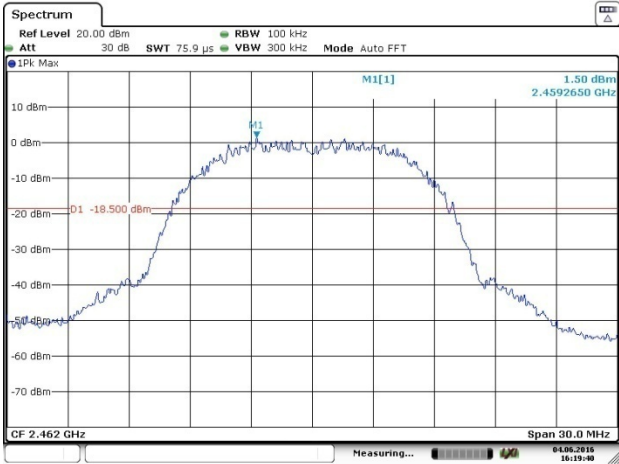


Mode:

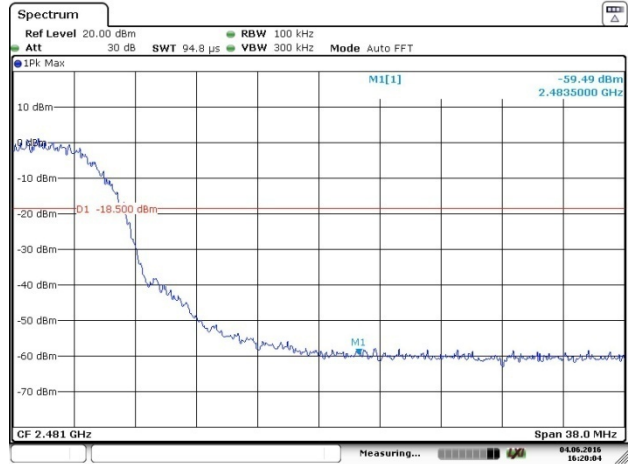
802.11b

Test channel:

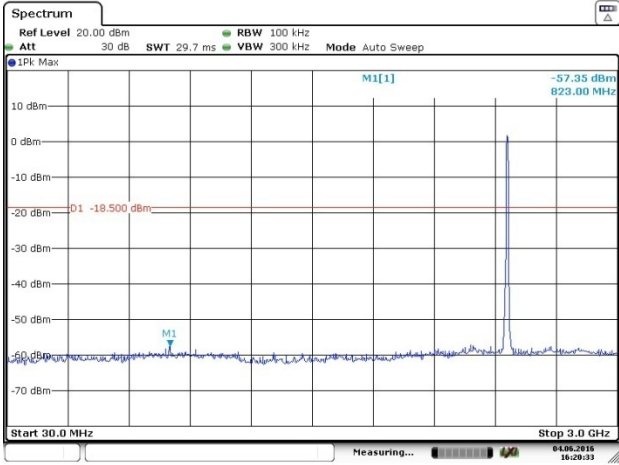
11



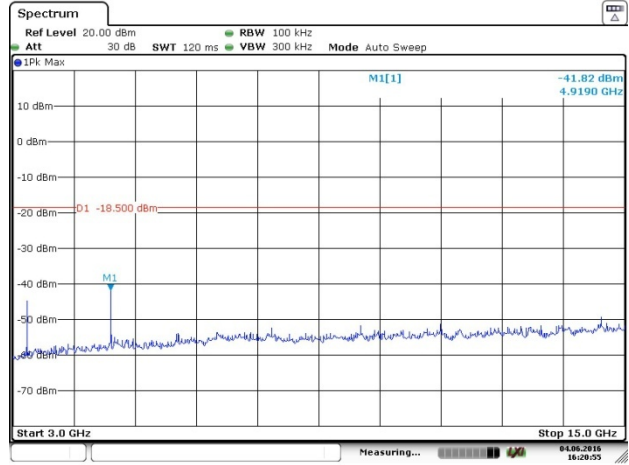
100kHz PSD Reference Level



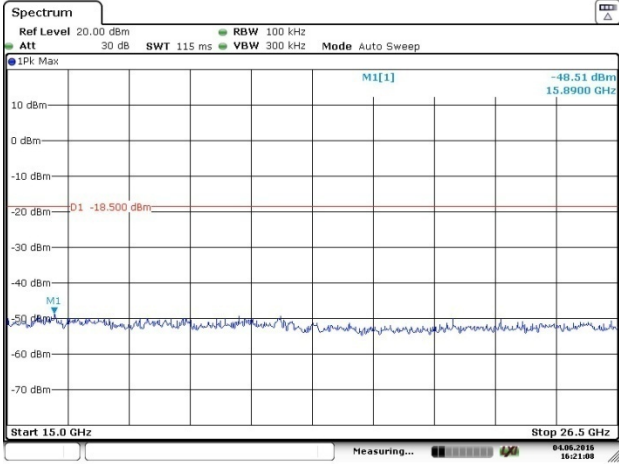
High bandedge Plot



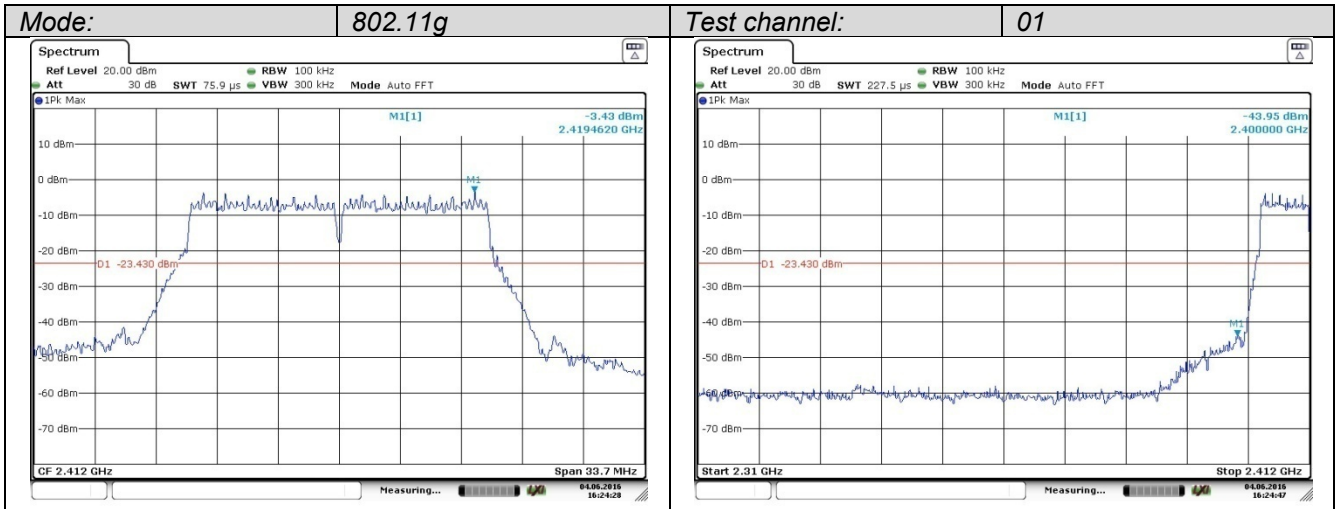
30MHz~3GHz



3GHz~15GHz

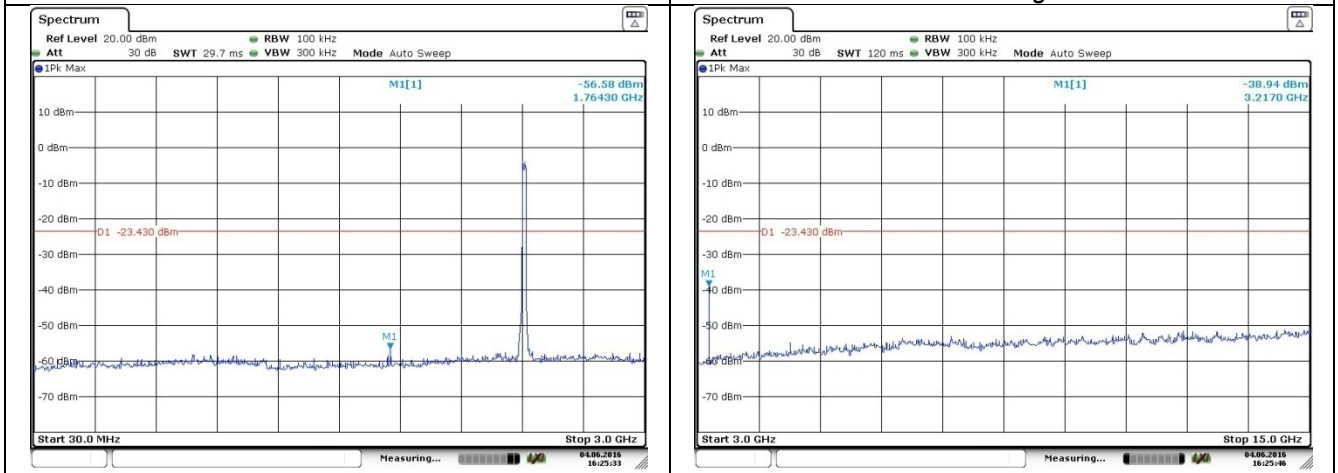


15GHz~26.5GHz



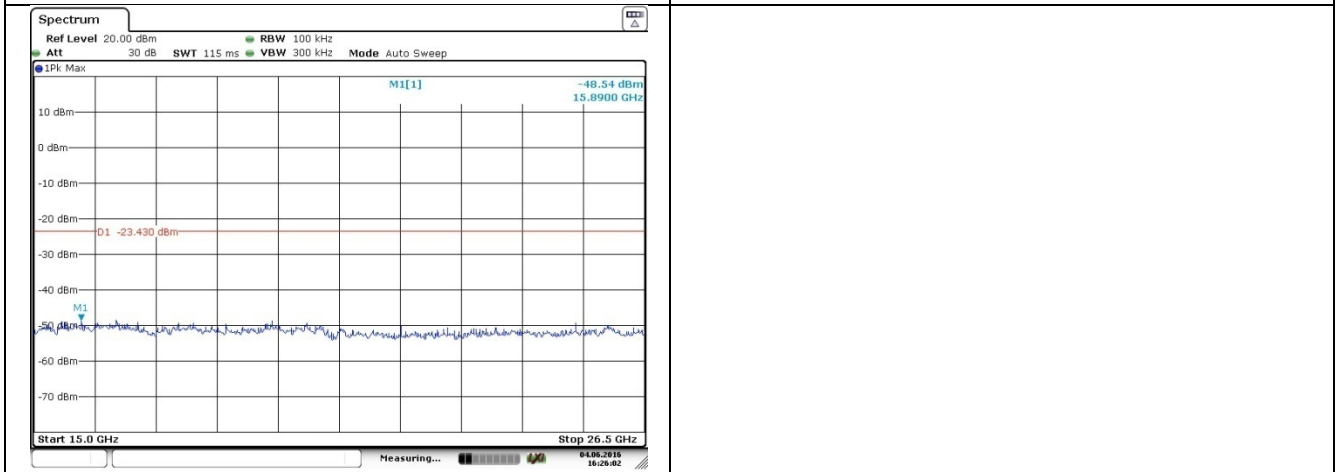
100KHz PSD Reference Level

Low bandedge Plot



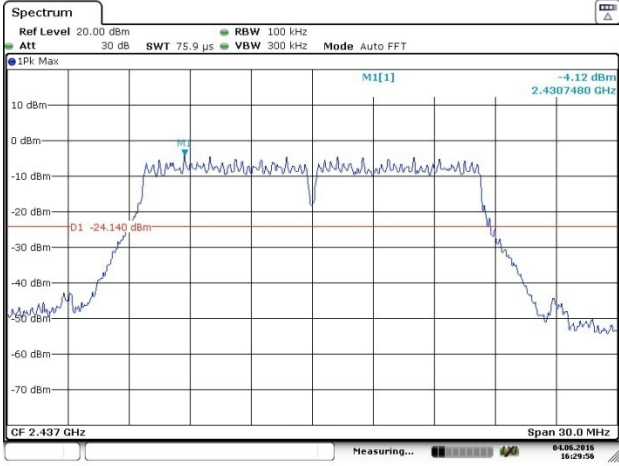
30MHz~3GHz

3GHz15GHz

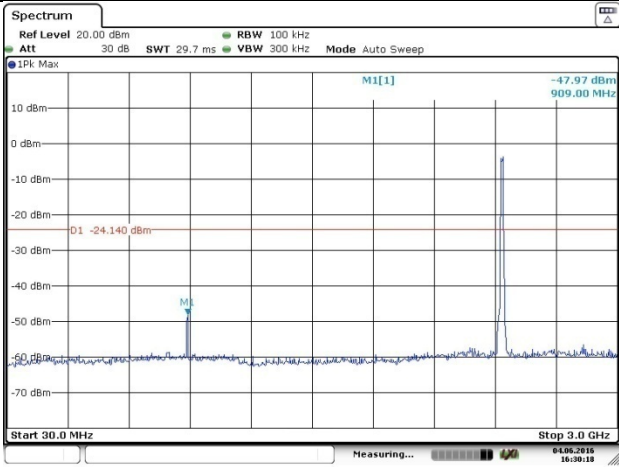


15GHz~26.5GHz

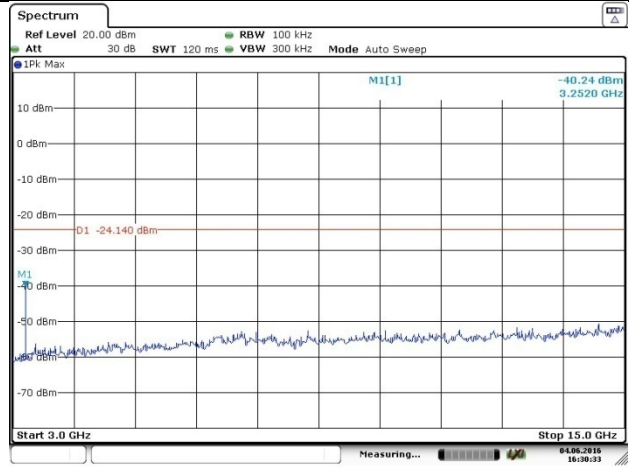
Mode: 802.11g Test channel: 06



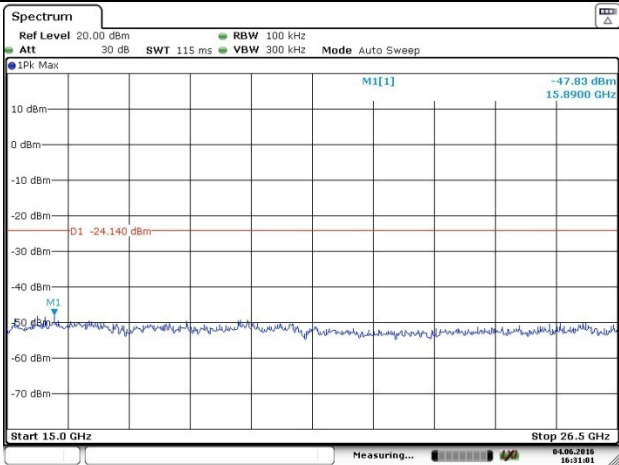
100KHz PSD Reference Level



30MHz~3GHz



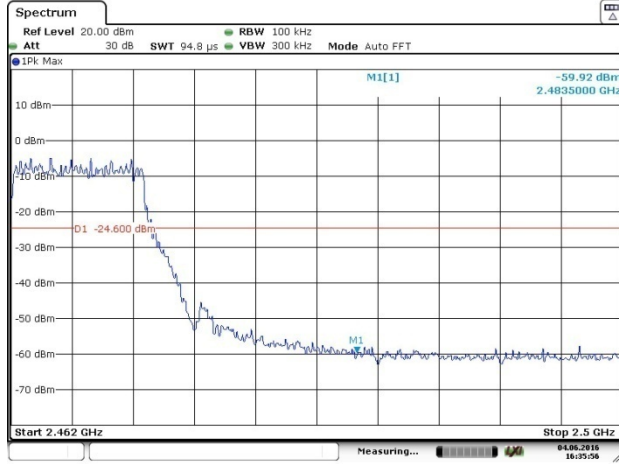
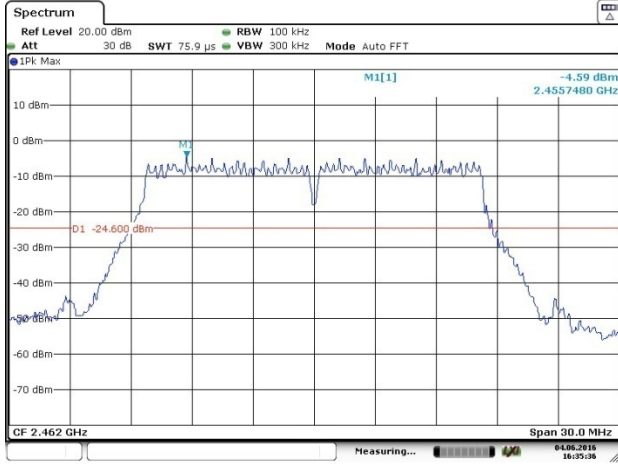
3GHz~15GHz



15GHz~26.5GHz

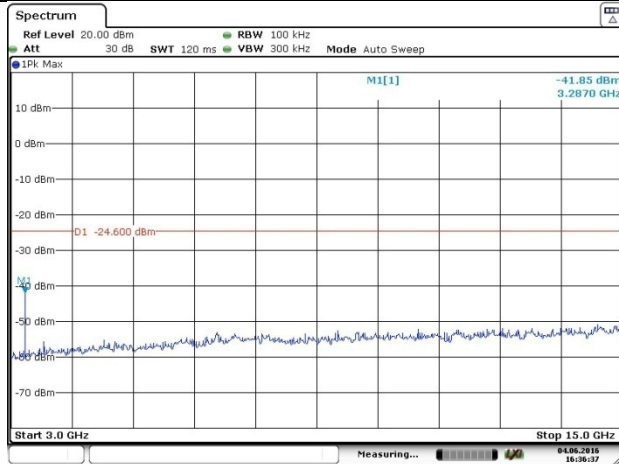
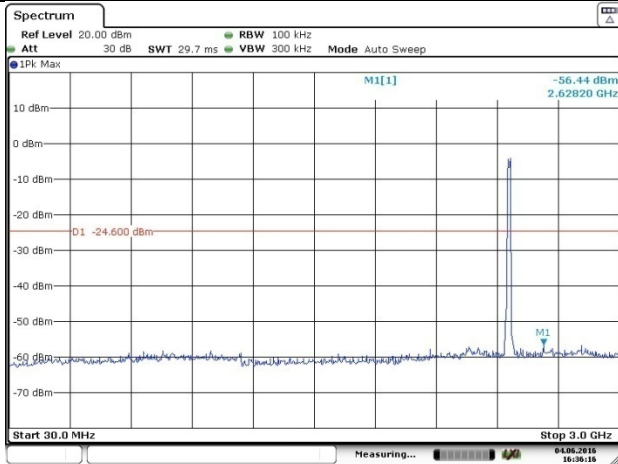
Mode: 802.11g

Test channel: 11



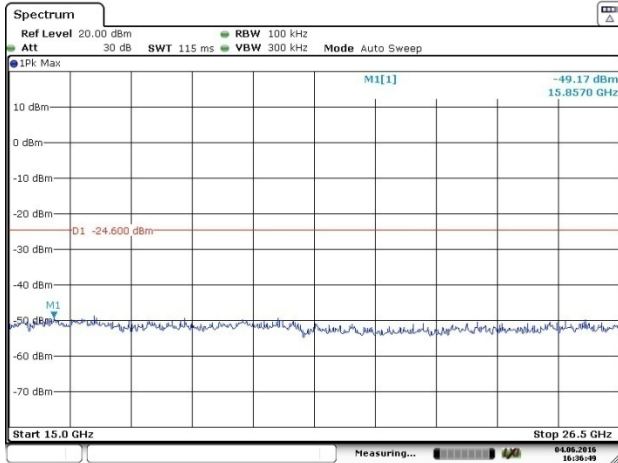
100KHz PSD Reference Level

High bandedge Plot



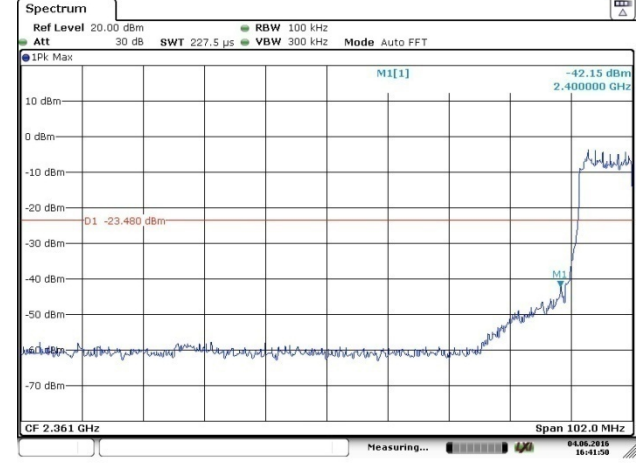
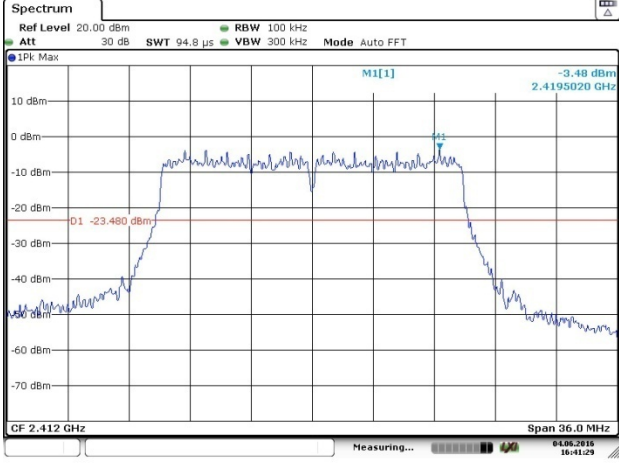
30MHz~3GHz

3GHz~15GHz



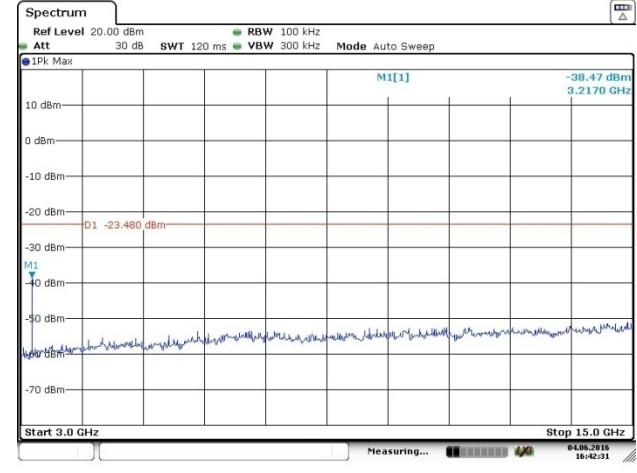
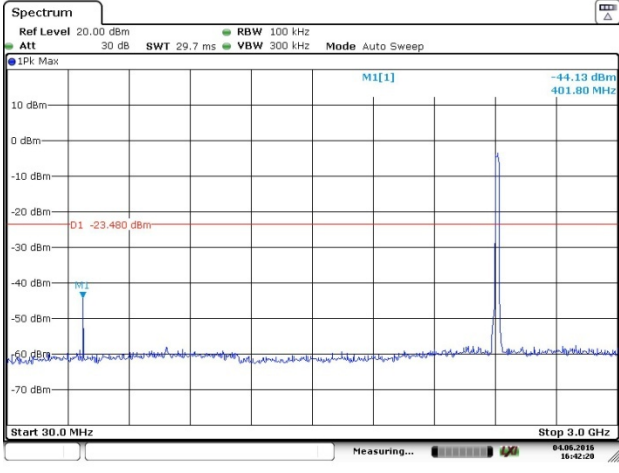
15GHz~26.5GHz

Mode: 802.11n20 Test channel: 01



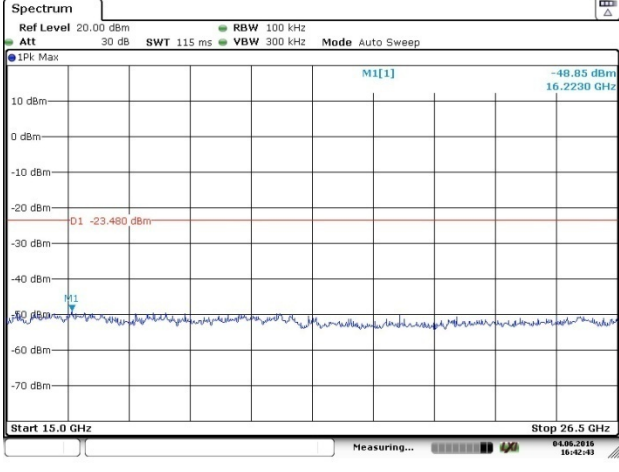
100KHz PSD Reference Level

Low bandedge Plot



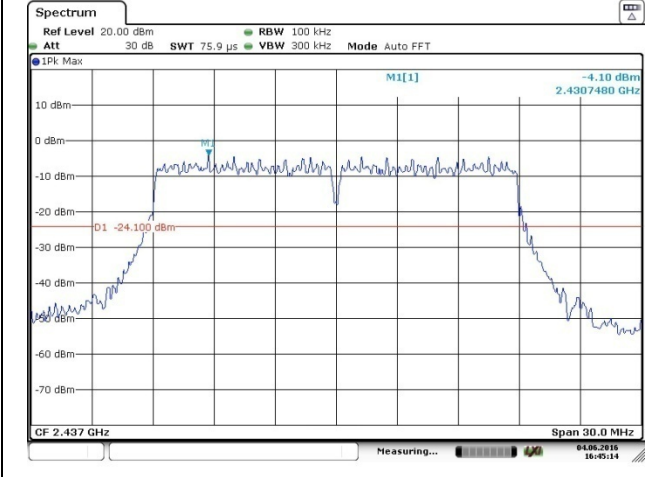
30MHz~3GHz

3GHz~15GHz

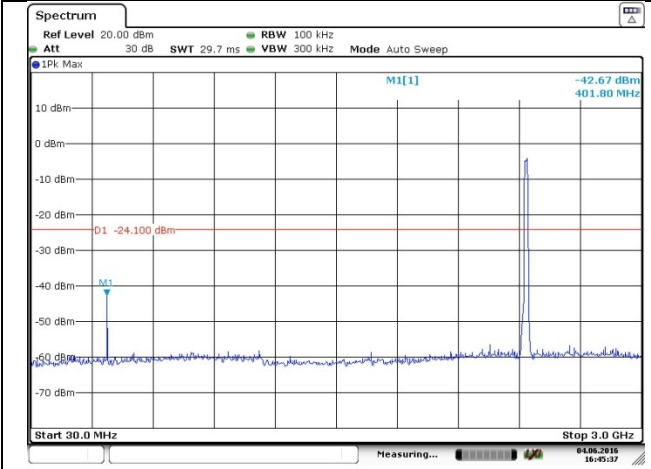


15GHz~26.5GHz

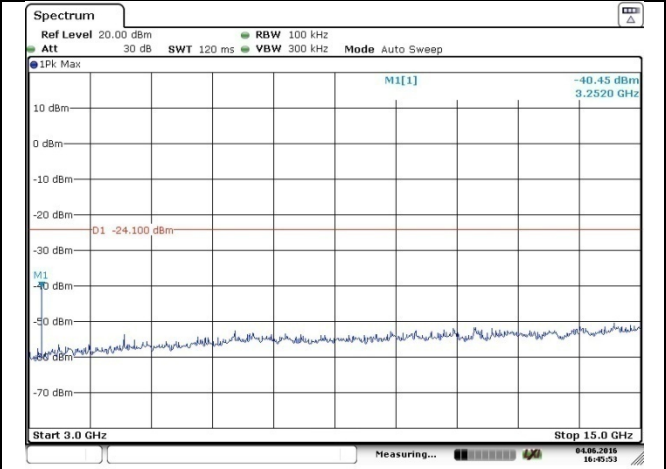
|       |           |               |    |
|-------|-----------|---------------|----|
| Mode: | 802.11n20 | Test channel: | 06 |
|-------|-----------|---------------|----|



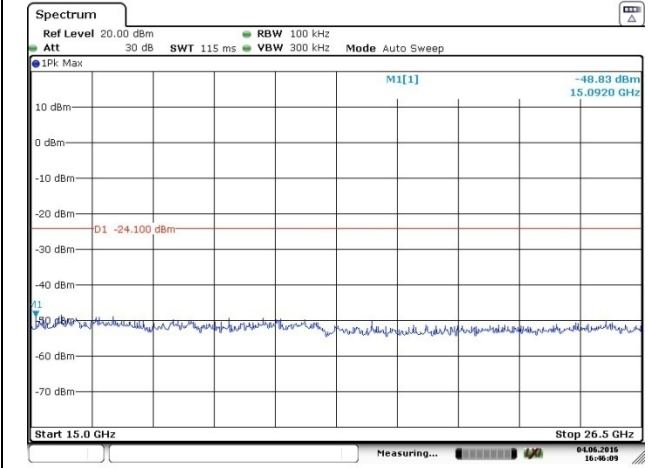
100KHz PSD Reference Level



30MHz~3GHz

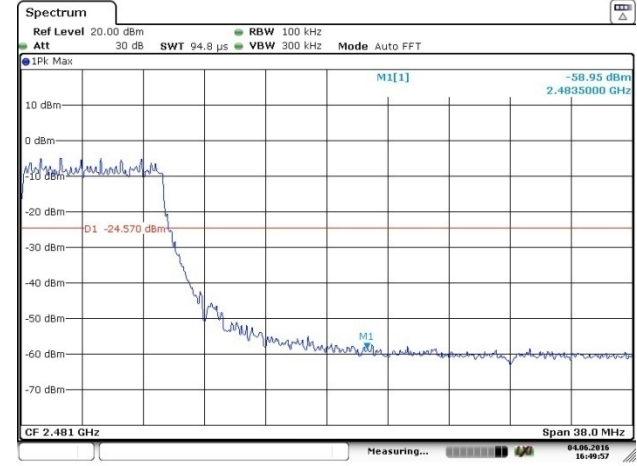
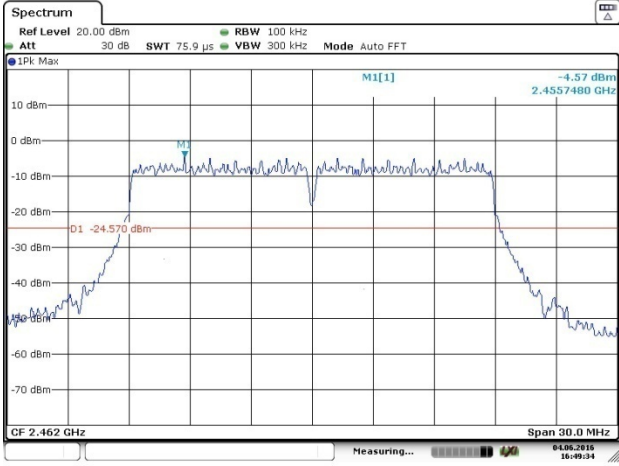


3GHz~15GHz



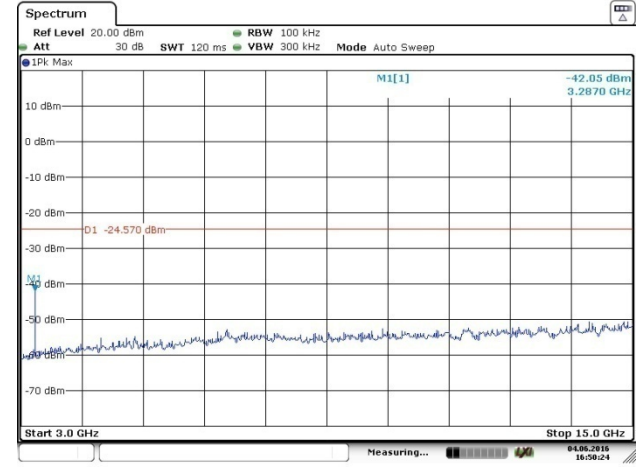
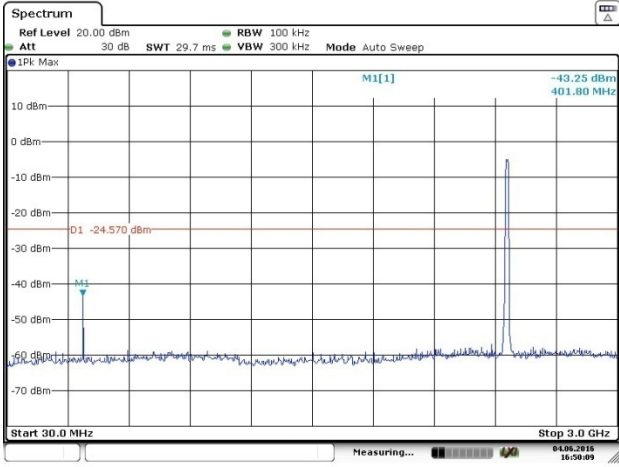
15GHz~26.5GHz

Mode: 802.11n20 Test channel: 11



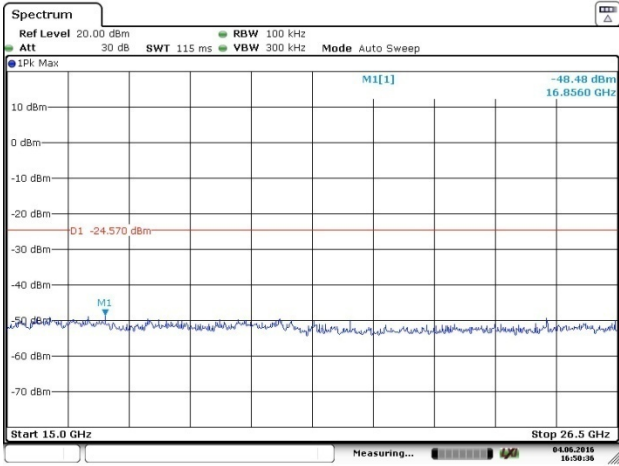
100KHz PSD Reference Level

High bandedge Plot



30MHz~3GHz

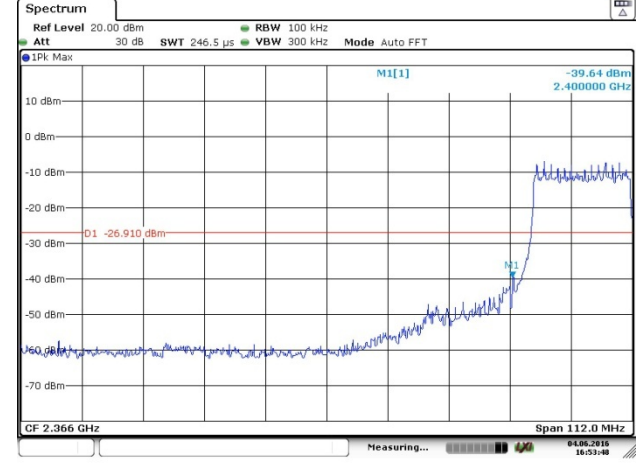
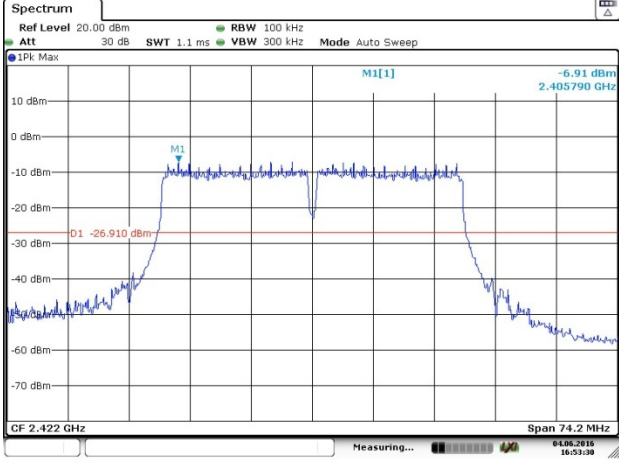
3GHz~15GHz



15GHz~26.5GHz

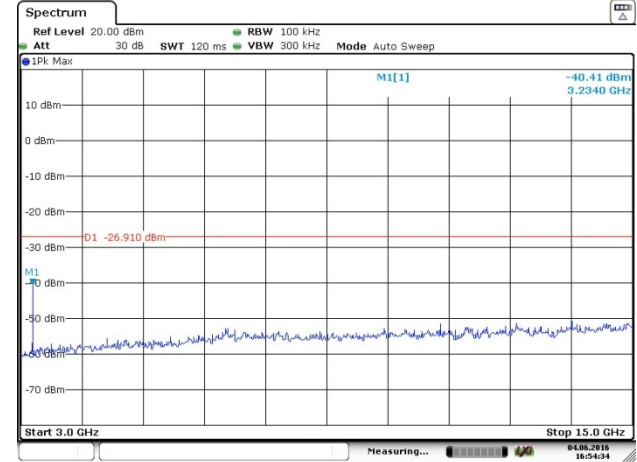
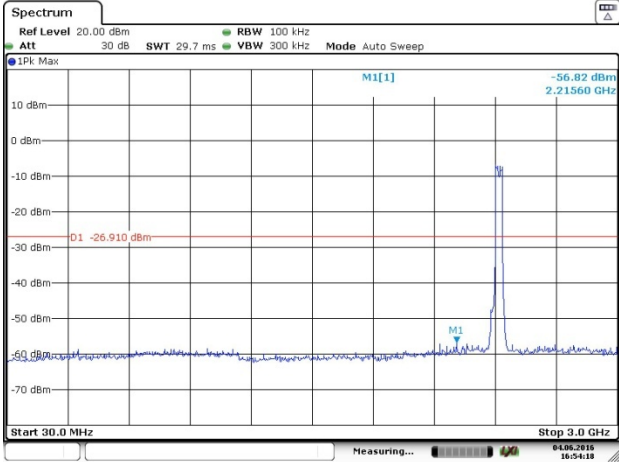


Mode: 802.11n40 Test channel: 03



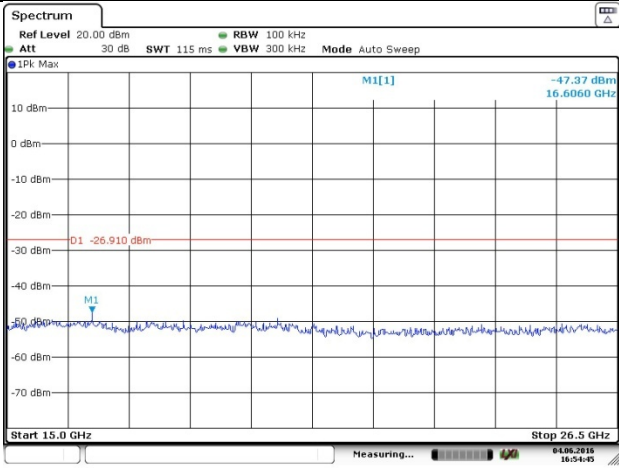
100KHz PSD Reference Level

Low bandedge Plot



30MHz~3GHz

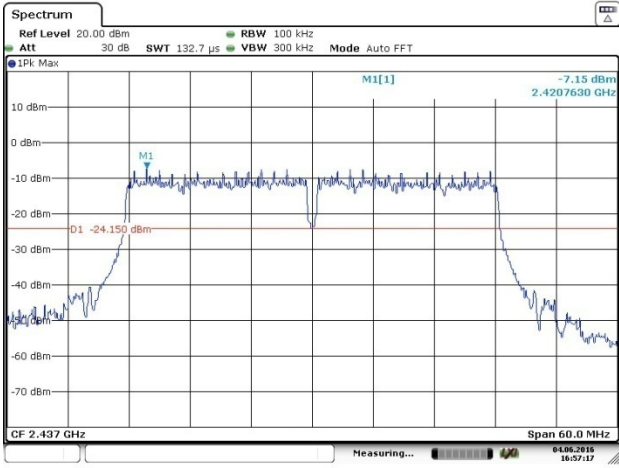
3GHz15GHz



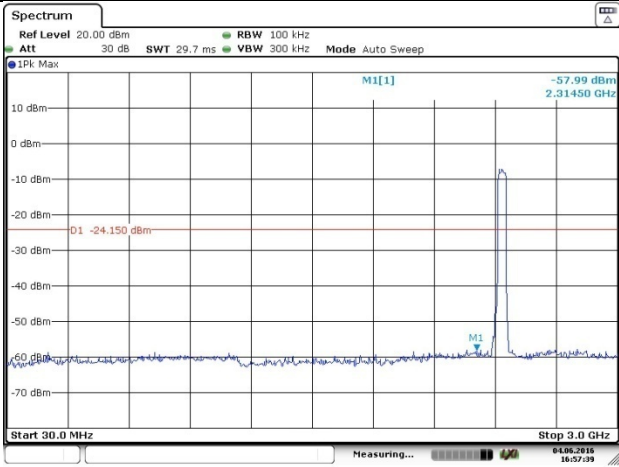
15GHz~26.5GHz



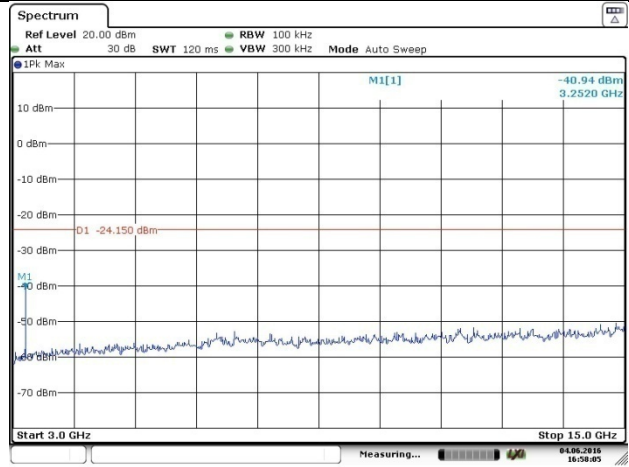
Mode: 802.11n40 Test channel: 06



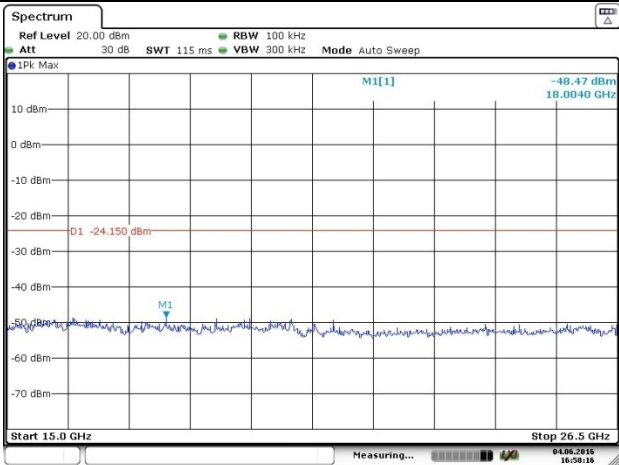
100KHz PSD Reference Level



30MHz~3GHz



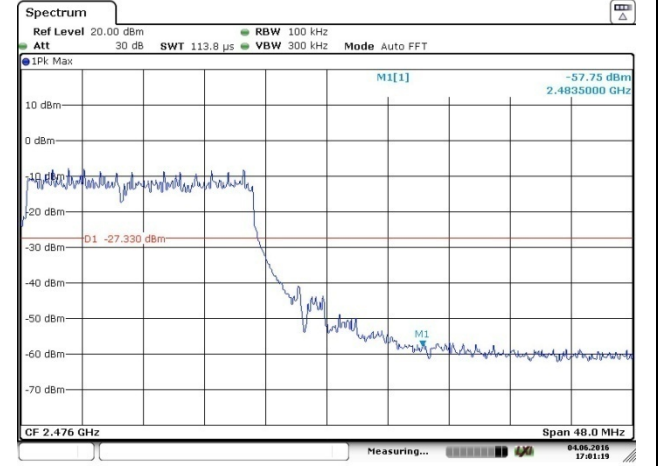
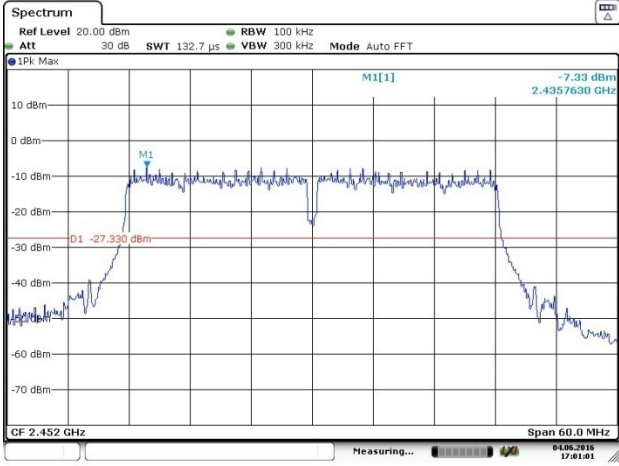
3GHz~15GHz



15GHz~26.5GHz

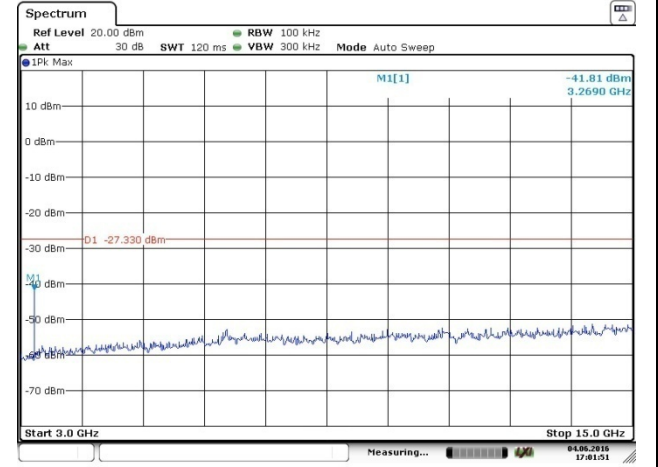
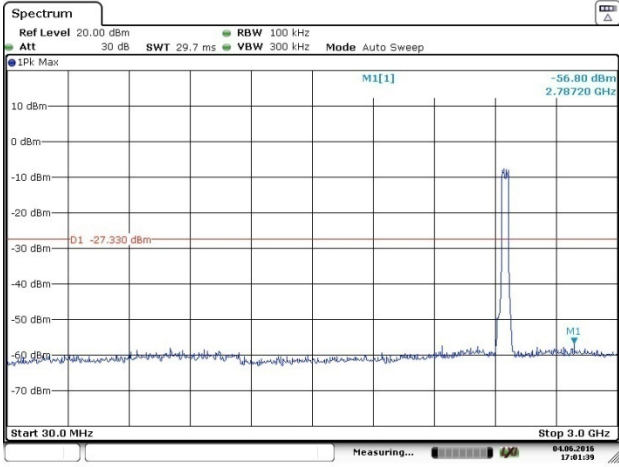
Mode: 802.11n40

Test channel: 09



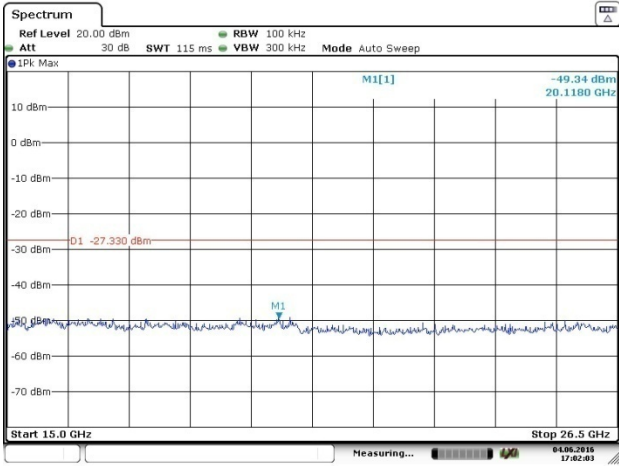
100KHz PSD Reference Level

High bandedge Plot



30MHz~3GHz

3GHz~15GHz



15GHz~26.5GHz

### 4.8. Spurious Emission (radiated)

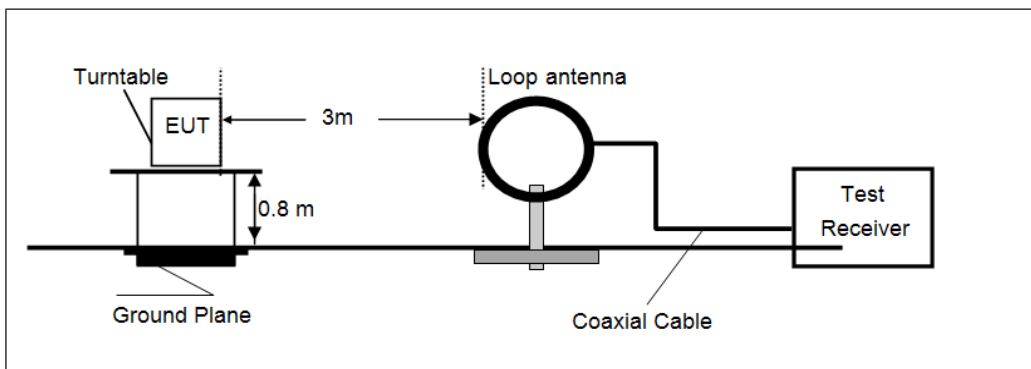
#### LIMIT

FCC CFR Title 47 Part 15 Subpart C Section 15.209

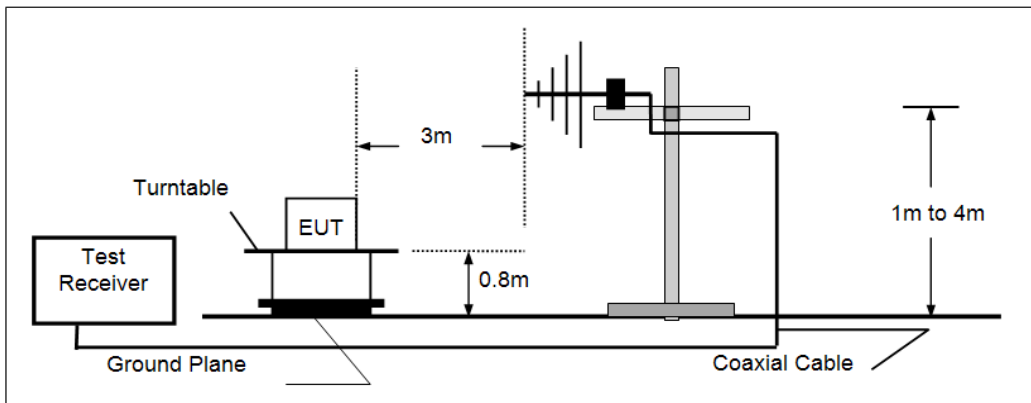
| Frequency     | Limit (dBuV/m @3m) | Value      |
|---------------|--------------------|------------|
| 30MHz-88MHz   | 40.00              | Quasi-peak |
| 88MHz-216MHz  | 43.50              | Quasi-peak |
| 216MHz-960MHz | 46.00              | Quasi-peak |
| 960MHz-1GHz   | 54.00              | Quasi-peak |
| Above 1GHz    | 54.00              | Average    |
|               | 74.00              | Peak       |

#### TEST CONFIGURATION

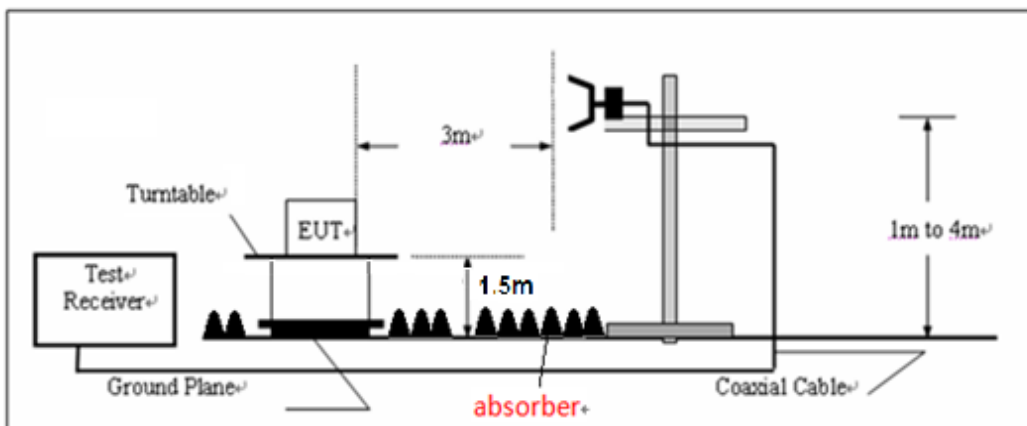
- 9KHz ~30MHz



- 30MHz ~ 1GHz



- Above 1GHz



### TEST PROCEDURE

1. The EUT was tested according to ANSI C63.10:2013 for compliance to FCC 47CFR 15.247 requirements.
2. The EUT is placed on a turn table which is 0.8 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.
5. Use the following spectrum analyzer settings
  - (1) Span shall be wide enough to fully capture the emission being measured;
  - (2) Below 1GHz, RBW=120KHz, VBW=300KHz, 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) Above 1GHz, RBW=1MHz, VBW=3MHz for Peak value  
RBW=1MHz, VBW=3MHz for Average value.

### TEST RESULTS

#### **Measurement data:**

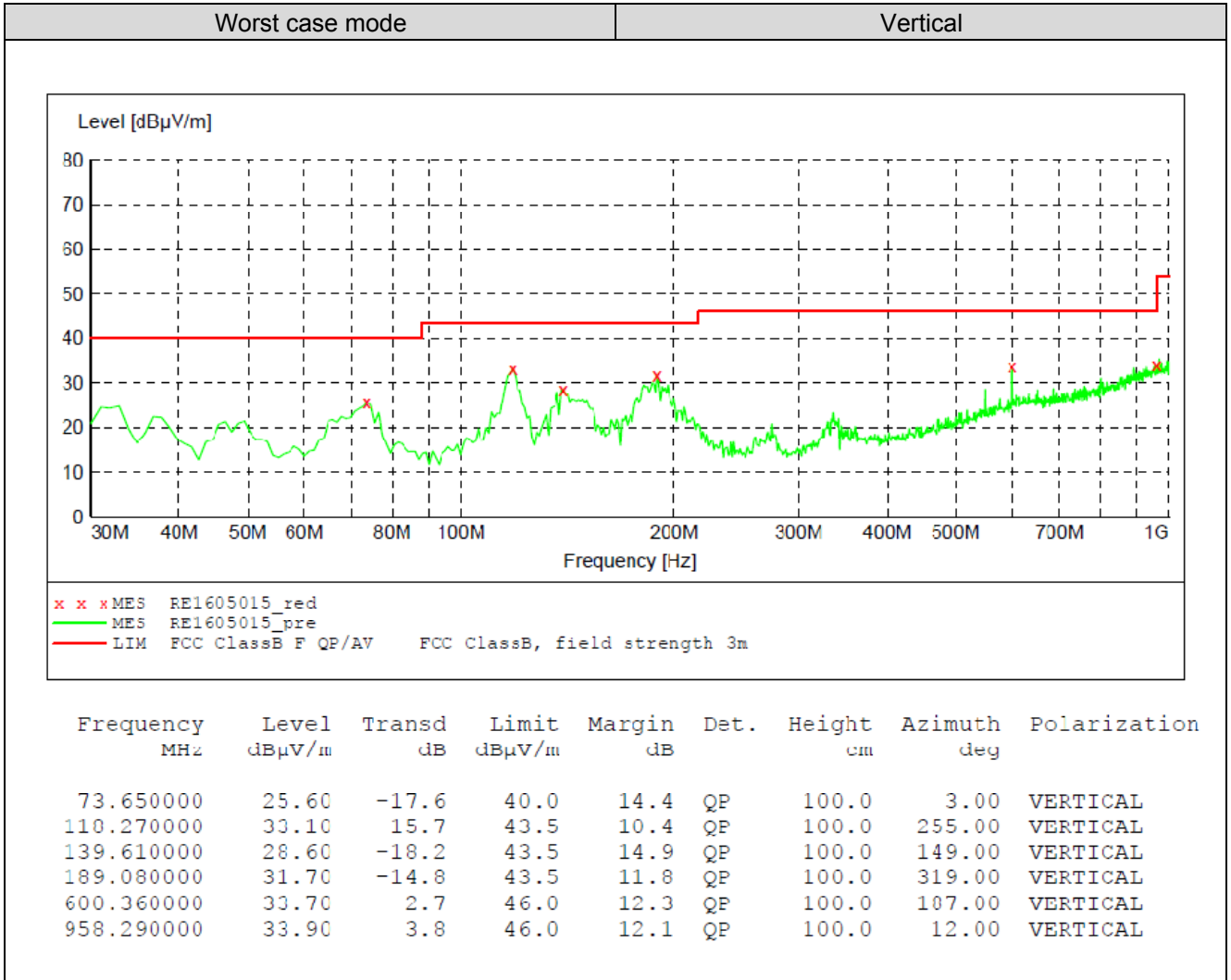
Remark:

1. *Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor*
2. *“\*”*, means this data is too weak instrument of signal is unable to test.
3. *The emission levels of other frequencies are very lower than the limit and not show in test report.*

#### ■ **9kHz ~ 30MHz**

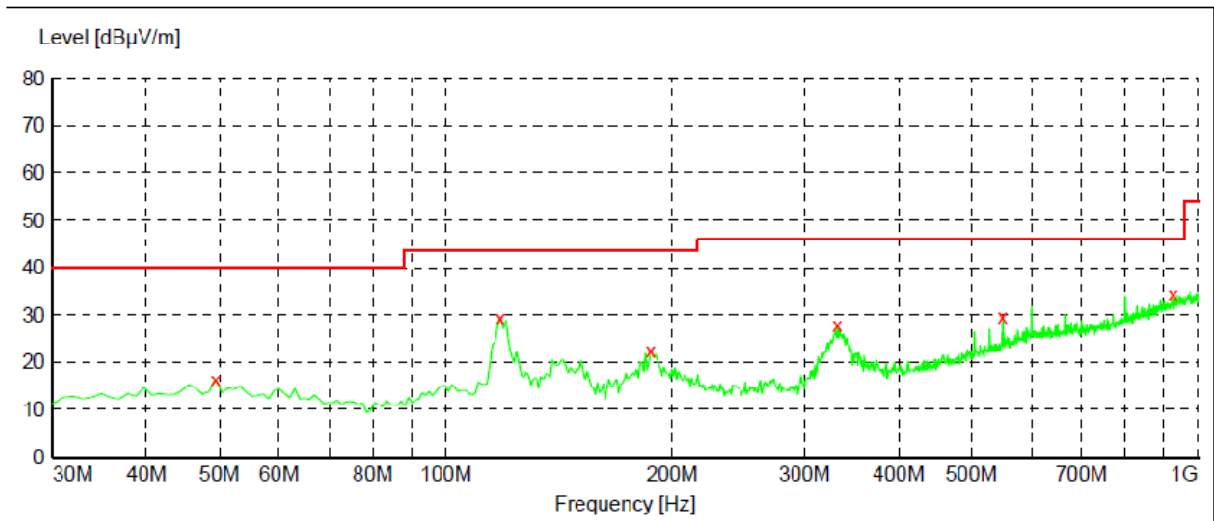
The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line per 15.31(o) was not show.

■ 30MHz ~ 1GHz



Worst case mode

Horizontal



x x x MES RE1605014\_red  
 MES RE1605014\_pre  
 LIM FCC ClassB F QP/AV FCC ClassB, field strength 3m

| Frequency<br>MHz | Level<br>dBµV/m | Transd<br>dB | Limit<br>dBµV/m | Margin<br>dB | Det. | Height<br>cm | Azimuth<br>deg | Polarization |
|------------------|-----------------|--------------|-----------------|--------------|------|--------------|----------------|--------------|
| 49.400000        | 16.30           | -14.4        | 40.0            | 23.7         | QP   | 300.0        | 202.00         | HORIZONTAL   |
| 118.270000       | 29.50           | -15.7        | 43.5            | 14.0         | QP   | 300.0        | 1.00           | HORIZONTAL   |
| 187.140000       | 22.50           | -15.0        | 43.5            | 21.0         | QP   | 100.0        | 171.00         | HORIZONTAL   |
| 331.670000       | 27.90           | -12.7        | 46.0            | 18.1         | QP   | 100.0        | 319.00         | HORIZONTAL   |
| 549.920000       | 29.60           | -4.8         | 46.0            | 16.4         | QP   | 100.0        | 156.00         | HORIZONTAL   |
| 927.250000       | 34.40           | 3.2          | 46.0            | 11.6         | QP   | 300.0        | 234.00         | HORIZONTAL   |

■ Above 1 GHz ~12.75GHz

| CH01 for 802.11b |                   |                       |                 |                          |                |                     |                   |              |            |
|------------------|-------------------|-----------------------|-----------------|--------------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)  | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2400.00          | 48.56             | 27.58                 | 3.90            | 35.62                    | 44.42          | 74.00               | -29.58            | Vertical     | Peak       |
| 4824.00          | 40.32             | 29.18                 | 8.61            | 37.99                    | 40.12          | 74.00               | -33.88            | Vertical     |            |
| 7236.00          | 35.55             | 36.17                 | 10.95           | 38.15                    | 44.52          | 74.00               | -29.48            | Vertical     |            |
| 9648.00          | 37.42             | 38.2                  | 12.17           | 38.08                    | 49.71          | 74.00               | -24.29            | Vertical     |            |
| 12060.00         | *                 |                       |                 |                          |                | 74.00               |                   | Vertical     |            |
| 2400.00          | 47.82             | 27.58                 | 3.90            | 35.62                    | 43.68          | 74.00               | -30.32            | Horizontal   |            |
| 4824.00          | 38.68             | 32                    | 9.53            | 38.39                    | 41.82          | 74.00               | -32.18            | Horizontal   |            |
| 7236.00          | 38.16             | 35.92                 | 6.94            | 35.18                    | 45.84          | 74.00               | -28.16            | Horizontal   |            |
| 9648.00          | 40.83             | 38.2                  | 12.17           | 38.08                    | 53.12          | 74.00               | -20.88            | Horizontal   |            |
| 12060.00         | *                 |                       |                 |                          |                | 74.00               |                   | Horizontal   |            |
| 2400.00          | 40.88             | 27.58                 | 3.90            | 35.62                    | 36.74          | 54.00               | -17.26            | Vertical     | Average    |
| 4824.00          | 40.3              | 29.18                 | 8.61            | 37.99                    | 40.1           | 54.00               | -13.90            | Vertical     |            |
| 7236.00          | 28.25             | 36.17                 | 10.95           | 38.15                    | 37.22          | 54.00               | -16.78            | Vertical     |            |
| 9648.00          | 27.58             | 38.2                  | 12.17           | 38.08                    | 39.87          | 54.00               | -14.13            | Vertical     |            |
| 12060.00         | *                 |                       |                 |                          |                | 54.00               |                   | Vertical     |            |
| 2400.00          | 39.92             | 27.58                 | 3.90            | 35.62                    | 35.78          | 54.00               | -18.22            | Horizontal   |            |
| 4824.00          | 41.24             | 32                    | 9.53            | 38.39                    | 44.38          | 54.00               | -9.62             | Horizontal   |            |
| 7236.00          | 28.78             | 35.92                 | 6.94            | 35.18                    | 36.46          | 54.00               | -17.54            | Horizontal   |            |
| 9648.00          | 27.73             | 38.2                  | 12.17           | 38.08                    | 40.02          | 54.00               | -13.98            | Horizontal   |            |
| 12060.00         | *                 |                       |                 |                          |                | 54.00               |                   | Horizontal   |            |

| CH06 for 802.11b |                   |                       |                 |                          |                |                     |                   |              |            |
|------------------|-------------------|-----------------------|-----------------|--------------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)  | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 4874.00          | 39.35             | 30.91                 | 8.99            | 38.34                    | 40.91          | 74.00               | -33.09            | Vertical     | Peak       |
| 7311.00          | 35.56             | 35.44                 | 10.53           | 38.02                    | 43.51          | 74.00               | -30.49            | Vertical     |            |
| 9748.00          | 37.59             | 38.02                 | 12.17           | 38.08                    | 49.70          | 74.00               | -24.30            | Vertical     |            |
| 12185.00         | *                 |                       |                 |                          |                | 74.00               |                   | Vertical     |            |
| 4874.00          | 38.61             | 30.24                 | 8.81            | 38.17                    | 39.49          | 74.00               | -34.51            | Horizontal   |            |
| 7311.00          | 36.60             | 35.44                 | 10.53           | 38.02                    | 44.55          | 74.00               | -29.45            | Horizontal   |            |
| 9748.00          | 37.54             | 38.2                  | 12.17           | 38.08                    | 49.83          | 74.00               | -24.17            | Horizontal   |            |
| 12185.00         | *                 |                       |                 |                          |                | 74.00               |                   | Horizontal   |            |
| 4874.00          | 40.02             | 30.91                 | 8.99            | 38.34                    | 41.58          | 54.00               | -12.42            | Vertical     | Average    |
| 7311.00          | 29.57             | 35.44                 | 10.53           | 38.02                    | 37.52          | 54.00               | -16.48            | Vertical     |            |
| 9748.00          | 27.76             | 38.02                 | 12.17           | 38.08                    | 39.87          | 54.00               | -14.13            | Vertical     |            |
| 12185.00         | *                 |                       |                 |                          |                | 54.00               |                   | Vertical     |            |
| 4874.00          | 43.75             | 30.24                 | 8.81            | 38.17                    | 44.63          | 54.00               | -19.37            | Horizontal   |            |
| 7311.00          | 28.53             | 35.44                 | 10.53           | 38.02                    | 36.48          | 54.00               | -17.52            | Horizontal   |            |
| 9748.00          | 27.56             | 38.2                  | 12.17           | 38.08                    | 39.85          | 54.00               | -14.15            | Horizontal   |            |
| 12185.00         | *                 |                       |                 |                          |                | 54.00               |                   | Horizontal   |            |

Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.



| CH11 for 802.11b |                   |                       |                 |                          |                |                     |                   |              |            |
|------------------|-------------------|-----------------------|-----------------|--------------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)  | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2483.50          | 49.16             | 27.85                 | 3.96            | 35.65                    | 45.32          | 74.00               | -28.68            | Vertical     | Peak       |
| 4924.00          | 45.34             | 31.17                 | 9.31            | 38.62                    | 47.20          | 74.00               | -26.80            | Vertical     |            |
| 7386.00          | 36.11             | 36.72                 | 11.24           | 38.24                    | 45.83          | 74.00               | -28.17            | Vertical     |            |
| 9848.00          | 37.54             | 38.33                 | 12.39           | 38.12                    | 50.14          | 74.00               | -23.86            | Vertical     |            |
| 12310.00         | *                 |                       |                 |                          |                | 74.00               |                   | Vertical     |            |
| 2400.00          | 47.36             | 27.85                 | 3.96            | 35.65                    | 43.52          | 74.00               | -30.48            | Horizontal   |            |
| 4924.00          | 49.00             | 31.17                 | 9.31            | 38.62                    | 50.86          | 74.00               | -23.14            | Horizontal   |            |
| 7386.00          | 39.41             | 36.13                 | 10.93           | 38.14                    | 48.33          | 74.00               | -25.67            | Horizontal   |            |
| 9848.00          | 41.02             | 38.33                 | 12.39           | 38.12                    | 53.62          | 74.00               | -20.38            | Horizontal   |            |
| 12310.00         | *                 |                       |                 |                          |                | 74.00               |                   | Horizontal   |            |
| 2483.50          | 41.36             | 27.85                 | 3.96            | 35.65                    | 37.52          | 54.00               | -16.48            | Vertical     | Average    |
| 4924.00          | 39.26             | 31.17                 | 9.31            | 38.62                    | 41.12          | 54.00               | -12.88            | Vertical     |            |
| 7386.00          | 27.95             | 36.72                 | 11.24           | 38.24                    | 37.67          | 54.00               | -16.33            | Vertical     |            |
| 9848.00          | 26.65             | 38.33                 | 12.39           | 38.12                    | 39.25          | 54.00               | -14.75            | Vertical     |            |
| 12310.00         | *                 |                       |                 |                          |                | 54.00               |                   | Vertical     |            |
| 2483.50          | 39.20             | 27.85                 | 3.96            | 35.65                    | 35.36          | 54.00               | -18.64            | Horizontal   |            |
| 4924.00          | 43.01             | 31.17                 | 9.31            | 38.62                    | 44.87          | 54.00               | -9.13             | Horizontal   |            |
| 7386.00          | 26.60             | 36.13                 | 10.93           | 38.14                    | 35.52          | 54.00               | -18.48            | Horizontal   |            |
| 9848.00          | 28.49             | 38.33                 | 12.39           | 38.12                    | 41.09          | 54.00               | -12.91            | Horizontal   |            |
| 12310.00         | *                 |                       |                 |                          |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

| CH01 for 802.11g |                   |                       |                 |                    |                |                     |                   |              |            |
|------------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)  | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2400.00          | 47.56             | 27.58                 | 3.90            | 35.62              | 43.42          | 74.00               | -30.58            | Vertical     | Peak       |
| 4824.00          | 43.85             | 29.18                 | 8.61            | 37.99              | 43.65          | 74.00               | -30.35            | Vertical     |            |
| 7236.00          | 33.58             | 36.17                 | 10.95           | 38.15              | 42.55          | 74.00               | -31.45            | Vertical     |            |
| 9648.00          | 35.30             | 38.2                  | 12.17           | 38.08              | 47.59          | 74.00               | -26.41            | Vertical     |            |
| 12060.00         | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 2400.00          | 45.90             | 27.58                 | 3.90            | 35.62              | 41.76          | 74.00               | -32.24            | Horizontal   |            |
| 4824.00          | 41.37             | 32                    | 9.53            | 38.39              | 44.51          | 74.00               | -29.49            | Horizontal   |            |
| 7236.00          | 36.06             | 35.92                 | 6.94            | 35.18              | 43.74          | 74.00               | -30.26            | Horizontal   |            |
| 9648.00          | 35.64             | 38.2                  | 12.17           | 38.08              | 47.93          | 74.00               | -26.07            | Horizontal   |            |
| 12060.00         | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 2400.00          | 39.92             | 27.58                 | 3.90            | 35.62              | 35.78          | 54.00               | -18.22            | Vertical     | Average    |
| 4824.00          | 38.84             | 29.18                 | 8.61            | 37.99              | 38.64          | 54.00               | -15.36            | Vertical     |            |
| 7236.00          | 28.25             | 36.17                 | 10.95           | 38.15              | 37.22          | 54.00               | -16.78            | Vertical     |            |
| 9648.00          | 27.58             | 38.2                  | 12.17           | 38.08              | 39.87          | 54.00               | -14.13            | Vertical     |            |
| 12060.00         | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 2400.00          | 39.39             | 27.58                 | 3.90            | 35.62              | 35.25          | 54.00               | -18.75            | Horizontal   |            |
| 4824.00          | 34.85             | 32                    | 9.53            | 38.39              | 37.99          | 54.00               | -16.01            | Horizontal   |            |
| 7236.00          | 29.30             | 35.92                 | 6.94            | 35.18              | 36.98          | 54.00               | -17.02            | Horizontal   |            |
| 9648.00          | 27.45             | 38.2                  | 12.17           | 38.08              | 39.74          | 54.00               | -14.26            | Horizontal   |            |
| 12060.00         | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |

| CH06 for 802.11g |                   |                       |                 |                    |                |                     |                   |              |            |
|------------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)  | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 4874.00          | 43.01             | 30.91                 | 8.99            | 38.34              | 44.57          | 74.00               | -29.43            | Vertical     | Peak       |
| 7311.00          | 34.54             | 35.44                 | 10.53           | 38.02              | 42.49          | 74.00               | -31.51            | Vertical     |            |
| 9748.00          | 36.41             | 38.02                 | 12.17           | 38.08              | 48.52          | 74.00               | -25.48            | Vertical     |            |
| 12185.00         | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 4874.00          | 44.65             | 30.24                 | 8.81            | 38.17              | 45.53          | 74.00               | -28.47            | Horizontal   |            |
| 7311.00          | 35.63             | 35.44                 | 10.53           | 38.02              | 43.58          | 74.00               | -30.42            | Horizontal   |            |
| 9748.00          | 34.95             | 38.2                  | 12.17           | 38.08              | 47.24          | 74.00               | -26.76            | Horizontal   |            |
| 12185.00         | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 4874.00          | 36.49             | 30.91                 | 8.99            | 38.34              | 38.05          | 54.00               | -15.95            | Vertical     | Average    |
| 7311.00          | 28.99             | 35.44                 | 10.53           | 38.02              | 36.94          | 54.00               | -17.06            | Vertical     |            |
| 9748.00          | 27.71             | 38.02                 | 12.17           | 38.08              | 39.82          | 54.00               | -14.18            | Vertical     |            |
| 12185.00         | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 4874.00          | 37.78             | 30.24                 | 8.81            | 38.17              | 38.66          | 54.00               | -15.34            | Horizontal   |            |
| 7311.00          | 28.56             | 35.44                 | 10.53           | 38.02              | 36.51          | 54.00               | -17.49            | Horizontal   |            |
| 9748.00          | 28.38             | 38.2                  | 12.17           | 38.08              | 40.67          | 54.00               | -13.33            | Horizontal   |            |
| 12185.00         | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “\*” , means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

| CH11 for 802.11g |                   |                       |                 |                          |                |                     |                   |              |            |
|------------------|-------------------|-----------------------|-----------------|--------------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)  | Read Level (dBUV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Level (dBUV/m) | Limit Line (dBUV/m) | Margin Limit (dB) | Polarization | Test value |
| 2483.50          | 47.48             | 27.85                 | 3.96            | 35.65                    | 43.64          | 74.00               | -30.36            | Vertical     | Peak       |
| 4924.00          | 41.68             | 31.17                 | 9.31            | 38.62                    | 43.54          | 74.00               | -30.46            | Vertical     |            |
| 7386.00          | 33.64             | 36.72                 | 11.24           | 38.24                    | 43.36          | 74.00               | -30.64            | Vertical     |            |
| 9848.00          | 35.32             | 38.33                 | 12.39           | 38.12                    | 47.92          | 74.00               | -26.08            | Vertical     |            |
| 12310.00         | *                 |                       |                 |                          |                | 74.00               |                   | Vertical     |            |
| 2483.50          | 45.44             | 27.85                 | 3.96            | 35.65                    | 41.60          | 74.00               | -32.40            | Horizontal   |            |
| 4924.00          | 43.18             | 31.17                 | 9.31            | 38.62                    | 45.04          | 74.00               | -28.96            | Horizontal   |            |
| 7386.00          | 34.24             | 36.13                 | 10.93           | 38.14                    | 43.16          | 74.00               | -30.84            | Horizontal   |            |
| 9848.00          | 34.38             | 38.33                 | 12.39           | 38.12                    | 46.98          | 74.00               | -27.02            | Horizontal   |            |
| 12310.00         | *                 |                       |                 |                          |                | 74.00               |                   | Horizontal   |            |
| 2483.50          | 39.29             | 27.85                 | 3.96            | 35.65                    | 35.45          | 54.00               | -18.55            | Vertical     | Average    |
| 4924.00          | 36.16             | 31.17                 | 9.31            | 38.62                    | 38.02          | 54.00               | -15.98            | Vertical     |            |
| 7386.00          | 28.24             | 36.72                 | 11.24           | 38.24                    | 37.96          | 54.00               | -16.04            | Vertical     |            |
| 9848.00          | 27.35             | 38.33                 | 12.39           | 38.12                    | 39.95          | 54.00               | -14.05            | Vertical     |            |
| 12310.00         | *                 |                       |                 |                          |                | 54.00               |                   | Vertical     |            |
| 2483.50          | 38.71             | 27.85                 | 3.96            | 35.65                    | 34.87          | 54.00               | -19.13            | Horizontal   |            |
| 4924.00          | 36.73             | 31.17                 | 9.31            | 38.62                    | 38.59          | 54.00               | -15.41            | Horizontal   |            |
| 7386.00          | 28.45             | 36.13                 | 10.93           | 38.14                    | 37.37          | 54.00               | -16.63            | Horizontal   |            |
| 9848.00          | 27.00             | 38.33                 | 12.39           | 38.12                    | 39.60          | 54.00               | -14.40            | Horizontal   |            |
| 12310.00         | *                 |                       |                 |                          |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

| CH01 for 802.11n(H20) |                   |                       |                 |                    |                |                     |                   |              |            |
|-----------------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)       | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2400.00               | 47.80             | 27.58                 | 3.90            | 35.62              | 43.66          | 74.00               | -30.34            | Vertical     | Peak       |
| 4824.00               | 41.05             | 29.18                 | 8.61            | 37.99              | 40.85          | 74.00               | -33.15            |              |            |
| 7236.00               | 34.59             | 36.17                 | 10.95           | 38.15              | 43.56          | 74.00               | -30.44            | Vertical     |            |
| 9648.00               | 35.68             | 38.2                  | 12.17           | 38.08              | 47.97          | 74.00               | -26.03            | Vertical     |            |
| 12060.00              | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 2400.00               | 45.46             | 27.58                 | 3.90            | 35.62              | 41.32          | 74.00               | -32.68            | Horizontal   |            |
| 4824.00               | 34.28             | 32                    | 9.53            | 38.39              | 37.42          | 74.00               | -36.58            | Horizontal   |            |
| 7236.00               | 38.91             | 35.92                 | 6.94            | 35.18              | 46.59          | 74.00               | -27.41            | Horizontal   |            |
| 9648.00               | 35.55             | 38.2                  | 12.17           | 38.08              | 47.84          | 74.00               | -26.16            | Horizontal   |            |
| 12060.00              | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 2400.00               | 39.38             | 27.58                 | 3.90            | 35.62              | 35.24          | 54.00               | -18.76            | Vertical     | Average    |
| 4824.00               | 35.61             | 29.18                 | 8.61            | 37.99              | 35.41          | 54.00               | -18.59            | Vertical     |            |
| 7236.00               | 27.67             | 36.17                 | 10.95           | 38.15              | 36.64          | 54.00               | -17.36            | Vertical     |            |
| 9648.00               | 26.45             | 38.2                  | 12.17           | 38.08              | 38.74          | 54.00               | -15.26            | Vertical     |            |
| 12060.00              | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 2400.00               | 39.35             | 27.58                 | 3.90            | 35.62              | 35.21          | 54.00               | -18.79            | Horizontal   |            |
| 4824.00               | 33.48             | 32                    | 9.53            | 38.39              | 36.62          | 54.00               | -17.38            | Horizontal   |            |
| 7236.00               | 29.41             | 35.92                 | 6.94            | 35.18              | 37.09          | 54.00               | -16.91            | Horizontal   |            |
| 9648.00               | 28.54             | 38.2                  | 12.17           | 38.08              | 40.83          | 54.00               | -13.17            | Horizontal   |            |
| 12060.00              | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |
| CH06 for 802.11n(H20) |                   |                       |                 |                    |                |                     |                   |              |            |
| Frequency (MHz)       | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 4874.00               | 39.43             | 30.91                 | 8.99            | 38.34              | 40.99          | 74.00               | -33.01            | Vertical     | Peak       |
| 7311.00               | 35.79             | 35.44                 | 10.53           | 38.02              | 43.74          | 74.00               | -30.26            | Vertical     |            |
| 9748.00               | 34.72             | 38.02                 | 12.17           | 38.08              | 46.83          | 74.00               | -27.17            | Vertical     |            |
| 12185.00              | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 4874.00               | 41.59             | 30.24                 | 8.81            | 38.17              | 42.47          | 74.00               | -31.53            | Horizontal   |            |
| 7311.00               | 35.61             | 35.44                 | 10.53           | 38.02              | 43.56          | 74.00               | -30.44            | Horizontal   |            |
| 9748.00               | 35.30             | 38.2                  | 12.17           | 38.08              | 47.59          | 74.00               | -26.41            | Horizontal   |            |
| 12185.00              | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 4874.00               | 34.39             | 30.91                 | 8.99            | 38.34              | 35.95          | 54.00               | -18.05            | Vertical     | Average    |
| 7311.00               | 27.45             | 35.44                 | 10.53           | 38.02              | 35.40          | 54.00               | -18.60            | Vertical     |            |
| 9748.00               | 27.38             | 38.02                 | 12.17           | 38.08              | 39.49          | 54.00               | -14.51            | Vertical     |            |
| 12185.00              | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 4874.00               | 34.98             | 30.24                 | 8.81            | 38.17              | 35.86          | 54.00               | -18.14            | Horizontal   |            |
| 7311.00               | 29.35             | 35.44                 | 10.53           | 38.02              | 37.30          | 54.00               | -16.70            | Horizontal   |            |
| 9748.00               | 27.29             | 38.2                  | 12.17           | 38.08              | 39.58          | 54.00               | -14.42            | Horizontal   |            |
| 12185.00              | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

| CH11 for 802.11n(H20) |                   |                       |                 |                          |                |                     |                   |              |            |
|-----------------------|-------------------|-----------------------|-----------------|--------------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)       | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamplifier Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2483.50               | 46.38             | 27.85                 | 3.96            | 35.65                    | 42.54          | 74.00               | -31.46            | Vertical     | Peak       |
| 4924.00               | 39.44             | 31.17                 | 9.31            | 38.62                    | 41.30          | 74.00               | -32.70            |              |            |
| 7386.00               | 33.65             | 36.72                 | 11.24           | 38.24                    | 43.37          | 74.00               | -30.63            | Vertical     |            |
| 9848.00               | 34.93             | 38.33                 | 12.39           | 38.12                    | 47.53          | 74.00               | -26.47            | Vertical     |            |
| 12310.00              | *                 |                       |                 |                          |                | 74.00               |                   | Vertical     |            |
| 2483.50               | 45.54             | 27.85                 | 3.96            | 35.65                    | 41.70          | 74.00               | -32.30            | Horizontal   |            |
| 4924.00               | 41.05             | 31.17                 | 9.31            | 38.62                    | 42.91          | 74.00               | -31.09            | Horizontal   |            |
| 7386.00               | 35.69             | 36.13                 | 10.93           | 38.14                    | 44.61          | 74.00               | -29.39            | Horizontal   |            |
| 9848.00               | 35.74             | 38.33                 | 12.39           | 38.12                    | 48.34          | 74.00               | -25.66            | Horizontal   |            |
| 12310.00              | *                 |                       |                 |                          |                | 74.00               |                   | Horizontal   |            |
| 2483.50               | 39.99             | 27.85                 | 3.96            | 35.65                    | 36.15          | 54.00               | -17.85            | Vertical     | Average    |
| 4924.00               | 33.45             | 31.17                 | 9.31            | 38.62                    | 35.31          | 54.00               | -18.69            | Vertical     |            |
| 7386.00               | 27.45             | 36.72                 | 11.24           | 38.24                    | 37.17          | 54.00               | -16.83            | Vertical     |            |
| 9848.00               | 27.56             | 38.33                 | 12.39           | 38.12                    | 40.16          | 54.00               | -13.84            | Vertical     |            |
| 12310.00              | *                 |                       |                 |                          |                | 54.00               |                   | Vertical     |            |
| 2483.50               | 38.72             | 27.85                 | 3.96            | 35.65                    | 34.88          | 54.00               | -19.12            | Horizontal   |            |
| 4924.00               | 34.36             | 31.17                 | 9.31            | 38.62                    | 36.22          | 54.00               | -17.78            | Horizontal   |            |
| 7386.00               | 28.63             | 36.13                 | 10.93           | 38.14                    | 37.55          | 54.00               | -16.45            | Horizontal   |            |
| 9848.00               | 27.54             | 38.33                 | 12.39           | 38.12                    | 40.14          | 54.00               | -13.86            | Horizontal   |            |
| 12310.00              | *                 |                       |                 |                          |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Preamplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

| CH03 for 802.11n(H40) |                   |                       |                 |                    |                |                     |                   |              |            |
|-----------------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)       | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2400.00               | 47.15             | 27.58                 | 3.90            | 35.62              | 43.01          | 74.00               | -30.99            | Vertical     | Peak       |
| 4824.00               | 41.25             | 29.18                 | 8.61            | 37.99              | 41.05          | 74.00               | -32.95            |              |            |
| 7236.00               | 33.55             | 36.17                 | 10.95           | 38.15              | 42.52          | 74.00               | -31.48            | Vertical     |            |
| 9648.00               | 34.87             | 38.2                  | 12.17           | 38.08              | 47.16          | 74.00               | -26.84            | Vertical     |            |
| 12060.00              | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 2400.00               | 46.62             | 27.58                 | 3.90            | 35.62              | 42.48          | 74.00               | -31.52            | Horizontal   |            |
| 4824.00               | 39.75             | 32                    | 9.53            | 38.39              | 42.89          | 74.00               | -31.11            | Horizontal   |            |
| 7236.00               | 36.97             | 35.92                 | 6.94            | 35.18              | 44.65          | 74.00               | -29.35            | Horizontal   |            |
| 9648.00               | 35.75             | 38.2                  | 12.17           | 38.08              | 48.04          | 74.00               | -25.96            | Horizontal   |            |
| 12060.00              | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 2400.00               | 39.80             | 27.58                 | 3.90            | 35.62              | 35.66          | 54.00               | -18.34            | Vertical     | Average    |
| 4824.00               | 35.62             | 29.18                 | 8.61            | 37.99              | 35.42          | 54.00               | -18.58            | Vertical     |            |
| 7236.00               | 27.82             | 36.17                 | 10.95           | 38.15              | 36.79          | 54.00               | -17.21            | Vertical     |            |
| 9648.00               | 27.47             | 38.2                  | 12.17           | 38.08              | 39.76          | 54.00               | -14.24            | Vertical     |            |
| 12060.00              | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 2400.00               | 40.15             | 27.58                 | 3.90            | 35.62              | 36.01          | 54.00               | -17.99            | Horizontal   |            |
| 4824.00               | 35.38             | 32                    | 9.53            | 38.39              | 38.52          | 54.00               | -15.48            | Horizontal   |            |
| 7236.00               | 30.40             | 35.92                 | 6.94            | 35.18              | 38.08          | 54.00               | -15.92            | Horizontal   |            |
| 9648.00               | 27.24             | 38.2                  | 12.17           | 38.08              | 39.53          | 54.00               | -14.47            | Horizontal   |            |
| 12060.00              | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |
| CH06 for 802.11n(H40) |                   |                       |                 |                    |                |                     |                   |              |            |
| Frequency (MHz)       | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 4874.00               | 39.13             | 30.91                 | 8.99            | 38.34              | 40.69          | 74.00               | -33.31            | Vertical     | Peak       |
| 7311.00               | 34.59             | 35.44                 | 10.53           | 38.02              | 42.54          | 74.00               | -31.46            | Vertical     |            |
| 9748.00               | 35.52             | 38.02                 | 12.17           | 38.08              | 47.63          | 74.00               | -26.37            | Vertical     |            |
| 12185.00              | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 4874.00               | 40.15             | 30.24                 | 8.81            | 38.17              | 41.03          | 74.00               | -32.97            | Horizontal   |            |
| 7311.00               | 35.51             | 35.44                 | 10.53           | 38.02              | 43.46          | 74.00               | -30.54            | Horizontal   |            |
| 9748.00               | 35.60             | 38.2                  | 12.17           | 38.08              | 47.89          | 74.00               | -26.11            | Horizontal   |            |
| 12185.00              | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 4874.00               | 34.82             | 30.91                 | 8.99            | 38.34              | 36.38          | 54.00               | -17.62            | Vertical     | Average    |
| 7311.00               | 27.35             | 35.44                 | 10.53           | 38.02              | 35.30          | 54.00               | -18.70            | Vertical     |            |
| 9748.00               | 27.63             | 38.02                 | 12.17           | 38.08              | 39.74          | 54.00               | -14.26            | Vertical     |            |
| 12185.00              | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 4874.00               | 36.58             | 30.24                 | 8.81            | 38.17              | 37.46          | 54.00               | -16.54            | Horizontal   |            |
| 7311.00               | 29.04             | 35.44                 | 10.53           | 38.02              | 36.99          | 54.00               | -17.01            | Horizontal   |            |
| 9748.00               | 27.46             | 38.2                  | 12.17           | 38.08              | 39.75          | 54.00               | -14.25            | Horizontal   |            |
| 12185.00              | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

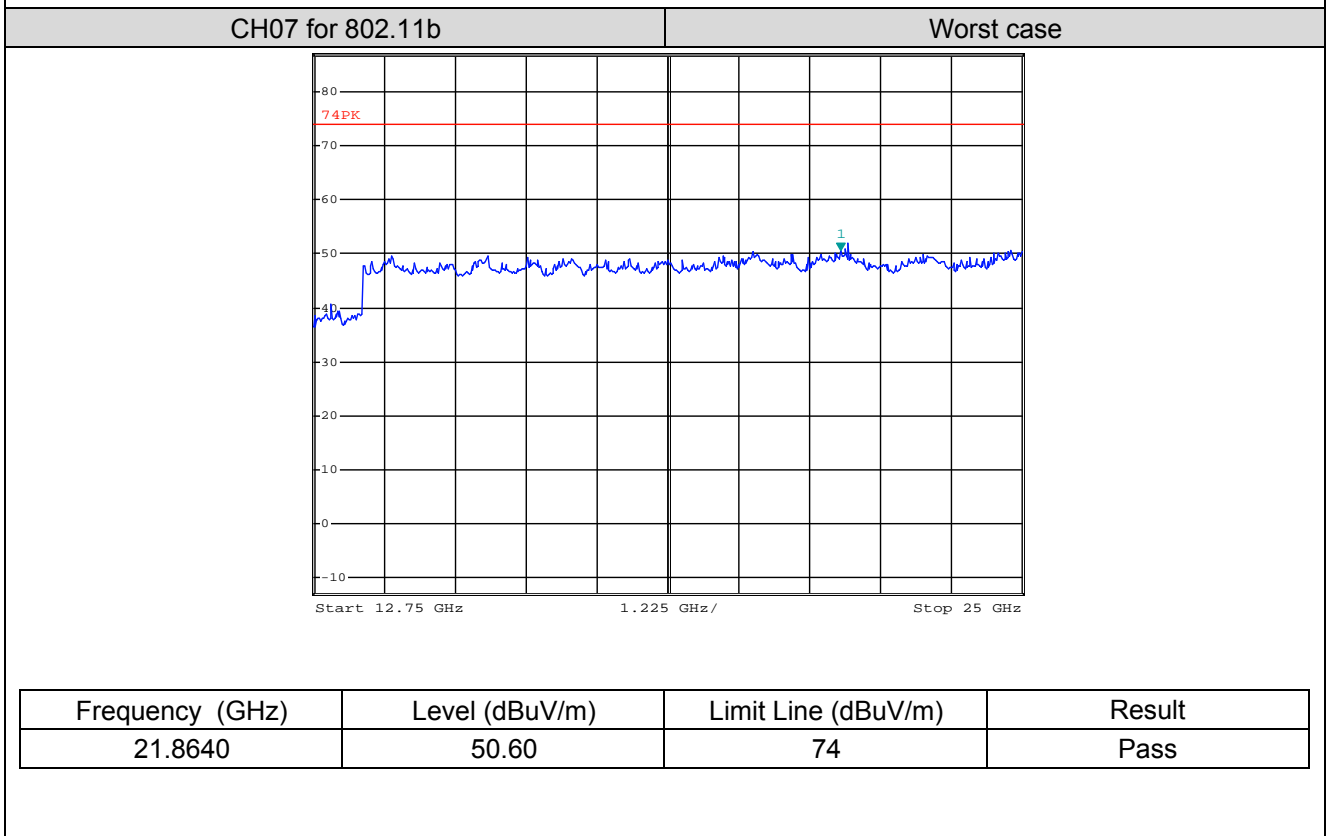
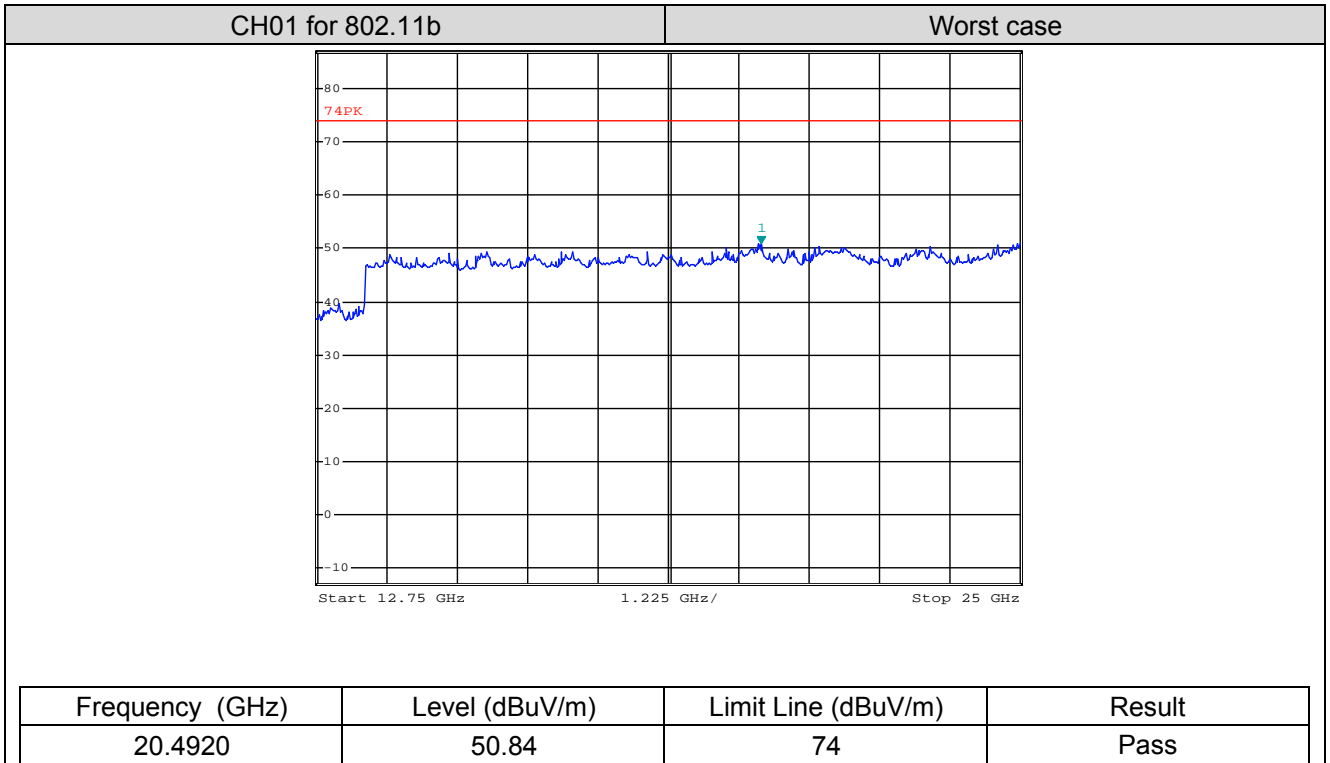
| CH09 for 802.11n(H40) |                   |                       |                 |                    |                |                     |                   |              |            |
|-----------------------|-------------------|-----------------------|-----------------|--------------------|----------------|---------------------|-------------------|--------------|------------|
| Frequency (MHz)       | Read Level (dBuV) | Antenna Factor (dB/m) | Cable Loss (dB) | Preamp Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin Limit (dB) | Polarization | Test value |
| 2483.50               | 46.25             | 27.85                 | 3.96            | 35.65              | 42.41          | 74.00               | -31.59            | Vertical     | Peak       |
| 4924.00               | 39.41             | 31.17                 | 9.31            | 38.62              | 41.27          | 74.00               | -32.73            |              |            |
| 7386.00               | 33.69             | 36.72                 | 11.24           | 38.24              | 43.41          | 74.00               | -30.59            | Vertical     |            |
| 9848.00               | 34.94             | 38.33                 | 12.39           | 38.12              | 47.54          | 74.00               | -26.46            | Vertical     |            |
| 12310.00              | *                 |                       |                 |                    |                | 74.00               |                   | Vertical     |            |
| 2483.50               | 45.45             | 27.85                 | 3.96            | 35.65              | 41.61          | 74.00               | -32.39            | Horizontal   |            |
| 4924.00               | 41.50             | 31.17                 | 9.31            | 38.62              | 43.36          | 74.00               | -30.64            | Horizontal   |            |
| 7386.00               | 35.00             | 36.13                 | 10.93           | 38.14              | 43.92          | 74.00               | -30.08            | Horizontal   |            |
| 9848.00               | 35.71             | 38.33                 | 12.39           | 38.12              | 48.31          | 74.00               | -25.69            | Horizontal   |            |
| 12310.00              | *                 |                       |                 |                    |                | 74.00               |                   | Horizontal   |            |
| 2483.50               | 39.00             | 27.85                 | 3.96            | 35.65              | 35.16          | 54.00               | -18.84            | Vertical     | Average    |
| 4924.00               | 33.42             | 31.17                 | 9.31            | 38.62              | 35.28          | 54.00               | -18.72            | Vertical     |            |
| 7386.00               | 27.15             | 36.72                 | 11.24           | 38.24              | 36.87          | 54.00               | -17.13            | Vertical     |            |
| 9848.00               | 26.18             | 38.33                 | 12.39           | 38.12              | 38.78          | 54.00               | -15.22            | Vertical     |            |
| 12310.00              | *                 |                       |                 |                    |                | 54.00               |                   | Vertical     |            |
| 2483.50               | 39.15             | 27.85                 | 3.96            | 35.65              | 35.31          | 54.00               | -18.69            | Horizontal   |            |
| 4924.00               | 34.57             | 31.17                 | 9.31            | 38.62              | 36.43          | 54.00               | -17.57            | Horizontal   |            |
| 7386.00               | 28.61             | 36.13                 | 10.93           | 38.14              | 37.53          | 54.00               | -16.47            | Horizontal   |            |
| 9848.00               | 27.55             | 38.33                 | 12.39           | 38.12              | 40.15          | 54.00               | -13.85            | Horizontal   |            |
| 12310.00              | *                 |                       |                 |                    |                | 54.00               |                   | Horizontal   |            |

## Remark:

1. Final Level = Receiver Read level + Antenna Factor + Cable Loss – Pre-amplifier Factor
2. “\*”, means this data is the too weak instrument of signal is unable to test.
3. The emission levels of other frequencies are very lower than the limit and not show in test report.

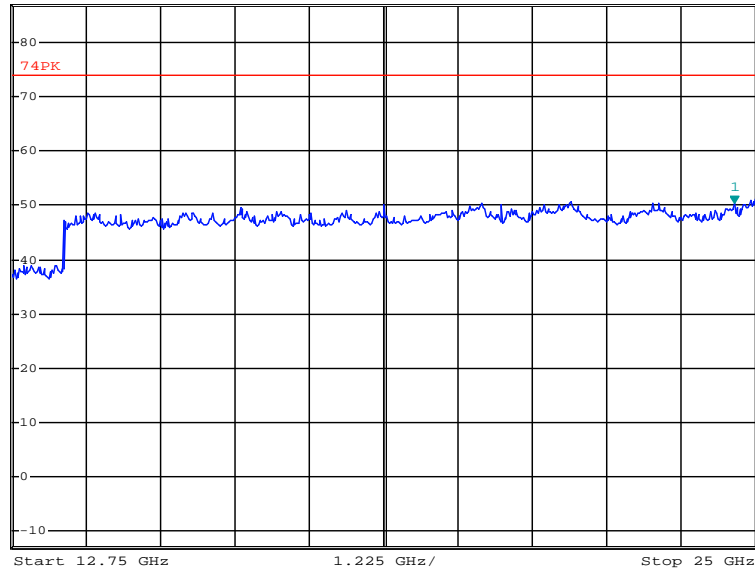


■ Above 12.75GHz ~25 GHz



CH11 for 802.11b

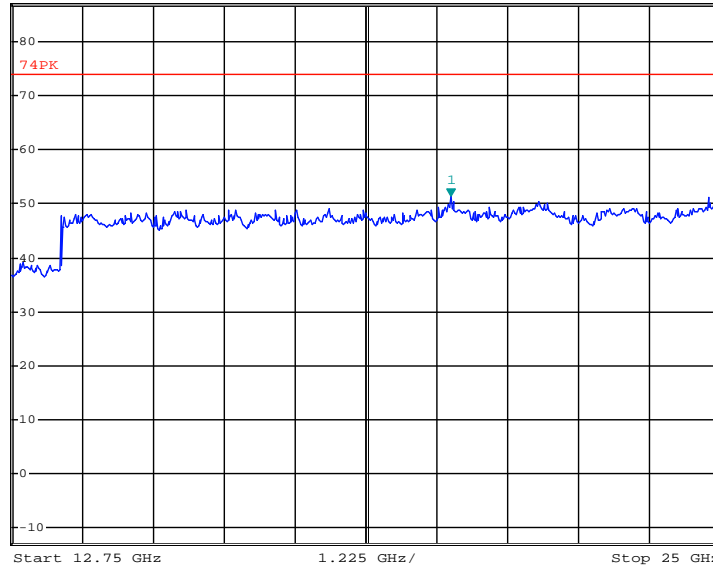
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 24.6570         | 50.27          | 74                  | Pass   |

CH01 for 802.11g

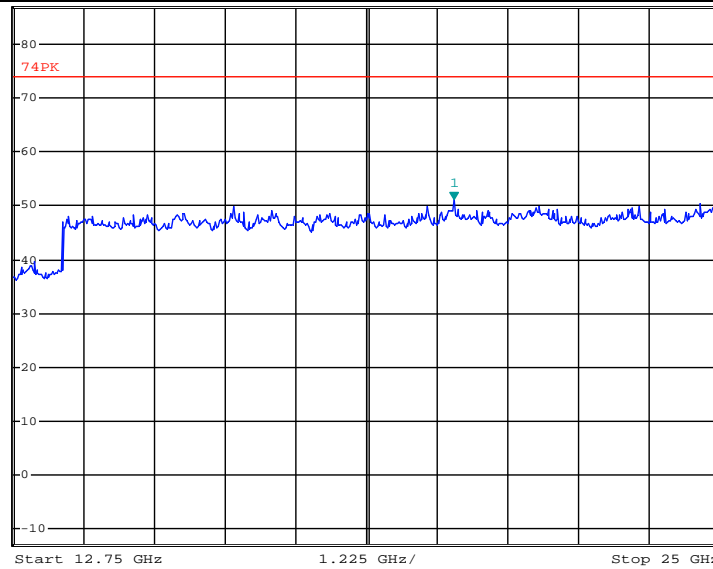
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 20.3450         | 51.42          | 74                  | Pass   |

CH07 for 802.11g

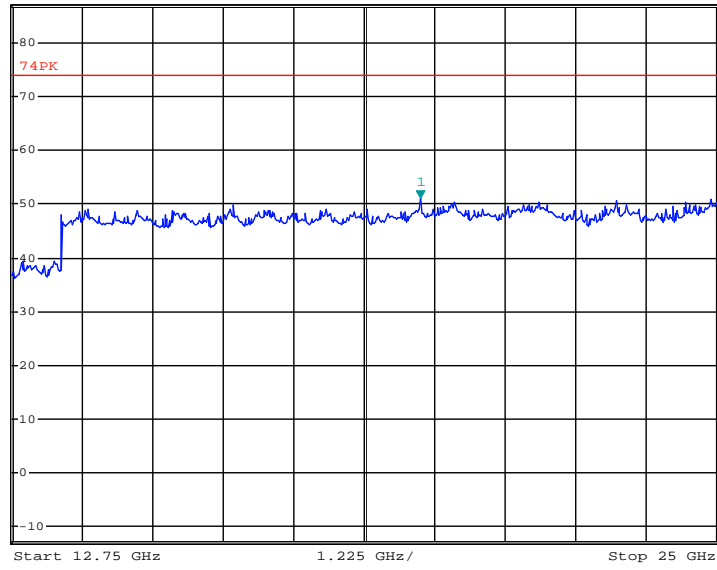
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 20.3940         | 51.07          | 74                  | Pass   |

CH11 for 802.11g

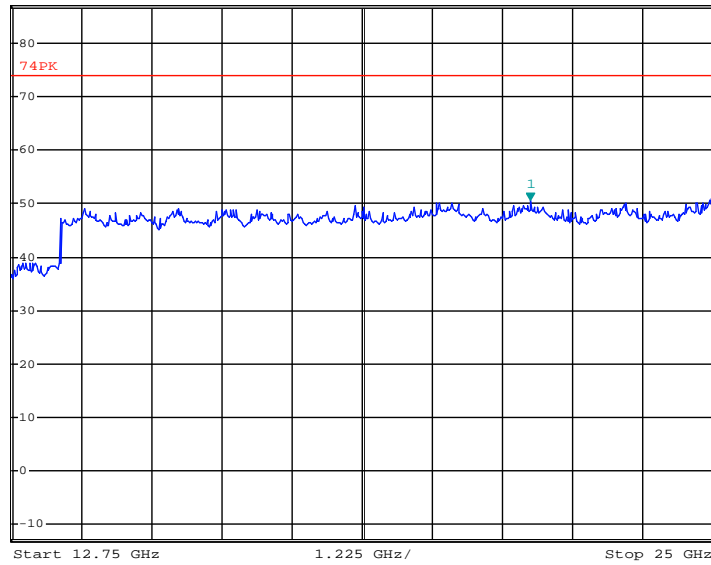
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 19.8550         | 51.16          | 74                  | Pass   |

CH01 for 802.11 n(H20)

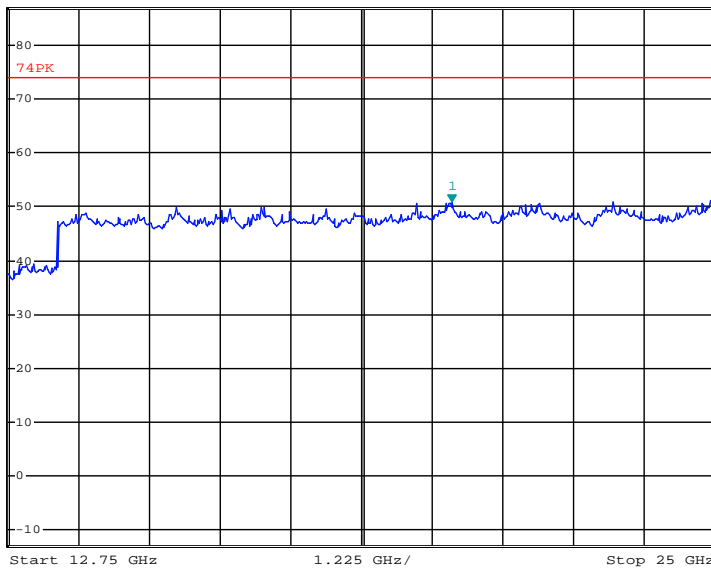
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 21.8150         | 50.63          | 74                  | Pass   |

CH07 for 802.11 n(H20)

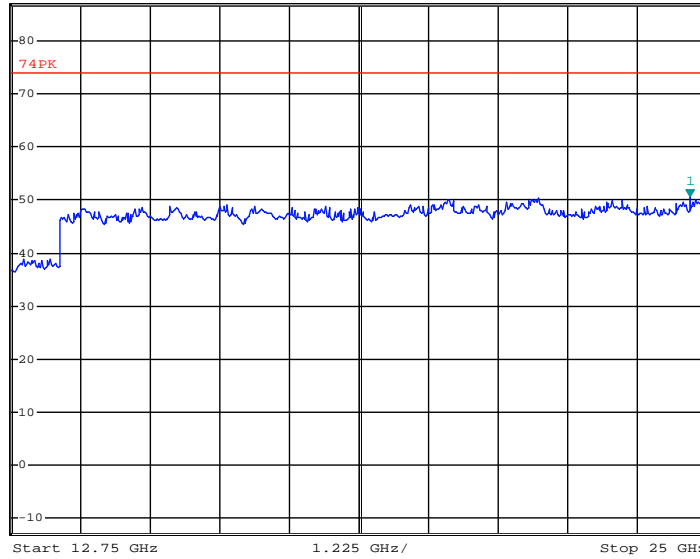
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 20.4430         | 50.79          | 74                  | Pass   |

CH11 for 802.11 n(H2O)

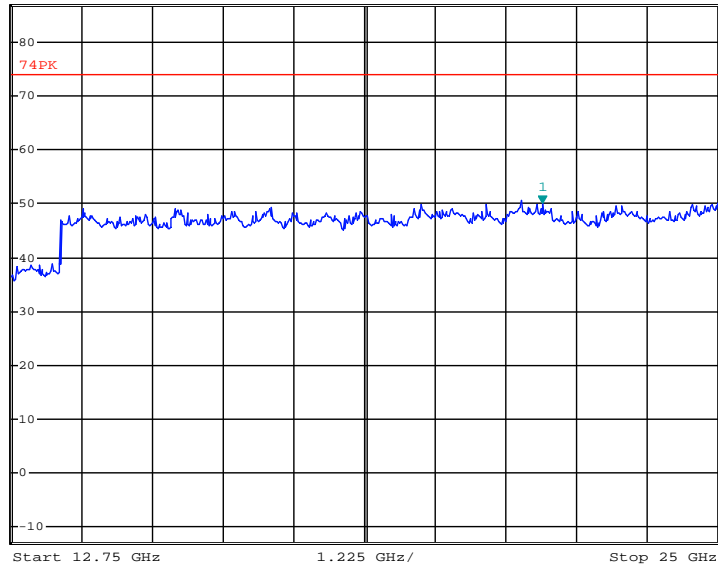
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 24.7060         | 50.60          | 74                  | Pass   |

CH03 for 802.11 n(H40)

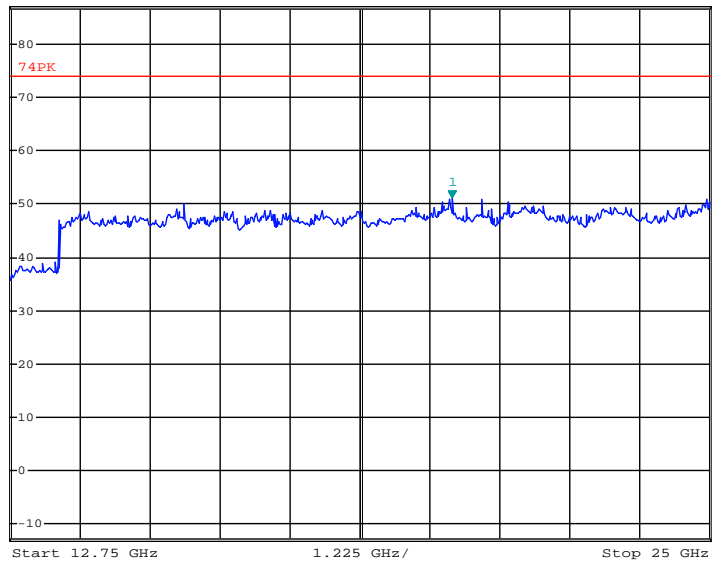
Worst case



| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 21.9620         | 50.00          | 74                  | Pass   |

CH07 for 802.11 n(H40)

Worst case

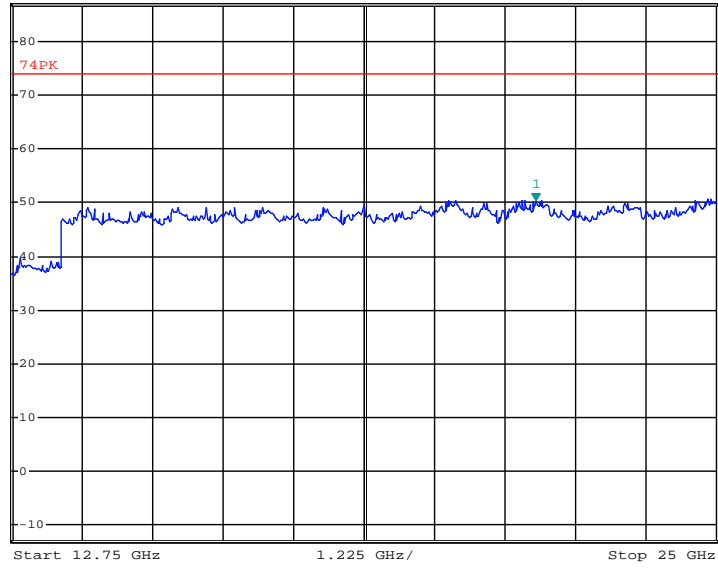


| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 20.4920         | 51.20          | 74                  | Pass   |



CH09 for 802.11 n(H40)

Worst case



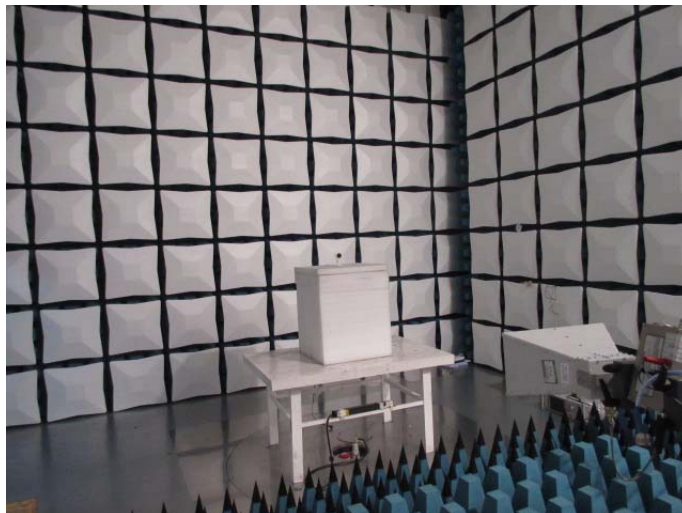
| Frequency (GHz) | Level (dBuV/m) | Limit Line (dBuV/m) | Result |
|-----------------|----------------|---------------------|--------|
| 21.8640         | 50.45          | 74                  | Pass   |

## 5. Test Setup Photos of the EUT

Conducted Emission



Radiated Emission





## 6. External and Internal Photos of the EUT External photos

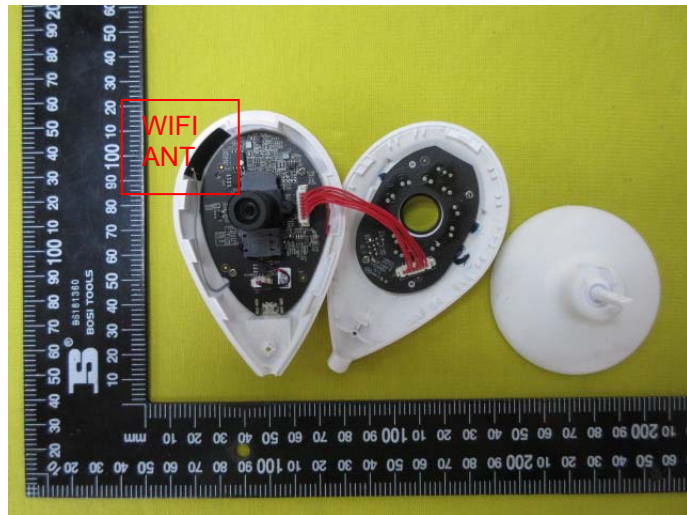


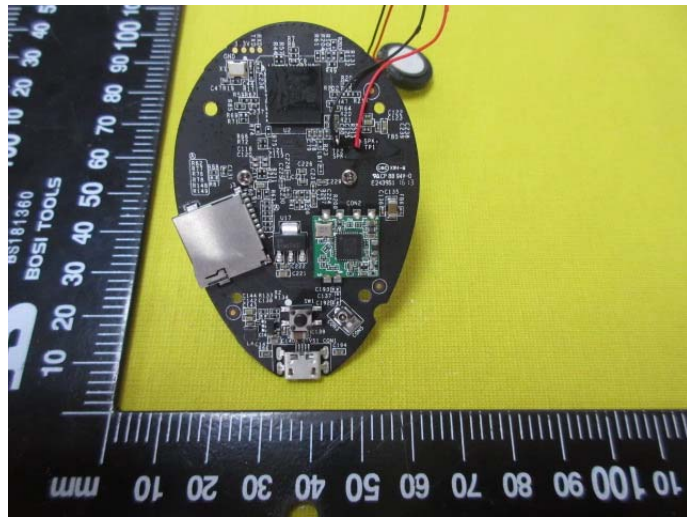
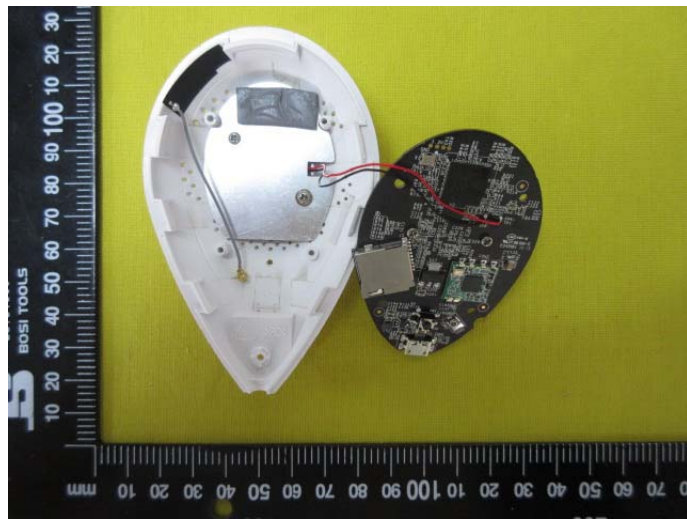




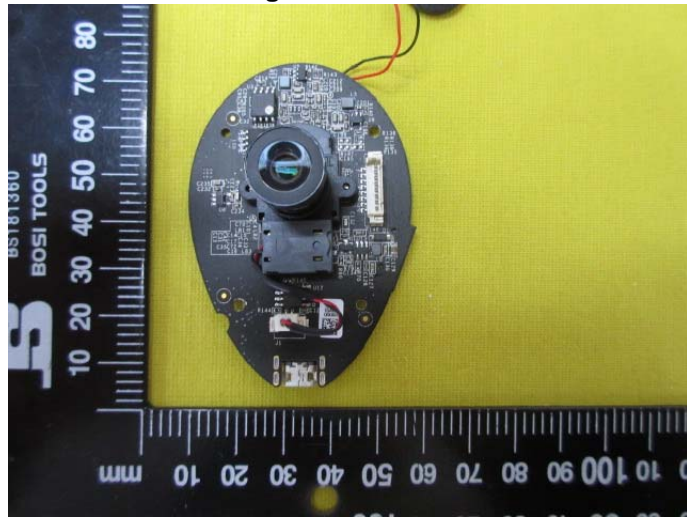


Internal photos









.....End of Report.....