# FCC Test Report (WIFI)

| | | |
|---|---|---|
| **FCC ID** | : | **2ACDNTMC-HERO** |
| **Applicant** | : | **CHINA TRADE GROUP S.A.S**<br>CALLE 13 NO 14-42-CENTRO CUNDINAMARQUES OFICINA 805-806-OCTAVO PISO, BOGOTA, COLOMBIA |
| **Sample Description** | | |
| Product Name | : | **MOBILE PHONE** |
| Model No. | : | TMC-HERO |
| Serial No. | : | N/A |
| Trademark | : | TMC |
| **Receipt Date** | : | 2014-04-25 |
| **Test Date** | : | 2014-04-25 to 2014-05-14 |
| **Issue Date** | : | 2014-05-14 |
| **Test Standard(s)** | : | **FCC CFR Title 47 Part 15 Subpart C Section 15.247** |
| **Conclusions** | : | **PASSED*** |

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

**Test/Witness Engineer** : Jason Deng

**Approved & Authorized** : Winkey Wang

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. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

# Contents

# 1. General Information

## 1.1 Client Information

| | | |
|---|---|---|
| Applicant | : | CHINA TRADE GROUP S.A.S |
| Address | : | CALLE 13 NO 14-42-CENTRO CUNDINAMARQUES OFICINA 805-806-OCTAVO PISO, BOGOTA, COLOMBIA |
| Manufacturer | : | SHENZHEN YILIWANDA ELECTRONIC TECHNOLOGY Co., LTD. |
| Address | : | 5 FL, TOWER 5A, XINFU INDUSTRIAL ZONE, CHONGQING ROAD, SHENZHEN, CHINA |

## 1.2 General Description of EUT (Equipment Under Test)

| | | | |
|---|---|---|---|
| Product Name | : | MOBILE PHONE | |
| Models No. | : | TMC-HERO | |
| Serial No. | : | N/A | |
| Trademark | : | TMC | |
| Product Description | : | Operation Frequency: | 2412MHz~2462MHz (802.11b/802.11g/802.11n(H20)) 2422MHz~2452MHz (802.11n(H40)) |
| | | Transfer Rate: | 802.11b: 1/ 2/ 5.5/ 11Mbps 802.11g: 6/ 9/ 12/ 18/ 24/ 36/, 48/54 Mbps 802.11n: Up to 150Mbps |
| | | Number of Channel: | 11 for 802.11b/802.11g/802.11(H20) 7 for 802.11n(H40) |
| | | Channel separation | 5MHz |
| | | Modulation Technology: | 802.11b:DSSS 802.11g/ 802.11n:OFDM |
| | | Antenna Type: | Integral Antenna |
| | | Antenna Gain: | 0 dBi |
| Power Supply | : | AC adapter: Input 100-240V~, 50/60Hz 0.15A, Output 5.0V DC, 500mA Rechargeable Li-ion Battery DC 3.7V | |

**Note:**

(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

(2) Channel List:

CH 01~CH 11 for 802.11b/ g/ n(20M) and CH 03~CH 09 for 802.11n(40M)

| Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
|---|---|---|---|---|---|
| 01 | 2412 | 05 | 2432 | 09 | 2452 |
| 02 | 2417 | 06 | 2437 | 10 | 2457 |
| 03 | 2422 | 07 | 2442 | 11 | 2462 |
| 04 | 2427 | 08 | 2447 | | |

## 1.3 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

| Test Mode | Description |
|---|---|
| Transmitting mode | Keep the EUT in continuous transmitting with modulation |

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

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

| **Per-scan all kind of data rate in lowest channel, and found the follow list which it was worst case.** | |
|---|---|
| Mode | Data rate |
| 802.11b | 1Mbps |
| 802.11g | 6Mbps |
| 802.11n(H20) | 6.5Mbps |
| 802.11n(H40) | 13.5Mbps |
| **Final Test Mode:** | |
| According to ANSI C63.4 standards, the test results are both the “worst case” and “worst setup” 1Mbps for 802.11b, 6Mbps for 802.11g, 6.5Mbps for 802.11n(H20) and 13.5 Mbps for 802.11n(H40). Duty cycle setting during the transmission is 100% with maximum power setting for all modulations. | |

## 1.4 Test Instruments List

| Item | Test Equipment | Manufacturer | Model No. | Cal. Date | Cal. Due date |
|---|---|---|---|---|---|
| 1 | Bilog Antenna | SCHWARZBECK MESS-ELEKTRONIK | VULB9163 | Mar. 28, 2014 | Mar. 27, 2015 |
| 2 | Double -ridged waveguide horn | SCHWARZBECK MESS-ELEKTRONIK | BBHA9120D | Mar. 28, 2014 | Mar. 27, 2015 |
| 3 | Coaxial Cable | N/A | N/A | Mar. 28, 2014 | Mar. 27, 2015 |
| 4 | Coaxial Cable | N/A | N/A | Mar. 28, 2014 | Mar. 27, 2015 |
| 5 | Coaxial cable | N/A | N/A | Mar. 28, 2014 | Mar. 27, 2015 |
| 6 | Coaxial Cable | N/A | N/A | Mar. 28, 2014 | Mar. 27, 2015 |
| 7 | Coaxial Cable | N/A | N/A | Mar. 28, 2014 | Mar. 27, 2015 |
| 8 | Amplifier (10kHz-1.3GHz) | HP | 8447D | Mar. 28, 2014 | Mar. 27, 2015 |
| 9 | Amplifier (1GHz-18GHz) | Compliance Direction Systems Inc. | PAP-1G18 | Mar. 28, 2014 | Mar. 27, 2015 |
| 10 | Pre-amplifier (18-26GHz) | Rohde & Schwarz | AFS33-18002 650-30-8P-44 | Mar. 28, 2014 | Mar. 27, 2015 |
| 11 | Horn Antenna | ETS-LINDGREN | 3160 | Mar. 28, 2014 | Mar. 27, 2015 |
| 12 | Positioning Controller | UC | UC3000 | N/A | N/A |
| 13 | Spectrum analyzer 9kHz-30GHz | Rohde & Schwarz | FSP | Mar. 28, 2014 | Mar. 27, 2015 |
| 14 | EMI Test Receiver | Rohde & Schwarz | ESPI | Mar. 28, 2014 | Mar. 27, 2015 |
| 15 | Loop antenna | Laplace instrument | RF300 | Mar. 28, 2014 | Mar. 27, 2015 |
| 16 | Universal radio communication tester | Rhode & Schwarz | CMU200 | Mar. 28, 2014 | Mar. 27, 2015 |
| 17 | Signal Analyzer | Rohde & Schwarz | FSIQ3 | Mar. 28, 2014 | Mar. 27, 2015 |
| 18 | EMI Test Receiver | Rohde & Schwarz ESCI | ESCI | Mar. 28, 2014 | Mar. 27, 2015 |
| 19 | LISN | CHASE | MN2050D | Mar. 28, 2014 | Mar. 27, 2015 |

## 1.5 Laboratory Location

Shenzhen Certification Technology Service Co., Ltd.
Address: 2F, Building B, East Area of Nanchang Second Industrial Zone, Gushu 2nd Road, Bao'an District, Shenzhen 518126, P.R. China

At the time of testing, the Laboratory is accredited. It is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 197647.
Tel:86-755-86375552 Fax: 86-755-26736857

# 2. Test Summary

| Standard Section | Test Item | Judgment |
|---|---|---|
| 15.203/15.247(c) | Antenna Requirement | PASSED |
| 15.207 | Conducted Emission | PASSED |
| 15.247(b)(3) | Conducted Peak Output Power | PASSED |
| 15.247(a)(2) | 6dB Emission Bandwidth | PASSED |
| 15.247(e) | Power Spectral Density | PASSED |
| 15.247(d) | Band Edge | PASSED |
| 15.205/15.209 | Spurious Emission | PASSED |

# 3. Antenna Requirement

## 3.1. Standard Requirement

3.1.1 Test standard

FCC Part15 Section 15.203 /247(c)

3.1.2 Requirement

1) 15.203 requirement:

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

2) 15.247(c) (1)(i) requirement:

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 6 dBi.

## 3.2. Antenna Connected Construction

The antenna is an integral antenna which permanently attached, and the best case gain of the antenna is 0 dBi. It complies with the standard requirement.

# 4. Conducted Emission Test

## 4.1 Test Standard and Limit

4.1.1 Test Standard

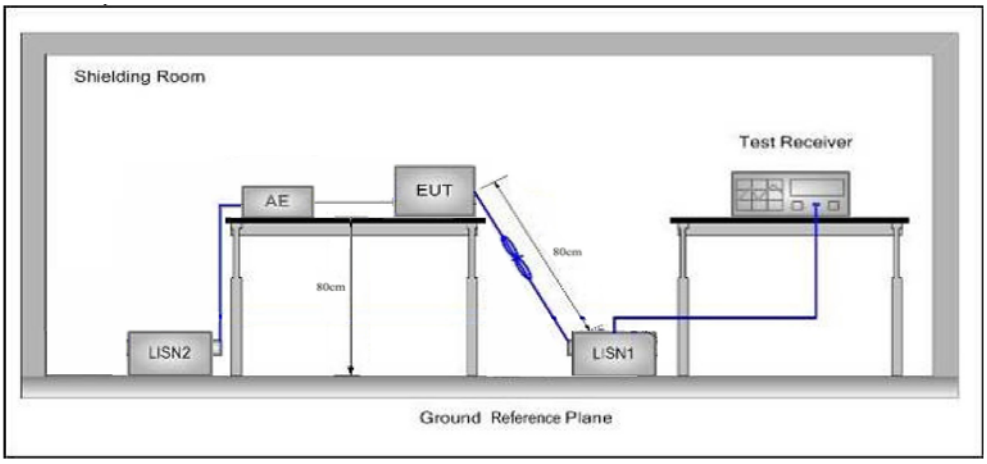
FCC Part15 Section 15.207

4.1.2 Test Limit

**Conducted Emission Test Limit**

| Frequency | Maximum RF Line Voltage (dBμV) | |
|---|---|---|
| | Quasi-peak Level | Average Level |
| 150kHz~500kHz | 66 ~ 56 * | 56 ~ 46 * |
| 500kHz~5MHz | 56 | 46 |
| 5MHz~30MHz | 60 | 50 |
| Remark: (1) *Decreasing linearly with logarithm of the frequency.<br>(2) The lower limit shall apply at the transition frequencies. | | |

## 4.2 Test Setup




## 4.3 Test Procedure

1) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.

2) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.

The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal

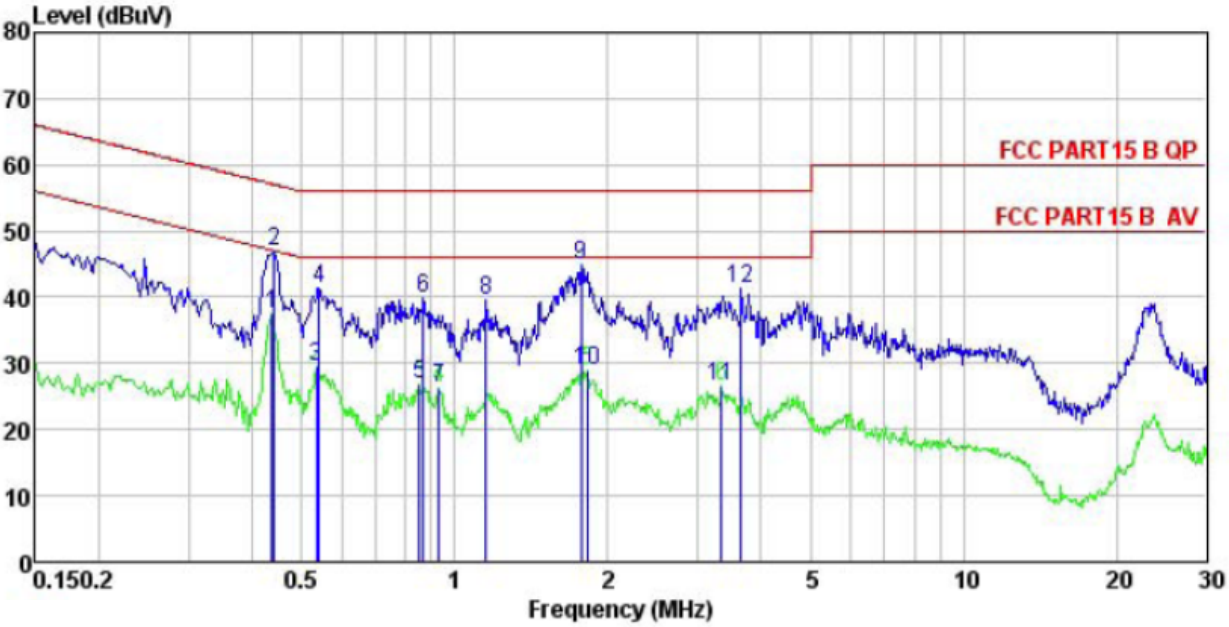
ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.

## 4.4 Test Data

Please refer to the following pages

**Conducted Emission Test Data**

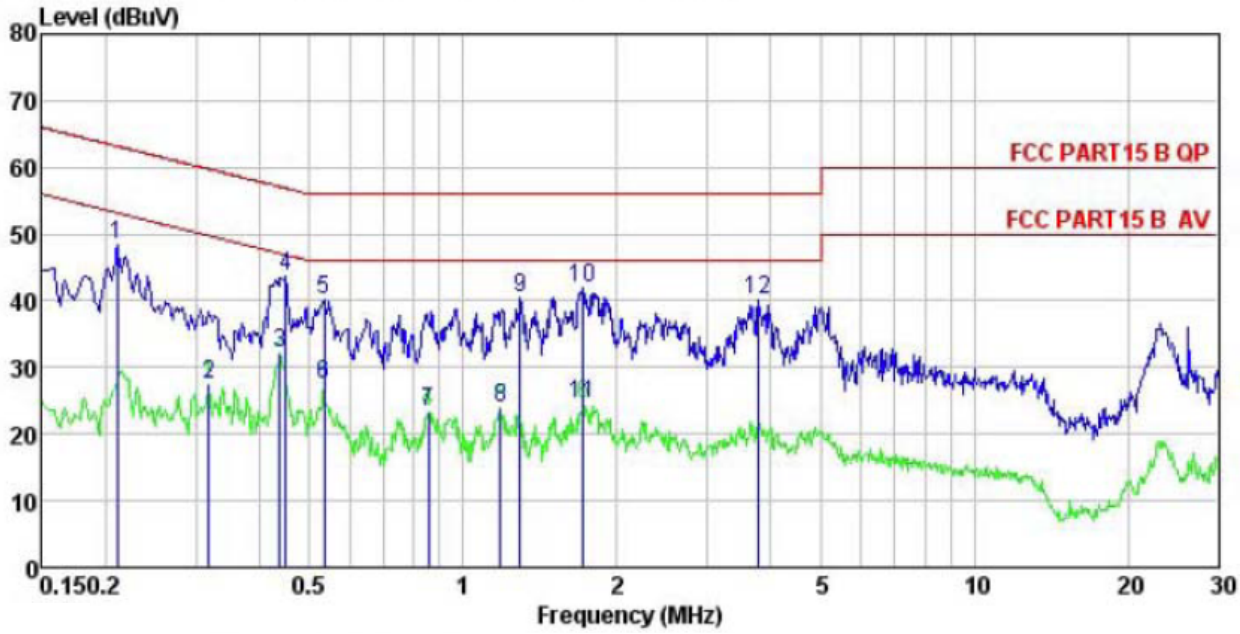
| | | |
|---|---|---|
| EUT: | MOBILE PHONE | M/N: TMC-HERO |
| Operating Condition: | WIFI mode | |
| Test Site: | Shielded room | |
| Operator: | Tom | |
| Test Specification: | AC 120V/60Hz | |
| Polarization: | Line | |
| Note | Tem:25℃ Hum:50% | |




| | Freq | Read Level | LISN Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.437 | 26.37 | 10.28 | 0.74 | 37.39 | 47.11 | -9.72 | Average |
| 2 | 0.442 | 35.78 | 10.27 | 0.74 | 46.79 | 57.02 | -10.23 | QP |
| 3 | 0.535 | 18.47 | 10.25 | 0.76 | 29.48 | 46.00 | -16.52 | Average |
| 4 | 0.541 | 30.44 | 10.25 | 0.76 | 41.45 | 56.00 | -14.55 | QP |
| 5 | 0.853 | 15.98 | 10.20 | 0.82 | 27.00 | 46.00 | -19.00 | Average |
| 6 | 0.866 | 28.82 | 10.18 | 0.83 | 39.83 | 56.00 | -16.17 | QP |
| 7 | 0.933 | 15.23 | 10.20 | 0.85 | 26.28 | 46.00 | -19.72 | Average |
| 8 | 1.153 | 28.48 | 10.21 | 0.89 | 39.58 | 56.00 | -16.42 | QP |
| 9 | 1.772 | 33.60 | 10.26 | 0.94 | 44.80 | 56.00 | -11.20 | QP |
| 10 | 1.819 | 17.78 | 10.27 | 0.95 | 29.00 | 46.00 | -17.00 | Average |
| 11 | 3.346 | 15.23 | 10.29 | 0.91 | 26.43 | 46.00 | -19.57 | Average |
| 12 | 3.661 | 30.09 | 10.28 | 0.90 | 41.27 | 56.00 | -14.73 | QP |

**Conducted Emission Test Data**

| | | |
|---|---|---|
| EUT: | MOBILE PHONE | M/N: TMC-HERO |
| Operating Condition: | WIFI mode | |
| Test Site: | Shielded room | |
| Operator: | Tom | |
| Test Specification: | AC 120V/60Hz | |
| Polarization: | Neutral | |
| Note | Tem:25℃ Hum:50% | |




| | Freq | Read Level | LISN Factor | Cable Loss | Level | Limit Line | Over Limit | Remark |
|---|---|---|---|---|---|---|---|---|
| | MHz | dBuV | dB | dB | dBuV | dBuV | dB | |
| 1 | 0.211 | 37.57 | 10.22 | 0.76 | 48.55 | 63.18 | -14.63 | QP |
| 2 | 0.318 | 16.32 | 10.26 | 0.74 | 27.32 | 49.75 | -22.43 | Average |
| 3 | 0.437 | 21.17 | 10.28 | 0.74 | 32.19 | 47.11 | -14.92 | Average |
| 4 | 0.449 | 32.61 | 10.27 | 0.74 | 43.62 | 56.89 | -13.27 | QP |
| 5 | 0.535 | 29.01 | 10.25 | 0.76 | 40.02 | 56.00 | -15.98 | QP |
| 6 | 0.535 | 16.40 | 10.25 | 0.76 | 27.41 | 46.00 | -18.59 | Average |
| 7 | 0.857 | 12.29 | 10.20 | 0.83 | 23.32 | 46.00 | -22.68 | Average |
| 8 | 1.184 | 12.72 | 10.23 | 0.89 | 23.84 | 46.00 | -22.16 | Average |
| 9 | 1.296 | 29.31 | 10.24 | 0.90 | 40.45 | 56.00 | -15.55 | QP |
| 10 | 1.707 | 30.73 | 10.26 | 0.94 | 41.93 | 56.00 | -14.07 | QP |
| 11 | 1.716 | 13.32 | 10.26 | 0.94 | 24.52 | 46.00 | -21.48 | Average |
| 12 | 3.779 | 28.95 | 10.29 | 0.90 | 40.14 | 56.00 | -15.86 | QP |

# 5. Peak Output Power Test

## 5.1. Test Standard and Limit

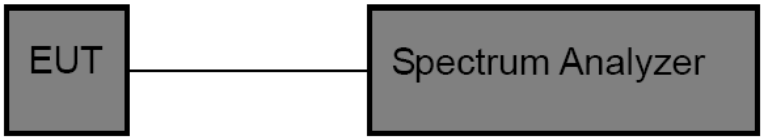
5.1.1 Test Standard

FCC Part15 C Section 15.247 (b)(3)

5.1.2 Test Limit

| FCC Part 15 Subpart C(15.247) | | |
|---|---|---|
| Test Item | Limit | Frequency Range (MHz) |
| Peak Output Power | 1 Watt or 30 dBm | 2400~2483.5 |

## 5.2. Test Setup




## 5.3. Test Procedure

(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) Spectrum Setting:

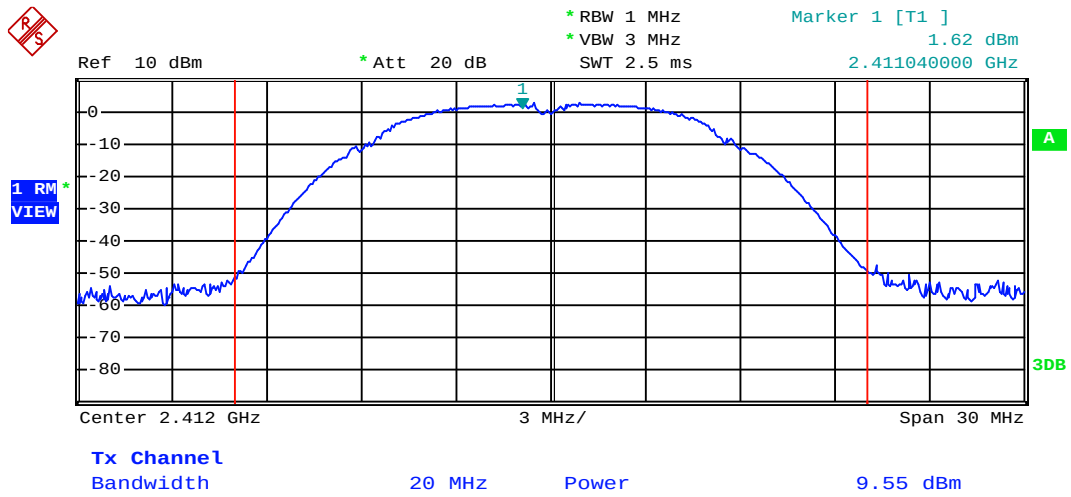
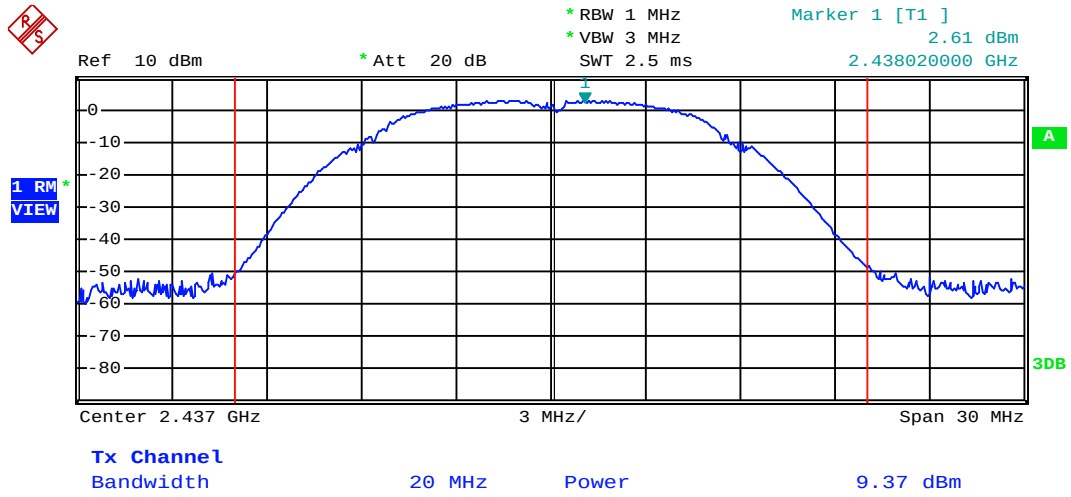
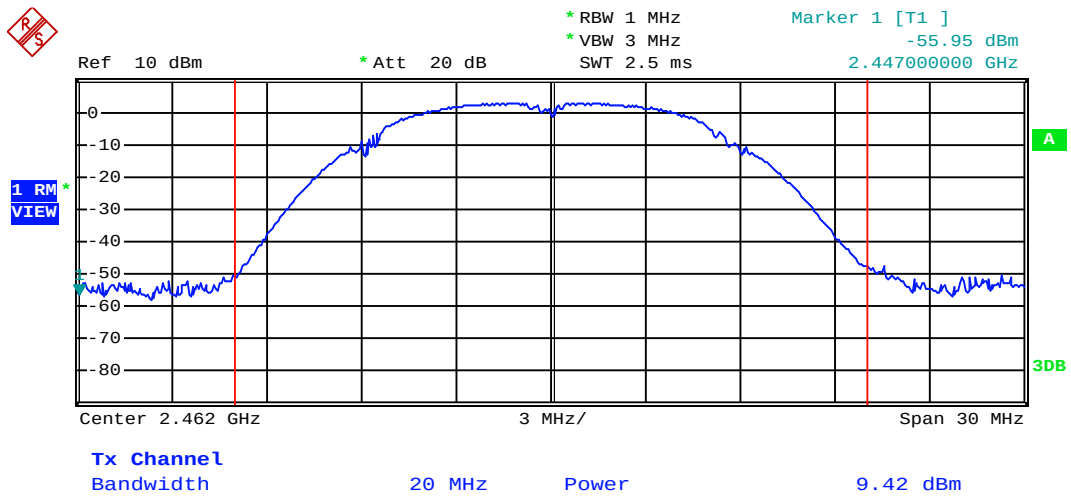
RBW=1MHz, VBW=3MHz, Detector=Peak (If 20dB BW ≤1 MHz)

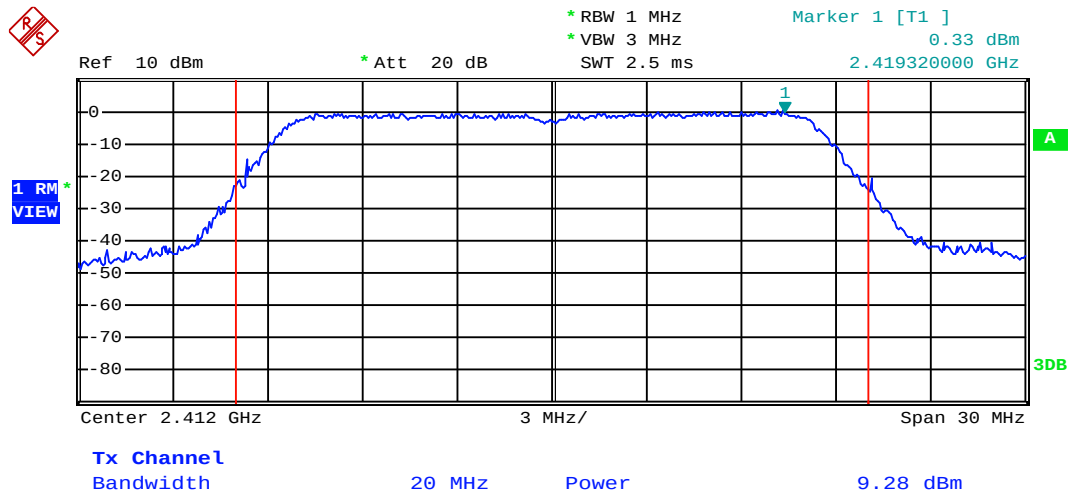
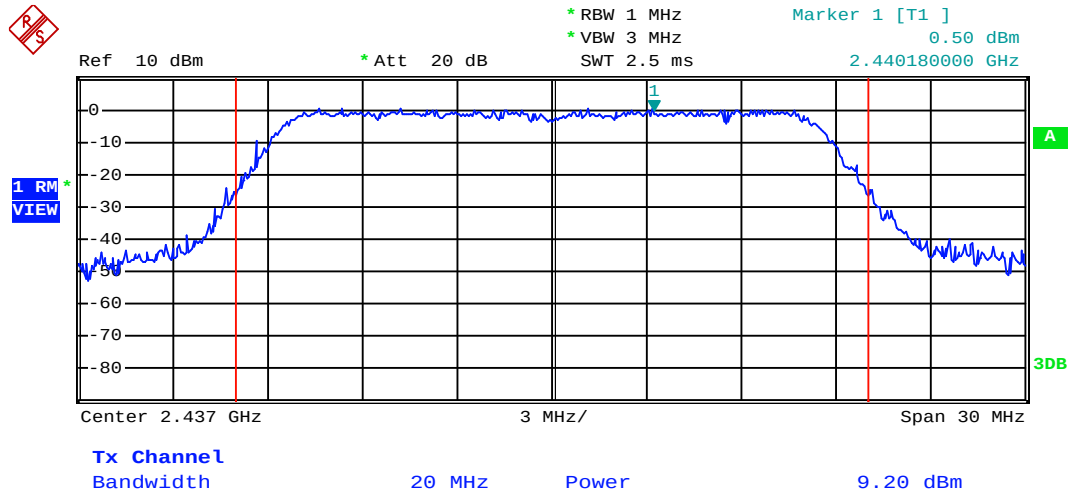
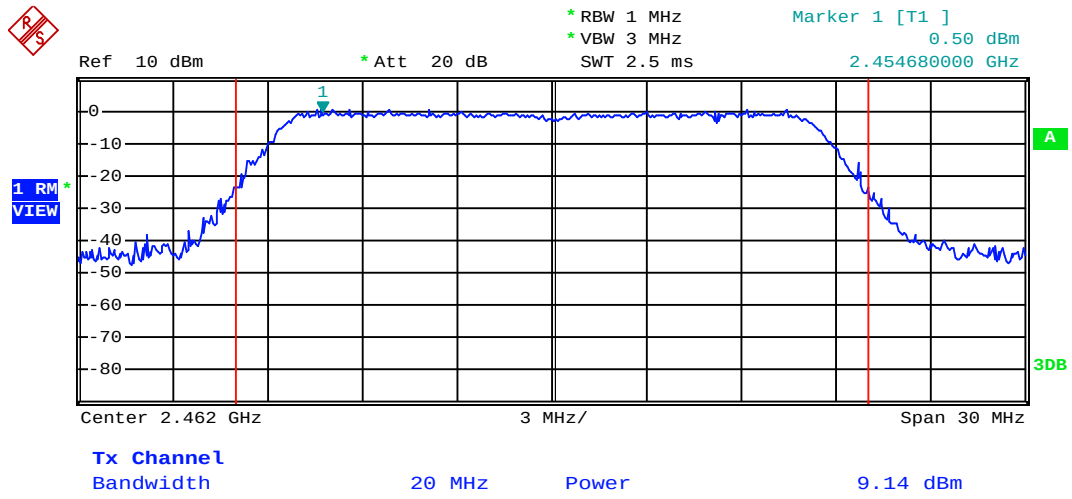
RBW=3MHz, VBW=10MHz, Detector=Peak (If 20dB BW > 1 MHz)

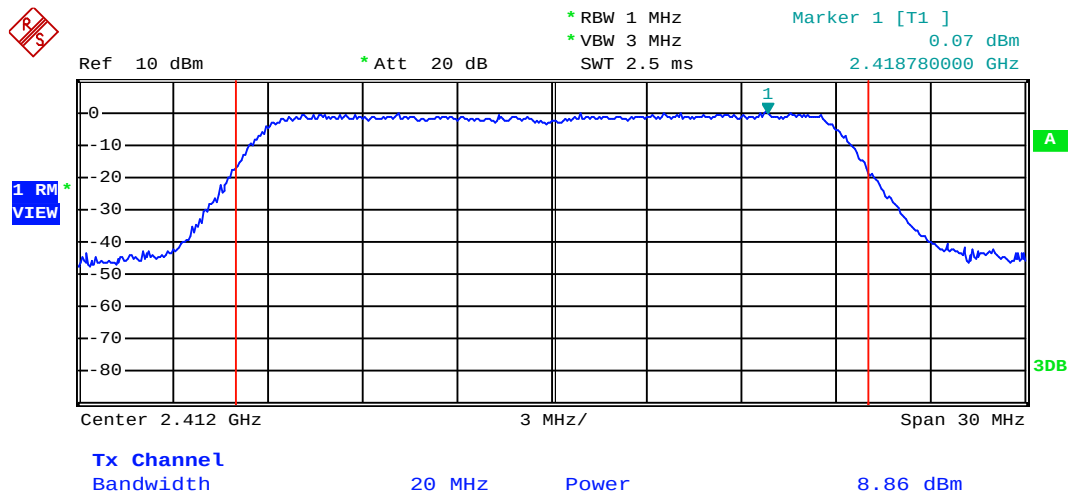
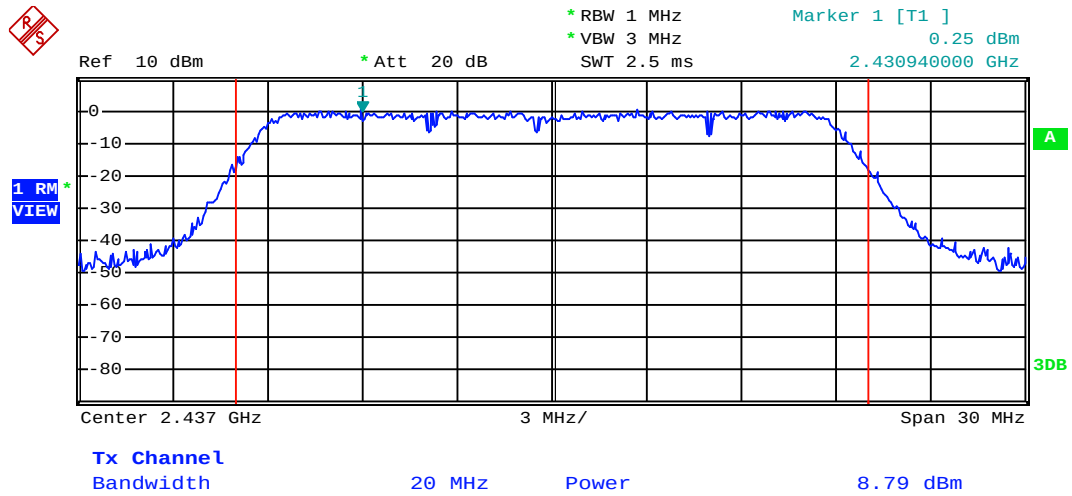
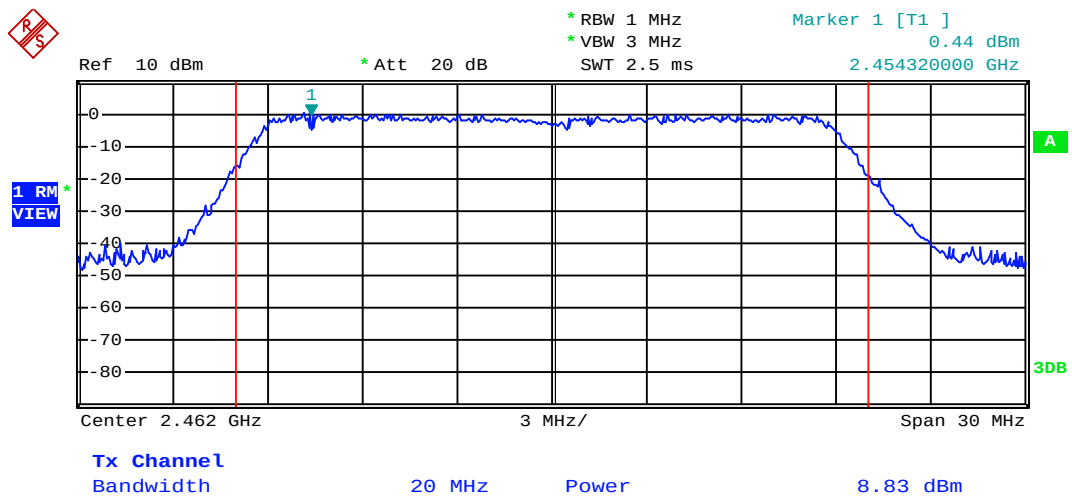
(3) The EUT was set to continuously transmitting in the max power during the test.

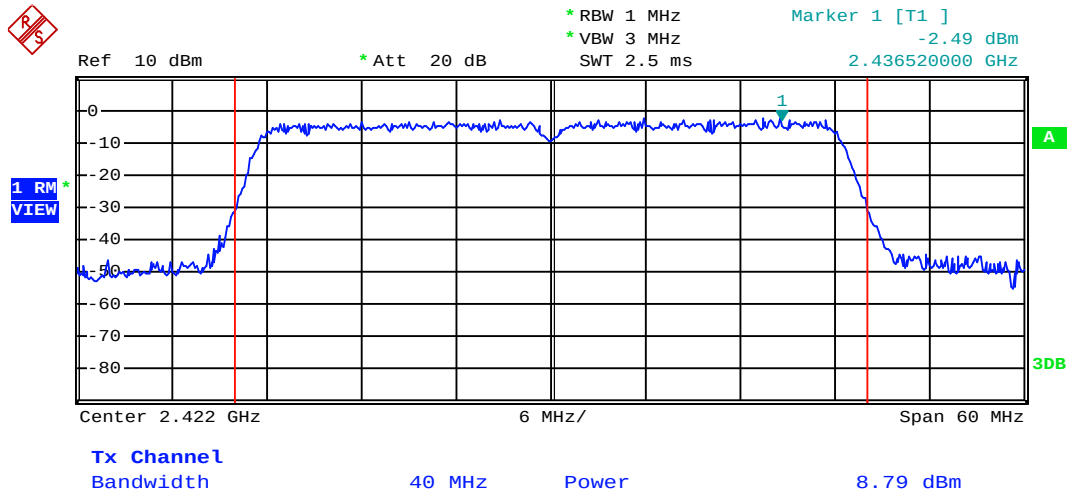
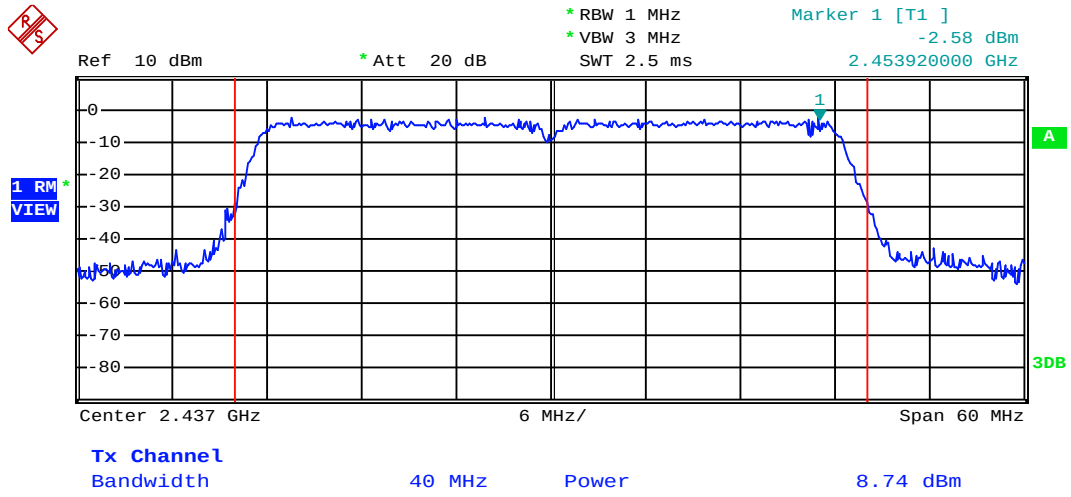
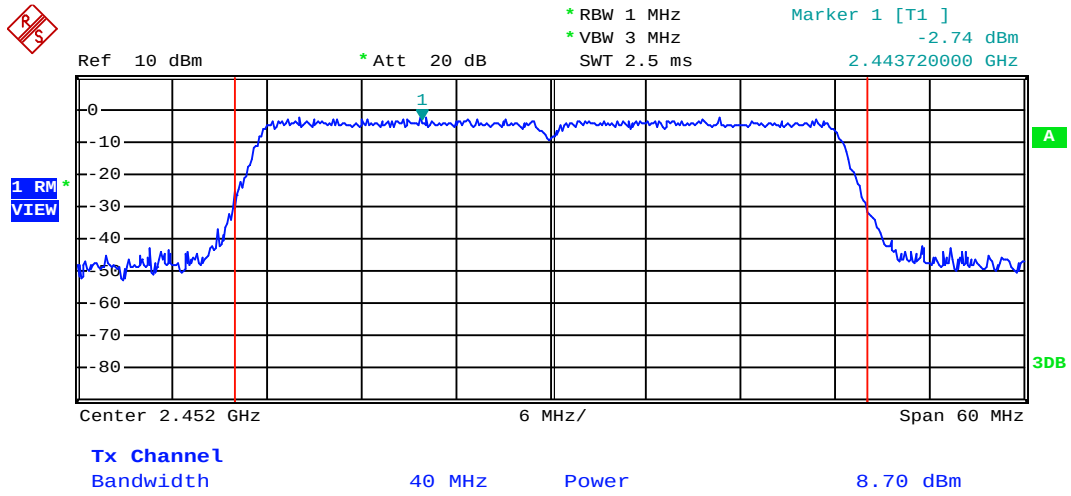
## 5.4. Test Data

| Test CH | Maximum Conducted Output Power (dBm) | | | | Limit(dBm) | Result |
|---|---|---|---|---|---|---|
| | 802.11b | 802.11g | 802.11n(H20) | 802.11n(H40) | | |
| Lowest | 9.55 | 9.28 | 8.86 | 8.79 | 30.00dBm | PASSED |
| Middle | 9.37 | 9.20 | 8.79 | 8.74 | | PASSED |
| Highest | 9.42 | 9.14 | 8.83 | 8.70 | | PASSED |
| **Remark:** Test plot as follows | | | | | | |

| Test mode | 802.11b |
|---|---|
| Lowest Channel |  |
| Middle Channel |  |
| Highest Channel |  |

| Test mode | 802.11g |
|---|---|
| Lowest Channel |  |
| Middle Channel |  |
| Highest Channel |  |

| Test mode | 802.11n(H20) |
|---|---|
| Lowest Channel |  |
| Middle Channel |  |
| Highest Channel |  |

| Test mode | 802.11n(H40) |
|---|---|
| Lowest Channel |  |
| Middle Channel |  |
| Highest Channel |  |

# 6. Occupy Bandwidth Test

## 6.1. Test Standard and Limit

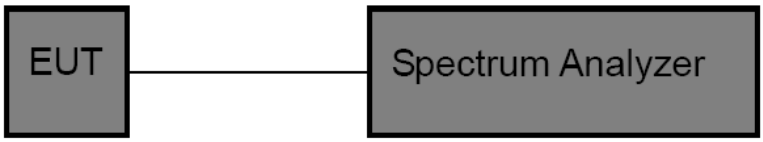
6.1.1 Test Standard

FCC Part15 C Section 15.247 (a)(2)

6.1.2 Test Limit

| FCC Part 15 Subpart C(15.247) | | |
|---|---|---|
| Test Item | Limit | Frequency Range |
| Bandwidth | >500 kHz (6dB bandwidth) | 2400~2483.5(MHz) |

## 6.2. Test Setup




## 6.3. Test Procedure

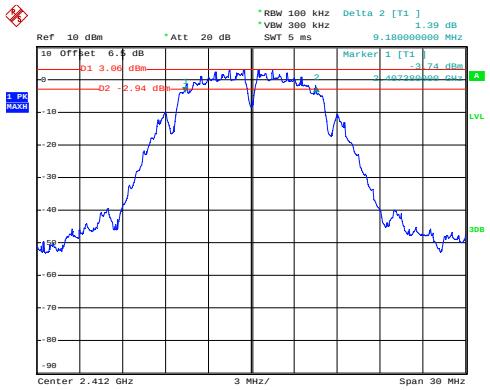
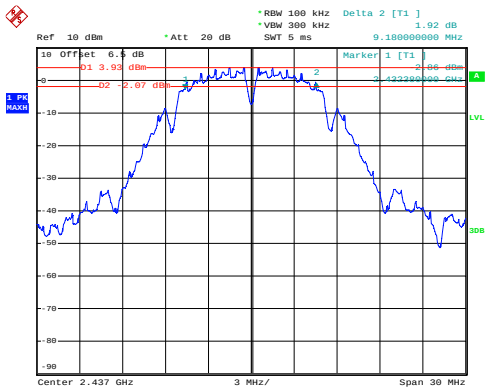
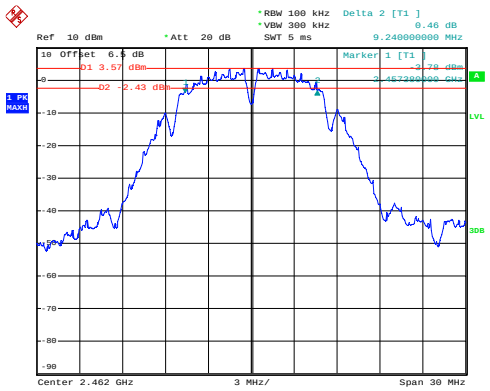
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

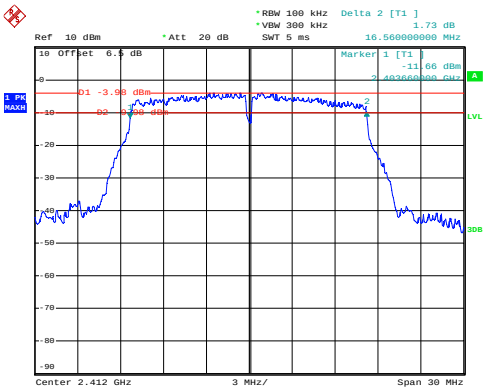
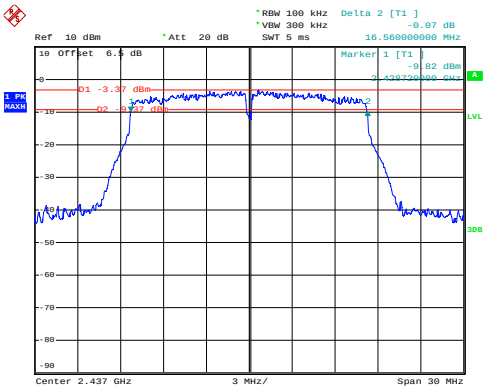
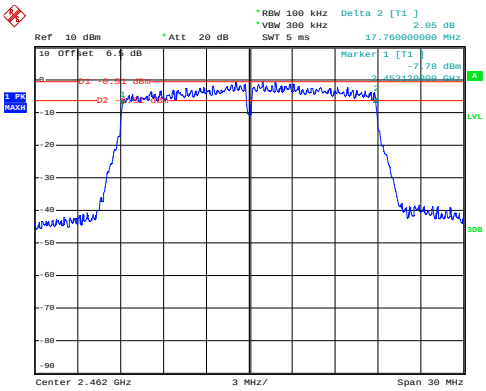
(2) The bandwidth is measured at an amplitude level reduced 6dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.

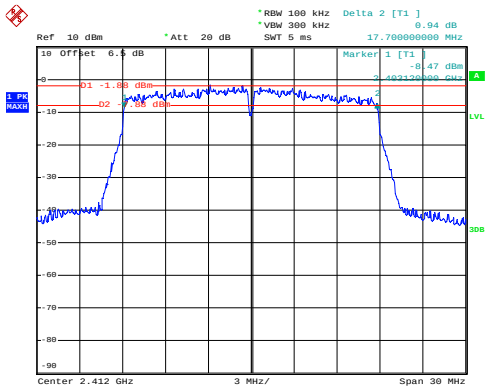
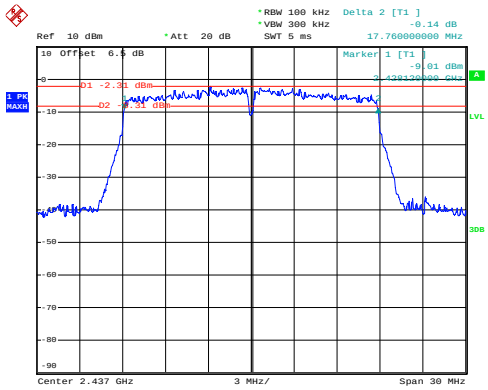
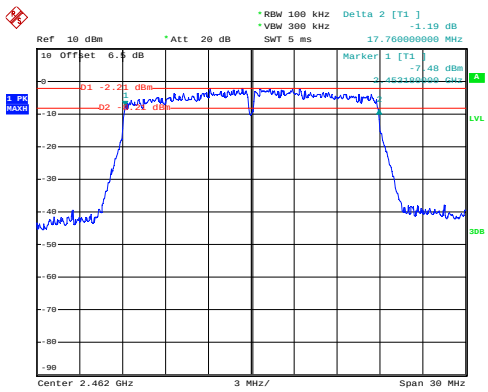
(3) Spectrum Setting:
Bandwidth: RBW=100 kHz, VBW=300 kHz, detector= Peak

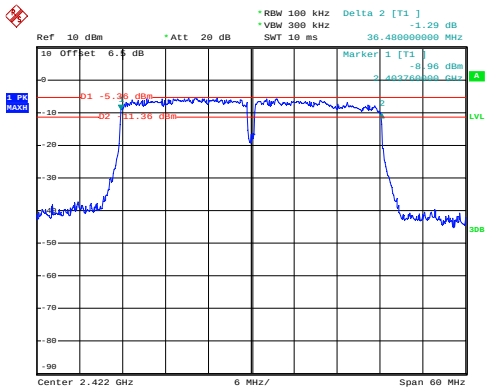
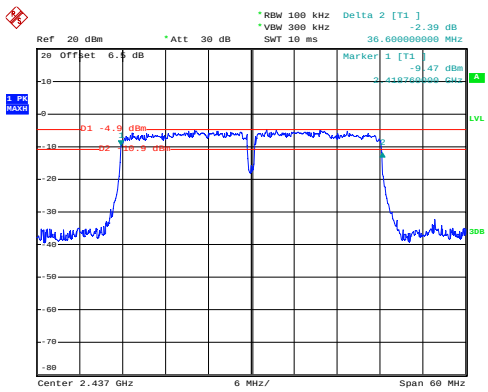
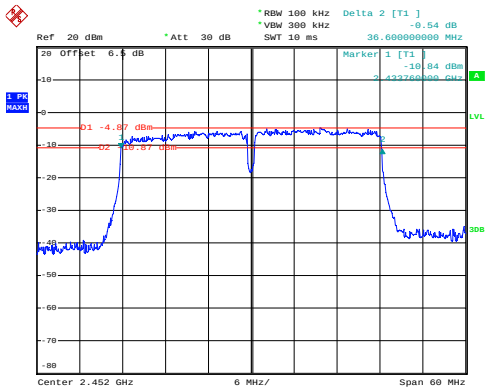
## 6.4. Test Data

| Test CH | 6dB Occupy Bandwidth (MHz) | | | | Limit (kHz) | Result |
|---|---|---|---|---|---|---|
| | 802.11b | 802.11g | 802.11n(H20) | 802.11n(H40) | | |
| Lowest | 9.18 | 16.56 | 17.70 | 36.48 | >=500 kHz | PASSED |
| Middle | 9.18 | 16.56 | 17.76 | 36.60 | | PASSED |
| Highest | 9.24 | 17.76 | 17.76 | 36.60 | | PASSED |

| Test mode | 6dB BW 802.11b |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:17:53 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:22:27 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:25:35 |

| Test mode | 6dB BW 802.11g |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:13:05 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:07:06 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 18:30:03 |

| Test mode | 6dB BW 802.11n(H20) |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:57:18 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 18:21:10 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 18:25:20 |

| Test mode | 6dB BW 802.11n(H40) |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:45:39 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:05:08 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 16:59:31 |

# 7. Power Spectral Density Test

## 7.1. Test Standard and Limit

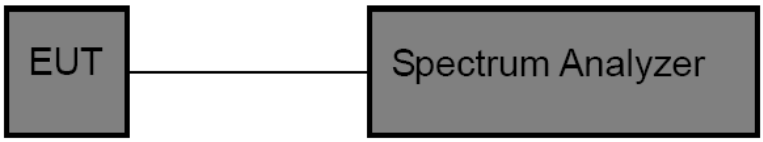
7.1.1 Test Standard

FCC Part15 C Section 15.247 (e)

7.1.2 Test Limit

| FCC Part 15 Subpart C(15.247) | | |
|---|---|---|
| Test Item | Limit | Frequency Range (MHz) |
| Power Spectral Density | 8dBm(in any 3 kHz) | 2400~2483.5 |

## 7.2. Test Setup




## 7.3. Test Procedure

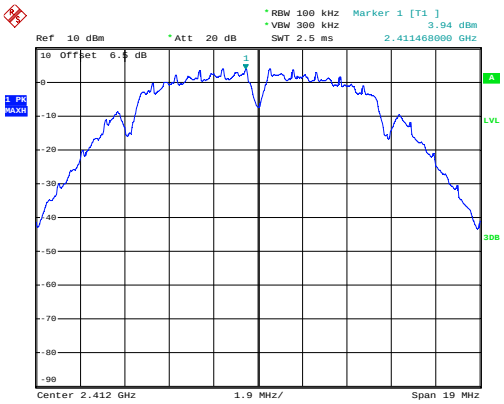
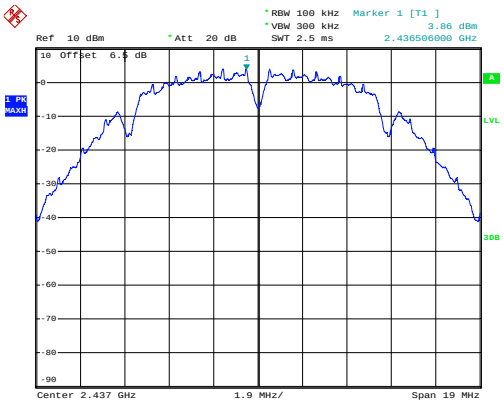
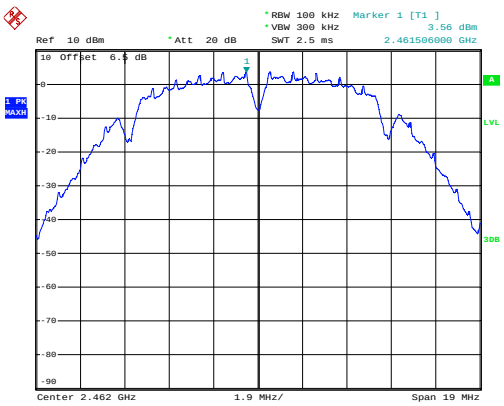
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

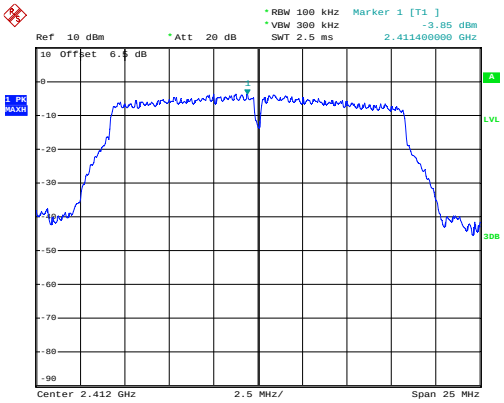
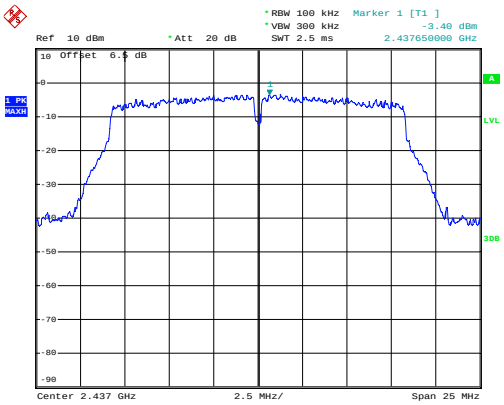
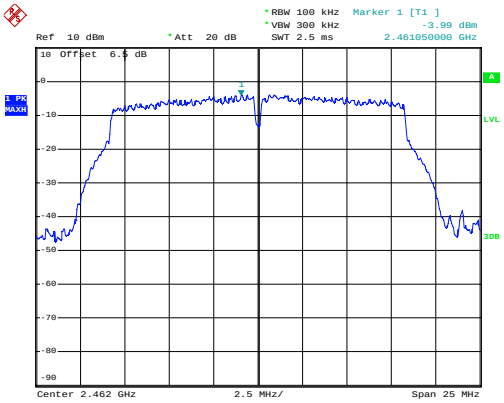
(2) Measure the spectral power density the spectrum analyzer was set to Resolution Bandwidth=100 kHz, and Video Bandwidth≥300 kHz, Detector: Peak, Span to 5%~30% greater than EBW, Sweep time auto.

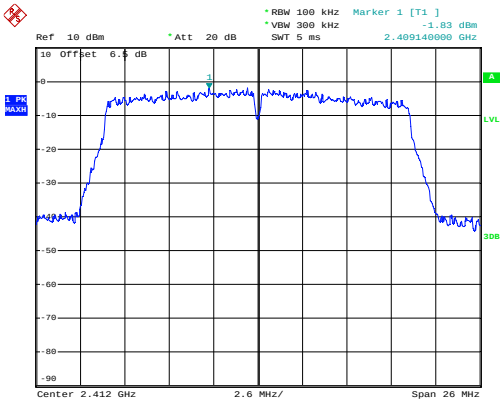
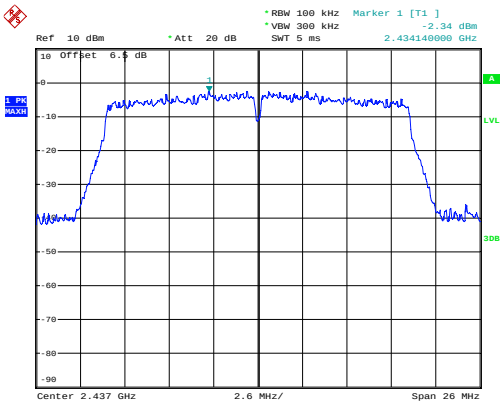
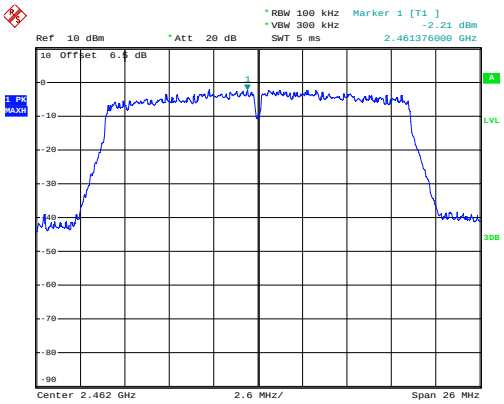
(3) Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a BWCF=-15.2 dB.

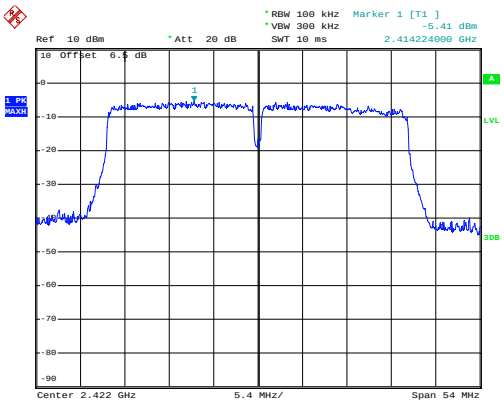
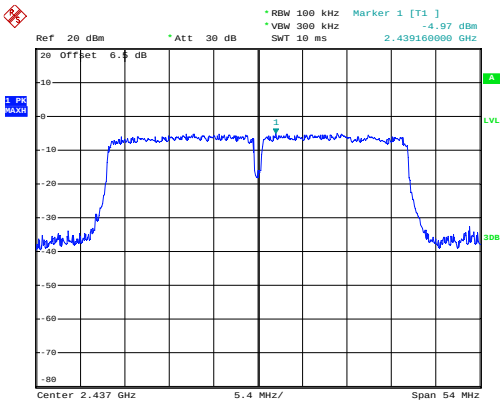
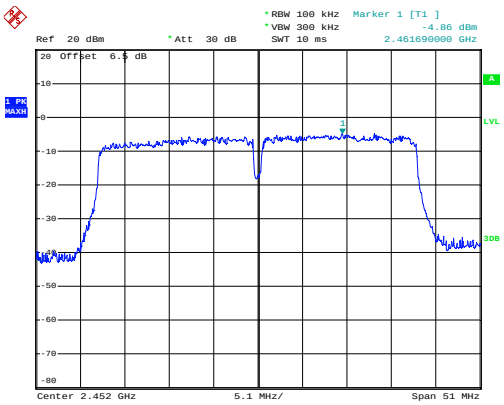
## 7.4. Test Data

| Test CH | Power Spectral Density (dBm) | | | | Limit (dBm) | Result |
|---|---|---|---|---|---|---|
| | 802.11b | 802.11g | 802.11n(H20) | 802.11n(H40) | | |
| Lowest | 3.94 | -3.85 | -1.83 | -5.41 | 8.00 | PASSED |
| Middle | 3.86 | -3.40 | -2.34 | -4.97 | | PASSED |
| Highest | 3.56 | -3.99 | -2.21 | -4.86 | | PASSED |
| **Remark:** Test plot as follows | | | | | | |

| Test mode | 802.11b |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:20:10 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:23:46 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:26:18 |

| Test mode | 802.11g |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:14:31 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:08:53 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:04:00 |

| Test mode | 802.11n(H20) |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:59:07 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 18:22:53 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 18:26:50 |

| Test mode | 802.11n(H40) |
|---|---|
| Lowest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:53:50 |
| Middle Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:06:20 |
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:00:48 |

# 8. Band Edge Requirement (Conducted Emission Method)

## 8.1. Test Standard and Limit

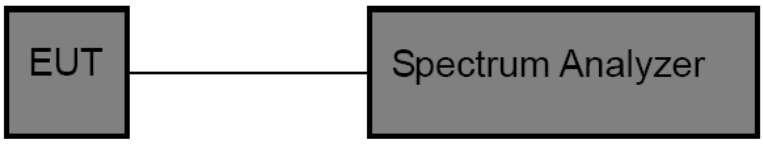
8.1.1 Test Standard

FCC Part15 C Section 15.247 (d)

8.1.2 Test 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.

## 8.2. Test Setup



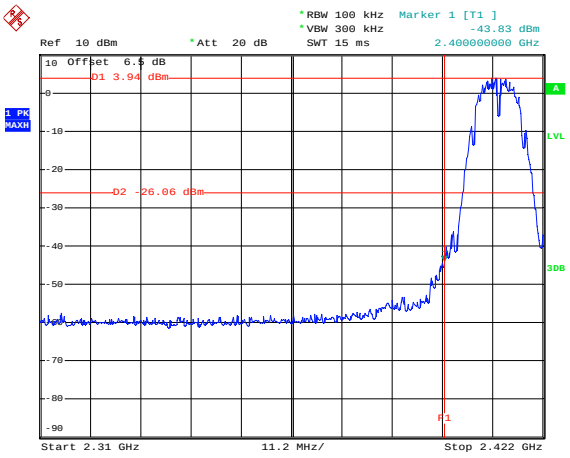
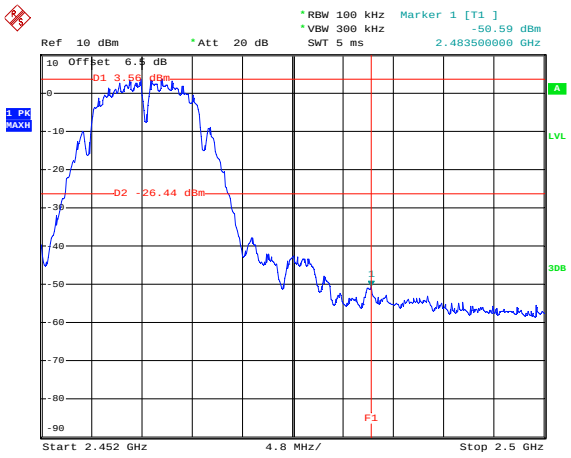

## 8.3. Test Procedure

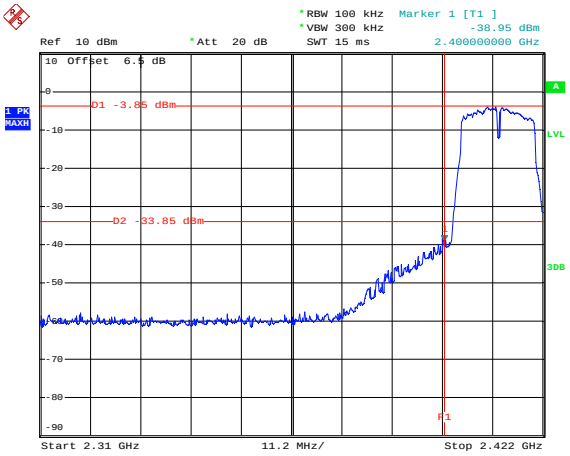
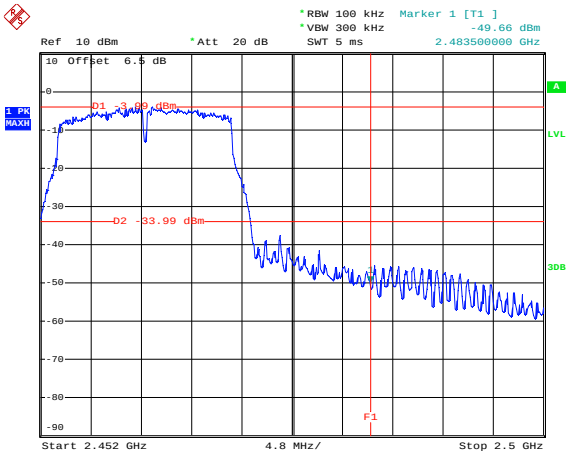
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

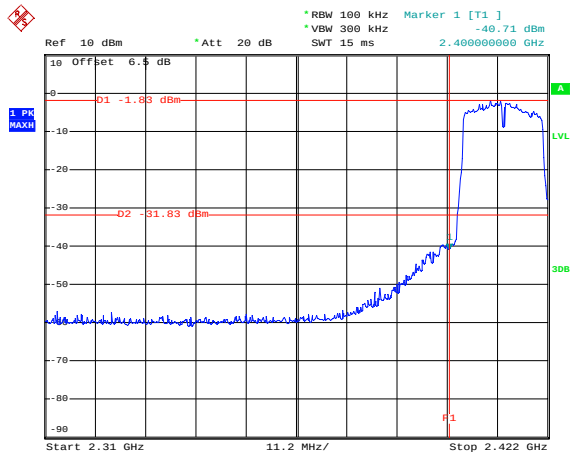
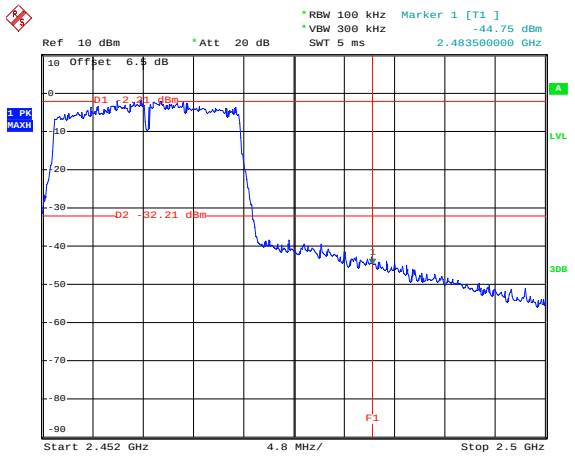
(2) Spectrum Setting: RBW=100 kHz, VBW=300 kHz, Detector=Peak

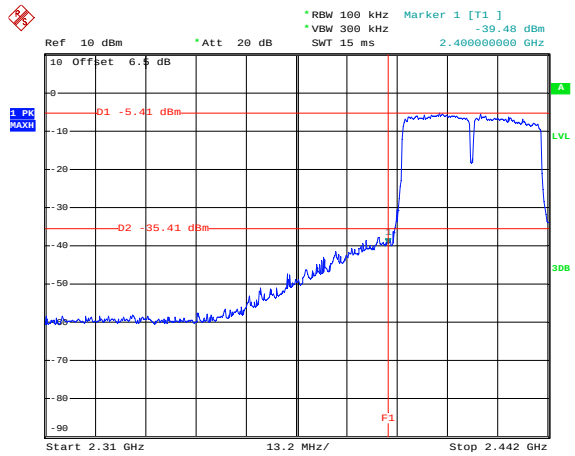
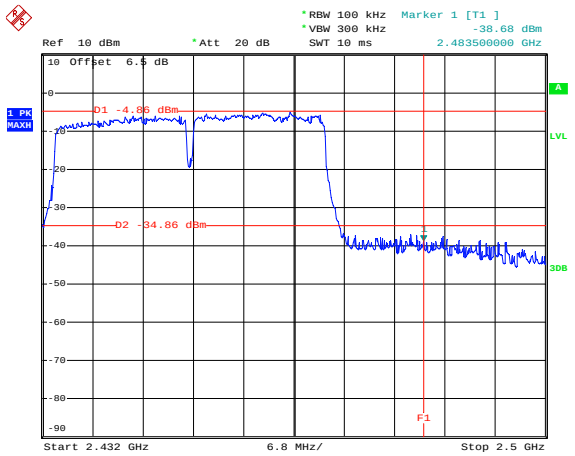
## 8.4. Test Data

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 |

| Test mode | 802.11n(H40) |
|---|---|
|  |  |
| Lowest Channel | Highest Channel |

# 9. Band Edge Requirement (Radiated Emission Method)

## 9.1. Test Standard and Limit

9.1.1 Test Standard

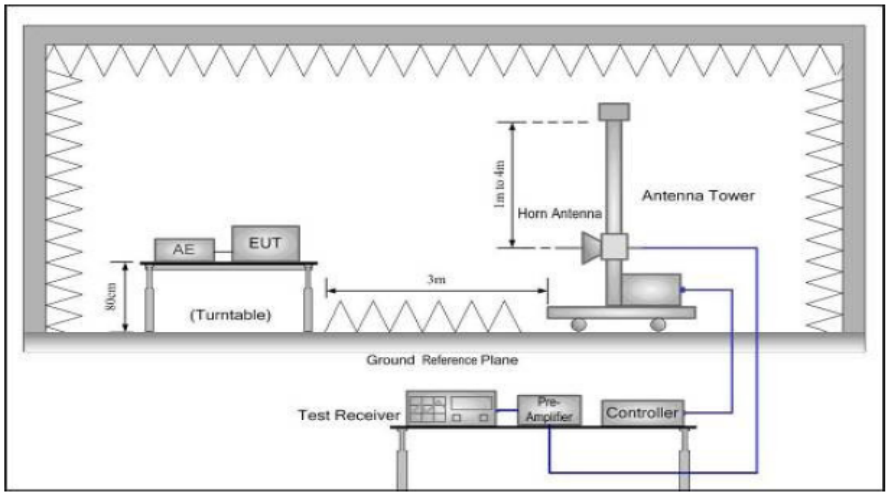
FCC Part15 C Section 15.209 and 15.205

9.1.2 Test Limit

**Radiated Emission Test Limit**

| Frequency | Limit (dBμV/m @3m) | Remark |
|---|---|---|
| Above 1GHz | 54.00 | Average value |
| | 74.00 | Peak value |

## 9.2. Test Setup




## 9.3. Test Procedure

1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
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.
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.
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 rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
5) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
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.

## 9.4. Test Data

| Test mode: 802.11b | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2390.00 | 21.46 | 27.58 | 5.67 | 0.00 | 54.71 | 74.00 | -19.29 | H | PEAK |
| 2390.00 | 20.46 | 27.58 | 5.67 | 0.00 | 53.71 | 74.00 | -20.29 | V | PEAK |
| 2390.00 | 11.04 | 27.58 | 5.67 | 0.00 | 44.29 | 54.00 | -9.71 | H | AVG. |
| 2390.00 | 9.04 | 27.58 | 5.67 | 0.00 | 42.29 | 54.00 | -11.71 | V | AVG. |
| Test mode: 802.11b | | | | | Test channel: Highest | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2483.50 | 20.17 | 27.52 | 5.70 | 0.00 | 53.39 | 74.00 | -20.61 | H | PEAK |
| 2483.50 | 20.53 | 27.52 | 5.70 | 0.00 | 53.75 | 74.00 | -20.25 | V | PEAK |
| 2483.50 | 10.53 | 27.52 | 5.70 | 0.00 | 43.75 | 54.00 | -10.25 | H | AVG. |
| 2483.50 | 10.05 | 27.52 | 5.70 | 0.00 | 43.27 | 54.00 | -10.73 | V | AVG. |

| Test mode: 802.11g | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2390.00 | 26.84 | 27.58 | 5.67 | 0.00 | 60.09 | 74.00 | -13.91 | H | PEAK |
| 2390.00 | 25.84 | 27.58 | 5.67 | 0.00 | 59.09 | 74.00 | -14.91 | V | PEAK |
| 2390.00 | 10.11 | 27.58 | 5.67 | 0.00 | 43.36 | 54.00 | -10.64 | H | AVG. |
| 2390.00 | 9.11 | 27.58 | 5.67 | 0.00 | 42.36 | 54.00 | -11.64 | V | AVG. |
| Test mode: 802.11g | | | | | Test channel: Highest | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2483.50 | 27.34 | 27.52 | 5.70 | 0.00 | 60.56 | 74.00 | -13.44 | H | PEAK |
| 2483.50 | 26.84 | 27.52 | 5.70 | 0.00 | 60.06 | 74.00 | -13.94 | V | PEAK |
| 2483.50 | 10.59 | 27.52 | 5.70 | 0.00 | 43.81 | 54.00 | -10.19 | H | AVG. |
| 2483.50 | 9.62 | 27.52 | 5.70 | 0.00 | 42.84 | 54.00 | -11.16 | V | AVG. |

| Test mode: 802.11n(H20) | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2390.00 | 26.03 | 27.58 | 5.67 | 0.00 | 59.28 | 74.00 | -14.72 | H | PEAK |
| 2390.00 | 25.56 | 27.58 | 5.67 | 0.00 | 58.81 | 74.00 | -15.19 | V | PEAK |
| 2390.00 | 11.00 | 27.58 | 5.67 | 0.00 | 44.25 | 54.00 | -9.75 | H | AVG. |
| 2390.00 | 10.23 | 27.58 | 5.67 | 0.00 | 43.48 | 54.00 | -10.52 | V | AVG. |
| Test mode: 802.11n(H20) | | | | | Test channel: Highest | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2483.50 | 30.54 | 27.52 | 5.70 | 0.00 | 63.76 | 74.00 | -10.24 | H | PEAK |
| 2483.50 | 27.20 | 27.52 | 5.70 | 0.00 | 60.42 | 74.00 | -13.58 | V | PEAK |
| 2483.50 | 10.15 | 27.52 | 5.70 | 0.00 | 43.37 | 54.00 | -10.63 | H | AVG. |
| 2483.50 | 10.33 | 27.52 | 5.70 | 0.00 | 43.55 | 54.00 | -10.45 | V | AVG. |

| Test mode: 802.11n(H40) | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2390.00 | 25.65 | 27.58 | 5.67 | 0.00 | 58.90 | 74.00 | -15.10 | H | PEAK |
| 2390.00 | 23.26 | 27.58 | 5.67 | 0.00 | 56.51 | 74.00 | -17.49 | V | PEAK |
| 2390.00 | 11.64 | 27.58 | 5.67 | 0.00 | 44.89 | 54.00 | -9.11 | H | AVG. |
| 2390.00 | 10.12 | 27.58 | 5.67 | 0.00 | 43.37 | 54.00 | -10.63 | V | AVG. |
| Test mode: 802.11n(H40) | | | | | Test channel: Highest | | | | |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 2483.50 | 25.72 | 27.52 | 5.70 | 0.00 | 58.94 | 74.00 | -15.06 | H | PEAK |
| 2483.50 | 23.21 | 27.52 | 5.70 | 0.00 | 56.43 | 74.00 | -17.57 | V | PEAK |
| 2483.50 | 13.00 | 27.52 | 5.70 | 0.00 | 46.22 | 54.00 | -7.78 | H | AVG. |
| 2483.50 | 13.21 | 27.52 | 5.70 | 0.00 | 46.43 | 54.00 | -7.57 | V | AVG. |

**Remark:**

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

# 10. Spurious Emission (Conducted Emission Method)

## 10.1. Test Standard and Limit

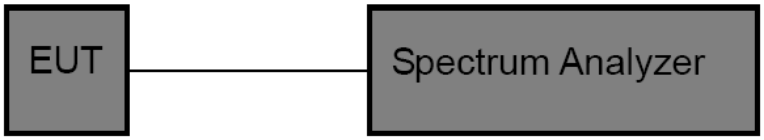
10.1.1 Test Standard

FCC Part15 C Section 15.247 (d)

10.1.2 Test 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.

## 10.2. Test Setup




## 10.3. Test Procedure

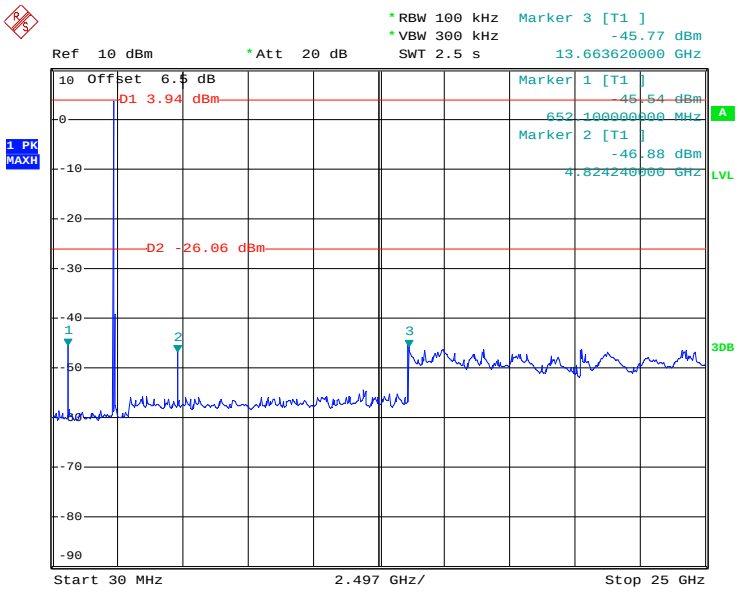
(1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.

(2) Spectrum Setting: RBW=100 KHz, VBW=300 KHz.
Frequency range from 30MHz to 25 GHz.

## 10.4. Test Data

| Modulation mode | 802.11b | Frequency range | 30MHz~25GHz |
|---|---|---|---|

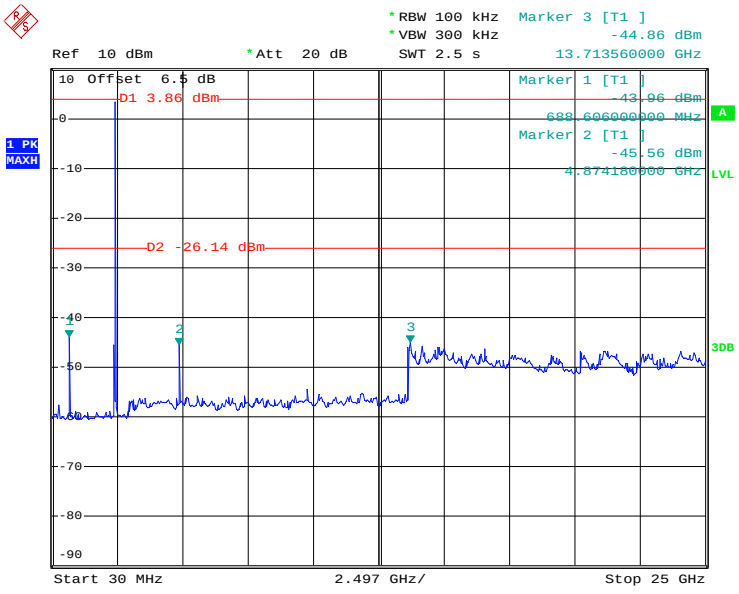
Lowest Channel




REMOTE HIGH

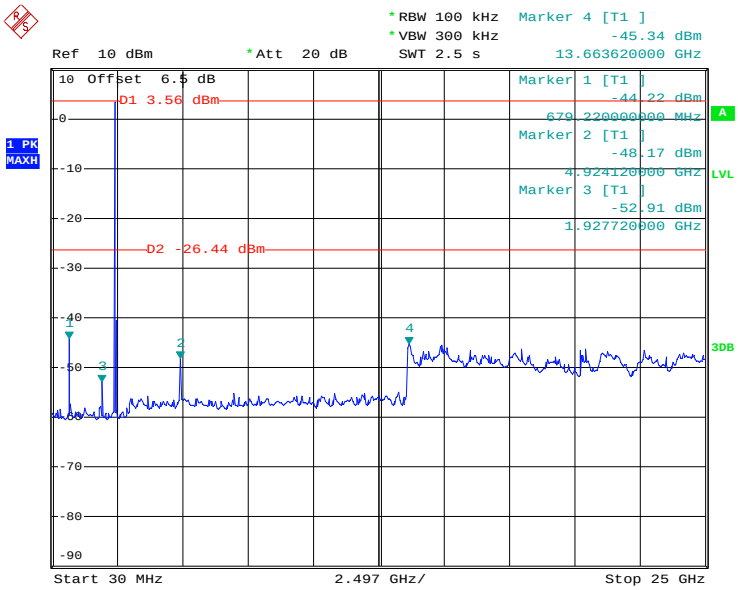
Date: 5.MAY.2014 09:21:12

Middle Channel



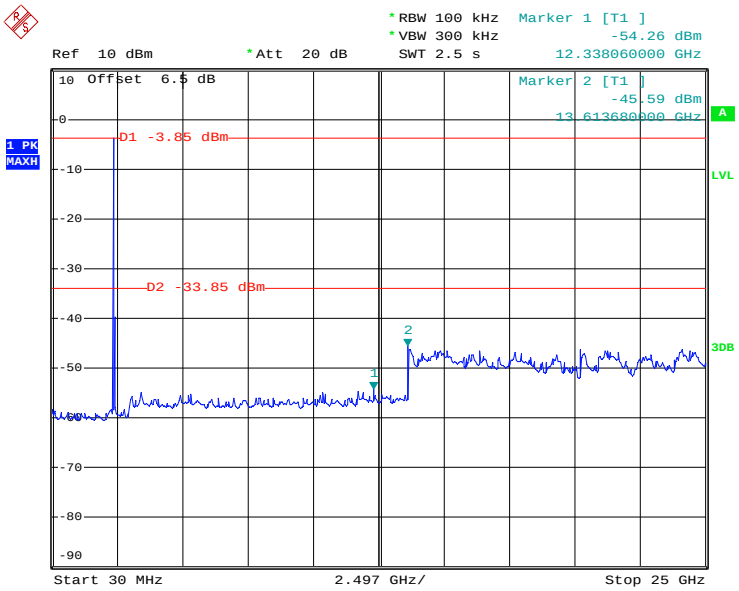

REMOTE HIGH

Date: 5.MAY.2014 09:24:30

| | |
|---|---|
| Highest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:27:39 |

| Modulation mode | 802.11g | Frequency range | 30MHz~25GHz |
|---|---|---|---|

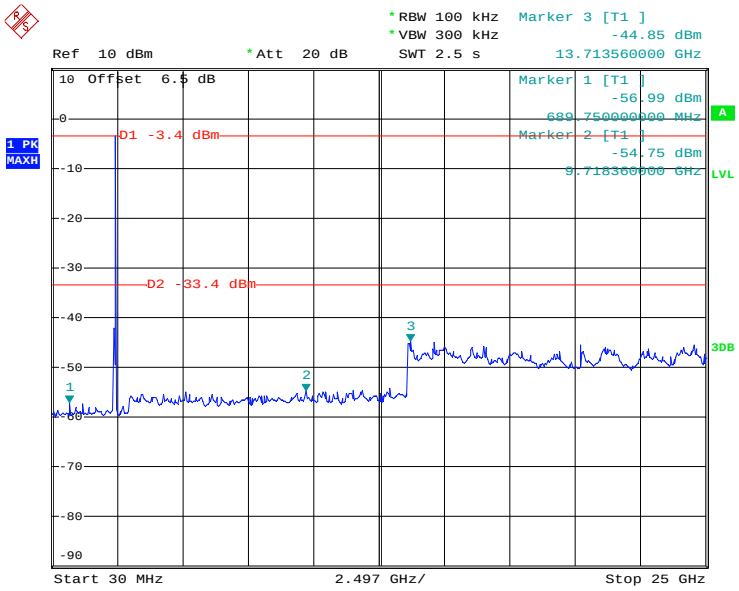
Lowest Channel




REMOTE HIGH

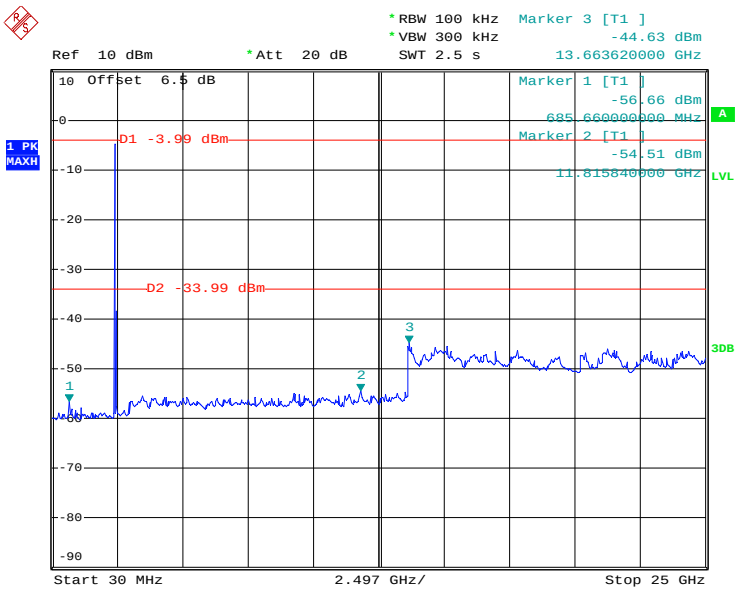
Date: 5.MAY.2014 09:15:37

Middle Channel



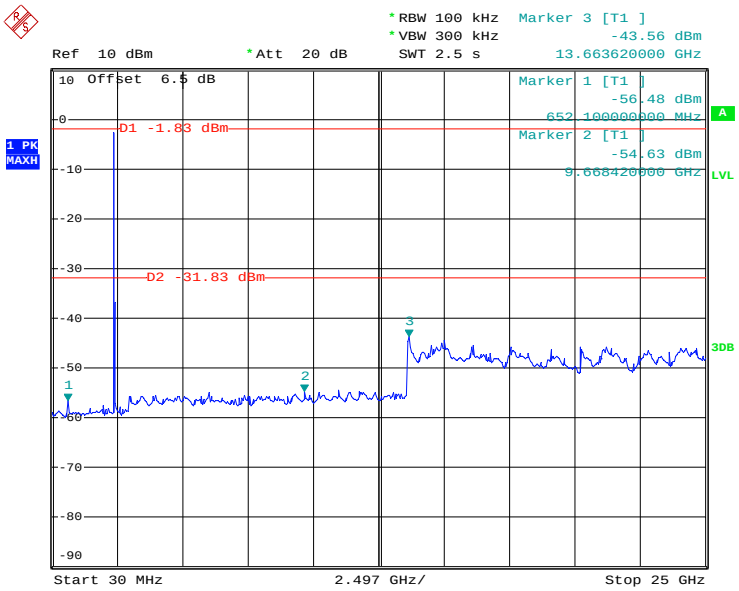

REMOTE HIGH

Date: 5.MAY.2014 09:10:37

| | |
|---|---|
| Highest Channel |  <br>REMOTE HIGH<br>Date: 5.MAY.2014 09:05:49 |

| Modulation mode | 802.11n(H20) | Frequency range | 30MHz~25GHz |
|---|---|---|---|

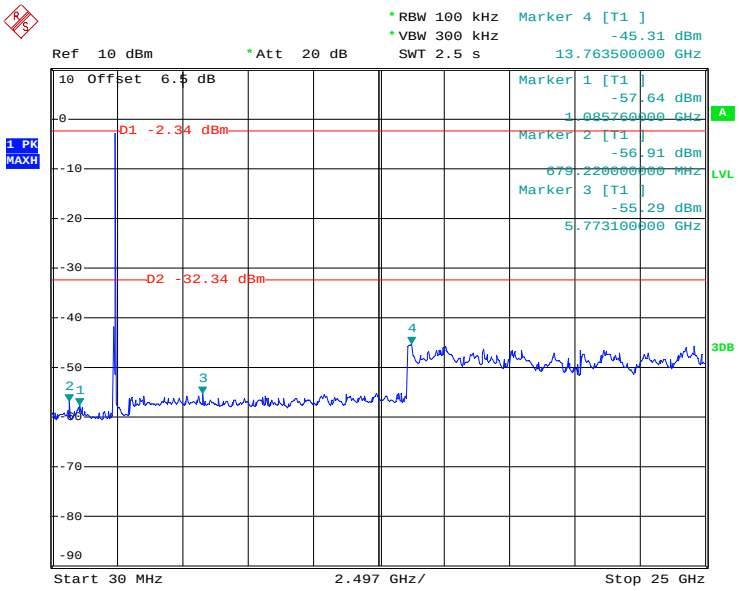
Lowest Channel




REMOTE HIGH

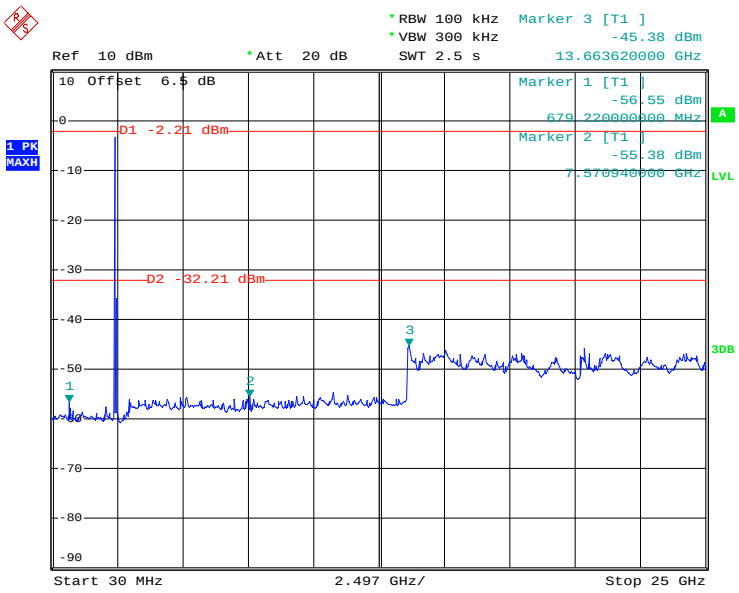
Date: 4.MAY.2014 18:02:40

Middle Channel



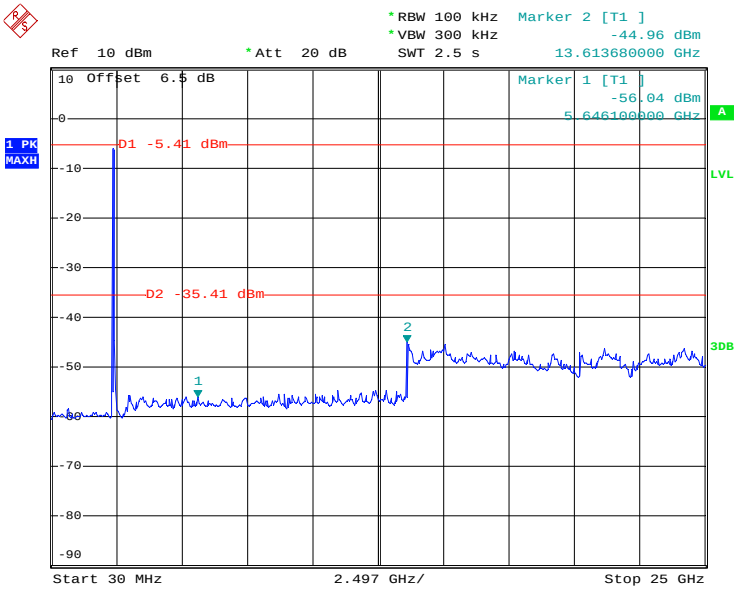

REMOTE HIGH

Date: 4.MAY.2014 18:23:57

| | |
|---|---|
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 18:28:13 |

| Modulation mode | 802.11n(H40) | Frequency range | 30MHz~25GHz |
|---|---|---|---|

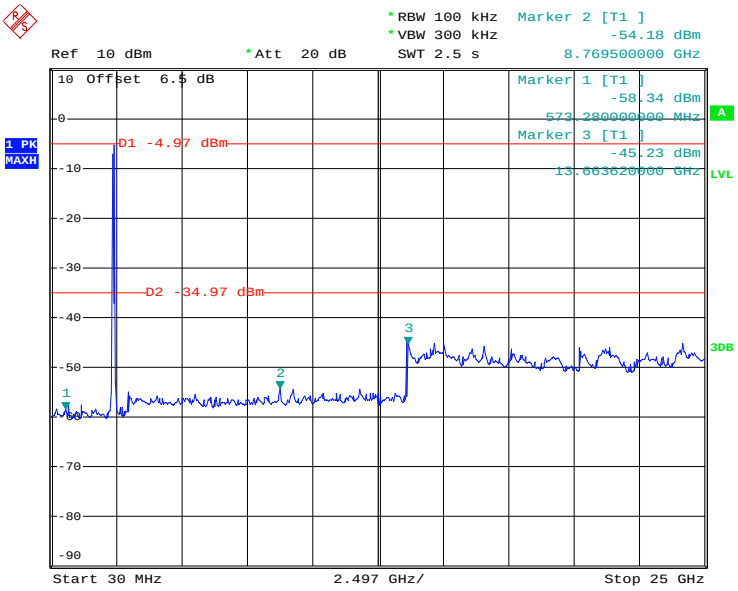
Lowest Channel




REMOTE HIGH

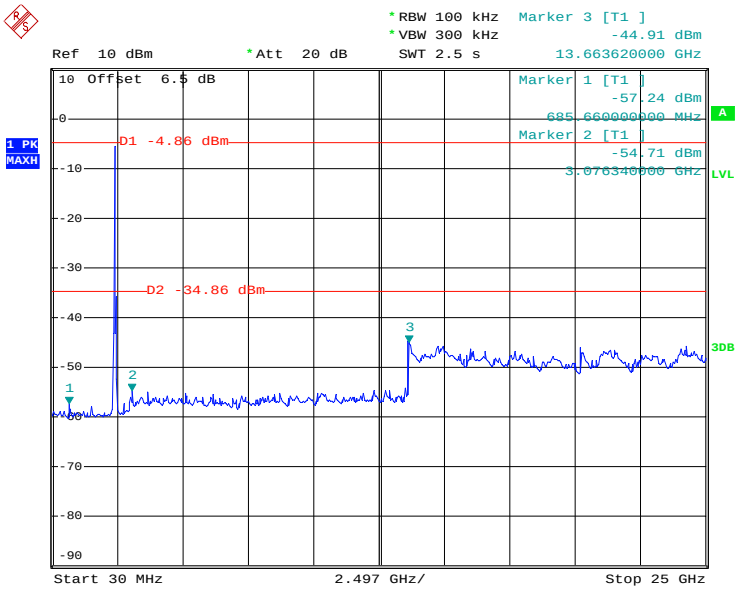
Date: 4.MAY.2014 17:55:35

Middle Channel




REMOTE HIGH

Date: 4.MAY.2014 17:43:51

| | |
|---|---|
| Highest Channel |  <br>REMOTE HIGH<br>Date: 4.MAY.2014 17:13:59 |

# 11. Spurious Emission (Radiated Emission Method)

## 11.1. Test Standard and Limit

11.1.1 Test Standard

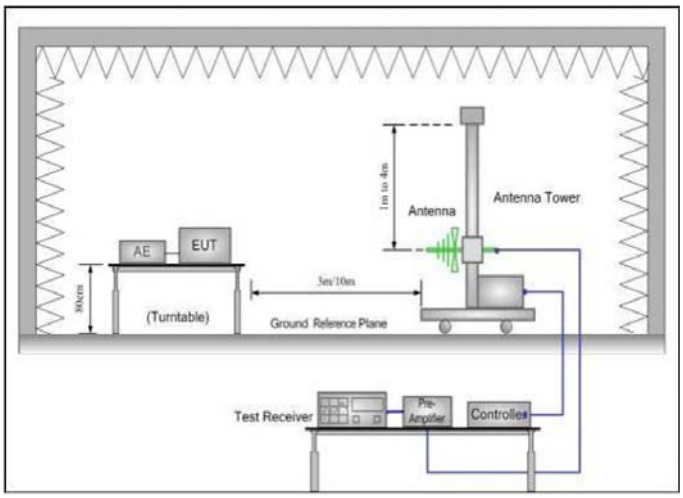
FCC Part15 C Section 15.209 and 15.205

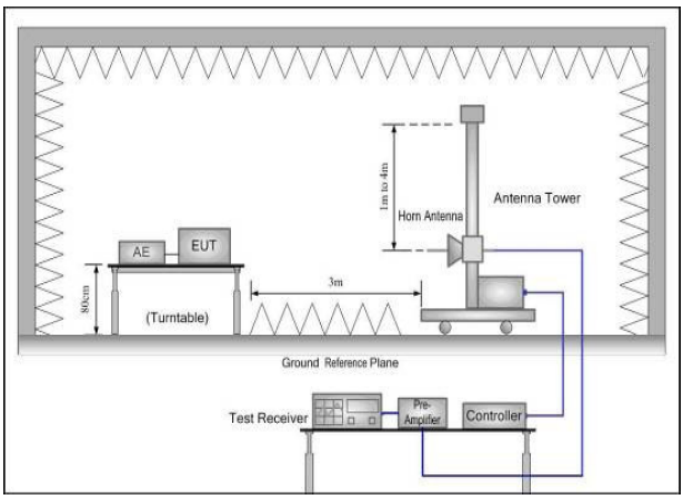
11.1.2 Test Limit

| Frequency (MHz) | Limit (dBμV/m) | |
|---|---|---|
| | At 3m Distance | |
| 30MHz~88MHz | 40 | Quasi-peak |
| 88MHz~216MHz | 43.5 | Quasi-peak |
| 216MHz~960MHz | 46 | Quasi-peak |
| 960MHz~1000MHz | 54 | Quasi-peak |
| Above 1000MHz | 54 | Average |
| | 74 | Peak |
| **Remark:** 1. The lower limit shall apply at the transition frequency. | | |

## 11.2. Test Setup

**Below 1GHz** **Above 1GHz**




## 11.3. Test Procedure

1) The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.
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.

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.

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 rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

5) The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

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.

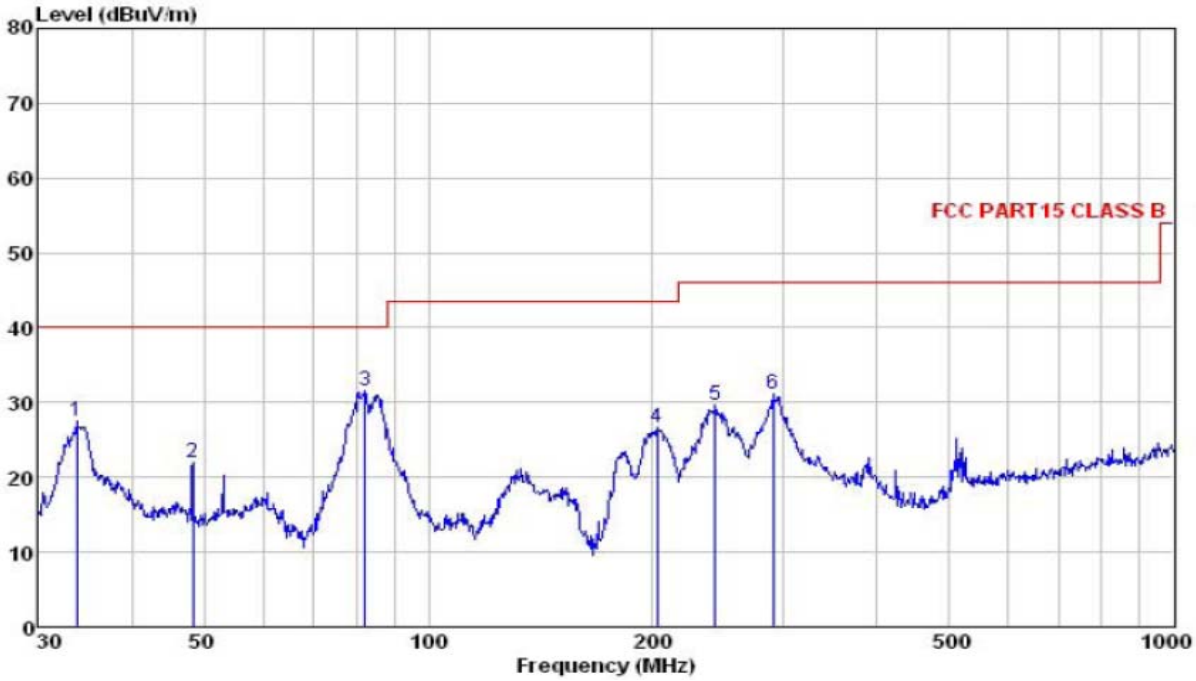
## 11.4. Test Data

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.
2. 9 kHz to 30MHz is noise floor, so only shows the data of above 30MHz in this report.

**Radiated Emission Test Data (Below 1GHz)**

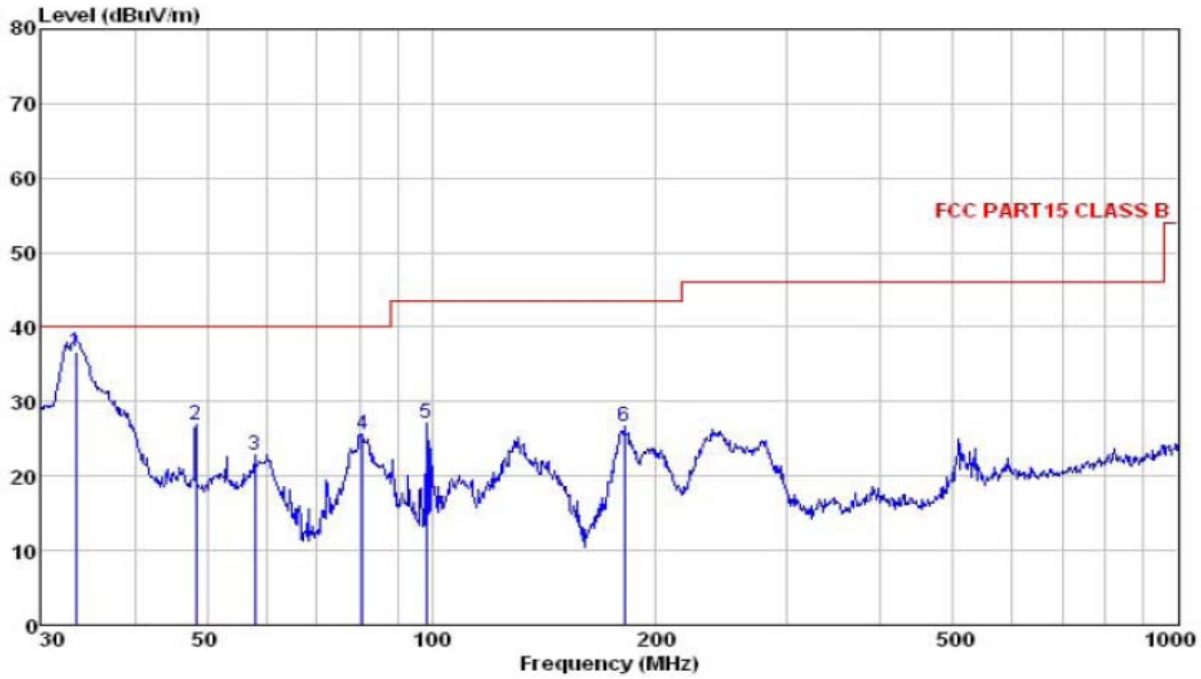
| | | |
|---|---|---|
| EUT: | MOBILE PHONE | M/N: TMC-HERO |
| Operating Condition: | WIFI mode | |
| Test Site: | 3m chamber | |
| Operator: | Tom | |
| Test Specification: | AC 120V/60Hz | |
| Polarization: | Horizontal | |
| Note | Tem:25℃ Hum:50% | |




| | 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 | 33.799 | 40.80 | 12.31 | 0.98 | 26.67 | 27.42 | 40.00 | -12.58 | QP |
| 2 | 48.332 | 35.44 | 13.35 | 1.27 | 28.14 | 21.92 | 40.00 | -18.08 | QP |
| 3 | 82.359 | 50.57 | 9.43 | 1.76 | 30.11 | 31.65 | 40.00 | -8.35 | QP |
| 4 | 202.810 | 43.05 | 10.64 | 2.87 | 29.80 | 26.76 | 43.50 | -16.74 | QP |
| 5 | 242.525 | 44.39 | 12.08 | 2.82 | 29.63 | 29.66 | 46.00 | -16.34 | QP |
| 6 | 290.017 | 44.92 | 12.86 | 2.91 | 29.46 | 31.23 | 46.00 | -14.77 | QP |

**Radiated Emission Test Data (Below 1GHz)**

| | | |
|---|---|---|
| EUT: | MOBILE PHONE | M/N: TMC-HERO |
| Operating Condition: | WIFI mode | |
| Test Site: | 3m chamber | |
| Operator: | Tom | |
| Test Specification: | AC 120V/60Hz | |
| Polarization: | Vertical | |
| Note | Tem:25℃ Hum:50% | |




| | 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 | 33.328 | 50.10 | 12.31 | 0.98 | 26.63 | 36.76 | 40.00 | -3.24 | QP |
| 2 | 48.332 | 40.42 | 13.35 | 1.27 | 28.14 | 26.90 | 40.00 | -13.10 | QP |
| 3 | 57.999 | 37.73 | 12.83 | 1.37 | 29.03 | 22.90 | 40.00 | -17.10 | QP |
| 4 | 80.927 | 45.17 | 8.84 | 1.69 | 30.12 | 25.58 | 40.00 | -14.42 | QP |
| 5 | 98.487 | 42.25 | 13.06 | 1.97 | 30.09 | 27.19 | 43.50 | -16.31 | QP |
| 6 | 181.283 | 40.86 | 9.76 | 2.74 | 26.77 | 26.59 | 43.50 | -16.91 | QP |

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11b | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4824.00 | 41.46 | 31.54 | 8.92 | 40.22 | 41.70 | 74.00 | -32.30 | V | PEAK |
| 7236.00 | 32.92 | 36.49 | 10.62 | 41.23 | 38.80 | 74.00 | -35.20 | V | PEAK |
| 9648.00 | * | | | | | 74.00 | | V | PEAK |
| 12060.00 | * | | | | | 74.00 | | V | PEAK |
| 14472.00 | * | | | | | 74.00 | | V | PEAK |
| 16884.00 | * | | | | | 74.00 | | V | PEAK |
| 4824.00 | 42.39 | 31.54 | 8.92 | 40.22 | 42.63 | 74.00 | -31.37 | H | PEAK |
| 7236.00 | 32.86 | 36.49 | 10.62 | 41.22 | 38.75 | 74.00 | -35.25 | H | PEAK |
| 9648.00 | * | | | | | 74.00 | | H | PEAK |
| 12060.00 | * | | | | | 74.00 | | H | PEAK |
| 14472.00 | * | | | | | 74.00 | | H | PEAK |
| 16884.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4824.00 | 32.41 | 31.54 | 8.92 | 40.22 | 32.65 | 54.00 | -21.35 | V | AVG. |
| 7236.00 | 24.24 | 36.50 | 10.62 | 41.22 | 30.14 | 54.00 | -23.86 | V | AVG. |
| 9648.00 | * | | | | | 54.00 | | V | AVG. |
| 12060.00 | * | | | | | 54.00 | | V | AVG. |
| 14472.00 | * | | | | | 54.00 | | V | AVG. |
| 16884.00 | * | | | | | 54.00 | | V | AVG. |
| 4824.00 | 31.16 | 31.54 | 8.92 | 40.22 | 31.40 | 54.00 | -22.60 | H | AVG. |
| 7236.00 | 24.04 | 36.50 | 10.62 | 41.22 | 29.94 | 54.00 | -24.06 | H | AVG. |
| 9648.00 | * | | | | | 54.00 | | H | AVG. |
| 12060.00 | * | | | | | 54.00 | | H | AVG. |
| 14472.00 | * | | | | | 54.00 | | H | AVG. |
| 16884.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11b | | | | | Test channel: Middle | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4874.00 | 42.66 | 31.57 | 8.98 | 40.15 | 43.06 | 74.00 | -30.94 | V | PEAK |
| 7311.00 | 44.11 | 36.48 | 10.68 | 41.16 | 50.11 | 74.00 | -23.89 | V | PEAK |
| 9748.00 | * | | | | | 74.00 | | V | PEAK |
| 12185.00 | * | | | | | 74.00 | | V | PEAK |
| 14622.00 | * | | | | | 74.00 | | V | PEAK |
| 17059.00 | * | | | | | 74.00 | | V | PEAK |
| 4874.00 | 45.60 | 31.57 | 8.98 | 40.15 | 46.00 | 74.00 | -28.00 | H | PEAK |
| 7311.00 | 41.11 | 36.48 | 10.68 | 41.16 | 47.11 | 74.00 | -26.89 | H | PEAK |
| 9748.00 | * | | | | | 74.00 | | H | PEAK |
| 12185.00 | * | | | | | 74.00 | | H | PEAK |
| 14622.00 | * | | | | | 74.00 | | H | PEAK |
| 17059.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4874.00 | 32.44 | 31.57 | 8.98 | 40.15 | 32.84 | 54.00 | -21.16 | V | AVG. |
| 7311.00 | 35.30 | 36.48 | 10.68 | 41.16 | 41.30 | 54.00 | -12.70 | V | AVG. |
| 9748.00 | * | | | | | 54.00 | | V | AVG. |
| 12185.00 | * | | | | | 54.00 | | V | AVG. |
| 14622.00 | * | | | | | 54.00 | | V | AVG. |
| 17059.00 | * | | | | | 54.00 | | V | AVG. |
| 4874.00 | 36.14 | 31.57 | 8.98 | 40.15 | 36.54 | 54.00 | -17.46 | H | AVG. |
| 7311.00 | 32.02 | 36.48 | 10.68 | 41.16 | 38.02 | 54.00 | -15.98 | H | AVG. |
| 9748.00 | * | | | | | 54.00 | | H | AVG. |
| 12185.00 | * | | | | | 54.00 | | H | AVG. |
| 14622.00 | * | | | | | 54.00 | | H | AVG. |
| 17059.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11b | | | | | Test channel: Highest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4924.00 | 43.68 | 31.61 | 9.04 | 40.08 | 44.25 | 74.00 | -29.75 | V | PEAK |
| 7386.00 | 42.19 | 36.52 | 10.75 | 41.09 | 48.37 | 74.00 | -25.63 | V | PEAK |
| 9848.00 | * | | | | | 74.00 | | V | PEAK |
| 12310.00 | * | | | | | 74.00 | | V | PEAK |
| 14772.00 | * | | | | | 74.00 | | V | PEAK |
| 17234.00 | * | | | | | 74.00 | | V | PEAK |
| 4924.00 | 37.45 | 31.61 | 9.04 | 40.08 | 38.02 | 74.00 | -35.98 | H | PEAK |
| 7386.00 | 32.59 | 36.52 | 10.75 | 41.09 | 38.77 | 74.00 | -35.23 | H | PEAK |
| 9848.00 | * | | | | | 74.00 | | H | PEAK |
| 12310.00 | * | | | | | 74.00 | | H | PEAK |
| 14772.00 | * | | | | | 74.00 | | H | PEAK |
| 17234.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4924.00 | 34.44 | 31.61 | 9.04 | 40.08 | 35.01 | 54.00 | -18.99 | V | AVG. |
| 7386.00 | 32.46 | 36.52 | 10.75 | 41.09 | 38.64 | 54.00 | -15.36 | V | AVG. |
| 9848.00 | * | | | | | 54.00 | | V | AVG. |
| 12310.00 | * | | | | | 54.00 | | V | AVG. |
| 14772.00 | * | | | | | 54.00 | | V | AVG. |
| 17234.00 | * | | | | | 54.00 | | V | AVG. |
| 4924.00 | 27.73 | 31.61 | 9.04 | 40.08 | 28.30 | 54.00 | -25.70 | H | AVG. |
| 7386.00 | 23.12 | 36.52 | 10.75 | 41.09 | 29.30 | 54.00 | -24.70 | H | AVG. |
| 9848.00 | * | | | | | 54.00 | | H | AVG. |
| 12310.00 | * | | | | | 54.00 | | H | AVG. |
| 14772.00 | * | | | | | 54.00 | | H | AVG. |
| 17234.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11g | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4824.00 | 41.43 | 31.54 | 8.92 | 40.22 | 41.67 | 74.00 | -32.33 | V | PEAK |
| 7236.00 | 35.14 | 36.49 | 10.62 | 41.22 | 41.03 | 74.00 | -32.97 | V | PEAK |
| 9648.00 | * | | | | | 74.00 | | V | PEAK |
| 12060.00 | * | | | | | 74.00 | | V | PEAK |
| 14472.00 | * | | | | | 74.00 | | V | PEAK |
| 16884.00 | * | | | | | 74.00 | | V | PEAK |
| 4824.00 | 46.75 | 31.54 | 8.92 | 40.22 | 46.99 | 74.00 | -27.01 | H | PEAK |
| 7236.00 | 35.08 | 36.49 | 10.62 | 41.22 | 40.97 | 74.00 | -33.03 | H | PEAK |
| 9648.00 | * | | | | | 74.00 | | H | PEAK |
| 12060.00 | * | | | | | 74.00 | | H | PEAK |
| 14472.00 | * | | | | | 74.00 | | H | PEAK |
| 16884.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4824.00 | 32.23 | 31.54 | 8.92 | 40.22 | 32.47 | 54.00 | -21.53 | V | AVG. |
| 7236.00 | 26.14 | 36.50 | 10.62 | 41.22 | 32.04 | 54.00 | -21.96 | V | AVG. |
| 9648.00 | * | | | | | 54.00 | | V | AVG. |
| 12060.00 | * | | | | | 54.00 | | V | AVG. |
| 14472.00 | * | | | | | 54.00 | | V | AVG. |
| 16884.00 | * | | | | | 54.00 | | V | AVG. |
| 4824.00 | 36.33 | 31.54 | 8.92 | 40.22 | 36.57 | 54.00 | -17.43 | H | AVG. |
| 7236.00 | 24.75 | 36.50 | 10.62 | 41.22 | 30.65 | 54.00 | -23.35 | H | AVG. |
| 9648.00 | * | | | | | 54.00 | | H | AVG. |
| 12060.00 | * | | | | | 54.00 | | H | AVG. |
| 14472.00 | * | | | | | 54.00 | | H | AVG. |
| 16884.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11g | | | | | Test channel: Middle | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4874.00 | 43.75 | 31.57 | 8.98 | 40.15 | 44.15 | 74.00 | -29.85 | V | PEAK |
| 7311.00 | 44.82 | 36.48 | 10.68 | 41.16 | 50.82 | 74.00 | -23.18 | V | PEAK |
| 9748.00 | * | | | | | 74.00 | | V | PEAK |
| 12185.00 | * | | | | | 74.00 | | V | PEAK |
| 14622.00 | * | | | | | 74.00 | | V | PEAK |
| 17059.00 | * | | | | | 74.00 | | V | PEAK |
| 4874.00 | 44.25 | 31.57 | 8.98 | 40.15 | 44.65 | 74.00 | -29.35 | H | PEAK |
| 7311.00 | 40.87 | 36.48 | 10.68 | 41.16 | 46.87 | 74.00 | -27.13 | H | PEAK |
| 9748.00 | * | | | | | 74.00 | | H | PEAK |
| 12185.00 | * | | | | | 74.00 | | H | PEAK |
| 14622.00 | * | | | | | 74.00 | | H | PEAK |
| 17059.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4874.00 | 33.95 | 31.57 | 8.98 | 40.15 | 34.35 | 54.00 | -19.65 | V | AVG. |
| 7311.00 | 34.15 | 36.48 | 10.68 | 41.16 | 40.15 | 54.00 | -13.85 | V | AVG. |
| 9748.00 | * | | | | | 54.00 | | V | AVG. |
| 12185.00 | * | | | | | 54.00 | | V | AVG. |
| 14622.00 | * | | | | | 54.00 | | V | AVG. |
| 17059.00 | * | | | | | 54.00 | | V | AVG. |
| 4874.00 | 44.90 | 31.57 | 8.98 | 40.15 | 45.30 | 54.00 | -8.70 | H | AVG. |
| 7311.00 | 31.12 | 36.48 | 10.68 | 41.16 | 37.12 | 54.00 | -16.88 | H | AVG. |
| 9748.00 | * | | | | | 54.00 | | H | AVG. |
| 12185.00 | * | | | | | 54.00 | | H | AVG. |
| 14622.00 | * | | | | | 54.00 | | H | AVG. |
| 17059.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11g | | | | | Test channel: Highest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4924.00 | 46.30 | 31.61 | 9.04 | 40.08 | 46.87 | 74.00 | -27.13 | V | PEAK |
| 7386.00 | 40.46 | 36.52 | 10.75 | 41.09 | 46.64 | 74.00 | -27.36 | V | PEAK |
| 9848.00 | * | | | | | 74.00 | | V | PEAK |
| 12310.00 | * | | | | | 74.00 | | V | PEAK |
| 14772.00 | * | | | | | 74.00 | | V | PEAK |
| 17234.00 | * | | | | | 74.00 | | V | PEAK |
| 4924.00 | 42.36 | 31.61 | 9.04 | 40.08 | 42.93 | 74.00 | -31.07 | H | PEAK |
| 7386.00 | 37.20 | 36.52 | 10.75 | 41.09 | 43.38 | 74.00 | -30.62 | H | PEAK |
| 9848.00 | * | | | | | 74.00 | | H | PEAK |
| 12310.00 | * | | | | | 74.00 | | H | PEAK |
| 14772.00 | * | | | | | 74.00 | | H | PEAK |
| 17234.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4924.00 | 36.67 | 31.61 | 9.04 | 40.08 | 37.24 | 54.00 | -16.76 | V | AVG. |
| 7386.00 | 30.07 | 36.52 | 10.75 | 41.09 | 36.25 | 54.00 | -17.75 | V | AVG. |
| 9848.00 | * | | | | | 54.00 | | V | AVG. |
| 12310.00 | * | | | | | 54.00 | | V | AVG. |
| 14772.00 | * | | | | | 54.00 | | V | AVG. |
| 17234.00 | * | | | | | 54.00 | | V | AVG. |
| 4924.00 | 33.05 | 31.61 | 9.04 | 40.08 | 33.62 | 54.00 | -20.38 | H | AVG. |
| 7386.00 | 26.48 | 36.52 | 10.75 | 41.09 | 32.66 | 54.00 | -21.34 | H | AVG. |
| 9848.00 | * | | | | | 54.00 | | H | AVG. |
| 12310.00 | * | | | | | 54.00 | | H | AVG. |
| 14772.00 | * | | | | | 54.00 | | H | AVG. |
| 17234.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11n(H20) | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4824.00 | 36.57 | 31.54 | 8.92 | 40.22 | 36.81 | 74.00 | -37.19 | V | PEAK |
| 7236.00 | 32.62 | 36.49 | 10.62 | 41.22 | 38.51 | 74.00 | -35.49 | V | PEAK |
| 9648.00 | * | | | | | 74.00 | | V | PEAK |
| 12060.00 | * | | | | | 74.00 | | V | PEAK |
| 14472.00 | * | | | | | 74.00 | | V | PEAK |
| 16884.00 | * | | | | | 74.00 | | V | PEAK |
| 4824.00 | 35.40 | 31.54 | 8.92 | 40.22 | 35.64 | 74.00 | -38.36 | H | PEAK |
| 7236.00 | 33.27 | 36.49 | 10.62 | 41.22 | 39.16 | 74.00 | -34.84 | H | PEAK |
| 9648.00 | * | | | | | 74.00 | | H | PEAK |
| 12060.00 | * | | | | | 74.00 | | H | PEAK |
| 14472.00 | * | | | | | 74.00 | | H | PEAK |
| 16884.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4824.00 | 27.07 | 31.54 | 8.92 | 40.22 | 27.31 | 54.00 | -26.69 | V | AVG. |
| 7236.00 | 23.71 | 36.50 | 10.62 | 41.22 | 29.61 | 54.00 | -24.39 | V | AVG. |
| 9648.00 | * | | | | | 54.00 | | V | AVG. |
| 12060.00 | * | | | | | 54.00 | | V | AVG. |
| 14472.00 | * | | | | | 54.00 | | V | AVG. |
| 16884.00 | * | | | | | 54.00 | | V | AVG. |
| 4824.00 | 25.77 | 31.54 | 8.92 | 40.22 | 26.01 | 54.00 | -27.99 | H | AVG. |
| 7236.00 | 24.24 | 36.50 | 10.62 | 41.22 | 30.14 | 54.00 | -23.86 | H | AVG. |
| 9648.00 | * | | | | | 54.00 | | H | AVG. |
| 12060.00 | * | | | | | 54.00 | | H | AVG. |
| 14472.00 | * | | | | | 54.00 | | H | AVG. |
| 16884.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11n(H20) | | | | | Test channel: Middle | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4874.00 | 34.70 | 31.57 | 8.98 | 40.15 | 35.10 | 74.00 | -38.90 | V | PEAK |
| 7311.00 | 37.78 | 36.48 | 10.68 | 41.16 | 43.78 | 74.00 | -30.22 | V | PEAK |
| 9748.00 | * | | | | | 74.00 | | V | PEAK |
| 12185.00 | * | | | | | 74.00 | | V | PEAK |
| 14622.00 | * | | | | | 74.00 | | V | PEAK |
| 17059.00 | * | | | | | 74.00 | | V | PEAK |
| 4874.00 | 35.07 | 31.57 | 8.98 | 40.15 | 35.47 | 74.00 | -38.53 | H | PEAK |
| 7311.00 | 36.51 | 36.48 | 10.68 | 41.16 | 42.51 | 74.00 | -31.49 | H | PEAK |
| 9748.00 | * | | | | | 74.00 | | H | PEAK |
| 12185.00 | * | | | | | 74.00 | | H | PEAK |
| 14622.00 | * | | | | | 74.00 | | H | PEAK |
| 17059.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4874.00 | 25.90 | 31.57 | 8.98 | 40.15 | 26.30 | 54.00 | -27.70 | V | AVG. |
| 7311.00 | 25.64 | 36.48 | 10.68 | 41.16 | 31.64 | 54.00 | -22.36 | V | AVG. |
| 9748.00 | * | | | | | 54.00 | | V | AVG. |
| 12185.00 | * | | | | | 54.00 | | V | AVG. |
| 14622.00 | * | | | | | 54.00 | | V | AVG. |
| 17059.00 | * | | | | | 54.00 | | V | AVG. |
| 4874.00 | 26.10 | 31.57 | 8.98 | 40.15 | 26.50 | 54.00 | -27.50 | H | AVG. |
| 7311.00 | 27.02 | 36.48 | 10.68 | 41.16 | 33.02 | 54.00 | -20.98 | H | AVG. |
| 9748.00 | * | | | | | 54.00 | | H | AVG. |
| 12185.00 | * | | | | | 54.00 | | H | AVG. |
| 14622.00 | * | | | | | 54.00 | | H | AVG. |
| 17059.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11n(H20) | | | | | Test channel: Highest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4924.00 | 35.03 | 31.61 | 9.04 | 40.08 | 35.60 | 74.00 | -38.40 | V | PEAK |
| 7386.00 | 34.44 | 36.52 | 10.75 | 41.09 | 40.62 | 74.00 | -33.38 | V | PEAK |
| 9848.00 | * | | | | | 74.00 | | V | PEAK |
| 12310.00 | * | | | | | 74.00 | | V | PEAK |
| 14772.00 | * | | | | | 74.00 | | V | PEAK |
| 17234.00 | * | | | | | 74.00 | | V | PEAK |
| 4924.00 | 34.67 | 31.61 | 9.04 | 40.08 | 35.24 | 74.00 | -38.76 | H | PEAK |
| 7386.00 | 34.88 | 36.52 | 10.75 | 41.09 | 41.06 | 74.00 | -32.94 | H | PEAK |
| 9848.00 | * | | | | | 74.00 | | H | PEAK |
| 12310.00 | * | | | | | 74.00 | | H | PEAK |
| 14772.00 | * | | | | | 74.00 | | H | PEAK |
| 17234.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4924.00 | 25.73 | 31.61 | 9.04 | 40.08 | 26.30 | 54.00 | -27.70 | V | AVG. |
| 7386.00 | 25.46 | 36.52 | 10.75 | 41.09 | 31.64 | 54.00 | -22.36 | V | AVG. |
| 9848.00 | * | | | | | 54.00 | | V | AVG. |
| 12310.00 | * | | | | | 54.00 | | V | AVG. |
| 14772.00 | * | | | | | 54.00 | | V | AVG. |
| 17234.00 | * | | | | | 54.00 | | V | AVG. |
| 4924.00 | 26.73 | 31.61 | 9.04 | 40.08 | 27.30 | 54.00 | -26.70 | H | AVG. |
| 7386.00 | 26.22 | 36.52 | 10.75 | 41.09 | 32.40 | 54.00 | -21.60 | H | AVG. |
| 9848.00 | * | | | | | 54.00 | | H | AVG. |
| 12310.00 | * | | | | | 54.00 | | H | AVG. |
| 14772.00 | * | | | | | 54.00 | | H | AVG. |
| 17234.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11n(H40) | | | | | Test channel: Lowest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4844.00 | 35.21 | 31.55 | 8.94 | 40.19 | 35.51 | 74.00 | -38.49 | V | PEAK |
| 7266.00 | 34.19 | 36.49 | 10.63 | 41.20 | 40.11 | 74.00 | -33.89 | V | PEAK |
| 9688.00 | * | | | | | 74.00 | | V | PEAK |
| 12110.00 | * | | | | | 74.00 | | V | PEAK |
| 14532.00 | * | | | | | 74.00 | | V | PEAK |
| 16954.00 | * | | | | | 74.00 | | V | PEAK |
| 4844.00 | 34.54 | 31.55 | 8.94 | 40.19 | 34.84 | 74.00 | -39.16 | H | PEAK |
| 7266.00 | 36.42 | 36.49 | 10.63 | 41.20 | 42.34 | 74.00 | -31.66 | H | PEAK |
| 9688.00 | * | | | | | 74.00 | | H | PEAK |
| 12110.00 | * | | | | | 74.00 | | H | PEAK |
| 14532.00 | * | | | | | 74.00 | | H | PEAK |
| 16954.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4844.00 | 24.35 | 31.55 | 8.94 | 40.19 | 24.65 | 54.00 | -29.35 | V | AVG. |
| 7266.00 | 25.45 | 36.49 | 10.63 | 41.20 | 31.40 | 54.00 | -22.60 | V | AVG. |
| 9688.00 | * | | | | | 54.00 | | V | AVG. |
| 12110.00 | * | | | | | 54.00 | | V | AVG. |
| 14532.00 | * | | | | | 54.00 | | V | AVG. |
| 16954.00 | * | | | | | 54.00 | | V | AVG. |
| 4844.00 | 24.18 | 31.55 | 8.94 | 40.19 | 24.48 | 54.00 | -29.52 | H | AVG. |
| 7266.00 | 25.84 | 36.49 | 10.63 | 41.20 | 31.79 | 54.00 | -22.21 | H | AVG. |
| 9688.00 | * | | | | | 54.00 | | H | AVG. |
| 12110.00 | * | | | | | 54.00 | | H | AVG. |
| 14532.00 | * | | | | | 54.00 | | H | AVG. |
| 16954.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11n(H40) | | | | | Test channel: Middle | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4844.00 | 34.97 | 31.55 | 8.94 | 40.19 | 35.37 | 74.00 | -38.63 | V | PEAK |
| 7266.00 | 36.04 | 36.49 | 10.63 | 41.20 | 42.04 | 74.00 | -31.96 | V | PEAK |
| 9688.00 | * | | | | | 74.00 | | V | PEAK |
| 12110.00 | * | | | | | 74.00 | | V | PEAK |
| 14532.00 | * | | | | | 74.00 | | V | PEAK |
| 16954.00 | * | | | | | 74.00 | | V | PEAK |
| 4844.00 | 35.34 | 31.55 | 8.94 | 40.19 | 35.74 | 74.00 | -38.26 | H | PEAK |
| 7266.00 | 35.87 | 36.49 | 10.63 | 41.20 | 41.87 | 74.00 | -32.13 | H | PEAK |
| 9688.00 | * | | | | | 74.00 | | H | PEAK |
| 12110.00 | * | | | | | 74.00 | | H | PEAK |
| 14532.00 | * | | | | | 74.00 | | H | PEAK |
| 16954.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4844.00 | 23.97 | 31.55 | 8.94 | 40.19 | 24.37 | 54.00 | -29.63 | V | AVG. |
| 7266.00 | 25.37 | 36.49 | 10.63 | 41.20 | 31.37 | 54.00 | -22.63 | V | AVG. |
| 9688.00 | * | | | | | 54.00 | | V | AVG. |
| 12110.00 | * | | | | | 54.00 | | V | AVG. |
| 14532.00 | * | | | | | 54.00 | | V | AVG. |
| 16954.00 | * | | | | | 54.00 | | V | AVG. |
| 4844.00 | 24.72 | 31.55 | 8.94 | 40.19 | 25.12 | 54.00 | -28.88 | H | AVG. |
| 7266.00 | 24.95 | 36.49 | 10.63 | 41.20 | 30.95 | 54.00 | -23.05 | H | AVG. |
| 9688.00 | * | | | | | 54.00 | | H | AVG. |
| 12110.00 | * | | | | | 54.00 | | H | AVG. |
| 14532.00 | * | | | | | 54.00 | | H | AVG. |
| 16954.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.

**Radiated Emission Test Data (Above 1GHz)**

| Test mode: 802.11n(H40) | | | | | Test channel: Highest | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4844.00 | 35.02 | 31.55 | 8.94 | 40.19 | 35.49 | 74.00 | -38.51 | V | PEAK |
| 7266.00 | 36.56 | 36.49 | 10.63 | 41.20 | 42.65 | 74.00 | -31.35 | V | PEAK |
| 9688.00 | * | | | | | 74.00 | | V | PEAK |
| 12110.00 | * | | | | | 74.00 | | V | PEAK |
| 14532.00 | * | | | | | 74.00 | | V | PEAK |
| 16954.00 | * | | | | | 74.00 | | V | PEAK |
| 4844.00 | 35.43 | 31.55 | 8.94 | 40.19 | 35.90 | 74.00 | -38.10 | H | PEAK |
| 7266.00 | 36.60 | 36.49 | 10.63 | 41.20 | 42.69 | 74.00 | -31.31 | H | PEAK |
| 9688.00 | * | | | | | 74.00 | | H | PEAK |
| 12110.00 | * | | | | | 74.00 | | H | PEAK |
| 14532.00 | * | | | | | 74.00 | | H | PEAK |
| 16954.00 | * | | | | | 74.00 | | H | PEAK |
| Frequency (MHz) | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit (dBuV/m) | Over Limit (dB) | Pol. | Level |
| 4844.00 | 26.08 | 31.55 | 8.94 | 40.19 | 26.59 | 54.00 | -27.41 | V | AVG. |
| 7266.00 | 25.30 | 36.49 | 10.63 | 41.20 | 31.37 | 54.00 | -22.63 | V | AVG. |
| 9688.00 | * | | | | | 54.00 | | V | AVG. |
| 12110.00 | * | | | | | 54.00 | | V | AVG. |
| 14532.00 | * | | | | | 54.00 | | V | AVG. |
| 16954.00 | * | | | | | 54.00 | | V | AVG. |
| 4844.00 | 24.69 | 31.55 | 8.94 | 40.19 | 25.20 | 54.00 | -28.80 | H | AVG. |
| 7266.00 | 25.24 | 36.49 | 10.63 | 41.20 | 31.31 | 54.00 | -22.69 | H | AVG. |
| 9688.00 | * | | | | | 54.00 | | H | AVG. |
| 12110.00 | * | | | | | 54.00 | | H | AVG. |
| 14532.00 | * | | | | | 54.00 | | H | AVG. |
| 16954.00 | * | | | | | 54.00 | | H | AVG. |

**Remark:**

1. Final Level = 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.