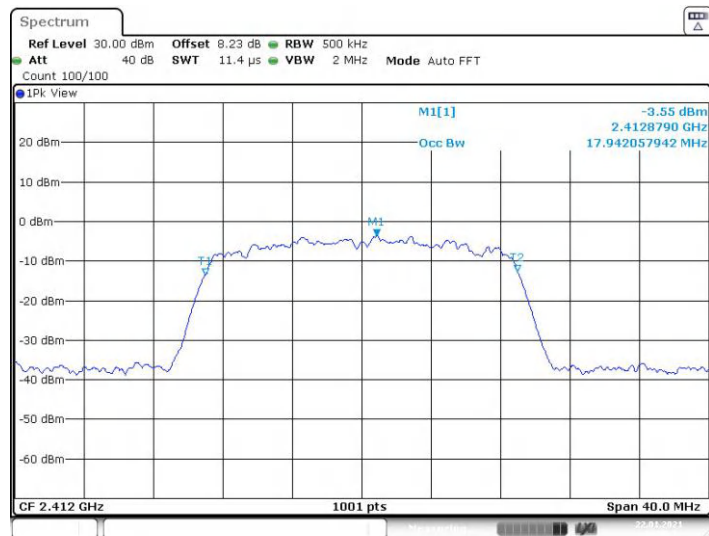


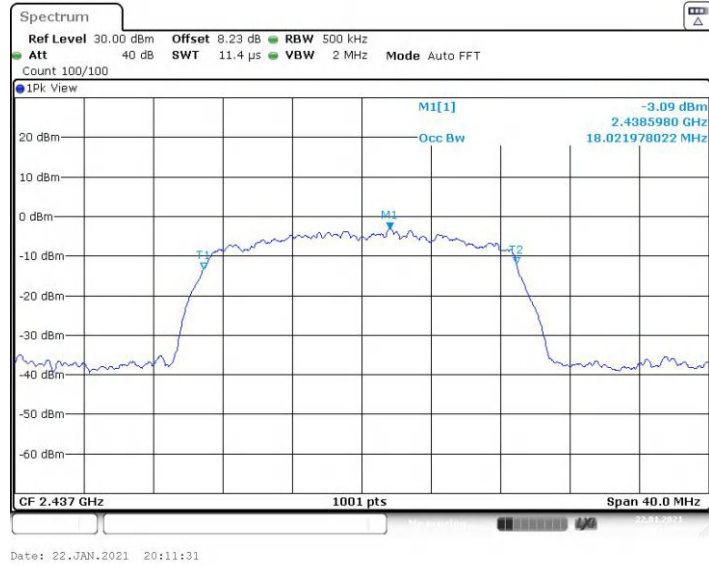
| Test Mode:              | 802.11n(HT20) Mode  |             |
|-------------------------|---------------------|-------------|
| Channel frequency (MHz) | 99% Bandwidth (MHz) | Limit (MHz) |
| 2412                    | 17.942              | >=0.5       |
| 2437                    | 18.022              |             |
| 2462                    | 18.022              |             |

**2412 MHz**

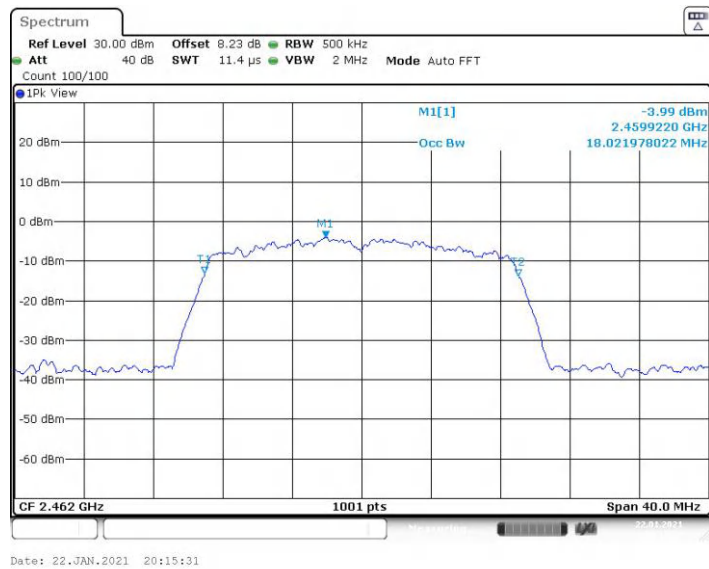


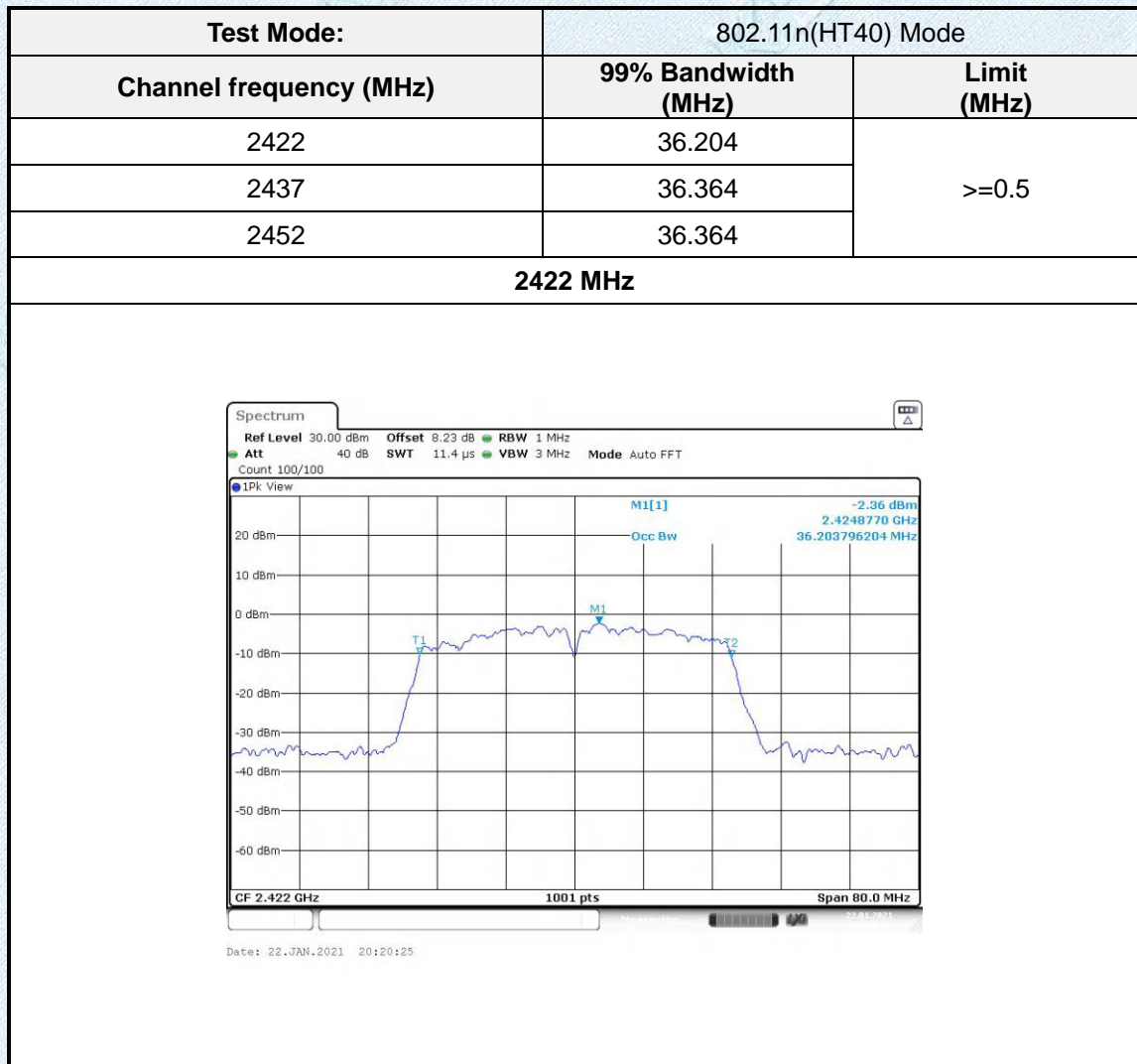
Date: 22.JAN.2021 20:07:10

### 2437 MHz

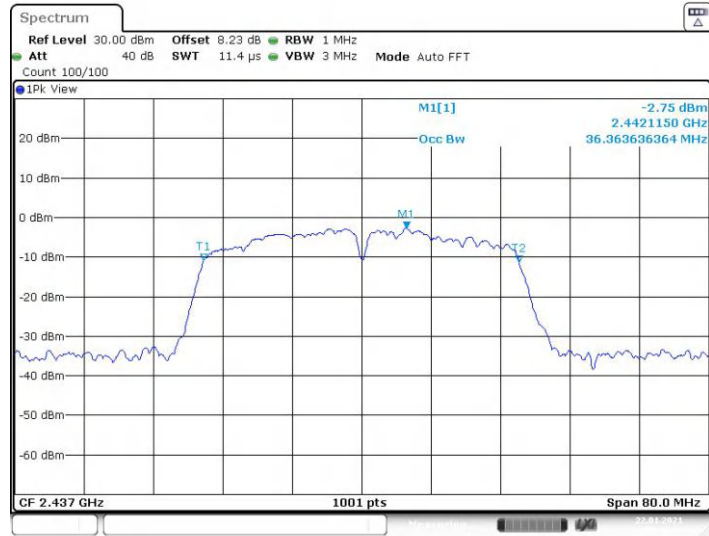


### 2462 MHz



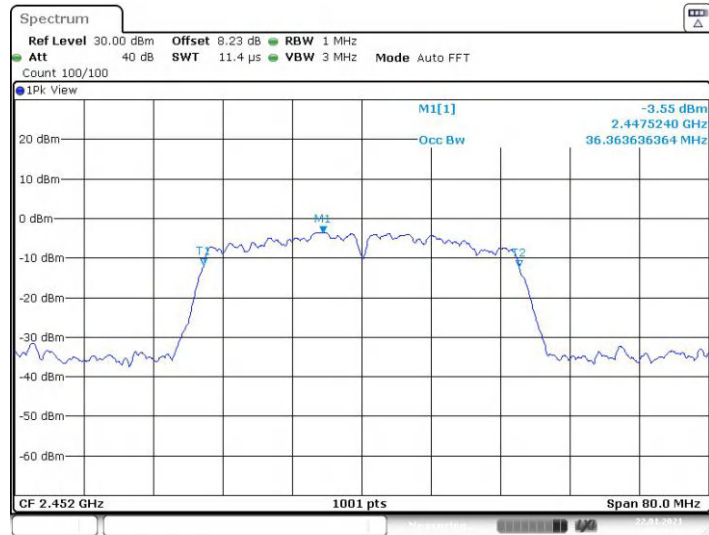


### 2437 MHz



Date: 22.JAN.2021 20:28:31

### 2452 MHz



Date: 22.JAN.2021 20:33:19

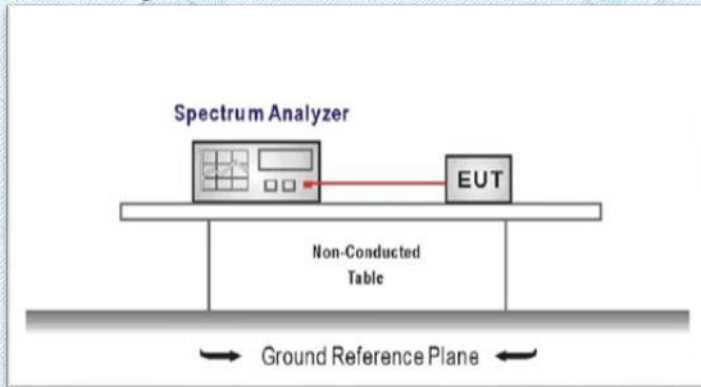
### 3.5. Band edge and Spurious Emission (conducted)

#### Limit

#### **FCC CFR Title 47 Part 15 Subpart C Section 15.247 (d):**

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement.

#### **Test Configuration**



#### **Test Procedure**

1. Connect EUT RF Output port to the Spectrum Analyzer through an RF attenuator.
2. Spectrum Setting:  
 RBW=100KHz  
 VBW=300KHz.  
 Detector function: Peak.  
 Trace: Max hold.  
 Sweep = Auto couple.

Allow the trace to stabilize.

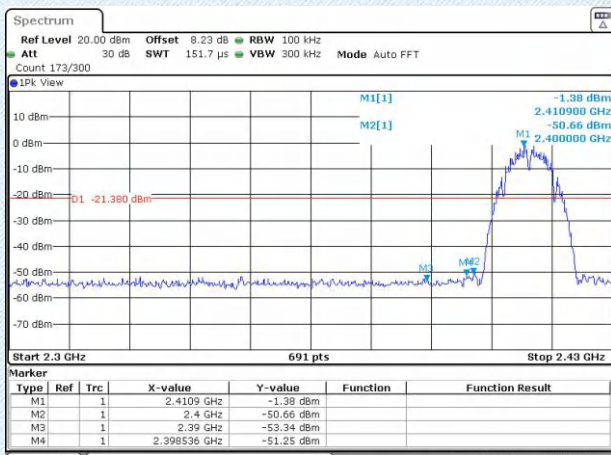
#### **Test Mode**

Please refer to the clause 2.3.

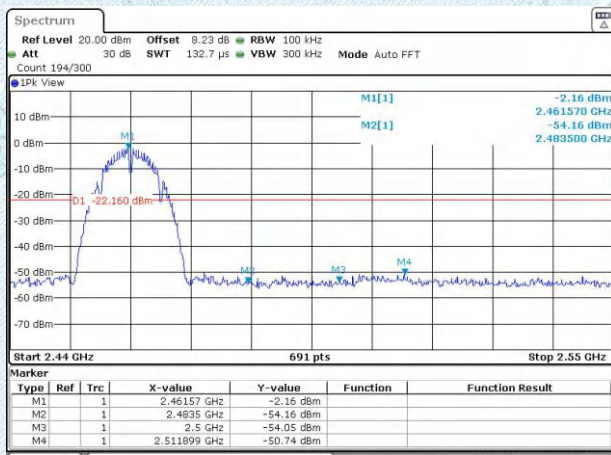
#### **Test Results**

802.11b

CH01-Bandedge



CH11-Bandedge

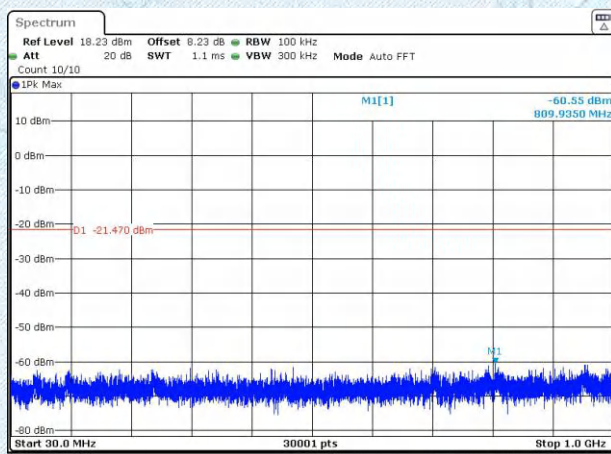


Date: 22, JAN, 2021 19:47:51

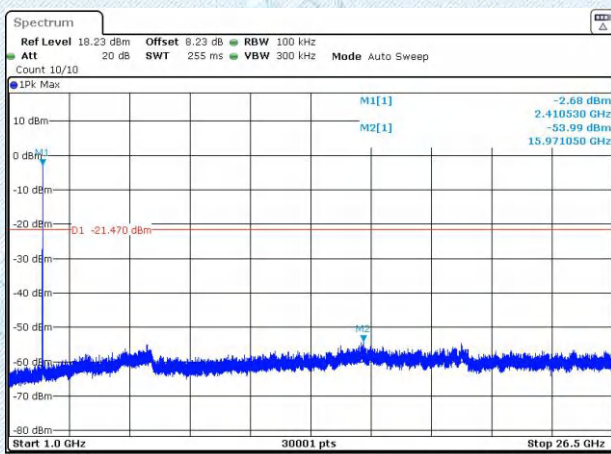
Date: 22, JAN, 2021 19:47:08

802.11b

CH01-SE

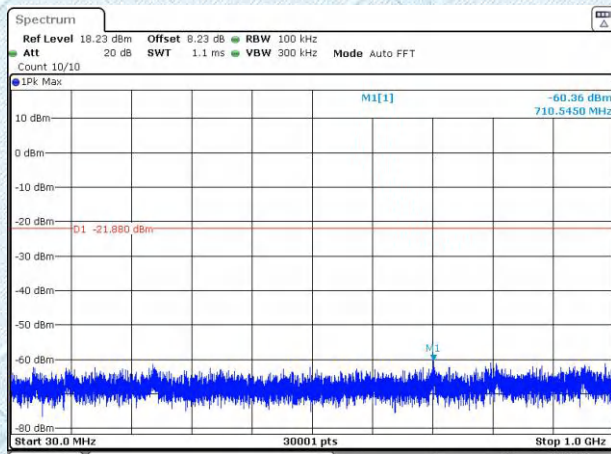


Date: 22, JAN, 2021 19:38:55

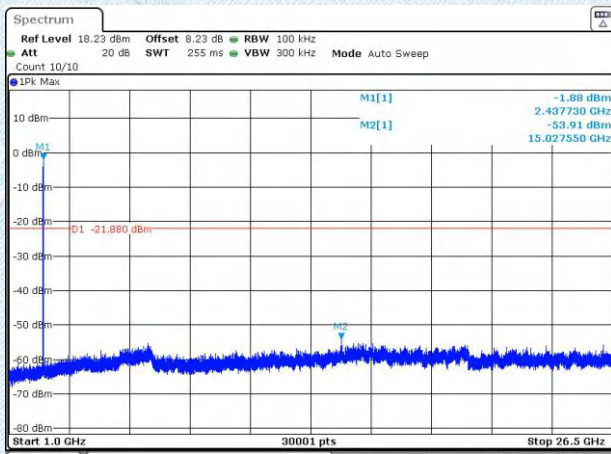


Date: 22, JAN, 2021 19:39:18

CH06-SE

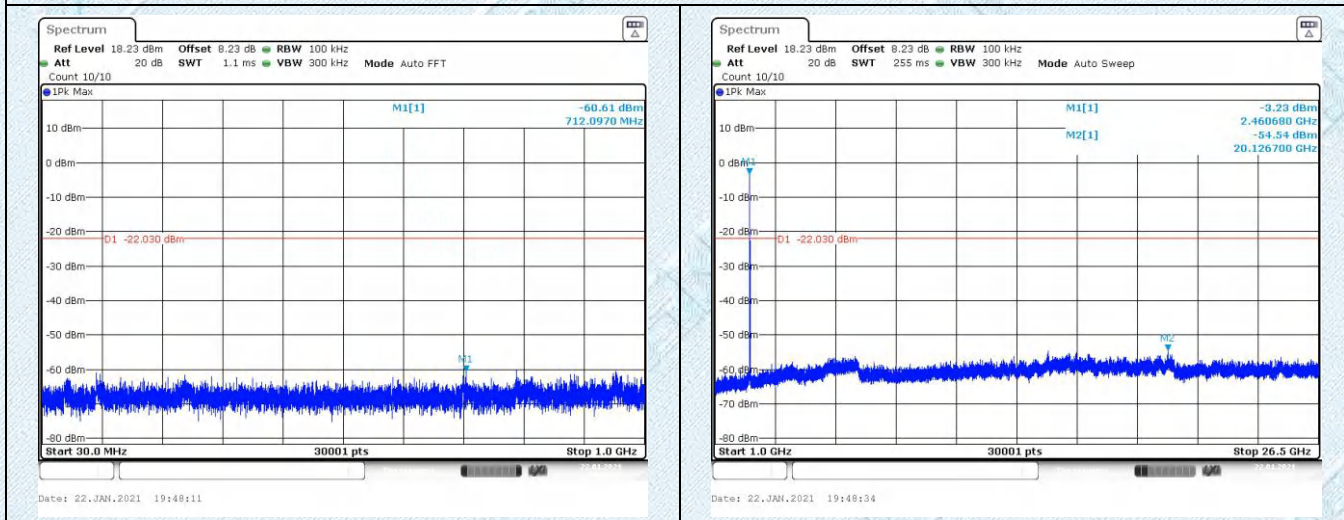


Date: 22, JAN, 2021 19:44:08



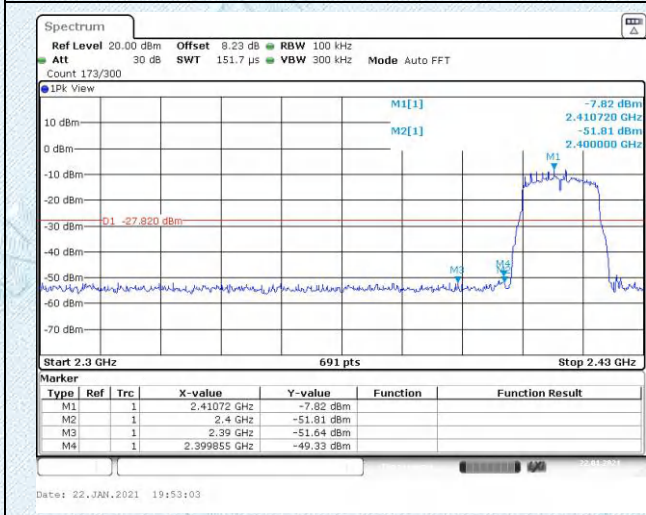
Date: 22, JAN, 2021 19:44:30

### CH11-SE

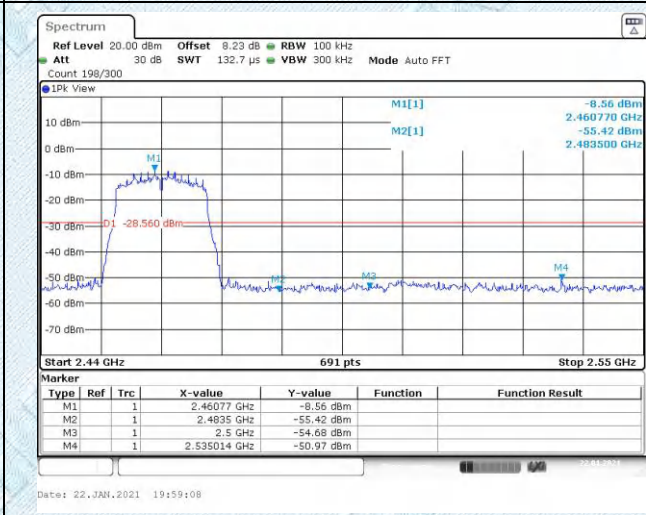


### 802.11g

#### CH01-Bandedge

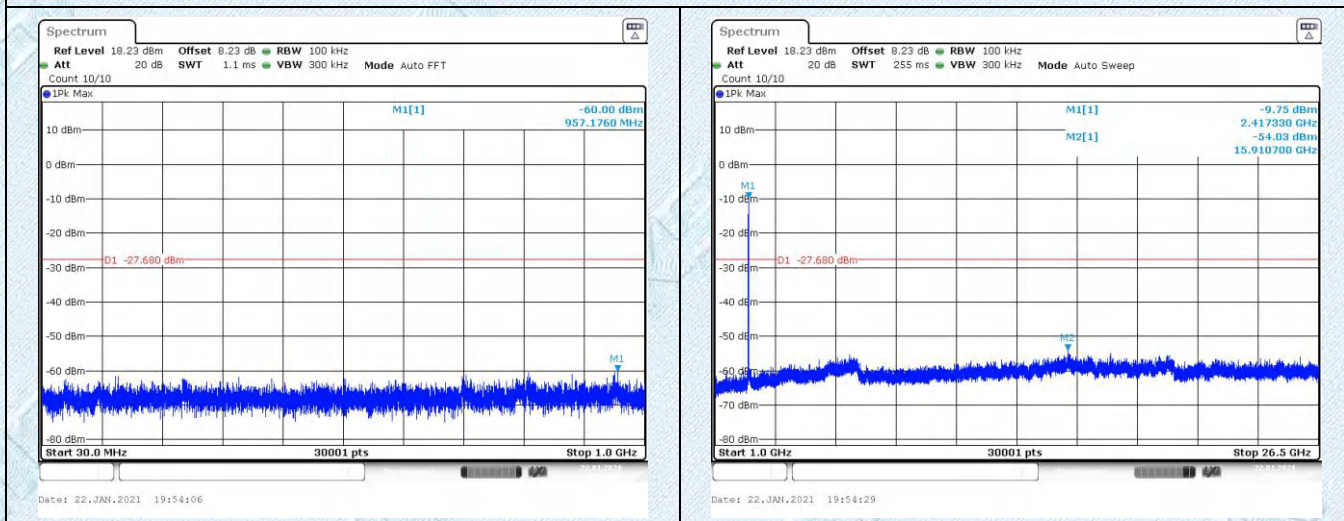


#### CH11-Bandedge

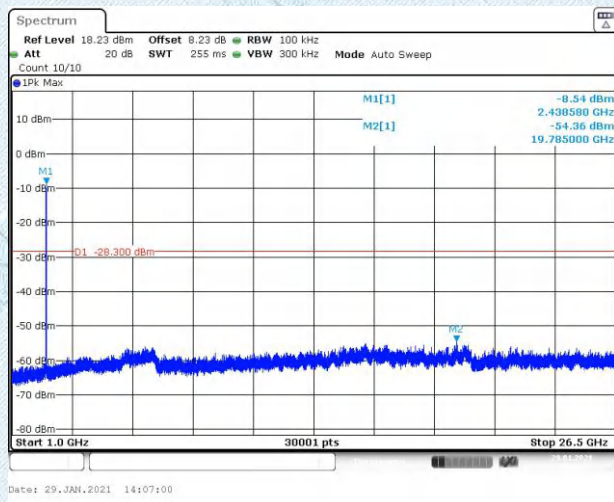
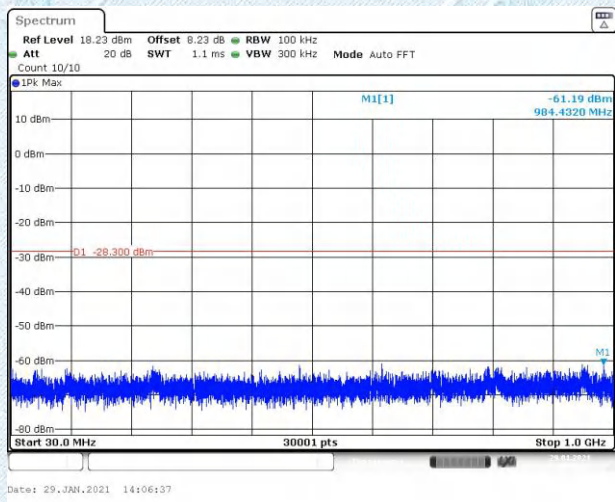


### 802.11g

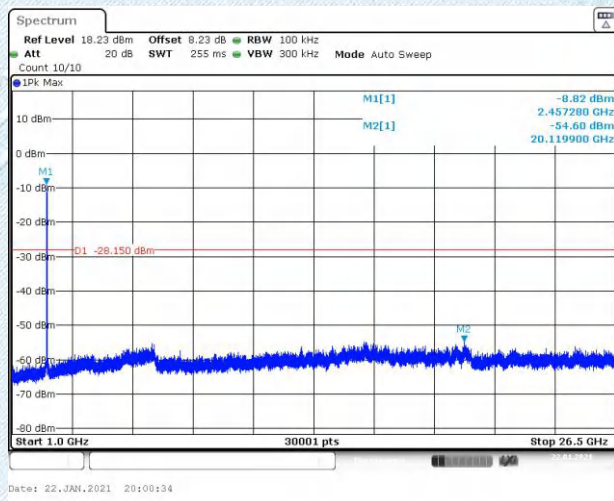
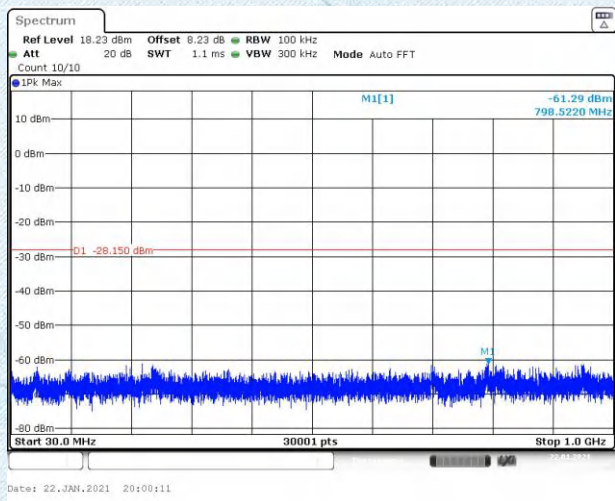
#### CH01-SE



### CH06-SE



### CH11-SE

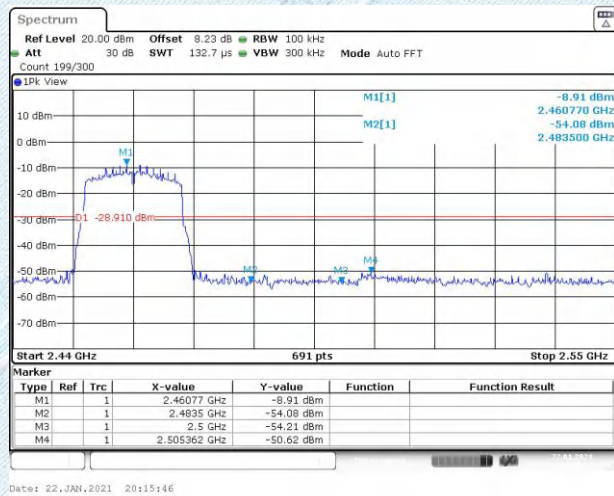


### 802.11n(HT20)

#### CH01-Bandedge



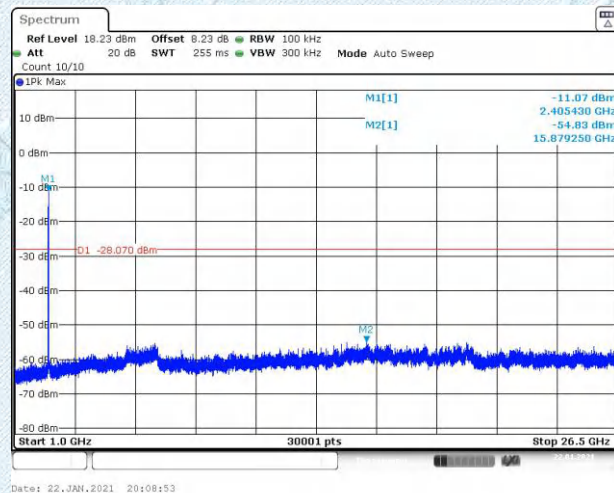
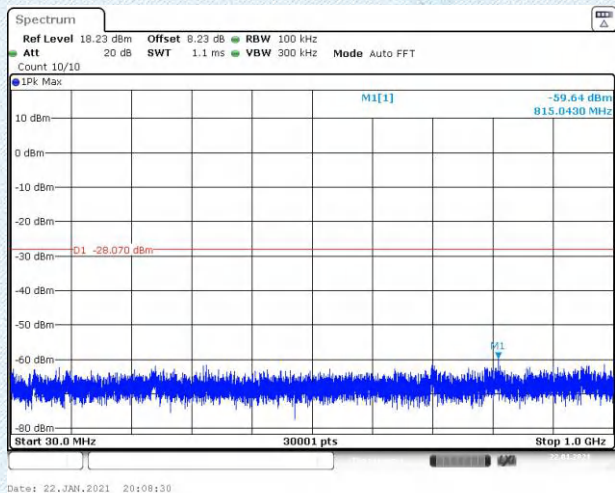
#### CH11-Bandedge



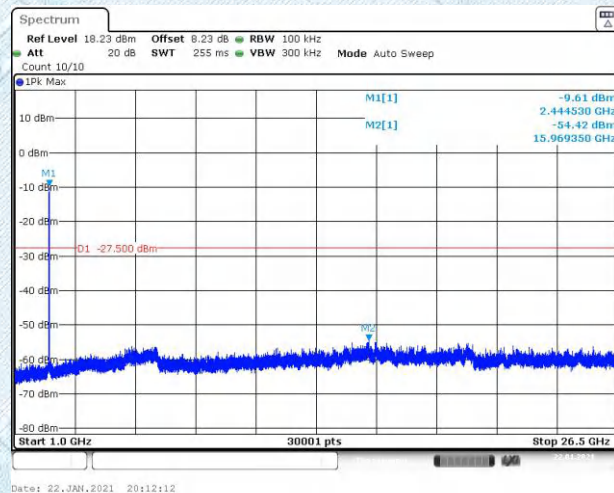
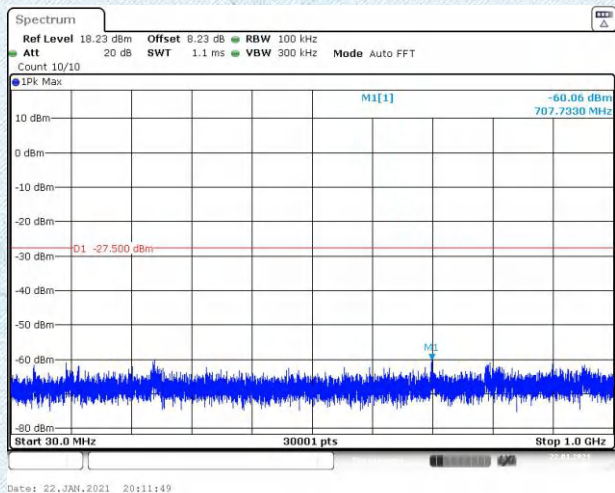


802.11n(HT20)

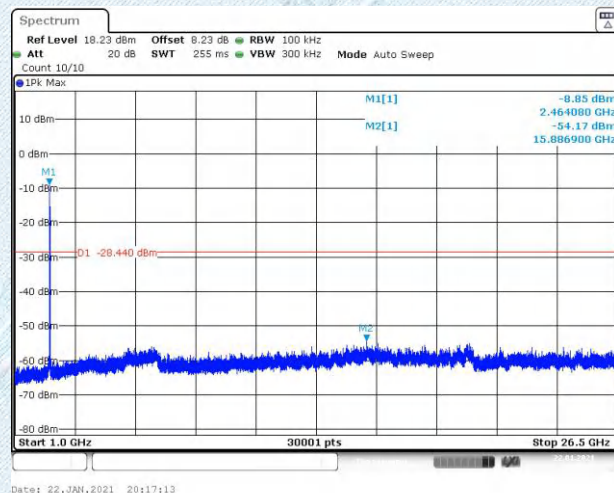
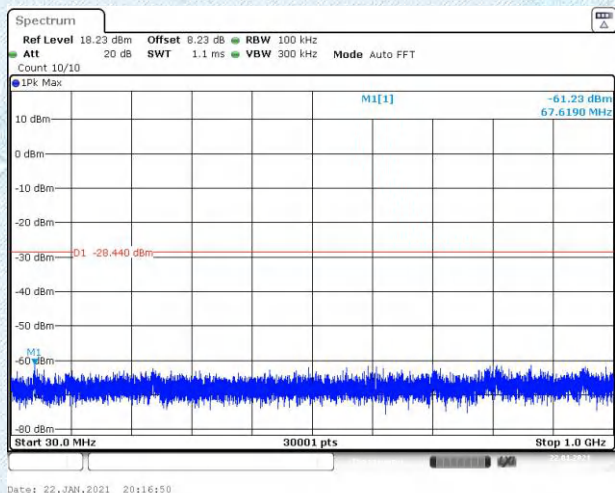
CH01-SE



CH06-SE

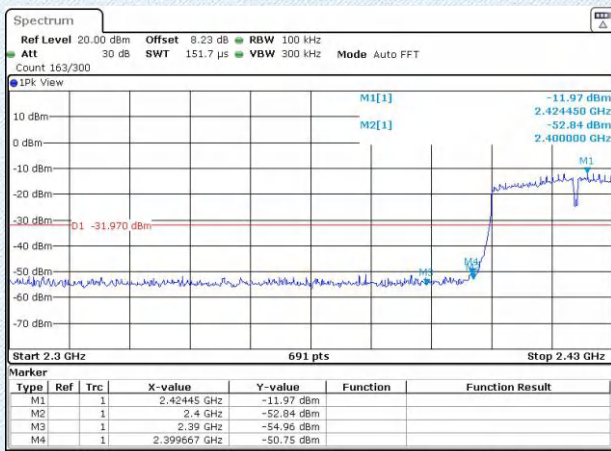


CH11-SE



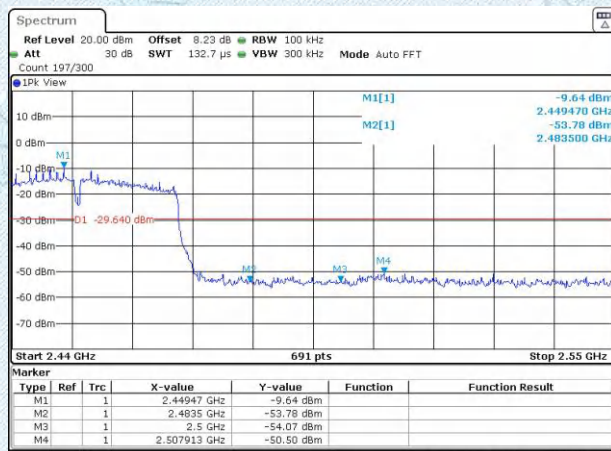
802.11n(HT40)

CH03-Bandedge



Date: 22, JAN, 2021 20:20:41

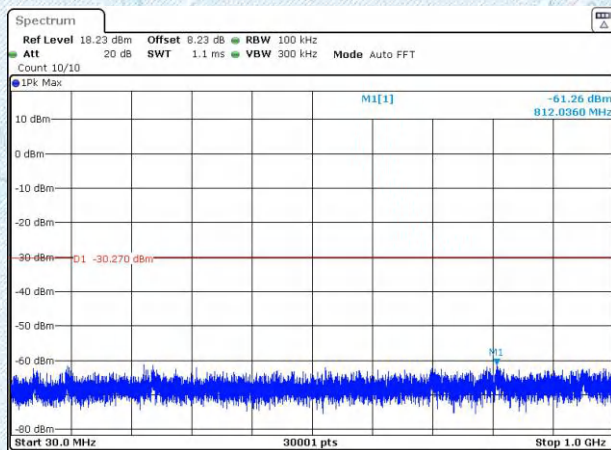
CH09-Bandedge



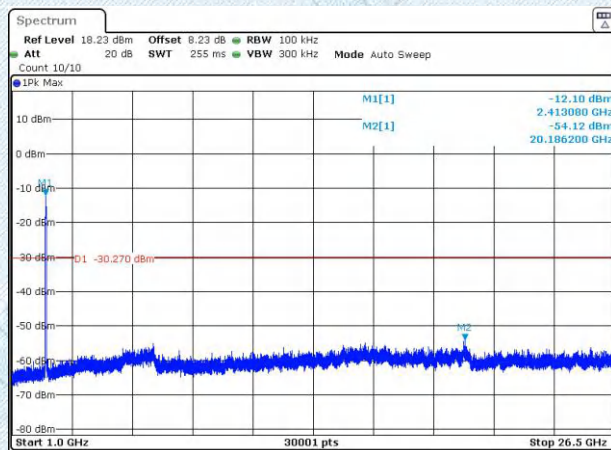
Date: 22, JAN, 2021 20:13:35

802.11n(HT40)

CH03-SE

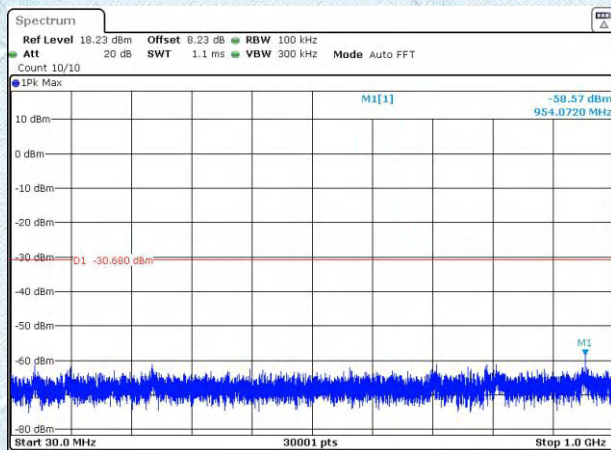


Date: 22, JAN, 2021 20:21:45

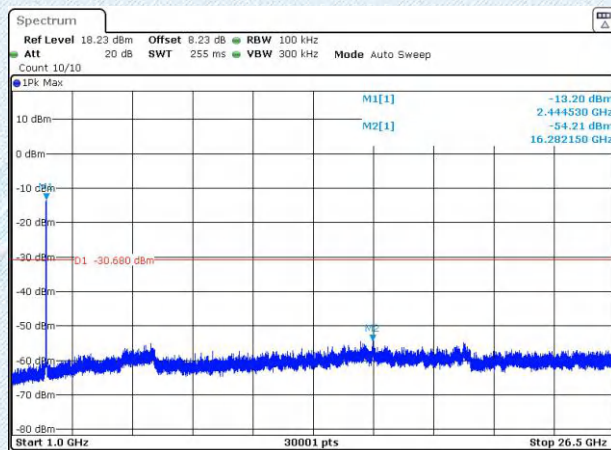


Date: 22, JAN, 2021 20:22:08

CH06-SE

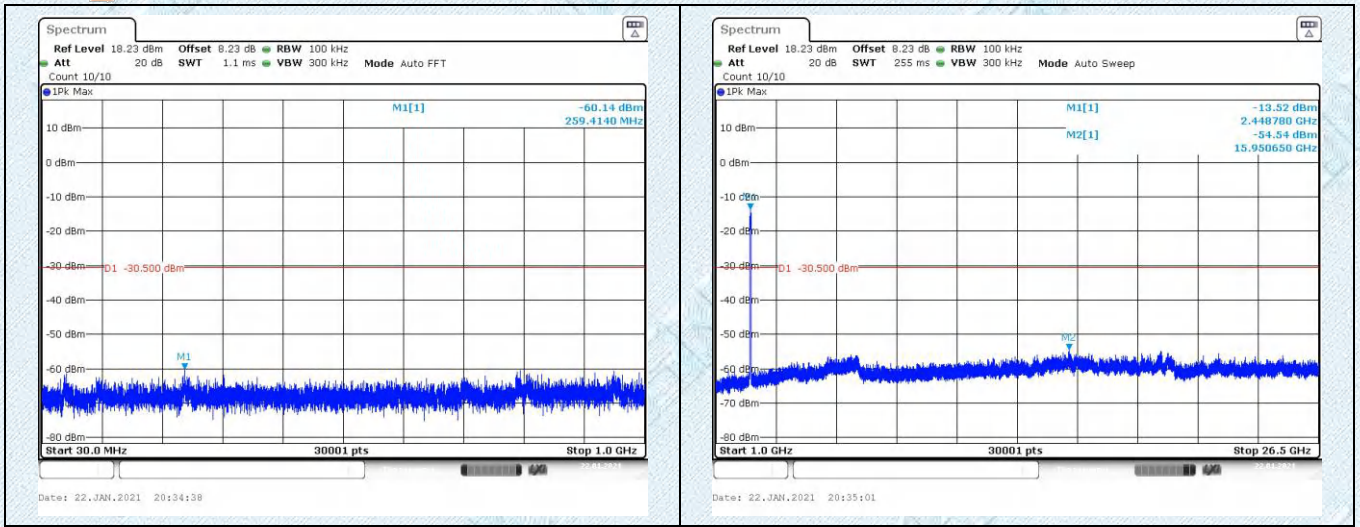


Date: 22, JAN, 2021 20:28:49



Date: 22, JAN, 2021 20:29:11

CH09-SE



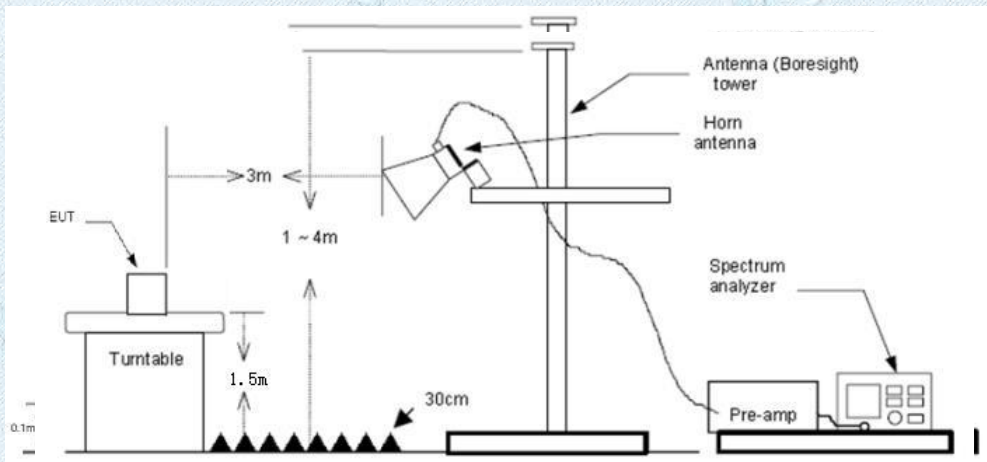
### 3.6. Band Edge Emissions(Radiated)

**Limit**

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

**Note: All restriction bands have been tested, only the worst case is reported.**

**Test Configuration**



**Test Procedure**

1. The EUT was setup and tested according to ANSI C63.10:2013 requirements.
2. The EUT is placed on a turn table which is 1.5 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.
4. The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10:2013 on radiated measurement.
5. The receiver set as follow:  
 RBW=1MHz, VBW=3MHz PEAK detector for Peak value.  
 RBW=1MHz, VBW=10Hz with PEAK detector for Average Value.

**Test Mode**

Please refer to the clause 2.3.

**Test Results**

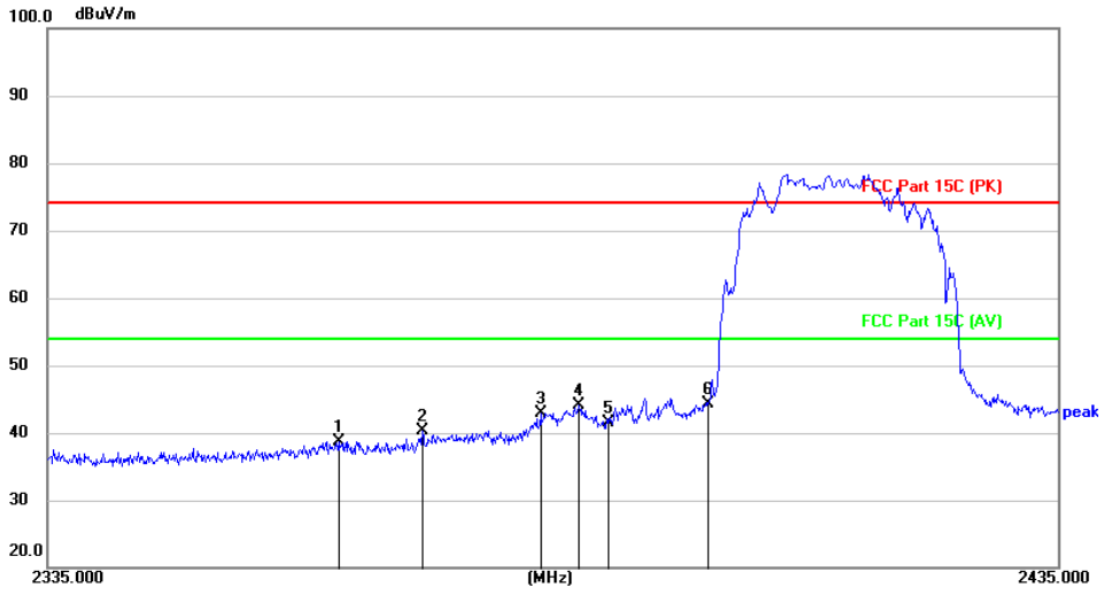
Note:

1.Measurement = Reading level + Correct Factor

Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor

- 2.Pre-scan 802.11b, 802.11g, 802.11n(HT20) and 802.11n(HT40) mode, and found the 802.11b mode which it is worse case, so only show the test data for worse case.

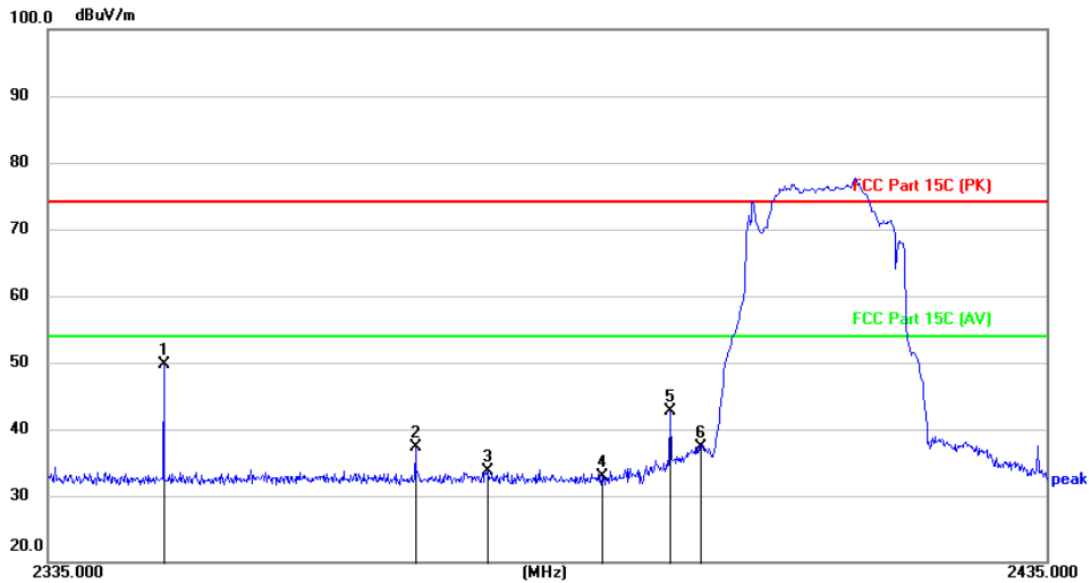
|               |                         |
|---------------|-------------------------|
| Test Voltage: | DC 3.7V                 |
| Ant. Pol.     | Horizontal              |
| Test Mode:    | TX 802.11b Mode 2412MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 2363.410     | 49.71                      | -10.93                      | 38.78                        | 74.00             | 35.22        | peak     |
| 2   |     | 2371.700     | 51.25                      | -10.92                      | 40.33                        | 74.00             | 33.67        | peak     |
| 3   |     | 2383.290     | 53.83                      | -10.92                      | 42.91                        | 74.00             | 31.09        | peak     |
| 4   |     | 2387.160     | 55.06                      | -10.92                      | 44.14                        | 74.00             | 29.86        | peak     |
| 5   |     | 2390.000     | 52.41                      | -10.92                      | 41.49                        | 74.00             | 32.51        | peak     |
| 6   | *   | 2400.000     | 55.12                      | -10.92                      | 44.20                        | 74.00             | 29.80        | peak     |

Measurement = Reading level + Correct Factor

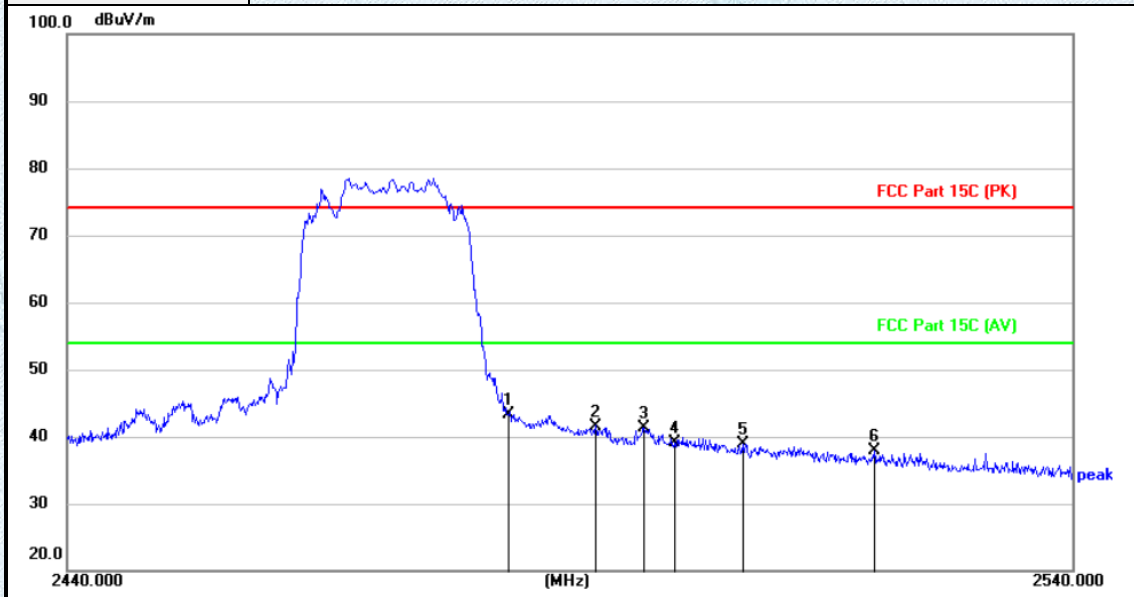
|               |                          |
|---------------|--------------------------|
| Test Voltage: | DC 3.7V                  |
| Ant. Pol.     | Vertical                 |
| Test Mode:    | TX 802.11b Mode 2412 MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   | *   | 2346.470     | 60.69                      | -10.93                      | 49.76                        | 74.00             | 24.24        | peak     |
| 2   |     | 2371.330     | 48.32                      | -10.92                      | 37.40                        | 74.00             | 36.60        | peak     |
| 3   |     | 2378.680     | 44.68                      | -10.92                      | 33.76                        | 74.00             | 40.24        | peak     |
| 4   |     | 2390.000     | 43.74                      | -10.92                      | 32.82                        | 74.00             | 41.18        | peak     |
| 5   |     | 2396.850     | 53.67                      | -10.92                      | 42.75                        | 74.00             | 31.25        | peak     |
| 6   |     | 2400.000     | 48.31                      | -10.92                      | 37.39                        | 74.00             | 36.61        | peak     |

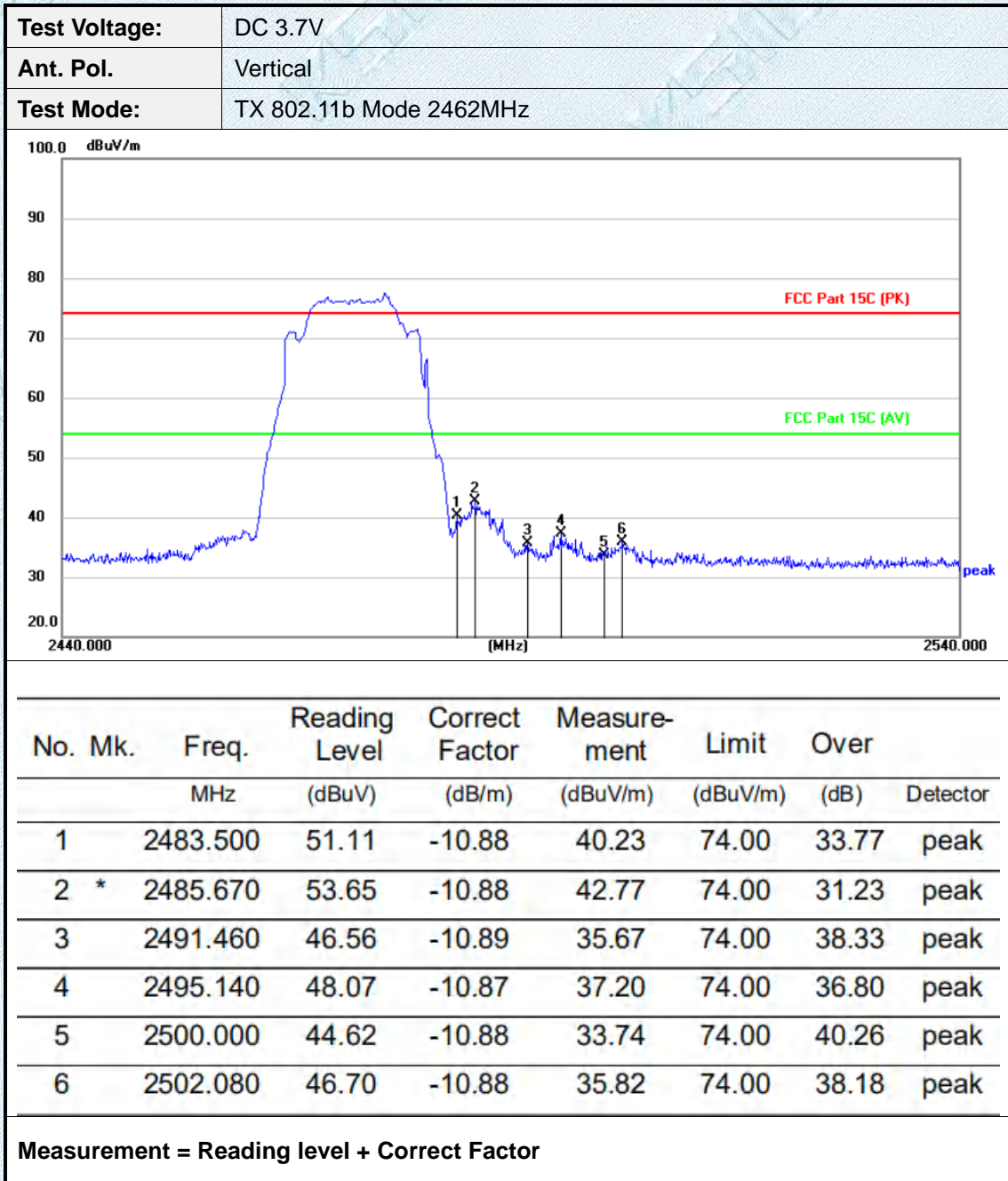
Measurement = Reading level + Correct Factor

|                      |                         |
|----------------------|-------------------------|
| <b>Test Voltage:</b> | DC 3.7V                 |
| <b>Ant. Pol.</b>     | Horizontal              |
| <b>Test Mode:</b>    | TX 802.11b Mode 2462MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   | *   | 2483.500     | 54.08                      | -10.88                      | 43.20                        | 74.00             | 30.80        | peak     |
| 2   |     | 2492.190     | 52.49                      | -10.89                      | 41.60                        | 74.00             | 32.40        | peak     |
| 3   |     | 2496.950     | 52.28                      | -10.88                      | 41.40                        | 74.00             | 32.60        | peak     |
| 4   |     | 2500.000     | 50.05                      | -10.88                      | 39.17                        | 74.00             | 34.83        | peak     |
| 5   |     | 2506.780     | 49.69                      | -10.87                      | 38.82                        | 74.00             | 35.18        | peak     |
| 6   |     | 2520.070     | 48.80                      | -10.87                      | 37.93                        | 74.00             | 36.07        | peak     |

Measurement = Reading level + Correct Factor





### 3.7. Spurious Emission (Radiated)

Limit

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

| 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                             |

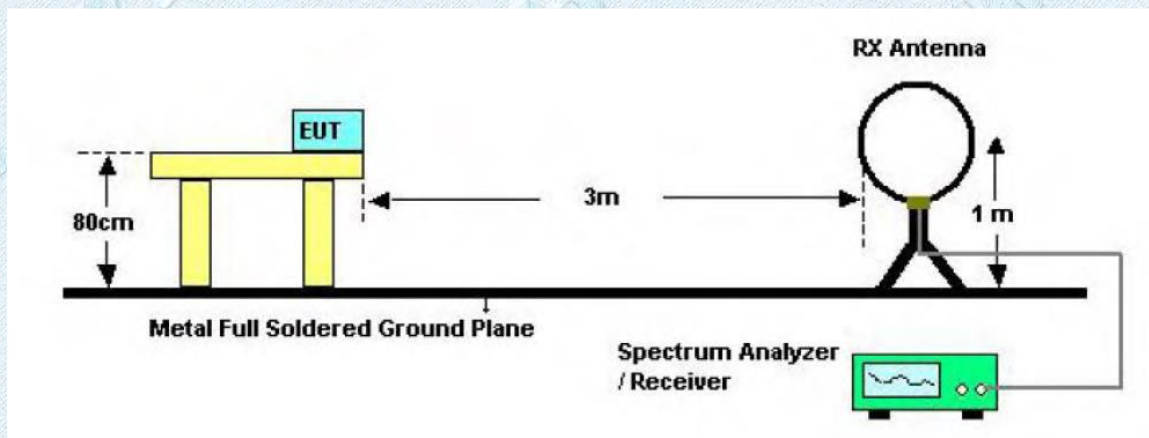
**Radiated Emission Limit (Above 1000MHz)**

| Frequency (MHz) | Distance Meters(at 3m) |         |
|-----------------|------------------------|---------|
|                 | Peak                   | Average |
| Above 1000      | 74                     | 54      |

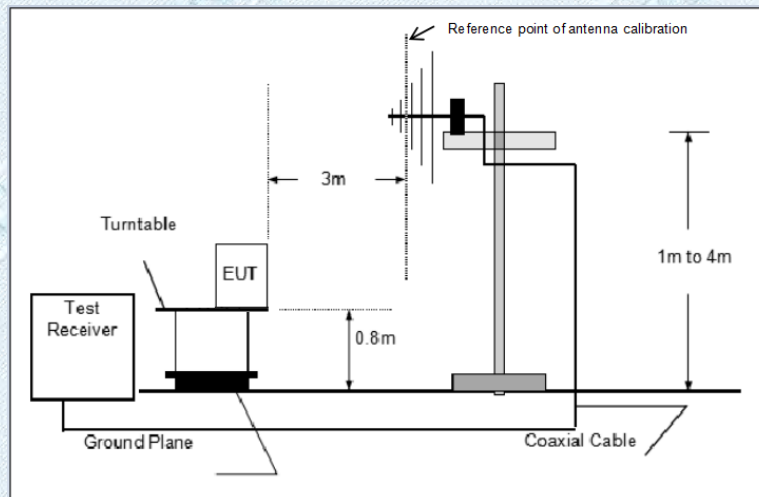
**Note:**

- (1) The tighter limit applies at the band edges.
- (2) Emission Level (dBuV/m)=20log Emission Level (uV/m).

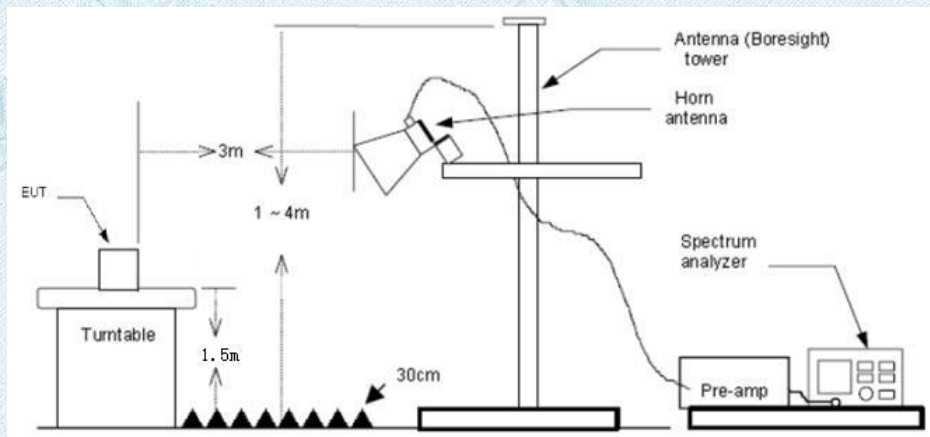
Test Configuration



Below 30MHz Test Setup



Below 1000MHz Test Setup



Above 1GHz Test Setup

**Test Procedure**

1. The EUT was setup and tested according to ANSI C63.10:2013
2. The EUT is placed on a turn table which is 0.8 meter above ground for below 1 GHz, and 1.5 m for above 1 GHz. The turn table is rotated 360 degrees to determine the position of the maximum emission level.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the top of a variable height antenna tower.
4. For each suspected emission, the EUT was arranged to its worst case and then tune the Antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high pass filter are used for the test in order to get better signal level to comply with the guidelines.
5. Set to the maximum power setting and enable the EUT transmit continuously.
6. Use the following spectrum analyzer settings
  - (1) Span shall wide enough to fully capture the emission being measured;
  - (2) Below 1 GHz:  
 RBW=120 kHz, VBW=300 kHz, Sweep=auto, Detector function=peak, Trace=max hold;  
 If the emission level of the EUT measured by the peak detector is 3 dB lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.
  - (3) From 1 GHz to 10<sup>th</sup> harmonic:  
 RBW=1MHz, VBW=1MHz Peak detector for Peak value.  
 RBW=1MHz, VBW=10Hz Peak detector for Average value.

**Test Mode**

Please refer to the clause 2.3.

**Test Result****9 KHz~30 MHz and 18GHz~25GHz**

From 9 KHz~30 MHz and 18GHz~25GHz: Conclusion: PASS

**Note:**

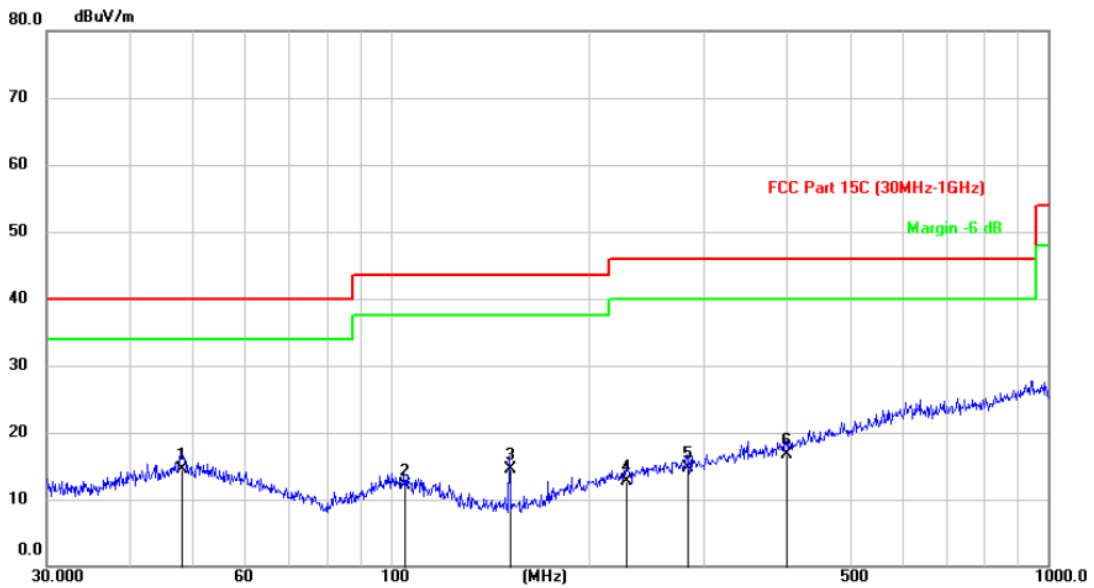
- 1) Measurement = Reading level + Correct Factor  
Correct Factor=Antenna Factor + Cable Loss -Preamplifier Factor
- 2) The peak level is lower than average limit(54 dBuV/m), this data is the too weak instrument of signal is unable to test.
- 3) The emission levels of other frequencies are very lower than the limit and not show in test report.
- 4) The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.
- 5) Pre-scan 802.11b/g/n(HT20/HT40) modulation, and found the 802.11b modulation which it is worse case for above 1GHz, so only show the test data for worse case.

**BELOW 30MHZ**

No emission found between lowest internal used/generated frequencies to 30MHz.

30MHz-1GHz

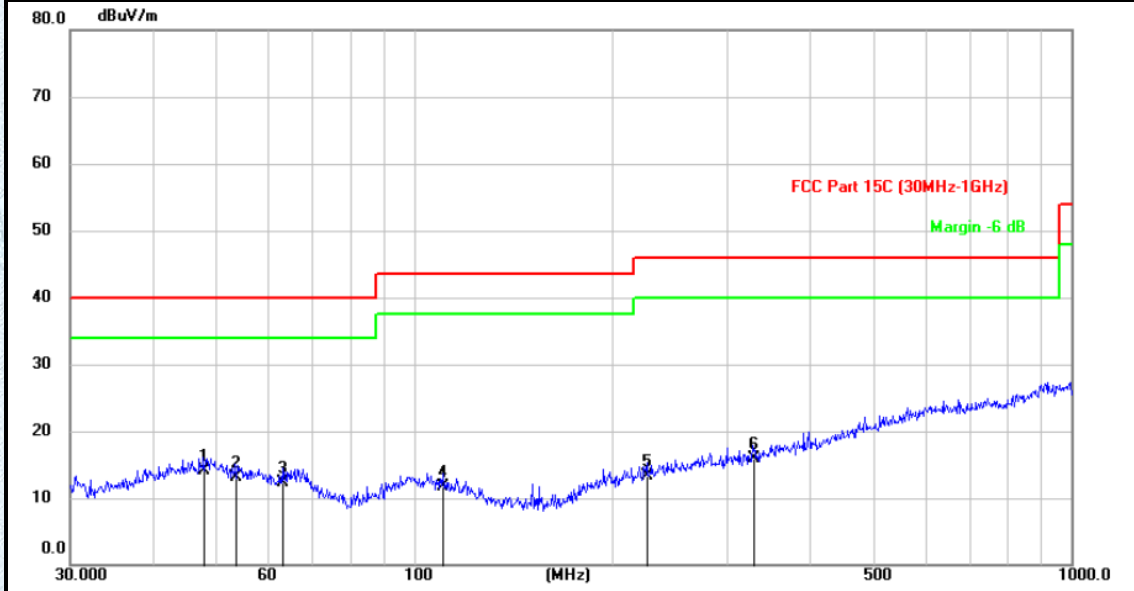
|               |                         |
|---------------|-------------------------|
| Test Voltage: | DC 3.7V                 |
| Ant. Pol.     | Horizontal              |
| Test Mode:    | TX 802.11b Mode 2412MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   | *   | 48.0445      | 25.04                      | -10.44                      | 14.60                        | 40.00             | -25.40       | QP       |
| 2   |     | 105.0137     | 24.99                      | -12.97                      | 12.02                        | 43.50             | -31.48       | QP       |
| 3   |     | 152.0231     | 30.95                      | -16.52                      | 14.43                        | 43.50             | -29.07       | QP       |
| 4   |     | 228.4904     | 25.00                      | -12.20                      | 12.80                        | 46.00             | -33.20       | QP       |
| 5   |     | 282.1923     | 25.47                      | -10.85                      | 14.62                        | 46.00             | -31.38       | QP       |
| 6   |     | 399.8706     | 25.41                      | -8.66                       | 16.75                        | 46.00             | -29.25       | QP       |

Measurement = Reading Level+ Correct Factor

|               |                         |
|---------------|-------------------------|
| Test Voltage: | DC 3.7V                 |
| Ant. Pol.     | Vertical                |
| Test Mode:    | TX 802.11b Mode 2412MHz |

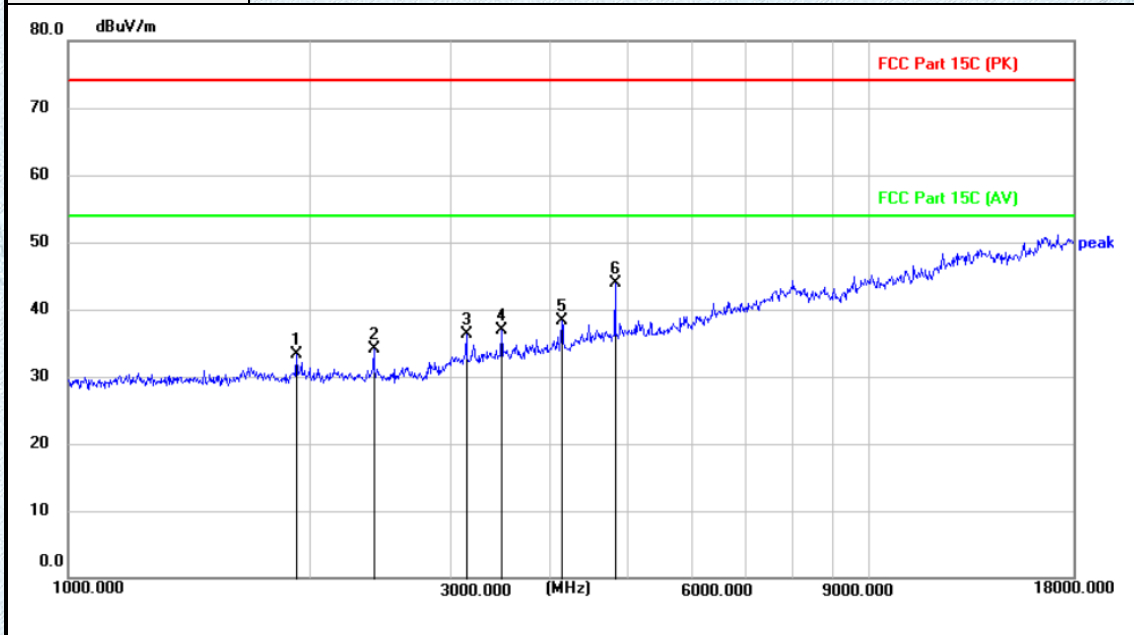


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   | *   | 47.9267      | 24.50                      | -10.45                      | 14.05                        | 40.00             | -25.95       | QP       |
| 2   |     | 53.5428      | 24.10                      | -11.07                      | 13.03                        | 40.00             | -26.97       | QP       |
| 3   |     | 63.2023      | 25.41                      | -13.01                      | 12.40                        | 40.00             | -27.60       | QP       |
| 4   |     | 110.7627     | 25.24                      | -13.45                      | 11.79                        | 43.50             | -31.71       | QP       |
| 5   |     | 226.3374     | 25.68                      | -12.29                      | 13.39                        | 46.00             | -32.61       | QP       |
| 6   |     | 328.4627     | 25.67                      | -9.85                       | 15.82                        | 46.00             | -30.18       | QP       |

Measurement = Reading Level+ Correct Factor

Adobe 1GHz

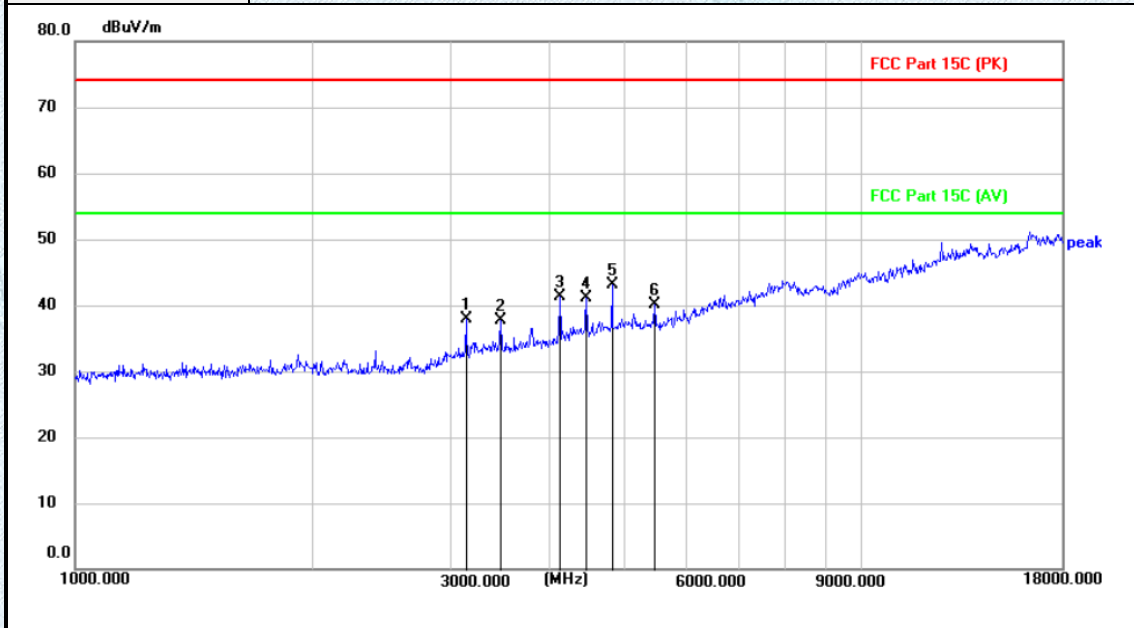
|                      |                         |
|----------------------|-------------------------|
| <b>Test Voltage:</b> | DC 3.7V                 |
| <b>Ant. Pol.</b>     | Horizontal              |
| <b>Test Mode:</b>    | TX 802.11b Mode 2412MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 1931.600     | 44.52                      | -11.12                      | 33.40                        | 74.00             | 40.60        | peak     |
| 2   |     | 2412.700     | 45.06                      | -10.92                      | 34.14                        | 74.00             | 39.86        | peak     |
| 3   |     | 3147.100     | 46.62                      | -10.32                      | 36.30                        | 74.00             | 37.70        | peak     |
| 4   |     | 3482.000     | 46.55                      | -9.71                       | 36.84                        | 74.00             | 37.16        | peak     |
| 5   |     | 4139.900     | 46.28                      | -7.96                       | 38.32                        | 74.00             | 35.68        | peak     |
| 6   | *   | 4823.300     | 49.69                      | -5.87                       | 43.82                        | 74.00             | 30.18        | peak     |

Measurement = Reading level + Correct Factor

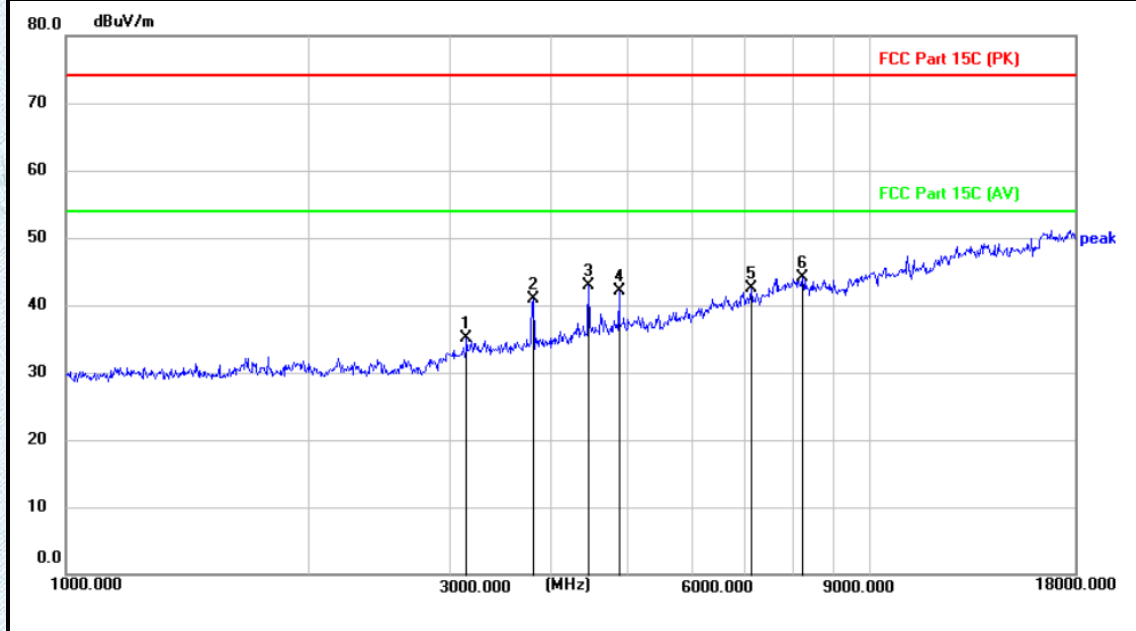
|                      |                         |
|----------------------|-------------------------|
| <b>Test Voltage:</b> | DC 3.7V                 |
| <b>Ant. Pol.</b>     | Vertical                |
| <b>Test Mode:</b>    | TX 802.11b Mode 2412MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 3148.800     | 48.28                      | -10.32                      | 37.96                        | 74.00             | 36.04        | peak     |
| 2   |     | 3476.900     | 47.36                      | -9.72                       | 37.64                        | 74.00             | 36.36        | peak     |
| 3   |     | 4141.600     | 49.28                      | -7.95                       | 41.33                        | 74.00             | 32.67        | peak     |
| 4   |     | 4474.800     | 47.86                      | -6.84                       | 41.02                        | 74.00             | 32.98        | peak     |
| 5   | *   | 4823.300     | 48.96                      | -5.87                       | 43.09                        | 74.00             | 30.91        | peak     |
| 6   |     | 5467.600     | 45.08                      | -4.96                       | 40.12                        | 74.00             | 33.88        | peak     |

Measurement = Reading level + Correct Factor

|                      |                         |
|----------------------|-------------------------|
| <b>Test Voltage:</b> | DC 3.7V                 |
| <b>Ant. Pol.</b>     | Horizontal              |
| <b>Test Mode:</b>    | TX 802.11b Mode 2437MHz |

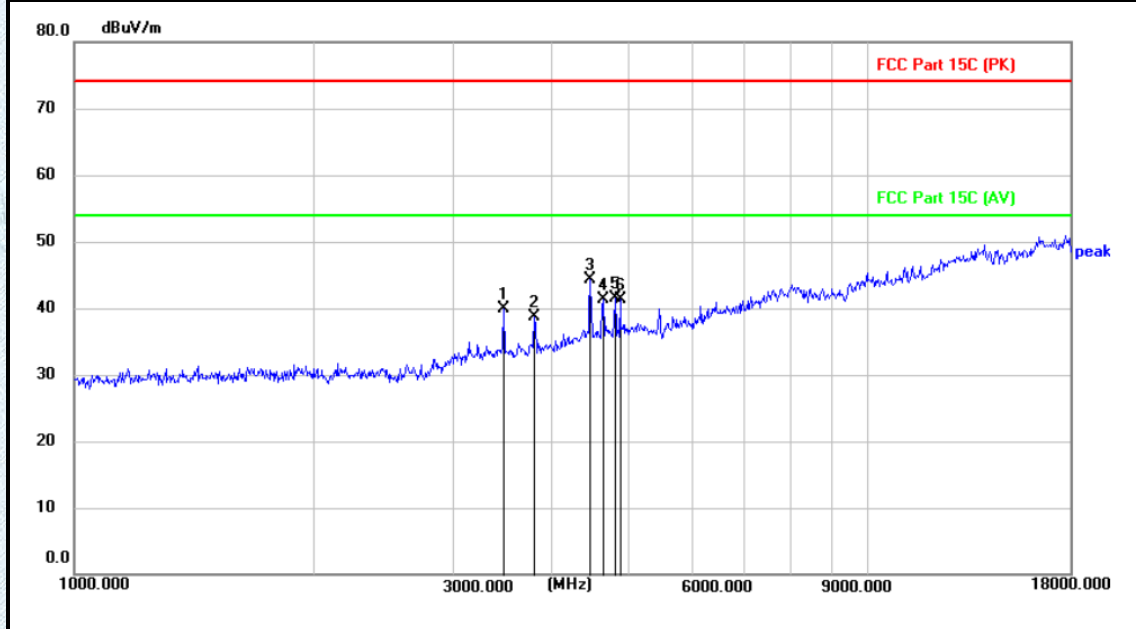


| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 3150.500     | 45.42                      | -10.31                      | 35.11                        | 74.00             | 38.89        | peak     |
| 2   |     | 3813.500     | 49.80                      | -8.89                       | 40.91                        | 74.00             | 33.09        | peak     |
| 3   |     | 4473.100     | 49.82                      | -6.85                       | 42.97                        | 74.00             | 31.03        | peak     |
| 4   |     | 4884.500     | 47.79                      | -5.70                       | 42.09                        | 74.00             | 31.91        | peak     |
| 5   |     | 7128.500     | 42.91                      | -0.32                       | 42.59                        | 74.00             | 31.41        | peak     |
| 6   | *   | 8250.500     | 42.03                      | 2.00                        | 44.03                        | 74.00             | 29.97        | peak     |

Measurement = Reading level + Correct Factor



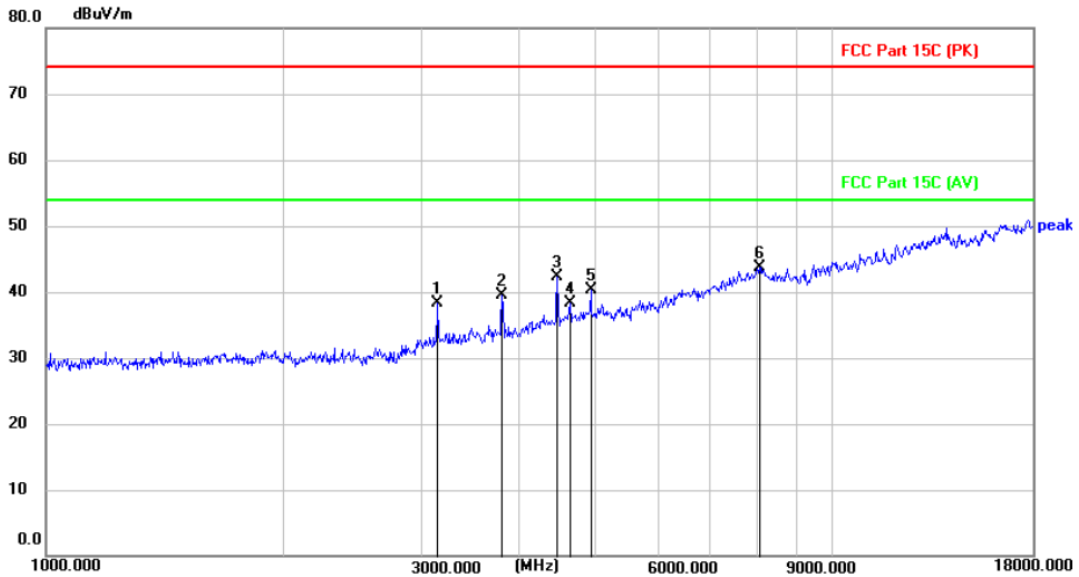
|                      |                         |
|----------------------|-------------------------|
| <b>Test Voltage:</b> | DC 3.7V                 |
| <b>Ant. Pol.</b>     | Vertical                |
| <b>Test Mode:</b>    | TX 802.11b Mode 2437MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 3480.300     | 49.71                      | -9.71                       | 40.00                        | 74.00             | 34.00        | peak     |
| 2   |     | 3811.800     | 47.66                      | -8.90                       | 38.76                        | 74.00             | 35.24        | peak     |
| 3   | *   | 4473.100     | 51.15                      | -6.85                       | 44.30                        | 74.00             | 29.70        | peak     |
| 4   |     | 4641.400     | 47.61                      | -6.36                       | 41.25                        | 74.00             | 32.75        | peak     |
| 5   |     | 4804.600     | 47.43                      | -5.92                       | 41.51                        | 74.00             | 32.49        | peak     |
| 6   |     | 4884.500     | 47.00                      | -5.70                       | 41.30                        | 74.00             | 32.70        | peak     |

Measurement = Reading level + Correct Factor

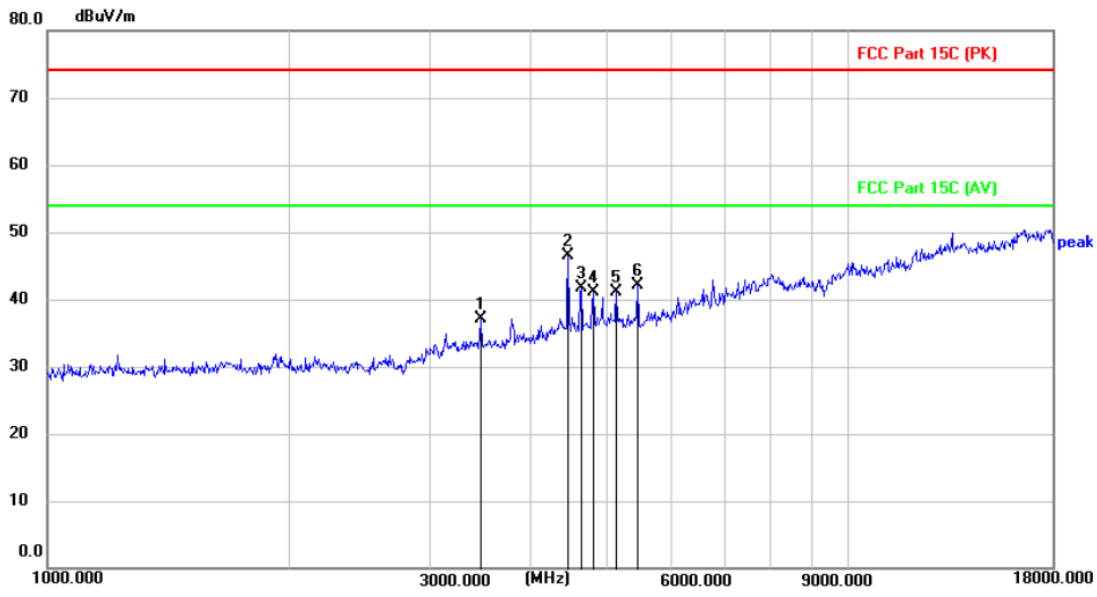
|                      |                         |
|----------------------|-------------------------|
| <b>Test Voltage:</b> | DC 3.7V                 |
| <b>Ant. Pol.</b>     | Horizontal              |
| <b>Test Mode:</b>    | TX 802.11b Mode 2462MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 3150.500     | 48.66                      | -10.31                      | 38.35                        | 74.00             | 35.65        | peak     |
| 2   |     | 3811.800     | 48.49                      | -8.90                       | 39.59                        | 74.00             | 34.41        | peak     |
| 3   |     | 4473.100     | 49.13                      | -6.85                       | 42.28                        | 74.00             | 31.72        | peak     |
| 4   |     | 4641.400     | 44.62                      | -6.36                       | 38.26                        | 74.00             | 35.74        | peak     |
| 5   |     | 4944.000     | 45.76                      | -5.53                       | 40.23                        | 74.00             | 33.77        | peak     |
| 6   | *   | 8085.600     | 41.73                      | 2.05                        | 43.78                        | 74.00             | 30.22        | peak     |

Measurement = Reading level + Correct Factor

|               |                         |
|---------------|-------------------------|
| Test Voltage: | DC 3.7V                 |
| Ant. Pol.     | Vertical                |
| Test Mode:    | TX 802.11b Mode 2462MHz |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>(dBuV) | Correct<br>Factor<br>(dB/m) | Measure-<br>ment<br>(dBuV/m) | Limit<br>(dBuV/m) | Over<br>(dB) | Detector |
|-----|-----|--------------|----------------------------|-----------------------------|------------------------------|-------------------|--------------|----------|
| 1   |     | 3480.300     | 46.86                      | -9.71                       | 37.15                        | 74.00             | 36.85        | peak     |
| 2   | *   | 4474.800     | 53.40                      | -6.84                       | 46.56                        | 74.00             | 27.44        | peak     |
| 3   |     | 4641.400     | 48.06                      | -6.36                       | 41.70                        | 74.00             | 32.30        | peak     |
| 4   |     | 4806.300     | 47.11                      | -5.92                       | 41.19                        | 74.00             | 32.81        | peak     |
| 5   |     | 5137.800     | 46.38                      | -5.26                       | 41.12                        | 74.00             | 32.88        | peak     |
| 6   |     | 5471.000     | 47.04                      | -4.96                       | 42.08                        | 74.00             | 31.92        | peak     |

Measurement = Reading level + Correct Factor

### 3.8. Conducted Emission

#### Limit

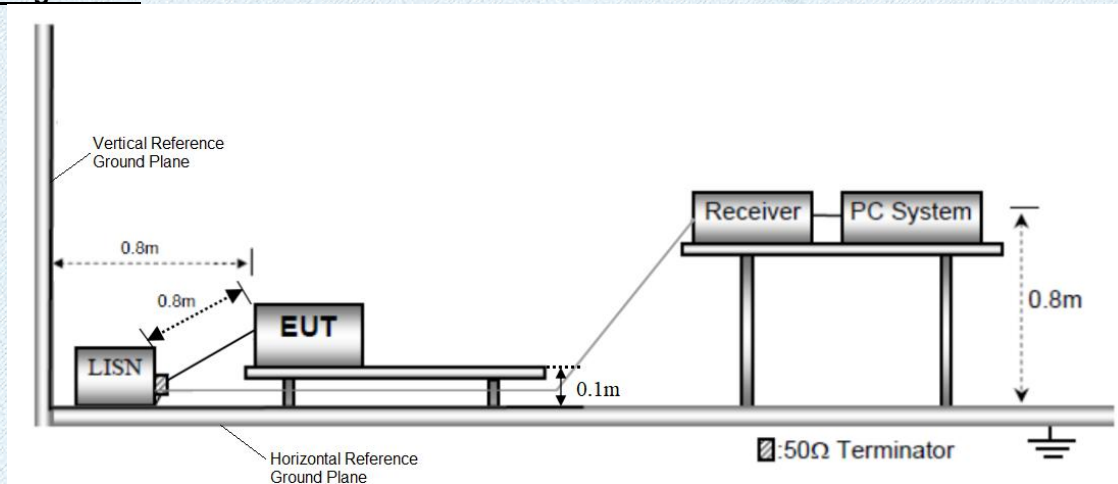
Conducted Emission Test Limit

| Frequency     | Maximum RF Line Voltage (dB $\mu$ V) |               |
|---------------|--------------------------------------|---------------|
|               | 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.

#### Test Configuration



#### Test Procedure

1. The EUT was setup according to ANSI C63.10:2013 requirements.
2. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 0.1m above the conducting ground plane. The vertical conducting plane was located 80 cm to the rear of the EUT. All other surfaces of EUT were at least 0.8m from any other grounded conducting surface.
3. The EUT and simulators are connected to the main power through a line impedances stabilization network (LISN). The LISN provides a 50ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN. (Please refer to the block diagram of the test setup and photographs)
4. Each current-carrying conductor of the EUT power cord, except the ground (safety) conductor, was individually connected through a LISN to the input power source.
5. The excess length of the power cord between the EUT and the LISN receptacle were folded back and forth at the center of the lead to form a bundle not exceeding 40 cm in length.
6. Conducted Emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.
7. During the above scans, the emissions were maximized by cable manipulation.

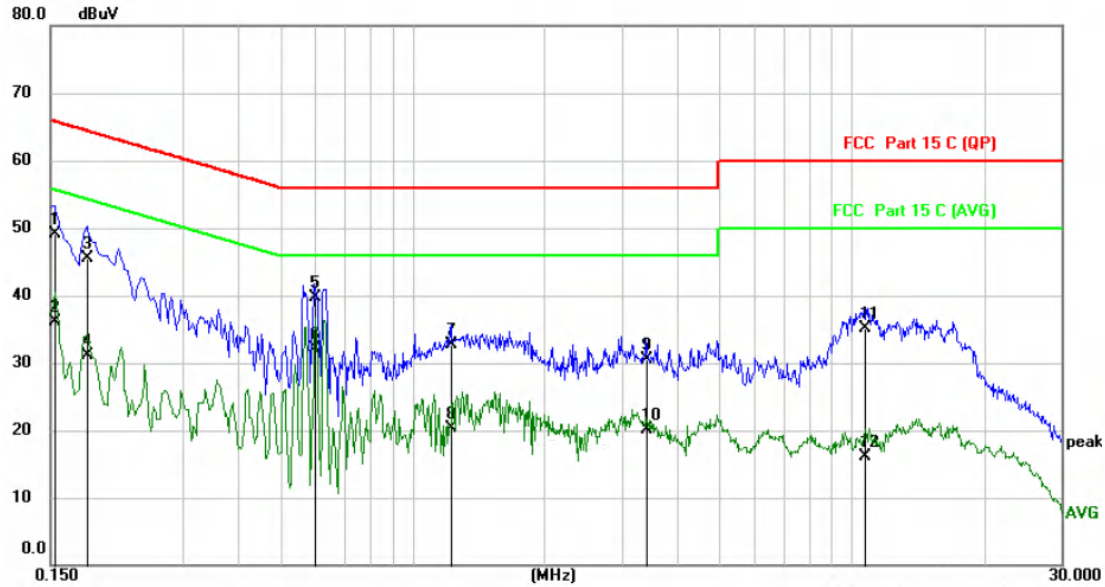
#### Test Mode:

Please refer to the clause 2.3.

#### Test Results

Pre-scan 802.11b/g/n(HT20/HT40) modulation, and found the 802.11b modulation 2412MHz which it is worse case, so only show the test data for worse case.

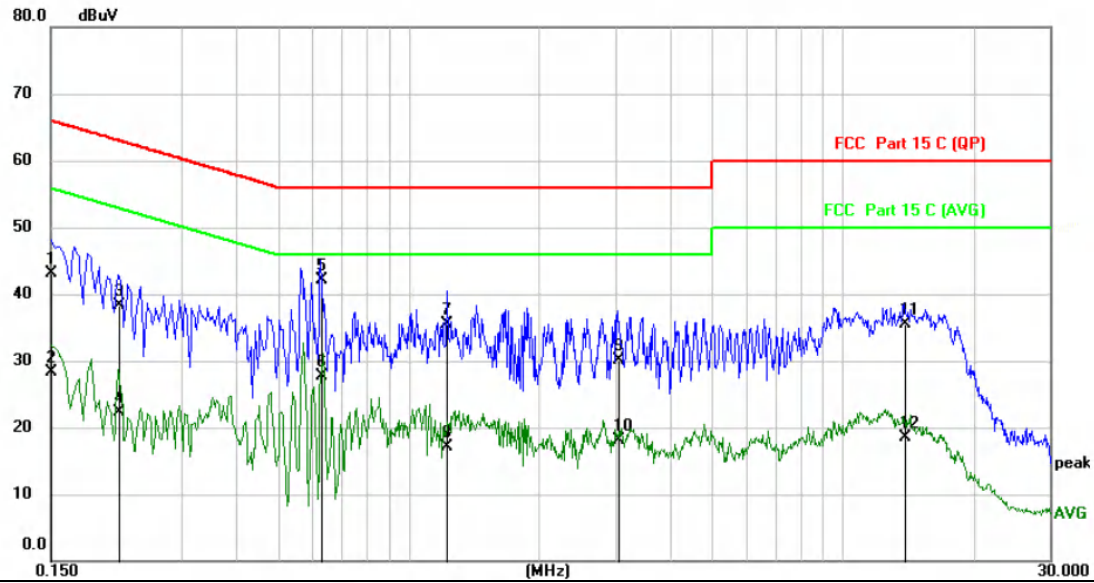
|                      |               |
|----------------------|---------------|
| <b>Test Voltage:</b> | AC 120V/60Hz  |
| <b>Terminal:</b>     | Line          |
| <b>Test Mode:</b>    | Charging+WIFI |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measurement<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector |
|-----|-----|--------------|--------------------------|-------------------------|---------------------|---------------|------------|----------|
| 1   |     | 0.1539       | 38.29                    | 10.82                   | 49.11               | 65.79         | -16.68     | QP       |
| 2   |     | 0.1539       | 25.31                    | 10.82                   | 36.13               | 55.79         | -19.66     | AVG      |
| 3   |     | 0.1819       | 34.68                    | 10.86                   | 45.54               | 64.40         | -18.86     | QP       |
| 4   |     | 0.1819       | 20.27                    | 10.86                   | 31.13               | 54.40         | -23.27     | AVG      |
| 5   |     | 0.5980       | 28.80                    | 10.90                   | 39.70               | 56.00         | -16.30     | QP       |
| 6   | *   | 0.5980       | 21.22                    | 10.90                   | 32.12               | 46.00         | -13.88     | AVG      |
| 7   |     | 1.2260       | 21.73                    | 10.88                   | 32.61               | 56.00         | -23.39     | QP       |
| 8   |     | 1.2260       | 9.50                     | 10.88                   | 20.38               | 46.00         | -25.62     | AVG      |
| 9   |     | 3.4100       | 19.65                    | 10.93                   | 30.58               | 56.00         | -25.42     | QP       |
| 10  |     | 3.4100       | 9.12                     | 10.93                   | 20.05               | 46.00         | -25.95     | AVG      |
| 11  |     | 10.6899      | 24.19                    | 10.96                   | 35.15               | 60.00         | -24.85     | QP       |
| 12  |     | 10.6899      | 5.22                     | 10.96                   | 16.18               | 50.00         | -33.82     | AVG      |

Remarks:  
 1.Measurement = Reading Level+ Correct Factor  
 2.Over = Measurement -Limit

|                      |               |
|----------------------|---------------|
| <b>Test Voltage:</b> | AC 120V/60Hz  |
| <b>Terminal:</b>     | Neutral       |
| <b>Test Mode:</b>    | Charging+WIFI |



| No. | Mk. | Freq.<br>MHz | Reading<br>Level<br>dBuV | Correct<br>Factor<br>dB | Measure-<br>ment<br>dBuV | Limit<br>dBuV | Over<br>dB | Detector |
|-----|-----|--------------|--------------------------|-------------------------|--------------------------|---------------|------------|----------|
| 1   |     | 0.1500       | 32.28                    | 10.83                   | 43.11                    | 66.00         | -22.89     | QP       |
| 2   |     | 0.1500       | 17.43                    | 10.83                   | 28.26                    | 56.00         | -27.74     | AVG      |
| 3   |     | 0.2140       | 27.35                    | 10.87                   | 38.22                    | 63.05         | -24.83     | QP       |
| 4   |     | 0.2140       | 11.46                    | 10.87                   | 22.33                    | 53.05         | -30.72     | AVG      |
| 5   | *   | 0.6300       | 31.18                    | 10.87                   | 42.05                    | 56.00         | -13.95     | QP       |
| 6   |     | 0.6300       | 16.88                    | 10.87                   | 27.75                    | 46.00         | -18.25     | AVG      |
| 7   |     | 1.2260       | 24.54                    | 10.88                   | 35.42                    | 56.00         | -20.58     | QP       |
| 8   |     | 1.2260       | 6.15                     | 10.88                   | 17.03                    | 46.00         | -28.97     | AVG      |
| 9   |     | 3.0380       | 19.16                    | 10.92                   | 30.08                    | 56.00         | -25.92     | QP       |
| 10  |     | 3.0380       | 7.14                     | 10.92                   | 18.06                    | 46.00         | -27.94     | AVG      |
| 11  |     | 13.8620      | 24.57                    | 10.91                   | 35.48                    | 60.00         | -24.52     | QP       |
| 12  |     | 13.8620      | 7.58                     | 10.91                   | 18.49                    | 50.00         | -31.51     | AVG      |

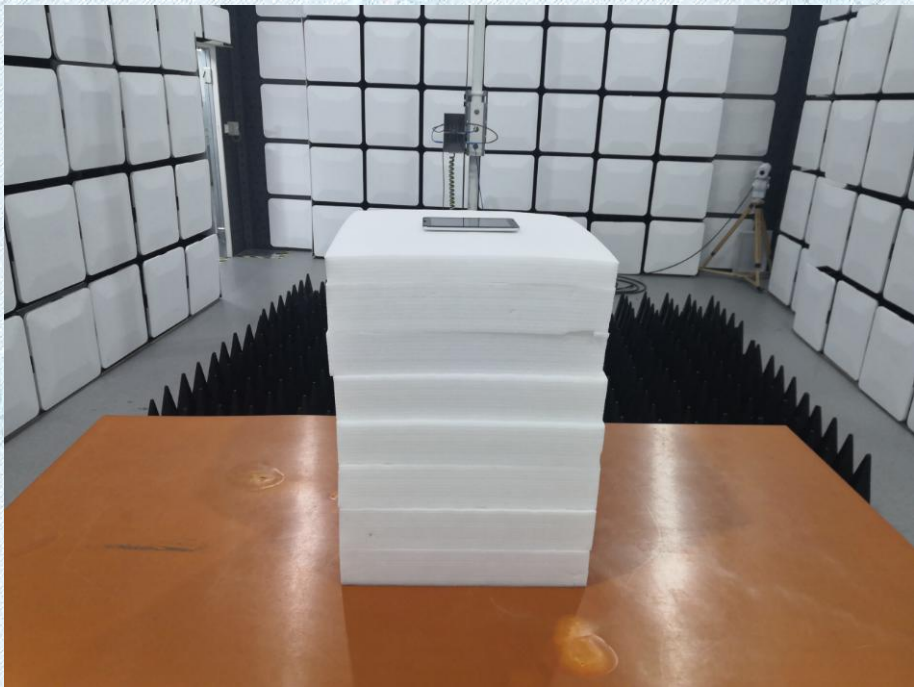
Remarks:  
 1.Measurement = Reading Level+ Correct Factor  
 2.Over = Measurement -Limit

## 4.EUT TEST PHOTOS

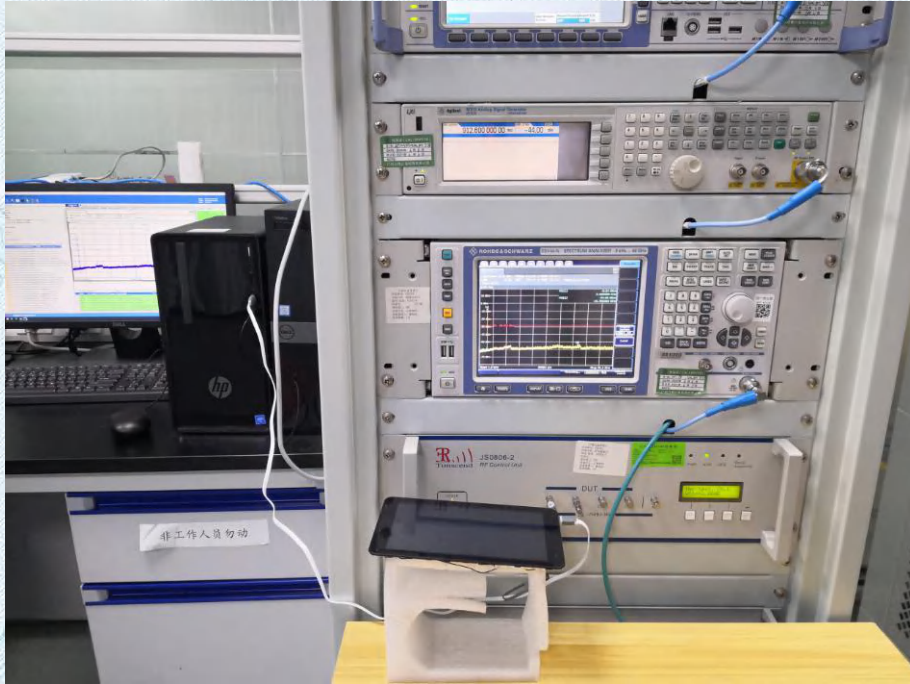
Radiated Emissions (30MHz~1000MHz)



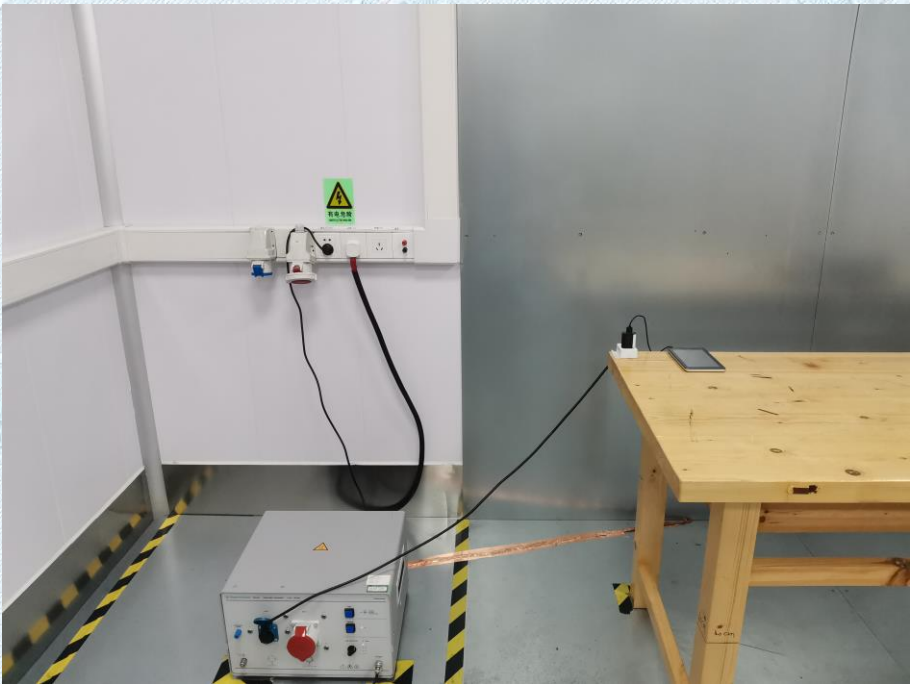
Radiated Emissions (Above 1GHz)



RF Conducted



Conducted Emission

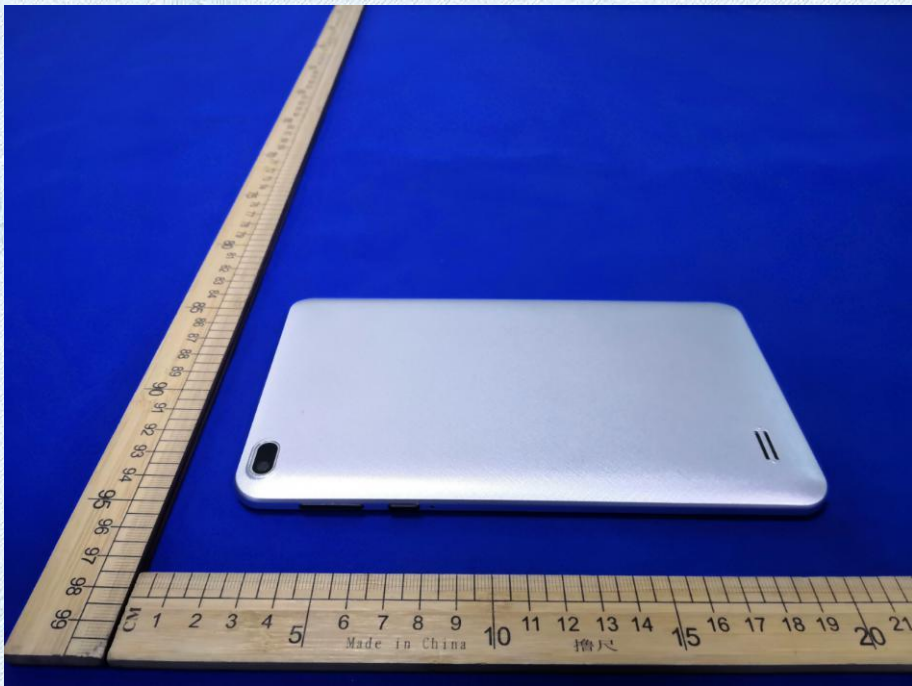




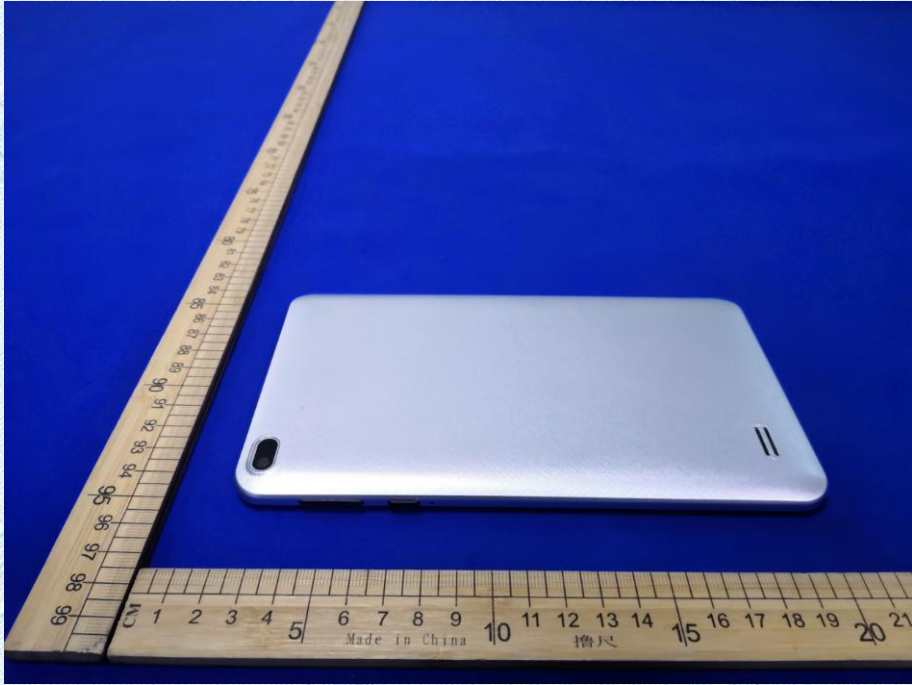
# 5. PHOTOGRAPHS OF EUT CONSTRUCTIONAL

## External Photographs







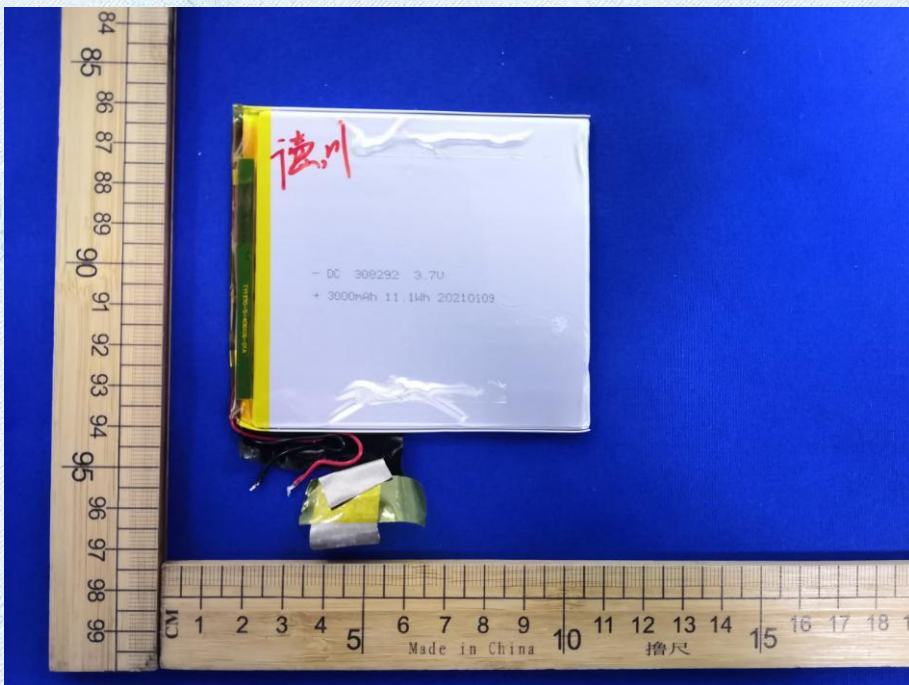


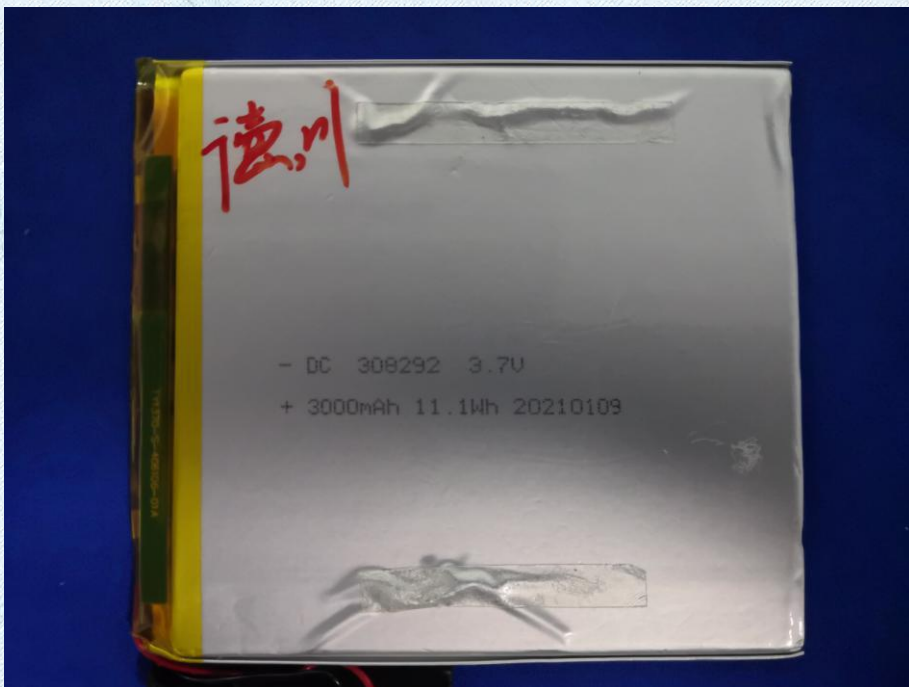
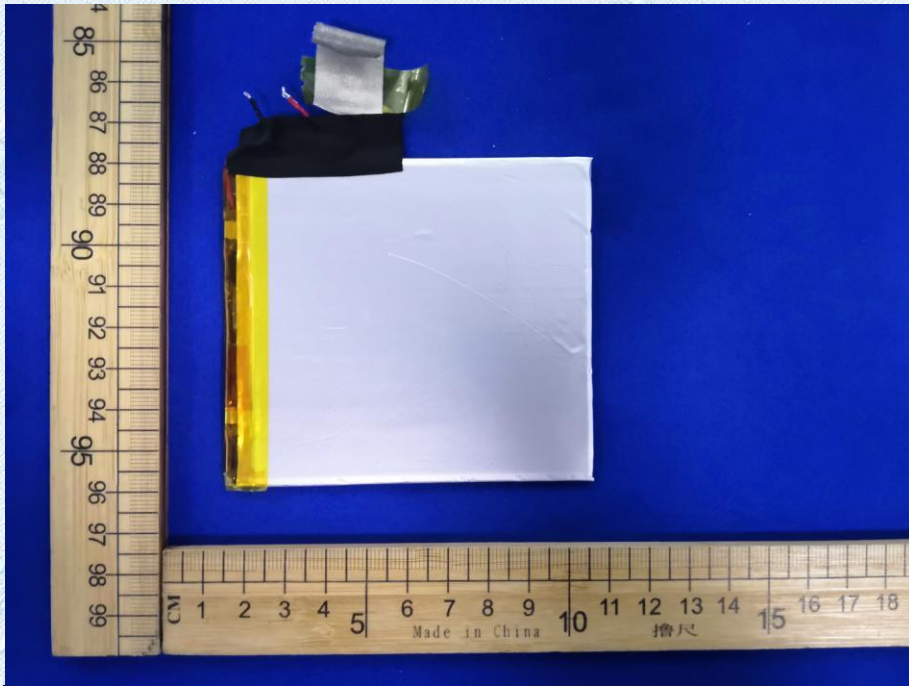




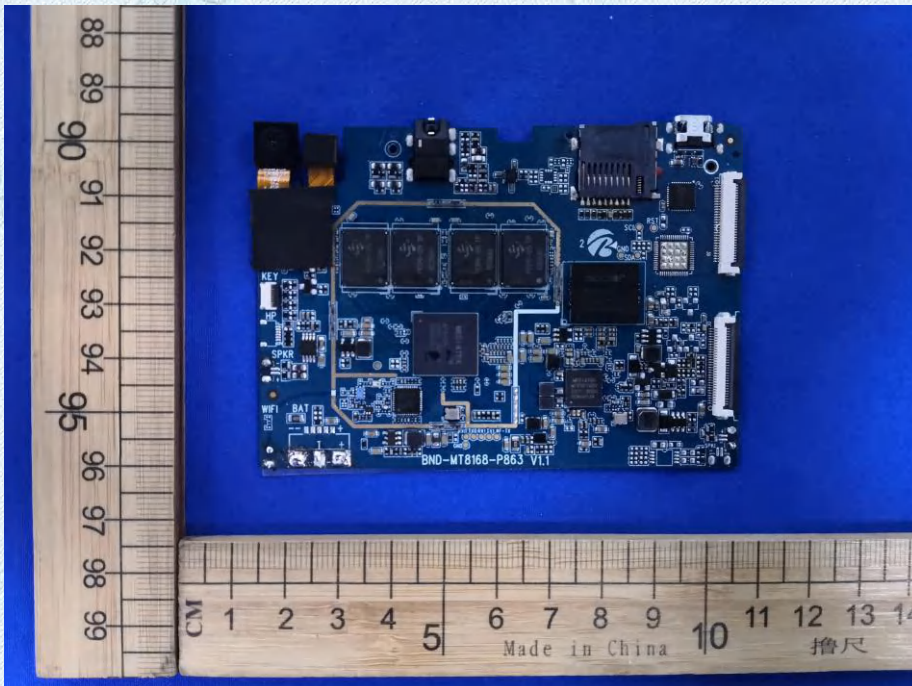
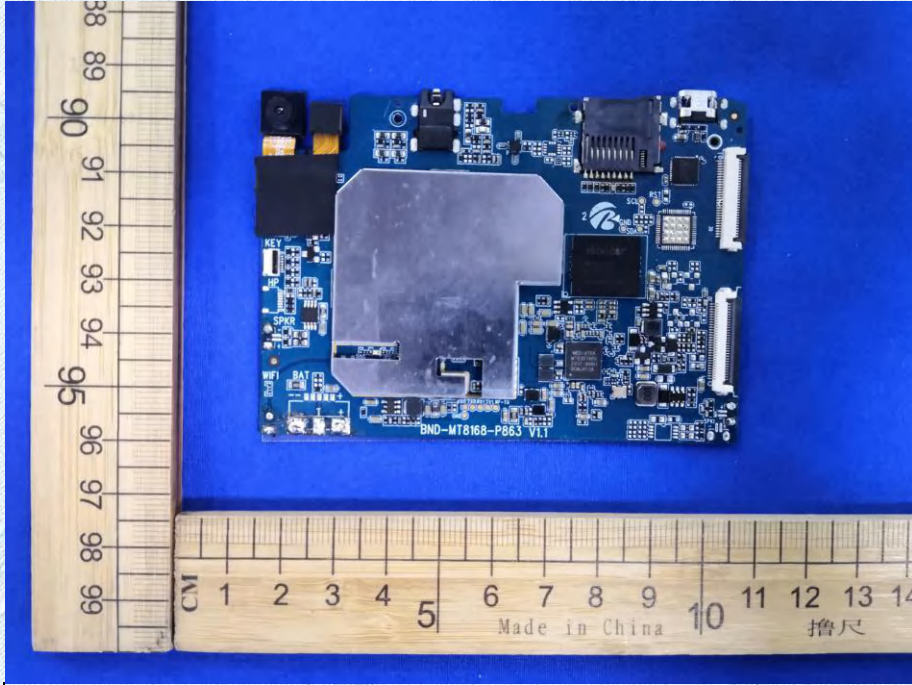
### Internal Photographs

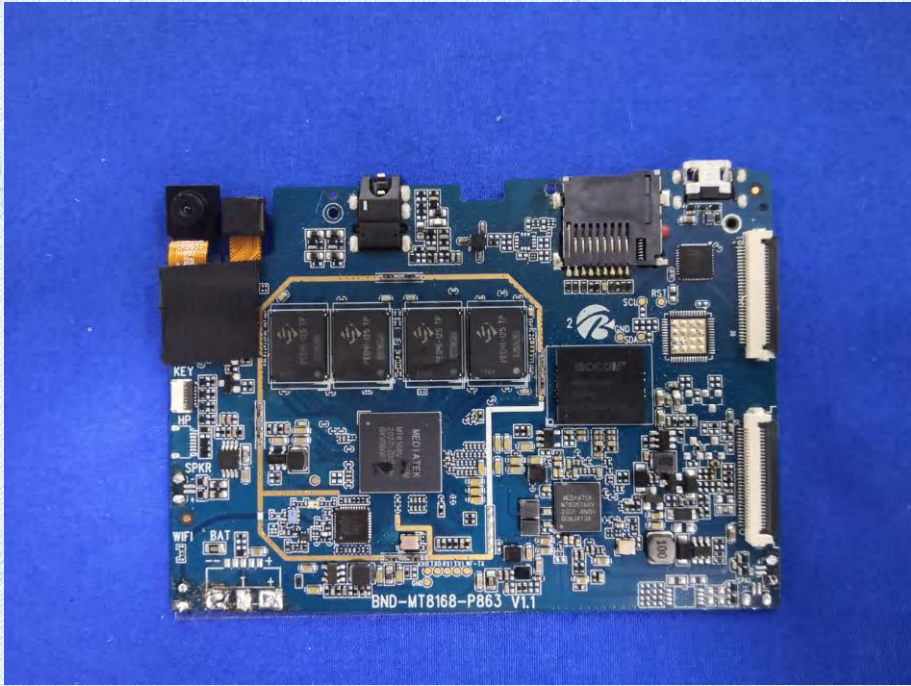
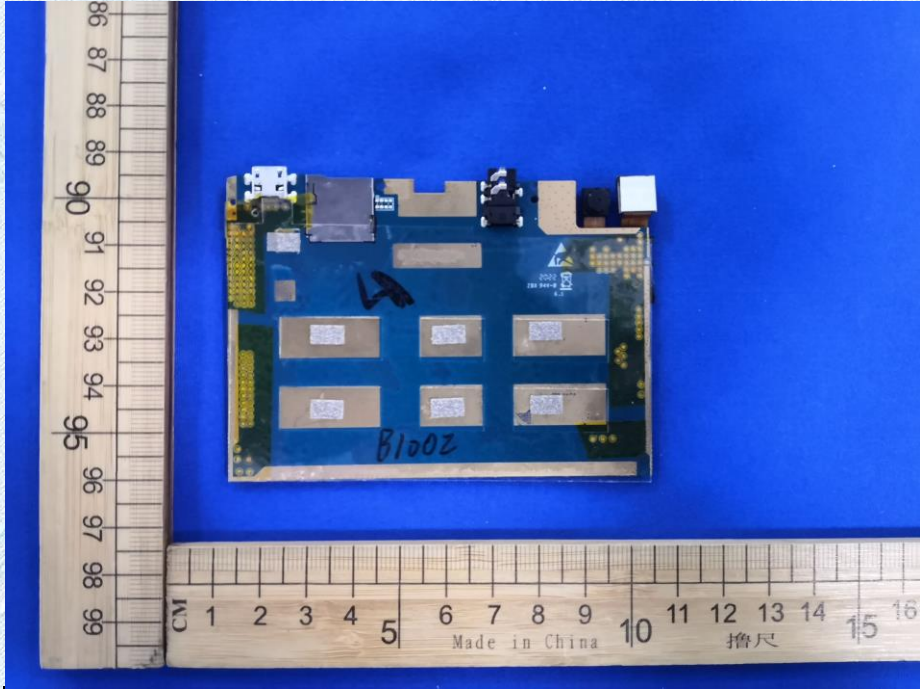














\*\*\*\*\*THE END\*\*\*\*\*