

# Partial FCC RF Test Report

**APPLICANT** : Getac Technology Corporation  
**EQUIPMENT** : Notebook PC  
**BRAND NAME** : Getac  
**MODEL NAME** : B300  
**FCC ID** : QYL3X02  
**STANDARD** : FCC Part 15 Subpart C §15.247  
**CLASSIFICATION** : Digital Transmission System (DTS)

This is a partial report which is only valid combined with the Integrated WLAN Module (Brand name: Intel / Model name: 633ANHMW, FCC ID: PD9633ANH) Report.

The product was received on May 25, 2010 and completely tested on Jun. 21, 2010. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:



Anderson Chiu / Deputy Manager



## **SPORTON INTERNATIONAL INC.**

**No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.**



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### SUMMARY OF TEST RESULT

| Report Section | FCC Rule              | IC Rule   | Description                   | Limit                    | Result | Remark                                  |
|----------------|-----------------------|-----------|-------------------------------|--------------------------|--------|---|
| 3.1            | 15.247(d)             | A8.5      | Frequency Band Edges          | $\leq 20\text{dBc}$      | Pass   | -                                       |
| 3.2            | 15.207                | Gen 7.2.2 | AC Conducted Emission         | 15.207(a)                | Pass   | Under limit<br>3.6 dB at<br>23.998 MHz  |
| 3.3            | 15.247(d)             | A8.5      | Transmitter Radiated Emission | 15.209(a) &<br>15.247(d) | Pass   | Under limit<br>4.11 dB at<br>43.770 MHz |
| 3.4            | 15.203 &<br>15.247(b) | A8.4      | Antenna Requirement           | N/A                      | Pass   | -                                       |

# 1 General Description

## 1.1 Applicant

**Getac Technology Corporation**

5F., Building A, No. 209, Sec. 1, Nangang Rd., Nangang Dist., Taipei City 11568, Taiwan, R.O.C.

## 1.2 Manufacturer

**GeTAC Technology (Kunshan) LTD.**

No. 269, 2nd Road, Export Processing Zone, Changjiang South Road, Kunshan, Jiangsu, P.R.C.

## 1.3 Feature of Equipment Under Test

| Product Feature & Specification        |  |
|--|--|
| <b>Equipment</b>                       | Notebook PC  |
| <b>Brand Name</b>                      | Getac  |
| <b>Model Name</b>                      | B300   |
| <b>FCC ID</b>                          | QYL3X02  |
| <b>Tx/Rx Frequency Range</b>           | 802.11b/g/n : 2400 MHz ~ 2483.5 MHz<br>802.11a/n : 5725 MHz ~ 5850 MHz   |
| <b>Channel Spacing</b>                 | 802.11b/g : 5 MHz<br>802.11a : 20 MHz  |
| <b>Maximum Output Power to Antenna</b> | <b>&lt;2400 MHz ~ 2483.5 MHz&gt;</b><br>802.11b : 16.23 dBm (41.98 mW)<br>802.11g : 16.56 dBm (45.29 mW)<br>802.11n (BW 20MHz) : 16.49 dBm (44.57 mW)<br>802.11n (BW 40MHz) : 16.23 dBm (41.98 mW)<br><b>&lt;5725 MHz ~ 5850 MHz&gt;</b><br>802.11a : 16.82 dBm (48.08 mW)<br>802.11n (BW 20MHz) : 16.66 dBm (46.34 mW)<br>802.11n (BW 40MHz) : 16.65 dBm (46.24 mW) |
| <b>Antenna Type</b>                    | 802.11b/g/n : PIFA Antenna with gain 2.75 dBi<br>802.11a/n : PIFA Antenna with gain -0.3 dBi   |
| <b>HW Version</b>                      | R0A  |
| <b>SW Version</b>                      | R0.05.070520G  |
| <b>Type of Modulation</b>              | 802.11b : DSSS (BPSK / QPSK / CCK)<br>802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)   |
| <b>EUT Stage</b>                       | Identical Prototype  |

**Remark:**

1. For other wireless features of this EUT, test report will be issued separately.
2. This test report recorded only product characteristics and test results of Digital Transmission System (DTS).
3. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

### 1.4 Testing Site

|                           |  |          |                                |
|---------------------------|--|----------|--------------------------------|
| <b>Test Site</b>          | SPORTON INTERNATIONAL INC.   |          |                                |
| <b>Test Site Location</b> | No. 52, Hwa Ya 1 <sup>st</sup> Rd., Hwa Ya Technology Park,<br>Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.<br>TEL: +886-3-3273456 / FAX: +886-3-3284978 |          |                                |
| <b>Test Site No.</b>      | <b>Sporton Site No.</b>  |          | <b>FCC/IC Registration No.</b> |
|                           | CO05-HY  | 03CH05HY | TW1022/4086B-1                 |

### 1.5 Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC Part 15 Subpart C §15.247
- ♦ FCC KDB Publication No. 558074 (Measurement Guidelines of DTS)
- ♦ ANSI C63.4-2003
- ♦ IC RSS-210 Issue 7

**Remark:**

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B (DoC), recorded in a separate test report.



### 1.6 Ancillary Equipment List

| Item | Equipment          | Trade Name    | Model Name  | FCC ID      | Data Cable        | Power Cord   |
|------|--------------------|---------------|-------------|-------------|-------------------|--|
| 1.   | GPS Station        | T&E           | GS-50       | N/A         | N/A               | Unshielded, 1.8 m  |
| 2.   | WLAN AP            | D-Link        | DIR-628     | KA2DIR628A2 | N/A               | Unshielded, 1.8 m  |
| 3.   | Notebook           | DELL          | Vostro 1510 | FCC DoC     | N/A               | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 4.   | Bluetooth Earphone | Nokia         | BH-102      | PYAHS-107W  | N/A               | N/A  |
| 5.   | Earphone           | Ergotech      | ET-E200     | FCC DoC     | Unshielded, 1.8 m | N/A  |
| 6.   | LCD Monitor        | Acer          | H223HQ      | FCC DoC     | N/A               | Unshielded, 1.8 m  |
| 7.   | iPod               | Apple         | A1285       | FCC DoC     | Shielded, 1.0 m   | N/A  |
| 8.   | Modem              | ACEEX         | DM1414      | IFAXDM1414  | Shielded, 1.15 m  | N/A  |
| 9.   | Mouse              | State         | MS-303      | FCC DoC     | Shielded, 1.3 m   | N/A  |
| 10.  | Exchange           | Sun Moon Star | SMS-4 PLUS  | 95180108    | Shielded, 1.6 m   | N/A  |

## 2 Test Configuration of Equipment Under Test

### 2.1 RF Power

Preliminary tests were performed in different data rate and recorded the RF power output in the following table:

| Channel | Frequency | 802.11b RF Power (dBm) |              |         |
|---------|-----------|------------------------|--------------|---------|
|         |           | Data Rate: 1Mbps       |              |         |
|         |           | Chain A                | Chain B      | Chain C |
| CH 01   | 2412 MHz  | 15.95                  | 16.16        | 15.94   |
| CH 06   | 2437 MHz  | 15.83                  | <b>16.23</b> | 16.02   |
| CH 11   | 2462 MHz  | 15.83                  | 15.89        | 15.79   |

| Channel | Frequency | 802.11g RF Power (dBm) |         |         |
|---------|-----------|------------------------|---------|---------|
|         |           | Data Rate: 6Mbps       |         |         |
|         |           | Chain A                | Chain B | Chain C |
| CH 01   | 2412 MHz  | 14.95                  | 14.47   | 15.11   |
| CH 06   | 2437 MHz  | <b>16.56</b>           | 15.35   | 15.43   |
| CH 11   | 2462 MHz  | 14.61                  | 14.04   | 14.39   |

| Channel | Frequency | 802.11n (BW 20MHz) RF Power (dBm) |              |         |
|---------|-----------|-----------------------------------|--------------|---------|
|         |           | Data Rate: HT0                    |              |         |
|         |           | SISO                              |              |         |
|         |           | Chain A                           | Chain B      | Chain C |
| CH 01   | 2412 MHz  | 14.45                             | 14.30        | 15.01   |
| CH 06   | 2437 MHz  | 15.48                             | <b>16.28</b> | 16.20   |
| CH 11   | 2462 MHz  | 14.36                             | 14.58        | 15.22   |

| Channel | Frequency | 802.11n (BW 20MHz) RF Power (dBm) |           |              |                |
|---------|-----------|-----------------------------------|-----------|--------------|----------------|
|         |           | Data Rate: HT0                    |           |              | Data Rate: HT0 |
|         |           | 2Tx                               |           |              | 3Tx            |
|         |           | Chain A+B                         | Chain A+C | Chain B+C    | Chain A+B+C    |
| CH 01   | 2412 MHz  | 14.24                             | 14.36     | 14.60        | 14.33          |
| CH 06   | 2437 MHz  | 16.34                             | 16.35     | <b>16.49</b> | 15.67          |
| CH 11   | 2462 MHz  | 14.49                             | 14.56     | 14.42        | 14.01          |





| Channel | Frequency | 802.11n (BW 40MHz) RF Power (dBm) |              |         |
|---------|-----------|-----------------------------------|--------------|---------|
|         |           | Data Rate: HT0                    |              |         |
|         |           | SISO                              |              |         |
|         |           | Chain A                           | Chain B      | Chain C |
| CH 03   | 2422 MHz  | 11.87                             | 11.46        | 11.55   |
| CH 06   | 2437 MHz  | 16.13                             | <b>16.23</b> | 16.21   |
| CH 09   | 2452 MHz  | 12.19                             | 12.04        | 12.32   |

| Channel | Frequency | 802.11n (BW 40MHz) RF Power (dBm) |           |                |              |
|---------|-----------|-----------------------------------|-----------|----------------|--------------|
|         |           | Data Rate: HT0                    |           | Data Rate: HT0 |              |
|         |           | 2Tx                               |           | 3Tx            |              |
|         |           | Chain A+B                         | Chain A+C | Chain B+C      | Chain A+B+C  |
| CH 03   | 2422 MHz  | 12.14                             | 11.92     | 11.59          | 12.10        |
| CH 06   | 2437 MHz  | 15.75                             | 16.00     | 15.76          | <b>16.11</b> |
| CH 09   | 2452 MHz  | 11.90                             | 11.36     | 11.60          | 11.82        |

| Channel | Frequency | 802.11a RF Power (dBm) |         |              |
|---------|-----------|------------------------|---------|--------------|
|         |           | Data Rate: 6Mbps       |         |              |
|         |           | Chain A                | Chain B | Chain C      |
| CH149   | 5745 MHz  | 16.36                  | 16.01   | <b>16.82</b> |
| CH157   | 5785 MHz  | 16.52                  | 16.00   | 16.39        |
| CH165   | 5825 MHz  | 16.29                  | 16.04   | 16.30        |

| Channel | Frequency | 802.11n (BW 20MHz) RF Power (dBm) |         |         |
|---------|-----------|-----------------------------------|---------|---------|
|         |           | Data Rate: HT0                    |         |         |
|         |           | SISO                              |         |         |
|         |           | Chain A                           | Chain B | Chain C |
| CH149   | 5745 MHz  | 16.07                             | 16.02   | 16.13   |
| CH157   | 5785 MHz  | <b>16.40</b>                      | 16.00   | 16.05   |
| CH165   | 5825 MHz  | 15.93                             | 16.11   | 16.15   |

| Channel | Frequency | 802.11n (BW 20MHz) RF Power (dBm) |           |           |              |
|---------|-----------|-----------------------------------|-----------|-----------|--------------|
|         |           | Data Rate: HT0                    |           |           |              |
|         |           | 2Tx                               |           | 3Tx       |              |
|         |           | Chain A+B                         | Chain A+C | Chain B+C | Chain A+B+C  |
| CH149   | 5745 MHz  | 15.99                             | 16.57     | 16.43     | <b>16.66</b> |
| CH157   | 5785 MHz  | 15.86                             | 16.52     | 16.33     | 15.77        |
| CH165   | 5825 MHz  | 16.16                             | 16.27     | 16.33     | 16.40        |



| Channel | Frequency | 802.11n (BW 40MHz) RF Power (dBm) |         |              |
|---------|-----------|-----------------------------------|---------|--------------|
|         |           | Data Rate: HT0                    |         |              |
|         |           | SISO                              |         |              |
|         |           | Chain A                           | Chain B | Chain C      |
| CH 151  | 5755 MHz  | 15.98                             | 16.06   | <b>16.44</b> |
| CH 159  | 5795 MHz  | 16.24                             | 16.01   | 16.35        |

| Channel | Frequency | 802.11n (BW 40MHz) RF Power (dBm) |           |                |              |
|---------|-----------|-----------------------------------|-----------|----------------|--------------|
|         |           | Data Rate: HT0                    |           | Data Rate: HT0 |              |
|         |           | 2Tx                               |           | 3Tx            |              |
|         |           | Chain A+B                         | Chain A+C | Chain B+C      | Chain A+B+C  |
| CH 151  | 5755 MHz  | 15.82                             | 16.33     | 15.77          | <b>16.65</b> |
| CH 159  | 5795 MHz  | 15.68                             | 16.53     | 16.40          | 16.50        |

**Remark:**

1. The EUT is programmed to transmit signals continuously for all testing.
2. SISO stands for single input and single output. It means that only one chain transmits signals at a time.
3. 2Tx is one type of MIMO, which means that two chains transmit signals at the same time, and 3Tx is another type of MIMO, it means three chains transmit signals at the same time.



## 2.2 Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conducted emission (150 kHz to 30 MHz), radiated emission (30 MHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following table is showing the total pre-scanned test modes, and the worst modes are recorded in this report only.

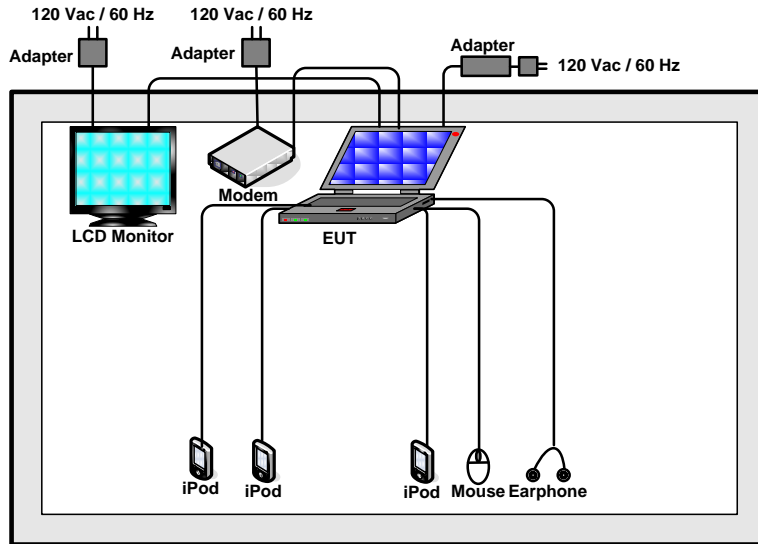
| Test Cases   |  |
|--------------|--|
| Test Item    | 802.11b (Modulation : DSSS)              |
|              | 802.11g/n (Modulation : OFDM)            |
|              | 802.11a/n (Modulation : OFDM)            |
| Radiated TCs | Mode 1: 802.11b_CH01_2412 MHz            |
|              | Mode 2: 802.11b_CH06_2437 MHz            |
|              | Mode 3: 802.11b_CH11_2462 MHz            |
|              | Mode 4: 802.11g_CH01_2412 MHz            |
|              | Mode 5: 802.11g_CH06_2437 MHz            |
|              | Mode 6: 802.11g_CH11_2462 MHz            |
|              | Mode 7: 802.11n_CH01_2412 MHz (BW 20M)   |
|              | Mode 8: 802.11n_CH06_2437 MHz (BW 20M)   |
|              | Mode 9: 802.11n_CH11_2462 MHz (BW 20M)   |
|              | Mode 10: 802.11n_CH03_2422 MHz (BW 40M)  |
|              | Mode 11: 802.11n_CH06_2437 MHz (BW 40M)  |
|              | Mode 12: 802.11n_CH09_2452 MHz (BW 40M)  |
|              | Mode 13: 802.11a_CH149_5745 MHz          |
|              | Mode 14: 802.11a_CH157_5785 MHz          |
|              | Mode 15: 802.11a_CH165_5825 MHz          |
|              | Mode 16: 802.11n_CH149_5745 MHz (BW 20M) |
|              | Mode 17: 802.11n_CH157_5785 MHz (BW 20M) |
|              | Mode 18: 802.11n_CH165_5825 MHz (BW 20M) |
|              | Mode 19: 802.11n_CH151_5755 MHz (BW 40M) |
|              | Mode 20: 802.11n_CH159_5795 MHz (BW 40M) |



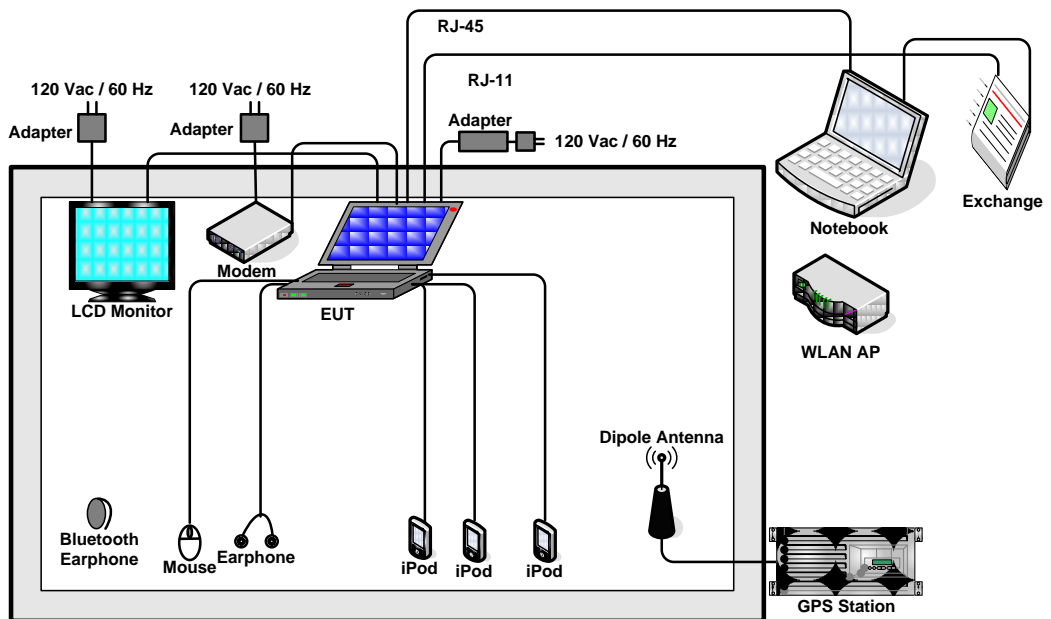
| Test Cases   |   |
|--|---|
| <b>AC<br/>Conducted<br/>Emission</b>   | Mode 1 :WLAN Link + Bluetooth Link + TC + Adapter 1 |
| <b>Remark:</b><br><ol style="list-style-type: none"><li>1. TC stands for Test Configuration, and consists of GPS Rx, LCD monitor, modem, i-Pod, mouse, earphone, RJ-45, and RJ-11.</li><li>2. Mode 4~6, 10~12, and 16~20 of radiated emission only verify bandedge.</li><li>3. Only the radiated emission and conducted emission tests were performed in this report and the conducted test cases can be referred to the WLAN module (Brand name: Intel / Model name: 633ANHMW, FCC ID: PD9633ANH, AEGIS Report Number: INTEL-090526F-Rev. A1) report.</li></ol> |   |

## 2.3 Connection Diagram of Test System

### <WLAN Tx Mode>



### <EUT with TC Mode>





## **2.4 RF Utility**

The programmed RF utility "CRTU", is installed in EUT to provide channel selection, power level, data rate and the application type. RF Utility can send transmitting signal for all testing. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product.



### **3 Test Result**

#### **3.1 Band Edges Measurement**

##### **3.1.1 Limit of Band Edges**

In any 100 kHz bandwidth outside the intentional radiation frequency band, the radio frequency power shall be at least 20 dB below the highest level of the radiated power. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB.

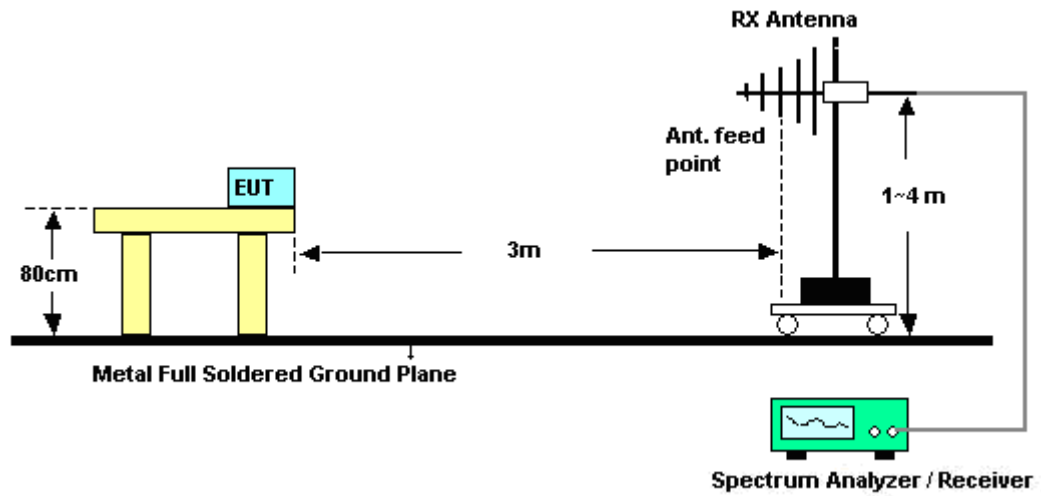
##### **3.1.2 Measuring Instruments**

See list of measuring instruments of this test report.

##### **3.1.3 Test Procedures**

1. The testing follows the guidelines in ANSI C63.4-2003 and FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
2. Conducted emission test: Set RBW = 100 kHz, Video bandwidth (VBW) > RBW. Band edge emissions must be at least 20 dB below the highest emission level within the authorized band as measured with a 100 kHz RBW. Note: If the output power of this device was measured by power meter, the attenuation under this paragraph shall be 30 dB instead of 20 dB.
3. Radiated emission test: Apply to band edge emissions that fall in the restricted bands listed in FCC Section 15.205. The maximum permitted average field strength is listed in FCC Section 15.209. A pre-amp is necessary for this measurement. For measurements above 1 GHz, set RBW = 1MHz, VBW = 10 Hz, Sweep=Auto. If the emission is pulsed, modify the unit for continuous operation; use the settings shown above, then correct the reading by subtracting the peak-average correction factor, derived from the appropriate duty cycle calculation as in FCC Section 15.35(b) and (c).

### 3.1.4 Test Setup







3.1.5 Test Result of Radiated Band Edges

|                |         |                     |            |
|----------------|---------|---------------------|------------|
| Test Mode :    | Mode 1  | Temperature :       | 23~25°C    |
| Test Band :    | 802.11b | Relative Humidity : | 49~52%     |
| Test Channel : | 01      | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2316.65                       | 44.01               | -29.99                  | 74.00                       | 43.93                     | 31.73                       | 4.41                    | 36.06                      | 101                  | 82                      | Peak    |
| 2316.65                       | 31.09               | -22.91                  | 54.00                       | 31.01                     | 31.73                       | 4.41                    | 36.06                      | 101                  | 82                      | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2385.81                     | 50.43               | -23.57                  | 74.00                       | 50.18                     | 31.86                       | 4.47                    | 36.08                      | 127                  | 12                      | Peak    |
| 2385.81                     | 42.48               | -11.52                  | 54.00                       | 42.23                     | 31.86                       | 4.47                    | 36.08                      | 127                  | 12                      | Average |

|                |         |                     |            |
|----------------|---------|---------------------|------------|
| Test Mode :    | Mode 3  | Temperature :       | 23~25°C    |
| Test Band :    | 802.11b | Relative Humidity : | 49~52%     |
| Test Channel : | 11      | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2483.50                       | 47.60               | -26.40                  | 74.00                       | 47.13                     | 31.98                       | 4.59                    | 36.10                      | 102                  | 292                     | Peak    |
| 2483.50                       | 39.35               | -14.65                  | 54.00                       | 38.88                     | 31.98                       | 4.59                    | 36.10                      | 102                  | 292                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2483.50                     | 52.71               | -21.29                  | 74.00                       | 52.24                     | 31.98                       | 4.59                    | 36.10                      | 153                  | 21                      | Peak    |
| 2483.50                     | 46.88               | -7.12                   | 54.00                       | 46.41                     | 31.98                       | 4.59                    | 36.10                      | 153                  | 21                      | Average |



|                |         |                     |            |
|----------------|---------|---------------------|------------|
| Test Mode :    | Mode 4  | Temperature :       | 23~25°C    |
| Test Band :    | 802.11g | Relative Humidity : | 49~52%     |
| Test Channel : | 01      | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2349.90                       | 44.84               | -29.16                  | 74.00                       | 44.69                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 85                      | Peak    |
| 2349.90                       | 31.05               | -22.95                  | 54.00                       | 30.90                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 85                      | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2389.99                     | 50.39               | -23.61                  | 74.00                       | 50.11                     | 31.86                       | 4.50                    | 36.08                      | 106                  | 59                      | Peak    |
| 2389.99                     | 35.53               | -18.47                  | 54.00                       | 35.25                     | 31.86                       | 4.50                    | 36.08                      | 106                  | 59                      | Average |

|                |         |                     |            |
|----------------|---------|---------------------|------------|
| Test Mode :    | Mode 6  | Temperature :       | 23~25°C    |
| Test Band :    | 802.11g | Relative Humidity : | 49~52%     |
| Test Channel : | 11      | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2483.85                       | 47.68               | -26.32                  | 74.00                       | 47.21                     | 31.98                       | 4.59                    | 36.10                      | 149                  | 78                      | Peak    |
| 2483.85                       | 33.07               | -20.93                  | 54.00                       | 32.60                     | 31.98                       | 4.59                    | 36.10                      | 149                  | 78                      | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
| 2486.89                     | 59.63               | -14.37                  | 74.00                       | 59.16                     | 31.98                       | 4.59                    | 36.10                      | 189                  | 23                      | Peak    |
| 2486.89                     | 35.06               | -18.94                  | 54.00                       | 34.59                     | 31.98                       | 4.59                    | 36.10                      | 189                  | 23                      | Average |



|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 7             | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 20MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 01                 | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2389.99                       | 49.88            | -24.12            | 74.00                 | 49.60               | 31.86                 | 4.50              | 36.08                | 105            | 172               | Peak    |
| 2389.99                       | 34.53            | -19.47            | 54.00                 | 34.25               | 31.86                 | 4.50              | 36.08                | 105            | 172               | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2389.99                     | 52.22            | -21.78            | 74.00                 | 51.94               | 31.86                 | 4.50              | 36.08                | 100            | 93                | Peak    |
| 2389.99                     | 35.52            | -18.48            | 54.00                 | 35.24               | 31.86                 | 4.50              | 36.08                | 100            | 93                | Average |

|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 9             | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 20MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 11                 | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.50                       | 56.27            | -17.73            | 74.00                 | 55.80               | 31.98                 | 4.59              | 36.10                | 100            | 200               | Peak    |
| 2483.50                       | 38.64            | -15.36            | 54.00                 | 38.17               | 31.98                 | 4.59              | 36.10                | 100            | 200               | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.66                     | 56.07            | -17.93            | 74.00                 | 55.60               | 31.98                 | 4.59              | 36.10                | 100            | 99                | Peak    |
| 2483.66                     | 37.81            | -16.19            | 54.00                 | 37.34               | 31.98                 | 4.59              | 36.10                | 100            | 99                | Average |



|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 10            | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 40MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 03                 | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2311.33                       | 43.30            | -30.70            | 74.00                 | 43.25               | 31.73                 | 4.38              | 36.06                | 153            | 70                | Peak    |
| 2311.33                       | 30.55            | -23.45            | 54.00                 | 30.50               | 31.73                 | 4.38              | 36.06                | 153            | 70                | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2389.99                     | 46.53            | -27.47            | 74.00                 | 46.25               | 31.86                 | 4.50              | 36.08                | 121            | 15                | Peak    |
| 2389.99                     | 32.67            | -21.33            | 54.00                 | 32.39               | 31.86                 | 4.50              | 36.08                | 121            | 15                | Average |

|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 12            | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 40MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 09                 | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.85                       | 44.86            | -29.14            | 74.00                 | 44.39               | 31.98                 | 4.59              | 36.10                | 120            | 74                | Peak    |
| 2483.85                       | 31.81            | -22.19            | 54.00                 | 31.34               | 31.98                 | 4.59              | 36.10                | 120            | 74                | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBuV/m ) | Over Limit ( dB ) | Limit Line ( dBuV/m ) | Read Level ( dBuV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.85                     | 49.68            | -24.32            | 74.00                 | 49.21               | 31.98                 | 4.59              | 36.10                | 100            | 58                | Peak    |
| 2483.85                     | 32.91            | -21.09            | 54.00                 | 32.44               | 31.98                 | 4.59              | 36.10                | 100            | 58                | Average |



|                |         |                     |            |
|----------------|---------|---------------------|------------|
| Test Mode :    | Mode 13 | Temperature :       | 23~25°C    |
| Test Band :    | 802.11a | Relative Humidity : | 49~52%     |
| Test Channel : | 149     | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5725.00                       | 68.45               | -10.32                  | 78.77                       | 63.23                     | 34.21                       | 7.01                    | 36.00                      | 100                  | 319                     | Peak   |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5725.00                     | 68.76               | -11.93                  | 80.69                       | 63.54                     | 34.21                       | 7.01                    | 36.00                      | 101                  | 330                     | Peak   |

|                |         |                     |            |
|----------------|---------|---------------------|------------|
| Test Mode :    | Mode 15 | Temperature :       | 23~25°C    |
| Test Band :    | 802.11a | Relative Humidity : | 49~52%     |
| Test Channel : | 165     | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5850.00                       | 60.03               | -18.12                  | 78.15                       | 54.78                     | 34.16                       | 7.09                    | 36.00                      | 100                  | 318                     | Peak   |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5850.00                     | 64.39               | -17.14                  | 81.53                       | 59.14                     | 34.16                       | 7.09                    | 36.00                      | 101                  | 327                     | Peak   |



|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 16            | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 20MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 149                | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5725.00                       | 66.13               | -11.70                  | 77.83                       | 60.91                     | 34.21                       | 7.01                    | 36.00                      | 160                  | 41                      | Peak   |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5725.00                     | 73.86               | -10.18                  | 84.04                       | 68.64                     | 34.21                       | 7.01                    | 36.00                      | 102                  | 12                      | Peak   |

|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 18            | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 20MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 165                | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5850.00                       | 60.09               | -20.44                  | 80.53                       | 54.84                     | 34.16                       | 7.09                    | 36.00                      | 100                  | 35                      | Peak   |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5850.00                     | 64.01               | -22.58                  | 86.59                       | 58.76                     | 34.16                       | 7.09                    | 36.00                      | 101                  | 14                      | Peak   |



|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 19            | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 40MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 151                | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5725.00                       | 63.06               | -12.98                  | 76.04                       | 57.84                     | 34.21                       | 7.01                    | 36.00                      | 163                  | 39                      | Peak   |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5725.00                     | 70.64               | -11.68                  | 82.32                       | 65.42                     | 34.21                       | 7.01                    | 36.00                      | 103                  | 14                      | Peak   |

|                |                    |                     |            |
|----------------|--------------------|---------------------|------------|
| Test Mode :    | Mode 20            | Temperature :       | 23~25°C    |
| Test Band :    | 802.11n (BW 40MHz) | Relative Humidity : | 49~52%     |
| Test Channel : | 159                | Test Engineer :     | Cona Huang |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )          | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5850.00                       | 49.88               | -27.75                  | 77.63                       | 44.63                     | 34.16                       | 7.09                    | 36.00                      | 100                  | 38                      | Peak   |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |        |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|--------|
| Frequency<br>( MHz )        | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark |
| 5850.00                     | 54.50               | -28.76                  | 83.26                       | 49.25                     | 34.16                       | 7.09                    | 36.00                      | 101                  | 14                      | Peak   |

## 3.2 AC Conducted Emission Measurement

### 3.2.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of Emission<br>(MHz) | Conducted Limit (dBuV) |           |
|--------------------------------|------------------------|-----------|
|                                | Quasi-Peak             | Average   |
| 0.15-0.5                       | 66 to 56*              | 56 to 46* |
| 0.5-5                          | 56                     | 46        |
| 5-30                           | 60                     | 50        |

\*Decreases with the logarithm of the frequency.

### 3.2.2 Measuring Instruments

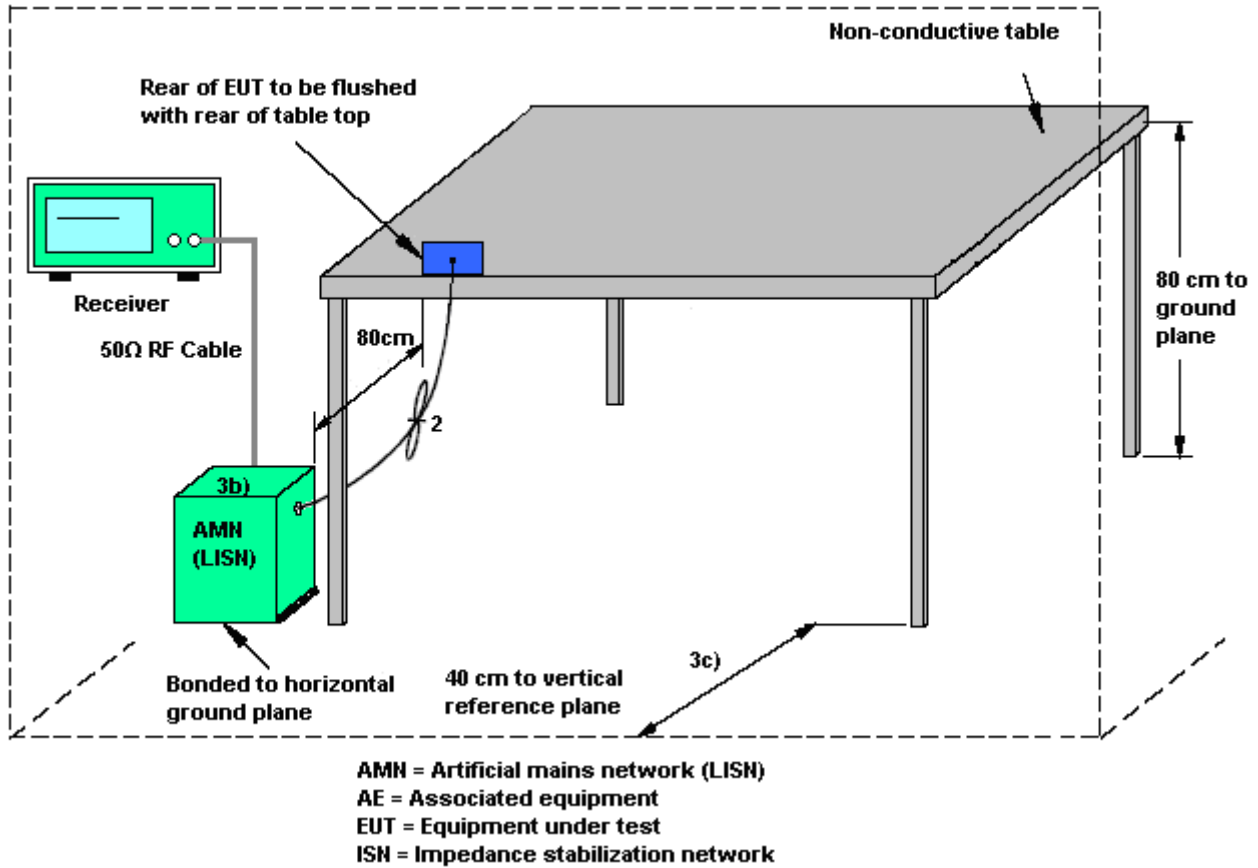
See list of measuring instruments of this test report.

### 3.2.3 Test Procedures

1. The testing follows the guidelines in ANSI C63.4-2003.
2. The EUT was placed 0.4 meter from the conducting wall of the shielding room, and it was kept at least 80 centimeters from any other grounded conducting surface.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN).
4. All the support units are connecting to the other LISN.
5. The LISN provides 50 ohm coupling impedance for the measuring instrument.
6. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
7. Both sides of AC line were checked for maximum conducted interference.
8. The frequency range from 150 kHz to 30 MHz was searched.
9. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

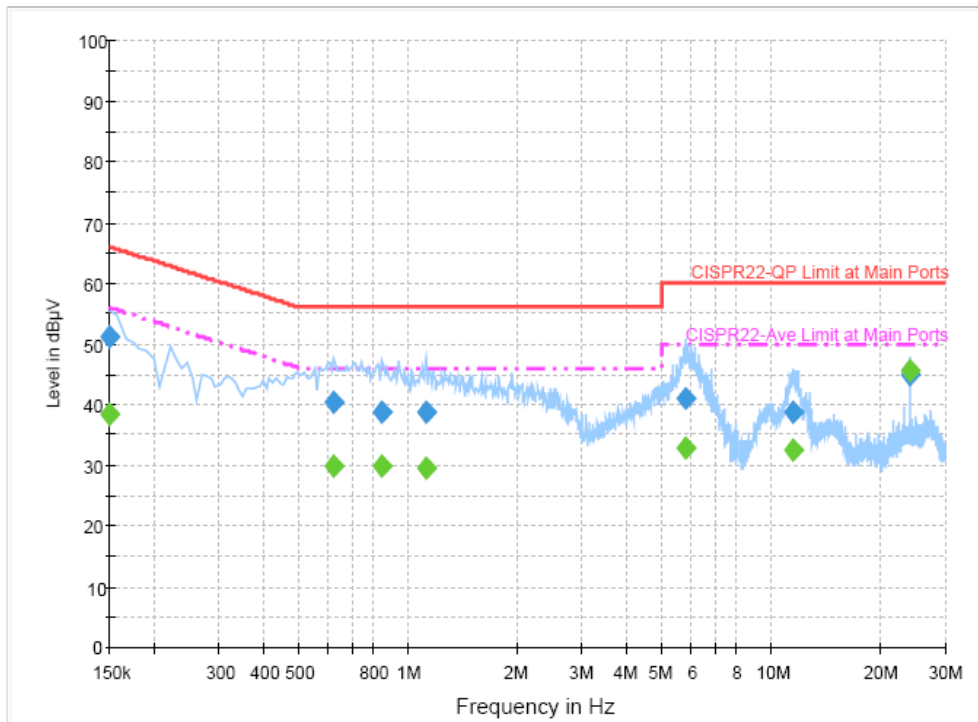


### 3.2.4 Test Setup



### 3.2.5 Test Result of AC Conducted Emission

|                 |   |                     |         |
|-----------------|---|---------------------|---------|
| Test Mode :     | Mode 1  | Temperature :       | 20~22°C |
| Test Engineer : | Novic Jiang   | Relative Humidity : | 40~42%  |
| Test Voltage :  | 120Vac / 60Hz   | Phase :             | Line    |
| Function Type : | WLAN Link + Bluetooth Link + TC + Adapter 1                                     |                     |         |
| Remark :        | All emissions not reported here are more than 10 dB below the prescribed limit. |                     |         |



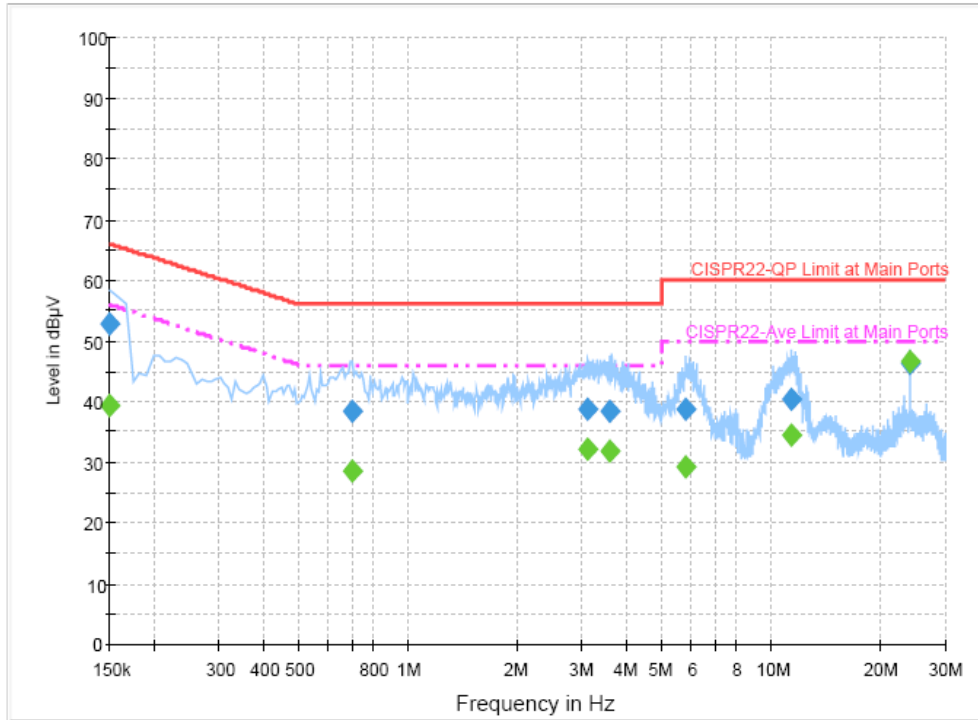
#### Final Result 1

| Frequency (MHz) | QuasiPeak (dBμV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBμV) |
|-----------------|------------------|--------|------|------------|-------------|--------------|
| 0.150000        | 51.0             | Off    | L1   | 19.5       | 15.0        | 66.0         |
| 0.622000        | 40.4             | Off    | L1   | 19.5       | 15.6        | 56.0         |
| 0.846000        | 38.8             | Off    | L1   | 19.5       | 17.2        | 56.0         |
| 1.118000        | 38.8             | Off    | L1   | 19.5       | 17.2        | 56.0         |
| 5.782000        | 41.0             | Off    | L1   | 19.5       | 19.0        | 60.0         |
| 11.430000       | 38.6             | Off    | L1   | 19.6       | 21.4        | 60.0         |
| 23.998000       | 45.1             | Off    | L1   | 19.7       | 14.9        | 60.0         |

#### Final Result 2

| Frequency (MHz) | Average (dBμV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBμV) |
|-----------------|----------------|--------|------|------------|-------------|--------------|
| 0.150000        | 38.4           | Off    | L1   | 19.5       | 17.6        | 56.0         |
| 0.622000        | 29.7           | Off    | L1   | 19.5       | 16.3        | 46.0         |
| 0.846000        | 29.9           | Off    | L1   | 19.5       | 16.1        | 46.0         |
| 1.118000        | 29.4           | Off    | L1   | 19.5       | 16.6        | 46.0         |
| 5.782000        | 32.6           | Off    | L1   | 19.5       | 17.4        | 50.0         |
| 11.430000       | 32.3           | Off    | L1   | 19.6       | 17.7        | 50.0         |
| 23.998000       | 45.5           | Off    | L1   | 19.7       | 4.5         | 50.0         |

|                 |   |                     |         |
|-----------------|---|---------------------|---------|
| Test Mode :     | Mode 1  | Temperature :       | 20~22°C |
| Test Engineer : | Novic Jiang   | Relative Humidity : | 40~42%  |
| Test Voltage :  | 120Vac / 60Hz   | Phase :             | Neutral |
| Function Type : | WLAN Link + Bluetooth Link + TC + Adapter 1                                     |                     |         |
| Remark :        | All emissions not reported here are more than 10 dB below the prescribed limit. |                     |         |



**Final Result 1**

| Frequency (MHz) | QuasiPeak (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|------------------|--------|------|------------|-------------|--------------|
| 0.150000        | 52.6             | Off    | N    | 19.5       | 13.4        | 66.0         |
| 0.702000        | 38.4             | Off    | N    | 19.5       | 17.6        | 56.0         |
| 3.102000        | 38.8             | Off    | N    | 19.5       | 17.2        | 56.0         |
| 3.574000        | 38.3             | Off    | N    | 19.5       | 17.7        | 56.0         |
| 5.790000        | 38.6             | Off    | N    | 19.5       | 21.4        | 60.0         |
| 11.366000       | 40.2             | Off    | N    | 19.6       | 19.8        | 60.0         |
| 23.998000       | 46.1             | Off    | N    | 19.9       | 13.9        | 60.0         |

**Final Result 2**

| Frequency (MHz) | Average (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|----------------|--------|------|------------|-------------|--------------|
| 0.150000        | 39.5           | Off    | N    | 19.5       | 16.5        | 56.0         |
| 0.702000        | 28.7           | Off    | N    | 19.5       | 17.3        | 46.0         |
| 3.102000        | 32.2           | Off    | N    | 19.5       | 13.8        | 46.0         |
| 3.574000        | 31.9           | Off    | N    | 19.5       | 14.1        | 46.0         |
| 5.790000        | 29.1           | Off    | N    | 19.5       | 20.9        | 50.0         |
| 11.366000       | 34.4           | Off    | N    | 19.6       | 15.6        | 50.0         |
| 23.998000       | 46.4           | Off    | N    | 19.9       | 3.6         | 50.0         |

### 3.3 Radiated Emission Measurement

#### 3.3.1 Limit of Radiated Emission

In any 100 kHz bandwidth outside the intentional radiator frequency band, all harmonics/spurious must be at least 20 dB below the highest emission level within the authorized band. If the output power of this device was measured by spectrum analyzer, the attenuation under this paragraph shall be 30 dB instead of 20 dB. In addition, radiated emissions which fall in the restricted bands must also comply with the FCC section 15.209 limits as below.

| Frequency (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                             |

#### 3.3.2 Measuring Instruments

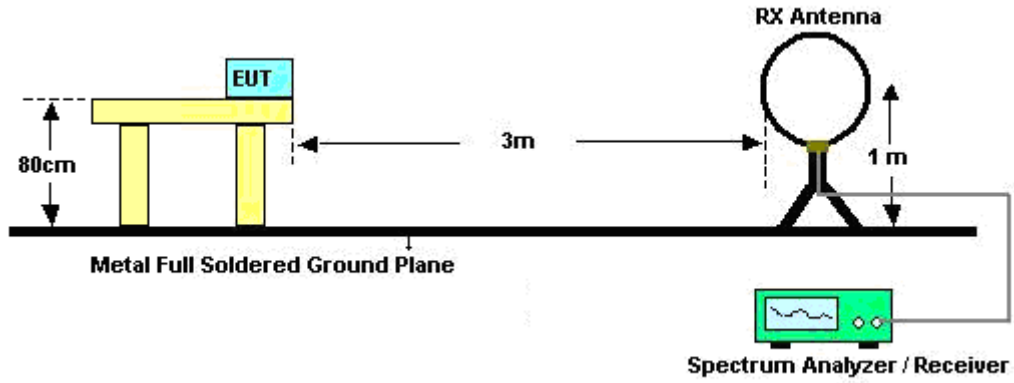
See list of measuring instruments of this test report.

#### 3.3.3 Test Procedures

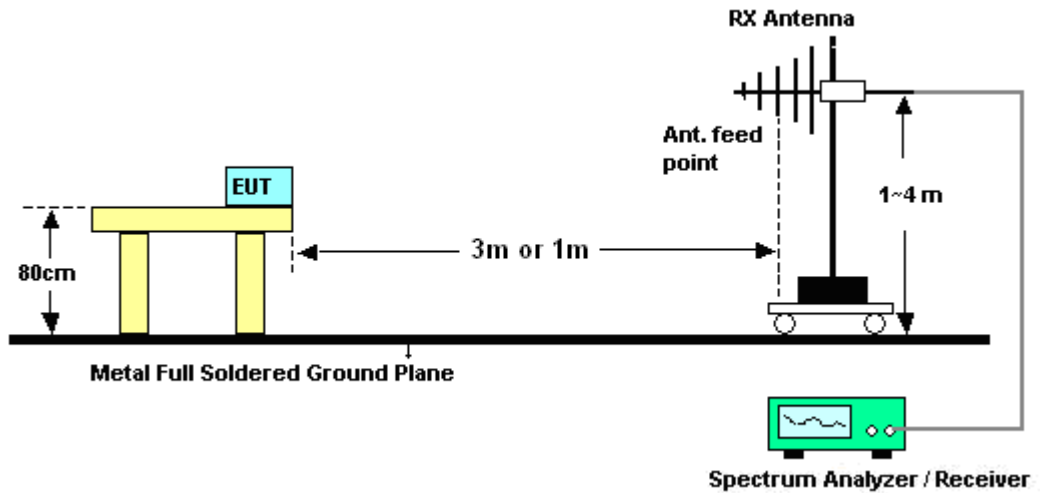
- The testing follows the guidelines in FCC KDB Publication No. 558074 (Measurement Guidelines of DTS).
- Use the following spectrum analyzer settings:
  - Span = wide enough to fully capture the emission being measured; RBW = 1 MHz for  $f \geq 1$  GHz, 100 kHz for  $f < 1$  GHz; VBW  $\geq$  RBW; Sweep = auto; Detector function = peak; Trace = max hold.
  - Above 18 GHz shall be extrapolated to the specified distance using an extrapolation factor of 20 dB/decade from 3m to 1m.  
 Distance extrapolation factor =  $20 \log(\text{specific distance [3m]} / \text{test distance [1m]})$  (dB)
- Follow the guidelines in ANSI C63.4-2003 with respect to maximizing the emission by rotating the EUT, measuring the emission for three EUT orthogonal planes, and adjusting the measurement antenna height and polarization. A pre-amp and a high pass filter are used for this test in order to get the good signal level.

### 3.3.4 Test Setup

For radiated emissions below 30MHz



For radiated emissions above 30MHz





3.3.5 Test Results of Radiated Emissions (9kHz ~ 30MHz)

| Test Engineer : | Cona Huang   | Temperature :       | 23~25°C           |          |
|-----------------|--------------|---------------------|-------------------|----------|
|                 |              | Relative Humidity : | 49~52%            |          |
| Frequency (MHz) | Level (dBuV) | Over Limit (dB)     | Limit Line (dBuV) | Remark   |
| -               | -            | -                   | -                 | See Note |

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Distance extrapolation factor =  $40 \log(\text{specific distance} / \text{test distance})$  (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.



3.3.6 Test Result of Radiated Emission (30MHz ~ 10<sup>th</sup> Harmonic)

|                 |   |                     |            |
|-----------------|---|---------------------|------------|
| Test Mode :     | Mode 1  | Temperature :       | 23~25°C    |
| Test Channel :  | 01  | Relative Humidity : | 49~52%     |
| Test Engineer : | Cona Huang  | Polarization :      | Horizontal |
| Remark :        | 2412 MHz is Fundamental Signals which can be ignored. |                     |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 27.08               | -12.92                  | 40.00                       | 46.97                     | 10.93                       | 0.73                    | 31.55                      | -                    | -                       | Peak    |
| 166.62               | 23.17               | -20.33                  | 43.50                       | 43.72                     | 9.84                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 34.87               | -11.13                  | 46.00                       | 53.36                     | 11.68                       | 1.34                    | 31.51                      | 100                  | 125                     | Peak    |
| 335.00               | 34.28               | -11.72                  | 46.00                       | 49.30                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 478.50               | 30.75               | -15.25                  | 46.00                       | 42.01                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 30.30               | -15.70                  | 46.00                       | 37.56                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 2316.65              | 44.01               | -29.99                  | 74.00                       | 43.93                     | 31.73                       | 4.41                    | 36.06                      | 101                  | 82                      | Peak    |
| 2316.65              | 31.09               | -22.91                  | 54.00                       | 31.01                     | 31.73                       | 4.41                    | 36.06                      | 101                  | 82                      | Average |
| 2412.00              | 94.38               | -                       | -                           | 94.08                     | 31.88                       | 4.50                    | 36.08                      | 101                  | 82                      | Peak    |
| 2412.00              | 90.86               | -                       | -                           | 90.56                     | 31.88                       | 4.50                    | 36.08                      | 101                  | 82                      | Average |
| 2484.00              | 42.31               | -31.69                  | 74.00                       | 41.84                     | 31.98                       | 4.59                    | 36.10                      | 101                  | 82                      | Peak    |
| 2484.00              | 30.92               | -23.08                  | 54.00                       | 30.45                     | 31.98                       | 4.59                    | 36.10                      | 101                  | 82                      | Average |
| 8244.00              | 50.25               | -23.75                  | 74.00                       | 42.18                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 107                     | Peak    |
| 8244.00              | 39.64               | -14.36                  | 54.00                       | 31.57                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 107                     | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 1  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 01  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2412 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 41.61                | 34.80               | -5.20                   | 40.00                       | 54.00                     | 11.75                       | 0.58                    | 31.53                      | 100                  | 305                     | Peak    |
| 107.49               | 30.51               | -12.99                  | 43.50                       | 48.93                     | 12.16                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 30.96               | -12.54                  | 43.50                       | 49.03                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.76               | -14.24                  | 46.00                       | 46.78                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 34.31               | -11.69                  | 46.00                       | 44.44                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.43               | -11.57                  | 46.00                       | 41.65                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 2385.81              | 50.43               | -23.57                  | 74.00                       | 50.18                     | 31.86                       | 4.47                    | 36.08                      | 127                  | 12                      | Peak    |
| 2385.81              | 42.48               | -11.52                  | 54.00                       | 42.23                     | 31.86                       | 4.47                    | 36.08                      | 127                  | 12                      | Average |
| 2412.00              | 103.18              | -                       | -                           | 102.88                    | 31.88                       | 4.50                    | 36.08                      | 127                  | 12                      | Peak    |
| 2412.00              | 99.90               | -                       | -                           | 99.60                     | 31.88                       | 4.50                    | 36.08                      | 127                  | 12                      | Average |
| 2500.00              | 43.54               | -30.46                  | 74.00                       | 43.02                     | 32.00                       | 4.62                    | 36.10                      | 127                  | 12                      | Peak    |
| 2500.00              | 31.42               | -22.58                  | 54.00                       | 30.90                     | 32.00                       | 4.62                    | 36.10                      | 127                  | 12                      | Average |
| 8232.00              | 50.54               | -23.46                  | 74.00                       | 42.50                     | 35.76                       | 8.93                    | 36.65                      | 105                  | 204                     | Peak    |
| 8232.00              | 39.49               | -14.51                  | 54.00                       | 31.45                     | 35.76                       | 8.93                    | 36.65                      | 105                  | 204                     | Average |





|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 2  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 28.58               | -11.42                  | 40.00                       | 48.47                     | 10.93                       | 0.73                    | 31.55                      | 100                  | 59                      | Peak    |
| 165.81               | 23.30               | -20.20                  | 43.50                       | 43.82                     | 9.87                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 34.49               | -11.51                  | 46.00                       | 52.98                     | 11.68                       | 1.34                    | 31.51                      | -                    | -                       | Peak    |
| 335.00               | 33.69               | -12.31                  | 46.00                       | 48.71                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 478.50               | 31.46               | -14.54                  | 46.00                       | 42.72                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 32.59               | -13.41                  | 46.00                       | 39.85                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 2340.00              | 42.80               | -31.20                  | 74.00                       | 42.65                     | 31.78                       | 4.44                    | 36.07                      | 192                  | 242                     | Peak    |
| 2340.00              | 30.98               | -23.02                  | 54.00                       | 30.83                     | 31.78                       | 4.44                    | 36.07                      | 192                  | 242                     | Average |
| 2437.00              | 96.02               | -                       | -                           | 95.68                     | 31.90                       | 4.53                    | 36.09                      | 192                  | 242                     | Peak    |
| 2437.00              | 92.17               | -                       | -                           | 91.80                     | 31.93                       | 4.53                    | 36.09                      | 192                  | 242                     | Average |
| 2494.00              | 42.72               | -31.28                  | 74.00                       | 42.20                     | 32.00                       | 4.62                    | 36.10                      | 192                  | 242                     | Peak    |
| 2494.00              | 30.87               | -23.13                  | 54.00                       | 30.35                     | 32.00                       | 4.62                    | 36.10                      | 192                  | 242                     | Average |
| 8211.00              | 50.97               | -23.03                  | 74.00                       | 42.92                     | 35.76                       | 8.93                    | 36.64                      | 100                  | 329                     | Peak    |
| 8211.00              | 40.20               | -13.80                  | 54.00                       | 32.15                     | 35.76                       | 8.93                    | 36.64                      | 100                  | 329                     | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 2  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 35.55               | -4.45                   | 40.00                       | 55.44                     | 10.93                       | 0.73                    | 31.55                      | 100                  | 88                      | Peak    |
| 107.22               | 30.00               | -13.50                  | 43.50                       | 48.54                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 30.98               | -12.52                  | 43.50                       | 49.05                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 32.21               | -13.79                  | 46.00                       | 47.23                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 34.24               | -11.76                  | 46.00                       | 44.37                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.69               | -11.31                  | 46.00                       | 41.91                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 2390.00              | 44.78               | -29.22                  | 74.00                       | 44.50                     | 31.86                       | 4.50                    | 36.08                      | 100                  | 17                      | Peak    |
| 2390.00              | 33.88               | -20.12                  | 54.00                       | 33.60                     | 31.86                       | 4.50                    | 36.08                      | 100                  | 17                      | Average |
| 2437.00              | 104.14              | -                       | -                           | 103.80                    | 31.90                       | 4.53                    | 36.09                      | 100                  | 17                      | Peak    |
| 2437.00              | 100.77              | -                       | -                           | 100.40                    | 31.93                       | 4.53                    | 36.09                      | 100                  | 17                      | Average |
| 2500.00              | 43.69               | -30.31                  | 74.00                       | 43.17                     | 32.00                       | 4.62                    | 36.10                      | 100                  | 17                      | Peak    |
| 2500.00              | 31.36               | -22.64                  | 54.00                       | 30.84                     | 32.00                       | 4.62                    | 36.10                      | 100                  | 17                      | Average |
| 8244.00              | 50.47               | -23.53                  | 74.00                       | 42.40                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 137                     | Peak    |
| 8244.00              | 40.33               | -13.67                  | 54.00                       | 32.26                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 137                     | Average |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 3  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 11  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2462 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 46.74                | 32.83               | -7.17                   | 40.00                       | 53.98                     | 9.68                        | 0.73                    | 31.56                      | 100                  | 15                      | Peak    |
| 164.73               | 22.67               | -20.83                  | 43.50                       | 43.16                     | 9.89                        | 1.14                    | 31.52                      | -                    | -                       | Peak    |
| 240.06               | 35.43               | -10.57                  | 46.00                       | 53.92                     | 11.68                       | 1.34                    | 31.51                      | -                    | -                       | Peak    |
| 335.00               | 34.65               | -11.35                  | 46.00                       | 49.67                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 478.50               | 31.26               | -14.74                  | 46.00                       | 42.52                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 30.51               | -15.49                  | 46.00                       | 37.77                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 2382.00              | 42.76               | -31.24                  | 74.00                       | 42.54                     | 31.83                       | 4.47                    | 36.08                      | 102                  | 292                     | Peak    |
| 2382.00              | 30.60               | -23.40                  | 54.00                       | 30.38                     | 31.83                       | 4.47                    | 36.08                      | 102                  | 292                     | Average |
| 2462.00              | 94.03               | -                       | -                           | 93.61                     | 31.95                       | 4.56                    | 36.09                      | 102                  | 292                     | Peak    |
| 2462.00              | 90.21               | -                       | -                           | 89.79                     | 31.95                       | 4.56                    | 36.09                      | 102                  | 292                     | Average |
| 2483.50              | 47.60               | -26.40                  | 74.00                       | 47.13                     | 31.98                       | 4.59                    | 36.10                      | 102                  | 292                     | Peak    |
| 2483.50              | 39.35               | -14.65                  | 54.00                       | 38.88                     | 31.98                       | 4.59                    | 36.10                      | 102                  | 292                     | Average |
| 8196.00              | 51.38               | -22.62                  | 74.00                       | 43.36                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 218                     | Peak    |
| 8196.00              | 39.88               | -14.12                  | 54.00                       | 31.86                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 218                     | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 3  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 11  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2462 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 35.89               | -4.11                   | 40.00                       | 55.78                     | 10.93                       | 0.73                    | 31.55                      | 110                  | 319                     | Peak    |
| 106.14               | 29.73               | -13.77                  | 43.50                       | 48.40                     | 11.92                       | 0.95                    | 31.54                      | -                    | -                       | Peak    |
| 129.90               | 31.38               | -12.12                  | 43.50                       | 49.45                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.69               | -14.31                  | 46.00                       | 46.71                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 34.19               | -11.81                  | 46.00                       | 44.32                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.59               | -11.41                  | 46.00                       | 41.81                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 2390.00              | 43.39               | -30.61                  | 74.00                       | 43.11                     | 31.86                       | 4.50                    | 36.08                      | 153                  | 21                      | Peak    |
| 2390.00              | 31.62               | -22.38                  | 54.00                       | 31.34                     | 31.86                       | 4.50                    | 36.08                      | 153                  | 21                      | Average |
| 2462.00              | 101.31              | -                       | -                           | 100.89                    | 31.95                       | 4.56                    | 36.09                      | 153                  | 21                      | Peak    |
| 2462.00              | 97.76               | -                       | -                           | 97.34                     | 31.95                       | 4.56                    | 36.09                      | 153                  | 21                      | Average |
| 2483.50              | 52.71               | -21.29                  | 74.00                       | 52.24                     | 31.98                       | 4.59                    | 36.10                      | 153                  | 21                      | Peak    |
| 2483.50              | 46.88               | -7.12                   | 54.00                       | 46.41                     | 31.98                       | 4.59                    | 36.10                      | 153                  | 21                      | Average |
| 8169.00              | 50.04               | -23.96                  | 74.00                       | 42.03                     | 35.77                       | 8.87                    | 36.63                      | 100                  | 154                     | Peak    |
| 8169.00              | 40.11               | -13.89                  | 54.00                       | 32.10                     | 35.77                       | 8.87                    | 36.63                      | 100                  | 154                     | Average |



|                 |   |                     |            |
|-----------------|---|---------------------|------------|
| Test Mode :     | Mode 4  | Temperature :       | 23~25°C    |
| Test Channel :  | 01  | Relative Humidity : | 49~52%     |
| Test Engineer : | Cona Huang  | Polarization :      | Horizontal |
| Remark :        | 2412 MHz is Fundamental Signals which can be ignored. |                     |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2349.90              | 44.84               | -29.16                  | 74.00                       | 44.69                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 85                      | Peak    |
| 2349.90              | 31.05               | -22.95                  | 54.00                       | 30.90                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 85                      | Average |
| 2412.00              | 92.21               | -                       | -                           | 91.91                     | 31.88                       | 4.50                    | 36.08                      | 100                  | 85                      | Peak    |
| 2412.00              | 82.57               | -                       | -                           | 82.27                     | 31.88                       | 4.50                    | 36.08                      | 100                  | 85                      | Average |
| 2486.00              | 42.44               | -31.56                  | 74.00                       | 41.97                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 85                      | Peak    |
| 2486.00              | 31.07               | -22.93                  | 54.00                       | 30.60                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 85                      | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 4  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 01  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2412 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2389.99              | 50.39               | -23.61                  | 74.00                       | 50.11                     | 31.86                       | 4.50                    | 36.08                      | 106                  | 59                      | Peak    |
| 2389.99              | 35.53               | -18.47                  | 54.00                       | 35.25                     | 31.86                       | 4.50                    | 36.08                      | 106                  | 59                      | Average |
| 2412.00              | 88.57               | -                       | -                           | 88.27                     | 31.88                       | 4.50                    | 36.08                      | 106                  | 59                      | Average |
| 2412.00              | 97.53               | -                       | -                           | 97.23                     | 31.88                       | 4.50                    | 36.08                      | 106                  | 59                      | Peak    |
| 2484.00              | 43.01               | -30.99                  | 74.00                       | 42.54                     | 31.98                       | 4.59                    | 36.10                      | 0                    | 0                       | Peak    |
| 2484.00              | 31.39               | -22.61                  | 54.00                       | 30.92                     | 31.98                       | 4.59                    | 36.10                      | 106                  | 59                      | Average |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 5  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2382.00              | 43.16               | -30.84                  | 74.00                       | 42.94                   | 31.83                       | 4.47                    | 36.08                      | 100                  | 287                     | Peak    |
| 2382.00              | 30.72               | -23.28                  | 54.00                       | 30.50                   | 31.83                       | 4.47                    | 36.08                      | 100                  | 287                     | Average |
| 2437.00              | 80.99               | -                       | -                           | 80.62                   | 31.93                       | 4.53                    | 36.09                      | 100                  | 287                     | Average |
| 2437.00              | 90.35               | -                       | -                           | 89.95                   | 31.93                       | 4.56                    | 36.09                      | 100                  | 287                     | Peak    |
| 2494.00              | 42.56               | -31.44                  | 74.00                       | 42.04                   | 32.00                       | 4.62                    | 36.10                      | 100                  | 287                     | Peak    |
| 2494.00              | 30.98               | -23.02                  | 54.00                       | 30.46                   | 32.00                       | 4.62                    | 36.10                      | 100                  | 287                     | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 5  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2340.00              | 43.22               | -30.78                  | 74.00                       | 43.07                     | 31.78                       | 4.44                    | 36.07                      | 121                  | 17                      | Peak    |
| 2340.00              | 31.14               | -22.86                  | 54.00                       | 30.99                     | 31.78                       | 4.44                    | 36.07                      | 121                  | 17                      | Average |
| 2437.00              | 100.45              | -                       | -                           | 100.11                    | 31.90                       | 4.53                    | 36.09                      | 121                  | 17                      | Peak    |
| 2437.00              | 91.05               | -                       | -                           | 90.68                     | 31.93                       | 4.53                    | 36.09                      | 121                  | 17                      | Average |
| 2486.00              | 43.56               | -30.44                  | 74.00                       | 43.09                     | 31.98                       | 4.59                    | 36.10                      | 121                  | 17                      | Peak    |
| 2486.00              | 31.54               | -22.46                  | 54.00                       | 31.07                     | 31.98                       | 4.59                    | 36.10                      | 121                  | 17                      | Average |





|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 6  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 11  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2462 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2350.00              | 43.00               | -31.00                  | 74.00                       | 42.85                     | 31.78                       | 4.44                    | 36.07                      | 149                  | 78                      | Peak    |
| 2350.00              | 30.97               | -23.03                  | 54.00                       | 30.82                     | 31.78                       | 4.44                    | 36.07                      | 149                  | 78                      | Average |
| 2462.00              | 93.24               | -                       | -                           | 92.82                     | 31.95                       | 4.56                    | 36.09                      | 149                  | 78                      | Peak    |
| 2462.00              | 83.80               | -                       | -                           | 83.38                     | 31.95                       | 4.56                    | 36.09                      | 149                  | 78                      | Average |
| 2483.85              | 47.68               | -26.32                  | 74.00                       | 47.21                     | 31.98                       | 4.59                    | 36.10                      | 149                  | 78                      | Peak    |
| 2483.85              | 33.07               | -20.93                  | 54.00                       | 32.60                     | 31.98                       | 4.59                    | 36.10                      | 149                  | 78                      | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 6  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 11  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2462 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2374.00              | 43.39               | -30.61                  | 74.00                       | 43.16                     | 31.83                       | 4.47                    | 36.07                      | 189                  | 23                      | Peak    |
| 2374.00              | 31.34               | -22.66                  | 54.00                       | 31.11                     | 31.83                       | 4.47                    | 36.07                      | 189                  | 23                      | Average |
| 2462.00              | 100.20              | -                       | -                           | 99.78                     | 31.95                       | 4.56                    | 36.09                      | 189                  | 23                      | Peak    |
| 2462.00              | 90.66               | -                       | -                           | 90.24                     | 31.95                       | 4.56                    | 36.09                      | 189                  | 23                      | Average |
| 2486.89              | 59.63               | -14.37                  | 74.00                       | 59.16                     | 31.98                       | 4.59                    | 36.10                      | 189                  | 23                      | Peak    |
| 2486.89              | 35.06               | -18.94                  | 54.00                       | 34.59                     | 31.98                       | 4.59                    | 36.10                      | 189                  | 23                      | Average |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 7  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 01  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2412 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 28.85               | -11.15                  | 40.00                       | 48.74                     | 10.93                       | 0.73                    | 31.55                      | -                    | -                       | Peak    |
| 165.81               | 23.59               | -19.91                  | 43.50                       | 44.11                     | 9.87                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 34.88               | -11.12                  | 46.00                       | 53.37                     | 11.68                       | 1.34                    | 31.51                      | 100                  | 329                     | Peak    |
| 335.00               | 33.06               | -12.94                  | 46.00                       | 48.08                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 30.81               | -15.19                  | 46.00                       | 40.94                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 780.20               | 31.13               | -14.87                  | 46.00                       | 38.39                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 2389.99              | 49.88               | -24.12                  | 74.00                       | 49.60                     | 31.86                       | 4.50                    | 36.08                      | 105                  | 172                     | Peak    |
| 2389.99              | 34.53               | -19.47                  | 54.00                       | 34.25                     | 31.86                       | 4.50                    | 36.08                      | 105                  | 172                     | Average |
| 2412.00              | 102.38              | -                       | -                           | 102.08                    | 31.88                       | 4.50                    | 36.08                      | 105                  | 172                     | Peak    |
| 2412.00              | 90.55               | -                       | -                           | 90.25                     | 31.88                       | 4.50                    | 36.08                      | 105                  | 172                     | Average |
| 2494.00              | 31.09               | -22.91                  | 54.00                       | 30.57                     | 32.00                       | 4.62                    | 36.10                      | 105                  | 172                     | Average |
| 2494.00              | 43.77               | -30.23                  | 74.00                       | 43.25                     | 32.00                       | 4.62                    | 36.10                      | 105                  | 172                     | Peak    |
| 8205.00              | 53.20               | -20.80                  | 74.00                       | 45.18                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 175                     | Peak    |
| 8205.00              | 37.90               | -16.10                  | 54.00                       | 29.88                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 175                     | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 7  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 01  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2412 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 35.42               | -4.58                   | 40.00                       | 55.31                     | 10.93                       | 0.73                    | 31.55                      | 100                  | 74                      | Peak    |
| 107.22               | 29.15               | -14.35                  | 43.50                       | 47.69                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 31.34               | -12.16                  | 43.50                       | 49.41                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 32.15               | -13.85                  | 46.00                       | 47.17                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 33.84               | -12.16                  | 46.00                       | 43.97                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.47               | -11.53                  | 46.00                       | 41.69                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 2389.99              | 35.52               | -18.48                  | 54.00                       | 35.24                     | 31.86                       | 4.50                    | 36.08                      | 100                  | 93                      | Average |
| 2389.99              | 52.22               | -21.78                  | 74.00                       | 51.94                     | 31.86                       | 4.50                    | 36.08                      | 100                  | 93                      | Peak    |
| 2412.00              | 102.13              | -                       | -                           | 101.83                    | 31.88                       | 4.50                    | 36.08                      | 100                  | 93                      | Peak    |
| 2412.00              | 90.17               | -                       | -                           | 89.87                     | 31.88                       | 4.50                    | 36.08                      | 100                  | 93                      | Average |
| 2500.00              | 43.46               | -30.54                  | 74.00                       | 42.94                     | 32.00                       | 4.62                    | 36.10                      | 100                  | 93                      | Peak    |
| 2500.00              | 31.15               | -22.85                  | 54.00                       | 30.63                     | 32.00                       | 4.62                    | 36.10                      | 100                  | 93                      | Average |
| 8205.00              | 53.23               | -20.77                  | 74.00                       | 45.21                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 17                      | Peak    |
| 8205.00              | 37.91               | -16.09                  | 54.00                       | 29.89                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 17                      | Average |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 8  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.77                | 23.91               | -16.09                  | 40.00                       | 43.80                     | 10.93                       | 0.73                    | 31.55                      | -                    | -                       | Peak    |
| 166.62               | 23.18               | -20.32                  | 43.50                       | 43.73                     | 9.84                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 34.61               | -11.39                  | 46.00                       | 53.10                     | 11.68                       | 1.34                    | 31.51                      | 100                  | 107                     | Peak    |
| 335.00               | 33.50               | -12.50                  | 46.00                       | 48.52                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 478.50               | 31.65               | -14.35                  | 46.00                       | 42.91                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 32.70               | -13.30                  | 46.00                       | 39.96                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 2364.00              | 44.31               | -29.69                  | 74.00                       | 44.13                     | 31.81                       | 4.44                    | 36.07                      | 102                  | 200                     | Peak    |
| 2364.00              | 31.70               | -22.30                  | 54.00                       | 31.52                     | 31.81                       | 4.44                    | 36.07                      | 102                  | 200                     | Average |
| 2437.00              | 93.39               | -                       | -                           | 93.02                     | 31.93                       | 4.53                    | 36.09                      | 102                  | 200                     | Average |
| 2437.00              | 104.94              | -                       | -                           | 104.60                    | 31.90                       | 4.53                    | 36.09                      | 102                  | 200                     | Peak    |
| 2494.00              | 31.89               | -22.11                  | 54.00                       | 31.37                     | 32.00                       | 4.62                    | 36.10                      | 102                  | 200                     | Average |
| 2494.00              | 43.81               | -30.19                  | 74.00                       | 43.29                     | 32.00                       | 4.62                    | 36.10                      | 102                  | 200                     | Peak    |
| 8214.00              | 52.88               | -21.12                  | 74.00                       | 44.84                     | 35.76                       | 8.93                    | 36.65                      | 100                  | 197                     | Peak    |
| 8214.00              | 37.94               | -16.06                  | 54.00                       | 29.90                     | 35.76                       | 8.93                    | 36.65                      | 100                  | 197                     | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 8  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 42.69                | 34.30               | -5.70                   | 40.00                       | 53.77                     | 11.34                       | 0.73                    | 31.54                      | 100                  | 117                     | Peak    |
| 107.22               | 29.00               | -14.50                  | 43.50                       | 47.54                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 32.06               | -11.44                  | 43.50                       | 50.13                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.84               | -14.16                  | 46.00                       | 46.86                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 33.95               | -12.05                  | 46.00                       | 44.08                     | 18.78                       | 2.1                     | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.40               | -11.60                  | 46.00                       | 41.62                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 2340.00              | 44.04               | -29.96                  | 74.00                       | 43.89                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 99                      | Peak    |
| 2340.00              | 31.81               | -22.19                  | 54.00                       | 31.66                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 99                      | Average |
| 2437.00              | 91.61               | -                       | -                           | 91.24                     | 31.93                       | 4.53                    | 36.09                      | 100                  | 99                      | Average |
| 2437.00              | 103.15              | -                       | -                           | 102.81                    | 31.90                       | 4.53                    | 36.09                      | 100                  | 99                      | Peak    |
| 2500.00              | 31.46               | -22.54                  | 54.00                       | 30.94                     | 32.00                       | 4.62                    | 36.10                      | 100                  | 99                      | Average |
| 2500.00              | 43.42               | -30.58                  | 74.00                       | 42.90                     | 32.00                       | 4.62                    | 36.10                      | 100                  | 99                      | Peak    |
| 8202.00              | 52.47               | -21.53                  | 74.00                       | 44.45                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 57                      | Peak    |
| 8202.00              | 37.69               | -16.31                  | 54.00                       | 29.67                     | 35.76                       | 8.90                    | 36.64                      | 100                  | 57                      | Average |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 9  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 11  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2462 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 46.20                | 31.17               | -8.83                   | 40.00                       | 52.32                     | 9.68                        | 0.73                    | 31.56                      | 100                  | 151                     | Peak    |
| 129.90               | 22.88               | -20.62                  | 43.50                       | 40.95                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 240.06               | 35.08               | -10.92                  | 46.00                       | 53.57                     | 11.68                       | 1.34                    | 31.51                      | -                    | -                       | Peak    |
| 335.00               | 33.06               | -12.94                  | 46.00                       | 48.08                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 478.50               | 30.91               | -15.09                  | 46.00                       | 42.17                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 32.00               | -14.00                  | 46.00                       | 39.26                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 2364.00              | 43.07               | -30.93                  | 74.00                       | 42.89                     | 31.81                       | 4.44                    | 36.07                      | 100                  | 200                     | Peak    |
| 2364.00              | 31.33               | -22.67                  | 54.00                       | 31.15                     | 31.81                       | 4.44                    | 36.07                      | 100                  | 200                     | Average |
| 2462.00              | 103.56              | -                       | -                           | 103.11                    | 31.95                       | 4.59                    | 36.09                      | 100                  | 200                     | Peak    |
| 2462.00              | 91.02               | -                       | -                           | 90.60                     | 31.95                       | 4.56                    | 36.09                      | 100                  | 200                     | Average |
| 2483.50              | 38.64               | -15.36                  | 54.00                       | 38.17                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 200                     | Average |
| 2483.50              | 56.27               | -17.73                  | 74.00                       | 55.80                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 200                     | Peak    |
| 8250.00              | 52.55               | -21.45                  | 74.00                       | 44.48                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 54                      | Peak    |
| 8250.00              | 37.75               | -16.25                  | 54.00                       | 29.68                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 54                      | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 9  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 11  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2462 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 41.61                | 34.86               | -5.14                   | 40.00                       | 54.06                     | 11.75                       | 0.58                    | 31.53                      | 103                  | 205                     | Peak    |
| 107.22               | 28.77               | -14.73                  | 43.50                       | 47.31                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 30.71               | -12.79                  | 43.50                       | 48.78                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.85               | -14.15                  | 46.00                       | 46.87                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 33.81               | -12.19                  | 46.00                       | 43.94                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.82               | -11.18                  | 46.00                       | 42.04                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 2342.00              | 43.82               | -30.18                  | 74.00                       | 43.67                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 99                      | Peak    |
| 2342.00              | 31.73               | -22.27                  | 54.00                       | 31.58                     | 31.78                       | 4.44                    | 36.07                      | 100                  | 99                      | Average |
| 2462.00              | 101.56              | -                       | -                           | 101.14                    | 31.95                       | 4.56                    | 36.09                      | 100                  | 99                      | Peak    |
| 2462.00              | 89.14               | -                       | -                           | 88.72                     | 31.95                       | 4.56                    | 36.09                      | 100                  | 99                      | Average |
| 2483.66              | 37.81               | -16.19                  | 54.00                       | 37.34                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 99                      | Average |
| 2483.66              | 56.07               | -17.93                  | 74.00                       | 55.60                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 99                      | Peak    |
| 8217.00              | 53.31               | -20.69                  | 74.00                       | 45.27                     | 35.76                       | 8.93                    | 36.65                      | 100                  | 285                     | Peak    |
| 8217.00              | 38.00               | -16.00                  | 54.00                       | 29.96                     | 35.76                       | 8.93                    | 36.65                      | 100                  | 285                     | Average |





|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 10   | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 03  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2422 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2311.33              | 30.55               | -23.45                  | 54.00                       | 30.50                     | 31.73                       | 4.38                    | 36.06                      | 153                  | 70                      | Average |
| 2311.33              | 43.30               | -30.70                  | 74.00                       | 43.25                     | 31.73                       | 4.38                    | 36.06                      | 153                  | 70                      | Peak    |
| 2422.00              | 69.73               | -                       | -                           | 69.38                     | 31.90                       | 4.53                    | 36.08                      | 153                  | 70                      | Average |
| 2422.00              | 80.30               | -                       | -                           | 79.96                     | 31.90                       | 4.53                    | 36.09                      | 153                  | 70                      | Peak    |
| 2494.00              | 42.02               | -31.98                  | 74.00                       | 41.50                     | 32.00                       | 4.62                    | 36.10                      | 153                  | 70                      | Peak    |
| 2494.00              | 30.18               | -23.82                  | 54.00                       | 29.66                     | 32.00                       | 4.62                    | 36.10                      | 153                  | 70                      | Average |



|                        |   |                            |          |
|------------------------|---|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 10   | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 03  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 2422 MHz is Fundamental Signals which can be ignored. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2389.99              | 46.53               | -27.47                  | 74.00                       | 46.25                     | 31.86                       | 4.50                    | 36.08                      | 121                  | 15                      | Peak    |
| 2389.99              | 32.67               | -21.33                  | 54.00                       | 32.39                     | 31.86                       | 4.50                    | 36.08                      | 121                  | 15                      | Average |
| 2422.00              | 86.47               | -                       | -                           | 86.13                     | 31.90                       | 4.53                    | 36.09                      | 121                  | 15                      | Peak    |
| 2422.00              | 76.33               | -                       | -                           | 75.98                     | 31.90                       | 4.53                    | 36.08                      | 121                  | 15                      | Average |
| 2492.00              | 41.91               | -32.09                  | 74.00                       | 41.39                     | 32.00                       | 4.62                    | 36.10                      | 121                  | 15                      | Peak    |
| 2492.00              | 30.26               | -23.74                  | 54.00                       | 29.74                     | 32.00                       | 4.62                    | 36.10                      | 121                  | 15                      | Average |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 11   | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 06  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2437 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2324.00              | 42.83               | -31.17                  | 74.00                       | 42.72                     | 31.76                       | 4.41                    | 36.06                      | 200                  | 247                     | Peak    |
| 2324.00              | 30.24               | -23.76                  | 54.00                       | 30.13                     | 31.76                       | 4.41                    | 36.06                      | 200                  | 247                     | Average |
| 2437.00              | 76.18               | -                       | -                           | 75.81                     | 31.93                       | 4.53                    | 36.09                      | 200                  | 247                     | Average |
| 2437.00              | 86.27               | -                       | -                           | 85.93                     | 31.90                       | 4.53                    | 36.09                      | 200                  | 247                     | Peak    |
| 2500.00              | 30.36               | -23.64                  | 54.00                       | 29.84                     | 32.00                       | 4.62                    | 36.10                      | 200                  | 247                     | Average |
| 2500.00              | 42.45               | -31.55                  | 74.00                       | 41.93                     | 32.00                       | 4.62                    | 36.10                      | 200                  | 247                     | Peak    |



|                 |   |                     |          |
|-----------------|---|---------------------|----------|
| Test Mode :     | Mode 11   | Temperature :       | 23~25°C  |
| Test Channel :  | 06  | Relative Humidity : | 49~52%   |
| Test Engineer : | Cona Huang  | Polarization :      | Vertical |
| Remark :        | 2437 MHz is Fundamental Signals which can be ignored. |                     |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2390.00              | 43.47               | -30.53                  | 74.00                       | 43.19                     | 31.86                       | 4.50                    | 36.08                      | 100                  | 22                      | Peak    |
| 2390.00              | 31.37               | -22.63                  | 54.00                       | 31.09                     | 31.86                       | 4.50                    | 36.08                      | 100                  | 22                      | Average |
| 2437.00              | 93.04               | -                       | -                           | 92.70                     | 31.90                       | 4.53                    | 36.09                      | 100                  | 22                      | Peak    |
| 2437.00              | 82.33               | -                       | -                           | 81.96                     | 31.93                       | 4.53                    | 36.09                      | 100                  | 22                      | Average |
| 2484.00              | 31.07               | -22.93                  | 54.00                       | 30.60                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 22                      | Average |
| 2484.00              | 45.10               | -28.90                  | 74.00                       | 44.63                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 22                      | Peak    |



|                        |   |                            |            |
|------------------------|---|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 12   | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 09  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang  | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 2452 MHz is Fundamental Signals which can be ignored. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2364.00              | 41.97               | -32.03                  | 74.00                       | 41.79                     | 31.81                       | 4.44                    | 36.07                      | 120                  | 74                      | Peak    |
| 2364.00              | 30.54               | -23.46                  | 54.00                       | 30.36                     | 31.81                       | 4.44                    | 36.07                      | 120                  | 74                      | Average |
| 2452.00              | 82.82               | -                       | -                           | 82.42                     | 31.93                       | 4.56                    | 36.09                      | 120                  | 74                      | Peak    |
| 2452.00              | 72.15               | -                       | -                           | 71.75                     | 31.93                       | 4.56                    | 36.09                      | 120                  | 74                      | Average |
| 2483.85              | 31.81               | -22.19                  | 54.00                       | 31.34                     | 31.98                       | 4.59                    | 36.10                      | 120                  | 74                      | Average |
| 2483.85              | 44.86               | -29.14                  | 74.00                       | 44.39                     | 31.98                       | 4.59                    | 36.10                      | 120                  | 74                      | Peak    |



|                 |   |                     |          |
|-----------------|---|---------------------|----------|
| Test Mode :     | Mode 12   | Temperature :       | 23~25°C  |
| Test Channel :  | 09  | Relative Humidity : | 49~52%   |
| Test Engineer : | Cona Huang  | Polarization :      | Vertical |
| Remark :        | 2452 MHz is Fundamental Signals which can be ignored. |                     |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2324.00              | 42.21               | -31.79                  | 74.00                       | 42.10                     | 31.76                       | 4.41                    | 36.06                      | 100                  | 58                      | Peak    |
| 2324.00              | 30.55               | -23.45                  | 54.00                       | 30.44                     | 31.76                       | 4.41                    | 36.06                      | 100                  | 58                      | Average |
| 2452.00              | 86.92               | -                       | -                           | 86.55                     | 31.93                       | 4.53                    | 36.09                      | 100                  | 58                      | Peak    |
| 2452.00              | 76.72               | -                       | -                           | 76.32                     | 31.93                       | 4.56                    | 36.09                      | 100                  | 58                      | Average |
| 2483.85              | 49.68               | -24.32                  | 74.00                       | 49.21                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 58                      | Peak    |
| 2483.85              | 32.91               | -21.09                  | 54.00                       | 32.44                     | 31.98                       | 4.59                    | 36.10                      | 100                  | 58                      | Average |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 13  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5745 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 46.74                | 30.37               | -9.63                   | 40.00                       | 51.52                     | 9.68                        | 0.73                    | 31.56                      | 100                  | 173                     | Peak    |
| 165.81               | 22.75               | -20.75                  | 43.50                       | 43.27                     | 9.87                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 34.76               | -11.24                  | 46.00                       | 53.25                     | 11.68                       | 1.34                    | 31.51                      | -                    | -                       | Peak    |
| 335.00               | 33.73               | -12.27                  | 46.00                       | 48.75                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 478.50               | 31.21               | -14.79                  | 46.00                       | 42.47                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 32.98               | -13.02                  | 46.00                       | 40.24                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 5725.00              | 68.45               | -10.32                  | 78.77                       | 63.23                     | 34.21                       | 7.01                    | 36.00                      | 100                  | 319                     | Peak    |
| 5745.00              | 88.88               | -                       | -                           | 83.65                     | 34.20                       | 7.03                    | 36.00                      | 100                  | 319                     | Average |
| 5745.00              | 98.77               | -                       | -                           | 93.54                     | 34.20                       | 7.03                    | 36.00                      | 100                  | 319                     | Peak    |
| 5850.00              | 47.18               | -31.59                  | 78.77                       | 41.93                     | 34.16                       | 7.09                    | 36.00                      | 100                  | 319                     | Peak    |
| 8470.00              | 52.20               | -21.80                  | 74.00                       | 43.93                     | 35.71                       | 9.25                    | 36.69                      | 100                  | 64                      | Peak    |
| 8470.00              | 38.05               | -15.95                  | 54.00                       | 29.78                     | 35.71                       | 9.25                    | 36.69                      | 100                  | 64                      | Average |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 13  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5745 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 42.42                | 34.77               | -5.23                   | 40.00                       | 54.39                     | 11.34                       | 0.58                    | 31.54                      | 100                  | 324                     | Peak    |
| 107.22               | 28.78               | -14.72                  | 43.50                       | 47.32                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 31.46               | -12.04                  | 43.50                       | 49.53                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.93               | -14.07                  | 46.00                       | 46.95                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 33.82               | -12.18                  | 46.00                       | 43.95                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 33.97               | -12.03                  | 46.00                       | 41.19                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 5725.00              | 68.76               | -11.93                  | 80.69                       | 63.54                     | 34.21                       | 7.01                    | 36.00                      | 101                  | 330                     | Peak    |
| 5745.00              | 91.41               | -                       | -                           | 86.18                     | 34.20                       | 7.03                    | 36.00                      | 101                  | 330                     | Average |
| 5745.00              | 100.69              | -                       | -                           | 95.46                     | 34.20                       | 7.03                    | 36.00                      | 101                  | 330                     | Peak    |
| 5850.00              | 46.72               | -33.97                  | 80.69                       | 41.47                     | 34.16                       | 7.09                    | 36.00                      | 101                  | 330                     | Peak    |
| 8508.00              | 52.75               | -21.25                  | 74.00                       | 44.46                     | 35.71                       | 9.29                    | 36.71                      | 100                  | 88                      | Peak    |
| 8508.00              | 38.18               | -15.82                  | 54.00                       | 29.89                     | 35.71                       | 9.29                    | 36.71                      | 100                  | 88                      | Average |





|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 14  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5785 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 30.00                | 22.49               | -17.51                  | 40.00                       | 34.99                     | 18.48                       | 0.58                    | 31.56                      | -                    | -                       | Peak    |
| 165.81               | 21.61               | -21.89                  | 43.50                       | 42.13                     | 9.87                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 35.62               | -10.38                  | 46.00                       | 54.11                     | 11.68                       | 1.34                    | 31.51                      | 100                  | 136                     | Peak    |
| 307.70               | 33.80               | -12.20                  | 46.00                       | 49.66                     | 13.87                       | 1.55                    | 31.28                      | -                    | -                       | Peak    |
| 528.20               | 30.91               | -15.09                  | 46.00                       | 41.04                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 780.20               | 30.18               | -15.82                  | 46.00                       | 37.44                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 5725.00              | 47.27               | -31.91                  | 79.18                       | 42.05                     | 34.21                       | 7.01                    | 36.00                      | 100                  | 315                     | Peak    |
| 5785.00              | 89.59               | -                       | -                           | 84.35                     | 34.19                       | 7.05                    | 36.00                      | 100                  | 315                     | Average |
| 5785.00              | 99.18               | -                       | -                           | 93.94                     | 34.19                       | 7.05                    | 36.00                      | 100                  | 315                     | Peak    |
| 5850.00              | 46.43               | -32.75                  | 79.18                       | 41.18                     | 34.16                       | 7.09                    | 36.00                      | 100                  | 315                     | Peak    |
| 8470.00              | 53.13               | -20.87                  | 74.00                       | 44.86                     | 35.71                       | 9.25                    | 36.69                      | 100                  | 222                     | Peak    |
| 8470.00              | 37.63               | -16.37                  | 54.00                       | 29.36                     | 35.71                       | 9.25                    | 36.69                      | 100                  | 222                     | Average |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 14  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5785 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 42.42                | 34.62               | -5.38                   | 40.00                       | 54.24                     | 11.34                       | 0.58                    | 31.54                      | 100                  | 210                     | Peak    |
| 107.22               | 28.60               | -14.90                  | 43.50                       | 47.14                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 29.84               | -13.66                  | 43.50                       | 47.91                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.28               | -14.72                  | 46.00                       | 46.30                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 34.41               | -11.59                  | 46.00                       | 44.54                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.08               | -11.92                  | 46.00                       | 41.30                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 5725.00              | 47.65               | -34.78                  | 82.43                       | 42.43                     | 34.21                       | 7.01                    | 36.00                      | 101                  | 327                     | Peak    |
| 5785.00              | 92.38               | -                       | -                           | 87.14                     | 34.19                       | 7.05                    | 36.00                      | 101                  | 327                     | Average |
| 5785.00              | 102.43              | -                       | -                           | 97.19                     | 34.18                       | 7.06                    | 36.00                      | 101                  | 327                     | Peak    |
| 5850.00              | 46.58               | -35.85                  | 82.43                       | 41.33                     | 34.16                       | 7.09                    | 36.00                      | 101                  | 327                     | Peak    |
| 8236.00              | 52.50               | -21.50                  | 74.00                       | 44.43                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 17                      | Peak    |
| 8236.00              | 37.85               | -16.15                  | 54.00                       | 29.78                     | 35.75                       | 8.97                    | 36.65                      | 100                  | 17                      | Average |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 15  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5825 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 30.00                | 22.16               | -17.84                  | 40.00                       | 34.66                     | 18.48                       | 0.58                    | 31.56                      | -                    | -                       | Peak    |
| 166.62               | 22.23               | -21.27                  | 43.50                       | 42.78                     | 9.84                        | 1.14                    | 31.53                      | -                    | -                       | Peak    |
| 240.06               | 34.70               | -11.30                  | 46.00                       | 53.19                     | 11.68                       | 1.34                    | 31.51                      | 110                  | 128                     | Peak    |
| 307.70               | 33.01               | -12.99                  | 46.00                       | 48.87                     | 13.87                       | 1.55                    | 31.28                      | -                    | -                       | Peak    |
| 478.50               | 31.09               | -14.91                  | 46.00                       | 42.35                     | 17.87                       | 1.98                    | 31.11                      | -                    | -                       | Peak    |
| 780.20               | 33.21               | -12.79                  | 46.00                       | 40.47                     | 20.74                       | 2.54                    | 30.54                      | -                    | -                       | Peak    |
| 5725.00              | 47.17               | -30.98                  | 78.15                       | 41.95                     | 34.21                       | 7.01                    | 36.00                      | 100                  | 318                     | Peak    |
| 5825.00              | 88.25               | -                       | -                           | 83.01                     | 34.17                       | 7.07                    | 36.00                      | 100                  | 318                     | Average |
| 5825.00              | 98.15               | -                       | -                           | 92.91                     | 34.17                       | 7.07                    | 36.00                      | 100                  | 318                     | Peak    |
| 5850.00              | 60.03               | -18.12                  | 78.15                       | 54.78                     | 34.16                       | 7.09                    | 36.00                      | 100                  | 318                     | Peak    |
| 8230.00              | 52.98               | -21.02                  | 74.00                       | 44.94                     | 35.76                       | 8.93                    | 36.65                      | 100                  | 88                      | Peak    |
| 8230.00              | 37.71               | -16.29                  | 54.00                       | 29.67                     | 35.76                       | 8.93                    | 36.65                      | 100                  | 88                      | Average |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 15  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5825 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 42.42                | 35.09               | -4.91                   | 40.00                       | 54.71                     | 11.34                       | 0.58                    | 31.54                      | 100                  | 166                     | Peak    |
| 107.22               | 28.72               | -14.78                  | 43.50                       | 47.26                     | 12.04                       | 0.95                    | 31.53                      | -                    | -                       | Peak    |
| 129.90               | 30.64               | -12.86                  | 43.50                       | 48.71                     | 12.38                       | 1.07                    | 31.52                      | -                    | -                       | Peak    |
| 335.00               | 31.74               | -14.26                  | 46.00                       | 46.76                     | 14.65                       | 1.63                    | 31.30                      | -                    | -                       | Peak    |
| 528.20               | 34.36               | -11.64                  | 46.00                       | 44.49                     | 18.78                       | 2.10                    | 31.01                      | -                    | -                       | Peak    |
| 799.80               | 34.03               | -11.97                  | 46.00                       | 41.25                     | 20.75                       | 2.57                    | 30.54                      | -                    | -                       | Peak    |
| 5725.00              | 48.81               | -32.72                  | 81.53                       | 43.59                     | 34.21                       | 7.01                    | 36.00                      | 101                  | 327                     | Peak    |
| 5825.00              | 91.68               | -                       | -                           | 86.44                     | 34.17                       | 7.07                    | 36.00                      | 101                  | 327                     | Average |
| 5825.00              | 101.53              | -                       | -                           | 96.29                     | 34.17                       | 7.07                    | 36.00                      | 101                  | 327                     | Peak    |
| 5850.00              | 64.39               | -17.14                  | 81.53                       | 59.14                     | 34.16                       | 7.09                    | 36.00                      | 101                  | 327                     | Peak    |
| 8284.00              | 53.32               | -20.68                  | 74.00                       | 45.21                     | 35.74                       | 9.03                    | 36.66                      | 100                  | 76                      | Peak    |
| 8284.00              | 37.98               | -16.02                  | 54.00                       | 29.87                     | 35.74                       | 9.03                    | 36.66                      | 100                  | 76                      | Average |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 16  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5745 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5825 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 66.13               | -11.70                  | 77.83                       | 60.91                   | 34.21                       | 7.01                    | 36.00                      | 160                  | 41                      | Peak    |
| 5745.00              | 84.84               | -                       | -                           | 79.61                   | 34.20                       | 7.03                    | 36.00                      | 160                  | 41                      | Average |
| 5745.00              | 97.83               | -                       | -                           | 92.60                   | 34.20                       | 7.03                    | 36.00                      | 160                  | 41                      | Peak    |
| 5825.00              | 46.32               | -31.51                  | 77.83                       | 41.08                   | 34.17                       | 7.07                    | 36.00                      | 160                  | 41                      | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 16  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5745 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 73.86               | -10.18                  | 84.04                       | 68.64                   | 34.21                       | 7.01                    | 36.00                      | 102                  | 12                      | Peak    |
| 5745.00              | 91.22               | -                       | -                           | 85.99                   | 34.20                       | 7.03                    | 36.00                      | 102                  | 12                      | Average |
| 5745.00              | 104.04              | -                       | -                           | 98.81                   | 34.20                       | 7.03                    | 36.00                      | 102                  | 12                      | Peak    |
| 5850.00              | 45.98               | -38.06                  | 84.04                       | 40.73                   | 34.16                       | 7.09                    | 36.00                      | 102                  | 12                      | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 17  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5785 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 46.80               | -34.04                  | 80.84                       | 41.58                   | 34.21                       | 7.01                    | 36.00                      | 101                  | 37                      | Peak    |
| 5785.00              | 87.72               | -                       | -                           | 82.48                   | 34.19                       | 7.05                    | 36.00                      | 101                  | 37                      | Average |
| 5785.00              | 100.84              | -                       | -                           | 95.60                   | 34.19                       | 7.05                    | 36.00                      | 101                  | 37                      | Peak    |
| 5850.00              | 46.99               | -33.85                  | 80.84                       | 41.74                   | 34.16                       | 7.09                    | 36.00                      | 101                  | 37                      | Peak    |



|                 |  |                     |          |
|-----------------|--|---------------------|----------|
| Test Mode :     | Mode 17  | Temperature :       | 23~25°C  |
| Test Channel :  | 157  | Relative Humidity : | 49~52%   |
| Test Engineer : | Cona Huang   | Polarization :      | Vertical |
| Remark :        | 1. 5785 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                     |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 48.37               | -37.83                  | 86.20                       | 43.15                   | 34.21                       | 7.01                    | 36.00                      | 102                  | 15                      | Peak    |
| 5785.00              | 92.69               | -                       | -                           | 87.45                   | 34.19                       | 7.05                    | 36.00                      | 102                  | 15                      | Average |
| 5785.00              | 106.20              | -                       | -                           | 100.96                  | 34.19                       | 7.05                    | 36.00                      | 102                  | 15                      | Peak    |
| 5850.00              | 46.50               | -39.70                  | 86.20                       | 41.25                   | 34.16                       | 7.09                    | 36.00                      | 102                  | 15                      | Peak    |





|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 18  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5825 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 47.00               | -33.53                  | 80.53                       | 41.78                   | 34.21                       | 7.01                    | 36.00                      | 100                  | 35                      | Peak    |
| 5825.00              | 87.31               | -                       | -                           | 82.07                   | 34.17                       | 7.07                    | 36.00                      | 100                  | 35                      | Average |
| 5825.00              | 100.53              | -                       | -                           | 95.29                   | 34.17                       | 7.07                    | 36.00                      | 100                  | 35                      | Peak    |
| 5850.00              | 60.09               | -20.44                  | 80.53                       | 54.84                   | 34.16                       | 7.09                    | 36.00                      | 100                  | 35                      | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 18  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5825 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 47.77               | -38.82                  | 86.59                       | 42.55                   | 34.21                       | 7.01                    | 36.00                      | 101                  | 14                      | Peak    |
| 5825.00              | 93.22               | -                       | -                           | 87.98                   | 34.17                       | 7.07                    | 36.00                      | 101                  | 14                      | Average |
| 5825.00              | 106.59              | -                       | -                           | 101.35                  | 34.17                       | 7.07                    | 36.00                      | 101                  | 14                      | Peak    |
| 5850.00              | 64.01               | -22.58                  | 86.59                       | 58.76                   | 34.16                       | 7.09                    | 36.00                      | 101                  | 14                      | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | Mode 19  | <b>Temperature :</b>       | 23~25°C    |
| <b>Test Channel :</b>  | 151  | <b>Relative Humidity :</b> | 49~52%     |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5755 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>( dBuV ) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 63.06               | -12.98                  | 76.04                       | 57.84                     | 34.21                       | 7.01                    | 36.00                      | 163                  | 39                      | Peak    |
| 5755.00              | 82.92               | -                       | -                           | 77.69                     | 34.20                       | 7.03                    | 36.00                      | 163                  | 39                      | Average |
| 5755.00              | 96.04               | -                       | -                           | 90.81                     | 34.20                       | 7.03                    | 36.00                      | 163                  | 39                      | Peak    |
| 5850.00              | 46.96               | -29.08                  | 76.04                       | 41.71                     | 34.16                       | 7.09                    | 36.00                      | 163                  | 39                      | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 19  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 151  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5755 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 70.64               | -11.68                  | 82.32                       | 65.42                   | 34.21                       | 7.01                    | 36.00                      | 103                  | 14                      | Peak    |
| 5755.00              | 88.20               | -                       | -                           | 82.97                   | 34.20                       | 7.03                    | 36.00                      | 103                  | 14                      | Average |
| 5755.00              | 102.32              | -                       | -                           | 97.09                   | 34.20                       | 7.03                    | 36.00                      | 103                  | 14                      | Peak    |
| 5850.00              | 47.34               | -34.98                  | 82.32                       | 42.09                   | 34.16                       | 7.09                    | 36.00                      | 103                  | 14                      | Peak    |



|                 |  |                     |            |
|-----------------|--|---------------------|------------|
| Test Mode :     | Mode 20  | Temperature :       | 23~25°C    |
| Test Channel :  | 159  | Relative Humidity : | 49~52%     |
| Test Engineer : | Cona Huang   | Polarization :      | Horizontal |
| Remark :        | 1. 5795 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                     |            |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 50.93               | -26.70                  | 77.63                       | 45.71                   | 34.21                       | 7.01                    | 36.00                      | 100                  | 38                      | Peak    |
| 5795.00              | 83.84               | -                       | -                           | 78.60                   | 34.18                       | 7.06                    | 36.00                      | 100                  | 38                      | Average |
| 5795.00              | 97.63               | -                       | -                           | 92.39                   | 34.18                       | 7.06                    | 36.00                      | 100                  | 38                      | Peak    |
| 5850.00              | 49.88               | -27.75                  | 77.63                       | 44.63                   | 34.16                       | 7.09                    | 36.00                      | 100                  | 38                      | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | Mode 20  | <b>Temperature :</b>       | 23~25°C  |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 49~52%   |
| <b>Test Engineer :</b> | Cona Huang   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5795 MHz is Fundamental Signals which can be ignored.<br>2. 5725 MHz and 5850 MHz are not within a restricted band. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBuV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBuV/m ) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>( dB ) | Cable<br>Loss<br>( dB ) | Preamp<br>Factor<br>( dB ) | Ant<br>Pos<br>( cm ) | Table<br>Pos<br>( deg ) | Remark  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5725.00              | 56.21               | -27.05                  | 83.26                       | 50.99                   | 34.21                       | 7.01                    | 36.00                      | 101                  | 14                      | Peak    |
| 5795.00              | 89.38               | -                       | -                           | 84.14                   | 34.18                       | 7.06                    | 36.00                      | 101                  | 14                      | Average |
| 5795.00              | 103.26              | -                       | -                           | 98.02                   | 34.19                       | 7.05                    | 36.00                      | 101                  | 14                      | Peak    |
| 5850.00              | 54.50               | -28.76                  | 83.26                       | 49.25                   | 34.16                       | 7.09                    | 36.00                      | 101                  | 14                      | Peak    |



## **3.4 Antenna Requirements**

### **3.4.1 Standard Applicable**

If directional gain of transmitting antennas is greater than 6dBi, the power shall be reduced by the same level in dB comparing to gain minus 6dBi. For the fixed point-to-point operation, the power shall be reduced by one dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the FCC rule.

### **3.4.2 Antenna Connected Construction**

The antennas type used in this product is PIFA Antenna and it is considered to meet antenna requirement.

### **3.4.3 Antenna Gain**

The antenna peak gain of EUT is less than 6 dBi. Therefore, it is not necessary to reduce maximum peak output power limit.



## 4 List of Measuring Equipment

| Instrument           | Manufacturer      | Model No.    | Serial No.  | Characteristics | Calibration Date | Due Date      | Remark                |
|----------------------|-------------------|--------------|-------------|-----------------|------------------|---------------|-----------------------|
| EMI Test Receive     | R&S               | ESCS 30      | 100356      | 9KHz – 2.75GHz  | Aug. 05, 2009    | Aug. 04, 2010 | Conduction (CO05-HY)  |
| Two-LISN             | R&S               | ENV216       | 11-100081   | 9kHz~30MHz      | Nov. 30, 2009    | Nov. 29, 2010 | Conduction (CO05-HY)  |
| Two-LISN             | R&S               | ENV216       | 11-100080   | 9kHz~30MHz      | Nov. 23, 2009    | Nov. 22, 2010 | Conduction (CO05-HY)  |
| AC Power Source      | APC               | APC-1000W    | N/A         | N/A             | N/A              | N/A           | Conduction (CO05-HY)  |
| GPS Station          | T&E               | GS-50        | N/A         | N/A             | N/A              | N/A           | Conduction (CO05-HY)  |
| Spectrum Analyzer    | R&S               | FSP40        | 100057      | 9KHz-40GHz      | Oct. 20, 2009    | Oct. 19, 2010 | Radiation (03CH05-HY) |
| Amplifier            | COM-POWER         | PA-103       | 161069      | 1KHz - 1GHz     | Mar. 29, 2010    | Mar. 28, 2011 | Radiation (03CH05-HY) |
| Bilog Antenna        | SCHAFFNER         | CBL6111C     | 2727C       | 30 MHz - 1 GHz  | Aug. 12, 2009    | Aug. 11, 2010 | Radiation (03CH05-HY) |
| SHF-EHF Horn Antenna | SCHWARZBECK       | BBHA 9170    | BBHA9170251 | 15GHz- 40GHz    | Oct. 14, 2009    | Oct. 13, 2010 | Radiation (03CH05-HY) |
| Pre Amplifier        | Agilent           | 8449B        | 3008A01917  | 1GHz- 26.5GHz   | Nov. 11, 2009    | Nov. 10, 2010 | Radiation (03CH05-HY) |
| Turn Table           | HD                | Deis HD 2000 | 420/611     | 0 - 360 degree  | N/A              | N/A           | Radiation (03CH05-HY) |
| Antenna Mast         | HD                | MA 240       | 240/666     | 1 m - 4 m       | N/A              | N/A           | Radiation (03CH05-HY) |
| Horn Antenna         | ESCO              | 3117         | 00066584    | 1GHz ~ 18GHz    | Aug. 05, 2009    | Aug. 04, 2010 | Radiation (03CH05-HY) |
| Horn Antenna         | Training Research | AH-0801      | 95119       | 8GHz~18GHz      | Nov. 02, 2009    | Nov. 01, 2010 | Radiation (03CH05-HY) |



## 5 Uncertainty of Evaluation

### Uncertainty of Conducted Emission Measurement (150kHz ~ 30MHz)

| Contribution   | Uncertainty of $X_i$ |                          | $u(X_i)$ |
|--|----------------------|--------------------------|----------|
|  | dB                   | Probability Distribution |          |
| Receiver Reading   | 0.10                 | Normal (k=2)             | 0.05     |
| Cable Loss   | 0.10                 | Normal (k=2)             | 0.05     |
| AMN Insertion Loss   | 2.50                 | Rectangular              | 0.63     |
| Receiver Specification   | 1.50                 | Rectangular              | 0.43     |
| Site Imperfection  | 1.39                 | Rectangular              | 0.80     |
| Mismatch   | +0.34 / -0.35        | U-Shape                  | 0.24     |
| <b>Combined Standard Uncertainty <math>U_c(y)</math></b>                                 | <b>1.13</b>          |                          |          |
| <b>Measuring Uncertainty for a Level of Confidence of 95% (<math>U = 2U_c(y)</math>)</b> | <b>2.26</b>          |                          |          |

### Uncertainty of Radiated Emission Measurement (30MHz ~ 1000MHz)

| Contribution   | Uncertainty of $X_i$ |                          | $u(X_i)$ |
|--|----------------------|--------------------------|----------|
|  | dB                   | Probability Distribution |          |
| Receiver Reading   | 0.41                 | Normal (k=2)             | 0.21     |
| Antenna Factor Calibration   | 0.83                 | Normal (k=2)             | 0.42     |
| Cable Loss Calibration   | 0.25                 | Normal (k=2)             | 0.13     |
| Pre-Amplifier Gain Calibration   | 0.27                 | Normal (k=2)             | 0.14     |
| RCV/SPA Specification  | 2.50                 | Rectangular              | 0.72     |
| Antenna Factor Interpolation for Frequency   | 1.00                 | Rectangular              | 0.29     |
| Site Imperfection  | 1.43                 | Rectangular              | 0.83     |
| Mismatch   | +0.39 / -0.41        | U-Shape                  | 0.28     |
| <b>Combined Standard Uncertainty <math>U_c(y)</math></b>                                 | <b>1.27</b>          |                          |          |
| <b>Measuring Uncertainty for a Level of Confidence of 95% (<math>U = 2U_c(y)</math>)</b> | <b>2.54</b>          |                          |          |



**Uncertainty of Radiated Emission Measurement (1GHz ~ 40GHz)**

| Contribution   | Uncertainty of $X_i$ |                          | $u(X_i)$ | $C_i$ | $C_i * u(X_i)$ |
|--|----------------------|--------------------------|----------|-------|----------------|
|  | dB                   | Probability Distribution |          |       |                |
| Receiver Reading   | ±0.10                | Normal (k=2)             | 0.10     | 1     | 0.10           |
| Antenna Factor Calibration   | ±1.70                | Normal (k=2)             | 0.85     | 1     | 0.85           |
| Cable Loss Calibration   | ±0.50                | Normal (k=2)             | 0.25     | 1     | 0.25           |
| Receiver Correction  | ±2.00                | Rectangular              | 1.15     | 1     | 1.15           |
| Antenna Factor Directional   | ±1.50                | Rectangular              | 0.87     | 1     | 0.87           |
| Site Imperfection  | ±2.80                | Triangular               | 1.14     | 1     | 1.14           |
| Mismatch<br>Receiver VSWR $\Gamma_1 = 0.197$<br>Antenna VSWR $\Gamma_2 = 0.194$<br>Uncertainty = $20\text{Log}(1-\Gamma_1*\Gamma_2)$ | +0.34 / -0.35        | U-Shape                  | 0.244    | 1     | 0.244          |
| <b>Combined Standard Uncertainty<br/><math>U_c(y)</math></b>   | <b>2.36</b>          |                          |          |       |                |
| <b>Measuring Uncertainty for a<br/>Level of Confidence of 95%<br/>(<math>U = 2U_c(y)</math>)</b>                                     | <b>4.72</b>          |                          |          |       |                |



## **Appendix A. Photographs of EUT**

Please refer to Sporton report number EP052506-02 as below.