

# Partial FCC RF Test Report

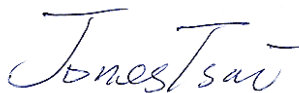
APPLICANT : FUJITSU LIMITED  
EQUIPMENT : Fujitsu Stylistic Q Series Tablet PC  
BRAND NAME : Fujitsu  
MODEL NAME : Q704  
FCC ID : EJE-WB0087  
STANDARD : FCC Part 15 Subpart C §15.247  
CLASSIFICATION : (DTS) Digital Transmission System

This is a partial report which is included conducted power, radiated band edges, radiated spurious emission, and AC conducted emission measurement. The product was received on Sep. 17, 2013 and testing was completed on Oct. 31, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures and shown to be compliant 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: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager



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DTS v1.0

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### SUMMARY OF TEST RESULT

| Report Section | FCC Rule           | IC Rule          | Description  | Limit                 | Result | Remark                                    |
|----------------|--------------------|------------------|--|-----------------------|--------|---|
| 3.1            | 15.247(d)          | RSS-210<br>A8.5  | Radiated Band Edges and Radiated Spurious Emission | 15.209(a) & 15.247(d) | Pass   | Under limit<br>1.55 dB at<br>2483.560 MHz |
| 3.2            | 15.207             | RSS-Gen<br>7.2.4 | AC Conducted Emission                              | 15.207(a)             | Pass   | Under limit<br>13.80 dB at<br>0.198 MHz   |
| 3.3            | 15.203 & 15.247(b) | RSS-210<br>A8.4  | Antenna Requirement                                | N/A                   | Pass   | -   |

# 1 General Description

## 1.1 Applicant

**FUJITSU LIMITED**

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, 211-8588 Japan

## 1.2 Manufacturer

**FUJITSU LIMITED**

1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki, 211-8588 Japan

## 1.3 Feature of Equipment Under Test

| Product Feature                        |  |
|--|--|
| <b>Equipment</b>                       | Fujitsu Stylistic Q Series Tablet PC                         |
| <b>Brand Name</b>                      | Fujitsu  |
| <b>Model Name</b>                      | Q704   |
| <b>FCC ID</b>                          | EJE-WB0087   |
| <b>Integrated Module</b>               | Brand Name: Intel<br>Model Name: 7260HMW<br>FCC ID: PD97260H |
| <b>EUT supports Radios application</b> | WLAN 11a/b/g/n HT20/HT40<br>Bluetooth v3.0 + EDR / v4.0-LE   |
| <b>EUT Stage</b>                       | Pre-Production Unit  |

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

### 1.4 Product Specification of Equipment Under Test

| Product Specification subjective to this standard |  |                       |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
|---|--|-----------------------|--|-----------------------|-----------------------|----------|---|---|----------|---|---|----------|---|---|------------------|---|---|------------------|---|---|
| <b>Tx/Rx Channel Frequency Range</b>              | 802.11b/g/n : 2412 MHz ~ 2462 MHz<br>802.11a/n: 5745~5825MHz.  |                       |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| <b>Maximum (Peak) Output Power to antenna</b>     | <p><b>&lt;Ant. 1&gt;</b><br/> <b>&lt;2412 MHz ~ 2462 MHz &gt;</b><br/>           802.11b : 17.33 dBm (0.0541 W)<br/>           802.11g : 19.90 dBm (0.0977 W)<br/>           802.11n HT20 : 19.84 dBm (0.0964 W)<br/>           802.11n HT40 : 19.66 dBm (0.0925 W)<br/> <b>&lt;5745 MHz ~ 5825 MHz &gt;</b><br/>           802.11a : 17.86 dBm (0.0611 W)<br/>           802.11n HT20 : 17.94 dBm (0.0622 W)<br/>           802.11n HT40 : 17.34 dBm (0.0542 W)</p> <p><b>&lt;Ant. 2&gt;</b><br/> <b>&lt;2412 MHz ~ 2462 MHz &gt;</b><br/>           802.11b : 16.40 dBm (0.0437 W)<br/>           802.11g : 19.52 dBm (0.0895 W)<br/>           802.11n HT20 : 19.41 dBm (0.0873 W)<br/>           802.11n HT40 : 18.28 dBm (0.0673 W)<br/> <b>&lt;5745 MHz ~ 5825 MHz &gt;</b><br/>           802.11a : 18.12 dBm (0.0649 W)<br/>           802.11n HT20 : 18.13 dBm (0.0650 W)<br/>           802.11n HT40 : 17.57 dBm (0.0571 W)</p> <p><b>&lt;Ant. 1+2&gt;</b><br/> <b>&lt;2412 MHz ~ 2462 MHz &gt;</b><br/>           802.11n HT20 : 18.77 dBm (0.0753 W)<br/>           802.11n HT40 : 18.04 dBm (0.0637 W)<br/> <b>&lt;5745 MHz ~ 5825 MHz &gt;</b><br/>           802.11n HT20 : 18.51 dBm (0.0710 W)<br/>           802.11n HT40 : 18.04 dBm (0.0637 W)</p> |                       |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| <b>Antenna Type</b>                               | <p><b>&lt;Ant. 1&gt;</b><br/>           802.11b/g/n : PIFA Antenna type with gain -0.44 dBi<br/>           802.11a/n : PIFA Antenna type with gain 1.14 dBi<br/> <b>&lt;Ant. 2&gt;</b><br/>           802.11b/g/n : PIFA Antenna type with gain -0.95 dBi<br/>           802.11a/n : PIFA Antenna type with gain 0.48 dBi</p>  |                       |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| <b>Type of Modulation</b>                         | 802.11b : DSSS (DBPSK / DQPSK / CCK)<br>802.11a/g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM)   |                       |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| <b>Antenna Function for Transmitter</b>           | <table border="1"> <thead> <tr> <th></th> <th>Chain Port 0<br/>Ant 1</th> <th>Chain Port 1<br/>Ant 2</th> </tr> </thead> <tbody> <tr> <td>802.11 b</td> <td>V</td> <td>V</td> </tr> <tr> <td>802.11 g</td> <td>V</td> <td>V</td> </tr> <tr> <td>802.11 a</td> <td>V</td> <td>V</td> </tr> <tr> <td>802.11 n<br/>SISO</td> <td>V</td> <td>V</td> </tr> <tr> <td>802.11 n<br/>MIMO</td> <td>V</td> <td>V</td> </tr> </tbody> </table>  |                       |  | Chain Port 0<br>Ant 1 | Chain Port 1<br>Ant 2 | 802.11 b | V | V | 802.11 g | V | V | 802.11 a | V | V | 802.11 n<br>SISO | V | V | 802.11 n<br>MIMO | V | V |
|   | Chain Port 0<br>Ant 1  | Chain Port 1<br>Ant 2 |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| 802.11 b  | V  | V                     |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| 802.11 g  | V  | V                     |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| 802.11 a  | V  | V                     |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| 802.11 n<br>SISO                                  | V  | V                     |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |
| 802.11 n<br>MIMO                                  | V  | V                     |  |                       |                       |          |   |   |          |   |   |          |   |   |                  |   |   |                  |   |   |

## 1.5 Modification of EUT

No modifications are made to the EUT during all test items.

## 1.6 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> |
|                           | TH02-HY  | CO05-HY | 03CH08-HY | 636805/4086B-2                 |

**Note:** The test site complies with ANSI C63.4 2003 requirement.

## 1.7 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 D01 DTS Meas. Guidance v03r01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ♦ ANSI C63.4-2003

**Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.

## 2 Test Configuration of Equipment Under Test

The EUT has been associated with peripherals 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) and radiated emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane or Ant. 1, Ant. 2 (WLAN 2.4G), and MIMO Ant.1+2 (WLAN 2.4G); Z plane for Ant. 2 (WLAN 5G) and MIMO Ant. 1+2 (WLAN 5G)) were recorded in this report.

The final configuration from all the combinations and the worst-case data rates were investigated by measuring the maximum power across all the data rates and modulation modes under section 2.2.

Based on the worst configuration found above, the RF power setting is set individually to meet FCC compliance limit for the final conducted and radiated tests shown in section 2.3.

### 2.1 Carrier Frequency and Channel

| Frequency Band  | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|-----------------|---------|-------------|---------|-------------|
| 2400-2483.5 MHz | 1       | 2412        | 7       | 2442        |
|                 | 2       | 2417        | 8       | 2447        |
|                 | 3       | 2422        | 9       | 2452        |
|                 | 4       | 2427        | 10      | 2457        |
|                 | 5       | 2432        | 11      | 2462        |
|                 | 6       | 2437        |         |             |

| Frequency Band          | Channel | Freq. (MHz) | Channel | Freq. (MHz) |
|-------------------------|---------|-------------|---------|-------------|
| 5725-5850 MHz<br>Band 4 | 149     | 5745        | 159     | 5795        |
|                         | 151     | 5755        | 161     | 5805        |
|                         | 153     | 5765        | 165     | 5825        |
|                         | 157     | 5785        | -       | -           |



## 2.2 Pre-Scanned RF Power

Preliminary tests were performed in different data rate and data rate associated with the highest power were chosen for full test shown in the following tables.

<Ant. 1>

| 802.11b          |        |        |          |         |
|------------------|--------|--------|----------|---------|
| Data Rate (MHz)  | 1M bps | 2M bps | 5.5M bps | 11M bps |
| Peak Power (dBm) | 17.33  | 17.01  | 16.97    | 17.09   |

| 802.11g          |        |        |         |         |         |         |         |         |
|------------------|--------|--------|---------|---------|---------|---------|---------|---------|
| Data Rate (MHz)  | 6M bps | 9M bps | 12M bps | 18M bps | 24M bps | 36M bps | 48M bps | 54M bps |
| Peak Power (dBm) | 19.90  | 19.74  | 19.73   | 19.78   | 19.77   | 19.78   | 19.77   | 19.79   |

| 2.4GHz 802.11n HT20 |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)     | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)    | 19.84 | 19.66 | 19.73 | 19.75 | 19.83 | 19.81 | 19.83 | 19.83 |

| 2.4GHz 802.11n HT40 |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)     | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)    | 19.66 | 19.65 | 19.64 | 19.65 | 19.64 | 19.65 | 19.65 | 19.64 |

| 802.11a          |        |        |         |         |         |         |         |         |
|------------------|--------|--------|---------|---------|---------|---------|---------|---------|
| Data Rate (MHz)  | 6M bps | 9M bps | 12M bps | 18M bps | 24M bps | 36M bps | 48M bps | 54M bps |
| Peak Power (dBm) | 17.86  | 17.85  | 17.84   | 17.83   | 17.82   | 17.85   | 17.85   | 17.75   |

| 5GHz 802.11n HT20 |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)   | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)  | 17.94 | 17.93 | 17.91 | 17.93 | 17.93 | 17.92 | 17.91 | 17.91 |

| 5GHz 802.11n HT40 |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)   | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)  | 17.34 | 17.33 | 17.29 | 17.33 | 17.32 | 17.33 | 17.30 | 17.31 |



<Ant. 2>

| 802.11b          |        |        |          |         |
|------------------|--------|--------|----------|---------|
| Data Rate (MHz)  | 1M bps | 2M bps | 5.5M bps | 11M bps |
| Peak Power (dBm) | 16.40  | 16.27  | 16.38    | 16.39   |

| 802.11g          |        |        |         |         |         |         |         |         |
|------------------|--------|--------|---------|---------|---------|---------|---------|---------|
| Data Rate (MHz)  | 6M bps | 9M bps | 12M bps | 18M bps | 24M bps | 36M bps | 48M bps | 54M bps |
| Peak Power (dBm) | 19.52  | 19.03  | 18.99   | 19.12   | 19.02   | 18.99   | 19.13   | 19.21   |

| 2.4GHz 802.11n HT20 |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)     | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)    | 19.41 | 18.96 | 18.93 | 18.99 | 18.90 | 19.02 | 19.38 | 19.37 |

| 2.4GHz 802.11n HT40 |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)     | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)    | 18.28 | 18.27 | 18.27 | 18.27 | 18.25 | 18.25 | 18.27 | 18.25 |

| 802.11a          |        |        |         |         |         |         |         |         |
|------------------|--------|--------|---------|---------|---------|---------|---------|---------|
| Data Rate (MHz)  | 6M bps | 9M bps | 12M bps | 18M bps | 24M bps | 36M bps | 48M bps | 54M bps |
| Peak Power (dBm) | 18.12  | 17.89  | 18.11   | 17.74   | 18.10   | 18.11   | 18.11   | 18.01   |

| 5GHz 802.11n HT20 |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)   | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)  | 18.13 | 18.02 | 18.08 | 18.11 | 18.10 | 18.12 | 18.11 | 18.11 |

| 5GHz 802.11n HT40 |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)   | MCS0  | MCS1  | MCS2  | MCS3  | MCS4  | MCS5  | MCS6  | MCS7  |
| Peak Power (dBm)  | 17.57 | 17.52 | 17.51 | 17.56 | 17.56 | 17.55 | 17.55 | 17.55 |



MIMO <Ant. 1+2>

| 2.4GHz 802.11n HT20 |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)     | MCS8  | MCS9  | MCS10 | MCS11 | MCS12 | MCS13 | MCS14 | MCS15 |
| Peak Power (dBm)    | 18.77 | 18.51 | 18.53 | 18.24 | 18.03 | 18.39 | 18.57 | 17.49 |

| 2.4GHz 802.11n HT40 |       |       |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)     | MCS8  | MCS9  | MCS10 | MCS11 | MCS12 | MCS13 | MCS14 | MCS15 |
| Peak Power (dBm)    | 18.04 | 17.84 | 18.00 | 17.99 | 17.65 | 17.58 | 17.94 | 18.02 |

| 5GHz 802.11n HT20 |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)   | MCS8  | MCS9  | MCS10 | MCS11 | MCS12 | MCS13 | MCS14 | MCS15 |
| Peak Power (dBm)  | 18.51 | 18.43 | 18.42 | 18.28 | 18.38 | 18.46 | 18.22 | 18.06 |

| 5GHz 802.11n HT40 |       |       |       |       |       |       |       |       |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Data Rate (MHz)   | MCS8  | MCS9  | MCS10 | MCS11 | MCS12 | MCS13 | MCS14 | MCS15 |
| Peak Power (dBm)  | 18.04 | 17.87 | 17.98 | 18.02 | 18.02 | 18.02 | 17.90 | 14.91 |

Note: MIMO Ant 1+2 is a calculated result from sum of the power MIMO Ant 1 and MIMO Ant 2.



### 2.3 Test Mode

Final results of test modes, data rates and test channels are shown as following table.

<2.4GHz>

| Test Cases                    |                 |                              |                  |              |
|-------------------------------|-----------------|------------------------------|------------------|--------------|
|                               | Test Items      | Mode                         | Data Rate        | Test Channel |
|                               | Radiated<br>TCs | Radiated Band Edge           | 802.11b (Ant. 1) | 1 Mbps       |
| 802.11b (Ant. 2)              |                 |                              | 1 Mbps           | 1            |
| 802.11g (Ant. 1)              |                 |                              | 6 Mbps           | 1/11         |
| 802.11g (Ant. 2)              |                 |                              | 6 Mbps           | 11           |
| 802.11n HT20 (Ant. 1)         |                 |                              | MCS0             | 11           |
| 802.11n HT20 (Ant. 2)         |                 |                              | MCS0             | 11           |
| 802.11n HT20 MIMO (Ant. 1+2)  |                 |                              | MCS8             | 1/11         |
| 802.11n HT40 (Ant. 1)         |                 |                              | MCS0             | 9            |
| 802.11n HT40 (Ant. 2)         |                 |                              | MCS0             | 9            |
| 802.11n HT40 MIMO (Ant. 1+2)  |                 |                              | MCS8             | 3/9          |
| Radiated Spurious<br>Emission |                 | 802.11b (Ant. 1)             | 1 Mbps           | 1/6/11       |
|                               |                 | 802.11b (Ant. 2)             | 1 Mbps           | 1            |
|                               |                 | 802.11g (Ant. 1)             | 6 Mbps           | 1/6/11       |
|                               |                 | 802.11g (Ant. 2)             | 6 Mbps           | 11           |
|                               |                 | 802.11n HT20 (Ant. 1)        | MCS0             | 11           |
|                               |                 | 802.11n HT20 (Ant. 2)        | MCS0             | 11           |
|                               |                 | 802.11n HT20 MIMO (Ant. 1+2) | MCS8             | 1/6/11       |
|                               |                 | 802.11n HT40 (Ant. 1)        | MCS0             | 9            |
|                               |                 | 802.11n HT40 (Ant. 2)        | MCS0             | 9            |
|                               |                 | 802.11n HT40 MIMO (Ant. 1+2) | MCS8             | 3/6/9        |

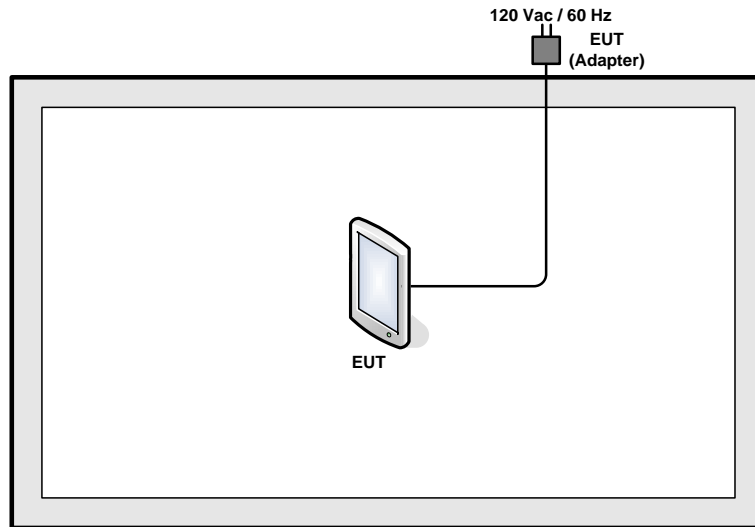


**<5GHz>**

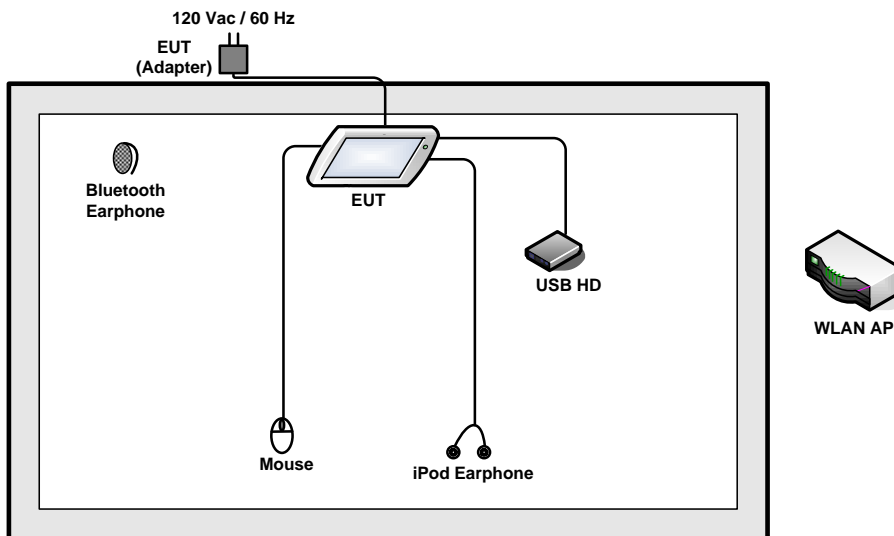
| <b>Test Cases</b>                    |  |                              |                  |                     |
|--------------------------------------|--|------------------------------|------------------|---------------------|
|                                      | <b>Test Items</b>  | <b>Mode</b>                  | <b>Data Rate</b> | <b>Test Channel</b> |
| <b>Radiated<br/>TCs</b>              | <b>Radiated Spurious<br/>Emission</b>  | 802.11a (Ant. 1)             | 6 Mbps           | 157                 |
|                                      |  | 802.11a (Ant. 2)             | 6 Mbps           | 149/157/165         |
|                                      |  | 802.11n HT20 (Ant. 1)        | MCS0             | 157                 |
|                                      |  | 802.11n HT20 (Ant. 1)        | MCS0             | 157                 |
|                                      |  | 802.11n HT20 MIMO (Ant. 1+2) | MCS8             | 149/157/165         |
|                                      |  | 802.11n HT40 (Ant. 1)        | MCS0             | 159                 |
|                                      |  | 802.11n HT40 (Ant. 2)        | MCS0             | 159                 |
|                                      |  | 802.11n HT40 MIMO (Ant. 1+2) | MCS8             | 151/159             |
| <b>AC<br/>Conducted<br/>Emission</b> | Mode 1 : WLAN (2.4GHz) Link + Bluetooth Link + MPEG4 + Earphone + Mouse + Adapter + USB HD + H Pattern |                              |                  |                     |

## 2.4 Connection Diagram of Test System

<WLAN Tx Mode>



<AC Conducted Emission Mode>



## 2.5 Support Unit used in test configuration and system

| Item | Equipment          | Trade Name    | Model Name             | FCC ID       | Data Cable        | Power Cord        |
|------|--------------------|---------------|------------------------|--------------|-------------------|-------------------|
| 1.   | WLAN AP            | D-Link        | DIR-628                | KA2DIR628A2  | N/A               | Unshielded, 1.8 m |
| 2.   | Bluetooth Earphone | Sony Ericsson | MW600                  | PY7DDA-2029  | N/A               | N/A               |
| 3.   | iPod Earphone      | Apple         | N/A                    | verification | Unshielded, 1.0 m | N/A               |
| 4.   | (USB) Mouse        | Lenovo        | MO20BOL                | FCC DoC      | Shielded, 1.3 m   | N/A               |
| 5.   | USB HD             | WD            | WDBAAR3200<br>ABK-PESN | FCC DoC      | Unshielded, 0.5 m | N/A               |
| 6.   | SD Card            | SanDisk       | MicroSD HC             | FCC DoC      | N/A               | N/A               |

## 2.6 EUT Operation Test Setup

The programmed RF utility "DRTU", 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 Radiated Band Edges and Spurious Emission Measurement

##### 3.1.1 Limit of Radiated band edge and Spurious Emission Measurement

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<br>(MHz) | Field Strength<br>(microvolts/meter) | Measurement Distance<br>(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                                |

##### 3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.





### **3.1.3 Test Procedure**

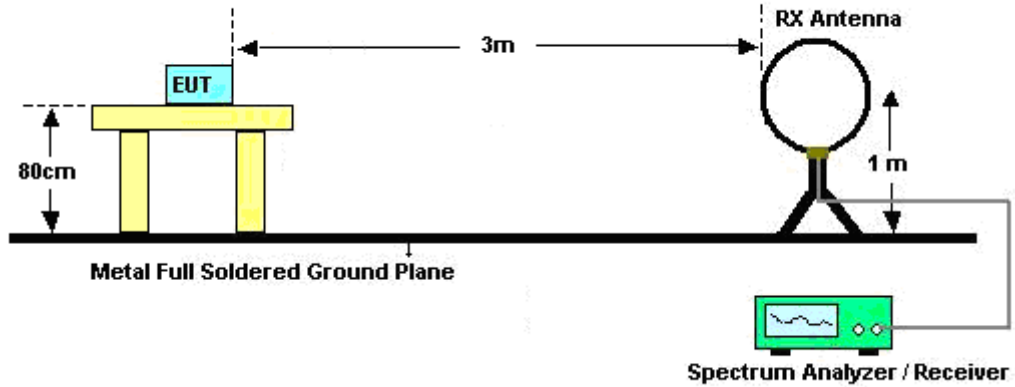
1. The testing follows FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v03r01.
2. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level.
3. The EUT was placed on a turntable with 0.8 meter above ground.
4. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
5. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level
6. For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
7. Use the following spectrum analyzer settings:
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Set RBW=100 kHz for  $f < 1$  GHz;  $VBW \geq RBW$ ; Sweep = auto; Detector function = peak; Trace = max hold;
  - (3) Set RBW = 1 MHz, VBW= 3MHz for  $f \geq 1$  GHz for peak measurement.  
For average measurement:
    - $VBW = 10$  Hz, when duty cycle is no less than 98 percent.
    - $VBW \geq 1/T$ , when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.



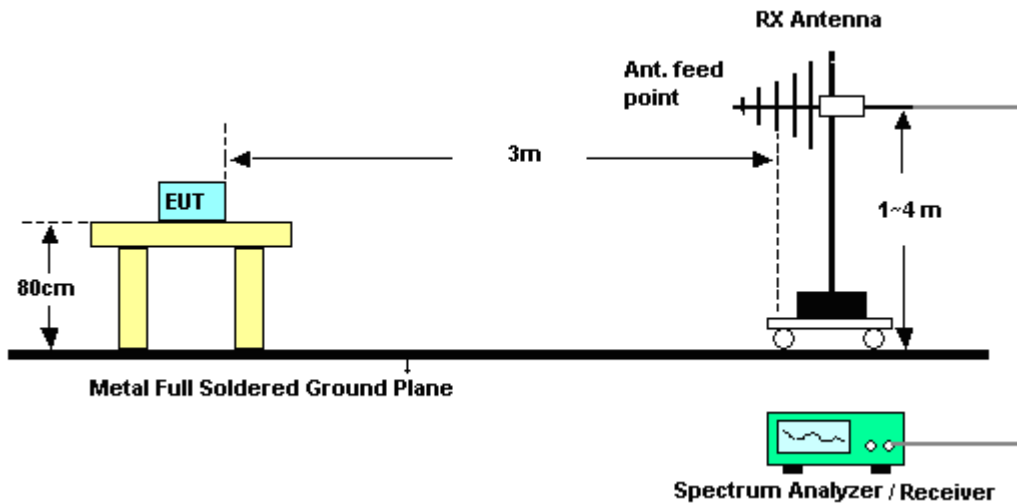
| Antenna | Band                         | Duty Cycle (%) | T(us)  | 1/T(kHz) | VBW Setting |
|---------|------------------------------|----------------|--------|----------|-------------|
| 1       | 802.11b                      | 99.12          | -      | -        | 10Hz        |
| 2       | 802.11b                      | 98.68          |        |          |             |
| 1       | 802.11g                      | 99.04          | -      | -        | 10Hz        |
| 2       | 802.11g                      | 99.04          |        |          |             |
| 1       | 2.4G 802.11n HT20            | 98.97          | -      | -        | 10Hz        |
| 2       | 2.4G 802.11n HT20            | 98.98          |        |          |             |
| 1+2     | 2.4G 802.11n HT20 for Ant. 1 | 97.03          | 980.00 | 1.02     | 3kHz        |
| 1+2     | 2.4G 802.11n HT20 for Ant. 2 | 98.02          | -      | -        | 10Hz        |
| 1       | 2.4G 802.11n HT40            | 96.94          | 950.00 | 1.05     | 3kHz        |
| 2       | 2.4G 802.11n HT40            | 96.91          | 940.00 | 1.06     |             |
| 1+2     | 2.4G 802.11n HT40 for Ant. 1 | 95.40          | 498.00 | 2.01     |             |
| 1+2     | 2.4G 802.11n HT40 for Ant. 2 | 94.32          | 498.00 | 2.01     |             |
| 1       | 802.11a                      | 98.56          | -      | -        | 10Hz        |
| 2       | 802.11a                      | 98.56          |        |          |             |
| 1       | 5G 802.11n HT20              | 98.46          | -      | -        | 10Hz        |
| 2       | 5G 802.11n HT20              | 98.46          |        |          |             |
| 1+2     | 5G 802.11n HT20 for Ant. 1   | 97.04          | 984.00 | 1.02     | 3kHz        |
| 1+2     | 5G 802.11n HT20 for Ant. 2   | 97.04          | 984.00 | 1.02     | 3kHz        |
| 1       | 5G 802.11n HT40              | 97.53          | 948.00 | 1.06     | 3kHz        |
| 2       | 5G 802.11n HT40              | 96.93          | 948.00 | 1.06     |             |
| 1+2     | 5G 802.11n HT40 for Ant. 1   | 94.70          | 500.00 | 2.00     |             |
| 1+2     | 5G 802.11n HT40 for Ant. 2   | 94.70          | 500.00 | 2.00     |             |

### 3.1.4 Test Setup

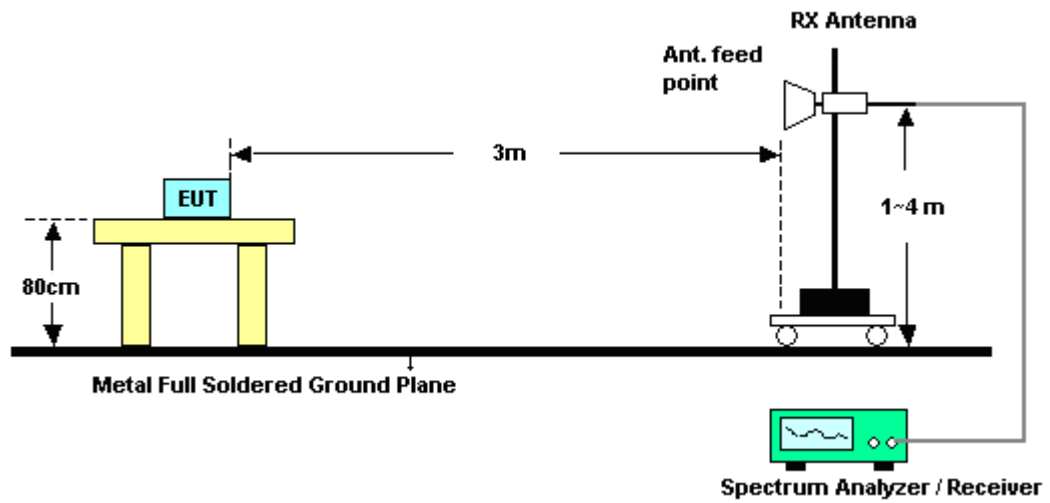
For radiated emissions below 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not reported.



3.1.6 Test Result of Radiated Spurious at Band Edges

<Ant. 1.>

|                |         |                     |         |
|----------------|---------|---------------------|---------|
| Test Mode :    | 802.11b | Temperature :       | 23~24°C |
| Test Band :    | Low     | Relative Humidity : | 50~51%  |
| Test Channel : | 01      | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2386.23                       | 52.73            | -21.27            | 74                    | 47.72               | 32.27                 | 6.22              | 33.48                | 100            | 137               | Peak    |
| 2385.78                       | 42.81            | -11.19            | 54                    | 37.8                | 32.27                 | 6.22              | 33.48                | 100            | 137               | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2388.93                     | 52.47            | -21.53            | 74                    | 47.67               | 32.06                 | 6.22              | 33.48                | 100            | 247               | Peak    |
| 2385.78                     | 42.79            | -11.21            | 54                    | 37.99               | 32.06                 | 6.22              | 33.48                | 100            | 247               | Average |

|                |         |                     |         |
|----------------|---------|---------------------|---------|
| Test Mode :    | 802.11b | Temperature :       | 23~24°C |
| Test Band :    | High    | Relative Humidity : | 50~51%  |
| Test Channel : | 11      | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2487.58                       | 52.15            | -21.85            | 74                    | 46.46               | 32.7                  | 6.45              | 33.46                | 100            | 175               | Peak    |
| 2483.5                        | 41.57            | -12.43            | 54                    | 35.95               | 32.63                 | 6.45              | 33.46                | 100            | 175               | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.86                     | 51.49            | -22.51            | 74                    | 45.91               | 32.59                 | 6.45              | 33.46                | 187            | 255               | Peak    |
| 2483.5                      | 41.09            | -12.91            | 54                    | 35.51               | 32.59                 | 6.45              | 33.46                | 187            | 255               | Average |



<Ant. 2.>

|                |         |                     |         |
|----------------|---------|---------------------|---------|
| Test Mode :    | 802.11b | Temperature :       | 23~24°C |
| Test Band :    | Low     | Relative Humidity : | 50~51%  |
| Test Channel : | 01      | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2386.23                       | 59.18               | -14.82                  | 74                          | 54.17                     | 32.27                       | 6.22                    | 33.48                      | 104                  | 288                     | Peak    |
| 2385.69                       | 52.15               | -1.85                   | 54                          | 47.14                     | 32.27                       | 6.22                    | 33.48                      | 104                  | 288                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2386.32                     | 55.19               | -18.81                  | 74                          | 50.39                     | 32.06                       | 6.22                    | 33.48                      | 131                  | 97                      | Peak    |
| 2385.78                     | 47.29               | -6.71                   | 54                          | 42.49                     | 32.06                       | 6.22                    | 33.48                      | 131                  | 97                      | Average |



<Ant. 1>

|                |         |                     |         |
|----------------|---------|---------------------|---------|
| Test Mode :    | 802.11g | Temperature :       | 23~24°C |
| Test Band :    | Low     | Relative Humidity : | 50~51%  |
| Test Channel : | 01      | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2388.12                       | 59.09            | -14.91            | 74                    | 54.08               | 32.27                 | 6.22              | 33.48                | 104            | 27                | Peak    |
| 2390                          | 44.39            | -9.61             | 54                    | 39.38               | 32.27                 | 6.22              | 33.48                | 104            | 27                | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2389.83                     | 53.99            | -20.01            | 74                    | 49.19               | 32.06                 | 6.22              | 33.48                | 200            | 245               | Peak    |
| 2390                        | 40.74            | -13.26            | 54                    | 35.94               | 32.06                 | 6.22              | 33.48                | 200            | 245               | Average |

|                |         |                     |         |
|----------------|---------|---------------------|---------|
| Test Mode :    | 802.11g | Temperature :       | 23~24°C |
| Test Band :    | High    | Relative Humidity : | 50~51%  |
| Test Channel : | 11      | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-------------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )             | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.89                       | 67.62            | -6.38             | 74                    | 62                  | 32.63                 | 6.45              | 33.46                | 100            | 155               | Peak    |
| 2483.5                        | 47.85            | -6.15             | 54                    | 42.23               | 32.63                 | 6.45              | 33.46                | 100            | 155               | Average |

| ANTENNA POLARITY : VERTICAL |                  |                   |                       |                     |                       |                   |                      |                |                   |         |
|-----------------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| Frequency ( MHz )           | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
| 2483.74                     | 62.69            | -11.31            | 74                    | 57.11               | 32.59                 | 6.45              | 33.46                | 100            | 268               | Peak    |
| 2483.5                      | 44.66            | -9.34             | 54                    | 39.08               | 32.59                 | 6.45              | 33.46                | 100            | 268               | Average |



<Ant. 2>

|                |         |                     |         |
|----------------|---------|---------------------|---------|
| Test Mode :    | 802.11g | Temperature :       | 23~24°C |
| Test Band :    | High    | Relative Humidity : | 50~51%  |
| Test Channel : | 11      | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2483.74                       | 69.38               | -4.62                   | 74                          | 63.76                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 246                     | Peak    |
| 2483.5                        | 50.67               | -3.33                   | 54                          | 45.05                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 246                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2483.74                     | 66.41               | -7.59                   | 74                          | 60.83                     | 32.59                       | 6.45                    | 33.46                      | 154                  | 295                     | Peak    |
| 2483.5                      | 47.44               | -6.56                   | 54                          | 41.86                     | 32.59                       | 6.45                    | 33.46                      | 154                  | 295                     | Average |





<MIMO Ant. 1+2>

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT20 | Temperature :       | 23~24°C |
| Test Band :    | Low          | Relative Humidity : | 50~51%  |
| Test Channel : | 01           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2388.57                       | 66.66               | -7.34                   | 74                          | 61.65                     | 32.27                       | 6.22                    | 33.48                      | 125                  | 68                      | Peak    |
| 2389.65                       | 50.12               | -3.88                   | 54                          | 45.11                     | 32.27                       | 6.22                    | 33.48                      | 125                  | 68                      | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2389.65                     | 63.92               | -10.08                  | 74                          | 59.12                     | 32.06                       | 6.22                    | 33.48                      | 100                  | 270                     | Peak    |
| 2389.56                     | 48.48               | -5.52                   | 54                          | 43.68                     | 32.06                       | 6.22                    | 33.48                      | 100                  | 270                     | Average |

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT20 | Temperature :       | 23~24°C |
| Test Band :    | High         | Relative Humidity : | 50~51%  |
| Test Channel : | 11           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2483.95                       | 70.2                | -3.8                    | 74                          | 64.58                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 283                     | Peak    |
| 2483.56                       | 52.45               | -1.55                   | 54                          | 46.83                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 283                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2484.76                     | 59.87               | -14.13                  | 74                          | 54.29                     | 32.59                       | 6.45                    | 33.46                      | 185                  | 114                     | Peak    |
| 2483.71                     | 45.91               | -8.09                   | 54                          | 40.33                     | 32.59                       | 6.45                    | 33.46                      | 185                  | 114                     | Average |



<Ant. 1>

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT20 | Temperature :       | 23~24°C |
| Test Band :    | High         | Relative Humidity : | 50~51%  |
| Test Channel : | 11           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2484.79                       | 69.87               | -4.13                   | 74                          | 64.25                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 338                     | Peak    |
| 2483.5                        | 50.69               | -3.31                   | 54                          | 45.07                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 338                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2484.1                      | 68                  | -6                      | 74                          | 62.42                     | 32.59                       | 6.45                    | 33.46                      | 127                  | 80                      | Peak    |
| 2483.5                      | 48.04               | -5.96                   | 54                          | 42.46                     | 32.59                       | 6.45                    | 33.46                      | 127                  | 80                      | Average |

<Ant. 2>

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT20 | Temperature :       | 23~24°C |
| Test Band :    | High         | Relative Humidity : | 50~51%  |
| Test Channel : | 11           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2483.92                       | 68.11               | -5.89                   | 74                          | 62.49                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 246                     | Peak    |
| 2483.5                        | 46.48               | -7.52                   | 54                          | 40.86                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 246                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2489.56                     | 59.03               | -14.97                  | 74                          | 53.34                     | 32.7                        | 6.45                    | 33.46                      | 154                  | 297                     | Peak    |
| 2483.5                      | 42.76               | -11.24                  | 54                          | 37.18                     | 32.59                       | 6.45                    | 33.46                      | 154                  | 297                     | Average |



<MIMO Ant. 1+2>

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT40 | Temperature :       | 23~24°C |
| Test Band :    | Low          | Relative Humidity : | 50~51%  |
| Test Channel : | 03           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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                          | 55.96               | -18.04                  | 74                          | 50.95                     | 32.27                       | 6.22                    | 33.48                      | 100                  | 286                     | Peak    |
| 2389.11                       | 43.92               | -10.08                  | 54                          | 38.91                     | 32.27                       | 6.22                    | 33.48                      | 100                  | 286                     | Average |
| 2489.38                       | 53.94               | -20.06                  | 74                          | 48.25                     | 32.7                        | 6.45                    | 33.46                      | 100                  | 286                     | Peak    |
| 2483.86                       | 40.67               | -13.33                  | 54                          | 35.05                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 286                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2389.65                     | 52.79               | -21.21                  | 74                          | 47.99                     | 32.06                       | 6.22                    | 33.48                      | 100                  | 271                     | Peak    |
| 2389.56                     | 41.94               | -12.06                  | 54                          | 37.14                     | 32.06                       | 6.22                    | 33.48                      | 100                  | 271                     | Average |
| 2499.97                     | 49.93               | -24.07                  | 74                          | 44.24                     | 32.7                        | 6.45                    | 33.46                      | 100                  | 271                     | Peak    |
| 2491.87                     | 38.82               | -15.18                  | 54                          | 33.13                     | 32.7                        | 6.45                    | 33.46                      | 100                  | 271                     | Average |



|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT40 | Temperature :       | 23~24°C |
| Test Band :    | High         | Relative Humidity : | 50~51%  |
| Test Channel : | 09           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBµV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBµV/m ) | Read<br>Level<br>( dBµV ) | 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  |
| 2387.85                       | 54.47               | -19.53                  | 74                          | 49.46                     | 32.27                       | 6.22                    | 33.48                      | 100                  | 72                      | Peak    |
| 2389.74                       | 42.3                | -11.7                   | 54                          | 37.29                     | 32.27                       | 6.22                    | 33.48                      | 100                  | 72                      | Average |
| 2487.43                       | 64.48               | -9.52                   | 74                          | 58.86                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 72                      | Peak    |
| 2483.74                       | 50.28               | -3.72                   | 54                          | 44.66                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 72                      | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBµV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBµV/m ) | Read<br>Level<br>( dBµV ) | 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  |
| 2388.84                     | 49.22               | -24.78                  | 74                          | 44.42                     | 32.06                       | 6.22                    | 33.48                      | 100                  | 107                     | Peak    |
| 2389.56                     | 38.86               | -15.14                  | 54                          | 34.06                     | 32.06                       | 6.22                    | 33.48                      | 100                  | 107                     | Average |
| 2488.24                     | 61.3                | -12.7                   | 74                          | 55.61                     | 32.7                        | 6.45                    | 33.46                      | 100                  | 107                     | Peak    |
| 2483.8                      | 47.09               | -6.91                   | 54                          | 41.51                     | 32.59                       | 6.45                    | 33.46                      | 100                  | 107                     | Average |



<Ant. 1>

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT40 | Temperature :       | 23~24°C |
| Test Band :    | High         | Relative Humidity : | 50~51%  |
| Test Channel : | 09           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2388.57                       | 54.85               | -19.15                  | 74                          | 49.84                     | 32.27                       | 6.22                    | 33.48                      | 159                  | 316                     | Peak    |
| 2389.02                       | 41.57               | -12.43                  | 54                          | 36.56                     | 32.27                       | 6.22                    | 33.48                      | 159                  | 316                     | Average |
| 2486.11                       | 66.51               | -7.49                   | 74                          | 60.89                     | 32.63                       | 6.45                    | 33.46                      | 159                  | 316                     | Peak    |
| 2483.65                       | 51.98               | -2.02                   | 54                          | 46.36                     | 32.63                       | 6.45                    | 33.46                      | 159                  | 316                     | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2389.56                     | 52.58               | -21.42                  | 74                          | 47.78                     | 32.06                       | 6.22                    | 33.48                      | 104                  | 282                     | Peak    |
| 2389.83                     | 40.6                | -13.4                   | 54                          | 35.8                      | 32.06                       | 6.22                    | 33.48                      | 104                  | 282                     | Average |
| 2485.51                     | 64.35               | -9.65                   | 74                          | 58.77                     | 32.59                       | 6.45                    | 33.46                      | 104                  | 282                     | Peak    |
| 2484.22                     | 50.15               | -3.85                   | 54                          | 44.57                     | 32.59                       | 6.45                    | 33.46                      | 104                  | 282                     | Average |



<Ant. 2>

|                |              |                     |         |
|----------------|--------------|---------------------|---------|
| Test Mode :    | 802.11n HT40 | Temperature :       | 23~24°C |
| Test Band :    | High         | Relative Humidity : | 50~51%  |
| Test Channel : | 09           | Test Engineer :     | Jet Lu  |

| ANTENNA POLARITY : HORIZONTAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-------------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )          | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2387.94                       | 48.89               | -25.11                  | 74                          | 43.88                     | 32.27                       | 6.22                    | 33.48                      | 100                  | 68                      | Peak    |
| 2389.56                       | 38.57               | -15.43                  | 54                          | 33.56                     | 32.27                       | 6.22                    | 33.48                      | 100                  | 68                      | Average |
| 2483.83                       | 52.16               | -21.84                  | 74                          | 46.54                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 68                      | Peak    |
| 2484.55                       | 40.56               | -13.44                  | 54                          | 34.94                     | 32.63                       | 6.45                    | 33.46                      | 100                  | 68                      | Average |

| ANTENNA POLARITY : VERTICAL |                     |                         |                             |                           |                             |                         |                            |                      |                         |         |
|-----------------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| Frequency<br>( MHz )        | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
| 2384.43                     | 50.45               | -23.55                  | 74                          | 45.76                     | 31.95                       | 6.22                    | 33.48                      | 126                  | 120                     | Peak    |
| 2389.92                     | 39.51               | -14.49                  | 54                          | 34.71                     | 32.06                       | 6.22                    | 33.48                      | 126                  | 120                     | Average |
| 2485.75                     | 58.27               | -15.73                  | 74                          | 52.69                     | 32.59                       | 6.45                    | 33.46                      | 126                  | 120                     | Peak    |
| 2484.07                     | 45.47               | -8.53                   | 54                          | 39.89                     | 32.59                       | 6.45                    | 33.46                      | 126                  | 120                     | Average |



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

**Note:** Pre-scanned all test modes and only choose the worst case mode recorded in the test report for radiated spurious emission below 1GHz.

<Ant. 1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2414 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 105.87               | 33.1                | -10.4                   | 43.5                        | 52.75                     | 11.05                       | 1.21                    | 31.91                      | 100                  | 183                     | Peak    |
| 150.15               | 26.36               | -17.14                  | 43.5                        | 46.76                     | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 35.01               | -10.99                  | 46                          | 52.27                     | 12.54                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 444.9                | 31.46               | -14.54                  | 46                          | 44.15                     | 16.16                       | 2.43                    | 31.28                      | -                    | -                       | Peak    |
| 477.8                | 27.98               | -18.02                  | 46                          | 39.81                     | 16.87                       | 2.51                    | 31.21                      | -                    | -                       | Peak    |
| 800.5                | 25.75               | -20.25                  | 46                          | 33.5                      | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2414                 | 95.78               | -                       | -                           | 90.64                     | 32.34                       | 6.28                    | 33.48                      | 100                  | 137                     | Average |
| 2414                 | 101.48              | -                       | -                           | 96.34                     | 32.34                       | 6.28                    | 33.48                      | 100                  | 137                     | Peak    |
| 4824                 | 44.18               | -29.82                  | 74                          | 60.64                     | 34.44                       | 8.04                    | 58.94                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2414 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 93.72                | 33.75               | -9.75                   | 43.5                        | 55.04                   | 9.5                         | 1.12                    | 31.91                      | 102                  | 267                     | Peak    |
| 198.21               | 30.54               | -12.96                  | 43.5                        | 51.49                   | 9.12                        | 1.64                    | 31.71                      | -                    | -                       | Peak    |
| 268.41               | 32.53               | -13.47                  | 46                          | 49.69                   | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 451.2                | 27.73               | -18.27                  | 46                          | 40.56                   | 15.98                       | 2.45                    | 31.26                      | -                    | -                       | Peak    |
| 600.3                | 26.92               | -19.08                  | 46                          | 36.36                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 24.12               | -21.88                  | 46                          | 31.89                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2414                 | 93.93               | -                       | -                           | 88.97                   | 32.16                       | 6.28                    | 33.48                      | 100                  | 247                     | Average |
| 2414                 | 99.53               | -                       | -                           | 94.57                   | 32.16                       | 6.28                    | 33.48                      | 100                  | 247                     | Peak    |
| 4824                 | 42.27               | -31.73                  | 74                          | 58.73                   | 34.44                       | 8.04                    | 58.94                      | 100                  | 0                       | Peak    |





|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2439 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2439                 | 95.45               | -                       | -                           | 90.09                     | 32.49                       | 6.34                    | 33.47                      | 100                  | 147                     | Average |
| 2439                 | 100.88              | -                       | -                           | 95.52                     | 32.49                       | 6.34                    | 33.47                      | 100                  | 147                     | Peak    |
| 4875                 | 47.76               | -26.24                  | 74                          | 64.12                     | 34.4                        | 8.11                    | 58.87                      | 100                  | 0                       | Peak    |
| 7311                 | 41.04               | -32.96                  | 74                          | 53.41                     | 35.62                       | 10.47                   | 58.46                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2439 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2439                 | 93.51               | -                       | -                           | 88.26                     | 32.38                       | 6.34                    | 33.47                      | 100                  | 268                     | Average |
| 2439                 | 98.55               | -                       | -                           | 93.3                      | 32.38                       | 6.34                    | 33.47                      | 100                  | 268                     | Peak    |
| 4875                 | 43.57               | -30.43                  | 74                          | 59.93                     | 34.4                        | 8.11                    | 58.87                      | 100                  | 0                       | Peak    |
| 7311                 | 40.77               | -33.23                  | 74                          | 53.2                      | 35.56                       | 10.47                   | 58.46                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2464                 | 93.69               | -                       | -                           | 88.21                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 175                     | Average |
| 2464                 | 99.54               | -                       | -                           | 94.06                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 175                     | Peak    |
| 4926                 | 45.9                | -28.1                   | 74                          | 62.12                     | 34.36                       | 8.22                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 41.36               | -32.64                  | 74                          | 53.86                     | 35.66                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2464                 | 91.9                | -                       | -                           | 86.49                     | 32.49                       | 6.39                    | 33.47                      | 187                  | 255                     | Average |
| 2464                 | 97.72               | -                       | -                           | 92.31                     | 32.49                       | 6.39                    | 33.47                      | 187                  | 255                     | Peak    |
| 4923                 | 43.46               | -30.54                  | 74                          | 59.72                     | 34.36                       | 8.18                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 40.68               | -33.32                  | 74                          | 53.35                     | 35.49                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |



<Ant. 2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2412 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 101.55               | 28.9                | -14.6                   | 43.5                        | 49.31                     | 10.32                       | 1.18                    | 31.91                      | -                    | -                       | Peak    |
| 240.06               | 30.15               | -15.85                  | 46                          | 49.2                      | 10.89                       | 1.8                     | 31.74                      | -                    | -                       | Peak    |
| 268.41               | 35.8                | -10.2                   | 46                          | 53.06                     | 12.54                       | 1.91                    | 31.71                      | 100                  | 123                     | Peak    |
| 359.5                | 27.74               | -18.26                  | 46                          | 42.59                     | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 450.5                | 29.34               | -16.66                  | 46                          | 41.94                     | 16.21                       | 2.45                    | 31.26                      | -                    | -                       | Peak    |
| 800.5                | 26.31               | -19.69                  | 46                          | 34.06                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2412                 | 100.32              | -                       | -                           | 95.18                     | 32.34                       | 6.28                    | 33.48                      | 104                  | 288                     | Average |
| 2412                 | 106.03              | -                       | -                           | 100.89                    | 32.34                       | 6.28                    | 33.48                      | 104                  | 288                     | Peak    |
| 4824                 | 46.27               | -27.73                  | 74                          | 62.73                     | 34.44                       | 8.04                    | 58.94                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11b  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2414 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 93.72                | 30.95               | -12.55                  | 43.5                        | 52.24                   | 9.5                         | 1.12                    | 31.91                      | 100                  | 147                     | Peak    |
| 150.96               | 28.48               | -15.02                  | 43.5                        | 47.6                    | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 31.91               | -14.09                  | 46                          | 49.07                   | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 359.5                | 25.91               | -20.09                  | 46                          | 40.76                   | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 454.7                | 27.75               | -18.25                  | 46                          | 40.5                    | 16.03                       | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 600.3                | 25.74               | -20.26                  | 46                          | 35.18                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 2414                 | 95.15               | -                       | -                           | 90.19                   | 32.16                       | 6.28                    | 33.48                      | 131                  | 97                      | Average |
| 2414                 | 100.94              | -                       | -                           | 95.98                   | 32.16                       | 6.28                    | 33.48                      | 131                  | 97                      | Peak    |
| 4824                 | 48.39               | -25.61                  | 74                          | 61.5                    | 34.44                       | 8.04                    | 55.59                      | 100                  | 0                       | Peak    |



<Ant. 1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2410 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2410                 | 93.05               | -                       | -                           | 87.91                     | 32.34                       | 6.28                    | 33.48                      | 104                  | 27                      | Average |
| 2410                 | 104.85              | -                       | -                           | 99.71                     | 32.34                       | 6.28                    | 33.48                      | 104                  | 27                      | Peak    |
| 4824                 | 38.09               | -35.91                  | 74                          | 54.55                     | 34.44                       | 8.04                    | 58.94                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2414 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2414                 | 88.68               | -                       | -                           | 83.72                     | 32.16                       | 6.28                    | 33.48                      | 200                  | 245                     | Average |
| 2414                 | 100.31              | -                       | -                           | 95.35                     | 32.16                       | 6.28                    | 33.48                      | 200                  | 245                     | Peak    |
| 4824                 | 38.33               | -35.67                  | 74                          | 54.79                     | 34.44                       | 8.04                    | 58.94                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2435 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
|-------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| 2435              | 91.73            | -                 | -                     | 86.45               | 32.41                 | 6.34              | 33.47                | 102            | 27                | Average |
| 2435              | 103.77           | -                 | -                     | 98.49               | 32.41                 | 6.34              | 33.47                | 102            | 27                | Peak    |
| 4875              | 44.53            | -29.47            | 74                    | 60.89               | 34.4                  | 8.11              | 58.87                | 100            | 0                 | Peak    |
| 7311              | 40.4             | -33.6             | 74                    | 52.77               | 35.62                 | 10.47             | 58.46                | 100            | 0                 | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2435 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
|-------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| 2435              | 88.48            | -                 | -                     | 83.34               | 32.27                 | 6.34              | 33.47                | 100            | 270               | Average |
| 2435              | 100.66           | -                 | -                     | 95.52               | 32.27                 | 6.34              | 33.47                | 100            | 270               | Peak    |
| 4875              | 43.52            | -30.48            | 74                    | 56.69               | 34.4                  | 8.11              | 55.68                | 100            | 0                 | Peak    |
| 7311              | 42.75            | -31.25            | 74                    | 53                  | 35.56                 | 10.47             | 56.28                | 100            | 0                 | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2460 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 90.75                | 34.97               | -8.53                   | 43.5                        | 56.55                     | 9.13                        | 1.11                    | 31.82                      | 100                  | 128                     | Peak    |
| 136.11               | 30.58               | -12.92                  | 43.5                        | 49.86                     | 11.19                       | 1.36                    | 31.83                      | -                    | -                       | Peak    |
| 268.14               | 36.44               | -9.56                   | 46                          | 53.71                     | 12.54                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 445.6                | 32.4                | -13.6                   | 46                          | 45.09                     | 16.16                       | 2.43                    | 31.28                      | -                    | -                       | Peak    |
| 495.3                | 29.21               | -16.79                  | 46                          | 40.86                     | 16.95                       | 2.57                    | 31.17                      | -                    | -                       | Peak    |
| 800.5                | 26.07               | -19.93                  | 46                          | 33.82                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2460                 | 89.61               | -                       | -                           | 84.13                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 155                     | Average |
| 2460                 | 101.62              | -                       | -                           | 96.14                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 155                     | Peak    |
| 4923                 | 43.01               | -30.99                  | 74                          | 59.27                     | 34.36                       | 8.18                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 40.34               | -33.66                  | 74                          | 52.84                     | 35.66                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2460 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 79.68                | 31.76               | -8.24                   | 40                          | 55.63                   | 7.05                        | 1.04                    | 31.96                      | 102                  | 149                     | Peak    |
| 149.88               | 28.84               | -14.66                  | 43.5                        | 47.96                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 33.21               | -12.79                  | 46                          | 50.37                   | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 448.4                | 28.19               | -17.81                  | 46                          | 41.09                   | 15.93                       | 2.44                    | 31.27                      | -                    | -                       | Peak    |
| 600.3                | 26.04               | -19.96                  | 46                          | 35.48                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 26.22               | -19.78                  | 46                          | 33.99                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2460                 | 85.84               | -                       | -                           | 80.43                   | 32.49                       | 6.39                    | 33.47                      | 100                  | 268                     | Average |
| 2460                 | 97.83               | -                       | -                           | 92.42                   | 32.49                       | 6.39                    | 33.47                      | 100                  | 268                     | Peak    |
| 4923                 | 43.59               | -30.41                  | 74                          | 56.83                   | 34.36                       | 8.18                    | 55.78                      | 100                  | 0                       | Peak    |
| 7386                 | 42.28               | -31.72                  | 74                          | 52.45                   | 35.49                       | 10.45                   | 56.11                      | 100                  | 0                       | Peak    |





**<Ant. 2>**

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 84.27                | 33.59               | -6.41                   | 40                          | 56.4                      | 7.98                        | 1.07                    | 31.86                      | 100                  | 24                      | Peak    |
| 150.96               | 25.05               | -18.45                  | 43.5                        | 45.45                     | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.14               | 35.61               | -10.39                  | 46                          | 52.88                     | 12.54                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 335.7                | 27.46               | -18.54                  | 46                          | 43.19                     | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 448.4                | 29.5                | -16.5                   | 46                          | 42.15                     | 16.18                       | 2.44                    | 31.27                      | -                    | -                       | Peak    |
| 800.5                | 26.01               | -19.99                  | 46                          | 33.76                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2464                 | 94.25               | -                       | -                           | 88.77                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 246                     | Average |
| 2464                 | 106.02              | -                       | -                           | 100.54                    | 32.56                       | 6.39                    | 33.47                      | 100                  | 246                     | Peak    |
| 4923                 | 42.89               | -31.11                  | 74                          | 59.15                     | 34.36                       | 8.18                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 40.27               | -33.73                  | 74                          | 52.77                     | 35.66                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11g  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2462 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 150.15               | 28.96               | -14.54                  | 43.5                        | 48.08                     | 11.24                       | 1.44                    | 31.8                       | 100                  | 253                     | Peak    |
| 209.82               | 25.13               | -18.37                  | 43.5                        | 45.81                     | 9.34                        | 1.69                    | 31.71                      | -                    | -                       | Peak    |
| 288.66               | 31.02               | -14.98                  | 46                          | 47.95                     | 12.78                       | 1.96                    | 31.67                      | -                    | -                       | Peak    |
| 449.1                | 27.33               | -18.67                  | 46                          | 40.19                     | 15.95                       | 2.45                    | 31.26                      | -                    | -                       | Peak    |
| 600.3                | 28.19               | -17.81                  | 46                          | 37.63                     | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 673.1                | 22.87               | -23.13                  | 46                          | 32                        | 18.87                       | 2.99                    | 30.99                      | -                    | -                       | Peak    |
| 2462                 | 90.42               | -                       | -                           | 85.01                     | 32.49                       | 6.39                    | 33.47                      | 154                  | 295                     | Average |
| 2462                 | 101.91              | -                       | -                           | 96.5                      | 32.49                       | 6.39                    | 33.47                      | 154                  | 295                     | Peak    |
| 4923                 | 44.32               | -29.68                  | 74                          | 57.56                     | 34.36                       | 8.18                    | 55.78                      | 100                  | 0                       | Peak    |
| 7386                 | 42.38               | -31.62                  | 74                          | 52.55                     | 35.49                       | 10.45                   | 56.11                      | 100                  | 0                       | Peak    |



<MIMO Ant. 1+2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2414 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2414                 | 95.79               | -                       | -                           | 90.65                     | 32.34                       | 6.28                    | 33.48                      | 125                  | 68                      | Average |
| 2414                 | 106.83              | -                       | -                           | 101.69                    | 32.34                       | 6.28                    | 33.48                      | 125                  | 68                      | Peak    |
| 4824                 | 39.79               | -34.21                  | 74                          | 56.25                     | 34.44                       | 8.04                    | 58.94                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 01   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2414 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2414                 | 92.7                | -                       | -                           | 87.74                     | 32.16                       | 6.28                    | 33.48                      | 100                  | 270                     | Average |
| 2414                 | 103.9               | -                       | -                           | 98.94                     | 32.16                       | 6.28                    | 33.48                      | 100                  | 270                     | Peak    |
| 4824                 | 43.32               | -30.68                  | 74                          | 56.43                     | 34.44                       | 8.04                    | 55.59                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2439 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2439                 | 96.99               | -                       | -                           | 91.63                     | 32.49                       | 6.34                    | 33.47                      | 100                  | 286                     | Average |
| 2439                 | 108.3               | -                       | -                           | 102.94                    | 32.49                       | 6.34                    | 33.47                      | 100                  | 286                     | Peak    |
| 4875                 | 42.02               | -31.98                  | 74                          | 58.38                     | 34.4                        | 8.11                    | 58.87                      | 100                  | 0                       | Peak    |
| 7311                 | 40.71               | -33.29                  | 74                          | 53.08                     | 35.62                       | 10.47                   | 58.46                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2439 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2439                 | 91.91               | -                       | -                           | 86.66                     | 32.38                       | 6.34                    | 33.47                      | 156                  | 111                     | Average |
| 2439                 | 102.39              | -                       | -                           | 97.14                     | 32.38                       | 6.34                    | 33.47                      | 156                  | 111                     | Peak    |
| 4875                 | 44.86               | -29.14                  | 74                          | 58.03                     | 34.4                        | 8.11                    | 55.68                      | 100                  | 0                       | Peak    |
| 7311                 | 42.83               | -31.17                  | 74                          | 53.08                     | 35.56                       | 10.47                   | 56.28                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 77.52                | 32.88               | -7.12                   | 40                          | 57.2                      | 6.61                        | 1.03                    | 31.96                      | 100                  | 137                     | Peak    |
| 150.42               | 26.29               | -17.21                  | 43.5                        | 46.69                     | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.14               | 36                  | -10                     | 46                          | 53.27                     | 12.54                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 359.5                | 28.31               | -17.69                  | 46                          | 43.16                     | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 444.2                | 31.8                | -14.2                   | 46                          | 44.53                     | 16.13                       | 2.43                    | 31.29                      | -                    | -                       | Peak    |
| 800.5                | 26.53               | -19.47                  | 46                          | 34.28                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2464                 | 96.31               | -                       | -                           | 90.83                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 283                     | Average |
| 2464                 | 107.86              | -                       | -                           | 102.38                    | 32.56                       | 6.39                    | 33.47                      | 100                  | 283                     | Peak    |
| 4923                 | 42.05               | -31.95                  | 74                          | 58.31                     | 34.36                       | 8.18                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 40.3                | -33.7                   | 74                          | 52.8                      | 35.66                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 78.6                 | 32.08               | -7.92                   | 40                          | 55.96                     | 7.05                        | 1.03                    | 31.96                      | 102                  | 135                     | Peak    |
| 150.69               | 29.23               | -14.27                  | 43.5                        | 48.35                     | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.68               | 32.68               | -13.32                  | 46                          | 49.84                     | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 451.2                | 28.02               | -17.98                  | 46                          | 40.85                     | 15.98                       | 2.45                    | 31.26                      | -                    | -                       | Peak    |
| 600.3                | 27.87               | -18.13                  | 46                          | 37.31                     | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 27.51               | -18.49                  | 46                          | 35.28                     | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2464                 | 91.61               | -                       | -                           | 86.2                      | 32.49                       | 6.39                    | 33.47                      | 185                  | 114                     | Average |
| 2464                 | 102.41              | -                       | -                           | 97                        | 32.49                       | 6.39                    | 33.47                      | 185                  | 114                     | Peak    |
| 4923                 | 45.35               | -28.65                  | 74                          | 58.59                     | 34.36                       | 8.18                    | 55.78                      | 100                  | 0                       | Peak    |
| 7386                 | 42.53               | -31.47                  | 74                          | 52.7                      | 35.49                       | 10.45                   | 56.11                      | 100                  | 0                       | Peak    |



<Ant. 1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2460 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 151.5                | 24.66               | -18.84                  | 43.5                        | 45.16                     | 9.85                        | 1.45                    | 31.8                       | -                    | -                       | Peak    |
| 240.06               | 29.19               | -16.81                  | 46                          | 48.24                     | 10.89                       | 1.8                     | 31.74                      | -                    | -                       | Peak    |
| 268.14               | 35.13               | -10.87                  | 46                          | 52.4                      | 12.54                       | 1.9                     | 31.71                      | 100                  | 14                      | Peak    |
| 335.7                | 27.99               | -18.01                  | 46                          | 43.72                     | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 442.8                | 29.44               | -16.56                  | 46                          | 42.17                     | 16.13                       | 2.43                    | 31.29                      | -                    | -                       | Peak    |
| 799.8                | 26.82               | -19.18                  | 46                          | 34.57                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2460                 | 92.34               | -                       | -                           | 86.86                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 338                     | Average |
| 2460                 | 104.29              | -                       | -                           | 98.81                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 338                     | Peak    |
| 4923                 | 43.66               | -30.34                  | 74                          | 59.92                     | 34.36                       | 8.18                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 41.38               | -32.62                  | 74                          | 53.88                     | 35.66                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 127.47               | 31.58               | -11.92                  | 43.5                        | 50.87                   | 11.26                       | 1.32                    | 31.87                      | 100                  | 185                     | Peak    |
| 149.88               | 28.8                | -14.7                   | 43.5                        | 47.92                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.68               | 31.63               | -14.37                  | 46                          | 48.79                   | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 359.5                | 26.17               | -19.83                  | 46                          | 41.02                   | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 456.1                | 27.88               | -18.12                  | 46                          | 40.63                   | 16.03                       | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 600.3                | 26.16               | -19.84                  | 46                          | 35.6                    | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 2464                 | 89.12               | -                       | -                           | 83.71                   | 32.49                       | 6.39                    | 33.47                      | 127                  | 80                      | Average |
| 2464                 | 101.02              | -                       | -                           | 95.61                   | 32.49                       | 6.39                    | 33.47                      | 127                  | 80                      | Peak    |
| 4923                 | 43.47               | -30.53                  | 74                          | 56.71                   | 34.36                       | 8.18                    | 55.78                      | 100                  | 0                       | Peak    |
| 7386                 | 42.64               | -31.36                  | 74                          | 52.81                   | 35.49                       | 10.45                   | 56.11                      | 100                  | 0                       | Peak    |





<Ant. 2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2464 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 92.64                | 29.24               | -14.26                  | 43.5                        | 50.58                     | 9.42                        | 1.12                    | 31.88                      | -                    | -                       | Peak    |
| 150.42               | 24.9                | -18.6                   | 43.5                        | 45.3                      | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 35.46               | -10.54                  | 46                          | 52.72                     | 12.54                       | 1.91                    | 31.71                      | 100                  | 19                      | Peak    |
| 335.7                | 27.07               | -18.93                  | 46                          | 42.8                      | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 454.7                | 29.28               | -16.72                  | 46                          | 41.76                     | 16.3                        | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 800.5                | 27.04               | -18.96                  | 46                          | 34.79                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2464                 | 94.75               | -                       | -                           | 89.27                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 246                     | Average |
| 2464                 | 106.43              | -                       | -                           | 100.95                    | 32.56                       | 6.39                    | 33.47                      | 100                  | 246                     | Peak    |
| 4923                 | 43.49               | -30.51                  | 74                          | 59.75                     | 34.36                       | 8.18                    | 58.8                       | 100                  | 0                       | Peak    |
| 7386                 | 40.41               | -33.59                  | 74                          | 52.91                     | 35.66                       | 10.45                   | 58.61                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 11   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2460 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 149.88               | 28.83               | -14.67                  | 43.5                        | 47.95                     | 11.24                       | 1.44                    | 31.8                       | 100                  | 211                     | Peak    |
| 240.06               | 26.31               | -19.69                  | 46                          | 45.32                     | 10.93                       | 1.8                     | 31.74                      | -                    | -                       | Peak    |
| 268.41               | 31.24               | -14.76                  | 46                          | 48.4                      | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 455.4                | 27.89               | -18.11                  | 46                          | 40.64                     | 16.03                       | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 600.3                | 25.62               | -20.38                  | 46                          | 35.06                     | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 23.41               | -22.59                  | 46                          | 31.18                     | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2460                 | 91.09               | -                       | -                           | 85.68                     | 32.49                       | 6.39                    | 33.47                      | 154                  | 297                     | Average |
| 2460                 | 103.14              | -                       | -                           | 97.73                     | 32.49                       | 6.39                    | 33.47                      | 154                  | 297                     | Peak    |
| 4923                 | 45.04               | -28.96                  | 74                          | 58.28                     | 34.36                       | 8.18                    | 55.78                      | 100                  | 0                       | Peak    |
| 7386                 | 43.05               | -30.95                  | 74                          | 53.22                     | 35.49                       | 10.45                   | 56.11                      | 100                  | 0                       | Peak    |



<MIMO Ant. 1+2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 03   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2424 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2424                 | 89.12               | -                       | -                           | 83.9                      | 32.41                       | 6.28                    | 33.47                      | 100                  | 286                     | Average |
| 2424                 | 100.14              | -                       | -                           | 94.92                     | 32.41                       | 6.28                    | 33.47                      | 100                  | 286                     | Peak    |
| 4845                 | 40.23               | -33.77                  | 74                          | 56.65                     | 34.43                       | 8.07                    | 58.92                      | 100                  | 0                       | Peak    |
| 7266                 | 40.18               | -33.82                  | 74                          | 52.49                     | 35.61                       | 10.48                   | 58.4                       | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 03   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2424 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2424                 | 84.98               | -                       | -                           | 79.9                      | 32.27                       | 6.28                    | 33.47                      | 100                  | 271                     | Average |
| 2424                 | 96.22               | -                       | -                           | 91.14                     | 32.27                       | 6.28                    | 33.47                      | 100                  | 271                     | Peak    |
| 4845                 | 43.21               | -30.79                  | 74                          | 56.33                     | 34.43                       | 8.07                    | 55.62                      | 100                  | 0                       | Peak    |
| 7266                 | 42.39               | -31.61                  | 74                          | 52.67                     | 35.59                       | 10.48                   | 56.35                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2439 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2439                 | 93.57               | -                       | -                           | 88.21                     | 32.49                       | 6.34                    | 33.47                      | 100                  | 289                     | Average |
| 2439                 | 104.96              | -                       | -                           | 99.6                      | 32.49                       | 6.34                    | 33.47                      | 100                  | 289                     | Peak    |
| 4875                 | 41.04               | -32.96                  | 74                          | 57.4                      | 34.4                        | 8.11                    | 58.87                      | 100                  | 0                       | Peak    |
| 7311                 | 40.87               | -33.13                  | 74                          | 53.24                     | 35.62                       | 10.47                   | 58.46                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 06   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2439 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 2439                 | 89.32               | -                       | -                           | 84.07                     | 32.38                       | 6.34                    | 33.47                      | 155                  | 271                     | Average |
| 2439                 | 100.46              | -                       | -                           | 95.21                     | 32.38                       | 6.34                    | 33.47                      | 155                  | 271                     | Peak    |
| 4875                 | 43.43               | -30.57                  | 74                          | 56.6                      | 34.4                        | 8.11                    | 55.68                      | 100                  | 0                       | Peak    |
| 7311                 | 42.66               | -31.34                  | 74                          | 52.91                     | 35.56                       | 10.47                   | 56.28                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 09   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2454 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 106.41               | 33.73               | -9.77                   | 43.5                        | 53.38                     | 11.05                       | 1.21                    | 31.91                      | -                    | -                       | Peak    |
| 240.06               | 31.46               | -14.54                  | 46                          | 50.51                     | 10.89                       | 1.8                     | 31.74                      | -                    | -                       | Peak    |
| 268.41               | 36.43               | -9.57                   | 46                          | 53.69                     | 12.54                       | 1.91                    | 31.71                      | 100                  | 157                     | Peak    |
| 451.9                | 31.71               | -14.29                  | 46                          | 44.27                     | 16.24                       | 2.46                    | 31.26                      | -                    | -                       | Peak    |
| 800.5                | 27.89               | -18.11                  | 46                          | 35.64                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 950.3                | 28.19               | -17.81                  | 46                          | 34.2                      | 20.94                       | 3.57                    | 30.52                      | -                    | -                       | Peak    |
| 2454                 | 93.06               | -                       | -                           | 87.58                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 72                      | Average |
| 2454                 | 103.94              | -                       | -                           | 98.46                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 72                      | Peak    |
| 4905                 | 41.87               | -32.13                  | 74                          | 58.14                     | 34.37                       | 8.18                    | 58.82                      | 100                  | 0                       | Peak    |
| 7356                 | 40.58               | -33.42                  | 74                          | 53.03                     | 35.64                       | 10.46                   | 58.55                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 09   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2454 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 113.16               | 33.46               | -10.04                  | 43.5                        | 53.79                     | 10.32                       | 1.25                    | 31.9                       | -                    | -                       | Peak    |
| 202.53               | 35.72               | -7.78                   | 43.5                        | 56.48                     | 9.29                        | 1.65                    | 31.7                       | 100                  | 218                     | Peak    |
| 268.14               | 32.16               | -13.84                  | 46                          | 49.33                     | 12.64                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 461.7                | 28.08               | -17.92                  | 46                          | 40.66                     | 16.18                       | 2.48                    | 31.24                      | -                    | -                       | Peak    |
| 600.3                | 27.09               | -18.91                  | 46                          | 36.53                     | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 25.6                | -20.4                   | 46                          | 33.37                     | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2454                 | 88.43               | -                       | -                           | 83.02                     | 32.49                       | 6.39                    | 33.47                      | 100                  | 107                     | Average |
| 2454                 | 99.83               | -                       | -                           | 94.42                     | 32.49                       | 6.39                    | 33.47                      | 100                  | 107                     | Peak    |
| 4905                 | 43.33               | -30.67                  | 74                          | 56.52                     | 34.37                       | 8.18                    | 55.74                      | 100                  | 0                       | Peak    |
| 7356                 | 43.67               | -30.33                  | 74                          | 53.88                     | 35.51                       | 10.46                   | 56.18                      | 100                  | 0                       | Peak    |



<Ant. 1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 09   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2454 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 120.72               | 31.18               | -12.32                  | 43.5                        | 50.27                     | 11.53                       | 1.28                    | 31.9                       | -                    | -                       | Peak    |
| 149.07               | 24.62               | -18.88                  | 43.5                        | 44.86                     | 10.13                       | 1.43                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 35.46               | -10.54                  | 46                          | 52.72                     | 12.54                       | 1.91                    | 31.71                      | 100                  | 41                      | Peak    |
| 335.7                | 28.01               | -17.99                  | 46                          | 43.74                     | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 455.4                | 29.64               | -16.36                  | 46                          | 42.12                     | 16.3                        | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 800.5                | 26.16               | -19.84                  | 46                          | 33.91                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2454                 | 93.12               | -                       | -                           | 87.64                     | 32.56                       | 6.39                    | 33.47                      | 159                  | 316                     | Average |
| 2454                 | 103.06              | -                       | -                           | 97.58                     | 32.56                       | 6.39                    | 33.47                      | 159                  | 316                     | Peak    |
| 4905                 | 43.14               | -30.86                  | 74                          | 59.41                     | 34.37                       | 8.18                    | 58.82                      | 100                  | 0                       | Peak    |
| 7356                 | 40.57               | -33.43                  | 74                          | 53.02                     | 35.64                       | 10.46                   | 58.55                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 09   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2454 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 90.75                | 23.91               | -19.59                  | 43.5                        | 45.34                   | 9.28                        | 1.11                    | 31.82                      | -                    | -                       | Peak    |
| 151.23               | 28.7                | -14.8                   | 43.5                        | 47.97                   | 11.09                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 32.03               | -13.97                  | 46                          | 49.19                   | 12.64                       | 1.91                    | 31.71                      | 100                  | 211                     | Peak    |
| 442.8                | 26.66               | -19.34                  | 46                          | 39.62                   | 15.9                        | 2.43                    | 31.29                      | -                    | -                       | Peak    |
| 600.3                | 23.62               | -22.38                  | 46                          | 33.06                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 673.1                | 21.37               | -24.63                  | 46                          | 30.5                    | 18.87                       | 2.99                    | 30.99                      | -                    | -                       | Peak    |
| 2454                 | 89.7                | -                       | -                           | 84.29                   | 32.49                       | 6.39                    | 33.47                      | 104                  | 282                     | Average |
| 2454                 | 99.56               | -                       | -                           | 94.15                   | 32.49                       | 6.39                    | 33.47                      | 104                  | 282                     | Peak    |
| 4904                 | 47.39               | -26.61                  | 74                          | 60.58                   | 34.37                       | 8.18                    | 55.74                      | 100                  | 0                       | Peak    |
| 7356                 | 42.47               | -31.53                  | 74                          | 52.68                   | 35.51                       | 10.46                   | 56.18                      | 100                  | 0                       | Peak    |





<Ant. 2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 09   | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 2454 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 122.34               | 23.68               | -19.82                  | 43.5                        | 42.67                     | 11.61                       | 1.29                    | 31.89                      | -                    | -                       | Peak    |
| 150.69               | 24.9                | -18.6                   | 43.5                        | 45.3                      | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 33.24               | -12.76                  | 46                          | 50.5                      | 12.54                       | 1.91                    | 31.71                      | 100                  | 12                      | Peak    |
| 335.7                | 26.92               | -19.08                  | 46                          | 42.65                     | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 445.6                | 29.45               | -16.55                  | 46                          | 42.14                     | 16.16                       | 2.43                    | 31.28                      | -                    | -                       | Peak    |
| 800.5                | 26.21               | -19.79                  | 46                          | 33.96                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2454                 | 95.28               | -                       | -                           | 89.8                      | 32.56                       | 6.39                    | 33.47                      | 100                  | 68                      | Average |
| 2454                 | 105.36              | -                       | -                           | 99.88                     | 32.56                       | 6.39                    | 33.47                      | 100                  | 68                      | Peak    |
| 4904                 | 40.79               | -33.21                  | 74                          | 57.06                     | 34.37                       | 8.18                    | 58.82                      | 100                  | 0                       | Peak    |
| 7356                 | 40.99               | -33.01                  | 74                          | 53.44                     | 35.64                       | 10.46                   | 58.55                      | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 09   | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 2454 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 87.24                | 31.83               | -8.17                   | 40                          | 54.01                     | 8.56                        | 1.09                    | 31.83                      | 100                  | 25                      | Peak    |
| 150.96               | 28.56               | -14.94                  | 43.5                        | 47.68                     | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.68               | 30.52               | -15.48                  | 46                          | 47.68                     | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 449.8                | 27.15               | -18.85                  | 46                          | 40.01                     | 15.95                       | 2.45                    | 31.26                      | -                    | -                       | Peak    |
| 600.3                | 27.33               | -18.67                  | 46                          | 36.77                     | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 23.33               | -22.67                  | 46                          | 31.1                      | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 2454                 | 91.36               | -                       | -                           | 85.95                     | 32.49                       | 6.39                    | 33.47                      | 126                  | 120                     | Average |
| 2454                 | 101.02              | -                       | -                           | 95.61                     | 32.49                       | 6.39                    | 33.47                      | 126                  | 120                     | Peak    |
| 4904                 | 42.37               | -31.63                  | 74                          | 55.56                     | 34.37                       | 8.18                    | 55.74                      | 100                  | 0                       | Peak    |
| 7356                 | 43.18               | -30.82                  | 74                          | 53.39                     | 35.51                       | 10.46                   | 56.18                      | 100                  | 0                       | Peak    |



<Ant. 2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5743 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5743                 | 92.15               | -                       | -                           | 81.52                     | 34.7                        | 9.1                     | 33.17                      | 100                  | 69                      | Average |
| 5743                 | 103.14              | -                       | -                           | 92.51                     | 34.7                        | 9.1                     | 33.17                      | 100                  | 69                      | Peak    |
| 11490                | 42.43               | -31.57                  | 74                          | 48.23                     | 38.59                       | 12.92                   | 57.31                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5743 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5743                 | 85.65               | -                       | -                           | 75.02                     | 34.7                        | 9.1                     | 33.17                      | 100                  | 331                     | Average |
| 5743                 | 96.7                | -                       | -                           | 86.07                     | 34.7                        | 9.1                     | 33.17                      | 100                  | 331                     | Peak    |
| 11490                | 40.96               | -33.04                  | 74                          | 47.57                     | 37.78                       | 12.92                   | 57.31                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5787 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 64.29                | 32.23               | -7.77                   | 40                          | 58.38                   | 4.85                        | 0.94                    | 31.94                      | 102                  | 187                     | Peak    |
| 151.23               | 25.95               | -17.55                  | 43.5                        | 46.46                   | 9.85                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.68               | 35.23               | -10.77                  | 46                          | 52.49                   | 12.54                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 335.7                | 28.56               | -17.44                  | 46                          | 44.29                   | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 444.9                | 31.08               | -14.92                  | 46                          | 43.77                   | 16.16                       | 2.43                    | 31.28                      | -                    | -                       | Peak    |
| 800.5                | 25.82               | -20.18                  | 46                          | 33.57                   | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5787                 | 92.03               | -                       | -                           | 81.26                   | 34.8                        | 9.13                    | 33.16                      | 109                  | 69                      | Average |
| 5787                 | 102.97              | -                       | -                           | 92.2                    | 34.8                        | 9.13                    | 33.16                      | 109                  | 69                      | Peak    |
| 11571                | 43.67               | -30.33                  | 74                          | 49.34                   | 38.63                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 83.73                | 33.34               | -6.66                   | 40                          | 56.36                   | 7.79                        | 1.07                    | 31.88                      | 102                  | 154                     | Peak    |
| 113.43               | 30.62               | -12.88                  | 43.5                        | 50.95                   | 10.32                       | 1.25                    | 31.9                       | -                    | -                       | Peak    |
| 268.41               | 32.82               | -13.18                  | 46                          | 49.98                   | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 445.6                | 27.65               | -18.35                  | 46                          | 40.58                   | 15.92                       | 2.43                    | 31.28                      | -                    | -                       | Peak    |
| 600.3                | 27.51               | -18.49                  | 46                          | 36.95                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 25.49               | -20.51                  | 46                          | 33.26                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5783                 | 85.02               | -                       | -                           | 74.32                   | 34.73                       | 9.13                    | 33.16                      | 100                  | 337                     | Average |
| 5783                 | 96.18               | -                       | -                           | 85.48                   | 34.73                       | 9.13                    | 33.16                      | 100                  | 337                     | Peak    |
| 11571                | 42.33               | -31.67                  | 74                          | 48.77                   | 37.86                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5827 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
|-------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| 5827              | 93.64            | -                 | -                     | 82.68               | 34.87                 | 9.25              | 33.16                | 108            | 67                | Average |
| 5827              | 104.44           | -                 | -                     | 93.48               | 34.87                 | 9.25              | 33.16                | 108            | 67                | Peak    |
| 11649             | 42.48            | -31.52            | 74                    | 48.03               | 38.66                 | 13.09             | 57.3                 | 100            | 0                 | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5823 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
|-------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| 5823              | 84.76            | -                 | -                     | 73.9                | 34.77                 | 9.25              | 33.16                | 100            | 333               | Average |
| 5823              | 96.21            | -                 | -                     | 85.35               | 34.77                 | 9.25              | 33.16                | 100            | 333               | Peak    |
| 11649             | 42.71            | -31.29            | 74                    | 49.01               | 37.91                 | 13.09             | 57.3                 | 100            | 0                 | Peak    |



<Ant. 1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 113.7                | 24.91               | -18.59                  | 43.5                        | 44.18                   | 11.38                       | 1.25                    | 31.9                       | -                    | -                       | Peak    |
| 149.88               | 24.84               | -18.66                  | 43.5                        | 45.24                   | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 34.34               | -11.66                  | 46                          | 51.6                    | 12.54                       | 1.91                    | 31.71                      | 100                  | 52                      | Peak    |
| 335.7                | 28.08               | -17.92                  | 46                          | 43.81                   | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 438.6                | 29.78               | -16.22                  | 46                          | 42.54                   | 16.13                       | 2.42                    | 31.31                      | -                    | -                       | Peak    |
| 797.7                | 24.39               | -21.61                  | 46                          | 32.15                   | 19.94                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5783                 | 93.49               | -                       | -                           | 82.75                   | 34.77                       | 9.13                    | 33.16                      | 127                  | 324                     | Average |
| 5783                 | 104.83              | -                       | -                           | 94.09                   | 34.77                       | 9.13                    | 33.16                      | 127                  | 324                     | Peak    |
| 11571                | 41.61               | -32.39                  | 74                          | 47.28                   | 38.63                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11a  | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 149.34               | 28.75               | -14.75                  | 43.5                        | 47.87                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 208.2                | 25.63               | -17.87                  | 43.5                        | 46.32                   | 9.34                        | 1.68                    | 31.71                      | -                    | -                       | Peak    |
| 268.14               | 31.31               | -14.69                  | 46                          | 48.48                   | 12.64                       | 1.9                     | 31.71                      | 100                  | 213                     | Peak    |
| 456.1                | 28.11               | -17.89                  | 46                          | 40.86                   | 16.03                       | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 600.3                | 27.73               | -18.27                  | 46                          | 37.17                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 759.9                | 29.43               | -16.57                  | 46                          | 37.44                   | 19.72                       | 3.17                    | 30.9                       | -                    | -                       | Peak    |
| 5783                 | 93.11               | -                       | -                           | 82.41                   | 34.73                       | 9.13                    | 33.16                      | 114                  | 22                      | Average |
| 5783                 | 104.25              | -                       | -                           | 93.55                   | 34.73                       | 9.13                    | 33.16                      | 114                  | 22                      | Peak    |
| 11571                | 43.3                | -30.7                   | 74                          | 49.74                   | 37.86                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |





<MIMO Ant. 1+2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5746 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5746                 | 91.83               | -                       | -                           | 81.2                      | 34.7                        | 9.1                     | 33.17                      | 101                  | 294                     | Average |
| 5746                 | 101.86              | -                       | -                           | 91.23                     | 34.7                        | 9.1                     | 33.17                      | 101                  | 294                     | Peak    |
| 11490                | 42.58               | -31.42                  | 74                          | 48.38                     | 38.59                       | 12.92                   | 57.31                      | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 149  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5743 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5743                 | 89.23               | -                       | -                           | 78.6                      | 34.7                        | 9.1                     | 33.17                      | 102                  | 335                     | Average |
| 5743                 | 98.23               | -                       | -                           | 87.6                      | 34.7                        | 9.1                     | 33.17                      | 102                  | 335                     | Peak    |
| 11490                | 41.84               | -32.16                  | 74                          | 48.45                     | 37.78                       | 12.92                   | 57.31                      | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 43.5                 | 27.05               | -12.95                  | 40                          | 47.64                   | 10.62                       | 0.77                    | 31.98                      | -                    | -                       | Peak    |
| 125.04               | 31.75               | -11.75                  | 43.5                        | 50.61                   | 11.7                        | 1.31                    | 31.87                      | -                    | -                       | Peak    |
| 268.14               | 35.68               | -10.32                  | 46                          | 52.95                   | 12.54                       | 1.9                     | 31.71                      | 102                  | 117                     | Peak    |
| 335.7                | 29.41               | -16.59                  | 46                          | 45.14                   | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 462.4                | 29.69               | -16.31                  | 46                          | 41.99                   | 16.44                       | 2.49                    | 31.23                      | -                    | -                       | Peak    |
| 800.5                | 26                  | -20                     | 46                          | 33.75                   | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5783                 | 91.21               | -                       | -                           | 80.47                   | 34.77                       | 9.13                    | 33.16                      | 100                  | 296                     | Average |
| 5783                 | 100.67              | -                       | -                           | 89.93                   | 34.77                       | 9.13                    | 33.16                      | 100                  | 296                     | Peak    |
| 11571                | 43.11               | -30.89                  | 74                          | 48.78                   | 38.63                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 49.71                | 30.36               | -9.64                   | 40                          | 54.13                   | 7.31                        | 0.83                    | 31.91                      | 103                  | 231                     | Peak    |
| 150.69               | 28.53               | -14.97                  | 43.5                        | 47.65                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.14               | 32.52               | -13.48                  | 46                          | 49.69                   | 12.64                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 335.7                | 24.09               | -21.91                  | 46                          | 39.51                   | 14.2                        | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 457.5                | 27.4                | -18.6                   | 46                          | 40.11                   | 16.06                       | 2.47                    | 31.24                      | -                    | -                       | Peak    |
| 600.3                | 26.68               | -19.32                  | 46                          | 36.12                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 5783                 | 88.21               | -                       | -                           | 77.51                   | 34.73                       | 9.13                    | 33.16                      | 102                  | 336                     | Average |
| 5783                 | 97.65               | -                       | -                           | 86.95                   | 34.73                       | 9.13                    | 33.16                      | 102                  | 336                     | Peak    |
| 11571                | 42.16               | -31.84                  | 74                          | 48.6                    | 37.86                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5827 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
|-------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| 5827              | 92.4             | -                 | -                     | 81.44               | 34.87                 | 9.25              | 33.16                | 100            | 295               | Average |
| 5827              | 102.56           | -                 | -                     | 91.6                | 34.87                 | 9.25              | 33.16                | 100            | 295               | Peak    |
| 11649             | 42.09            | -31.91            | 74                    | 47.64               | 38.66                 | 13.09             | 57.3                 | 100            | 0                 | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 165  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5824 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency ( MHz ) | Level ( dBμV/m ) | Over Limit ( dB ) | Limit Line ( dBμV/m ) | Read Level ( dBμV ) | Antenna Factor ( dB ) | Cable Loss ( dB ) | Preamp Factor ( dB ) | Ant Pos ( cm ) | Table Pos ( deg ) | Remark  |
|-------------------|------------------|-------------------|-----------------------|---------------------|-----------------------|-------------------|----------------------|----------------|-------------------|---------|
| 5824              | 88.03            | -                 | -                     | 77.17               | 34.77                 | 9.25              | 33.16                | 100            | 27                | Average |
| 5824              | 97.56            | -                 | -                     | 86.7                | 34.77                 | 9.25              | 33.16                | 100            | 27                | Peak    |
| 11649             | 42.48            | -31.52            | 74                    | 48.78               | 37.91                 | 13.09             | 57.3                 | 100            | 0                 | Peak    |



<Ant. 1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 64.83                | 30.97               | -9.03                   | 40                          | 57.01                   | 4.95                        | 0.95                    | 31.94                      | 105                  | 221                     | Peak    |
| 91.02                | 31.77               | -11.73                  | 43.5                        | 53.38                   | 9.13                        | 1.11                    | 31.85                      | -                    | -                       | Peak    |
| 268.14               | 36.85               | -9.15                   | 46                          | 54.12                   | 12.54                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 335.7                | 28.56               | -17.44                  | 46                          | 44.29                   | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 444.2                | 30.3                | -15.7                   | 46                          | 43.03                   | 16.13                       | 2.43                    | 31.29                      | -                    | -                       | Peak    |
| 495.3                | 25.79               | -20.21                  | 46                          | 37.44                   | 16.95                       | 2.57                    | 31.17                      | -                    | -                       | Peak    |
| 5783                 | 92.98               | -                       | -                           | 82.24                   | 34.77                       | 9.13                    | 33.16                      | 129                  | 325                     | Average |
| 5783                 | 104.41              | -                       | -                           | 93.67                   | 34.77                       | 9.13                    | 33.16                      | 129                  | 325                     | Peak    |
| 11571                | 41.55               | -32.45                  | 74                          | 47.22                   | 38.63                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 42.96                | 33.59               | -6.41                   | 40                          | 54.79                   | 10.03                       | 0.76                    | 31.99                      | 100                  | 198                     | Peak    |
| 90.48                | 32.51               | -10.99                  | 43.5                        | 53.94                   | 9.28                        | 1.11                    | 31.82                      | -                    | -                       | Peak    |
| 267.87               | 32.81               | -13.19                  | 46                          | 49.98                   | 12.64                       | 1.9                     | 31.71                      | -                    | -                       | Peak    |
| 379.8                | 34.19               | -11.81                  | 46                          | 48.48                   | 15.06                       | 2.25                    | 31.6                       | -                    | -                       | Peak    |
| 451.9                | 27.92               | -18.08                  | 46                          | 40.74                   | 15.98                       | 2.46                    | 31.26                      | -                    | -                       | Peak    |
| 800.5                | 25.34               | -20.66                  | 46                          | 33.11                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5783                 | 92.4                | -                       | -                           | 81.7                    | 34.73                       | 9.13                    | 33.16                      | 103                  | 27                      | Average |
| 5783                 | 103.67              | -                       | -                           | 92.97                   | 34.73                       | 9.13                    | 33.16                      | 103                  | 27                      | Peak    |
| 11571                | 41.8                | -32.2                   | 74                          | 48.24                   | 37.86                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



<Ant. 2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5787 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 122.88               | 22.86               | -20.64                  | 43.5                        | 41.85                     | 11.61                       | 1.29                    | 31.89                      | -                    | -                       | Peak    |
| 240.06               | 29.08               | -16.92                  | 46                          | 48.13                     | 10.89                       | 1.8                     | 31.74                      | -                    | -                       | Peak    |
| 268.14               | 35.62               | -10.38                  | 46                          | 52.89                     | 12.54                       | 1.9                     | 31.71                      | 100                  | 17                      | Peak    |
| 451.2                | 29.67               | -16.33                  | 46                          | 42.24                     | 16.24                       | 2.45                    | 31.26                      | -                    | -                       | Peak    |
| 760.6                | 24.46               | -21.54                  | 46                          | 32.43                     | 19.76                       | 3.17                    | 30.9                       | -                    | -                       | Peak    |
| 799.8                | 25.12               | -20.88                  | 46                          | 32.87                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5787                 | 93.13               | -                       | -                           | 82.36                     | 34.8                        | 9.13                    | 33.16                      | 103                  | 297                     | Average |
| 5787                 | 104.94              | -                       | -                           | 94.17                     | 34.8                        | 9.13                    | 33.16                      | 103                  | 297                     | Peak    |
| 11571                | 41.89               | -32.11                  | 74                          | 47.56                     | 38.63                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT20   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 157  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5783 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 94.26                | 24.28               | -19.22                  | 43.5                        | 45.52                   | 9.57                        | 1.13                    | 31.94                      | -                    | -                       | Peak    |
| 150.96               | 28.73               | -14.77                  | 43.5                        | 47.85                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 32.57               | -13.43                  | 46                          | 49.73                   | 12.64                       | 1.91                    | 31.71                      | 100                  | 152                     | Peak    |
| 444.9                | 28.19               | -17.81                  | 46                          | 41.12                   | 15.92                       | 2.43                    | 31.28                      | -                    | -                       | Peak    |
| 600.3                | 28.6                | -17.4                   | 46                          | 38.04                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 24.38               | -21.62                  | 46                          | 32.15                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5783                 | 85.8                | -                       | -                           | 75.1                    | 34.73                       | 9.13                    | 33.16                      | 101                  | 64                      | Average |
| 5783                 | 96.86               | -                       | -                           | 86.16                   | 34.73                       | 9.13                    | 33.16                      | 101                  | 64                      | Peak    |
| 11571                | 42.47               | -31.53                  | 74                          | 48.91                   | 37.86                       | 13                      | 57.3                       | 100                  | 0                       | Peak    |





<MIMO Ant. 1+2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 151  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5753 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5753                 | 89.02               | -                       | -                           | 78.35                   | 34.73                       | 9.1                     | 33.16                      | 103                  | 293                     | Average |
| 5753                 | 99.3                | -                       | -                           | 88.63                   | 34.73                       | 9.1                     | 33.16                      | 103                  | 293                     | Peak    |
| 11511                | 42.32               | -31.68                  | 74                          | 48.07                   | 38.6                        | 12.95                   | 57.3                       | 100                  | 0                       | Peak    |

|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 151  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5753 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 5753                 | 84.44               | -                       | -                           | 73.79                   | 34.71                       | 9.1                     | 33.16                      | 100                  | 36                      | Average |
| 5753                 | 95.03               | -                       | -                           | 84.38                   | 34.71                       | 9.1                     | 33.16                      | 100                  | 36                      | Peak    |
| 11511                | 42.6                | -31.4                   | 74                          | 49.15                   | 37.8                        | 12.95                   | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5797 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 81.84                | 28.74               | -11.26                  | 40                          | 52.41                     | 7.2                         | 1.05                    | 31.92                      | -                    | -                       | Peak    |
| 150.15               | 25.97               | -17.53                  | 43.5                        | 46.37                     | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.14               | 35.76               | -10.24                  | 46                          | 53.03                     | 12.54                       | 1.9                     | 31.71                      | 102                  | 217                     | Peak    |
| 359.5                | 28.83               | -17.17                  | 46                          | 43.68                     | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 431.6                | 29.23               | -16.77                  | 46                          | 41.91                     | 16.26                       | 2.4                     | 31.34                      | -                    | -                       | Peak    |
| 759.9                | 34.08               | -11.92                  | 46                          | 42.05                     | 19.76                       | 3.17                    | 30.9                       | -                    | -                       | Peak    |
| 5797                 | 89.24               | -                       | -                           | 78.44                     | 34.8                        | 9.16                    | 33.16                      | 100                  | 295                     | Average |
| 5797                 | 98.89               | -                       | -                           | 88.09                     | 34.8                        | 9.16                    | 33.16                      | 100                  | 295                     | Peak    |
| 11589                | 43.22               | -30.78                  | 74                          | 48.86                     | 38.64                       | 13.02                   | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5797 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 85.89                | 33.1                | -6.9                    | 40                          | 55.69                   | 8.17                        | 1.08                    | 31.84                      | 100                  | 103                     | Peak    |
| 149.34               | 28.16               | -15.34                  | 43.5                        | 47.28                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 269.49               | 30.84               | -15.16                  | 46                          | 48.18                   | 12.46                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 359.5                | 27.12               | -18.88                  | 46                          | 41.97                   | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 461.7                | 26.16               | -19.84                  | 46                          | 38.74                   | 16.18                       | 2.48                    | 31.24                      | -                    | -                       | Peak    |
| 570.2                | 27.36               | -18.64                  | 46                          | 37.33                   | 18.52                       | 2.76                    | 31.25                      | -                    | -                       | Peak    |
| 5797                 | 85.33               | -                       | -                           | 74.59                   | 34.74                       | 9.16                    | 33.16                      | 102                  | 27                      | Average |
| 5797                 | 95.88               | -                       | -                           | 85.14                   | 34.74                       | 9.16                    | 33.16                      | 102                  | 27                      | Peak    |
| 11589                | 41.99               | -32.01                  | 74                          | 48.4                    | 37.87                       | 13.02                   | 57.3                       | 100                  | 0                       | Peak    |



<Ant .1>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5795 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 61.59                | 28.32               | -11.68                  | 40                          | 54.5                      | 4.85                        | 0.92                    | 31.95                      | -                    | -                       | Peak    |
| 91.02                | 32.56               | -10.94                  | 43.5                        | 54.17                     | 9.13                        | 1.11                    | 31.85                      | 107                  | 214                     | Peak    |
| 268.41               | 34.17               | -11.83                  | 46                          | 51.43                     | 12.54                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 335.7                | 28.73               | -17.27                  | 46                          | 44.46                     | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 495.3                | 30.9                | -15.1                   | 46                          | 42.55                     | 16.95                       | 2.57                    | 31.17                      | -                    | -                       | Peak    |
| 759.9                | 28.41               | -17.59                  | 46                          | 36.38                     | 19.76                       | 3.17                    | 30.9                       | -                    | -                       | Peak    |
| 5795                 | 90.65               | -                       | -                           | 79.85                     | 34.8                        | 9.16                    | 33.16                      | 140                  | 324                     | Average |
| 5795                 | 101.22              | -                       | -                           | 90.42                     | 34.8                        | 9.16                    | 33.16                      | 140                  | 324                     | Peak    |
| 11589                | 41.98               | -32.02                  | 74                          | 47.62                     | 38.64                       | 13.02                   | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5797 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 42.96                | 29.88               | -10.12                  | 40                          | 51.08                   | 10.03                       | 0.76                    | 31.99                      | 102                  | 247                     | Peak    |
| 150.96               | 28.72               | -14.78                  | 43.5                        | 47.84                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 31.88               | -14.12                  | 46                          | 49.04                   | 12.64                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 359.5                | 26.48               | -19.52                  | 46                          | 41.33                   | 14.67                       | 2.19                    | 31.71                      | -                    | -                       | Peak    |
| 600.3                | 27.2                | -18.8                   | 46                          | 36.64                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 27.27               | -18.73                  | 46                          | 35.04                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5797                 | 90.77               | -                       | -                           | 80.03                   | 34.74                       | 9.16                    | 33.16                      | 126                  | 26                      | Average |
| 5797                 | 100.79              | -                       | -                           | 90.05                   | 34.74                       | 9.16                    | 33.16                      | 126                  | 26                      | Peak    |
| 11589                | 41.85               | -32.15                  | 74                          | 48.26                   | 37.87                       | 13.02                   | 57.3                       | 100                  | 0                       | Peak    |



<Ant .2>

|                        |  |                            |            |
|------------------------|--|----------------------------|------------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C    |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 50~51%     |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Horizontal |
| <b>Remark :</b>        | 1. 5793 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |            |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>( dBμV ) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|---------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 84.27                | 32.33               | -7.67                   | 40                          | 55.14                     | 7.98                        | 1.07                    | 31.86                      | 100                  | 122                     | Peak    |
| 150.42               | 24.33               | -19.17                  | 43.5                        | 44.73                     | 9.96                        | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 268.41               | 33.82               | -12.18                  | 46                          | 51.08                     | 12.54                       | 1.91                    | 31.71                      | -                    | -                       | Peak    |
| 335.7                | 27.11               | -18.89                  | 46                          | 42.84                     | 13.89                       | 2.12                    | 31.74                      | -                    | -                       | Peak    |
| 454.7                | 29.77               | -16.23                  | 46                          | 42.25                     | 16.3                        | 2.47                    | 31.25                      | -                    | -                       | Peak    |
| 800.5                | 25.88               | -20.12                  | 46                          | 33.63                     | 19.95                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5793                 | 92.49               | -                       | -                           | 81.69                     | 34.8                        | 9.16                    | 33.16                      | 103                  | 296                     | Average |
| 5793                 | 102.18              | -                       | -                           | 91.38                     | 34.8                        | 9.16                    | 33.16                      | 103                  | 296                     | Peak    |
| 11589                | 42.17               | -31.83                  | 74                          | 47.81                     | 38.64                       | 13.02                   | 57.3                       | 100                  | 0                       | Peak    |



|                        |  |                            |          |
|------------------------|--|----------------------------|----------|
| <b>Test Mode :</b>     | 802.11n HT40   | <b>Temperature :</b>       | 23~24°C  |
| <b>Test Channel :</b>  | 159  | <b>Relative Humidity :</b> | 50~51%   |
| <b>Test Engineer :</b> | Jet Lu   | <b>Polarization :</b>      | Vertical |
| <b>Remark :</b>        | 1. 5797 MHz is fundamental signal which can be ignored.<br>2. Average measurement was not performed if peak level went lower than the average limit. |                            |          |

| Frequency<br>( MHz ) | Level<br>( dBμV/m ) | Over<br>Limit<br>( dB ) | Limit<br>Line<br>( dBμV/m ) | Read<br>Level<br>(dBμV) | 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  |
|----------------------|---------------------|-------------------------|-----------------------------|-------------------------|-----------------------------|-------------------------|----------------------------|----------------------|-------------------------|---------|
| 149.61               | 28.63               | -14.87                  | 43.5                        | 47.75                   | 11.24                       | 1.44                    | 31.8                       | -                    | -                       | Peak    |
| 209.01               | 24.75               | -18.75                  | 43.5                        | 45.43                   | 9.34                        | 1.69                    | 31.71                      | -                    | -                       | Peak    |
| 268.14               | 31.91               | -14.09                  | 46                          | 49.08                   | 12.64                       | 1.9                     | 31.71                      | 100                  | 165                     | Peak    |
| 454                  | 28.08               | -17.92                  | 46                          | 40.86                   | 16.01                       | 2.46                    | 31.25                      | -                    | -                       | Peak    |
| 600.3                | 28.14               | -17.86                  | 46                          | 37.58                   | 18.91                       | 2.83                    | 31.18                      | -                    | -                       | Peak    |
| 800.5                | 25.25               | -20.75                  | 46                          | 33.02                   | 19.93                       | 3.26                    | 30.96                      | -                    | -                       | Peak    |
| 5797                 | 83.91               | -                       | -                           | 73.17                   | 34.74                       | 9.16                    | 33.16                      | 102                  | 64                      | Average |
| 5797                 | 93.45               | -                       | -                           | 82.71                   | 34.74                       | 9.16                    | 33.16                      | 102                  | 64                      | Peak    |
| 11589                | 41.59               | -32.41                  | 74                          | 48                      | 37.87                       | 13.02                   | 57.3                       | 100                  | 0                       | 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 (dB $\mu$ V) |           |
|--------------------------------|------------------------------|-----------|
|                                | Quasi-Peak                   | Average   |
| 0.15-0.5                       | 66 to 56*                    | 56 to 46* |
| 0.5-5                          | 56                           | 46        |
| 5-30                           | 60                           | 50        |

\*Decreases with the logarithm of the frequency.

#### 3.2.2 Measuring Instruments

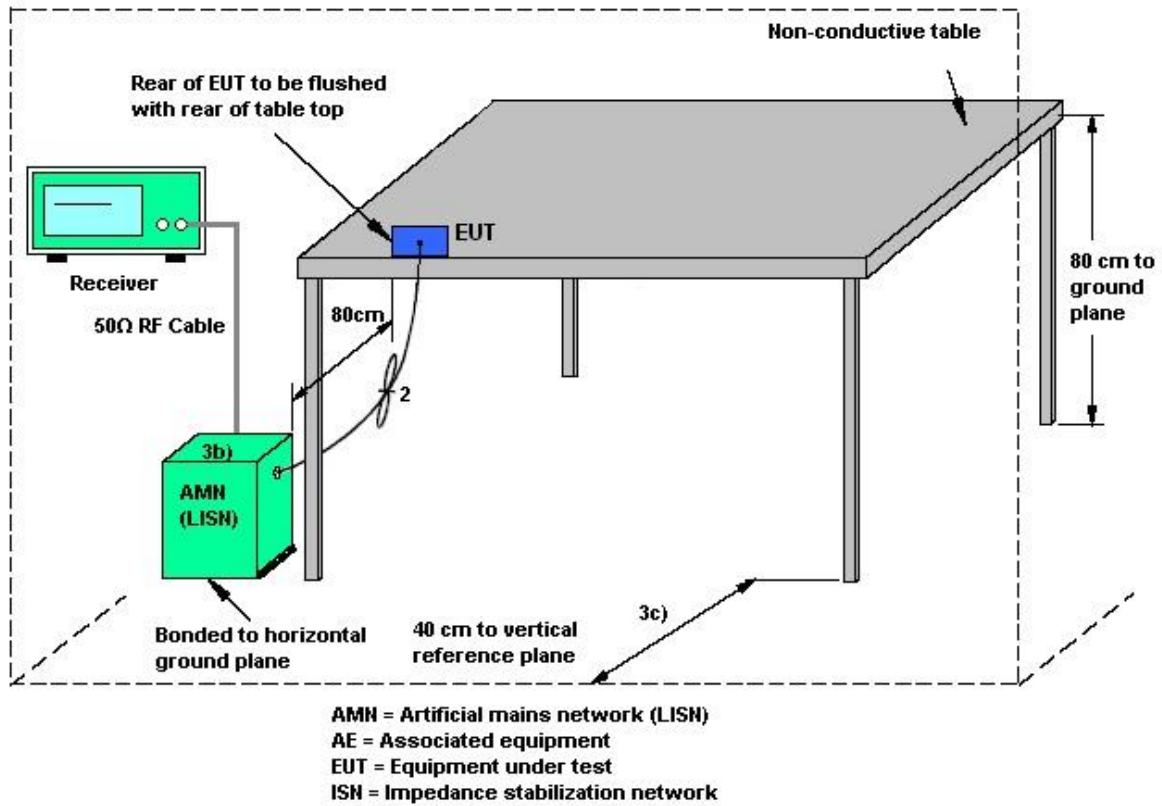
The measuring equipment is listed in the section 4 of this test report.

#### 3.2.3 Test Procedures

1. 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.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

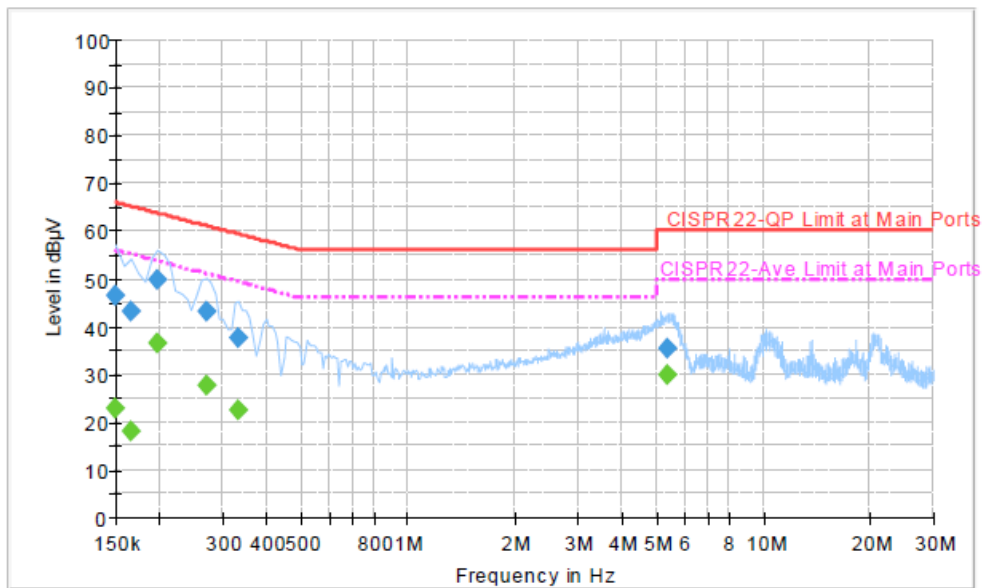


### 3.2.4 Test Setup



3.2.5 Test Result of AC Conducted Emission

|                 |   |                     |         |
|-----------------|---|---------------------|---------|
| Test Mode :     | Mode 1  | Temperature :       | 20~22°C |
| Test Engineer : | Kai-Chun Chu  | Relative Humidity : | 46~48%  |
| Test Voltage :  | 120Vac / 60Hz   | Phase :             | Line    |
| Function Type : | WLAN (2.4GHz) Link + Bluetooth Link + MPEG4 + Earphone + Mouse + Adapter + USB HD + H Pattern |                     |         |



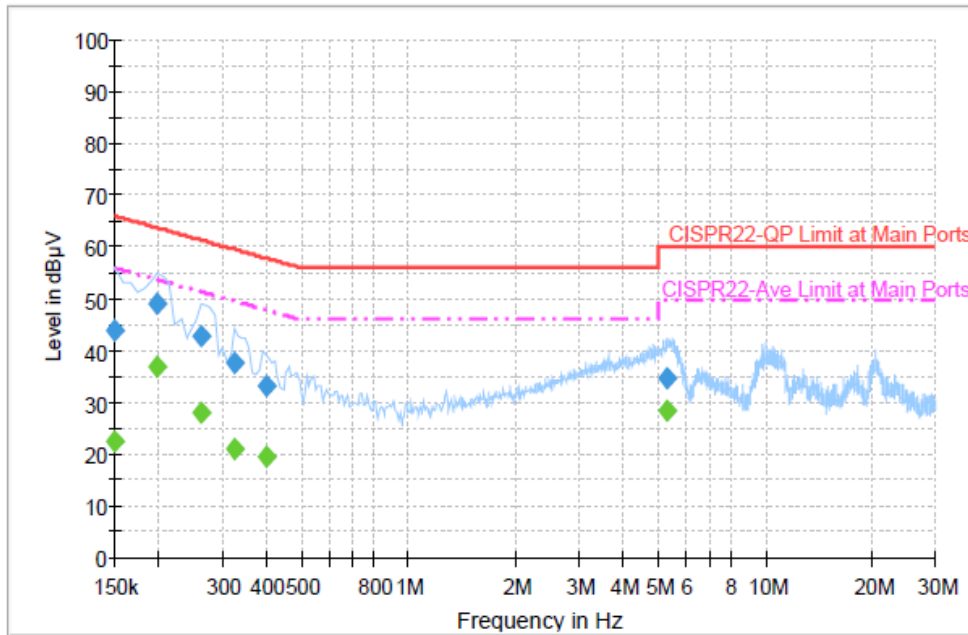
Final Result : QuasiPeak

| Frequency (MHz) | QuasiPeak (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|------------------|--------|------|------------|-------------|--------------|
| 0.150000        | 46.4             | Off    | L1   | 19.4       | 19.6        | 66.0         |
| 0.166000        | 43.2             | Off    | L1   | 19.4       | 22.0        | 65.2         |
| 0.198000        | 49.9             | Off    | L1   | 19.3       | 13.8        | 63.7         |
| 0.270000        | 43.1             | Off    | L1   | 19.3       | 18.0        | 61.1         |
| 0.334000        | 37.7             | Off    | L1   | 19.4       | 21.7        | 59.4         |
| 5.374000        | 35.5             | Off    | L1   | 19.6       | 24.5        | 60.0         |

Final Result : Average

| Frequency (MHz) | Average (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|----------------|--------|------|------------|-------------|--------------|
| 0.150000        | 23.0           | Off    | L1   | 19.4       | 33.0        | 56.0         |
| 0.166000        | 18.0           | Off    | L1   | 19.4       | 37.2        | 55.2         |
| 0.198000        | 36.5           | Off    | L1   | 19.3       | 17.2        | 53.7         |
| 0.270000        | 27.5           | Off    | L1   | 19.3       | 23.6        | 51.1         |
| 0.334000        | 22.4           | Off    | L1   | 19.4       | 27.0        | 49.4         |
| 5.374000        | 29.8           | Off    | L1   | 19.6       | 20.2        | 50.0         |

|                 |   |                     |         |
|-----------------|---|---------------------|---------|
| Test Mode :     | Mode 1  | Temperature :       | 20~22°C |
| Test Engineer : | Kai-Chun Chu  | Relative Humidity : | 46~48%  |
| Test Voltage :  | 120Vac / 60Hz   | Phase :             | Neutral |
| Function Type : | WLAN (2.4GHz) Link + Bluetooth Link + MPEG4 + Earphone + Mouse + Adapter + USB HD + H Pattern |                     |         |



**Final Result : QuasiPeak**

| Frequency (MHz) | QuasiPeak (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|------------------|--------|------|------------|-------------|--------------|
| 0.150000        | 43.8             | Off    | N    | 19.4       | 22.2        | 66.0         |
| 0.198000        | 49.1             | Off    | N    | 19.3       | 14.6        | 63.7         |
| 0.262000        | 42.7             | Off    | N    | 19.4       | 18.7        | 61.4         |
| 0.326000        | 37.5             | Off    | N    | 19.4       | 22.1        | 59.6         |
| 0.398000        | 33.0             | Off    | N    | 19.5       | 24.9        | 57.9         |
| 5.326000        | 34.6             | Off    | N    | 19.6       | 25.4        | 60.0         |

**Final Result : Average**

| Frequency (MHz) | Average (dBµV) | Filter | Line | Corr. (dB) | Margin (dB) | Limit (dBµV) |
|-----------------|----------------|--------|------|------------|-------------|--------------|
| 0.150000        | 22.4           | Off    | N    | 19.4       | 33.6        | 56.0         |
| 0.198000        | 37.0           | Off    | N    | 19.3       | 16.7        | 53.7         |
| 0.262000        | 28.2           | Off    | N    | 19.4       | 23.2        | 51.4         |
| 0.326000        | 21.0           | Off    | N    | 19.4       | 28.6        | 49.6         |
| 0.398000        | 19.5           | Off    | N    | 19.5       | 28.4        | 47.9         |
| 5.326000        | 28.5           | Off    | N    | 19.6       | 21.5        | 50.0         |



### **3.3 Antenna Requirements**

#### **3.3.1 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.

#### **3.3.2 Antenna Anti-Replacement Construction**

An embedded-in antenna design is used.

### 3.3.3 Antenna Gain

FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

For CDD transmissions, directional gain is calculated as

$$DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;

$N_{SS}$  = the number of independent spatial streams of data;

$N_{ANT}$  = the total number of antennas

$g_{j,k} = 10^{G_k / 20}$  if the  $k$ th antenna is being fed by spatial stream  $j$ , or zero if it is not;  
 $G_k$  is the gain in dBi of the  $k$ th antenna.

The EUT supports CDD mode.

The power and PSD limit should be modified if the directional gain of EUT is over 6 dBi,

The directional gain “DG” is calculated as following table.

|         | Ant 1 | Ant 2 | for   | for   | Limit     | Limit     |
|---------|-------|-------|-------|-------|-----------|-----------|
|         | (dBi) | (dBi) | Power | PSD   | Reduction | Reduction |
|         | (dBi) | (dBi) | (dBi) | (dBi) | (dB)      | (dB)      |
| 2.4 GHz | -0.44 | -0.95 | 2.32  | 2.32  | 0.00      | 0.00      |
| 5 GHz   | 1.14  | 0.48  | 3.83  | 3.83  | 0.00      | 0.00      |

Power Limit Reduction = DG(Power) – 6dBi, ( min = 0 )

PSD Limit Reduction = DG(PSD) – 6dBi, ( min = 0 )



## 4 List of Measuring Equipment

| Instrument                         | Manufacturer    | Model No.     | Serial No.  | Characteristics | Calibration Date | Test Date                     | Due Date      | Remark                |
|------------------------------------|-----------------|---------------|-------------|-----------------|------------------|-------------------------------|---------------|-----------------------|
| Spectrum Analyzer                  | Rohde & Schwarz | FSP40         | 100055      | 9kHz~40GHz      | Jun. 07, 2013    | Oct. 03, 2013 ~ Oct. 19, 2013 | Jun. 06, 2014 | Conducted (TH02-HY)   |
| Power Meter                        | Anritsu         | ML2495A       | 1036004     | 300MHz~40GHz    | Aug. 17, 2013    | Oct. 03, 2013 ~ Oct. 19, 2013 | Aug. 16, 2014 | Conducted (TH02-HY)   |
| Power Sensor                       | Anritsu         | MA2411B       | 1027253     | 300MHz~40GHz    | Aug. 17, 2013    | Oct. 03, 2013 ~ Oct. 19, 2013 | Aug. 16, 2014 | Conducted (TH02-HY)   |
| EMI Test Receiver                  | Rohde & Schwarz | ESCS 30       | 100356      | 9kHz ~ 2.75GHz  | Nov. 13, 2012    | Oct. 18, 2013                 | Nov. 12, 2013 | Conduction (CO05-HY)  |
| Two-LISN (for auxiliary equipment) | Rohde & Schwarz | ENV216        | 100081      | 9kHz ~ 30MHz    | Dec. 12, 2012    | Oct. 18, 2013                 | Dec. 11, 2013 | Conduction (CO05-HY)  |
| Two-LISN                           | Rohde & Schwarz | ENV216        | 100080      | 9kHz ~ 30MHz    | Dec. 06, 2012    | Oct. 18, 2013                 | Dec. 05, 2013 | Conduction (CO05-HY)  |
| AC Power Source                    | APC             | APC-1000W     | N/A         | N/A             | N/A              | Oct. 18, 2013                 | N/A           | Conduction (CO05-HY)  |
| EMI Test Receiver                  | Rohde & Schwarz | ESU26         | 100472      | 20Hz ~ 26.5GHz  | Jan. 23, 2013    | Oct. 29, 2013 ~ Oct. 31, 2013 | Jan. 22, 2014 | Radiation (03CH08-HY) |
| Bilog Antenna                      | Teseq GmbH      | CBL6112D      | 35379       | 30MHz~2GHz      | Oct. 10, 2013    | Oct. 29, 2013 ~ Oct. 31, 2013 | Oct. 09, 2014 | Radiation (03CH08-HY) |
| Horn Antenna                       | ESCO            | 3117          | 000143261   | 1GHz~18GHz      | Jan. 08, 2013    | Oct. 29, 2013 ~ Oct. 31, 2013 | Jan. 07, 2014 | Radiation (03CH08-HY) |
| SHF-EHF Horn Antenna               | SCHWARZBECK     | BBHA 9170     | BBHA9170251 | 18GHz~40GHz     | Oct. 03, 2013    | Oct. 29, 2013 ~ Oct. 31, 2013 | Oct. 02, 2014 | Radiation (03CH08-HY) |
| Amplifier                          | SONOMA          | 310N          | 187231      | 9kHz~1GHz       | May 15, 2013     | Oct. 29, 2013 ~ Oct. 31, 2013 | May 14, 2014  | Radiation (03CH08-HY) |
| Pre Amplifier                      | EMC INSTRUMENT  | EMC011830     | 980148      | 100MHz~18GHz    | Jun. 21, 2013    | Oct. 29, 2013 ~ Oct. 31, 2013 | Jun. 20, 2014 | Radiation (03CH08-HY) |
| Pre Amplifier                      | Agilent         | 8449B         | 3008A02665  | 1GHz~26.5GHz    | Sep. 04, 2013    | Oct. 29, 2013 ~ Oct. 31, 2013 | Sep. 03, 2014 | Radiation (03CH08-HY) |
| Loop Antenna                       | Rohde & Schwarz | HFH2-Z2       | 860004/0001 | 9 kHz~30 MhZ    | Jul. 03, 2012    | Oct. 29, 2013 ~ Oct. 31, 2013 | Jul. 03, 2014 | Radiation (03CH08-HY) |
| Turn Table                         | Chaintek        | Chaintek 3000 | N/A         | 0~360 Degree    | N/A              | Oct. 29, 2013 ~ Oct. 31, 2013 | N/A           | Radiation (03CH08-HY) |
| Antenna Mast                       | MF              | MFA520BS      | N/A         | 1m~4m           | N/A              | Oct. 29, 2013 ~ Oct. 31, 2013 | N/A           | Radiation (03CH08-HY) |



## 5 Uncertainty of Evaluation

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

|   |      |
|---|------|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 2.26 |
|---|------|

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

|   |     |
|---|-----|
| Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ ) | 4.3 |
|---|-----|