

## RF Test Report

Applicant : Getac Technology Corporation  
Product Name : Wireless Module  
Trade Name : Getac  
Model Number : EM7511U  
Applicable Standard : FCC 47 CFR PART 22H  
FCC 47 CFR PART 24E  
FCC 47 CFR PART 27L  
ANSI C63.26 2015  
Received Date : Oct. 13, 2022  
Test Period : Nov. 08, 2022  
Issued Date : Jan. 04, 2023

### Issued by

Eurofins E&E Wireless Taiwan Co., Ltd.  
No. 140-1, Changan Street, Bade District,  
Taoyuan City 334025, Taiwan (R.O.C.)  
Tel : +886-3-2710188 / Fax : +886-3-2710190



Taiwan Accreditation Foundation accreditation number: 1330

Frequency Range : 9 kHz to 40 GHz

Test Firm MRA designation number: TW0010

#### Note:

- 1.The test results are valid only for samples provided by customers and under the test conditions described in this report.
- 2.This report shall not be reproduced except in full, without the written approval of Eurofins E&E Wireless Taiwan Co., Ltd.
- 3.The relevant information is provided by customers in this test report. According to the correctness, appropriateness or completeness of the information provided by the customer, if there is any doubt or error in the information which affects the validity of the test results, the laboratory does not take the responsibility.

**Revision History**

| Version | Issued Date   | Revisions                | Revised By |
|---------|---------------|--------------------------|------------|
| 00      | Dec. 23, 2022 | Initial Issue            | Snow Wang  |
| 01      | Jan. 04, 2023 | Update chapter 1.3 (P.6) | Snow Wang  |
|         |               |                          |            |
|         |               |                          |            |

## Verification of Compliance

Applicant : Getac Technology Corporation

Product Name : Wireless Module

Trade Name : Getac

Model Number : EM7511U

FCC ID : QYLEM7511U

Applicable Standard : FCC 47 CFR PART 22H  
FCC 47 CFR PART 24E  
FCC 47 CFR PART 27L  
ANSI C63.26 2015

Test Result : Complied

Performing Lab. : Eurofins E&E Wireless Taiwan Co., Ltd.  
No. 140-1, Changan Street, Bade District,  
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Taiwan Accreditation Foundation accreditation number: 1330



Eurofins E&E Wireless Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Eurofins E&E Wireless Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Approved By : \_\_\_\_\_

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### Appendix A. Test Setup Photographs

# 1 General Information

## 1.1. EUT Description

|                                     |                                                                                                                                                                                                                                                                      |                    |                    |                 |       |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-----------------|-------|
| Applicant                           | Getac Technology Corporation<br>5F.,Building A,No.209,Sec.1 Nangang.,Rd., Taipei City, 11568, Taiwan                                                                                                                                                                 |                    |                    |                 |       |
| Product Name                        | Wireless Module                                                                                                                                                                                                                                                      |                    |                    |                 |       |
| Trade Name                          | Getac                                                                                                                                                                                                                                                                |                    |                    |                 |       |
| Model Number                        | EM7511U                                                                                                                                                                                                                                                              |                    |                    |                 |       |
| FCC ID                              | QYLEM7511U                                                                                                                                                                                                                                                           |                    |                    |                 |       |
| Host Information                    | Product Name: Tablet<br>Trade Name: Getac<br>Model Name: UX10, UX10G3, UX10-301, UX10-321, UX10-Ex, UX10Y(Y= 10 characters, Y can be 0 to 9, A to Z, a to z, “/”, “\”, “-”, “_” or blank for marketing purpose)<br>(Different model numbers are for market purpose.) |                    |                    |                 |       |
| IMEI No.                            | 351664100388162                                                                                                                                                                                                                                                      |                    |                    |                 |       |
| Mode                                | Band                                                                                                                                                                                                                                                                 | UL Frequency (MHz) | DL Frequency (MHz) | Modulation      |       |
| WCDMA(RMC12.2K)/<br>HSDPA/<br>HSUPA | II                                                                                                                                                                                                                                                                   | 1852.4 ~ 1907.6    | 1932.4 ~ 1987.6    | QPSK            |       |
|                                     | IV                                                                                                                                                                                                                                                                   | 1712.4 ~ 1752.6    | 2112.4 ~ 2152.6    | QPSK            |       |
|                                     | V                                                                                                                                                                                                                                                                    | 826.4 ~ 846.6      | 871.4 ~ 891.6      | QPSK            |       |
| Antenna information                 | Antenna                                                                                                                                                                                                                                                              |                    | Type               | Max. Gain (dBi) |       |
|                                     | Main                                                                                                                                                                                                                                                                 |                    | FPC Antenna        | Band II         | 2.76  |
|                                     |                                                                                                                                                                                                                                                                      |                    |                    | Band V          | 2.00  |
|                                     |                                                                                                                                                                                                                                                                      |                    |                    | Band IV         | 0.34  |
|                                     | AUX                                                                                                                                                                                                                                                                  |                    | FPC Antenna        | Band II         | -3.29 |
|                                     |                                                                                                                                                                                                                                                                      |                    |                    | Band V          | -0.57 |
|                                     |                                                                                                                                                                                                                                                                      |                    |                    | Band IV         | 1.31  |
| Operate Temp. Range                 | -10 ~ 55 ℃                                                                                                                                                                                                                                                           |                    |                    |                 |       |
| EUT Power Rating                    | DC 3.3 V                                                                                                                                                                                                                                                             |                    |                    |                 |       |

### EUT Modify Description :

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Modify Description:</p> <ol style="list-style-type: none"> <li>Added Host Model: UX10, UX10G3, UX10-301, UX10-321, UX10-Ex, UX10Y(Y= 10 characters, Y can be 0 to 9, A to Z, a to z, "/", "\", "-", "_" or blank for marketing purpose)</li> <li>Disable Band 48 by software</li> </ol> <p>After our evaluation, the retest of Simultaneous Transmission of Field Strength of Spurious Radiation is required. The other test data refer to the original report.</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 1.2. Testing Location

Lab Name: Eurofins E&E Wireless Taiwan Co., Ltd.

Site Address: ☒ No. 140-1, Changan Street, Bade District, Taoyuan City 334025, Taiwan (R.O.C.)

Site Address: ☐ No. 2, Wuquan 5th Rd. Wugu Dist., New Taipei City, Taiwan (R.O.C.)

## 1.3. Mode of Operation

Eurofins has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

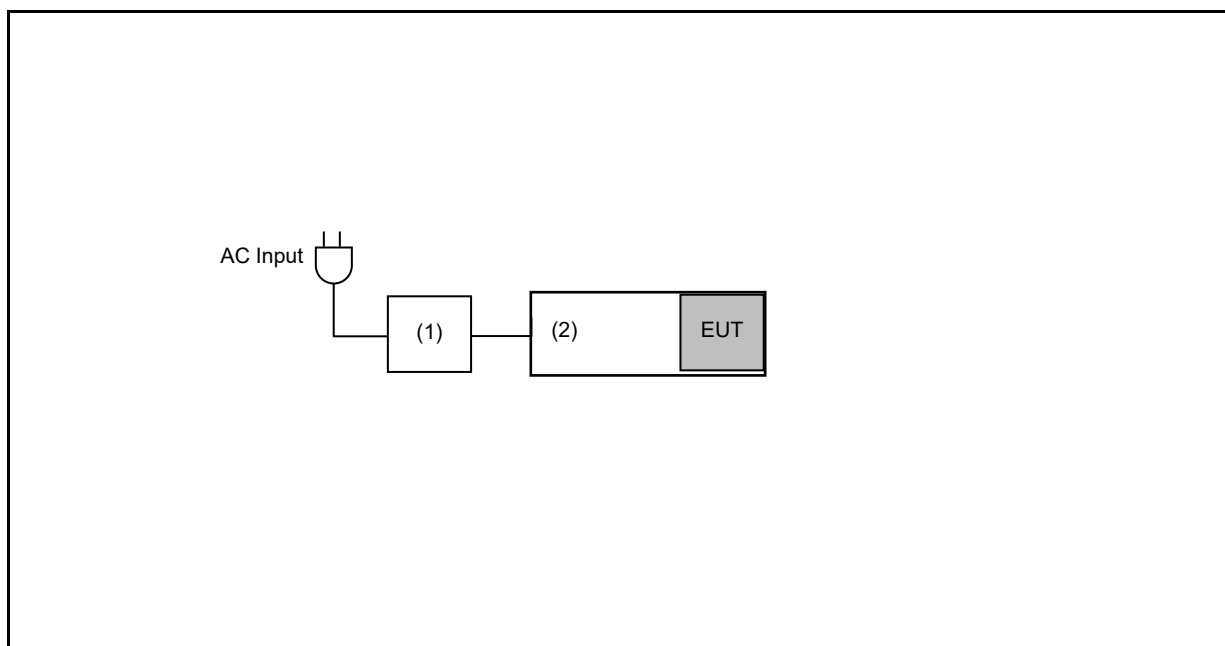
| Test Mode    |
|--------------|
| WCDMA Band V |

By preliminary testing and verifying three axis (X, Y and Z) position of EUT transmitted status, it was found that "Y axis" position was the worst, then the final test was executed the worst condition and test data were recorded in this report.

## 1.4. EUT Test Step

|   |                                                                                          |
|---|------------------------------------------------------------------------------------------|
| 1 | Setup the EUT by "Configuration of Test System Details" shown below.                     |
| 2 | Turn on the power of all equipment.                                                      |
| 3 | The EUT was programmed to be in continuously transmitting mode.                          |
| 4 | The EUT get into the test mode to provide data rate, channel, bandwidth and power level. |

## 1.5. Configuration of Test System Details



| Devices Description |         |              |              |               |            |
|---------------------|---------|--------------|--------------|---------------|------------|
|                     | Product | Manufacturer | Model Number | Serial Number | Power Cord |
| (1)                 | Adapter | FSP          | FSP065-RBBN3 | ---           | ---        |
| (2)                 | Tablet  | Getac        | UX10G3       | ---           | ---        |

## 1.6. Test Instruments

For Radiated Emissions

Test Period: Nov. 08, 2022

Testing Engineer: Hung Chou

| Test Site                           |                                               | 96603-BD                       |                       |               |               |             |
|-------------------------------------|-----------------------------------------------|--------------------------------|-----------------------|---------------|---------------|-------------|
| Radiation test sites                |                                               | Semi Anechoic Room             |                       |               |               |             |
| Use                                 | Equipment                                     | Manufacturer                   | Model Number          | Serial Number | Cal. Date     | Cal. Period |
| <input checked="" type="checkbox"/> | Spectrum Analyzer<br>(10 Hz~44 GHz)           | Keysight                       | N9020B                | MY60112363    | Feb. 27, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Amplifier<br>(100 kHz~1.3 GHz)                | Agilent                        | 8447D                 | 2944A11119    | Jan. 14, 2022 | 1 year      |
| <input type="checkbox"/>            | Amplifier<br>(100 kHz~1.3 GHz)                | Agilent                        | 8447D                 | 2944A10961    | Jul. 07, 2022 | 1 year      |
| <input type="checkbox"/>            | Broadband Amplifier<br>(100 kHz~1 GHz)        | Titan                          | T0910E00014330<br>A1F | 001           | Jul. 21, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Broadband Amplifier<br>(1 GHz~26.5 GHz)       | Titan                          | T0912E01263025<br>A1F | 002           | Jul. 21, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Preamplifier<br>(26.5 GHz~40 GHz)             | EMCI                           | EMC2654045            | 980028        | Sep. 02, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Loop Antenna<br>(9 kHz~30 MHz)                | COM-POWER<br>CORPORATION       | AL-130                | 121014        | Mar. 28, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Trilog Broadband<br>Antenna<br>(30 kHz~1 GHz) | Schwarzbeck<br>Mess-Elektronik | VULB9168              | 01146         | Jul. 22, 2022 | 1 year      |
| <input type="checkbox"/>            | Trilog Broadband<br>Antenna<br>(30 kHz~1 GHz) | Schwarzbeck<br>Mess-Elektronik | VULB9168              | 416           | Nov. 17, 2021 | 1 year      |
| <input checked="" type="checkbox"/> | Broadband Horn<br>Antenna<br>(1 GHz~18 GHz)   | Schwarzbeck<br>Mess-Elektronik | 9120D                 | 02207         | Jul. 13, 2022 | 1 year      |
| <input type="checkbox"/>            | Broadband Horn<br>Antenna<br>(1 GHz~18 GHz)   | Schwarzbeck<br>Mess-Elektronik | 9120D                 | 9120D-550     | Aug. 25, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Broadband Horn<br>Antenna<br>(18 GHz~40 GHz)  | Schwarzbeck<br>Mess-Elektronik | 9170                  | 9170-320      | Aug. 25, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Coaxial Cable                                 | Titan                          | T0710AT327A10A<br>100 | J11005        | Aug. 04, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Coaxial Cable                                 | Titan                          | T0710AT327A10A<br>900 | J11004        | Aug. 04, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Coaxial Cable                                 | Titan                          | CFD400NL-LW           | 001           | Aug. 04, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Universal Radio<br>Communication<br>Tester    | R&S                            | CMU200                | 112387        | Feb. 27, 2022 | 1 year      |
| <input checked="" type="checkbox"/> | Software                                      | EZ EMC                         | 1.1.4.4               | N/A           | N.C.R.        | ---         |

Note: N.C.R. = No Calibration Request.

### 1.7. Test Site Environment

| Items            | Required (IEC 60068-1) | Actual |
|------------------|------------------------|--------|
| Temperature (°C) | 15-35                  | 20-30  |
| Humidity (%RH)   | 25-75                  | 45-75  |

### 1.8. Measurement Uncertainty

| Parameter         | Uncertainty |
|-------------------|-------------|
| Radiated Emission | 6.3 dB      |

## 1.9. Summary of Test Result

| FCC Rule                                         | Description                                   | Result           |
|--------------------------------------------------|-----------------------------------------------|------------------|
| §2.1046                                          | Conducted Output Power                        | N/A<br>(Note 1)  |
| §22.913(a)(5)                                    | Effective Radiated Power                      | N/A<br>(Note 2)  |
| §24.232(c)<br>§27.50(d)(4)                       | Equivalent Isotropic Radiated Power           | N/A<br>(Note 1)  |
| §24.232(d)<br>§27.50<br>KDB 971168 D01 (5.7.1)   | Peak to average ratio                         | N/A<br>(Note 1)  |
| §2.1049<br>§22.917(a)<br>§24.238(a)<br>§27.53(g) | Emission Bandwidth & Occupied Bandwidth       | N/A<br>(Note 1)  |
| §2.1051<br>§22.917(a)<br>§24.238(a)<br>§27.53(h) | Band Edge Measurement                         | N/A<br>(Note 1)  |
| §2.1051<br>§22.917(a)<br>§24.238(a)<br>§27.53(h) | Conducted Spurious Emission                   | N/A<br>(Note 1)  |
| §2.1053<br>§22.917(a)<br>§24.238(a)<br>§27.53(h) | Field Strength of Spurious Radiation          | Pass<br>(Note 1) |
| §2.1055<br>§22.355<br>§24.235<br>§27.54          | Frequency Stability for Temperature & Voltage | N/A<br>(Note 1)  |

Note 1: Class II permissive change. No need for verification.

Note 2: Only verify the Simultaneous Transmission.

### Decision Rule

- ☒ Uncertainty is not included.
- ☐ Uncertainty is included.

## 2 Measurement Procedure

### 2.1. Field Strength of Spurious Radiation Test

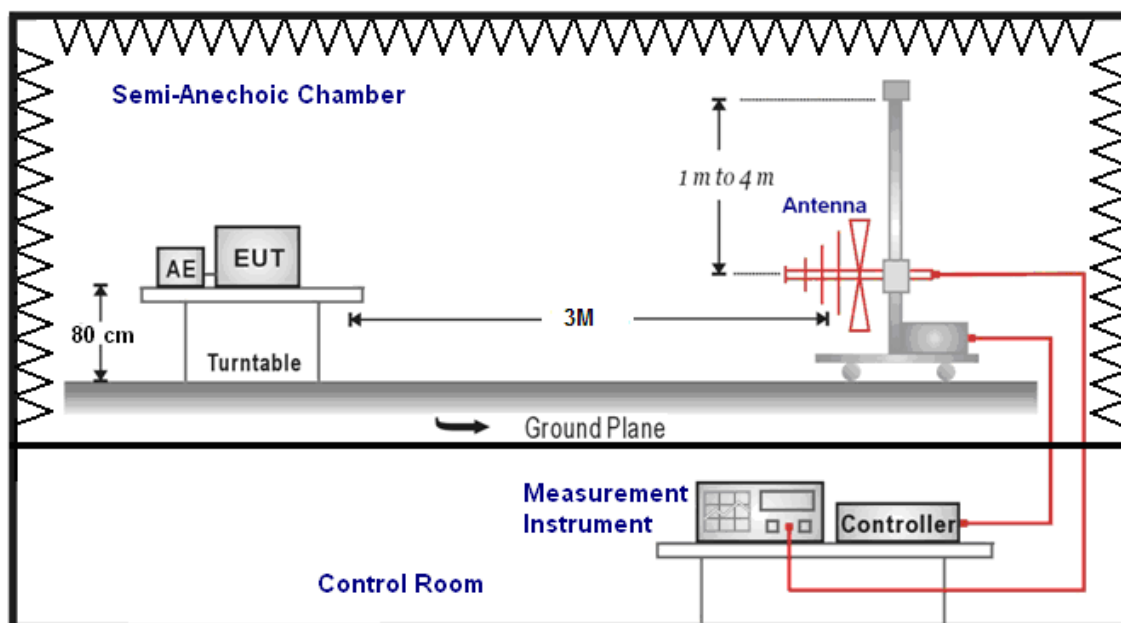
#### ■ Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log(P)$  dB.

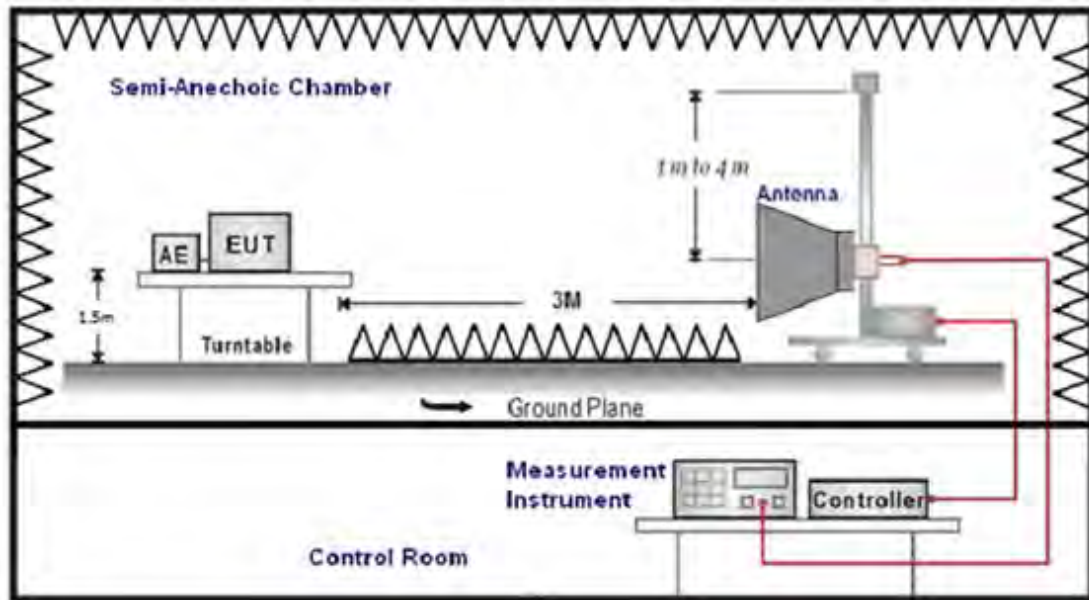
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

#### ■ Setup

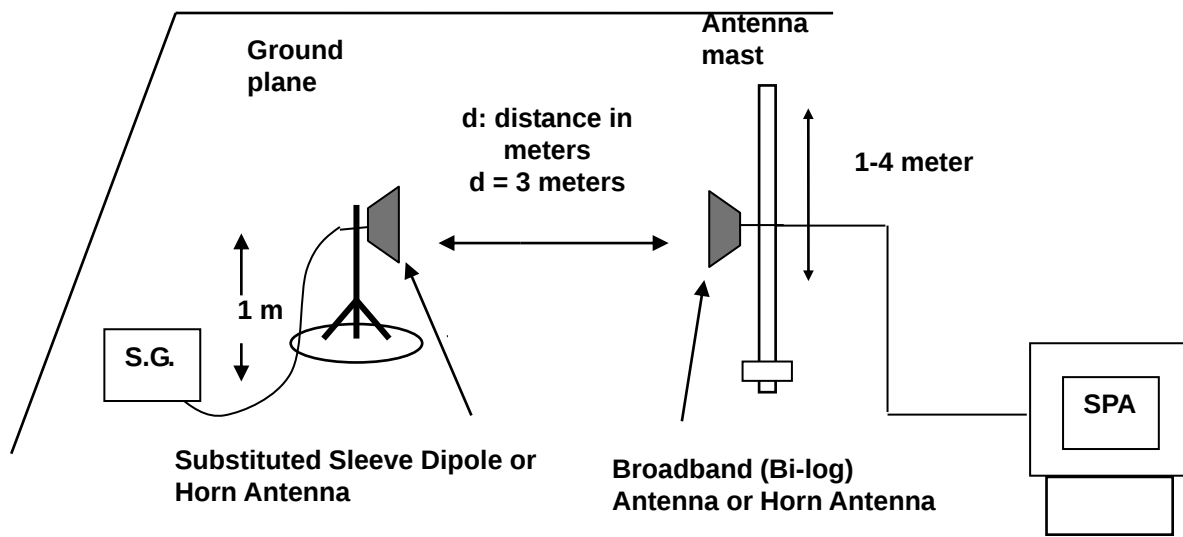
Below 1 GHz



Above 1 GHz



For Substituted Method Test Set-UP



## ■ Test Procedure

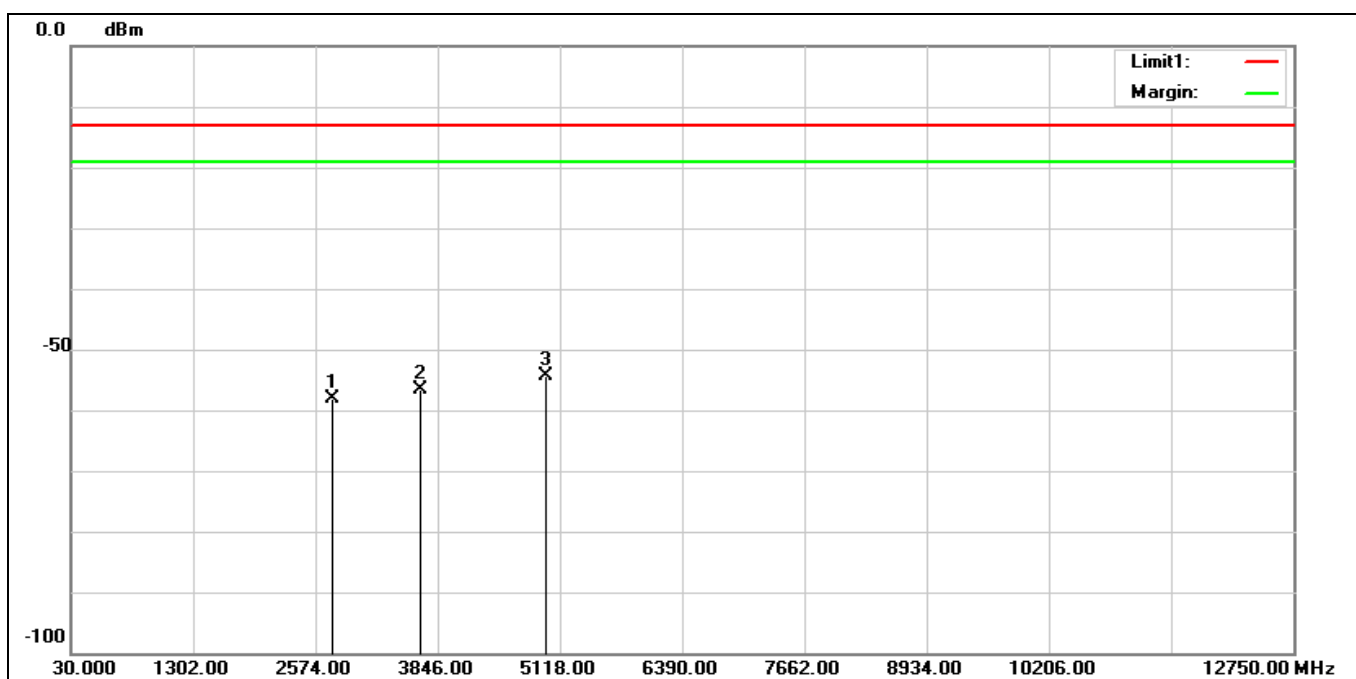
- a. The EUT was set up for the maximum power with wwan link data modulation. The power was measured with Spectrum Analyzer. All measurements were done at 3 channels (low, middle and high operational frequency range).
- b. E.I.R.P power measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (1.5 m for above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution antenna (Note:1 & 2) is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G.
- d.  $E.I.R.P. = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$
- e.  $E.R.P. = E.I.R.P. - 2.15 \text{ dB}$
- f. Measurement range 9 kHz - 10 th Harmonic

Note: 1. Below 1 GHz Substituted Method Test : Sleeve dipole antenna to Bi-Log Antenna  
2. Above 1 GHz Substituted Method Test : Horn antenna to Horn Antenna

### 3 Test Results

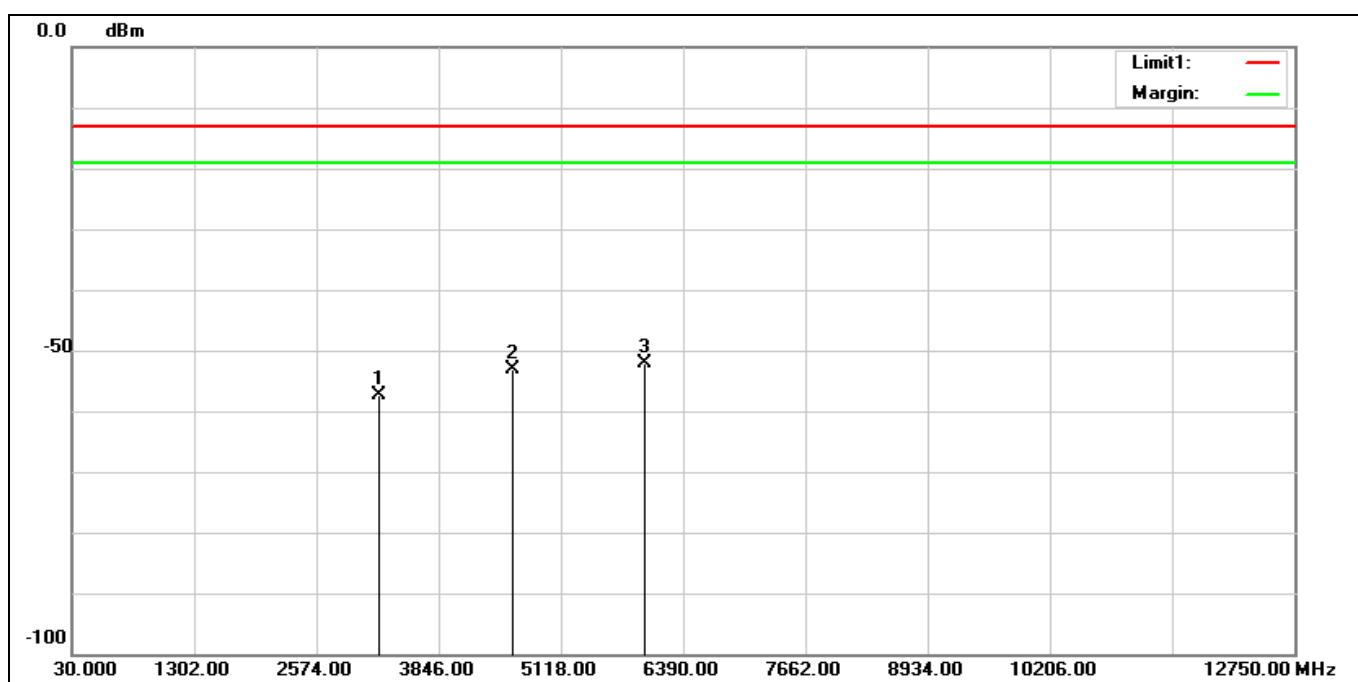
#### 3.1. Field Strength of Spurious Radiation

|               |                      |            |             |
|---------------|----------------------|------------|-------------|
| Standard:     | Part 22/24/27        | Test Site: | 966 Chamber |
| Polarization: | Horizontal           |            |             |
| Test Mode:    | WCDMA Band V+BT+2.4G |            |             |
| Remark:       |                      |            |             |



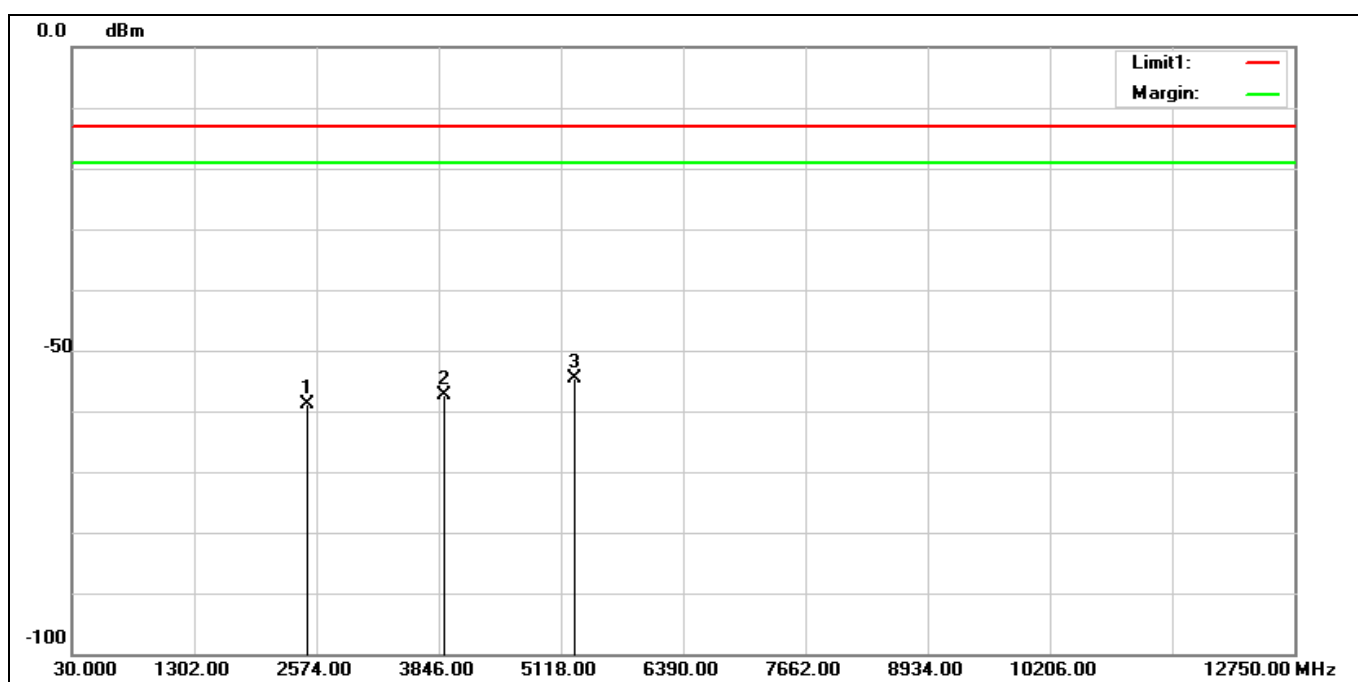
| No. | Frequency (MHz) | Reading (dBm) | Correction (dB) | Result (dBm) | Limit (dBm) | Margin (dB) | Remark |
|-----|-----------------|---------------|-----------------|--------------|-------------|-------------|--------|
| 1   | 2750.750        | -64.33        | 6.27            | -58.06       | -13.00      | -45.06      | peak   |
| 2   | 3667.250        | -64.84        | 8.31            | -56.53       | -13.00      | -43.53      | peak   |
| 3*  | 4971.500        | -66.77        | 12.45           | -54.32       | -13.00      | -41.32      | peak   |

|               |                      |            |             |
|---------------|----------------------|------------|-------------|
| Standard:     | Part 22/24/27        | Test Site: | 966 Chamber |
| Polarization: | Vertical             |            |             |
| Test Mode:    | WCDMA Band V+BT+2.4G |            |             |
| Remark:       |                      |            |             |



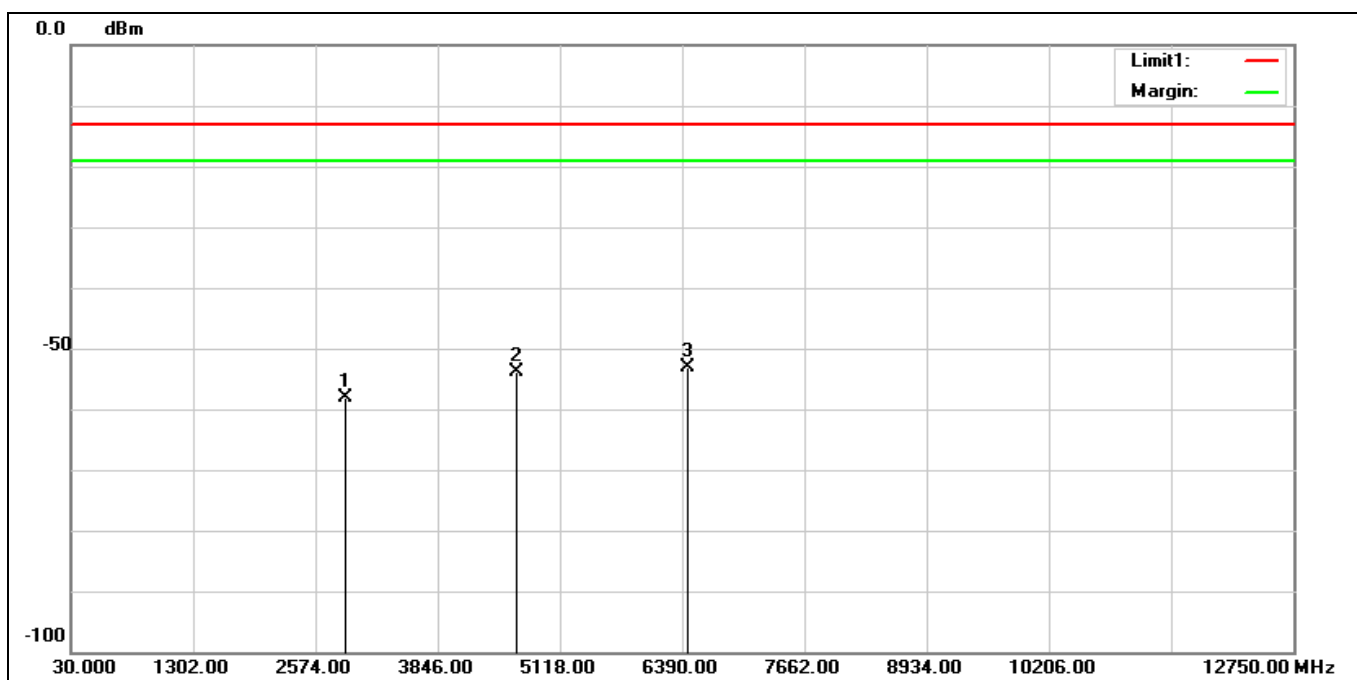
| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correction<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|--------------------|-----------------|----------------|----------------|--------|
| 1   | 3220.750           | -64.70           | 7.45               | -57.25          | -13.00         | -44.25         | peak   |
| 2   | 4607.250           | -64.40           | 11.26              | -53.14          | -13.00         | -40.14         | peak   |
| 3*  | 5970.250           | -67.05           | 15.02              | -52.03          | -13.00         | -39.03         | peak   |

|               |                    |            |             |
|---------------|--------------------|------------|-------------|
| Standard:     | Part 22/24/27      | Test Site: | 966 Chamber |
| Polarization: | Horizontal         |            |             |
| Test Mode:    | WCDMA Band V+BT+5G |            |             |
| Remark:       |                    |            |             |



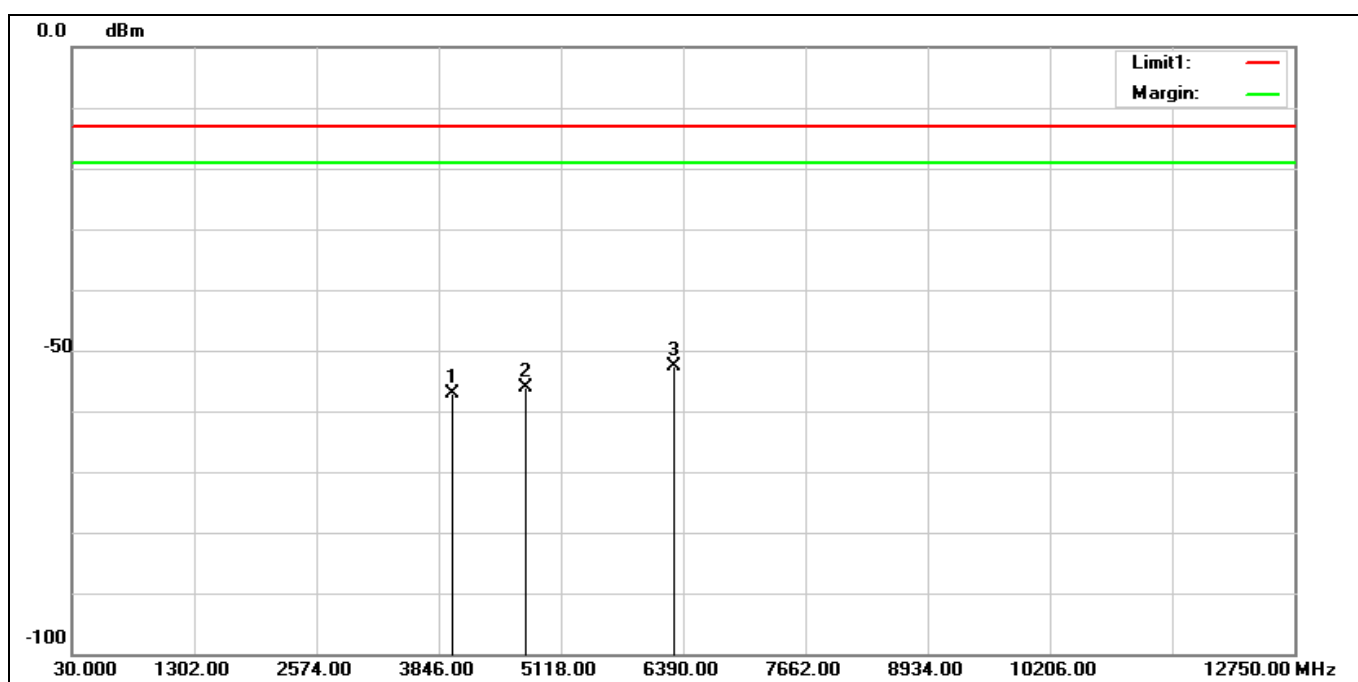
| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correction<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|--------------------|-----------------|----------------|----------------|--------|
| 1   | 2468.750           | -64.04           | 5.19               | -58.85          | -13.00         | -45.85         | peak   |
| 2   | 3902.250           | -66.41           | 9.15               | -57.26          | -13.00         | -44.26         | peak   |
| 3*  | 5253.500           | -67.60           | 13.09              | -54.51          | -13.00         | -41.51         | peak   |

|               |                    |            |             |
|---------------|--------------------|------------|-------------|
| Standard:     | Part 22/24/27      | Test Site: | 966 Chamber |
| Polarization: | Vertical           |            |             |
| Test Mode:    | WCDMA Band V+BT+5G |            |             |
| Remark:       |                    |            |             |



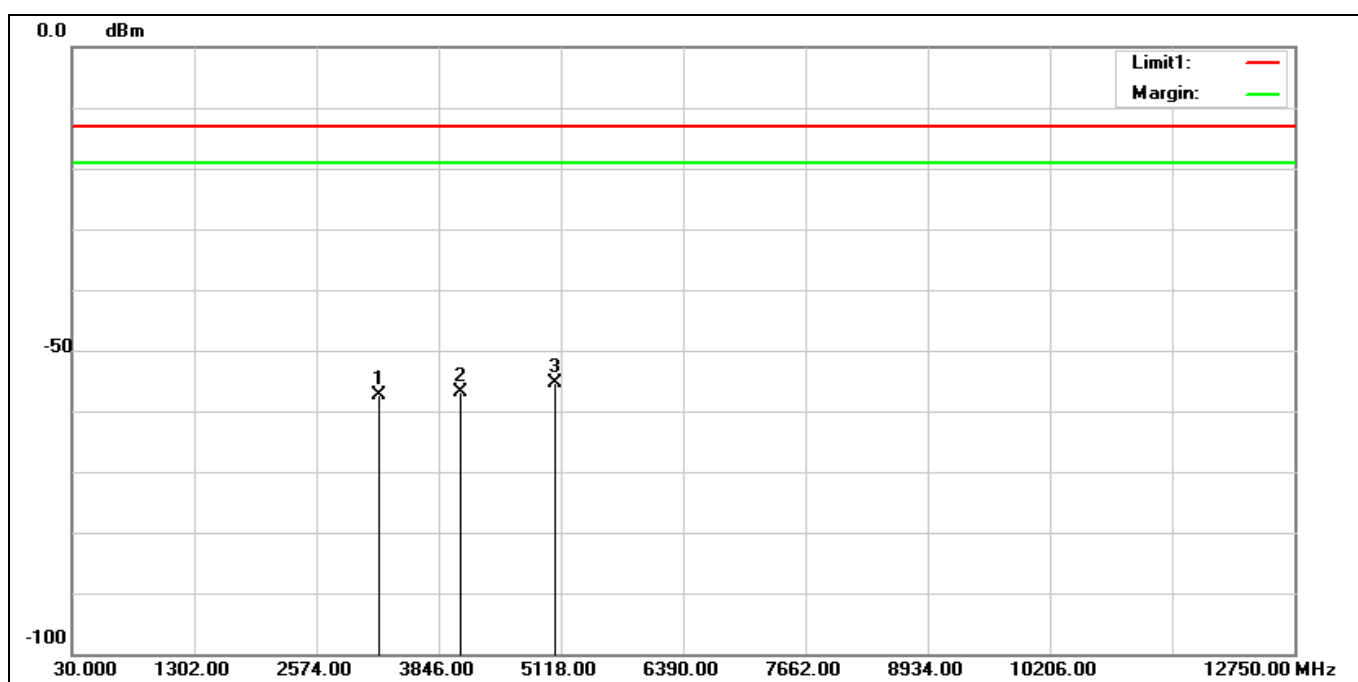
| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correction<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|--------------------|-----------------|----------------|----------------|--------|
| 1   | 2880.000           | -65.00           | 6.77               | -58.23          | -13.00         | -45.23         | peak   |
| 2   | 4654.250           | -65.22           | 11.41              | -53.81          | -13.00         | -40.81         | peak   |
| 3*  | 6428.500           | -69.71           | 16.71              | -53.00          | -13.00         | -40.00         | peak   |

|               |                         |            |             |
|---------------|-------------------------|------------|-------------|
| Standard:     | Part 22/24/27           | Test Site: | 966 Chamber |
| Polarization: | Horizontal              |            |             |
| Test Mode:    | WCDMA Band V+BT+WIFI 6E |            |             |
| Remark:       |                         |            |             |



| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correction<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|--------------------|-----------------|----------------|----------------|--------|
| 1   | 3984.500           | -66.45           | 9.45               | -57.00          | -13.00         | -44.00         | peak   |
| 2   | 4736.500           | -67.77           | 11.67              | -56.10          | -13.00         | -43.10         | peak   |
| 3*  | 6299.250           | -68.72           | 16.22              | -52.50          | -13.00         | -39.50         | peak   |

|               |                      |            |             |
|---------------|----------------------|------------|-------------|
| Standard:     | Part 22/24/27        | Test Site: | 966 Chamber |
| Polarization: | Vertical             |            |             |
| Test Mode:    | WCDMA Band V+BT+2.4G |            |             |
| Remark:       |                      |            |             |



| No. | Frequency<br>(MHz) | Reading<br>(dBm) | Correction<br>(dB) | Result<br>(dBm) | Limit<br>(dBm) | Margin<br>(dB) | Remark |
|-----|--------------------|------------------|--------------------|-----------------|----------------|----------------|--------|
| 1   | 3220.750           | -64.70           | 7.45               | -57.25          | -13.00         | -44.25         | peak   |
| 2   | 4066.750           | -66.59           | 9.70               | -56.89          | -13.00         | -43.89         | peak   |
| 3*  | 5042.000           | -67.99           | 12.64              | -55.35          | -13.00         | -42.35         | peak   |

--- END---