# FCC REPORT (WIFI)

Applicant: Shenzhen Contel Electronics Technology Co., Ltd.

Address of Applicant: 3/F, R2-A, High-tech Industrial Park, Nanshan District,

Shenzhen, China

**Equipment Under Test (EUT)** 

Product Name: 7 Inch Tablet

TAB-735, TAB-735G, TAB-735\_G, TAB-740, TAB-740G, Model No.:

TAB-740\_G, TAB-740H

FCC ID: YAPTAB740

Applicable standards: FCC CFR Title 47 Part 15 Subpart C Section 15.247

Date of sample receipt: 20 May., 2013

Date of Test: 27 May to 08 Aug., 2013

Date of report issued: 09 Aug., 2013

Test Result: PASS \*

#### Authorized Signature:



Bruce Zhang Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



# 2 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | 09 Aug., 2013 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |
|             |               |             |

| Prepared by: | Lisa chon        | Date: | 09 Aug., 2013 |
|--------------|------------------|-------|---------------|
|              | Report Clerk     |       |               |
| Reviewed by: | Wimer rhang      | Date: | 09 Aug., 2013 |
|              | Project Engineer | _     |               |



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# 4 Test Summary

| Test Item                        | Section in CFR 47 | Result |
|----------------------------------|-------------------|--------|
| Antenna requirement              | 15.203/15.247 (c) | Pass   |
| AC Power Line Conducted Emission | 15.207            | Pass   |
| Conducted Output Power           | 15.247 (b)(3)     | Pass   |
| 26/6dB Emission Bandwidth        | 15.247 (a)(2)     | Pass   |
| Power Spectral Density           | 15.247 (e)        | Pass   |
| Band Edge                        | 15.247(d)         | Pass   |
| Spurious Emission                | 15.205/15.209     | Pass   |

Pass: The EUT complies with the essential requirements in the standard.

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# 5 General Information

# 5.1 Client Information

| Applicant:               | Shenzhen Contel Electronics Technology Co., Ltd.                        |
|--------------------------|---|
| Address of Applicant:    | 3/F, R2-A, High-tech Industrial Park, Nanshan District, Shenzhen, China |
| Manufacturer:            | Dongguan Contel Cloud Terminal System CO.,LTD                           |
| Address of Manufacturer: | Waijing Industrial Park, Gaolong road, GaobuTown, Dongguan,             |
|                          | GuangDong   |

# 5.2 General Description of E.U.T.

| Product Name:                                 | 7 Inch Tablet   |
|---|---|
| Madal Na .                                    | TAB-735, TAB-735G, TAB-735_G, TAB-740, TAB-740G,  |
| Model No.:                                    | TAB-740_G, TAB-740H   |
| Operation Frequency:                          | 2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))  |
| Channel numbers:                              | 11 for 802.11b/802.11g/802.11(H20)  |
| Channel separation:                           | 5MHz  |
| Modulation technology: (IEEE 802.11b)         | Direct Sequence Spread Spectrum (DSSS)  |
| Modulation technology: (IEEE 802.11g/802.11n) | Orthogonal Frequency Division Multiplexing(OFDM)  |
| Data speed (IEEE 802.11b):                    | 1Mbps, 2Mbps, 5.5Mbps, 11Mbps   |
| Data speed (IEEE 802.11g):                    | 6Mbps, 9Mbps, 12Mbps, 18Mbps, 24Mbps, 36Mbps, 48Mbps,54Mbps   |
| Data speed (IEEE 802.11n):                    | Up to 150Mbps   |
| Antenna Type:                                 | Internal Antenna  |
| Antenna gain:                                 | 2.5 dBi   |
| AC adapter:                                   | Model: SW-050200A   |
|   | Input: AC 100-240V, 50/60Hz 0.68A   |
|   | Output: DC 5.0V, 2.0A   |
| Power supply:                                 | Rechargeable Li-ion Battery DC3.7V/2700mAh  |
| Remark:                                       | The model No. TAB-735, TAB-735G, TAB-735_G, TAB-740, TAB-740G, TAB-740_G and TAB-740H were identical wiring, the electrical circuit design, layout, components used and internal wiring, with only difference being with only difference being model name. We selected TAB-735 to perform the full tests. |

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| Operation   | Operation Frequency each of channel For 802.11b/g/n(H20) |   |         |   |         |    |           |  |
|---|--|---|---------|---|---------|----|-----------|--|
| Channel Frequency Channel Frequency Channel Frequency Channel Frequence |  |   |         |   |         |    | Frequency |  |
| 1   | 2412MHz  | 4 | 2427MHz | 7 | 2442MHz | 10 | 2457MHz   |  |
| 2   | 2417MHz  | 5 | 2432MHz | 8 | 2447MHz | 11 | 2462MHz   |  |
| 3   | 2422MHz  | 6 | 2437MHz | 9 | 2452MHz |    |           |  |

#### Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

802.11b/802.11g/802.11n (H20)

| Channel             | Frequency |
|---------------------|-----------|
| The lowest channel  | 2412MHz   |
| The middle channel  | 2437MHz   |
| The Highest channel | 2462MHz   |

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#### 5.3 Test environment and mode

| Operating Environment: |   |  |  |  |
|------------------------|---|--|--|--|
| Temperature:           | 24.0 °C   |  |  |  |
| Humidity:              | 54 % RH   |  |  |  |
| Atmospheric Pressure:  | 1010 mbar   |  |  |  |
| Test mode:             |   |  |  |  |
| Operation mode         | Keep the EUT in continuous transmitting with modulation |  |  |  |

The sample was placed 0.8m above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case are shown in Test Results of the following pages.

We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows:

#### Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.

| Mode         | Data rate |
|--------------|-----------|
| 802.11b      | 1Mbps     |
| 802.11g      | 6Mbps     |
| 802.11n(H20) | 6.5Mbps   |

#### **Final Test Mode:**

According to ANSI C63.4 standards, the test results are both the "worst case" and "worst setup" 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.

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Project No.: CCIS130500138RF

# 5.4 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### ● FCC - Registration No.: 817957

Shenzhen Zhongjian Nanfang Testing Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in out files. Registration 817957, February 27, 2012.

#### ● IC - Registration No.: 10106A-1

The 3m Semi-anechoic chamber of Shenzhen Zhongjian Nanfang Testing Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

#### ● CNAS - Registration No.: CNAS L6048

Shenzhen Zhongjian Nanfang Testing Co., Ltd. is accredited to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L6048.

### 5.5 Laboratory Location

Shenzhen Zhongjian Nanfang Testing Co., Ltd.

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# 5.6 Test Instruments list

| Radi | Radiated Emission:               |                                   |                             |                  |                         |                             |
|------|----------------------------------|-----------------------------------|-----------------------------|------------------|-------------------------|-----------------------------|
| Item | Test Equipment                   | Manufacturer                      | Model No.                   | Inventory<br>No. | Cal. Date<br>(mm-dd-yy) | Cal. Due date<br>(mm-dd-yy) |
| 1    | 3m Semi- Anechoic<br>Chamber     | SAEMC                             | 9(L)*6(W)* 6(H)             | CCIS0001         | June 09 2013            | June 08 2014                |
| 2    | Control Room                     | ZhongYu Electron                  | 6.2(L)*2.5(W)* 2.4(H)       | CCIS0002         | N/A                     | N/A                         |
| 3    | BiConiLog Antenna                | SCHWARZBECK<br>MESS-ELEKTRONIK    | VULB9163                    | CCIS0005         | June 04 2013            | June 03 2014                |
| 4    | Double -ridged<br>waveguide horn | SCHWARZBECK<br>MESS-ELEKTRONIK    | BBHA9120D                   | CCIS0006         | May 30 2013             | May 29 2014                 |
| 5    | EMI Test Software                | AUDIX                             | E3                          | N/A              | N/A                     | N/A                         |
| 6    | Coaxial Cable                    | CCIS                              | N/A                         | CCIS0016         | Apr. 01 2013            | Mar. 31 2014                |
| 7    | Coaxial Cable                    | CCIS                              | N/A                         | CCIS0017         | Apr. 01 2013            | Mar. 31 2014                |
| 8    | Coaxial cable                    | CCIS                              | N/A                         | CCIS0018         | Apr. 01 2013            | Mar. 31 2014                |
| 9    | Coaxial Cable                    | CCIS                              | N/A                         | CCIS0019         | Apr. 01 2013            | Mar. 31 2014                |
| 10   | Coaxial Cable                    | CCIS                              | N/A                         | CCIS0087         | Apr. 01 2013            | Mar. 31 2014                |
| 11   | Amplifier(10kHz-1.3GHz)          | HP                                | 8447D                       | CCIS0003         | Apr. 01 2013            | Mar. 31 2014                |
| 12   | Amplifier(1GHz-18GHz)            | Compliance Direction Systems Inc. | PAP-1G18                    | CCIS0011         | June 09 2013            | June 08 2014                |
| 13   | Pre-amplifier<br>(18-26GHz)      | Rohde & Schwarz                   | AFS33-18002<br>650-30-8P-44 | GTS218           | Apr. 01 2013            | Mar. 31 2014                |
| 14   | Horn Antenna                     | ETS-LINDGREN                      | 3160                        | GTS217           | Mar. 30 2013            | Mar. 29 2014                |
| 15   | Printer                          | HP                                | HP LaserJet P1007           | N/A              | N/A                     | N/A                         |
| 16   | Positioning Controller           | UC                                | UC3000                      | CCIS0015         | N/A                     | N/A                         |
| 17   | Spectrum analyzer<br>9k-30GHz    | Rohde & Schwarz                   | FSP                         | CCIS0023         | May. 29 2013            | May. 28 2014                |
| 18   | Loop antenna                     | Laplace instrument                | RF300                       | EMC0701          | Aug. 12 2012            | Aug. 11 2013                |
| 19   | EMI Test Receiver                | Rohde & Schwarz                   | ESCI                        | CCIS0002         | May 25 2013             | May 24 2014                 |
| 20   | Signal analyzer                  | Rohde & Schwarz                   | FSIQ3                       | CCIS0088         | May.29.2013             | May.28.2014                 |

| Cond                             | Conducted Emission: |                    |                       |           |               |              |  |  |
|----------------------------------|---------------------|--------------------|-----------------------|-----------|---------------|--------------|--|--|
| Item Test Equipment Manufacturer |                     | Model No.          | Inventory             | Cal. Date | Cal. Due date |              |  |  |
|                                  |                     |                    |                       | No.       | (mm-dd-yy)    | (mm-dd-yy)   |  |  |
| 1                                | Shielding Room      | ZhongShuo Electron | 11.0(L)x4.0(W)x3.0(H) | CCIS0061  | June 09 2013  | June 08 2014 |  |  |
| 2                                | EMI Test Receiver   | Rohde & Schwarz    | ESCI                  | CCIS0002  | May 25 2013   | May. 24 2014 |  |  |
| 3                                | LISN                | CHASE              | MN2050D               | CCIS0074  | Apr. 01 2013  | Mar. 31 2014 |  |  |
| 4                                | Coaxial Cable       | CCIS               | N/A                   | CCIS0086  | Apr. 01 2013  | Mar. 31 2014 |  |  |



### 6 Test results and Measurement Data

### 6.1 Antenna requirement:

Standard requirement: FCC Part15 C Section 15.203 /247(c)

15.203 requirement:

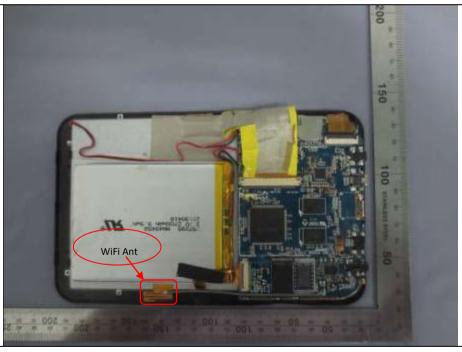
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(c) (1)(i) requirement:

(i) Systems operating in the 2400-2483.5 MHz band that is used exclusively for fixed. Point-to-point operations may employ transmitting antennas with directional gain greater than 6dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6dBi.

#### **E.U.T Antenna:**

The antenna is an integral antenna which permanently attached, and the best case gain of the antenna is 2.5 dBi



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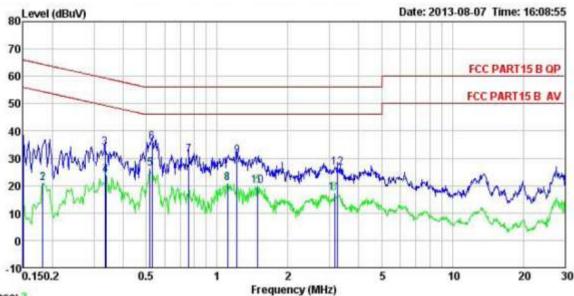
# **6.2 Conducted Emissions**

| Test Requirement:     | FCC Part15 C Section 15.207  |   |  |  |  |
|-----------------------|--|---|--|--|--|
| Test Method:          | ANSI C63.4: 2003   |   |  |  |  |
| Test Frequency Range: | 150kHz to 30MHz  |   |  |  |  |
| Class / Severity:     | Class B  |   |  |  |  |
| Receiver setup:       | RBW=9kHz, VBW=30kHz  |   |  |  |  |
| Limit:                | Frequency range (MHz)  | Limit (c  | dBuV)  |  |  |
|                       |  | Quasi-peak  | Average  |  |  |
|                       | 0.15-0.5   | 66 to 56*   | 56 to 46*  |  |  |
|                       | 0.5-5<br>5-30  | 56<br>60  | 46<br>50   |  |  |
|                       | * Decreases with the logarithm   |   | 30   |  |  |
| Test procedure        | <ol> <li>The E.U.T and simulators a line impedance stabilize 50ohm/50uH coupling im</li> <li>The peripheral devices at through a LISN that provi</li> </ol>  | ation network (L.I.S.N.)<br>pedance for the measi<br>re also connected to th<br>des a 50ohm/50uH co | ). It provides a uring equipment. ne main power upling impedance |  |  |
|                       | with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).  3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative |   |  |  |  |
|                       | positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.   |   |  |  |  |
| Test setup:           | Refere   | nce Plane   |  |  |  |
|                       | Test table/Insulation pla  | J.T EMI Receiver  | er — AC power  |  |  |
|                       | Remark<br>E.U.T. Equipment Under Test<br>LISN: Line Impedence Stabilizatio<br>Test table height=0.8m   | n Network   |  |  |  |
| Test Instruments:     | Refer to section 5.6 for details   | ;   |  |  |  |
| Test mode:            | Refer to section 5.3 for details   |   |  |  |  |
| Test results:         | Passed   |   |  |  |  |

#### **Measurement Data**



#### Neutral:



Trace: 3

: CCIS Conducted Test Site : FCC PART15 B QP LISN NEUTRAL Site Condition

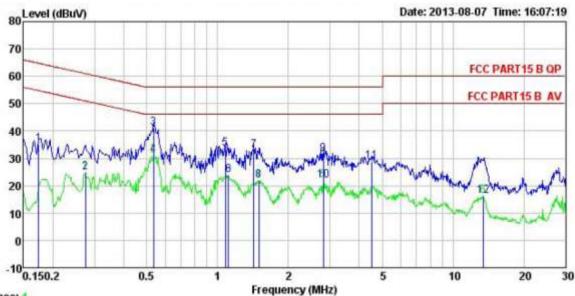
: 138RF : 7" Tablet Job No. EUT Model : TAB-735
Test Mode : WIFI TX mode
Power Rating : AC 120V/60Hz
Environment : Temp: 23 °C Huni:56% Atmos:101KPa

Test Engineer: Winner

|          | Freq  | Read<br>Level | LISN<br>Factor | Cable<br>Loss | Level | Limit<br>Line | Over<br>Limit | Remark  |
|----------|-------|---------------|----------------|---------------|-------|---------------|---------------|---------|
|          | MHz   | dBu∛          | −−−dB          | ₫₿            | dBu∛  | dBu√          | dB            |         |
| 1        | 0.150 | 25.44         | 10.27          | 0.79          | 36.50 |               | -29.50        |         |
| 2        | 0.182 | 9.91          | 10.24          | 0.77          | 20.92 | 54.42         | -33.50        | Average |
| 3        | 0.334 | 23.00         | 10.25          | 0.73          | 33.98 | 59.35         | -25.37        | QP      |
| 4        | 0.337 | 12.95         | 10.25          | 0.73          | 23.93 | 49.27         | -25.34        | Average |
| 5        | 0.518 | 15.02         | 10.27          | 0.76          | 26.05 | 46.00         | -19.95        | Average |
| 6        | 0.529 | 24.70         | 10.26          | 0.76          | 35.72 | 56.00         | -20.28        | QP      |
| 7        | 0.759 | 20.30         | 10.17          | 0.79          | 31.26 | 56.00         | -24.74        | QP      |
| 23456789 | 1.106 | 9.87          | 10.21          | 0.80          | 20.88 | 46.00         | -25.12        | Average |
| 9        | 1.216 | 19.74         | 10.22          | 0.90          | 30.86 | 56.00         | -25.14        | QP      |
| 10       | 1.487 | 9.50          | 10.24          | 0.31          | 20.05 | 46.00         | -25.95        | Average |
| 11       | 3.156 | 6.00          | 10.28          | 0.91          | 17.19 | 46.00         | -28.81        | Average |
| 12       | 3.241 | 15.18         | 10.28          | 0.91          | 26.37 |               | -29.63        |         |



#### Line:



Trace: 1 Site

: CCIS Conducted Test Site : FCC PART15 B QP LISN LINE : 138RF Condition

Job No. : 7" Tablet : TAB-735 : WIFI TX mode EUT Model Test Mode

Power Rating: AC 120V/60Hz Environment: Temp: 23 'C Huni:56% Atmos:101KPa

| est  | Engineer: | Read  | LISN   | Cable |        | Limit | Over   |            |
|--|-----------|-------|--------|-------|--------|-------|--------|------------|
|  | Freq      |       | Factor | Loss  |        |       |        | Remark     |
|  | MHz       | dBuV  | ₫₿     | ₫₿    | dBu∜   | dBu∜  | dB     | ********** |
| 1  | 0.174     | 24.19 | 10.23  | 0.77  | 35.19  | 64.77 | -29.58 | QP         |
|  | 0.274     | 13.82 | 10.25  | 0.74  | 24.81  | 50.98 | -26.17 | Average    |
| 2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10 | 0.535     | 30.11 | 10.25  | 0.76  | 41.12  | 56.00 | -14.88 | QP         |
| 4  | 0.535     | 20.13 | 10.25  | 0.76  | 31.14  | 46.00 | -14.86 | Average    |
| 5  | 1.077     | 22.25 | 10.22  | 0.88  | 33.35  | 56.00 | -22.65 | QP         |
| 6  | 1.111     | 12.90 | 10.22  | 0.80  | 23.92  | 46.00 | -22.08 | Average    |
| 7  | 1.426     | 21.62 | 10.25  | 0.92  | 32.79  | 56.00 | -23.21 | QP         |
| 8  | 1.495     | 11.38 | 10.25  | 0.31  | 21.94  | 46.00 | -24.06 | Average    |
| 9  | 2.809     | 20.42 | 10.28  | 0.93  | 31.63  | 56.00 | -24.37 | QP         |
| 10   | 2.809     | 10.67 | 10.28  | 0.93  | 21.88  | 46.00 | -24.12 | Average    |
| 11   | 4.525     | 17.59 | 10.29  | 0.87  | 28.75  | 56.00 | -27.25 | QP         |
| 12   | 13, 408   | 5.05  | 10.24  | 0.91  | 16, 20 | 50.00 | -33.80 | Average    |

#### Notes:

- 1. An initial pre-scan was performed on the live and neutral lines with peak detector.
- 2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
- 3. Final Level = Receiver Read level + LISN Factor + Cable Loss

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# **6.3 Conducted Output Power**

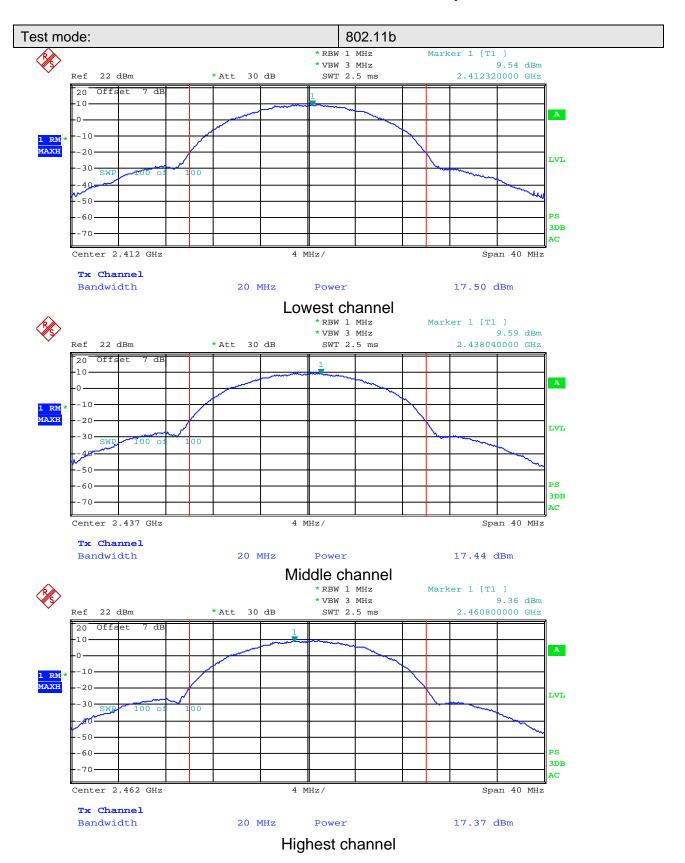
| Test Requirement: | FCC Part15 C Section 15.247 (b)(3)                                    |  |  |
|-------------------|---|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB 558074  |  |  |
| Limit:            | 30dBm   |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 5.6 for details                                      |  |  |
| Test mode:        | Refer to section 5.3 for details                                      |  |  |
| Test results:     | Passed  |  |  |
| Remark:           | Test method refer to KDB558074 V03 (DTS Measure Guidance)             |  |  |

#### Measurement Data

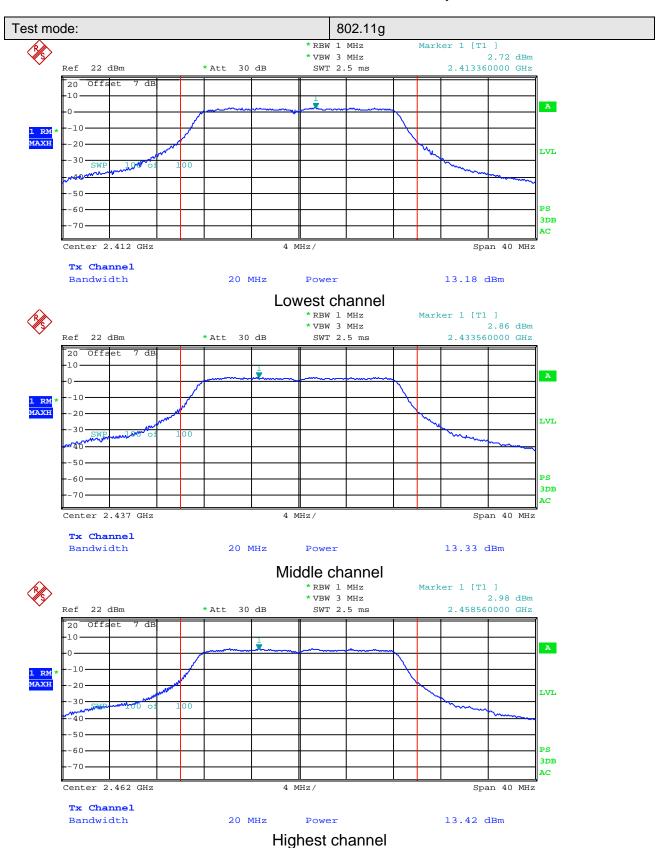
| T ( O) ! | Maximum Conducted Output Power (dBm) |         |            | 1 ' - ''( ID - ') | D !  |
|----------|--------------------------------------|---------|------------|-------------------|------|
| Test CH  | 802.11b                              | 802.11g | Limit(dBm) | Result            |      |
| Lowest   | 17.50                                | 13.18   | 12.60      |                   |      |
| Middle   | 17.44                                | 13.33   | 12.65      | 30.00             | Pass |
| Highest  | 17.37                                | 13.42   | 12.81      |                   |      |

Test plot as follows:

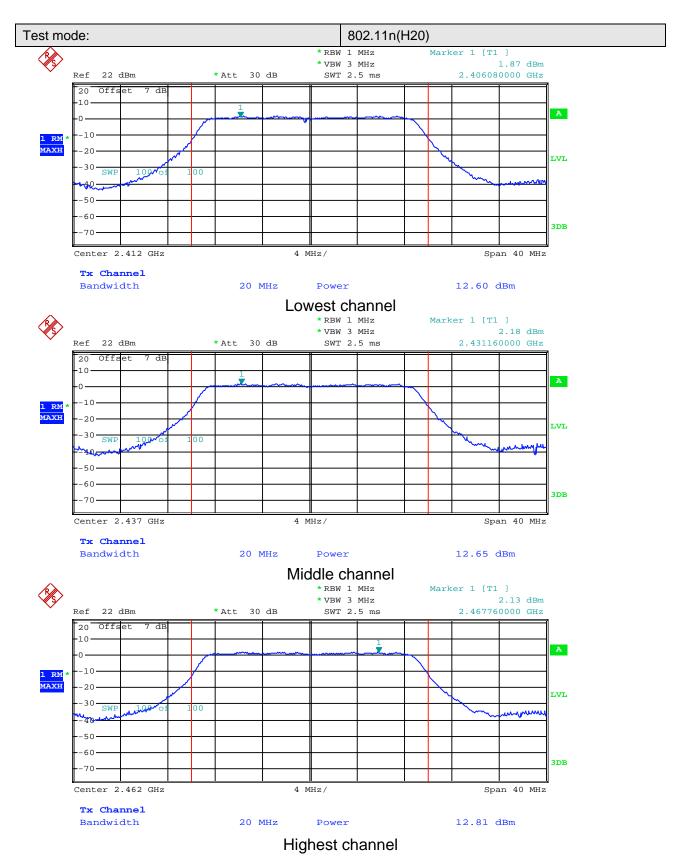














# 6.4 Occupy Bandwidth

| Test Requirement: | FCC Part15 C Section 15.247 (a)(2)                                    |  |  |
|-------------------|---|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB558074   |  |  |
| Limit:            | >500kHz   |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 5.6 for details                                      |  |  |
| Test mode:        | Refer to section 5.3 for details                                      |  |  |
| Test results:     | Passed  |  |  |

#### Measurement Data

| T . (01) | 1                            | D 1   |            |        |      |
|----------|------------------------------|-------|------------|--------|------|
| Test CH  | 802.11b 802.11g 802.11n(H20) |       | Limit(kHz) | Result |      |
| Lowest   | 9.76                         | 16.64 | 17.84      |        |      |
| Middle   | 9.76                         | 16.56 | 17.84      | >500   | Pass |
| Highest  | 9.76                         | 16.64 | 17.84      |        |      |

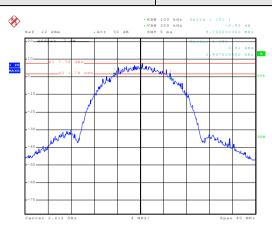
| T . 011 |         |         |              |            |        |
|---------|---------|---------|--------------|------------|--------|
| Test CH | 802.11b | 802.11g | 802.11n(H20) | Limit(kHz) | Result |
| Lowest  | 14.80   | 16.48   | 17.76        |            |        |
| Middle  | 14.80   | 16.48   | 17.76        | N/A        | N/A    |
| Highest | 14.96   | 16.48   | 17.76        |            |        |

Test plot as follows:



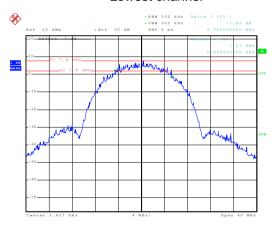
Test mode:6dB EBW

802.11b



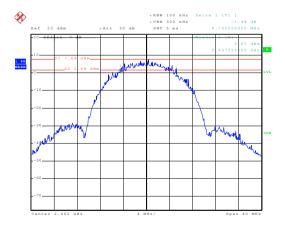
Date: 7.AUG.2013 11:21:54

#### Lowest channel



Date: 7.AUG.2013 11:20:07

#### Middle channel



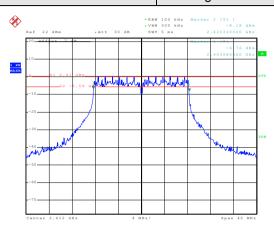
Date: 7.AUG.2013 11:18:51

Highest channel



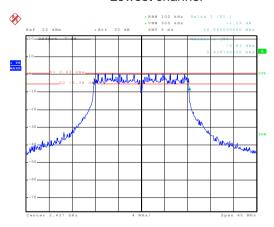
Test mode:6dB EBW

802.11g



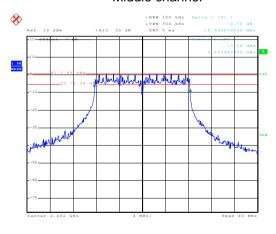
Date: 7.AUG.2013 11:13:34

#### Lowest channel



Date: 7.AUG.2013 11:15:24

#### Middle channel



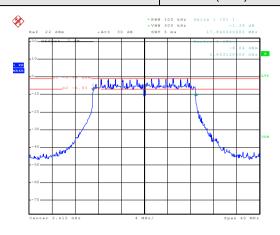
Date: 7.AUG.2013 11:16:59

Highest channel



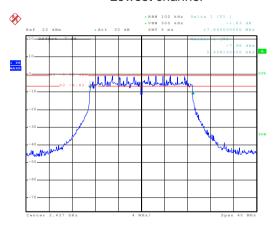
Test mode:6dB EBW

802.11n(H20)



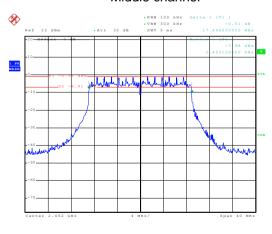
Date: 7.AUG.2013 11:10:26

#### Lowest channel



Date: 7.AUG.2013 11:07:23

#### Middle channel

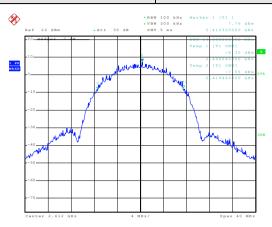


Date: 7.AUG.2013 11:05:00

Highest channel



Test mode: 99% OBW 802.11b



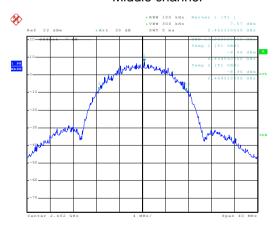
Date: 7.AUG.2013 11:23:17

#### Lowest channel



Date: 7.AUG.2013 11:24:17

#### Middle channel

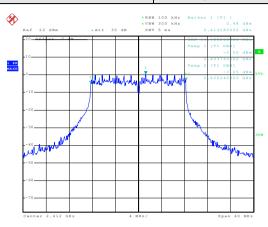


Date: 7.AUG.2013 11:25:12

Highest channel

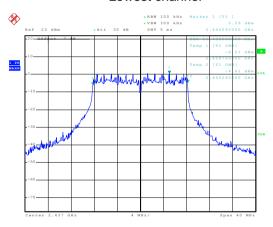


Test mode: 99% OBW 802.11g



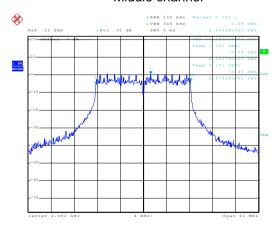
Date: 7.AUG.2013 11:29:47

#### Lowest channel



Date: 7.AUG.2013 11:28:51

#### Middle channel

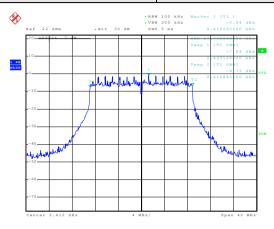


Date: 7.AUG.2013 11:27:40

Highest channel

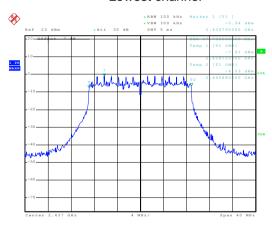


Test mode: 99% OBW 802.11n(H20)



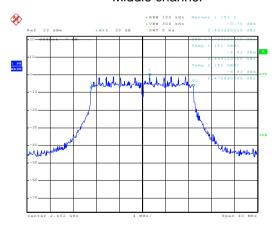
Date: 7.AUG.2013 11:31:21

#### Lowest channel



Date: 7.AUG.2013 11:32:53

#### Middle channel



Date: 7.AUG.2013 11:34:06

Highest channel



# 6.5 Power Spectral Density

| Test Requirement: | FCC Part15 C Section 15.247 (e)                                       |  |  |
|-------------------|---|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB558074   |  |  |
| Limit:            | 8 dBm   |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane |  |  |
| Test Instruments: | Refer to section 5.6 for details                                      |  |  |
| Test mode:        | Refer to section 5.3 for details                                      |  |  |
| Test results:     | Passed  |  |  |

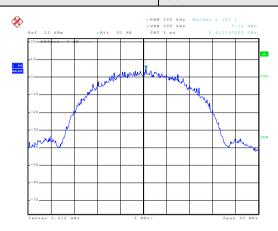
#### Measurement Data

| T . O   | Power Spectral Density (dBm) |         |              |            | D !!   |
|---------|------------------------------|---------|--------------|------------|--------|
| Test CH | 802.11b                      | 802.11g | 802.11n(H20) | Limit(dBm) | Result |
| Lowest  | 5.12                         | 0.18    | -1.29        |            |        |
| Middle  | 4.74                         | 0.23    | -1.07        | 8.00       | Pass   |
| Highest | 4.31                         | 0.26    | -1.04        |            |        |

Test plot as follows:

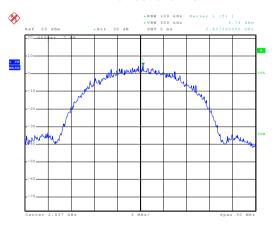


Test mode: 802.11b



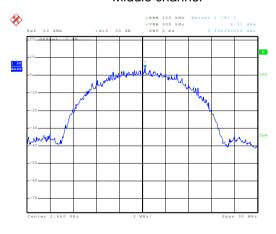
Date: 7.AUG.2013 16:55:35

#### Lowest channel



Date: 7.AUG.2013 16:56:58

#### Middle channel

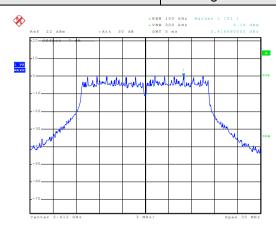


Date: 7.AUG.2013 16:58:26

Highest channel

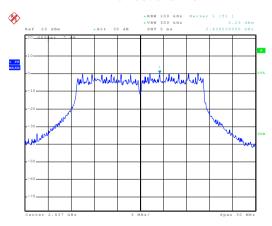


Test mode: 802.11g



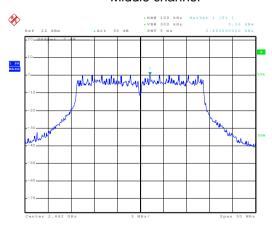
Date: 7.AUG.2013 12:00:06

#### Lowest channel



Date: 7.AUG.2013 12:00:56

#### Middle channel

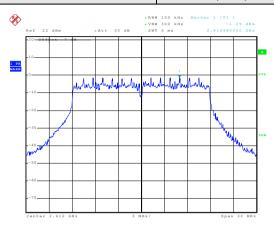


Date: 7.AUG.2013 12:01:57

Highest channel

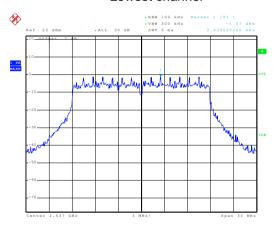


Test mode: 802.11n(H20)



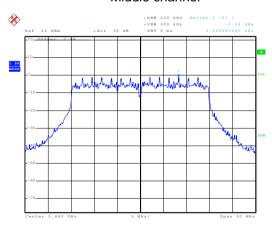
Date: 7.AUG.2013 12:06:07

#### Lowest channel



Date: 7.AUG.2013 12:05:03

#### Middle channel



Date: 7.AUG.2013 12:04:01

Highest channel



# 6.6 Band Edge

### 6.6.1 Conducted Emission Method

| Test Requirement: | FCC Part15 C Section 15.247 (d)   |  |  |
|-------------------|---|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB558074   |  |  |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table  Ground Reference Plane   |  |  |
| Test Instruments: | Refer to section 5.6 for details  |  |  |
| Test mode:        | Refer to section 5.3 for details  |  |  |
| Test results:     | Passed  |  |  |

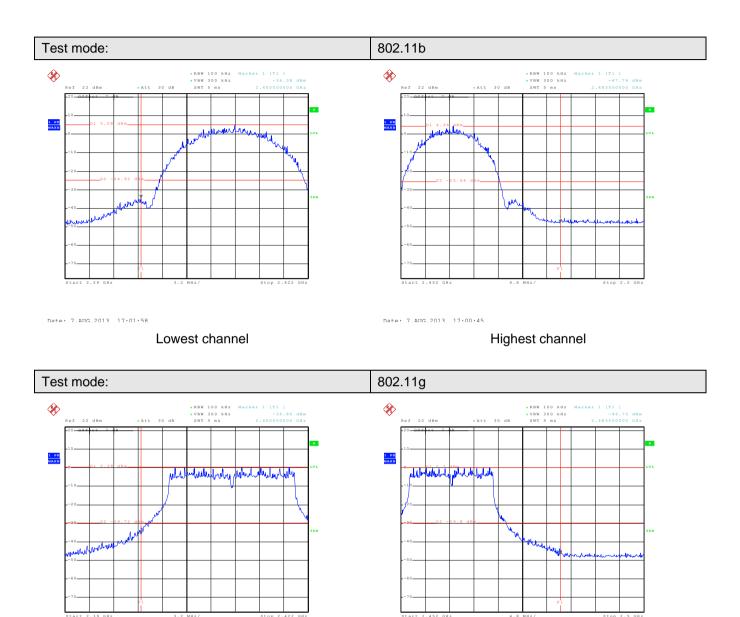
Test plot as follows:

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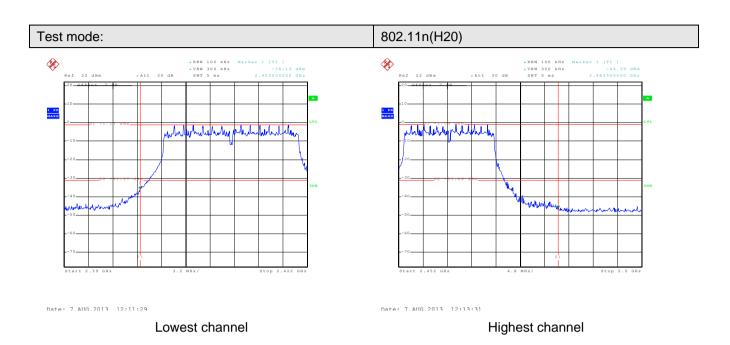
Date: 7.AUG.2013 12:16:52

### Report No: CCIS13050013801



Lowest channel Highest channel





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Bao'an District, Shenzhen, Guangdong, China



#### 6.6.2 Radiated Emission Method

| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205  |                 |             |         |               |  |
|-----------------------|---|-----------------|-------------|---------|---------------|--|
| Test Method:          | ANSI C63.4: 20  | 03              |             |         |               |  |
| Test Frequency Range: | 2.3GHz to 2.5G  | Hz              |             |         |               |  |
| Test site:            | Measurement D   | istance: 3m     |             |         |               |  |
| Receiver setup:       |   |                 |             |         |               |  |
|                       | Frequency   | Detector        | RBW         | VBW     | Remark        |  |
|                       | Above 1GHz  | Peak            | 1MHz        | 3MHz    | Peak Value    |  |
| 11. 1                 |   | Peak            | 1MHz        | 10Hz    | Average Value |  |
| Limit:                | Freque  | encv            | Limit (dBuV | /m @3m) | Remark        |  |
|                       |   | •               | 54.0        |         | Average Value |  |
|                       | Above 1   |                 | 74.0        |         | Peak Value    |  |
| Test setup:           | <ol> <li>The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> </ol> |                 |             |         |               |  |
|                       | EUT  4m  Spectrum  Analyzer  Amplifier  |                 |             |         |               |  |
| Test Instruments:     | Refer to section 5.6 for details  |                 |             |         |               |  |
| Test mode:            | Refer to section  | 5.3 for details |             |         |               |  |
| Test results:         | Passed  |                 |             |         |               |  |

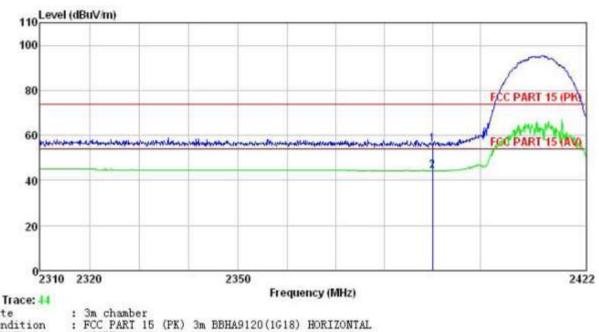
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802.11b

Test channel: Lowest

Horizontal:



Site

Condition

Job No. : 138RF
EUT : 7" Tablet
Model : TAB-735
Test mode : WIFI TX(802.11b low channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Humi:55% Atmos:101Kpa

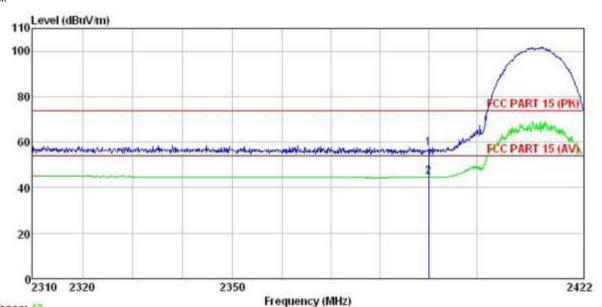
Test Engineer: Winner

Remark

ReadAntenna Cable Preamp Over Limit Loss Factor Level Freq Level Factor Line Limit Remark dB -MHz dBuV dB/n dB dBuV/m dBuV/m dB 2390.000 22.85 27.58 5.67 0.00 56.10 74.00 -17.90 Peak 2390.000 11.17 27.58 0.00 44.42 54.00 -9.58 Average 5.67



#### Vertical:



Trace: 42 Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

Job No. EUT Model

: 138RF : 7° Tablet : TAB-735 : WIFI TX(802.11b low channel) mode Test mode

Power Rating : AC 120V/60Hz Environment : Temp:25°C Huni:55% Atmos:101Kpa

Test Engineer: Winner

Remark

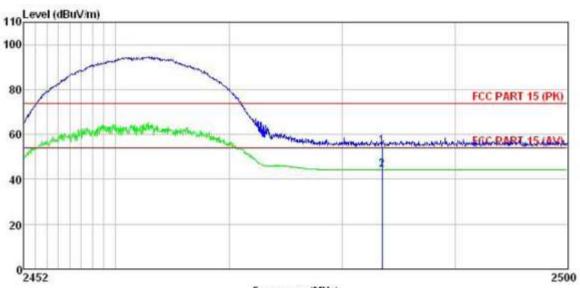
ReadAntenna Cable Preamp Limit Over Freq Level Factor Loss Factor Level Line Limit Remark MHz dBuV dB/m dB dB dBuV/m dBuV/m dB 2390.000 23.81 27.58 5.67 0.00 57.06 74.00 -16.94 Peak 2390.000 11.27 27.58 5.67 0.00 44.52 54.00 -9.48 Average

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Test channel: Highest

Horizontal:



Trace: 38

Frequency (MHz)

Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

: 138RF : 7" Tablet Job No. EUT

Model : TAB-735
Test mode : WIFI TX(802.11b high channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa

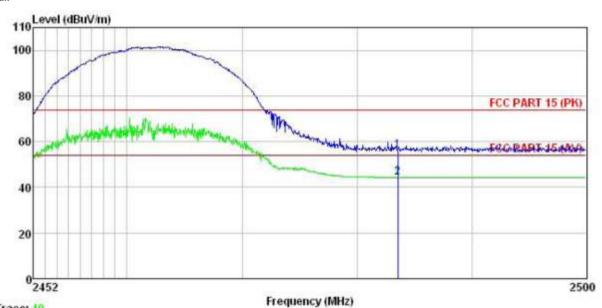
Test Engineer: Winner

Remark

| oma. |                      | ReadAntenna<br>Level Factor |      | Cable<br>Loss | Preamp<br>Factor | Level  | Limit<br>Line  |           |  |
|------|----------------------|-----------------------------|------|---------------|------------------|--------|----------------|-----------|--|
|      | MHz                  | dBu₹                        | dB/m | <u>dB</u>     | dB               | dBuV/m | dBuV/m         | <u>dB</u> |  |
| 1 2  | 2483.500<br>2483.500 |                             |      |               |                  |        | 74.00<br>54.00 |           |  |



#### Vertical:



Trace: 40 Site

Condition

Job No. EUT Model

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL : 138RF : 7" Tablet : TAB-735 : WIFI TX(802.11b high channel) mode Test mode Power Rating: AC 120V/60Hz Environment: Temp:25°C Huni:55% Atmos:101Kpa

Test Engineer: Winner

Remark

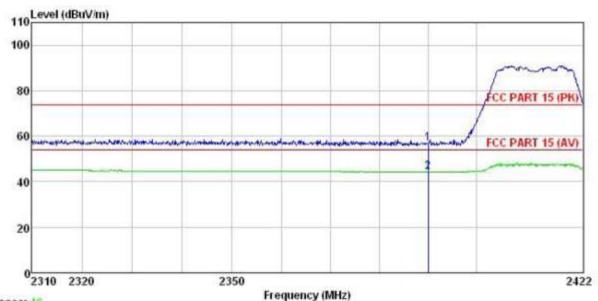
|     |                      | ReadAntenn<br>Level Facto |      | a Cable<br>Loss | Preamp<br>Factor | Level  | Limit<br>Line | Over<br>Limit | Remark |
|-----|----------------------|---------------------------|------|-----------------|------------------|--------|---------------|---------------|--------|
|     |                      | dBu∀                      | dB/m | dB              | ₫B               | dBuV/m | dBuV/m        | ₫₿            |        |
| 1 2 | 2483.500<br>2483.500 |                           |      |                 |                  |        |               |               |        |



802.11g

Test channel: Lowest

Horizontal:



Trace: 46

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Site Condition

138RF 7" Tablet Job No. EUT

Model : TAB-735
Test mode : WIFI TX(802.11g low channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa

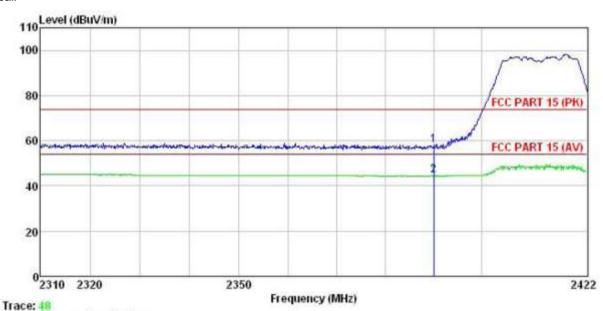
Test Engineer: Winner

Remark

| -   | 100000000            | Read           | Antenna        | Cable        | Preamp | Louis          | Limit          | Over            | Remark          |
|-----|----------------------|----------------|----------------|--------------|--------|----------------|----------------|-----------------|-----------------|
|     | ried                 | rever          | Pactor         | Loss         | ractor | rever          | Line           | Limit           | Nemark          |
| 52  | MHz                  | dBu∜           | dB/m           | d₿           | ₫B     | dBuV/m         | dBuV/a         | dB              |                 |
| 1 2 | 2390.000<br>2390.000 | 23.47<br>11.15 | 27.58<br>27.58 | 5.67<br>5.67 | 0.00   | 56.72<br>44.40 | 74.00<br>54.00 | -17.28<br>-9.60 | Peak<br>Average |



#### Vertical:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
Job No. : 138RF
EUT : 7" Tablet
Model : TAB-735
Test mode : WIFI TX(802.11g low channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa
Test Environment : Winner

Test Engineer: Winner Remark :

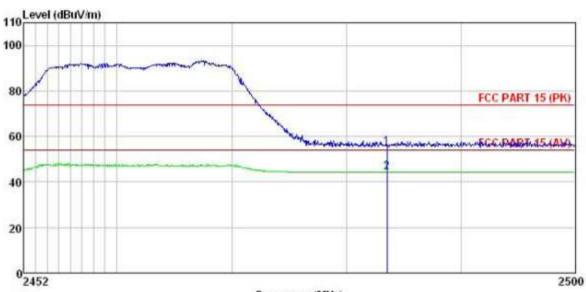
| 11 |                      | Read | Antenna | Cable | Preamp |        | Limit  | Over |        |
|----|----------------------|------|---------|-------|--------|--------|--------|------|--------|
|    | Freq                 |      | Factor  |       |        |        |        |      | Remark |
|    | MHz                  | dBu∀ | -dB/m   | dB    | ₫B     | dBuV/n | dBuV/m | ₫B   |        |
|    | 2390.000<br>2390.000 |      |         |       | 0.00   |        |        |      |        |

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Test channel: Highest

Horizontal:



Frequency (MHz) Trace: 52

Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

: 138RF : 7" Tablet Job No. EUT

Model: TAB-735
Test mode: WIFI TX(802.11g high channel) mode
Power Rating: AC 120V/60Hz
Environment: Temp:25°C Huni:55% Atmos:101Kpa
Test Engineer: Winner
Remark

Remark

|     | Freq                 | Read<br>Level | Antenna<br>Factor | Cable<br>Loss | Preamp<br>Factor | Level          | Limit<br>Line  | Over<br>Limit                          | Remark          |
|-----|----------------------|---------------|-------------------|---------------|------------------|----------------|----------------|--|-----------------|
|     | MHz                  | dBu∀          | dB/m              | <u>dB</u>     | <u>dB</u>        | dBuV/m         | dBuV/m         | $\overline{-}\overline{d}\overline{B}$ |                 |
| 1 2 | 2483.500<br>2483.500 |               |                   | 5.70<br>5.70  | 0.00<br>0.00     | 55.37<br>44.26 | 74.00<br>54.00 | -18.63<br>-9.74                        | Peak<br>Average |

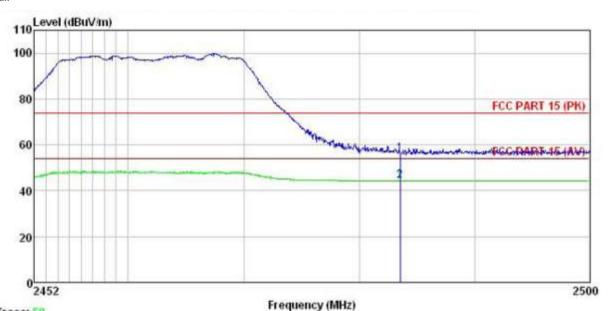
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Project No.: CCIS130500138RF

#### Vertical:



Trace: 50 Site

3m chamber FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

50 Job No.

Tablet EUT

Model : TAB-735
Test mode : WIFI TX(802.11g high channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa

Test Engineer: Winner

Remark

1 2

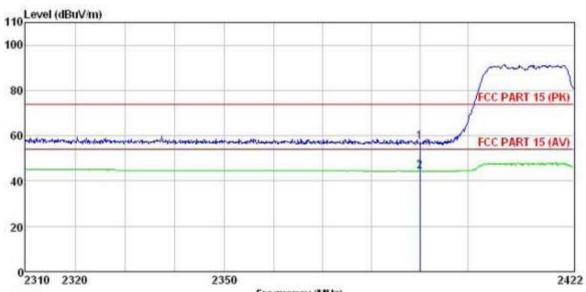
| - |          | Read  | Antenna | Cable | Preamp |        | Limit  | Over |        |
|---|----------|-------|---------|-------|--------|--------|--------|------|--------|
|   | Freq     | Level | Factor  | Loss  | Factor | Level  |        |      | Remark |
|   | MHz      | dBu∀  | dB/m    | ₫B    | −−−dB  | dBuV/m | dBuV/m | ₫B   |        |
|   | 2483.500 |       |         |       |        |        |        |      |        |

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802.11n (H20) Test channel: Lowest

Horizontal:



Frequency (MHz) Trace: 61

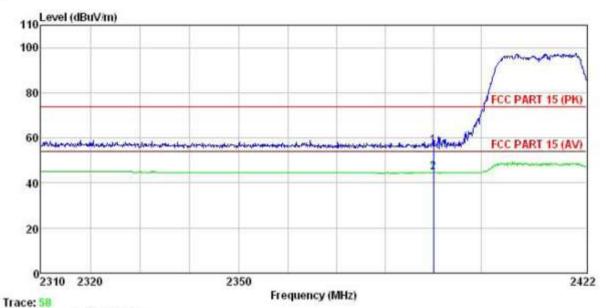
Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL
Job No. : 138RF
EUT : 7" Tablet
Model : TAB-735
Test mode : WIFI TX(802.11n low channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa
Test Engineer: Winner
Remark

Remark

|     |                      |          | Antenna<br>Factor |    |    |                |        | Over<br>Limit |                 |
|-----|----------------------|----------|-------------------|----|----|----------------|--------|---------------|-----------------|
|     | MHz                  | MHz dBu∀ |                   | d₿ | dB | dBuV/m         | dBuV/m | ₫₿            |                 |
| 1 2 | 2390.000<br>2390.000 |          |                   |    |    | 57.09<br>44.42 |        |               | Peak<br>Average |



#### Vertical:



Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL Condition

138RF 7" Tablet Job No. EUT

Model

: TAB-735 : WIFI TX(802.11n low channel) mode Test mode Power Rating : AC 120V/60Hz Environment : Temp:25°C Huni:55% Atmos:101Kpa

Test Engineer: Winner

Remark

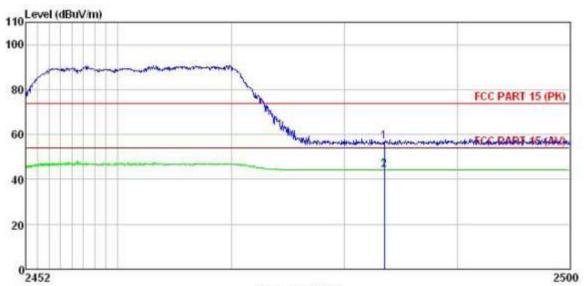
| tomat. |                      | Read           | Antenna        | Cable          | Preamp |                | Limit          | Over            |                 |
|--------|----------------------|----------------|----------------|----------------|--------|----------------|----------------|-----------------|-----------------|
|        | Freq                 | Level          | Factor         | Loss           | Factor | Level          | Line           | Limit           | Remark          |
| - 3    | MHz                  | dBu₹           | dB/m           | dB             | dB     | dBuV/m         | dBuV/m         | dB              |                 |
| 1 2    | 2390.000<br>2390.000 | 23.30<br>11.22 | 27.58<br>27.58 | 5. 67<br>5. 67 | 0.00   | 56.55<br>44.47 | 74.00<br>54.00 | -17.45<br>-9.53 | Peak<br>Average |

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Test channel: Highest

Horizontal:



Trace: 54

Frequency (MHz)

Site

: 3m chamber : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL Condition

138RF 7° Tablet Job No. EUT

Model : TAB-735
Test mode : WIFI TX(802.11n high channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa

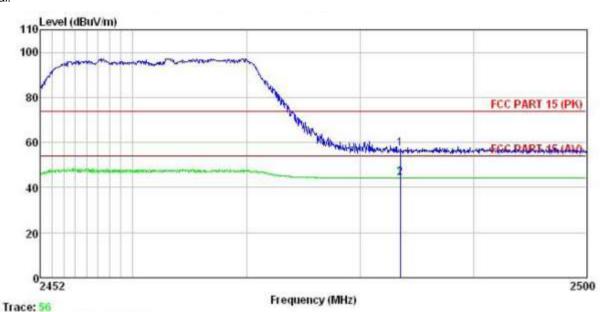
Test Engineer: Winner

Remark

| 7     | 9    | Read  | ReadAntenna    |              | Preamp |                | Limit  | Over  |                 |  |
|-------|------|-------|----------------|--------------|--------|----------------|--------|-------|-----------------|--|
|       | Freq | Level | Factor         | Loss         | Factor | Level          | Line   | Limit | Remark          |  |
| Velen | MHz  | dBu₹  | dB/m           | −−−dB        | ₫B     | dBuV/m         | dBuV/m | dB    |                 |  |
| 77.0  |      |       | 27.52<br>27.52 | 1175 7 10070 |        | 56.78<br>44.25 |        |       | Peak<br>Average |  |



#### Vertical:



Site : 3m chamber
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL
Job No. : 138RF
EUI : 7" Tablet
Model : TAB-735
Test mode : WIFI IX(802.11n high channel) mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Humi:55% Atmos:101Kpa
Test Engineer: Winner

Test Engineer: Winner

Remark

|     |                      |            |      |           |        |                | Limit  |       |                 |
|-----|----------------------|------------|------|-----------|--------|----------------|--------|-------|-----------------|
|     | Freq                 | Freq Level |      | Loss      | Factor | Level          | Line   | Limit | Remark          |
|     | MHz                  | dBu∜       | dB/m | dB        | −−−dB  | dBuV/a         | dBuV/m | −−−dB |                 |
| 1 2 | 2483.500<br>2483.500 |            |      | 1,020,000 |        | 57.23<br>44.30 |        |       | Peak<br>Average |

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# 6.7 Spurious Emission

## 6.7.1 Conducted Emission Method

| Test Requirement: | FCC Part15 C Section 15.247 (d)   |  |  |  |  |  |  |  |
|-------------------|---|--|--|--|--|--|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB558074   |  |  |  |  |  |  |  |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 30 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |  |  |  |  |  |
| Test setup:       | Spectrum Analyzer   |  |  |  |  |  |  |  |
|                   | Non-Conducted Table  Ground Reference Plane   |  |  |  |  |  |  |  |
| Test Instruments: | Refer to section 5.6 for details  |  |  |  |  |  |  |  |
| Test mode:        | Refer to section 5.3 for details  |  |  |  |  |  |  |  |
| Test results:     | Passed  |  |  |  |  |  |  |  |

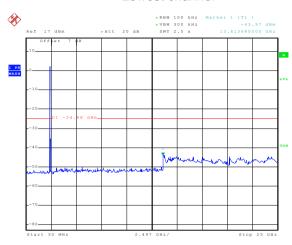
Test plot as follows:

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Test mode: 802.11b

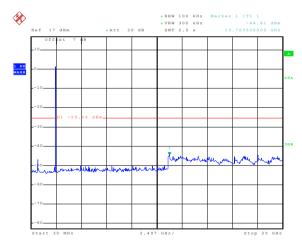
#### Lowest channel



Date: 7.AUG.2013 17:06:45

30MHz~25GHz

### Middle channel

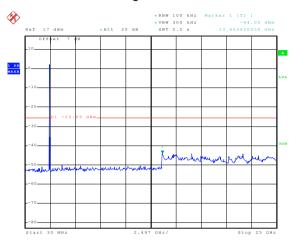


Date: 7.AUG.2013 17:08:19

30MHz~25GHz



### Highest channel

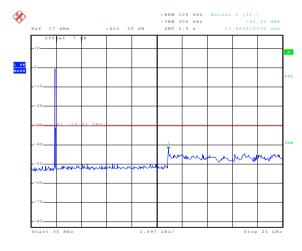


Date: 7.ANG.2013 17:09:07

30MHz~25GHz

Test mode: 802.11g

### Lowest channel



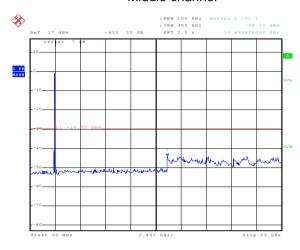
Date: 7.AUG.2013 15:11:31

30MHz~25GHz

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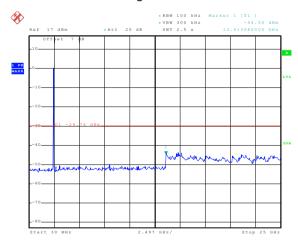
### Middle channel



Date: 7.AUG.2013 15:13:47

### 30MHz~25GHz

### Highest channel



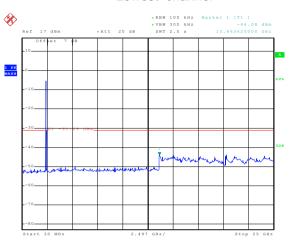
Date: 7.AUG.2013 14:56:24

30MHz~25GHz



Test mode: 802.11n(H20)

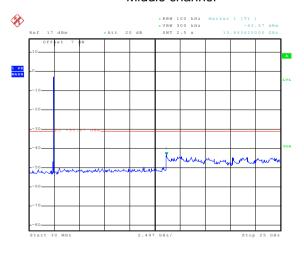
#### Lowest channel



Date: 7.AUG.2013 15:01:12

30MHz~25GHz

### Middle channel



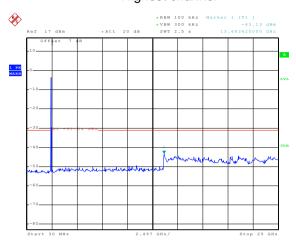
Date: 7.AUG.2013 15:02:43

30MHz~25GHz

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### Highest channel



Date: 7.AUG.2013 15:05:08

30MHz~25GHz

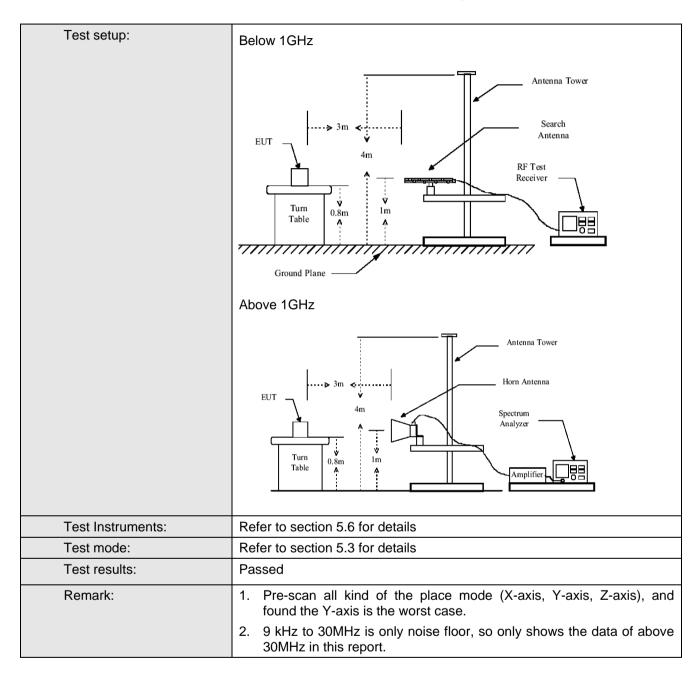


## 6.7.2 Radiated Emission Method

| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205   |  |  |  |  |  |  |  |  |
|-----------------------|--|--|--|--|--|--|--|--|--|
| Test Method:          | ANSI C63.4:200   | )3   |  |  |  |  |  |  |  |
| Test Frequency Range: | 9 kHz to 25 GH   | Z  |  |  |  |  |  |  |  |
| Test site:            | Measurement D  | istance: 3m  |  |  |  |  |  |  |  |
| Receiver setup:       |  |  |  |  |  |  |  |  |  |
| ·                     | Frequency Detector RBW VBW Remark  |  |  |  |  |  |  |  |  |
|                       | 30MHz-1GHz   | Quasi-peak   | 100KHz   | 300KHz   | Quasi-peak Value   |  |  |  |  |
|                       | Above 1GHz   | Peak   | 1MHz   | 3MHz   | Peak Value   |  |  |  |  |
|                       | 710070 10112   | Peak   | 1MHz   | 10Hz   | Average Value  |  |  |  |  |
| Limit:                |  |  |  |  |  |  |  |  |  |
|                       | Freque   |  | Limit (dBuV/   |  | Remark   |  |  |  |  |
|                       | 30MHz-8  |  | 40.0   |  | Quasi-peak Value   |  |  |  |  |
|                       | 88MHz-21   |  | 43.5   |  | Quasi-peak Value   |  |  |  |  |
|                       | 216MHz-9<br>960MHz-  |  | 46.0<br>54.0   |  | Quasi-peak Value<br>Quasi-peak Value   |  |  |  |  |
|                       | 900101112-   | IGHZ   | 54.0   |  | Average Value  |  |  |  |  |
|                       | Above 1  | GHz  | 74.0   |  | Peak Value   |  |  |  |  |
| Test Procedure:       | the ground to determin 2. The EUT wantenna, wantenna, wantenna and the ground Both horizon make the numbers and to find the number of the limit spundles of the did not have | at a 3 meter cane the position was set 3 meter which was mour that he ight is various and height is various and vertice the asurement. If the rota table maximum read ceiver system and width with sion level of the ecified, then tene EUT would be a 10dB margin i-peak or average and width with sion level of the ecified, then tene EUT would be a 10dB margin i-peak or average. | he top of a reamber. The famber. The famber. The fambers away from the don the total famber and famber and famber awas turned famber awas turned famber awas fambe | otating table table was restracted in the interferop of a variate meter to for a value of the ons of the art to heights from 0 degreeak Detect old Mode. It was estopped of the otherwise estested one | e 0.8 meters above otated 360 degrees rence-receiving able-height antenna our meters above he field strength. Intenna are set to respect to 360 degrees function and s 10dB lower than and the peak the emissions that |  |  |  |  |

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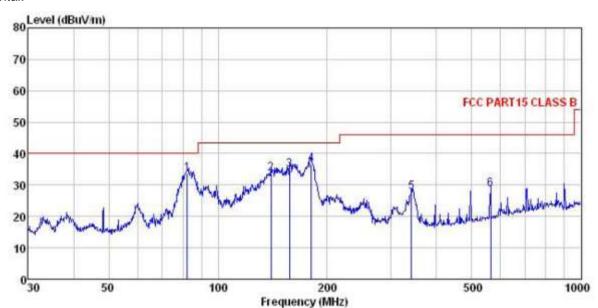
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Project No.: CCIS130500138RF

#### **Below 1GHz**

Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) HORIZONTAL : 138RF Condition

Job No. : 7" Tablet : TAB-735 : WIFI TX mode EUT Model Test mode

Power Rating: AC 120V/60Hz Environment: Temp:25°C Huni:55% Atmos:101Kpa

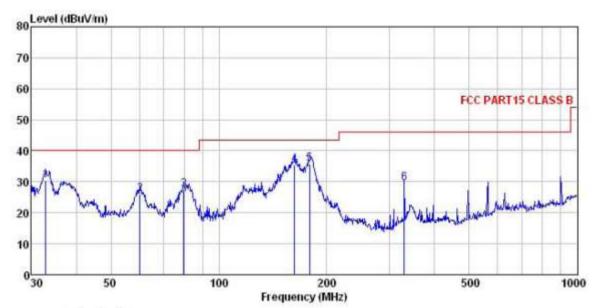
Test Engineer: Winner Remark

| nar         | K :      |       |          |       |        |        |        |        |        |
|-------------|----------|-------|----------|-------|--------|--------|--------|--------|--------|
|             |          | Read  | Ant enna | Cable | Preamp |        | Limit  | Over   |        |
|             | Freq     |       |          |       |        |        | Line   | Limit  | Remark |
|             | MHz      | dBuV  | dB/m     | ₫₿    | −−−dB  | dBuV/m | dBuV/m | ₫B     |        |
| 1           | 82.359   | 52.53 | 9.43     | 1.76  | 30.11  | 33.61  | 40.00  | -6.39  | QP     |
| 1<br>2<br>3 | 139.851  | 52.47 | 8.19     | 2.39  | 29.38  | 33.67  | 43.50  | -9.83  | QP     |
| 3           | 157.559  | 53.50 | 8.58     | 2.57  | 29.78  | 34.87  | 43.50  | -8.63  | QP     |
| 4<br>5      | 180.649  | 50.99 | 9.76     | 2.73  | 26.77  | 36.71  | 43.50  | -6.79  | QP     |
| 5           | 340.782  | 40.15 | 14.15    | 3.07  | 29.64  | 27.73  | 46.00  | -18.27 | QP     |
| 6           | 562, 662 | 37.46 | 17.83    | 3.90  | 30.54  | 28, 65 | 46.00  | -17.35 | QP     |

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#### Vertical:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) VERTICAL Condition

138RF 7" Tablet Job No. EUT Model : TAB-735
Test mode : WIFI TX mode
Power Rating : AC 120V/60Hz
Environment : Temp:25°C Huni:55% Atmos:101Kpa

Test Engineer: Winner

| CHAIR       |         | Read  | Antenna | Cable | Preamn |        | Limit  | Over   |        |
|-------------|---------|-------|---------|-------|--------|--------|--------|--------|--------|
|             | Freq    |       | Factor  |       |        |        |        |        | Remark |
| -           | MHz     | dBuV  | dB/m    | ₫₿    | d₿     | dBuV/m | dBuV/m | ₫B     |        |
| 1           | 32.864  | 43.84 | 12.31   | 0.91  | 26.58  | 30.48  | 40.00  | -9.52  | QP     |
| 2           | 60.280  | 41.14 | 12.69   | 1.38  | 29.23  | 25.98  | 40.00  | -14.02 | QP     |
| 3           | 79.800  | 47.45 | 8.54    | 1.65  | 30.13  | 27.51  | 40.00  | -12.49 | QP     |
| 4           | 162.611 | 53.65 | 8.74    | 2.61  | 29.64  | 35.36  | 43.50  | -8.14  | QP     |
| 5           | 179.386 | 49.91 | 9.62    | 2.73  | 26.66  | 35.60  | 43.50  | -7.90  | QP     |
| 4<br>5<br>6 | 329.039 | 42.35 | 13.73   | 3.03  | 29.58  | 29.53  | 46.00  | -16.47 | QP     |
|             |         |       |         |       |        |        |        |        |        |

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### **Above 1GHz**

| Test mode:         | 802.1                | 11b                         | Test channe        | el: Low               | est               | Remark:                |               | Peak |              |
|--------------------|----------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|---------------|------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over I<br>(dE |      | polarization |
| 4804.00            | 50.12                | 31.53                       | 8.90               | 40.24                 | 50.31             | 74.00                  | -23.          | 69   | Vertical     |
| 7206.00            | 45.65                | 36.47                       | 10.59              | 41.24                 | 51.47             | 74.00                  | -22.          | 53   | Vertical     |
| 9608.00            | 42.36                | 38.10                       | 13.16              | 41.40                 | 52.22             | 74.00                  | -21.          | 78   | Vertical     |
| 4804.00            | 50.24                | 31.53                       | 8.90               | 40.24                 | 50.43             | 74.00                  | -23.          | 57   | Horizontal   |
| 7206.00            | 45.84                | 36.47                       | 10.59              | 41.24                 | 51.66             | 74.00                  | -22.          | 34   | Horizontal   |
| 9608.00            | 43.10                | 38.10                       | 13.16              | 41.40                 | 52.96             | 74.00                  | -21.          | 04   | Horizontal   |

| Test mode:         | 802.1                | l1b                         | Test channe        | el: Lowe              | st                | Remark:                | Avera              | age          |
|--------------------|----------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4804.00            | 40.25                | 31.53                       | 8.90               | 40.24                 | 40.44             | 54.00                  | -13.56             | Vertical     |
| 7206.00            | 35.24                | 36.47                       | 10.59              | 41.24                 | 41.06             | 54.00                  | -12.94             | Vertical     |
| 9608.00            | 32.54                | 38.10                       | 13.16              | 41.40                 | 42.40             | 54.00                  | -11.60             | Vertical     |
| 4804.00            | 39.98                | 31.53                       | 8.90               | 40.24                 | 40.17             | 54.00                  | -13.83             | Horizontal   |
| 7206.00            | 36.14                | 36.47                       | 10.59              | 41.24                 | 41.96             | 54.00                  | -12.04             | Horizontal   |
| 9608.00            | 32.74                | 38.10                       | 13.16              | 41.40                 | 42.60             | 54.00                  | -11.40             | Horizontal   |

| Test mode:         | 802.                 | 11b                         | Test chann         | el: N             | Middl | е                 | Remark:                | Remark: Pe |             |              |
|--------------------|----------------------|-----------------------------|--------------------|-------------------|-------|-------------------|------------------------|------------|-------------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Pream<br>Factor ( |       | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) |            | Limit<br>B) | polarization |
| 4882.00            | 50.41                | 31.58                       | 8.98               | 40.15             | 5     | 50.82             | 74.00                  | -23        | .18         | Vertical     |
| 7323.00            | 45.69                | 36.47                       | 10.69              | 41.15             | 5     | 51.70             | 74.00                  | -22        | .30         | Vertical     |
| 9764.00            | 42.45                | 38.45                       | 13.37              | 41.7              | 1     | 52.56             | 74.00                  | -21        | .44         | Vertical     |
| 4882.00            | 51.25                | 31.58                       | 8.98               | 40.15             | 5     | 51.66             | 74.00                  | -22        | .34         | Horizontal   |
| 7323.00            | 46.12                | 36.47                       | 10.69              | 41.15             | 5     | 52.13             | 74.00                  | -21        | .87         | Horizontal   |
| 9764.00            | 43.52                | 38.45                       | 13.37              | 41.7              | 1     | 53.63             | 74.00                  | -20        | .37         | Horizontal   |

| Test mode:         | 802                  | .11b                        | Test chann         | el: M              | 1iddle |                 | Remark:                | emark: Aver |             | age          |
|--------------------|----------------------|-----------------------------|--------------------|--------------------|--------|-----------------|------------------------|-------------|-------------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Pream<br>Factor (d |        | Level<br>BuV/m) | Limit Line<br>(dBuV/m) |             | Limit<br>B) | polarization |
| 4882.00            | 40.84                | 31.58                       | 8.98               | 40.15              | 4      | 41.25           | 54.00                  | -12         | .75         | Vertical     |
| 7323.00            | 36.41                | 36.47                       | 10.69              | 41.15              | 4      | 42.42           | 54.00                  | -11         | .58         | Vertical     |
| 9764.00            | 33.21                | 38.45                       | 13.37              | 41.71              | 4      | 43.32           | 54.00                  | -10         | .68         | Vertical     |
| 4882.00            | 41.21                | 31.58                       | 8.98               | 40.15              | 4      | 41.62           | 54.00                  | -12         | .38         | Horizontal   |
| 7323.00            | 36.12                | 36.47                       | 10.69              | 41.15              | 4      | 42.13           | 54.00                  | -11         | .87         | Horizontal   |
| 9764.00            | 33.47                | 38.45                       | 13.37              | 41.71              | 4      | 43.58           | 54.00                  | -10         | .42         | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

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| Test mode:         | 802.1                | l1b                         | Test chann         | el: High              | est               | Remark:                | Peak               | (            |
|--------------------|----------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4960.00            | 51.64                | 31.69                       | 9.08               | 40.03                 | 52.38             | 74.00                  | -21.62             | Vertical     |
| 7440.00            | 46.87                | 36.60                       | 10.80              | 41.05                 | 53.22             | 74.00                  | -20.78             | Vertical     |
| 9920.00            | 44.21                | 38.66                       | 13.55              | 41.99                 | 54.43             | 74.00                  | -19.57             | Vertical     |
| 4960.00            | 51.46                | 31.69                       | 9.08               | 40.03                 | 52.20             | 74.00                  | -21.80             | Horizontal   |
| 7440.00            | 47.32                | 36.60                       | 10.80              | 41.05                 | 53.67             | 74.00                  | -20.33             | Horizontal   |
| 9920.00            | 44.54                | 38.66                       | 13.55              | 41.99                 | 54.76             | 74.00                  | -19.24             | Horizontal   |

| Test mode:         | 802.1                | 11b                         | Test chann         | el: High              | est               | Remark:                | A۱               | verage          |
|--------------------|----------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|------------------|-----------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Lim<br>(dB) | it polarization |
| 4960.00            | 41.21                | 31.69                       | 9.08               | 40.03                 | 41.95             | 54.00                  | -12.05           | Vertical        |
| 7440.00            | 36.21                | 36.60                       | 10.80              | 41.05                 | 42.56             | 54.00                  | -11.44           | Vertical        |
| 9920.00            | 33.69                | 38.66                       | 13.55              | 41.99                 | 43.91             | 54.00                  | -10.09           | Vertical        |
| 4960.00            | 40.84                | 31.69                       | 9.08               | 40.03                 | 41.58             | 54.00                  | -12.42           | Horizontal      |
| 7440.00            | 36.47                | 36.60                       | 10.80              | 41.05                 | 42.82             | 54.00                  | -11.18           | Horizontal      |
| 9920.00            | 33.41                | 38.66                       | 13.55              | 41.99                 | 43.63             | 54.00                  | -10.37           | Horizontal      |

| Test mode:         | 802                  | .11g                        | Test chann         | el:            | Lowe | st                | Remark:                | ark: Peal |             |              |
|--------------------|----------------------|-----------------------------|--------------------|----------------|------|-------------------|------------------------|-----------|-------------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Prea<br>Factor |      | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) |           | Limit<br>B) | polarization |
| 4804.00            | 50.24                | 31.53                       | 8.90               | 40.            | 24   | 50.43             | 74.00                  | -23       | .57         | Vertical     |
| 7206.00            | 45.45                | 36.47                       | 10.59              | 41.            | 24   | 51.27             | 74.00                  | -22       | .73         | Vertical     |
| 9608.00            | 42.34                | 38.10                       | 13.16              | 41.            | 40   | 52.20             | 74.00                  | -21       | .80         | Vertical     |
| 4804.00            | 50.38                | 31.53                       | 8.90               | 40.            | 24   | 50.57             | 74.00                  | -23       | .43         | Horizontal   |
| 7206.00            | 45.64                | 36.47                       | 10.59              | 41.            | 24   | 51.46             | 74.00                  | -22       | .54         | Horizontal   |
| 9608.00            | 43.02                | 38.10                       | 13.16              | 41.            | 40   | 52.88             | 74.00                  | -21       | .12         | Horizontal   |

| Test mode:         | 802.1                | 11g                         | Test chann         | el: Lov               | rest .            | Remark:                | Ave                | rage         |
|--------------------|----------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4804.00            | 40.62                | 31.53                       | 8.90               | 40.24                 | 40.81             | 54                     | -13.19             | Vertical     |
| 7206.00            | 35.41                | 36.47                       | 10.59              | 41.24                 | 41.23             | 54                     | -12.77             | Vertical     |
| 9608.00            | 32.43                | 38.10                       | 13.16              | 41.40                 | 42.29             | 54                     | -11.71             | Vertical     |
| 4804.00            | 40.54                | 31.53                       | 8.90               | 40.24                 | 40.73             | 54                     | -13.27             | Horizontal   |
| 7206.00            | 35.64                | 36.47                       | 10.59              | 41.24                 | 41.46             | 54                     | -12.54             | Horizontal   |
| 9608.00            | 32.74                | 38.10                       | 13.16              | 41.40                 | 42.60             | 54                     | -11.40             | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

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| Test mode:         | 802.1                   | l1g                         | Test chann         | el: Midd                                | lle   | Remark:      |       | Peak |            |
|--------------------|-------------------------|-----------------------------|--------------------|---|-------|--------------|-------|------|------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | (dB) Factor (dB) (dBuV/m) (dBuV/m) (dB) |       | polarization |       |      |            |
| 4882.00            | 50.55                   | 31.58                       | 8.98               | 40.15                                   | 50.96 | 74.00        | -23.0 | 04   | Vertical   |
| 7323.00            | 45.64                   | 36.47                       | 10.69              | 41.15                                   | 51.65 | 74.00        | -22.3 | 35   | Vertical   |
| 9764.00            | 42.15                   | 38.45                       | 13.37              | 41.71                                   | 52.26 | 74.00        | -21.  | 74   | Vertical   |
| 4882.00            | 50.33                   | 31.58                       | 8.98               | 40.15                                   | 50.74 | 74.00        | -23.2 | 26   | Horizontal |
| 7323.00            | 46.12                   | 36.47                       | 10.69              | 41.15                                   | 52.13 | 74.00        | -21.8 | 87   | Horizontal |
| 9764.00            | 43.15                   | 38.45                       | 13.37              | 41.71                                   | 53.26 | 74.00        | -20.  | 74   | Horizontal |

| Test mode:         | mode: 802.11g           |                             | Test chann         | el:                | Midd | le                | Remark:                |     | Average     |              |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------|------|-------------------|------------------------|-----|-------------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Prea<br>Fac<br>(dE | tor  | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) |     | Limit<br>B) | polarization |
| 4882.00            | 40.65                   | 31.58                       | 8.98               | 40.                | 15   | 41.06             | 54.00                  | -12 | 2.94        | Vertical     |
| 7323.00            | 36.42                   | 36.47                       | 10.69              | 41.                | 15   | 42.43             | 54.00                  | -11 | .57         | Vertical     |
| 9764.00            | 33.22                   | 38.45                       | 13.37              | 41.                | 71   | 43.33             | 54.00                  | -10 | .67         | Vertical     |
| 4882.00            | 40.98                   | 31.58                       | 8.98               | 40.                | 15   | 41.39             | 54.00                  | -12 | 2.61        | Horizontal   |
| 7323.00            | 36.49                   | 36.47                       | 10.69              | 41.                | 15   | 42.50             | 54.00                  | -11 | .50         | Horizontal   |
| 9764.00            | 33.75                   | 38.45                       | 13.37              | 41.                | 71   | 43.86             | 54.00                  | -10 | ).14        | Horizontal   |

| Test mode:         | ode: 802.11g            |                             | Test chann         | el: High              | est               | Remark:                | Pea                | Peak         |  |
|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|--|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |  |
| 4960.00            | 51.41                   | 31.69                       | 9.08               | 40.03                 | 52.15             | 74.00                  | -21.85             | Vertical     |  |
| 7440.00            | 46.33                   | 36.60                       | 10.80              | 41.05                 | 52.68             | 74.00                  | -21.32             | Vertical     |  |
| 9920.00            | 44.54                   | 38.66                       | 13.55              | 41.99                 | 54.76             | 74.00                  | -19.24             | Vertical     |  |
| 4960.00            | 51.37                   | 31.69                       | 9.08               | 40.03                 | 52.11             | 74.00                  | -21.89             | Horizontal   |  |
| 7440.00            | 47.57                   | 36.60                       | 10.80              | 41.05                 | 53.92             | 74.00                  | -20.08             | Horizontal   |  |
| 9920.00            | 44.33                   | 38.66                       | 13.55              | 41.99                 | 54.55             | 74.00                  | -19.45             | Horizontal   |  |

| Test mode:         | 802.1                   | 11g                         | Test chann  | el: High | est              | Remark: | Remark: Aver |            |
|--------------------|-------------------------|-----------------------------|---|----------|------------------|---------|--------------|------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss Preamp Level Limit Line Over Limit (dB) Factor (dB) (dBuV/m) (dBuV/m) (dB) |          | nit polarization |         |              |            |
| 4960.00            | 41.22                   | 31.69                       | 9.08  | 40.03    | 41.96            | 54.00   | -12.04       | Vertical   |
| 7440.00            | 36.57                   | 36.60                       | 10.80   | 41.05    | 42.92            | 54.00   | -11.08       | Vertical   |
| 9920.00            | 33.64                   | 38.66                       | 13.55   | 41.99    | 43.86            | 54.00   | -10.14       | Vertical   |
| 4960.00            | 40.73                   | 31.69                       | 9.08  | 40.03    | 41.47            | 54.00   | -12.53       | Horizontal |
| 7440.00            | 36.57                   | 36.60                       | 10.80   | 41.05    | 42.92            | 54.00   | -11.08       | Horizontal |
| 9920.00            | 33.44                   | 38.66                       | 13.55   | 41.99    | 43.66            | 54.00   | -10.34       | Horizontal |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

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| Test mode: 802.11n(H2 |                         | 11n(H20)                    | Test chann         | el: Low               | est               | Remark:                |                    | Peak |              |
|-----------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|------|--------------|
| Frequency<br>(MHz)    | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) |      | polarization |
| 4804.00               | 51.34                   | 31.53                       | 8.90               | 40.24                 | 51.53             | 74.00                  | -22.47             |      | Vertical     |
| 7206.00               | 46.37                   | 36.47                       | 10.59              | 41.24                 | 52.19             | 74.00                  | -21.81             |      | Vertical     |
| 9608.00               | 43.24                   | 38.10                       | 13.16              | 41.40                 | 53.10             | 74.00                  | -20.90             |      | Vertical     |
| 4804.00               | 51.22                   | 31.53                       | 8.90               | 40.24                 | 51.41             | 74.00                  | -22.59             |      | Horizontal   |
| 7206.00               | 46.35                   | 36.47                       | 10.59              | 41.24                 | 52.17             | 74.00                  | -21.83             |      | Horizontal   |
| 9608.00               | 43.23                   | 38.10                       | 13.16              | 41.40                 | 53.09             | 74.00                  | -20.9              | 91   | Horizontal   |

| Test mode:         | Test mode: 802.11n(H20) |                             | Test chann         | el: Low               | est               | Remark:                |                    | Average |              |
|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|---------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) |         | polarization |
| 4804.00            | 41.24                   | 31.53                       | 8.90               | 40.24                 | 41.43             | 54.00                  | -12.57             |         | Vertical     |
| 7206.00            | 36.23                   | 36.47                       | 10.59              | 41.24                 | 42.05             | 54.00                  | -11.95             |         | Vertical     |
| 9608.00            | 33.71                   | 38.10                       | 13.16              | 41.40                 | 43.57             | 54.00                  | -10.4              | 43      | Vertical     |
| 4804.00            | 41.43                   | 31.53                       | 8.90               | 40.24                 | 41.62             | 54.00                  | -12.3              | 38      | Horizontal   |
| 7206.00            | 36.51                   | 36.47                       | 10.59              | 41.24                 | 42.33             | 54.00                  | -11.67             |         | Horizontal   |
| 9608.00            | 33.66                   | 38.10                       | 13.16              | 41.40                 | 43.52             | 54.00                  | -10.4              | 48      | Horizontal   |

| Test mode: 802.1   |                 | 11n(H20) | Test channel:               |                    | Middle        |     | Remark:           |                        | Peak       |     |              |
|--------------------|-----------------|----------|-----------------------------|--------------------|---------------|-----|-------------------|------------------------|------------|-----|--------------|
| Frequency<br>(MHz) | Re<br>Le<br>(dB | vel      | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Prea<br>Facto |     | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>(d |     | polarization |
| 4882.00            | 51.             | 46       | 31.58                       | 8.98               | 40            | .15 | 51.87             | 74.00                  | -22.13     |     | Vertical     |
| 7323.00            | 46.             | 37       | 36.47                       | 10.69              | 41            | .15 | 52.38             | 74.00                  | -21.62     |     | Vertical     |
| 9764.00            | 43.             | 76       | 38.45                       | 13.37              | 41            | .71 | 53.87             | 74.00                  | -20.13     |     | Vertical     |
| 4882.00            | 51.             | 32       | 31.58                       | 8.98               | 40            | .15 | 51.73             | 74.00                  | -22.27     |     | Horizontal   |
| 7323.00            | 46.             | 55       | 36.47                       | 10.69              | 41            | .15 | 52.56             | 74.00                  | -21.44     |     | Horizontal   |
| 9764.00            | 43.             | 61       | 38.45                       | 13.37              | 41            | .71 | 53.72             | 74.00                  | -20        | .28 | Horizontal   |

| Test mode:         | Test mode: 802.11n(H20) |                             | Test channel:      |                | Middle |                   | Remark:                |            | Average |              |
|--------------------|-------------------------|-----------------------------|--------------------|----------------|--------|-------------------|------------------------|------------|---------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Prea<br>Factor |        | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>(d |         | polarization |
| 4882.00            | 41.21                   | 31.58                       | 8.98               | 40.            | 15     | 41.62             | 54.00                  | -12.38     |         | Vertical     |
| 7323.00            | 36.54                   | 36.47                       | 10.69              | 41.            | 15     | 42.55             | 54.00                  | -11.45     |         | Vertical     |
| 9764.00            | 33.46                   | 38.45                       | 13.37              | 41.            | 71     | 43.57             | 54.00                  | -10        | .43     | Vertical     |
| 4882.00            | 41.43                   | 31.58                       | 8.98               | 40.            | 15     | 41.84             | 54.00                  | -12        | .16     | Horizontal   |
| 7323.00            | 36.42                   | 36.47                       | 10.69              | 41.            | 15     | 42.43             | 54.00                  | -11        | .57     | Horizontal   |
| 9764.00            | 33.23                   | 38.45                       | 13.37              | 41.7           | 71     | 43.34             | 54.00                  | -10        | .66     | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

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| Test mode:         | Test mode: 802.11n(H20) |                             | Test chann         | el: High              | est               | Remark:                |                    | Peak |              |
|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) |      | polarization |
| 4960.00            | 51.42                   | 31.69                       | 9.08               | 40.03                 | 52.16             | 74.00                  | -21.84             |      | Vertical     |
| 7440.00            | 46.88                   | 36.60                       | 10.80              | 41.05                 | 53.23             | 74.00                  | -20.77             |      | Vertical     |
| 9920.00            | 44.59                   | 38.66                       | 13.55              | 41.99                 | 54.81             | 74.00                  | -19.19             |      | Vertical     |
| 4960.00            | 51.26                   | 31.69                       | 9.08               | 40.03                 | 52.00             | 74.00                  | -22.00             |      | Horizontal   |
| 7440.00            | 46.77                   | 36.60                       | 10.80              | 41.05                 | 53.12             | 74.00                  | -20.88             |      | Horizontal   |
| 9920.00            | 44.36                   | 38.66                       | 13.55              | 41.99                 | 54.58             | 74.00                  | -19.42             |      | Horizontal   |

| Test mode:         | est mode: 802.11n(H20   |                             | Test chann         | el: Hig              | hest              | Remark:                |             | Average |              |
|--------------------|-------------------------|-----------------------------|--------------------|----------------------|-------------------|------------------------|-------------|---------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor (dB | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>(dl |         | polarization |
| 4960.00            | 40.87                   | 31.69                       | 9.08               | 40.03                | 41.61             | 54.00                  | -12.39      |         | Vertical     |
| 7440.00            | 36.24                   | 36.60                       | 10.80              | 41.05                | 42.59             | 54.00                  | -11.41      |         | Vertical     |
| 9920.00            | 33.14                   | 38.66                       | 13.55              | 41.99                | 43.36             | 54.00                  | -10.        | .64     | Vertical     |
| 4960.00            | 40.65                   | 31.69                       | 9.08               | 40.03                | 41.39             | 54.00                  | -12.        | .61     | Horizontal   |
| 7440.00            | 36.46                   | 36.60                       | 10.80              | 41.05                | 42.81             | 54.00                  | -11.        | .19     | Horizontal   |
| 9920.00            | 33.19                   | 38.66                       | 13.55              | 41.99                | 43.41             | 54.00                  | -10.        | .59     | Horizontal   |

#### Remark

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. The emission levels of other frequencies are very lower than the limit and not show in test report.

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