODE A & B

- Connected the EUT to a notebook and placed on a testing table.
- Set WiFi/ Bluetooth/ WWAN in idle mode.
- The notebook executes EMC TEST tool to read data and write data to microSD of EUT via USB cable.
- The necessary accessories enable the system in full functions.

##### TEST MODE C & D

- Connected the EUT to a notebook and placed on a testing table.
- Set WiFi/ Bluetooth/ WWAN in idle mode.
- EUT send video stream to TV via HDMI cable.
- The necessary accessories enable the system in full functions.

##### TEST MODE E

Enable EUT under receiving condition continuously at specific channel frequency.

#### 4.1.7 TEST RESULTS

##### ABOVE 1GHz DATA :

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |                           |
|--------------------------|-----------------|--------------------|---------------------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | 1 ~ 12.5GHz               |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Peak (PK)<br>Average (AV) |
| TESTED BY                | David Huang     | TEST MODE          | A                         |

| 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   | 1670.00     | 46.8 PK                 | 74.0           | -27.2       | 1.00 H             | 113                  | 18.70            | 28.10                    |
| 2   | 1670.00     | 34.6 AV                 | 54.0           | -19.4       | 1.00 H             | 113                  | 6.50             | 28.10                    |
| 3   | 1865.00     | 44.4 PK                 | 74.0           | -29.6       | 1.00 H             | 150                  | 16.30            | 28.10                    |
| 4   | 1865.00     | 33.8 AV                 | 54.0           | -20.2       | 1.00 H             | 150                  | 5.70             | 28.10                    |
| 5   | 2300.00     | 44.1 PK                 | 74.0           | -29.9       | 1.00 H             | 168                  | 16.00            | 28.10                    |
| 6   | 2300.00     | 34.4 AV                 | 54.0           | -19.6       | 1.00 H             | 168                  | 6.30             | 28.10                    |
| 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   | 1670.00     | 46.4 PK                 | 74.0           | -27.6       | 1.00 V             | 154                  | 18.30            | 28.10                    |
| 2   | 1670.00     | 34.4 AV                 | 54.0           | -19.6       | 1.00 V             | 154                  | 6.30             | 28.10                    |
| 3   | 1865.00     | 44.0 PK                 | 74.0           | -30.0       | 1.00 V             | 291                  | 15.90            | 28.10                    |
| 4   | 1865.00     | 33.4 AV                 | 54.0           | -20.6       | 1.00 V             | 291                  | 5.30             | 28.10                    |
| 5   | 2300.00     | 44.8 PK                 | 74.0           | -29.2       | 1.00 V             | 142                  | 16.70            | 28.10                    |
| 6   | 2300.00     | 34.1 AV                 | 54.0           | -19.9       | 1.00 V             | 142                  | 6.00             | 28.10                    |

- 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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |                           |
|--------------------------|-----------------|--------------------|---------------------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | 1 ~ 12.5GHz               |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Peak (PK)<br>Average (AV) |
| TESTED BY                | David Huang     | TEST MODE          | B                         |

| 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   | 1670.00     | 46.1 PK                 | 74.0           | -27.9       | 1.00 H             | 145                  | 18.00            | 28.10                    |
| 2   | 1670.00     | 34.2 AV                 | 54.0           | -19.8       | 1.00 H             | 145                  | 6.10             | 28.10                    |
| 3   | 1865.00     | 44.1 PK                 | 74.0           | -29.9       | 1.00 H             | 177                  | 16.00            | 28.10                    |
| 4   | 1865.00     | 33.3 AV                 | 54.0           | -20.7       | 1.00 H             | 177                  | 5.20             | 28.10                    |
| 5   | 2300.00     | 43.20 PK                | 74.0           | -30.8       | 1.00 H             | 198                  | 15.10            | 28.10                    |
| 6   | 2300.00     | 33.1 AV                 | 54.0           | -20.9       | 1.00 H             | 198                  | 5.00             | 28.10                    |
| 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   | 1670.00     | 44.5 PK                 | 74.0           | -29.5       | 1.00 V             | 101                  | 16.40            | 28.10                    |
| 2   | 1670.00     | 32.1 AV                 | 54.0           | -21.9       | 1.00 V             | 101                  | 4.00             | 28.10                    |
| 3   | 1865.00     | 43.0 PK                 | 74.0           | -31.0       | 1.00 V             | 121                  | 14.90            | 28.10                    |
| 4   | 1865.00     | 32.2 AV                 | 54.0           | -21.8       | 1.00 V             | 121                  | 4.10             | 28.10                    |
| 5   | 2300.00     | 42.1 PK                 | 74.0           | -31.9       | 1.00 V             | 135                  | 14.00            | 28.10                    |
| 6   | 2300.00     | 32.7 AV                 | 54.0           | -21.3       | 1.00 V             | 135                  | 4.60             | 28.10                    |

**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.



| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |                           |
|--------------------------|-----------------|--------------------|---------------------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | 1 ~ 12.5GHz               |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Peak (PK)<br>Average (AV) |
| TESTED BY                | David Huang     | TEST MODE          | C                         |

| 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   | 1332.00     | 46.7 PK                 | 74.0           | -27.3       | 1.00 H             | 192                  | 18.60            | 28.10                    |
| 2   | 1332.00     | 32.4 AV                 | 54.0           | -21.6       | 1.00 H             | 192                  | 4.30             | 28.10                    |
| 3   | 1628.00     | 43.4 PK                 | 74.0           | -30.6       | 1.00 H             | 143                  | 15.30            | 28.10                    |
| 4   | 1628.00     | 33.6 AV                 | 54.0           | -20.4       | 1.00 H             | 143                  | 5.50             | 28.10                    |
| 5   | 2220.00     | 45.6 PK                 | 74.0           | -28.4       | 1.00 H             | 233                  | 17.50            | 28.10                    |
| 6   | 2220.00     | 32.6 AV                 | 54.0           | -21.4       | 1.00 H             | 233                  | 4.50             | 28.10                    |
| 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   | 1332.00     | 45.1 PK                 | 74.0           | -28.9       | 1.00 V             | 244                  | 17.00            | 28.10                    |
| 2   | 1332.00     | 31.2 AV                 | 54.0           | -22.8       | 1.00 V             | 244                  | 3.10             | 28.10                    |
| 3   | 1628.00     | 42.2 PK                 | 74.0           | -31.8       | 1.00 V             | 165                  | 14.10            | 28.10                    |
| 4   | 1628.00     | 32.3 AV                 | 54.0           | -21.7       | 1.00 V             | 165                  | 4.20             | 28.10                    |
| 5   | 2220.00     | 44.2 PK                 | 74.0           | -29.8       | 1.00 V             | 129                  | 16.10            | 28.10                    |
| 6   | 2220.00     | 31.3 AV                 | 54.0           | -22.7       | 1.00 V             | 129                  | 3.20             | 28.10                    |

**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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |                           |
|--------------------------|-----------------|--------------------|---------------------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | 1 ~ 12.5GHz               |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Peak (PK)<br>Average (AV) |
| TESTED BY                | David Huang     | TEST MODE          | D                         |

| 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   | 1332.00     | 47.2 PK                 | 74.0           | -26.8       | 1.00 H             | 146                  | 19.10            | 28.10                    |
| 2   | 1332.00     | 34.1 AV                 | 54.0           | -19.9       | 1.00 H             | 146                  | 6.00             | 28.10                    |
| 3   | 1628.00     | 44.9 PK                 | 74.0           | -29.1       | 1.00 H             | 125                  | 16.80            | 28.10                    |
| 4   | 1628.00     | 34.5 AV                 | 54.0           | -19.5       | 1.00 H             | 125                  | 6.40             | 28.10                    |
| 5   | 2220.00     | 46.8 PK                 | 74.0           | -27.2       | 1.00 H             | 176                  | 18.70            | 28.10                    |
| 6   | 2220.00     | 33.9 AV                 | 54.0           | -20.1       | 1.00 H             | 176                  | 5.80             | 28.10                    |
| 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   | 1332.00     | 45.3 PK                 | 74.0           | -28.7       | 1.00 V             | 163                  | 17.20            | 28.10                    |
| 2   | 1332.00     | 32.5 AV                 | 54.0           | -21.5       | 1.00 V             | 163                  | 4.40             | 28.10                    |
| 3   | 1628.00     | 44.0 PK                 | 74.0           | -30.0       | 1.00 V             | 197                  | 15.90            | 28.10                    |
| 4   | 1628.00     | 33.5 AV                 | 54.0           | -20.5       | 1.00 V             | 197                  | 5.40             | 28.10                    |
| 5   | 2220.00     | 46.0 PK                 | 74.0           | -28.0       | 1.00 V             | 235                  | 17.90            | 28.10                    |
| 6   | 2220.00     | 33.4 AV                 | 54.0           | -20.6       | 1.00 V             | 235                  | 5.30             | 28.10                    |

**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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |                           |
|--------------------------|-----------------|--------------------|---------------------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60 Hz   | FREQUENCY RANGE    | 1 ~ 25GHz                 |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Peak (PK)<br>Average (AV) |
| TESTED BY                | Kay Wu          | TEST MODE          | E                         |

| 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   | 1000.00     | 37.0 PK                 | 74.0           | -37.0       | 1.00 H             | 180                  | 9.70             | 27.30                    |
| 2   | 1000.00     | 23.9 AV                 | 54.0           | -30.1       | 1.00 H             | 180                  | -3.40            | 27.30                    |
| 3   | 1200.00     | 36.7 PK                 | 74.0           | -37.3       | 1.00 H             | 183                  | 8.80             | 27.90                    |
| 4   | 1200.00     | 23.2 AV                 | 54.0           | -30.8       | 1.00 H             | 183                  | -4.70            | 27.90                    |
| 5   | 1400.00     | 36.7 PK                 | 74.0           | -37.3       | 1.00 H             | 58                   | 8.30             | 28.40                    |
| 6   | 1400.00     | 24.3 AV                 | 54.0           | -29.7       | 1.00 H             | 58                   | -4.10            | 28.40                    |
| 7   | 1575.42     | 37.4 PK                 | 74.0           | -36.6       | 1.00 H             | 196                  | 8.50             | 28.90                    |
| 8   | 1575.42     | 24.7 AV                 | 54.0           | -29.3       | 1.00 H             | 196                  | -4.20            | 28.90                    |
| 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   | 1000.00     | 46.3 PK                 | 74.0           | -27.7       | 1.00 V             | 284                  | 19.00            | 27.30                    |
| 2   | 1000.00     | 33.2 AV                 | 54.0           | -20.8       | 1.00 V             | 284                  | 5.90             | 27.30                    |
| 3   | 1200.00     | 44.6 PK                 | 74.0           | -29.4       | 1.00 V             | 231                  | 16.70            | 27.90                    |
| 4   | 1200.00     | 32.3 AV                 | 54.0           | -21.7       | 1.00 V             | 231                  | 4.40             | 27.90                    |
| 5   | 1400.00     | 44.5 PK                 | 74.0           | -29.5       | 1.00 V             | 250                  | 16.10            | 28.40                    |
| 6   | 1400.00     | 32.3 AV                 | 54.0           | -21.7       | 1.00 V             | 250                  | 3.90             | 28.40                    |
| 7   | 1575.42     | 44.5 PK                 | 74.0           | -29.5       | 1.00 V             | 150                  | 15.60            | 28.90                    |
| 8   | 1575.42     | 31.9 AV                 | 54.0           | -22.1       | 1.00 V             | 150                  | 3.00             | 28.90                    |

**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.

# BELOW 1GHz WORST-CASE DATA :

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |               |
|--------------------------|-----------------|--------------------|---------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | Below 1000MHz |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Quasi-Peak    |
| TESTED BY                | David Huang     | TEST MODE          | A             |

| 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   | 101.84      | 37.8 QP                 | 43.5           | -5.7        | 2.00 H             | 109                  | 27.40            | 10.40                    |
| 2   | 199.05      | 26.5 QP                 | 43.5           | -17.0       | 1.00 H             | 52                   | 16.00            | 10.50                    |
| 3   | 307.93      | 27.0 QP                 | 46.0           | -19.0       | 1.50 H             | 127                  | 11.90            | 15.10                    |
| 4   | 331.26      | 29.1 QP                 | 46.0           | -16.9       | 2.00 H             | 190                  | 13.40            | 15.70                    |
| 5   | 480.97      | 31.0 QP                 | 46.0           | -15.0       | 1.50 H             | 61                   | 11.30            | 19.70                    |
| 6   | 521.81      | 30.0 QP                 | 46.0           | -16.0       | 2.00 H             | 34                   | 9.30             | 20.70                    |
| 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   | 99.89       | 33.3 QP                 | 43.5           | -10.2       | 2.00 V             | 10                   | 23.10            | 10.20                    |
| 2   | 191.28      | 25.5 QP                 | 43.5           | -18.0       | 1.00 V             | 253                  | 14.20            | 11.30                    |
| 3   | 331.26      | 29.2 QP                 | 46.0           | -16.8       | 1.50 V             | 28                   | 13.50            | 15.70                    |
| 4   | 399.31      | 26.1 QP                 | 46.0           | -19.9       | 1.50 V             | 121                  | 8.70             | 17.40                    |
| 5   | 521.81      | 33.1 QP                 | 46.0           | -12.9       | 1.00 V             | 67                   | 12.40            | 20.70                    |
| 6   | 665.68      | 33.3 QP                 | 46.0           | -12.7       | 1.00 V             | 217                  | 9.80             | 23.50                    |

- 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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |               |
|--------------------------|-----------------|--------------------|---------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | Below 1000MHz |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Quasi-Peak    |
| TESTED BY                | David Huang     | TEST MODE          | B             |

| 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   | 101.84      | 37.8 QP                 | 43.5           | -5.7        | 2.00 H             | 109                  | 27.40            | 10.40                    |
| 2   | 331.26      | 29.1 QP                 | 46.0           | -16.9       | 2.00 H             | 190                  | 13.40            | 15.70                    |
| 3   | 480.97      | 31.0 QP                 | 46.0           | -15.0       | 1.50 H             | 61                   | 11.30            | 19.70                    |
| 4   | 500.42      | 36.5 QP                 | 46.0           | -9.5        | 1.50 H             | 316                  | 16.30            | 20.20                    |
| 5   | 667.63      | 31.5 QP                 | 46.0           | -14.5       | 2.00 H             | 97                   | 7.90             | 23.60                    |
| 6   | 830.95      | 40.5 QP                 | 46.0           | -5.5        | 2.00 H             | 187                  | 14.70            | 25.80                    |
| 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   | 101.84      | 33.2 QP                 | 43.5           | -10.3       | 2.00 V             | 7                    | 22.80            | 10.40                    |
| 2   | 232.11      | 27.0 QP                 | 46.0           | -19.0       | 1.00 V             | 46                   | 15.00            | 12.00                    |
| 3   | 331.26      | 29.2 QP                 | 46.0           | -16.8       | 1.50 V             | 28                   | 13.50            | 15.70                    |
| 4   | 500.42      | 36.6 QP                 | 46.0           | -9.4        | 1.00 V             | 163                  | 16.40            | 20.20                    |
| 5   | 665.68      | 33.3 QP                 | 46.0           | -12.7       | 1.00 V             | 217                  | 9.80             | 23.50                    |
| 6   | 832.89      | 39.6 QP                 | 46.0           | -6.4        | 1.00 V             | 10                   | 13.80            | 25.80                    |

**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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |               |
|--------------------------|-----------------|--------------------|---------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | Below 1000MHz |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Quasi-Peak    |
| TESTED BY                | David Huang     | TEST MODE          | C             |

| 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   | 148.50      | 38.5 QP                 | 43.5           | -5.0        | 2.00 H             | 289                  | 24.10            | 14.40                    |
| 2   | 267.10      | 33.8 QP                 | 46.0           | -12.2       | 1.25 H             | 13                   | 20.20            | 13.60                    |
| 3   | 296.27      | 34.9 QP                 | 46.0           | -11.1       | 1.25 H             | 295                  | 20.10            | 14.80                    |
| 4   | 372.09      | 28.9 QP                 | 46.0           | -17.1       | 2.00 H             | 259                  | 12.20            | 16.70                    |
| 5   | 519.86      | 31.8 QP                 | 46.0           | -14.2       | 1.25 H             | 121                  | 11.20            | 20.60                    |
| 6   | 609.30      | 33.7 QP                 | 46.0           | -12.3       | 1.25 H             | 316                  | 11.10            | 22.60                    |
| 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   | 148.50      | 40.5 QP                 | 43.5           | -3.0        | 1.00 V             | 322                  | 26.10            | 14.40                    |
| 2   | 173.78      | 33.9 QP                 | 43.5           | -9.6        | 1.00 V             | 253                  | 20.90            | 13.00                    |
| 3   | 296.27      | 33.1 QP                 | 46.0           | -12.9       | 2.00 V             | 307                  | 18.30            | 14.80                    |
| 4   | 372.09      | 29.8 QP                 | 46.0           | -16.2       | 1.25 V             | 325                  | 13.10            | 16.70                    |
| 5   | 519.86      | 35.1 QP                 | 46.0           | -10.9       | 1.25 V             | 28                   | 14.50            | 20.60                    |
| 6   | 595.69      | 32.7 QP                 | 46.0           | -13.3       | 1.00 V             | 298                  | 10.40            | 22.30                    |

**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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |               |
|--------------------------|-----------------|--------------------|---------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60Hz    | FREQUENCY RANGE    | Below 1000MHz |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Quasi-Peak    |
| TESTED BY                | David Huang     | TEST MODE          | D             |

| 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   | 148.50      | 37.9 QP                 | 43.5           | -5.6        | 1.25 H             | 268                  | 23.50            | 14.40                    |
| 2   | 272.94      | 35.9 QP                 | 46.0           | -10.1       | 1.00 H             | 10                   | 22.00            | 13.90                    |
| 3   | 296.27      | 35.4 QP                 | 46.0           | -10.6       | 1.00 H             | 1                    | 20.60            | 14.80                    |
| 4   | 372.09      | 31.1 QP                 | 46.0           | -14.9       | 1.00 H             | 70                   | 14.40            | 16.70                    |
| 5   | 445.98      | 30.2 QP                 | 46.0           | -15.8       | 1.00 H             | 214                  | 11.50            | 18.70                    |
| 6   | 519.86      | 33.5 QP                 | 46.0           | -12.5       | 2.00 H             | 160                  | 12.90            | 20.60                    |
| 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   | 148.50      | 40.5 QP                 | 43.5           | -3.0        | 1.00 V             | 265                  | 26.10            | 14.40                    |
| 2   | 267.10      | 30.0 QP                 | 46.0           | -16.0       | 1.00 V             | 103                  | 16.40            | 13.60                    |
| 3   | 296.27      | 33.9 QP                 | 46.0           | -12.1       | 1.25 V             | 199                  | 19.10            | 14.80                    |
| 4   | 445.98      | 30.4 QP                 | 46.0           | -15.6       | 1.25 V             | 307                  | 11.70            | 18.70                    |
| 5   | 519.86      | 31.4 QP                 | 46.0           | -14.6       | 1.00 V             | 10                   | 10.80            | 20.60                    |
| 6   | 591.80      | 33.9 QP                 | 46.0           | -12.1       | 1.00 V             | 301                  | 11.70            | 22.20                    |

**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.

| EUT TEST CONDITION       |                 | MEASUREMENT DETAIL |               |
|--------------------------|-----------------|--------------------|---------------|
| INPUT POWER (SYSTEM)     | 120Vac, 60 Hz   | FREQUENCY RANGE    | Below 1000MHz |
| ENVIRONMENTAL CONDITIONS | 25deg. C, 65%RH | DETECTOR FUNCTION  | Quasi-Peak    |
| TESTED BY                | Kay Wu          | TEST MODE          | E             |

| 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   | 49.34       | 17.3 QP                 | 40.0           | -22.7       | 2.50 H             | 247                  | 2.90             | 14.40                    |
| 2   | 136.84      | 23.6 QP                 | 43.5           | -19.9       | 2.00 H             | 88                   | 9.80             | 13.80                    |
| 3   | 247.66      | 17.9 QP                 | 46.0           | -28.1       | 2.50 H             | 292                  | 5.00             | 12.90                    |
| 4   | 385.70      | 18.6 QP                 | 46.0           | -27.4       | 3.50 H             | 196                  | 1.30             | 17.30                    |
| 5   | 638.46      | 23.5 QP                 | 46.0           | -22.5       | 1.50 H             | 10                   | -0.10            | 23.60                    |
| 6   | 832.89      | 26.4 QP                 | 46.0           | -19.6       | 2.50 H             | 205                  | -0.20            | 26.60                    |
| 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   | 51.29       | 24.7 QP                 | 40.0           | -15.3       | 1.00 V             | 49                   | 10.40            | 14.30                    |
| 2   | 140.72      | 24.7 QP                 | 43.5           | -18.8       | 1.00 V             | 109                  | 10.60            | 14.10                    |
| 3   | 286.55      | 15.2 QP                 | 46.0           | -30.8       | 3.50 V             | 163                  | 0.70             | 14.50                    |
| 4   | 587.91      | 23.4 QP                 | 46.0           | -22.6       | 3.50 V             | 355                  | 0.80             | 22.60                    |
| 5   | 733.73      | 24.2 QP                 | 46.0           | -21.8       | 4.00 V             | 286                  | -1.00            | 25.20                    |
| 6   | 900.94      | 28.1 QP                 | 46.0           | -17.9       | 2.50 V             | 235                  | 0.40             | 27.70                    |

**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 OF EMISSION (MHz) | CONDUCTED LIMIT (dB $\mu$ 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. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

### 4.2.2 TEST INSTRUMENTS

#### FOR TEST MODE A, B, C & D

| DESCRIPTION & MANUFACTURER       | MODEL NO.        | SERIAL NO.     | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|----------------------------------|------------------|----------------|---------------------|-------------------------|
| Test Receiver<br>ROHDE & SCHWARZ | ESCS30           | 100289         | Nov. 23, 2010       | Nov. 22, 2011           |
| RF signal cable<br>Woken         | 5D-FB            | Cable-HYCO2-01 | Dec. 30, 2010       | Dec. 29, 2011           |
| LISN<br>ROHDE & SCHWARZ          | ESH2-Z5          | 100100         | Jan. 06, 2011       | Jan. 05, 2012           |
| LISN<br>ROHDE & SCHWARZ          | ESH3-Z5          | 100312         | Jul. 07, 2011       | Jul. 06, 2012           |
| V-LISN<br>SCHWARZBECK            | NNBL 8226-2      | 8226-142       | Jun. 30, 2011       | Jun. 29, 2012           |
| LISN<br>ROHDE & SCHWARZ          | ENV216           | 100072         | Jun. 10, 2011       | Jun. 09, 2012           |
| Software<br>ADT                  | ADT_Conc_ V7.3.7 | 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 2.
  3. The VCCI Site Registration No. is C-2047.

# FOR TEST MODE E

| DESCRIPTION & MANUFACTURER       | MODEL NO.        | SERIAL NO.     | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|----------------------------------|------------------|----------------|---------------------|-------------------------|
| Test Receiver<br>ROHDE & SCHWARZ | ESCS30           | 100291         | Nov. 23, 2011       | Nov. 22, 2012           |
| RF signal cable<br>Woken         | 5D-FB            | Cable-HYC01-01 | Dec. 30, 2010       | Dec. 29, 2011           |
| LISN<br>ROHDE & SCHWARZ          | ESH3-Z5          | 100312         | Jul. 07, 2011       | Jul. 06, 2012           |
| LISN<br>ROHDE & SCHWARZ          | ESH2-Z5          | 100100         | Jan. 06, 2011       | Jan. 05, 2012           |
| LISN<br>ROHDE & SCHWARZ          | ESH3-Z5          | 835239/001     | Feb. 22, 2011       | Feb. 21, 2012           |
| V-LISN<br>SCHWARZBECK            | NNBL 8226-2      | 8226-142       | Jun. 30, 2011       | Jun. 29, 2012           |
| LISN<br>ROHDE & SCHWARZ          | ENV216           | 100072         | Jun. 10, 2011       | Jun. 09, 2012           |
| Software<br>ADT                  | ADT_Conf_ V7.3.7 | 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.

#### 4.2.3 TEST PROCEDURES

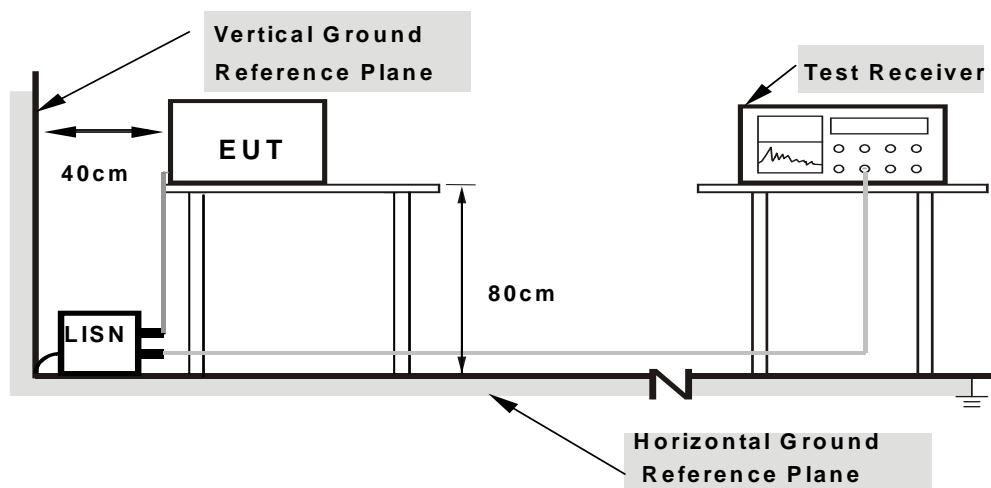
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling 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:** All modes of operation were investigated and the worst-case emissions are reported.

#### 4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

#### 4.2.5 TEST SETUP



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

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

#### 4.2.6 EUT OPERATING CONDITIONS

Same as item 4.1.6.

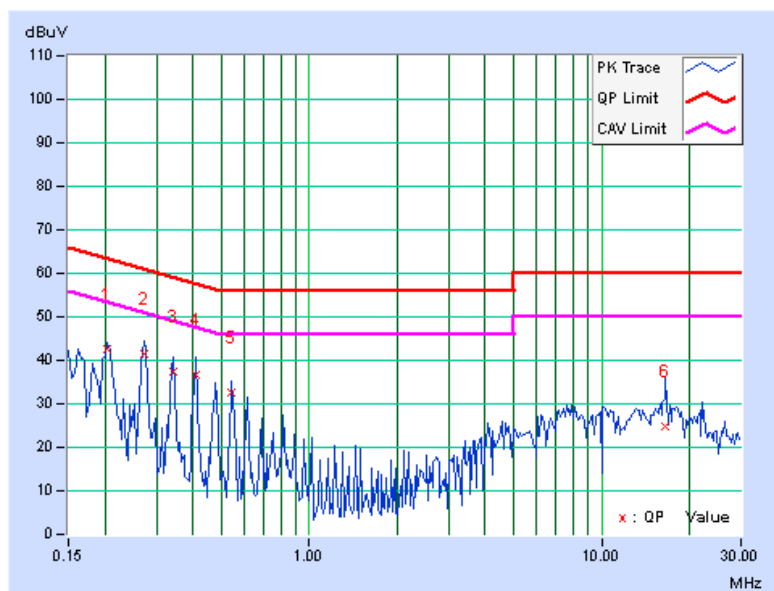
## 4.2.7 TEST RESULTS

### CONDUCTED WORST-CASE DATA:

|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 1 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | A      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.205          | 0.15                    | 42.33                      | -   | 42.48                       | -   | 63.42              | 53.42 | -20.94         | -   |
| 2  | 0.271          | 0.16                    | 41.50                      | -   | 41.66                       | -   | 61.08              | 51.08 | -19.43         | -   |
| 3  | 0.341          | 0.16                    | 37.43                      | -   | 37.59                       | -   | 59.17              | 49.17 | -21.57         | -   |
| 4  | 0.412          | 0.17                    | 36.44                      | -   | 36.61                       | -   | 57.61              | 47.61 | -21.00         | -   |
| 5  | 0.545          | 0.17                    | 32.25                      | -   | 32.42                       | -   | 56.00              | 46.00 | -23.58         | -   |
| 6  | 16.605         | 0.96                    | 23.97                      | -   | 24.93                       | -   | 60.00              | 50.00 | -35.07         | -   |

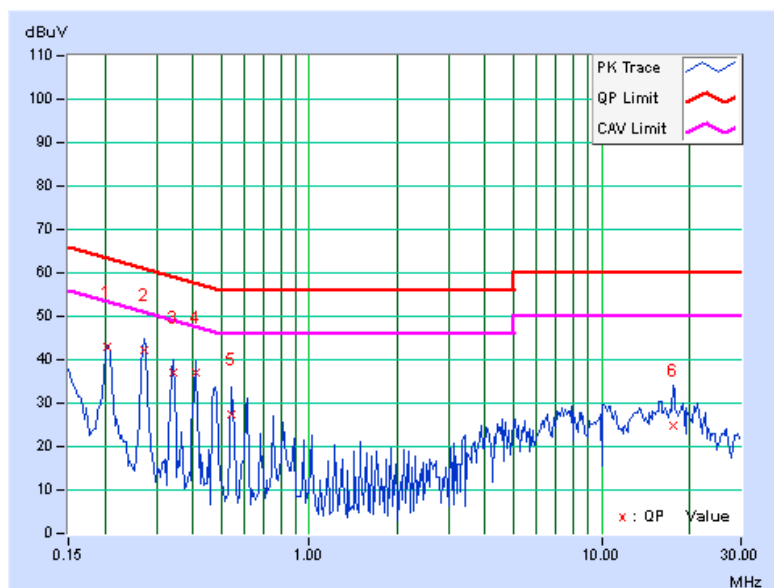
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 2 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | A      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.205          | 0.17                    | 42.86                      | -   | 43.03                       | -   | 63.42              | 53.42 | -20.39         | -   |
| 2  | 0.271          | 0.18                    | 41.87                      | -   | 42.05                       | -   | 61.08              | 51.08 | -19.04         | -   |
| 3  | 0.341          | 0.18                    | 36.89                      | -   | 37.07                       | -   | 59.17              | 49.17 | -22.09         | -   |
| 4  | 0.408          | 0.19                    | 36.84                      | -   | 37.03                       | -   | 57.69              | 47.69 | -20.66         | -   |
| 5  | 0.541          | 0.19                    | 27.35                      | -   | 27.54                       | -   | 56.00              | 46.00 | -28.46         | -   |
| 6  | 17.602         | 0.83                    | 24.14                      | -   | 24.97                       | -   | 60.00              | 50.00 | -35.03         | -   |

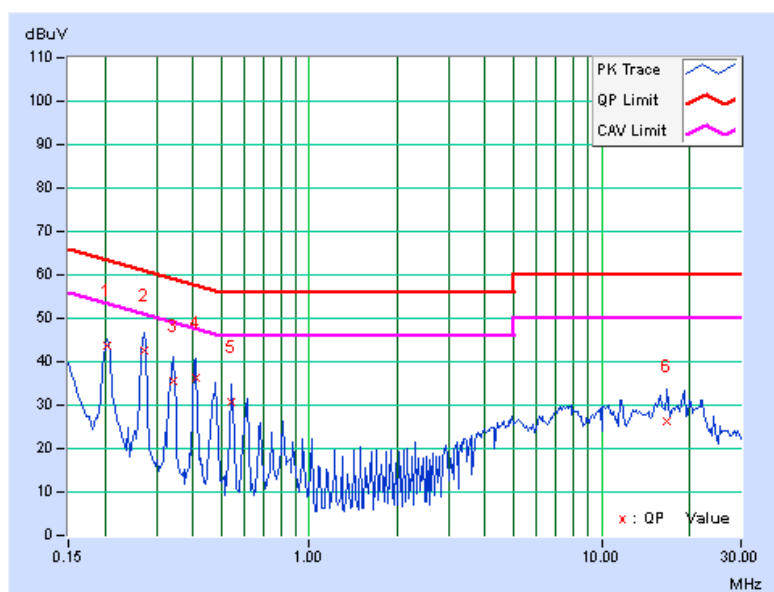
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 1 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | B      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.205          | 0.15                    | 43.65                      | -   | 43.80                       | -   | 63.42              | 53.42 | -19.62         | -   |
| 2  | 0.271          | 0.16                    | 42.43                      | -   | 42.59                       | -   | 61.08              | 51.08 | -18.50         | -   |
| 3  | 0.341          | 0.16                    | 35.30                      | -   | 35.46                       | -   | 59.17              | 49.17 | -23.70         | -   |
| 4  | 0.408          | 0.17                    | 36.20                      | -   | 36.37                       | -   | 57.69              | 47.69 | -21.32         | -   |
| 5  | 0.541          | 0.17                    | 30.52                      | -   | 30.69                       | -   | 56.00              | 46.00 | -25.31         | -   |
| 6  | 16.789         | 0.97                    | 25.51                      | -   | 26.48                       | -   | 60.00              | 50.00 | -33.52         | -   |

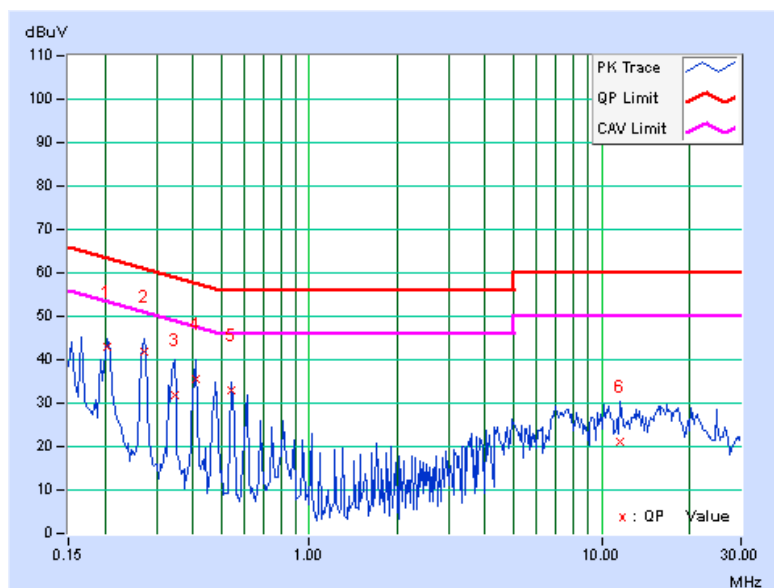
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 2 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | B      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.205          | 0.17                    | 42.72                      | -   | 42.89                       | -   | 63.42              | 53.42 | -20.53         | -   |
| 2  | 0.271          | 0.18                    | 41.85                      | -   | 42.03                       | -   | 61.08              | 51.08 | -19.06         | -   |
| 3  | 0.345          | 0.18                    | 31.55                      | -   | 31.73                       | -   | 59.07              | 49.07 | -27.34         | -   |
| 4  | 0.412          | 0.19                    | 35.29                      | -   | 35.48                       | -   | 57.61              | 47.61 | -22.13         | -   |
| 5  | 0.545          | 0.19                    | 32.64                      | -   | 32.83                       | -   | 56.00              | 46.00 | -23.17         | -   |
| 6  | 11.586         | 0.57                    | 20.72                      | -   | 21.29                       | -   | 60.00              | 50.00 | -38.71         | -   |

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

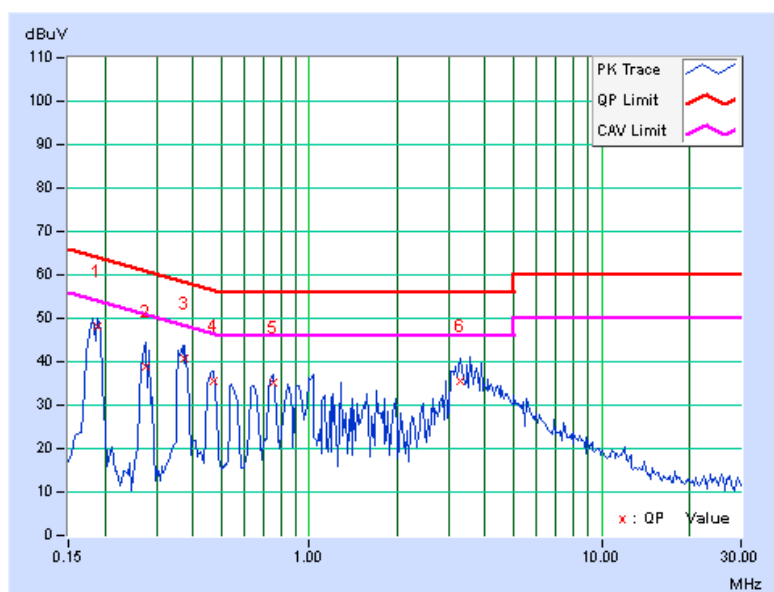




|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 1 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | C      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.189          | 0.15                    | 48.03                      | -   | 48.18                       | -   | 64.08              | 54.08 | -15.90         | -   |
| 2  | 0.275          | 0.16                    | 38.87                      | -   | 39.03                       | -   | 60.97              | 50.97 | -21.94         | -   |
| 3  | 0.377          | 0.17                    | 40.44                      | -   | 40.61                       | -   | 58.35              | 48.35 | -17.75         | -   |
| 4  | 0.470          | 0.17                    | 35.41                      | -   | 35.58                       | -   | 56.51              | 46.51 | -20.93         | -   |
| 5  | 0.752          | 0.18                    | 35.12                      | -   | 35.30                       | -   | 56.00              | 46.00 | -20.70         | -   |
| 6  | 3.277          | 0.28                    | 35.10                      | -   | 35.38                       | -   | 56.00              | 46.00 | -20.62         | -   |

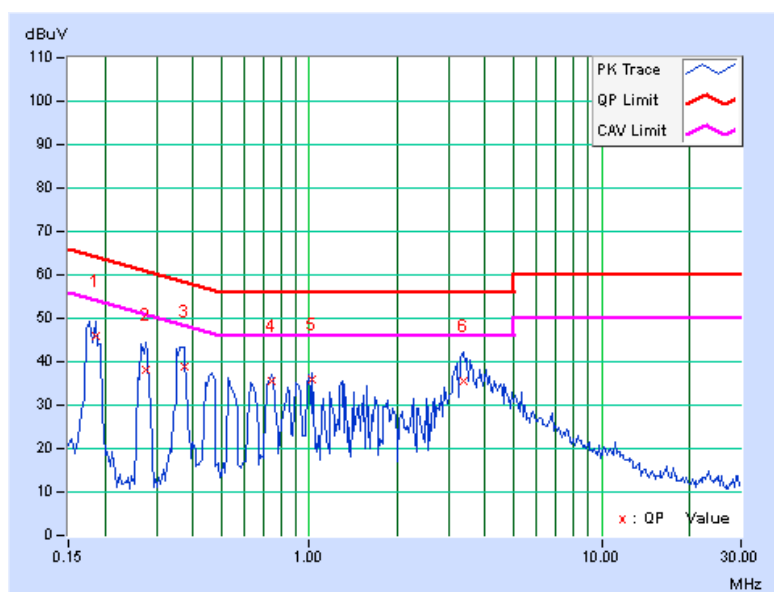
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 2 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | C      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.185          | 0.17                    | 45.69                      | -   | 45.86                       | -   | 64.25              | 54.25 | -18.40         | -   |
| 2  | 0.275          | 0.18                    | 38.10                      | -   | 38.28                       | -   | 60.97              | 50.97 | -22.69         | -   |
| 3  | 0.373          | 0.19                    | 38.84                      | -   | 39.03                       | -   | 58.44              | 48.44 | -19.41         | -   |
| 4  | 0.748          | 0.20                    | 35.21                      | -   | 35.41                       | -   | 56.00              | 46.00 | -20.59         | -   |
| 5  | 1.027          | 0.21                    | 35.59                      | -   | 35.80                       | -   | 56.00              | 46.00 | -20.20         | -   |
| 6  | 3.363          | 0.29                    | 35.17                      | -   | 35.46                       | -   | 56.00              | 46.00 | -20.54         | -   |

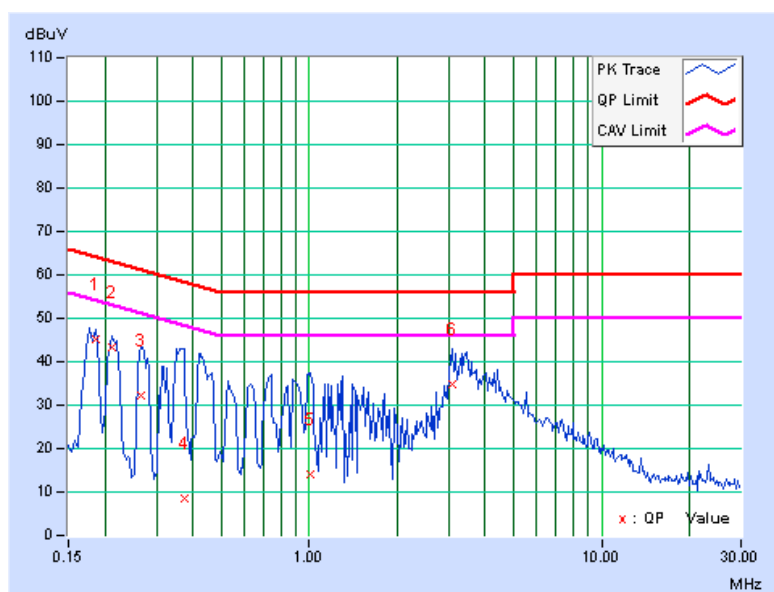
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 1 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | D      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.185          | 0.15                    | 44.96                      | -   | 45.11                       | -   | 64.25              | 54.25 | -19.14         | -   |
| 2  | 0.213          | 0.15                    | 43.35                      | -   | 43.50                       | -   | 63.11              | 53.11 | -19.61         | -   |
| 3  | 0.267          | 0.16                    | 31.99                      | -   | 32.15                       | -   | 61.20              | 51.20 | -29.06         | -   |
| 4  | 0.373          | 0.17                    | 8.53                       | -   | 8.70                        | -   | 58.44              | 48.44 | -49.74         | -   |
| 5  | 1.012          | 0.19                    | 13.75                      | -   | 13.94                       | -   | 56.00              | 46.00 | -42.06         | -   |
| 6  | 3.070          | 0.27                    | 34.56                      | -   | 34.83                       | -   | 56.00              | 46.00 | -21.17         | -   |

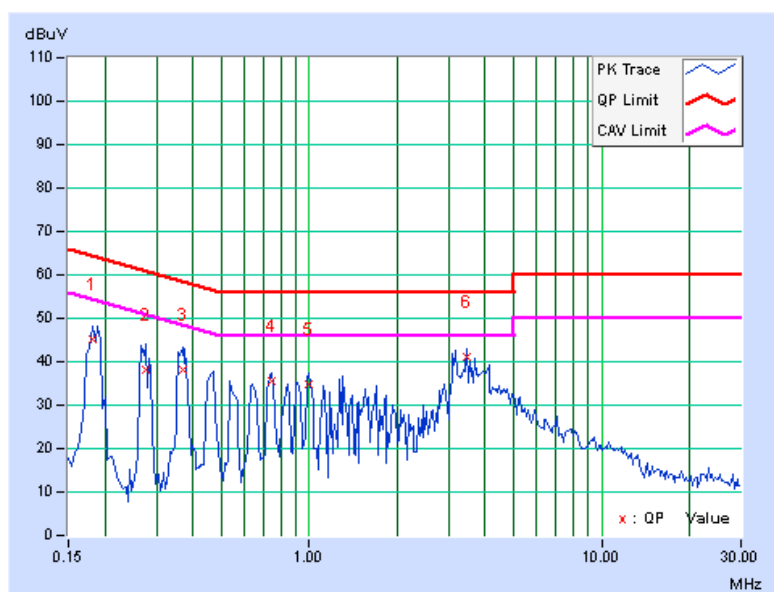
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 2 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | D      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.181          | 0.16                    | 45.11                      | -   | 45.27                       | -   | 64.43              | 54.43 | -19.15         | -   |
| 2  | 0.275          | 0.18                    | 37.79                      | -   | 37.97                       | -   | 60.97              | 50.97 | -23.00         | -   |
| 3  | 0.369          | 0.19                    | 37.90                      | -   | 38.09                       | -   | 58.53              | 48.53 | -20.44         | -   |
| 4  | 0.744          | 0.20                    | 35.36                      | -   | 35.56                       | -   | 56.00              | 46.00 | -20.44         | -   |
| 5  | 0.994          | 0.21                    | 34.58                      | -   | 34.79                       | -   | 56.00              | 46.00 | -21.21         | -   |
| 6  | 3.477          | 0.30                    | 40.98                      | -   | 41.28                       | -   | 56.00              | 46.00 | -14.72         | -   |

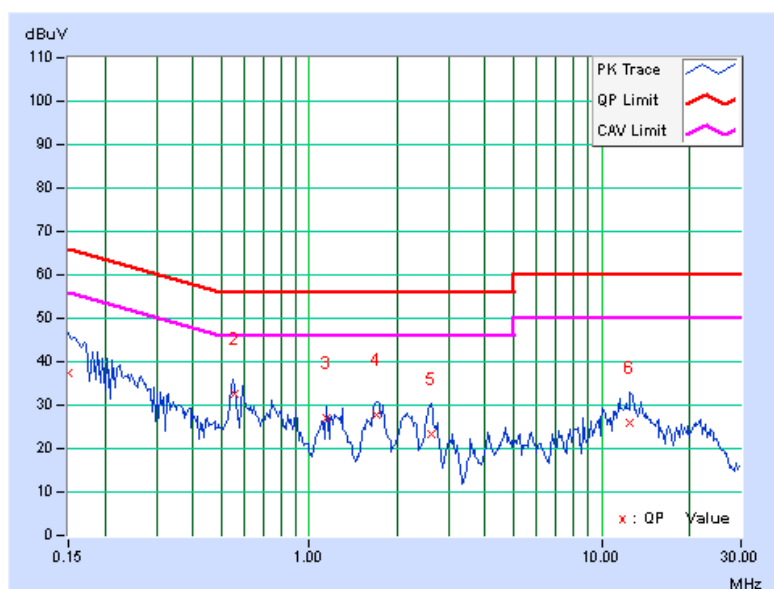
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 1 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | E      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.150          | 0.17                    | 37.06                      | -   | 37.23                       | -   | 66.00              | 56.00 | -28.77         | -   |
| 2  | 0.552          | 0.24                    | 32.32                      | -   | 32.56                       | -   | 56.00              | 46.00 | -23.44         | -   |
| 3  | 1.145          | 0.21                    | 26.81                      | -   | 27.02                       | -   | 56.00              | 46.00 | -28.98         | -   |
| 4  | 1.695          | 0.23                    | 27.67                      | -   | 27.90                       | -   | 56.00              | 46.00 | -28.10         | -   |
| 5  | 2.609          | 0.29                    | 23.14                      | -   | 23.43                       | -   | 56.00              | 46.00 | -32.57         | -   |
| 6  | 12.563         | 0.83                    | 25.24                      | -   | 26.07                       | -   | 60.00              | 50.00 | -33.93         | -   |

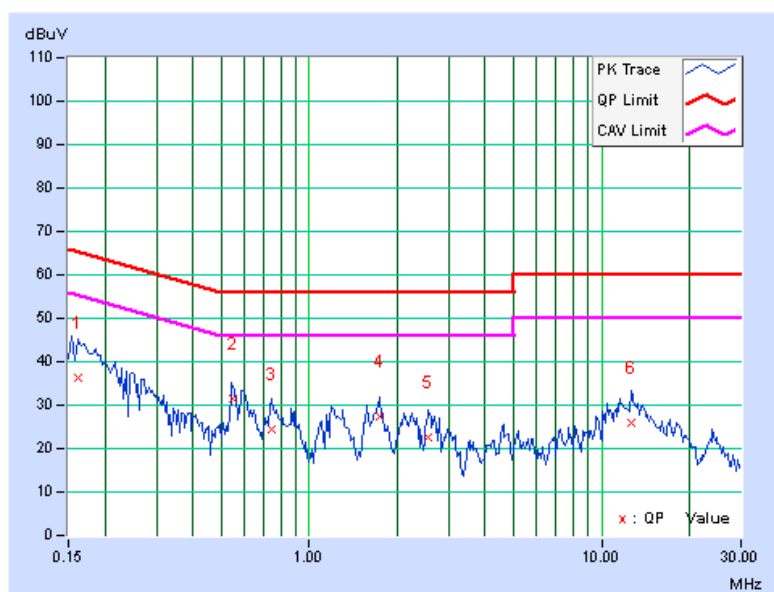
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value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



|           |        |               |      |
|-----------|--------|---------------|------|
| PHASE     | Line 2 | 6dB BANDWIDTH | 9kHz |
| TEST MODE | E      |               |      |

| No | Freq.<br>[MHz] | Corr.<br>Factor<br>(dB) | Reading Value<br>[dB (uV)] |     | Emission Level<br>[dB (uV)] |     | Limit<br>[dB (uV)] |       | Margin<br>(dB) |     |
|----|----------------|-------------------------|----------------------------|-----|-----------------------------|-----|--------------------|-------|----------------|-----|
|    |                |                         | Q.P.                       | AV. | Q.P.                        | AV. | Q.P.               | AV.   | Q.P.           | AV. |
| 1  | 0.162          | 0.22                    | 35.93                      | -   | 36.15                       | -   | 65.38              | 55.38 | -29.22         | -   |
| 2  | 0.547          | 0.24                    | 31.10                      | -   | 31.34                       | -   | 56.00              | 46.00 | -24.66         | -   |
| 3  | 0.740          | 0.25                    | 24.04                      | -   | 24.29                       | -   | 56.00              | 46.00 | -31.71         | -   |
| 4  | 1.742          | 0.29                    | 27.14                      | -   | 27.43                       | -   | 56.00              | 46.00 | -28.57         | -   |
| 5  | 2.559          | 0.34                    | 22.17                      | -   | 22.51                       | -   | 56.00              | 46.00 | -33.49         | -   |
| 6  | 12.570         | 0.77                    | 25.19                      | -   | 25.96                       | -   | 60.00              | 50.00 | -34.04         | -   |

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



## 5. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (Test Setup Photo).

## 6. 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.

Copies of accreditation and authorization certificates of our laboratories obtained from approval agencies can be downloaded from our web site: [www.adt.com.tw/index.5.phtml](http://www.adt.com.tw/index.5.phtml). If you have any comments, please feel free to contact us at the following:

**Linko EMC/RF Lab:**

Tel: 886-2-26052180

Fax: 886-2-26051924

**Hsin Chu EMC/RF Lab:**

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**Web Site:** [www.adt.com.tw](http://www.adt.com.tw)

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



## **7. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No any modifications are made to the EUT by the lab during the test.

**--- END ---**