

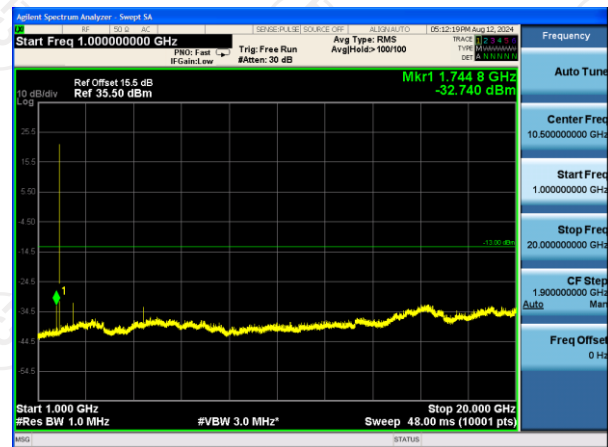
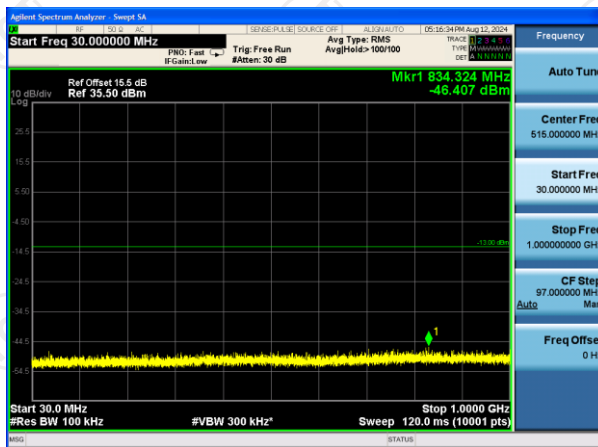
Band:

GSM 1900

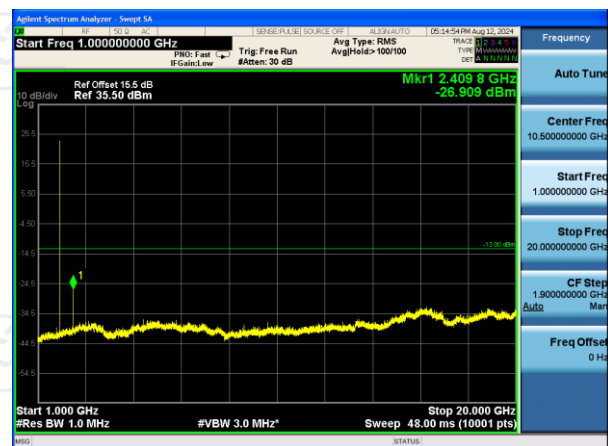
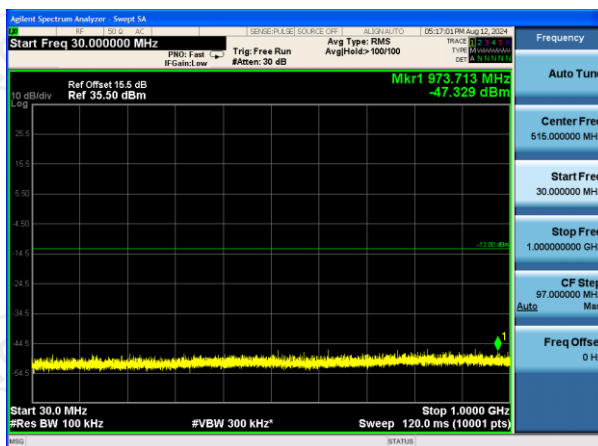
Test Mode:

GSM Link (GMSK)

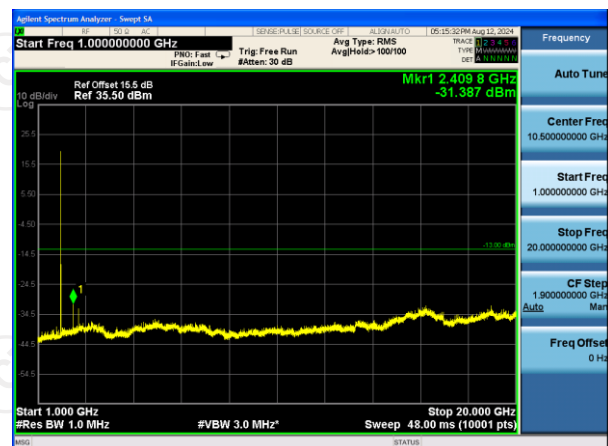
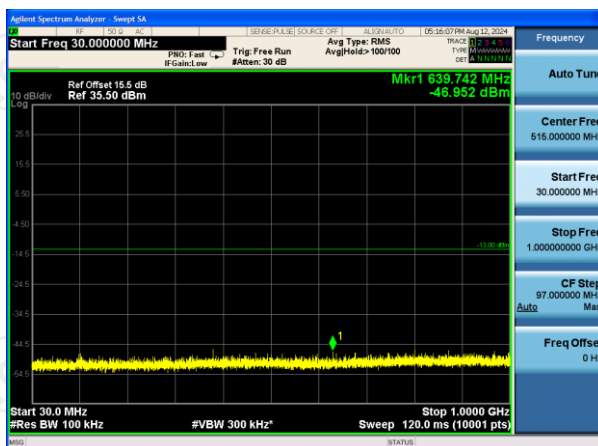
## Conducted Spurious Emission on Channel 512



## Conducted Spurious Emission on Channel 661



## Conducted Spurious Emission on Channel 810



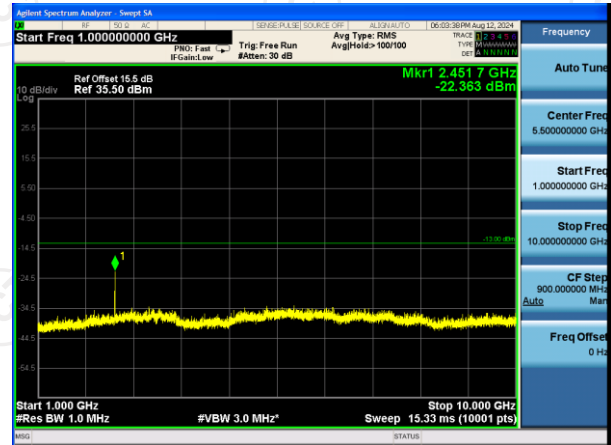
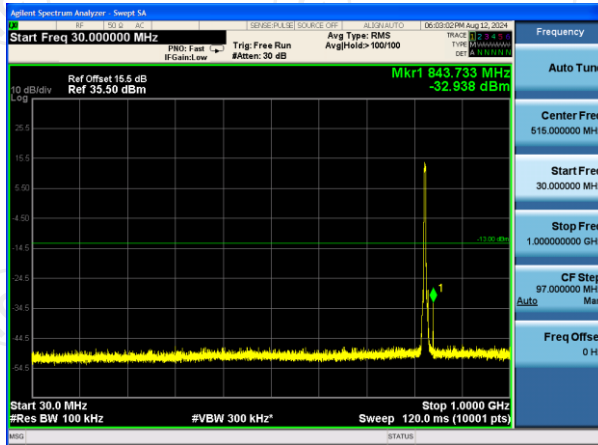
Band:

WCDMA Band V

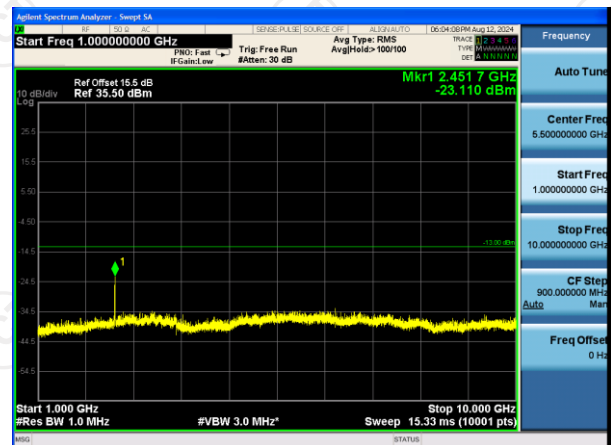
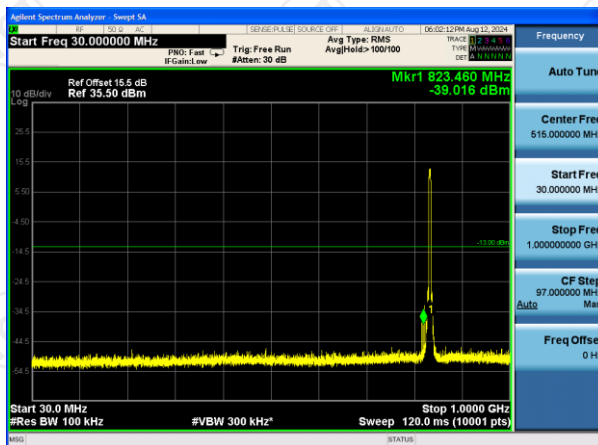
Test Mode:

RMC 12.2Kbps Link  
(QPSK)

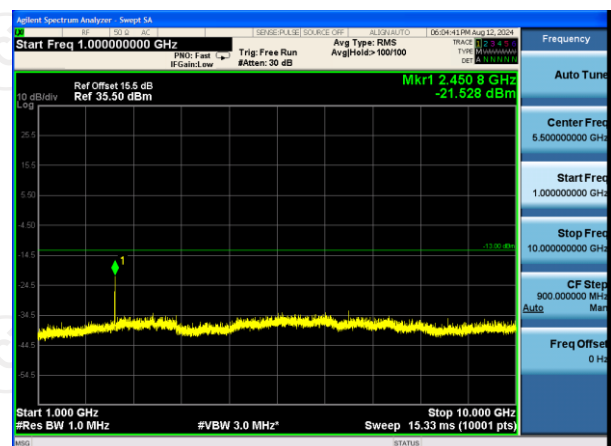
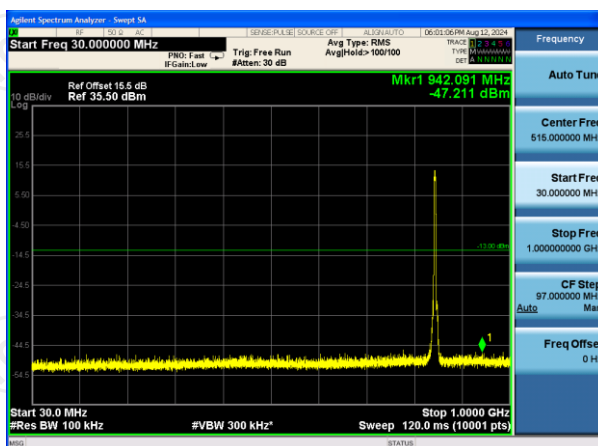
### Conducted Spurious Emission on Channel 4132



### Conducted Spurious Emission on Channel 4182

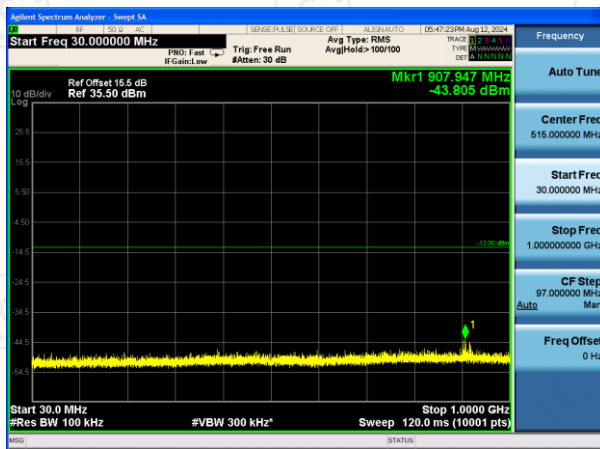


### Conducted Spurious Emission on Channel 4233

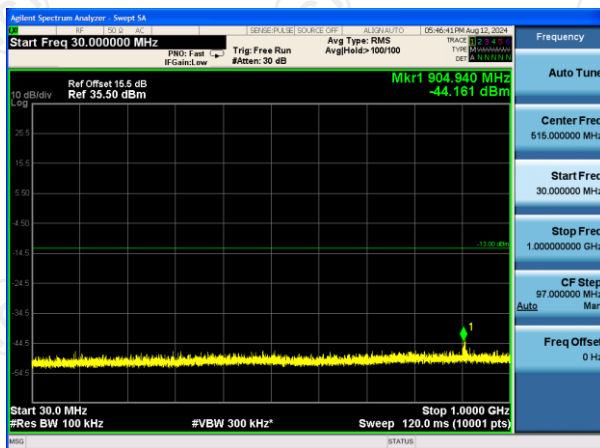


|       |               |            |                          |
|-------|---------------|------------|--------------------------|
| Band: | WCDMA Band IV | Test Mode: | RMC 12.2Kbps Link (QPSK) |
|-------|---------------|------------|--------------------------|

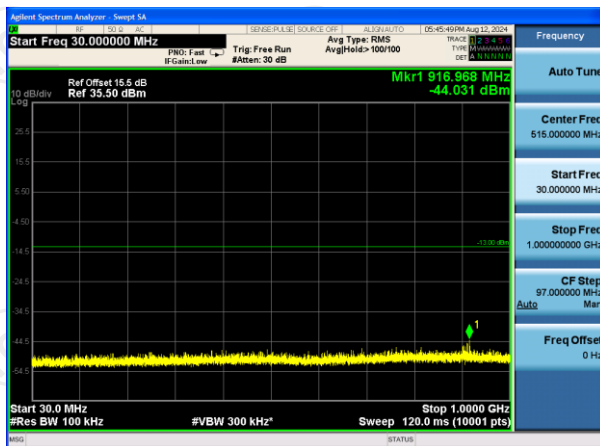
### Conducted Spurious Emission on Channel 1312



### Conducted Spurious Emission on Channel 1413

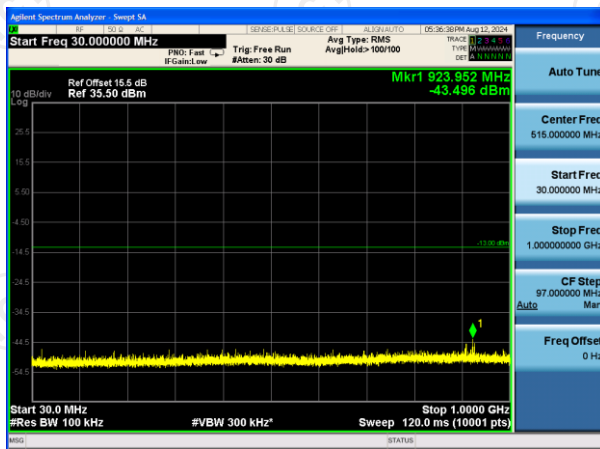


### Conducted Spurious Emission on Channel 1513

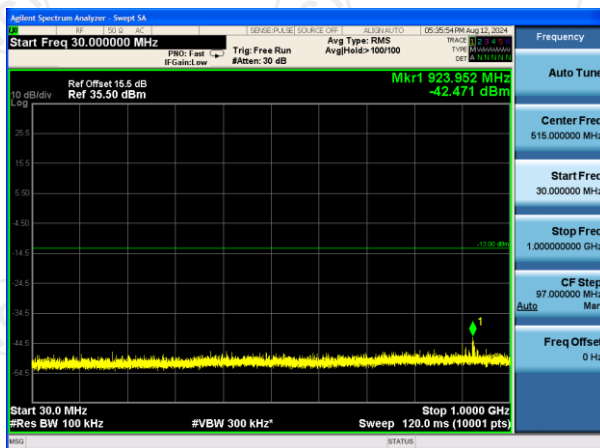


|       |               |            |                          |
|-------|---------------|------------|--------------------------|
| Band: | WCDMA Band II | Test Mode: | RMC 12.2Kbps Link (QPSK) |
|-------|---------------|------------|--------------------------|

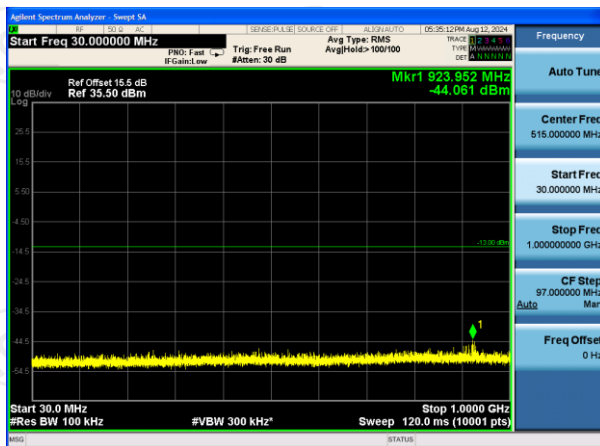
## Conducted Spurious Emission on Channel 9262



## Conducted Spurious Emission on Channel 9400



## Conducted Spurious Emission on Channel 9538

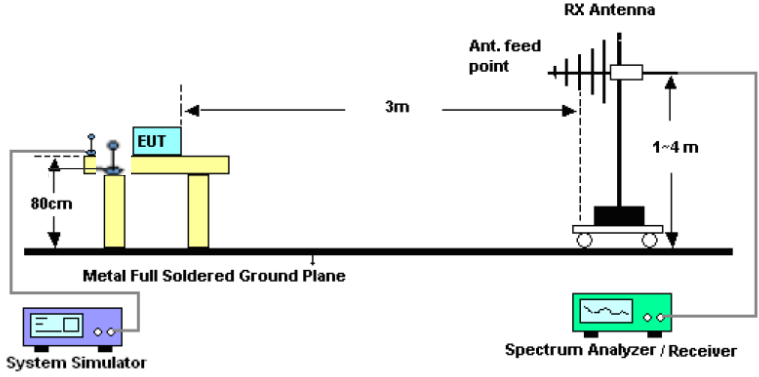
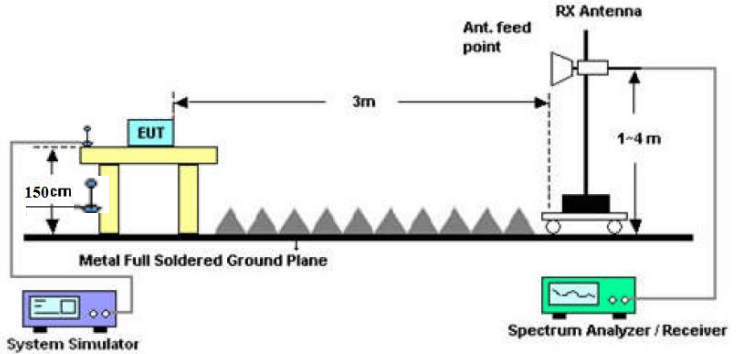


| GSM1900(GSM) Conducted Spurious Emission for Below 1G                                                                                                                                                          |           |                   |           |                        |                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------------|-----------|------------------------|----------------|
| Channel                                                                                                                                                                                                        | RBW (KHz) | Test result (dBm) | RBW (MHz) | Calculate result (dBm) | Limit (-13dBm) |
| 512                                                                                                                                                                                                            | 100       | -49.00            | 1         | -39.00                 | Pass           |
| 661                                                                                                                                                                                                            | 100       | -47.84            | 1         | -37.84                 | Pass           |
| 810                                                                                                                                                                                                            | 100       | -48.88            | 1         | -38.88                 | Pass           |
| WCDMA Band II(RMC 12.2Kbps) Conducted Spurious Emission for Below 1G                                                                                                                                           |           |                   |           |                        |                |
| Channel                                                                                                                                                                                                        | RBW (KHz) | Test result (dBm) | RBW (MHz) | Calculate result (dBm) | Limit (-13dBm) |
| 9262                                                                                                                                                                                                           | 100       | -46.41            | 1         | -36.41                 | Pass           |
| 9400                                                                                                                                                                                                           | 100       | -47.33            | 1         | -37.33                 | Pass           |
| 9538                                                                                                                                                                                                           | 100       | -46.95            | 1         | -36.95                 | Pass           |
| WCDMA Band IV(RMC 12.2Kbps) Conducted Spurious Emission for Below 1G                                                                                                                                           |           |                   |           |                        |                |
| Channel                                                                                                                                                                                                        | RBW (KHz) | Test result (dBm) | RBW (MHz) | Calculate result (dBm) | Limit (-13dBm) |
| 1312                                                                                                                                                                                                           | 100       | -43.81            | 1         | -33.81                 | Pass           |
| 1413                                                                                                                                                                                                           | 100       | -44.16            | 1         | -34.16                 | Pass           |
| 1513                                                                                                                                                                                                           | 100       | -44.03            | 1         | -34.03                 | Pass           |
| Compensate 10dB is for Exchange rate of RBW<br>$\text{Exchange rate of RBW} = 10 \cdot \log_{10}(\text{Reference bandwidth} / \text{RBW at measurement}) = 10[\text{dB}]$<br>where Reference bandwidth = 1 MHz |           |                   |           |                        |                |

**Note:** Measurements were conducted in all GMSK modulation (GSM/GPRS) and the worst case Mode (GSM) was submitted only.

## 5.5. Effective Radiated Power and Effective Isotropic Radiated Power Measurement

### 5.5.1. Test Specification

|                          |                                                                                                                                                                                                                       |               |            |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------|
| <b>Test Requirement:</b> | FCC part 22.913(a) and FCC part 24.232(c)<br>FCC part 27.50(d)                                                                                                                                                        |               |            |
| <b>Test Method:</b>      | FCC KDB 971168 D01v03r01                                                                                                                                                                                              |               |            |
| <b>Receiver Setup:</b>   |                                                                                                                                                                                                                       | GSM/GPRS/EDGE | WCDMA/HSPA |
|                          | SPAN                                                                                                                                                                                                                  | 500kHz        | 10MHz      |
|                          | RBW                                                                                                                                                                                                                   | 10kHz         | 100kHz     |
|                          | VBW                                                                                                                                                                                                                   | 30kHz         | 300kHz     |
|                          | Detector                                                                                                                                                                                                              | RMS           | RMS        |
|                          | Trace                                                                                                                                                                                                                 | Average       | Average    |
|                          | Average Type                                                                                                                                                                                                          | Power         | Power      |
|                          | Sweep Count                                                                                                                                                                                                           | 100           | 100        |
| <b>Limit:</b>            | GSM850: 7W ERP<br>PCS1900: 2W EIRP<br>WCDMA Band V: 7W ERP<br>WCDMA Band II: 2W EIRP<br>WCDMA Band IV: 1W EIRP                                                                                                        |               |            |
| <b>Test Setup:</b>       | <p>From 30MHz to 1GHz</p>  <p>Above 1GHz</p>  |               |            |

## Test Procedure:

1. The testing follows FCC KDB 971168 D01v03r01 Section 5.8. and ANSI / TIA-603-D-2010 Section 2.2.17.
2. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01v03.
3. Key the transmitter, then rotate the EUT 360° azimuthally and record spectrum analyzer power level (LVL) measurements at angular increments that are sufficiently small to permit resolution of all peaks. If a standard radiation test site is used, raise and lower the test antenna to obtain a maximum reading at each angular increment.
4. Replace the transmitter under test with a substitution antenna. The center of the antenna should be at the same location as the center of the antenna under test.
5. Connect the antenna to a signal generator with a known output power and record the path loss (in dB) as LOSS. If a standard radiation test site is used, raise and lower the test antenna to obtain a maximum reading.  

$$\text{LOSS} = \text{Generator Output Power (dBm)} - \text{Analyzer reading (dBm)}$$
6. Determine the effective radiated output power at each angular position from the readings in steps 3) and 5) using the following equation:  

$$\text{ERP (dBm)} = \text{LVL (dBm)} + \text{LOSS (dB)}$$
7. The maximum ERP is the maximum value determined in the preceding step.
8. Calculating ERP:  

$$\text{ERP (dBm)} = \text{Output Power (dBm)} - \text{Losses (dB)} + \text{Antenna Gain (dBd)}$$

$$\text{Antenna Gain (dBd)} = \text{Antenna Gain (dBi)} - 2.15$$

$$\text{EIRP} = \text{ERP} + 2.15$$

## Test results:

PASS

### 5.5.2. Test Instruments

| Radiated Emission Test Site (966)    |              |             |               |                 |
|--------------------------------------|--------------|-------------|---------------|-----------------|
| Name of Equipment                    | Manufacturer | Model       | Serial Number | Calibration Due |
| Universal Radio Communication Tester | R&S          | CMU200      | 110188        | Jun. 26, 2025   |
| Spectrum Analyzer                    | R&S          | FSQ40       | 200061        | Jun. 26, 2025   |
| Signal Generator                     | Agilent      | N5173B      | MY58108823    | Jan. 31, 2025   |
| Broadband Antenna                    | Schwarzbeck  | VULB9163    | 340           | Jun. 28, 2025   |
| Horn Antenna                         | Schwarzbeck  | BBHA 9120D  | 631           | Jun. 28, 2025   |
| Broadband Antenna                    | Schwarzbeck  | VULB9163    | 412           | Jun. 28, 2025   |
| Horn Antenna                         | Schwarzbeck  | BBHA 9120D  | 1201          | Jun. 28, 2025   |
| Horn Antenna                         | Schwarzbeck  | BBHA 9170   | 00956         | Feb. 02, 2025   |
| Coaxial cable                        | SKET         | RE-03-D     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-03-M     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-03-L     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-04-D     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-04-M     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-04-L     | /             | Jun. 26, 2025   |
| Antenna Mast                         | Keleto       | RE-AM       | /             | /               |
| EMI Test Software                    | EZ EMC       | FA-03A2 RE+ | 1.1.4.2       | /               |

### 5.5.3. Test Data

#### Test Result of ERP

| GSM850 (GSM) Radiated Power ERP        |            |           |                        |           |         |
|----------------------------------------|------------|-----------|------------------------|-----------|---------|
| Horizontal Polarization (Antenna Pol.) |            |           |                        |           |         |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |
| 824.2                                  | H          | 10.22     | 21.66                  | 29.73     | 0.94    |
| 836.4                                  | H          | 10.56     | 21.54                  | 29.95     | 0.99    |
| 848.8                                  | H          | 10.07     | 21.46                  | 29.38     | 0.87    |
| Vertical Polarization (Antenna Pol.)   |            |           |                        |           |         |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |
| 824.2                                  | H          | 10.85     | 21.66                  | 30.36     | 1.09    |
| 836.4                                  | H          | 10.45     | 21.54                  | 29.84     | 0.96    |
| 848.8                                  | H          | 11.26     | 21.46                  | 30.57     | 1.14    |

| GPRS 850 (1-solt) Radiated Power ERP   |            |           |                        |           |         |
|----------------------------------------|------------|-----------|------------------------|-----------|---------|
| Horizontal Polarization (Antenna Pol.) |            |           |                        |           |         |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |
| 824.2                                  | H          | 10.26     | 21.66                  | 29.77     | 0.95    |
| 836.4                                  | H          | 10.54     | 21.54                  | 29.93     | 0.98    |
| 848.8                                  | H          | 11.06     | 21.46                  | 30.37     | 1.09    |
| Vertical Polarization (Antenna Pol.)   |            |           |                        |           |         |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |
| 824.2                                  | H          | 10.26     | 21.66                  | 29.77     | 0.95    |
| 836.4                                  | H          | 10.34     | 21.54                  | 29.73     | 0.94    |
| 848.8                                  | H          | 10.12     | 21.46                  | 29.43     | 0.88    |

| WCDMA Band V (RMC 12.2Kbps) Radiated Power ERP |            |           |                        |           |         |
|------------------------------------------------|------------|-----------|------------------------|-----------|---------|
| Horizontal Polarization (Antenna Pol.)         |            |           |                        |           |         |
| Frequency (MHz)                                | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |
| 826.4                                          | H          | 0.59      | 21.66                  | 20.10     | 0.10    |
| 836.4                                          | H          | 0.75      | 21.54                  | 20.14     | 0.10    |
| 846.6                                          | H          | 0.97      | 21.46                  | 20.28     | 0.11    |
| Vertical Polarization (Antenna Pol.)           |            |           |                        |           |         |
| Frequency (MHz)                                | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | ERP (dBm) | ERP (W) |
| 826.4                                          | H          | 0.77      | 21.66                  | 20.28     | 0.11    |
| 836.4                                          | H          | 0.91      | 21.54                  | 20.30     | 0.11    |
| 846.6                                          | H          | 1.05      | 21.46                  | 20.36     | 0.11    |

**Note:** \* ERP = LVL (dBm) + Correction Factor (dB) - 2.15  
Correction Factor= S.G. Power - Cable loss + Antenna Gain- SPA. Reading

Test Result of EIRP

| GSM1900 (GSM) Radiated Power EIRP      |            |           |                        |            |          |
|----------------------------------------|------------|-----------|------------------------|------------|----------|
| Horizontal Polarization (Antenna Pol.) |            |           |                        |            |          |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1850.2                                 | H          | 6.55      | 21.66                  | 28.21      | 0.66     |
| 1880.0                                 | H          | 6.45      | 21.54                  | 27.99      | 0.63     |
| 1909.8                                 | H          | 7.00      | 21.46                  | 28.46      | 0.70     |
| Vertical Polarization (Antenna Pol.)   |            |           |                        |            |          |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1850.2                                 | H          | 6.70      | 21.66                  | 28.36      | 0.69     |
| 1880.0                                 | H          | 6.84      | 21.54                  | 28.38      | 0.69     |
| 1909.8                                 | H          | 7.02      | 21.46                  | 28.48      | 0.70     |

| GPRS1900 (1-solt) Radiated Power EIRP  |            |           |                        |            |          |
|----------------------------------------|------------|-----------|------------------------|------------|----------|
| Horizontal Polarization (Antenna Pol.) |            |           |                        |            |          |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1850.2                                 | H          | 6.55      | 21.66                  | 28.21      | 0.66     |
| 1880.0                                 | H          | 7.11      | 21.54                  | 28.65      | 0.73     |
| 1909.8                                 | H          | 7.08      | 21.46                  | 28.54      | 0.71     |
| Vertical Polarization (Antenna Pol.)   |            |           |                        |            |          |
| Frequency (MHz)                        | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1850.2                                 | H          | 6.80      | 21.66                  | 28.46      | 0.70     |
| 1880.0                                 | H          | 6.95      | 21.54                  | 28.49      | 0.71     |
| 1909.8                                 | H          | 7.11      | 21.46                  | 28.57      | 0.72     |

| WCDMA Band IV (RMC 12.2Kbps) Radiated Power EIRP |            |           |                        |            |          |
|--------------------------------------------------|------------|-----------|------------------------|------------|----------|
| Horizontal Polarization (Antenna Pol.)           |            |           |                        |            |          |
| Frequency (MHz)                                  | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1712.4                                           | H          | -0.98     | 21.66                  | 20.68      | 0.12     |
| 1732.6                                           | H          | -0.77     | 21.54                  | 20.77      | 0.12     |
| 1752.6                                           | H          | -0.81     | 21.46                  | 20.65      | 0.12     |
| Vertical Polarization (Antenna Pol.)             |            |           |                        |            |          |
| Frequency (MHz)                                  | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1712.4                                           | H          | -0.89     | 21.66                  | 20.77      | 0.12     |
| 1732.6                                           | H          | -0.70     | 21.54                  | 20.84      | 0.12     |
| 1752.6                                           | H          | -0.95     | 21.46                  | 20.51      | 0.11     |

\* EIRP = LVL (dBm) + Correction Factor (dB)

Correction Factor= S.G. Power - Cable loss + Antenna Gain- SPA. Reading

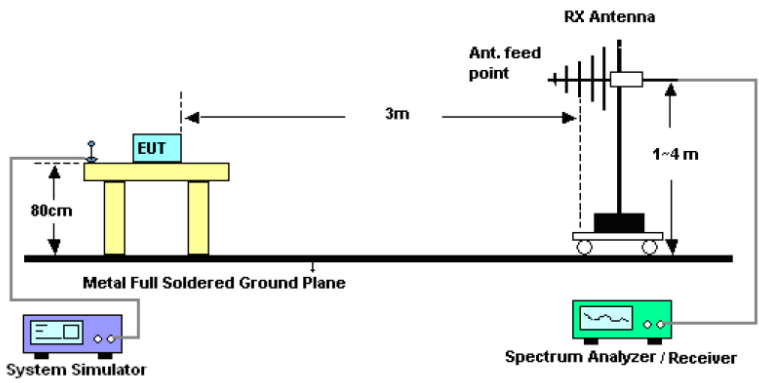
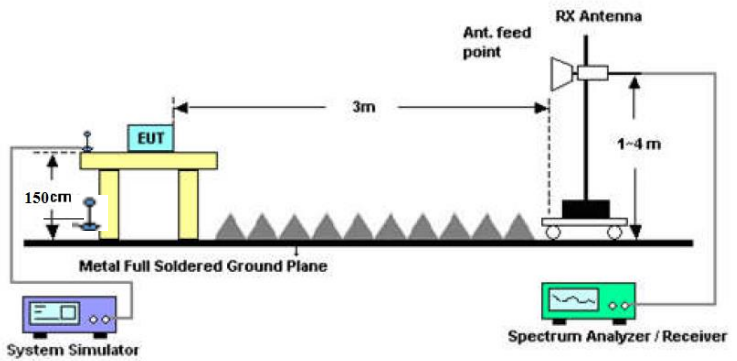
| WCDMA Band II (RMC 12.2Kbps) Radiated Power EIRP |            |           |                        |            |          |
|--------------------------------------------------|------------|-----------|------------------------|------------|----------|
| Horizontal Polarization (Antenna Pol.)           |            |           |                        |            |          |
| Frequency (MHz)                                  | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1852.4                                           | H          | -0.75     | 21.66                  | 20.91      | 0.12     |
| 1880.0                                           | H          | -0.57     | 21.54                  | 20.97      | 0.13     |
| 1907.6                                           | H          | -0.44     | 21.46                  | 21.02      | 0.13     |
| Vertical Polarization (Antenna Pol.)             |            |           |                        |            |          |
| Frequency (MHz)                                  | (EUT Pol.) | LVL (dBm) | Correction Factor (dB) | EIRP (dBm) | EIRP (W) |
| 1852.4                                           | H          | -0.65     | 21.66                  | 21.01      | 0.13     |
| 1880.0                                           | H          | -0.58     | 21.54                  | 20.96      | 0.12     |
| 1907.6                                           | H          | -0.78     | 21.46                  | 20.68      | 0.12     |

Note: \* EIRP = LVL (dBm) + Correction Factor (dB)

Correction Factor= S.G. Power - Cable loss + Substitution Antenna Gain- SPA. Reading

## 5.6. Field Strength of Spurious Radiation Measurement

### 5.6.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | FCC part 22.917(a) and FCC part 24.238(a)<br>FCC part 27.53(g)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Test Method:</b>      | FCC KDB 971168 D01v03r01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Operation mode:</b>   | Refer to item 3.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Limit:</b>            | -13dBm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Test setup:</b>       | <p>For 30MHz~1GHz</p>  <p>Above 1GHz</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Test Procedure:</b>   | <ol style="list-style-type: none"> <li>1. The testing follows FCC KDB 971168 D01v03r01 Section 6 and ANSI / TIA-603-D-2010 Section 2.2.12.</li> <li>2. The EUT was placed on a rotatable wooden table 0.8 meters above the ground.</li> <li>3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.</li> <li>4. The table was rotated 360 degrees to determine the position of the highest spurious emission.</li> <li>5. The height of the receiving antenna is varied between one meter and four meters to search for the maximum spurious emission for both horizontal and vertical polarizations.</li> <li>6. Make the measurement with the spectrum analyzer's</li> </ol> |

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                      | <p>RBW = 1MHz, VBW = 3MHz, taking record of maximum spurious emission.</p> <p>7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.</p> <p>8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.</p> <p>9. Taking the record of output power at antenna port.</p> <p>10. Repeat step 7 to step 8 for another polarization.</p> <p>11. <math>EIRP\ (dBm) = S.G.\ Power - Tx\ Cable\ Loss + Tx\ Antenna\ Gain</math></p> <p>12. <math>ERP\ (dBm) = EIRP - 2.15</math></p> <p>13. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.</p> <p>14. The limit line is derived from <math>43 + 10\log(P)</math> dB below the transmitter power P(Watts)</p> <p><math>= P(W) - [43 + 10\log(P)]\ (dB)</math></p> <p><math>= [30 + 10\log(P)]\ (dBm) - [43 + 10\log(P)]\ (dB)</math></p> <p><math>= -13dBm.</math></p> |
| <b>Test results:</b> | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Remark:</b>       | All modulations have been tested, but only the worst modulation show in this test item.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

## 5.6.2. Test Instruments

| Radiated Emission Test Site (966)    |              |             |               |                 |
|--------------------------------------|--------------|-------------|---------------|-----------------|
| Name of Equipment                    | Manufacturer | Model       | Serial Number | Calibration Due |
| Universal Radio Communication Tester | R&S          | CMU200      | 110188        | Jun. 26, 2025   |
| Spectrum Analyzer                    | R&S          | FSQ40       | 200061        | Jun. 26, 2025   |
| Signal Generator                     | Agilent      | N5173B      | MY58108823    | Jan. 31, 2025   |
| Broadband Antenna                    | Schwarzbeck  | VULB9163    | 340           | Jun. 28, 2025   |
| Horn Antenna                         | Schwarzbeck  | BBHA 9120D  | 631           | Jun. 28, 2025   |
| Broadband Antenna                    | Schwarzbeck  | VULB9163    | 412           | Jun. 28, 2025   |
| Horn Antenna                         | Schwarzbeck  | BBHA 9120D  | 1201          | Jun. 28, 2025   |
| Horn Antenna                         | Schwarzbeck  | BBHA 9170   | 00956         | Feb. 02, 2025   |
| Coaxial cable                        | SKET         | RE-03-D     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-03-M     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-03-L     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-04-D     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-04-M     | /             | Jun. 26, 2025   |
| Coaxial cable                        | SKET         | RE-04-L     | /             | Jun. 26, 2025   |
| Antenna Mast                         | Keleto       | RE-AM       | /             | /               |
| EMI Test Software                    | EZ_EMC       | FA-03A2 RE+ | 1.1.4.2       | /               |

### 5.6.3. Test Data

#### Frequency Range (9 kHz-30MHz)

| Frequency (MHz) | Level@3m (dBμV/m) | Limit@3m (dBμV/m) |
|-----------------|-------------------|-------------------|
| --              | --                | --                |
| --              | --                | --                |
| --              | --                | --                |
| --              | --                | --                |

**Note:** 1. Emission Level=Reading+ Cable loss+Antenna factor-Amp factor

2. The emission levels are 20 dB below the limit value, which are not reported. It is deemed to comply with the requirement

|            |         |                    |        |
|------------|---------|--------------------|--------|
| Band       | GSM 850 | Test channel:      | Lowest |
| Test mode: |         | Temperature:       | 25°C   |
|            |         | Relative Humidity: | 56%    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 1648.4          | Vertical          | -40.55      | -6.47                  | -47.02                   | -13.00      | PASS   |
| 2472.6          | V                 | -49.36      | -2.89                  | -52.25                   |             |        |
| 3296.8          | V                 | -61.95      | -0.48                  | -62.43                   |             |        |
| 1648.4          | Horizontal        | -40.71      | -6.29                  | -47.00                   |             |        |
| 2472.6          | H                 | -47.02      | -2.99                  | -50.01                   |             |        |
| 3296.8          | H                 | -58.55      | -0.10                  | -58.65                   |             |        |

|            |         |                    |        |
|------------|---------|--------------------|--------|
| Band       | GSM 850 | Test channel:      | Middle |
| Test mode: |         | Temperature:       | 25°C   |
|            |         | Relative Humidity: | 56%    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 1673.2          | Vertical          | -41.36      | -6.46                  | -47.82                   | -13.00      | PASS   |
| 2509.8          | V                 | -53.18      | -2.75                  | -55.93                   |             |        |
| 3346.4          | V                 | -61.25      | -0.47                  | -61.72                   |             |        |
| 1673.2          | Horizontal        | -39.01      | -6.32                  | -45.33                   |             |        |
| 2509.8          | H                 | -48.36      | -2.85                  | -51.21                   |             |        |
| 3346.4          | H                 | -61.95      | -0.10                  | -62.05                   |             |        |

|            |         |                    |         |
|------------|---------|--------------------|---------|
| Band       | GSM 850 | Test channel:      | Highest |
| Test mode: |         | Temperature:       | 25°C    |
|            |         | Relative Humidity: | 56%     |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 1697.6          | Vertical          | -42.33      | -6.44                  | -48.77                   | -13.00      | PASS   |
| 2546.4          | V                 | -53.48      | -2.58                  | -56.06                   |             |        |
| 3395.2          | V                 | -60.02      | -0.47                  | -60.49                   |             |        |
| 1697.6          | Horizontal        | -38.98      | -6.35                  | -45.33                   |             |        |
| 2546.4          | H                 | -48.04      | -2.65                  | -50.69                   |             |        |
| 3395.2          | H                 | -63.14      | -0.10                  | -63.24                   |             |        |

|                   |                 |                           |               |
|-------------------|-----------------|---------------------------|---------------|
| <b>Band</b>       | <b>PCS 1900</b> | <b>Test channel:</b>      | <b>Lowest</b> |
| <b>Test mode:</b> |                 | <b>Temperature:</b>       | <b>25°C</b>   |
|                   |                 | <b>Relative Humidity:</b> | <b>56%</b>    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3700.4          | Vertical          | -47.22      | 0.91                   | -46.31                   | -13.00      | PASS   |
| 5550.6          | V                 | -56.33      | 6.87                   | -49.46                   |             |        |
| 7400.8          | V                 | -64.14      | 10.39                  | -53.75                   |             |        |
| 3700.4          | Horizontal        | -44.57      | 1.89                   | -42.68                   |             |        |
| 5550.6          | H                 | -51.11      | 7.38                   | -43.73                   |             |        |
| 7400.8          | H                 | -61.16      | 10.01                  | -51.15                   |             |        |

|                   |                 |                           |               |
|-------------------|-----------------|---------------------------|---------------|
| <b>Band</b>       | <b>PCS 1900</b> | <b>Test channel:</b>      | <b>Middle</b> |
| <b>Test mode:</b> |                 | <b>Temperature:</b>       | <b>25°C</b>   |
|                   |                 | <b>Relative Humidity:</b> | <b>56%</b>    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3760.0          | Vertical          | -48.25      | 1.32                   | -46.93                   | -13.00      | PASS   |
| 5640.0          | V                 | -58.66      | 7.21                   | -51.45                   |             |        |
| 7520.0          | V                 | -56.13      | 10.43                  | -45.70                   |             |        |
| 3760.0          | Horizontal        | -44.52      | 2.48                   | -42.04                   |             |        |
| 5640.0          | H                 | -57.98      | 7.63                   | -50.35                   |             |        |
| 7520.0          | H                 | -62.50      | 10.03                  | -52.47                   |             |        |

|                   |                 |                           |                |
|-------------------|-----------------|---------------------------|----------------|
| <b>Band</b>       | <b>PCS 1900</b> | <b>Test channel:</b>      | <b>Highest</b> |
| <b>Test mode:</b> |                 | <b>Temperature:</b>       | <b>25°C</b>    |
|                   |                 | <b>Relative Humidity:</b> | <b>56%</b>     |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3819.6          | Vertical          | -46.52      | 1.72                   | -44.80                   | -13.00      | PASS   |
| 5729.4          | V                 | -55.36      | 7.54                   | -47.82                   |             |        |
| 7639.2          | V                 | -62.79      | 10.58                  | -52.21                   |             |        |
| 3819.6          | Horizontal        | -45.63      | 3.07                   | -42.56                   |             |        |
| 5729.4          | H                 | -50.28      | 7.89                   | -42.39                   |             |        |
| 7639.2          | H                 | -63.42      | 10.33                  | -53.09                   |             |        |

|                   |                                 |                           |               |
|-------------------|---------------------------------|---------------------------|---------------|
| <b>Band</b>       | <b>WCDMA Band V</b>             | <b>Test channel:</b>      | <b>Lowest</b> |
| <b>Test mode:</b> | <b>RMC 12.2Kbps Link (QPSK)</b> | <b>Temperature:</b>       | <b>25°C</b>   |
|                   |                                 | <b>Relative Humidity:</b> | <b>56%</b>    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 1652.8          | Vertical          | -54.58      | -6.47                  | -61.05                   | -13.00      | PASS   |
| 2479.2          | V                 | -61.40      | -2.84                  | -64.24                   |             |        |
| 3305.6          | V                 | -60.49      | -0.48                  | -60.97                   |             |        |
| 1652.8          | Horizontal        | -51.32      | -6.30                  | -57.62                   |             |        |
| 2479.2          | H                 | -61.55      | -2.95                  | -64.50                   |             |        |
| 3305.6          | H                 | -61.02      | -0.10                  | -61.12                   |             |        |

|                   |                                 |                           |               |
|-------------------|---------------------------------|---------------------------|---------------|
| <b>Band</b>       | <b>WCDMA Band V</b>             | <b>Test channel:</b>      | <b>Middle</b> |
| <b>Test mode:</b> | <b>RMC 12.2Kbps Link (QPSK)</b> | <b>Temperature:</b>       | <b>25°C</b>   |
|                   |                                 | <b>Relative Humidity:</b> | <b>56%</b>    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 1673.2          | Vertical          | -50.72      | -6.46                  | -57.18                   | -13.00      | PASS   |
| 2509.8          | V                 | -60.14      | -2.75                  | -62.89                   |             |        |
| 3346.4          | V                 | -62.02      | -0.47                  | -62.49                   |             |        |
| 1673.2          | Horizontal        | -49.16      | -6.32                  | -55.48                   |             |        |
| 2509.8          | H                 | -62.36      | -2.86                  | -65.22                   |             |        |
| 3346.4          | H                 | -60.25      | -0.10                  | -60.35                   |             |        |

|                   |                                 |                           |                |
|-------------------|---------------------------------|---------------------------|----------------|
| <b>Band</b>       | <b>WCDMA Band V</b>             | <b>Test channel:</b>      | <b>Highest</b> |
| <b>Test mode:</b> | <b>RMC 12.2Kbps Link (QPSK)</b> | <b>Temperature:</b>       | <b>25°C</b>    |
|                   |                                 | <b>Relative Humidity:</b> | <b>56%</b>     |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 1693.2          | Vertical          | -55.22      | -6.45                  | -61.67                   | -13.00      | PASS   |
| 2539.8          | V                 | -61.36      | -2.65                  | -64.01                   |             |        |
| 3386.4          | V                 | -65.44      | -0.47                  | -65.91                   |             |        |
| 1693.2          | Horizontal        | -51.02      | -6.35                  | -57.37                   |             |        |
| 2539.8          | H                 | -60.85      | -2.74                  | -63.59                   |             |        |
| 3386.4          | H                 | -64.75      | -0.11                  | -64.86                   |             |        |

| Band       | WCDMA Band IV            | Test channel:      | Lowest |
|------------|--------------------------|--------------------|--------|
| Test mode: | RMC 12.2Kbps Link (QPSK) | Temperature:       | 25°C   |
|            |                          | Relative Humidity: | 56%    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 2452.3          | Vertical          | -63.22      | -2.96                  | -66.18                   | -13.00      | PASS   |
| 3424.8          | V                 | -62.43      | -0.46                  | -62.89                   |             |        |
| 5137.2          | V                 | -64.68      | 6.11                   | -58.57                   |             |        |
| 2452.3          | Horizontal        | -61.47      | -2.99                  | -64.46                   |             |        |
| 3424.8          | H                 | -61.01      | -0.11                  | -61.12                   |             |        |
| 5137.2          | H                 | -61.16      | 6.55                   | -54.61                   |             |        |

| Band       | WCDMA Band IV            | Test channel:      | Middle |
|------------|--------------------------|--------------------|--------|
| Test mode: | RMC 12.2Kbps Link (QPSK) | Temperature:       | 25°C   |
|            |                          | Relative Humidity: | 56%    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 2641.3          | Vertical          | -62.85      | -2.15                  | -65.00                   | -13.00      | PASS   |
| 3465.2          | V                 | -59.40      | -0.46                  | -59.86                   |             |        |
| 5197.8          | V                 | -65.36      | 6.21                   | -59.15                   |             |        |
| 2641.3          | Horizontal        | -61.18      | -2.11                  | -63.29                   |             |        |
| 3465.2          | H                 | -63.28      | -0.11                  | -63.39                   |             |        |
| 5197.8          | H                 | -64.17      | 6.66                   | -57.51                   |             |        |

| Band       | WCDMA Band IV            | Test channel:      | Highest |
|------------|--------------------------|--------------------|---------|
| Test mode: | RMC 12.2Kbps Link (QPSK) | Temperature :      | 25°C    |
|            |                          | Relative Humidity: | 56%     |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3102.2          | Vertical          | -62.23      | -2.15                  | -64.38                   | -13.00      | PASS   |
| 3505.2          | V                 | -61.56      | -0.41                  | -61.97                   |             |        |
| 5257.8          | V                 | -59.12      | 6.30                   | -52.82                   |             |        |
| 3102.2          | Horizontal        | -62.45      | -0.09                  | -62.54                   |             |        |
| 3505.2          | H                 | -62.89      | -0.06                  | -62.95                   |             |        |
| 5257.8          | H                 | -65.61      | 6.77                   | -58.84                   |             |        |

|                   |                                 |                           |               |
|-------------------|---------------------------------|---------------------------|---------------|
| <b>Band</b>       | <b>WCDMA Band II</b>            | <b>Test channel:</b>      | <b>Lowest</b> |
| <b>Test mode:</b> | <b>RMC 12.2Kbps Link (QPSK)</b> | <b>Temperature:</b>       | <b>25°C</b>   |
|                   |                                 | <b>Relative Humidity:</b> | <b>56%</b>    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3704.8          | Vertical          | -50.53      | 0.94                   | -49.59                   | -13.00      | PASS   |
| 5557.2          | V                 | -63.43      | 6.89                   | -56.54                   |             |        |
| 7409.6          | V                 | -65.49      | 10.39                  | -55.10                   |             |        |
| 3704.8          | Horizontal        | -53.05      | 1.93                   | -51.12                   |             |        |
| 5557.2          | H                 | -60.79      | 7.39                   | -53.40                   |             |        |
| 7409.6          | H                 | -66.55      | 10.01                  | -56.54                   |             |        |

|                   |                                 |                           |               |
|-------------------|---------------------------------|---------------------------|---------------|
| <b>Band</b>       | <b>WCDMA Band II</b>            | <b>Test channel:</b>      | <b>Middle</b> |
| <b>Test mode:</b> | <b>RMC 12.2Kbps Link (QPSK)</b> | <b>Temperature:</b>       | <b>25°C</b>   |
|                   |                                 | <b>Relative Humidity:</b> | <b>56%</b>    |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3760.0          | Vertical          | -61.33      | 1.32                   | -60.01                   | -13.00      | PASS   |
| 5640.0          | V                 | -64.25      | 7.21                   | -57.04                   |             |        |
| 7520.0          | V                 | -54.68      | 10.43                  | -44.25                   |             |        |
| 3760.0          | Horizontal        | -60.74      | 2.48                   | -58.26                   |             |        |
| 5640.0          | H                 | -64.15      | 7.63                   | -56.52                   |             |        |
| 7520.0          | H                 | -62.08      | 10.03                  | -52.05                   |             |        |

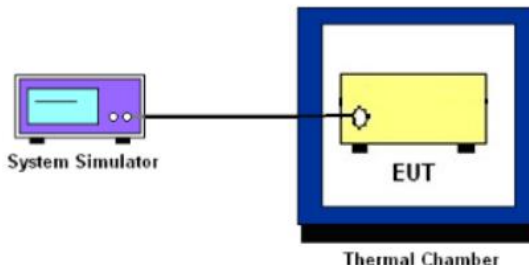
|                   |                                 |                           |                |
|-------------------|---------------------------------|---------------------------|----------------|
| <b>Band</b>       | <b>WCDMA Band II</b>            | <b>Test channel:</b>      | <b>Highest</b> |
| <b>Test mode:</b> | <b>RMC 12.2Kbps Link (QPSK)</b> | <b>Temperature:</b>       | <b>25°C</b>    |
|                   |                                 | <b>Relative Humidity:</b> | <b>56%</b>     |

**Note:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

| Frequency (MHz) | Spurious Emission |             |                        |                          | Limit (dBm) | Result |
|-----------------|-------------------|-------------|------------------------|--------------------------|-------------|--------|
|                 | Polarization      | Level (dBm) | Correction Factor (dB) | Spurious emissions (dBm) |             |        |
| 3815.2          | Vertical          | -54.83      | 1.69                   | -53.14                   | -13.00      | PASS   |
| 5722.8          | V                 | -65.24      | 7.52                   | -57.72                   |             |        |
| 7630.4          | V                 | -66.46      | 10.57                  | -55.89                   |             |        |
| 3815.2          | Horizontal        | -53.02      | 3.03                   | -49.99                   |             |        |
| 5722.8          | H                 | -61.99      | 7.87                   | -54.12                   |             |        |
| 7630.4          | H                 | -65.81      | 10.31                  | -55.50                   |             |        |

## 5.7. Frequency Stability Measurement

### 5.7.1. Test Specification

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Test Requirement:</b> | FCC Part 2.1055 ; FCC Part 22.355 ; FCC Part 24.235<br>FCC Part 27.54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Test Method:</b>      | FCC KDB 971168 D01v03r01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Operation mode:</b>   | Refer to item 3.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Limit:</b>            | FCC Part 22.355 : $\pm 2.5$ ppm<br>FCC Part 24.235 :<br>The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Test Setup:</b>       |  <p>The diagram illustrates the test setup. On the left, a purple box labeled 'System Simulator' is connected by a line to a yellow box labeled 'EUT' (Equipment Under Test). The 'EUT' is positioned inside a blue square frame labeled 'Thermal Chamber'.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Test Procedure:</b>   | <p><b>Test Procedures for Temperature Variation</b></p> <ol style="list-style-type: none"> <li>1. The testing follows FCC KDB 971168 D01v03r01 Section 9.0.</li> <li>2. The EUT was set up in the thermal chamber and connected with the system simulator.</li> <li>3. With power OFF, the temperature was decreased to <math>-30^{\circ}\text{C}</math> and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.</li> <li>4. With power OFF, the temperature was raised in <math>10^{\circ}\text{C}</math> steps up to <math>50^{\circ}\text{C}</math>. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.</li> </ol> <p><b>Test Procedures for Voltage Variation</b></p> <ol style="list-style-type: none"> <li>1. The testing follows FCC KDB 971168 D01v03r01 Section 9.0.</li> <li>2. The EUT was placed in a temperature chamber at <math>25 \pm 5^{\circ}\text{C}</math> and connected with the system simulator.</li> <li>3. The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.</li> <li>4. The variation in frequency was measured for the worst case.</li> </ol> |
| <b>Test Result:</b>      | PASS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Remark:</b>           | All three channels of all modulations have been tested, but only the worst channel and the worst modulation show in this test item.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

### 5.7.2. Test Instruments

| Equipment                                   | Manufacturer | Model     | Serial Number | Calibration Due |
|---------------------------------------------|--------------|-----------|---------------|-----------------|
| Universal Radio Communication Tester        | R&S          | CMU200    | 110188        | Jun. 26, 2025   |
| Programable tempratuce and humidity chamber | JQ           | JQ-2000   | /             | Jun. 26, 2025   |
| DC power supply                             | Kingrang     | KR3005K   | /             | Jun. 26, 2025   |
| Combiner Box                                | AT890-RFB    | Ascentest | /             | /               |

### 5.7.3. Test Data

#### Test Result of Temperature Variation

|                         |                        |                   |                 |
|-------------------------|------------------------|-------------------|-----------------|
| <b>Band:</b>            | <b>GSM 850</b>         | <b>Channel:</b>   | <b>190</b>      |
| <b>Limit (ppm):</b>     | <b>2.5</b>             | <b>Frequency:</b> | <b>836.4MHz</b> |
| <b>Temperature (°C)</b> | <b>Deviation (ppm)</b> | <b>Result</b>     |                 |
| 50                      | 0.016                  | PASS              |                 |
| 40                      | 0.015                  |                   |                 |
| 30                      | 0.015                  |                   |                 |
| 20                      | 0.018                  |                   |                 |
| 10                      | 0.017                  |                   |                 |
| 0                       | 0.016                  |                   |                 |
| -10                     | 0.011                  |                   |                 |
| -20                     | 0.015                  |                   |                 |
| -30                     | 0.020                  |                   |                 |

|                         |                        |                   |                |
|-------------------------|------------------------|-------------------|----------------|
| <b>Band:</b>            | <b>GSM 1900</b>        | <b>Channel:</b>   | <b>661</b>     |
| <b>Limit (ppm):</b>     | <b>Note</b>            | <b>Frequency:</b> | <b>1880MHz</b> |
| <b>Temperature (°C)</b> | <b>Deviation (ppm)</b> | <b>Result</b>     |                |
| 50                      | 0.021                  | PASS              |                |
| 40                      | 0.019                  |                   |                |
| 30                      | 0.015                  |                   |                |
| 20                      | 0.019                  |                   |                |
| 10                      | 0.013                  |                   |                |
| 0                       | 0.017                  |                   |                |
| -10                     | 0.014                  |                   |                |
| -20                     | 0.021                  |                   |                |
| -30                     | 0.016                  |                   |                |

**Note:** The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

|                         |                                     |                   |                 |
|-------------------------|-------------------------------------|-------------------|-----------------|
| <b>Band:</b>            | <b>WCDMA Band V</b>                 | <b>Channel:</b>   | <b>4182</b>     |
| <b>Limit (ppm):</b>     | <b>2.5</b>                          | <b>Frequency:</b> | <b>836.4MHz</b> |
| <b>Temperature (°C)</b> | <b>RMC 12.2Kbps Deviation (ppm)</b> | <b>Result</b>     |                 |
| 50                      | 0.023                               | PASS              |                 |
| 40                      | 0.015                               |                   |                 |
| 30                      | 0.016                               |                   |                 |
| 20                      | 0.019                               |                   |                 |
| 10                      | 0.015                               |                   |                 |
| 0                       | 0.019                               |                   |                 |
| -10                     | 0.019                               |                   |                 |
| -20                     | 0.020                               |                   |                 |
| -30                     | 0.021                               |                   |                 |

|                         |                              |                   |               |
|-------------------------|------------------------------|-------------------|---------------|
| <b>Band:</b>            | <b>WCDMA Band IV</b>         | <b>Channel:</b>   | <b>1413</b>   |
| <b>Limit (ppm):</b>     | <b>Note</b>                  | <b>Frequency:</b> | <b>1732.6</b> |
| <b>Temperature (°C)</b> | <b>HSUPA Deviation (ppm)</b> | <b>Result</b>     |               |
| 50                      | 0.021                        | PASS              |               |
| 40                      | 0.022                        |                   |               |
| 30                      | 0.018                        |                   |               |
| 20                      | 0.018                        |                   |               |
| 10                      | 0.016                        |                   |               |
| 0                       | 0.017                        |                   |               |
| -10                     | 0.015                        |                   |               |
| -20                     | 0.021                        |                   |               |
| -30                     | 0.016                        |                   |               |

| Band:            | WCDMA Band II                | Channel:   | 9400    |
|------------------|------------------------------|------------|---------|
| Limit (ppm):     | Note                         | Frequency: | 1880MHz |
| Temperature (°C) | RMC 12.2Kbps Deviation (ppm) | Result     |         |
| 50               | 0.020                        | PASS       |         |
| 40               | 0.018                        |            |         |
| 30               | 0.017                        |            |         |
| 20               | 0.018                        |            |         |
| 10               | 0.016                        |            |         |
| 0                | 0.017                        |            |         |
| -10              | 0.018                        |            |         |
| -20              | 0.021                        |            |         |
| -30              | 0.022                        |            |         |

**Note:** The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

## Test Result of Voltage Variation

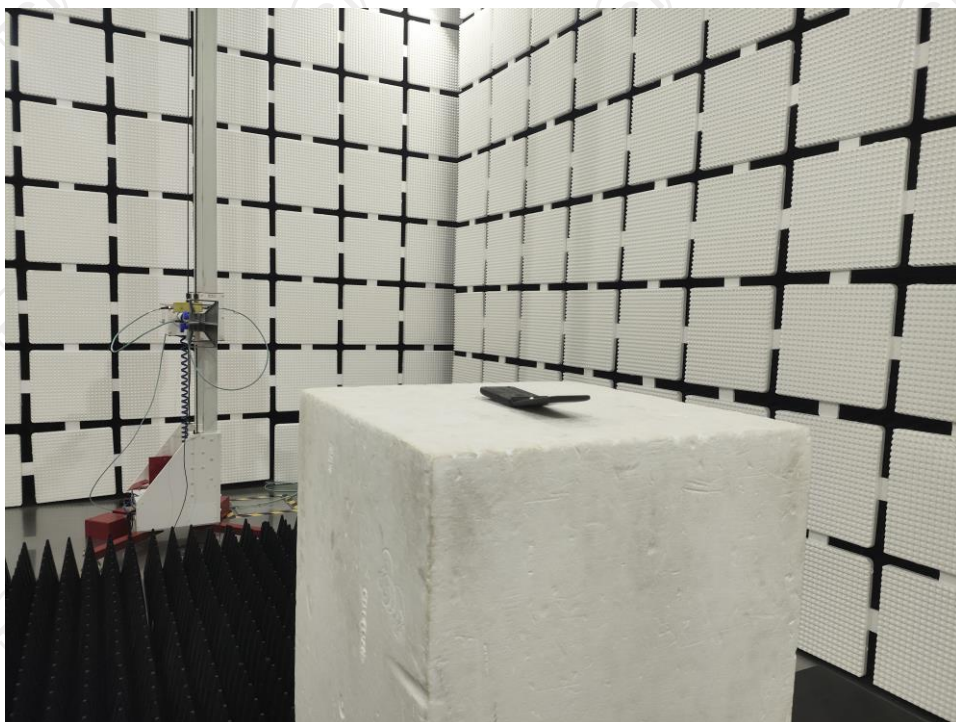
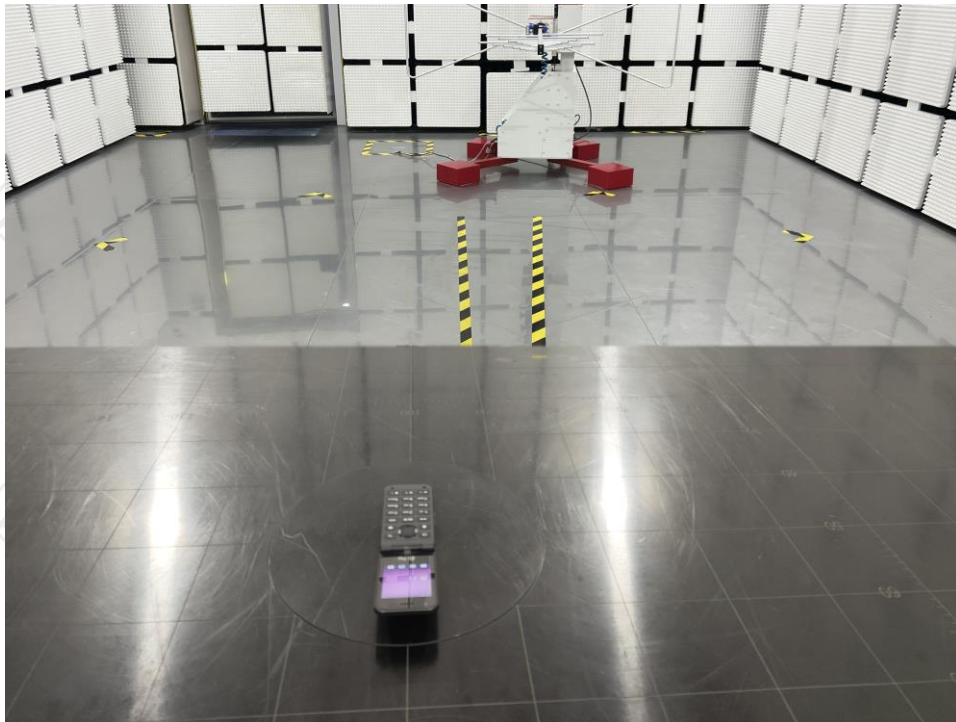
| Band & Channel       | Mode         | Voltage (Volt) | Deviation (ppm) | Limit (ppm) | Result |
|----------------------|--------------|----------------|-----------------|-------------|--------|
| GSM 850 CH190        | GSM          | 4.2            | +0.015          | 2.5         | PASS   |
|                      |              | 3.8            | +0.016          |             |        |
|                      |              | BEP            | +0.019          |             |        |
| GSM 1900 CH661       | GSM          | 4.2            | +0.016          | (Note 3.)   |        |
|                      |              | 3.8            | +0.020          |             |        |
|                      |              | BEP            | +0.018          |             |        |
| WCDMA Band V CH4182  | RMC 12.2Kbps | 4.2            | -0.010          | 2.5         |        |
|                      |              | 3.8            | -0.014          |             |        |
|                      |              | BEP            | -0.015          |             |        |
| WCDMA Band IV CH1413 | RMC 12.2Kbps | 4.2            | -0.016          |             |        |
|                      |              | 3.8            | -0.012          |             |        |
|                      |              | BEP            | -0.024          |             |        |
| WCDMA Band II CH9400 | RMC 12.2Kbps | 4.2            | -0.018          | (Note 3.)   |        |
|                      |              | 3.8            | -0.013          |             |        |
|                      |              | BEP            | -0.018          |             |        |

### Note:

1. Normal Voltage = 3.8V.
2. Battery End Point (BEP) = 3.3V.
3. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.

## Appendix B: Photographs of Test Setup

### Radiated Emission



## Appendix C: Photographs of EUT

Refer to the test report No. TCT240812E024

**\*\*\*\*\*END OF REPORT\*\*\*\*\***