# FCC Radio Test Report

## *FCC ID: 2AAQL-M709*

### Original Grant

| | | |
|---|---|---|
| **Report No.** | : | TB-FCC140341 |
| **Applicant** | : | More Star Industrial Group Limited |
| **Equipment Under Test (EUT)** | | |
| **EUT Name** | : | Tablet PC |
| **Model No.** | : | M709 |
| **Series Model No.** | : | Vixen, M708 |
| **Brand Name** | : | N/A |
| **Receipt Date** | : | 2014-05-26 |
| **Test Date** | : | 2014-05-26 to 2014-06-06 |
| **Issue Date** | : | 2014-06-10 |
| **Standards** | : | FCC Part 15, Subpart C (15.247:2012) |
| **Test Method** | : | ANSI C63.4:2003 |
| **Conclusions** | : | **PASS** |
| | | In the configuration tested, the EUT complied with the standards specified above, The EUT technically complies with the FCC and IC requirements |
| **Test/Witness Engineer** | : | IVAN SU |
| **Approved& Authorized** | : | Roy Lai. |

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.



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# 1. General Information about EUT

## 1.1 Client Information

| | | |
|---|---|---|
| **Applicant** | : | More Star Industrial Group Limited |
| **Address** | : | 3&4F, D Building, ZhuangBian Industrial Park, GuShu Industrial Area, Xixiang Town, Bao'an District, ShenZhen, China |
| **Manufacturer** | : | More Star Industrial Group Limited |
| **Address** | : | 3&4F, D Building, ZhuangBian Industrial Park, GuShu Industrial Area, Xixiang Town, Bao'an District, ShenZhen, China |

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

| | | | |
|---|---|---|---|
| **EUT Name** | : | Tablet PC | |
| **Models No.** | : | M709, Vixen, M708 | |
| **Model Difference** | : | All models are identical in the same PCB layout, interior structure and electrical circuits, The only difference is model name for commercial purpose. | |
| **Product Description** | : | Operation Frequency:<br>802.11b/g/n(HT20): 2412MHz~2462MHz | |
| | | Number of Channel: | 802.11b/g/n(HT20):11 channels **see note(3)** |
| | | RF Output Power: | 802.11b: 9.29 dBm<br>802.11g: 8.98 dBm<br>802.11n (HT20): 8.76 dBm |
| | | Antenna Gain: | 0 dBi (PIFA Antenna) |
| | | Modulation Type: | 802.11b: DSSS (CCK, QPSK, BPSK)<br>802.11g: OFDM<br>802.11n: OFDM |
| | | Bit Rate of Transmitter: | 802.11b:11/5.5/2/1 Mbps<br>802.11g:54/48/36/24/18/12/9/6 Mbps<br>802.11n:up to 150Mbps |
| **Power Supply** | : | DC power supplied by AC/DC Adapter<br>DC Voltage supplied from Li-Polymer battery. | |
| **Power Rating** | : | AC/DC Adapter(PS12A050K2000UD):<br>Input: AC 100~240V 50/60Hz 0.35A Output: DC 5V 2A<br>DC 3.7V 4000mAh from Li-ion battery | |
| **Connecting I/O Port(S)** | : | The equipent have USB port for link with PC, so the equipment is considered as a Computing Device Peripheral.<br>Please refer to the User's Manual | |
| **Note:** The equipment have Bluetooth function, Bluetooth have test comply with FCC Part 15C Rules. More detailed features description, please refer to the manufacturer's | | | |

specifications or the User's Manual.

**Note:**

(1) This Test Report is FCC Part 15.247 for 802.11b/g/n, the test procedure follows the FCC KDB 558074 D01 DTS Meas Guidance v03r01.

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

(3) Antenna information provided by the applicant.

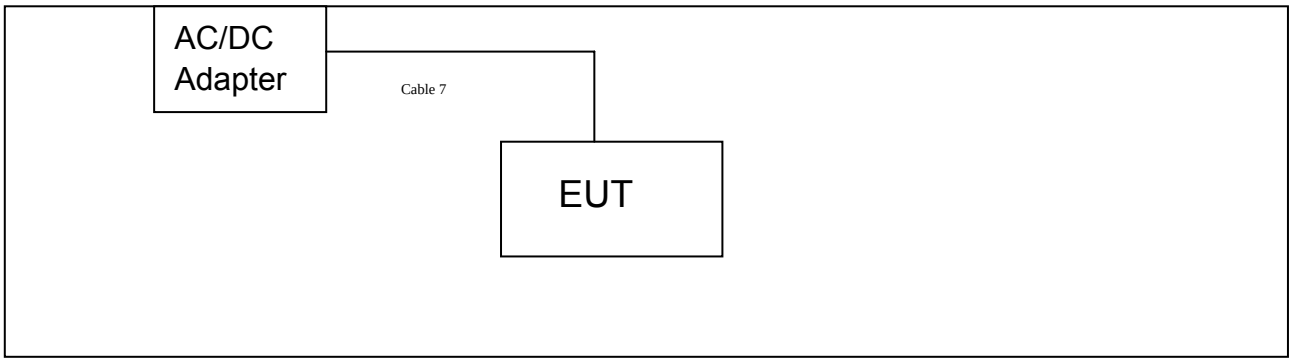
(4) Channel List:

CH 01~CH 11 for 802.11b/g/n(HT20)

| 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 Block Diagram Showing the Configuration of System Tested

**TX Mode**




## 1.4 Description of Support Units

| Equipment Information | | | | |
|---|---|---|---|---|
| **Name** | **Model** | **S/N** | **Manufacturer** | **Used "√"** |
| / | / | / | / | / |
| **Cable Information** | | | | |
| **Number** | **Shielded Type** | **Ferrite Core** | **Length** | **Note** |
| Cable 7 | NO | NO | 1.2M | Accessories |

## 1.5 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.

| For Conducted Test | |
|---|---|
| **Final Test Mode** | **Description** |
| Mode 1 | AC Charging with TX B Mode |

| For Radiated Test | |
|---|---|
| **Final Test Mode** | **Description** |
| Mode 3 | TX Mode B Mode Channel 01/06/11 |
| Mode 4 | TX Mode G Mode Channel 01/06/11 |
| Mode 5 | TX Mode N(HT20) Mode Channel 01/06/11 |

**Note:**

(1) For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.
According to ANSI C63.4 standards, the measurements are performed at the highest, middle, lowest available channels, and the worst case data rate as follows:
802.11b Mode: CCK (1 Mbps)
802.11g Mode: OFDM (6 Mbps)
802.11n (HT20) Mode: MCS 0 (6.5 Mbps)

(2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.

(3) The EUT is considered a mobile unit; in normal use it was positioned on X-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

## 1.6 Description of Test Software Setting

During testing channel& Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of WLAN.

| Test Software Version | Test Program: Realtek MP Tool.apk | | |
|---|---|---|---|
| **Channel** | **CH 01** | **CH 06** | **CH 11** |
| IEEE 802.11b DSSS | DEF | DEF | DEF |

| | | | |
|---|---|---|---|
| IEEE 802.11g OFDM | DEF | DEF | DEF |
| IEEE 802.11n (HT20) | DEF | DEF | DEF |
| **Channel** | **CH 03** | **CH 06** | **CH 09** |
| IEEE 802.11n (HT40) | / | / | / |

## 1.7 Test Facility

The testing was performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at:

1A/F., Bldg.6, Yusheng Industrial Zone, The National Road No.107 Xixiang Section 467, Xixiang, Bao'an, Shenzhen, Guangdong, China.

At the time of testing, the following bodies accredited the Laboratory:

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number is 811562.

# 2. Test Summary

| FCC Part 15 Subpart C(15.247)/RSS-210: 2010 | | | | |
|---|---|---|---|---|
| Standard Section | | Test Item | Judgment | Remark |
| FCC | IC | | | |
| 15.203 | / | Antenna Requirement | PASS | N/A |
| 15.207 | RSS-GEN 7.2.4 | Conducted Emission | PASS | N/A |
| 15.205 | RSS-GEN 7.2.2 | Restricted Bands | PASS | N/A |
| 15.247(a)(2) | RSS-210 A.8.2(a) | 6dB Bandwidth | PASS | N/A |
| 15.247(b) | RSS-210 A.8.4(4) | Peak Output Power | PASS | N/A |
| 15.247(e) | RSS-210 A.8.2(b) | Power Spectral Density | PASS | N/A |
| 15.247(d) | RSS-210 Annex 8 (A8.5) | Transmitter Radiated Spurious Emission | PASS | N/A |
| 15.247(d) | RSS-210 Annex 8 (A8.5) | Antenna Conducted Spurious Emission | PASS | N/A |
| **Note:** "/" for no requirement for this test item.<br>N/A is an abbreviation for Not Applicable. | | | | |

# 3. Conducted Emission Test

## 3.1 Test Standard and Limit

### 3.1.1Test Standard

FCC Part 15.207

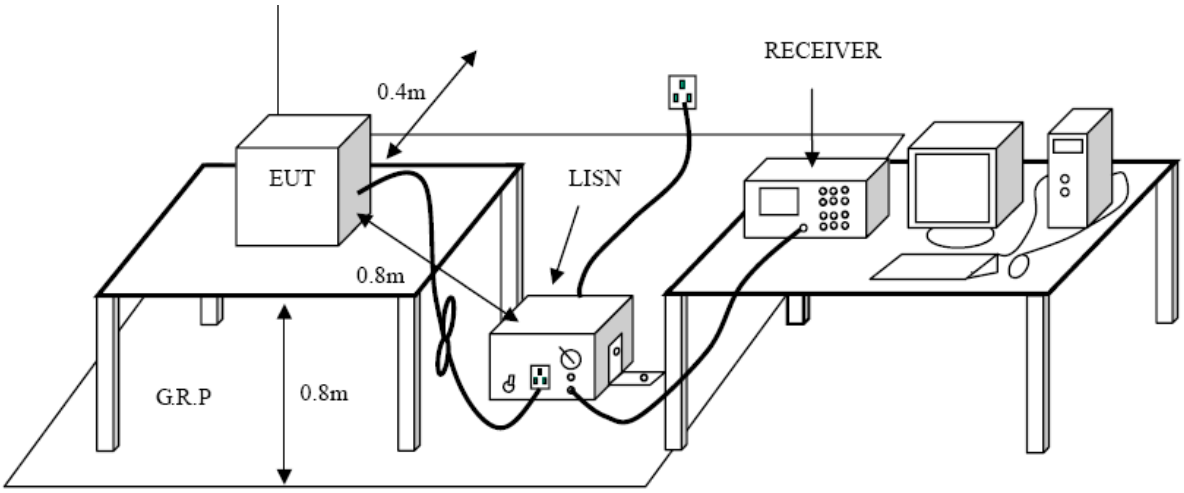
### 3.1.2 Test Limit

**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 |

Notes:
(1) *Decreasing linearly with logarithm of the frequency.
(2) The lower limit shall apply at the transition frequencies.
(3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

## 3.2 Test Setup




## 3.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

## 3.4 Test Equipment Used

| Description | Manufacturer | Model No. | Serial No. | Cal. Date | Cal. Due Date |
|---|---|---|---|---|---|
| EMI Test Receiver | ROHDE& SCHWARZ | ESCI | 100321 | 2013-08-10 | 2014-08-09 |
| 50ΩCoaxial Switch | Anritsu | MP59B | X10321 | 2013-08-10 | 2014-08-09 |
| L.I.S.N | Rohde & Schwarz | ENV216 | 101131 | 2013-08-10 | 2014-08-09 |
| L.I.S.N | SCHWARZBECK | NNBL 8226-2 | 8226-2/164 | 2013-08-10 | 2014-08-09 |

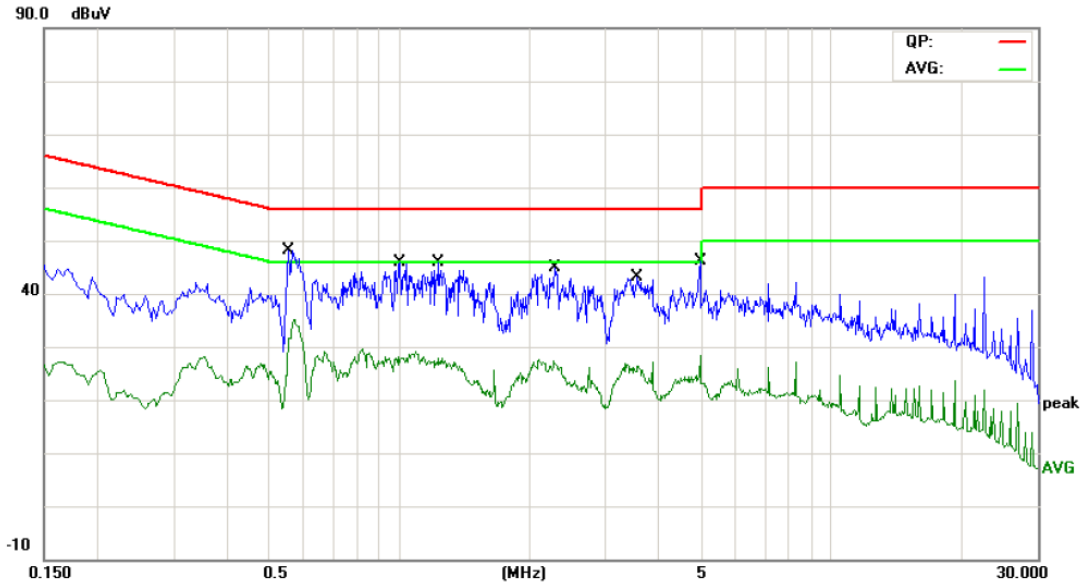
## 3.5 EUT Operating Mode

Please refer to the description of test mode.

## 3.6 Test Data

Please see the next page.

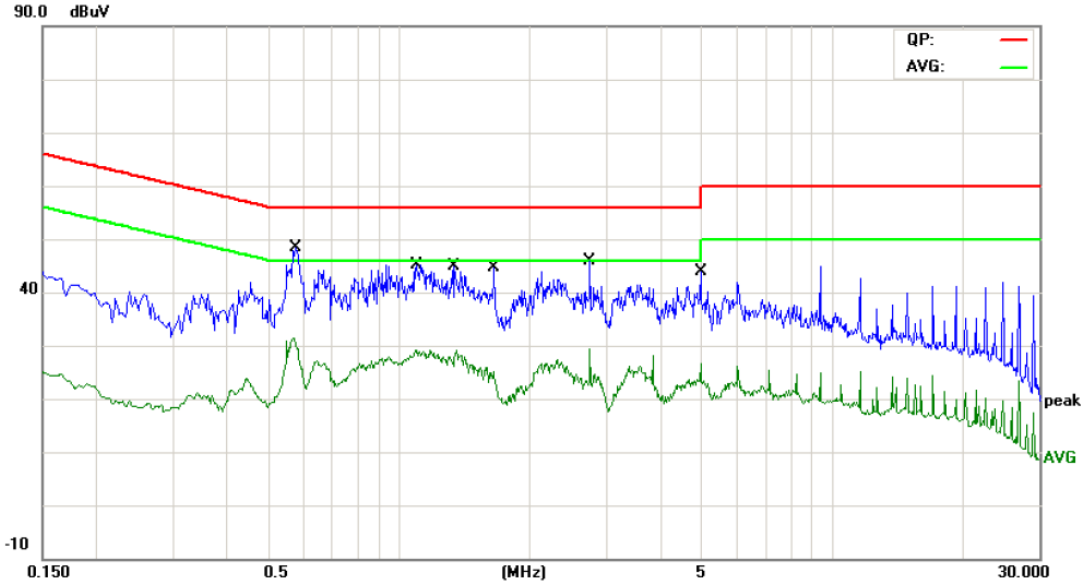
| EUT: | TABLET PC | Model Name : | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Terminal: | Line | | |
| Test Mode: | AC Charging with TX B Mode | | |
| Remark: | Only worse case is reported | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector |
| 1 | * | 0.5540 | 30.51 | 10.05 | 40.56 | 56.00 | -15.44 | QP |
| 2 | | 0.5540 | 19.80 | 10.05 | 29.85 | 46.00 | -16.15 | AVG |
| 3 | | 1.0020 | 26.96 | 10.06 | 37.02 | 56.00 | -18.98 | QP |
| 4 | | 1.0020 | 17.27 | 10.06 | 27.33 | 46.00 | -18.67 | AVG |
| 5 | | 1.2300 | 26.99 | 10.06 | 37.05 | 56.00 | -18.95 | QP |
| 6 | | 1.2300 | 16.90 | 10.06 | 26.96 | 46.00 | -19.04 | AVG |
| 7 | | 2.2940 | 26.50 | 10.05 | 36.55 | 56.00 | -19.45 | QP |
| 8 | | 2.2940 | 16.31 | 10.05 | 26.36 | 46.00 | -19.64 | AVG |
| 9 | | 3.5580 | 24.63 | 10.01 | 34.64 | 56.00 | -21.36 | QP |
| 10 | | 3.5580 | 15.30 | 10.01 | 25.31 | 46.00 | -20.69 | AVG |
| 11 | | 4.9580 | 28.00 | 9.96 | 37.96 | 56.00 | -18.04 | QP |
| 12 | | 4.9580 | 15.30 | 9.96 | 25.26 | 46.00 | -20.74 | AVG |

**Emission Level= Read Level+ Correct Factor**

| EUT: | TABLET PC | Model Name : | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Terminal: | Neutral | | |
| Test Mode: | AC Charging with TX B Mode | | |
| Remark: | Only worse case is reported | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | | |
|---|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB | dBuV | dBuV | dB | Detector | Comment |
| 1 | | 0.5780 | 30.82 | 10.02 | 40.84 | 56.00 | -15.16 | QP | |
| 2 | | 0.5780 | 20.03 | 10.02 | 30.05 | 46.00 | -15.95 | AVG | |
| 3 | | 1.0940 | 27.06 | 10.15 | 37.21 | 56.00 | -18.79 | QP | |
| 4 | | 1.0940 | 17.84 | 10.15 | 27.99 | 46.00 | -18.01 | AVG | |
| 5 | | 1.3420 | 27.55 | 10.13 | 37.68 | 56.00 | -18.32 | QP | |
| 6 | | 1.3420 | 17.63 | 10.13 | 27.76 | 46.00 | -18.24 | AVG | |
| 7 | | 1.6540 | 31.28 | 10.09 | 41.37 | 56.00 | -14.63 | QP | |
| 8 | | 1.6540 | 16.46 | 10.09 | 26.55 | 46.00 | -19.45 | AVG | |
| 9 | * | 2.7540 | 31.92 | 10.06 | 41.98 | 56.00 | -14.02 | QP | |
| 10 | | 2.7540 | 16.46 | 10.06 | 26.52 | 46.00 | -19.48 | AVG | |
| 11 | | 4.9540 | 29.58 | 10.06 | 39.64 | 56.00 | -16.36 | QP | |
| 12 | | 4.9540 | 15.28 | 10.06 | 25.34 | 46.00 | -20.66 | AVG | |

**Emission Level= Read Level+ Correct Factor**

# 4. Radiated Emission Test

## 4.1 Test Standard and Limit

4.1.1 Test Standard

FCC Part 15.209

4.1.2 Test Limit

**Radiated Emission Limits (9kHz~1000MHz)**

| Frequency (MHz | Field Strength (microvolt/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above 960 | 500 | 3 |

**Radiated Emission Limit (Above 1000MHz)**

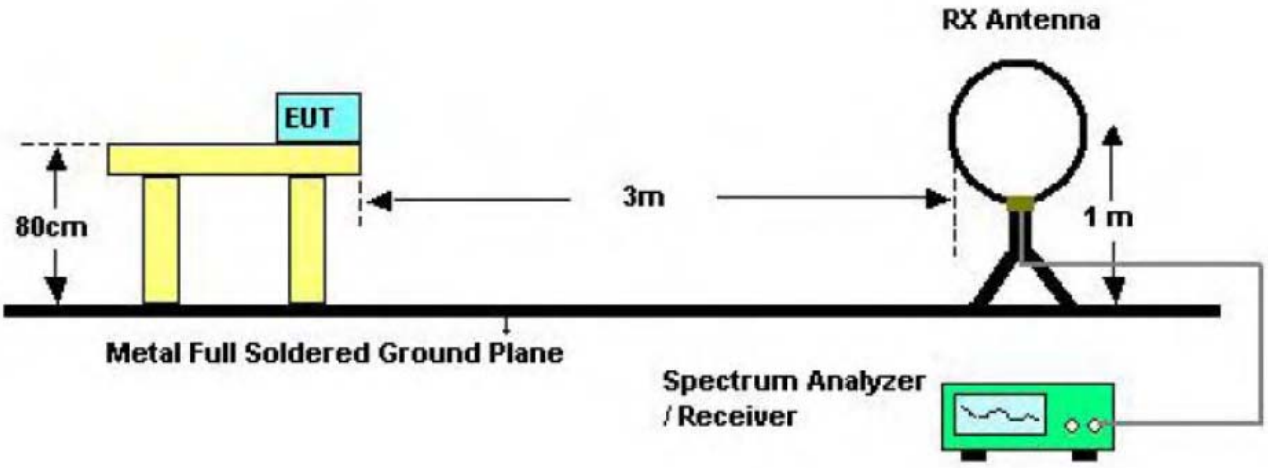
| Frequency (MHz) | Class A (dBuV/m)(at 3 M) | | Class B (dBuV/m)(at 3 M) | |
|---|---|---|---|---|
| | Peak | Average | Peak | Average |
| Above 1000 | 80 | 60 | 74 | 54 |

**Note:**

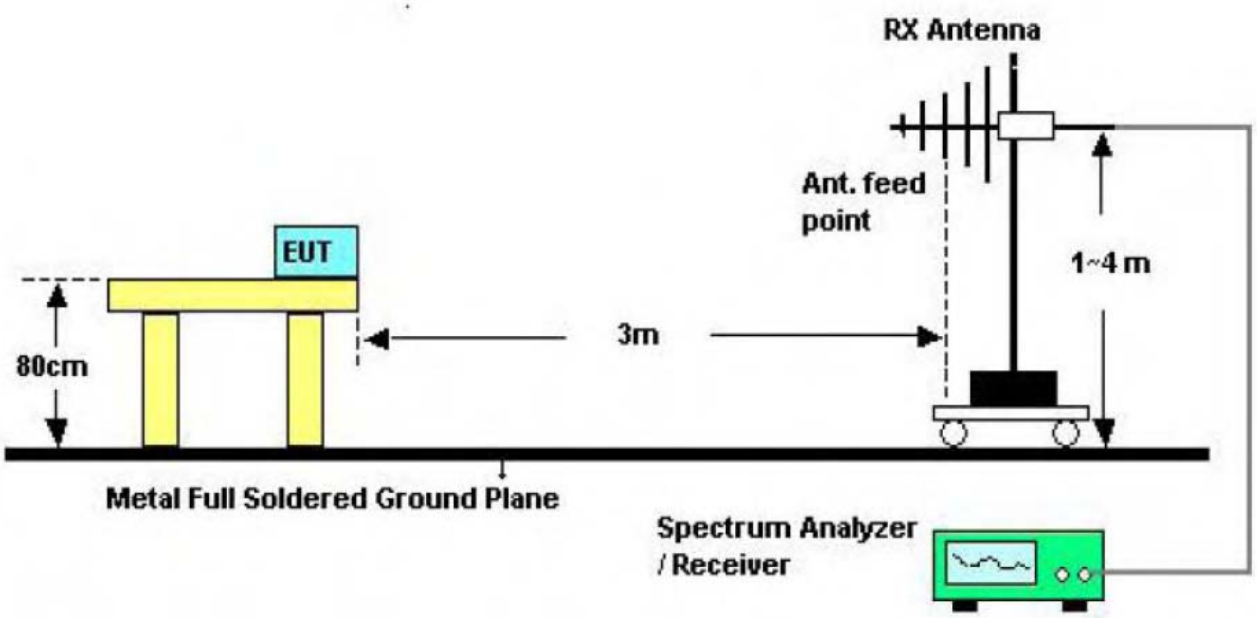
(1) The tighter limit applies at the band edges.

(2) Emission Level(dBuV/m)=20log Emission Level(uV/m)

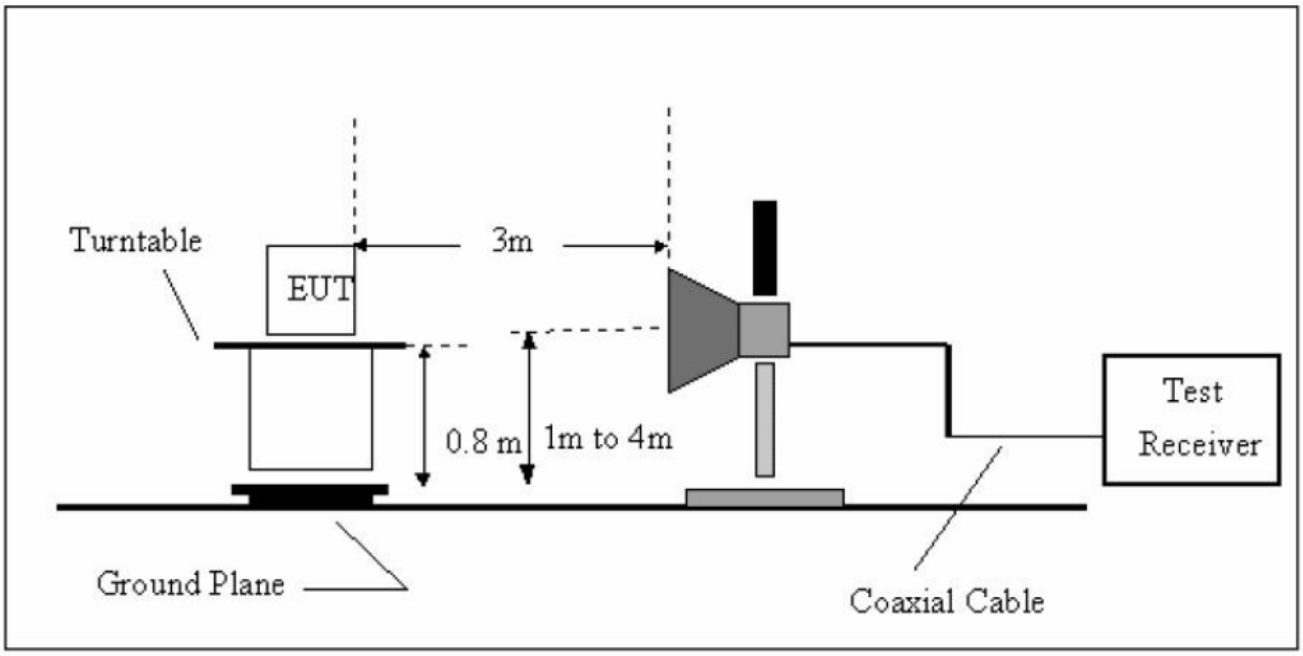
## 4.2 Test Setup




Below 30MHz Test Setup




Below 1000MHz Test Setup




Above 1GHz Test Setup

## 4.3 Test Procedure

(1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above the ground, the table was rotated 360 degrees to determine the position of the highest radiation.
(2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
(3) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
(4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
(5) For the actual test configuration, please see the test setup photo.

## 4.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

## 4.5 Test Equipment

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Spectrum Analyzer | Agilent | E4407B | MY45106456 | Mar. 20, 2014 | Mar. 19, 2015 |

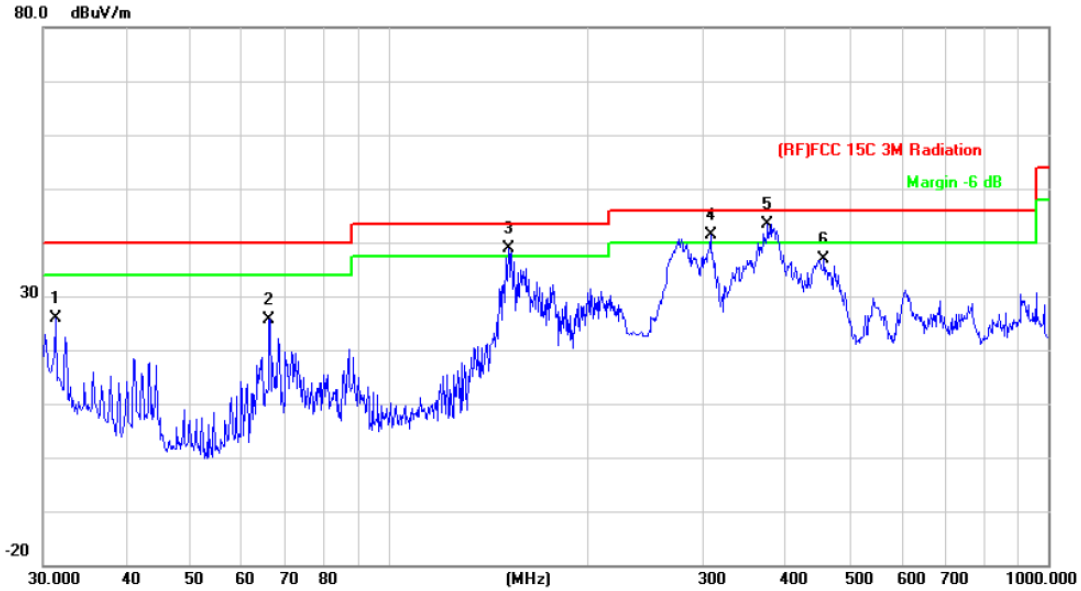
| | | | | | |
|---|---|---|---|---|---|
| Spectrum Analyzer | Rohde & Schwarz | FSP30 | DE25181 | Aug. 10, 2013 | Aug.09, 2014 |
| EMI Test Receiver | Rohde & Schwarz | ESCI | 101165 | Aug. 10, 2013 | Aug.09, 2014 |
| Bilog Antenna | ETS-LINDGREN | 3142E | 00117537 | Mar. 07, 2014 | Mar.06, 2015 |
| Bilog Antenna | ETS-LINDGREN | 3142E | 00117542 | Mar. 07, 2014 | Mar.06, 2015 |
| Horn Antenna | ETS-LINDGREN | 3117 | 00143207 | Mar. 07, 2014 | Mar.06, 2015 |
| Horn Antenna | ETS-LINDGREN | 3117 | 00143209 | Mar. 07, 2014 | Mar.06, 2015 |
| Pre-amplifier | HP | 11909A | 185903 | Mar. 07, 2014 | Mar.06, 2015 |
| Pre-amplifier | HP | 8447B | 3008A00849 | Mar. 07, 2014 | Mar.06, 2015 |
| Cable | HUBER+SUHNER | 100 | SUCOFLEX | Mar. 07, 2014 | Mar.06, 2015 |
| Signal Generator | Rohde & Schwarz | SML03 | IKW682-054 | Feb. 11, 2014 | Feb.10, 2015 |
| Positioning Controller | ETS-LINDGREN | 2090 | N/A | N/A | N/A |

## 4.6 Test Data

Remark: During testing above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.

Test data please refer the following pages.

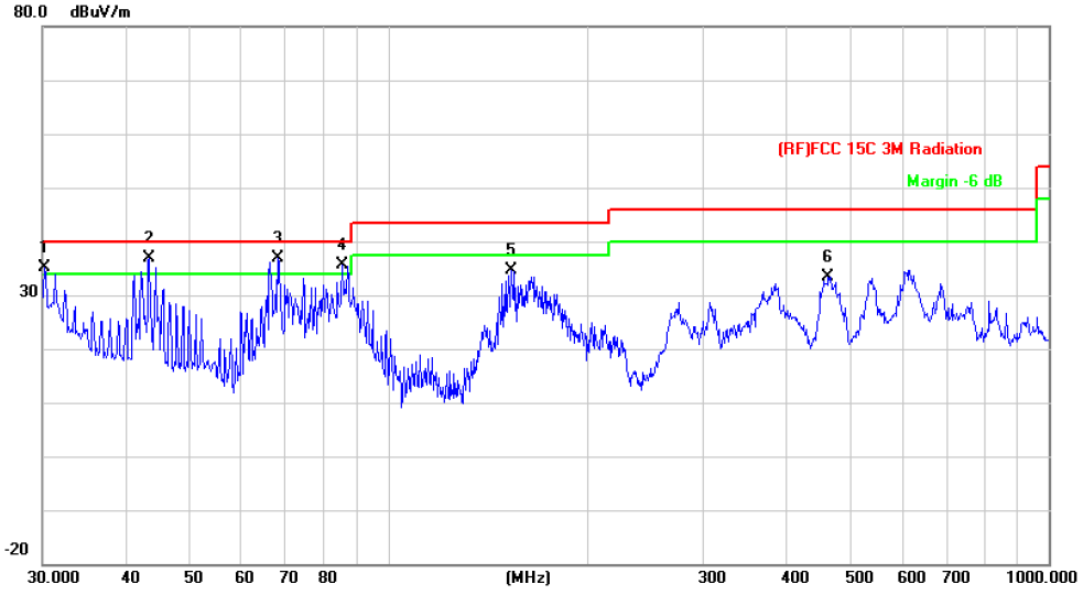
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX B Mode 2412MHz | | |
| Remark: | Only worse case is reported | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 31.2893 | 40.52 | -14.76 | 25.76 | 40.00 | -14.24 | peak |
| 2 | | 66.0342 | 49.62 | -23.98 | 25.64 | 40.00 | -14.36 | peak |
| 3 | ! | 152.1297 | 60.03 | -21.04 | 38.99 | 43.50 | -4.51 | peak |
| 4 | ! | 307.8313 | 58.26 | -16.79 | 41.47 | 46.00 | -4.53 | peak |
| 5 | * | 375.9385 | 57.85 | -14.40 | 43.45 | 46.00 | -2.55 | peak |
| 6 | | 457.5073 | 49.03 | -12.20 | 36.83 | 46.00 | -9.17 | peak |

**Emission Level= Read Level+ Correct Factor**

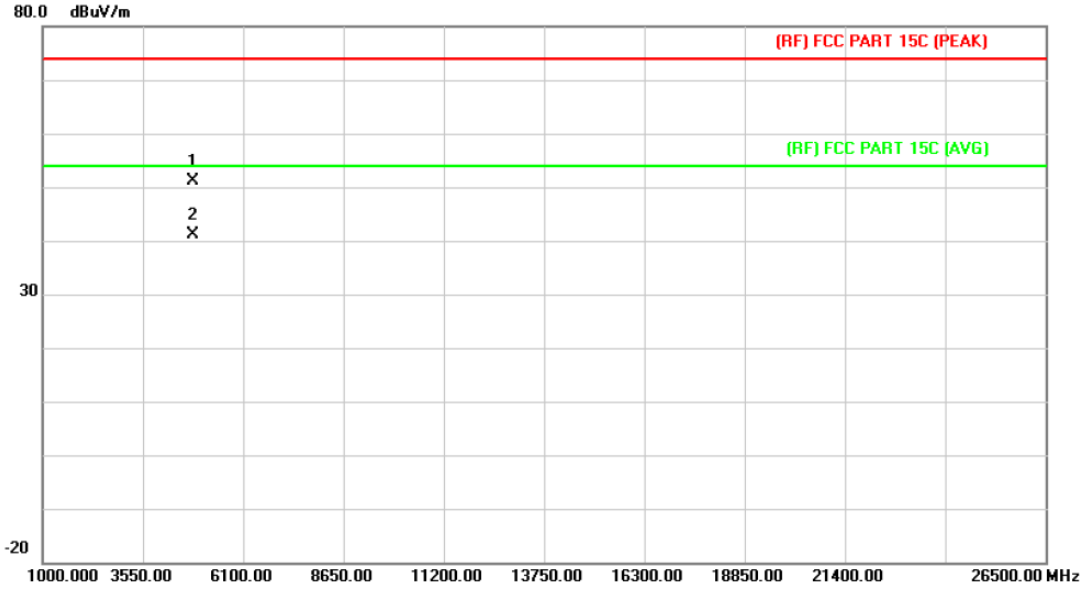
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX B Mode 2412MHz | | |
| Remark: | Only worse case is reported | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | ! | 30.2111 | 49.31 | -14.09 | 35.22 | 40.00 | -4.78 | peak |
| 2 | * | 43.5057 | 58.62 | -21.64 | 36.98 | 40.00 | -3.02 | peak |
| 3 | ! | 68.1514 | 60.72 | -23.78 | 36.94 | 40.00 | -3.06 | peak |
| 4 | ! | 85.2980 | 58.53 | -22.97 | 35.56 | 40.00 | -4.44 | peak |
| 5 | | 153.7385 | 55.44 | -20.92 | 34.52 | 43.50 | -8.98 | peak |
| 6 | | 463.9696 | 45.38 | -11.97 | 33.41 | 46.00 | -12.59 | peak |

**Emission Level= Read Level+ Correct Factor**

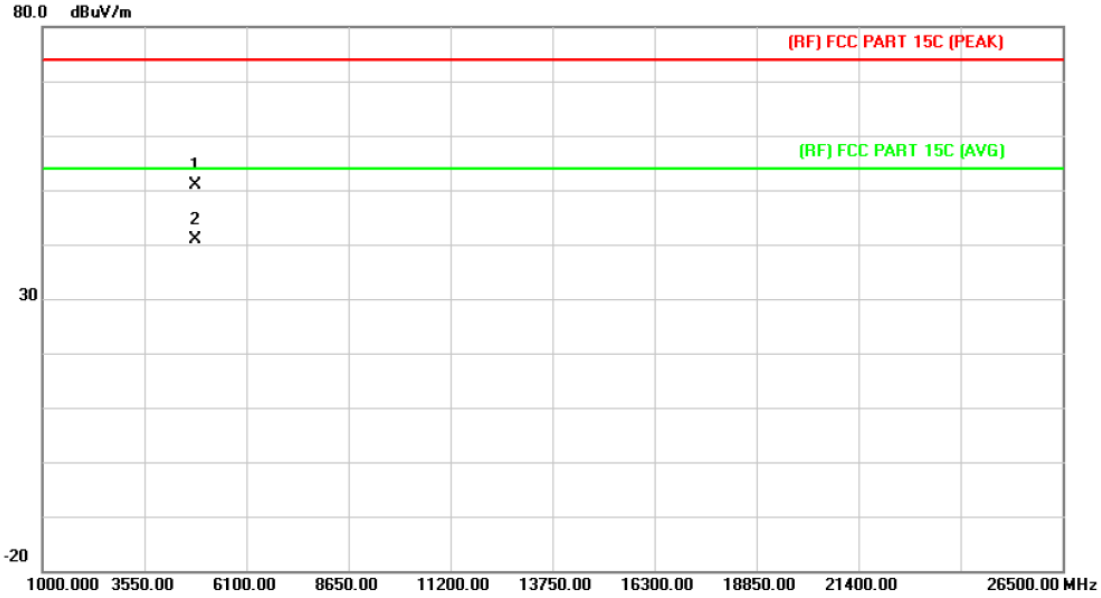
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX B Mode 2412MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4823.903 | 43.05 | 8.19 | 51.24 | 74.00 | -22.76 | peak |
| 2 | * | 4823.903 | 33.06 | 8.19 | 41.25 | 54.00 | -12.75 | AVG |

**Emission Level= Read Level+ Correct Factor**

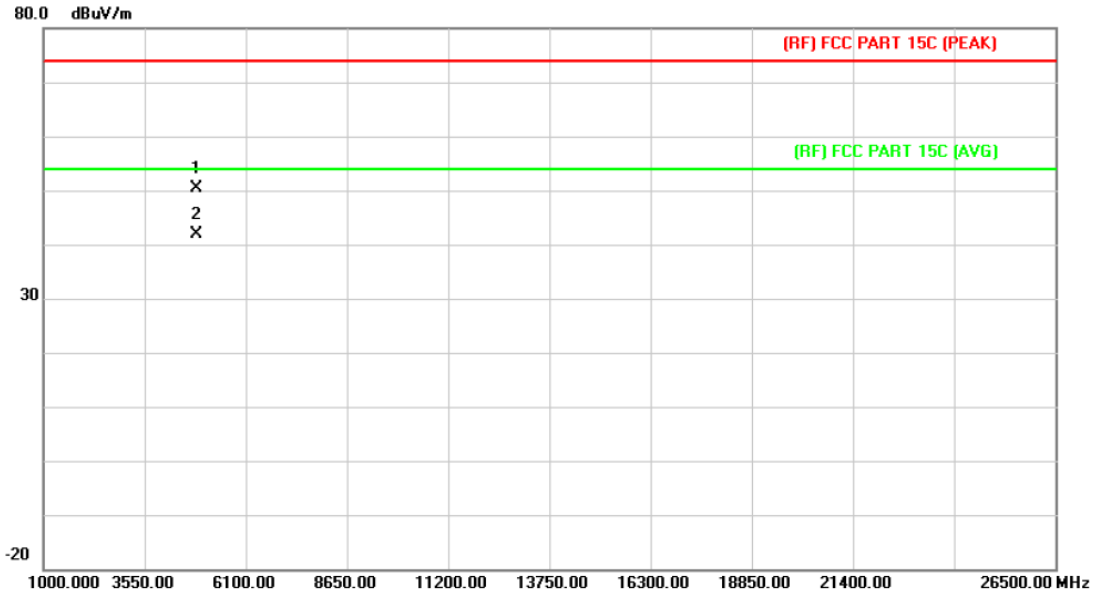
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX B Mode 2412MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4823.903 | 43.91 | 8.19 | 52.10 | 74.00 | -21.90 | peak |
| 2 | * | 4823.903 | 434.37 | 8.19 | 42.56 | 54.00 | -11.44 | AVG |

**Emission Level= Read Level+ Correct Factor**

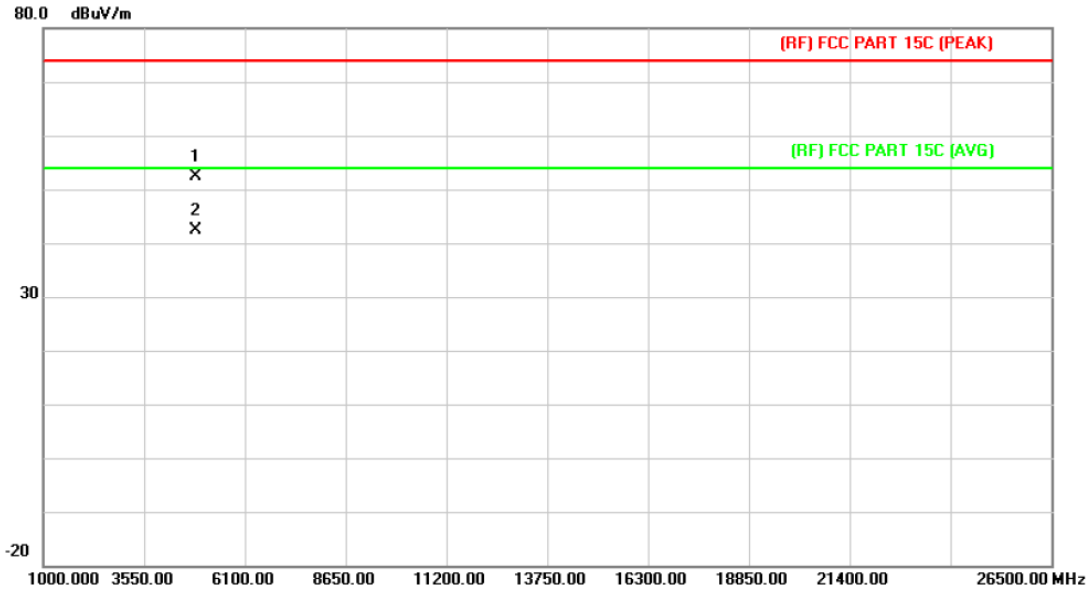
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX B Mode 2437MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4873.903 | 42.17 | 8.21 | 50.38 | 74.00 | -23.62 | peak |
| 2 | * | 4873.903 | 33.77 | 8.21 | 41.98 | 54.00 | -12.02 | AVG |

**Emission Level= Read Level+ Correct Factor**

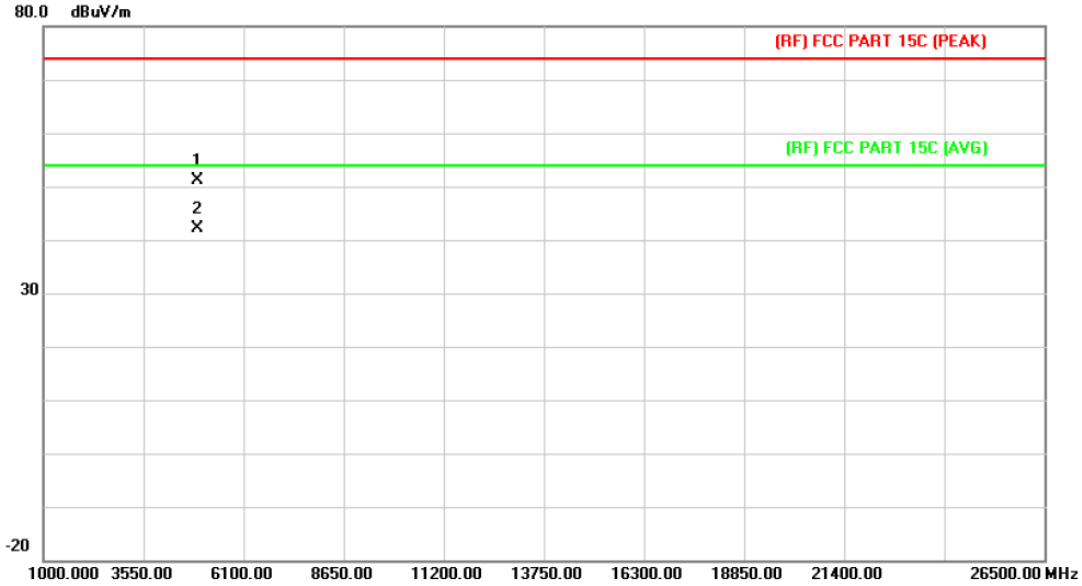
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX B Mode 2437MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4873.903 | 44.15 | 8.21 | 52.36 | 74.00 | -21.64 | peak |
| 2 | * | 4873.903 | 34.20 | 8.21 | 42.41 | 54.00 | -11.59 | AVG |

**Emission Level= Read Level+ Correct Factor**

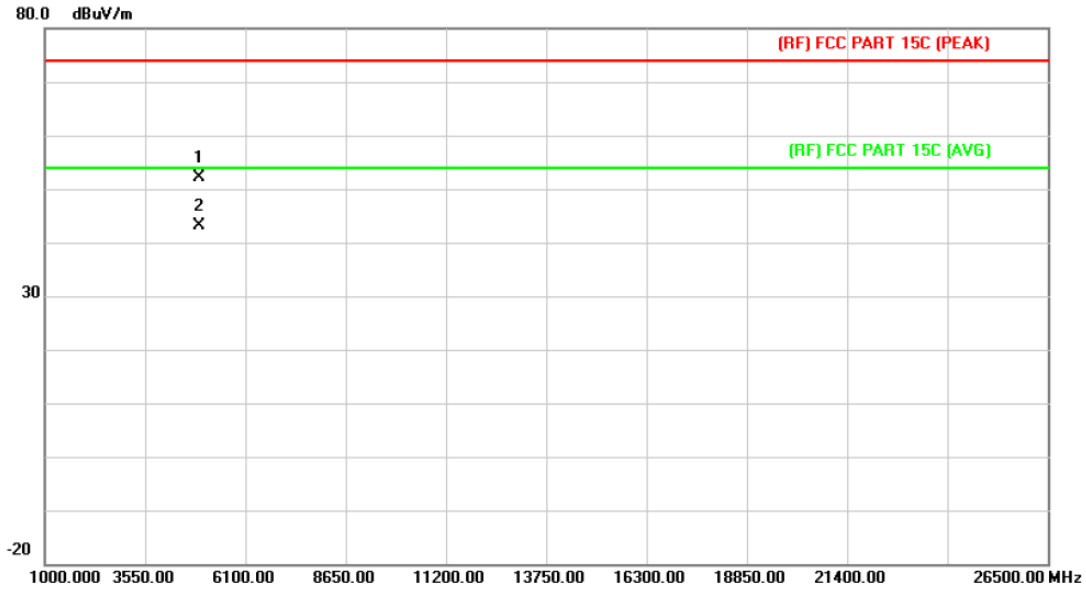
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX B Mode 2462MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4923.903 | 43.03 | 8.22 | 51.25 | 74.00 | -22.75 | peak |
| 2 | * | 4923.903 | 34.03 | 8.22 | 42.25 | 54.00 | -11.75 | AVG |

**Emission Level= Read Level+ Correct Factor**

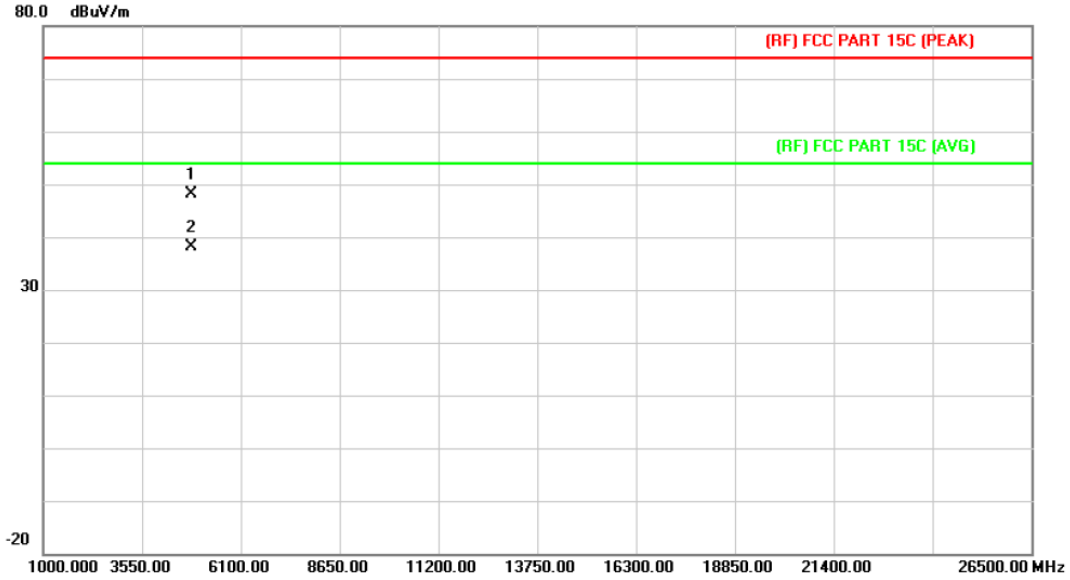
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX B Mode 2462MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4923.962 | 43.92 | 8.22 | 52.14 | 74.00 | -21.86 | peak |
| 2 | * | 4923.962 | 34.92 | 8.22 | 43.14 | 54.00 | -10.86 | AVG |

**Emission Level= Read Level+ Correct Factor**

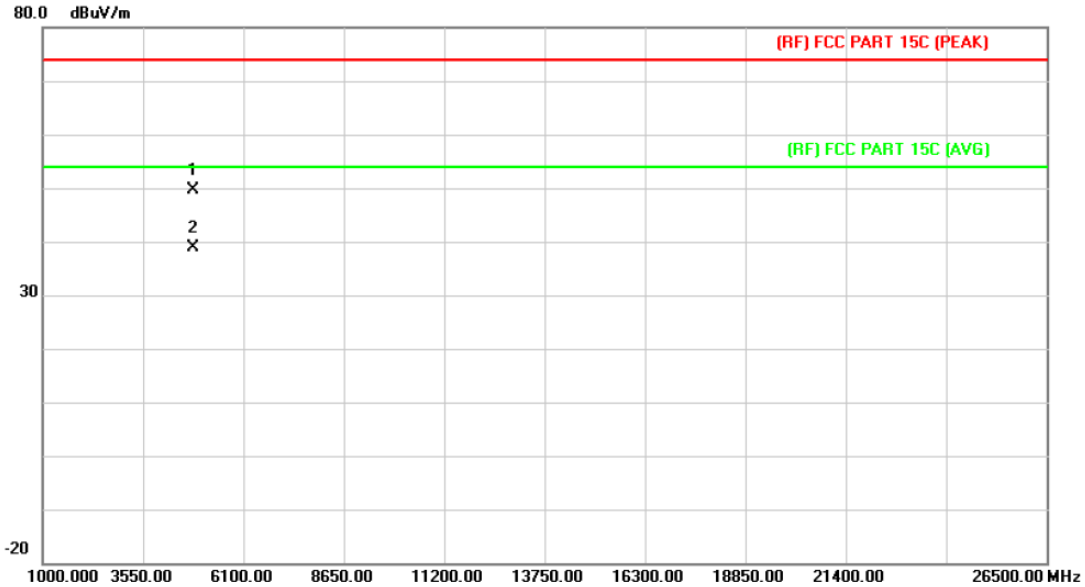
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX G Mode 2412MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4823.974 | 40.06 | 8.19 | 48.25 | 74.00 | -25.75 | peak |
| 2 | * | 4823.974 | 30.06 | 8.19 | 38.25 | 54.00 | -15.75 | AVG |

**Emission Level= Read Level+ Correct Factor**

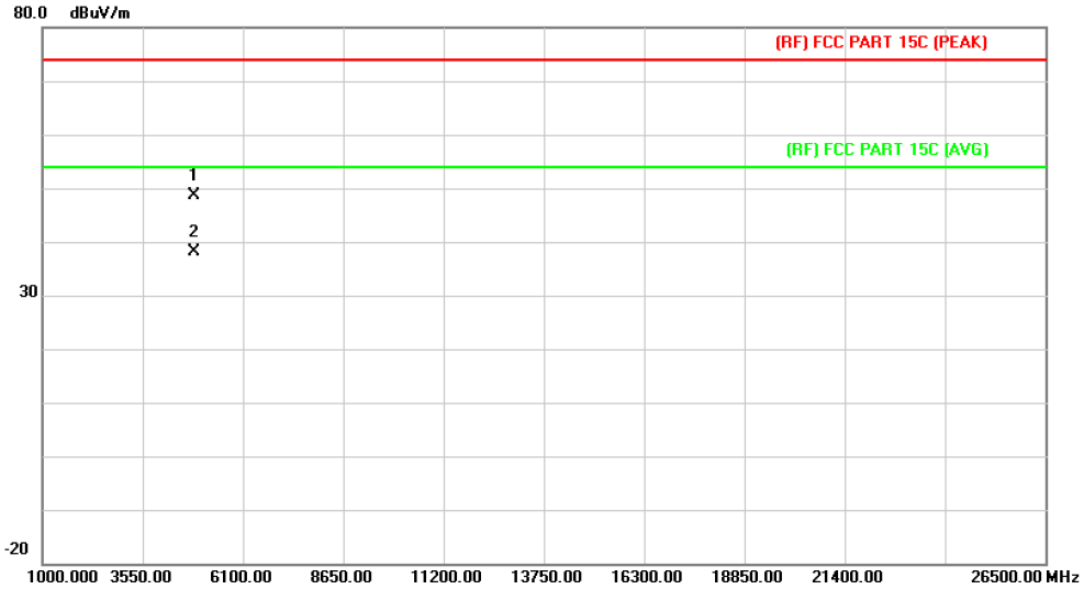
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX G Mode 2412MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4823.970 | 41.32 | 8.19 | 49.51 | 74.00 | -24.49 | peak |
| 2 | * | 4823.970 | 30.70 | 8.19 | 38.89 | 54.00 | -15.11 | AVG |

**Emission Level= Read Level+ Correct Factor**

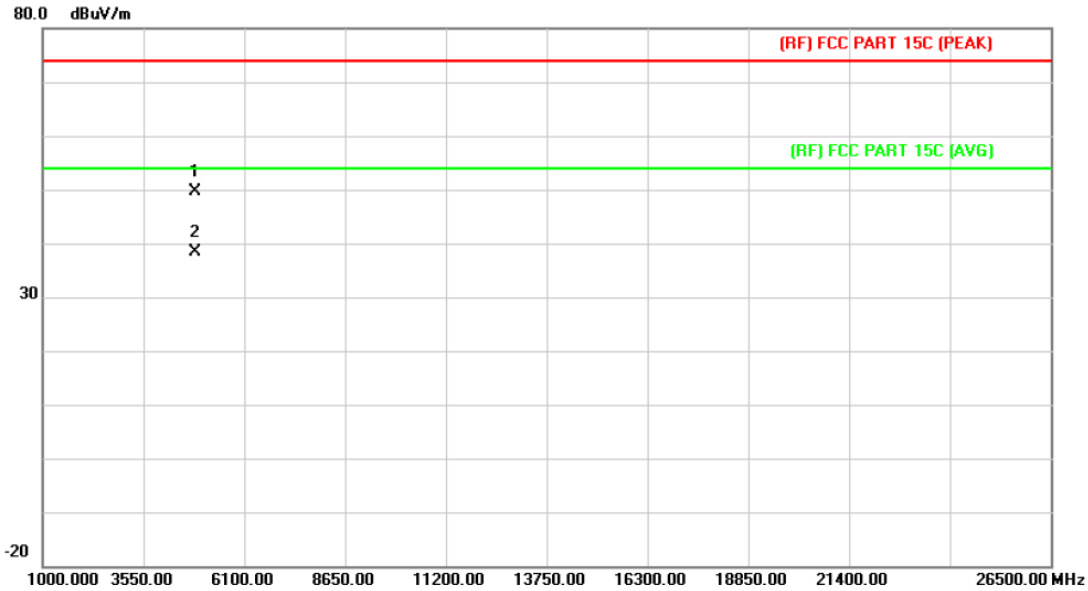
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX G Mode 2437MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4873.966 | 40.31 | 8.21 | 48.52 | 74.00 | -25.48 | peak |
| 2 | * | 4873.966 | 29.92 | 8.21 | 38.13 | 54.00 | -15.87 | AVG |

**Emission Level= Read Level+ Correct Factor**

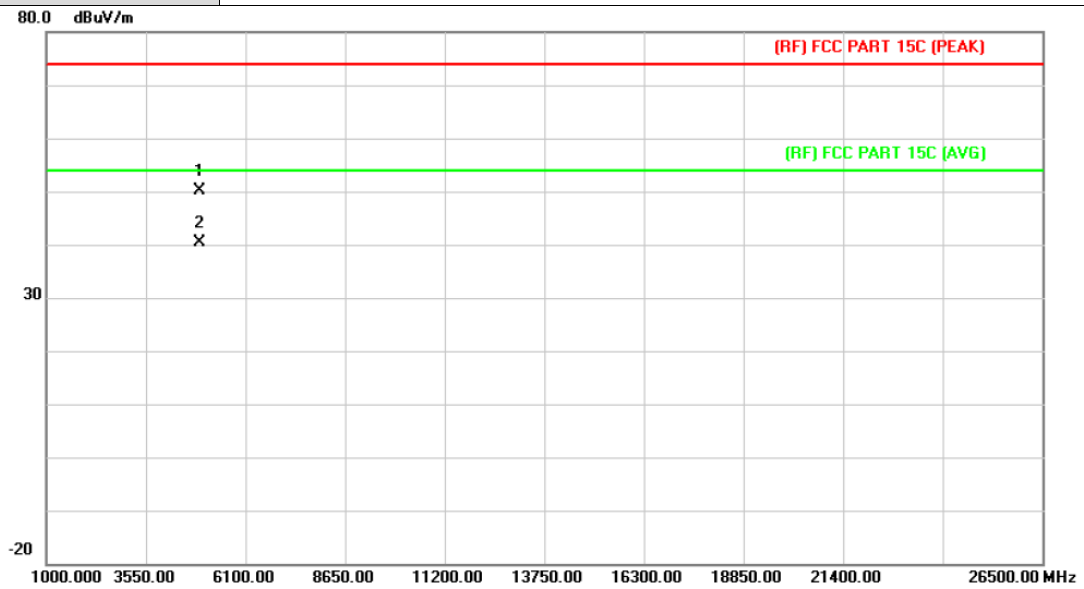
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX G Mode 2437MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4873.964 | 41.54 | 8.21 | 49.75 | 74.00 | -24.25 | peak |
| 2 | * | 4873.964 | 30.07 | 8.21 | 38.28 | 54.00 | -15.72 | AVG |

**Emission Level= Read Level+ Correct Factor**

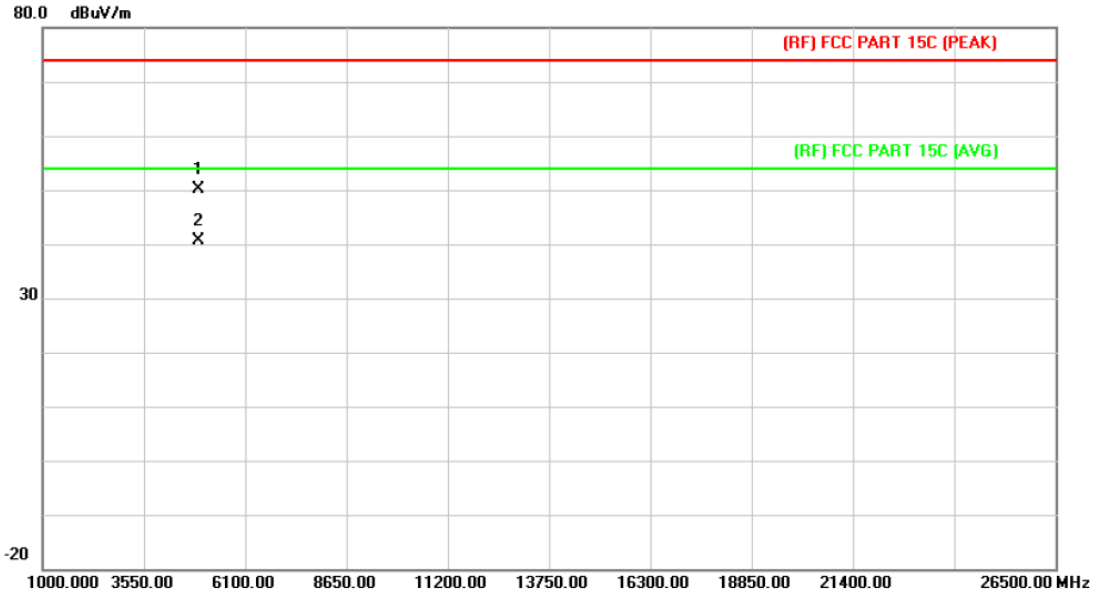
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX G Mode 2462MHz | | |
| Remark: | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4923.962 | 42.01 | 8.22 | 50.23 | 74.00 | -23.77 | peak |
| 2 | * | 4923.962 | 32.10 | 8.22 | 40.32 | 54.00 | -13.68 | AVG |

**Emission Level= Read Level+ Correct Factor**

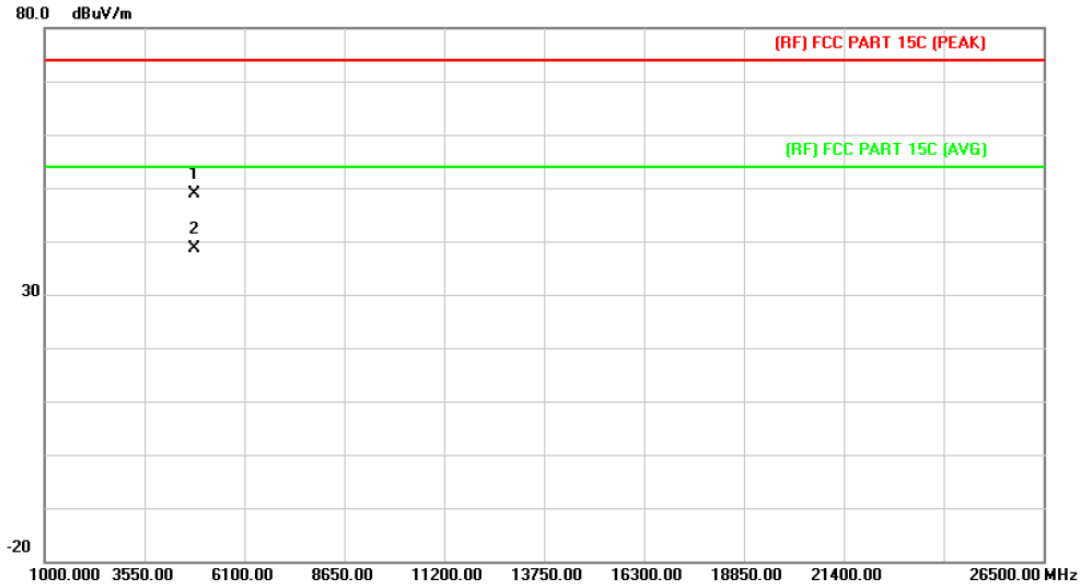
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX G Mode 2462MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4923.962 | 42.03 | 8.22 | 50.25 | 74.00 | -23.75 | peak |
| 2 | * | 4923.962 | 32.38 | 8.22 | 40.60 | 54.00 | -13.40 | AVG |

**Emission Level= Read Level+ Correct Factor**

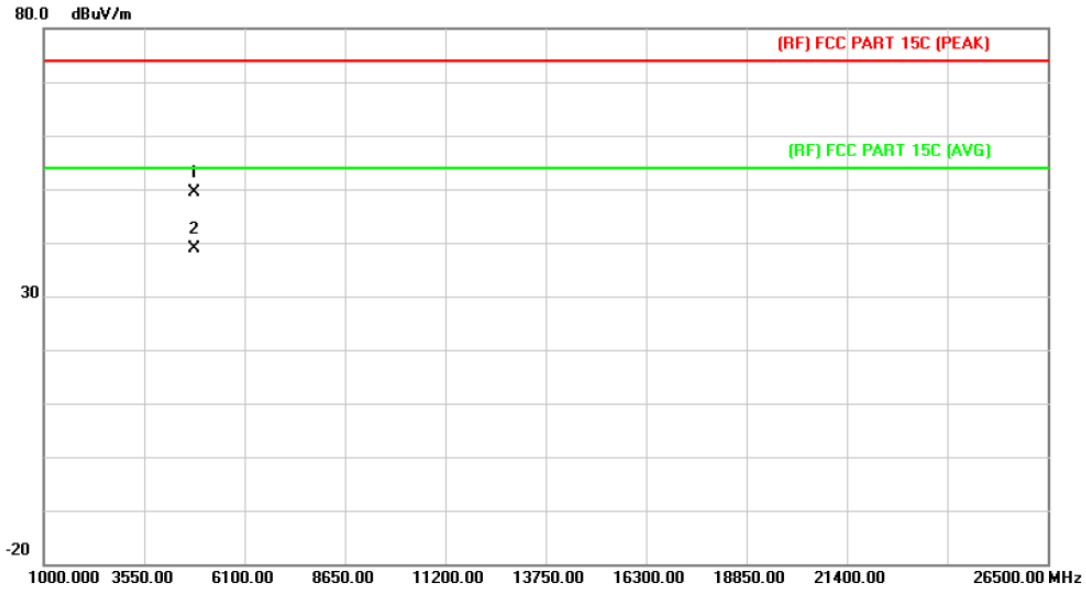
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX N(HT20) Mode 2412MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4823.970 | 40.79 | 8.19 | 48.98 | 74.00 | -25.02 | peak |
| 2 | * | 4823.970 | 30.52 | 8.19 | 38.71 | 54.00 | -15.29 | AVG |

**Emission Level= Read Level+ Correct Factor**

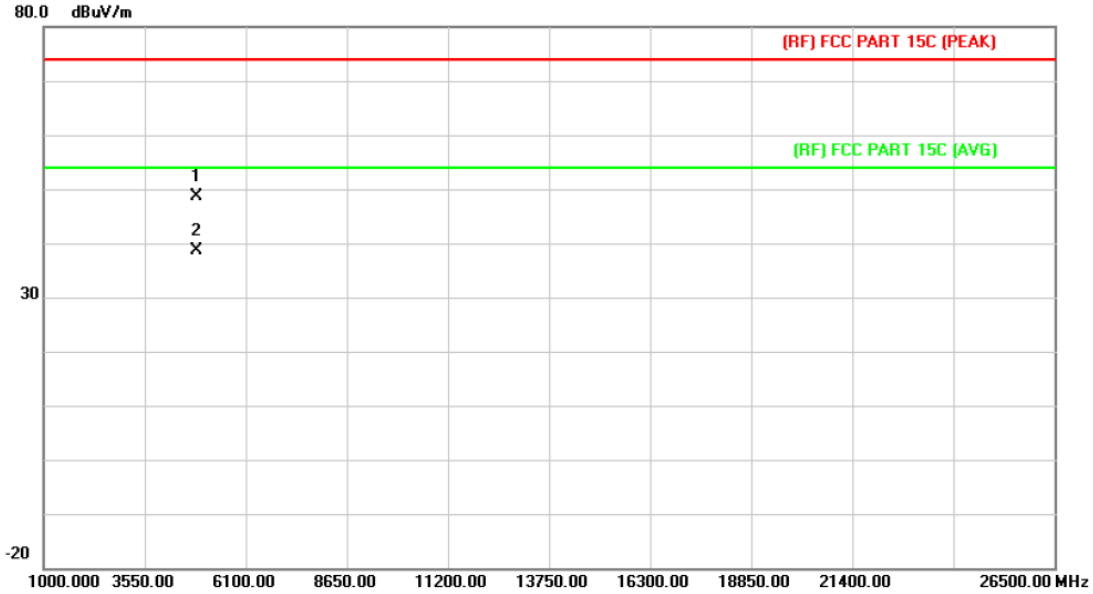
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX N(HT20) Mode 2412MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4823.970 | 41.08 | 8.19 | 49.27 | 74.00 | -24.73 | peak |
| 2 | * | 4823.970 | 30.72 | 8.19 | 38.91 | 54.00 | -15.09 | AVG |

**Emission Level= Read Level+ Correct Factor**

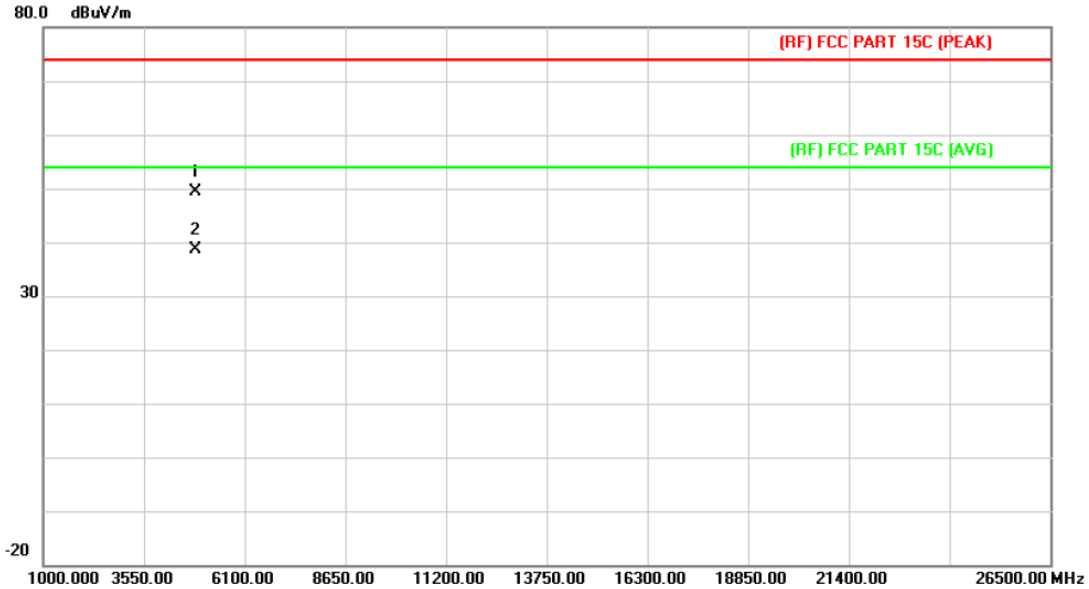
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX N(HT20) Mode 2437MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4873.970 | 40.39 | 8.21 | 48.60 | 74.00 | -25.40 | peak |
| 2 | * | 4873.970 | 30.34 | 8.21 | 38.55 | 54.00 | -15.45 | AVG |

**Emission Level= Read Level+ Correct Factor**

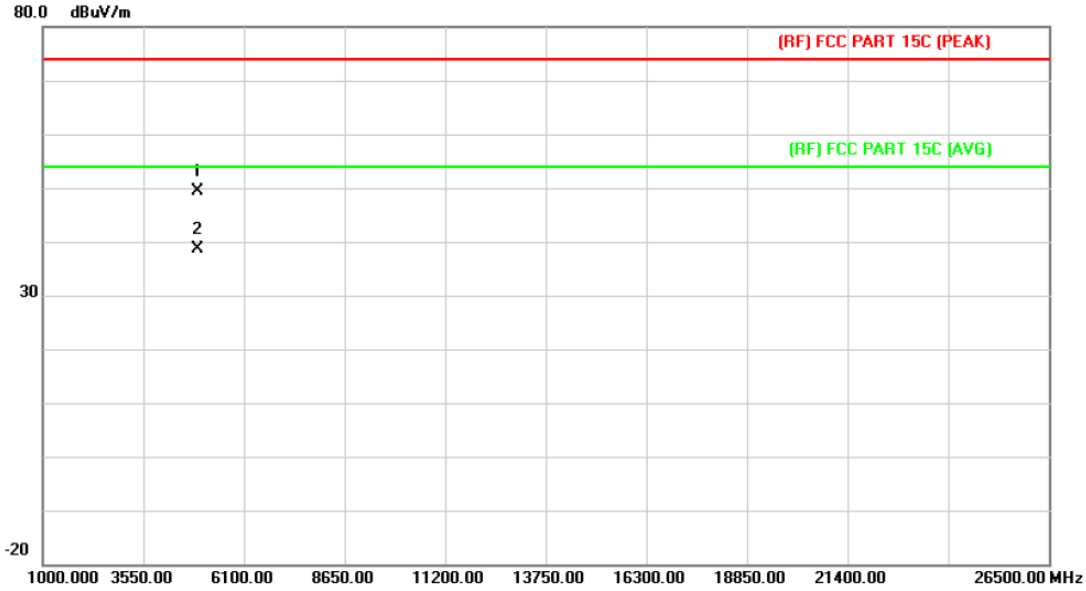
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX N(HT20) Mode 2437MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4873.970 | 41.21 | 8.21 | 49.42 | 74.00 | -24.58 | peak |
| 2 | * | 4873.970 | 30.46 | 8.21 | 38.67 | 54.00 | -15.33 | AVG |

**Emission Level= Read Level+ Correct Factor**

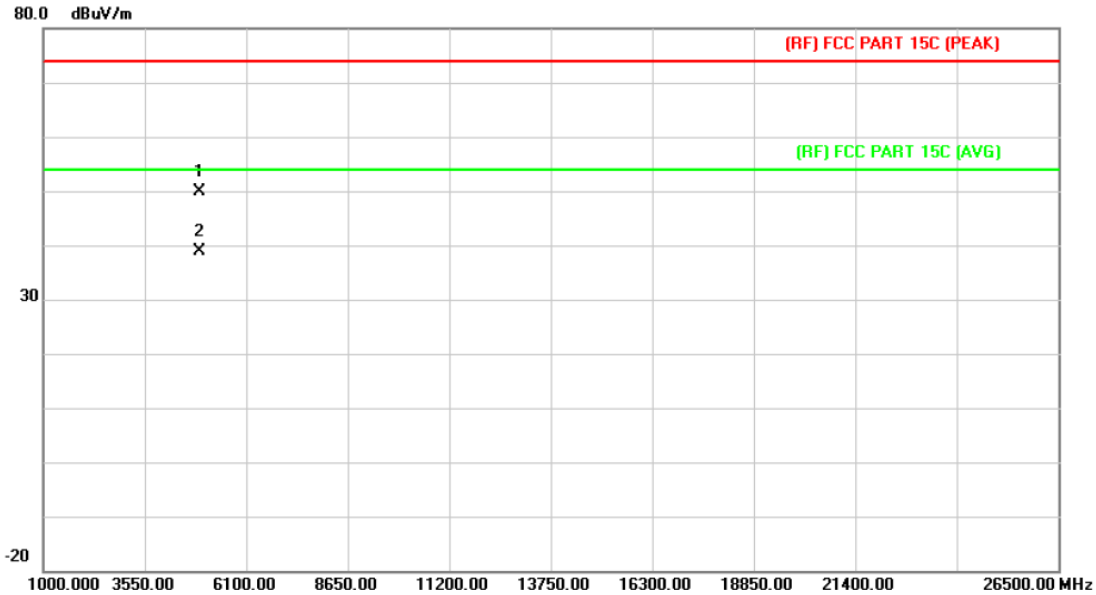
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX N(HT20) Mode 2462MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4923.970 | 41.05 | 8.22 | 49.27 | 74.00 | -24.73 | peak |
| 2 | * | 4923.970 | 30.40 | 8.22 | 38.62 | 54.00 | -15.38 | AVG |

**Emission Level= Read Level+ Correct Factor**

| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Vertical | | |
| **Test Mode:** | TX N(HT20) Mode 2462MHz | | |
| **Remark:** | No report for the emission which more than 10 dB below the prescribed limit. | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 4923.970 | 41.57 | 8.22 | 49.79 | 74.00 | -24.21 | peak |
| 2 | * | 4923.970 | 30.61 | 8.22 | 38.83 | 54.00 | -15.17 | AVG |

**Emission Level= Read Level+ Correct Factor**

# 5. Restricted Bands Requirement

## 5.1 Test Standard and Limit

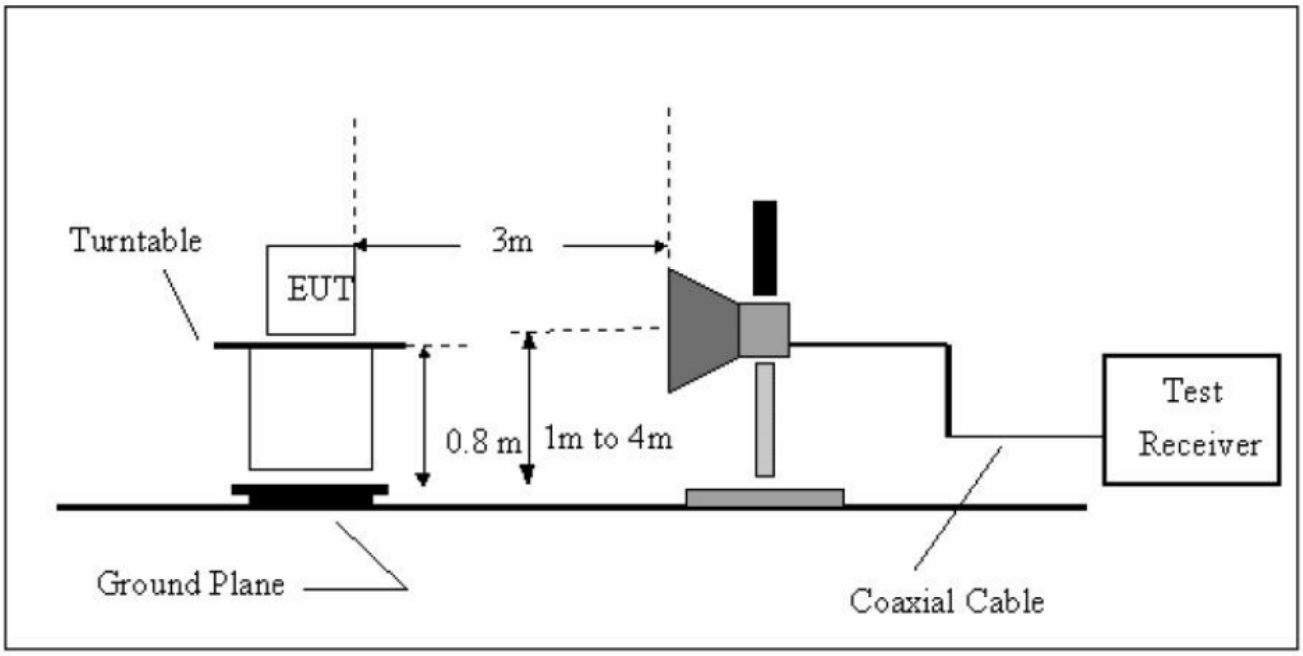
5.1.1 Test Standard

FCC Part 15.209 FCC Part 15.205

5.1.2 Test Limit

| Restricted Frequency Band (MHz) | Class B (dBuV/m)(at 3 M) | |
|---|---|---|
| | Peak | Average |
| 2310 ~2390 | 74 | 54 |
| 2483.5 ~2500 | 74 | 54 |

## 5.2 Test Setup




## 5.3 Test Procedure

(1) The measuring distance of 3m shall be used for measurements at frequency up to 1GHz and above 1 GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.

(2) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.

(3) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.

(4) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit

Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.

Peak Detection:

Set the center frequency of the emission to be measured (within 2 MHz of the authorized band edge), set span to 2 MHz, with RBW/VBW=100 kHz/300 kHz, detector mode is Peak, then use band power function to measure the Bandwidth of 1 MHz.

Average Detection (EUT transmitting continuously and duty cycle>=98 percent):

Set the center frequency of the emission to be measured (within 2 MHz of the authorized band edge), set span to 2 MHz, with RBW/VBW=100 kHz/300 kHz, detector mode is RMS or Average, then use band power function to measure the Bandwidth of 1 MHz.

(5) For the actual test configuration, please see the test setup photo.

## 5.4 EUT Operating Condition

The Equipment Under Test was set to Continual Transmitting in maximum power.

## 5.5 Test Equipment

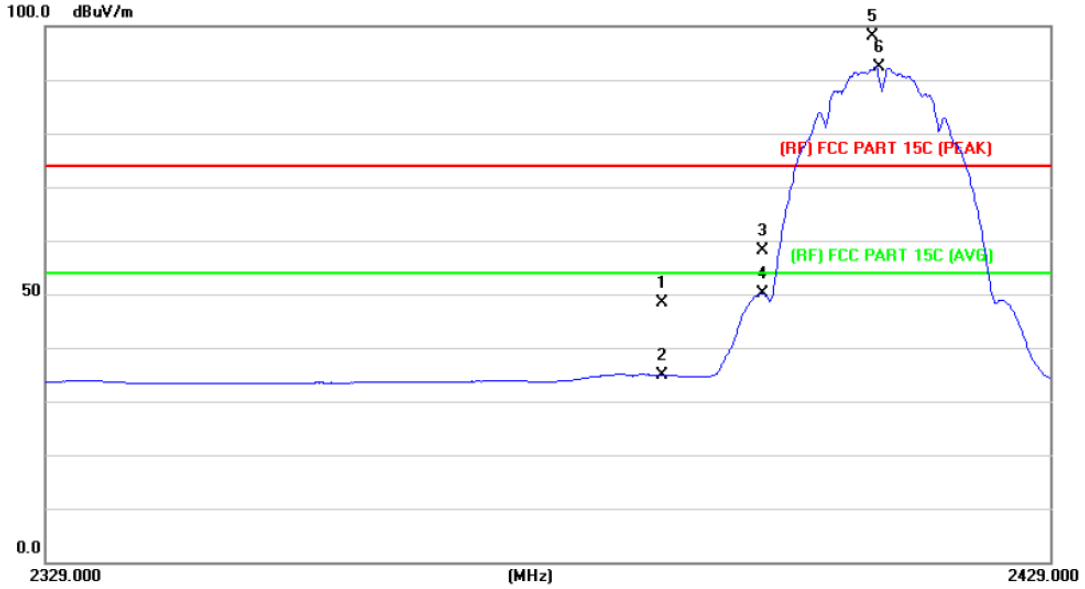
| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Spectrum Analyzer | Agilent | E4407B | MY45106456 | Mar. 20, 2014 | Mar. 19, 2015 |
| Spectrum Analyzer | Rohde & Schwarz | FSP30 | DE25181 | Aug. 10, 2013 | Aug.09, 2014 |
| EMI Test Receiver | Rohde & Schwarz | ESCI | 101165 | Aug. 10, 2013 | Aug.09, 2014 |
| Bilog Antenna | ETS-LINDGREN | 3142E | 00117537 | Mar. 07, 2014 | Mar.06, 2015 |
| Bilog Antenna | ETS-LINDGREN | 3142E | 00117542 | Mar. 07, 2014 | Mar.06, 2015 |
| Horn Antenna | ETS-LINDGREN | 3117 | 00143207 | Mar. 07, 2014 | Mar.06, 2015 |
| Horn Antenna | ETS-LINDGREN | 3117 | 00143209 | Mar. 07, 2014 | Mar.06, 2015 |
| Pre-amplifier | HP | 11909A | 185903 | Mar. 07, 2014 | Mar.06, 2015 |
| Pre-amplifier | HP | 8447B | 3008A00849 | Mar. 07, 2014 | Mar.06, 2015 |
| Cable | HUBER+SUHNER | 100 | SUCOFLEX | Mar. 07, 2014 | Mar.06, 2015 |
| Signal Generator | Rohde & Schwarz | SML03 | IKW682-054 | Feb. 11, 2014 | Feb.10, 2015 |
| Positioning Controller | ETS-LINDGREN | 2090 | N/A | N/A | N/A |

## 5.6 Test Data

Please see the next page.

## (1) Radiation Test

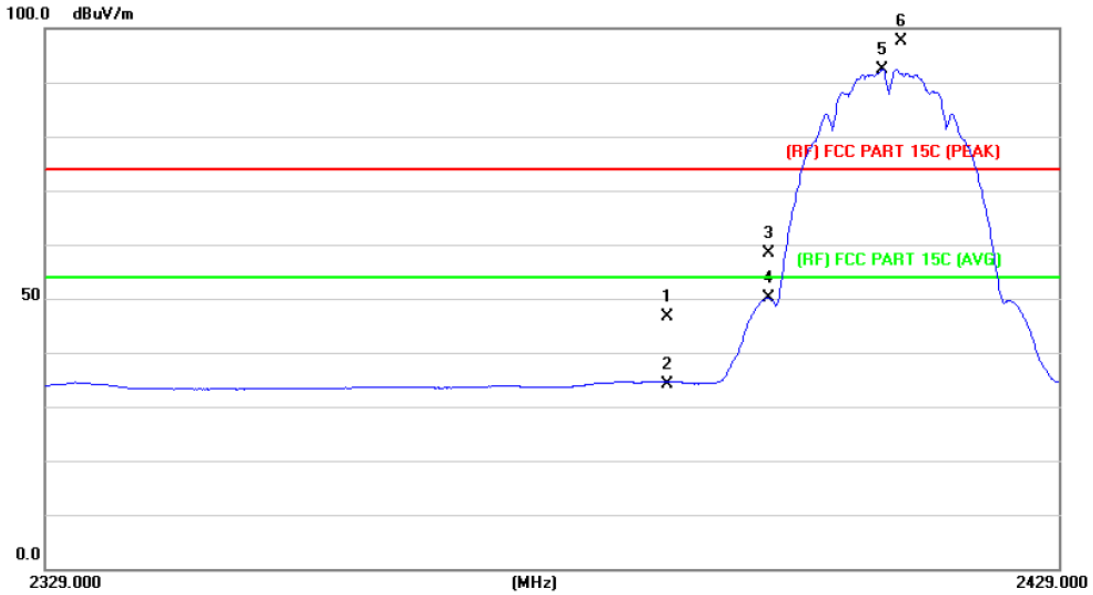
| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Ant. Pol.** | Horizontal | | |
| **Test Mode:** | TX B Mode 2412MHz | | |
| **Remark:** | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 2390.000 | 47.59 | 0.77 | 48.36 | 74.00 | -25.64 | peak |
| 2 | | 2390.000 | 34.12 | 0.77 | 34.89 | 54.00 | -19.11 | AVG |
| 3 | | 2400.000 | 57.23 | 0.81 | 58.04 | 74.00 | -15.96 | peak |
| 4 | | 2400.000 | 49.26 | 0.81 | 50.07 | 54.00 | -3.93 | AVG |
| 5 | X | 2411.000 | 97.24 | 0.86 | 98.10 | 74.00 | 24.10 | peak |
| 6 | * | 2411.800 | 91.55 | 0.86 | 92.41 | 54.00 | 38.41 | AVG |

**Emission Level= Read Level+ Correct Factor**

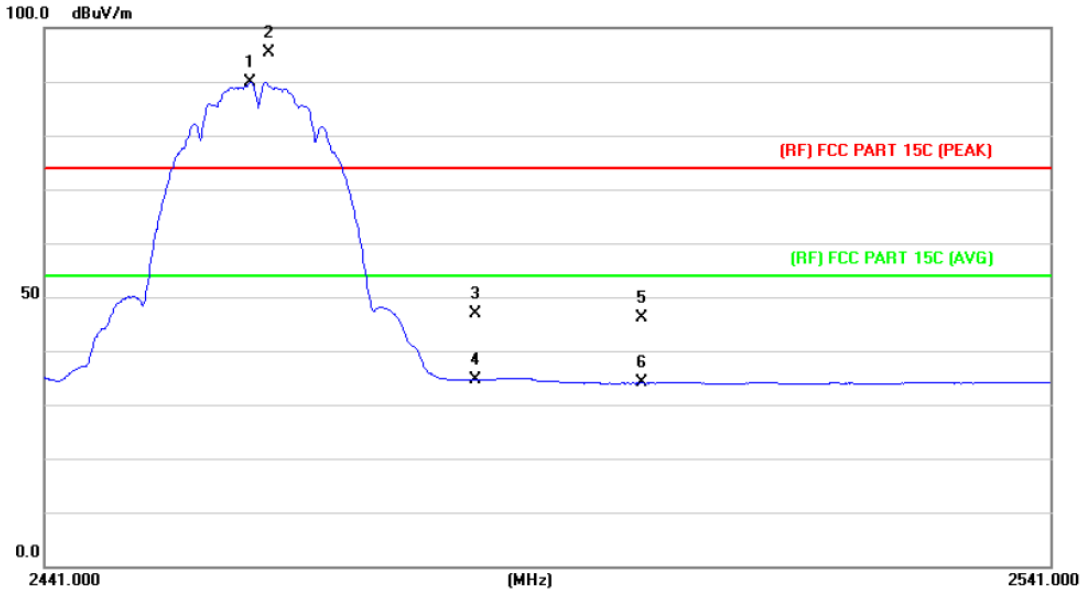
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX B Mode 2412MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 2390.000 | 45.80 | 0.77 | 46.57 | 74.00 | -27.43 | peak |
| 2 | | 2390.000 | 33.44 | 0.77 | 34.21 | 54.00 | -19.79 | AVG |
| 3 | | 2400.000 | 57.55 | 0.81 | 58.36 | 74.00 | -15.64 | peak |
| 4 | | 2400.000 | 49.42 | 0.81 | 50.23 | 54.00 | -3.77 | AVG |
| 5 | * | 2411.300 | 91.40 | 0.86 | 92.26 | 54.00 | 38.26 | AVG |
| 6 | X | 2413.100 | 96.77 | 0.86 | 97.63 | 74.00 | 23.63 | peak |

**Emission Level= Read Level+ Correct Factor**

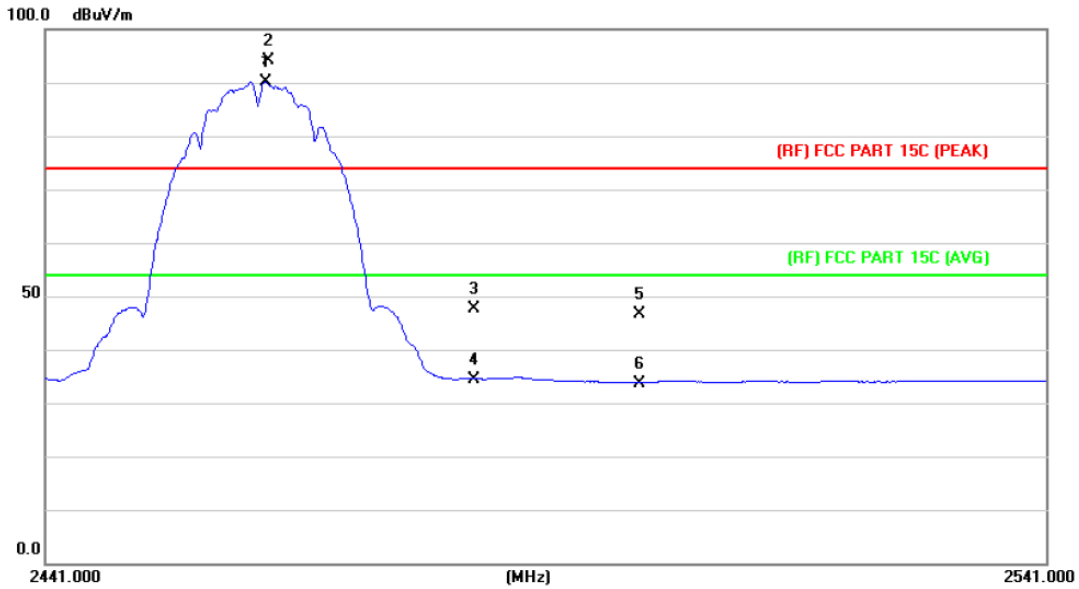
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX B Mode 2462MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | * | 2461.200 | 88.92 | 1.07 | 89.99 | 54.00 | 35.99 | AVG |
| 2 | X | 2463.000 | 94.28 | 1.08 | 95.36 | 74.00 | 21.36 | peak |
| 3 | | 2483.500 | 45.70 | 1.17 | 46.87 | 74.00 | -27.13 | peak |
| 4 | | 2483.500 | 33.51 | 1.17 | 34.68 | 54.00 | -19.32 | AVG |
| 5 | | 2500.000 | 45.02 | 1.23 | 46.25 | 74.00 | -27.75 | peak |
| 6 | | 2500.000 | 32.82 | 1.23 | 34.05 | 54.00 | -19.95 | AVG |

**Emission Level= Read Level+ Correct Factor**

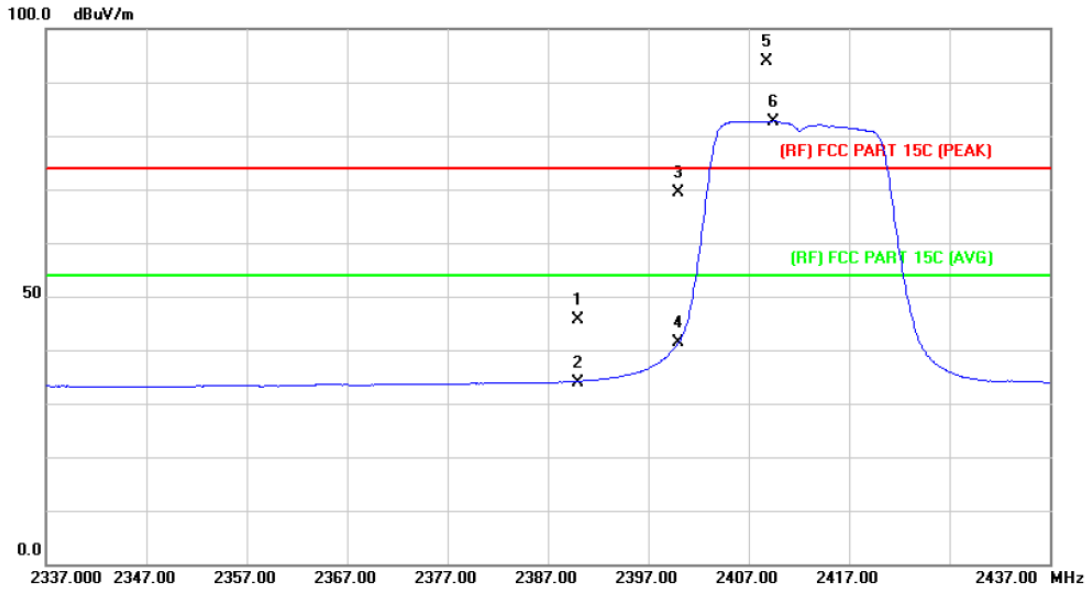
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX B Mode 2462MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | * | 2462.700 | 89.16 | 1.08 | 90.24 | 54.00 | 36.24 | AVG |
| 2 | X | 2463.000 | 93.17 | 1.08 | 94.25 | 74.00 | 20.25 | peak |
| 3 | | 2483.500 | 46.48 | 1.17 | 47.65 | 74.00 | -26.35 | peak |
| 4 | | 2483.500 | 33.11 | 1.17 | 34.28 | 54.00 | -19.72 | AVG |
| 5 | | 2500.000 | 45.35 | 1.23 | 46.58 | 74.00 | -27.42 | peak |
| 6 | | 2500.000 | 32.44 | 1.23 | 33.67 | 54.00 | -20.33 | AVG |

**Emission Level= Read Level+ Correct Factor**

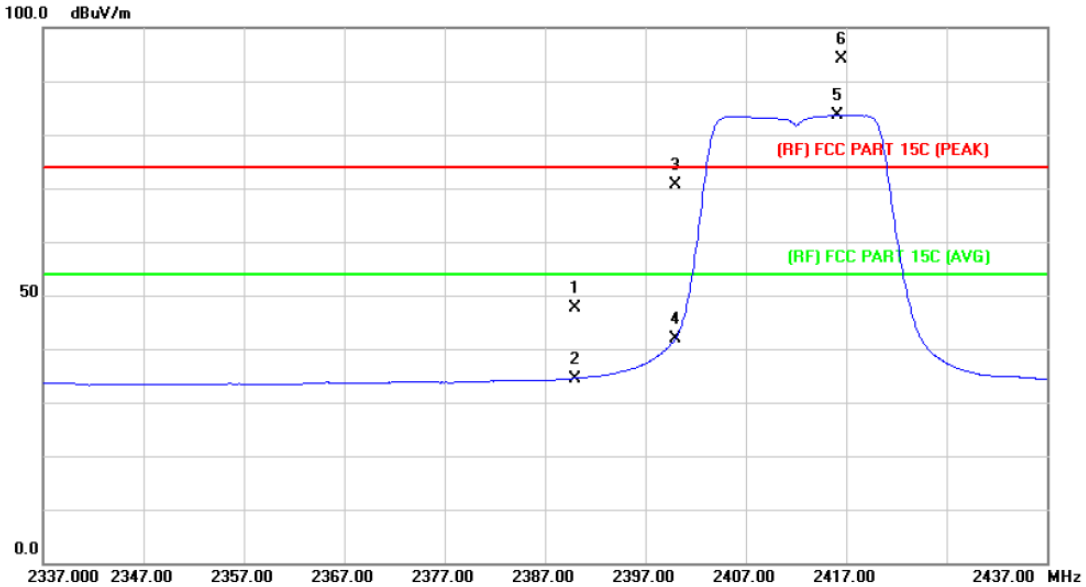
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX G Mode 2412MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 2390.000 | 44.90 | 0.77 | 45.67 | 74.00 | -28.33 | peak |
| 2 | | 2390.000 | 33.23 | 0.77 | 34.00 | 54.00 | -20.00 | AVG |
| 3 | | 2400.000 | 68.47 | 0.81 | 69.28 | 74.00 | -4.72 | peak |
| 4 | | 2400.000 | 40.62 | 0.81 | 41.43 | 54.00 | -12.57 | AVG |
| 5 | X | 2408.800 | 93.11 | 0.85 | 93.96 | 74.00 | 19.96 | peak |
| 6 | * | 2409.500 | 81.83 | 0.85 | 82.68 | 54.00 | 28.68 | AVG |

**Emission Level= Read Level+ Correct Factor**

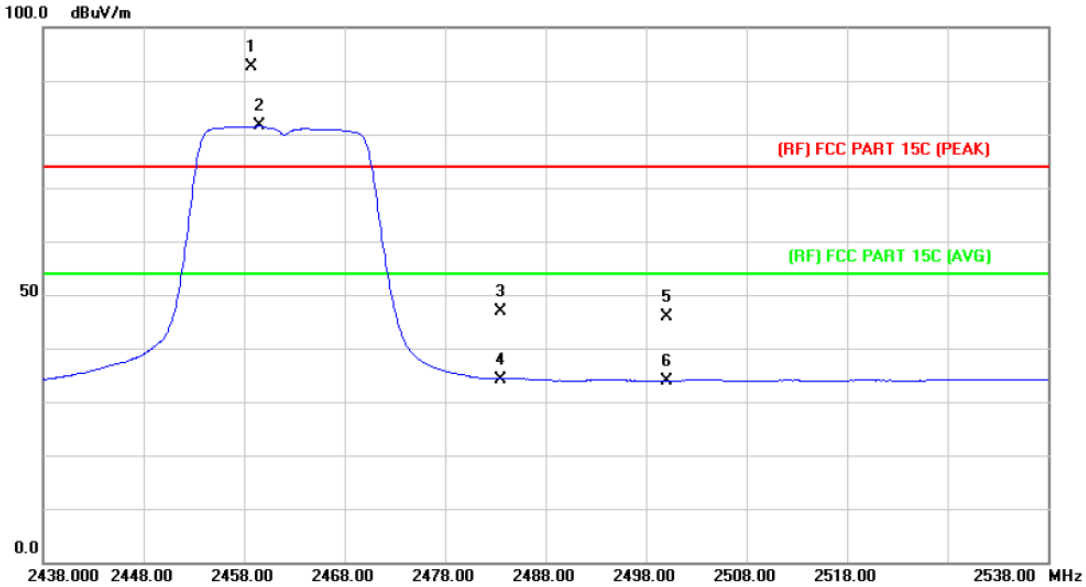
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX G Mode 2412MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 2390.000 | 46.78 | 0.77 | 47.55 | 74.00 | -26.45 | peak |
| 2 | | 2390.000 | 33.49 | 0.77 | 34.26 | 54.00 | -19.74 | AVG |
| 3 | | 2400.000 | 69.84 | 0.81 | 70.65 | 74.00 | -3.35 | peak |
| 4 | | 2400.000 | 41.08 | 0.81 | 41.89 | 54.00 | -12.11 | AVG |
| 5 | * | 2416.200 | 82.80 | 0.88 | 83.68 | 54.00 | 29.68 | AVG |
| 6 | X | 2416.600 | 93.37 | 0.88 | 94.25 | 74.00 | 20.25 | peak |

**Emission Level= Read Level+ Correct Factor**

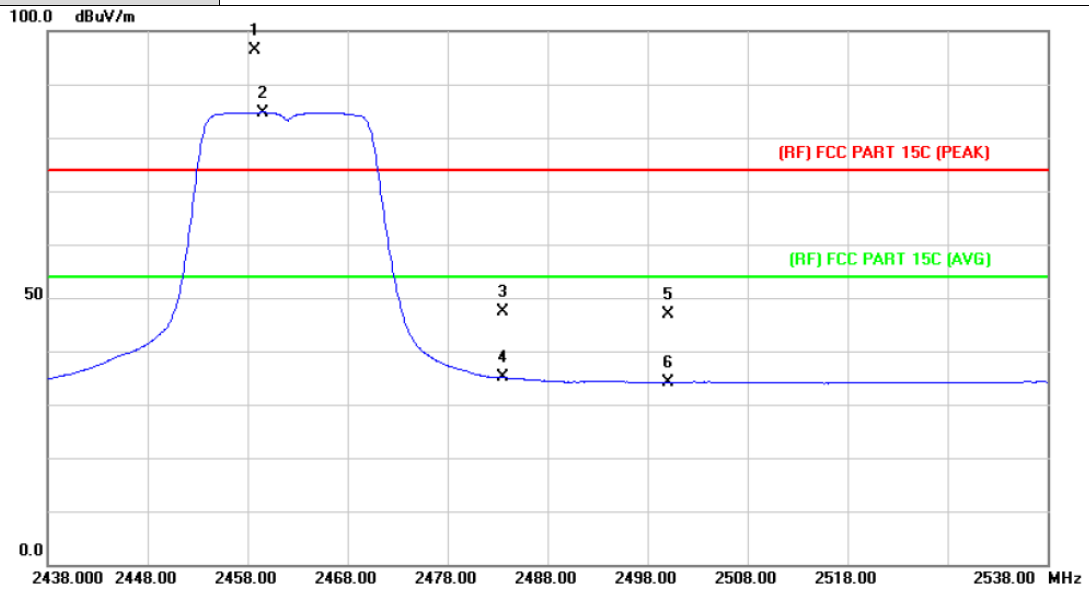
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX G Mode 2462MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | X | 2458.700 | 91.55 | 1.06 | 92.61 | 74.00 | 18.61 | peak |
| 2 | * | 2459.500 | 80.46 | 1.06 | 81.52 | 54.00 | 27.52 | AVG |
| 3 | | 2483.500 | 45.81 | 1.17 | 46.98 | 74.00 | -27.02 | peak |
| 4 | | 2483.500 | 32.96 | 1.17 | 34.13 | 54.00 | -19.87 | AVG |
| 5 | | 2500.000 | 44.74 | 1.23 | 45.97 | 74.00 | -28.03 | peak |
| 6 | | 2500.000 | 32.68 | 1.23 | 33.91 | 54.00 | -20.09 | AVG |

**Emission Level= Read Level+ Correct Factor**

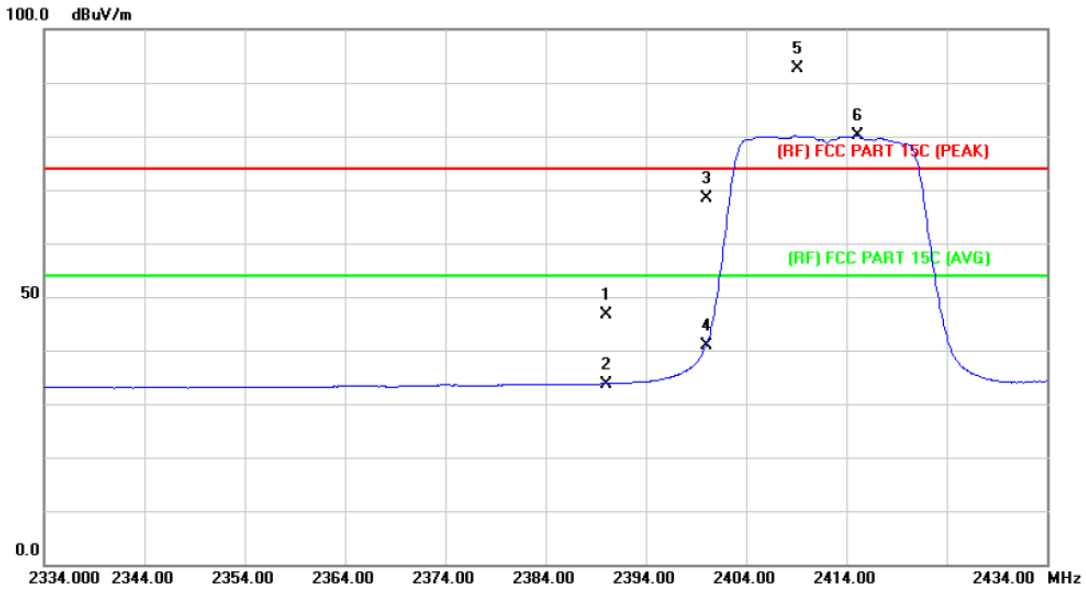
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX G Mode 2462MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | X | 2458.700 | 95.44 | 1.06 | 96.50 | 74.00 | 22.50 | peak |
| 2 | * | 2459.500 | 83.56 | 1.06 | 84.62 | 54.00 | 30.62 | AVG |
| 3 | | 2483.500 | 46.18 | 1.17 | 47.35 | 74.00 | -26.65 | peak |
| 4 | | 2483.500 | 34.04 | 1.17 | 35.21 | 54.00 | -18.79 | AVG |
| 5 | | 2500.000 | 45.62 | 1.23 | 46.85 | 74.00 | -27.15 | peak |
| 6 | | 2500.000 | 32.86 | 1.23 | 34.09 | 54.00 | -19.91 | AVG |

**Emission Level= Read Level+ Correct Factor**

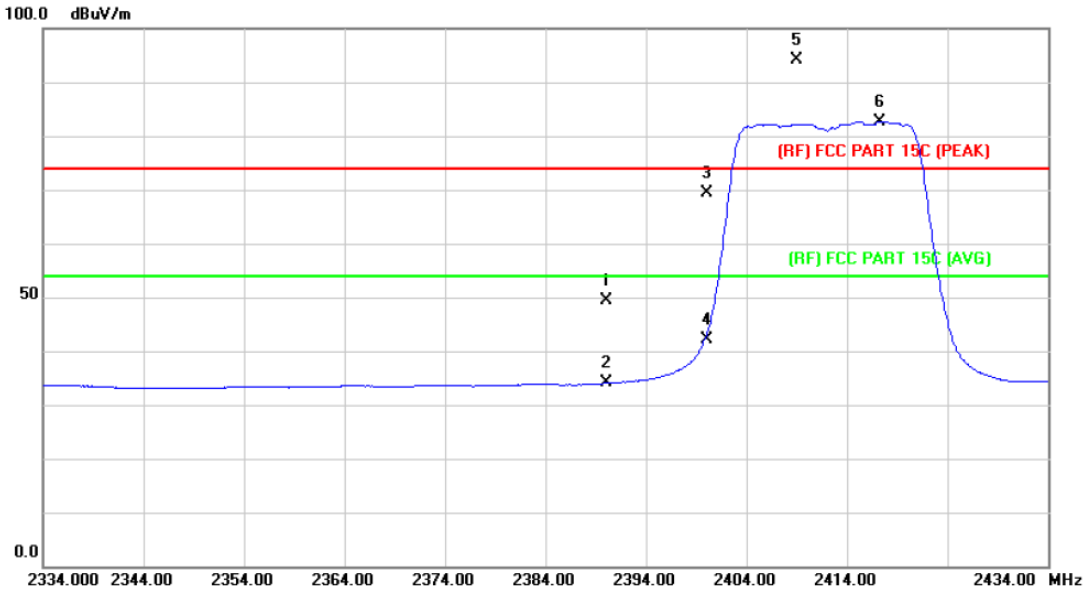
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX N(HT20) Mode 2412MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 2390.000 | 45.81 | 0.77 | 46.58 | 74.00 | -27.42 | peak |
| 2 | | 2390.000 | 32.87 | 0.77 | 33.64 | 54.00 | -20.36 | AVG |
| 3 | | 2400.000 | 67.53 | 0.81 | 68.34 | 74.00 | -5.66 | peak |
| 4 | | 2400.000 | 40.08 | 0.81 | 40.89 | 54.00 | -13.11 | AVG |
| 5 | X | 2409.100 | 91.66 | 0.85 | 92.51 | 74.00 | 18.51 | peak |
| 6 | * | 2415.100 | 79.24 | 0.88 | 80.12 | 54.00 | 26.12 | AVG |

**Emission Level= Read Level+ Correct Factor**

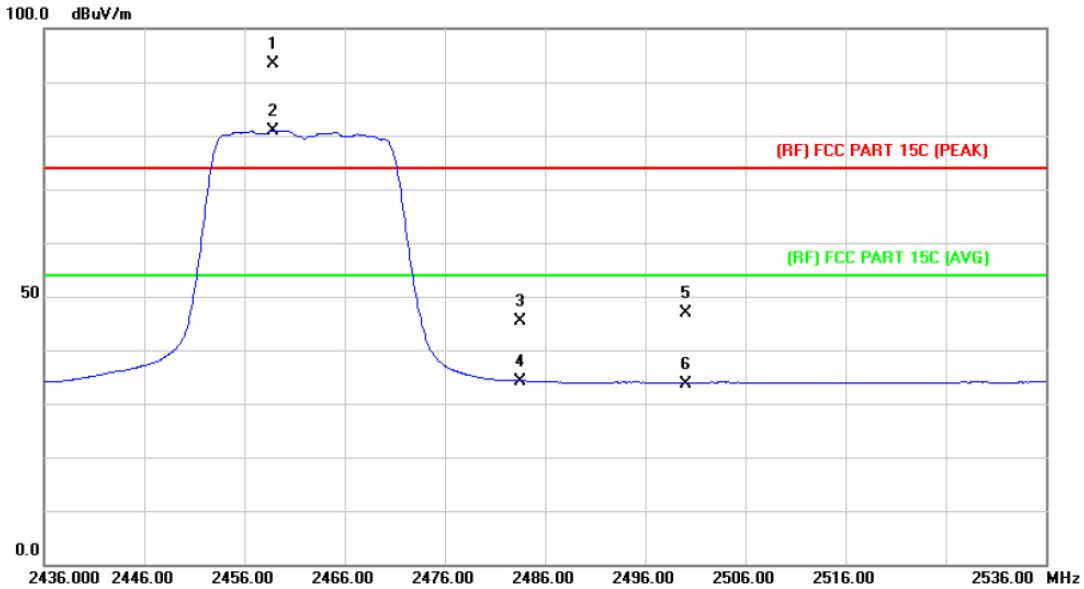
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX N(HT20) Mode 2412MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | | 2390.000 | 48.55 | 0.77 | 49.32 | 74.00 | -24.68 | peak |
| 2 | | 2390.000 | 33.33 | 0.77 | 34.10 | 54.00 | -19.90 | AVG |
| 3 | | 2400.000 | 68.53 | 0.81 | 69.34 | 74.00 | -4.66 | peak |
| 4 | | 2400.000 | 41.28 | 0.81 | 42.09 | 54.00 | -11.91 | AVG |
| 5 | X | 2409.000 | 93.27 | 0.85 | 94.12 | 74.00 | 20.12 | peak |
| 6 | * | 2417.300 | 81.78 | 0.89 | 82.67 | 54.00 | 28.67 | AVG |

**Emission Level= Read Level+ Correct Factor**

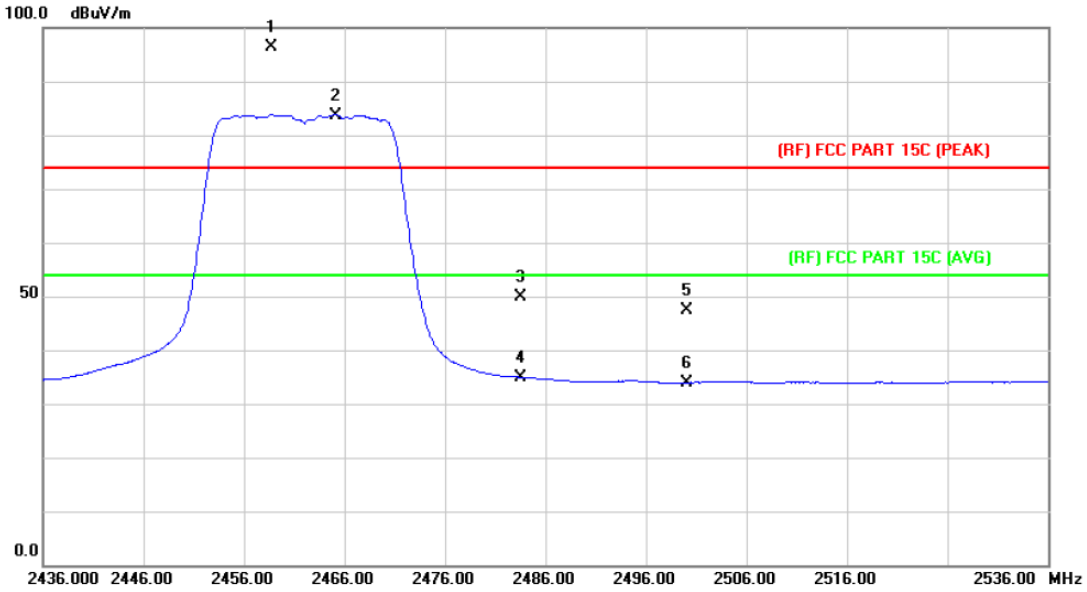
| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Horizontal | | |
| Test Mode: | TX N(HT20) Mode 2462MHz | | |
| Remark: | N/A | | |




| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | X | 2458.800 | 92.40 | 1.06 | 93.46 | 74.00 | 19.46 | peak |
| 2 | * | 2458.800 | 79.91 | 1.06 | 80.97 | 54.00 | 26.97 | AVG |
| 3 | | 2483.500 | 44.19 | 1.17 | 45.36 | 74.00 | -28.64 | peak |
| 4 | | 2483.500 | 33.08 | 1.17 | 34.25 | 54.00 | -19.75 | AVG |
| 5 | | 2500.000 | 45.64 | 1.23 | 46.87 | 74.00 | -27.13 | peak |
| 6 | | 2500.000 | 32.46 | 1.23 | 33.69 | 54.00 | -20.31 | AVG |

**Emission Level= Read Level+ Correct Factor**

| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Ant. Pol. | Vertical | | |
| Test Mode: | TX N(HT20) Mode 2462MHz | | |
| Remark: | N/A | | |

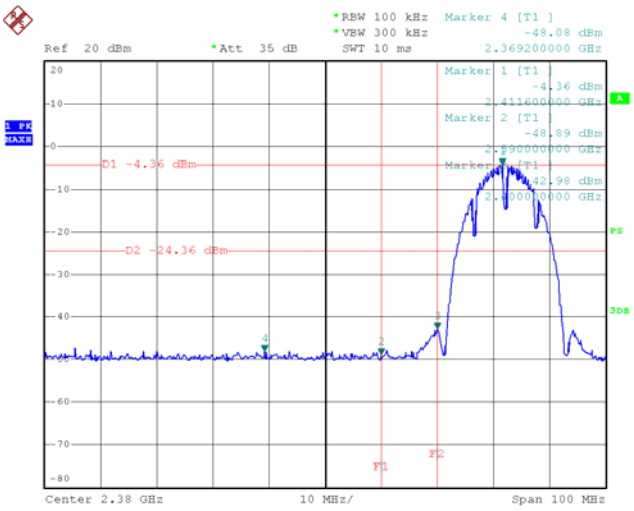



| No. | Mk. | Freq. | Reading Level | Correct Factor | Measure-ment | Limit | Over | |
|---|---|---|---|---|---|---|---|---|
| | | MHz | dBuV | dB/m | dBuV/m | dBuV/m | dB | Detector |
| 1 | X | 2458.700 | 95.32 | 1.06 | 96.38 | 74.00 | 22.38 | peak |
| 2 | * | 2465.200 | 82.55 | 1.09 | 83.64 | 54.00 | 29.64 | AVG |
| 3 | | 2483.500 | 48.68 | 1.17 | 49.85 | 74.00 | -24.15 | peak |
| 4 | | 2483.500 | 33.70 | 1.17 | 34.87 | 54.00 | -19.13 | AVG |
| 5 | | 2500.000 | 46.12 | 1.23 | 47.35 | 74.00 | -26.65 | peak |
| 6 | | 2500.000 | 32.54 | 1.23 | 33.77 | 54.00 | -20.23 | AVG |

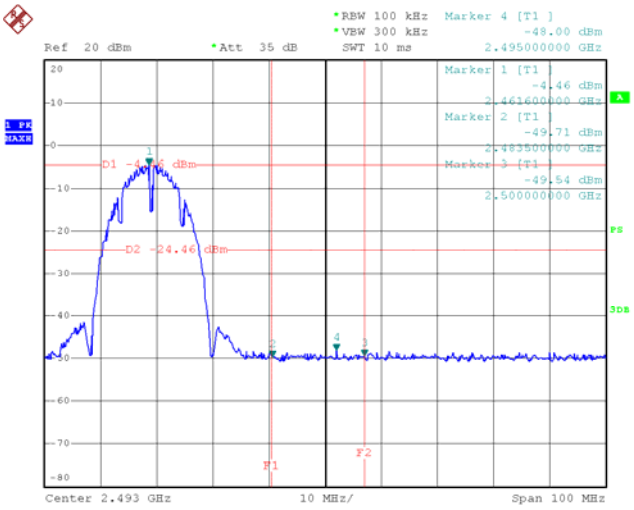
**Emission Level= Read Level+ Correct Factor**

## (2) Conducted Test

| | | | |
|---|---|---|---|
| **EUT:** | TABLET PC | **Model:** | M709 |
| **Temperature:** | 25 ℃ | **Relative Humidity:** | 55% |
| **Test Voltage:** | AC 120V/60 Hz | | |
| **Test Mode:** | TX B Mode 2412MHz / TX B Mode 2462MHz | | |
| **Remark:** | The EUT is programed in continuously transmitting mode | | |

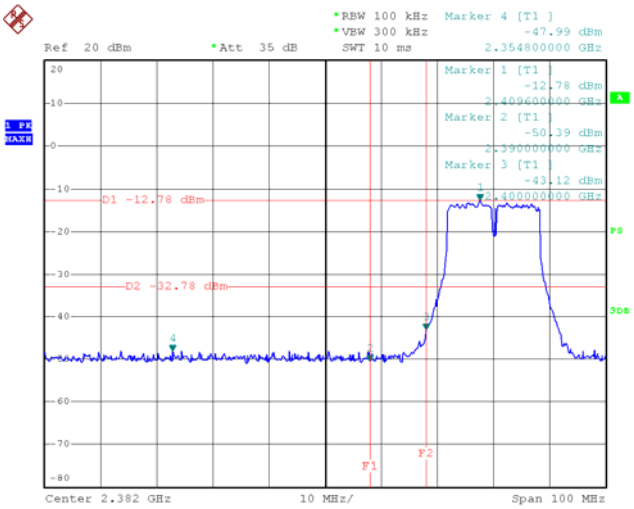



Date: 4.JUN.2014 12:09:38

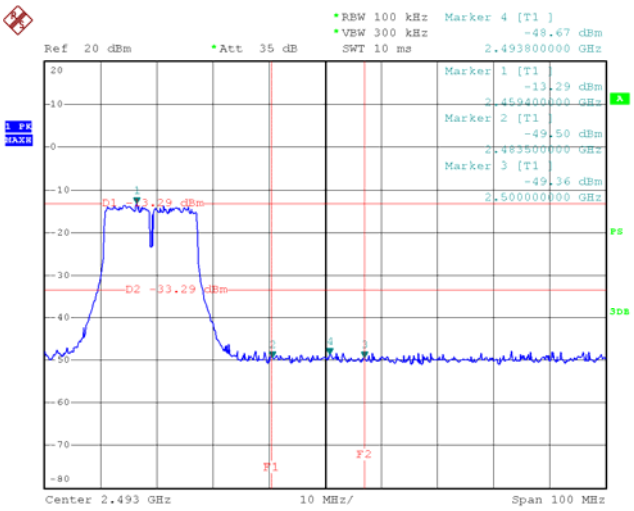



Date: 4.JUN.2014 12:07:14

| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Test Mode: | TX G Mode 2412MHz / TX G Mode 2462MHz | | |
| Remark: | The EUT is programed in continuously transmitting mode | | |

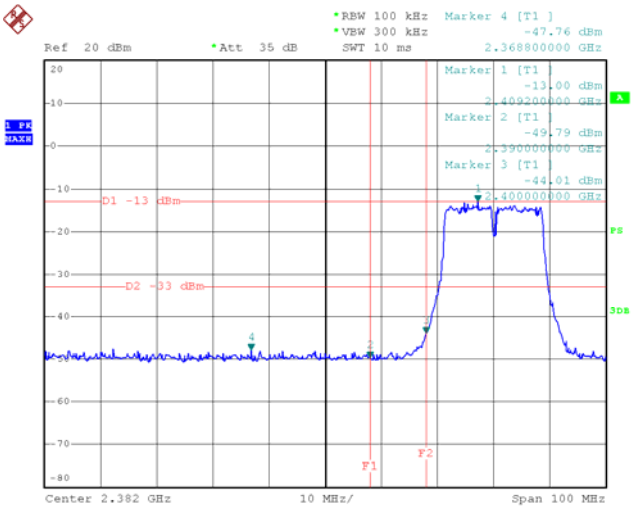



Date: 4.JUN.2014 12:03:46

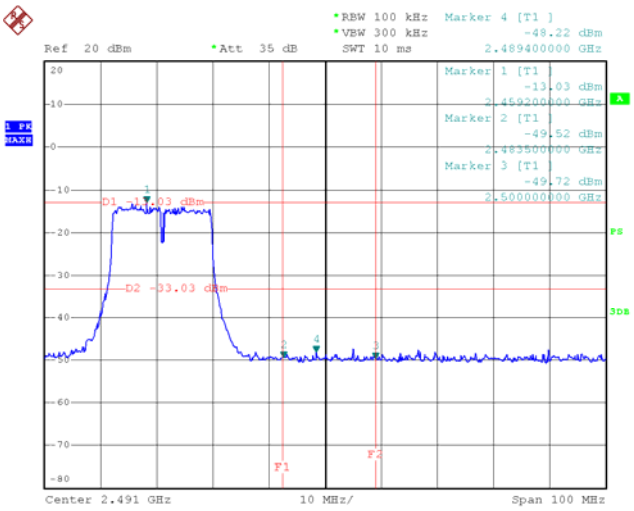



Date: 4.JUN.2014 12:05:30

| EUT: | TABLET PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Test Mode: | TX N(HT20) Mode 2412MHz / TX N(HT20) Mode 2462MHz | | |
| Remark: | The EUT is programed in continuously transmitting mode | | |




Date: 4.JUN.2014 12:01:59




Date: 4.JUN.2014 11:59:45

# 6. Bandwidth Test

## 6.1 Test Standard and Limit

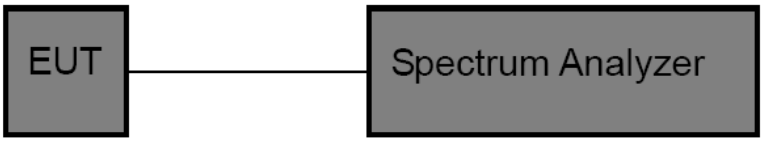
8.1.1 Test Standard

FCC Part 15.247 (a)(2)

8.1.2 Test Limit

| FCC Part 15 Subpart C(15.247)/RSS-210 | | |
|---|---|---|
| **Test Item** | **Limit** | **Frequency Range(MHz)** |
| Bandwidth | >=500 KHz (6dB bandwidth) | 2400~2483.5 |

## 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)Measure the channel separation the spectrum analyzer was set to Resolution Bandwidth:100 kHz, and Video Bandwidth:300 kHz, Detector: Peak, Sweep Time set auto.

## 6.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, middle and high channel for the test.

## 6.5 Test Equipment

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Spectrum Analyzer | Rohde & Schwarz | FSP30 | DE25181 | Aug. 10, 2013 | Aug.09, 2014 |

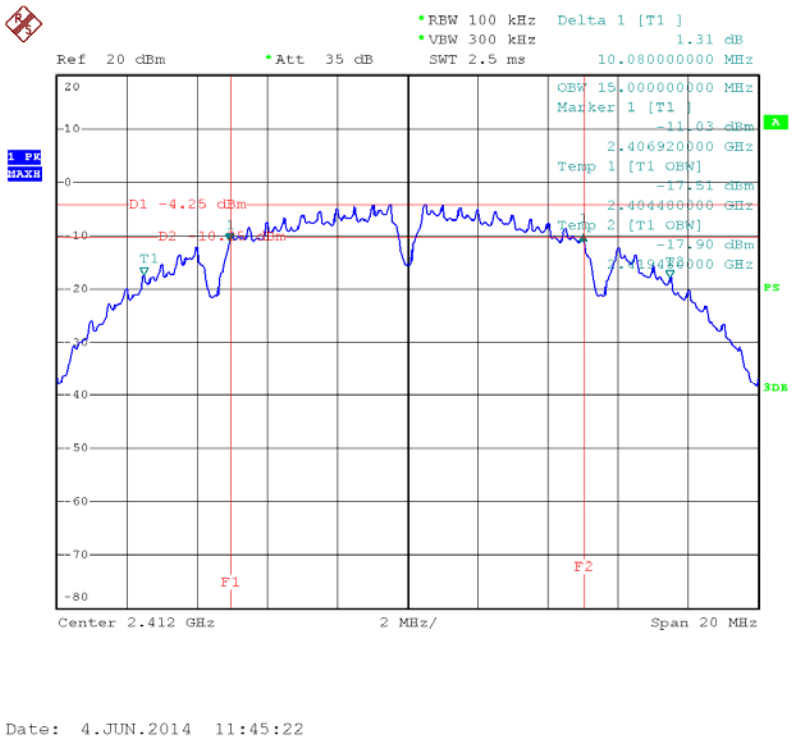
## 6.6 Test Data

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Test Mode: | TX 802.11B Mode | | |

| Channel frequency (MHz) | 6dB Bandwidth (MHz) | 99% Bandwidth (MHz) | Limit (MHz) |
|---|---|---|---|
| 2412 | 10.08 | 15.00 | >=0.5 |
| 2437 | 10.08 | 15.00 | |
| 2462 | 10.08 | 15.04 | |

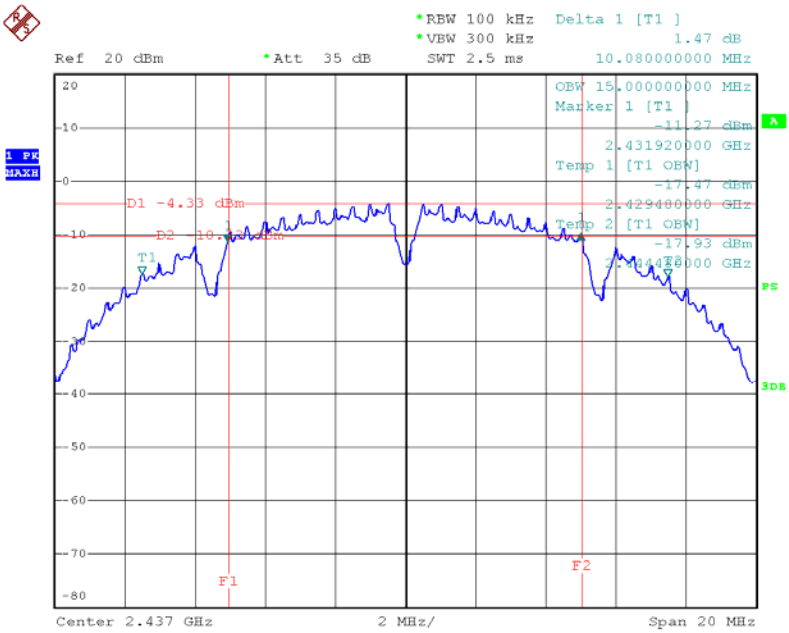
**802.11B Mode**

**2412 MHz**



**802.11B Mode**

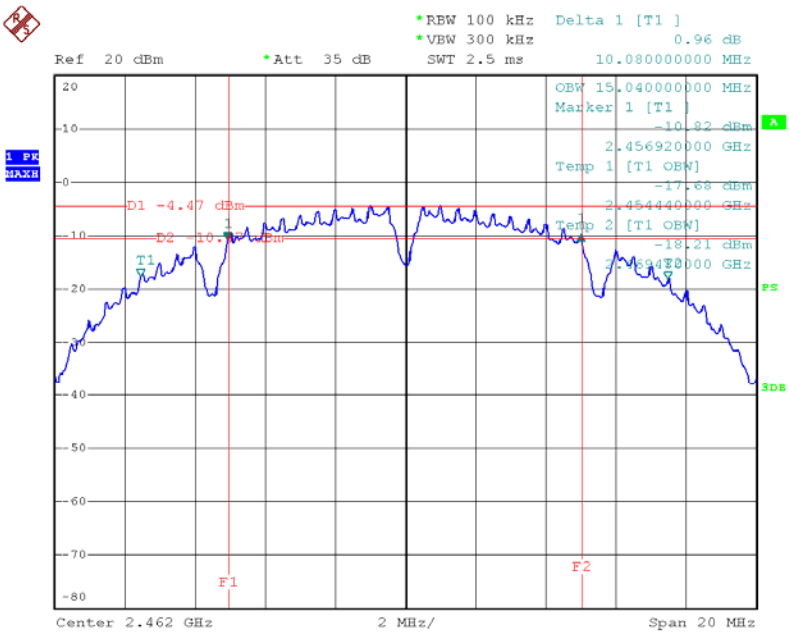
**2437 MHz**




Date: 4.JUN.2014 11:31:07

**802.11B Mode**

**2462 MHz**



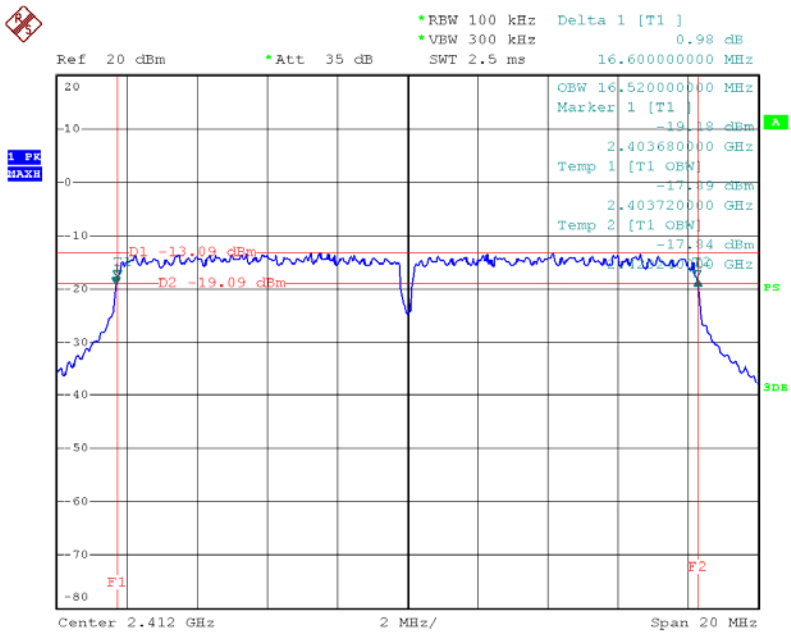

Date: 4.JUN.2014 11:33:44

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Test Mode: | TX 802.11G Mode | | |

| Channel frequency (MHz) | 6dB Bandwidth (MHz) | 99% Bandwidth (MHz) | Limit (MHz) |
|---|---|---|---|
| 2412 | 16.60 | 16.52 | >=0.5 |
| 2437 | 16.60 | 16.52 | |
| 2462 | 16.60 | 16.52 | |

**802.11G Mode**

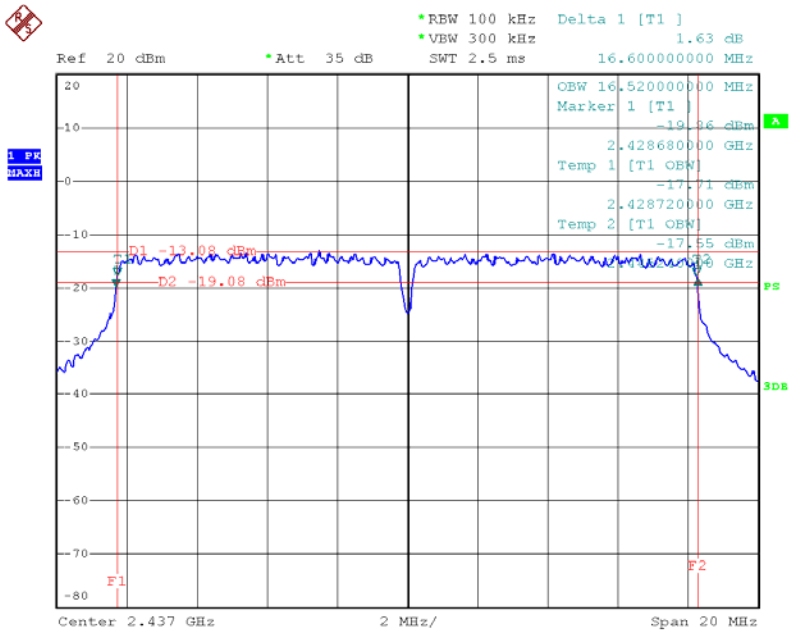
**2412 MHz**




Date: 4.JUN.2014 11:38:34

**802.11G Mode**

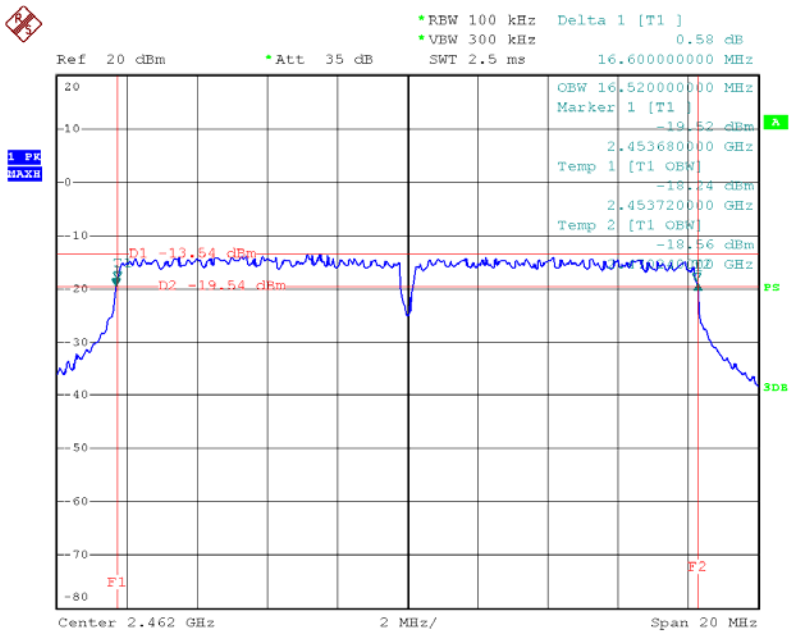
**2437 MHz**




Date: 4.JUN.2014 11:37:16

**802.11G Mode**

**2462 MHz**



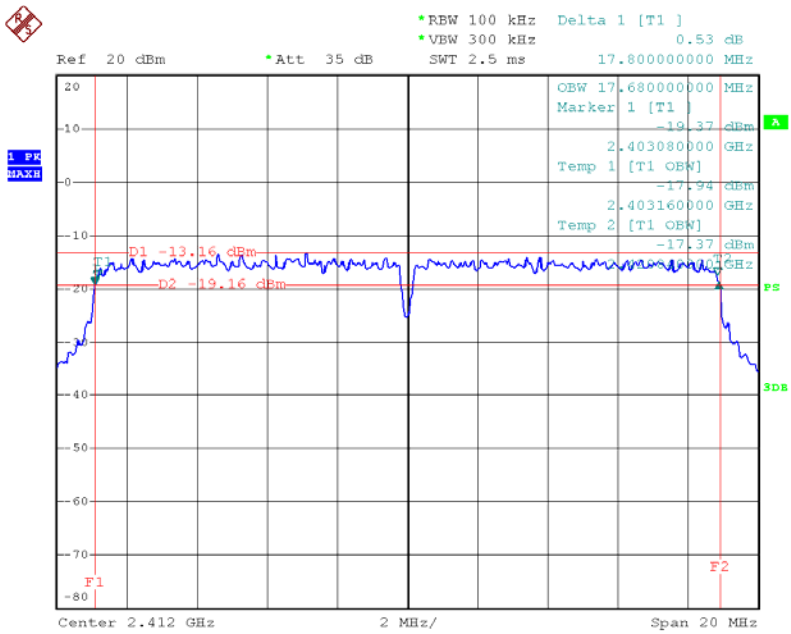

Date: 4.JUN.2014 11:35:33

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 Hz | | |
| Test Mode: | TX 802.11N(HT20) Mode | | |

| Channel frequency (MHz) | 6dB Bandwidth (MHz) | 99% Bandwidth (MHz) | Limit (MHz) |
|---|---|---|---|
| 2412 | 17.80 | 17.68 | >=0.5 |
| 2437 | 17.80 | 17.68 | |
| 2462 | 17.80 | 17.72 | |

**802.11N(HT20) Mode**

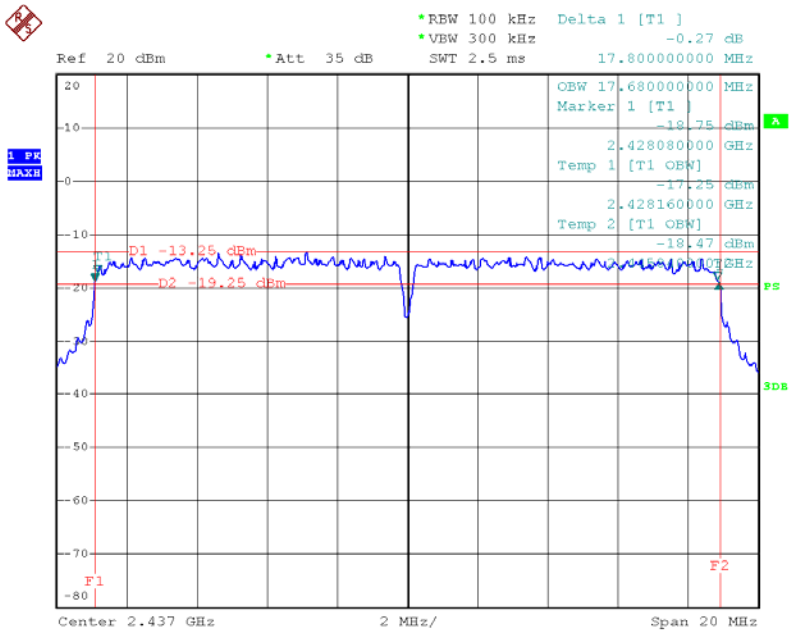
**2412 MHz**




Date: 4.JUN.2014 11:40:13

**802.11N(HT20) Mode**

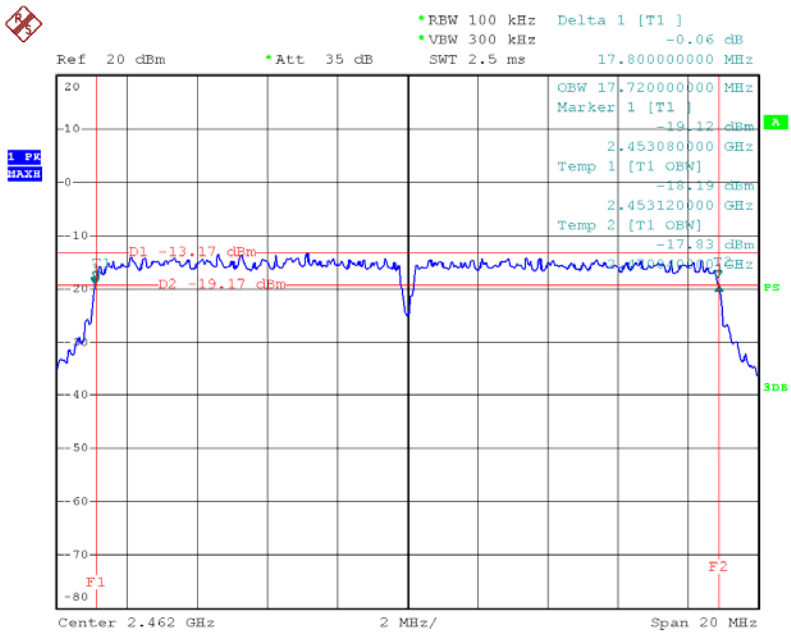
**2437 MHz**




Date: 4.JUN.2014 11:41:40

**802.11N(HT20) Mode**

**2462 MHz**




Date: 4.JUN.2014 11:43:01

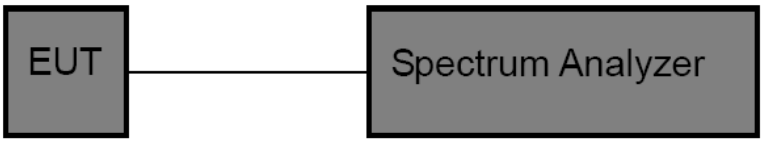
# 7. Peak Output Power Test

## 7.1 Test Standard and Limit

9.1.1 Test Standard
FCC Part 15.247 (b)
9.1.2 Test Limit

| FCC Part 15 Subpart C(15.247)/RSS-210 | | |
|---|---|---|
| **Test Item** | **Limit** | **Frequency Range(MHz)** |
| Peak Output Power | 1 Watt or 30 dBm | 2400~2483.5 |

## 7.2 Test Setup




## 7.3 Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

## 7.4 EUT Operating Condition

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

## 7.5 Test Equipment

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Spectrum Analyzer | Rohde & Schwarz | FSP30 | DE25181 | Aug. 10, 2013 | Aug.09, 2014 |

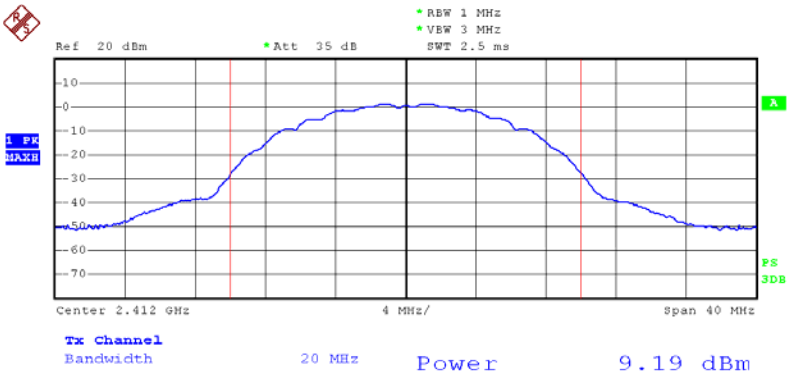
## 7.6 Test Data

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 HZ | | |
| Test Mode: | TX 802.11B Mode | | |

| Channel frequency (MHz) | Test Result (dBm) | Limit (dBm) |
|---|---|---|
| 2412 | 9.19 | 30 |
| 2437 | 9.23 | |
| 2462 | 9.29 | |

**802.11B Mode**

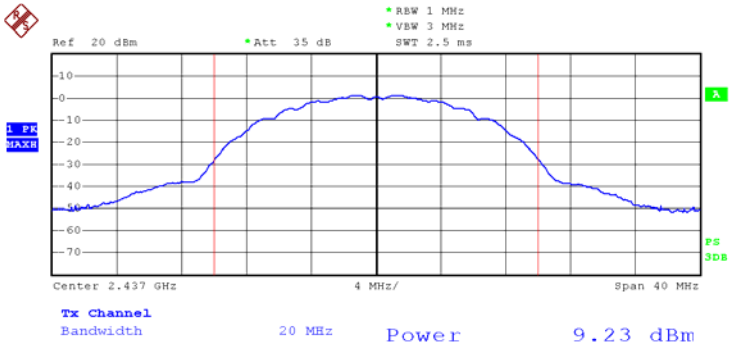
**2412 MHz**




Date: 4.JUN.2014 11:07:51

## 802.11B Mode

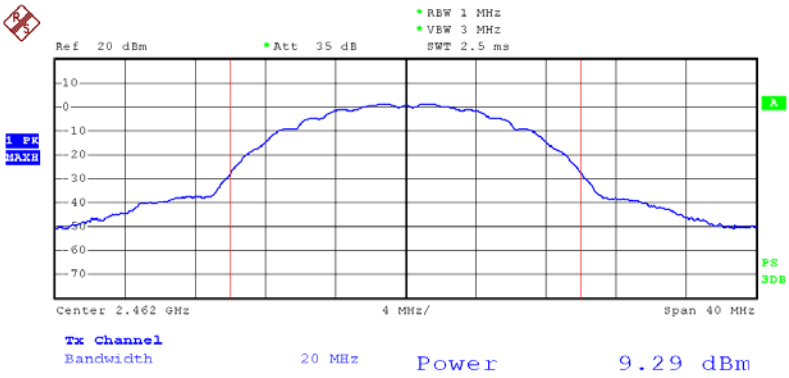
### 2437 MHz




Date: 4.JUN.2014 11:09:31

## 802.11B Mode

### 2462 MHz



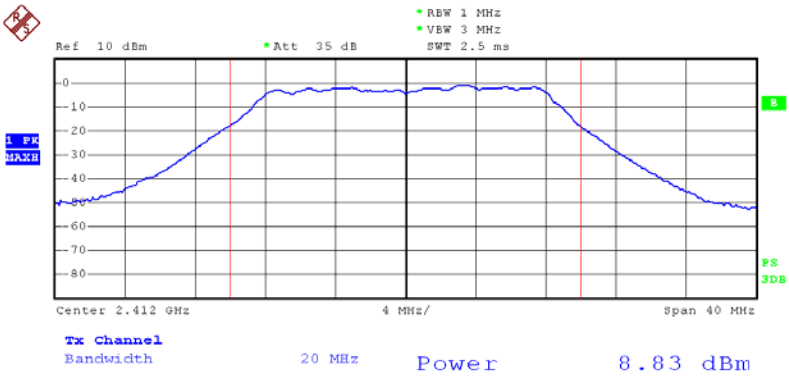

Date: 4.JUN.2014 11:10:58

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 HZ | | |
| Test Mode: | TX 802.11G Mode | | |

| Channel frequency (MHz) | Test Result (dBm) | Limit (dBm) |
|---|---|---|
| 2412 | 8.83 | 30 |
| 2437 | 8.60 | |
| 2462 | 8.98 | |

**802.11G Mode**

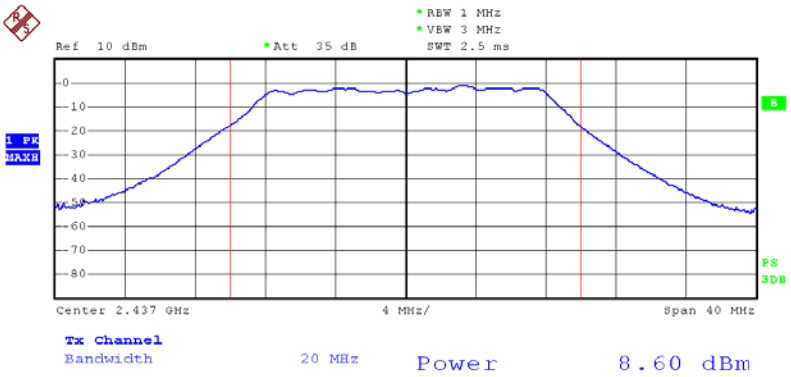
**2412 MHz**




Date: 4.JUN.2014 11:23:01

## 802.11G Mode

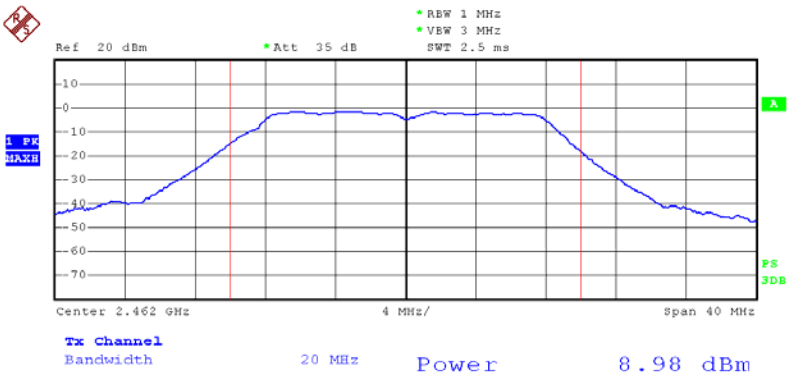
### 2437 MHz




Date: 4.JUN.2014 11:26:16

## 802.11G Mode

### 2462 MHz



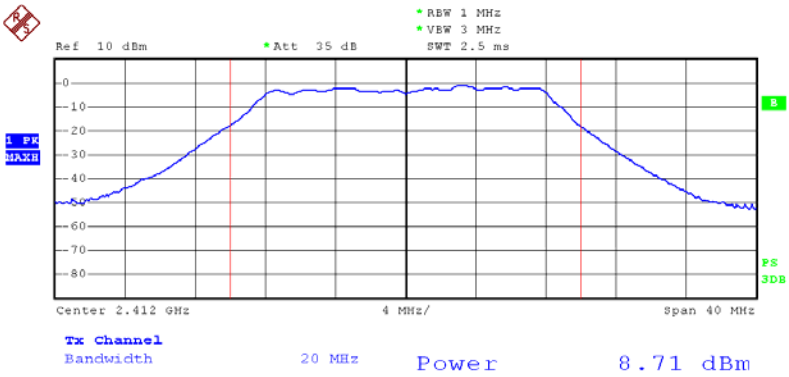

Date: 4.JUN.2014 11:16:31

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 HZ | | |
| Test Mode: | TX 802.11N(HT20) Mode | | |

| Channel frequency (MHz) | Test Result (dBm) | Limit (dBm) |
|---|---|---|
| 2412 | 8.71 | 30 |
| 2437 | 8.76 | |
| 2462 | 8.75 | |

**802.11N(HT20) Mode**

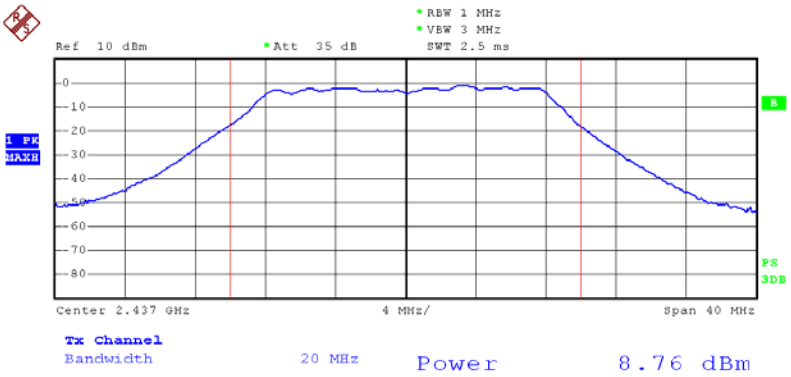
**2412 MHz**




Date: 4.JUN.2014 11:37:16

## 802.11N(HT20) Mode

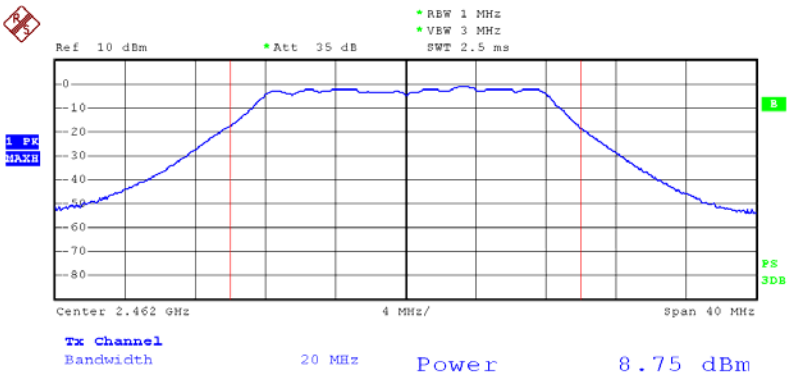
### 2437 MHz




Date: 4.JUN.2014 11:41:56

## 802.11N(HT20) Mode

### 2462 MHz




Date: 4.JUN.2014 11:45:01

# 8. Power Spectral Density Test

## 8.1 Test Standard and Limit

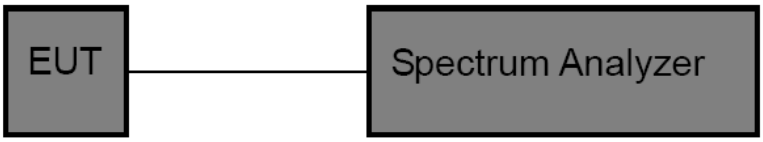
8.1.1 Test Standard

FCC Part 15.247 (e)

8.1.2 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 |

## 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) 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.

## 8.4 EUT Operating Condition

The EUT was set to continuously transmitting in each mode and low, Midle and high channel for the test.

## 8.5 Test Equipment

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Spectrum Analyzer | Rohde & Schwarz | FSP30 | DE25181 | Aug. 10, 2013 | Aug.09, 2014 |

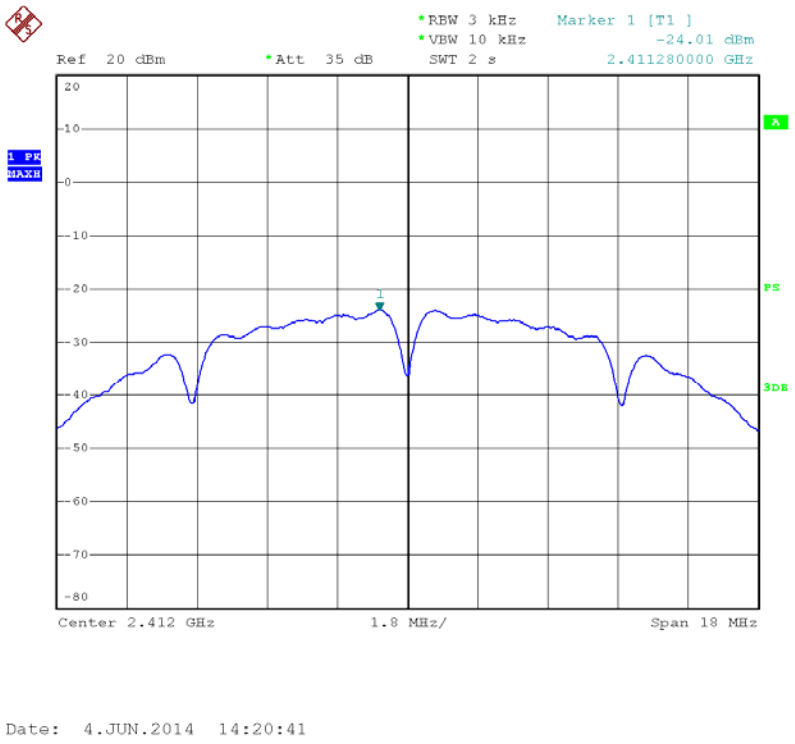
## 8.6 Test Data

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 HZ | | |
| Test Mode: | TX 802.11B Mode | | |

| Channel Frequency (MHz) | Power Density (3 kHz/dBm) | Limit (dBm) |
|---|---|---|
| 2412 | -24.01 | 8 |
| 2437 | -24.22 | |
| 2462 | -24.33 | |

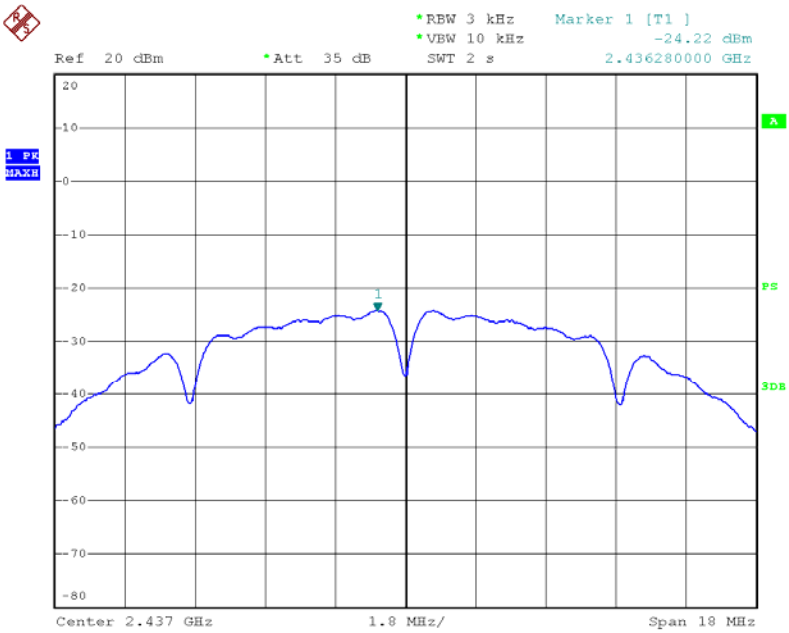
**802.11B Mode**

**2412 MHz**



**802.11B Mode**

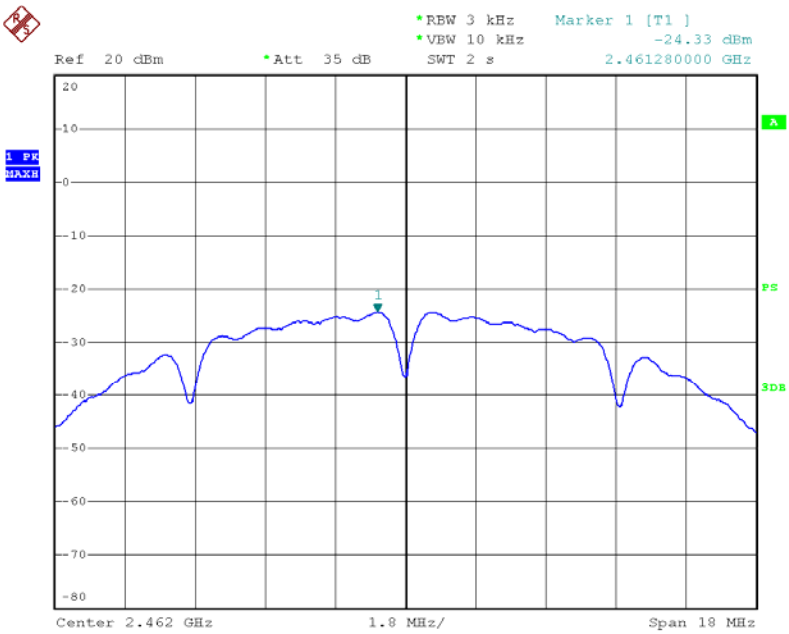
**2437 MHz**




Date: 4.JUN.2014 14:21:14

**802.11B Mode**

**2462 MHz**



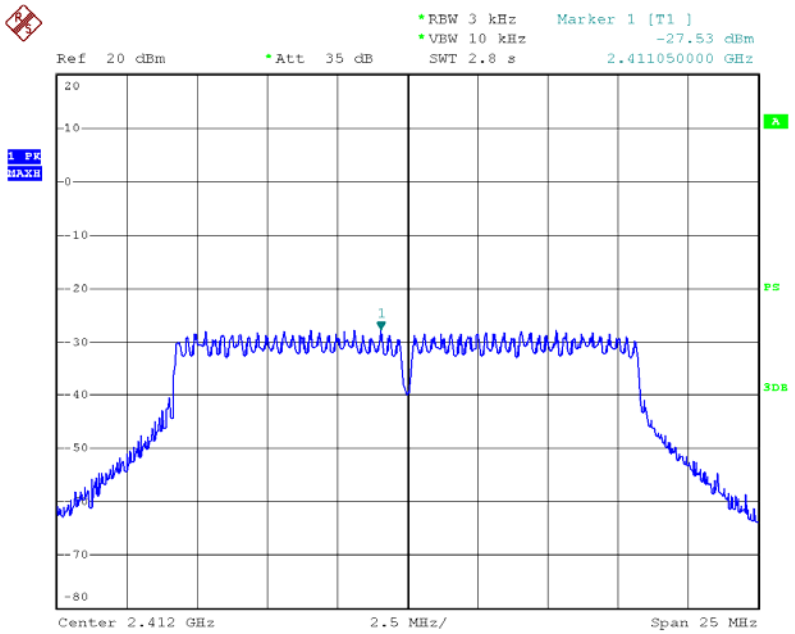

Date: 4.JUN.2014 14:21:43

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 HZ | | |
| Test Mode: | TX 802.11G Mode | | |

| Channel Frequency (MHz) | Power Density (3 kHz/dBm) | Limit (dBm) |
|---|---|---|
| 2412 | -27.53 | 8 |
| 2437 | -27.44 | |
| 2462 | -28.03 | |

**802.11G Mode**

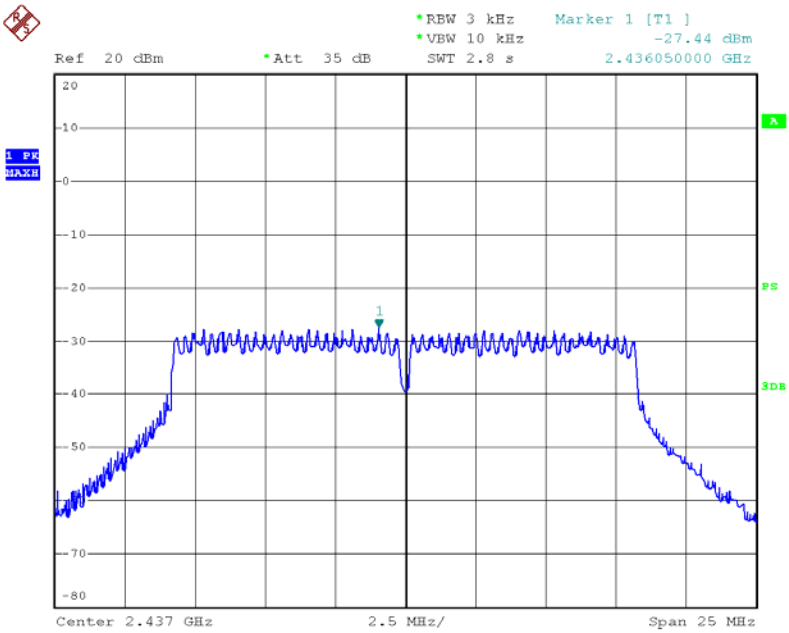
**2412 MHz**




Date: 4.JUN.2014 14:23:55

**802.11G Mode**

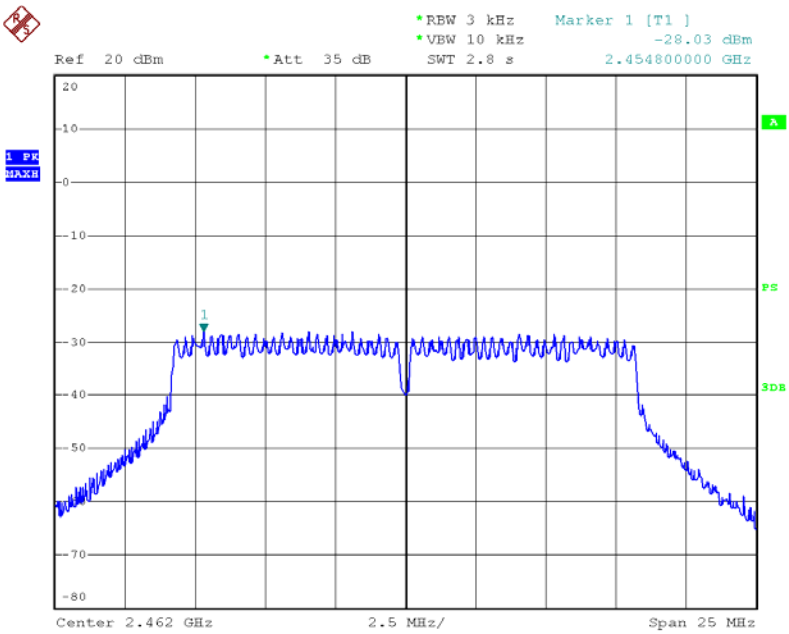
**2437 MHz**




Date: 4.JUN.2014 14:23:21

**802.11G Mode**

**2462 MHz**



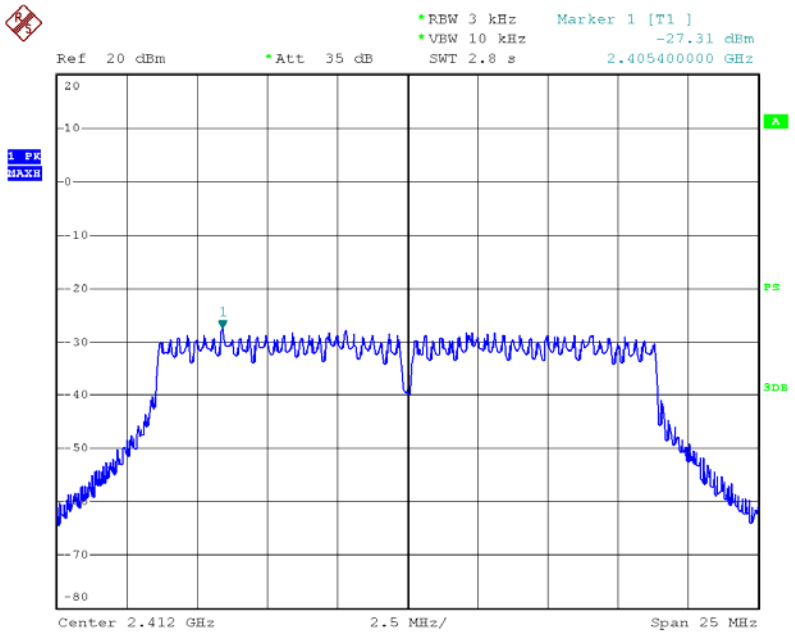

Date: 4.JUN.2014 14:22:33

| EUT: | Tablet PC | Model: | M709 |
|---|---|---|---|
| Temperature: | 25 ℃ | Relative Humidity: | 55% |
| Test Voltage: | AC 120V/60 HZ | | |
| Test Mode: | TX 802.11N(HT20) Mode | | |

| Channel Frequency (MHz) | Power Density (3 kHz/dBm) | Limit (dBm) |
|---|---|---|
| 2412 | -27.31 | 8 |
| 2437 | -27.25 | |
| 2462 | -27.02 | |

**802.11N(HT20) Mode**

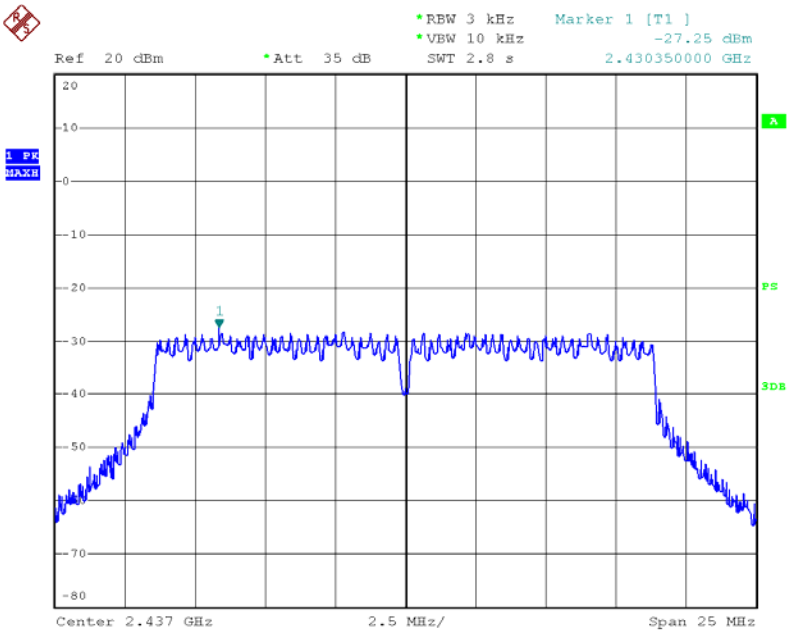
**2412 MHz**




Date: 4.JUN.2014 14:24:32

**802.11N(HT20) Mode**

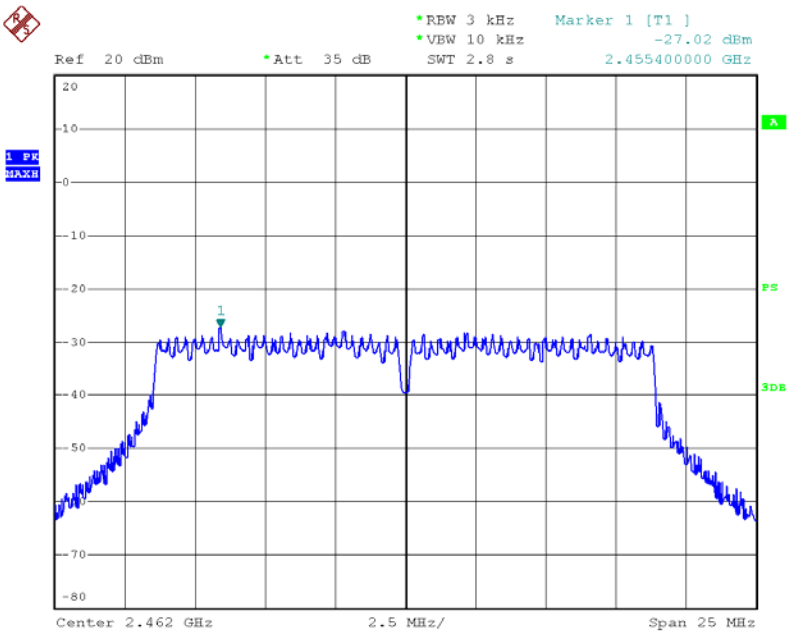
**2437 MHz**




Date: 4.JUN.2014 14:25:16

**802.11N(HT20) Mode**

**2462 MHz**




Date: 4.JUN.2014 14:26:10

# 9. Antenna Conducted Spurious Emission

## 9.1 Test Standard and Limit

10.1.1 Test Standard

FCC Part 15.247 (d)

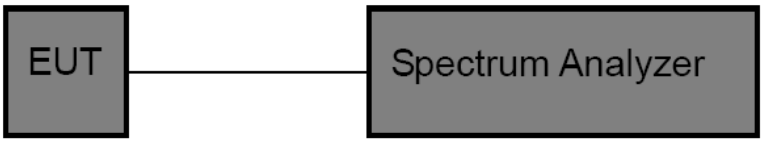
10.1.2 Test Limit

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated 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. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Frequencies (MHz) | Field Strength (microvolt/meter) | Measurement Distance (meters) |
|---|---|---|
| 0.009~0.490 | 2400/F(KHz) | 300 |
| 0.490~1.705 | 24000/F(KHz) | 30 |
| 1.705~30.0 | 30 | 30 |
| 30~88 | 100 | 3 |
| 88~216 | 150 | 3 |
| 216~960 | 200 | 3 |
| Above~960 | 500 | 3 |

(2)If the peak output power procedure is used to measure the fundamental emission power to demonstrate compliance to 15.247(b)(3) requirements, then the peak conducted output power measured within any 100 kHz outside the authorized frequency band shall be attenuated by at least 20 dB relative to the maximum measured in-band peak PSD level.

## 9.2 Test Setup




## 9.3 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 26.5 GHz.

## 9.4 EUT Operating Condition

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

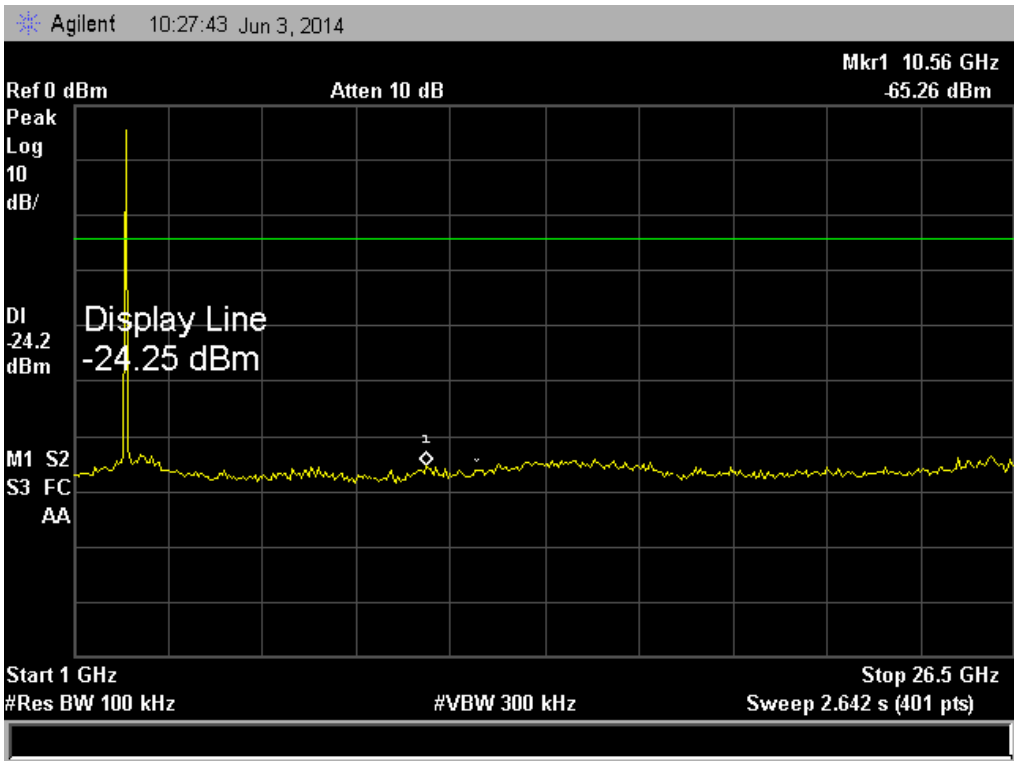
## 9.5 Test Equipment

| Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Cal. Due Date |
|---|---|---|---|---|---|
| Spectrum Analyzer | Agilent | E4407B | MY45106456 | Mar. 20, 2014 | Mar. 19, 2015 |

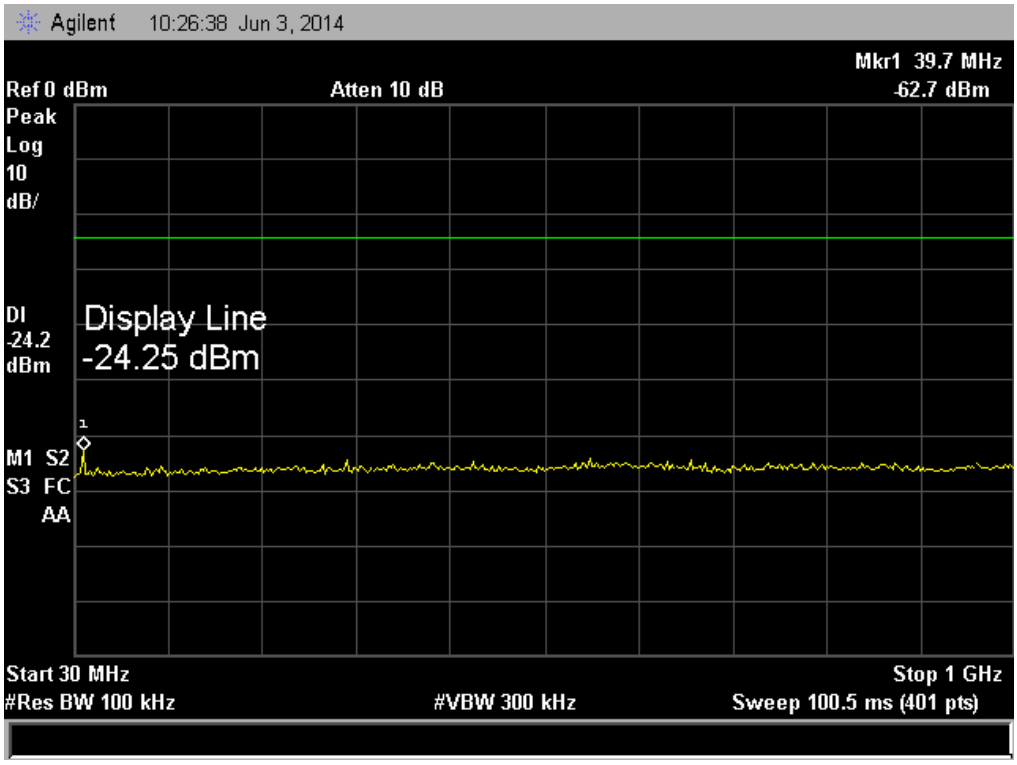
## 9.6 Test Data

802.11b Mode TX CH 01 2412MHz

Above 1 GHz

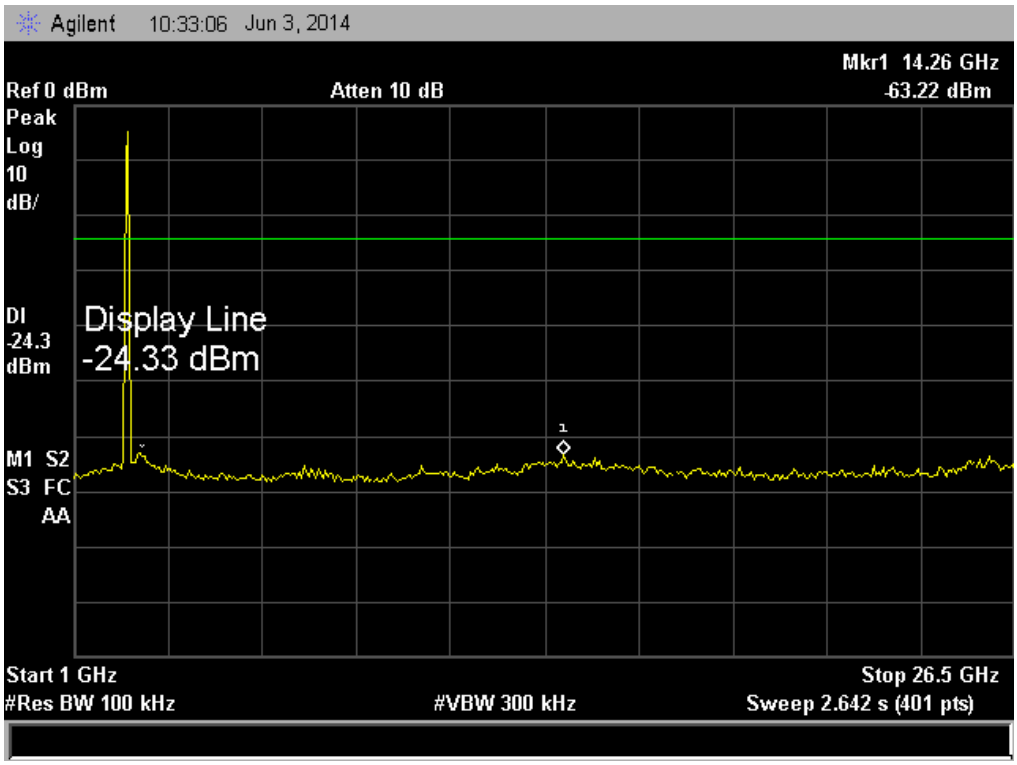



Below 1 GHz

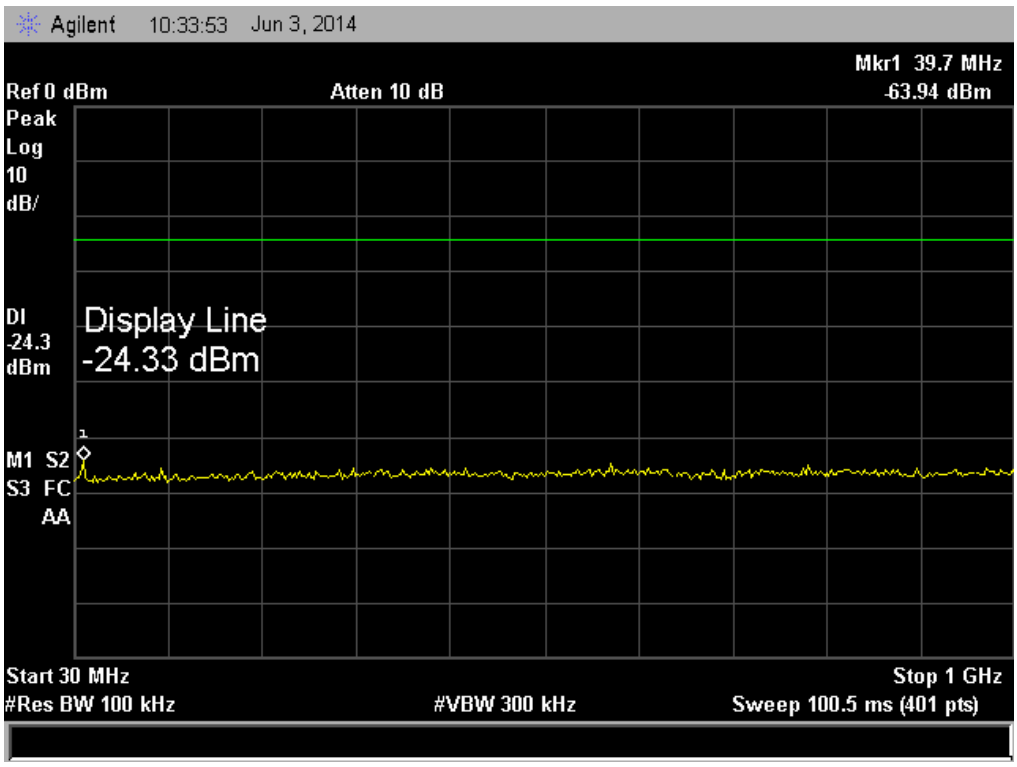


802.11b Mode TX CH 06 2437MHz

Above 1 GHz

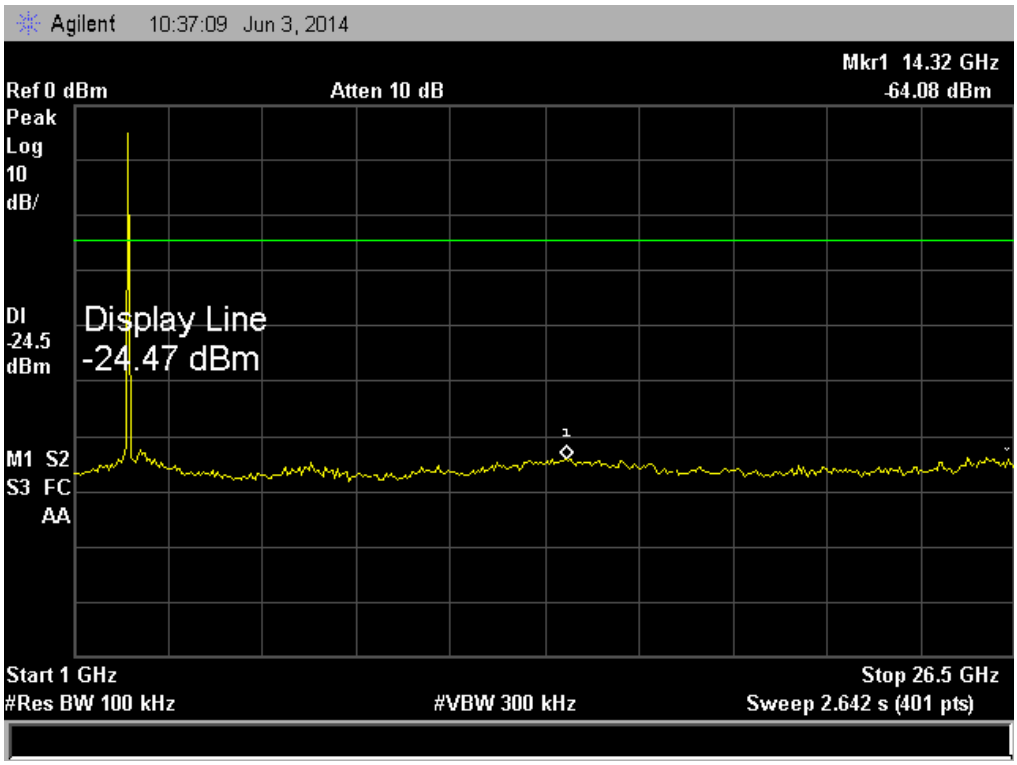



Below 1 GHz

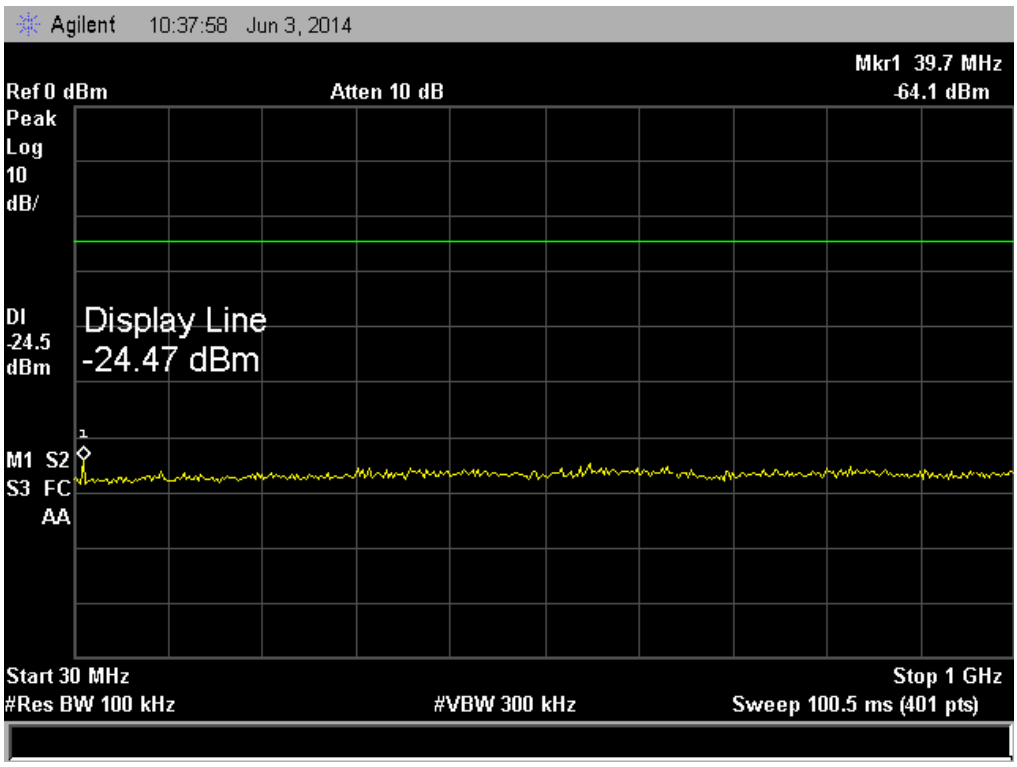


802.11b Mode TX CH 11 2462MHz

Above 1 GHz

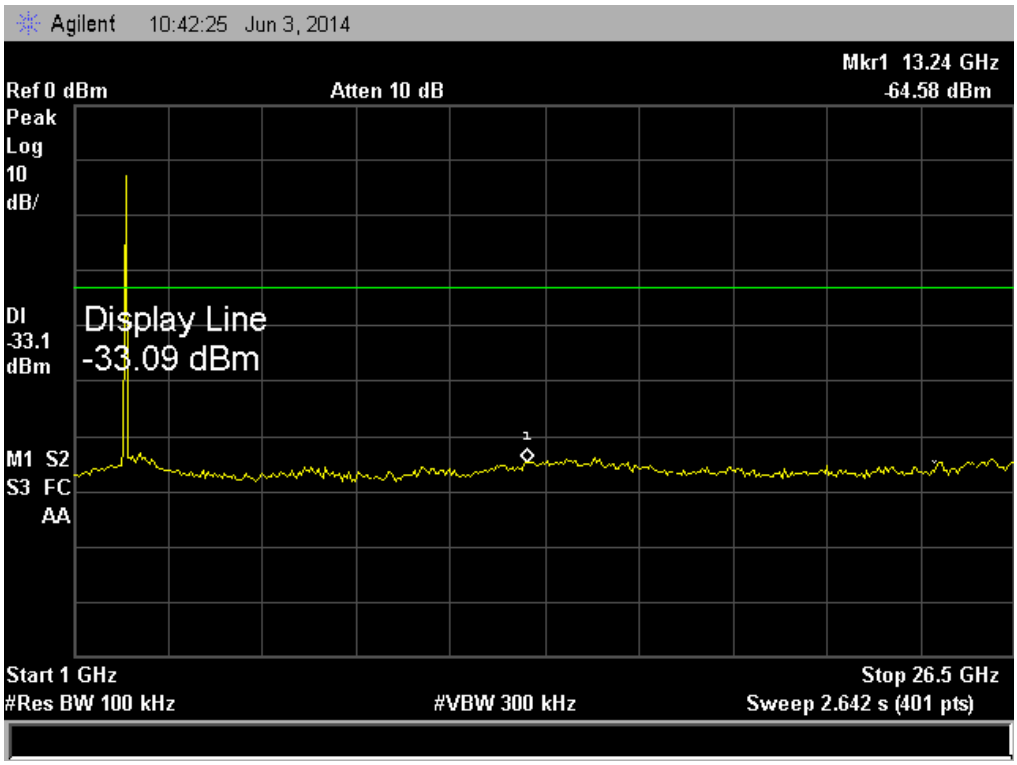



Below 1 GHz

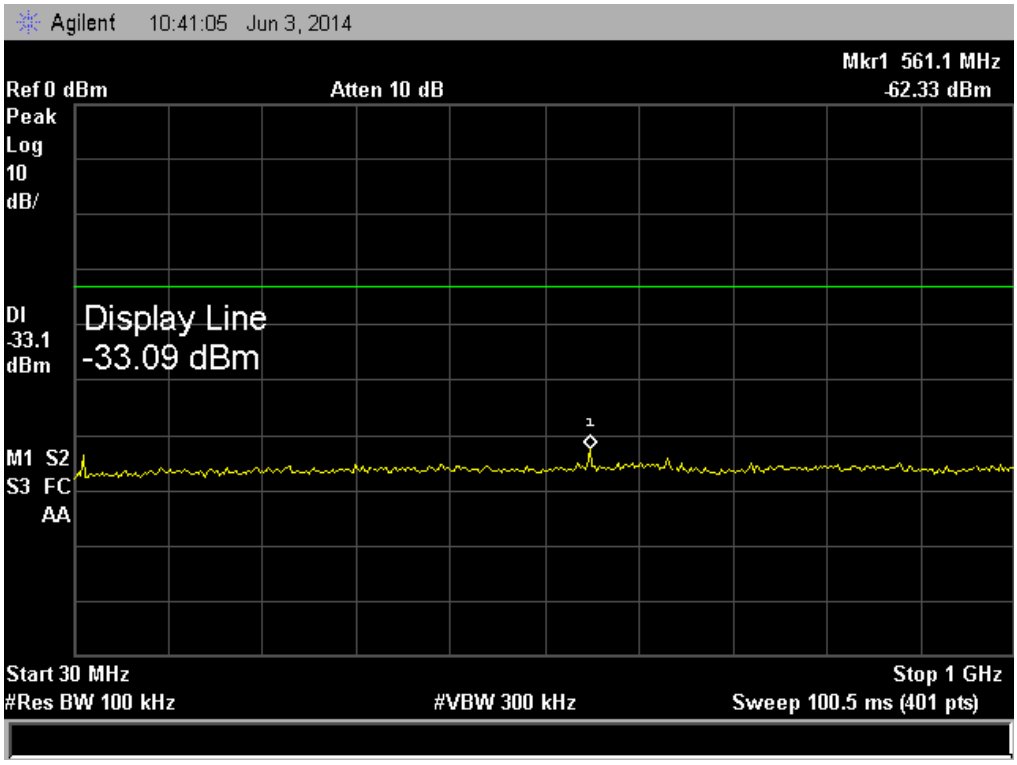


802.11g Mode TX CH 01 2412MHz

Above 1 GHz

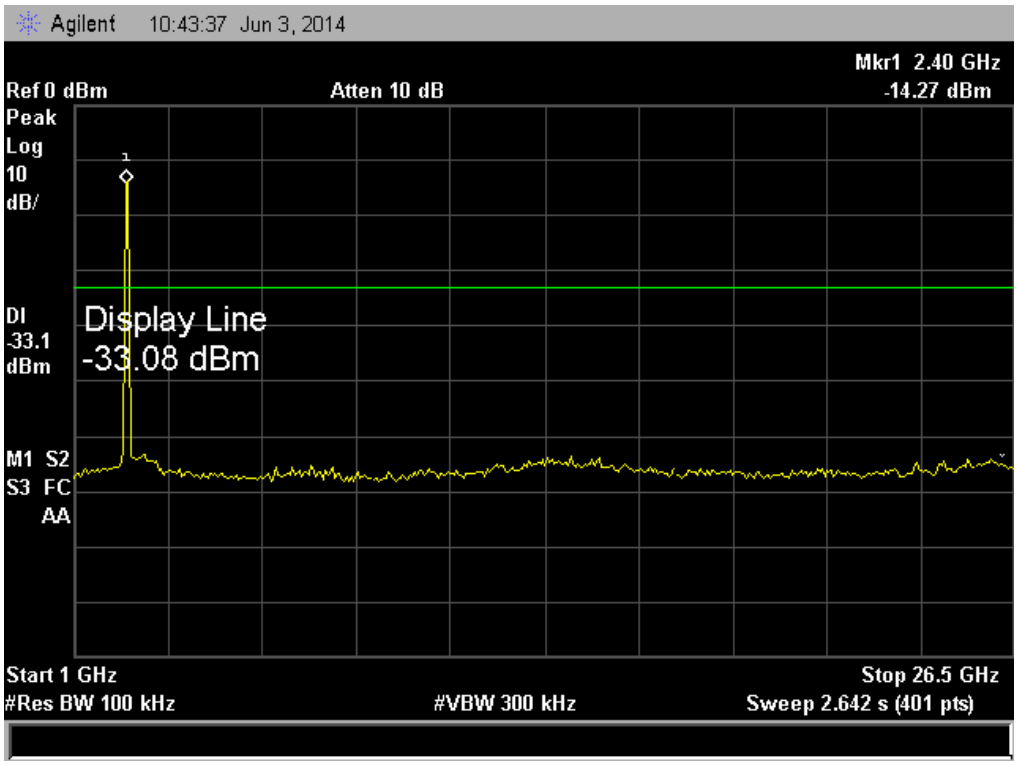



Below 1 GHz

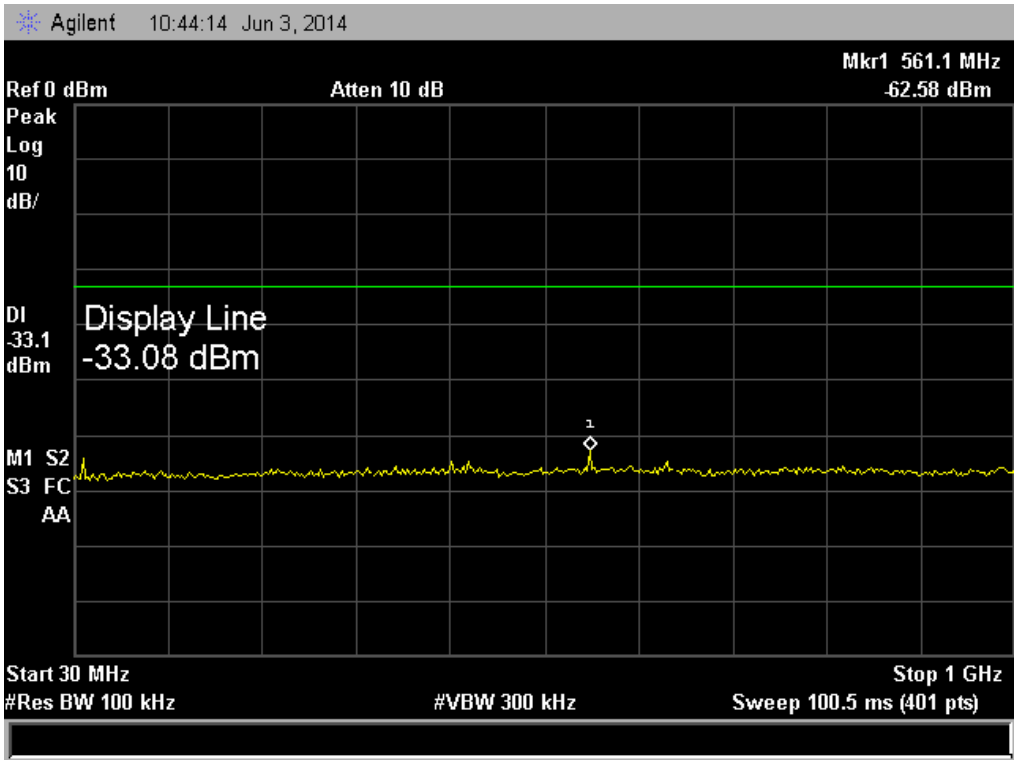


802.11g Mode TX CH 06 2437MHz

Above 1 GHz

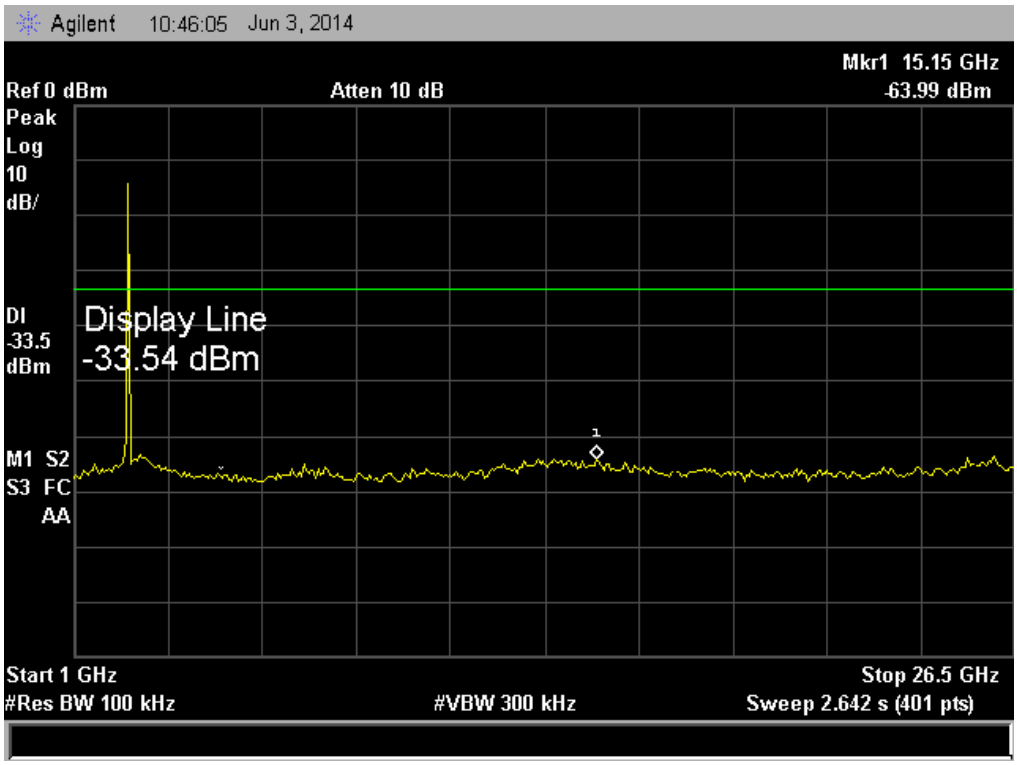



Below 1 GHz

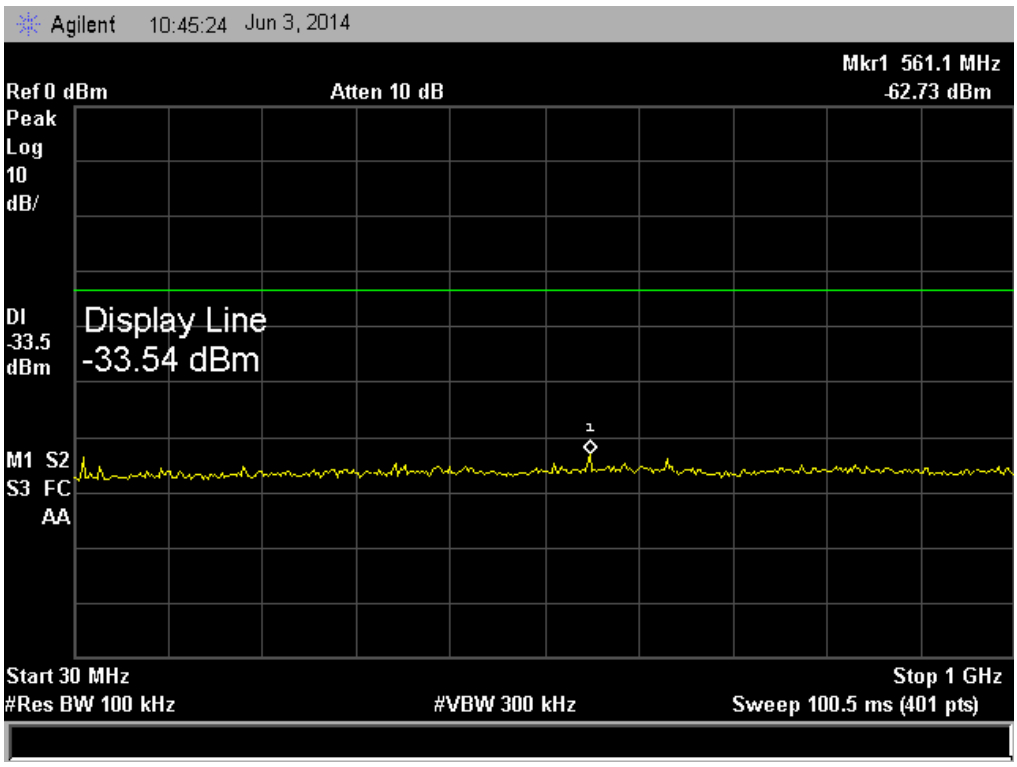


802.11g Mode TX CH 11 2462MHz

Above 1 GHz

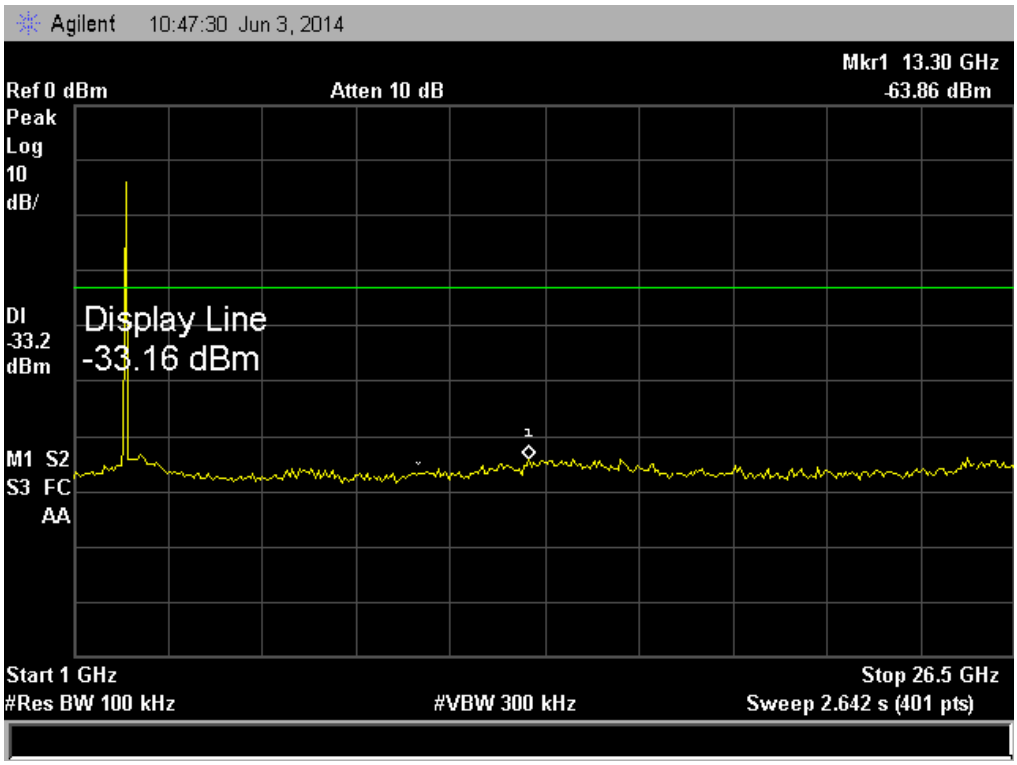



Below 1 GHz

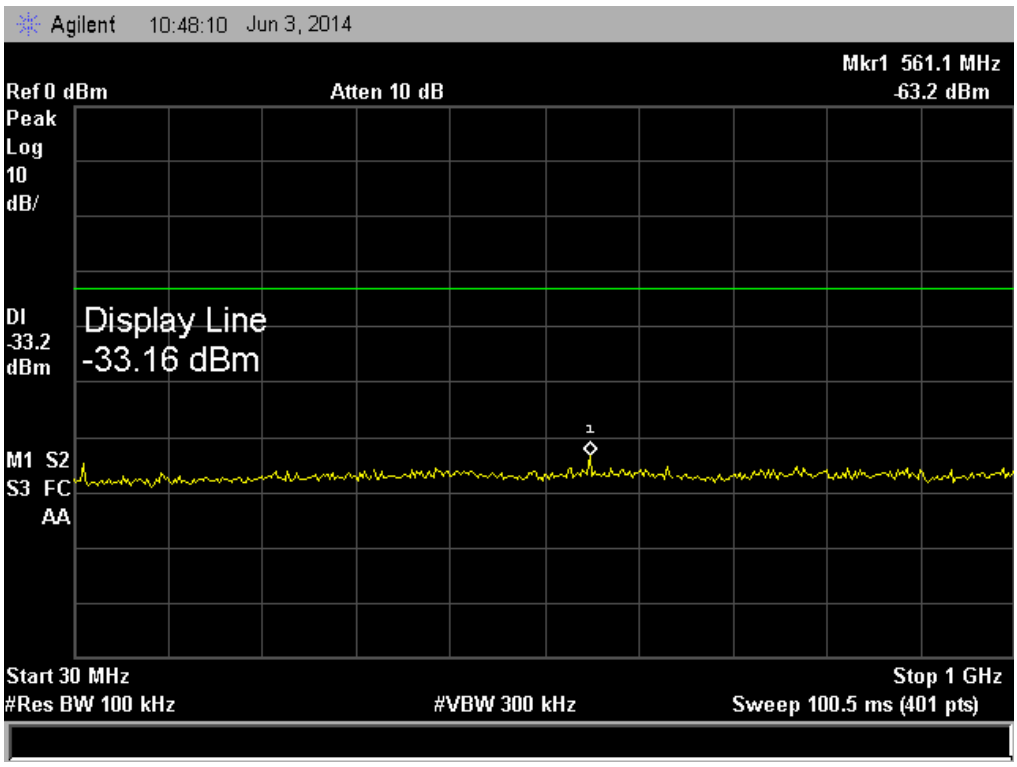


802.11n (HT20) Mode TX CH 01 2412MHz

Above 1 GHz

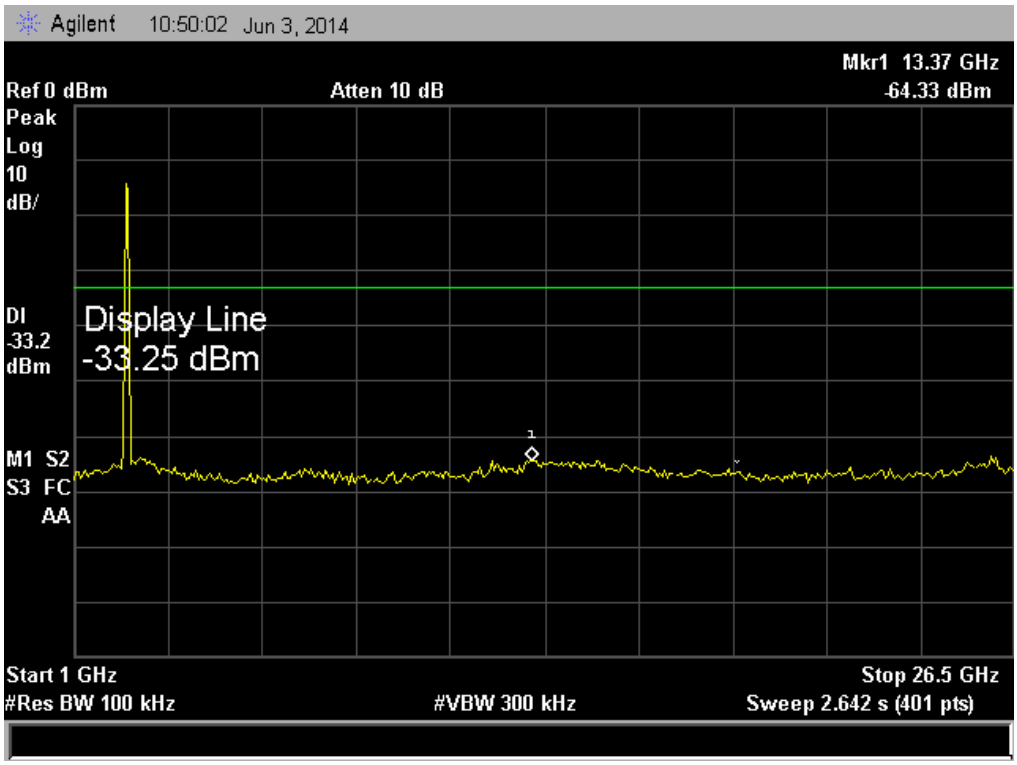



Below 1 GHz

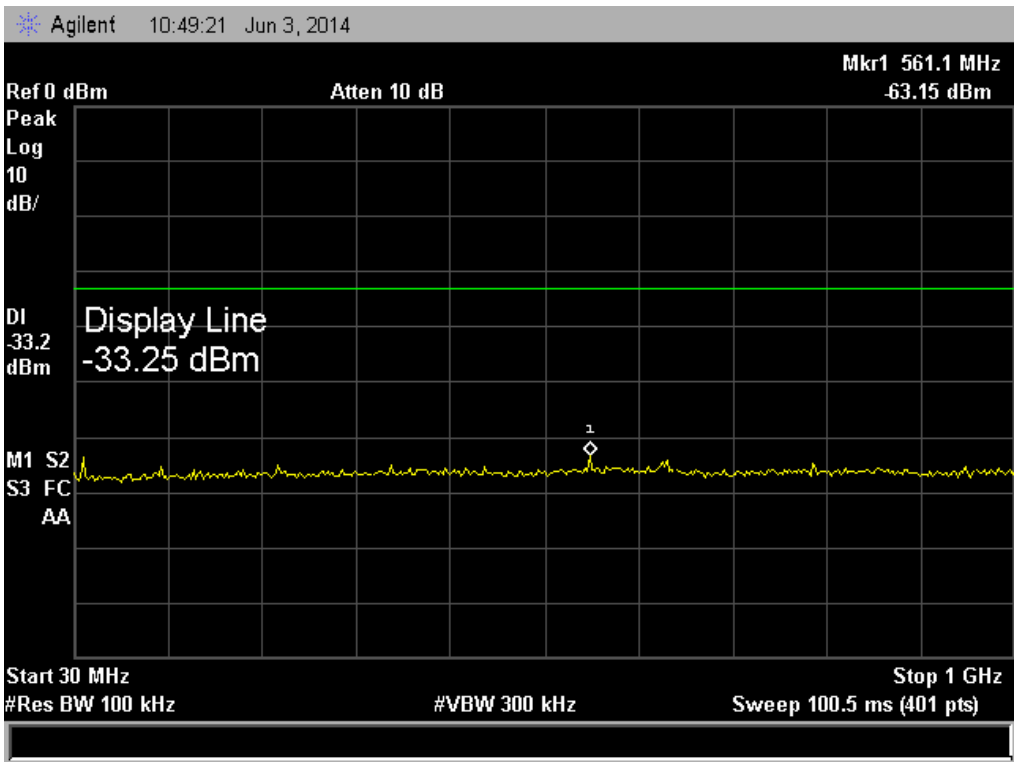


802.11n (HT20) Mode TX CH 06 2437MHz

Above 1 GHz

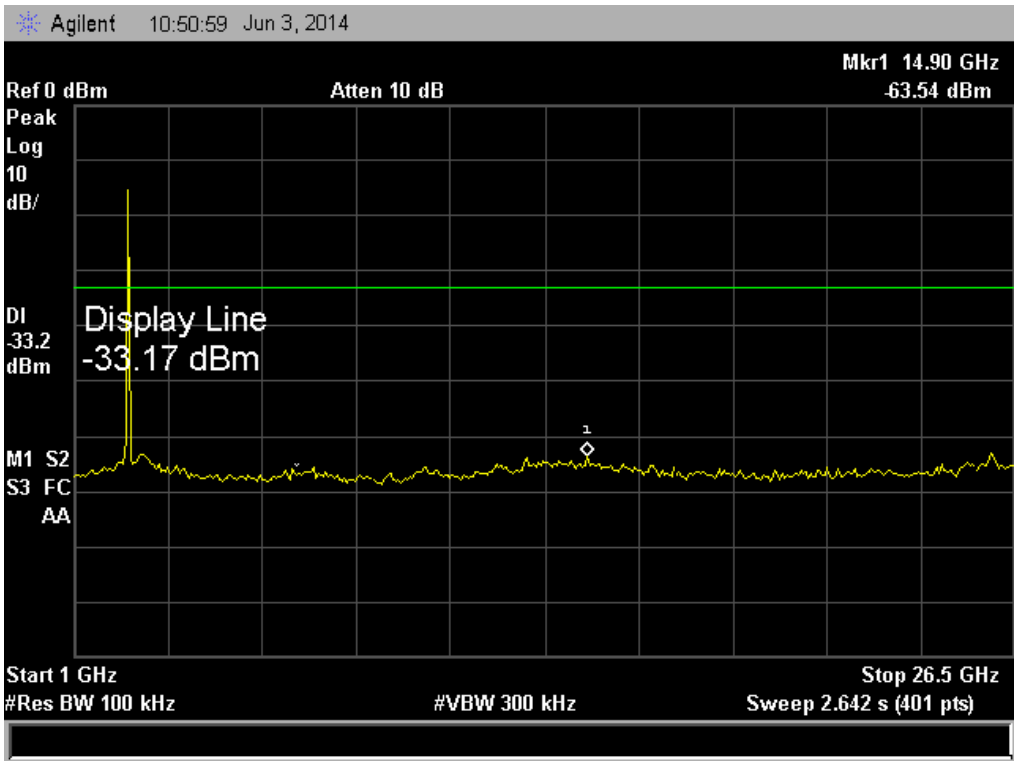



Below 1 GHz

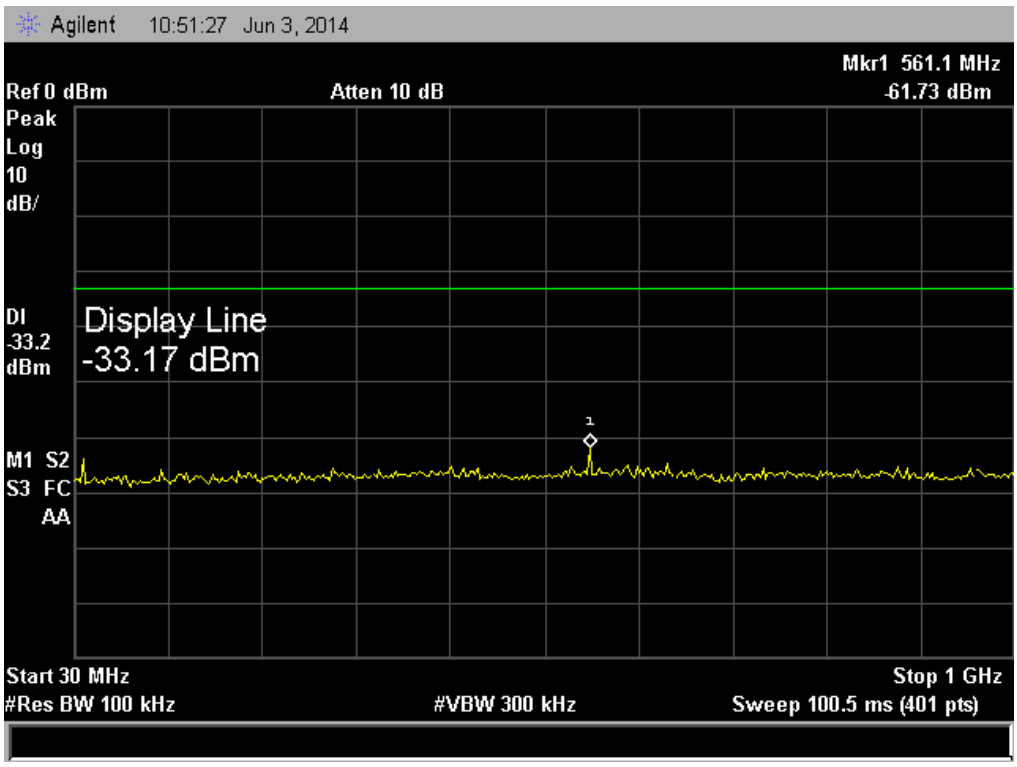


802.11n (HT20) Mode TX CH 11 2462MHz

Above 1 GHz




Below 1 GHz



# 10. Antenna Requirement

## 10.1 Standard Requirement

11.1.1 Standard

FCC Part 15.203

11.1.2 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 shall be considered sufficient to comply with the provisions of this Section. 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.

## 10.2 Antenna Connected Construction

The directional gains of the antenna used for transmitting is 0dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

## 10.2 Result

The EUT antenna is a PIFA Antenna. It complies with the standard requirement.