

# Shenzhen Zhongjian Nanfang Testing Co., Ltd.

Report No: CCIS14080067803

# FCC REPORT (WIFI)

**Applicant:** MOVILTELCO TRADE, S.L.

Address of Applicant: C/ ABTAO, 25-10 A MADRID (28007) SPAIN

**Equipment Under Test (EUT)** 

Product Name: mobile phone

Model No.: A26

Trade mark: mtt

FCC ID: 2ACQKTELCO003

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

Date of sample receipt: 18 Aug., 2014

**Date of Test:** 18 Aug., to 12 Sep., 2014

Date of report issued: 12 Sep., 2014

Test Result: PASS \*

\* In the configuration tested, the EUT complied with the standards specified above.

#### 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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**Version** 

Report No: CCIS13070021903

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | 12 Sep., 2014 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |
|             |               |             |

Prepared by: Date: 12 Sep., 2014

Reviewed by: 12 Sep., 2014 Date:

**Project Engineer** 

Telephone: +86 (0) 755 23118282 Fax: +86 (0) 755 23116366



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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 Peak Output Power                   | 15.247 (b)(3)     | Pass   |
| 6dB Emission Bandwidth 99% Occupied 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.



# **5** General Information

## **5.1 Client Information**

| Applicant:               | MOVILTELCO TRADE, S.L                  |
|--------------------------|--|
| Address of Applicant:    | C/ ABTAO, 25-1º A MADRID (28007) SPAIN |
| Manufacturer:            | REACH CHANCE INTERNATIONAL LIMITED     |
| Address of Manufacturer: | 7/F KIN ON COMMERCIAL BUILDING         |
|                          | 49-51 JERVOIS STREET SHEUNG WAN, HK    |

# 5.2 General Description of E.U.T.

| Product Name:                                    | mobile phone   |
|--|--|
| Model No.:                                       | A26  |
| Operation Frequency:                             | 2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))<br>2422MHz~2452MHz (802.11n(H40)) |
| Channel numbers:                                 | 11 for 802.11b/802.11g/802.11(H20)<br>7 for 802.11n(H40)                         |
| Channel separation:                              | 5MHz   |
| Modulation technology:<br>(IEEE 802.11b)         | Direct Sequence Spread Spectrum (DSSS)   |
| Modulation technology:<br>(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:                                    | -0.8 dBi   |
| AC adapter:                                      | Input:100-240V AC,50/60Hz 0.2A<br>Output:5.0V DC MAX600mA                        |
| Power supply:                                    | Rechargeable Li-ion Battery DC3.7V- 1350mAh                                      |



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

| Operation Frequency each of channel For 802.11n(H40) |   |   |         |   |         |  |  |  |  |  |
|--|---|---|---------|---|---------|--|--|--|--|--|
| Channel  | Channel Frequency Channel Frequency Channel Frequency Channel Frequency |   |         |   |         |  |  |  |  |  |
|  |   | 4 | 2427MHz | 7 | 2442MHz |  |  |  |  |  |
|  |   | 5 | 2432MHz | 8 | 2447MHz |  |  |  |  |  |
| 3  |   |   |         |   |         |  |  |  |  |  |

#### 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   |

#### 802.11n (H40)

| Channel             | Frequency |
|---------------------|-----------|
| The lowest channel  | 2422MHz   |
| The middle channel  | 2437MHz   |
| The Highest channel | 2452MHz   |



#### 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   |
| 802.11n(H40) | 13.5Mbps  |

#### **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 802.11n(H20) and 13.5 Mbps for 802.11n(H40). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations.



#### 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.

Address: No.B-C, 1/F., Building 2, Laodong No.2 Industrial Park, Xixiang Road,

Bao'an District, Shenzhen, Guangdong, China

Tel: +86-755-23118282 Fax: +86-755-23116366



#### 5.6 Test Instruments list

| 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 2014            | June 08 2015                |  |
| 2                  | BiConiLog Antenna                    | SCHWARZBECK<br>MESS-ELEKTRONIK    | VULB9163                    | CCIS0005         | May 25 2014             | May 24 2015                 |  |
| 3                  | Double -ridged waveguide horn        | SCHWARZBECK<br>MESS-ELEKTRONIK    | BBHA9120D                   | CCIS0006         | May 25 2014             | May 24 2015                 |  |
| 4                  | EMI Test Software                    | AUDIX                             | E3                          | N/A              | N/A                     | N/A                         |  |
| 5                  | Coaxial Cable                        | CCIS                              | N/A                         | CCIS0016         | Apr. 01 2014            | Mar. 31 2015                |  |
| 6                  | Coaxial Cable                        | CCIS                              | N/A                         | CCIS0017         | Apr. 01 2014            | Mar. 31 2015                |  |
| 7                  | Coaxial cable                        | CCIS                              | N/A                         | CCIS0018         | Apr. 01 2014            | Mar. 31 2015                |  |
| 8                  | Coaxial Cable                        | CCIS                              | N/A                         | CCIS0019         | Apr. 01 2014            | Mar. 31 2015                |  |
| 9                  | Coaxial Cable                        | CCIS                              | N/A                         | CCIS0087         | Apr. 01 2014            | Mar. 31 2015                |  |
| 10                 | Amplifier(10kHz-<br>1.3GHz)          | HP                                | 8447D                       | CCIS0003         | Apr. 01 2014            | Mar. 31 2015                |  |
| 11                 | Amplifier(1GHz-<br>18GHz)            | Compliance Direction Systems Inc. | PAP-1G18                    | CCIS0011         | June 09 2014            | June 08 2015                |  |
| 12                 | Pre-amplifier<br>(18-26GHz)          | Rohde & Schwarz                   | AFS33-18002<br>650-30-8P-44 | GTS218           | Apr. 01 2014            | Mar. 31 2015                |  |
| 13                 | Horn Antenna                         | ETS-LINDGREN                      | 3160                        | GTS217           | Mar. 30 2014            | Mar. 29 2015                |  |
| 14                 | Printer                              | HP                                | HP LaserJet P1007           | N/A              | N/A                     | N/A                         |  |
| 15                 | Positioning Controller               | UC                                | UC3000                      | CCIS0015         | N/A                     | N/A                         |  |
| 16                 | Spectrum analyzer<br>9k-30GHz        | Rohde & Schwarz                   | FSP                         | CCIS0023         | May. 25 2014            | May. 24 2015                |  |
| 17                 | EMI Test Receiver                    | Rohde & Schwarz                   | ESPI                        | CCIS0022         | Apr 01 2014             | Mar. 31 2015                |  |
| 18                 | Loop antenna                         | Laplace instrument                | RF300                       | EMC0701          | Aug. 12 2014            | Aug. 11 2015                |  |
| 19                 | Universal radio communication tester | Rhode & Schwarz                   | CMU200                      | CCIS0069         | May. 25 2014            | May. 24 2015                |  |
| 20                 | Signal Analyzer                      | Rohde & Schwarz                   | FSIQ3                       | CCIS0088         | May. 25 2014            | May. 24 2015                |  |

| Conducted Emission: |                   |                    |                       |                  |                         |                             |
|---------------------|-------------------|--------------------|-----------------------|------------------|-------------------------|-----------------------------|
| Item                | Test Equipment    | Manufacturer       | Model No.             | Inventory<br>No. | Cal. Date<br>(mm-dd-yy) | Cal. Due date<br>(mm-dd-yy) |
| 1                   | Shielding Room    | ZhongShuo Electron | 11.0(L)x4.0(W)x3.0(H) | CCIS0061         | June 09 2014            | June 08 2015                |
| 2                   | EMI Test Receiver | Rohde & Schwarz    | ESCI                  | CCIS0002         | May 25 2014             | May 24 2015                 |
| 3                   | LISN              | CHASE              | MN2050D               | CCIS0074         | Apr 01 2014             | Mar. 31 2015                |
| 4                   | Coaxial Cable     | CCIS               | N/A                   | CCIS0086         | Apr. 01 2014            | Mar. 31 2015                |
| 5                   | EMI Test Software | AUDIX              | E3                    | N/A              | N/A                     | N/A                         |



#### 6 Test results and Measurement Data

#### 6.1 Antenna requirement:

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

15.203 requirement:

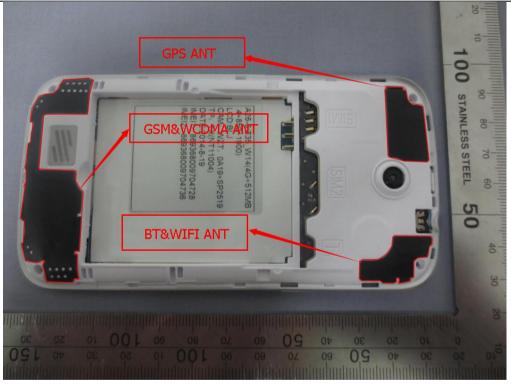
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit 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 internal antenna which cannot replace by end-user, the best case gain of the antenna is-0.8 dBi.





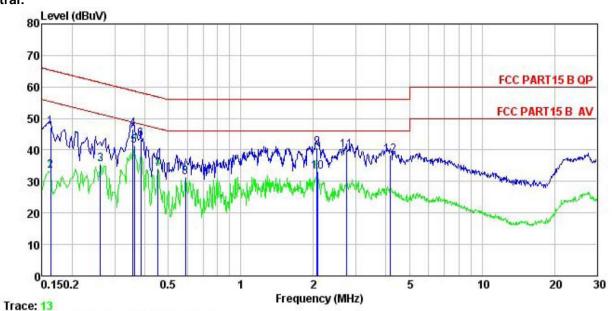
## 6.2 Conducted Emission

| Test Requirement:     | FCC Part15 C Section 15.207  |                   |               |  |  |  |
|-----------------------|--|-------------------|---------------|--|--|--|
| •                     | ANSI C63.4: 2003   |                   |               |  |  |  |
| Test Method:          |  |                   |               |  |  |  |
| Test Frequency Range: | 150 kHz to 30 MHz  | 150 kHz to 30 MHz |               |  |  |  |
| Class / Severity:     | Class B  |                   |               |  |  |  |
| Receiver setup:       | RBW=9 kHz, VBW=30 kHz  |                   |               |  |  |  |
| Limit:                | Frequency range (MHz)  | Limit (c          | dBuV)         |  |  |  |
|                       | , , , ,  | Quasi-peak        | Average       |  |  |  |
|                       | 0.15-0.5   | 66 to 56*         | 56 to 46*     |  |  |  |
|                       | 0.5-5  | 56                | 46            |  |  |  |
|                       | 5-30 * Decreases with the logarithm  | 60                | 50            |  |  |  |
| Test procedure        | <ol> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.), which provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>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.</li> </ol> |                   |               |  |  |  |
| Test setup:           | LISN 40cm  |                   | er — AC power |  |  |  |
| Test Instruments:     | Refer to section 5.6 for details   |                   |               |  |  |  |
| Test mode:            | Refer to section 5.3 for details   |                   |               |  |  |  |
| Test results:         | Passed   |                   |               |  |  |  |

**Measurement Data** 



#### Neutral:



Site

: CCIS Shielding Room : FCC PART15 B QP LISN NEUTRAL : GSM Mobile Phone Condition EUT

Model : A26

Test Mode : WIFI Mode
Power Rating : AC120 V/ 60Hz
Environment : Temp: 23 C Huni:56% Atmos:101KPa

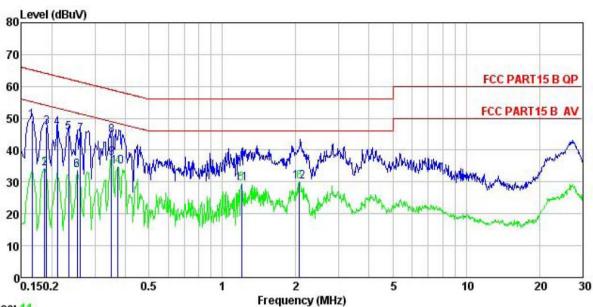
Test Engineer: Garen

Remark

|   | Freq  | Read<br>Level | LISN<br>Factor | Cable<br>Loss | Level | Limit<br>Line | Over<br>Limit | Remark  |
|---|-------|---------------|----------------|---------------|-------|---------------|---------------|---------|
| -   | MHz   | dBu∜          | <u>dB</u>      | dB            | dBu₹  | −dBuV         | <u>dB</u>     |         |
| 1   | 0.162 | 36.10         | 0.25           | 10.77         | 47.12 | 65.34         | -18.22        | QP      |
| 2   | 0.162 | 22.24         | 0.25           | 10.77         | 33.26 | 55.34         | -22.08        | Average |
| 3   | 0.262 | 24.54         | 0.26           | 10.75         | 35.55 | 51.38         | -15.83        | Average |
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9 | 0.358 | 35.73         | 0.25           | 10.73         | 46.71 |               | -12.07        |         |
| 5   | 0.361 | 30.40         | 0.25           | 10.73         | 41.38 | 48.69         | -7.31         | Average |
| 6   | 0.385 | 32.41         | 0.25           | 10.72         | 43.38 |               | -14.79        |         |
| 7   | 0.454 | 23.06         | 0.27           | 10.74         | 34.07 | 46.80         | -12.73        | Average |
| 8   | 0.589 | 20.17         | 0.24           | 10.77         | 31.18 | 46.00         | -14.82        | Average |
| 9   | 2.066 | 29.43         | 0.29           | 10.96         | 40.68 | 56.00         | -15.32        | QP      |
| 10  | 2.077 | 21.74         | 0.29           | 10.96         | 32.99 | 46.00         | -13.01        | Average |
| 11  | 2.736 | 28.78         | 0.29           | 10.93         | 40.00 | 56.00         | -16.00        | QP      |
| 12  | 4.158 | 27.35         | 0.29           | 10.88         | 38.52 | 56.00         | -17.48        | QP      |



#### Line:



Trace: 11

Site

: CCIS Shielding Room : FCC PART15 B QP LISN LINE Condition

EUT GSM Mobile Phone

Model A26 : WIFI Mode Test Mode

Power Rating: AC120 V/ 60Hz Environment: Temp: 23 °C Huni:56% Atmos:101KPa Test Engineer: Garen

Remark

| Freq  | Read<br>Level   | LISN<br>Factor   | Cable<br>Loss   | Level  | Limit<br>Line  | Over<br>Limit  | Remark  |
|-------|---|--|---|--|--|--|---|
| MHz   | dBu∜  | dB   | dB  | dBu₹   | dBu∀   | dB   |   |
| 0.166 | 38.18   | 0.27   | 10.77   | 49.22  | 65.16  | -15.94   | QP  |
| 0.186 | 23.23   | 0.28   | 10.76   | 34.27  | 54.20  | -19.93   | Average   |
| 0.190 | 36.23   | 0.28   | 10.76   | 47.27  | 64.02  | -16.75   | QP  |
| 0.211 | 35.92   | 0.28   | 10.76   | 46.96  | 63.18  | -16.22   | QP  |
| 0.234 | 34.45   | 0.27   | 10.75   | 45.47  | 62.30  | -16.83   | QP  |
| 0.253 | 22.53   | 0.27   | 10.75   | 33.55  | 51.64  | -18.09   | Average   |
| 0.262 | 33.96   | 0.27   | 10.75   | 44.98  | 61.38  | -16.40   | QP  |
| 0.350 | 33.49   | 0.27   | 10.73   | 44.49  | 58.96  | -14.47   | QP  |
| 0.350 | 26.42   | 0.27   | 10.73   | 37.42  | 48.96  | -11.54   | Average   |
| 0.373 | 23.82   | 0.28   | 10.73   | 34.83  | 48.43  | -13.60   | Average   |
| 1.197 | 18.28   | 0.25   | 10.89   | 29.42  | 46.00  | -16.58   | Average   |
| 2.066 | 18.96   | 0.26   | 10.96   | 30.18  | 46.00  | -15.82   | Average   |
|       | Freq<br>0.166<br>0.186<br>0.190<br>0.211<br>0.234<br>0.253<br>0.262<br>0.350<br>0.350<br>0.373<br>1.197 | Read<br>Freq Level<br>MHz dBuV<br>0.166 38.18<br>0.186 23.23<br>0.190 36.23<br>0.211 35.92<br>0.234 34.45<br>0.253 22.53<br>0.262 33.96<br>0.350 33.49<br>0.350 33.49<br>0.350 26.42<br>0.373 23.82<br>1.197 18.28 | Read LISN Level Factor  MHz dBuV dB  0.166 38.18 0.27 0.186 23.23 0.28 0.190 36.23 0.28 0.211 35.92 0.28 0.234 34.45 0.27 0.253 22.53 0.27 0.262 33.96 0.27 0.350 33.49 0.27 0.350 26.42 0.27 0.373 23.82 0.28 1.197 18.28 0.25 | Read LISN Cable Freq Level Factor Loss    MHz   dBuV   dB   dB | Read LISN Cable Level Factor Loss Level  MHz dBuV dB dB dB dBuV  0.166 38.18 0.27 10.77 49.22 0.186 23.23 0.28 10.76 34.27 0.190 36.23 0.28 10.76 47.27 0.211 35.92 0.28 10.76 46.96 0.234 34.45 0.27 10.75 45.47 0.253 22.53 0.27 10.75 45.47 0.253 22.53 0.27 10.75 33.55 0.262 33.96 0.27 10.75 44.98 0.350 33.49 0.27 10.75 44.98 0.350 26.42 0.27 10.73 37.42 0.373 23.82 0.28 10.73 34.83 1.197 18.28 0.25 10.89 29.42 | Read LISN Cable Limit Freq Level Factor Loss Level Line  MHz dBuV dB dB dB dBuV dBuV  0.166 38.18 0.27 10.77 49.22 65.16 0.186 23.23 0.28 10.76 34.27 54.20 0.190 36.23 0.28 10.76 47.27 64.02 0.211 35.92 0.28 10.76 46.96 63.18 0.234 34.45 0.27 10.75 45.47 62.30 0.253 22.53 0.27 10.75 45.47 62.30 0.253 22.53 0.27 10.75 33.55 51.64 0.262 33.96 0.27 10.75 33.55 51.64 0.262 33.96 0.27 10.75 44.98 61.38 0.350 33.49 0.27 10.73 44.49 58.96 0.350 26.42 0.27 10.73 37.42 48.96 0.373 23.82 0.28 10.73 34.83 48.43 1.197 18.28 0.25 10.89 29.42 46.00 | Read LISN Cable Limit Over Lovel Level Factor Loss Level Line Limit  MHz dBuV dB dB dB dBuV dBuV dB  0.166 38.18 0.27 10.77 49.22 65.16 -15.94  0.186 23.23 0.28 10.76 34.27 54.20 -19.93  0.190 36.23 0.28 10.76 47.27 64.02 -16.75  0.211 35.92 0.28 10.76 46.96 63.18 -16.22  0.234 34.45 0.27 10.75 45.47 62.30 -16.83  0.253 22.53 0.27 10.75 45.47 62.30 -16.83  0.253 22.53 0.27 10.75 33.55 51.64 -18.09  0.262 33.96 0.27 10.75 44.98 61.38 -16.40  0.350 33.49 0.27 10.73 44.49 58.96 -14.47  0.350 26.42 0.27 10.73 37.42 48.96 -11.54  0.373 23.82 0.28 10.73 34.83 48.43 -13.60  1.197 18.28 0.25 10.89 29.42 46.00 -16.58 |

#### 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



## **6.3 Conducted Output Power**

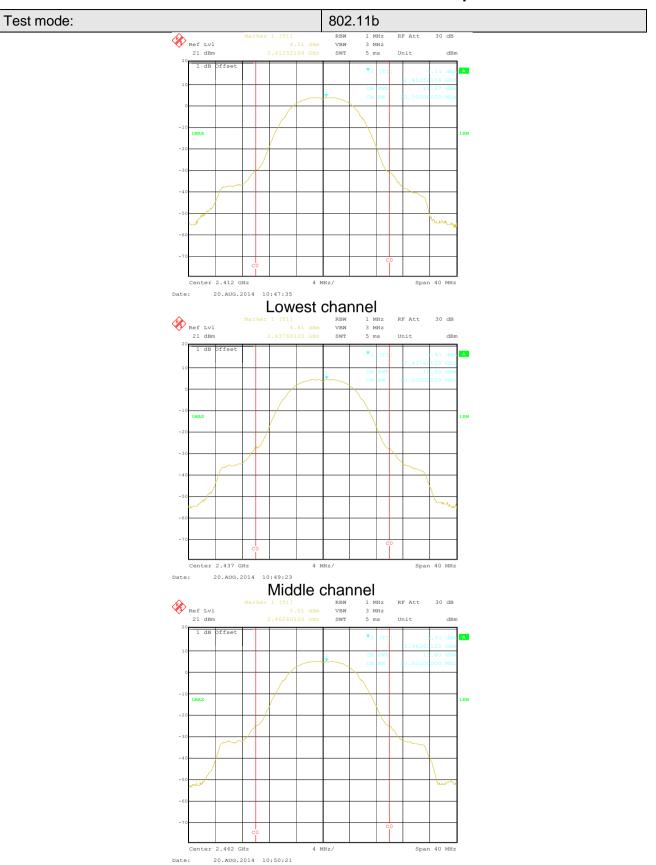
| Test Requirement: | FCC Part15 C Section 15.247 (b)(3)   |  |  |
|-------------------|--|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB558074  |  |  |
| Limit:            | 30dBm  |  |  |
| Test setup:       | Spectrum Analyzer  E.U.T  Non-Conducted Table                                |  |  |
|                   | 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 (DTS Measure Guidance) section 8.2, option 1. |  |  |

#### Measurement Data

| T O     | Max     | kimum Conduct | Limit/dDay)  | D !!         |            |        |
|---------|---------|---------------|--------------|--------------|------------|--------|
| Test CH | 802.11b | 802.11g       | 802.11n(H20) | 802.11n(H40) | Limit(dBm) | Result |
| Lowest  | 12.37   | 8.30          | 8.28         | 7.47         |            |        |
| Middle  | 13.00   | 11.06         | 11.15        | 9.90         | 30.00      | Pass   |
| Highest | 13.60   | 9.70          | 9.79         | 8.36         |            |        |

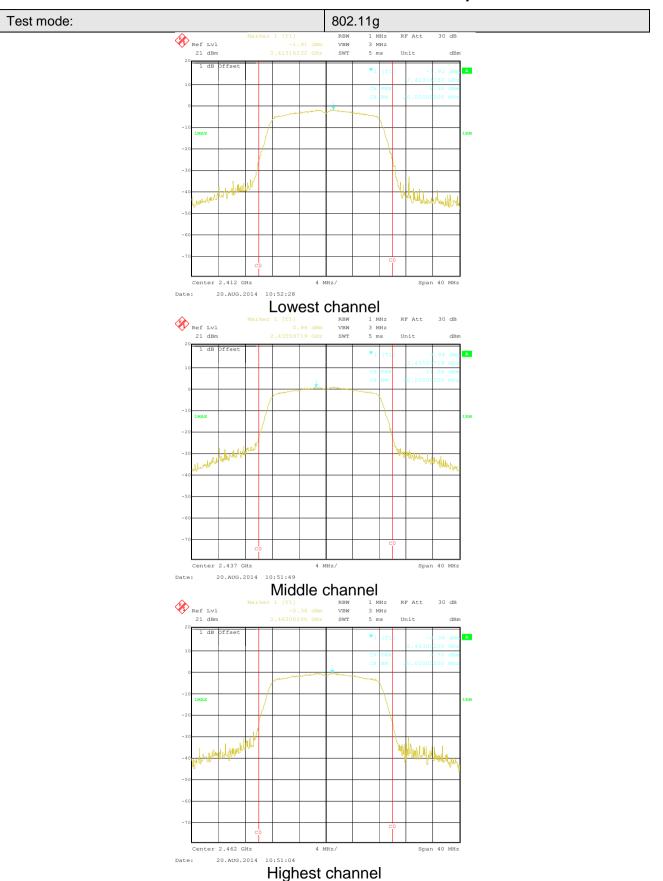
Test plot as follows:



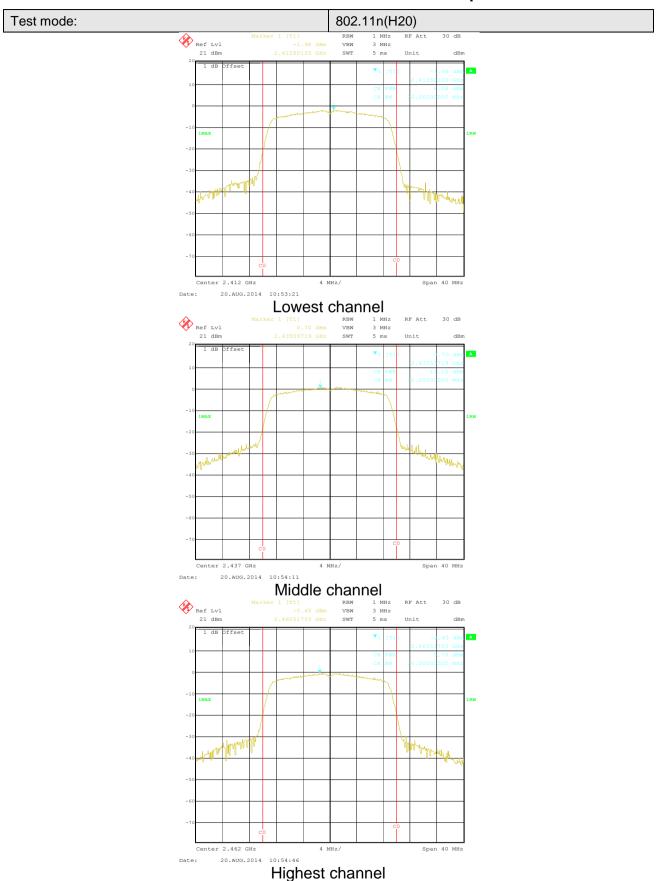


Highest channel

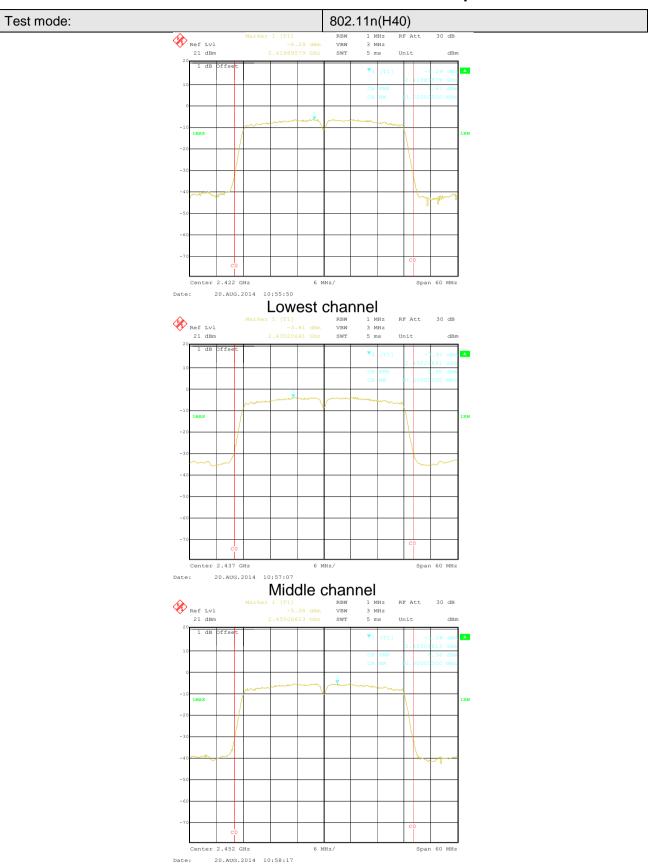












Highest channel



## 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  |  |  |

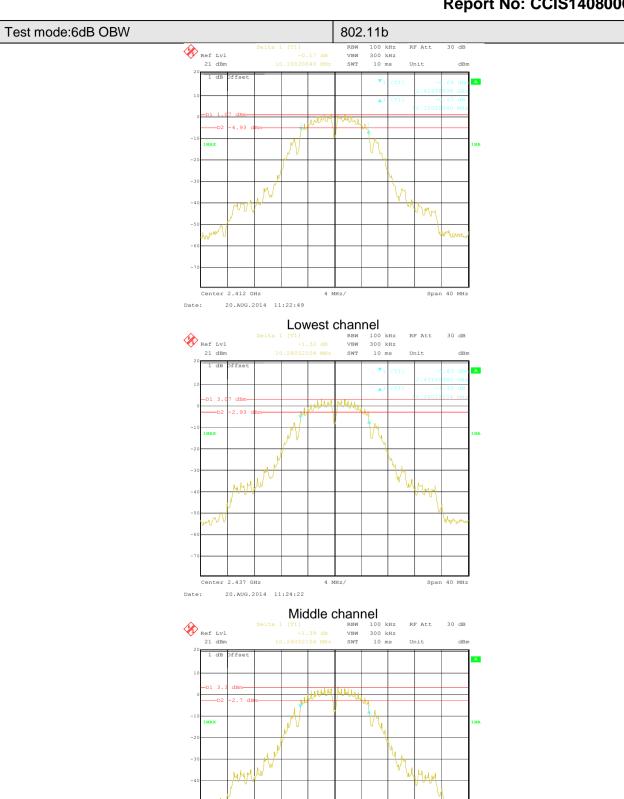
#### Measurement Data

| O.I.    |         | )       |              | <b>5</b>     |            |        |
|---------|---------|---------|--------------|--------------|------------|--------|
| Test CH | 802.11b | 802.11g | 802.11n(H20) | 802.11n(H40) | Limit(kHz) | Result |
| Lowest  | 10.10   | 16.51   | 17.88        | 36.55        |            |        |
| Middle  | 10.26   | 16.51   | 17.88        | 36.79        | >500       | Pass   |
| Highest | 10.26   | 16.51   | 17.80        | 36.79        |            |        |

|         |         | 99% Occupy |              | 5 "          |            |        |
|---------|---------|------------|--------------|--------------|------------|--------|
| Test CH | 802.11b | 802.11g    | 802.11n(H20) | 802.11n(H40) | Limit(kHz) | Result |
| Lowest  | 12.91   | 16.59      | 17.64        | 35.95        |            |        |
| Middle  | 12.99   | 16.43      | 17.64        | 35.95        | N/A        | N/A    |
| Highest | 13.15   | 16.59      | 17.64        | 35.95        |            |        |

Test plot as follows:



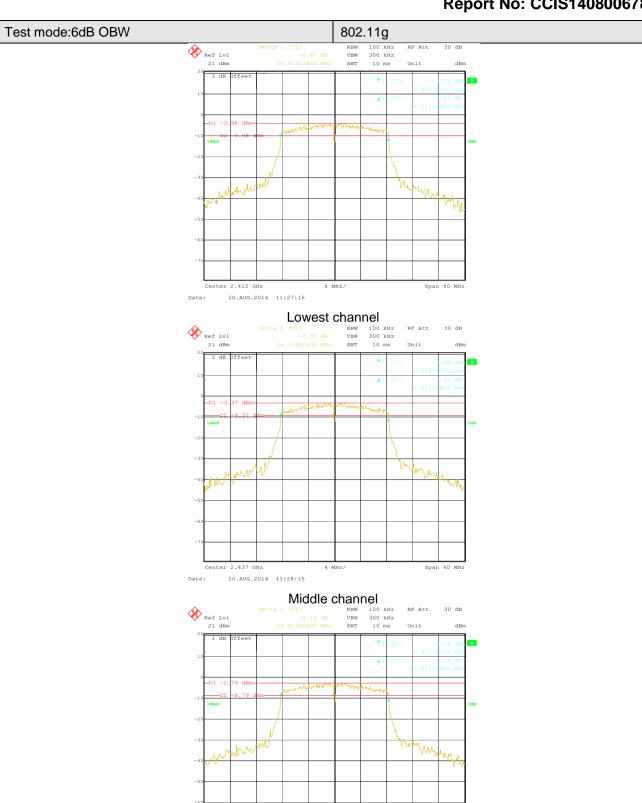


Highest channel

Center 2.462 GHz

21.AUG.2014 14:55:47



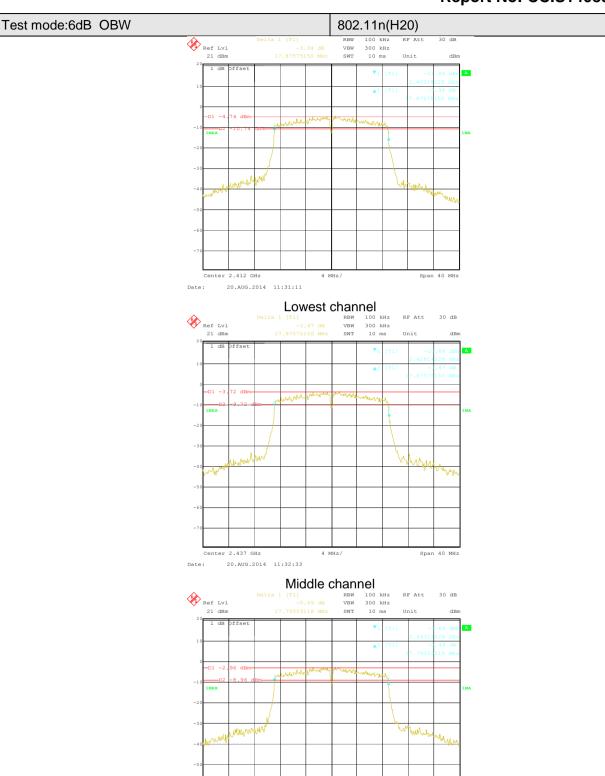


Highest channel

Center 2.462 GHz

20.AUG.2014 11:29:33

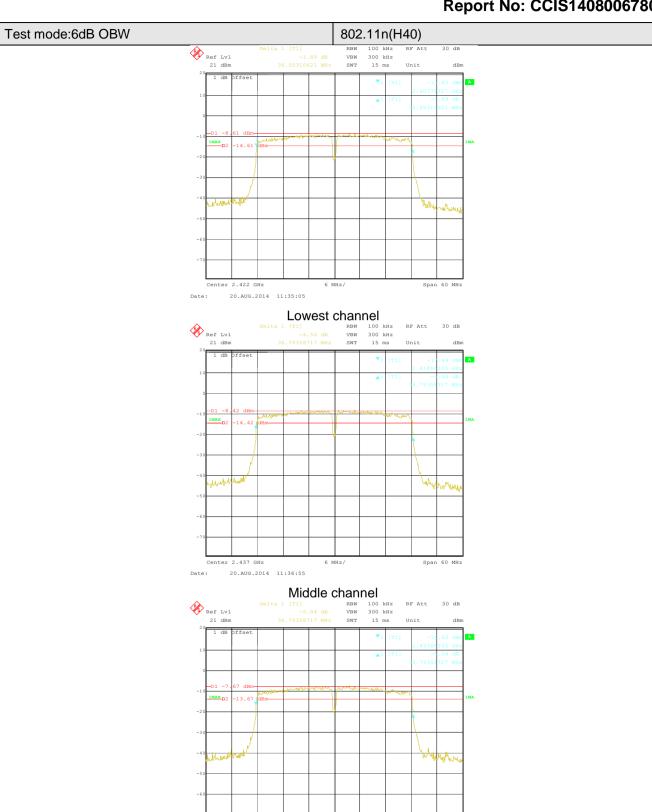




Highest channel

20.AUG.2014 11:33:39

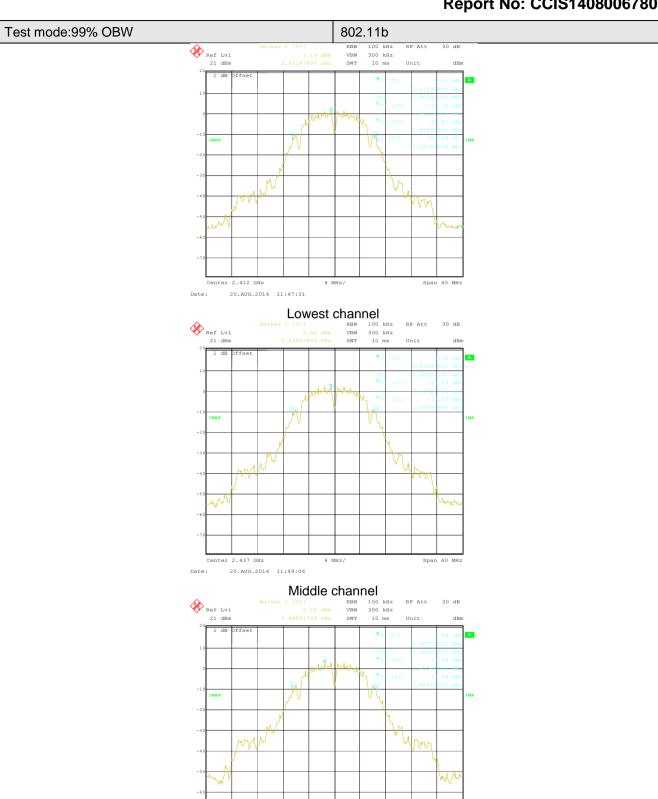




Highest channel

20.AUG.2014 11:38:40

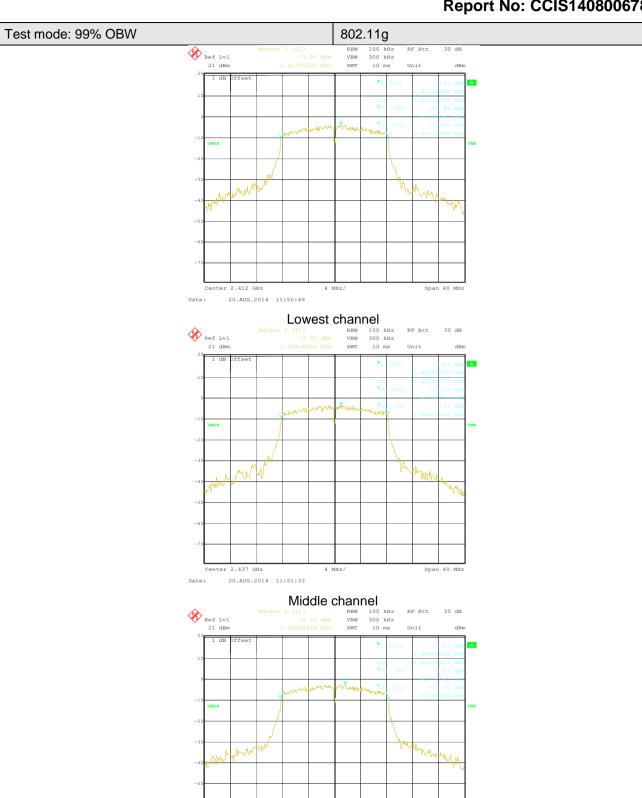




Highest channel

20.AUG.2014 11:49:53





Highest channel

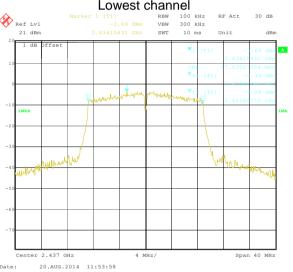
Center 2.462 GHz

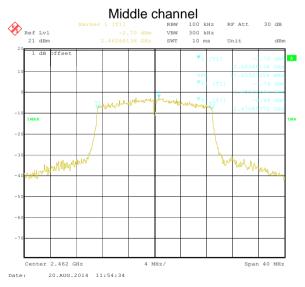


Test mode: 99% OBW

#### Report No: CCIS14080067803





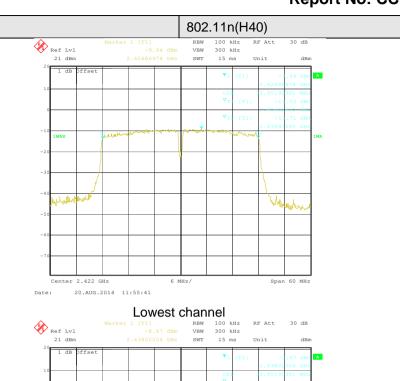


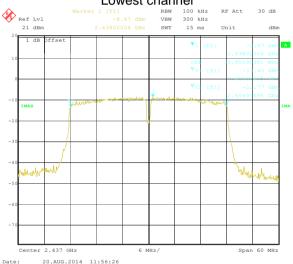
Highest channel

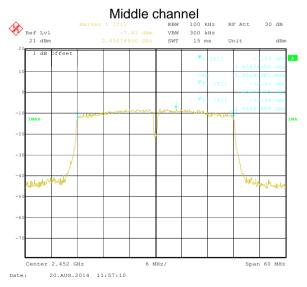


Test mode: 99% OBW

## Report No: CCIS14080067803







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:            | 8dBm  |  |  |
| 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

|         |         | Power Spec |              | <b>5</b>     |            |        |
|---------|---------|------------|--------------|--------------|------------|--------|
| Test CH | 802.11b | 802.11g    | 802.11n(H20) | 802.11n(H40) | Limit(dBm) | Result |
| Lowest  | 1.33    | -4.58      | -4.90        | -8.94        |            |        |
| Middle  | 2.00    | -3.20      | -3.33        | -8.33        | 8.00       | Pass   |
| Highest | 2.51    | -2.39      | -2.90        | -7.94        |            |        |

Test plot as follows:

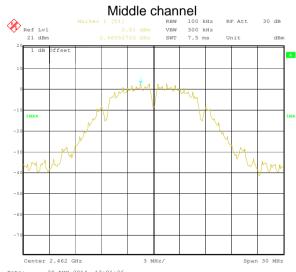


Test mode:

## Report No: CCIS14080067803





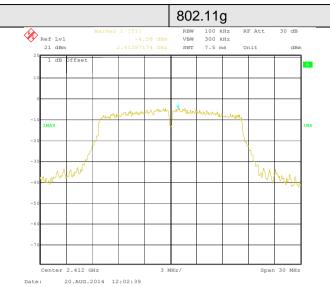


Highest channel

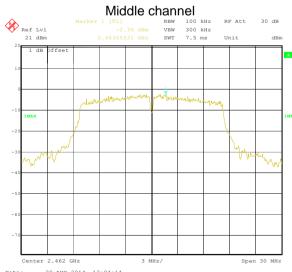


Test mode:

#### Report No: CCIS14080067803







Highest channel

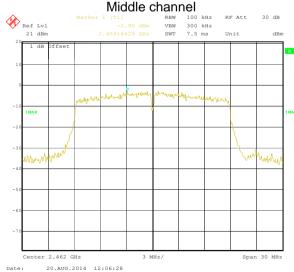


Test mode:

## Report No: CCIS14080067803

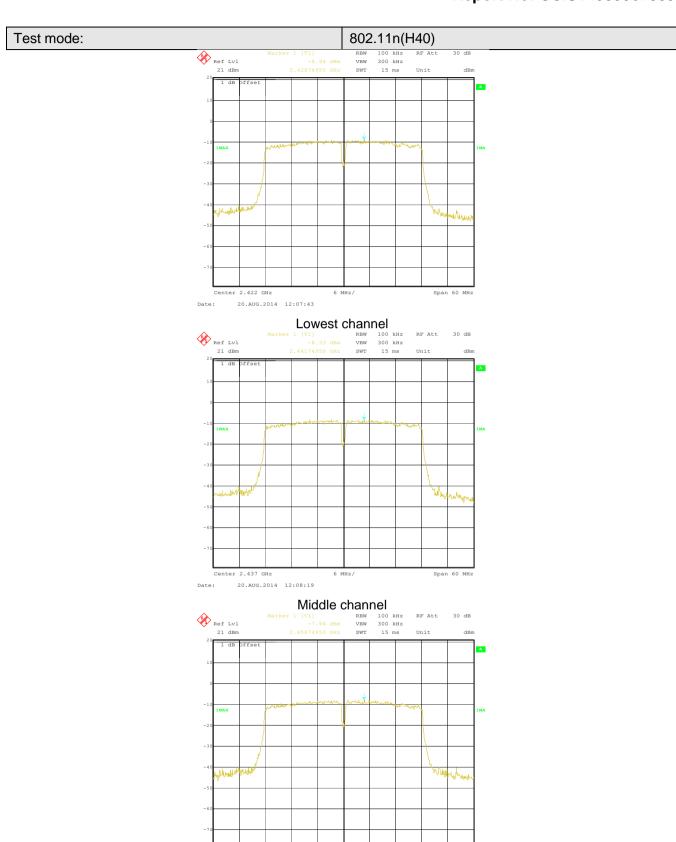






Highest channel





Highest channel

20.AUG.2014 12:08:50



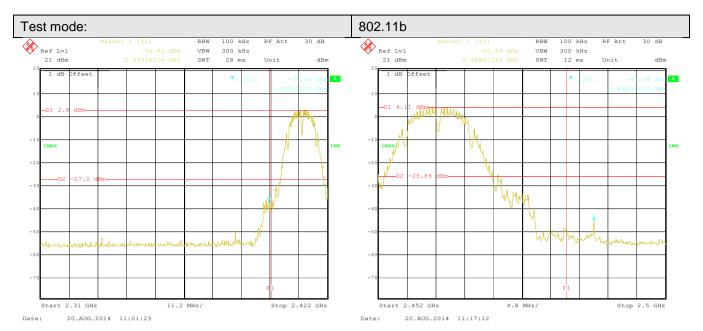
# 6.6 Band Edge

#### 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  |  |  |  |

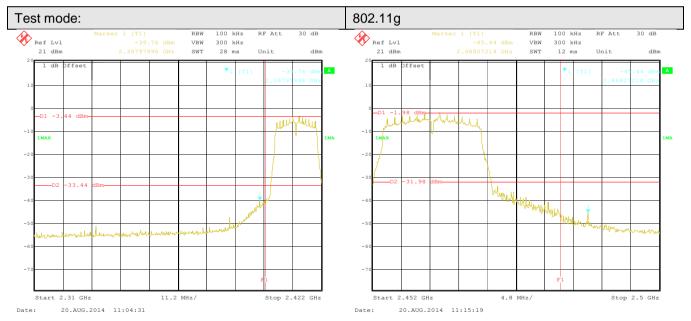
Test plot as follows:





Lowest channel

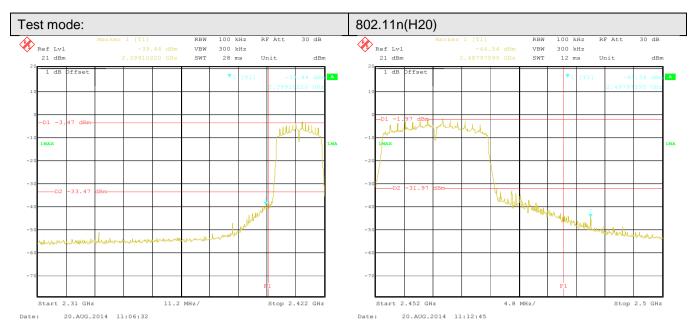
Highest channel



Lowest channel

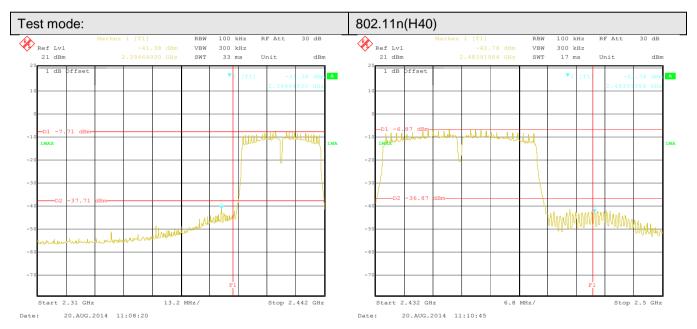
Highest channel





Lowest channel

Highest channel



Lowest channel

Highest channel



#### 6.6.2 Radiated Emission Method

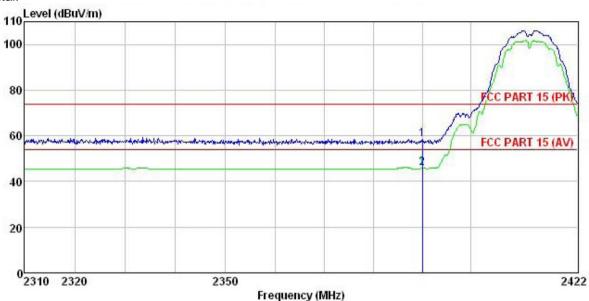
| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205  |                          |                              |                     |                                 |
|-----------------------|---|--------------------------|------------------------------|---------------------|---------------------------------|
| Test Method:          | ANSI C63.4: 2003  |                          |                              |                     |                                 |
| Test Frequency Range: | 2.3GHz to 2.5GHz  |                          |                              |                     |                                 |
| Test site:            | Measurement Distance: 3m  |                          |                              |                     |                                 |
| Receiver setup:       | Frequency Above 1GHz  | Detector<br>Peak<br>Peak | RBW<br>1MHz<br>1MHz          | VBW<br>3MHz<br>10Hz | Remark Peak Value Average Value |
| Limit:                | Freque<br>Above 1   | ncy                      | Limit (dBuV/<br>54.0<br>74.0 | ′m @3m)<br>0        | Remark Average Value Peak Value |
| Test Procedure:       | <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, quasipeak or average method as specified and then reported in a data</li> </ol> |                          |                              |                     |                                 |
| Test setup:           | Sheet.  Antenna Tower  Horn Antenna  Spectrum  Analyzer  Turn  Table  Amplifier   |                          |                              |                     |                                 |
| Test Instruments:     | Refer to section 5.6 for details  |                          |                              |                     |                                 |
| Test mode:            | Refer to section 5.3 for details  |                          |                              |                     |                                 |
| Test results:         | Passed  |                          |                              |                     |                                 |



## 802.11b

Test channel: Lowest

Horizontal:



Site

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

: Mobile phone EUT Model : A26 Test mode: Wifi B-L MODE
Power Rating: AC120V/60Hz
Environment: Temp:25.5°C H
Test Engineer: Garen

Huni:55%

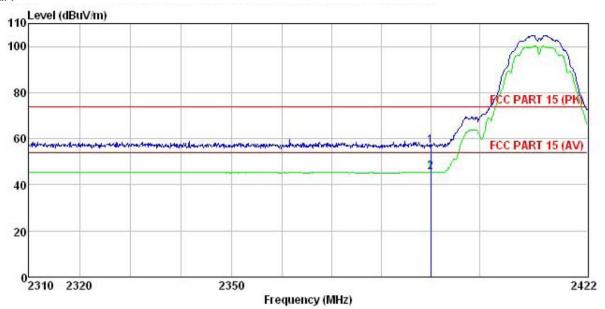
REMARK

1 2

| Freq                 |      | Antenna<br>Factor  |            |              |                     |        |            |      |
|----------------------|------|--|------------|--------------|---------------------|--------|------------|------|
| MHz                  | dBuV | <u>dB</u> /m   | ā <u>ā</u> | <u>d</u> B   | $\overline{dBuV/m}$ | dBuV/m | <u>d</u> B | <br> |
| 2390.000<br>2390.000 |      | 770 V. S. V. |            | 0.00<br>0.00 |                     |        |            |      |



### Vertical:



Site

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

Condition EUT

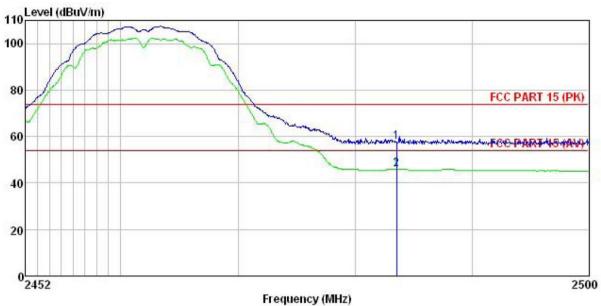
: A26
Test mode : Wifi B-L MODE
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Garen
REMARK :

| المالاد | 200                  |       | Antenna<br>Factor |            |              |        |        |           |  |
|---------|----------------------|-------|-------------------|------------|--------------|--------|--------|-----------|--|
| 4       | MHz                  | —dBuV | <u>dB</u> /m      | <u>d</u> B | <u>dB</u>    | dBuV/m | dBuV/m | <u>dB</u> |  |
|         | 2390.000<br>2390.000 |       |                   |            | 0.00<br>0.00 |        |        |           |  |



Test channel: Highest

Horizontal:



Site

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

EUT

Model : A26

Test mode : Wifi B-H MODE Power Rating : AC120V/60Hz Environment : Temp:25.5°C H

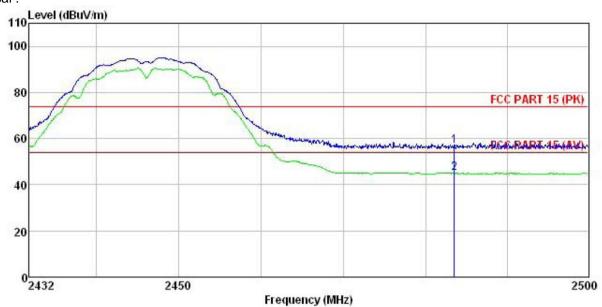
Huni:55%

Test Engineer: Garen REMARK :

|     |                      |  |  | Cable<br>Loss |           |        |        |           | Remark |
|-----|----------------------|--|--|---------------|-----------|--------|--------|-----------|--------|
|     | MHz                  | dBu₹   | <u>dB</u> /π   | <u>dB</u>     | <u>dB</u> | dBu√/m | dBuV/m | <u>dB</u> |        |
| 100 | 2483.500<br>2483.500 | A Part of the Control | The second secon |               |           |        |        |           |        |



### Vertical:



Site

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

Model : A26

Test mode : Wifi B-H MODE Power Rating : AC120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: Garen REMARK :

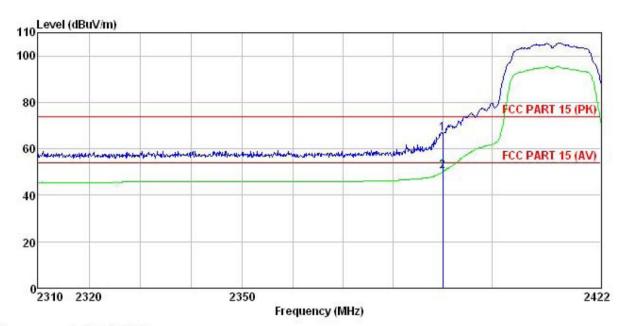
| Freq    |      |                | tenna Cable:<br>actor Loss: |        |  | Line | Limit |                 |
|---------|------|----------------|-----------------------------|--------|--|------|-------|-----------------|
| <br>MHz | dBu∜ |                | <u>d</u> B                  | dBuV/m |  |      |       |                 |
|         |      | 27.52<br>27.52 |                             | 0.00   |  |      |       | Peak<br>Average |



802.11g

Test channel: Lowest

### Horizontal:



Site

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

: Mobile phone EUT Model : A26

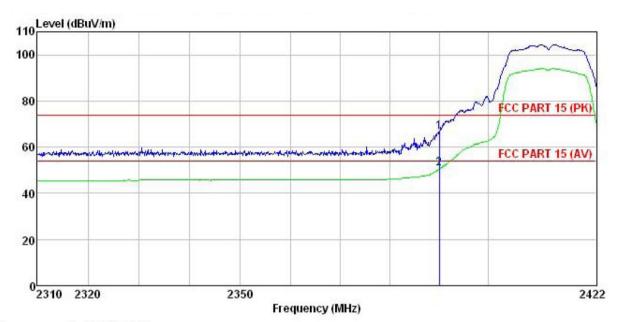
Test mode : Wifi G-L MODE
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%

Test Engineer: Garen REMARK :

| CHENIC |                      |      |                     |           |           |        |                     |               |                 |
|--------|----------------------|------|---------------------|-----------|-----------|--------|---------------------|---------------|-----------------|
|        | Freq                 |      | Antenna<br>Factor   |           |           |        | Limit<br>Line       | Over<br>Limit | Remark          |
|        | MHz                  | dBu∀ | <u>dB</u> /m        | <u>dB</u> | <u>ab</u> | dBuV/m | $\overline{dBuV/m}$ | <u>dB</u>     |                 |
| 1 2    | 2390.000<br>2390.000 |      | 75,900 TO 50,000 TO |           |           |        | 74.00<br>54.00      |               | Peak<br>Average |



## Vertical:



Site Condition

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

: Mobile phone EUT ## Model : Model ## Model ## Model ## Model ## Mode ## Model ##

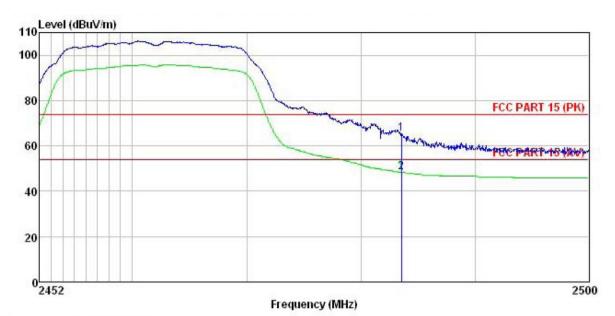
REMARK

|   | Freq                 |      |              |            | Preamp<br>Factor | Level  |                     |           |  |
|---|----------------------|------|--------------|------------|------------------|--------|---------------------|-----------|--|
| - | MHz                  | dBu₹ | <u>dB</u> /m | <u>d</u> B | <u>dB</u>        | dBuV/m | $\overline{dBuV/m}$ | <u>dB</u> |  |
|   | 2390.000<br>2390.000 |      |              |            |                  |        | 74.00<br>54.00      |           |  |



Test channel: Highest

## Horizontal:



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

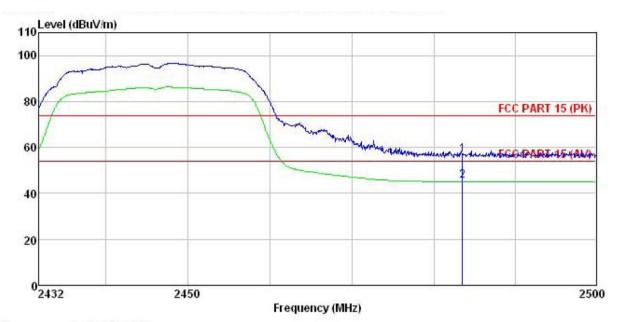
: Mobile phone EUT Model : A26 Test mode : Wifi G-H MODE Power Rating : AC120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: Garen REMARK

|      |          | Read  | Antenna | Cable     | Preamp      |        | Limit               |           |         |
|------|----------|-------|---------|-----------|-------------|--------|---------------------|-----------|---------|
|      | Freq     |       | Factor  |           |             |        |                     |           | Remark  |
|      | MHz      | —dBu∜ | dB/m    | <u>dB</u> | <u>dB</u>   | dBu√/m | $\overline{dBuV/m}$ | <u>dB</u> |         |
| 7656 | 2483.500 |       |         |           | - T120 T120 |        |                     |           |         |
| 2    | 2483.500 | 15.05 | 27.52   | 5, 70     | U. 00       | 48. 27 | 54.00               | -5.73     | Average |



## Vertical:



Site

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

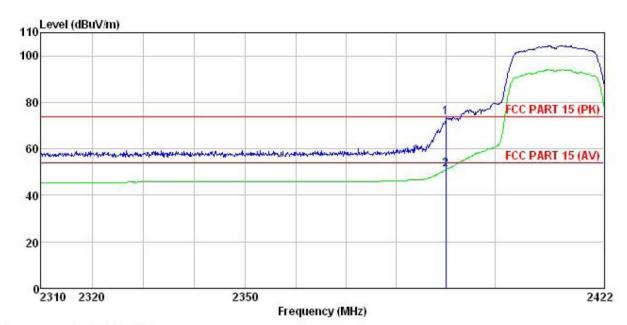
EUT

: A26
Test mode : Wifi G-H MODE
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Garen
REMARK :

| June |                      |       |        |           |           |        | Limit               |       | <u> </u> |  |
|------|----------------------|-------|--------|-----------|-----------|--------|---------------------|-------|----------|--|
|      | Freq                 | Level | Factor | Loss      | Factor    | Level  | Line                | Limit | Remark   |  |
|      | MHz                  | dBu₹  | dB/m   | <u>ab</u> | <u>dB</u> | dBuV/m | $\overline{dBuV/m}$ | dB    |          |  |
|      | 2483.500<br>2483.500 |       |        |           |           |        |                     |       |          |  |



802.11n (H20) Test channel: Lowest Horizontal:



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

EUT

Model : A26

: Wifi N20-L MODE Test mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C

Huni:55%

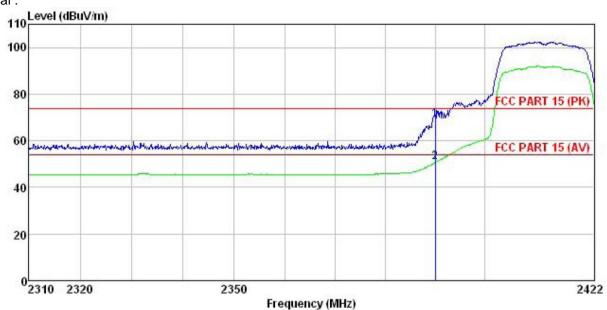
Test Engineer: Garen REMARK :

1 2

| 7 | Lan. |     |       |                    |            |            |                                 |                                |            |                 |  |
|---|------|-----|-------|--------------------|------------|------------|---------------------------------|--------------------------------|------------|-----------------|--|
|   | F    | req |       | Antenna<br>Factor  |            |            |                                 |                                |            |                 |  |
|   |      | MHz | —dBu₹ | $\overline{-dB/m}$ | <u>d</u> B | <u>d</u> B | $\overline{dB} \overline{uV/m}$ | $\overline{dB}\overline{uV/m}$ | <u>d</u> B |                 |  |
|   |      |     |       | 27.58<br>27.58     |            |            |                                 |                                |            | Peak<br>Average |  |



## Vertical:



Site

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

: Mobile phone EUT

Model

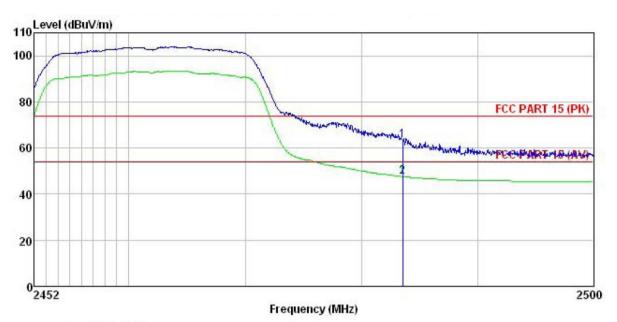
: A26 : Wifi N20-L MODE Test mode Power Rating: AC120V/60Hz Environment: Temp:25.5°C Huni:55% Test Engineer: Garen REMARK:

| CHIMA | r :       | Read  | Antenna      | Cable      | Preamn     |        | Limit  | Over      |         |
|-------|-----------|-------|--------------|------------|------------|--------|--------|-----------|---------|
|       | Freq      |       | Factor       |            |            |        |        |           |         |
| 9     | MHz       | dBu₹  | <u>dB</u> /m | <u>d</u> B | <u>d</u> B | dBuV/m | dBu√/m | <u>dB</u> |         |
| 1     | 2390.000  | 35.87 | 27.58        | 5.67       | 0.00       | 69.12  | 74.00  | -4.88     | Peak    |
| 2     | 2390, 000 | 17.61 | 27, 58       | 5, 67      | 0.00       | 50, 86 | 54,00  | -3.14     | Average |



Test channel: Highest

Horizontal:



Site

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

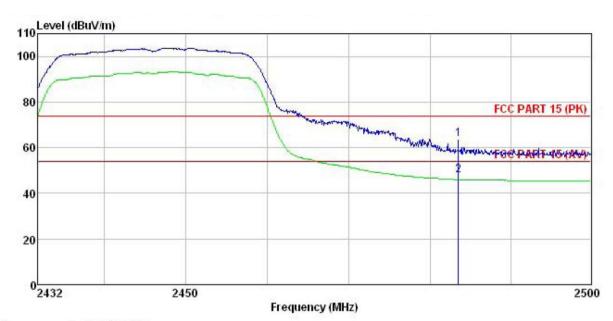
: Mobile phone

Model : A26
Test mode : Wifi N20-H MODE
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer: Garen
REMARK :

| יוטוונים | n .                  | Read  | Antenna                      | Cable     | Preamp     |                     | Limit               | Over      |        |
|----------|----------------------|-------|------------------------------|-----------|------------|---------------------|---------------------|-----------|--------|
|          | Freq                 | Level | Factor                       | Loss      | Factor     | Level               | Line                | Limit     | Remark |
|          | MHz                  | dBu₹  | $\overline{dB}/\overline{m}$ | <u>dB</u> | <u>d</u> B | $\overline{dBuV/m}$ | $\overline{dBuV/m}$ | <u>dB</u> |        |
| 1 2      | 2483.500<br>2483.500 |       |                              |           | 0.00       |                     |                     |           |        |



## Vertical:



Site Condition

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

EUT : Mobile phone

Model : A26
Test mode : Wifi N20-H MODE
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%

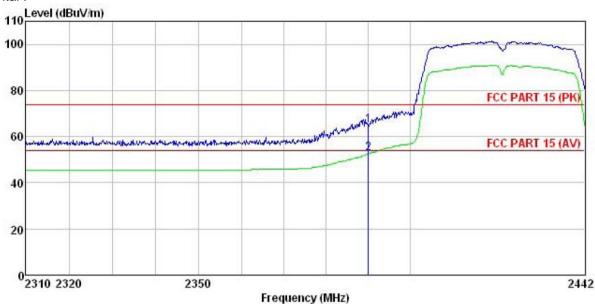
Test Engineer: Garen REMARK :

| EMAR | r :                  | Read  | Antenna | Cable | Preamp    |                | Limit  | Over  |        |
|------|----------------------|-------|---------|-------|-----------|----------------|--------|-------|--------|
|      | Freq                 | Level | Factor  | Loss  | Factor    | Level          | Line   | Limit | Remark |
|      | MHz                  | dBu₹  | dB/m    | dB    | <u>dB</u> | dBuV/m         | dBuV/m | dB    |        |
| 1 2  | 2483.500<br>2483.500 |       |         |       |           | 63.54<br>47.72 |        |       |        |



802.11n (H40) Test channel: Lowest

Horizontal:



Site

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

EUT : Mobile phone

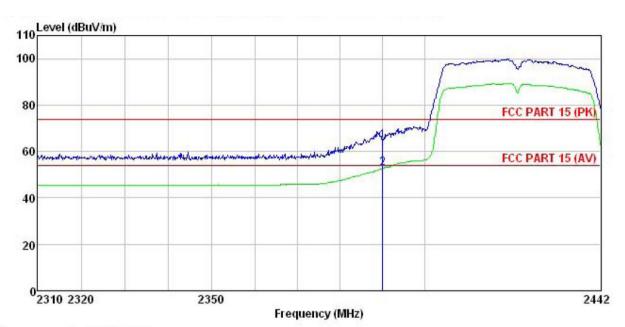
: A26 Model

Test mode: Wifi N40-L MODE
Power Rating: AC120V/60Hz
Environment: Temp: 25.5°C Huni: 55%
Test Engineer: Garen

| SJIGH. |                      |      | Antenna<br>Factor |      |                |        |  | Remark          |
|--------|----------------------|------|-------------------|------|----------------|--------|--|-----------------|
|        | MHz                  | dBu₹ | dB/m              | <br> | dBuV/m         | dBuV/m |  |                 |
| 100    | 2390.000<br>2390.000 |      |                   |      | 64.83<br>52.63 |        | A Prince of the Paris of the Pa | Peak<br>Average |



## Vertical:



Site

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

EUT

Model : A26

Test mode : Wifi N40-L MODE
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%

Test Engineer: Garen REMARK :

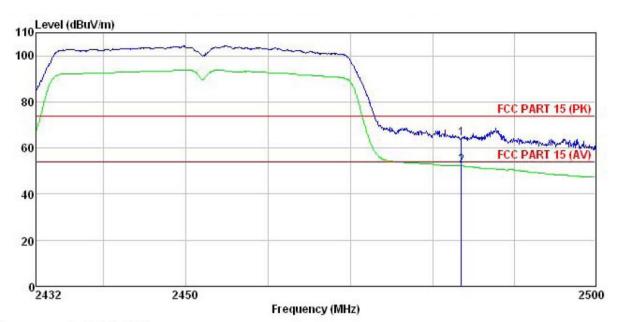
1 2

| $m_{IJ}$ |          |       |                   |            |           |        |                     |            |         |  |
|----------|----------|-------|-------------------|------------|-----------|--------|---------------------|------------|---------|--|
|          | Freq     |       | Antenna<br>Factor |            |           |        | Limit<br>Line       |            | Remark  |  |
| -        | MHz      | dBuV  |                   | <u>d</u> B | <u>dB</u> | dBuV/m | $\overline{dBuV/m}$ | <u>d</u> B |         |  |
|          | 2390.000 | 31.44 | 27.58             | 5.67       | 0.00      | 64.69  | 74.00               | -9.31      | Peak    |  |
|          | 2390.000 | 19.51 | 27.58             | 5.67       | 0.00      | 52.76  | 54.00               | -1.24      | Average |  |



Test channel: Highest

Horizontal:



Site

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

EUT

Model : A26

: Wifi N40-H MODE Test mode

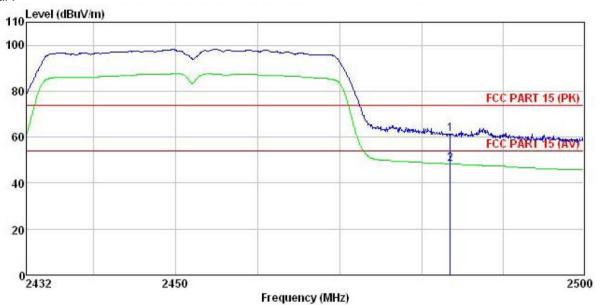
Power Rating : AC120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: Garen REMARK :

|                      |      | Antenna<br>Factor |    |            |        |                     |    | Remark |
|----------------------|------|-------------------|----|------------|--------|---------------------|----|--------|
| MHz                  | dBuV | dB/m              | dB | <u>d</u> B | dBuV/m | $\overline{dBuV/m}$ | dB |        |
| 2483.500<br>2483.500 |      |                   |    |            |        | 74.00<br>54.00      |    |        |



## Vertical:



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

EUT : Mobile phone

: A26 Model

: Wifi N40-H MODE Test mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C Huni:55%

Test Engineer: Garen REMARK :

| 4, | •                      | Read | Ant enna | Cable     | Preamn    |        | Limit  | Over      |                 |   |
|----|------------------------|------|----------|-----------|-----------|--------|--------|-----------|-----------------|---|
|    | Freq                   |      | Factor   |           |           |        |        |           |                 |   |
|    | MHz                    | dBuV | dB/m     | <u>dB</u> | <u>dB</u> | dBuV/m | dBuV/m | <u>dB</u> |                 | - |
|    | 2483, 500<br>2483, 500 |      |          |           | 0.00      |        |        |           | Peak<br>Average |   |

## Remark:

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



# 6.7 Spurious Emission

# 6.7.1 Conducted Emission Method

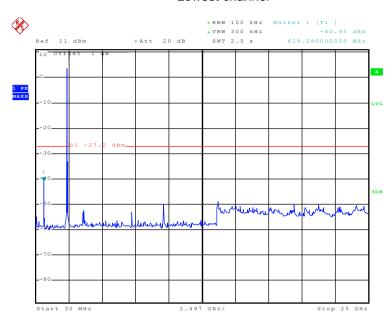
| Test Requirement: | FCC Part15 C Section 15.247 (d)   |  |  |  |  |  |  |
|-------------------|---|--|--|--|--|--|--|
| Test Method:      | ANSI C63.4:2003 and KDB558074   |  |  |  |  |  |  |
| Limit:            | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 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:



Test mode: 802.11b

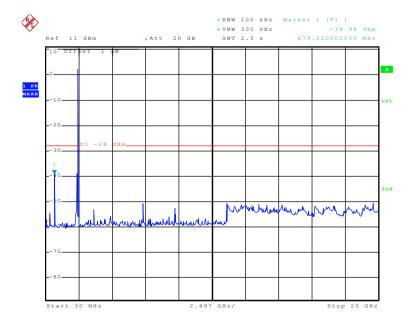
## Lowest channel



Date: 27.AUG.2014 14:54:58

30MHz~25GHz

# Middle channel

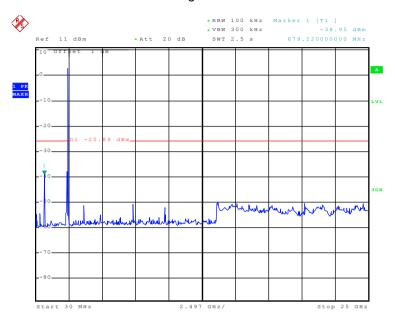


Date: 27.AUG.2014 14:56:20

30MHz~25GHz



## Highest channel

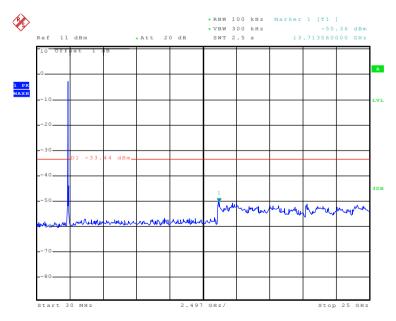


Date: 27.AUG.2014 14:56:39

30MHz~25GHz

Test mode: 802.11g

## Lowest channel

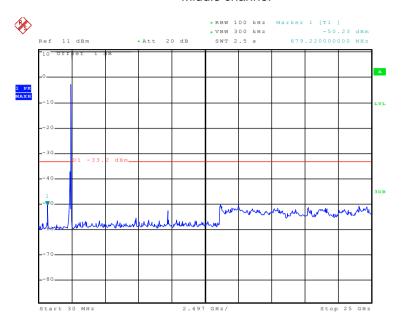


Date: 27.AUG.2014 14:58:28

30MHz~25GHz



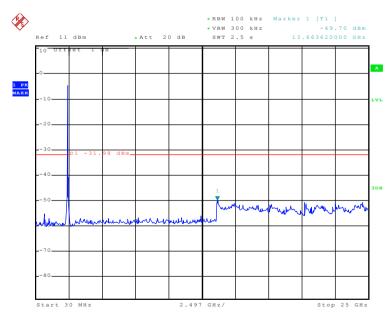
#### Middle channel



Date: 27.AUG.2014 14:59:09

## 30MHz~25GHz

## Highest channel



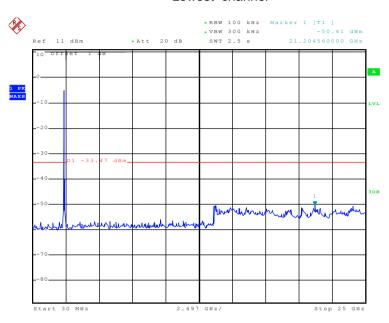
Date: 27.AUG.2014 15:00:06

30MHz~25GHz



Test mode: 802.11n(H20)

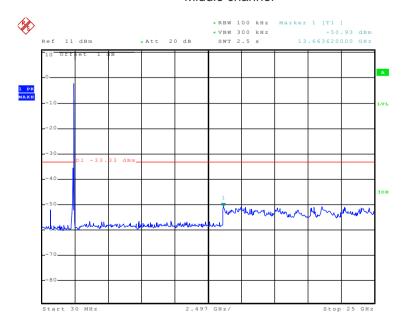
### Lowest channel



Date: 27.AUG.2014 15:03:08

## 30MHz~25GHz

## Middle channel

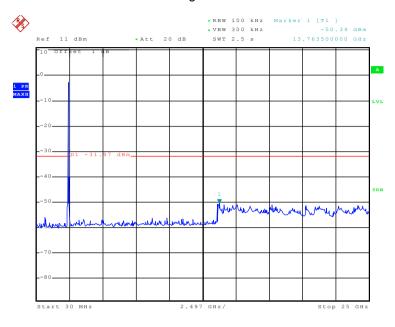


Date: 27.AUG.2014 15:02:40

30MHz~25GHz



## Highest channel

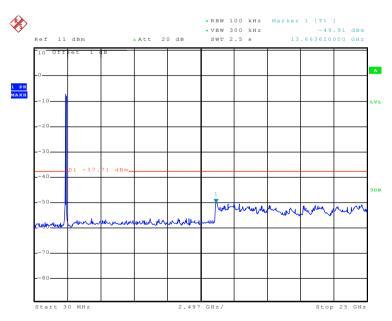


Date: 27.AUG.2014 15:03:31

30MHz~25GHz

Test mode: 802.11n(H40)

## Lowest channel

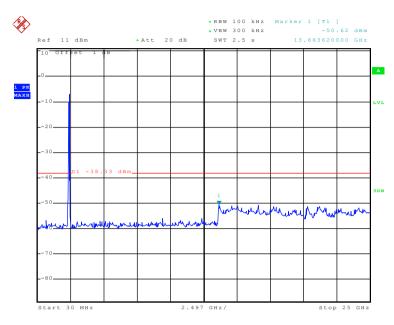


Date: 27.AUG.2014 15:04:25

30MHz~25GHz



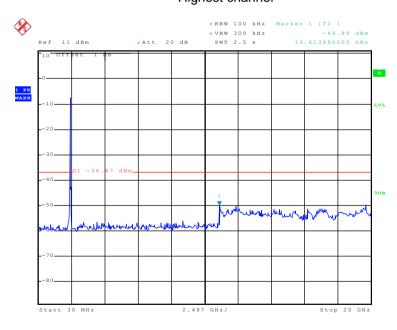
### Middle channel



Date: 27.AUG.2014 15:04:48

## 30MHz~25GHz

## Highest channel



Date: 27.AUG.2014 15:05:15

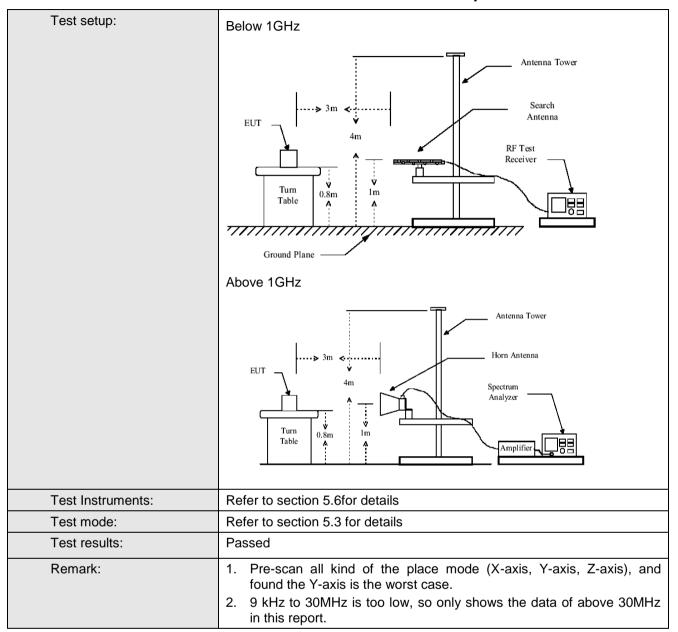
30MHz~25GHz



# 6.7.2 Radiated Emission Method

| Test Requirement:     | FCC Part15 C S  | Section 15.209   | and 15.205   |  |  |  |  |  |  |
|-----------------------|---|--|--|--|--|--|--|--|--|
| Test Method:          | ANSI C63.4:200  | )3   |  |  |  |  |  |  |  |
| Test Frequency Range: | 9KHz to 25GHz   |  |  |  |  |  |  |  |  |
| Test site:            | Measurement D   | istance: 3m  |  |  |  |  |  |  |  |
| Receiver setup:       |   |  |  |  |  |  |  |  |  |
| ·                     | Frequency   | Detector   | RBW  | VBW  | Remark   |  |  |  |  |
|                       | 30MHz-1GHz  | Quasi-peak   | 120KHz   | 300KHz   | Quasi-peak Value   |  |  |  |  |
|                       | Above 1GHz  | Peak   | 1MHz   | 3MHz   | Peak Value   |  |  |  |  |
|                       | 7.0010 101.1  | Peak   | 1MHz   | 10Hz   | Average Value  |  |  |  |  |
| Limit:                |   |  |  | / 00 )   |  |  |  |  |  |
|                       | Frequency Limit (dBuV/m @3m) Remark   |  |  |  |  |  |  |  |  |
|                       | 30MHz-88MHz 40.0 Quasi-peak Value   |  |  |  |  |  |  |  |  |
|                       | 88MHz-216MHz 43.5 Quasi-peak Value 216MHz-960MHz 46.0 Quasi-peak Value  |  |  |  |  |  |  |  |  |
|                       | 960MHz-9  |  | 54.0<br>54.0   |  | Quasi-peak Value   |  |  |  |  |
|                       |   |  | 54.0   |  | Average Value  |  |  |  |  |
|                       | Above 1   | GHz  | 74.0   |  | Peak Value   |  |  |  |  |
| Test Procedure:       | the ground to determin 2. The EUT wantenna, watower. 3. The antenrathe ground Both horizon make the numbers and to find the number should be specified Euther in the limit spof the EUT have 10dB | at a 3 meter come the position was set 3 meter which was mount a height is varied to determine to the and vertice measurement. If the rota table maximum read ceiver system and width with sion level of the ecified, then te would be reported to the position of the would be reported to the terminal than the sion level of the ecified, then the would be reported to the terminal than the sion level of the ecified, then the would be reported to the terminal than the sion level of the would be reported to the terminal than the sion level of the would be reported to the terminal than the sion level of the would be reported to the terminal than the sion level of the would be reported to the terminal than the sion level of the would be reported to the terminal than the sion level of the terminal than the sion level of the would be reported to the terminal than the sion level of the world than the w | the top of a reamber. The famber. The famber. The famber is away from the don the total famber in the maximum and polarizations in the EU was turned famber in peasing could borted. Otherwas be re-tested | otating table table was restradiation. The interferop of a variate meter to for a value of the ons of the art to heights from 0 degreak Detect old Mode. It was arranged and the estopped arise the emitone by one | e 0.8 meters above otated 360 degrees rence-receiving able-height antenna our meters above the field strength. Intenna are set to a set to |  |  |  |  |

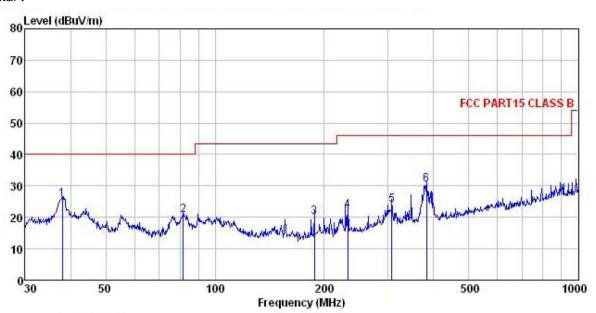






## **Below 1GHz**

Horizontal:



Site

: 3m chamber : FCC PART15 CLASS B 3m VULB9163(30M1G) HORIZONTAL : Mobile Phone Condition

EUT

: A26 : WIFI Mode Model Test mode Power Rating : AC120V/60Hz Environment : Temp:25.5°C

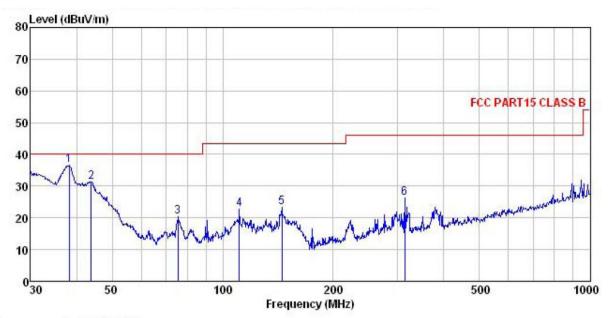
Huni:55%

Test Engineer: REMARK :

| THUTTE           |          |       |                    |            |            |                     |        |            |    |
|------------------|----------|-------|--------------------|------------|------------|---------------------|--------|------------|----|
|                  | Freq     |       | Antenna<br>Factor  |            |            |                     |        |            |    |
|                  | MHz      | dBu₹  | $\overline{-dB/m}$ | <u>d</u> B | <u>d</u> B | $\overline{dBuV/m}$ | dBuV/m | <u>d</u> B |    |
| 1                | 37.945   | 41.98 | 13.06              | 0.50       | 29.92      | 25.62               | 40.00  | -14.38     | QP |
| 2                | 81.783   | 40.21 | 9.28               | 0.86       | 29.63      | 20.72               | 40.00  | -19.28     | QP |
| 2<br>3<br>4<br>5 | 187.753  | 37.28 | 10.32              | 1.37       | 28.92      | 20.05               | 43.50  | -23.45     | QP |
| 4                | 231.718  | 37.39 | 11.72              | 1.54       | 28.64      | 22.01               | 46.00  | -23.99     | QP |
| 5                | 306.754  | 37.30 | 13.15              | 1.79       | 28.47      | 23.77               | 46.00  | -22.23     | QP |
| 6                | 382, 588 | 42.30 | 14 68              | 2.06       | 28, 70     | 30, 34              | 46,00  | -15.66     | OP |



## Vertical:



Site

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

EUT

: A26

Test mode : WIFI Mode
Power Rating : AC120V/60Hz
Environment : Temp:25.5°C Huni:55%
Test Engineer:
REMARK :

|   | Freq     |       | Antenna<br>Factor |            |           |        |        |           |    |
|---|----------|-------|-------------------|------------|-----------|--------|--------|-----------|----|
| _ | MHz      | dBu₹  |                   | <u>d</u> B | <u>ab</u> | dBuV/m | dBuV/m | <u>dB</u> |    |
| 1 | 38.212   | 52.80 | 13.15             | 0.51       | 29.92     | 36.54  | 40.00  | -3.46     | QP |
| 2 | 43.812   | 47.18 | 13.56             | 0.55       | 29.87     | 31.42  | 40.00  | -8.58     | QP |
| 3 | 75.446   | 41.34 | 7.91              | 0.82       | 29.68     | 20.39  | 40.00  | -19.61    | QP |
| 4 | 110.957  | 39.14 | 12.04             | 1.05       | 29.45     | 22.78  | 43.50  | -20.72    | QP |
| 5 | 144.842  | 43.05 | 8.23              | 1.29       | 29.25     | 23.32  | 43.50  | -20.18    | QP |
| 6 | 313, 276 | 39.83 | 13.24             | 1.82       | 28.48     | 26.41  | 46.00  | -19.59    | QP |



## **Above 1GHz**

| Test mode: 80      | Test mode: 802.11b      |                             |                    | el: Lowest            |                   | 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 |
| 4824.00            | 46.19                   | 31.53                       | 8.90               | 40.24                 | 46.38             | 74.00                  | -27.62             | Vertical     |
| 4824.00            | 46.76                   | 31.53                       | 8.90               | 40.24                 | 46.95             | 74.00                  | -27.05             | Horizontal   |

| Test mode: 80      | 02.11b                  |                             | Test channe        | el: Lowest            |                   | 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 |
| 4824.00            | 36.03                   | 31.53                       | 8.90               | 40.24                 | 36.22             | 54.00                  | -17.78             | Vertical     |
| 4824.00            | 36.19                   | 31.53                       | 8.90               | 40.24                 | 36.38             | 54.00                  | -17.62             | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 80      | 2.11b                   |                             | Test channel: Middle |                       |                   | 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<br>Limit (dB) | polarization |
| 4874.00            | 46.19                   | 31.58                       | 8.98                 | 40.15                 | 46.60             | 74.00                  | -27.40             | Vertical     |
| 4874.00            | 45.75                   | 31.58                       | 8.98                 | 40.15                 | 46.16             | 74.00                  | -27.84             | Horizontal   |

| Test mode: 80      | 2.11b                   |                             | Test channe        | el: Middle            |                   | 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>Limit (dB) | polarization |
| 4874.00            | 36.46                   | 31.58                       | 8.98               | 40.15                 | 36.87             | 54.00                  | -17.13             | Vertical     |
| 4874.00            | 35.57                   | 31.58                       | 8.98               | 40.15                 | 35.98             | 54.00                  | -18.02             | Horizontal   |

## Remark:

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802     | Test mode: 802.11b      |                             |                    | el: Highest              |                   | Remark: P              | eak                |              |  |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|------------------------|--------------------|--------------|--|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit (dB) | polarization |  |
| 4924.00            | 45.29                   | 31.69                       | 9.08               | 40.03                    | 46.03             | 74.00                  | -27.97             | Vertical     |  |
| 4924.00            | 46.10                   | 31.69                       | 9.08               | 40.03                    | 46.84             | 74.00                  | -27.16             | Horizontal   |  |

| Test mode: 802     | 2.11b                   |                             | Test channe        | el: Highest              |                   | Remark: Average        |                    |              |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over<br>Limit (dB) | polarization |
| 4924.00            | 35.24                   | 31.69                       | 9.08               | 40.03                    | 35.98             | 54.00                  | -18.02             | Vertical     |
| 4924.00            | 36.01                   | 31.69                       | 9.08               | 40.03                    | 36.75             | 54.00                  | -17.25             | Horizontal   |

### Remark:

- 1. Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 80      | Test mode: 802.11g      |                             |                    | : Lowest                 |                   | Remark: F              | Remark: Peak       |              |  |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|------------------------|--------------------|--------------|--|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |  |
| 4824.00            | 45.40                   | 31.53                       | 8.90               | 40.24                    | 45.59             | 74.00                  | -28.41             | Vertical     |  |
| 4824.00            | 44.69                   | 31.53                       | 8.90               | 40.24                    | 44.88             | 74.00                  | -29.12             | Horizontal   |  |

| Test mode: 802.11g |                         |                             | Test channel       | : Lowest                 |                   | Remark: A              | Average            |              |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable Loss<br>(dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4824.00            | 35.32                   | 31.53                       | 8.90               | 40.24                    | 35.51             | 54.00                  | -18.49             | Vertical     |
| 4824.00            | 34.57                   | 31.53                       | 8.90               | 40.24                    | 34.76             | 54.00                  | -19.24             | Horizontal   |

## Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802     | 2.11g                   |                             | Test chann         | el: Middle            |                   | Remark: P              | eak                |              |
|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4874.00            | 45.52                   | 31.58                       | 8.98               | 40.15                 | 45.93             | 74.00                  | -28.07             | Vertical     |
| 4874.00            | 45.45                   | 31.58                       | 8.98               | 40.15                 | 45.86             | 74.00                  | -28.14             | Horizontal   |

| Test mode: 802     | 2.11g                   |                             | Test chann         | el: Middle               |                   | Remark: A              | verage             |              |
|--------------------|-------------------------|-----------------------------|--------------------|--------------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Preamp<br>Factor<br>(dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4874.00            | 35.47                   | 31.58                       | 8.98               | 40.15                    | 35.88             | 54.00                  | -18.12             | Vertical     |
| 4874.00            | 35.36                   | 31.58                       | 8.98               | 40.15                    | 35.77             | 54.00                  | -18.23             | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 8       | Test mode: 802.11g   |                             |                    | el: Highest           |                   | 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 |
| 4924.00            | 46.46                | 31.69                       | 9.08               | 40.03                 | 47.20             | 74.00                  | -26.80             | Vertical     |
| 4924.00            | 46.39                | 31.69                       | 9.08               | 40.03                 | 47.13             | 74.00                  | -26.87             | Horizontal   |

| Test mode: 8       | Test mode: 802.11g   |                             | Test channe        | el: Highest           |                   | Remark: Average        |                    |              |
|--------------------|----------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| 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 |
| 4924.00            | 36.22                | 31.69                       | 9.08               | 40.03                 | 36.96             | 54.00                  | -17.04             | Vertical     |
| 4924.00            | 36.35                | 31.69                       | 9.08               | 40.03                 | 37.09             | 54.00                  | -16.91             | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802.    | Test mode: 802.11n(H20) |                             |                    | el: Lowest            |                   | Remark: P              | 'eak               |              |
|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| 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 |
| 4824.00            | 46.17                   | 31.53                       | 8.90               | 40.24                 | 46.36             | 74.00                  | -27.64             | Vertical     |
| 4824.00            | 46.59                   | 31.53                       | 8.90               | 40.24                 | 46.78             | 74.00                  | -27.22             | Horizontal   |

| Test mode: 802     | .11n(H20)               |                             | Test chann         | el: Lowest            |                   | Remark: A              | 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 |  |
| 4824.00            | 35.86                   | 31.53                       | 8.90               | 40.24                 | 36.05             | 54.00                  | -17.95             | Vertical     |  |
| 4824.00            | 35.96                   | 31.53                       | 8.90               | 40.24                 | 36.15             | 54.00                  | -17.85             | Horizontal   |  |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802     | Test mode: 802.11n(H20) |                             |                    | el: Middle            |                   | 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 |
| 4874.00            | 45.78                   | 31.58                       | 8.98               | 40.15                 | 46.19             | 74.00                  | -27.81             | Vertical     |
| 4874.00            | 46.17                   | 31.58                       | 8.98               | 40.15                 | 46.58             | 74.00                  | -27.42             | Horizontal   |

| Test mode: 802     | .11n(H20)               |                             | Test channe        | el: Middle            |                   | Remark: A              | Remark: Average    |              |  |
|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|--|
| Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |  |
| 4874.00            | 35.54                   | 31.58                       | 8.98               | 40.15                 | 35.95             | 54.00                  | -18.05             | Vertical     |  |
| 4874.00            | 36.63                   | 31.58                       | 8.98               | 40.15                 | 37.04             | 54.00                  | -16.96             | Horizontal   |  |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802.11n(H20) |                         |                             | Test chann         | el: Highest           |                   | 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 |
| 4924.00                 | 45.87                   | 31.69                       | 9.08               | 40.03                 | 46.61             | 74.00                  | -27.39             | Vertical     |
| 4924.00                 | 46.24                   | 31.69                       | 9.08               | 40.03                 | 46.98             | 74.00                  | -27.02             | Horizontal   |

| Test mode: 802.11n(H20) |                    |                         | Test chann                  | el: Highest        |                       | Remark: Average   |                        |                    |              |
|-------------------------|--------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| ı                       | Frequency<br>(MHz) | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
|                         | 4924.00            | 34.16                   | 31.69                       | 9.08               | 40.03                 | 34.90             | 54.00                  | -19.10             | Vertical     |
|                         | 4924.00            | 36.26                   | 31.69                       | 9.08               | 40.03                 | 37.00             | 54.00                  | -17.00             | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802.11n(H40) |                         |                             | Test channel: Lowest |                       |                   | 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 |
| 4844.00                 | 45.46                   | 31.53                       | 8.90                 | 40.24                 | 45.65             | 74.00                  | -28.35             | Vertical     |
| 4844.00                 | 46.01                   | 31.53                       | 8.90                 | 40.24                 | 46.20             | 74.00                  | -27.80             | Horizontal   |

| Test mode: 802.11n(H40) |                         |                             | Test channel: Lowest |                       |                   | 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 |
| 4844.00                 | 35.47                   | 31.53                       | 8.90                 | 40.24                 | 35.66             | 54.00                  | -18.34             | Vertical     |
| 4844.00                 | 36.19                   | 31.53                       | 8.90                 | 40.24                 | 36.38             | 54.00                  | -17.62             | Horizontal   |

### Remark:

- 1、 Final Level = Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802.11n(H40) |                         |                             | Test channe        | el: Middle            |                   | 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 |
| 4874.00                 | 45.78                   | 31.58                       | 8.98               | 40.15                 | 46.19             | 74.00                  | -27.81             | Vertical     |
| 4874.00                 | 45.35                   | 31.58                       | 8.98               | 40.15                 | 45.76             | 74.00                  | -28.24             | Horizontal   |

| Test mode: 802.11n(H40) |                         |                             | Test channel: Middle |                       |                   | Remark: Average        |                    |              |
|-------------------------|-------------------------|-----------------------------|----------------------|-----------------------|-------------------|------------------------|--------------------|--------------|
| Frequency<br>(MHz)      | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB)   | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |
| 4874.00                 | 35.46                   | 31.58                       | 8.98                 | 40.15                 | 35.87             | 54.00                  | -18.13             | Vertical     |
| 4874.00                 | 35.67                   | 31.58                       | 8.98                 | 40.15                 | 36.08             | 54.00                  | -17.92             | Horizontal   |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| Test mode: 802.11n(H40) |                         |                             | Test chann         | el: Highest           |                   | 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 |
| 4904.00                 | 47.00                   | 31.69                       | 9.08               | 40.03                 | 47.74             | 74.00                  | -26.26             | Vertical     |
| 4904.00                 | 46.07                   | 31.69                       | 9.08               | 40.03                 | 46.81             | 74.00                  | -27.19             | Horizontal   |

| Test mode: 802.11n(H40) |                         |                             | Test chann         | el: Highest           |                   | Remark: Average        |                    |              |  |
|-------------------------|-------------------------|-----------------------------|--------------------|-----------------------|-------------------|------------------------|--------------------|--------------|--|
| Frequency<br>(MHz)      | Read<br>Level<br>(dBuV) | Antenna<br>Factor<br>(dB/m) | Cable<br>Loss (dB) | Preamp<br>Factor (dB) | Level<br>(dBuV/m) | Limit Line<br>(dBuV/m) | Over Limit<br>(dB) | polarization |  |
| 4904.00                 | 37.26                   | 31.69                       | 9.08               | 40.03                 | 38.00             | 54.00                  | -16.00             | Vertical     |  |
| 4904.00                 | 36.34                   | 31.69                       | 9.08               | 40.03                 | 37.08             | 54.00                  | -16.92             | Horizontal   |  |

### Remark:

- 1. Final Level =Receiver Read level + Antenna Factor + Cable Loss Preamplifier Factor
- 2. "--", means this data is the too weak instrument of signal is unable to test.
- 3. The emission levels of other frequencies are very lower than the limit and not show in test report.