



Registration  
No.910917

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# TEST REPORT FOR WLAN TESTING

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Report No.: SRTC2017-9004(F)-0028

Product Name: LTE/WCDMA/GSM (GPRS) Multi-Mode Digital Mobile  
Phone

Product Model: ZTE BLADE V0850/ZTE BLADE V8 MINI/BLADE V8  
mini/ZTE BLADE V8 mini

Applicant: ZTE Corporation

Manufacturer: ZTE Corporation

Specification: FCC Part 15, Subpart C (October, 2016 edition)

FCC ID: SRQ-BLADEV8MINI

The State Radio\_monitoring\_center Testing Center (SRTC)

No.80 Beilishi Road Xicheng District Beijing, China

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## **1. GENERAL INFORMATION**

### **1.1 Notes of the test report**

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The test results relate only to individual items of the samples which have been tested.

### **1.2 Information about the testing laboratory**

|                    |   |
|--------------------|---|
| Company:           | The State Radio_monitoring_center Testing Center (SRTC) |
| Address:           | No.80 Beilishi Road, Xicheng District                   |
| City:              | Beijing   |
| Country or Region: | P.R.China   |
| Contacted person:  | Liu jia   |
| Tel:               | +86 10 5799 6181  |
| Fax:               | +86 10 5799 6288  |
| Email:             | liujiarf@srqc.org.cn                                    |

### **1.3 Applicant's details**

|                    |  |
|--------------------|--|
| Company:           | ZTE Corporation  |
| Address:           | ZTE Plaza, #55 Keji Road South, Hi-Tech, Industrial Park, Nanshan District,Guangdong |
| City:              | Shenzhen   |
| Country or Region: | P.R.China  |
| Grantee Code:      | SRQ  |
| Contacted person:  | Min Zhang  |
| Tel:               | 021-68897867   |
| Fax:               | 021-50801070   |
| Email:             | zhang.min13@zte.com.cn   |

### **1.4 Manufacturer's details**

|                    |  |
|--------------------|--|
| Company:           | ZTE Corporation  |
| Address:           | ZTE Plaza, #55 Keji Road South, Hi-Tech, Industrial Park, Nanshan District,Guangdong |
| City:              | Shenzhen   |
| Country or Region: | P.R.China  |
| Contacted person:  | Min Zhang  |
| Tel:               | 021-68897867   |
| Fax:               | 021-50801070   |
| Email:             | zhang.min13@zte.com.cn   |

## 1.5 Test Environment

|   |            |
|---|------------|
| Date of Receipt of test sample at SRTC: | 2017.03.23 |
| Testing Start Date:                     | 2017.04.06 |
| Testing End Date:                       | 2017.04.06 |

| Environmental Data: | Temperature (°C) | Humidity (%) |
|---------------------|------------------|--------------|
| Ambient             | 25               | 38           |
| Maximum Extreme     | 55               | 40           |
| Minimum Extreme     | -10              | ---          |

|  |     |
|--|-----|
| Normal Supply Voltage (V d.c.):          | 3.7 |
| Maximum Extreme Supply Voltage (V d.c.): | 4.2 |
| Minimum Extreme Supply Voltage (V d.c.): | 3.5 |

## 2 DESCRIPTION OF THE DEVICE UNDER TEST

### 2.1 Final Equipment Build Status

|                            |   |
|----------------------------|---|
| Frequency Range            | 2.4GHz~2.4835GHz  |
| Number of Channel          | 11  |
| Modulation Type            | DBPSK/DQPSK/CCK/BPSK/QPSK/16QAM/64QAM   |
| Duplex Mode                | TDD   |
| Channel Spacing            | 5MHz  |
| Data Rate                  | 1Mbps/2Mbps/5.5Mbps/11Mbps/6Mbps/9Mbps/12Mbps<br>/18Mbps/24Mbps/36Mbps/48Mbps/54Mbps/6.5Mbps<br>/13.0Mbps/13.5Mbps/19.5Mbps/26.0Mbps/27.0Mbps<br>/39.0Mbps/40.5Mbps/52.0Mbps/58.5Mbps/65Mbps<br>/81.0Mbps/108.0Mbps/121.5Mbps/135.0Mbps |
| Duty Cycles                | 98%   |
| Antenna Type               | Fixed Internal  |
| Power Supply               | Battery or Charger  |
| Rated Power Supply Voltage | 3.7V  |
| HW Version                 | ux9A  |
| SW Version                 | GEN_LA_BV0850_V1.0  |
| IMEI                       | 863927030034813   |

## 2.2 Support Equipment

The following support equipment was used to exercise the DUT during testing:

### Battery 1

|               |                                |
|---------------|--------------------------------|
| Equipment     | Battery                        |
| Manufacturer  | Harbin Coslight Power CO.,LTD. |
| Model Number  | Li3928T44P8h475371             |
| Serial Number | -----                          |

### **3 REFERENCE SPECIFICATION**

| Specification | Version       | Title   |
|---------------|---------------|---|
| 15.35         | Mar. 6, 2014  | Measurement detector functions and bandwidths.                              |
| 15.209        | Oct. 30, 1997 | Radiated emission limits; general requirements.                             |
| 15.247        | May 1, 2014   | Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz. |

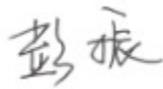
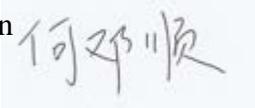
## **4 KEY TO NOTES AND RESULT CODES**

The following are the definition of the test result.

| Code | Meaning  |
|------|--|
| PASS | Test result shows that the requirements of the relevant specification have been met.     |
| FAIL | Test result shows that the requirements of the relevant specification have not been met. |
| N/T  | Test case is not tested.   |
| NTC  | Nominal voltage, Normal Temperature  |
| HV   | High voltage, Normal Temperature   |
| LV   | Low voltage, Normal Temperature  |
| HTHV | high voltage, High Temperature   |
| LTHV | High voltage, Low Temperature  |
| HTLV | Low voltage, High Temperature  |
| LTLV | Low voltage, Low Temperature   |

## 5 RESULT SUMMARY

| No. | Test case                                  | FCC reference             | Verdict |
|-----|--|---------------------------|---------|
| 1   | Peak Power Output                          | 15.247(b)(3)              | Pass    |
| 2   | Occupied Bandwidth                         | 15.247(a)(2)              | Pass    |
| 3   | Transmitter Power Spectral Density         | 15.247(e)                 | Pass    |
| 4   | Conducted Out of band emission measurement | 15.247(d)                 | Pass    |
| 5   | Spurious Radiated Emissions                | 15.247(d)/15.35(b)/15.209 | Pass    |
| 6   | AC Power line Conducted Emission           | 15.207                    | Pass    |

|  |  |
|--|--|
| This Test Report Is Issued by:<br>Mr. Peng Zhen<br> | Checked by:<br>Ms. Liu Jia<br> |
| Tested by:<br>Mr. He Dengshun<br>                   | Issued date:<br><br>20170418   |

## **6 TEST RESULT**

### **6.1 Peak Power Output**

#### **6.1.1 Ambient condition**

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 22°C        | 40%               | 101.5kPa |

#### **6.1.2 Test Description**

A transmitter antenna terminal of EUT is connected to the power meter. Measurement is made using a broadband power meter capable of making peak and average measurements while the EUT is operating at its maximum duty cycle (>98%), at maximum power, and at the appropriate frequencies.

#### **6.1.3 Test limit**

FCC Part15.247(b)(3)

The maximum permissible conducted output power is 1 Watt.

Used conversion factor: Limit (dBm) = 10 log (Limit (W)/1mW)

==> Maximum Output Power: 30.0 dBm

#### **6.1.4 Test Procedure Used**

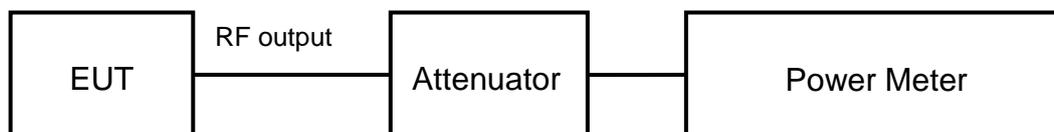
KDB 558074 D01 v03r02 – Section 9.1.2

#### **6.1.5 Test Settings**

The maximum peak conducted output power may be measured using a broadband peak RF power meter. The power meter shall have a video bandwidth that is greater than or equal to the DTS bandwidth and shall utilize a fast-responding diode detector.

#### **6.1.6 Test Setup**

The EUT and measurement equipment were set up as shown in the diagram below.



#### **6.1.7 Test result**

The test results are shown in Appendix A .

## 6.2 Occupied Bandwidth

### 6.2.1 Ambient condition

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 22°C        | 40%               | 101.5kPa |

### 6.2.2 Test Description

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer and Bluetooth test set via a power splitter with a known loss. Which connected to the transmitter antenna terminal of the EUT while the EUT is operating at maximum power and at the appropriate frequencies. All modes of operation were investigated and the worst case configuration results are reported in this section.

### 6.2.3 Test limit

FCC Part15.247(a)(2)

The minimum permissible 6dB bandwidth is 500 kHz

### 6.2.4 Test Procedure Used

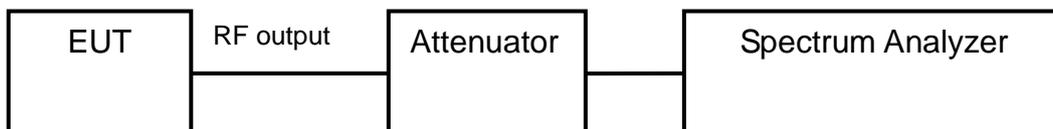
KDB 558074 D01 v03r02 – Section 8.1 Option 1

### 6.2.5 Test Settings

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW)  $\geq 3 \times$  RBW.
- c) Detector = Peak.
- d) Trace mode = max hold.
- e) Sweep = auto couple.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### 6.2.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



### 6.2.7 Test result

The test results are shown in Appendix A.

## 6.3 Transmitter Power Spectral Density

### 6.3.1 Ambient condition

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 22°C        | 40%               | 101.5kPa |

### 6.3.2 Test Description

The peak power density is measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle (>98%), at maximum power, and at the appropriate frequencies. All data rates were investigated and the worst case configuration results are reported in this section.

### 6.3.3 Test limit

FCC Part15.247(e)

The maximum permissible power spectral density is 8.0 dBm in any 3 kHz band.

### 6.3.4 Test Procedure Used

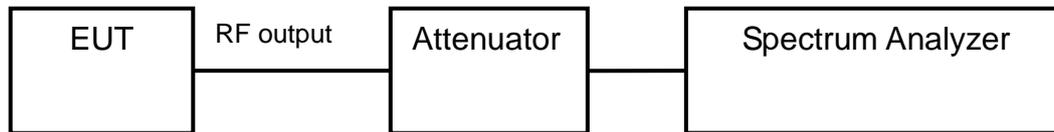
KDB 558074 D01 v03r02 Section 10.2.

### 6.3.5 Test Settings

- Set analyzer center frequency to DTS channel center frequency.
- Set the span to 1.5 times the DTS bandwidth.
- Set the RBW to:  $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$ .
- Set the VBW  $\geq 3 \times \text{RBW}$ .
- Detector = peak.
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level within the RBW.
- If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

### 6.3.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.



### 6.3.7 Test result

The test results are shown in Appendix A.

## 6.4 Conducted Out of band emission measurement

### 6.4.1 Ambient condition

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 22°C        | 40%               | 101.5kPa |

### 6.4.2 Test Description

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle (>98%), at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration.

### 6.4.3 Test limit

FCC Part 15.247(d)

The limit for out-of-band spurious emissions at the band edge is 20dB below the fundamental emission level, as determined from the in-band power measurement of the DTS channel performed in a 100 kHz bandwidth.

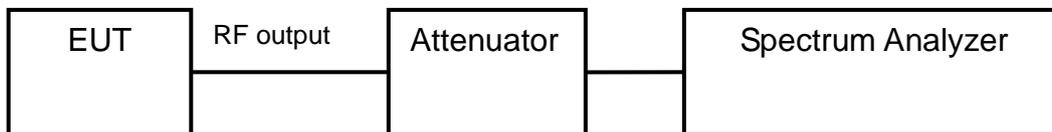
### 6.4.4 Test Procedure Used

KDB 558074 D01 v03r02 Section 11.3

### 6.4.5 Test Settings

- Set the center frequency and span to encompass frequency range to be measured.
- Set the RBW = 100kHz.
- Set the VBW  $\geq$  300kHz.
- Detector = peak.
- Set span to encompass the spectrum to be examined
- Sweep time = auto couple.
- Trace mode = max hold.
- Allow trace to fully stabilize.
- Use the peak marker function to determine the maximum amplitude level.

#### 6.4.6 Test Setup



#### 6.4.7 Test result

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.

The test results are shown in Appendix A.

## 6.5 Spurious Radiated Emissions

### 6.5.1 Ambient condition

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 20.8°C      | 36.5%             | 100.9kPa |

### 6.5.2 Test Description

All out of band radiated spurious emissions are measured with a spectrum analyzer connected to a receive antenna while the EUT is operating at maximum power and at the appropriate frequencies. Only the radiated emissions of the configuration that produced the worst case emissions are reported in this section.

### 6.5.3 Test limit

FCC Part15.205, 15.209, 15.247(d);

In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)). All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in below Table per Section 15.209.

| Frequency [MHz] | Field strength [ $\mu\text{V/m}$ ] | Measured Distance [meters] |
|-----------------|------------------------------------|----------------------------|
| 30~88           | 100                                | 3                          |
| 88~216          | 150                                | 3                          |
| 216~960         | 200                                | 3                          |
| Above 960       | 500                                | 3                          |

#### Radiated Limits

FCC Part15.35(b):

There is also a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20 dB above the maximum permitted average limit

**Used conversion factor: Limit (dB $\mu\text{V/m}$ ) = 20 log (Limit ( $\mu\text{V/m}$ )/1 $\mu\text{V/m}$ )**

| Frequency [MHz]  | Detector   | Unit (dB $\mu\text{V/m}$ ) |
|--|------------|----------------------------|
| 30~88  | Quasi-peak | 40.0                       |
| 88~216   | Quasi-peak | 43.5                       |
| 216~960  | Quasi-peak | 46.0                       |
| 960~1000   | Quasi-peak | 54.0                       |
| 1000~5th harmonic of the highest frequency<br>or 40GHz, whichever is lower | Average    | 54.0                       |
|  | Peak       | 74.0                       |

#### Conversion Radiated limits

#### 6.5.4 Test Procedure Used

KDB 558074 D01 v03r02 – Section 12.2.5 (average power measurements)

KDB 558074 D01 v03r02 – Section 12.2.4 (peak power measurements)

#### 6.5.5 Test Settings

Average Field Strength Measurements per Section 12.2.5.1 of KDB 558074 v03r02

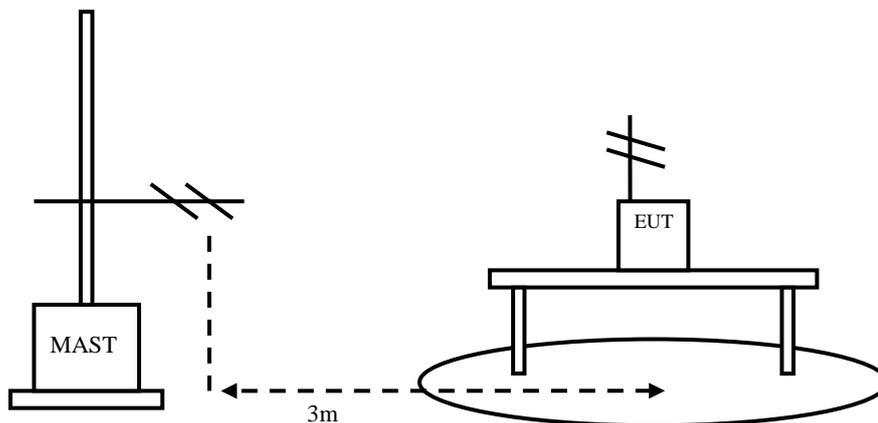
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (RMS)
5. Number of measurement points = 1001 (Number of points must be  $> 2 \times \text{span}/\text{RBW}$ )
6. Sweep time = auto
7. Trace (RMS) averaging was performed over at least 100 traces

Peak Field Strength Measurements per Section 12.2.4 of KDB 558074 v03r02

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

#### 6.5.6 Test Setup

The EUT and measurement equipment were set up as shown in the diagram below



The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration. Then start the test software ES-K1. Sweep the whole frequency band through the range from 30MHz to 1GHz or above, using receive log period antenna

HL562 or Ridge horn antenna HF906.

During the test, the antenna height and EUT azimuth were varied in order to identify the maximum level of emission from the EUT. The height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turn table shall be rotated from 0 to 360 degrees. The measurements shall be repeated with orthogonal polarization of the test antenna. The results shall be showed the worst case of the three orthogonal axes.

The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.

### 6.5.7 Test result

The test results are shown in Appendix B.

## 6.6 AC Power line Conducted Emission

### 6.6.1 Ambient condition

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 20.8°C      | 36.5%             | 100.9kPa |

### 6.6.2 Test limit

FCC Part15.207

| Frequency of Emission (MHz) | Conducted Limit (dBuV) |            |
|-----------------------------|------------------------|------------|
|                             | Quasi-peak             | Average    |
| 0.15-0.5                    | 66 to 56 *             | 56 to 46 * |
| 0.5-5                       | 56                     | 46         |
| 5-30                        | 60                     | 50         |

\* Decreases with the logarithm of the frequency.

The measurement is made according to ANSI C63.4-2014

### 6.6.3 Test result

The test results are shown in Appendix B.

## **7 MEASUREMENT UNCERTAINTIES**

| Items                | Uncertainty    |        |
|----------------------|----------------|--------|
| Occupied Bandwidth   | 3kHz           |        |
| Peak power output    | 0.67dB         |        |
| Band edge compliance | 1.20dB         |        |
| Spurious emissions   | 30MHz~1GHz     | 2.83dB |
|                      | 1GHz~12.75GHz  | 2.50dB |
|                      | 12.75GHz~25GHz | 2.75dB |

## **8 TEST EQUIPMENTS**

| No. | Name/Model                                     | Manufacturer  | S/N        | Cal Due date |
|-----|--|---------------|------------|--------------|
| 1.  | Spectrum Analyzer FSV                          | ROHDE&SCHWARZ | 101065     | 2017.08.20   |
| 2.  | Attenuation 6810.17.B                          | HUBER+SUHNER  | 768710     | 2017.08.20   |
| 3.  | Cable 104EA                                    | SUCOFLEX      | 9272/4EA   | 2018.03.01   |
| 4.  | Cable 104EA                                    | SUCOFLEX      | 9266/4EA   | 2018.03.01   |
| 5.  | Power Meter E4416A                             | Agilent       | MY52370013 | 2018.03.01   |
| 6.  | Peak Power Sensor E9327A                       | Agilent       | MY52420006 | 2018.03.01   |
| 7.  | 12.65m×8.03m×7.50m<br>Fully-Anechoic Chamber   | FRANKONIA     | ----       | ----         |
| 8.  | 23.18m×16.88m×9.60m<br>Semi-Anechoic Chamber   | FRANKONIA     | ---        | ----         |
| 9.  | Turn table Diameter:1m                         | HD            | ----       | ----         |
| 10. | Turn table Diameter:5m                         | HD            | ----       | ----         |
| 11. | Antenna master FAC(MA4.0)                      | MATURO        | ----       | ----         |
| 12. | Antenna master SAC(MA4.0)                      | MATURO        | ----       | ----         |
| 13. | 9.080m×5.255m×3.525m<br>Shielding room         | FRANKONIA     | ----       | ----         |
| 14. | HF 906 Double-Ridged<br>Waveguide Horn Antenna | R&S           | 100030     | 2017.08.20   |
| 15. | HF 906 Double-Ridged<br>Waveguide Horn Antenna | R&S           | 100029     | 2017.08.20   |
| 16. | HL562 Ultra log antenna                        | R&S           | 100016     | 2017.08.20   |
| 17. | 3160-09 Receive antenna                        | SCHWARZ-BECK  | 002058-002 | 2017.08.20   |
| 18. | ESI 40 EMI test receiver                       | R&S           | 100015     | 2017.08.20   |
| 19. | Radio tester                                   | CMU 200       | 114667     | 2017.08.20   |
| 20. | ESCS30 EMI test receiver                       | R&S           | 100029     | 2017.08.20   |
| 21. | HL562 Receive antenna                          | R&S           | 100167     | 2017.08.20   |
| 22. | ESH3-Z5 LISN                                   | R&S           | 100020     | 2017.08.20   |

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**APPENDIX A – TEST DATA OF CONDUCTED EMISSION**

Please refer to the attachment.

**APPENDIX B – TEST DATA OF RADIATED EMISSION**

Please refer to the attachment.

**APPENDIX C – TEST SETUP**

Please refer to the attachment.

## APPENDIX A – TEST DATA OF CONDUCTED EMISSION

### Peak Power Output test result

| Modulation type |           | Peak power output (dBm) |                  |                   |
|-----------------|-----------|-------------------------|------------------|-------------------|
|                 |           | 2412MHz<br>(Ch1)        | 2437MHz<br>(Ch6) | 2462MHz<br>(Ch11) |
| 11b             | 1 Mbps    | <b>20.91</b>            | <b>20.61</b>     | <b>20.58</b>      |
|                 | 2 Mbps    | 20.85                   | 20.53            | 20.43             |
|                 | 5.5 Mbps  | 20.72                   | 20.37            | 20.36             |
|                 | 11 Mbps   | 20.63                   | 20.10            | 20.30             |
| 11g             | 6 Mbps    | <b>22.87</b>            | <b>22.54</b>     | <b>22.95</b>      |
|                 | 9 Mbps    | 22.56                   | 22.25            | 22.83             |
|                 | 12 Mbps   | 22.42                   | 21.93            | 22.52             |
|                 | 18 Mbps   | 22.10                   | 21.83            | 22.26             |
|                 | 24 Mbps   | 21.93                   | 21.65            | 22.02             |
|                 | 36 Mbps   | 21.72                   | 21.58            | 21.74             |
|                 | 48 Mbps   | 21.48                   | 21.42            | 21.37             |
|                 | 54 Mbps   | 21.03                   | 21.23            | 21.16             |
| 11n<br>HT20     | 6.5 Mbps  | <b>22.46</b>            | <b>22.61</b>     | <b>21.77</b>      |
|                 | 13 Mbps   | 22.37                   | 22.52            | 21.64             |
|                 | 19.5 Mbps | 22.18                   | 22.38            | 21.53             |
|                 | 26 Mbps   | 21.99                   | 22.25            | 21.44             |
|                 | 39 Mbps   | 21.84                   | 21.84            | 21.42             |
|                 | 52 Mbps   | 21.83                   | 21.65            | 21.39             |
|                 | 58.5 Mbps | 21.79                   | 21.58            | 21.16             |
|                 | 65 Mbps   | 21.77                   | 21.51            | 21.03             |

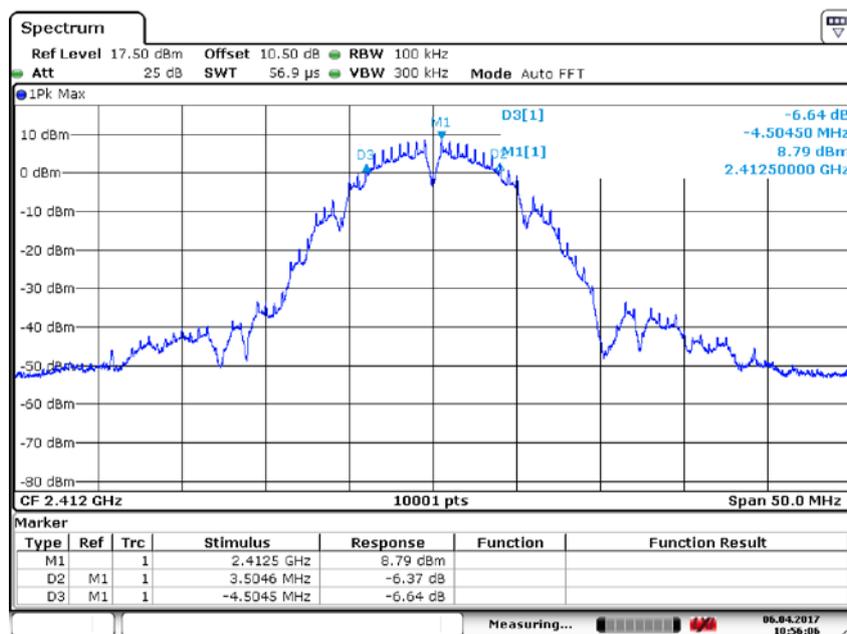
| Modulation type |           | Average power output (dBm) |                  |                   |
|-----------------|-----------|----------------------------|------------------|-------------------|
|                 |           | 2412MHz<br>(Ch1)           | 2437MHz<br>(Ch6) | 2462MHz<br>(Ch11) |
| 11b             | 1 Mbps    | <b>16.52</b>               | <b>17.12</b>     | <b>16.16</b>      |
|                 | 2 Mbps    | 16.42                      | 17.01            | 15.89             |
|                 | 5.5 Mbps  | 16.34                      | 16.59            | 15.82             |
|                 | 11 Mbps   | 16.17                      | 16.24            | 15.75             |
| 11g             | 6 Mbps    | <b>15.07</b>               | <b>14.20</b>     | <b>14.37</b>      |
|                 | 9 Mbps    | 14.97                      | 14.05            | 14.03             |
|                 | 12 Mbps   | 14.62                      | 13.85            | 13.83             |
|                 | 18 Mbps   | 14.21                      | 13.61            | 13.62             |
|                 | 24 Mbps   | 13.88                      | 12.94            | 12.84             |
|                 | 36 Mbps   | 13.45                      | 12.63            | 12.56             |
|                 | 48 Mbps   | 13.12                      | 12.25            | 12.43             |
|                 | 54 Mbps   | 12.84                      | 11.93            | 12.07             |
| 11n<br>HT20     | 6.5 Mbps  | <b>14.17</b>               | <b>13.09</b>     | <b>13.34</b>      |
|                 | 13 Mbps   | 14.00                      | 12.88            | 13.12             |
|                 | 19.5 Mbps | 13.85                      | 12.43            | 12.85             |
|                 | 26 Mbps   | 13.63                      | 12.10            | 12.53             |
|                 | 39 Mbps   | 12.92                      | 11.86            | 12.12             |
|                 | 52 Mbps   | 12.63                      | 11.54            | 11.43             |
|                 | 58.5 Mbps | 11.85                      | 11.35            | 11.27             |
|                 | 65 Mbps   | 11.79                      | 10.89            | 10.98             |

\* The data rate 1Mbps, 6Mbps, 6.5Mbps, are selected as worse condition, and the following cases are performed with this condition.

## Occupied Bandwidth

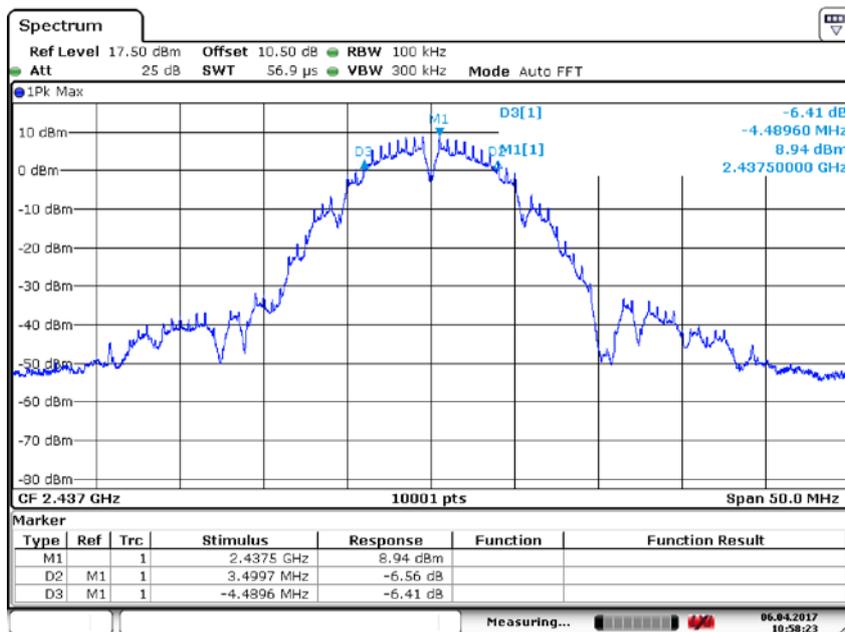
Test Mode: 802.11b

| Carrier frequency (MHz) | Channel No. | 6 dB bandwidth(kHz) |
|-------------------------|-------------|---------------------|
| 2412                    | 1           | 8009.1              |
| 2437                    | 6           | 7989.3              |
| 2462                    | 11          | 7434.3              |



Date: 6.APR.2017 10:56:06

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11b



Date: 6.APR.2017 10:58:23

Carrier frequency (MHz): 2437  
Channel No.:6  
Test Mode: 802.11b

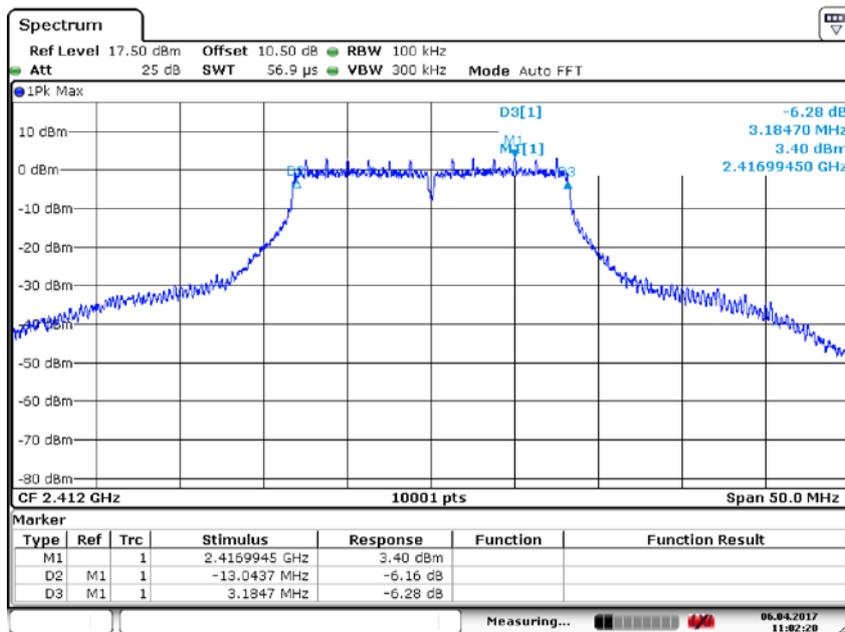


Date: 6.APR.2017 11:00:41

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11b

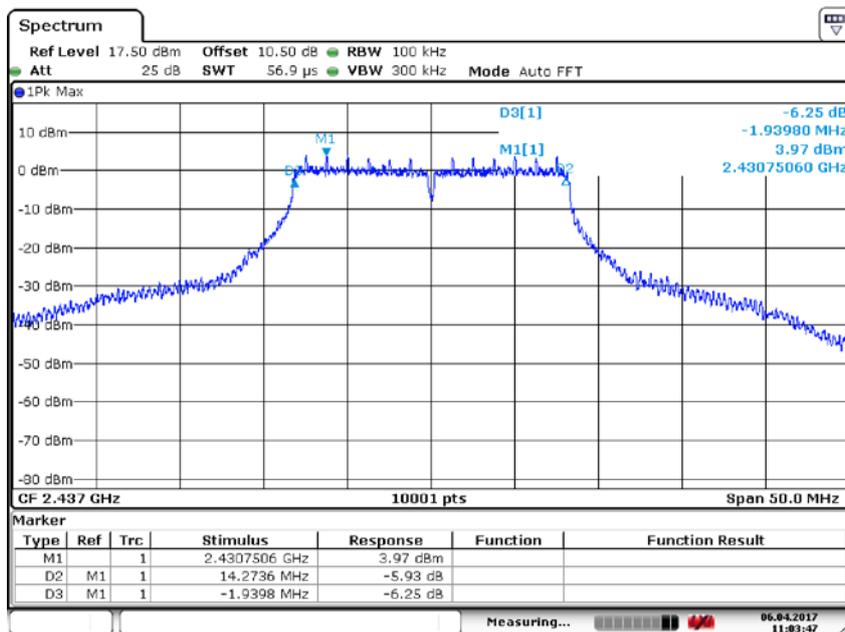
Test Mode: 802.11g

| Carrier frequency (MHz) | Channel No. | 6 dB bandwidth(kHz) |
|-------------------------|-------------|---------------------|
| 2412                    | 1           | 16228.4             |
| 2437                    | 6           | 16213.4             |
| 2462                    | 11          | 16353.4             |



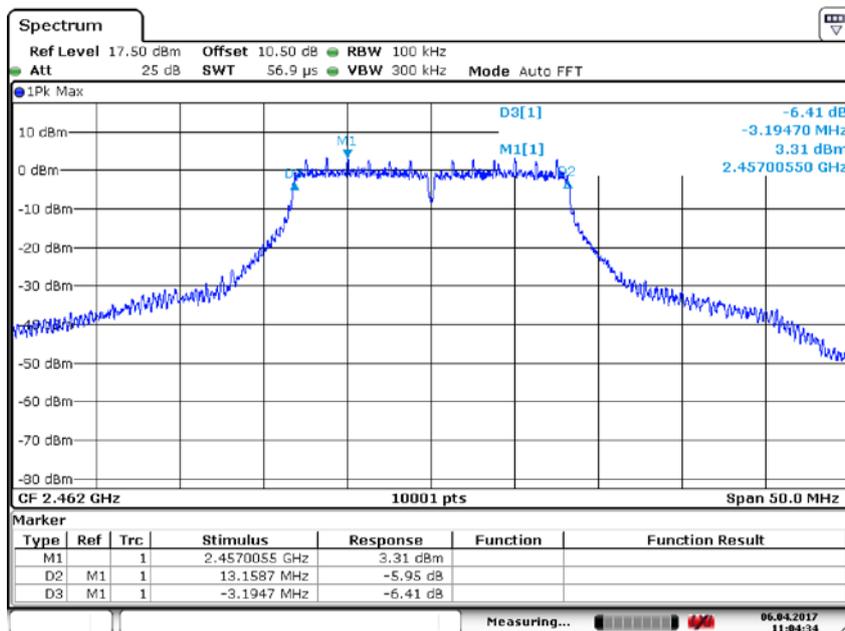
Date: 6.APR.2017 11:02:20

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11g



Date: 6.APR.2017 11:03:48

Carrier frequency (MHz): 2437  
Channel No.:6  
Test Mode: 802.11g

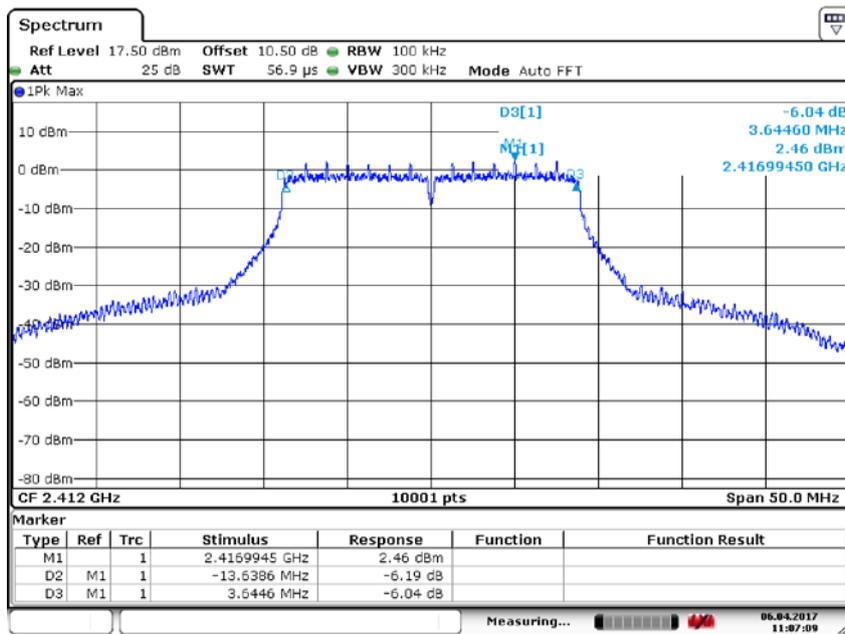


Date: 6.APR.2017 11:04:35

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11g

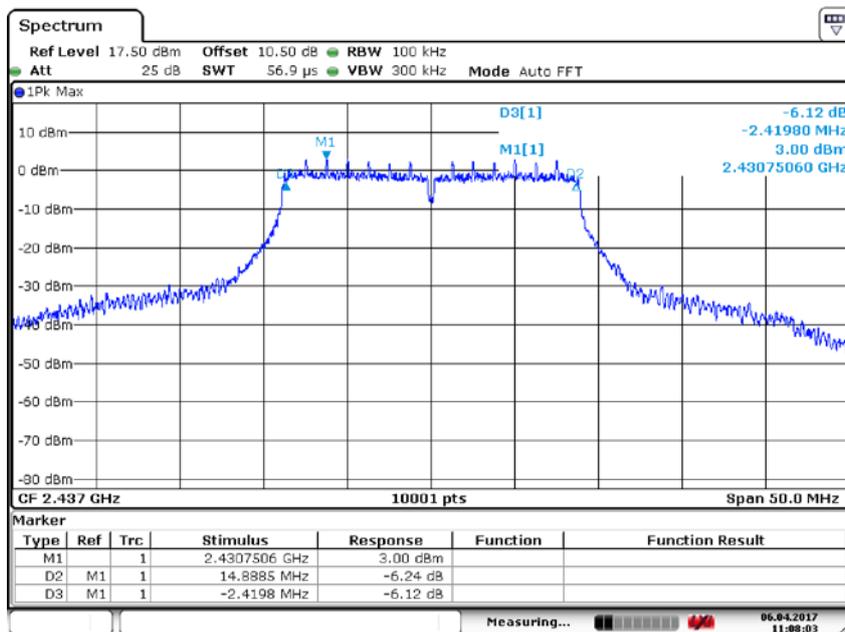
Test Mode: 802.11n (HT20)

| Carrier frequency (MHz) | Channel No. | 6 dB bandwidth(kHz) |
|-------------------------|-------------|---------------------|
| 2412                    | 1           | 17283.2             |
| 2437                    | 6           | 17308.3             |
| 2462                    | 11          | 17303.2             |



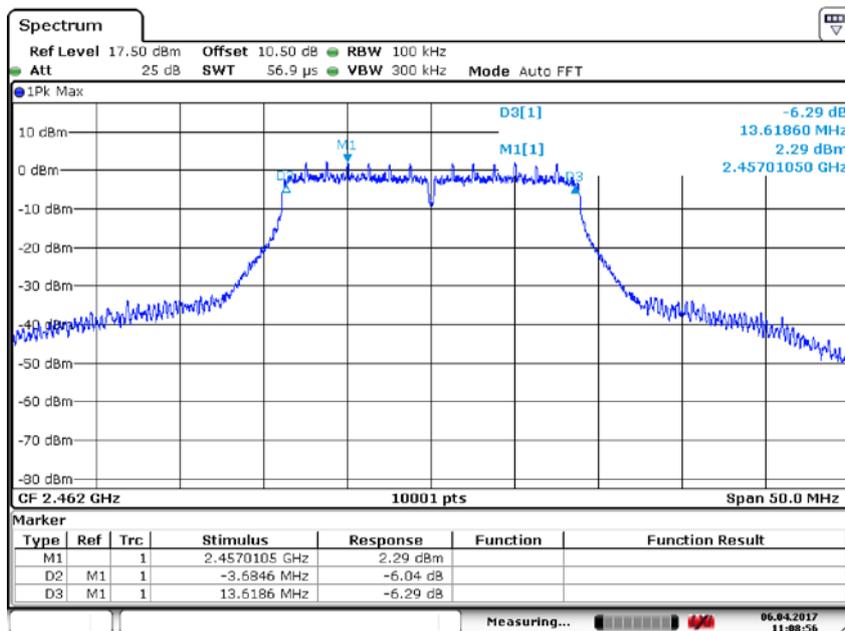
Date: 6.APR.2017 11:07:09

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11n (HT20)



Date: 6.APR.2017 11:08:03

Carrier frequency (MHz): 2437  
Channel No.:6  
Test Mode: 802.11n(HT20)



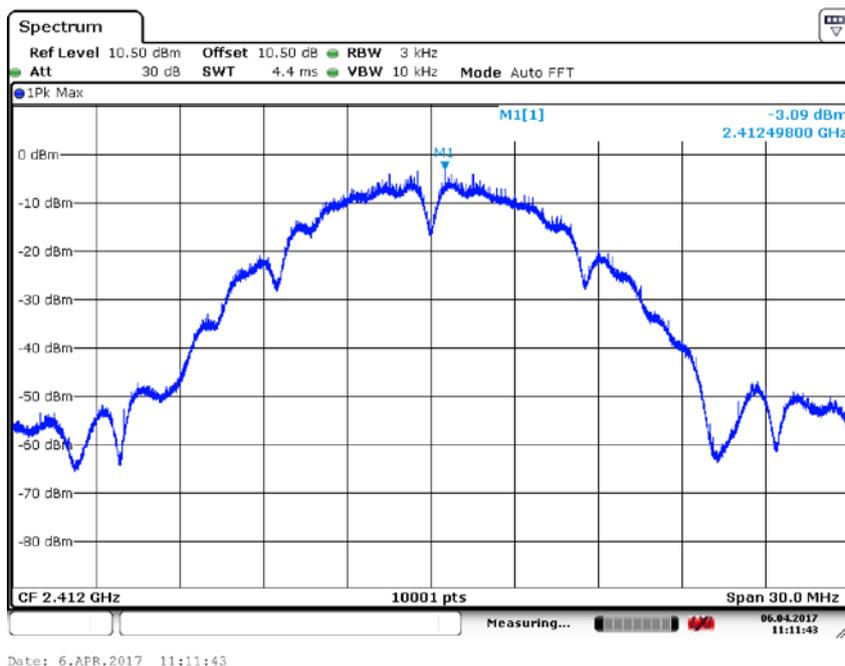
Date: 6.APR.2017 11:08:57

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11n(HT20)

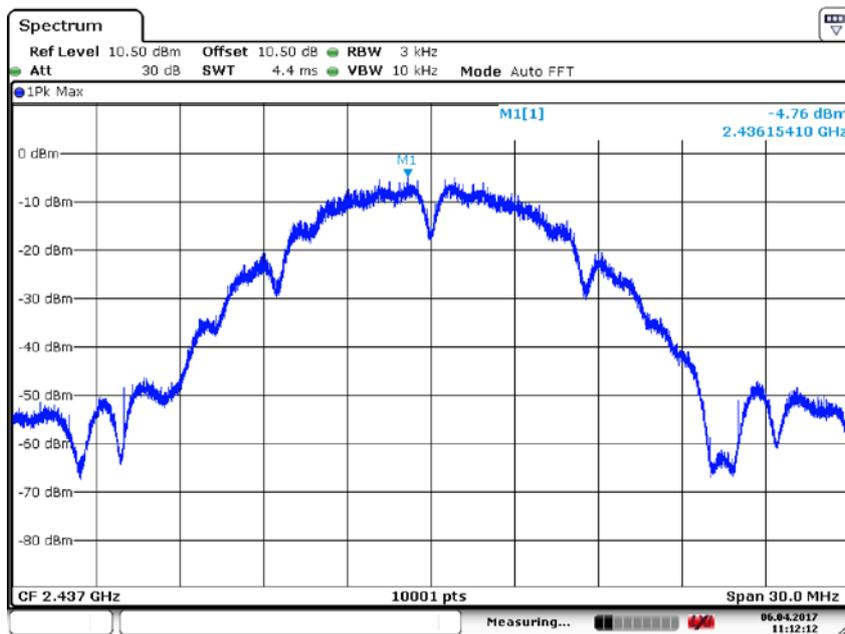
### Transmitter Power Spectral Density

Test Mode: 802.11b

| Carrier frequency (MHz) | Channel No | Power Density (dBm) |
|-------------------------|------------|---------------------|
| 2412                    | 1          | -3.09               |
| 2437                    | 6          | -4.76               |
| 2462                    | 11         | -6.03               |

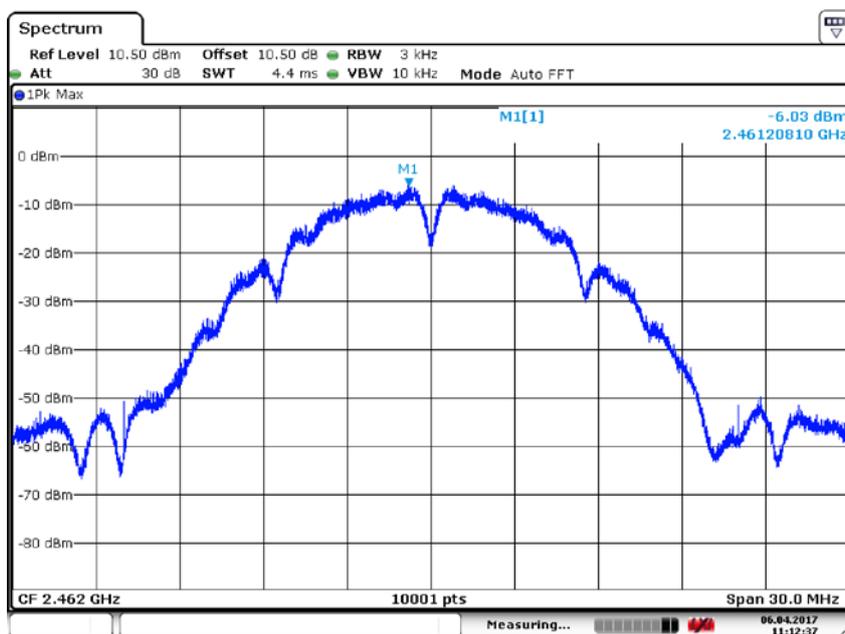


Carrier frequency (MHz): 2412  
Channel No.1  
Test Mode: 802.11b



Date: 6.APR.2017 11:12:12

Carrier frequency (MHz): 2437  
Channel No.6  
Test Mode: 802.11b

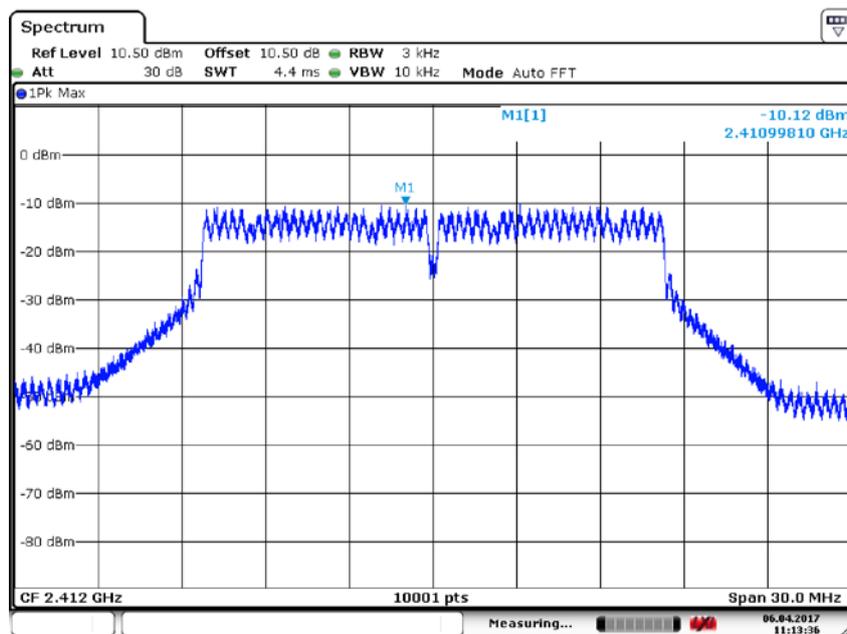


Date: 6.APR.2017 11:12:37

Carrier frequency (MHz): 2462  
Channel No.11  
Test Mode: 802.11b

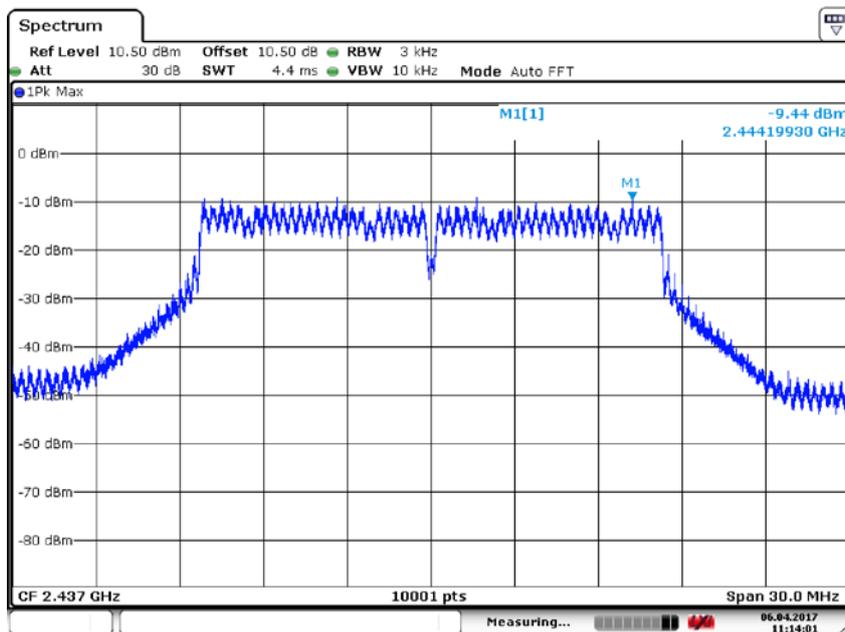
Test Mode: 802.11g

| Carrier frequency (MHz) | Channel No | Power Density (dBm) |
|-------------------------|------------|---------------------|
| 2412                    | 1          | -10.12              |
| 2442                    | 6          | -9.44               |
| 2472                    | 11         | -8.12               |



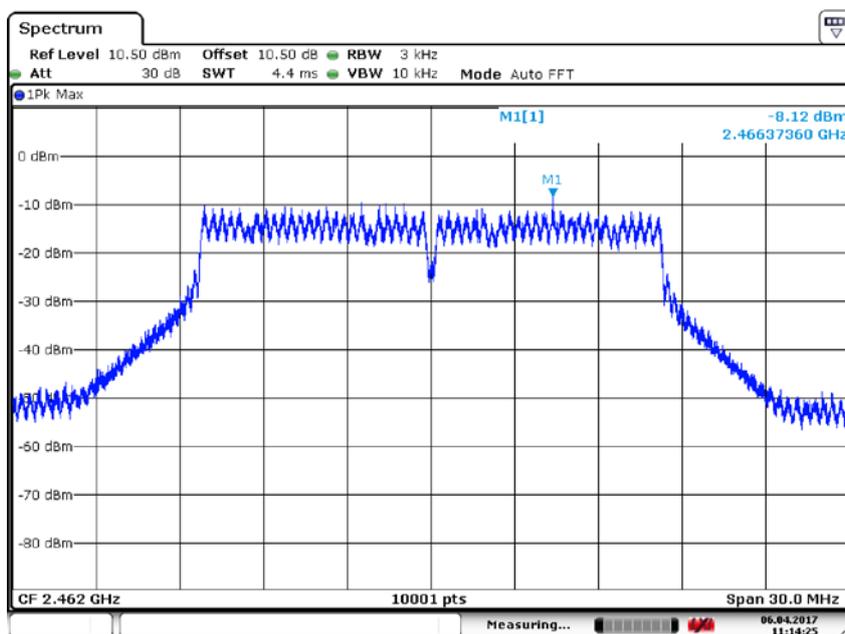
Date: 6.APR.2017 11:13:36

Carrier frequency (MHz): 2412  
Channel No.1  
Test Mode: 802.11g



Date: 6.APR.2017 11:14:01

Carrier frequency (MHz): 2437  
Channel No.6  
Test Mode: 802.11g

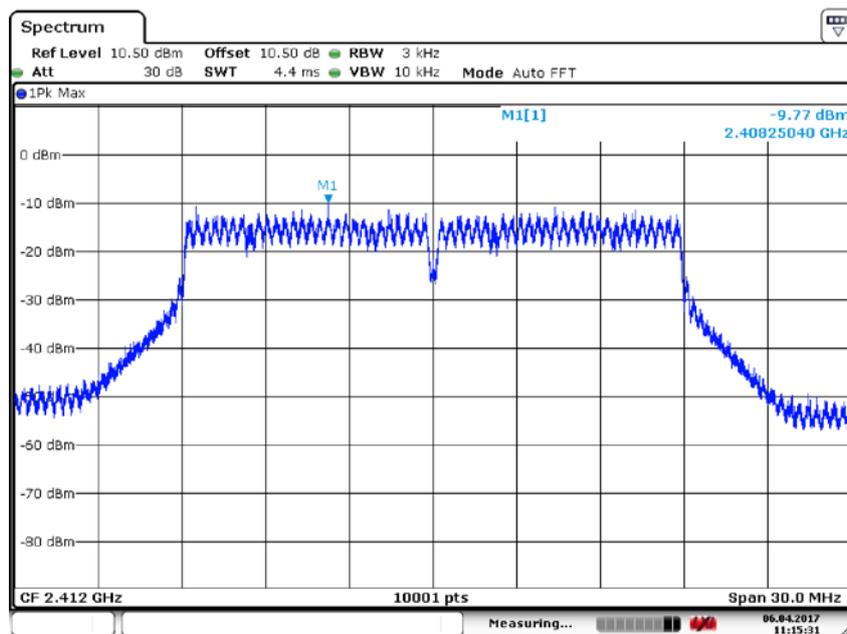


Date: 6.APR.2017 11:14:25

Carrier frequency (MHz): 2462  
Channel No.11  
Test Mode: 802.11g

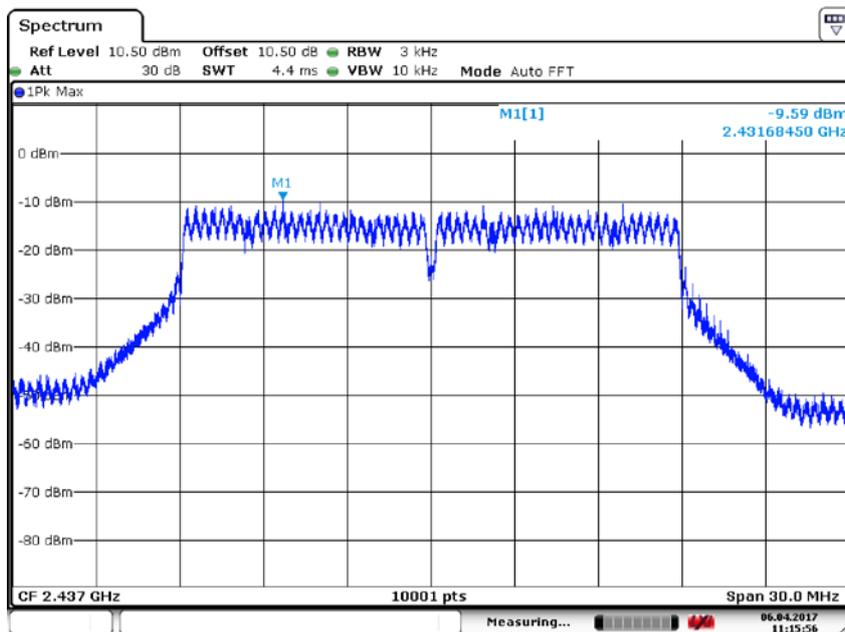
Test Mode: 802.11n(HT20)

| Carrier frequency (MHz) | Channel No | Power Density (dBm) |
|-------------------------|------------|---------------------|
| 2412                    | 1          | -9.77               |
| 2437                    | 6          | -9.59               |
| 2462                    | 11         | -11.17              |



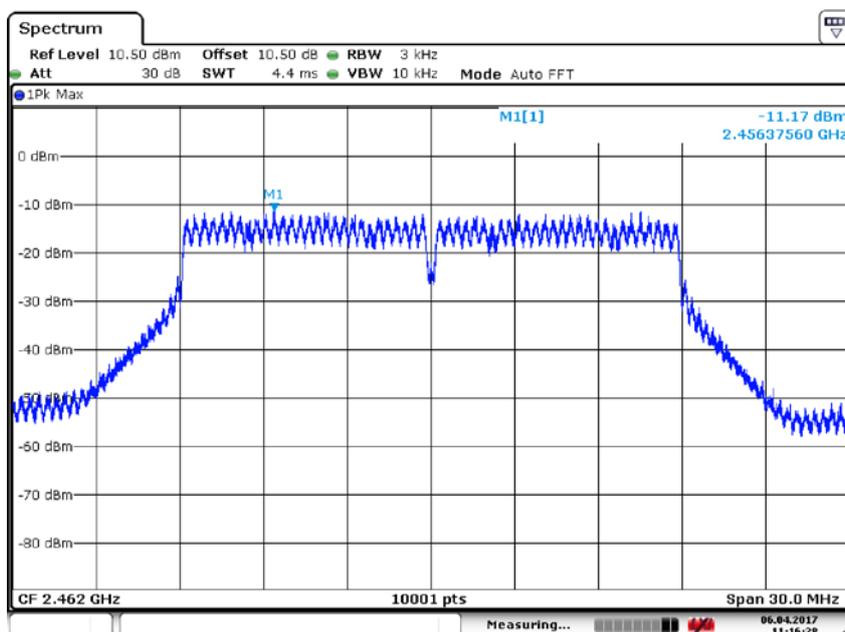
Date: 6.APR.2017 11:15:31

Carrier frequency (MHz): 2412  
Channel No.1  
Test Mode: 802.11n(HT20)



Date: 6.APR.2017 11:15:57

Carrier frequency (MHz): 2437  
Channel No.6  
Test Mode: 802.11n(HT20)



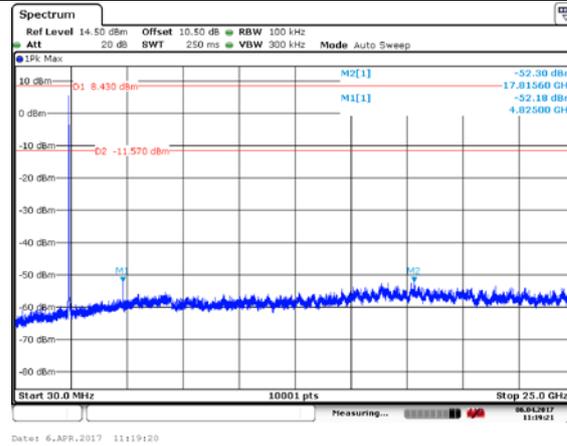
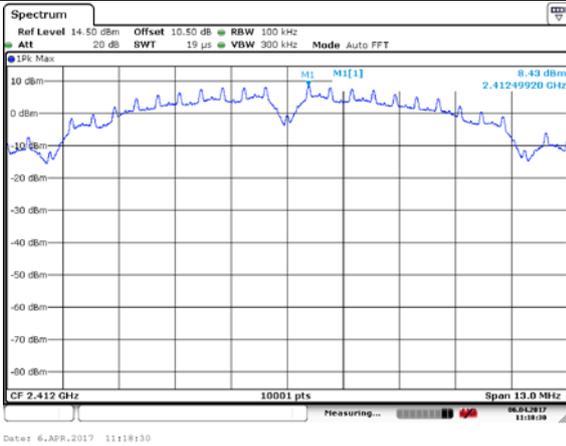
Date: 6.APR.2017 11:16:28

Carrier frequency (MHz): 2462  
Channel No.11  
Test Mode: 802.11n(HT20)

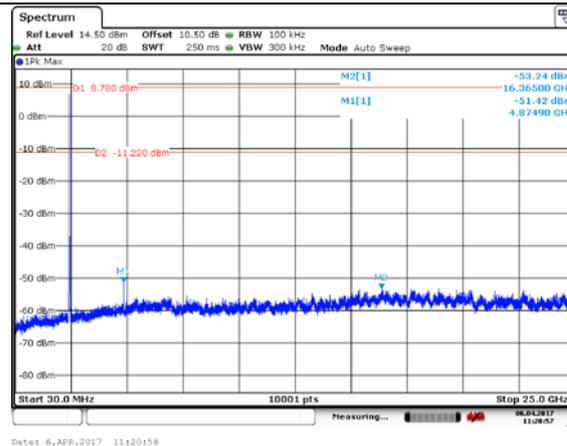
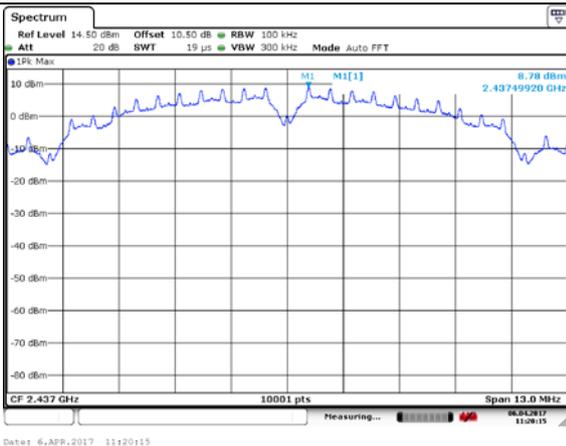
Conducted Out of band emission measurement

802.11b

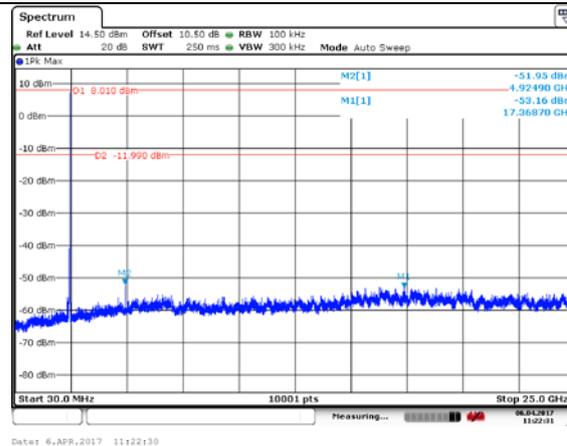
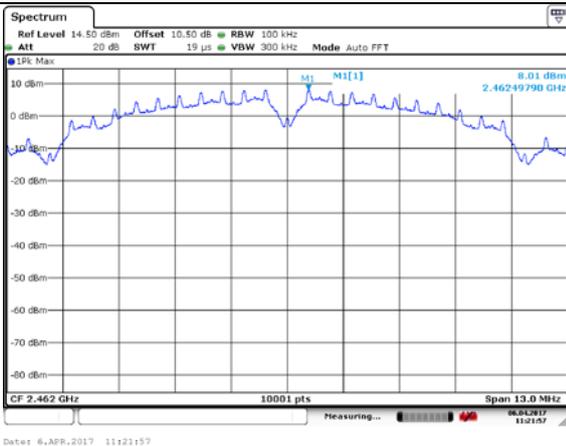
CH1



CH6

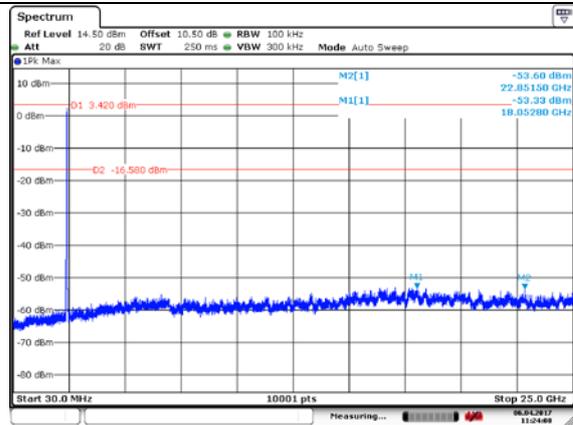
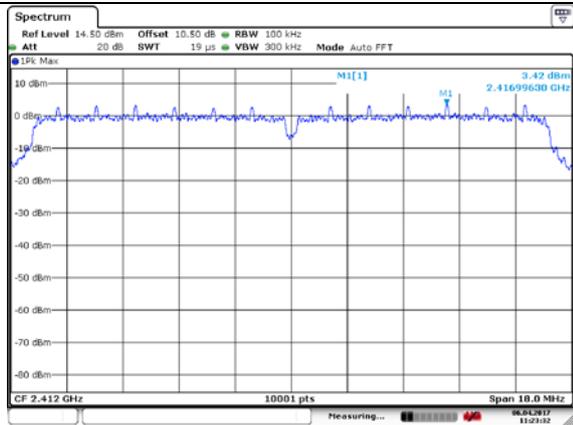


CH11

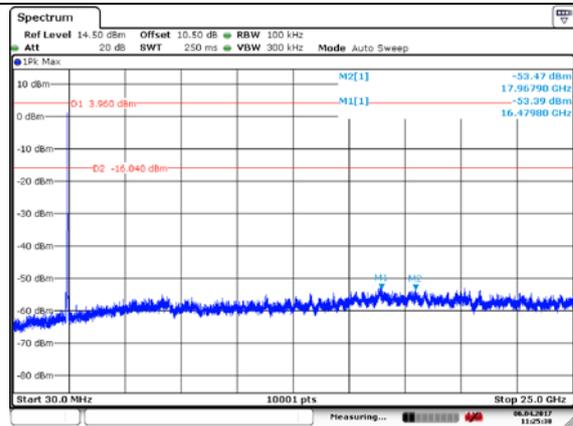
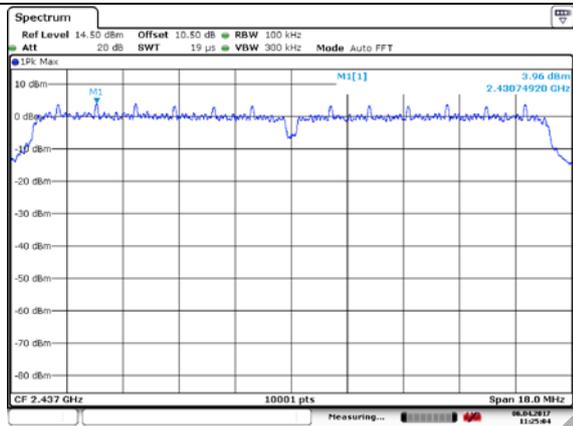


802.11g

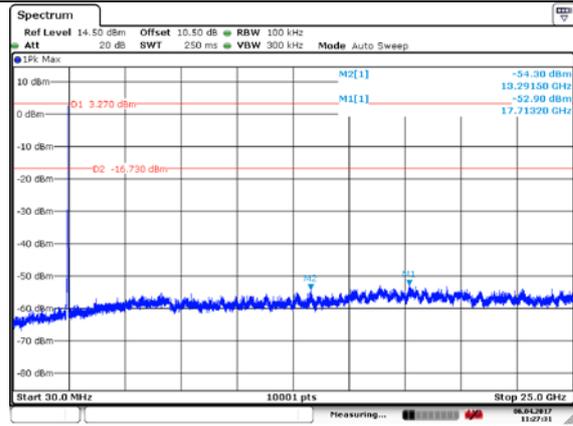
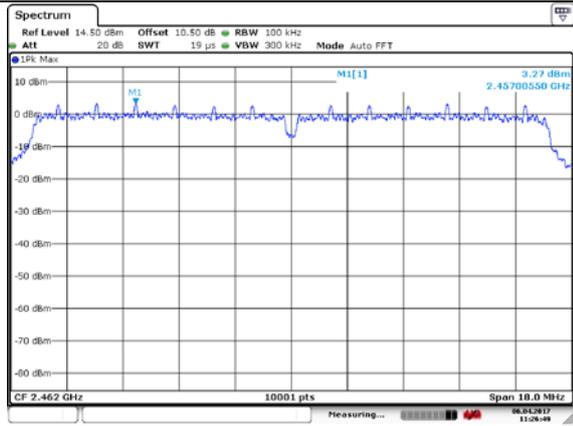
CH1



CH6

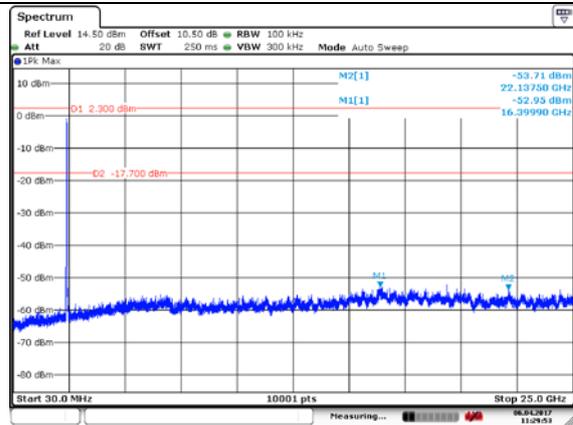
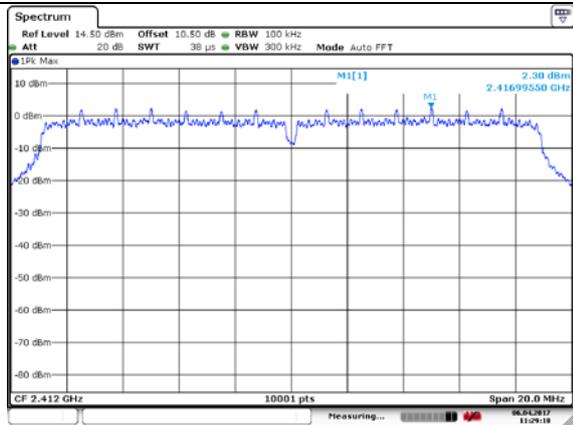


CH11

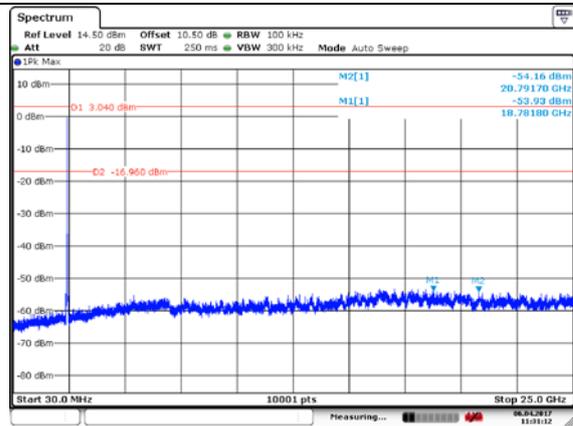
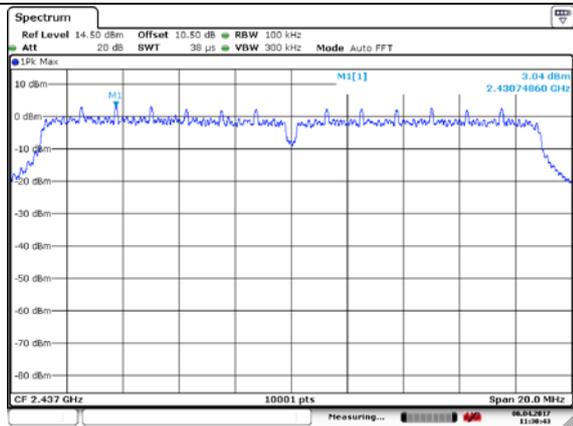


802.11n(20MHz)

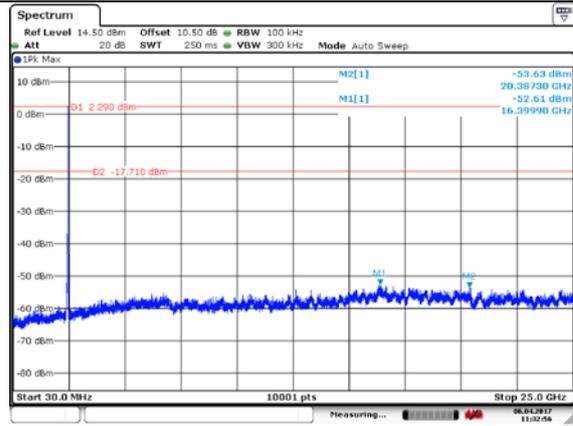
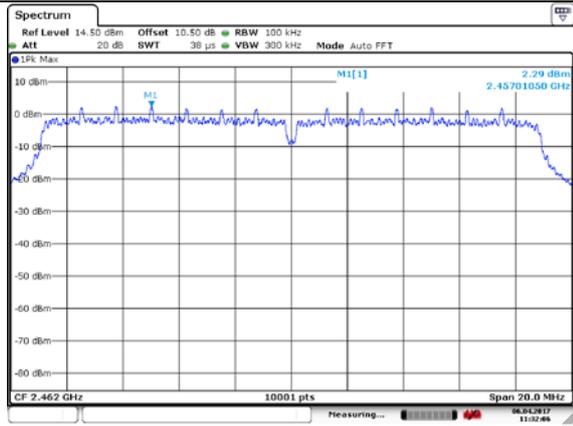
CH1



CH6



CH11



## APPENDIX B – TEST DATA OF RADIATED EMISSION

### Spurious Radiated Emissions

The worst case attitude: The mobile lay down.

Peak detector: RBW=1MHz,VBW=3MHz,sweep time=200ms;

Average detector: RBW=1MHz,VBW=3MHz,sweep time=auto;

Carrier frequency (MHz): 2412

Channel No.:1

Test Mode: 802.11b

Polarity:Vertical

Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 94.18                  | 60.18                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 61.74                  | 27.74                | -12.26          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412

Channel No.:1

Test Mode: 802.11b

Polarity:Horizontal

Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 88.81                  | 54.81                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 58.51                  | 24.51                | -15.49          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11b  
Polarity:Vertical  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 82.90                  | 48.90                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 53.64                  | 19.64                | -0.36           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11b  
Polarity:Horizontal  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 79.11                  | 45.11                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 52.98                  | 18.98                | -1.02           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11b  
Polarity:Vertical  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 93.18                  | 59.18                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 60.26                  | 26.26                | -13.74          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11b  
Polarity:Horizontal  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 88.81                  | 54.81                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 59.36                  | 25.36                | -14.64          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11b  
Polarity:Vertical  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 84.52                  | 50.52                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 50.30                  | 16.30                | -3.70           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11b  
Polarity:Horizontal  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 80.73                  | 46.73                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 50.03                  | 16.03                | -3.97           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11g  
Polarity: Vertical  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 94.33                  | 60.33                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 58.14                  | 24.14                | -15.86          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11g  
Polarity:Horizontal  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 89.69                  | 55.69                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 56.29                  | 22.29                | -17.71          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11g  
Polarity: Vertical  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 86.29                  | 52.29                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 53.16                  | 19.16                | -0.84           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11g  
Polarity:Horizontal  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 83.94                  | 49.94                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 51.06                  | 17.06                | -2.94           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11g  
Polarity: Vertical  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 93.47                  | 59.47                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 55.58                  | 21.58                | -18.42          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11g  
Polarity:Horizontal  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 90.19                  | 56.19                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 51.82                  | 17.82                | -22.18          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11g  
Polarity: Vertical  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 87.90                  | 53.90                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 52.01                  | 18.01                | -1.99           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11g  
Polarity:Horizontal  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 85.28                  | 51.28                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 50.85                  | 16.85                | -3.15           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11n(HT20)  
Polarity: Vertical  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 95.31                  | 61.31                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 54.74                  | 20.74                | -19.26          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11n(HT20)  
Polarity:Horizontal  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 91.01                  | 57.01                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 51.30                  | 17.30                | -22.70          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11n(HT20)  
Polarity: Vertical  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 86.78                  | 52.78                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 50.78                  | 16.78                | -3.22           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2412  
Channel No.:1  
Test Mode: 802.11n(HT20)  
Polarity:Horizontal  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2412            | 85.07                  | 51.07                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2390            | 49.19                  | 15.19                | -4.81           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11n(HT20)  
Polarity: Vertical  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 91.31                  | 57.31                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 55.43                  | 21.43                | -18.57          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11n(HT20)  
Polarity:Horizontal  
Detector: Peak

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 90.79                  | 56.79                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 53.35                  | 19.35                | -20.65          | 74.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11n(HT20)  
Polarity: Vertical  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 86.33                  | 52.33                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 50.06                  | 16.06                | -3.94           | 54.00          | 8.90            | 25.10               |

Carrier frequency (MHz): 2462  
Channel No.:11  
Test Mode: 802.11n(HT20)  
Polarity:Horizontal  
Detector: Average

| No | Frequency (MHz) | Measure Level (dBuV/m) | Reading Level (dBuV) | Over Limit (dB) | Limit (dBuV/m) | cable loss (dB) | antenna factor (dB) |
|----|-----------------|------------------------|----------------------|-----------------|----------------|-----------------|---------------------|
| 1  | 2462            | 85.03                  | 51.03                | N/A             | N/A            | 8.90            | 25.10               |
| 2  | 2483.5          | 49.79                  | 15.79                | -4.21           | 54.00          | 8.90            | 25.10               |

For 802.11b

| Frequency(MHz) | Result(dBuV/m) | ARpl (dB) | Pmea (dBuV/m) | Polarity |
|----------------|----------------|-----------|---------------|----------|
| 37.77          | 25.0           | 7.4       | 17.60         | Vertical |
| 78.59          | 17.1           | 8.8       | 8.30          | Vertical |
| 168.01         | 13.0           | 10.8      | 2.20          | Vertical |
| 183.56         | 13.5           | 10.8      | 2.70          | Vertical |
| 552.9          | 21.8           | 13.6      | 8.20          | Vertical |
| 900.86         | 28.4           | 14.5      | 13.90         | Vertical |

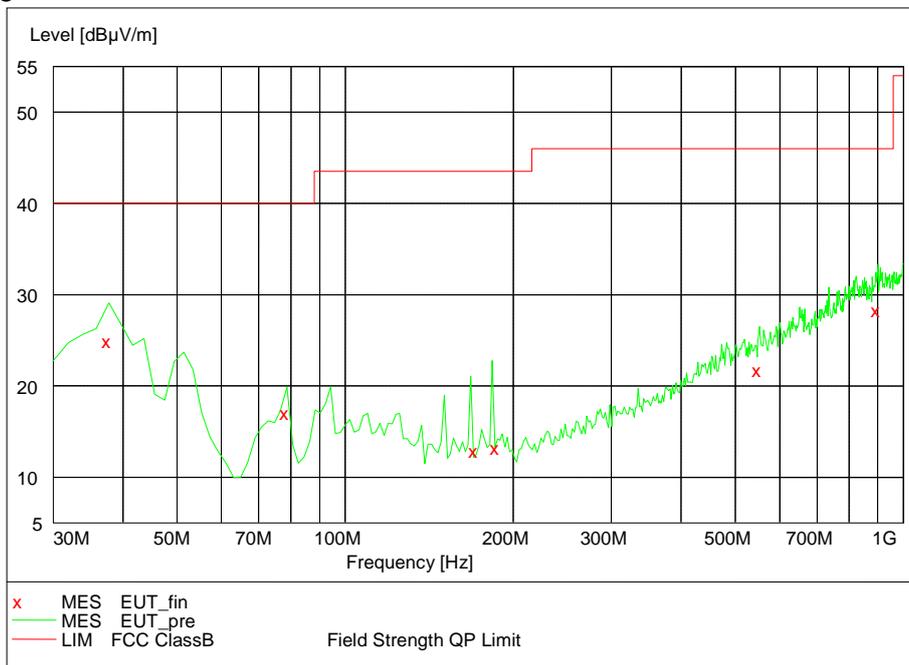
For 802.11g

| Frequency(MHz) | Result(dBuV/m) | ARpl (dB) | Pmea (dBuV/m) | Polarity |
|----------------|----------------|-----------|---------------|----------|
| 37.77          | 24.9           | 7.4       | 17.50         | Vertical |
| 51.38          | 21.8           | 8.5       | 13.30         | Vertical |
| 76.65          | 15.4           | 8.8       | 6.60          | Vertical |
| 183.56         | 13.5           | 10.8      | 2.70          | Vertical |
| 549.01         | 21.6           | 13.6      | 8.00          | Vertical |
| 920.3          | 28.5           | 14.8      | 13.70         | Vertical |

For 802.11n(HT20)

| Frequency(MHz) | Result(dBuV/m) | ARpl (dB) | Pmea (dBuV/m) | Polarity |
|----------------|----------------|-----------|---------------|----------|
| 37.77          | 24.9           | 7.4       | 17.50         | Vertical |
| 53.32          | 20             | 8.5       | 11.50         | Vertical |
| 168.01         | 13.9           | 10.8      | 3.10          | Vertical |
| 183.56         | 13.5           | 10.8      | 2.70          | Vertical |
| 541.24         | 21.5           | 13.6      | 7.90          | Vertical |
| 930.02         | 28.3           | 14.8      | 13.50         | Vertical |

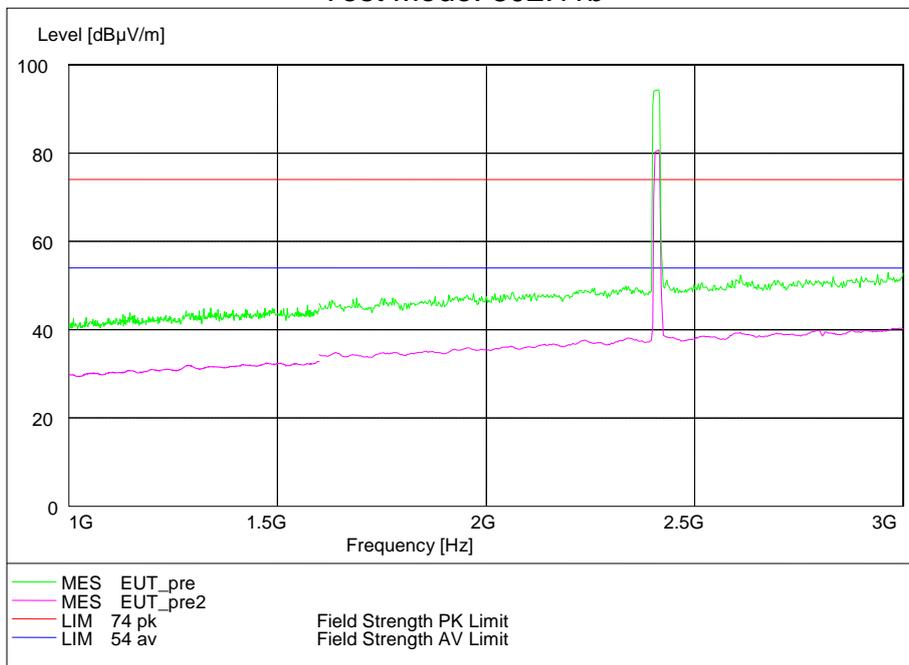
Carrier frequency (MHz): 2437  
Channel No.:6



Frequency Range: 30MHz -1GHz

Detector: QP mode

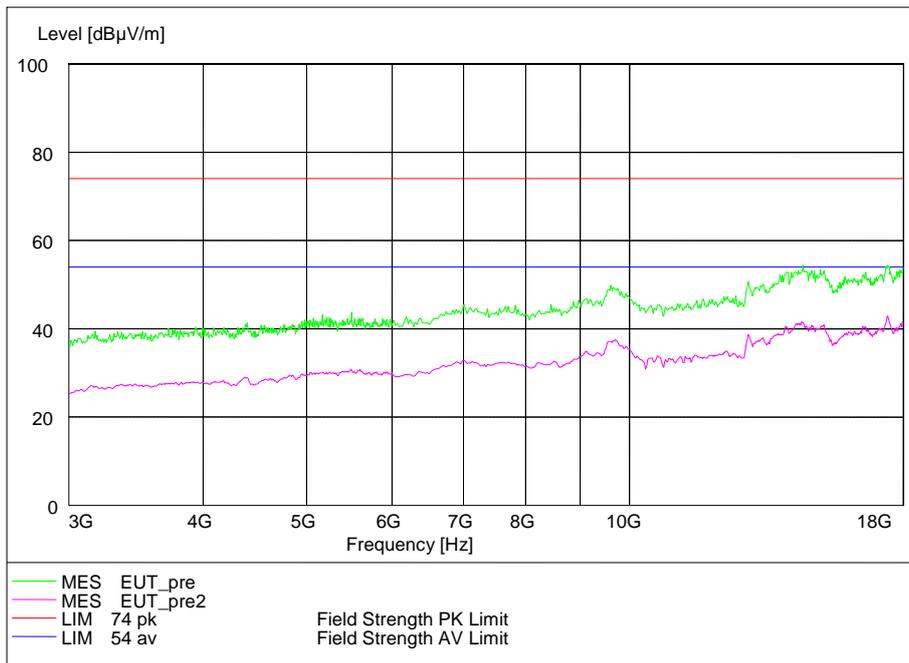
Test Mode: 802.11b



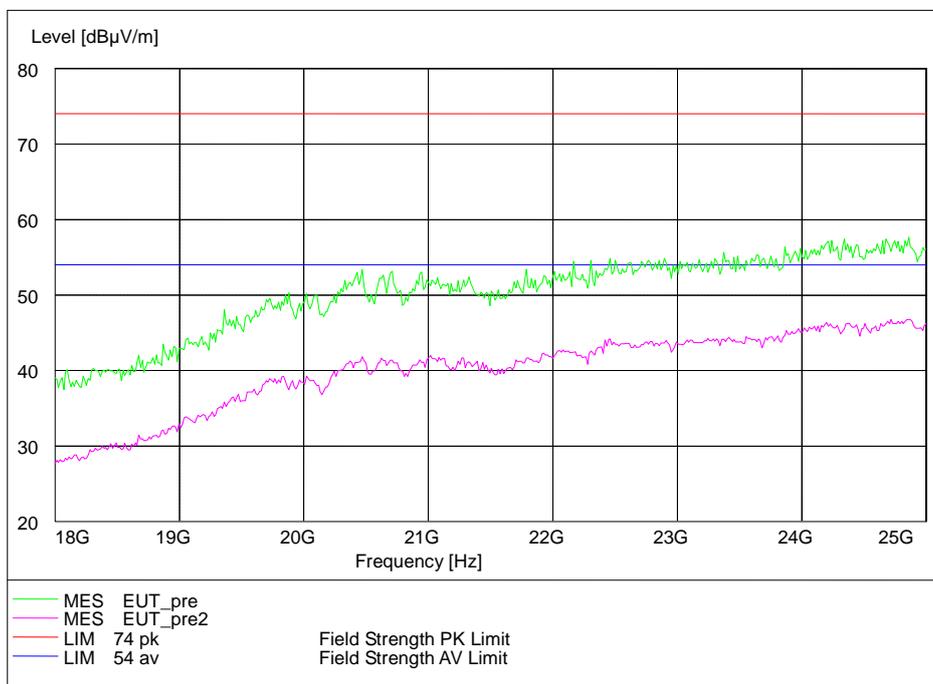
Frequency Range: 1GHz -3GHz

Detector: Av mode and PK mode

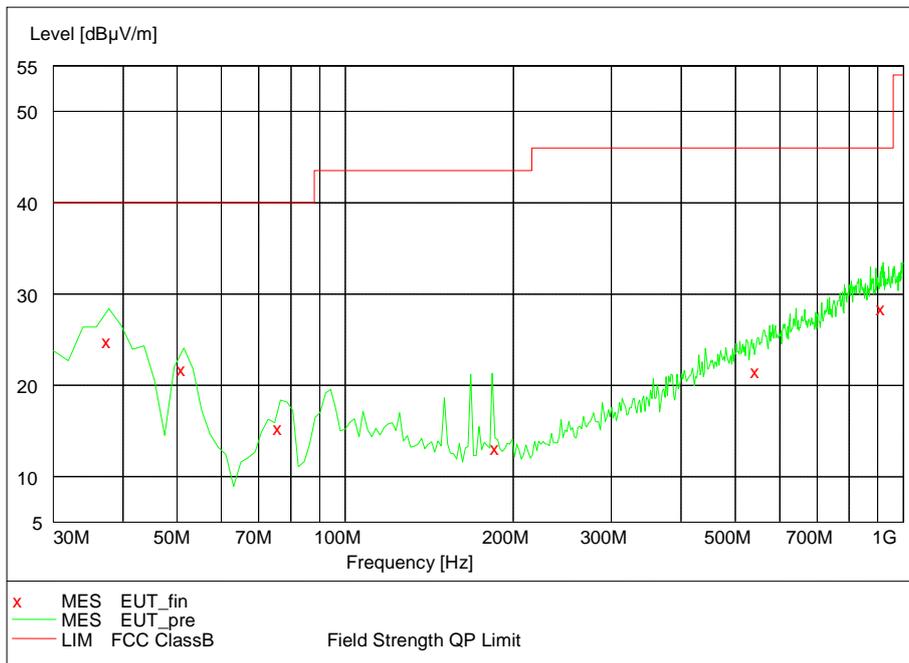
Modulation type: 802.11b



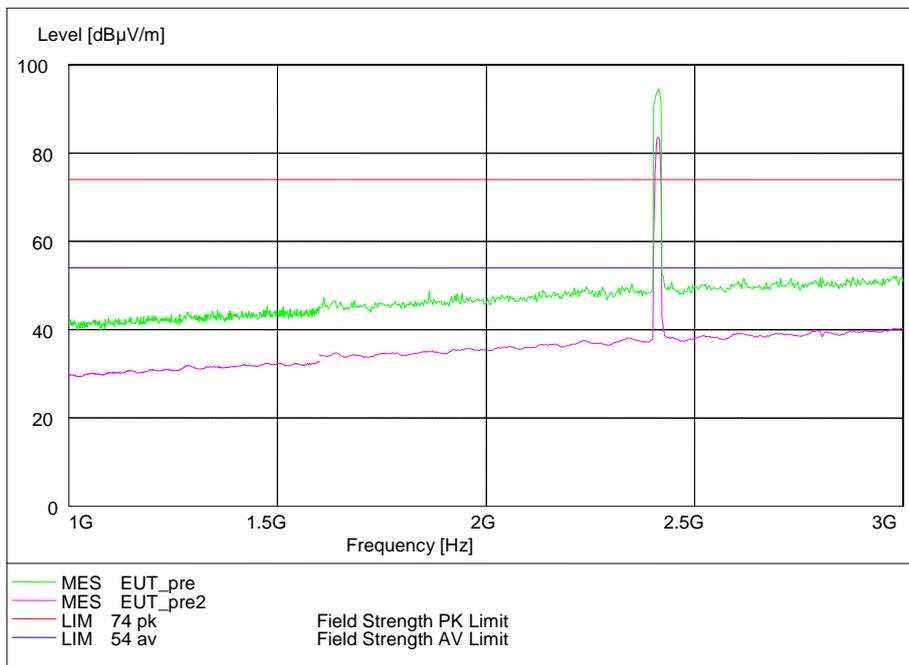
Frequency Range: 3GHz -18GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11b



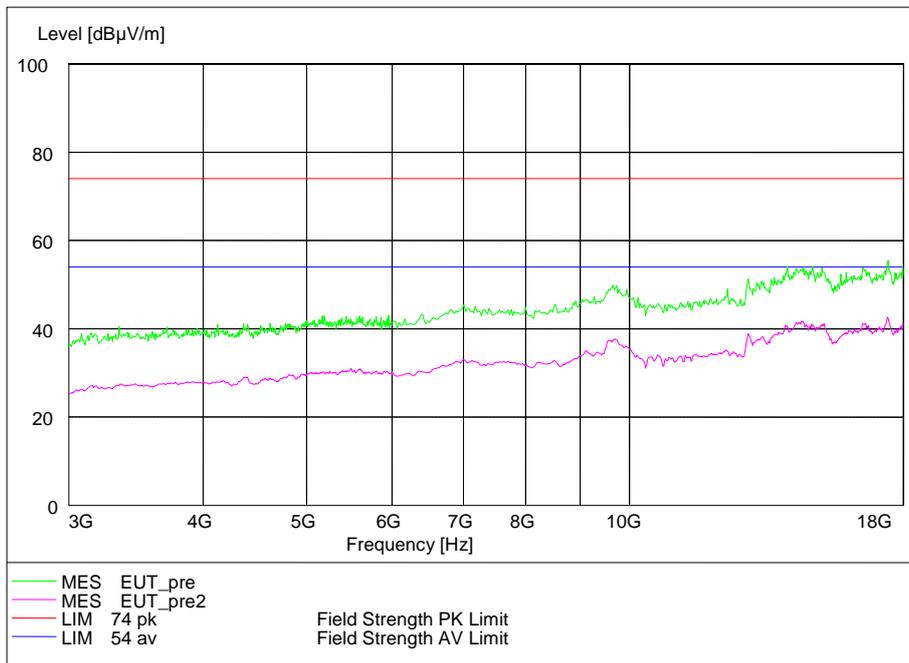
Frequency Range: 18GHz -25GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11b



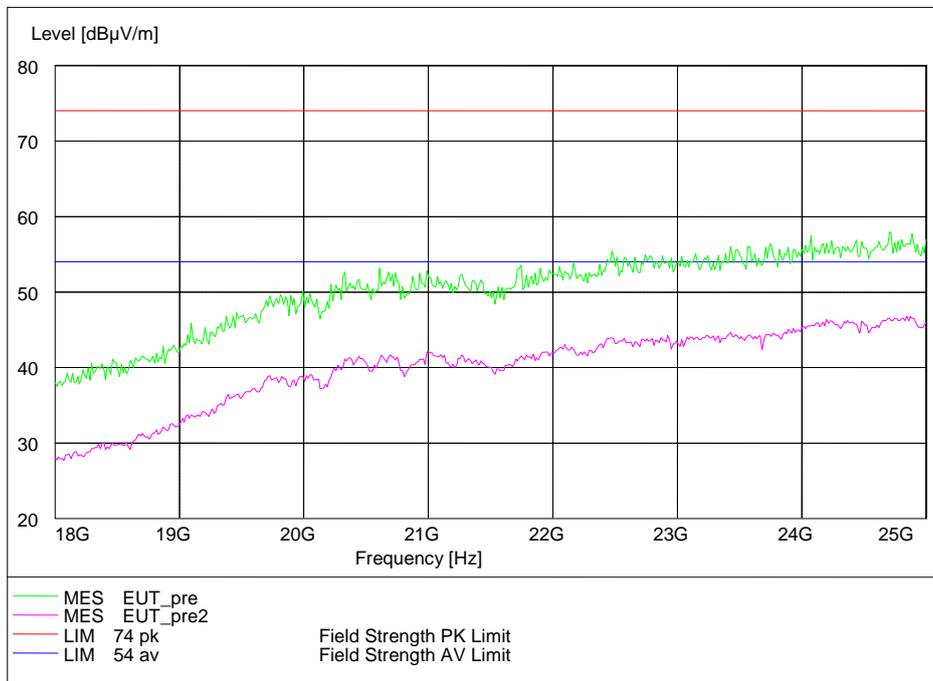
Frequency Range: 30MHz -1GHz  
Detector: QP mode  
Modulation type: 802.11g



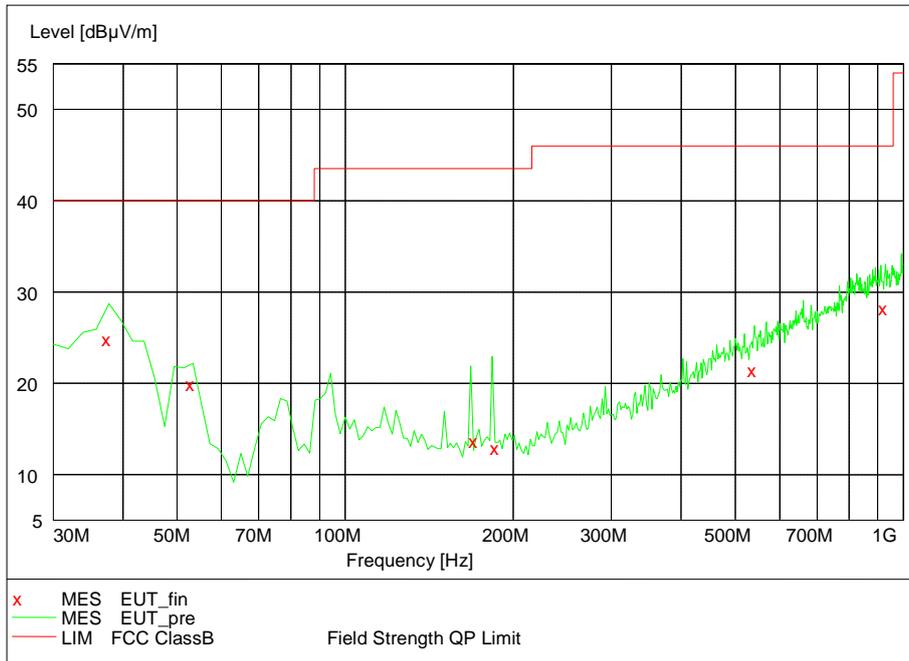
Frequency Range: 1GHz -3GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11g



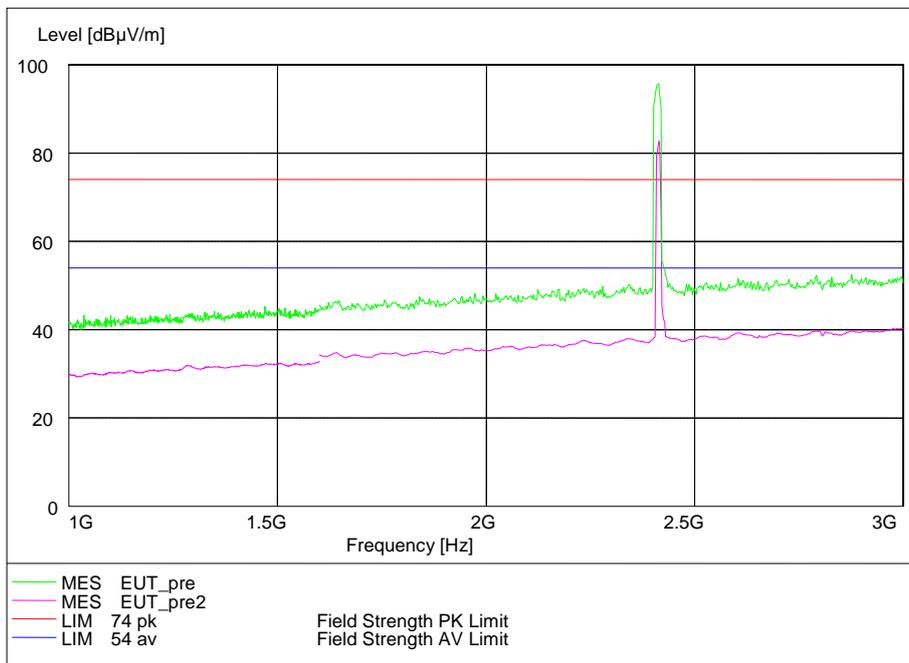
Frequency Range: 3GHz -18GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11g



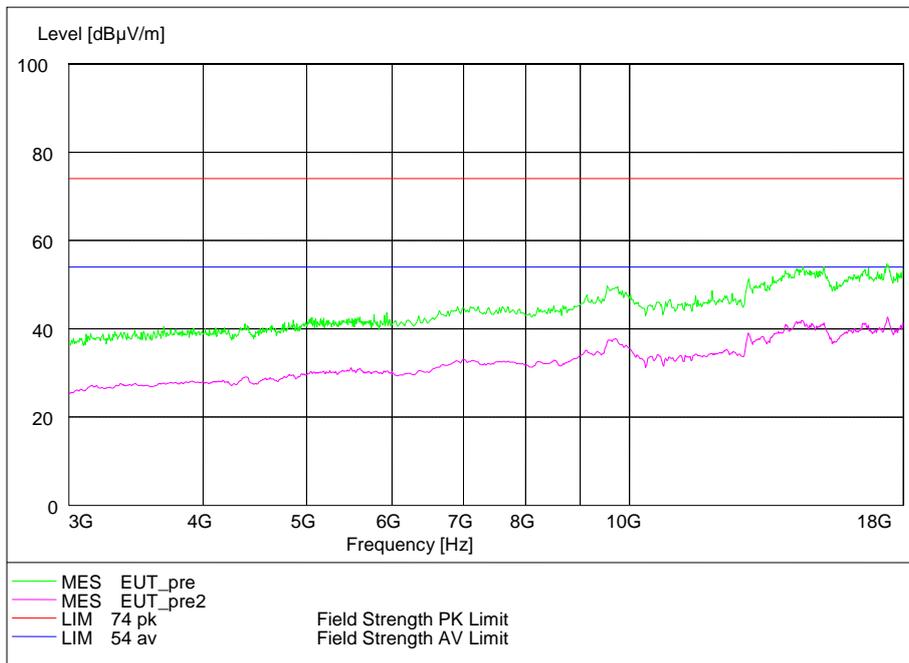
Frequency Range: 18GHz -25GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11g



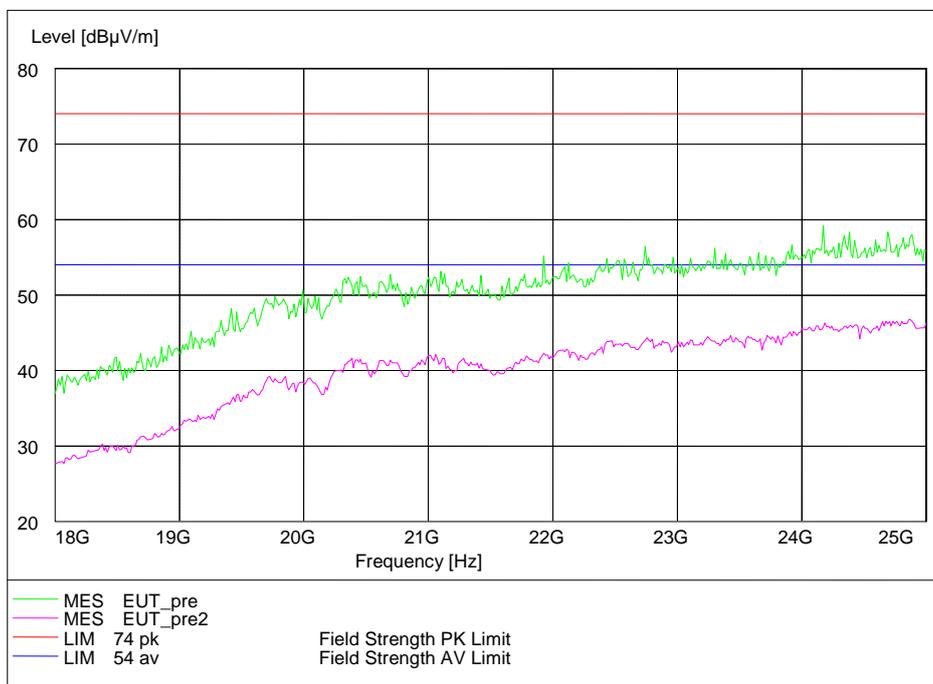
Frequency Range: 30MHz -1GHz  
Detector: QP mode  
Test Mode: 802.11n(HT20)



Frequency Range: 1GHz -3GHz  
Detector: Av mode and PK mode  
Modulation type: 802.11n(HT20)

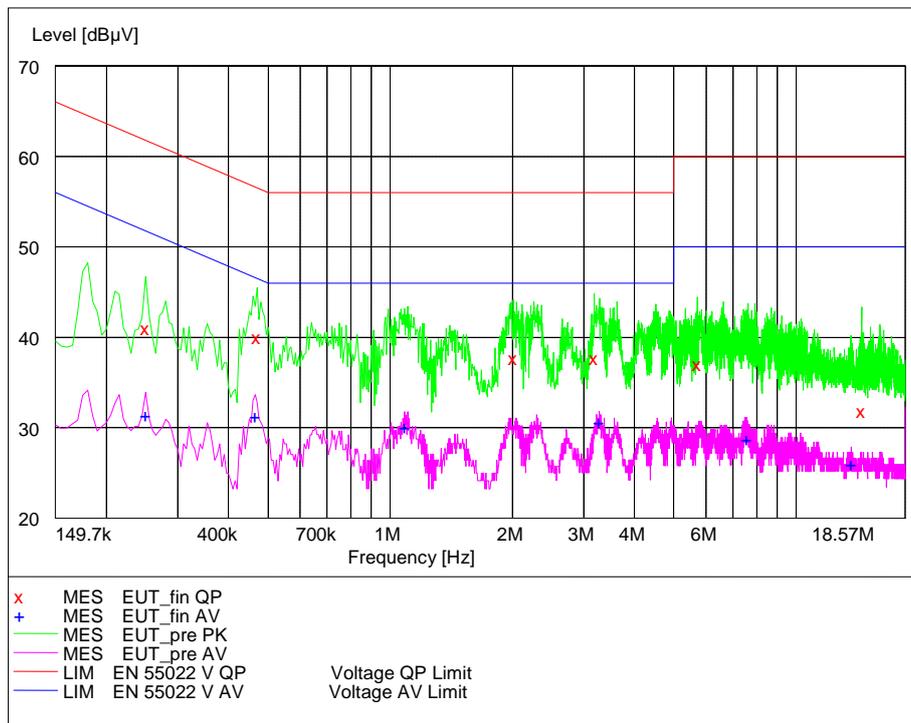


Frequency Range: 3GHz -18GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)



Frequency Range: 18GHz -25GHz  
 Detector: Av mode and PK mode  
 Modulation type: 802.11n(HT20)

### AC Power line Conducted Emission



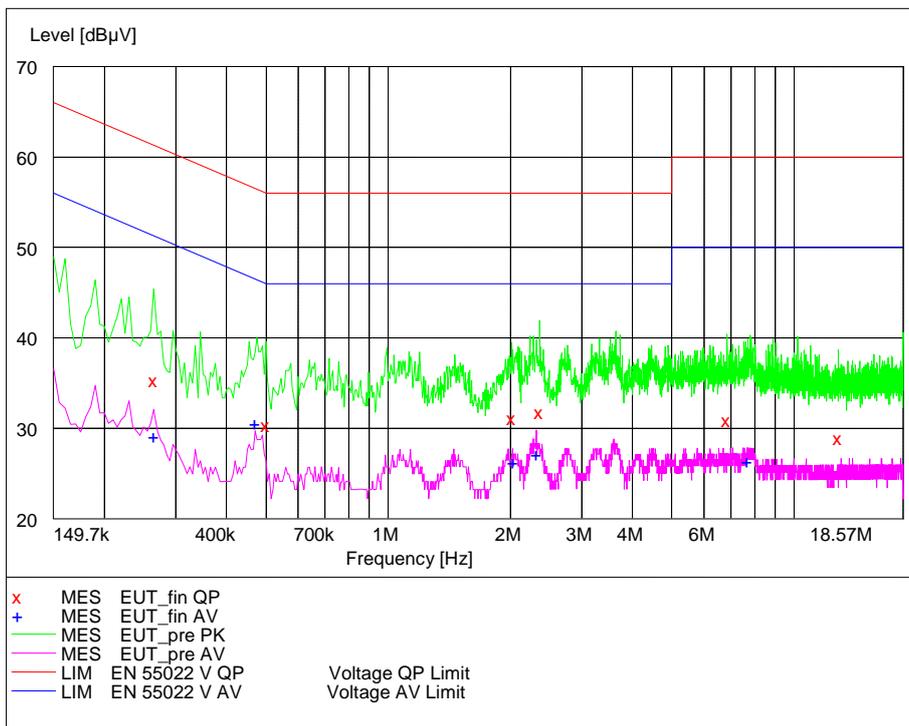
L Line

#### MEASUREMENT RESULT: "EUT\_fin QP"

| Frequency | Level | Transd | Limit | Margin | Line | PE  |
|-----------|-------|--------|-------|--------|------|-----|
| MHz       | dBµV  | dB     | dBµV  | dB     |      |     |
| 0.250000  | 41.10 | 29.6   | 62    | 20.7   | ---  | --- |
| 0.470000  | 40.10 | 29.5   | 57    | 16.4   | ---  | --- |
| 2.010000  | 37.80 | 29.5   | 56    | 18.2   | ---  | --- |
| 3.185000  | 37.80 | 29.6   | 56    | 18.2   | ---  | --- |
| 5.710000  | 37.20 | 29.7   | 60    | 22.8   | ---  | --- |
| 14.535000 | 32.00 | 30.0   | 60    | 28.0   | ---  | --- |

#### MEASUREMENT RESULT: "EUT\_fin AV"

| Frequency | Level | Transd | Limit | Margin | Line | PE  |
|-----------|-------|--------|-------|--------|------|-----|
| MHz       | dBµV  | dB     | dBµV  | dB     |      |     |
| 0.250000  | 31.50 | 29.6   | 52    | 20.2   | ---  | --- |
| 0.465000  | 31.40 | 29.5   | 47    | 15.2   | ---  | --- |
| 1.085000  | 30.20 | 29.5   | 46    | 15.8   | ---  | --- |
| 3.270000  | 30.70 | 29.6   | 46    | 15.3   | ---  | --- |
| 7.550000  | 28.80 | 29.7   | 50    | 21.2   | ---  | --- |
| 13.680000 | 26.10 | 30.0   | 50    | 23.9   | ---  | --- |



N Line

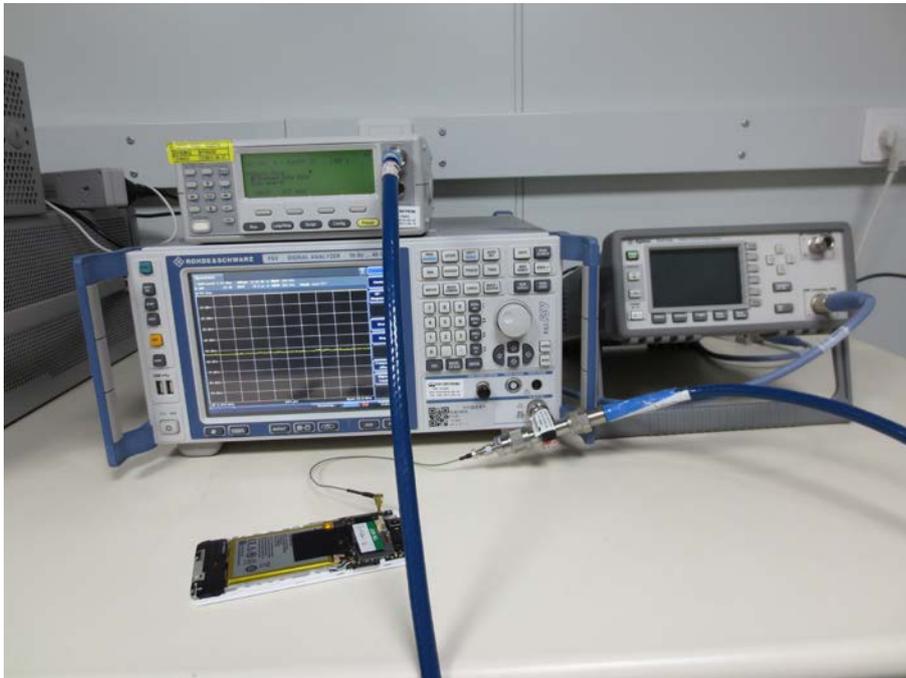
**MEASUREMENT RESULT: "EUT\_fin QP"**

| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|------|-----|
| 0.265000         | 35.40         | 29.6         | 61            | 25.9         | ---  | --- |
| 0.500000         | 30.40         | 29.5         | 56            | 25.6         | ---  | --- |
| 2.015000         | 31.20         | 29.5         | 56            | 24.8         | ---  | --- |
| 2.365000         | 31.90         | 29.5         | 56            | 24.1         | ---  | --- |
| 6.835000         | 31.00         | 29.7         | 60            | 29.0         | ---  | --- |
| 12.870000        | 29.00         | 29.9         | 60            | 31.0         | ---  | --- |

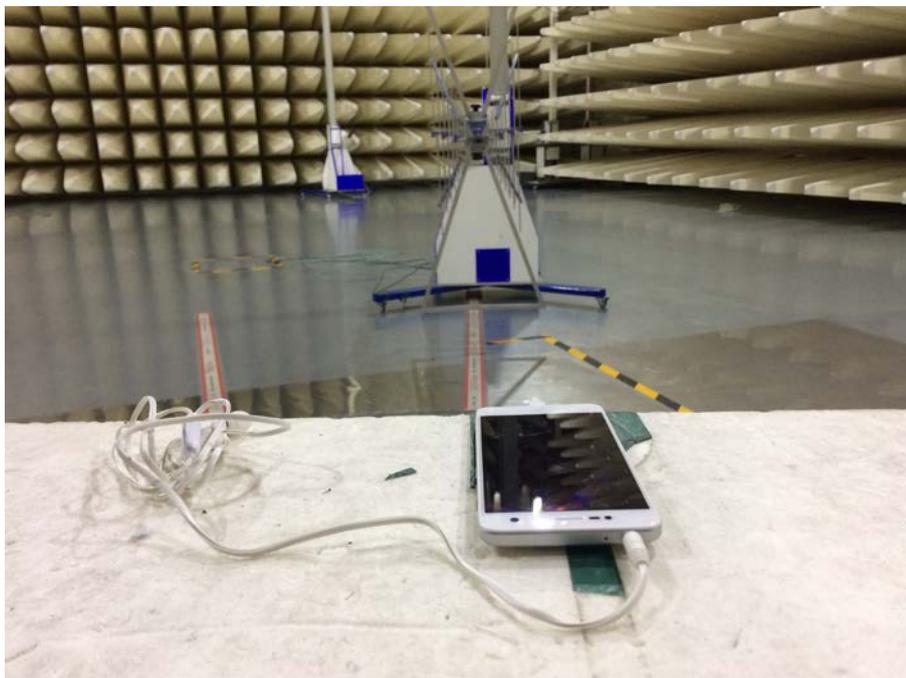
**MEASUREMENT RESULT: "EUT\_fin AV"**

| Frequency<br>MHz | Level<br>dBµV | Transd<br>dB | Limit<br>dBµV | Margin<br>dB | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|------|-----|
| 0.265000         | 29.20         | 29.6         | 51            | 22.0         | ---  | --- |
| 0.470000         | 30.70         | 29.5         | 47            | 15.8         | ---  | --- |
| 2.025000         | 26.40         | 29.6         | 46            | 19.6         | ---  | --- |
| 2.320000         | 27.20         | 29.6         | 46            | 18.8         | ---  | --- |
| 7.650000         | 26.50         | 29.7         | 50            | 23.5         | ---  | --- |
| 24.610000        | 26.00         | 31.1         | 50            | 24.0         | ---  | --- |

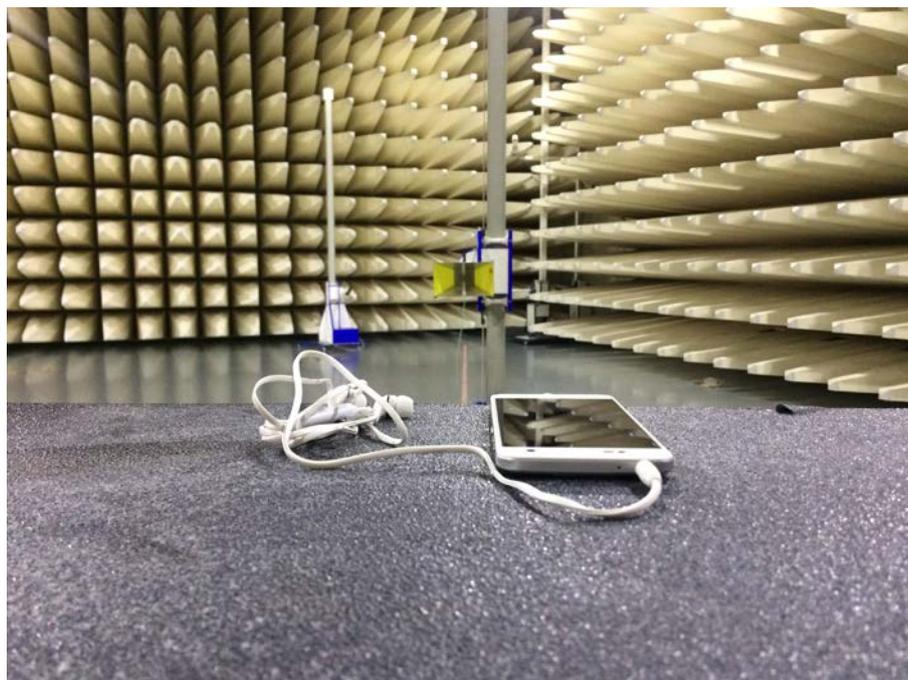
## Appendix C Test Setup



Spurious RF Conducted Emissions Test setup



Spurious Radiated Emissions Test setup (30MHz~1GHz)



Spurious Radiated Emissions Test setup (1GHz~25GHz)

---End of Test Report---