



**FCC TEST REPORT**  
**FCC ID: M7C-EID1400**

On Behalf of

Hena Digital Technology (Shenzhen) Co., Ltd.

Tablet PC

Model No.: M17QF18M, EID-1400, EID-1400-BK, NID-1400, VID-1400, SID-1400, NID-1400-XX, EID-1400-XX, VID-1400-XX, SID-1400-XX

Prepared for : Hena Digital Technology (Shenzhen) Co., Ltd.  
Address : 13F, Block B, Tairan Building Tairan 8th Road, Futian District,  
Shenzhen, China

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China

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## TEST REPORT DECLARATION

Applicant : Hena Digital Technology (Shenzhen) Co., Ltd.  
Address : 13F, Block B, Tairan Building Tairan 8th Road, Futian District, Shenzhen, China  
Manufacturer : Hena Digital Technology (Shenzhen) Co., Ltd.  
Address : 13F, Block B, Tairan Building Tairan 8th Road, Futian District, Shenzhen, China  
EUT Description : Tablet PC

M17QF18M, EID-1400, EID-1400-BK, NID-1400,  
(A) Model No. : VID-1400, SID-1400, NID-1400-XX, EID-1400-XX,  
VID-1400-XX, SID-1400-XX  
(B) Trademark : NAXA, HENA, EMERSON, SOUNDPRO, VICTOR



Measurement Standard Used:

**FCC CFR Title 47 Part 2**  
**FCC CFR Title 47 Part 22 Subpart H**  
**FCC CFR Title 47 Part 24 Subpart E**

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C limits both conducted and radiated emissions. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests.

After the test, our opinion is that EUT compliance with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....: Felix Pang  
Test Engineer   
Approved by (name + signature).....: Simple Guan  
Project Manager   
Date of issue.....: May 8, 2024

Revision History

| Revision | Issue Date  | Revisions              | Revised By |
|----------|-------------|------------------------|------------|
| V0       | May 8, 2024 | Initial released Issue | Felix Pang |



## 1 Test Summary

| Test Item                              | Section in CFR 47                                    | Result                                |
|--|--|---------------------------------------|
| RF Exposure (SAR)                      | Part 1.1307<br>Part 2.1093                           | Pass*<br>(Please refer to SAR Report) |
| Transmitter Radiated Power (EIRP/ERP)  | Part 2.1046<br>Part 22.913 (a)(2)<br>Part 24.232 (c) | Pass                                  |
| Peak-to-Average Ratio                  | Part 2.1046<br>Part 24.232 (d)                       | Pass                                  |
| Modulation Characteristics             | Part 2.1047  | Pass                                  |
| 99% & -26 dB Occupied Bandwidth        | Part 2.1049  | Pass                                  |
| Spurious Emissions at Antenna Terminal | Part 2.1051<br>Part 22.917 (a)<br>Part 24.238 (a)    | Pass                                  |
| Field Strength of Spurious Radiation   | Part 2.1053<br>Part 22.917 (a)<br>Part 24.238 (a)    | Pass                                  |
| Frequency stability                    | Part 2.1055(a)(1)(b)<br>Part 2.1055(d)(1)(2)         | Pass                                  |

*Pass: The EUT complies with the essential requirements in the standard.*

## 2 General Information

### 2.1 General Description of EUT

|                       |  |
|-----------------------|--|
| Description/PMN       | : Tablet PC  |
| Model Number/HVIN(s)  | : M17QF18M, EID-1400, EID-1400-BK, NID-1400, VID-1400, SID-1400, NID-1400-XX, EID-1400-XX, VID-1400-XX, SID-1400-XX  |
| Diff                  | : All models are same with electrical parameters and internal circuit structure, but only differ in appearance color and model name (this information provided by the customer). All tests are made with the M17QF18M model. |
| Test Voltage          | : DC 5V from adapter, DC 3.8V from battery   |
| Support Networks      | : GSM, GPRS, EGPRS   |
| Support Bands         | : GSM850, PCS1900  |
| TX Frequency          | : GSM850: 824.20MHz-848.80MHz<br>PCS1900: 1850.20MHz-1909.80MHz  |
| GPRS Class            | : 12   |
| EGPRS Class           | : 12   |
| Modulation type       | : GPRS: GMSK<br>EGPRS: GMSK/8PSK   |
| Antenna type          | : FPC Antenna  |
| Antenna gain          | : Maximum Gain is 0.5dBi for GSM 850<br>Maximum Gain is -2.0dBi for PCS1900  |
| Software version      | : A75_user_20240409  |
| Hardware version/FVIN | : V1.0.  |

- Remark: 1. The worst-case simultaneous transmission configuration was evaluated with no non-compliance found. Results in this report are only for 2G function, and there is no other transmitter involved.
2. The product contains two SIM card slots, both of which have been tested and only reflect the data of SIM card slot 1.
3. The product has two antennas, one of which is a diversity antenna with only receiving function.

**Operation Frequency List:**

| GSM 850 |                 | PCS1900 |                 |
|---------|-----------------|---------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 128     | 824.20          | 512     | 1850.20         |
| 129     | 824.40          | 513     | 1850.40         |
| · ∴     | · ∴             | · ∴     | · ∴             |
| 189     | 836.40          | 660     | 1879.80         |
| 190     | 836.60          | 661     | 1880.00         |
| 191     | 836.80          | 662     | 1880.20         |
| · ∴     | · ∴             | · ∴     | · ∴             |
| 250     | 848.60          | 809     | 1909.60         |
| 251     | 848.80          | 810     | 1909.80         |

Regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

**Final test channel:**

| GSM 850 |                 | PCS1900 |                 |
|---------|-----------------|---------|-----------------|
| Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 128     | 824.20          | 512     | 1850.20         |
| 190     | 836.60          | 661     | 1880.00         |
| 251     | 848.80          | 810     | 1909.80         |

## 2.2 Related Submittal(s) / Grant (s)

This submittal(s) (test report) is filing to comply with Section Part 22 subpart H and Part 24 subpart E of the FCC CFR 47 Rules.

## 2.3 Test Methodology

Both conducted and radiated testing were performed according to the procedures document on TIA/EIA 603 and FCC CFR 47.1046, 2.1047, 2.1049, 2.1051, 2.1053, 2.1055 and 2.1057

## 2.4 Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China 518104

September 13, 2023 File on Federal Communication Commission  
Registration Number: 916281

## 2.5 Measurement Uncertainty

(95% confidence levels, k=2)

| Item  | Uncertainty          |
|---|----------------------|
| Uncertainty for Power point Conducted Emissions Test                      | 2.17dB               |
| Uncertainty for Radiation Emission test in 3m chamber<br>(below 30MHz)    | 3.5dB                |
| Uncertainty for Radiation Emission test in 3m chamber<br>(30MHz to 1GHz)  | 2.74dB(Polarize: V)  |
|   | 2.76dB(Polarize: H)  |
| Uncertainty for Radiation Emission test in 3m chamber<br>(1GHz to 18GHz)  | 4.29dB(Polarize: V)  |
|   | 4.82dB(Polarize: H)  |
| Uncertainty for Radiation Emission test in 3m chamber<br>(18GHz to 40GHz) | 4.31 dB(Polarize: V) |
|   | 4.30 dB(Polarize: H) |
| Uncertainty for radio frequency   | 48.24KHz             |
| Uncertainty for conducted RF Power  | 0.41dB               |



### 3 Test Instruments list

| Item                          | Equipment                     | Manufacturer  | Model No.            | Serial No.                  | Firmware Version | Last Cal.  | Cal. Interval |
|-------------------------------|-------------------------------|---------------|----------------------|-----------------------------|------------------|------------|---------------|
| 1.                            | 9*6*6 anechoic chamber        | SKET          | 9*6*6                | N/A                         | /                | 2022.12.20 | 3 Year        |
| 2.                            | Test Receiver                 | Rohde&Schwarz | ESCI 7               | 101032/003                  | 4.42 SP3         | 2023.12.19 | 1 Year        |
| 3.                            | L.I.S.N.#1                    | Rohde&Schwarz | ENV216               | 102282                      | /                | 2023.12.19 | 1 Year        |
| 4.                            | L.I.S.N.#2                    | RFT           | NNB111               | 13835240                    | /                | 2023.12.19 | 1 Year        |
| 5.                            | Loop Antenna                  | Schwarz beck  | FMZB 1519B           | 00128                       | /                | 2023.04.03 | 2 Year        |
| 6.                            | Bilog Antenna                 | Schwarz beck  | VULB 9168            | 01448                       | /                | 2022.12.26 | 2 Year        |
| 7.                            | Spectrum Analyzer             | Rohde&Schwarz | FSV-40N              | 101648                      | 3.70             | 2023.12.19 | 1 Year        |
| 8.                            | Horn Antenna                  | Schwarz beck  | BBHA 9120 D          | 02706                       | /                | 2022.12.26 | 2 Year        |
| 9.                            | Amplifier                     | SKET          | LAPA_01G18<br>G-45dB | SK202203290<br>1            | /                | 2023.12.19 | 1 Year        |
| 10.                           | Horn Antenna                  | Schwarz beck  | BBHA 9170            | 00946                       | /                | 2022.12.25 | 2 Year        |
| 11.                           | Amplifier                     | SKET          | LNPA_0118G<br>-45    | SK202001080<br>1            | /                | 2023.12.19 | 1 Year        |
| 12.                           | RF Power Probe                | Rohde&Schwarz | NRP-Z11              | 1138.3004.02<br>-1111533-Fz | /                | 2023.12.19 | 1 Year        |
| 13.                           | RF Sensor Unit                | Tachoy        | TR1029-2             | 20220428P0<br>08            | /                | 2023.12.19 | 1 Year        |
| 14.                           | Comprehensive Test Instrument | Rohde&Schwarz | CMW 500              | 145266                      | /                | 2023.12.19 | 1 Year        |
| For Test Software Information |                               |               |                      |                             |                  |            |               |
| Item                          | Software Name                 | Manufacturer  |                      |                             | Version          |            |               |
| RE                            | EMC-I                         | SKET          |                      |                             | V1.5.0.3         |            |               |
| RF                            | RTS                           | TACHOY        |                      |                             | V1.0.0           |            |               |

## 4 System test configuration

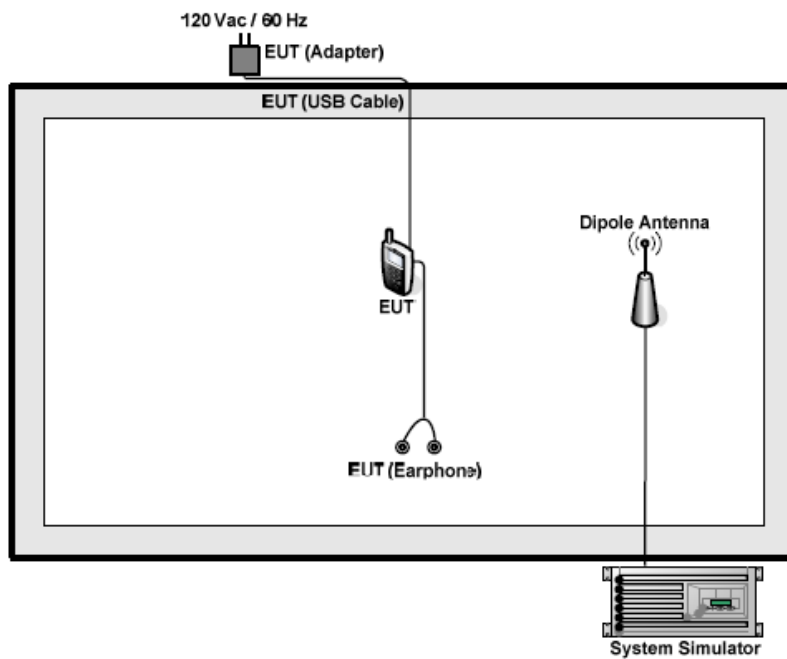
### 4.1 Test mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

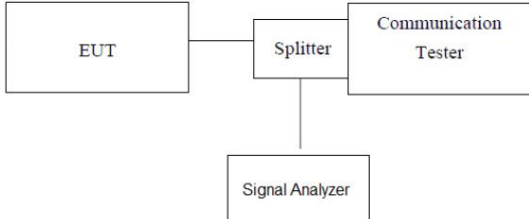
| Test modes |                |                |
|------------|----------------|----------------|
| Band       | Radiated       | Conducted      |
| GSM 850    | ■ GSM link     | ■ GSM link     |
|            | ■ GPRS 1 link  | ■ GPRS 1 link  |
|            | ■ EGPRS 1 link | ■ EGPRS 1 link |
| PCS 1900   | ■ GSM link     | ■ GSM link     |
|            | ■ GPRS 1 link  | ■ GPRS 1 link  |
|            | ■ EGPRS 1 link | ■ EGPRS 1 link |

Note: The maximum power levels are GSM mode for GMSK link, GPRS multi-slot class 8 mode for GMSK link, EGPRS multi-slot class 8 mode for 8PSK link.

### 4.2 Configuration of Tested System

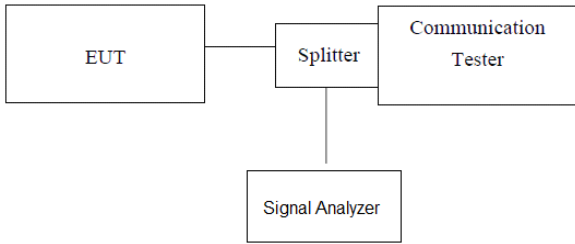


### 4.3 Transmitter Radiated Power (EIRP/ERP)

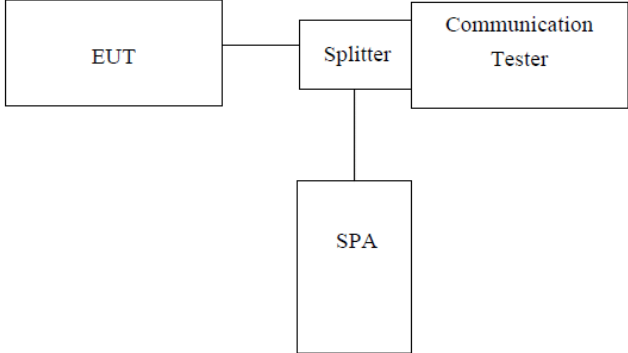
|                   |   |
|-------------------|---|
| Test Requirement: | FCC part22.913(a) and FCC part24.232(b), FCC part 27.50 (d)(4)  |
| Test Method:      | FCC part2.1046  |
| Limit:            | GSM850, 7W<br>PCS1900, 2W   |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>  |
| Test Procedure:   | <p><b>Description of the Conducted Output Power Measurement</b></p> <p>The EUT is coupled to the SS with attenuator through power splitter; the RF load attached to EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. A system simulator is used to establish communication with the EUT, and its parameters are set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.</p> <p>The relevant equation for determining the conducted measured value is:<br/> Conducted Output Power Value (dBm) = Measured Value (dBm) + Path Loss (dB)</p> <p>where:</p> <p>Conducted Output Power Value = final conducted measured value in the conducted power test, in dBm; Measured Value = measured conducted power received by spectrum analyzer or power meter, in dBm;</p> <p>Path Loss = signal attenuation in the connecting cable between the transmitter and spectrum analyzer or power meter, including external cable loss, in dB;</p> <p>During the test, the data of Path Loss (dB) is added in the spectrum analyzer or power meter, so Measured Value (dBm) is the final values which contains the data of Path Loss (dB).</p> <p>For example:</p> <p>In the conducted output power test, when measured value for GSM850 is 24.7 dBm, and path loss is 8.5 dB, then final conducted output power value is:<br/> Conducted Output Power Value (dBm) = 24.7 dBm + 8.5 dB = 33.2 dBm</p> <p><b>Description of the Transmitter Radiated Power Measurement</b></p> <p>In many cases, the RF output power limits for licensed digital transmission devices is specified in terms of effective radiated power (ERP) or equivalent isotropic radiated power (EIRP). Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are determined by adding the transmit antenna gain to the conducted RF output power with the primary difference between the two being that when determining the ERP, the transmit antenna gain is referenced to a dipole antenna (i.e., dBd) whereas when determining the EIRP, the transmit antenna gain is referenced to an</p> |

|                   |   |
|-------------------|---|
|                   | <p>isotropic antenna (dBi).</p> <p>Final measurement calculation as below:</p> <p>The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:</p> $\text{ERP/EIRP} = \text{PMeas} + \text{GT} - \text{LC}$ <p>where:</p> <p>ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);</p> <p>PMeas = measured transmitter output power or PSD, in dBm or dBW; GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP); dBd (ERP)=dBi (EIRP) -2.15 dB</p> <p>LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.</p> <p>For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.</p> <p>For example:</p> <p>In the EIRP test, when PMeas value for GSM1900 is 30.2 dBm, LC is 0.6 dB, and GT is -3.4 dB, then final EIRP value is:</p> $\text{EIRP for GSM1900} = 30.2 \text{ dBm} - 3.4 \text{ dBi} - 0.6 \text{ dB} = 26.2 \text{ dBm}$ <p>The relevant equation for determining the ERP/EIRP from the radiated RF output power is:</p> $\text{ERP/EIRP (dBm)} = \text{SA Read Value (dBm)} + \text{Correction Factor (dB)}$ <p>where:</p> <p>ERP/EIRP = effective or equivalent radiated power, in dBm;</p> <p>SA Read Value = measured transmitter power received by EMI receiver or spectrum analyzer, in dBm; Correction Factor = total correction factor including cable loss, in dB;</p> <p>During the test, the data of Correction Factor (dB) is added in the EMI receiver or spectrum analyzer, so SA Read Value (dBm) is the final values which contains the data of Correction Factor (dB).</p> <p>For example:</p> <p>In the ERP test, when SA read value for GSM850 is 21dBm, and correction factor is 8dB, then final ERP value for GSM850 is:</p> $\text{ERP (dBm)} = 21\text{dBm} + 8\text{dB} = 29\text{dBm}$ |
| Test Instruments: | Refer to section 3.0 for details  |
| Test mode:        | Refer to section 4.1 for details  |
| Test results:     | <p>Pass</p> <p>(Please refer to ANNEX A.2)</p>  |

#### 4.4 Peak-to-Average Ratio

|                   |  |
|-------------------|--|
| Test Requirement: | FCC part24.232(d)  |
| Test Method:      | FCC part2.1046   |
| Limit:            | 13db   |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>  |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The transmitter output port was connected to base station.</li> <li>2. The RF output of EUT was connected to the Signal Analyzer by RF cable and attenuator, the path loss was compensated to the results for each measurement.</li> <li>3. Set EUT at maximum power through base station.</li> <li>4. Select lowest, middle, and highest channels for each band and different modulation.</li> <li>5. Measure the maximum burst average power.</li> <li>6. Record the maximum peak-to-average ratio value.</li> </ol> |
| Test Instruments: | Refer to section 3.0 for details   |
| Test mode:        | Refer to section 4.1 for details   |
| Test results:     | Pass<br>(Please refer to ANNEX A.4)  |

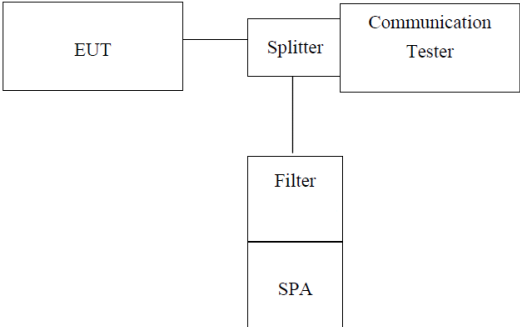
#### 4.5 Occupy Bandwidth

|                   |  |
|-------------------|--|
| Test Requirement: | FCC part22.913(a) and FCC part24.232(b)  |
| Test Method:      | FCC part2.1049   |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>  |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1. The EUT's output RF connector was connected with a short cable to the spectrum analyzer</li> <li>2. RBW was set to about 1% of emission BW, VBW= 3 times RBW.</li> <li>3. -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.</li> </ol> |
| Test Instruments: | Refer to section 3.0 for details   |
| Test mode:        | Refer to section 4.1 for details   |
| Test results:     | Pass<br>Pass(Please refer to ANNEX A.3)  |

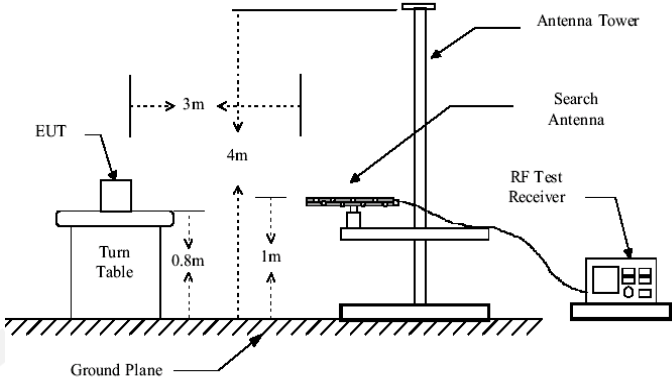
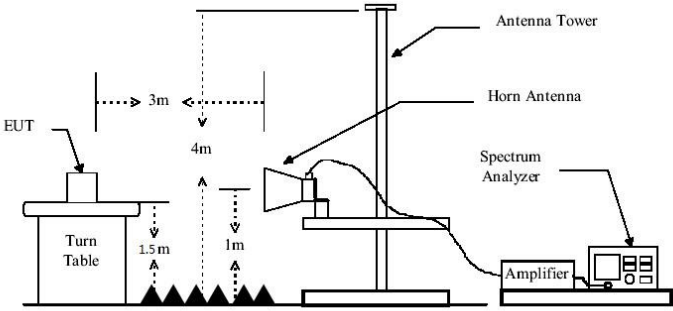
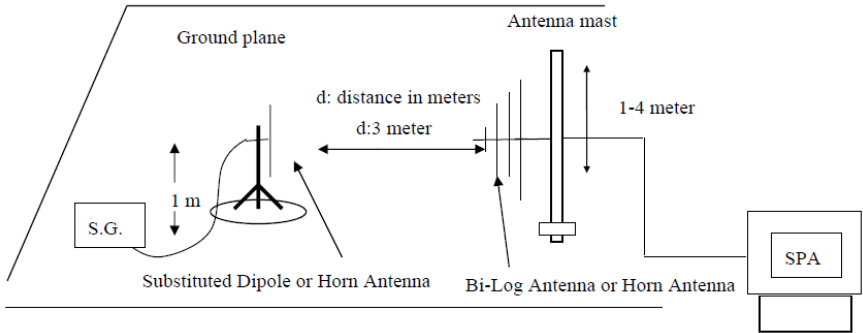
#### 4.6 Modulation Characteristic

According to FCC § 2.1047(d), Part 22H & 24E there is no specific requirement for digital modulation, therefore modulation characteristic is not presented.

#### 4.7 Out of band emission at antenna terminals

|                   |  |
|-------------------|--|
| Test Requirement: | FCC part22.917(a) and FCC part24.238(a)  |
| Test Method:      | FCC part2.1051   |
| Limit:            | -13dBm   |
| Test setup:       |  <p><i>Note: Measurement setup for testing on Antenna connector</i></p>  |
| Test Procedure:   | <ol style="list-style-type: none"> <li>1 The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation.</li> <li>2 The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.</li> <li>3 For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10th harmonic.</li> <li>4 Band Edge Requirements: In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions.</li> </ol> |
| Test Instruments: | Refer to section 3.0 for details   |
| Test mode:        | Refer to section 4.1 for details   |
| Test results:     | Pass<br>(Please refer to ANNEX A.5)  |

#### 4.8 Field strength of spurious radiation measurement

|                   |  |
|-------------------|--|
| Test Requirement: | FCC part22.917(a) and FCC part24.238(a)  |
| Test Method:      | FCC part2.1053   |
| Limit:            | -13dBm   |
| Test setup:       | <p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p>  |



|                   |  |
|-------------------|--|
| Test Procedure:   | <ol style="list-style-type: none"><li>1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer.</li><li>2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations.</li><li>3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method.</li><li>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.<br/><math display="block">\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}</math></li></ol> |
| Test Instruments: | Refer to section 3.0 for details   |
| Test mode:        | Refer to section 4.1 for details   |
| Test results:     | Pass   |

## Measurement Data

| Test mode:      | GSM850            |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1648.40         | Vertical          | -36.87      | -13.00        | Pass    |
| 2472.60         | V                 | -39.31      |               |         |
| 3296.80         | V                 | -38.14      |               |         |
| 4121.00         | V                 | -43.16      |               |         |
| 4945.20         | V                 | ---         |               |         |
| 1648.40         | Horizontal        | -38.61      | -13.00        | Pass    |
| 2472.60         | H                 | -42.73      |               |         |
| 3296.80         | H                 | -45.04      |               |         |
| 4121.00         | H                 | -46.26      |               |         |
| 4945.20         | H                 | ---         |               |         |
| Test mode:      | GSM850            |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1673.20         | Vertical          | -36.82      | -13.00        | Pass    |
| 2509.80         | V                 | -38.97      |               |         |
| 3346.40         | V                 | -38.18      |               |         |
| 4183.00         | V                 | -43.61      |               |         |
| 5019.60         | V                 | ---         |               |         |
| 1673.20         | Horizontal        | -39.09      | -13.00        | Pass    |
| 2509.80         | H                 | -42.42      |               |         |
| 3346.40         | H                 | -44.53      |               |         |
| 4183.00         | H                 | -45.97      |               |         |
| 5019.60         | H                 | ---         |               |         |
| Test mode:      | GSM850            |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1697.60         | Vertical          | -37.23      | -13.00        | Pass    |
| 2546.40         | V                 | -39.33      |               |         |
| 3395.20         | V                 | -38.50      |               |         |
| 4244.00         | V                 | -43.70      |               |         |
| 5092.80         | V                 | ---         |               |         |
| 1697.60         | Horizontal        | -39.47      | -13.00        | Pass    |
| 2546.40         | H                 | -42.70      |               |         |
| 3395.20         | H                 | -44.50      |               |         |
| 4244.00         | H                 | -45.77      |               |         |
| 5092.80         | H                 | ---         |               |         |

| Test mode:      | GPRS 850          |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1648.40         | Vertical          | -36.67      | -13.00        | Pass    |
| 2472.60         | V                 | -39.93      |               |         |
| 3296.80         | V                 | -37.76      |               |         |
| 4121.00         | V                 | -43.23      |               |         |
| 4945.20         | V                 | ---         |               |         |
| 1648.40         | Horizontal        | -39.03      | -13.00        | Pass    |
| 2472.60         | H                 | -42.59      |               |         |
| 3296.80         | H                 | -44.88      |               |         |
| 4121.00         | H                 | -46.29      |               |         |
| 4945.20         | H                 | ---         |               |         |
| Test mode:      | GPRS 850          |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1673.20         | Vertical          | -36.38      | -13.00        | Pass    |
| 2509.80         | V                 | -39.16      |               |         |
| 3346.40         | V                 | -38.09      |               |         |
| 4183.00         | V                 | -42.84      |               |         |
| 5019.60         | V                 | ---         |               |         |
| 1673.20         | Horizontal        | -39.58      | -13.00        | Pass    |
| 2509.80         | H                 | -42.67      |               |         |
| 3346.40         | H                 | -44.94      |               |         |
| 4183.00         | H                 | -45.61      |               |         |
| 5019.60         | H                 | ---         |               |         |
| Test mode:      | GPRS 850          |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1697.60         | Vertical          | -36.88      | -13.00        | Pass    |
| 2546.40         | V                 | -39.57      |               |         |
| 3395.20         | V                 | -37.79      |               |         |
| 4244.00         | V                 | -43.62      |               |         |
| 5092.80         | V                 | ---         |               |         |
| 1697.60         | Horizontal        | -38.59      | -13.00        | Pass    |
| 2546.40         | H                 | -42.48      |               |         |
| 3395.20         | H                 | -44.46      |               |         |
| 4244.00         | H                 | -46.30      |               |         |
| 5092.80         | H                 | ---         |               |         |

| Test mode:      | EGPRS 850         |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1648.40         | Vertical          | -36.99      | -13.00        | Pass    |
| 2472.60         | V                 | -39.18      |               |         |
| 3296.80         | V                 | -38.14      |               |         |
| 4121.00         | V                 | -43.54      |               |         |
| 4945.20         | V                 | ---         |               |         |
| 1648.40         | Horizontal        | -39.05      | -13.00        | Pass    |
| 2472.60         | H                 | -42.33      |               |         |
| 3296.80         | H                 | -44.83      |               |         |
| 4121.00         | H                 | -45.53      |               |         |
| 4945.20         | H                 | ---         |               |         |
| Test mode:      | EGPRS 850         |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1673.20         | Vertical          | -36.53      | -13.00        | Pass    |
| 2509.80         | V                 | -39.34      |               |         |
| 3346.40         | V                 | -37.52      |               |         |
| 4183.00         | V                 | -42.99      |               |         |
| 5019.60         | V                 | ---         |               |         |
| 1673.20         | Horizontal        | -39.21      | -13.00        | Pass    |
| 2509.80         | H                 | -42.94      |               |         |
| 3346.40         | H                 | -44.55      |               |         |
| 4183.00         | H                 | -46.18      |               |         |
| 5019.60         | H                 | ---         |               |         |
| Test mode:      | EGPRS 850         |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1697.60         | Vertical          | -36.56      | -13.00        | Pass    |
| 2546.40         | V                 | -39.15      |               |         |
| 3395.20         | V                 | -37.75      |               |         |
| 4244.00         | V                 | -43.74      |               |         |
| 5092.80         | V                 | ---         |               |         |
| 1697.60         | Horizontal        | -38.64      | -13.00        | Pass    |
| 2546.40         | H                 | -42.93      |               |         |
| 3395.20         | H                 | -44.79      |               |         |
| 4244.00         | H                 | -46.27      |               |         |
| 5092.80         | H                 | ---         |               |         |

Remark :

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

| Test mode:      | PCS1900           |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3700.40         | Vertical          | -37.06      | -13.00        | Pass    |
| 5550.60         | V                 | -39.15      |               |         |
| 7400.80         | V                 | -37.67      |               |         |
| 9251.00         | V                 | -43.21      |               |         |
| 11101.20        | V                 | ---         |               |         |
| 3700.40         | Horizontal        | -38.63      | -13.00        | Pass    |
| 5550.60         | H                 | -42.33      |               |         |
| 7400.80         | H                 | -45.06      |               |         |
| 9251.00         | H                 | -46.34      |               |         |
| 11101.20        | H                 | ---         |               |         |
| Test mode:      | PCS1900           |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3760.00         | Vertical          | -36.35      | -13.00        | Pass    |
| 5640.00         | V                 | -39.33      |               |         |
| 7520.00         | V                 | -37.65      |               |         |
| 9400.00         | V                 | -43.41      |               |         |
| 11280.00        | V                 | ---         |               |         |
| 3760.00         | Horizontal        | -39.08      | -13.00        | Pass    |
| 5640.00         | H                 | -42.70      |               |         |
| 7520.00         | H                 | -44.87      |               |         |
| 9400.00         | H                 | -45.89      |               |         |
| 11280.00        | H                 | ---         |               |         |
| Test mode:      | PCS1900           |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 3819.60         | Vertical          | -36.76      | -13.00        | Pass    |
| 5729.40         | V                 | -39.31      |               |         |
| 7639.20         | V                 | -38.05      |               |         |
| 9549.00         | V                 | -43.49      |               |         |
| 11458.80        | V                 | ---         |               |         |
| 3819.60         | Horizontal        | -38.65      | -13.00        | Pass    |
| 5729.40         | H                 | -42.61      |               |         |
| 7639.20         | H                 | -44.93      |               |         |
| 9549.00         | H                 | -46.30      |               |         |
| 11458.80        | H                 | ---         |               |         |

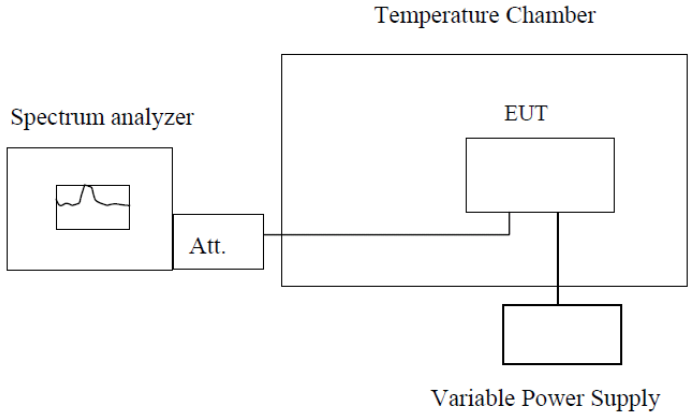
| Test mode:      | GPRS 1900         |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1648.40         | Vertical          | -36.75      | -13.00        | Pass    |
| 2472.60         | V                 | -39.22      |               |         |
| 3296.80         | V                 | -37.68      |               |         |
| 4121.00         | V                 | -43.58      |               |         |
| 4945.20         | V                 | ---         |               |         |
| 1648.40         | Horizontal        | -39.46      | -13.00        | Pass    |
| 2472.60         | H                 | -42.84      |               |         |
| 3296.80         | H                 | -44.98      |               |         |
| 4121.00         | H                 | -45.78      |               |         |
| 4945.20         | H                 | ---         |               |         |
| Test mode:      | GPRS 1900         |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1673.20         | Vertical          | -37.27      | -13.00        | Pass    |
| 2509.80         | V                 | -39.27      |               |         |
| 3346.40         | V                 | -37.74      |               |         |
| 4183.00         | V                 | -42.85      |               |         |
| 5019.60         | V                 | ---         |               |         |
| 1673.20         | Horizontal        | -38.86      | -13.00        | Pass    |
| 2509.80         | H                 | -42.56      |               |         |
| 3346.40         | H                 | -44.78      |               |         |
| 4183.00         | H                 | -45.53      |               |         |
| 5019.60         | H                 | ---         |               |         |
| Test mode:      | GPRS 1900         |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1697.60         | Vertical          | -36.98      | -13.00        | Pass    |
| 2546.40         | V                 | -39.83      |               |         |
| 3395.20         | V                 | -37.95      |               |         |
| 4244.00         | V                 | -43.08      |               |         |
| 5092.80         | V                 | ---         |               |         |
| 1697.60         | Horizontal        | -38.87      | -13.00        | Pass    |
| 2546.40         | H                 | -42.29      |               |         |
| 3395.20         | H                 | -44.92      |               |         |
| 4244.00         | H                 | -46.45      |               |         |
| 5092.80         | H                 | ---         |               |         |

| Test mode:      | EGPRS 1900        |             | Test channel: | Lowest  |
|-----------------|-------------------|-------------|---------------|---------|
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1648.40         | Vertical          | -37.04      | -13.00        | Pass    |
| 2472.60         | V                 | -39.27      |               |         |
| 3296.80         | V                 | -38.30      |               |         |
| 4121.00         | V                 | -43.77      |               |         |
| 4945.20         | V                 | ---         |               |         |
| 1648.40         | Horizontal        | -39.39      | -13.00        | Pass    |
| 2472.60         | H                 | -43.00      |               |         |
| 3296.80         | H                 | -45.11      |               |         |
| 4121.00         | H                 | -46.39      |               |         |
| 4945.20         | H                 | ---         |               |         |
| Test mode:      | EGPRS 1900        |             | Test channel: | Middle  |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1673.20         | Vertical          | -37.08      | -13.00        | Pass    |
| 2509.80         | V                 | -39.54      |               |         |
| 3346.40         | V                 | -38.00      |               |         |
| 4183.00         | V                 | -42.90      |               |         |
| 5019.60         | V                 | ---         |               |         |
| 1673.20         | Horizontal        | -39.46      | -13.00        | Pass    |
| 2509.80         | H                 | -42.63      |               |         |
| 3346.40         | H                 | -44.85      |               |         |
| 4183.00         | H                 | -45.73      |               |         |
| 5019.60         | H                 | ---         |               |         |
| Test mode:      | EGPRS 1900        |             | Test channel: | Highest |
| Frequency (MHz) | Spurious Emission |             | Limit (dBm)   | Result  |
|                 | Polarization      | Level (dBm) |               |         |
| 1697.60         | Vertical          | -37.04      | -13.00        | Pass    |
| 2546.40         | V                 | -39.83      |               |         |
| 3395.20         | V                 | -38.04      |               |         |
| 4244.00         | V                 | -42.94      |               |         |
| 5092.80         | V                 | ---         |               |         |
| 1697.60         | Horizontal        | -38.63      | -13.00        | Pass    |
| 2546.40         | H                 | -42.17      |               |         |
| 3395.20         | H                 | -44.99      |               |         |
| 4244.00         | H                 | -45.75      |               |         |
| 5092.80         | H                 | ---         |               |         |

Remark:

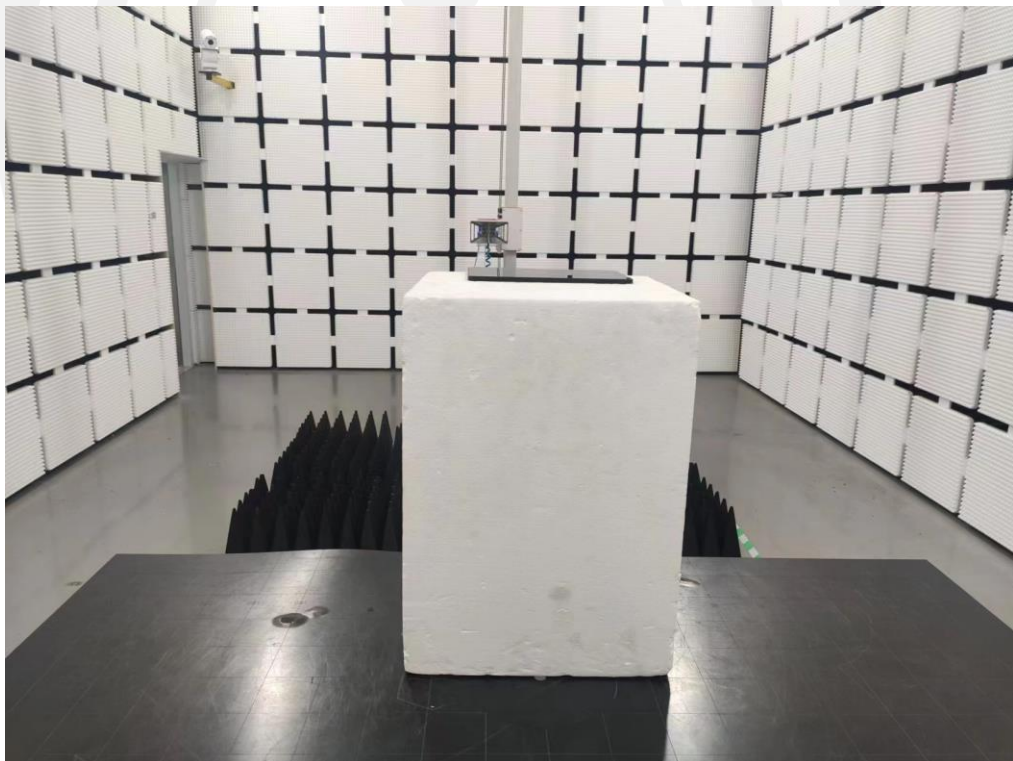
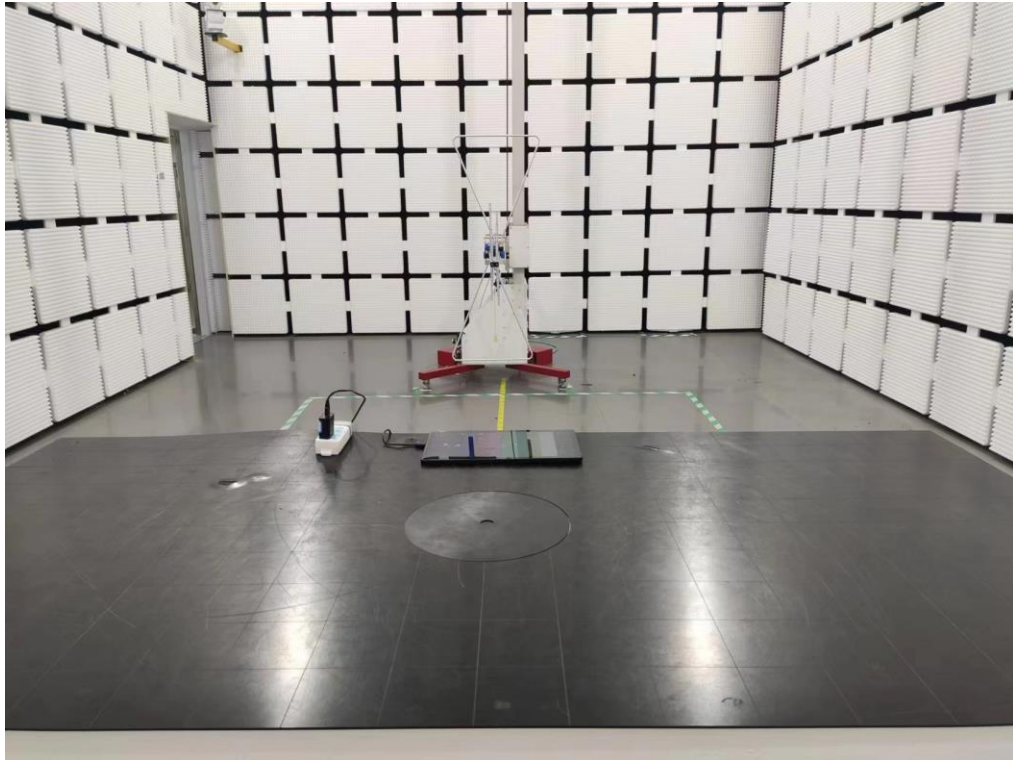
1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

#### 4.9 Frequency stability measurement

|                   |   |
|-------------------|---|
| Test Requirement: | Part 2.1055(a)(1)(b), Part 2.1055(d)(1)(2)  |
| Test Method:      | ANSI C63.26:2015  |
| Limit:            | 2.5ppm  |
| Test setup:       |  <p><b>Note :</b> Measurement setup for testing on Antenna connector</p>  |
| Test procedure:   | <ol style="list-style-type: none"> <li>1. The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>3. The EUT was placed inside the temperature chamber.</li> <li>4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.</li> <li>5. Turn EUT off and set the chamber temperature to –20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.</li> <li>7. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.</li> </ol> |
| Test Instruments: | Refer to section 3.0 for details  |
| Test mode:        | Refer to section 4.1 for details  |
| Test results:     | Pass<br>(Please refer to ANNEX A.6)   |



#### 4.10 Photos of test setup



-----End-----