



Test Report No.:  
FCC2025-0043-RF

## TEST REPORT

**FCC ID** : 2BHB8-NSA302  
**Applicant** : NAMI.AI PTE. LTD.  
**Product Name** : PIR Motion Sensor  
**Model No.** : NSA302

**CVC Testing Technology Co., Ltd.**

|  |  |                        |                         |  |  |  |
|--|--|------------------------|-------------------------|--|--|--|
| <b>Product Name</b>  | PIR Motion Sensor  | <b>Trade Mark</b>      | ---                     |  |  |  |
| <b>Type/Model</b>  | NSA302   | <b>Sample Status</b>   | ---                     |  |  |  |
| <b>Applicant</b>   | NAMI.AI PTE. LTD.  |                        |                         |  |  |  |
| <b>Applicant Address</b>   | #03-01, 25 Duxton Hill Singapore 089608 Singapore  |                        |                         |  |  |  |
| <b>Manufacturer</b>  | NAMI.AI PTE. LTD.  |                        |                         |  |  |  |
| <b>Manufacturer Address</b>  | #03-01, 25 Duxton Hill Singapore 089608 Singapore  |                        |                         |  |  |  |
| <b>Factory</b>   | Huizhou Weston Electronic Technology Co LTD  |                        |                         |  |  |  |
| <b>Factory Address</b>   | Floor7-8, Building 27, No.29 Litchi City Industrial Avenue, Shuikou Street, Huicheng District, Huizhou City, P.R. China  |                        |                         |  |  |  |
| <b>Sample Identification</b>   | 1-1  | <b>Test Item</b>       | See page 08             |  |  |  |
| <b>Tested According To</b>   | FCC CFR47 Part 15C Radio Frequency Devices<br>ANSI C63.10-2020+Cor1-2023<br>KDB 558074 D01 15.247 Meas Guidance v05r02   |                        |                         |  |  |  |
| <b>Receiving Date</b>  | Jul.17,2025  | <b>Completing Date</b> | Jul.23,2025~Aug.22,2025 |  |  |  |
| <b>Test conclusion</b>   | <p>The equipment under test was found to comply with the requirements of the standards applied.</p> <p>Final Verdict: Pass.</p> <p>Seal of CVC</p> <p>Date of issue: Sep.09,2025</p> |                        |                         |  |  |  |
| Abbreviations: / Pass= passed Fail = failed N/A= not applicable  |  |                        |                         |  |  |  |
| This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC. |  |                        |                         |  |  |  |

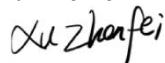
Approved by:

Chen Huawen



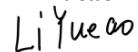
Reviewed by:

Xu Zhenfei



Tested by:

Li Yueao



## TABLE OF CONTENTS

|   |           |
|---|-----------|
| <b>RELEASE CONTROL RECORD .....</b>                         | <b>4</b>  |
| <b>1. GENERAL PRODUCT INFORMATION .....</b>                 | <b>5</b>  |
| 1.1 GENERAL INFORMATION .....                               | 5         |
| <b>2. TEST SITES .....</b>                                  | <b>6</b>  |
| 2.1 TEST FACILITIES .....                                   | 6         |
| 2.2 DESCRIPTION OF NON-STANDARD METHOD AND DEVIATIONS ..... | 6         |
| 2.3 LIST OF TEST AND MEASUREMENT INSTRUMENTS .....          | 6         |
| <b>3. TEST CONFIGURATION .....</b>                          | <b>7</b>  |
| 3.1 TEST MODE .....   | 7         |
| 3.2 DUTY CYCLE .....  | 9         |
| <b>4. SUMMARY OF MEASUREMENT RESULTS .....</b>              | <b>10</b> |
| <b>5. MEASUREMENT PROCEDURE .....</b>                       | <b>11</b> |
| 5.1 CONDUCTED EMISSION .....                                | 11        |
| 5.2 RADIATED EMISSION .....                                 | 14        |
| 5.3 MAXIMUM CONDUCTED OUTPUT POWER .....                    | 32        |
| 5.4 MINIMUM 6 DB BANDWIDTH .....                            | 33        |
| 5.5 OCCUPIED CHANNEL BANDWIDTH .....                        | 34        |
| 5.6 BAND EDGE MEASUREMENT .....                             | 35        |
| 5.7 MAXIMUM POWER SPECTRAL DENSITY .....                    | 36        |
| 5.8 SPURIOUS RF CONDUCTED EMISSIONS .....                   | 37        |
| <b>6. APPENDIX X .....</b>                                  | <b>38</b> |

**RELEASE CONTROL RECORD**

| <b>ISSUE NO.</b> | <b>REASON FOR CHANGE</b> | <b>DATE ISSUED</b> |
|------------------|--------------------------|--------------------|
| FCC2025-0043-RF  | Original release         | Sep.09,2025        |

# 1. General Product Information

## 1.1 General information

|                         |   |
|-------------------------|---|
| Product Name            | PIR Motion Sensor   |
| Model No.               | NSA302  |
| Additional model        | N/A   |
| Power Supply            | DC 3.0V   |
| Hardware Version        | V4.0  |
| Software Version        | V2.4  |
| Bluetooth Version       | 5.0   |
| Specific power settings | Bluetooth(LE_1M,2M): 80<br>Thread:10  |
| Antenna Type            | PCB Antenna   |
| Antenna Gain            | Bluetooth: 2.07 dBi (provided by client)<br>Thread: 2.07 dBi (provided by client) |
| Beamforming gain        | Unsupported (provided by client)  |
| Frequency Range         | Bluetooth(LE_1MHz,2MHz): 2402~2480MHz<br>Thread: 2405~2480MHz                     |
| Channel Number          | Bluetooth(LE_1MHz,2MHz):40 Channels<br>Thread: 16 Channels                        |
| Type of Modulation      | Bluetooth(LE_1MHz,2MHz):GFSK<br>Thread:OQPSK                                      |
| Max. Conducted Power    | Bluetooth: 6.35dBm<br>Thread:13.04dBm   |
| Operate Temp.Range      | 0°C~+40°C   |

**Note:**

1. The information of the EUT is declared by the manufacturer.
2. The laboratory is not responsible for the product technical specification provided by the client.
3. EUT photo refer to report (Report NO.:FCC2025-0043-EUT).
4. The EUT have SISO function, provides 1 completed transmitter and 1 receiver.
5. The product models of this application are NSA302.All the tests carried out on model NSA302.

## 2. Test Sites

### 2.1 Test Facilities

The tests and measurements refer to this report were performed by RF testing Lab. of CVC Testing Technology Co., Ltd.

Add.: No.3, Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, Guangdong, 510663, People's Republic of China

Telephone : +86-20-32293888

Fax : +86-20-32293889

FCC(Test firm designation number: CN1282)

IC(Test firm CAB identifier number: CN0103)

CNAS(Test firm designation number: L0095)

### 2.2 Description of Non-standard Method and Deviations

The testing and measurement methods used in this report are applied by all standard methods. Not any non-standard method or deviation from the used standards was used.

### 2.3 List of Test and Measurement Instruments

Refer to **Appendix X**.

## 3. Test Configuration

### 3.1 Test Mode

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

| Test Mode           | Antenna Delivery | Test Channel |
|---------------------|------------------|--------------|
| Bluetooth(LE_1M,2M) | 1TX / 1RX        | 0,19,39      |
| Thread              | 1TX / 1RX        | 11,18,26     |

The radiated emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in lie-down position (X axis) and the worst case was recorded.

In order to find the worst case condition, Pre-tests are needed at the presence of different data rate and different channels. Preliminary tests have been done on all the configurations for confirming worst case. Data rate below means worst-case rate of each test item.

Worst-case data rates and channels are shown as following table.

| Test Mode           | Data Rate |           |      |
|---------------------|-----------|-----------|------|
|                     | Antenna 1 | Antenna 2 | MIMO |
| Bluetooth(LE_1M,2M) | 1         | /         | /    |
| Thread              | 1         | /         | /    |

| Test Items                      | Test Antennas | Test Modes                    | Test Channels        |
|---------------------------------|---------------|-------------------------------|----------------------|
| Radiated Emissions              | Antenna 1     | Thread<br>Bluetooth(LE_1M)    | 11,18,26/<br>0,19,39 |
| Radiated Emissions (Band Edge)  | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,18,26/<br>0,19,39 |
| Maximum conducted output power  | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,18,26/<br>0,19,39 |
| Minimum 6 dB bandwidth          | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,18,26/<br>0,19,39 |
| Occupied Channel Bandwidth      | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,18,26/<br>0,19,39 |
| Band Edge Measurement           | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,26/<br>0,39       |
| Maximum Power spectral density  | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,18,26/<br>0,19,39 |
| Spurious RF Conducted Emissions | Antenna 1     | Thread<br>Bluetooth(LE_1M,2M) | 11,18,26/<br>0,19,39 |

## 3.2 Duty cycle

Appendix G of Thread\_diagram and Appendix G of BLE\_diagram

## 4. Summary of measurement results

| Summary of measurements of results | Clause in FCC rules     | Verdict | Note   |
|------------------------------------|-------------------------|---------|--|
| Conducted Emissions                | 15.207                  | N/A     | See note 1   |
| Radiated Emissions                 | 15.247(d),15.205,15.209 | PASS    | /  |
| Maximum conducted output power     | 15.247(b)(3)            | PASS    | Appendix C of BLE_diagram and Appendix C of Thread_diagram |
| Minimum 6 dB bandwidth             | 15.247(a)(2)            | PASS    | Appendix A of BLE_diagram and Appendix A of Thread_diagram |
| Occupied Channel Bandwidth         | 15.247(a)(2)            | PASS    | Appendix B of BLE_diagram and Appendix B of Thread_diagram |
| Band Edge Measurement              | 15.247(d)               | PASS    | Appendix E of BLE_diagram and Appendix E of Thread_diagram |
| Maximum Power spectral density     | 15.247(e)               | PASS    | Appendix D of BLE_diagram and Appendix D of Thread_diagram |
| Spurious RF Conducted Emissions    | 15.247(d)               | PASS    | Appendix F of BLE_diagram and Appendix F of Thread_diagram |
| Antenna Requirement                | 15.203                  | PASS    | See note 2   |

Note 1:This device does not work on the AC power cord.

Note 2: According to 15.203, it is considered sufficient to comply with the provisions of this section.

## 5. Measurement procedure

### 5.1 Conducted Emission

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

Method of Measurement:

The EUT was setup according to ANSI C63.10-2020+Cor1-2023 for compliance to FCC 47CFR 15.247 requirements. The EUT was placed on a platform of nominal size, 1 m by 1.5 m, raised 80 cm above the conducting ground plane. The vertical conducting plane was located 40 cm to the rear of the EUT. All other surfaces of EUT were at least 80 cm from any other grounded conducting surface. The EUT and simulators are connected to the main power through a line impedance stabilization network (LISN). The LISN provides a 50 ohm /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) 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.

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.

Conducted emissions were investigated over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9 kHz.

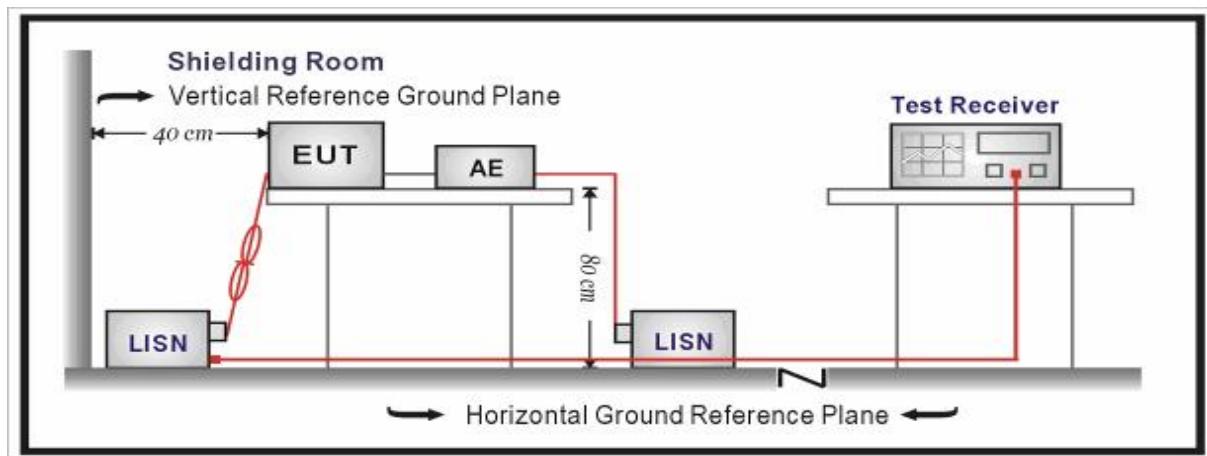
Limits:

| Frequency (MHz) | Conducted Limits(dB $\mu$ V) |           |
|-----------------|------------------------------|-----------|
|                 | Quasi-peak                   | Average   |
| 0.15 - 0.5      | 66 to 56 *                   | 56 to 46* |
| 0.5 - 5         | 56                           | 46        |
| 5 - 30          | 60                           | 50        |

Note 1: The lower limit shall apply at the transition frequencies.

Note 2: The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

## Test Setup:



## Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

### Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Level =Reading + Factor.

## Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ .  $U = 3.12$  dB.

**Test Results:**

Conducted Emission applies to an intentional radiator that is designed to be connected to the public utility (AC) power line. Measurements to demonstrate compliance with the conducted limits are not required for devices which only employ battery power for operation and which do not operate from the AC power lines or contain provisions for operation while connected to the AC power lines.

## 5.2 Radiated Emission

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

Method of Measurement:

The EUT was setup and tested according to ANSI C63.10-2020+Cor1-2023.

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. The EUT was positioned such that the distance from Antenna to the EUT was 3 meters.

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 C63.10-2020+Cor1-2023 on radiated measurement.

The resolution bandwidth below 1GHz setting on the field strength meter is 120 kHz and above 1GHz is 1MHz.

The frequency range from 30MHz to 10th harmonic is checked.

Note: When doing emission measurement above 1GHz, the horn Antenna will be bended down a little (as horn Antenna has the narrow beamwidth) in order to keeping the Antenna in the “cone of radiation” of EUT. The 3dB beamwidth is 10~60 degrees for H-plane and 10~90 degrees for E-plane.

Limits:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).

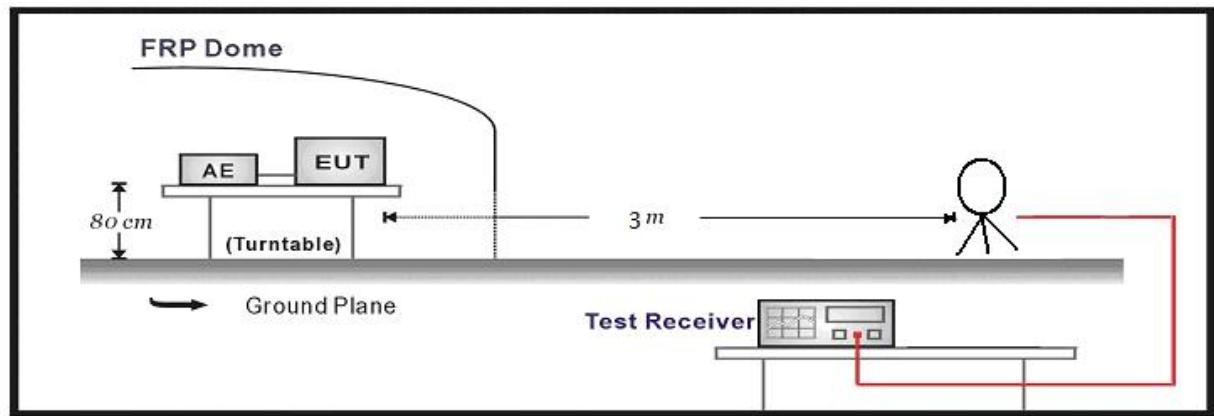
| Frequency         | Limit ( $\mu$ V/m ) | Limit (dB $\mu$ V/m @3m) | Remark           |
|-------------------|---------------------|--------------------------|------------------|
| 0.009MHz-0.490MHz | 2400/F(kHz)@300m    | 20lg(24000000/F(kHz))    | Quasi-peak Level |
| 0.490MHz~1.705MHz | 24000/F(kHz)@30m    | 20lg(2400000/F(kHz))     | Quasi-peak Level |
| 1.705MHz~30.0MHz  | 30@30m              | 69.54                    | Quasi-peak Level |
| 30MHz-88MHz       | 100@3m              | 40.0                     | Quasi-peak Level |
| 88MHz-216MHz      | 150@3m              | 43.5                     | Quasi-peak Level |
| 216MHz-960MHz     | 200@3m              | 46.0                     | Quasi-peak Level |
| 960MHz-1GHz       | 500@3m              | 54.0                     | Quasi-peak Level |
| Above 1GHz        | 500@3m              | 54.0                     | Average Level    |
|                   | 5000@3m             | 74.0                     | Peak Level       |

Spurious Radiated Emissions are permitted in any of the frequency bands listed below:

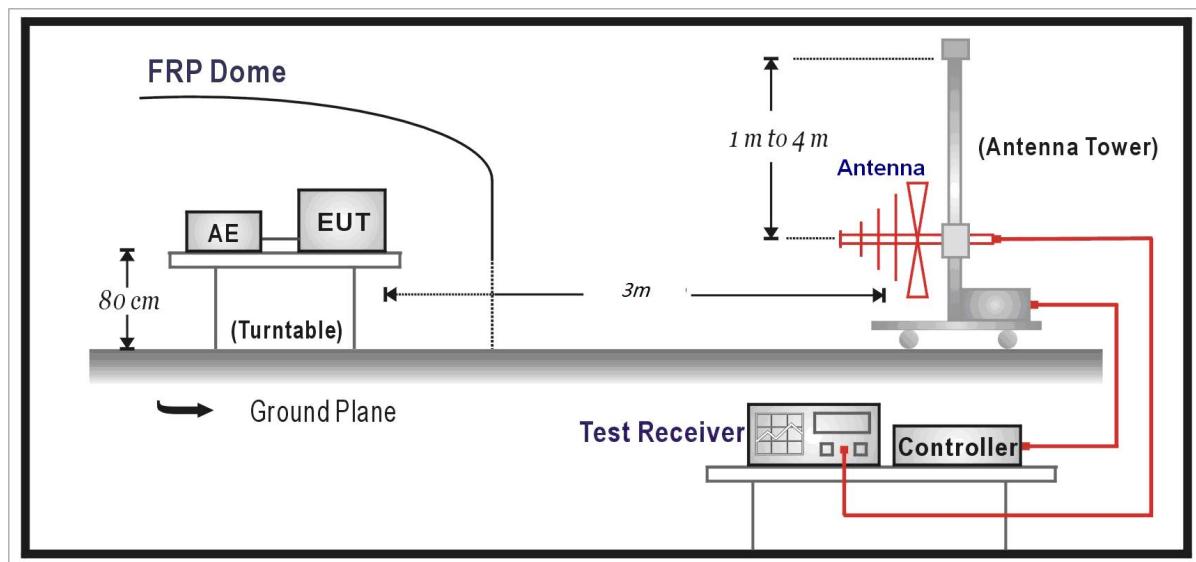
| MHz               | MHz                 | MHz           | GHz         |
|-------------------|---------------------|---------------|-------------|
| 0.090-0.110       | 16.42-16.423        | 399.9-410     | 4.5-5.15    |
| 0.495-0.505       | 16.69475-16.69525   | 608-614       | 5.35-5.46   |
| 2.1735-2.1905     | 16.80425-16.80475   | 960-1240      | 7.25-7.75   |
| 4.125-4.128       | 25.5-25.67          | 1300-1427     | 8.025-8.5   |
| 4.17725-4.17775   | 37.5-38.25          | 1435-1626.5   | 9.0-9.2     |
| 4.20725-4.20775   | 73-74.6             | 1645.5-1646.5 | 9.3-9.5     |
| 6.215-6.218       | 74.8-75.2           | 1660-1710     | 10.6-12.7   |
| 6.26775-6.26825   | 108-121.94          | 1718.8-1722.2 | 13.25-13.4  |
| 6.31175-6.31225   | 123-138             | 2200-2300     | 14.47-14.5  |
| 8.291-8.294       | 149.9-150.05        | 2310-2390     | 15.35-16.2  |
| 8.362-8.366       | 156.52475-156.52525 | 2483.5-2500   | 17.7-21.4   |
| 8.37625-8.38675   | 156.7-156.9         | 2690-2900     | 22.01-23.12 |
| 8.41425-8.41475   | 162.0125-167.17     | 3260-3267     | 23.6-24.0   |
| 12.29-12.293      | 167.72-173.2        | 3332-3339     | 31.2-31.8   |
| 12.51975-12.52025 | 240-285             | 3345.8-3358   | 36.43-36.   |
| 12.57675-12.57725 | 322-335.4           | 3600-4400     | /           |
| 13.36-13.41       | /                   | /             | /           |

## Test Setup:

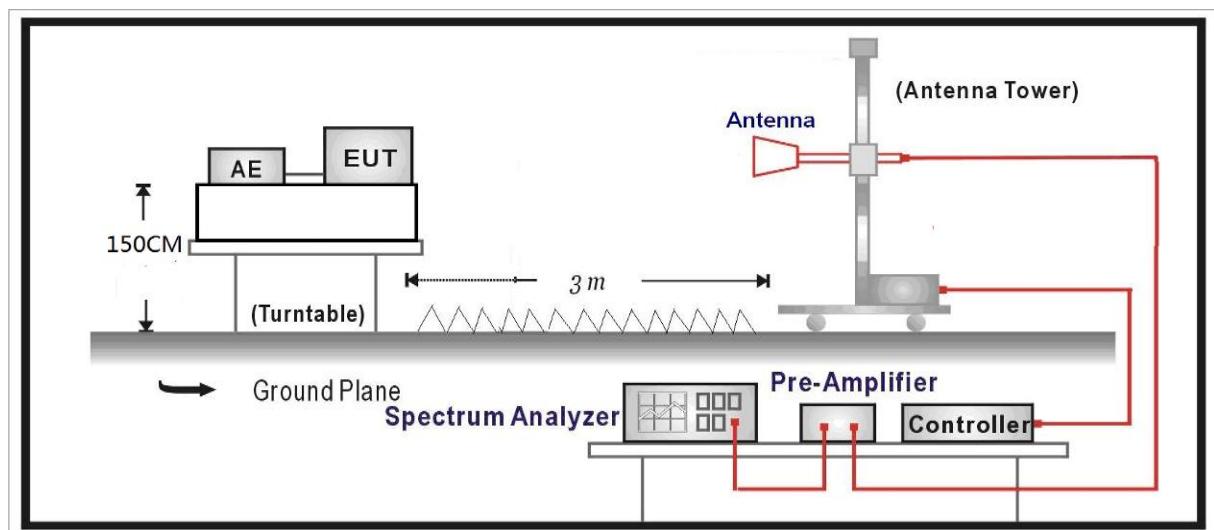
Below 30MHz Test Setup:



Below 1GHz Test Setup:



Above 1GHz Test Setup:



## Measurement Data:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Level =Reading - Factor

Factor = Preamplifier Factor – Antenna Factor–Cable Loss

## Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ .

| Frequency    | Uncertainty |
|--------------|-------------|
| 9KHz-30MHz   | 3.55 dB     |
| 30MHz-200MHz | 4.19 dB     |
| 200MHz-1GHz  | 3.63 dB     |
| Above 1GHz   | 3.68 dB     |

## Test Results:

### SPURIOUS EMISSIONS:

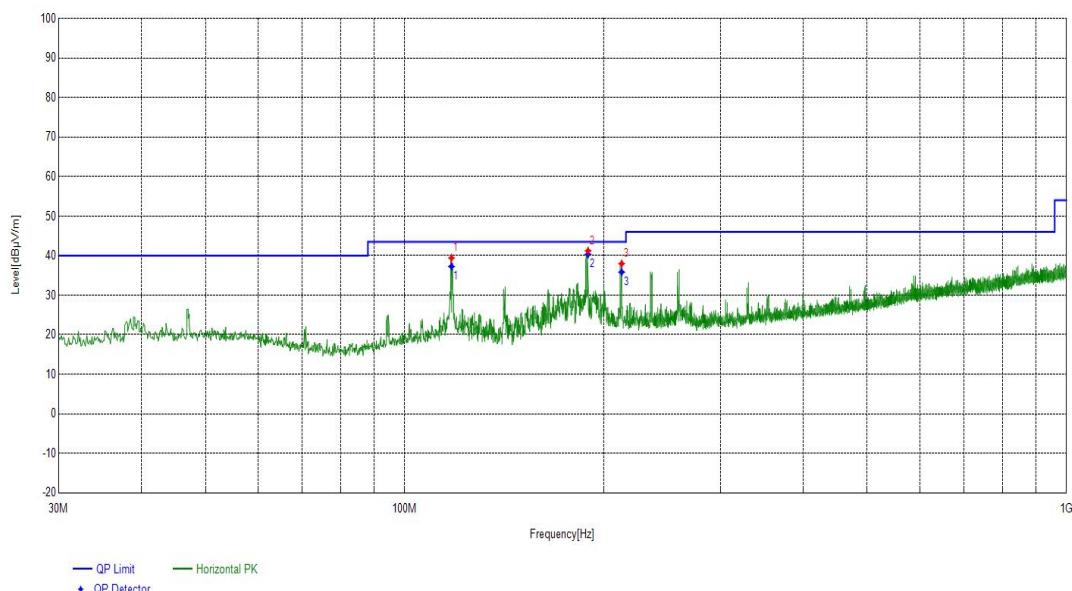
#### Bluetooth(Low Energy):

During the test, the Radiates Emission from 9kHz to 1GHz was performed in Bluetooth(Low Energy) all modes with all channels and all antennas. BLE(2Mbps), channel 0, antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

| Radiates Emission     | 9k~1G      |             |                        |                      |                      |             |          |             |           |           |
|-----------------------|------------|-------------|------------------------|----------------------|----------------------|-------------|----------|-------------|-----------|-----------|
| Test channel          | Worst-Case |             |                        |                      |                      |             |          |             |           |           |
| <b>Suspected List</b> |            |             |                        |                      |                      |             |          |             |           |           |
| Frequency [MHz]       | Polarity   | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detector | Height [cm] | Angle deg | Pass/Fail |
| 117.70                | Horizontal | 10.58       | 28.81                  | 39.39                | 43.50                | 4.11        | PK       | 100         | 161       | PASS      |
| 189.29                | Horizontal | 12.68       | 28.53                  | 41.21                | 43.50                | 2.29        | PK       | 100         | 47        | PASS      |
| 212.77                | Horizontal | 13.23       | 24.74                  | 37.97                | 43.50                | 5.53        | PK       | 100         | 24        | PASS      |

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

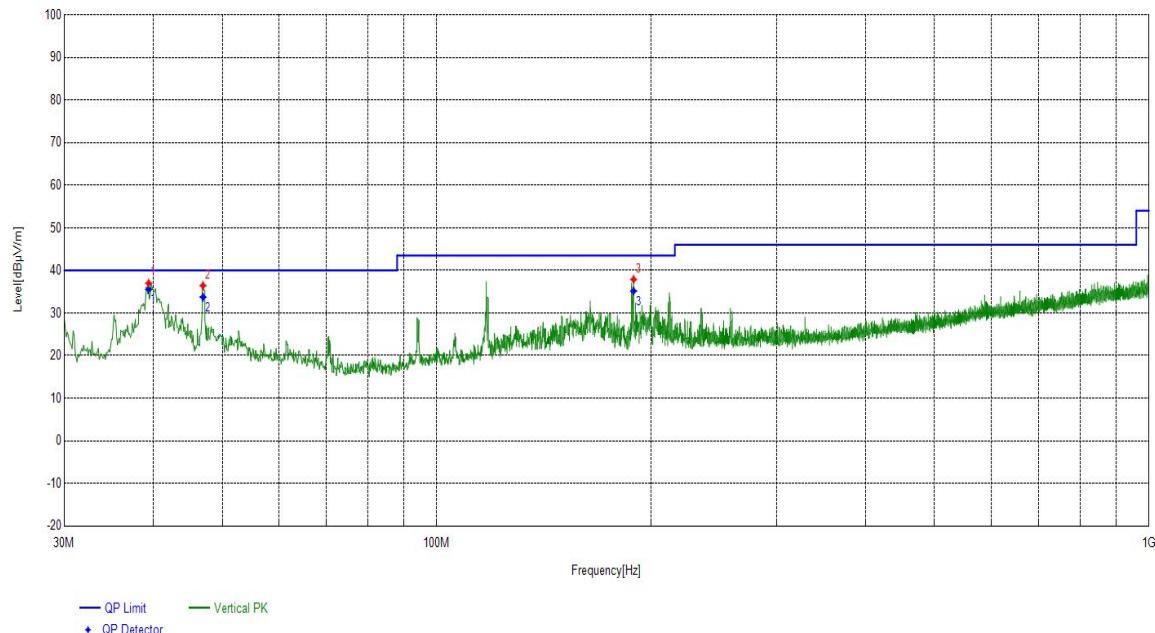
| Final Data List |            |             |                         |                         |                |             |           |           |
|-----------------|------------|-------------|-------------------------|-------------------------|----------------|-------------|-----------|-----------|
| Frequency [MHz] | Polarity   | Factor [dB] | QP Value [dB $\mu$ V/m] | QP Limit [dB $\mu$ V/m] | QP Margin [dB] | Height [cm] | Angle [°] | Pass/Fail |
| 117.69677       | Horizontal | 10.58       | 37.25                   | 43.50                   | 6.25           | 100         | 161       | PASS      |
| 189.267979      | Horizontal | 12.68       | 40.32                   | 43.50                   | 3.18           | 320         | 52        | PASS      |
| 212.766277      | Horizontal | 13.23       | 35.83                   | 43.50                   | 7.67           | 100         | 24        | PASS      |



| Radiates Emission     | 9k~1G      |             |                        |                      |                      |             |           |             |           |           |
|-----------------------|------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|-----------|
| Test channel          | Worst-Case |             |                        |                      |                      |             |           |             |           |           |
| <b>Suspected List</b> |            |             |                        |                      |                      |             |           |             |           |           |
| Frequency [MHz]       | Polarity   | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/Fail |
| 39.41                 | Vertical   | 11.99       | 24.99                  | 36.98                | 40.00                | 3.02        | PK        | 100         | 206       | PASS      |
| 46.98                 | Vertical   | 12.81       | 23.62                  | 36.43                | 40.00                | 3.57        | PK        | 100         | 107       | PASS      |
| 189.00                | Vertical   | 12.64       | 25.23                  | 37.87                | 43.50                | 5.63        | PK        | 100         | 122       | PASS      |

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

| <b>Final Data List</b> |          |             |                         |                         |                |             |           |           |
|------------------------|----------|-------------|-------------------------|-------------------------|----------------|-------------|-----------|-----------|
| Frequency [MHz]        | Polarity | Factor [dB] | QP Value [dB $\mu$ V/m] | QP Limit [dB $\mu$ V/m] | QP Margin [dB] | Height [cm] | Angle [°] | Pass/Fail |
| 39.409941              | Vertical | 11.99       | 35.56                   | 40.00                   | 4.44           | 100         | 203       | PASS      |
| 46.976698              | Vertical | 12.81       | 33.72                   | 40.00                   | 6.28           | 100         | 115       | PASS      |
| 188.9989               | Vertical | 12.64       | 35.16                   | 43.50                   | 8.34           | 100         | 131       | PASS      |



During the test, the Radiates Emission from Above 1G was performed in Bluetooth(Low Energy) all modes with all channels and all antennas. BLE(2Mbps), Highest, medium, lowest channels, antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

| Radiates Emission     |             | Above 1G               |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          |             | Lowest                 |                      |                      |             |           |             |           |            |
| polarization          |             | Horizontal             |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4959.39               | 0.60        | 43.82                  | 44.42                | 74.00                | 29.58       | PK        | 150         | 238       | PASS       |
| 6404.18               | 5.23        | 36.60                  | 41.83                | 74.00                | 32.17       | PK        | 150         | 35        | PASS       |
| 9905.88               | 10.17       | 35.20                  | 45.37                | 74.00                | 28.63       | PK        | 150         | 35        | PASS       |
| 4962.39               | 0.62        | 35.15                  | 35.77                | 54.00                | 18.23       | AV        | 150         | 238       | PASS       |
| 6584.22               | 5.59        | 24.56                  | 30.15                | 54.00                | 23.85       | AV        | 150         | 317       | PASS       |
| 8597.62               | 8.34        | 25.14                  | 33.48                | 54.00                | 20.52       | AV        | 150         | 207       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     |             | Above 1G               |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          |             | Lowest                 |                      |                      |             |           |             |           |            |
| polarization          |             | Vertical               |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4803.36               | 0.05        | 56.99                  | 57.04                | 74.00                | 16.96       | PK        | 150         | 165       | PASS       |
| 7620.92               | 7.20        | 36.67                  | 43.87                | 74.00                | 30.13       | PK        | 150         | 66        | PASS       |
| 12007.80              | 9.53        | 42.04                  | 51.57                | 74.00                | 22.43       | PK        | 150         | 128       | PASS       |
| 4804.86               | 0.05        | 46.53                  | 46.58                | 54.00                | 7.42        | AV        | 150         | 165       | PASS       |
| 7848.97               | 7.38        | 25.08                  | 32.46                | 54.00                | 21.54       | AV        | 150         | 318       | PASS       |
| 12009.30              | 9.53        | 30.56                  | 40.09                | 54.00                | 13.91       | AV        | 150         | 128       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     | Above 1G    |                        |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          | Medium      |                        |                      |                      |             |           |             |           |            |
| polarization          | Horizontal  |                        |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4803.36               | 0.05        | 61.55                  | 61.60                | 74.00                | 12.40       | PK        | 150         | 177       | PASS       |
| 7316.36               | 6.96        | 36.87                  | 43.83                | 74.00                | 30.17       | PK        | 150         | 134       | PASS       |
| 11002.60              | 10.17       | 36.28                  | 46.45                | 74.00                | 27.55       | PK        | 150         | 1         | PASS       |
| 4806.36               | 0.07        | 48.85                  | 48.92                | 54.00                | 5.08        | AV        | 150         | 134       | PASS       |
| 7208.34               | 6.89        | 26.20                  | 33.09                | 54.00                | 20.91       | AV        | 150         | 147       | PASS       |
| 10674.03              | 10.40       | 24.52                  | 34.92                | 54.00                | 19.08       | AV        | 150         | 214       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     | Above 1G    |                        |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          | Medium      |                        |                      |                      |             |           |             |           |            |
| polarization          | Vertical    |                        |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4804.86               | 0.05        | 51.69                  | 51.74                | 74.00                | 22.26       | PK        | 150         | 164       | PASS       |
| 11557.71              | 9.69        | 36.65                  | 46.34                | 74.00                | 27.66       | PK        | 150         | 219       | PASS       |
| 12009.30              | 9.53        | 37.25                  | 46.78                | 74.00                | 27.22       | PK        | 150         | 140       | PASS       |
| 4806.36               | 0.07        | 41.95                  | 42.02                | 54.00                | 11.98       | AV        | 150         | 164       | PASS       |
| 11034.11              | 10.14       | 25.18                  | 35.32                | 54.00                | 18.68       | AV        | 150         | 110       | PASS       |
| 12010.80              | 9.53        | 26.86                  | 36.39                | 54.00                | 17.61       | AV        | 150         | 140       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

|                   |            |  |  |  |  |  |  |  |  |
|-------------------|------------|--|--|--|--|--|--|--|--|
| Radiates Emission | Above 1G   |  |  |  |  |  |  |  |  |
| Test channel      | Highest    |  |  |  |  |  |  |  |  |
| polarization      | Horizontal |  |  |  |  |  |  |  |  |

#### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 4879.88         | 0.33        | 59.40                  | 59.73                | 74.00                | 14.27       | PK        | 150         | 176       | PASS       |
| 7580.42         | 7.18        | 36.94                  | 44.12                | 74.00                | 29.88       | PK        | 150         | 251       | PASS       |
| 10025.91        | 10.23       | 35.94                  | 46.17                | 74.00                | 27.83       | PK        | 150         | 263       | PASS       |
| 4881.38         | 0.33        | 49.53                  | 49.86                | 54.00                | 4.14        | AV        | 150         | 152       | PASS       |
| 7320.86         | 6.97        | 27.06                  | 34.03                | 54.00                | 19.97       | AV        | 150         | 146       | PASS       |
| 10747.55        | 10.35       | 25.03                  | 35.38                | 54.00                | 18.62       | AV        | 150         | 115       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

|                   |          |  |  |  |  |  |  |  |  |
|-------------------|----------|--|--|--|--|--|--|--|--|
| Radiates Emission | Above 1G |  |  |  |  |  |  |  |  |
| Test channel      | Highest  |  |  |  |  |  |  |  |  |
| polarization      | Vertical |  |  |  |  |  |  |  |  |

#### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 4881.38         | 0.33        | 54.34                  | 54.67                | 74.00                | 19.33       | PK        | 150         | 182       | PASS       |
| 7826.47         | 7.37        | 36.29                  | 43.66                | 74.00                | 30.34       | PK        | 150         | 195       | PASS       |
| 10397.98        | 10.45       | 35.45                  | 45.90                | 74.00                | 28.10       | PK        | 150         | 79        | PASS       |
| 4882.88         | 0.34        | 39.86                  | 40.20                | 54.00                | 13.80       | AV        | 150         | 182       | PASS       |
| 7610.42         | 7.19        | 25.39                  | 32.58                | 54.00                | 21.42       | AV        | 150         | 324       | PASS       |
| 10039.41        | 10.23       | 24.39                  | 34.62                | 54.00                | 19.38       | AV        | 150         | 342       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

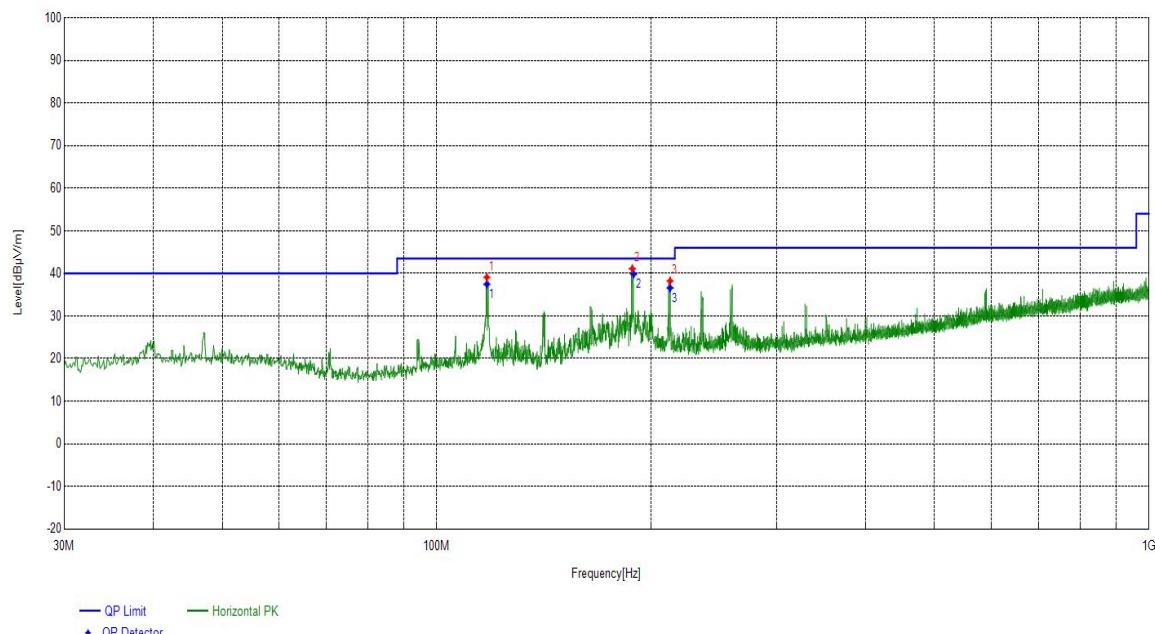
**Thread:**

During the test, the Radiates Emission from 9kHz to 1GHz was performed in Thread all modes with all channels and all antennas. Thread channel 0, antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

| Radiates Emission     |            | 9k~1G       |                        |                      |                      |             |          |             |           |           |  |
|-----------------------|------------|-------------|------------------------|----------------------|----------------------|-------------|----------|-------------|-----------|-----------|--|
| Test channel          |            | Worst-Case  |                        |                      |                      |             |          |             |           |           |  |
| <b>Suspected List</b> |            |             |                        |                      |                      |             |          |             |           |           |  |
| Frequency [MHz]       | Polarity   | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detector | Height [cm] | Angle deg | Pass/Fail |  |
| 117.60                | Horizontal | 10.60       | 28.48                  | 39.08                | 43.50                | 4.42        | PK       | 100         | 189       | PASS      |  |
| 188.22                | Horizontal | 12.57       | 28.53                  | 41.10                | 43.50                | 2.40        | PK       | 100         | 69        | PASS      |  |
| 212.67                | Horizontal | 13.23       | 25.00                  | 38.23                | 43.50                | 5.27        | PK       | 100         | 189       | PASS      |  |

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

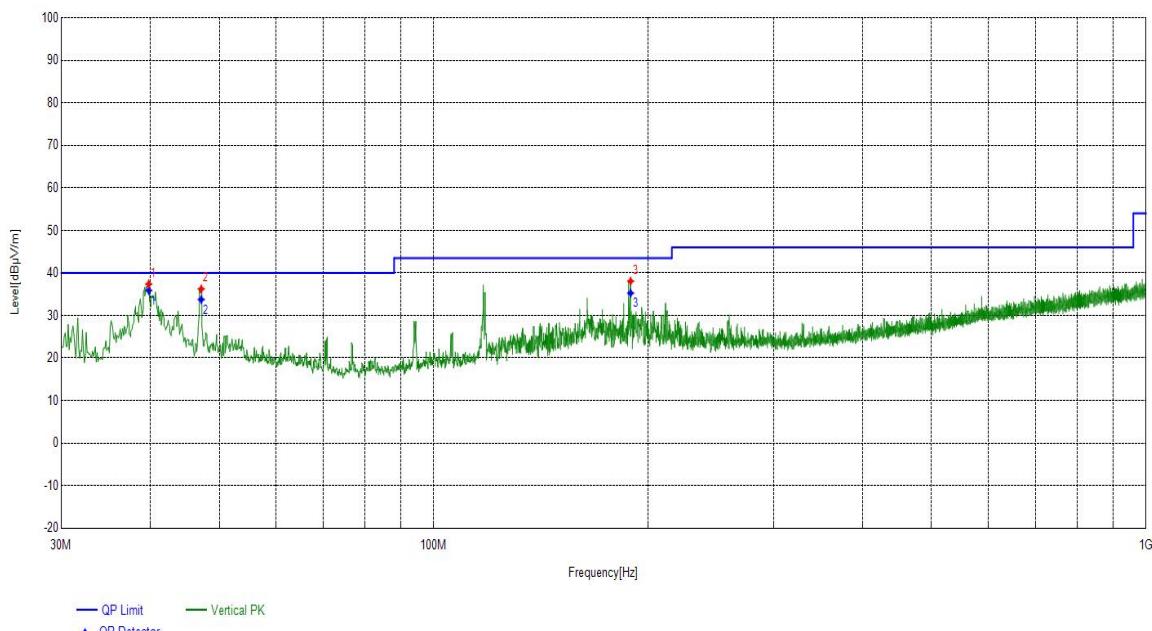
| Final Data List |            |             |                         |                         |                |             |           |           |
|-----------------|------------|-------------|-------------------------|-------------------------|----------------|-------------|-----------|-----------|
| Frequency [MHz] | Polarity   | Factor [dB] | QP Value [dB $\mu$ V/m] | QP Limit [dB $\mu$ V/m] | QP Margin [dB] | Height [cm] | Angle [°] | Pass/Fail |
| 117.59976       | Horizontal | 10.60       | 37.45                   | 43.50                   | 6.05           | 100         | 182       | PASS      |
| 189.023608      | Horizontal | 12.57       | 39.84                   | 43.50                   | 3.66           | 110         | 65        | PASS      |
| 212.669267      | Horizontal | 13.23       | 36.60                   | 43.50                   | 6.90           | 100         | 195       | PASS      |



| Radiates Emission     | 9k~1G      |             |                        |                      |                      |             |           |             |           |           |
|-----------------------|------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|-----------|
| Test channel          | Worst-Case |             |                        |                      |                      |             |           |             |           |           |
| <b>Suspected List</b> |            |             |                        |                      |                      |             |           |             |           |           |
| Frequency [MHz]       | Polarity   | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/Fail |
| 39.80                 | Vertical   | 12.07       | 25.30                  | 37.37                | 40.00                | 2.63        | PK        | 100         | 214       | PASS      |
| 47.17                 | Vertical   | 12.83       | 23.41                  | 36.24                | 40.00                | 3.76        | PK        | 100         | 85        | PASS      |
| 189.00                | Vertical   | 12.64       | 25.42                  | 38.06                | 43.50                | 5.44        | PK        | 100         | 100       | PASS      |

Note: 9kHz~30MHz have been test and test data more than 20dB margin.

| Final Data List |          |             |                         |                         |                |             |           |           |
|-----------------|----------|-------------|-------------------------|-------------------------|----------------|-------------|-----------|-----------|
| Frequency [MHz] | Polarity | Factor [dB] | QP Value [dB $\mu$ V/m] | QP Limit [dB $\mu$ V/m] | QP Margin [dB] | Height [cm] | Angle [°] | Pass/Fail |
| 39.79798        | Vertical | 12.07       | 35.88                   | 40.00                   | 4.12           | 100         | 214       | PASS      |
| 47.170717       | Vertical | 12.83       | 33.75                   | 40.00                   | 6.25           | 100         | 106       | PASS      |
| 188.9989        | Vertical | 12.64       | 35.25                   | 43.50                   | 8.25           | 100         | 118       | PASS      |



During the test, the Radiates Emission from Above 1G was performed in Thread all modes with all channels and all antennas. Thread, Highest, medium, lowest channels, antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

| Radiates Emission     |             | Above 1G               |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          |             | Lowest                 |                      |                      |             |           |             |           |            |
| polarization          |             | Horizontal             |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4809.36               | 0.07        | 42.93                  | 43.00                | 74.00                | 31.00       | PK        | 150         | 159       | PASS       |
| 7212.84               | 6.89        | 36.79                  | 43.68                | 74.00                | 30.32       | PK        | 150         | 257       | PASS       |
| 8605.12               | 8.35        | 37.12                  | 45.47                | 74.00                | 28.53       | PK        | 150         | 221       | PASS       |
| 4810.86               | 0.08        | 33.58                  | 33.66                | 54.00                | 20.34       | AV        | 150         | 159       | PASS       |
| 7217.34               | 6.89        | 27.71                  | 34.60                | 54.00                | 19.40       | AV        | 150         | 221       | PASS       |
| 8507.60               | 8.24        | 25.13                  | 33.37                | 54.00                | 20.63       | AV        | 150         | 245       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     |             | Above 1G               |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          |             | Lowest                 |                      |                      |             |           |             |           |            |
| polarization          |             | Vertical               |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4809.36               | 0.07        | 46.39                  | 46.46                | 74.00                | 27.54       | PK        | 150         | 201       | PASS       |
| 7217.34               | 6.89        | 37.72                  | 44.61                | 74.00                | 29.39       | PK        | 150         | 250       | PASS       |
| 11554.71              | 9.69        | 36.43                  | 46.12                | 74.00                | 27.88       | PK        | 150         | 359       | PASS       |
| 4810.86               | 0.08        | 38.43                  | 38.51                | 54.00                | 15.49       | AV        | 150         | 195       | PASS       |
| 7214.34               | 6.89        | 27.35                  | 34.24                | 54.00                | 19.76       | AV        | 150         | 250       | PASS       |
| 11199.14              | 9.99        | 24.71                  | 34.70                | 54.00                | 19.30       | AV        | 150         | 355       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     | Above 1G    |                        |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          | medium      |                        |                      |                      |             |           |             |           |            |
| polarization          | Horizontal  |                        |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4959.39               | 0.60        | 43.82                  | 44.42                | 74.00                | 29.58       | PK        | 150         | 190       | PASS       |
| 6404.18               | 5.23        | 36.60                  | 41.83                | 74.00                | 32.17       | PK        | 150         | 40        | PASS       |
| 9905.88               | 10.17       | 35.20                  | 45.37                | 74.00                | 28.63       | PK        | 150         | 200       | PASS       |
| 4962.39               | 0.62        | 35.15                  | 35.77                | 54.00                | 18.23       | AV        | 150         | 150       | PASS       |
| 6584.22               | 5.59        | 24.56                  | 30.15                | 54.00                | 23.85       | AV        | 150         | 220       | PASS       |
| 8597.62               | 8.34        | 25.14                  | 33.48                | 54.00                | 20.52       | AV        | 150         | 120       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     | Above 1G    |                        |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          | medium      |                        |                      |                      |             |           |             |           |            |
| polarization          | Vertical    |                        |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4960.89               | 0.61        | 48.45                  | 49.06                | 74.00                | 24.94       | PK        | 150         | 213       | PASS       |
| 6020.10               | 4.71        | 36.62                  | 41.33                | 74.00                | 32.67       | PK        | 150         | 305       | PASS       |
| 8651.63               | 8.41        | 36.43                  | 44.84                | 74.00                | 29.16       | PK        | 150         | 348       | PASS       |
| 4960.89               | 0.61        | 40.28                  | 40.89                | 54.00                | 13.11       | AV        | 150         | 213       | PASS       |
| 6248.15               | 5.01        | 25.38                  | 30.39                | 54.00                | 23.61       | AV        | 150         | 275       | PASS       |
| 8503.10               | 8.22        | 25.34                  | 33.56                | 54.00                | 20.44       | AV        | 150         | 54        | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     | Above 1G    |                        |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          | Highest     |                        |                      |                      |             |           |             |           |            |
| polarization          | Horizontal  |                        |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4891.88               | 0.37        | 43.46                  | 43.83                | 74.00                | 30.17       | PK        | 150         | 238       | PASS       |
| 7332.87               | 6.99        | 37.56                  | 44.55                | 74.00                | 29.45       | PK        | 150         | 251       | PASS       |
| 8611.12               | 8.36        | 37.53                  | 45.89                | 74.00                | 28.11       | PK        | 150         | 104       | PASS       |
| 4891.88               | 0.37        | 34.61                  | 34.98                | 54.00                | 19.02       | AV        | 150         | 238       | PASS       |
| 7334.37               | 6.99        | 26.34                  | 33.33                | 54.00                | 20.67       | AV        | 150         | 251       | PASS       |
| 8507.60               | 8.24        | 25.18                  | 33.42                | 54.00                | 20.58       | AV        | 150         | 359       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

| Radiates Emission     | Above 1G    |                        |                      |                      |             |           |             |           |            |
|-----------------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| Test channel          | Highest     |                        |                      |                      |             |           |             |           |            |
| polarization          | Vertical    |                        |                      |                      |             |           |             |           |            |
| <b>Suspected List</b> |             |                        |                      |                      |             |           |             |           |            |
| Frequency [MHz]       | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
| 4890.38               | 0.36        | 47.74                  | 48.10                | 74.00                | 25.90       | PK        | 150         | 198       | PASS       |
| 6228.65               | 4.99        | 37.39                  | 42.38                | 74.00                | 31.62       | PK        | 150         | 273       | PASS       |
| 8686.14               | 8.45        | 36.21                  | 44.66                | 74.00                | 29.34       | PK        | 150         | 30        | PASS       |
| 4891.88               | 0.37        | 39.28                  | 39.65                | 54.00                | 14.35       | AV        | 150         | 198       | PASS       |
| 6038.11               | 4.74        | 25.71                  | 30.45                | 54.00                | 23.55       | AV        | 150         | 141       | PASS       |
| 8503.10               | 8.22        | 25.52                  | 33.74                | 54.00                | 20.26       | AV        | 150         | 354       | PASS       |

Note: The emission levels of other frequencies were greater than 20dB margin.

**Band Edge:**

During the test, the Band Edge was performed in BLE all modes with all channels and all antennas.

BLE(2Mbps), Highest and lowest channels, Antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

|              |                |  |  |  |  |  |  |  |  |
|--------------|----------------|--|--|--|--|--|--|--|--|
| Test mode    | BLE(2Mbps)     |  |  |  |  |  |  |  |  |
| Test channel | Lowest channel |  |  |  |  |  |  |  |  |
| polarization | Horizontal     |  |  |  |  |  |  |  |  |

**Suspected List**

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 2384.28         | -3.77       | 45.54                  | 41.77                | 74.00                | 32.23       | PK        | 150         | 214       | PASS       |
| 2390.08         | -3.75       | 44.02                  | 40.27                | 74.00                | 33.73       | PK        | 150         | 226       | PASS       |
| 2401.88         | -3.73       | 102.46                 | 98.73                | ---                  | ---         | PK        | 150         | 232       | ---        |
| 2384.28         | -3.77       | 34.36                  | 30.59                | 54.00                | 23.41       | AV        | 150         | 91        | PASS       |
| 2390.08         | -3.75       | 33.95                  | 30.20                | 54.00                | 23.80       | AV        | 150         | 110       | PASS       |
| 2402.08         | -3.73       | 97.30                  | 93.57                | ---                  | ---         | AV        | 150         | 239       | ---        |

|              |                |  |  |  |  |  |  |  |  |
|--------------|----------------|--|--|--|--|--|--|--|--|
| Test mode    | 802.11ax20     |  |  |  |  |  |  |  |  |
| Test channel | Lowest channel |  |  |  |  |  |  |  |  |
| polarization | Vertical       |  |  |  |  |  |  |  |  |

**Suspected List**

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 2373.27         | -3.78       | 45.35                  | 41.57                | 74.00                | 32.43       | PK        | 150         | 299       | PASS       |
| 2389.88         | -3.75       | 44.40                  | 40.65                | 74.00                | 33.35       | PK        | 150         | 243       | PASS       |
| 2402.28         | -3.73       | 101.33                 | 97.60                | ---                  | ---         | PK        | 150         | 225       | ---        |
| 2373.27         | -3.78       | 34.03                  | 30.25                | 54.00                | 23.75       | AV        | 150         | 48        | PASS       |
| 2389.88         | -3.75       | 33.77                  | 30.02                | 54.00                | 23.98       | AV        | 150         | 341       | PASS       |
| 2402.08         | -3.73       | 93.66                  | 89.93                | ---                  | ---         | AV        | 150         | 146       | ---        |

The signal beyond the limit is carrier.

|              |                 |  |  |  |  |  |  |  |  |
|--------------|-----------------|--|--|--|--|--|--|--|--|
| Test mode    | BLE(2Mbps)      |  |  |  |  |  |  |  |  |
| Test channel | Highest channel |  |  |  |  |  |  |  |  |
| polarization | Horizontal      |  |  |  |  |  |  |  |  |

### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detector | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|----------|-------------|-----------|------------|
| 2479.90         | -3.59       | 99.91                  | 96.32                | ---                  | ---         | PK       | 150         | 238       | ---        |
| 2483.50         | -3.59       | 53.17                  | 49.58                | 74.00                | 24.42       | PK       | 150         | 232       | PASS       |
| 2495.70         | -3.56       | 45.53                  | 41.97                | 74.00                | 32.03       | PK       | 150         | 91        | PASS       |
| 2479.90         | -3.59       | 93.83                  | 90.24                | ---                  | ---         | AV       | 150         | 244       | ---        |
| 2483.50         | -3.59       | 37.34                  | 33.75                | 54.00                | 20.25       | AV       | 150         | 110       | PASS       |
| 2495.50         | -3.56       | 34.10                  | 30.54                | 54.00                | 23.46       | AV       | 150         | 208       | PASS       |

Test mode 802.11ax20

Test channel Highest channel

polarization Vertical

### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detector | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|----------|-------------|-----------|------------|
| 2479.30         | -3.59       | 97.94                  | 94.35                | ---                  | ---         | PK       | 150         | 215       | ---        |
| 2483.50         | -3.59       | 50.19                  | 46.60                | 74.00                | 27.40       | PK       | 150         | 233       | PASS       |
| 2509.70         | -3.52       | 45.57                  | 42.05                | 74.00                | 31.95       | PK       | 150         | 257       | PASS       |
| 2479.90         | -3.59       | 91.27                  | 87.68                | ---                  | ---         | AV       | 150         | 134       | ---        |
| 2483.50         | -3.59       | 38.47                  | 34.88                | 54.00                | 19.12       | AV       | 150         | 49        | PASS       |
| 2509.70         | -3.52       | 33.83                  | 30.31                | 54.00                | 23.69       | AV       | 150         | 215       | PASS       |

The signal beyond the limit is carrier.

During the test, the Band Edge was performed in Thread all modes with all channels and all antennas.

Thread, Highest and lowest channels, Antenna 1 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

|              |                |  |  |  |  |  |  |  |  |
|--------------|----------------|--|--|--|--|--|--|--|--|
| Test mode    | Thread         |  |  |  |  |  |  |  |  |
| Test channel | Lowest channel |  |  |  |  |  |  |  |  |
| polarization | Horizontal     |  |  |  |  |  |  |  |  |

#### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 2371.87         | -3.78       | 45.41                  | 41.63                | 74.00                | 32.37       | PK        | 150         | 342       | PASS       |
| 2390.08         | -3.75       | 44.80                  | 41.05                | 74.00                | 32.95       | PK        | 150         | 201       | PASS       |
| 2399.88         | -3.73       | 45.88                  | 42.15                | 74.00                | 31.85       | PK        | 150         | 243       | PASS       |
| 2405.08         | -3.73       | 95.62                  | 91.89                | ---                  | ---         | PK        | 150         | 243       | ---        |
| 2371.87         | -3.78       | 33.70                  | 29.92                | 54.00                | 24.08       | AV        | 150         | 237       | PASS       |
| 2390.08         | -3.75       | 33.96                  | 30.21                | 54.00                | 23.79       | AV        | 150         | 237       | PASS       |
| 2400.08         | -3.73       | 36.39                  | 32.66                | 54.00                | 21.34       | AV        | 150         | 243       | PASS       |
| 2405.08         | -3.72       | 91.46                  | 87.74                | ---                  | ---         | AV        | 150         | 243       | ---        |

|              |                |  |  |  |  |  |  |  |  |
|--------------|----------------|--|--|--|--|--|--|--|--|
| Test mode    | Thread         |  |  |  |  |  |  |  |  |
| Test channel | Lowest channel |  |  |  |  |  |  |  |  |
| polarization | Vertical       |  |  |  |  |  |  |  |  |

#### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 2382.68         | -3.77       | 45.90                  | 42.13                | 74.00                | 31.87       | PK        | 150         | 67        | PASS       |
| 2390.08         | -3.75       | 44.10                  | 40.35                | 74.00                | 33.65       | PK        | 150         | 250       | PASS       |
| 2399.88         | -3.73       | 45.30                  | 41.57                | 74.00                | 32.43       | PK        | 150         | 220       | PASS       |
| 2405.08         | -3.73       | 91.53                  | 87.80                | ---                  | ---         | PK        | 150         | 226       | ---        |
| 2382.48         | -3.77       | 33.95                  | 30.18                | 54.00                | 23.82       | AV        | 150         | 110       | PASS       |
| 2390.08         | -3.75       | 33.95                  | 30.20                | 54.00                | 23.80       | AV        | 150         | 354       | PASS       |
| 2399.88         | -3.73       | 35.03                  | 31.30                | 54.00                | 22.70       | AV        | 150         | 226       | PASS       |
| 2405.28         | -3.71       | 87.65                  | 83.94                | ---                  | ---         | AV        | 150         | 226       | ---        |

The signal beyond the limit is carrier.

|              |                 |  |  |  |  |  |  |  |  |
|--------------|-----------------|--|--|--|--|--|--|--|--|
| Test mode    | Thread          |  |  |  |  |  |  |  |  |
| Test channel | Highest channel |  |  |  |  |  |  |  |  |
| polarization | Horizontal      |  |  |  |  |  |  |  |  |

### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 2480.30         | -3.59       | 94.53                  | 90.94                | ---                  | ---         | PK        | 150         | 244       | ---        |
| 2483.50         | -3.59       | 51.08                  | 47.49                | 74.00                | 26.51       | PK        | 150         | 238       | PASS       |
| 2515.10         | -3.50       | 45.99                  | 42.49                | 74.00                | 31.51       | PK        | 150         | 36        | PASS       |
| 2480.30         | -3.59       | 90.57                  | 86.98                | ---                  | ---         | AV        | 150         | 244       | ---        |
| 2483.50         | -3.59       | 40.29                  | 36.70                | 54.00                | 17.30       | AV        | 150         | 238       | PASS       |
| 2514.90         | -3.50       | 34.30                  | 30.80                | 54.00                | 23.20       | AV        | 150         | 319       | PASS       |

|              |                 |  |  |  |  |  |  |  |  |
|--------------|-----------------|--|--|--|--|--|--|--|--|
| Test mode    | Thread          |  |  |  |  |  |  |  |  |
| Test channel | Highest channel |  |  |  |  |  |  |  |  |
| polarization | Vertical        |  |  |  |  |  |  |  |  |

### Suspected List

| Frequency [MHz] | Factor [dB] | Reading [dB $\mu$ V/m] | Level [dB $\mu$ V/m] | Limit [dB $\mu$ V/m] | Margin [dB] | Detect or | Height [cm] | Angle deg | Pass/ Fail |
|-----------------|-------------|------------------------|----------------------|----------------------|-------------|-----------|-------------|-----------|------------|
| 2480.10         | -3.59       | 88.08                  | 84.49                | ---                  | ---         | PK        | 150         | 221       | ---        |
| 2483.50         | -3.59       | 45.13                  | 41.54                | 74.00                | 32.46       | PK        | 150         | 227       | PASS       |
| 2508.50         | -3.53       | 45.39                  | 41.86                | 74.00                | 32.14       | PK        | 150         | 294       | PASS       |
| 2480.10         | -3.59       | 83.90                  | 80.31                | ---                  | ---         | AV        | 150         | 227       | ---        |
| 2483.50         | -3.59       | 35.82                  | 32.23                | 54.00                | 21.77       | AV        | 150         | 239       | PASS       |
| 2508.50         | -3.53       | 34.03                  | 30.50                | 54.00                | 23.50       | AV        | 150         | 288       | PASS       |

The signal beyond the limit is carrier.

## 5.3 Maximum conducted output power

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

Method of Measurement:

a. A peak power sensor was used on the output port of the EUT. A power meter was used to read the response of the peak power sensor and set the detector to PEAK. Record the power level.

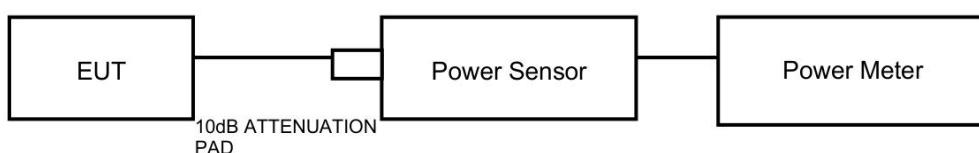
Limits:

|                      |                   |
|----------------------|-------------------|
| Average Output Power | $\leq 1W$ (30dBm) |
|----------------------|-------------------|

Note: the conducted output power limit specified above is based on the use the antennas with directional gains that do not exceed 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated Levels above, as appropriate, by the amount in dB that the directional gain of antenna exceeds 6 dBi.

Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point-to-point operations may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum conducted output power of the intentional radiator is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceeds 6 dBi.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 0.44$  dB.

## 5.4 Minimum 6 dB Bandwidth

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. Set RBW = shall be in the range of 1% to 5% of the OBW but not less than 100 kHz; VBW is set to greater than 3 times RBW on spectrum analyzer.

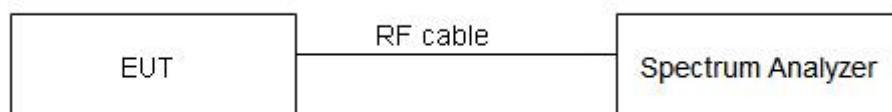
Detector=Peak, Trace mode=Max hold.

Limits:

Rule Part 15.247 (a) (2) specifies that "Systems using digital modulation techniques may operate in the 902–928 MHz, 2400–2483.5 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz."

|                       |                |
|-----------------------|----------------|
| Minimum 6dB Bandwidth | $\geq 500$ kHz |
|-----------------------|----------------|

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 936$  Hz.

## 5.5 Occupied Channel Bandwidth

Ambient condition:

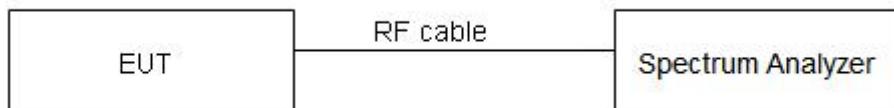
| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable. RBW is set to 1% to 5% of the OBW; video bandwidth (VBW) shall be at least three times RBW on spectrum analyzer.

Detector=Peak, Trace mode=Max hold.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 936$  Hz.

## 5.6 Band Edge Measurement

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

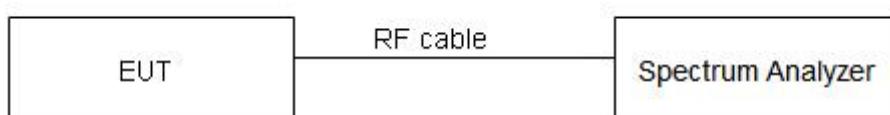
Method of Measurement:

The EUT was connected to the spectrum analyzer through an external attenuator (20dB) and a known loss cable the band edge of the lowest and highest channels were measured. The peak detector is used and RBW is set to 100 kHz and VBW is set to 300 kHz on spectrum analyzer.

Limits:

Rule Part 15.247(d) specifies that “In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ ,  $U = 936$  Hz,  $2 \text{ GHz}-3 \text{ GHz} = 1.407 \text{ dB}$ .

## 5.7 Maximum Power Spectral Density

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

### Method of Measurement:

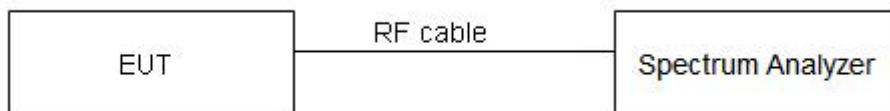
During the process of the testing, The EUT was connected to Spectrum Analyzer with a known loss. The EUT is max power transmission with proper modulation. The Average detector is used. We use Method AVGPSD-2 in KDB 558074 D01 for this test.

### Limits:

Rule Part 15.247(e) specifies that" For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

|                                |                                    |
|--------------------------------|------------------------------------|
| Maximum Power Spectral Density | $\leq 8 \text{ dBm} / 3\text{kHz}$ |
|--------------------------------|------------------------------------|

### Test Setup:



### Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 2$ ,  $U = 0.75\text{dB}$ .

## 5.8 Spurious RF Conducted Emissions

Ambient condition:

| Temperature | Relative humidity | Pressure |
|-------------|-------------------|----------|
| 23°C ~25°C  | 45%~50%           | 101.3kPa |

Method of Measurement:

The EUT was connected to the spectrum analyzer with a known loss. The spectrum analyzer scans from 30MHz to the 10th harmonic of the carrier. The peak detector is used. Set RBW to 100kHz and VBW to 300 kHz, Sweep is set to AUTO .The test is in transmitting mode.

Limits:

Rule Part 15.247(d) pacifies that “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.

Test Setup:



Measurement Uncertainty:

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor  $k = 1.96$ .

| Frequency   | Uncertainty |
|-------------|-------------|
| 100kHz-2GHz | 0.684 dB    |
| 2GHz-26GHz  | 1.407 dB    |

## 6. Appendix X

| Test Equipment                 | Type/Mode              | SERIAL NO.    | Equipment No. | Manufacturer | Cal. Due   |
|--------------------------------|------------------------|---------------|---------------|--------------|------------|
| Communication Shielded Room 2  | 4m*3m*3m               | CRTDSWKS44301 | /             | CRT          | 2027/04/22 |
| Spectrum Analyzer              | FSV40                  | 101580        | DZ-000238-3   | R&S          | 2026/03/27 |
| Power Meter                    | JS0806-2               | 19H9080187    | DZ-000241     | Tonscend     | 2026/03/27 |
| Programmable DC Power Supply   | E3644A                 | MY58036222    | DZ-000178     | KEYSIG HT    | 2026/04/10 |
| 5m Semi-Anechoic Chamber       | SAC-5                  | SAC-5-2.0     | EM-000557     | COMTEST      | 2027/02/01 |
| Spectrum Analyzer              | N9010B                 | MY57470323    | DZ-000174     | KEYSIG HT    | 2026/01/01 |
| EMI Test Receiver              | N9038A-508             | MY532290079   | EM-000397     | Agilent      | 2025/12/26 |
| EMI Test Receiver              | ESR7                   | 102235        | EM-000574     | R&S          | 2026/01/05 |
| loop antenna                   | HLA 6121               | 540046        | EM-000546     | TESEQ        | 2026/06/02 |
| Broadband Antenna              | VULB 9163              | 9163-530      | EM-000342     | SCHWARZBECK  | 2026/06/02 |
| Waveguide Horn Antenna         | HF906                  | 360306/008    | EM-000093     | R&S          | 2025/12/26 |
| Waveguide Horn Antenna         | BBHA9170               | 00949         | DZ-000209-2   | SCHWARZBECK  | 2026/08/02 |
| Preamplifier                   | BBV 9721               | 9721-050      | DZ-000209-1   | SCHWARZBECK  | 2026/06/02 |
| 2.4GHz band stop               | ZBSF6-C2400-2483.5-543 | 1232723       | DZ-000399-1   | Tonscend     | 2026/06/10 |
| 5.8GHz band resistance         | ZBSF6-C5725-5850-1627  | 1232740       | DZ-000399-2   | Tonscend     | 2026/05/29 |
| Temperature and humidity meter | MHO-C201               | /             | DZ-000249-2   | Seconds test | 2026/07/24 |
| Temperature and humidity meter | MHO-C201               | /             | DZ-000249-5   | Seconds test | 2026/07/24 |

| Dynacomm                              | Software Release | Software Developer |
|---------------------------------------|------------------|--------------------|
| TS1120-3 Test System(Conduction test) | 3.3.38           | Tonscend           |
| TS+ (5m,Radiation test)               | JS32-RE 5.0.0    | Tonscend           |

— No Body Text Below —

## Important

1. The test report is invalid without the official stamp of CVC;
2. Any part photocopies of the test report are forbidden without the written permission from CVC;
3. The test report is invalid without the signatures of Author and Reviewer;
4. The test report is invalid if altered;
5. Objections to the test report must be submitted to CVC within 15 days;
6. Generally, commission test is responsible for the tested samples only;
7. As for the test result, “---” or “N/A” means “not applicable”, “/” means “not testing”, “P” means “pass” and “F” means “fail”.

Address: No.3,Tiantaiyi Road, Kaitai Avenue, Science City, Guangzhou, China (Test location)

Post Code: 510663 Tel: 020-32293888

FAX: 020 32293889 E-mail: [office@cvc.org.cn](mailto:office@cvc.org.cn)