

# FCC & IC REPORT (WIFI)

**Applicant:** REACH Tech (Xiamen) Co., Ltd.

**Address of Applicant:** RM.303,#18,Guanri Road, Software Park II, Xiamen,361008, China

**Equipment Under Test (EUT)**

Product Name: Smart Phone

Model No.: R55

**FCC ID:** Z5JREACH-Q887R

**Canada IC:** 11908A-Q887R

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart C Section 15.247  
RSS-210 Issue 8 December 2010  
RSS-Gen Issue 3 December 2010

**Date of sample receipt:** 20 Mar., 2014

**Date of Test:** 21 Mar., to 14 Apr., 2014

**Date of report issued:** 15 Apr., 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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## 2 Version

| Version No. | Date         | Description |
|-------------|--------------|-------------|
| 00          | 15 Apr.,2014 | Original    |
|             |              |             |
|             |              |             |
|             |              |             |
|             |              |             |

Prepared by:

*Sera Xiang*

Report Clerk

Date:

15 Apr.,2014

Reviewed by:

*Abimb Yang*

Project Engineer

Date:

15 Apr.,2014

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## 4 Test Summary

| Test Item                                        | Section in CFR 47                    | Result |
|--------------------------------------------------|--------------------------------------|--------|
| Antenna requirement                              | 15.203/15.247 (c)<br>RSS-210,RSS-GEN | Pass   |
| AC Power Line Conducted Emission                 | 15.207<br>RSS-210,RSS-GEN            | Pass   |
| Conducted Peak Output Power                      | 15.247 (b)(3)<br>RSS-210,RSS-GEN     | Pass   |
| 6dB Emission Bandwidth<br>99% Occupied Bandwidth | 15.247 (a)(2)<br>RSS-210,RSS-GEN     | Pass   |
| Power Spectral Density                           | 15.247 (e)<br>RSS-210,RSS-GEN        | Pass   |
| Band Edge                                        | 15.247(d)<br>RSS-210,RSS-GEN         | Pass   |
| Spurious Emission                                | 15.205/15.209<br>RSS-210,RSS-GEN     | Pass   |
| Receiver spurious emissions                      | RSS-210,RSS-GEN                      | PASS   |

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

## 5 General Information

### 5.1 Client Information

|                          |                                                                |
|--------------------------|----------------------------------------------------------------|
| Applicant:               | REACH Tech (Xiamen) Co., Ltd.                                  |
| Address of Applicant:    | RM.303,#18,Guanri Road, Software Park II, Xiamen,361008, China |
| Manufacturer:            | REACH Tech (Xiamen) Co., Ltd.                                  |
| Address of Manufacturer: | RM.303,#18,Guanri Road, Software Park II, Xiamen,361008,China  |
| Factory:                 | REACH Tech (Xiamen) Co., Ltd.                                  |
| Address of Factory:      | 5/F,#51,Wanghai Road, Software Park II,Xiamen,361008, China    |

### 5.2 General Description of E.U.T.

|                                                  |                                                                                       |
|--------------------------------------------------|---------------------------------------------------------------------------------------|
| Product Name:                                    | Smart Phone                                                                           |
| Model No.:                                       | R55                                                                                   |
| Operation Frequency:                             | 2412MHz~2462MHz (802.11b/802.11g/802.11n(H20))                                        |
| Channel numbers:                                 | 11 for 802.11b/802.11g/802.11(H20)                                                    |
| Channel separation:                              | 5MHz                                                                                  |
| Modulation technology:<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:                                    | -0.33 dBi                                                                             |
| AC adapter:                                      | Model:SKL-5WU-U050-0700<br>Input:100-240V AC,50/60Hz 150mA<br>Output:5.0V DC MAX700mA |
| Power supply:                                    | Rechargeable Li-ion Battery DC3.7V-2100mAh                                            |

| 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   |         |           |

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   |

## 5.3 Test environment and mode

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>Operating Environment:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                         |
| Temperature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 24.0 °C                                                 |
| Humidity:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 54 % RH                                                 |
| Atmospheric Pressure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1010 mbar                                               |
| <b>Test mode:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                         |
| 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:                                                       |           |
| <b>Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.</b>                                                                                                                                                        |           |
| Mode                                                                                                                                                                                                                                                               | Data rate |
| 802.11b                                                                                                                                                                                                                                                            | 1Mbps     |
| 802.11g                                                                                                                                                                                                                                                            | 6Mbps     |
| 802.11n(H20)                                                                                                                                                                                                                                                       | 6.5Mbps   |
| <b>Final Test Mode:</b>                                                                                                                                                                                                                                            |           |
| According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup” 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations. |           |

## 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 our 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 No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| 1                  | 3m Semi- Anechoic Chamber            | SAEMC                                | 9(L)*6(W)* 6(H)             | CCIS0001      | June 09 2013         | June 08 2014             |
| 2                  | BiConiLog Antenna                    | SCHWARZBECK<br>MESS-ELEKTRONIK       | VULB9163                    | CCIS0005      | May 25 2013          | May 24 2014              |
| 3                  | Double -ridged waveguide horn        | SCHWARZBECK<br>MESS-ELEKTRONIK       | BBHA9120D                   | CCIS0006      | May 25 2013          | May 24 2014              |
| 4                  | EMI Test Software                    | AUDIX                                | E3                          | N/A           | N/A                  | N/A                      |
| 5                  | Coaxial Cable                        | CCIS                                 | N/A                         | CCIS0016      | Feb. 01 2014         | Jan. 31 2015             |
| 6                  | Coaxial Cable                        | CCIS                                 | N/A                         | CCIS0017      | Feb. 01 2014         | Jan. 31 2015             |
| 7                  | Coaxial cable                        | CCIS                                 | N/A                         | CCIS0018      | Feb. 01 2014         | Jan. 31 2015             |
| 8                  | Coaxial Cable                        | CCIS                                 | N/A                         | CCIS0019      | Feb. 01 2014         | Jan. 31 2015             |
| 9                  | Coaxial Cable                        | CCIS                                 | N/A                         | CCIS0087      | Feb. 01 2014         | Jan. 31 2015             |
| 10                 | Amplifier(10kHz-1.3GHz)              | HP                                   | 8447D                       | CCIS0003      | Feb. 01 2014         | Feb. 31 2015             |
| 11                 | Amplifier(1GHz-18GHz)                | Compliance Direction<br>Systems Inc. | PAP-1G18                    | CCIS0011      | June 09 2013         | June 08 2014             |
| 12                 | Pre-amplifier (18-26GHz)             | Rohde & Schwarz                      | AFS33-18002<br>650-30-8P-44 | GTS218        | Feb. 01 2014         | Jan. 31 2015             |
| 13                 | Horn Antenna                         | ETS-LINDGREN                         | 3160                        | GTS217        | Feb. 30 2014         | Feb. 29 2014             |
| 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 9k-30GHz           | Rohde & Schwarz                      | FSP                         | CCIS0023      | May. 25 2013         | May. 24 2014             |
| 17                 | EMI Test Receiver                    | Rohde & Schwarz                      | ESPI                        | CCIS0022      | Feb 01 2014          | Feb. 31 2015             |
| 18                 | Loop antenna                         | Laplace instrument                   | RF300                       | EMC0701       | Aug. 12 2013         | Aug. 11 2014             |
| 19                 | Universal radio communication tester | Rhode & Schwarz                      | CMU200                      | CCIS0069      | May. 25 2013         | May. 24 2014             |
| 20                 | Signal Analyzer                      | Rohde & Schwarz                      | FSIQ3                       | CCIS0088      | May. 25 2013         | May. 24 2014             |

| Conducted Emission: |                   |                    |                       |               |                      |                          |
|---------------------|-------------------|--------------------|-----------------------|---------------|----------------------|--------------------------|
| Item                | Test Equipment    | Manufacturer       | Model No.             | Inventory No. | Cal. Date (mm-dd-yy) | Cal. Due date (mm-dd-yy) |
| 1                   | Shielding Room    | ZhongShuo Electron | 11.0(L)x4.0(W)x3.0(H) | CCIS0061      | June 09 2013         | June 08 2014             |
| 2                   | EMI Test Receiver | Rohde & Schwarz    | ESCI                  | CCIS0002      | May 25 2013          | May 24 2014              |
| 3                   | LISN              | CHASE              | MN2050D               | CCIS0074      | Feb 01 2014          | Jan. 31 2015             |
| 4                   | Coaxial Cable     | CCIS               | N/A                   | CCIS0086      | Feb. 01 2014         | Jan. 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)<br>RSS Gen section 7.1.2 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| <p><b>1. 15.203 requirement:</b><br/>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.<br/>15.247(c) (1)(i) requirement:<br/>(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.</p> <p><b>2. RSS Gen section 7.1.2</b><br/>A transmitter can only be sold or operated with antennas with which it was approved. Transmitter may be approved with multiple antenna types. An antenna type comprises antennas having similar in-band and out-of-band radiation patterns. Testing shall be performed using the highest gain antenna of each combination of transmitter and antenna type for which approval is being sought, with the transmitter output power set at the maximum level. Any antenna of the same type having equal or lesser gain as an antenna that had been successfully tested with the transmitter, will also be considered approved with the transmitter, and may be used and marketed with the transmitter. For Category I transmitters, the manufacturer shall include with the application for certification a list of acceptable antenna types to be used with the transmitter.<br/>When a measurement at the antenna connector is used to determine RF output power, the effective gain of the device's antenna shall be stated, based on measurement or on data from the antenna manufacturer.<br/>For transmitters of RF output power of 10 milliwatts or less, only the portion of the antenna gain that is in excess of 6 dBi (6 dB above isotropic gain) shall be added to the measured RF output power to demonstrate compliance with the radiated power limits specified in the applicable standard. For transmitters of output power greater than 10 milliwatts, the total antenna gain shall be added to the measured RF output power to demonstrate compliance to the specified radiated power limits.<br/>User manuals for transmitters shall display the following notice in a conspicuous location:<br/>Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.<br/>The above notice may be affixed to the device instead of displayed in the user manual.<br/>User manuals for transmitters equipped with detachable antennas shall also contain the following notice in a conspicuous location:<br/>This radio transmitter (identify the device by certification number, or model number if Category II) has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.<br/>Immediately following the above notice, the manufacturer shall provide a list of all antenna types approved for use with the transmitter, indicating the maximum permissible antenna gain (in dBi) and required impedance for each.</p> |                                                              |

**E.U.T Antenna:**

The Bluetooth antenna is an integral antenna which permanently attached, and the best case gain of the antenna is -0.33 dBi.

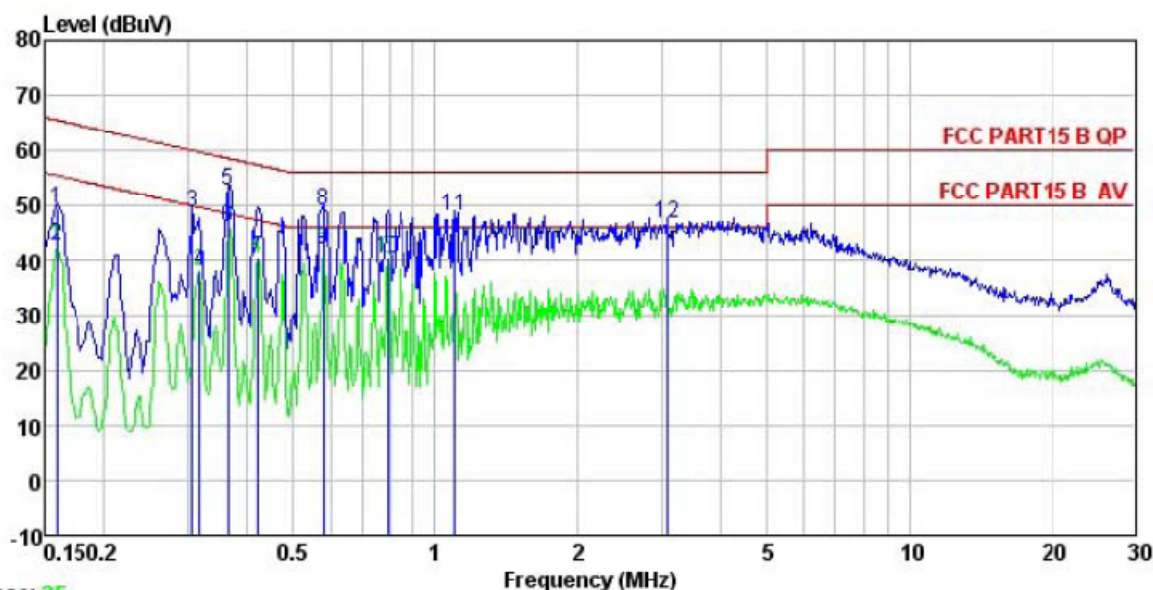


## 6.2 Conducted Emission

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |           |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|
| Test Requirement:                                | FCC Part15 C Section 15.207<br>RSS-Gen Section 7.1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |           |
| Test Method:                                     | ANSI C63.4: 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |           |
| Test Frequency Range:                            | 150 kHz to 30 MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |           |
| Class / Severity:                                | Class B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |           |
| Receiver setup:                                  | RBW=9 kHz, VBW=30 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |           |
| Limit:                                           | Frequency range (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Limit (dBuV) |           |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Quasi-peak   | Average   |
|                                                  | 0.15-0.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 66 to 56*    | 56 to 46* |
|                                                  | 0.5-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 56           | 46        |
|                                                  | 5-30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 60           | 50        |
| * Decreases with the logarithm of the frequency. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |           |
| Test procedure                                   | <div>1. 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.</div> <div>2. 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).</div> <div>3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.4: 2003 on conducted measurement.</div> |              |           |
| Test setup:                                      | <div><div><div>Reference Plane</div><div><div>LISN</div><div>AUX Equipment</div><div>E.U.T</div><div>Test table/Insulation plane</div></div><div><div>LISN</div><div>Filter</div><div>AC power</div><div>EMI Receiver</div></div></div><div>40cm</div><div>80cm</div><div><div>Remark:</div><div>E.U.T: Equipment Under Test</div><div>LISN: Line Impedance Stabilization Network</div><div>Test table height=0.8m</div></div></div>                                                                                                                                                                                                                                                                                         |              |           |
| Test Instruments:                                | Refer to section 5.6 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |           |
| Test mode:                                       | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |           |
| Test results:                                    | Passed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |           |

### Measurement Data

Neutral:

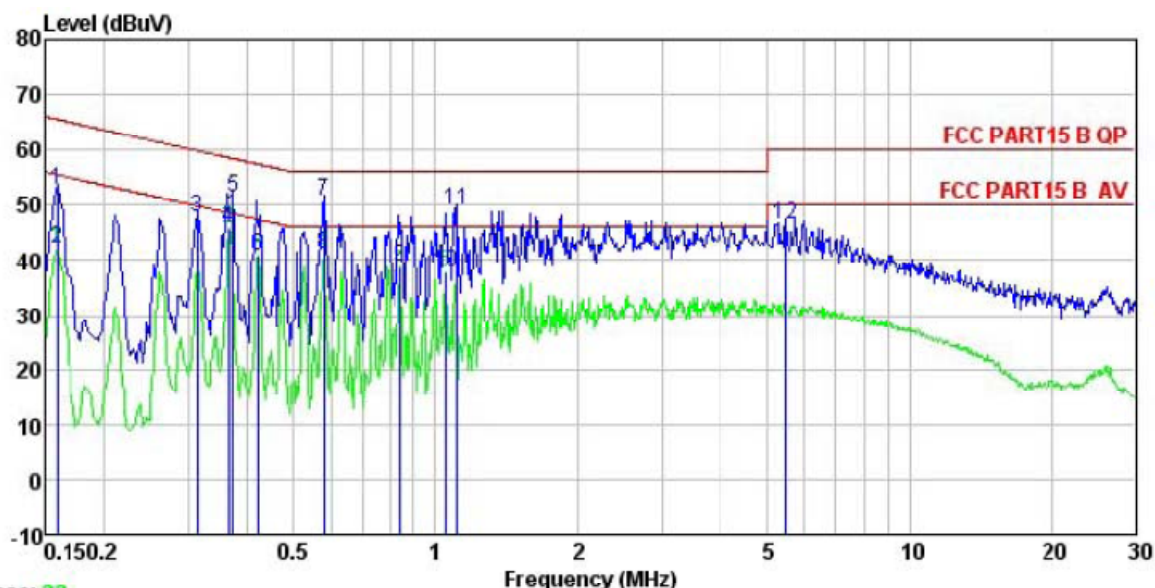


Trace: 35

Site : CCIS Conducted test Site  
 Condition : FCC PART15 B QP LISN NEUTRAL  
 Job No. : 154RF  
 EUT : Smart Phone  
 Model : R55  
 Test Mode : WIFI Mode  
 Power Rating : AC 120V/60Hz  
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa  
 Test Engineer: A-bomb  
 Remark :

|    | Freq  | Read  | LISN   | Cable | Level | Limit | Over   |         |
|----|-------|-------|--------|-------|-------|-------|--------|---------|
|    | MHz   | Level | Factor | Loss  | Level | Line  | Limit  | Remark  |
|    |       | dBuV  | dB     | dB    | dBuV  | dBuV  | dB     |         |
| 1  | 0.158 | 38.41 | 0.25   | 10.78 | 49.44 | 65.56 | -16.12 | QP      |
| 2  | 0.158 | 31.79 | 0.25   | 10.78 | 42.82 | 55.56 | -12.74 | Average |
| 3  | 0.307 | 37.74 | 0.26   | 10.74 | 48.74 | 60.06 | -11.32 | QP      |
| 4  | 0.318 | 27.07 | 0.26   | 10.74 | 38.07 | 49.75 | -11.68 | Average |
| 5  | 0.365 | 41.85 | 0.25   | 10.73 | 52.83 | 58.61 | -5.78  | QP      |
| 6  | 0.365 | 35.09 | 0.25   | 10.73 | 46.07 | 48.61 | -2.54  | Average |
| 7  | 0.421 | 29.53 | 0.26   | 10.73 | 40.52 | 47.42 | -6.90  | Average |
| 8  | 0.579 | 38.25 | 0.24   | 10.77 | 49.26 | 56.00 | -6.74  | QP      |
| 9  | 0.579 | 31.22 | 0.24   | 10.77 | 42.23 | 46.00 | -3.77  | Average |
| 10 | 0.792 | 29.54 | 0.19   | 10.81 | 40.54 | 46.00 | -5.46  | Average |
| 11 | 1.100 | 37.02 | 0.23   | 10.88 | 48.13 | 56.00 | -7.87  | QP      |
| 12 | 3.074 | 35.65 | 0.29   | 10.92 | 46.86 | 56.00 | -9.14  | QP      |

Line:



Trace: 33

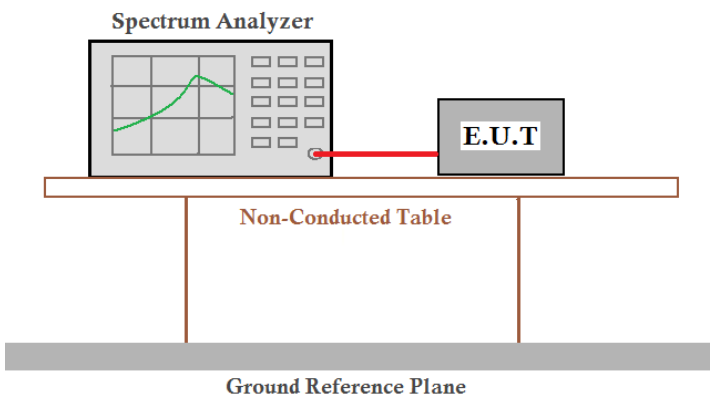
Site : CCIS Conducted test Site  
 Condition : FCC PART15 B QP LISN LINE  
 Job No. : 154RF  
 EUT : Smart Phone  
 Model : R55  
 Test Mode : WIFI Mode  
 Power Rating : AC 120V/60Hz  
 Environment : Temp: 23 °C Humi:56% Atmos:101KPa  
 Test Engineer: A-bomb  
 Remark :

|    | Freq  | Read Level | LISN Factor | Cable Loss | Level | Limit Line | Over Limit | Remark  |
|----|-------|------------|-------------|------------|-------|------------|------------|---------|
|    | MHz   | dBuV       | dB          | dB         | dBuV  | dBuV       | dB         |         |
| 1  | 0.158 | 41.66      | 0.27        | 10.78      | 52.71 | 65.56      | -12.85     | QP      |
| 2  | 0.158 | 31.11      | 0.27        | 10.78      | 42.16 | 55.56      | -13.40     | Average |
| 3  | 0.313 | 36.74      | 0.26        | 10.74      | 47.74 | 59.88      | -12.14     | QP      |
| 4  | 0.365 | 34.71      | 0.27        | 10.73      | 45.71 | 48.61      | -2.90      | Average |
| 5  | 0.373 | 40.41      | 0.28        | 10.73      | 51.42 | 58.43      | -7.01      | QP      |
| 6  | 0.421 | 29.84      | 0.28        | 10.73      | 40.85 | 47.42      | -6.57      | Average |
| 7  | 0.579 | 39.62      | 0.26        | 10.77      | 50.65 | 56.00      | -5.35      | QP      |
| 8  | 0.579 | 30.03      | 0.26        | 10.77      | 41.06 | 46.00      | -4.94      | Average |
| 9  | 0.839 | 27.91      | 0.23        | 10.82      | 38.96 | 46.00      | -7.04      | Average |
| 10 | 1.049 | 26.77      | 0.25        | 10.88      | 37.90 | 46.00      | -8.10      | Average |
| 11 | 1.111 | 37.94      | 0.25        | 10.88      | 49.07 | 56.00      | -6.93      | QP      |
| 12 | 5.476 | 35.43      | 0.30        | 10.84      | 46.57 | 60.00      | -13.43     | QP      |

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

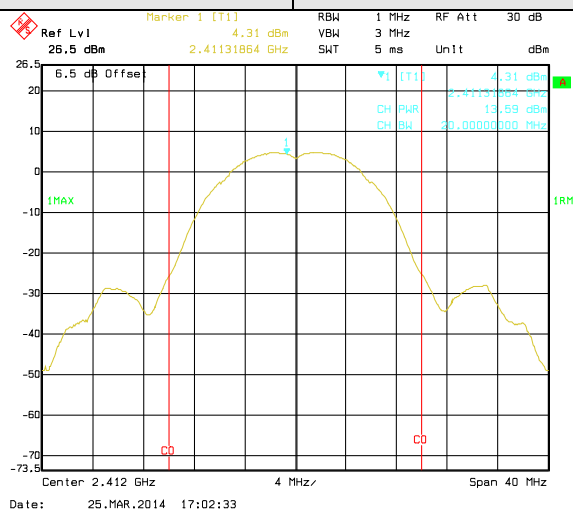
|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (b)(3)<br>RSS-210 A8.4 section 4                       |
| Test Method:      | ANSI C63.4:2003 and KDB558074<br>RSS-Gen section 4.8                               |
| Limit:            | 30dBm                                                                              |
| Test setup:       |  |
| 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

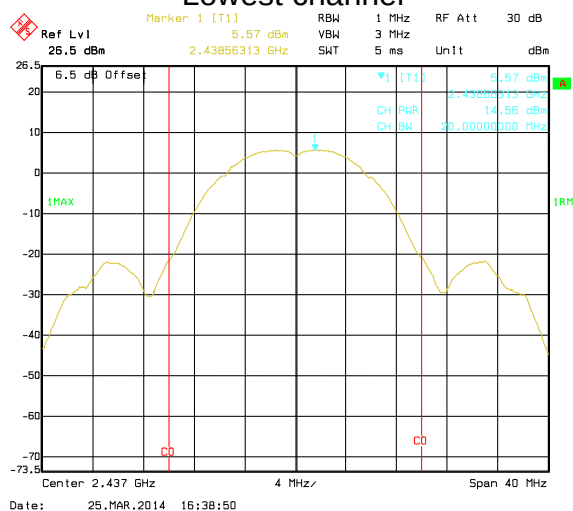
| Test CH | Maximum Conducted Output Power (dBm) |         |              | Limit(dBm) | Result |
|---------|--------------------------------------|---------|--------------|------------|--------|
|         | 802.11b                              | 802.11g | 802.11n(H20) |            |        |
| Lowest  | 13.59                                | 7.87    | 8.16         | 30.00      | Pass   |
| Middle  | 14.56                                | 14.35   | 13.29        |            |        |
| Highest | 14.51                                | 14.28   | 13.13        |            |        |

Test plot as follows:

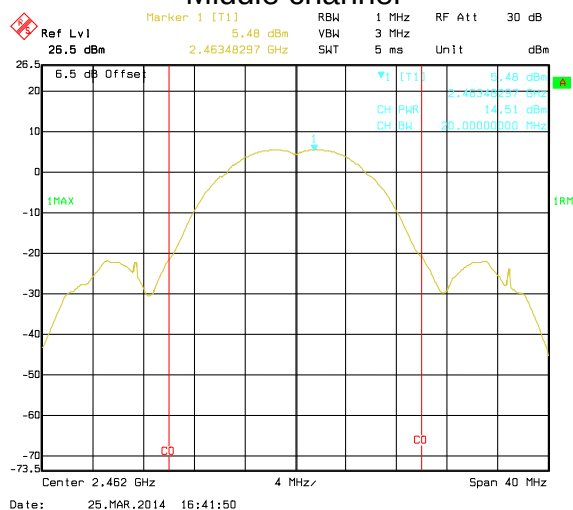
|            |         |
|------------|---------|
| Test mode: | 802.11b |
|------------|---------|



## Lowest channel



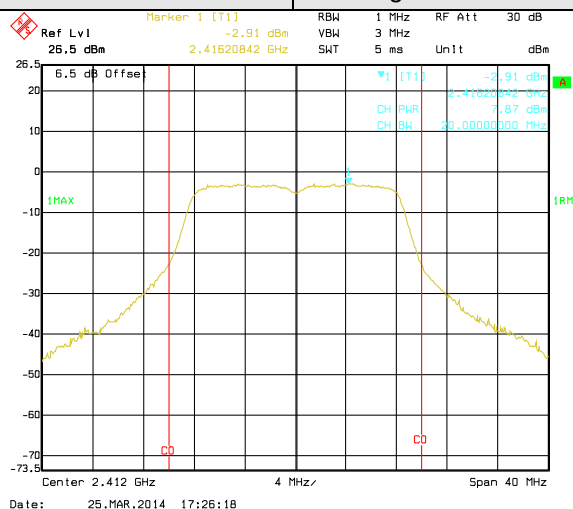
## Middle channel



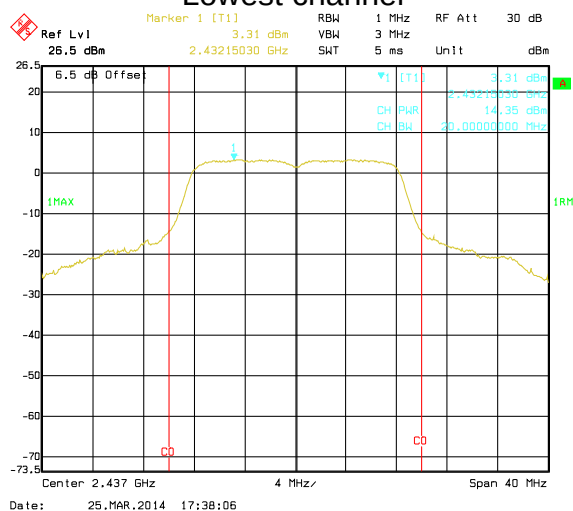
## Highest channel

Test mode:

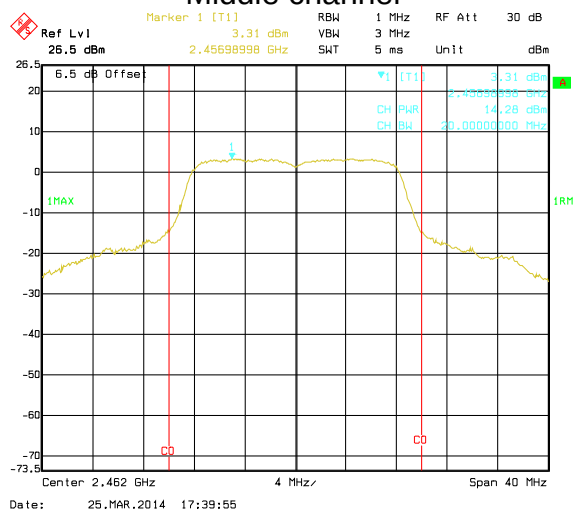
802.11g



Lowest channel



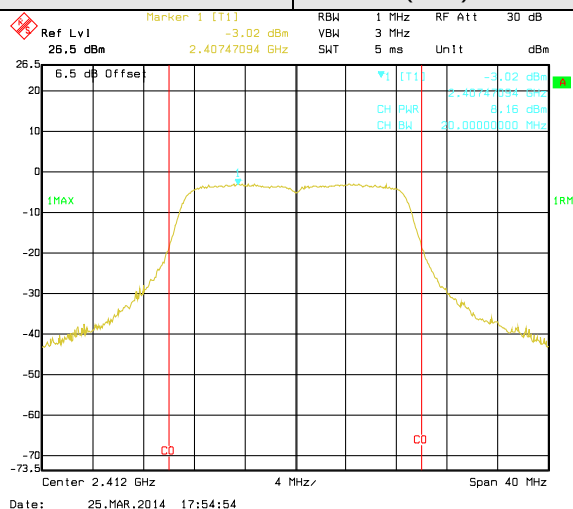
17:38:00  
Middle channel



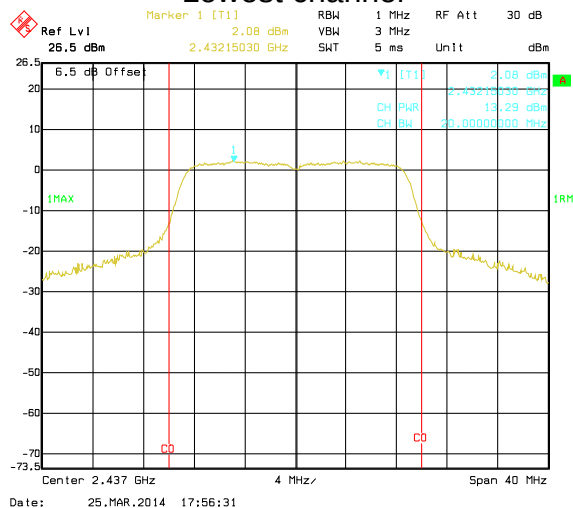
Highest channel

Test mode:

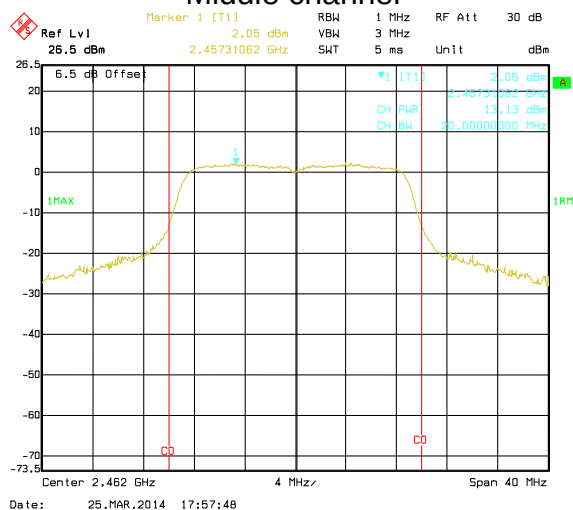
802.11n(H20)



Lowest channel

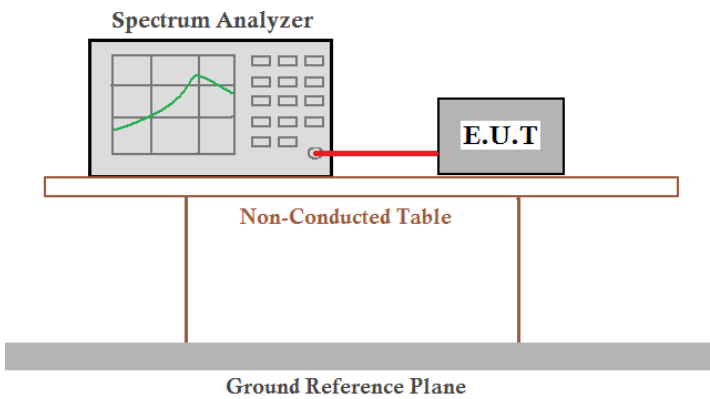


17:58:31  
Middle channel



17:57:48  
Highest channel

## 6.4 Occupy Bandwidth

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (a)(2)<br>RSS-210 section A8.2(a)                      |
| Test Method:      | ANSI C63.4:2003 and KDB558074<br>RSS-Gen section 4.6.2                             |
| Limit:            | >500kHz                                                                            |
| Test setup:       |  |
| Test Instruments: | Refer to section 5.6 for details                                                   |
| Test mode:        | Refer to section 5.3 for details                                                   |
| Test results:     | Passed                                                                             |

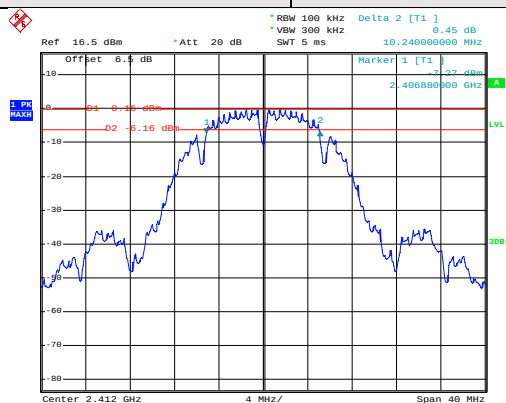
### Measurement Data

| Test CH | 6dB Emission Bandwidth (MHz) |         |              | Limit(kHz) | Result |
|---------|------------------------------|---------|--------------|------------|--------|
|         | 802.11b                      | 802.11g | 802.11n(H20) |            |        |
| Lowest  | 10.24                        | 16.48   | 17.76        | >500       | Pass   |
| Middle  | 10.32                        | 16.48   | 17.76        |            |        |
| Highest | 10.24                        | 16.48   | 17.76        |            |        |

| Test CH | 99% Occupy Bandwidth (MHz) |         |              | Limit(kHz) | Result |
|---------|----------------------------|---------|--------------|------------|--------|
|         | 802.11b                    | 802.11g | 802.11n(H20) |            |        |
| Lowest  | 14.16                      | 16.48   | 17.68        | N/A        | N/A    |
| Middle  | 14.00                      | 16.72   | 17.84        |            |        |
| Highest | 14.00                      | 16.72   | 17.84        |            |        |

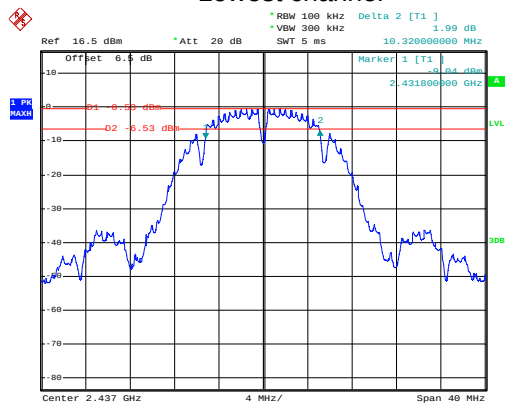
Test plot as follows:

|                   |         |
|-------------------|---------|
| Test mode:6dB OBW | 802.11b |
|-------------------|---------|



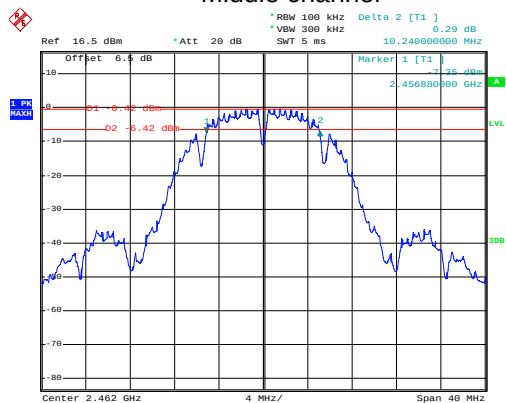
Date: 27.MAR.2014 15:12:25

## Lowest channel



Date: 27.MAR.2014 15:14:57

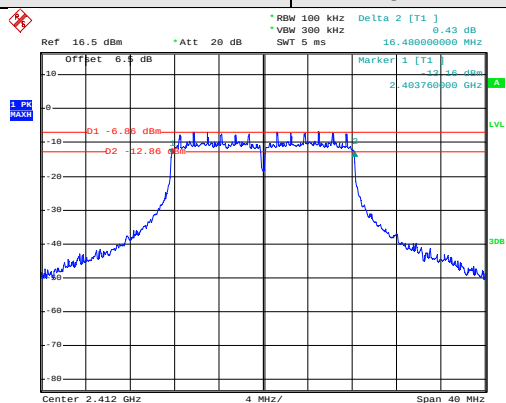
## Middle channel



Date: 27.MAR.2014 15:16:24

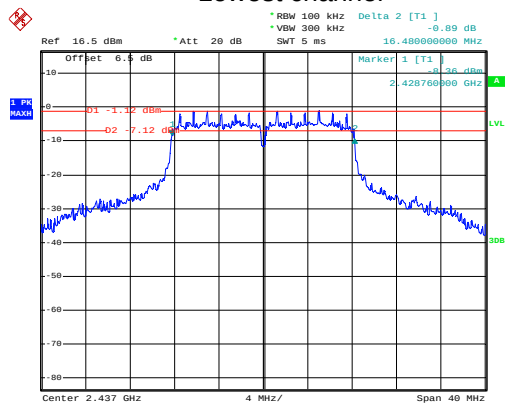
## Highest channel

|                   |         |
|-------------------|---------|
| Test mode:6dB OBW | 802.11g |
|-------------------|---------|



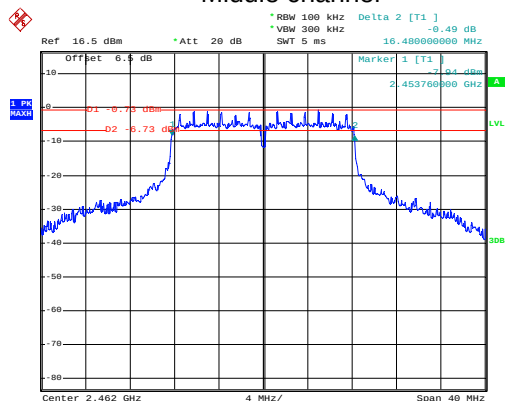
Date: 27.MAR.2014 15:24:47

## Lowest channel



Date: 27.MAR.2014 15:20:28

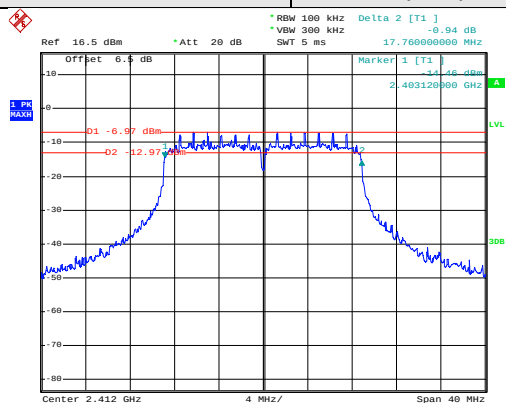
## Middle channel



Date: 27.MAR.2014 15:18:11

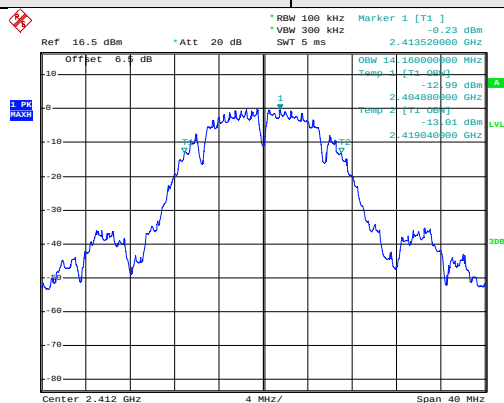
## Highest channel

|                   |              |
|-------------------|--------------|
| Test mode:6dB OBW | 802.11n(H20) |
|-------------------|--------------|



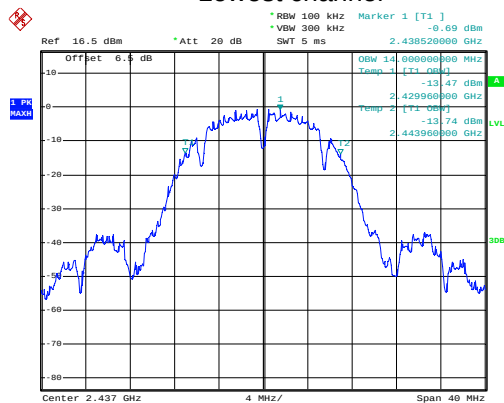
Test mode:99% OBW

802.11b



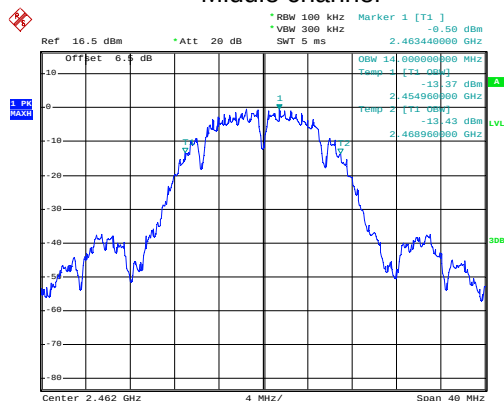
Date: 27.MAR.2014 14:53:52

Lowest channel



Date: 27.MAR.2014 14:55:24

Middle channel

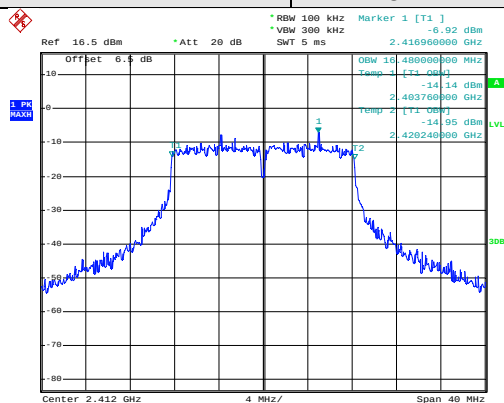


Date: 27.MAR.2014 14:56:56

## Highest channel

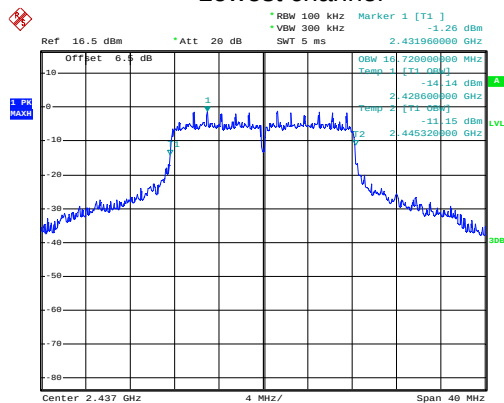
Test mode: 99% OBW

802.11g



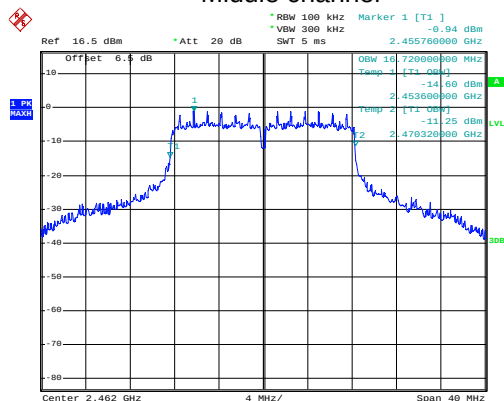
Date: 27.MAR.2014 15:01:17

Lowest channel



Date: 27.MAR.2014 15:09:14

Middle channel

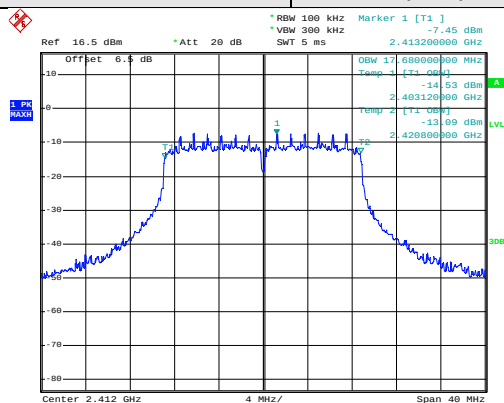


Date: 27.MAR.2014 14:58:10

## Highest channel

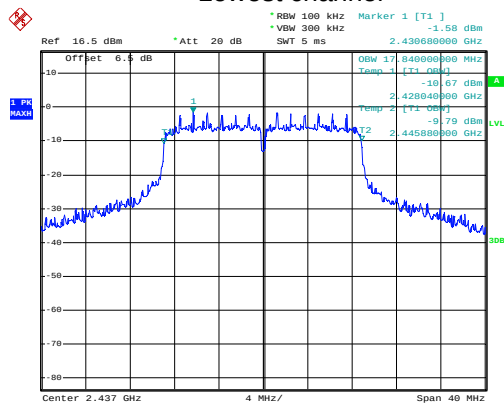
Test mode: 99% OBW

802.11n(H20)



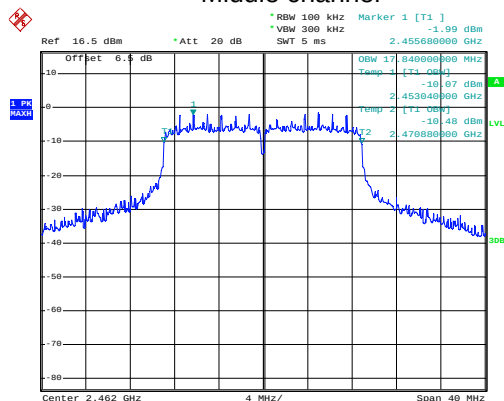
Date: 27.MAR.2014 15:02:37

Lowest channel



Date: 27.MAR.2014 15:05:25

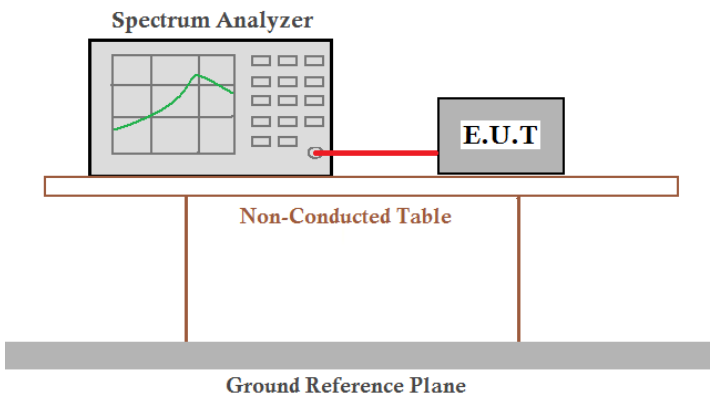
Middle channel



Date: 27.MAR.2014 15:08:00

## Highest channel

## 6.5 Power Spectral Density

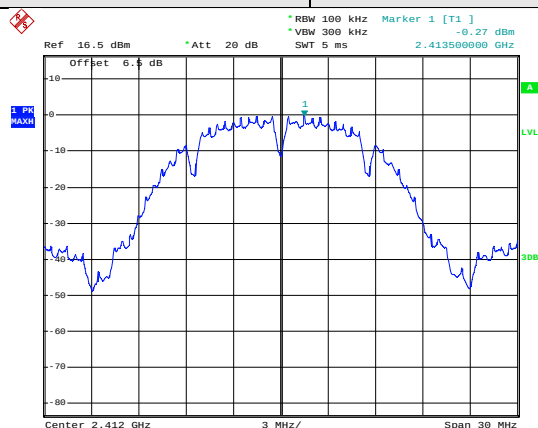
|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (e)<br>RSS-210 section A8.2 (b)                        |
| Test Method:      | ANSI C63.4:2003 and KDB558074<br>RSS-210 section A8.2 (b) and KDB558074            |
| Limit:            | 8dBm                                                                               |
| Test setup:       |  |
| Test Instruments: | Refer to section 5.6 for details                                                   |
| Test mode:        | Refer to section 5.3 for details                                                   |
| Test results:     | Passed                                                                             |

### Measurement Data

| Test CH | Power Spectral Density (dBm) |         |              | Limit(dBm) | Result |
|---------|------------------------------|---------|--------------|------------|--------|
|         | 802.11b                      | 802.11g | 802.11n(H20) |            |        |
| Lowest  | -0.27                        | -6.96   | -6.79        | 8.00       | Pass   |
| Middle  | -0.57                        | -1.10   | -1.40        |            |        |
| Highest | -0.47                        | -0.73   | -1.42        |            |        |

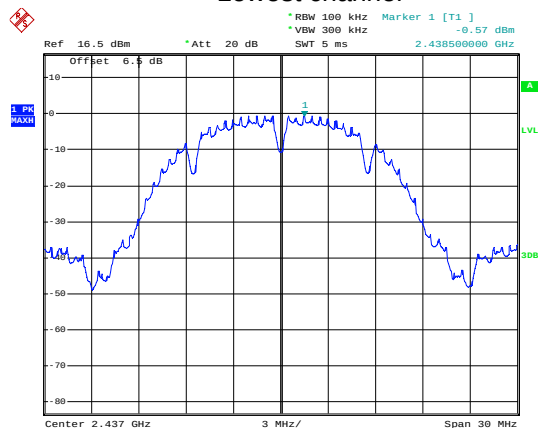
Test plot as follows:

|            |         |
|------------|---------|
| Test mode: | 802.11b |
|------------|---------|



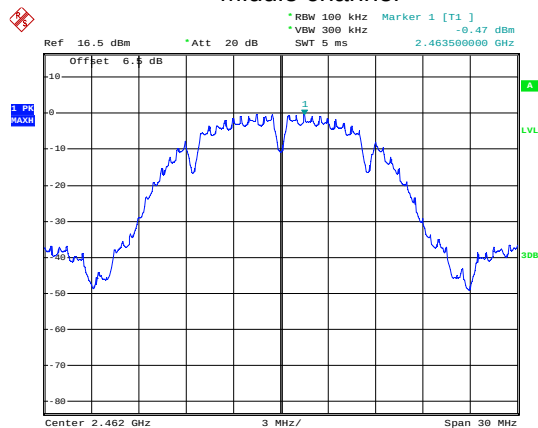
Date: 27.MAR.2014 15:49:14

## Lowest channel



Date: 27.MAR.2014 15:50:30

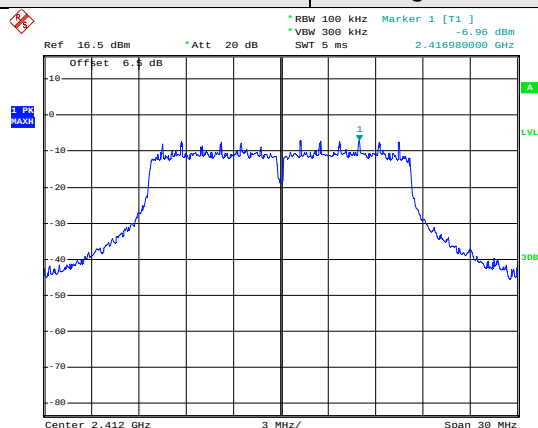
## Middle channel



Date: 27.MAR.2014 15:51:35

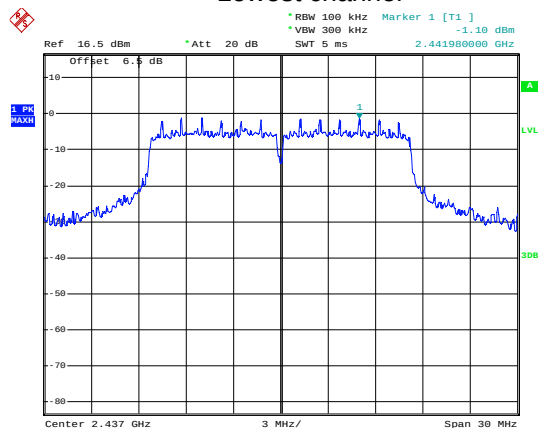
## Highest channel

|            |         |
|------------|---------|
| Test mode: | 802.11g |
|------------|---------|



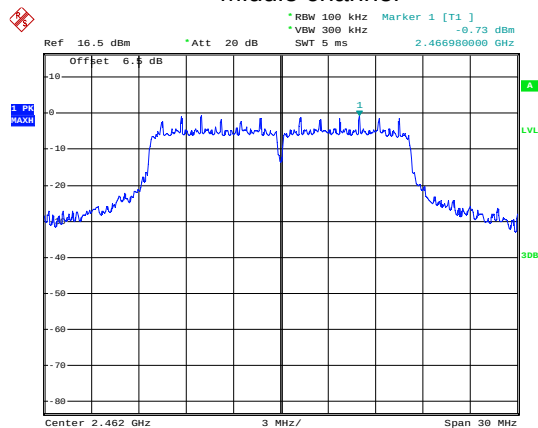
Date: 27.MAR.2014 15:56:29

## Lowest channel



Date: 27.MAR.2014 15:54:17

## Middle channel

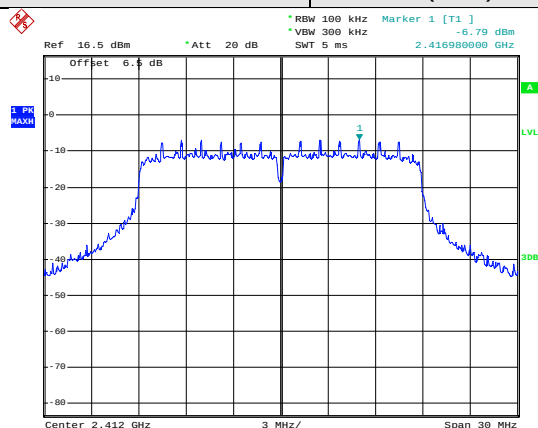


Date: 27.MAR.2014 15:52:47

## Highest channel

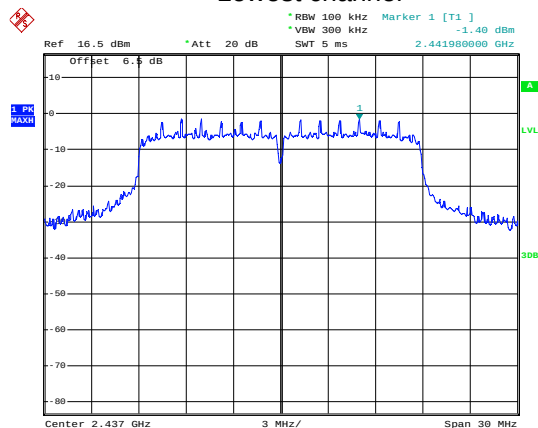
Test mode:

802.11n(H20)



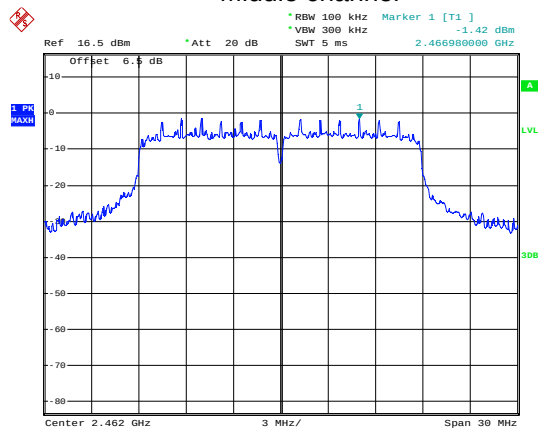
Date: 27.MAR.2014 15:58:17

Lowest channel



Date: 27.MAR.2014 16:00:01

Middle channel

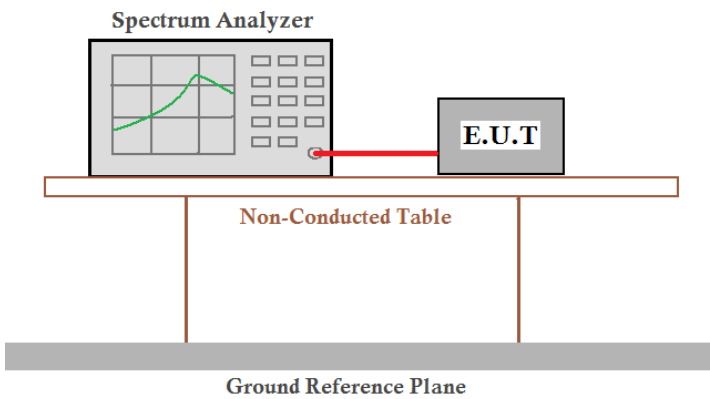


Date: 27.MAR.2014 16:01:12

## Highest channel

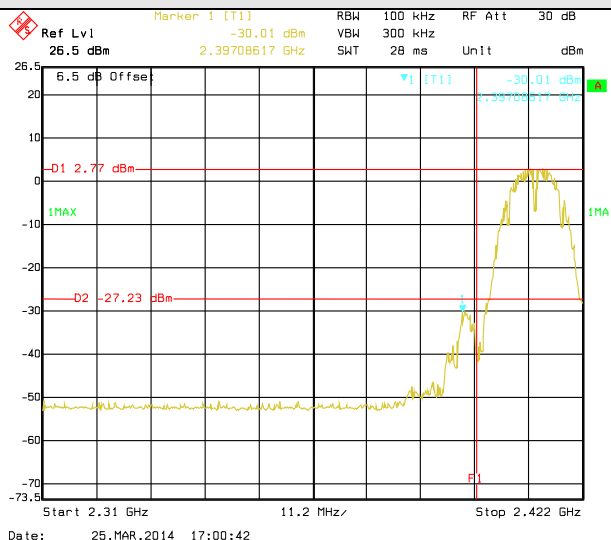
## 6.6 Band Edge

### 6.6.1 Conducted Emission Method

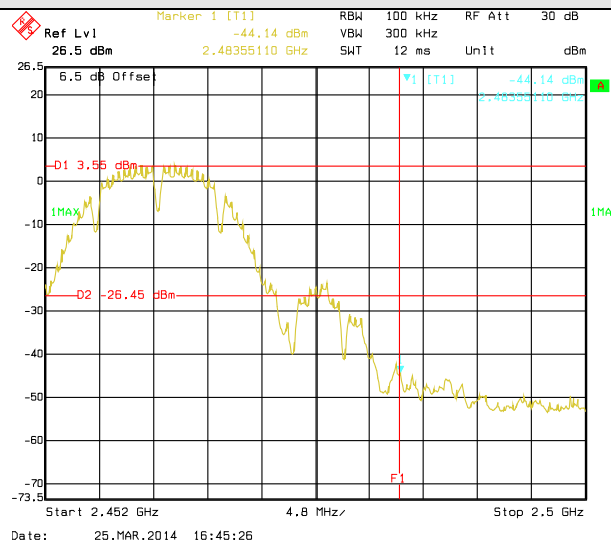
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (d)<br>RSS-210 section A8.5                                                                                                                                                                                                                                                                                                                                                                                                   |
| Test Method:      | ANSI C63.4:2003 and KDB558074<br>RSS-210 section A8.5                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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:       |  <p>The diagram illustrates the test setup. A 'Spectrum Analyzer' is connected to an 'E.U.T.' (Equipment Under Test) by a red cable. Both devices are positioned on a 'Non-Conducted Table'. This table is supported by two vertical legs and rests on a 'Ground Reference Plane', which is represented by a thick grey horizontal bar at the bottom of the setup.</p> |
| 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

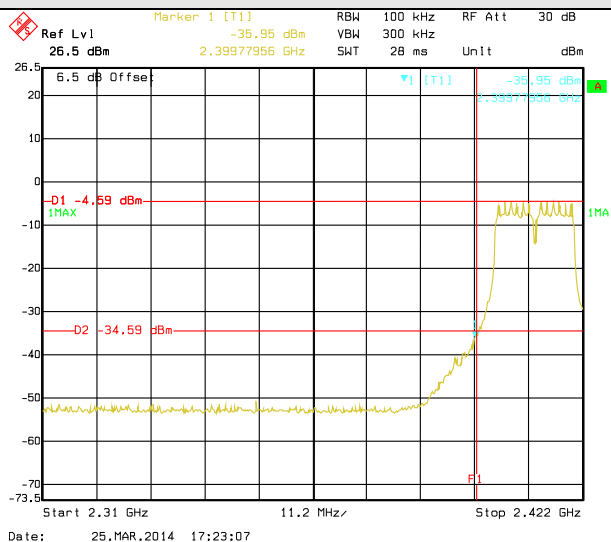


Lowest channel

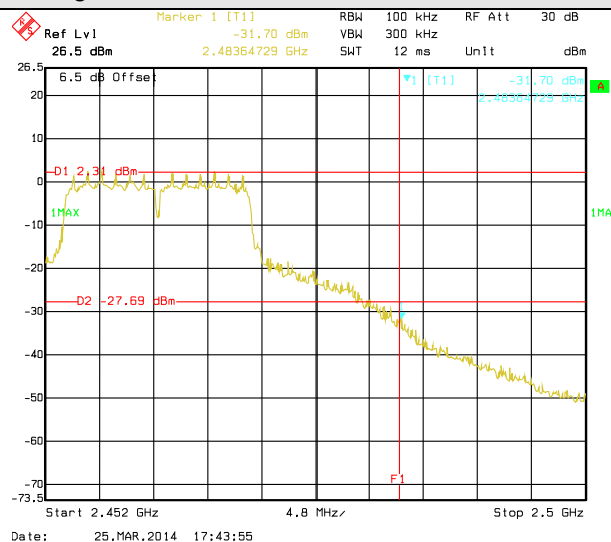


Highest channel

Test mode: 802.11g

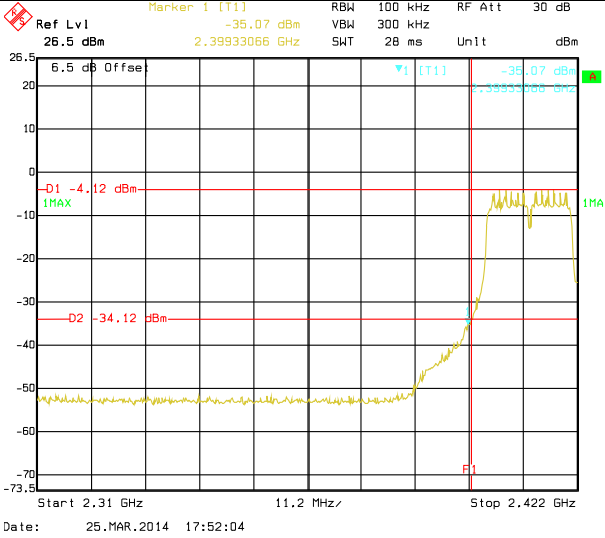


Lowest channel

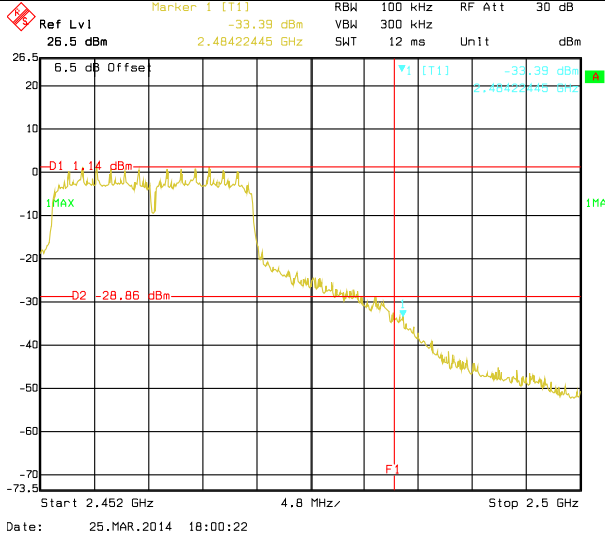


Highest channel

|            |              |
|------------|--------------|
| Test mode: | 802.11n(H20) |
|------------|--------------|

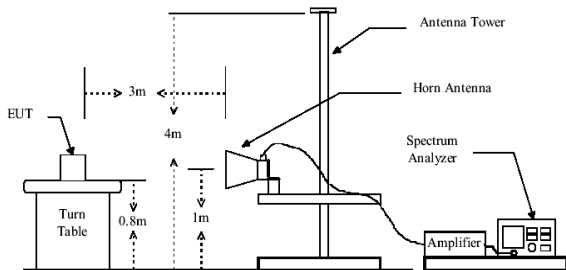


Lowest channel



Highest channel

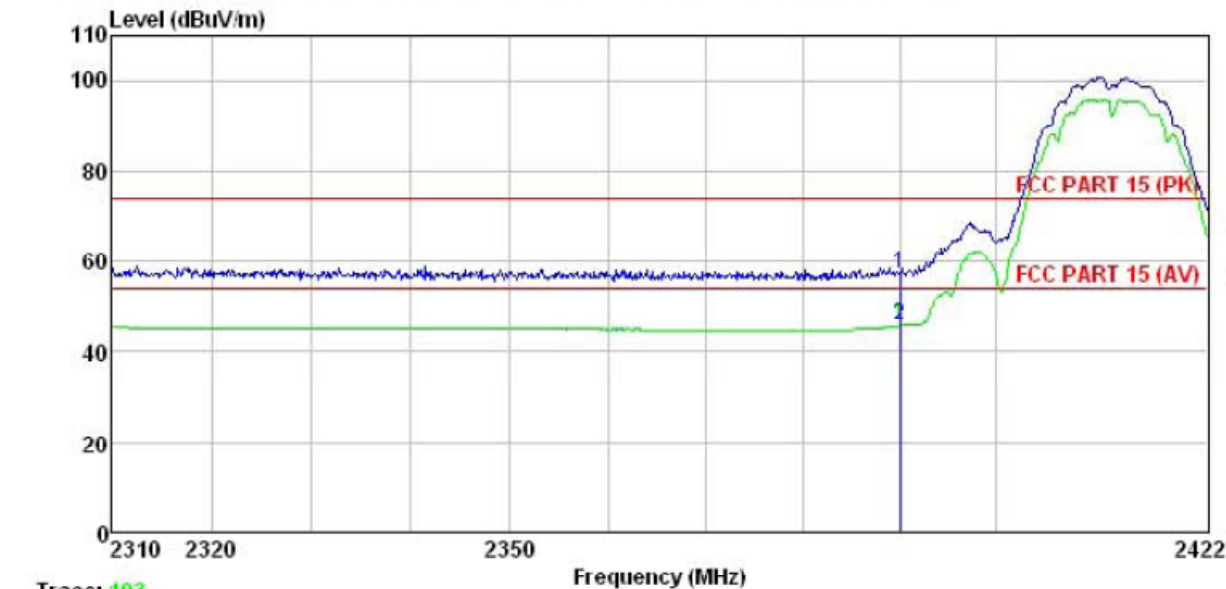
## 6.6.2 Radiated Emission Method

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |      |               |               |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|---------------|---------------|
| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205<br>RSS-210 section A8.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |      |               |               |
| Test Method:          | ANSI C63.4: 2003<br>RSS-Gen section 4.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |      |               |               |
| Test Frequency Range: | 2.3GHz to 2.5GHz<br>5.35 GHz to 5.46 GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |      |               |               |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                    |      |               |               |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Detector           | RBW  | VBW           | Remark        |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Peak               | 1MHz | 3MHz          | Peak Value    |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Peak               | 1MHz | 10Hz          | Average Value |
| Limit:                | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Limit (dBuV/m @3m) |      | Remark        |               |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 54.00              |      | Average Value |               |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 74.00              |      | Peak Value    |               |
| Test Procedure:       | <div>1. 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.</div> <div>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div> <div>3. 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.</div> <div>4. 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.</div> <div>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div> <div>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div> |                    |      |               |               |
| Test setup:           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    |      |               |               |
| 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

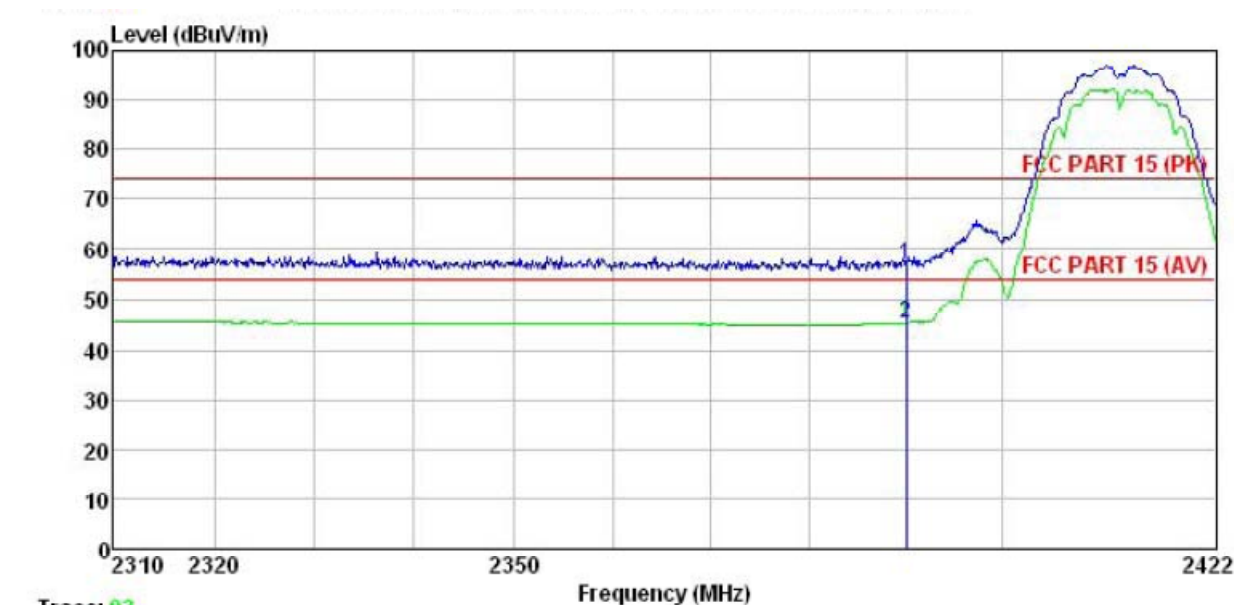
Horizontal:



Trace: 103  
Site : 3m chamber  
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI B MODE L  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

|   | Freq     | ReadLevel | AntennaFactor | CableLoss | Preamplifier | Limit  | OverLimit | Remark        |
|---|----------|-----------|---------------|-----------|--------------|--------|-----------|---------------|
|   | MHz      | dBuV      | dB/m          | dB        | dB           | dBuV/m | dBuV/m    | dB            |
| 1 | 2390.000 | 23.92     | 27.58         | 5.67      | 0.00         | 57.17  | 74.00     | -16.83 Peak   |
| 2 | 2390.000 | 12.45     | 27.58         | 5.67      | 0.00         | 45.70  | 54.00     | -8.30 Average |

Vertical :



Trace: 93

Site : 3m chamber

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

EUT : Smart phone

Model : R55

Test mode : WIFI B MODE L

Power Rating : AC120V/60Hz

Environment : Temp:25.5°C Humi:55%

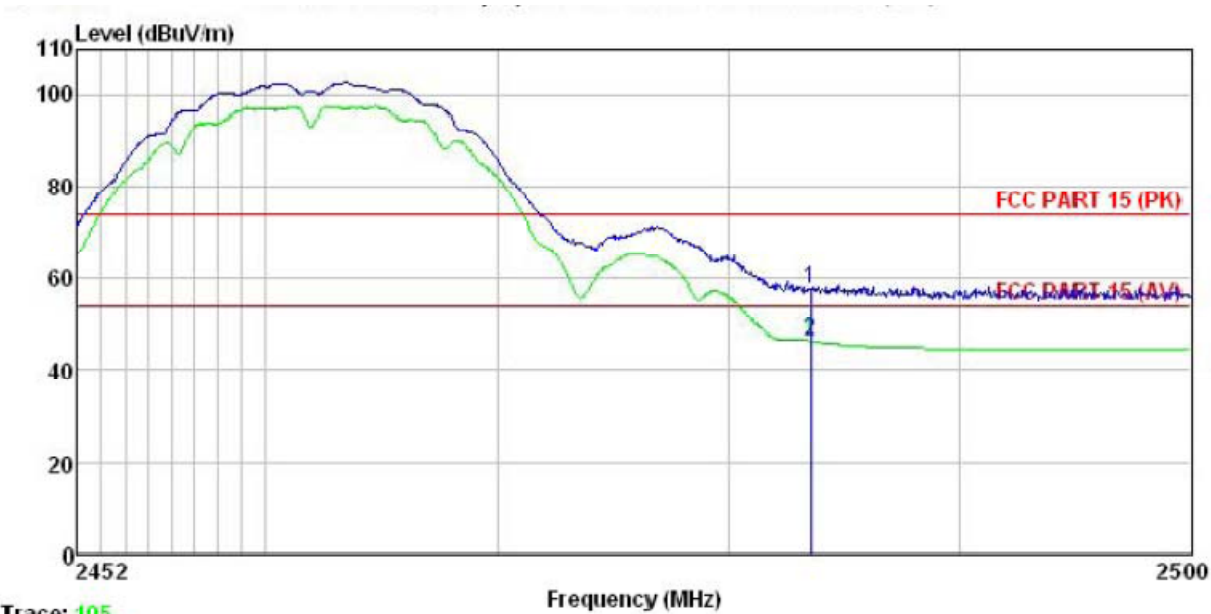
Test Engineer: A-bomb

REMARK :

|   | Freq     | Read  | Antenna | Cable | Preamp | Level  | Limit  | Over   |         |
|---|----------|-------|---------|-------|--------|--------|--------|--------|---------|
|   | MHz      | Level | Factor  | Loss  | Factor | dBuV/m | Line   | Limit  | Remark  |
|   | MHz      | dBuV  | dB/m    | dB    | dB     | dBuV/m | dBuV/m | dB     |         |
| 1 | 2390.000 | 23.66 | 27.58   | 5.67  | 0.00   | 56.91  | 74.00  | -17.09 | Peak    |
| 2 | 2390.000 | 11.93 | 27.58   | 5.67  | 0.00   | 45.18  | 54.00  | -8.82  | Average |

Test channel: Highest

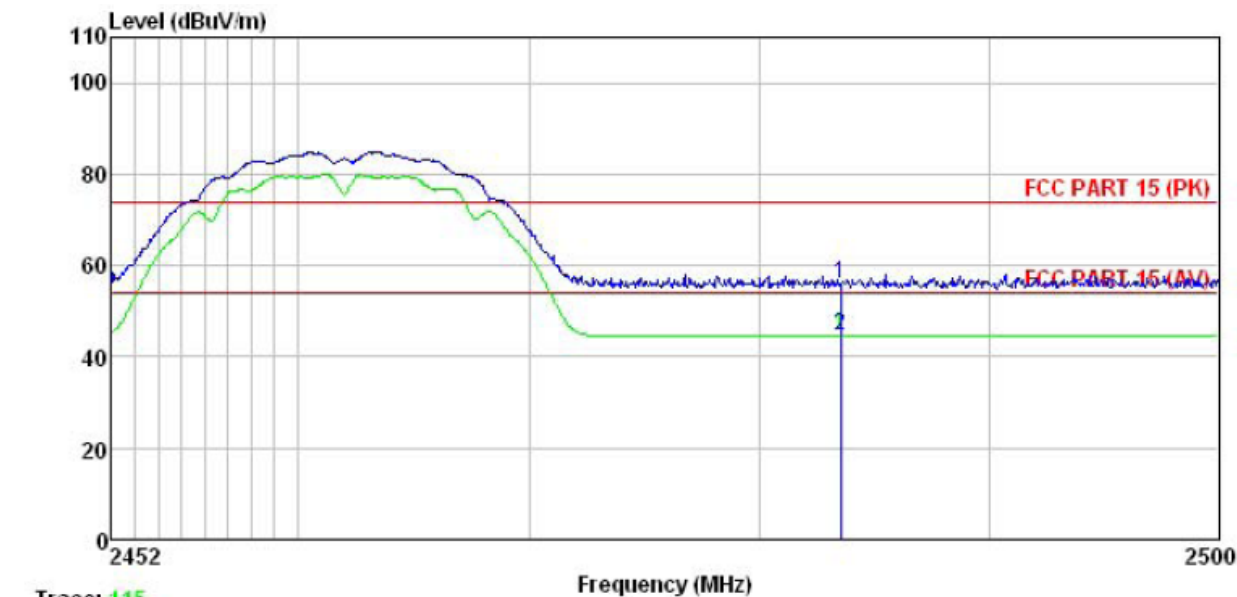
Horizontal:



Trace: 105  
Site : 3m chamber  
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI B MODE H  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

|   | Freq     | Level | ReadAntenna | Cable | Preamp | Limit  | Over   |               |
|---|----------|-------|-------------|-------|--------|--------|--------|---------------|
|   | MHz      | dBuV  | Factor      | Loss  | Factor | Line   | Limit  | Remark        |
|   | MHz      | dBuV  | dB/m        | dB    | dB     | dBuV/m | dBuV/m | dB            |
| 1 | 2483.500 | 24.24 | 27.52       | 5.70  | 0.00   | 57.46  | 74.00  | -16.54 Peak   |
| 2 | 2483.500 | 13.16 | 27.52       | 5.70  | 0.00   | 46.38  | 54.00  | -7.62 Average |

Vertical :

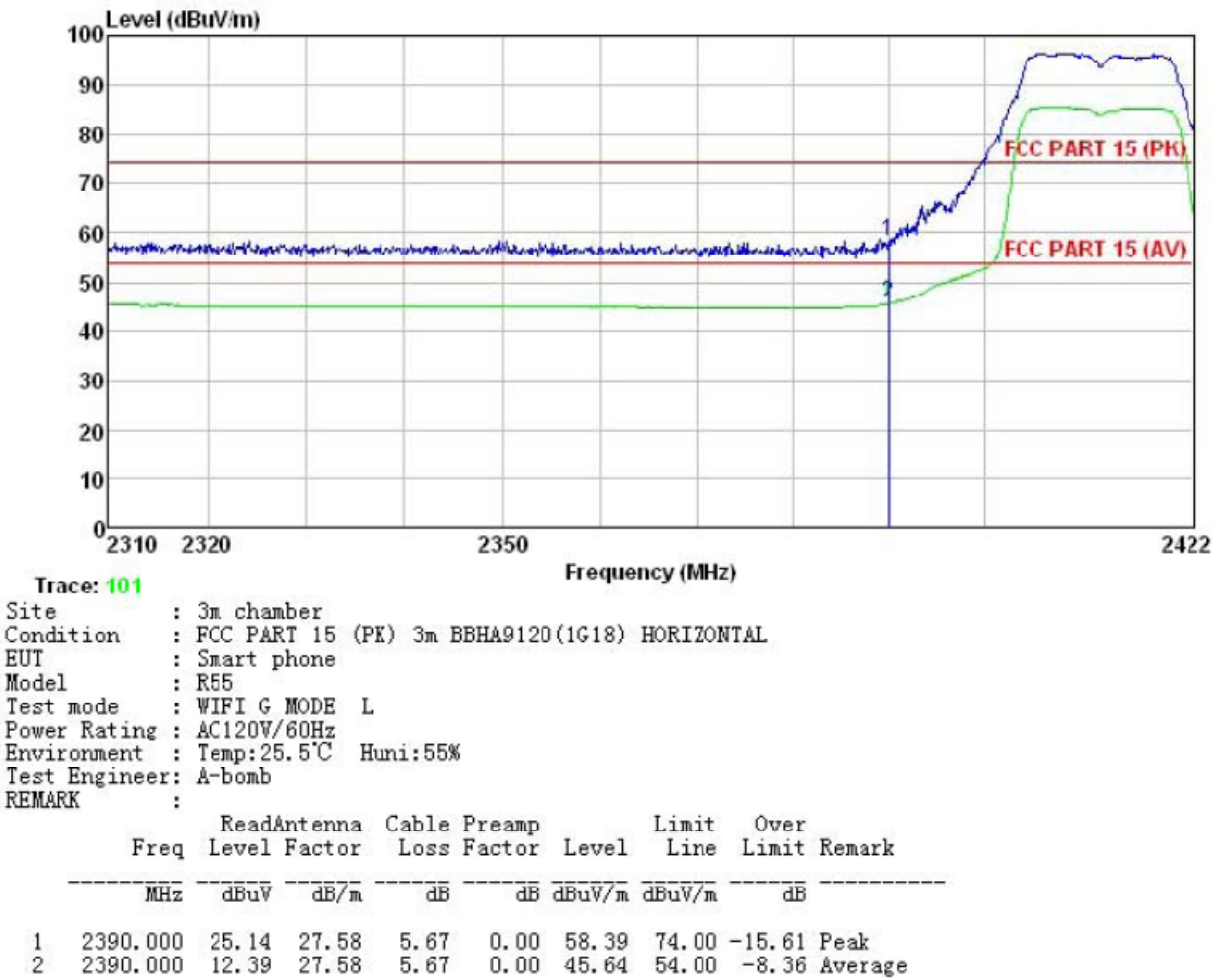


Trace: 115  
Site : 3m chamber  
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI B MODE H  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

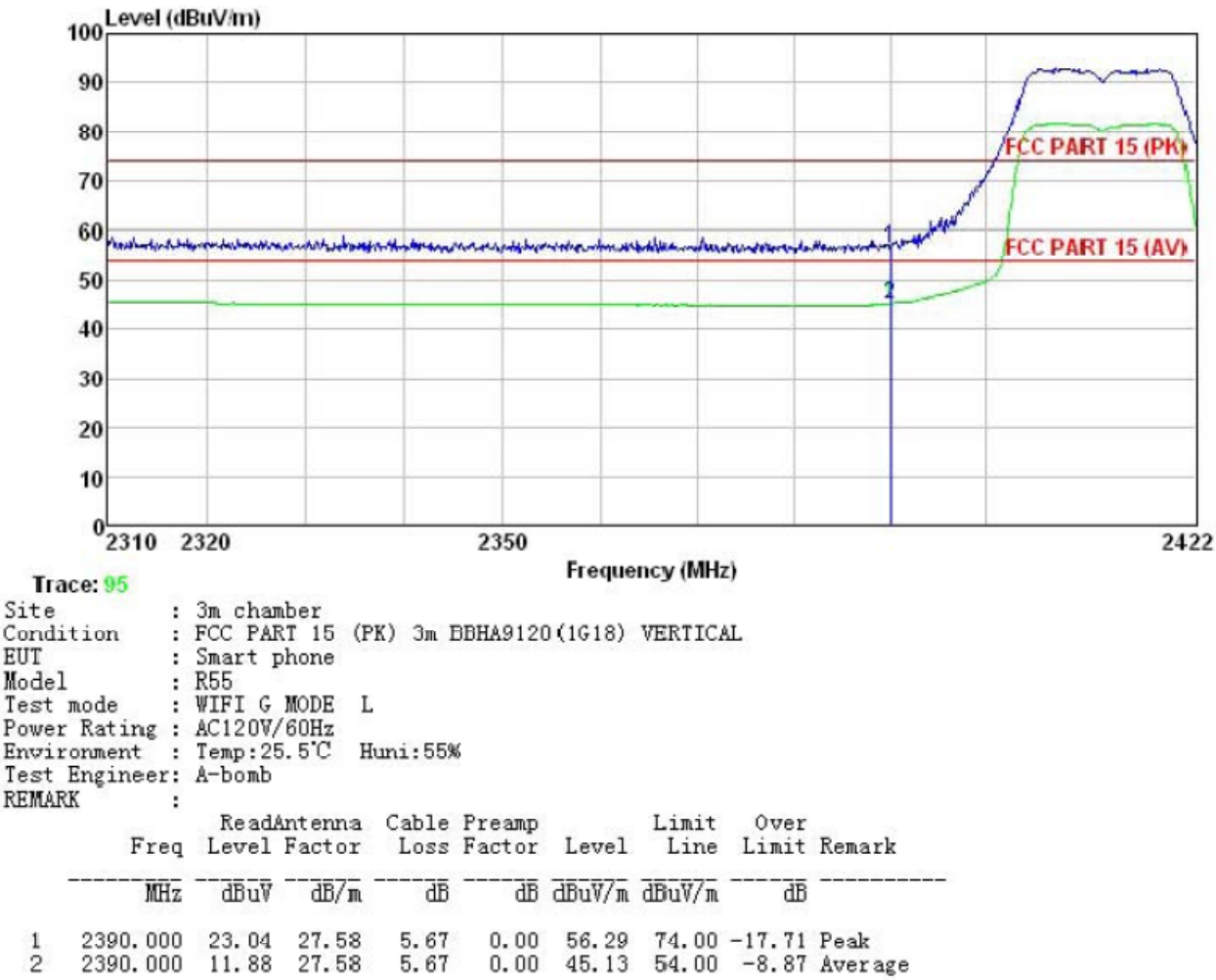
|   | Freq     | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Level  | Limit  | Over Limit | Remark  |
|---|----------|------------|----------------|------------|---------------|--------|--------|------------|---------|
|   | MHz      | dBuV       | dB/m           | dB         | dB            | dBuV/m | dBuV/m | dB         |         |
| 1 | 2483.500 | 22.86      | 27.52          | 5.70       | 0.00          | 56.08  | 74.00  | -17.92     | Peak    |
| 2 | 2483.500 | 11.27      | 27.52          | 5.70       | 0.00          | 44.49  | 54.00  | -9.51      | Average |

802.11g  
Test channel: Lowest

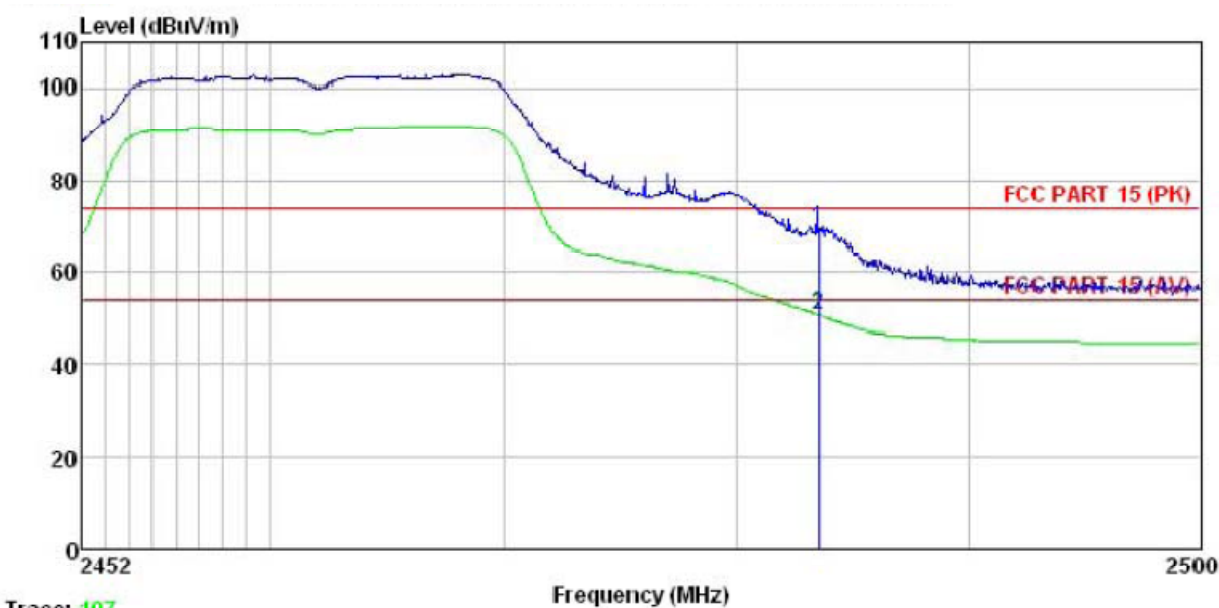
Horizontal :



Vertical :



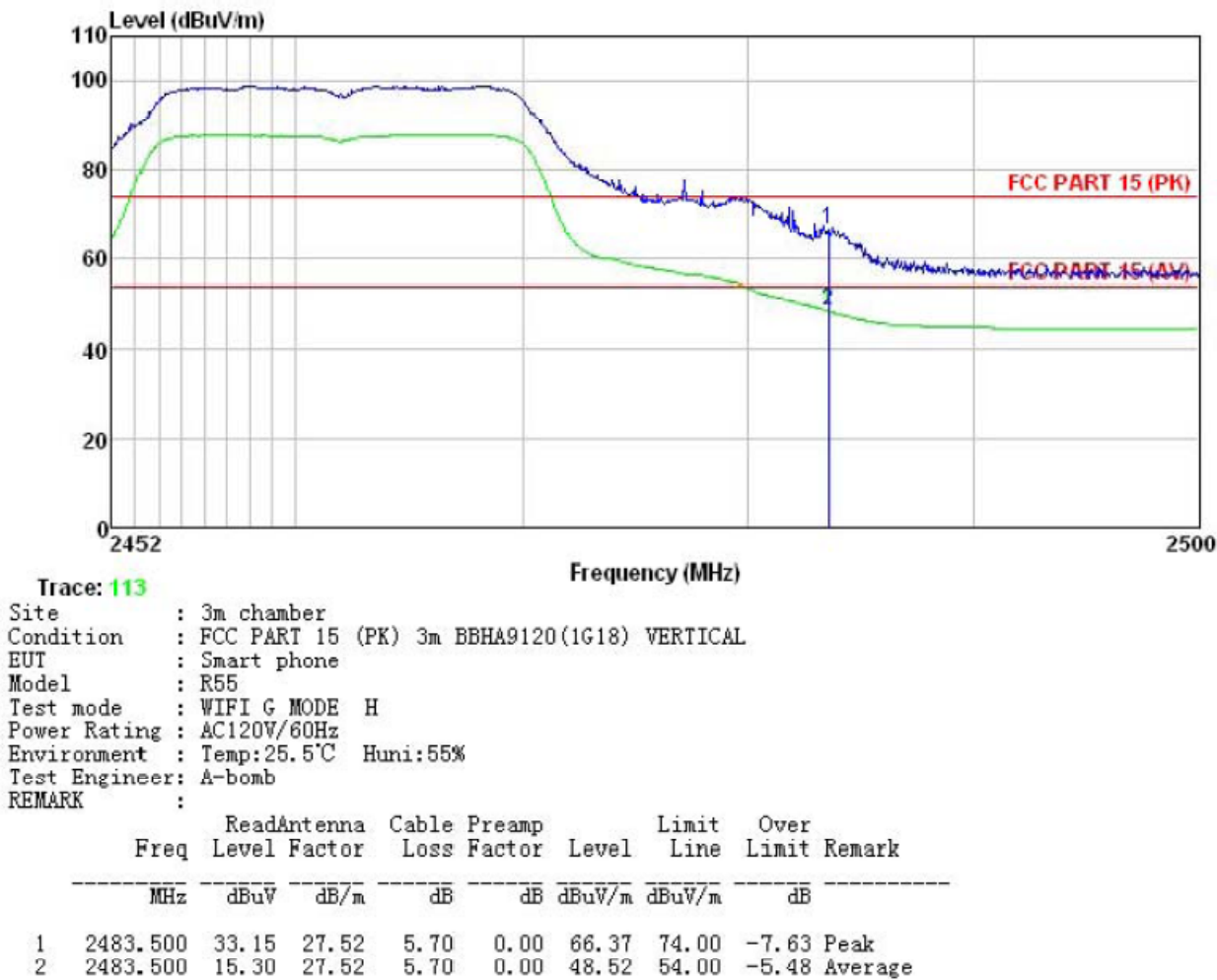
Test channel: Highest



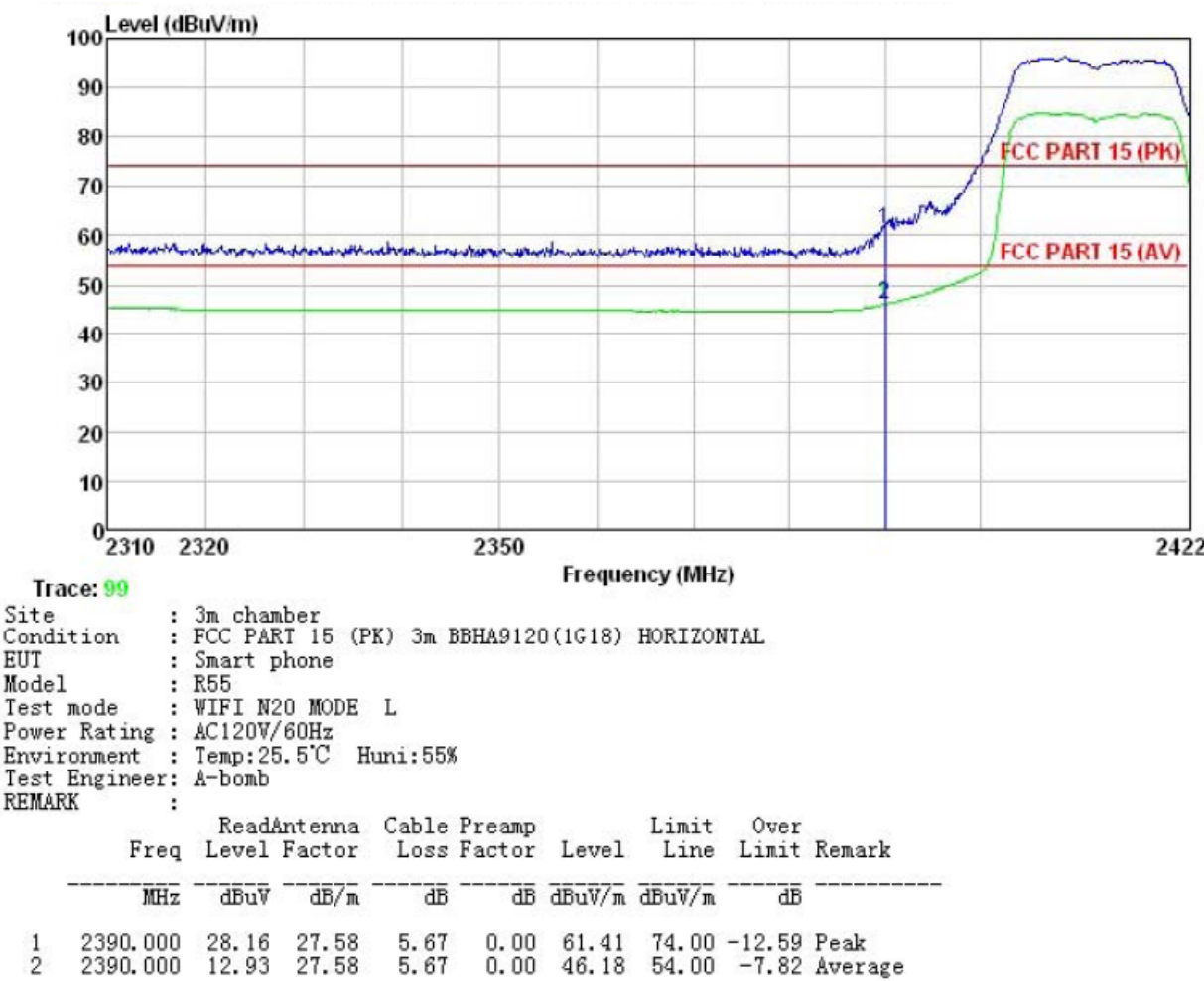
Trace: 107  
Site : 3m chamber  
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI G MODE H  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

|   | Freq     | Read  | Antenna | Cable | Preamp | Level  | Limit  | Over  | Remark  |
|---|----------|-------|---------|-------|--------|--------|--------|-------|---------|
|   |          | Level | Factor  | Loss  | Factor |        | Line   | Limit |         |
|   | MHz      | dBuV  | dB/m    | dB    | dB     | dBuV/m | dBuV/m | dB    |         |
| 1 | 2483.500 | 36.02 | 27.52   | 5.70  | 0.00   | 69.24  | 74.00  | -4.76 | Peak    |
| 2 | 2483.500 | 17.51 | 27.52   | 5.70  | 0.00   | 50.73  | 54.00  | -3.27 | Average |

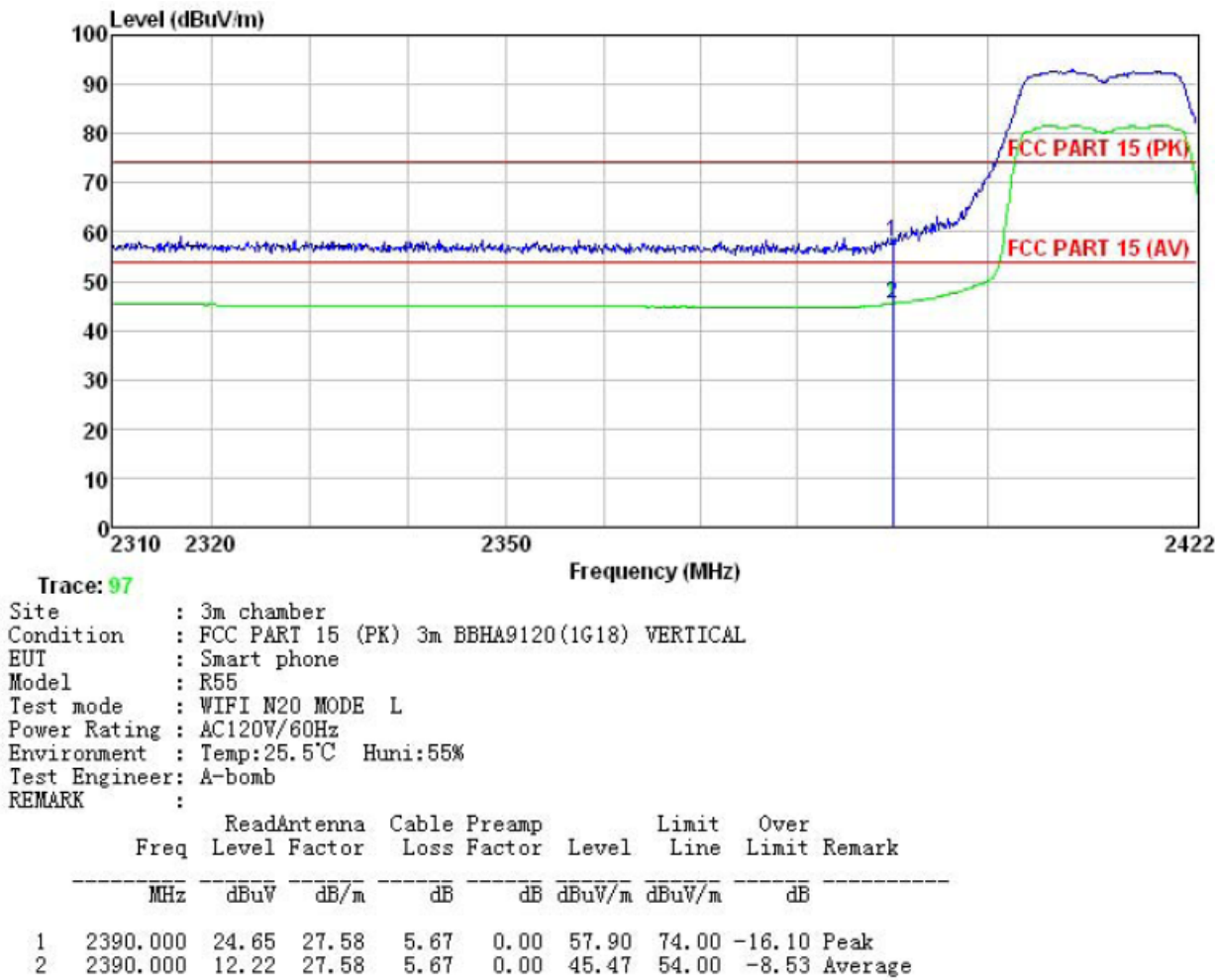
Vertical :



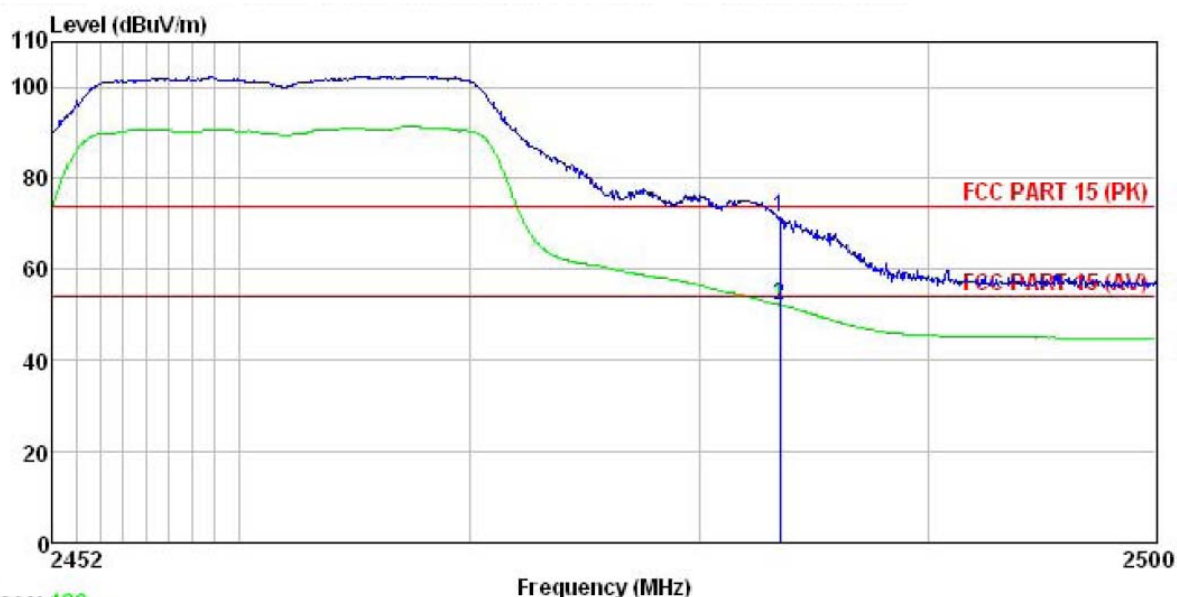
802.11n (H20)  
Test channel: Lowest  
Horizontal :



Vertical :



Test channel: Highest  
Horizontal :

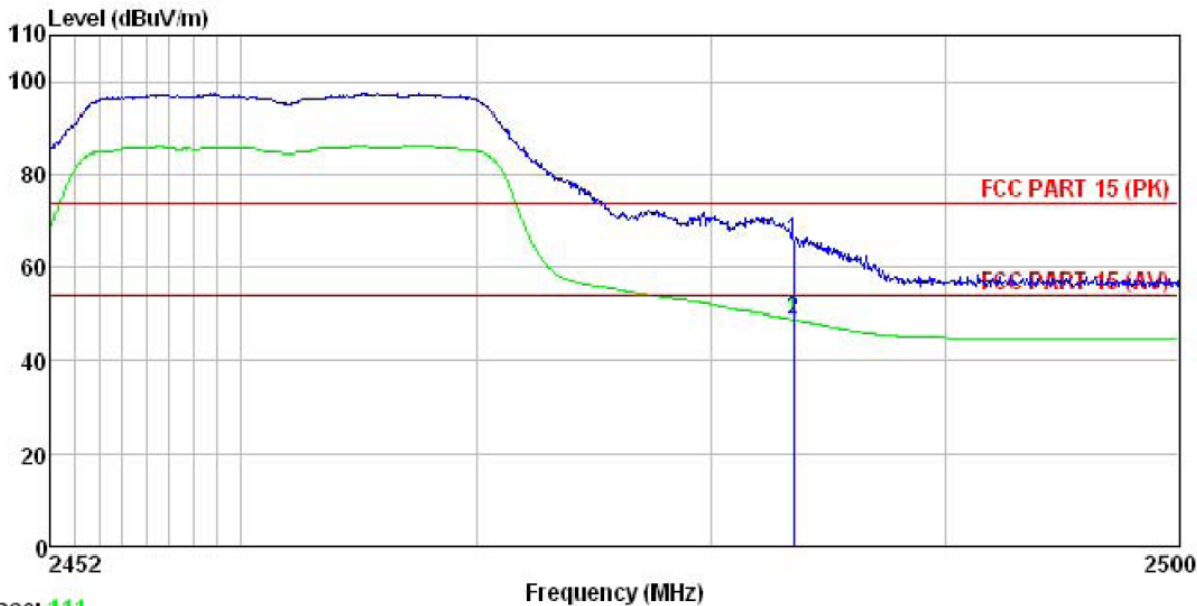


Trace: 109

Site : 3m chamber  
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) HORIZONTAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI N20 MODE H  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

|   | Freq     | Read Level | Antenna Factor | Cable Loss | Preamplifier | Level  | Limit  | Over Limit | Remark  |
|---|----------|------------|----------------|------------|--------------|--------|--------|------------|---------|
|   | MHz      | dBuV       | dB/m           | dB         | dB           | dBuV/m | dBuV/m | dB         |         |
| 1 | 2483.500 | 38.13      | 27.52          | 5.70       | 0.00         | 71.35  | 74.00  | -2.65      | Peak    |
| 2 | 2483.500 | 18.84      | 27.52          | 5.70       | 0.00         | 52.06  | 54.00  | -1.94      | Average |

Vertical :



Trace: 111

Site : 3m chamber  
Condition : FCC PART 15 (PK) 3m BBHA9120(1G18) VERTICAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI N20 MODE H  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

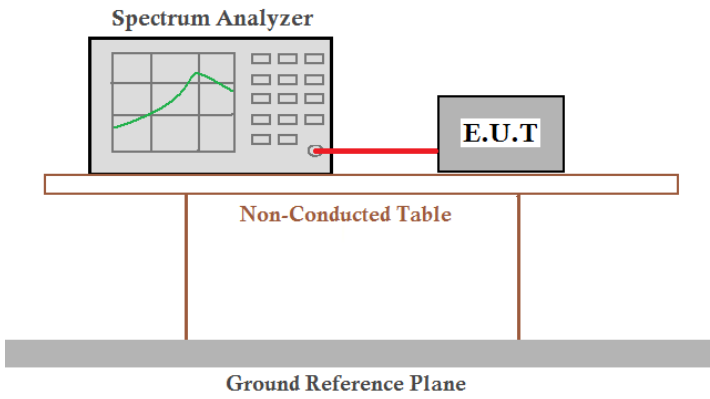
|   | Freq     | Read Level | Antenna Factor | Cable Loss | Preamp Factor | Level  | Limit Line | Over Limit | Remark  |
|---|----------|------------|----------------|------------|---------------|--------|------------|------------|---------|
|   | MHz      | dBuV       | dB/m           | dB         | dB            | dBuV/m | dBuV/m     | dB         |         |
| 1 | 2483.500 | 32.52      | 27.52          | 5.70       | 0.00          | 65.74  | 74.00      | -8.26      | Peak    |
| 2 | 2483.500 | 15.53      | 27.52          | 5.70       | 0.00          | 48.75  | 54.00      | -5.25      | Average |

Remark:

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

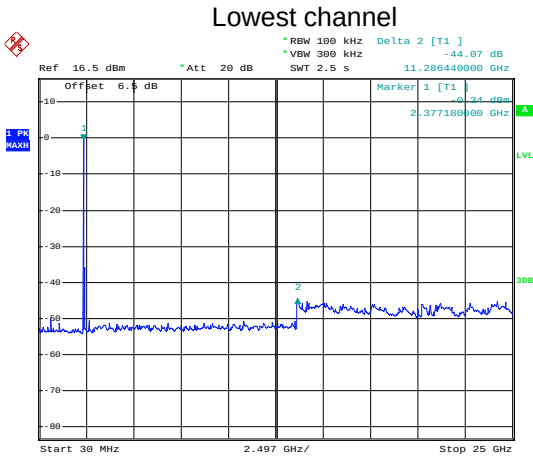
## 6.7 Spurious Emission

### 6.7.1 Conducted Emission Method

|                   |                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 C Section 15.247 (d)<br>RSS-210 section A8.5                                                                                                                                                                                                                                                                                                                                   |
| Test Method:      | ANSI C63.4:2003 and KDB558074<br>RSS-210 section A8.5                                                                                                                                                                                                                                                                                                                                     |
| 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:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T. (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T. are placed on a Non-Conducted Table. The table is supported by two vertical legs and sits on a Ground Reference Plane.</p> |
| Test Instruments: | Refer to section 5.6 for details                                                                                                                                                                                                                                                                                                                                                          |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                          |
| Test results:     | Passed                                                                                                                                                                                                                                                                                                                                                                                    |

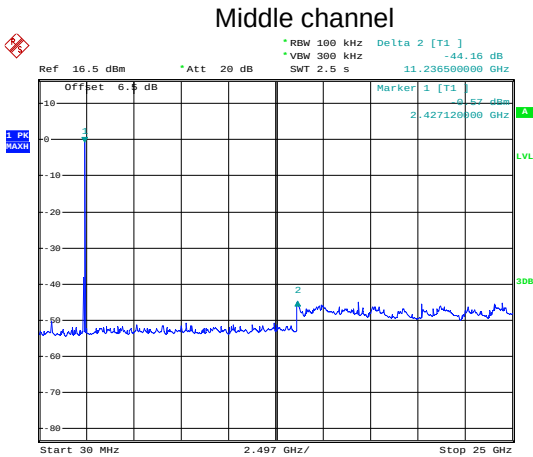
Test plot as follows:

|            |         |
|------------|---------|
| Test mode: | 802.11b |
|------------|---------|



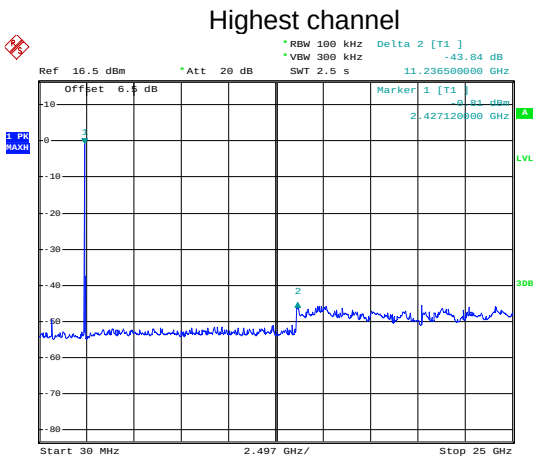
Date: 27.MAR.2014 15:46:30

30MHz~25GHz



Date: 27.MAR.2014 15:44:59

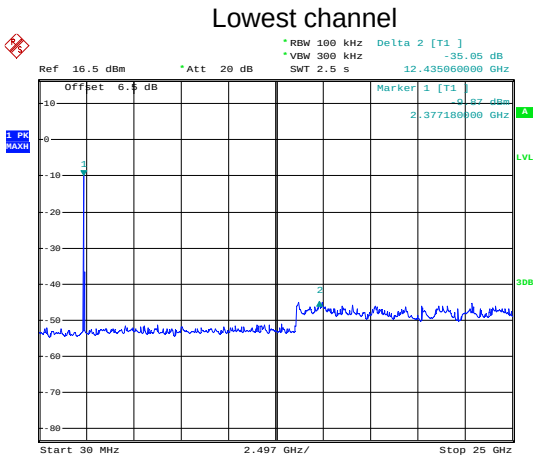
30MHz~25GHz



Date: 27.MAR.2014 15:43:21

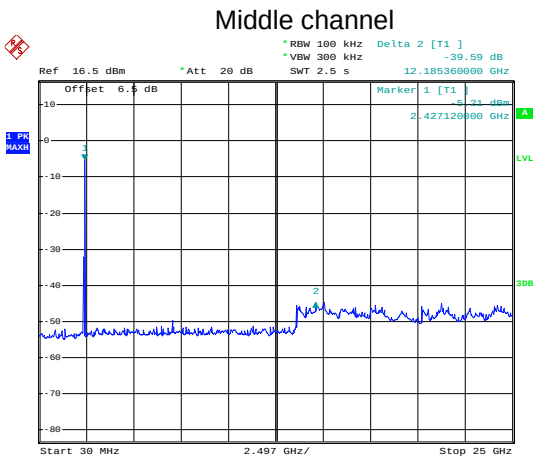
30MHz~25GHz

|            |         |
|------------|---------|
| Test mode: | 802.11g |
|------------|---------|



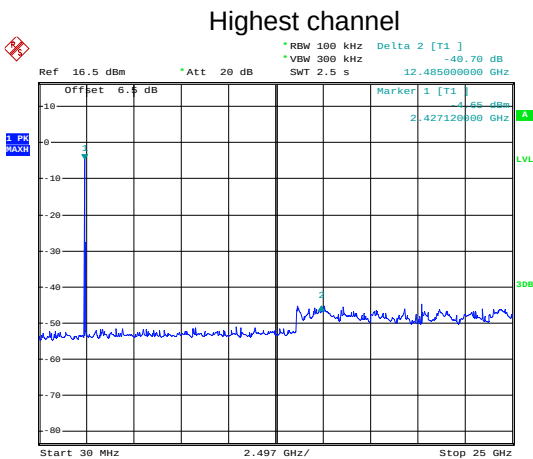
Date: 27.MAR.2014 15:39:33

30MHz~25GHz



Date: 27.MAR.2014 15:41:07

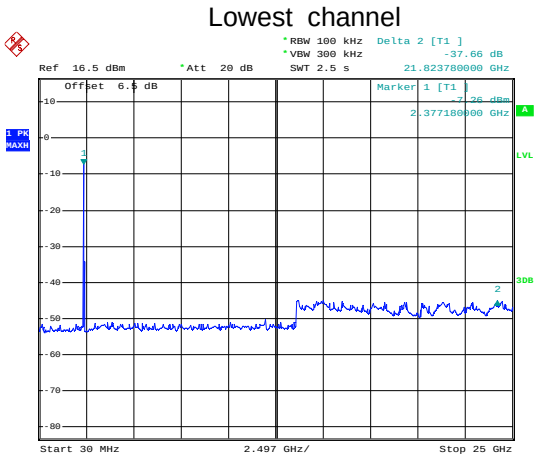
30MHz~25GHz



Date: 27.MAR.2014 15:42:08

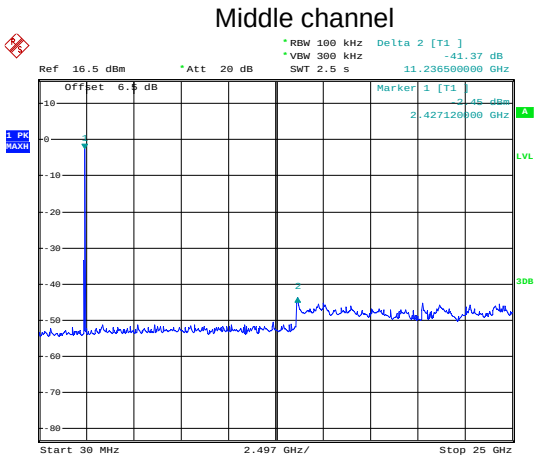
30MHz~25GHz

|            |              |
|------------|--------------|
| Test mode: | 802.11n(H20) |
|------------|--------------|



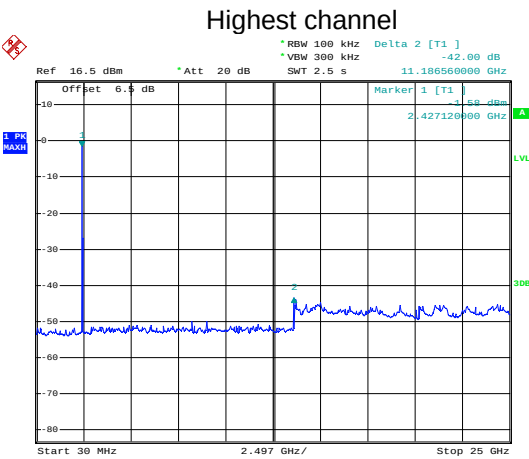
Date: 27.MAR.2014 15:37:14

30MHz~25GHz



Date: 27.MAR.2014 15:38:24

30MHz~25GHz

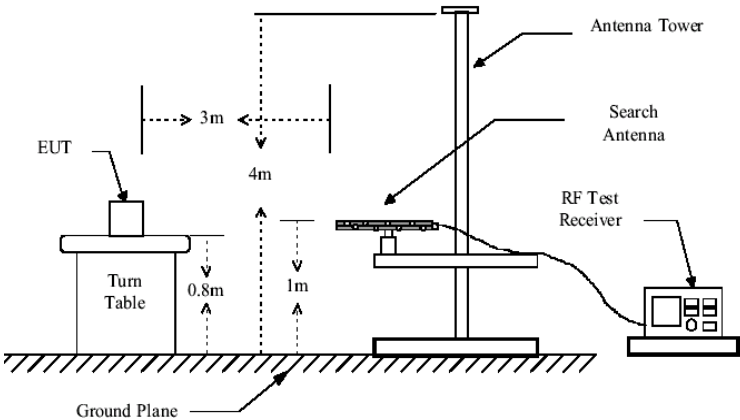
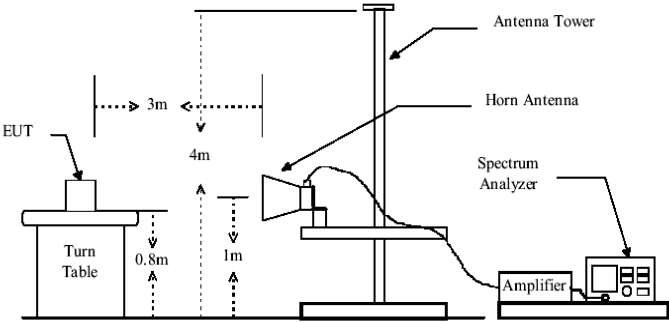


Date: 27.MAR.2014 15:34:10

30MHz~25GHz

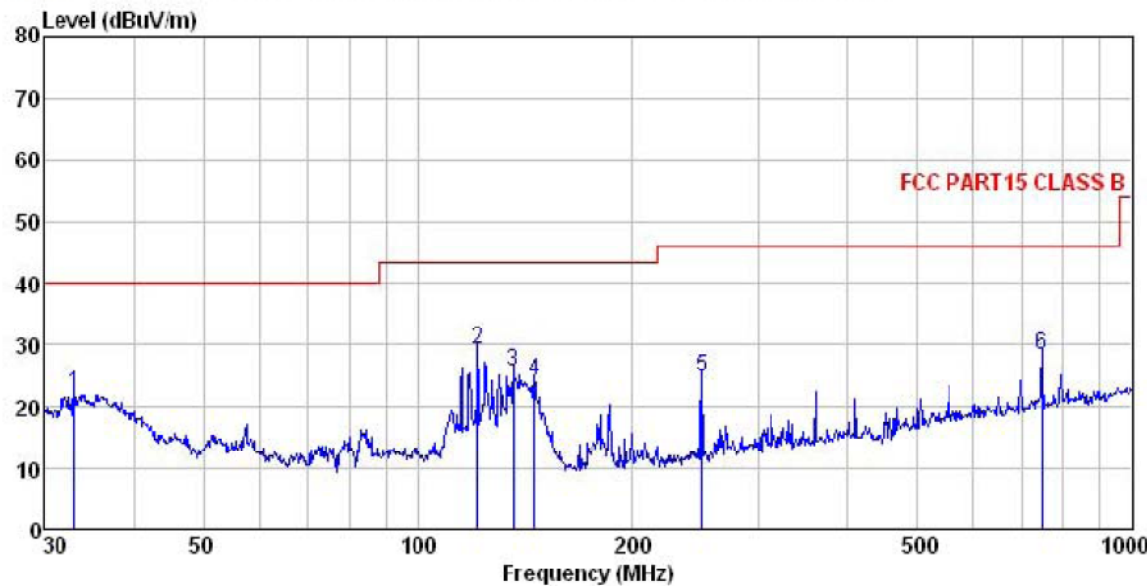
## 6.7.2 Radiated Emission Method

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------|------------------|--|-----------|--------------------|--------|-------------|--------|------------------|--------------|--------|------------------|------------------|------------|------------------|-------------|------|------------------|------------|------|---------------|---------------|------------|
| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205<br>RSS-Gen section 4.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test Method:          | ANSI C63.4:2003<br>RSS-Gen section 4.9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test Frequency Range: | 9KHz to 25GHz<br>30MHz to 40GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Receiver setup:       | <table><tr><td>Frequency</td><td>Detector</td><td>RBW</td><td>VBW</td><td>Remark</td></tr><tr><td>30MHz-1GHz</td><td>Quasi-peak</td><td>120KHz</td><td>300KHz</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>Peak</td><td>1MHz</td><td>3MHz</td><td>Peak Value</td></tr><tr><td>Peak</td><td>1MHz</td><td>10Hz</td><td>Average Value</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                  |        |                  |  | Frequency | Detector           | RBW    | VBW         | Remark | 30MHz-1GHz       | Quasi-peak   | 120KHz | 300KHz           | Quasi-peak Value | Above 1GHz | Peak             | 1MHz        | 3MHz | Peak Value       | Peak       | 1MHz | 10Hz          | Average Value |            |
| Frequency             | Detector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | RBW              | VBW    | Remark           |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| 30MHz-1GHz            | Quasi-peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 120KHz           | 300KHz | Quasi-peak Value |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Above 1GHz            | Peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1MHz             | 3MHz   | Peak Value       |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
|                       | Peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 1MHz             | 10Hz   | Average Value    |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Limit:                | <table><tr><td>Frequency</td><td>Limit (dBuV/m @3m)</td><td>Remark</td></tr><tr><td>30MHz-88MHz</td><td>40.0</td><td>Quasi-peak Value</td></tr><tr><td>88MHz-216MHz</td><td>43.5</td><td>Quasi-peak Value</td></tr><tr><td>216MHz-960MHz</td><td>46.0</td><td>Quasi-peak Value</td></tr><tr><td>960MHz-1GHz</td><td>54.0</td><td>Quasi-peak Value</td></tr><tr><td rowspan="2">Above 1GHz</td><td>54.0</td><td>Average Value</td></tr><tr><td>74.0</td><td>Peak Value</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |        |                  |  | 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-1GHz | 54.0 | Quasi-peak Value | Above 1GHz | 54.0 | Average Value | 74.0          | Peak Value |
| 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-1GHz           | 54.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Quasi-peak Value |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Above 1GHz            | 54.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Average Value    |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
|                       | 74.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Peak Value       |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |
| Test Procedure:       | <div>1. 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.</div> <div>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div> <div>3. 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.</div> <div>4. 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.</div> <div>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div> <div>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div> |                  |        |                  |  |           |                    |        |             |        |                  |              |        |                  |                  |            |                  |             |      |                  |            |      |               |               |            |

|                   |                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test setup:       | <p>Below 1GHz</p>  <p>Above 1GHz</p>  |
| Test Instruments: | Refer to section 5.6for details                                                                                                                                                                            |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                           |
| Test results:     | Passed                                                                                                                                                                                                     |
| Remark:           | <p>1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.</p> <p>2. 9 kHz to 30MHz is too low, so only shows the data of above 30MHz in this report.</p> |

Below 1GHz

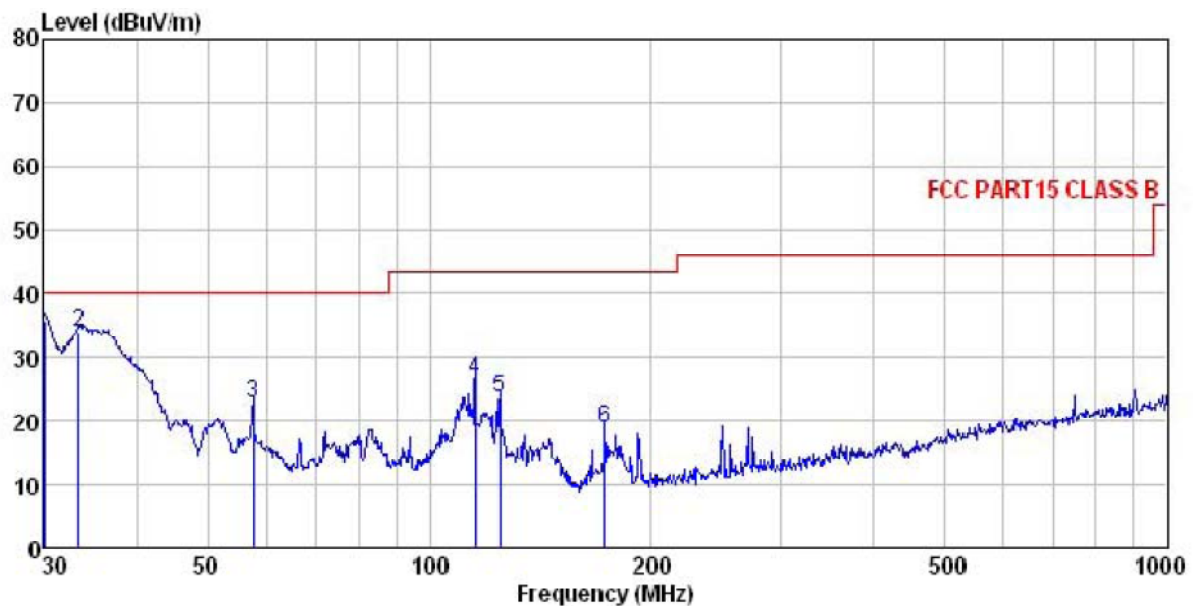
Horizontal :



Site : 3m chamber  
Condition : FCC PART15 CLASS B 3m VULB9163(30M1G) HORIZONTAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI mode  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5°C Humi:55%  
Test Engineer: A-bomb  
REMARK :

|   | Freq    | ReadLevel | AntennaFactor | CableLoss | PreampFactor | Level  | LimitLine | OverLimit | Remark |
|---|---------|-----------|---------------|-----------|--------------|--------|-----------|-----------|--------|
|   | MHz     | dBuV      | dB/m          | dB        | dB           | dBuV/m | dBuV/m    | dB        |        |
| 1 | 33.095  | 35.53     | 12.31         | 0.91      | 26.61        | 22.14  | 40.00     | -17.86    | QP     |
| 2 | 121.123 | 46.36     | 10.29         | 2.18      | 29.68        | 29.15  | 43.50     | -14.35    | QP     |
| 3 | 135.982 | 44.44     | 8.45          | 2.35      | 29.44        | 25.80  | 43.50     | -17.70    | QP     |
| 4 | 145.351 | 42.76     | 8.23          | 2.46      | 29.30        | 24.15  | 43.50     | -19.35    | QP     |
| 5 | 249.425 | 39.51     | 12.07         | 2.81      | 29.60        | 24.79  | 46.00     | -21.21    | QP     |
| 6 | 747.483 | 35.02     | 19.43         | 4.35      | 30.50        | 28.30  | 46.00     | -17.70    | QP     |

Vertical :



Site : 3m chamber  
 Condition : FCC PART15 CLASS B 3m VULB9163(30M1G) VERTICAL  
 EUT : Smart phone  
 Model : R55  
 Test mode : WIFI mode  
 Power Rating : AC120V/60Hz  
 Environment : Temp:25.5°C Humi:55%  
 Test Engineer: A-bomb  
 REMARK :

|   | Freq    | ReadAntenna | Cable  | Preamp | Level  | Limit  | Over   |           |
|---|---------|-------------|--------|--------|--------|--------|--------|-----------|
|   | MHz     | Level       | Factor | Loss   | Factor | Line   | Limit  | Remark    |
|   | MHz     | dBuV        | dB/m   | dB     | dB     | dBuV/m | dBuV/m | dB        |
| 1 | 30.000  | 49.04       | 12.33  | 0.72   | 26.27  | 35.82  | 40.00  | -4.18 QP  |
| 2 | 33.445  | 47.30       | 12.31  | 0.98   | 26.63  | 33.96  | 40.00  | -6.04 QP  |
| 3 | 57.594  | 37.63       | 12.87  | 1.37   | 28.99  | 22.88  | 40.00  | -17.12 QP |
| 4 | 115.321 | 42.97       | 11.31  | 2.11   | 29.78  | 26.61  | 43.50  | -16.89 QP |
| 5 | 124.569 | 41.35       | 9.80   | 2.22   | 29.62  | 23.75  | 43.50  | -19.75 QP |
| 6 | 172.599 | 35.19       | 9.16   | 2.68   | 28.17  | 18.86  | 43.50  | -24.64 QP |

### Above 1GHz

| Test mode: 802.11b |                   |                       | Test channel: Lowest |                    |                | Remark: Peak        |                 |              |
|--------------------|-------------------|-----------------------|----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4824.00            | 46.36             | 31.53                 | 8.90                 | 40.24              | 46.55          | 74.00               | -27.45          | Vertical     |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4824.00            | 47.35             | 31.53                 | 8.90                 | 40.24              | 47.54          | 74.00               | -26.46          | Horizontal   |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11b |                   |                       | Test channel: Lowest |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4824.00            | 36.52             | 31.53                 | 8.90                 | 40.24              | 36.71          | 54.00               | -17.29          | Vertical     |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4824.00            | 37.28             | 31.53                 | 8.90                 | 40.24              | 37.47          | 54.00               | -16.53          | Horizontal   |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |

| Test mode: 802.11b |                   |                       | Test channel: Middle |                    |                | Remark: Peak        |                 |              |
|--------------------|-------------------|-----------------------|----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4874.00            | 47.76             | 31.58                 | 8.98                 | 40.15              | 48.17          | 74.00               | -25.83          | Vertical     |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4874.00            | 46.84             | 31.58                 | 8.98                 | 40.15              | 47.25          | 74.00               | -26.75          | Horizontal   |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11b |                   |                       | Test channel: Middle |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4874.00            | 37.24             | 31.58                 | 8.98                 | 40.15              | 37.65          | 54.00               | -16.35          | Vertical     |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4874.00            | 36.26             | 31.58                 | 8.98                 | 40.15              | 36.67          | 54.00               | -17.33          | Horizontal   |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |

| Test mode: 802.11b |                   |                       | Test channel: Highest |                    |                | Remark: Peak        |                 |              |
|--------------------|-------------------|-----------------------|-----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)       | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4924.00            | 48.29             | 31.69                 | 9.08                  | 40.03              | 49.03          | 74.00               | -24.97          | Vertical     |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Vertical     |
| 4924.00            | 47.61             | 31.69                 | 9.08                  | 40.03              | 48.35          | 74.00               | -25.65          | Horizontal   |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11b |                   |                       | Test channel: Highest |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)       | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4924.00            | 39.51             | 31.69                 | 9.08                  | 40.03              | 40.25          | 54.00               | -13.75          | Vertical     |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Vertical     |
| 4924.00            | 38.55             | 31.69                 | 9.08                  | 40.03              | 39.29          | 54.00               | -14.71          | Horizontal   |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Horizontal   |

#### Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. "--", means this data is 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: 802.11g |                   |                       | Test channel: Lowest |                    |                | Remark: Peak        |                 |              |
|--------------------|-------------------|-----------------------|----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4824.00            | 43.42             | 31.53                 | 8.90                 | 40.24              | 43.61          | 74.00               | -30.39          | Vertical     |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4824.00            | 47.22             | 31.53                 | 8.90                 | 40.24              | 47.41          | 74.00               | -26.59          | Horizontal   |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11g |                   |                       | Test channel: Lowest |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4824.00            | 33.38             | 31.53                 | 8.90                 | 40.24              | 33.57          | 54.00               | -20.43          | Vertical     |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4824.00            | 37.63             | 31.53                 | 8.90                 | 40.24              | 37.82          | 54.00               | -16.18          | Horizontal   |
| 7236.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |

| Test mode: 802.11g |                   |                       | Test channel: Middle |                    |                | Remark: Peak        |                 |              |
|--------------------|-------------------|-----------------------|----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4874.00            | 46.60             | 31.58                 | 8.98                 | 40.15              | 47.01          | 74.00               | -26.99          | Vertical     |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4874.00            | 45.67             | 31.58                 | 8.98                 | 40.15              | 46.08          | 74.00               | -27.92          | Horizontal   |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11g |                   |                       | Test channel: Middle |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4874.00            | 36.37             | 31.58                 | 8.98                 | 40.15              | 36.78          | 54.00               | -17.22          | Vertical     |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4874.00            | 36.25             | 31.58                 | 8.98                 | 40.15              | 36.66          | 54.00               | -17.34          | Horizontal   |
| 7311.00            | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |

| Test mode: 802.11g |                   |                       | Test channel: Highest |                    |                | Remark: Peak        |                 |              |
|--------------------|-------------------|-----------------------|-----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)       | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4924.00            | 49.02             | 31.69                 | 9.08                  | 40.03              | 49.76          | 74.00               | -24.24          | Vertical     |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Vertical     |
| 4924.00            | 47.04             | 31.69                 | 9.08                  | 40.03              | 47.78          | 74.00               | -26.22          | Horizontal   |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11g |                   |                       | Test channel: Highest |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)    | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)       | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4924.00            | 40.23             | 31.69                 | 9.08                  | 40.03              | 40.97          | 54.00               | -13.03          | Vertical     |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | Vertical     |
| 4924.00            | 36.55             | 31.69                 | 9.08                  | 40.03              | 37.29          | 54.00               | -16.71          | Horizontal   |
| 7386.00            | --                | --                    | --                    | --                 | --             | --                  | --              | 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(H20) |                   |                       | Test channel: Lowest |                    |                | Remark: Peak        |                 |              |
|-------------------------|-------------------|-----------------------|----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)         | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4824.00                 | 46.84             | 31.53                 | 8.90                 | 40.24              | 47.03          | 74.00               | -26.97          | Vertical     |
| 7236.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4824.00                 | 46.96             | 31.53                 | 8.90                 | 40.24              | 47.15          | 74.00               | -26.85          | Horizontal   |
| 7236.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11n(H20) |                   |                       | Test channel: Lowest |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)         | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4824.00                 | 36.25             | 31.53                 | 8.90                 | 40.24              | 36.44          | 54.00               | -17.56          | Vertical     |
| 7236.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4824.00                 | 36.52             | 31.53                 | 8.90                 | 40.24              | 36.71          | 54.00               | -17.29          | Horizontal   |
| 7236.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |

| Test mode: 802.11n(H20) |                   |                       | Test channel: Middle |                    |                | Remark: Peak        |                 |              |
|-------------------------|-------------------|-----------------------|----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)         | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4874.00                 | 46.62             | 31.58                 | 8.98                 | 40.15              | 47.03          | 74.00               | -26.97          | Vertical     |
| 7311.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4874.00                 | 46.74             | 31.58                 | 8.98                 | 40.15              | 47.15          | 74.00               | -26.85          | Horizontal   |
| 7311.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11n(H20) |                   |                       | Test channel: Middle |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)         | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)      | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4874.00                 | 36.51             | 31.58                 | 8.98                 | 40.15              | 36.92          | 54.00               | -17.08          | Vertical     |
| 7311.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Vertical     |
| 4874.00                 | 36.92             | 31.58                 | 8.98                 | 40.15              | 37.33          | 54.00               | -16.67          | Horizontal   |
| 7311.00                 | --                | --                    | --                   | --                 | --             | --                  | --              | Horizontal   |

| Test mode: 802.11n(H20) |                   |                       | Test channel: Highest |                    |                | Remark: Peak        |                 |              |
|-------------------------|-------------------|-----------------------|-----------------------|--------------------|----------------|---------------------|-----------------|--------------|
| Frequency (MHz)         | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)       | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4924.00                 | 47.48             | 31.69                 | 9.08                  | 40.03              | 48.22          | 74.00               | -25.78          | Vertical     |
| 7386.00                 | --                | --                    | --                    | --                 | --             | --                  | --              | Vertical     |
| 4924.00                 | 48.03             | 31.69                 | 9.08                  | 40.03              | 48.77          | 74.00               | -25.23          | Horizontal   |
| 7386.00                 | --                | --                    | --                    | --                 | --             | --                  | --              | Horizontal   |
| Test mode: 802.11n(H20) |                   |                       | Test channel: Highest |                    |                | Remark: Average     |                 |              |
| Frequency (MHz)         | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB)       | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Over Limit (dB) | polarization |
| 4924.00                 | 37.60             | 31.69                 | 9.08                  | 40.03              | 38.34          | 54.00               | -15.66          | Vertical     |
| 7386.00                 | --                | --                    | --                    | --                 | --             | --                  | --              | Vertical     |
| 4924.00                 | 38.24             | 31.69                 | 9.08                  | 40.03              | 38.98          | 54.00               | -15.02          | Horizontal   |
| 7386.00                 | --                | --                    | --                    | --                 | --             | --                  | --              | Horizontal   |

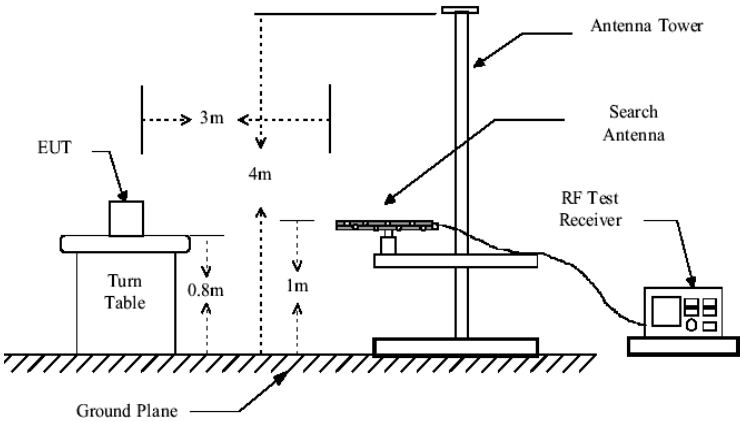
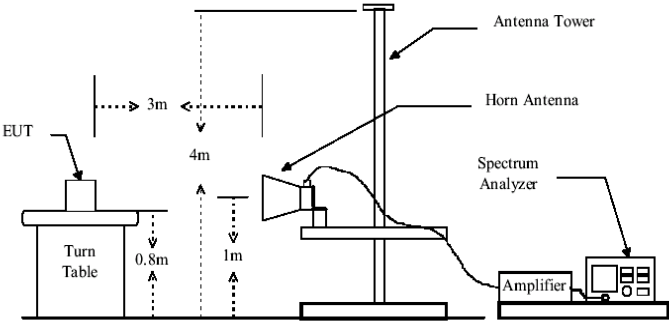
Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. "--", means this data is 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.

## 6.8 Receiver spurious emissions

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                    |               |                  |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|---------------|------------------|
| Test Requirement:     | RSS-Gen section 4.10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |                    |               |                  |
| Test Method:          | RSS-Gen section 4.10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |            |                    |               |                  |
| Test Frequency Range: | 30MHz to 25GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |            |                    |               |                  |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            |                    |               |                  |
| Receiver setup:       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                    |               |                  |
|                       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Detector   | RBW                | VBW           | Remark           |
|                       | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Quasi-peak | 100kHz             | 300kHz        | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Peak       | 1MHz               | 3MHz          | Peak Value       |
| Peak                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1MHz       | 10Hz               | Average Value |                  |
| Limit:                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            |                    |               |                  |
|                       | 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-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            | 54.0               |               | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |            | 54.0               |               | Average Value    |
| 74.0                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |            | Peak Value         |               |                  |
| Test Procedure:       | <div>1. 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.</div> <div>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div> <div>3. 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.</div> <div>4. 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.</div> <div>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div> <div>6. 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 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div> |            |                    |               |                  |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |                    |        |                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--------------------|--------|------------------|
| Test Requirement:     | RSS-Gen section 4.10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |        |                  |
| Test Method:          | RSS-Gen section 4.10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |            |                    |        |                  |
| Test Frequency Range: | 30MHz to 25GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |            |                    |        |                  |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |            |                    |        |                  |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Detector   | RBW                | VBW    | Remark           |
|                       | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Quasi-peak | 100kHz             | 300kHz | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Peak       | 1MHz               | 3MHz   | Peak Value       |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Peak       | 1MHz               | 10Hz   | Average Value    |
| Limit:                | 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-1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |            | 54.0               |        | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |            | 54.0               |        | Average Value    |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            | 74.0               |        | Peak Value       |
| Test Procedure:       | <div>7. 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.</div> <div>8. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div> <div>9. 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.</div> <div>10. 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.</div> <div>11. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div> <div>12. 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 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div> |            |                    |        |                  |

|                   |                                                                                                                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test setup:       | <p>Below 1GHz</p>  <p>Above 1GHz</p>  |
| Test Instruments: | Refer to section 5.6 for details                                                                                                                                                                           |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                           |
| Test results:     | Passed                                                                                                                                                                                                     |

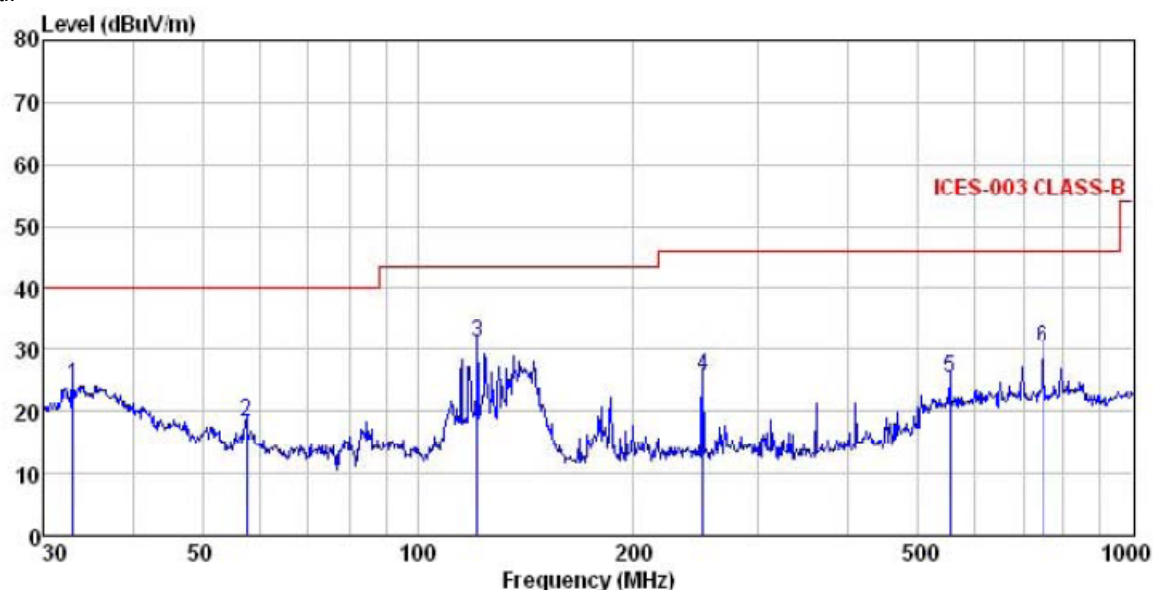
Remark:

1. Pre-scan all kind of the place mode (X-axis, Y-axis, Z-axis), and found the Y-axis is the worst case.

Measurement data:

## Below 1GHz

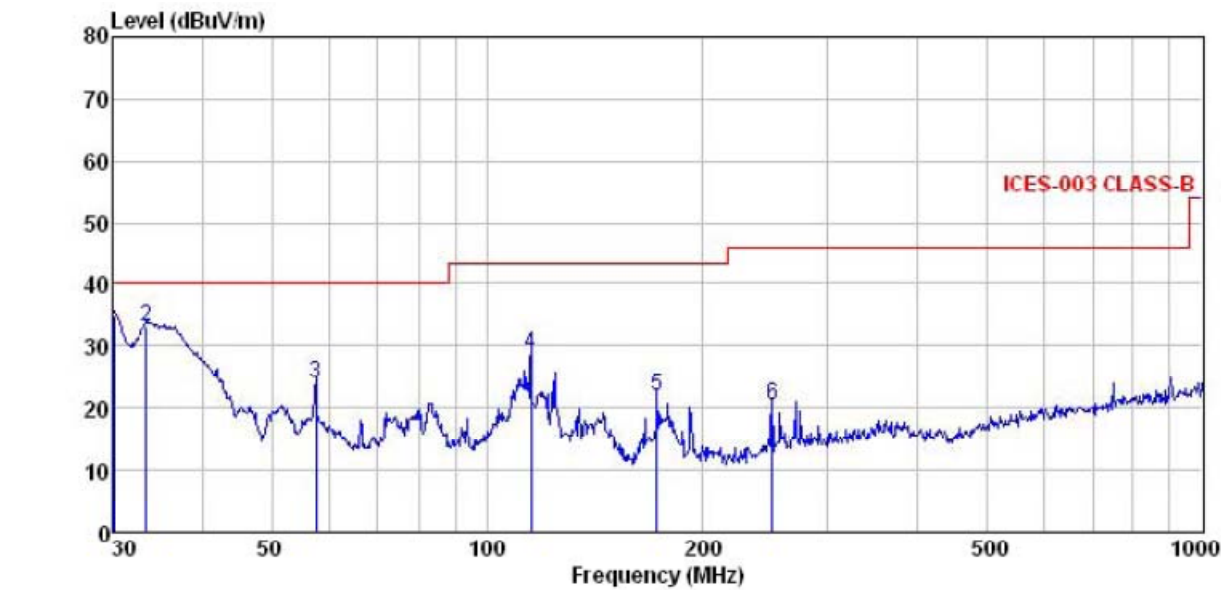
Horizontal:



Site : 3m chamber  
 Condition : ICES-003 CLASS-B 3m VULB9163(30M1G) HORIZONTAL  
 EUT : Smart phone  
 Model : R55  
 Test mode : WIFI RX mode  
 Power Rating : AC120V/60Hz  
 Environment : Temp:25.5℃ Humi:55%  
 Test Engineer: A-bomb  
 REMARK :

|   | Freq    | ReadAntenna | Cable Preamp |        | Limit  | Over   |                 |
|---|---------|-------------|--------------|--------|--------|--------|-----------------|
|   | Level   | Factor      | Loss         | Factor | Line   | Limit  | Remark          |
|   | dBuV    | dB/m        | dB           | dB     | dBuV/m | dBuV/m | dB              |
|   | MHz     | dBuV        | dB/m         | dB     | dBuV/m | dBuV/m | dB              |
| 1 | 33.095  | 37.53       | 12.31        | 0.91   | 26.61  | 24.14  | 40.00 -15.86 QP |
| 2 | 57.594  | 33.02       | 12.87        | 1.37   | 28.99  | 18.27  | 40.00 -21.73 QP |
| 3 | 121.123 | 48.36       | 10.29        | 2.18   | 29.68  | 31.15  | 43.50 -12.35 QP |
| 4 | 249.425 | 40.51       | 12.07        | 2.81   | 29.60  | 25.79  | 46.00 -20.21 QP |
| 5 | 552.883 | 34.45       | 17.62        | 3.89   | 30.54  | 25.42  | 46.00 -20.58 QP |
| 6 | 747.483 | 37.02       | 19.43        | 4.35   | 30.50  | 30.30  | 46.00 -15.70 QP |

Vertical:



Site : 3m chamber  
Condition : ICES-003 CLASS-B 3m VULB9163(30M1G) VERTICAL  
EUT : Smart phone  
Model : R55  
Test mode : WIFI RX mode  
Power Rating : AC120V/60Hz  
Environment : Temp:25.5℃ Humi:55%  
Test Engineer: A-bomb  
REMARK :

|   | Freq    | Read  | Antenna | Cable | Preamp | Level  | Limit  | Over   |        |
|---|---------|-------|---------|-------|--------|--------|--------|--------|--------|
|   | MHz     | Level | Factor  | Loss  | Factor | dBuV/m | Line   | Limit  | Remark |
|   | MHz     | dBuV  | dB/m    | dB    | dB     | dBuV/m | dBuV/m | dB     |        |
| 1 | 30.000  | 48.04 | 12.33   | 0.72  | 26.27  | 34.82  | 40.00  | -5.18  | QP     |
| 2 | 33.445  | 46.30 | 12.31   | 0.98  | 26.63  | 32.96  | 40.00  | -7.04  | QP     |
| 3 | 57.594  | 38.63 | 12.87   | 1.37  | 28.99  | 23.88  | 40.00  | -16.12 | QP     |
| 4 | 115.321 | 44.97 | 11.31   | 2.11  | 29.78  | 28.61  | 43.50  | -14.89 | QP     |
| 5 | 172.599 | 38.19 | 9.16    | 2.68  | 28.17  | 21.86  | 43.50  | -21.64 | QP     |
| 6 | 249.425 | 35.04 | 12.07   | 2.81  | 29.60  | 20.32  | 46.00  | -25.68 | QP     |

Remark: The emissions above 1GHz only noise floor, so not recorded in report.