

# **FCC REPORT**

## **(UNII)**

**Applicant:** TECNO MOBILE LIMITED

**Address of Applicant:** FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35  
SHAN MEI STREET FOTAN NT

**Equipment Under Test (EUT)**

Product Name: Mobile Phone

Model No.: KG5h

Trade mark: TECNO

**FCC ID:** 2ADYY-KG5H

**Applicable standards:** FCC CFR Title 47 Part 15 Subpart E Section 15.407

**Date of sample receipt:** 19 Nov., 2021

**Date of Test:** 20 Nov., to 08 Dec., 2021

**Date of report issued:** 13 Dec., 2021

**Test Result:** PASS\*

\* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Bruce Zhang  
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the JYT product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

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## 2 Version

| Version No. | Date          | Description |
|-------------|---------------|-------------|
| 00          | 13 Dec., 2021 | Original    |
|             |               |             |
|             |               |             |
|             |               |             |
|             |               |             |

Tested by: Mike.ou  
Test Engineer

Date: 13 Dec., 2021

Reviewed by: Winner Zhang  
Project Engineer

Date: 13 Dec., 2021

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## 4 Test Summary

| Test Item                                                                                                                                                                                                                         | Section in CFR 47                                                                | Test Data             | Test Result |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------|-------------|
| Antenna requirement                                                                                                                                                                                                               | 15.203 & 15.407 (a)                                                              | See Section 6.1       | Pass        |
| AC Power Line Conducted Emission                                                                                                                                                                                                  | 15.207                                                                           | See Section 6.2       | Pass        |
| Duty Cycle                                                                                                                                                                                                                        | ANSI C63.10-2013                                                                 | Appendix A – 5G Wi-Fi | Pass        |
| Conducted Peak Output Power                                                                                                                                                                                                       | 15.407 (a) (1) (iv) & (a) (3)                                                    | Appendix A – 5G Wi-Fi | Pass        |
| 26dB Occupied Bandwidth                                                                                                                                                                                                           | 15.407 (a) (12)                                                                  | Appendix A – 5G Wi-Fi | Pass        |
| 6dB Emission Bandwidth                                                                                                                                                                                                            | 15.407(e)                                                                        | Appendix A – 5G Wi-Fi | Pass        |
| Power Spectral Density                                                                                                                                                                                                            | 15.407 (a) (1) (iv) & (a) (3)                                                    | Appendix A – 5G Wi-Fi | Pass        |
| Band Edge                                                                                                                                                                                                                         | 15.407(b)                                                                        | See Section 6.6       | Pass        |
| Spurious Emission                                                                                                                                                                                                                 | 15.407 (b) & 15.205 & 15.209                                                     | See Section 6.7       | Pass        |
| Frequency Stability                                                                                                                                                                                                               | 15.407(g)                                                                        | Appendix A – 5G Wi-Fi | Pass        |
| <b>Remark:</b><br>1. Pass: The EUT complies with the essential requirements in the standard.<br>2. The cable insertion loss used by “RF Output Power” and other conduction measurement items is 0.5dB (provided by the customer). |                                                                                  |                       |             |
| <b>Test Method:</b>                                                                                                                                                                                                               | ANSI C63.10-2013<br>KDB 789033 D02 General UNII Test Procedures New Rules v02r01 |                       |             |

## 5 General Information

### 5.1 Client Information

|               |                                                                                                                        |
|---------------|------------------------------------------------------------------------------------------------------------------------|
| Applicant:    | TECNO MOBILE LIMITED                                                                                                   |
| Address:      | FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET FOTAN NT                                           |
| Manufacturer: | TECNO MOBILE LIMITED                                                                                                   |
| Address:      | FLAT 39 8/F BLOCK D WAH LOK INDUSTRIAL CENTRE 31-35 SHAN MEI STREET FOTAN NT                                           |
| Factory:      | SHENZHEN TECNO TECHNOLOGY CO., LTD.                                                                                    |
| Address:      | 101, Building 24, Waijing Industrial Park, Fumin Community, Fucheng Street, Longhua District, Shenzhen City, P.R.China |

### 5.2 General Description of E.U.T.

|                                        |                                                                                                             |                                    |                 |                         |  |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------|-------------------------|--|
| Product Name:                          | Mobile Phone                                                                                                |                                    |                 |                         |  |
| Model No.:                             | KG5h                                                                                                        |                                    |                 |                         |  |
| Operation Frequency:                   | Band 1: 5150MHz-5250MHz                                                                                     |                                    |                 | Band 4: 5725MHz-5825MHz |  |
| Channel numbers:                       | Band 1:                                                                                                     | 802.11a/802.11n/ac20: 4            | 802.11n/ac40: 2 | 802.11ac80: 1           |  |
|                                        | Band 4:                                                                                                     | 802.11a/802.11n/ac20: 5            | 802.11n/ac40: 2 | 802.11ac80: 1           |  |
| Channel separation:                    | 20MHz:                                                                                                      | 802.11a/802.11n-HT20/802.11ac-HT20 |                 |                         |  |
|                                        | 40MHz:                                                                                                      | 802.11n-HT40/802.11ac-HT40         |                 |                         |  |
|                                        | 80MHz:                                                                                                      | 802.11ac-HT80                      |                 |                         |  |
| Modulation technology (IEEE 802.11a):  | BPSK, QPSK, 16-QAM, 64-QAM                                                                                  |                                    |                 |                         |  |
| Modulation technology (IEEE 802.11n):  | BPSK, QPSK, 16-QAM, 64-QAM                                                                                  |                                    |                 |                         |  |
| Modulation technology (IEEE 802.11ac): | BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM                                                                         |                                    |                 |                         |  |
| Data speed (IEEE 802.11a):             | 6Mbps, 9Mbps,12Mbps,18Mbps, 24Mbps, 36Mbps, 48Mbps, 54Mbps                                                  |                                    |                 |                         |  |
| Data speed (IEEE 802.11n20):           | MCS0: 6.5Mbps, MCS1:13Mbps,MCS2:19.5Mbps, MCS3:26Mbps, MCS4:39Mbps, MCS5:52Mbps, MCS6:58.5Mbps, MCS7:65Mbps |                                    |                 |                         |  |
| Data speed (IEEE 802.11n40):           | MCS0:15Mbps, MCS1:30Mbps, MCS2:45Mbps, MCS3:60Mbps, MCS4:90Mbps, MCS5:120Mbps, MCS6:135Mbps, MCS7:150Mbps   |                                    |                 |                         |  |
| Data speed (IEEE 802.11ac):            | Up to 433.3Mbps                                                                                             |                                    |                 |                         |  |
| Antenna Type:                          | Internal Antenna                                                                                            |                                    |                 |                         |  |
| Antenna gain:                          | -0.9 dBi                                                                                                    |                                    |                 |                         |  |
| Power supply:                          | Rechargeable Li-ion Polymer Battery DC3.85V, 4900mAh                                                        |                                    |                 |                         |  |
| AC adapter:                            | Model: U100TSA<br>Input: AC100-240V, 50/60Hz, 0.3A<br>Output: DC 5.0V, 2.0A                                 |                                    |                 |                         |  |
| Test Sample Condition:                 | The test samples were provided in good working order with no visible defects.                               |                                    |                 |                         |  |

| Operation Frequency each of channel |           |                 |           |               |           |
|-------------------------------------|-----------|-----------------|-----------|---------------|-----------|
| Band 1                              |           |                 |           |               |           |
| 802.11a/802.11n/ac-HT20             |           | 802.11n/ac-HT40 |           | 802.11ac-HT80 |           |
| Channel                             | Frequency | Channel         | Frequency | Channel       | Frequency |
| 36                                  | 5180MHz   | 38              | 5190MHz   | 42            | 5210MHz   |
| 40                                  | 5200MHz   | 46              | 5230MHz   |               |           |
| 44                                  | 5220MHz   |                 |           |               |           |
| 48                                  | 5240MHz   |                 |           |               |           |
|                                     |           |                 |           |               |           |
| Band 4                              |           |                 |           |               |           |
| 802.11a/802.11n/ac-HT20             |           | 802.11n/ac-HT40 |           | 802.11ac-HT80 |           |
| Channel                             | Frequency | Channel         | Frequency | Channel       | Frequency |
| 149                                 | 5745MHz   | 151             | 5755MHz   | 155           | 5775MHz   |
| 153                                 | 5765MHz   | 159             | 5795MHz   |               |           |
| 157                                 | 5785MHz   |                 |           |               |           |
| 161                                 | 5805MHz   |                 |           |               |           |
| 165                                 | 5825MHz   |                 |           |               |           |

Note:

In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Band 1                  |           |                 |           |               |           |
|-------------------------|-----------|-----------------|-----------|---------------|-----------|
| 802.11a/802.11n/ac-HT20 |           | 802.11n/ac-HT40 |           | 802.11ac-HT80 |           |
| Channel                 | Frequency | Channel         | Frequency | Channel       | Frequency |
| Lowest                  | 5180MHz   | Lowest          | 5190MHz   | Middle        | 5210MHz   |
| Middle                  | 5200MHz   | Highest         | 5230MHz   |               |           |
| Highest                 | 5240MHz   |                 |           |               |           |
|                         |           |                 |           |               |           |
| Band 4                  |           |                 |           |               |           |
| 802.11a/802.11n/ac-HT20 |           | 802.11n/ac-HT40 |           | 802.11ac-HT80 |           |
| Channel                 | Frequency | Channel         | Frequency | Channel       | Frequency |
| Lowest                  | 5745MHz   | Lowest          | 5755MHz   | Middle        | 5775MHz   |
| Middle                  | 5785MHz   | Highest         | 5795MHz   |               |           |
| Highest                 | 5825MHz   |                 |           |               |           |

### 5.3 Test environment and mode, and test samples plans

| Operating Environment:                                                                                                                                                                                       |                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Temperature:                                                                                                                                                                                                 | 24.0 °C                                                       |
| Humidity:                                                                                                                                                                                                    | 54 % RH                                                       |
| Atmospheric Pressure:                                                                                                                                                                                        | 1010 mbar                                                     |
| Test mode:                                                                                                                                                                                                   |                                                               |
| Continuously transmitting mode                                                                                                                                                                               | Keep the EUT in 100% duty cycle transmitting with modulation. |
| We have verified the construction and function in typical operation. All the test modes were carried out with the EUT in transmitting operation, which was shown in this test report and defined as follows: |                                                               |
| Per-scan all kind of data rate, and found the follow list were the worst case.                                                                                                                               |                                                               |
| Mode                                                                                                                                                                                                         | Data rate                                                     |
| 802.11a                                                                                                                                                                                                      | 6 Mbps                                                        |
| 802.11n/ac20                                                                                                                                                                                                 | 6.5 Mbps                                                      |
| 802.11n/ac40                                                                                                                                                                                                 | 13.5 Mbps                                                     |
| 802.11ac80                                                                                                                                                                                                   | 29.3 Mbps                                                     |
| Test Samples Plans:                                                                                                                                                                                          |                                                               |
| Samples Number                                                                                                                                                                                               | Used for Test Items                                           |
| 1#                                                                                                                                                                                                           | Conducted measurements test method                            |
| 2#                                                                                                                                                                                                           | Radiated measurements test method                             |
| 5#                                                                                                                                                                                                           | EUT constructional details                                    |
| <i>Remark: JianYan Testing Group Shenzhen Co., Ltd. is only responsible for the test project data of the above samples, and will keep the above samples for a month.</i>                                     |                                                               |

### 5.4 Description of Support Units

| Manufacturer                                    | Description | Model | Serial Number | FCC ID/DoC |
|-------------------------------------------------|-------------|-------|---------------|------------|
| The EUT has been tested as an independent unit. |             |       |               |            |

### 5.5 Measurement Uncertainty

| Parameter                                                  | Expanded Uncertainty<br>(Confidence of 95%) |
|------------------------------------------------------------|---------------------------------------------|
| Conducted Emission (9kHz ~ 150KHz) for V-AMN               | 3.11 dB                                     |
| Conducted Emission (150kHz ~ 30MHz) for V-AMN              | 2.62 dB                                     |
| Conducted Emission (150kHz ~ 30MHz) for AAN                | 3.54 dB                                     |
| Radiated Emission (9kHz ~ 30MHz electric field) for 3m SAC | 3.13 dB                                     |
| Radiated Emission (9kHz ~ 30MHz magnetic field) for 3m SAC | 3.13 dB                                     |
| Radiated Emission (30MHz ~ 1GHz) for 3m SAC                | 4.45 dB                                     |
| Radiated Emission (1GHz ~ 18GHz) for 3m SAC                | 5.34 dB                                     |
| Radiated Emission (18GHz ~ 40GHz) for 3m SAC               | 5.34 dB                                     |

### 5.6 Additions to, deviations, or exclusions from the method

|    |
|----|
| No |
|----|

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

|                                                              |
|--------------------------------------------------------------|
| This is an original grant, no related submittals and grants. |
|--------------------------------------------------------------|

## 5.8 Laboratory Facility

The test facility is recognized, certified, or accredited by the following organizations:

● **FCC - Designation No.: CN1211**

JianYan Testing Group Shenzhen Co., Ltd. has been accredited as a testing laboratory by FCC(Federal Communications Commission). The test firm Registration No. is 727551.

● **ISED – CAB identifier.: CN0021**

The 3m Semi-anechoic chamber and 10m Semi-anechoic chamber of JianYan Testing Group Shenzhen Co., Ltd. has been Registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 10106A-1.

● **CNAS - Registration No.: CNAS L15527**

JianYan Testing Group Shenzhen Co., Ltd. is accredited to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration laboratories for the competence of testing. The Registration No. is CNAS L15527.

● **A2LA - Registration No.: 4346.01**

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. The test scope can be found as below link: <https://portal.a2la.org/scopepdf/4346-01.pdf>

## 5.9 Laboratory Location

JianYan Testing Group Shenzhen Co., Ltd.

Address: No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Email: info-JYTee@lets.com, Website: <http://www.ccis-cb.com>

## 5.10 Test Instruments list

| Radiated Emission:      |                 |                 |                 |                        |                            |
|-------------------------|-----------------|-----------------|-----------------|------------------------|----------------------------|
| Test Equipment          | Manufacturer    | Model No.       | Serial No.      | Cal.Date<br>(mm-dd-yy) | Cal.Due date<br>(mm-dd-yy) |
| 3m SAC                  | ETS             | RFD-100         | Q1984           | 04-14-2021             | 04-13-2024                 |
| BiConiLog Antenna       | SCHWARZBECK     | VULB9163        | 9163-1246       | 03-07-2021             | 03-06-2022                 |
| Biconical Antenna       | SCHWARZBECK     | VUBA 9117       | 9117#359        | 06-17-2021             | 06-17-2022                 |
| Horn Antenna            | SCHWARZBECK     | BBHA9120D       | 912D-916        | 03-07-2021             | 03-06-2022                 |
| Broad-Band Horn Antenna | SCHWARZBECK     | BBHA9170        | 1067            | 04-02-2021             | 04-01-2022                 |
| Broad-Band Horn Antenna | SCHWARZBECK     | BBHA9170        | 1068            | 04-02-2021             | 04-01-2022                 |
| EMI Test Receiver       | Rohde & Schwarz | ESRP7           | 101070          | 03-03-2021             | 03-02-2022                 |
| Spectrum analyzer       | Rohde & Schwarz | FSP30           | 101454          | 03-03-2021             | 03-02-2022                 |
| Spectrum analyzer       | Keysight        | N9010B          | MY60240202      | 10-27-2021             | 10-26-2022                 |
| Low Pre-amplifier       | SCHWARZBECK     | BBV9743B        | 00305           | 03-07-2021             | 03-06-2022                 |
| High Pre-amplifier      | SKET            | LNPA_0118G-50   | MF280208233     | 03-07-2021             | 03-06-2022                 |
| Cable                   | Qualwave        | JYT3M-1G-NN-8M  | JYT3M-1         | 03-07-2021             | 03-06-2022                 |
| Cable                   | Qualwave        | JYT3M-18G-NN-8M | JYT3M-2         | 03-07-2021             | 03-06-2022                 |
| Cable                   | Qualwave        | JYT3M-1G-BB-5M  | JYT3M-3         | 03-07-2021             | 03-06-2022                 |
| Cable                   | Bost            | JYT3M-40G-SS-8M | JYT3M-4         | 04-02-2021             | 04-01-2022                 |
| EMI Test Software       | Tonscend        | TS+             | Version:3.0.0.1 |                        |                            |

| Conducted Emission: |                 |                |                    |                         |                             |
|---------------------|-----------------|----------------|--------------------|-------------------------|-----------------------------|
| Test Equipment      | Manufacturer    | Model No.      | Serial No.         | Cal. Date<br>(mm-dd-yy) | Cal. Due date<br>(mm-dd-yy) |
| EMI Test Receiver   | Rohde & Schwarz | ESCI 3         | 101189             | 03-03-2021              | 03-02-2022                  |
| LISN                | Rohde & Schwarz | ENV432         | 101602             | 04-06-2021              | 04-05-2022                  |
| LISN                | Rohde & Schwarz | ESH3-Z5        | 843862/010         | 06-18-2020              | 06-17-2022                  |
| RF Switch           | TOP PRECISION   | RSU0301        | N/A                | 03-03-2021              | 03-02-2022                  |
| Cable               | Bost            | JYTCE-1G-NN-2M | JYTCE-1            | 03-03-2021              | 03-02-2022                  |
| Cable               | Bost            | JYTCE-1G-BN-3M | JYTCE-2            | 03-03-2021              | 03-02-2022                  |
| EMI Test Software   | AUDIX           | E3             | Version: 6.110919b |                         |                             |

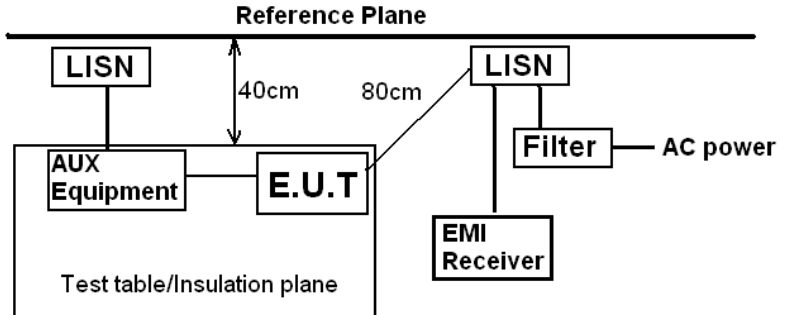
| Conducted method:            |                 |            |                  |                         |                             |
|------------------------------|-----------------|------------|------------------|-------------------------|-----------------------------|
| Test Equipment               | Manufacturer    | Model No.  | Serial No.       | Cal. Date<br>(mm-dd-yy) | Cal. Due date<br>(mm-dd-yy) |
| Spectrum Analyzer            | Keysight        | N9010B     | MY60240202       | 10-27-2021              | 10-26-2022                  |
| Vector Signal Generator      | Keysight        | N5182B     | MY59101009       | 10-27-2021              | 10-26-2022                  |
| Analog Signal Generator      | Keysight        | N5173B     | MY59100765       | 10-27-2021              | 10-26-2022                  |
| Power Detector Box           | MWRF-test       | MW100-PSB  | MW201020JYT      | 11-19-2021              | 11-18-2022                  |
| Simulated Station            | Rohde & Schwarz | CMW270     | 102335           | 10-27-2021              | 10-26-2022                  |
| RF Control Box               | MWRF-test       | MW100-RFCB | MW200927JYT      | N/A                     | N/A                         |
| PDU                          | MWRF-test       | XY-G10     | N/A              | N/A                     | N/A                         |
| DC Power Supply              | Keysight        | E3642A     | MY60296194       | 11-27-2020              | 11-26-2023                  |
| Temperature Humidity Chamber | Deli            | 8840       | N/A              | 03-08-2021              | 03-07-2022                  |
| Test Software                | MWRF-tes        | MTS 8310   | Version: 2.0.0.0 |                         |                             |

## 6 Test results and Measurement Data

### 6.1 Antenna requirement

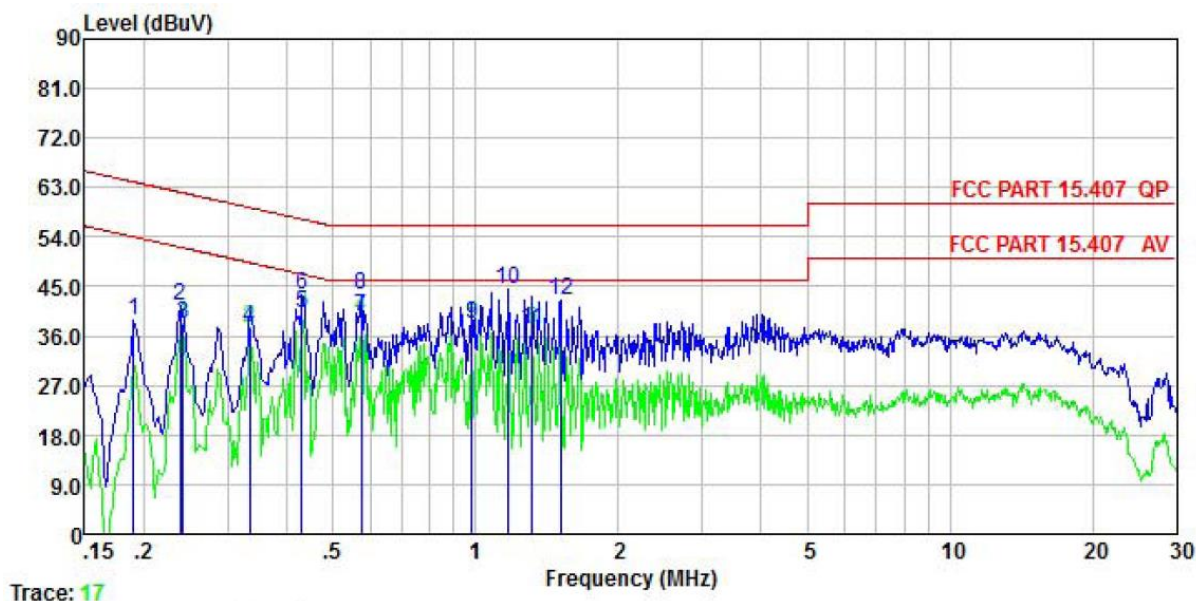
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| <b>Standard requirement:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | FCC Part15 E Section 15.203 /407(a) |
| <p>15.203 requirement:<br/>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.</p> <p>This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, § 15.213, § 15.217, § 15.219, or § 15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.</p> |                                     |
| <b>E.U.T Antenna:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                     |
| <p>The Wi-Fi antenna is an Internal antenna which cannot replace by end-user, the best case gain of the antenna is -0.9 dBi.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                     |

## 6.2 Conducted Emission

|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|
| Test Requirement:                                | FCC Part15 C Section 15.207                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |          |
| Test Frequency Range:                            | 150kHz to 30MHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |
| Class / Severity:                                | Class B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              |          |
| Receiver setup:                                  | RBW=9kHz, VBW=30kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |          |
| Limit:                                           | Frequency range (MHz)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Limit (dBUV) |          |
|                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quasi-peak   |          |
|                                                  | 0.15-0.5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 66 to 56*    | 0.15-0.5 |
|                                                  | 0.5-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 56           | 0.5-5    |
|                                                  | 5-30                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 60           | 5-30     |
| * Decreases with the logarithm of the frequency. |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |              |          |
| Test procedure                                   | <ol style="list-style-type: none"> <li>The E.U.T and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). It provides a 50ohm/50uH coupling impedance for the measuring equipment.</li> <li>The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs).</li> <li>Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10(latest version) on conducted measurement.</li> </ol> |              |          |
| Test setup:                                      |  <p>Remark:<br/>E.U.T: Equipment Under Test<br/>LISN: Line Impedance Stabilization Network<br/>Test table height=0.8m</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |          |
| Test Instruments:                                | Refer to section 5.10 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |
| Test mode:                                       | Refer to section 5.3 for details.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |          |
| Test results:                                    | Passed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |              |          |

## Measurement Data:

|                 |                  |                |                       |
|-----------------|------------------|----------------|-----------------------|
| Product name:   | Mobile Phone     | Product model: | KG5h                  |
| Test by:        | Mike             | Test mode:     | 5G Wi-Fi Tx mode      |
| Test frequency: | 150 kHz ~ 30 MHz | Phase:         | Line                  |
| Test voltage:   | AC 120 V/60 Hz   | Environment:   | Temp: 22.5℃ Humi: 55% |

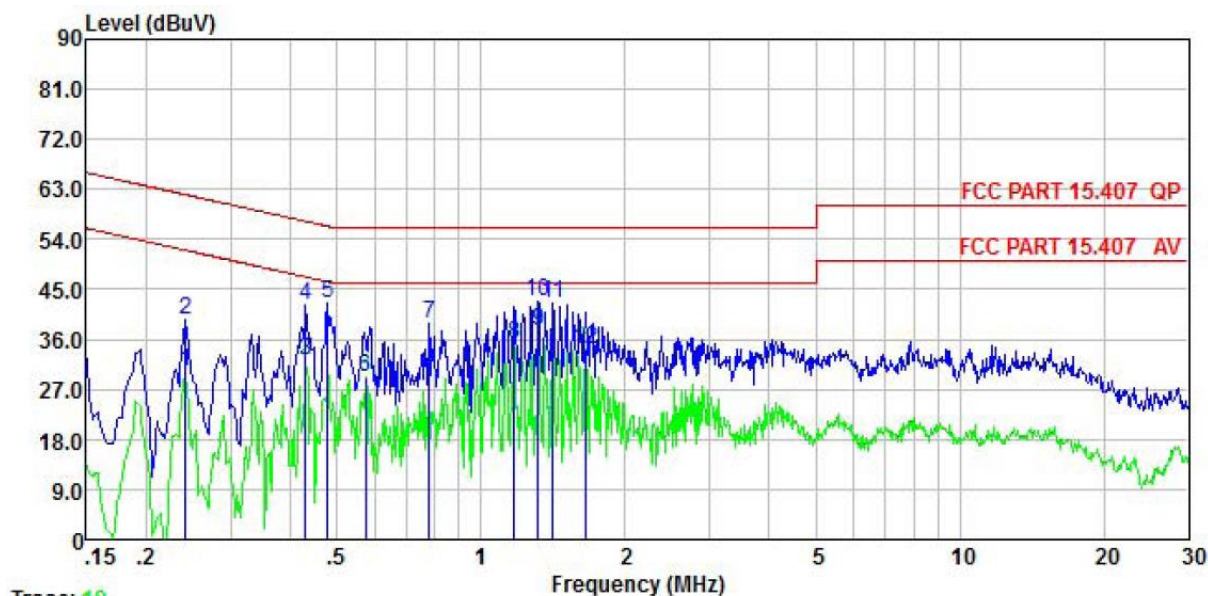


|    | Freq  | Read Level | LISN Factor | Aux Factor | Cable Loss | Level | Limit Line | Over Limit | Remark  |
|----|-------|------------|-------------|------------|------------|-------|------------|------------|---------|
|    | MHz   | dBuV       | dB          | dB         | dB         | dBuV  | dBuV       | dB         |         |
| 1  | 0.190 | 28.62      | 10.23       | -0.14      | 0.03       | 38.74 | 64.02      | -25.28     | QP      |
| 2  | 0.238 | 31.57      | 10.24       | -0.20      | 0.02       | 41.63 | 62.17      | -20.54     | QP      |
| 3  | 0.242 | 28.05      | 10.24       | -0.21      | 0.01       | 38.09 | 52.04      | -13.95     | Average |
| 4  | 0.334 | 27.24      | 10.27       | -0.01      | 0.02       | 37.52 | 49.35      | -11.83     | Average |
| 5  | 0.431 | 29.85      | 10.28       | 0.16       | 0.03       | 40.32 | 47.24      | -6.92      | Average |
| 6  | 0.431 | 33.07      | 10.28       | 0.16       | 0.03       | 43.54 | 57.24      | -13.70     | QP      |
| 7  | 0.573 | 29.46      | 10.29       | -0.37      | 0.02       | 39.40 | 46.00      | -6.60      | Average |
| 8  | 0.573 | 33.48      | 10.29       | -0.37      | 0.02       | 43.42 | 56.00      | -12.58     | QP      |
| 9  | 0.984 | 27.53      | 10.32       | 0.42       | 0.05       | 38.32 | 46.00      | -7.68      | Average |
| 10 | 1.172 | 33.77      | 10.32       | 0.29       | 0.09       | 44.47 | 56.00      | -11.53     | QP      |
| 11 | 1.317 | 26.72      | 10.32       | 0.15       | 0.11       | 37.30 | 46.00      | -8.70      | Average |
| 12 | 1.511 | 31.88      | 10.33       | -0.01      | 0.15       | 42.35 | 56.00      | -13.65     | QP      |

## Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Aux Factor + Cable Loss.

|                 |                  |                |                        |
|-----------------|------------------|----------------|------------------------|
| Product name:   | Mobile Phone     | Product model: | KG5h                   |
| Test by:        | Mike             | Test mode:     | 5G Wi-Fi Tx mode       |
| Test frequency: | 150 kHz ~ 30 MHz | Phase:         | Neutral                |
| Test voltage:   | AC 120 V/60 Hz   | Environment:   | Temp: 22.5°C Humi: 55% |

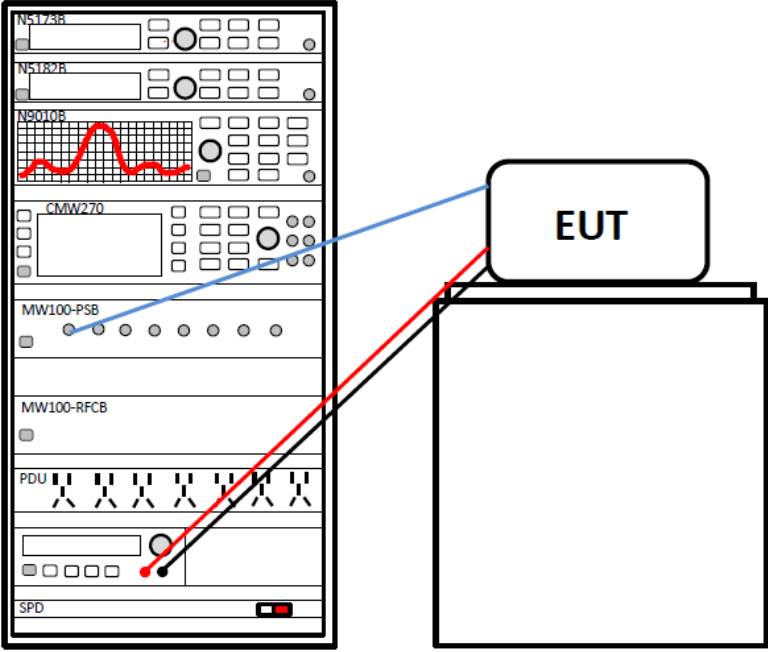


|    | Freq  | Read Level | LISN Factor | Aux Factor | Cable Loss | Level | Limit Line | Over Limit | Remark  |
|----|-------|------------|-------------|------------|------------|-------|------------|------------|---------|
|    | MHz   | dBuV       | dB          | dB         | dB         | dBuV  | dBuV       | dB         |         |
| 1  | 0.242 | 20.00      | 10.23       | 0.00       | 0.01       | 30.24 | 52.04      | -21.80     | Average |
| 2  | 0.242 | 29.22      | 10.23       | 0.00       | 0.01       | 39.46 | 62.04      | -22.58     | QP      |
| 3  | 0.431 | 21.84      | 10.27       | -0.03      | 0.03       | 32.11 | 47.24      | -15.13     | Average |
| 4  | 0.431 | 32.05      | 10.27       | -0.03      | 0.03       | 42.32 | 57.24      | -14.92     | QP      |
| 5  | 0.479 | 32.22      | 10.28       | 0.01       | 0.03       | 42.54 | 56.36      | -13.82     | QP      |
| 6  | 0.573 | 18.78      | 10.29       | 0.03       | 0.02       | 29.12 | 46.00      | -16.88     | Average |
| 7  | 0.779 | 28.49      | 10.30       | 0.05       | 0.03       | 38.87 | 56.00      | -17.13     | QP      |
| 8  | 1.172 | 24.71      | 10.31       | 0.10       | 0.09       | 35.21 | 46.00      | -10.79     | Average |
| 9  | 1.317 | 26.84      | 10.31       | 0.12       | 0.11       | 37.38 | 46.00      | -8.62      | Average |
| 10 | 1.317 | 32.28      | 10.31       | 0.12       | 0.11       | 42.82 | 56.00      | -13.18     | QP      |
| 11 | 1.411 | 32.02      | 10.31       | 0.12       | 0.13       | 42.58 | 56.00      | -13.42     | QP      |
| 12 | 1.654 | 23.50      | 10.32       | 0.15       | 0.17       | 34.14 | 46.00      | -11.86     | Average |

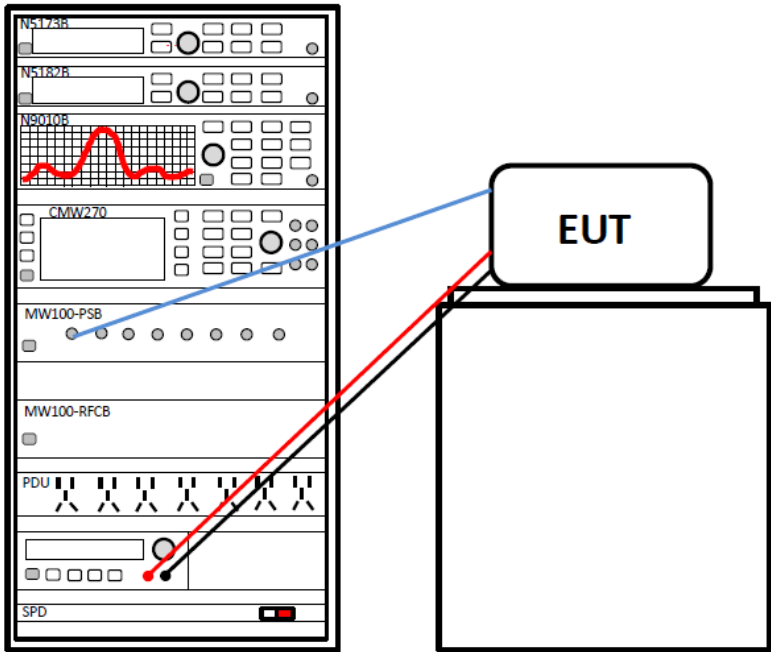
#### Notes:

1. An initial pre-scan was performed on the line and neutral lines with peak detector.
2. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission.
3. Final Level = Receiver Read level + LISN Factor + Aux Factor + Cable Loss.

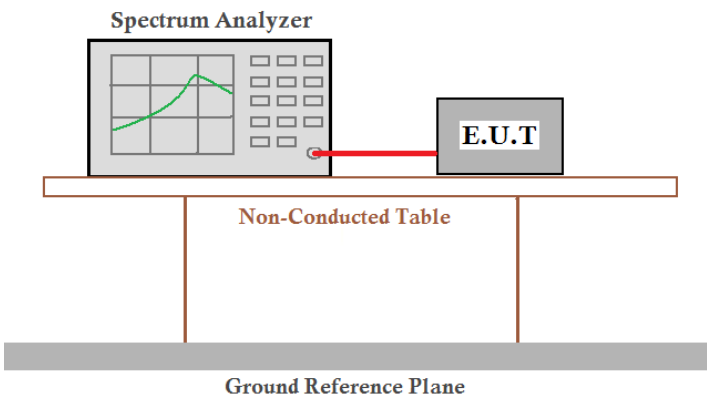
### 6.3 Conducted Output Power

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407 (a) (1) (iv) & (a) (3)                                 |
| Limit:            | Band 1: 24dBm<br>Band 4: 30dBm                                                     |
| Test setup:       |  |
| Test Instruments: | Refer to section 5.10 for details                                                  |
| Test mode:        | Refer to section 5.3 for details                                                   |
| Test results:     | Passed                                                                             |
| Measurement Data: | <b>Refer to Appendix A - 5G WIFI</b>                                               |

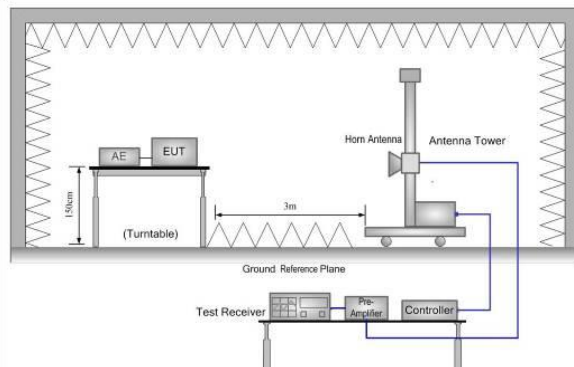
## 6.4 Occupy Bandwidth

|                   |                                                                                                     |
|-------------------|-----------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407 (a) (12) and Section 15.407 (e)                                         |
| Limit:            | Band 1/4: N/A (26dB Emission Bandwidth and 99% Occupy Bandwidth)<br>Band 4: >500kHz (6dB Bandwidth) |
| Test setup:       |                   |
| Test Instruments: | Refer to section 5.10 for details                                                                   |
| Test mode:        | Refer to section 5.3 for details                                                                    |
| Test results:     | Passed                                                                                              |
| Measurement Data: | <b>Refer to Appendix A - 5G WIFI</b>                                                                |

## 6.5 Power Spectral Density

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407 (a) (1) (iv) & (a)(3)                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Limit:            | Band 1: 11 dBm/MHz<br>Band 4: 30 dBm/500kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Test setup:       |  <p>The diagram illustrates the test setup. A Spectrum Analyzer, shown with a grid and a green curve, is connected to an E.U.T. (Equipment Under Test) box by a red cable. Both the Spectrum Analyzer and the E.U.T. are positioned on a table labeled 'Non-Conducted Table'. This table is supported by two vertical legs. Below the table, a horizontal bar represents the 'Ground Reference Plane'.</p> |
| Test Instruments: | Refer to section 5.10 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Test results:     | Passed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Measurement Data: | <b>Refer to Appendix A - 5G WIFI</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## 6.6 Band Edge

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |        |                  |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------|------------------|
| Test Requirement: | FCC Part 15 E Section 15.407 (b)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |        |                  |
| Receiver setup:   | Detector                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | RBW                | VBW    | Remark           |
|                   | Quasi-peak                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 120kHz             | 300kHz | Quasi-peak Value |
|                   | RMS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1MHz               | 3MHz   | Average Value    |
| Limit:            | Band                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Limit (dBuV/m @3m) |        | Remark           |
|                   | Band 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 68.20              |        | Peak Value       |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 54.00              |        | Average Value    |
|                   | Band 4 limit:<br>For transmitters operating in the 5.725-5.85 GHz band:<br>All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                    |        |                  |
|                   | Remark:<br>1. Band 1 limit:<br>$E[dB\mu V/m] = EIRP[dBm] + 95.2 = 68.2 \text{ dBuV/m}$ , for $EIPR[dBm] = -27 \text{ dBm}$ .<br>2. Band 4 limit:<br>$E[dB\mu V/m] = EIRP[dBm] + 95.2 = 68.2 \text{ dBuV/m}$ , for $EIPR[dBm] = -27 \text{ dBm}$ .<br>$E[dB\mu V/m] = EIRP[dBm] + 95.2 = 105.2 \text{ dBuV/m}$ , for $EIPR[dBm] = 10 \text{ dBm}$ .<br>$E[dB\mu V/m] = EIRP[dBm] + 95.2 = 110.8 \text{ dBuV/m}$ , for $EIPR[dBm] = 15.6 \text{ dBm}$ .<br>$E[dB\mu V/m] = EIRP[dBm] + 95.2 = 122.2 \text{ dBuV/m}$ , for $EIPR[dBm] = 27 \text{ dBm}$ .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |        |                  |
| Test Procedure:   | <div><div>1. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</div><div>2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div><div>3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</div><div>4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable was turned from 0 degrees to 360 degrees to find the maximum reading.</div><div>5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div><div>6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div></div> |                    |        |                  |
| Test setup:       | <div><div></div><div></div><div></div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |        |                  |
| Test Instruments: | Refer to section 5.10 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                    |        |                  |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |        |                  |
| Test results:     | Passed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |        |                  |

**Measurement Data (worst case):**
**Band 1:**

| Band 1 – 802.11a                                                                                                                                                           |                     |             |                |                     |             |              |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|----------|
| Test channel: Lowest channel                                                                                                                                               |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5150.00                                                                                                                                                                    | 41.19               | 15.49       | 56.68          | 68.20               | 11.52       | Horizontal   | Peak     |
| 5150.00                                                                                                                                                                    | 41.94               | 15.49       | 57.43          | 68.20               | 10.77       | Vertical     | Peak     |
| 5150.00                                                                                                                                                                    | 31.66               | 15.49       | 47.15          | 54.00               | 6.85        | Horizontal   | Average  |
| 5150.00                                                                                                                                                                    | 30.40               | 15.49       | 45.89          | 54.00               | 8.11        | Vertical     | Average  |
| Test channel: Highest channel                                                                                                                                              |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5350.00                                                                                                                                                                    | 36.04               | 16.44       | 52.48          | 68.20               | 15.72       | Horizontal   | Peak     |
| 5350.00                                                                                                                                                                    | 34.21               | 16.44       | 50.65          | 68.20               | 17.55       | Vertical     | Peak     |
| 5350.00                                                                                                                                                                    | 28.33               | 16.44       | 44.77          | 54.00               | 9.23        | Horizontal   | Average  |
| 5350.00                                                                                                                                                                    | 27.31               | 16.44       | 43.75          | 54.00               | 10.25       | Vertical     | Average  |
| Band 1 – 802.11n(HT20)                                                                                                                                                     |                     |             |                |                     |             |              |          |
| Test channel: Lowest channel                                                                                                                                               |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5150.00                                                                                                                                                                    | 41.39               | 15.49       | 56.88          | 68.20               | 11.32       | Horizontal   | Peak     |
| 5150.00                                                                                                                                                                    | 42.22               | 15.49       | 57.71          | 68.20               | 10.49       | Vertical     | Peak     |
| 5150.00                                                                                                                                                                    | 31.42               | 15.49       | 46.91          | 54.00               | 7.09        | Horizontal   | Average  |
| 5150.00                                                                                                                                                                    | 30.09               | 15.49       | 45.58          | 54.00               | 8.42        | Vertical     | Average  |
| Test channel: Highest channel                                                                                                                                              |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5350.00                                                                                                                                                                    | 36.32               | 16.44       | 52.76          | 68.20               | 15.44       | Horizontal   | Peak     |
| 5350.00                                                                                                                                                                    | 34.67               | 16.44       | 51.11          | 68.20               | 17.09       | Vertical     | Peak     |
| 5350.00                                                                                                                                                                    | 27.84               | 16.44       | 44.28          | 54.00               | 9.72        | Horizontal   | Average  |
| 5350.00                                                                                                                                                                    | 27.62               | 16.44       | 44.06          | 54.00               | 9.94        | Vertical     | Average  |
| <b>Remark:</b><br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |          |

| Band 1 – 802.11n(HT40)                                                                                                                                              |                     |             |                |                     |             |              |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|----------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5150.00                                                                                                                                                             | 48.05               | 15.49       | 63.54          | 68.20               | 4.66        | Horizontal   | Peak     |
| 5150.00                                                                                                                                                             | 48.66               | 15.49       | 64.15          | 68.20               | 4.05        | Vertical     | Peak     |
| 5150.00                                                                                                                                                             | 34.38               | 15.49       | 49.87          | 54.00               | 4.13        | Horizontal   | Average  |
| 5150.00                                                                                                                                                             | 35.03               | 15.49       | 50.52          | 54.00               | 3.48        | Vertical     | Average  |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5350.00                                                                                                                                                             | 35.15               | 16.44       | 51.59          | 68.20               | 16.61       | Horizontal   | Peak     |
| 5350.00                                                                                                                                                             | 35.02               | 16.44       | 51.46          | 68.20               | 16.74       | Vertical     | Peak     |
| 5350.00                                                                                                                                                             | 28.13               | 16.44       | 44.57          | 54.00               | 9.43        | Horizontal   | Average  |
| 5350.00                                                                                                                                                             | 27.07               | 16.44       | 43.51          | 54.00               | 10.49       | Vertical     | Average  |
| Band 1 – 802.11ac(HT20)                                                                                                                                             |                     |             |                |                     |             |              |          |
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5150.00                                                                                                                                                             | 41.32               | 15.49       | 56.81          | 68.20               | 11.39       | Horizontal   | Peak     |
| 5150.00                                                                                                                                                             | 41.98               | 15.49       | 57.47          | 68.20               | 10.73       | Vertical     | Peak     |
| 5150.00                                                                                                                                                             | 30.94               | 15.49       | 46.43          | 54.00               | 7.57        | Horizontal   | Average  |
| 5150.00                                                                                                                                                             | 30.36               | 15.49       | 45.85          | 54.00               | 8.15        | Vertical     | Average  |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5350.00                                                                                                                                                             | 36.41               | 16.44       | 52.85          | 68.20               | 15.35       | Horizontal   | Peak     |
| 5350.00                                                                                                                                                             | 34.21               | 16.44       | 50.65          | 68.20               | 17.55       | Vertical     | Peak     |
| 5350.00                                                                                                                                                             | 28.15               | 16.44       | 44.59          | 54.00               | 9.41        | Horizontal   | Average  |
| 5350.00                                                                                                                                                             | 27.22               | 16.44       | 43.66          | 54.00               | 10.34       | Vertical     | Average  |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |          |

| Band 1 – 802.11ac(HT40)                                                                                                                                             |                     |             |                |                     |             |              |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|----------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5150.00                                                                                                                                                             | 48.16               | 15.49       | 63.65          | 68.20               | 4.55        | Horizontal   | Peak     |
| 5150.00                                                                                                                                                             | 48.69               | 15.49       | 64.18          | 68.20               | 4.02        | Vertical     | Peak     |
| 5150.00                                                                                                                                                             | 34.40               | 15.49       | 49.89          | 54.00               | 4.11        | Horizontal   | Average  |
| 5150.00                                                                                                                                                             | 35.45               | 15.49       | 50.94          | 54.00               | 3.06        | Vertical     | Average  |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5350.00                                                                                                                                                             | 35.37               | 16.44       | 51.81          | 68.20               | 16.39       | Horizontal   | Peak     |
| 5350.00                                                                                                                                                             | 35.06               | 16.44       | 51.50          | 68.20               | 16.7        | Vertical     | Peak     |
| 5350.00                                                                                                                                                             | 28.45               | 16.44       | 44.89          | 54.00               | 9.11        | Horizontal   | Average  |
| 5350.00                                                                                                                                                             | 27.32               | 16.44       | 43.76          | 54.00               | 10.24       | Vertical     | Average  |
| Band 1 – 802.11ac(HT80)                                                                                                                                             |                     |             |                |                     |             |              |          |
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5150.00                                                                                                                                                             | 41.78               | 15.49       | 57.27          | 68.20               | 10.93       | Horizontal   | Peak     |
| 5150.00                                                                                                                                                             | 40.87               | 15.49       | 56.36          | 68.20               | 11.84       | Vertical     | Peak     |
| 5150.00                                                                                                                                                             | 31.85               | 15.49       | 47.34          | 54.00               | 6.66        | Horizontal   | Average  |
| 5150.00                                                                                                                                                             | 30.38               | 15.49       | 45.87          | 54.00               | 8.13        | Vertical     | Average  |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |          |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Polarity |
| 5350.00                                                                                                                                                             | 35.36               | 16.44       | 51.80          | 68.20               | 16.4        | Horizontal   | Peak     |
| 5350.00                                                                                                                                                             | 35.47               | 16.44       | 51.91          | 68.20               | 16.29       | Vertical     | Peak     |
| 5350.00                                                                                                                                                             | 28.18               | 16.44       | 44.62          | 54.00               | 9.38        | Horizontal   | Average  |
| 5350.00                                                                                                                                                             | 27.82               | 16.44       | 44.26          | 54.00               | 9.74        | Vertical     | Average  |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |          |

**Band 4:**

| Band 4 – 802.11a                                                                                                                                                    |                     |             |                |                     |             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5650.00                                                                                                                                                             | 40.44               | 17.02       | 57.46          | 68.20               | 10.74       | Horizontal   |
| 5700.00                                                                                                                                                             | 40.10               | 17.13       | 57.23          | 105.20              | 47.97       | Horizontal   |
| 5720.00                                                                                                                                                             | 47.52               | 17.21       | 64.73          | 110.80              | 46.07       | Horizontal   |
| 5725.00                                                                                                                                                             | 50.89               | 17.23       | 68.12          | 122.20              | 54.08       | Horizontal   |
| 5650.00                                                                                                                                                             | 40.02               | 17.02       | 57.04          | 68.20               | 11.16       | Vertical     |
| 5700.00                                                                                                                                                             | 41.03               | 17.13       | 58.16          | 105.20              | 47.04       | Vertical     |
| 5720.00                                                                                                                                                             | 44.57               | 17.21       | 61.78          | 110.80              | 49.02       | Vertical     |
| 5725.00                                                                                                                                                             | 49.17               | 17.23       | 66.40          | 122.20              | 55.80       | Vertical     |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5850.00                                                                                                                                                             | 48.81               | 17.55       | 66.36          | 122.20              | 55.84       | Horizontal   |
| 5855.00                                                                                                                                                             | 43.64               | 17.55       | 61.19          | 110.80              | 49.61       | Horizontal   |
| 5875.00                                                                                                                                                             | 40.13               | 17.57       | 57.70          | 105.20              | 47.50       | Horizontal   |
| 5925.00                                                                                                                                                             | 39.38               | 17.37       | 56.75          | 68.20               | 11.45       | Horizontal   |
| 5850.00                                                                                                                                                             | 42.19               | 17.55       | 59.74          | 122.20              | 62.46       | Vertical     |
| 5855.00                                                                                                                                                             | 41.00               | 17.55       | 58.55          | 110.80              | 52.25       | Vertical     |
| 5875.00                                                                                                                                                             | 40.04               | 17.57       | 57.61          | 105.20              | 47.59       | Vertical     |
| 5925.00                                                                                                                                                             | 41.99               | 17.37       | 59.36          | 68.20               | 8.84        | Vertical     |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |

| Band 4 – 802.11n(HT20)                                                                                                                                              |                     |             |                |                     |             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5650.00                                                                                                                                                             | 40.36               | 17.02       | 57.38          | 68.20               | 10.82       | Horizontal   |
| 5700.00                                                                                                                                                             | 39.84               | 17.13       | 56.97          | 105.20              | 48.23       | Horizontal   |
| 5720.00                                                                                                                                                             | 47.65               | 17.21       | 64.86          | 110.80              | 45.94       | Horizontal   |
| 5725.00                                                                                                                                                             | 50.62               | 17.23       | 67.85          | 122.20              | 54.35       | Horizontal   |
| 5650.00                                                                                                                                                             | 39.95               | 17.02       | 56.97          | 68.20               | 11.23       | Vertical     |
| 5700.00                                                                                                                                                             | 40.87               | 17.13       | 58.00          | 105.20              | 47.20       | Vertical     |
| 5720.00                                                                                                                                                             | 44.12               | 17.21       | 61.33          | 110.80              | 49.47       | Vertical     |
| 5725.00                                                                                                                                                             | 49.38               | 17.23       | 66.61          | 122.20              | 55.59       | Vertical     |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5850.00                                                                                                                                                             | 48.69               | 17.55       | 66.24          | 122.20              | 55.96       | Horizontal   |
| 5855.00                                                                                                                                                             | 43.51               | 17.55       | 61.06          | 110.80              | 49.74       | Horizontal   |
| 5875.00                                                                                                                                                             | 40.25               | 17.57       | 57.82          | 105.20              | 47.38       | Horizontal   |
| 5925.00                                                                                                                                                             | 39.50               | 17.37       | 56.87          | 68.20               | 11.33       | Horizontal   |
| 5850.00                                                                                                                                                             | 41.79               | 17.55       | 59.34          | 122.20              | 62.86       | Vertical     |
| 5855.00                                                                                                                                                             | 40.89               | 17.55       | 58.44          | 110.80              | 52.36       | Vertical     |
| 5875.00                                                                                                                                                             | 39.68               | 17.57       | 57.25          | 105.20              | 47.95       | Vertical     |
| 5925.00                                                                                                                                                             | 41.63               | 17.37       | 59.00          | 68.20               | 9.20        | Vertical     |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |

| Band 4 – 802.11n(HT40)                                                                                                                                              |                     |             |                |                     |             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5650.00                                                                                                                                                             | 40.86               | 17.02       | 57.88          | 68.20               | 10.32       | Horizontal   |
| 5700.00                                                                                                                                                             | 40.93               | 17.13       | 58.06          | 105.20              | 47.14       | Horizontal   |
| 5720.00                                                                                                                                                             | 54.75               | 17.21       | 71.96          | 110.80              | 38.84       | Horizontal   |
| 5725.00                                                                                                                                                             | 55.19               | 17.23       | 72.42          | 122.20              | 49.78       | Horizontal   |
| 5650.00                                                                                                                                                             | 40.70               | 17.02       | 57.72          | 68.20               | 10.48       | Vertical     |
| 5700.00                                                                                                                                                             | 40.44               | 17.13       | 57.57          | 105.20              | 47.63       | Vertical     |
| 5720.00                                                                                                                                                             | 51.67               | 17.21       | 68.88          | 110.80              | 41.92       | Vertical     |
| 5725.00                                                                                                                                                             | 52.85               | 17.23       | 70.08          | 122.20              | 52.12       | Vertical     |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5850.00                                                                                                                                                             | 39.95               | 17.55       | 57.50          | 122.20              | 64.70       | Horizontal   |
| 5855.00                                                                                                                                                             | 40.65               | 17.55       | 58.20          | 110.80              | 52.60       | Horizontal   |
| 5875.00                                                                                                                                                             | 39.22               | 17.57       | 56.79          | 105.20              | 48.41       | Horizontal   |
| 5925.00                                                                                                                                                             | 39.34               | 17.37       | 56.71          | 68.20               | 11.49       | Horizontal   |
| 5850.00                                                                                                                                                             | 39.62               | 17.55       | 57.17          | 122.20              | 65.03       | Vertical     |
| 5855.00                                                                                                                                                             | 39.49               | 17.55       | 57.04          | 110.80              | 53.76       | Vertical     |
| 5875.00                                                                                                                                                             | 39.26               | 17.57       | 56.83          | 105.20              | 48.37       | Vertical     |
| 5925.00                                                                                                                                                             | 39.02               | 17.37       | 56.39          | 68.20               | 11.81       | Vertical     |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |

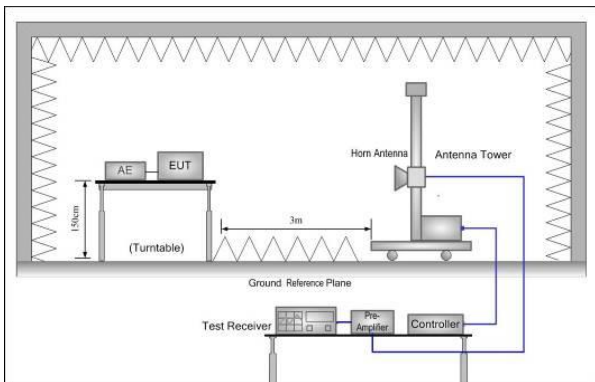
| Band 4 – 802.11ac(HT20)                                                                                                                                             |                     |             |                |                     |             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5650.00                                                                                                                                                             | 40.40               | 17.02       | 57.42          | 68.20               | 10.78       | Horizontal   |
| 5700.00                                                                                                                                                             | 40.23               | 17.13       | 57.36          | 105.20              | 47.84       | Horizontal   |
| 5720.00                                                                                                                                                             | 48.04               | 17.21       | 65.25          | 110.80              | 45.55       | Horizontal   |
| 5725.00                                                                                                                                                             | 50.22               | 17.23       | 67.45          | 122.20              | 54.75       | Horizontal   |
| 5650.00                                                                                                                                                             | 40.05               | 17.02       | 57.07          | 68.20               | 11.13       | Vertical     |
| 5700.00                                                                                                                                                             | 40.76               | 17.13       | 57.89          | 105.20              | 47.31       | Vertical     |
| 5720.00                                                                                                                                                             | 43.96               | 17.21       | 61.17          | 110.80              | 49.63       | Vertical     |
| 5725.00                                                                                                                                                             | 49.09               | 17.23       | 66.32          | 122.20              | 55.88       | Vertical     |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5850.00                                                                                                                                                             | 48.49               | 17.55       | 66.04          | 122.20              | 56.16       | Horizontal   |
| 5855.00                                                                                                                                                             | 43.27               | 17.55       | 60.82          | 110.80              | 49.98       | Horizontal   |
| 5875.00                                                                                                                                                             | 40.45               | 17.57       | 58.02          | 105.20              | 47.18       | Horizontal   |
| 5925.00                                                                                                                                                             | 39.37               | 17.37       | 56.74          | 68.20               | 11.46       | Horizontal   |
| 5850.00                                                                                                                                                             | 41.87               | 17.55       | 59.42          | 122.20              | 62.78       | Vertical     |
| 5855.00                                                                                                                                                             | 41.18               | 17.55       | 58.73          | 110.80              | 52.07       | Vertical     |
| 5875.00                                                                                                                                                             | 39.63               | 17.57       | 57.20          | 105.20              | 48.00       | Vertical     |
| 5925.00                                                                                                                                                             | 41.80               | 17.37       | 59.17          | 68.20               | 9.03        | Vertical     |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |

| Band 4 – 802.11ac(HT40)                                                                                                                                             |                     |             |                |                     |             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5650.00                                                                                                                                                             | 41.13               | 17.02       | 58.15          | 68.20               | 10.05       | Horizontal   |
| 5700.00                                                                                                                                                             | 41.38               | 17.13       | 58.51          | 105.20              | 46.69       | Horizontal   |
| 5720.00                                                                                                                                                             | 55.24               | 17.21       | 72.45          | 110.80              | 38.35       | Horizontal   |
| 5725.00                                                                                                                                                             | 54.81               | 17.23       | 72.04          | 122.20              | 50.16       | Horizontal   |
| 5650.00                                                                                                                                                             | 40.42               | 17.02       | 57.44          | 68.20               | 10.76       | Vertical     |
| 5700.00                                                                                                                                                             | 39.98               | 17.13       | 57.11          | 105.20              | 48.09       | Vertical     |
| 5720.00                                                                                                                                                             | 51.74               | 17.21       | 68.95          | 110.80              | 41.85       | Vertical     |
| 5725.00                                                                                                                                                             | 53.12               | 17.23       | 70.35          | 122.20              | 51.85       | Vertical     |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5850.00                                                                                                                                                             | 39.84               | 17.55       | 57.39          | 122.20              | 64.81       | Horizontal   |
| 5855.00                                                                                                                                                             | 40.88               | 17.55       | 58.43          | 110.80              | 52.37       | Horizontal   |
| 5875.00                                                                                                                                                             | 38.93               | 17.57       | 56.50          | 105.20              | 48.70       | Horizontal   |
| 5925.00                                                                                                                                                             | 39.04               | 17.37       | 56.41          | 68.20               | 11.79       | Horizontal   |
| 5850.00                                                                                                                                                             | 40.07               | 17.55       | 57.62          | 122.20              | 64.58       | Vertical     |
| 5855.00                                                                                                                                                             | 39.45               | 17.55       | 57.00          | 110.80              | 53.80       | Vertical     |
| 5875.00                                                                                                                                                             | 38.98               | 17.57       | 56.55          | 105.20              | 48.65       | Vertical     |
| 5925.00                                                                                                                                                             | 38.63               | 17.37       | 56.00          | 68.20               | 12.20       | Vertical     |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |

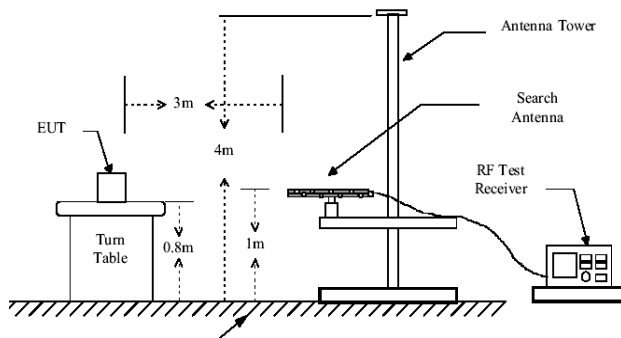
| Band 4 – 802.11ac(HT80)                                                                                                                                             |                     |             |                |                     |             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5650.00                                                                                                                                                             | 40.39               | 17.02       | 57.41          | 68.20               | 10.79       | Horizontal   |
| 5700.00                                                                                                                                                             | 41.45               | 17.13       | 58.58          | 105.20              | 46.62       | Horizontal   |
| 5720.00                                                                                                                                                             | 43.43               | 17.21       | 60.64          | 110.80              | 50.16       | Horizontal   |
| 5725.00                                                                                                                                                             | 42.21               | 17.23       | 59.44          | 122.20              | 62.76       | Horizontal   |
| 5650.00                                                                                                                                                             | 40.54               | 17.02       | 57.56          | 68.20               | 10.64       | Vertical     |
| 5700.00                                                                                                                                                             | 41.50               | 17.13       | 58.63          | 105.20              | 46.57       | Vertical     |
| 5720.00                                                                                                                                                             | 41.01               | 17.21       | 58.22          | 110.80              | 52.58       | Vertical     |
| 5725.00                                                                                                                                                             | 40.62               | 17.23       | 57.85          | 122.20              | 64.35       | Vertical     |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |
| Detector: Peak Value                                                                                                                                                |                     |             |                |                     |             |              |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization |
| 5850.00                                                                                                                                                             | 40.88               | 17.55       | 58.43          | 122.20              | 63.77       | Horizontal   |
| 5855.00                                                                                                                                                             | 41.31               | 17.55       | 58.86          | 110.80              | 51.94       | Horizontal   |
| 5875.00                                                                                                                                                             | 40.34               | 17.57       | 57.91          | 105.20              | 47.29       | Horizontal   |
| 5925.00                                                                                                                                                             | 39.93               | 17.37       | 57.30          | 68.20               | 10.90       | Horizontal   |
| 5850.00                                                                                                                                                             | 40.31               | 17.55       | 57.86          | 122.20              | 64.34       | Vertical     |
| 5855.00                                                                                                                                                             | 39.38               | 17.55       | 56.93          | 110.80              | 53.87       | Vertical     |
| 5875.00                                                                                                                                                             | 39.94               | 17.57       | 57.51          | 105.20              | 47.69       | Vertical     |
| 5925.00                                                                                                                                                             | 38.87               | 17.37       | 56.24          | 68.20               | 11.96       | Vertical     |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |

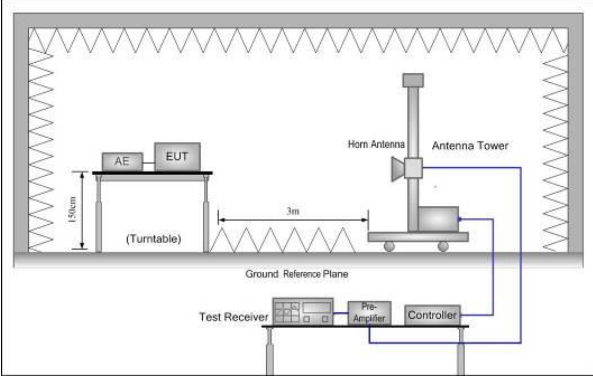
## 6.7 Spurious Emission

### 6.7.1 Restricted Band

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |                    |      |               |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|--------------------|------|---------------|
| Test Requirement:     | FCC Part15 E Section 15.407(b)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |          |                    |      |               |
| Test Frequency Range: | 4.5 GHz to 5.15 GHz and 5.35GHz to 5.46GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          |                    |      |               |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |          |                    |      |               |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Detector | RBW                | VBW  | Remark        |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Peak     | 1MHz               | 3MHz | Peak Value    |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RMS      | 1MHz               | 3MHz | Average Value |
| Limit:                | Frequency                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          | Limit (dBuV/m @3m) |      | Remark        |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |          | 74.00              |      | Peak Value    |
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          | 54.00              |      | Average Value |
| Test Procedure:       | <div><div>1.</div><div>The EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.</div><div>2.</div><div>The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</div><div>3.</div><div>The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</div><div>4.</div><div>For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.</div><div>5.</div><div>The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</div><div>6.</div><div>If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</div></div> |          |                    |      |               |
| Test setup:           | <div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |                    |      |               |
| Test Instruments:     | Refer to section 5.10 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |                    |      |               |
| Test mode:            | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |                    |      |               |
| Test results:         | Passed(Refer to section 6.6)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |                    |      |               |

## 6.7.2 Unwanted Emissions out of the Restricted Bands

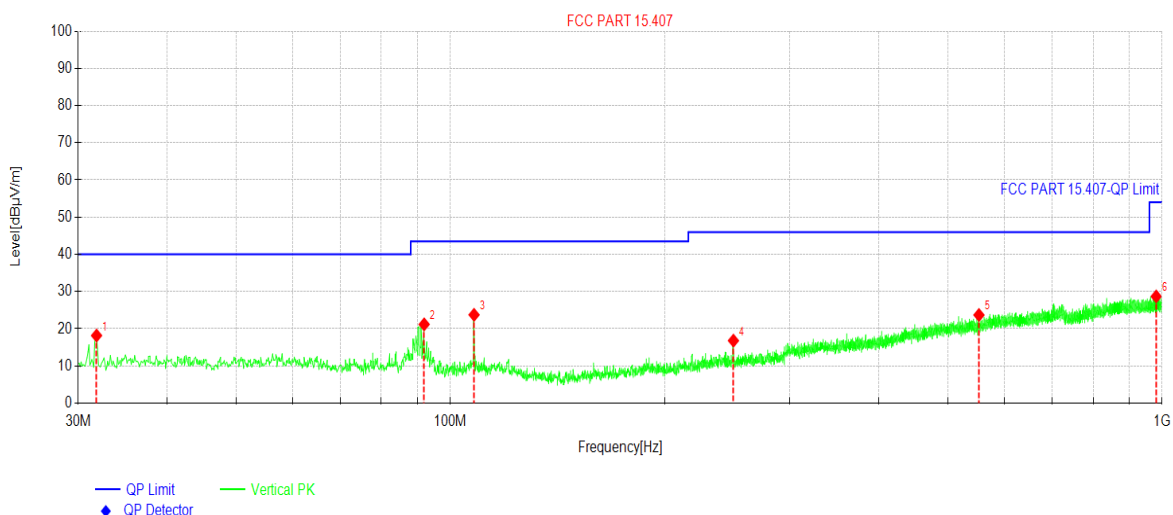
|                       |                                                                                                                                                                                                                                                                                                                                                        |                    |        |        |                  |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------|--------|------------------|
| Test Requirement:     | FCC Part15 C Section 15.209 and 15.205                                                                                                                                                                                                                                                                                                                 |                    |        |        |                  |
| Test Frequency Range: | 30MHz to 40GHz                                                                                                                                                                                                                                                                                                                                         |                    |        |        |                  |
| Test site:            | Measurement Distance: 3m                                                                                                                                                                                                                                                                                                                               |                    |        |        |                  |
| Receiver setup:       | Frequency                                                                                                                                                                                                                                                                                                                                              | Detector           | RBW    | VBW    | Remark           |
|                       | 30MHz-1GHz                                                                                                                                                                                                                                                                                                                                             | Quasi-peak         | 100kHz | 300kHz | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                             | Peak               | 1MHz   | 3MHz   | Peak Value       |
|                       |                                                                                                                                                                                                                                                                                                                                                        | RMS                | 1MHz   | 3MHz   | Average Value    |
| Limit:                | Frequency                                                                                                                                                                                                                                                                                                                                              | Limit (dBuV/m @3m) |        |        | Remark           |
|                       | 30MHz-88MHz                                                                                                                                                                                                                                                                                                                                            | 40.0               |        |        | Quasi-peak Value |
|                       | 88MHz-216MHz                                                                                                                                                                                                                                                                                                                                           | 43.5               |        |        | Quasi-peak Value |
|                       | 216MHz-960MHz                                                                                                                                                                                                                                                                                                                                          | 46.0               |        |        | Quasi-peak Value |
|                       | 960MHz-1GHz                                                                                                                                                                                                                                                                                                                                            | 54.0               |        |        | Quasi-peak Value |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                             | 68.20              |        |        | Peak Value       |
|                       |                                                                                                                                                                                                                                                                                                                                                        | 54.00              |        |        | Average Value    |
|                       | Remark:                                                                                                                                                                                                                                                                                                                                                |                    |        |        |                  |
|                       | Above 1GHz limit:                                                                                                                                                                                                                                                                                                                                      |                    |        |        |                  |
|                       | $E[dB\mu V/m] = EIRP[dBm] + 95.2 = 68.2 \text{ dBuV/m}$ , for $EIPR[dBm] = -27dBm$ .                                                                                                                                                                                                                                                                   |                    |        |        |                  |
| Test Procedure:       | 1. The EUT was placed on the top of a rotating table 0.8m(below 1GHz)/1.5m(above 1GHz) above the ground at a 3 meter camber. The table was rotated 360 degrees to determine the position of the highest radiation.                                                                                                                                     |                    |        |        |                  |
|                       | 2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.                                                                                                                                                                                                             |                    |        |        |                  |
|                       | 3. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.                                                                                                                        |                    |        |        |                  |
|                       | 4. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rota table was turned from 0 degrees to 360 degrees to find the maximum reading.                                                                                                                     |                    |        |        |                  |
|                       | 5. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.                                                                                                                                                                                                                                            |                    |        |        |                  |
|                       | 6. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. |                    |        |        |                  |
|                       |                                                                                                                                                                                                                                                                                                                                                        |                    |        |        |                  |
| Test setup:           | Below 1GHz                                                                                                                                                                                                                                                                                                                                             |                    |        |        |                  |
|                       |                                                                                                                                                                                                                                                                    |                    |        |        |                  |
|                       | Above 1GHz                                                                                                                                                                                                                                                                                                                                             |                    |        |        |                  |

|                   |                                                                                    |
|-------------------|------------------------------------------------------------------------------------|
|                   |  |
| Test Instruments: | Refer to section 5.10 for details                                                  |
| Test mode:        | Refer to section 5.3 for details                                                   |
| Test results:     | Passed                                                                             |

### Measurement Data (worst case):

#### Below 1GHz

|                 |                |                |                     |
|-----------------|----------------|----------------|---------------------|
| Product Name:   | Mobile Phone   | Product Model: | KG5h                |
| Test By:        | Mike           | Test mode:     | 5G Wi-Fi Tx mode    |
| Test Frequency: | 30 MHz ~ 1 GHz | Polarization:  | Vertical            |
| Test Voltage:   | AC 120/60Hz    | Environment:   | Temp: 24℃ Humi: 57% |

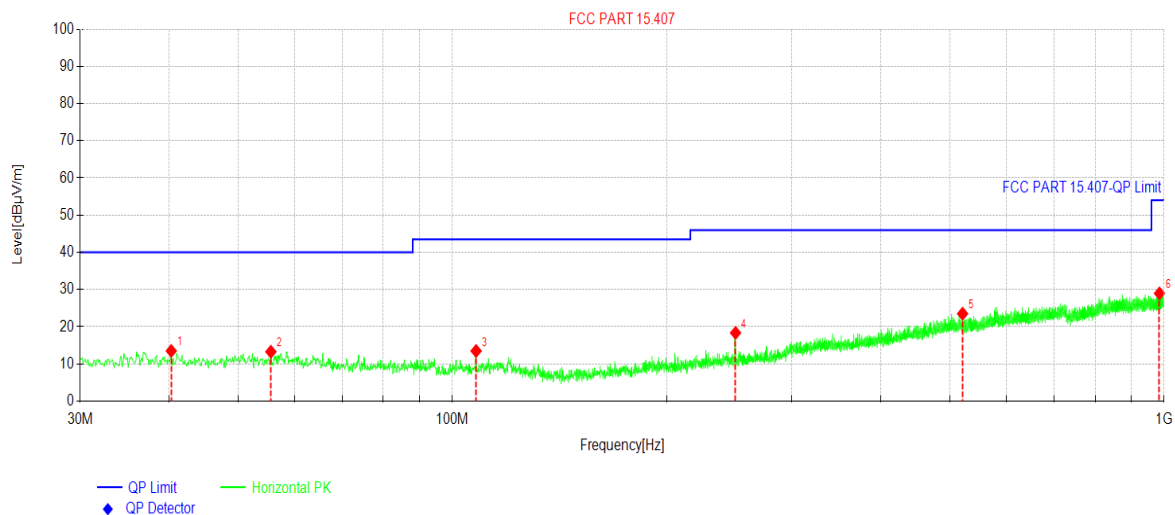


| NO. | Freq. [MHz] | Reading [dBuV/m] | Level [dBuV/m] | Factor [dB] | Limit [dBuV/m] | Margin [dB] | Trace | Polarity |
|-----|-------------|------------------|----------------|-------------|----------------|-------------|-------|----------|
| 1   | 31.8432     | 33.91            | 18.17          | -15.74      | 40.00          | 21.83       | PK    | Vertical |
| 2   | 91.8922     | 38.54            | 21.18          | -17.36      | 43.50          | 22.32       | PK    | Vertical |
| 3   | 107.995     | 39.68            | 23.74          | -15.94      | 43.50          | 19.76       | PK    | Vertical |
| 4   | 249.921     | 30.58            | 16.79          | -13.79      | 46.00          | 29.21       | PK    | Vertical |
| 5   | 553.076     | 30.47            | 23.69          | -6.78       | 46.00          | 22.31       | PK    | Vertical |
| 6   | 981.277     | 29.57            | 28.68          | -0.89       | 54.00          | 25.32       | PK    | Vertical |

#### Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

|                 |                |                |                     |
|-----------------|----------------|----------------|---------------------|
| Product Name:   | Mobile Phone   | Product Model: | KG5h                |
| Test By:        | Mike           | Test mode:     | 5G Wi-Fi Tx mode    |
| Test Frequency: | 30 MHz ~ 1 GHz | Polarization:  | Horizontal          |
| Test Voltage:   | AC 120/60Hz    | Environment:   | Temp: 24℃ Humi: 57% |



| NO. | Freq.<br>[MHz] | Reading[d<br>BμV/m] | Level<br>[dBμV/m] | Factor<br>[dB] | Limit<br>[dBμV/m] | Margin<br>[dB] | Trace | Polarity   |
|-----|----------------|---------------------|-------------------|----------------|-------------------|----------------|-------|------------|
| 1   | 40.2830        | 27.99               | 13.50             | -14.49         | 40.00             | 26.50          | PK    | Horizontal |
| 2   | 55.6106        | 27.93               | 13.27             | -14.66         | 40.00             | 26.73          | PK    | Horizontal |
| 3   | 107.995        | 29.42               | 13.48             | -15.94         | 43.50             | 30.02          | PK    | Horizontal |
| 4   | 250.018        | 32.14               | 18.35             | -13.79         | 46.00             | 27.65          | PK    | Horizontal |
| 5   | 521.160        | 30.41               | 23.50             | -6.91          | 46.00             | 22.50          | PK    | Horizontal |
| 6   | 985.254        | 29.75               | 28.96             | -0.79          | 54.00             | 25.04          | PK    | Horizontal |

#### Remark:

- Final Level = Receiver Read level + Factor(Antenna Factor + Cable Loss – Preamplifier Factor).
- The emission levels of other frequencies are very lower than the limit and not show in test report.

**Above 1GHz:**
**Band 1:**

| Band 1 – 802.11a                                                                                                                                                           |                     |             |                |                     |             |              |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|---------|
| Test channel: Lowest channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10360.00                                                                                                                                                                   | 51.50               | 5.48        | 56.98          | 68.20               | 11.22       | Vertical     | Peak    |
| 10360.00                                                                                                                                                                   | 51.94               | 5.48        | 57.42          | 68.20               | 10.78       | Horizontal   | Peak    |
| 10360.00                                                                                                                                                                   | 45.11               | 5.48        | 50.59          | 54.00               | 3.41        | Vertical     | Average |
| 10360.00                                                                                                                                                                   | 44.84               | 5.48        | 50.32          | 54.00               | 3.68        | Horizontal   | Average |
| Test channel: Middle channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10400.00                                                                                                                                                                   | 51.92               | 5.31        | 57.23          | 68.20               | 10.97       | Vertical     | Peak    |
| 10400.00                                                                                                                                                                   | 51.64               | 5.31        | 56.95          | 68.20               | 11.25       | Horizontal   | Peak    |
| 10400.00                                                                                                                                                                   | 45.59               | 5.31        | 50.90          | 54.00               | 3.10        | Vertical     | Average |
| 10400.00                                                                                                                                                                   | 44.73               | 5.31        | 50.04          | 54.00               | 3.96        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                              |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10480.00                                                                                                                                                                   | 51.40               | 5.98        | 57.38          | 68.20               | 10.82       | Vertical     | Peak    |
| 10480.00                                                                                                                                                                   | 51.66               | 5.98        | 57.64          | 68.20               | 10.56       | Horizontal   | Peak    |
| 10480.00                                                                                                                                                                   | 45.11               | 5.98        | 51.09          | 54.00               | 2.91        | Vertical     | Average |
| 10480.00                                                                                                                                                                   | 45.03               | 5.98        | 51.01          | 54.00               | 2.99        | Horizontal   | Average |
| Band 1 – 802.11n(HT20)                                                                                                                                                     |                     |             |                |                     |             |              |         |
| Test channel: Lowest channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10360.00                                                                                                                                                                   | 51.29               | 5.48        | 56.77          | 68.20               | 11.43       | Vertical     | Peak    |
| 10360.00                                                                                                                                                                   | 51.71               | 5.48        | 57.19          | 68.20               | 11.01       | Horizontal   | Peak    |
| 10360.00                                                                                                                                                                   | 44.66               | 5.48        | 50.14          | 54.00               | 3.86        | Vertical     | Average |
| 10360.00                                                                                                                                                                   | 44.91               | 5.48        | 50.39          | 54.00               | 3.61        | Horizontal   | Average |
| Test channel: Middle channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10400.00                                                                                                                                                                   | 51.18               | 5.31        | 56.49          | 68.20               | 11.71       | Vertical     | Peak    |
| 10400.00                                                                                                                                                                   | 52.04               | 5.31        | 57.35          | 68.20               | 10.85       | Horizontal   | Peak    |
| 10400.00                                                                                                                                                                   | 45.05               | 5.31        | 50.36          | 54.00               | 3.64        | Vertical     | Average |
| 10400.00                                                                                                                                                                   | 44.58               | 5.31        | 49.89          | 54.00               | 4.11        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                              |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10480.00                                                                                                                                                                   | 51.25               | 5.98        | 57.23          | 68.20               | 10.97       | Vertical     | Peak    |
| 10480.00                                                                                                                                                                   | 51.74               | 5.98        | 57.72          | 68.20               | 10.48       | Horizontal   | Peak    |
| 10480.00                                                                                                                                                                   | 44.69               | 5.98        | 50.67          | 54.00               | 3.33        | Vertical     | Average |
| 10480.00                                                                                                                                                                   | 44.76               | 5.98        | 50.74          | 54.00               | 3.26        | Horizontal   | Average |
| <b>Remark:</b><br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |         |

| Band 1 – 802.11n(HT40)                                                                                                                                              |                     |             |                |                     |             |              |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|---------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10380.00                                                                                                                                                            | 51.06               | 5.39        | 56.45          | 68.20               | 11.75       | Vertical     | Peak    |
| 10380.00                                                                                                                                                            | 51.78               | 5.39        | 57.17          | 68.20               | 11.03       | Horizontal   | Peak    |
| 10380.00                                                                                                                                                            | 45.37               | 5.39        | 50.76          | 54.00               | 3.24        | Vertical     | Average |
| 10380.00                                                                                                                                                            | 44.87               | 5.39        | 50.26          | 54.00               | 3.74        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10460.00                                                                                                                                                            | 50.62               | 5.81        | 56.43          | 68.20               | 11.77       | Vertical     | Peak    |
| 10460.00                                                                                                                                                            | 52.27               | 5.81        | 58.08          | 68.20               | 10.12       | Horizontal   | Peak    |
| 10460.00                                                                                                                                                            | 45.56               | 5.81        | 51.37          | 54.00               | 2.63        | Vertical     | Average |
| 10460.00                                                                                                                                                            | 44.37               | 5.81        | 50.18          | 54.00               | 3.82        | Horizontal   | Average |
| Band 1 – 802.11ac(HT20)                                                                                                                                             |                     |             |                |                     |             |              |         |
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10360.00                                                                                                                                                            | 51.78               | 5.48        | 57.26          | 68.20               | 10.94       | Vertical     | Peak    |
| 10360.00                                                                                                                                                            | 51.99               | 5.48        | 57.47          | 68.20               | 10.73       | Horizontal   | Peak    |
| 10360.00                                                                                                                                                            | 44.94               | 5.48        | 50.42          | 54.00               | 3.58        | Vertical     | Average |
| 10360.00                                                                                                                                                            | 45.29               | 5.48        | 50.77          | 54.00               | 3.23        | Horizontal   | Average |
| Test channel: Middle channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10400.00                                                                                                                                                            | 51.96               | 5.31        | 57.27          | 68.20               | 10.93       | Vertical     | Peak    |
| 10400.00                                                                                                                                                            | 52.12               | 5.31        | 57.43          | 68.20               | 10.77       | Horizontal   | Peak    |
| 10400.00                                                                                                                                                            | 45.25               | 5.31        | 50.56          | 54.00               | 3.44        | 10400.00     | Average |
| 10400.00                                                                                                                                                            | 45.55               | 5.31        | 50.86          | 54.00               | 3.14        | 10400.00     | Average |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10480.00                                                                                                                                                            | 51.40               | 5.98        | 57.38          | 68.20               | 10.82       | Vertical     | Peak    |
| 10480.00                                                                                                                                                            | 51.52               | 5.98        | 57.50          | 68.20               | 10.70       | Horizontal   | Peak    |
| 10480.00                                                                                                                                                            | 45.40               | 5.98        | 51.38          | 54.00               | 2.62        | Vertical     | Average |
| 10480.00                                                                                                                                                            | 44.98               | 5.98        | 50.96          | 54.00               | 3.04        | Horizontal   | Average |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |         |

| Band 1 – 802.11ac(HT40)                                                                                                                                             |                     |             |                |                     |             |              |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|---------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10380.00                                                                                                                                                            | 50.84               | 5.39        | 56.23          | 68.20               | 11.97       | Vertical     | Peak    |
| 10380.00                                                                                                                                                            | 51.93               | 5.39        | 57.32          | 68.20               | 10.88       | Horizontal   | Peak    |
| 10380.00                                                                                                                                                            | 45.44               | 5.39        | 50.83          | 54.00               | 3.17        | Vertical     | Average |
| 10380.00                                                                                                                                                            | 44.87               | 5.39        | 50.26          | 54.00               | 3.74        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10460.00                                                                                                                                                            | 50.57               | 5.81        | 56.38          | 68.20               | 11.82       | Vertical     | Peak    |
| 10460.00                                                                                                                                                            | 51.45               | 5.81        | 57.26          | 68.20               | 10.94       | Horizontal   | Peak    |
| 10460.00                                                                                                                                                            | 45.39               | 5.81        | 51.20          | 54.00               | 2.80        | Vertical     | Average |
| 10460.00                                                                                                                                                            | 45.18               | 5.81        | 50.99          | 54.00               | 3.01        | Horizontal   | Average |
| Band 1 – 802.11ac(HT80)                                                                                                                                             |                     |             |                |                     |             |              |         |
| Test channel: Middle channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 10420.00                                                                                                                                                            | 51.00               | 5.48        | 56.48          | 68.20               | 11.72       | Vertical     | Peak    |
| 10420.00                                                                                                                                                            | 52.07               | 5.48        | 57.55          | 68.20               | 10.65       | Horizontal   | Peak    |
| 10420.00                                                                                                                                                            | 45.20               | 5.48        | 50.68          | 54.00               | 3.32        | Vertical     | Average |
| 10420.00                                                                                                                                                            | 44.62               | 5.48        | 50.10          | 54.00               | 3.90        | Horizontal   | Average |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |         |

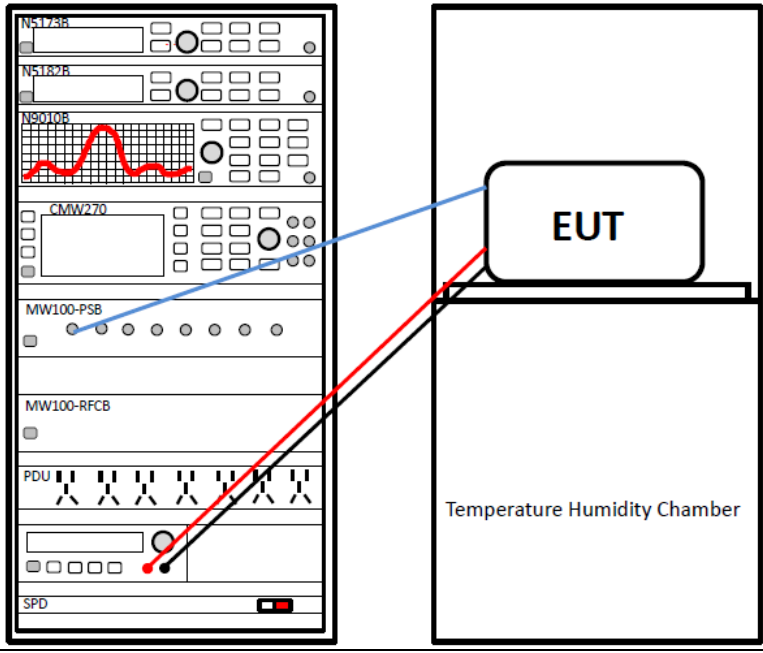
**Band 4:**

| Band 4 – 802.11a                                                                                                                                                           |                     |             |                |                     |             |              |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|---------|
| Test channel: Lowest channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11490.00                                                                                                                                                                   | 52.18               | 7.21        | 59.39          | 74.00               | 14.61       | Vertical     | Peak    |
| 11490.00                                                                                                                                                                   | 51.62               | 7.21        | 58.83          | 74.00               | 15.17       | Horizontal   | Peak    |
| 11490.00                                                                                                                                                                   | 45.89               | 7.21        | 53.10          | 54.00               | 0.90        | Vertical     | Average |
| 11490.00                                                                                                                                                                   | 45.02               | 7.21        | 52.23          | 54.00               | 1.77        | Horizontal   | Average |
| Test channel: Middle channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11570.00                                                                                                                                                                   | 52.29               | 6.88        | 59.17          | 74.00               | 14.83       | Vertical     | Peak    |
| 11570.00                                                                                                                                                                   | 51.38               | 6.88        | 58.26          | 74.00               | 15.74       | Horizontal   | Peak    |
| 11570.00                                                                                                                                                                   | 45.38               | 6.88        | 52.26          | 54.00               | 1.74        | Vertical     | Average |
| 11570.00                                                                                                                                                                   | 44.90               | 6.88        | 51.78          | 54.00               | 2.22        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                              |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11650.00                                                                                                                                                                   | 52.43               | 7.09        | 59.52          | 74.00               | 14.48       | Vertical     | Peak    |
| 11650.00                                                                                                                                                                   | 51.34               | 7.09        | 58.43          | 74.00               | 15.57       | Horizontal   | Peak    |
| 11650.00                                                                                                                                                                   | 45.36               | 7.09        | 52.45          | 54.00               | 1.55        | Vertical     | Average |
| 11650.00                                                                                                                                                                   | 45.07               | 7.09        | 52.16          | 54.00               | 1.84        | Horizontal   | Average |
| Band 4 – 802.11n(HT20)                                                                                                                                                     |                     |             |                |                     |             |              |         |
| Test channel: Lowest channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11490.00                                                                                                                                                                   | 51.71               | 7.21        | 58.92          | 74.00               | 15.08       | Vertical     | Peak    |
| 11490.00                                                                                                                                                                   | 51.87               | 7.21        | 59.08          | 74.00               | 14.92       | Horizontal   | Peak    |
| 11490.00                                                                                                                                                                   | 45.18               | 7.21        | 52.39          | 54.00               | 1.61        | Vertical     | Average |
| 11490.00                                                                                                                                                                   | 44.78               | 7.21        | 51.99          | 54.00               | 2.01        | Horizontal   | Average |
| Test channel: Middle channel                                                                                                                                               |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11570.00                                                                                                                                                                   | 52.13               | 6.88        | 59.01          | 74.00               | 14.99       | Vertical     | Peak    |
| 11570.00                                                                                                                                                                   | 51.74               | 6.88        | 58.62          | 74.00               | 15.38       | Horizontal   | Peak    |
| 11570.00                                                                                                                                                                   | 45.29               | 6.88        | 52.17          | 54.00               | 1.83        | Vertical     | Average |
| 11570.00                                                                                                                                                                   | 45.18               | 6.88        | 52.06          | 54.00               | 1.94        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                              |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                            | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11650.00                                                                                                                                                                   | 51.56               | 7.09        | 58.65          | 74.00               | 15.35       | Vertical     | Peak    |
| 11650.00                                                                                                                                                                   | 52.10               | 7.09        | 59.19          | 74.00               | 14.81       | Horizontal   | Peak    |
| 11650.00                                                                                                                                                                   | 45.13               | 7.09        | 52.22          | 54.00               | 1.78        | Vertical     | Average |
| 11650.00                                                                                                                                                                   | 44.83               | 7.09        | 51.92          | 54.00               | 2.08        | Horizontal   | Average |
| <b>Remark:</b><br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |         |

| Band 4 – 802.11n(HT40)                                                                                                                                              |                     |             |                |                     |             |              |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|---------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11510.00                                                                                                                                                            | 51.75               | 7.20        | 58.95          | 74.00               | 15.05       | Vertical     | Peak    |
| 11510.00                                                                                                                                                            | 51.65               | 7.20        | 58.85          | 74.00               | 15.15       | Horizontal   | Peak    |
| 11510.00                                                                                                                                                            | 45.27               | 7.20        | 52.47          | 54.00               | 1.53        | Vertical     | Average |
| 11510.00                                                                                                                                                            | 45.10               | 7.20        | 52.30          | 54.00               | 1.70        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11590.00                                                                                                                                                            | 51.83               | 6.77        | 58.60          | 74.00               | 15.40       | Vertical     | Peak    |
| 11590.00                                                                                                                                                            | 51.55               | 6.77        | 58.32          | 74.00               | 15.68       | Horizontal   | Peak    |
| 11590.00                                                                                                                                                            | 45.45               | 6.77        | 52.22          | 54.00               | 1.78        | Vertical     | Average |
| 11590.00                                                                                                                                                            | 45.47               | 6.77        | 52.24          | 54.00               | 1.76        | Horizontal   | Average |
| Band 4 – 802.11ac(HT20)                                                                                                                                             |                     |             |                |                     |             |              |         |
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11490.00                                                                                                                                                            | 52.46               | 7.21        | 59.67          | 74.00               | 14.33       | Vertical     | Peak    |
| 11490.00                                                                                                                                                            | 51.29               | 7.21        | 58.50          | 74.00               | 15.50       | Horizontal   | Peak    |
| 11490.00                                                                                                                                                            | 45.39               | 7.21        | 52.60          | 54.00               | 1.40        | Vertical     | Average |
| 11490.00                                                                                                                                                            | 45.07               | 7.21        | 52.28          | 54.00               | 1.72        | Horizontal   | Average |
| Test channel: Middle channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11570.00                                                                                                                                                            | 52.81               | 6.88        | 59.69          | 74.00               | 14.31       | Vertical     | Peak    |
| 11570.00                                                                                                                                                            | 51.03               | 6.88        | 57.91          | 74.00               | 16.09       | Horizontal   | Peak    |
| 11570.00                                                                                                                                                            | 45.22               | 6.88        | 52.10          | 54.00               | 1.90        | Vertical     | Average |
| 11570.00                                                                                                                                                            | 44.72               | 6.88        | 51.60          | 54.00               | 2.40        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11650.00                                                                                                                                                            | 52.60               | 7.09        | 59.69          | 74.00               | 14.31       | Vertical     | Peak    |
| 11650.00                                                                                                                                                            | 51.14               | 7.09        | 58.23          | 74.00               | 15.77       | Horizontal   | Peak    |
| 11650.00                                                                                                                                                            | 45.41               | 7.09        | 52.50          | 54.00               | 1.50        | Vertical     | Average |
| 11650.00                                                                                                                                                            | 45.08               | 7.09        | 52.17          | 54.00               | 1.83        | Horizontal   | Average |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |         |

| Band 4 – 802.11ac(HT40)                                                                                                                                             |                     |             |                |                     |             |              |         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-------------|----------------|---------------------|-------------|--------------|---------|
| Test channel: Lowest channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11510.00                                                                                                                                                            | 51.51               | 7.20        | 58.71          | 74.00               | 15.29       | Vertical     | Peak    |
| 11510.00                                                                                                                                                            | 51.69               | 7.20        | 58.89          | 74.00               | 15.11       | Horizontal   | Peak    |
| 11510.00                                                                                                                                                            | 45.51               | 7.20        | 52.71          | 54.00               | 1.29        | Vertical     | Average |
| 11510.00                                                                                                                                                            | 44.67               | 7.20        | 51.87          | 54.00               | 2.13        | Horizontal   | Average |
| Test channel: Highest channel                                                                                                                                       |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11590.00                                                                                                                                                            | 51.04               | 6.77        | 57.81          | 74.00               | 16.19       | Vertical     | Peak    |
| 11590.00                                                                                                                                                            | 52.05               | 6.77        | 58.82          | 74.00               | 15.18       | Horizontal   | Peak    |
| 11590.00                                                                                                                                                            | 46.15               | 6.77        | 52.92          | 54.00               | 1.08        | Vertical     | Average |
| 11590.00                                                                                                                                                            | 44.33               | 6.77        | 51.10          | 54.00               | 2.90        | Horizontal   | Average |
| Band 4 – 802.11ac(HT80)                                                                                                                                             |                     |             |                |                     |             |              |         |
| Test channel: Middle channel                                                                                                                                        |                     |             |                |                     |             |              |         |
| Frequency (MHz)                                                                                                                                                     | Read Level (dBuV/m) | Factor (dB) | Level (dBuV/m) | Limit Line (dBuV/m) | Margin [dB] | Polarization | Trace   |
| 11550.00                                                                                                                                                            | 51.94               | 6.99        | 58.93          | 74.00               | 15.07       | Vertical     | Peak    |
| 11550.00                                                                                                                                                            | 51.75               | 6.99        | 58.74          | 74.00               | 15.26       | Horizontal   | Peak    |
| 11550.00                                                                                                                                                            | 45.17               | 6.99        | 52.16          | 54.00               | 1.84        | Vertical     | Average |
| 11550.00                                                                                                                                                            | 44.65               | 6.99        | 51.64          | 54.00               | 2.36        | Horizontal   | Average |
| Remark:<br>1. Final Level = Receiver Read level + Factor.<br>2. The emission levels of other frequencies are very lower than the limit and not show in test report. |                     |             |                |                     |             |              |         |

## 6.8 Frequency stability

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test Requirement: | FCC Part15 E Section 15.407 (g)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Limit:            | Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Test setup:       |  <p>The diagram illustrates the test setup. On the left is a rack of test equipment including a spectrum analyzer (NS175B), a signal generator (NS182B), a network analyzer (NS100B), a microwave power source (CMW270), a microwave power splitter (MW100-PSB), a microwave power combiner (MW100-RFCB), a power distribution unit (PDU), and a signal processor (SPD). On the right is a Temperature Humidity Chamber containing the Equipment Under Test (EUT). A blue line connects the spectrum analyzer to the EUT, and a red line connects the signal generator to the EUT.</p> |
| Test procedure:   | <ol style="list-style-type: none"> <li>1. The EUT is installed in an environment test chamber with external power source.</li> <li>2. Set the chamber to operate at 50 centigrade and external power source to output at nominal voltage of EUT.</li> <li>3. A sufficient stabilization period at each temperature is used prior to each frequency measurement.</li> <li>4. When temperature is stabled, measure the frequency stability.</li> <li>5. The test shall be performed under -30 to 50 centigrade and 85 to 115 percent of the nominal voltage. Change setting of chamber and external power source to complete all conditions.</li> </ol>                     |
| Test Instruments: | Refer to section 5.10 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Test mode:        | Refer to section 5.3 for details                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Test results:     | <b>Refer to Appendix A - 5G WIFI</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |