



# RF TEST REPORT

Product Name: Smartphone

Model Name: A180

FCC ID: 2A9SN-A180

Issued For : INOI Limited

Office 302, Dominion Centre 43-59, Queens Road, East  
Wanchai, Hong Kong, China

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Chen Hsong Industrial Park,  
No.177 Renmin West Road, Jinsha Community, Kengzi  
Street, Pingshan New District, Shenzhen, China

Report Number: LGT23C066RF04

Sample Received Date: Mar. 24, 2023

Date of Test: Mar. 24, 2023 ~ Apr. 17, 2023

Date of Issue: Apr. 17, 2023

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## TEST REPORT CERTIFICATION

**Applicant** INOI Limited  
**Address** Office 302, Dominion Centre 43-59, Queens Road, East Wanchai,  
Hong Kong, China  
**Manufacturer** INOI Limited  
**Address** Office 302, Dominion Centre 43-59, Queens Road, East Wanchai,  
Hong Kong, China  
**Product Name** Smartphone  
**Trademark** INOI  
**Model Name** A180  
**Sample Status:** Normal

| APPLICABLE STANDARDS                           |              |
|------------------------------------------------|--------------|
| STANDARD                                       | TEST RESULTS |
| FCC Part 15.407, Subpart E<br>ANSI C63.10-2013 | PASS         |

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### **Revision History**

| Rev. | Issue Date    | Contents      |
|------|---------------|---------------|
| 00   | Apr. 17, 2023 | Initial Issue |
|      |               |               |



## 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

Part 15.407, KDB 789033 D02 General U-NII Test Procedures New Rules v02r01

| FCC Part 15.407         |                                                        |         |
|-------------------------|--------------------------------------------------------|---------|
| FCC standard            | Test Item                                              | Results |
| 15.207                  | AC Conducted Emission                                  | PASS    |
| 15.407 (a) /15.407 (e)  | 26dB/6dB &99% Bandwidth                                | PASS    |
| 15.407(a)               | Maximum Conducted Output Power                         | PASS    |
| 15.407(b)/15.205/15.209 | Radiated Emission And (bandedge Emissions) Measurement | PASS    |
| 15.407(a)               | Power Spectral Density                                 | PASS    |
| 15.407(c)               | Automatically Discontinue Transmission                 | PASS    |
| 15.203/15.204           | Antenna Requirement                                    | PASS    |

### NOTE:

(1) 'N/A' denotes test is not applicable in this Test Report.

(2) All tests are according to ANSI C63.10-2013.



## 1.1 TEST FACTORY

|                            |                                                                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Company Name:              | Shenzhen LGT Test Service Co., Ltd.                                                                                                                         |
| Address:                   | Room 205, Building 13, Zone B, Chen Hsong Industrial Park, No.177 Renmin West Road, Jinsha Community, Kengzi Street, Pingshan New District, Shenzhen, China |
| Accreditation Certificate: | A2LA Certificate No.: 6727.01                                                                                                                               |
|                            | FCC Registration No.: 746540                                                                                                                                |
|                            | CAB ID: CN0136                                                                                                                                              |

## 1.2 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately **95** %.

| No. | Item                              | Uncertainty          |
|-----|-----------------------------------|----------------------|
| 1   | RF output power, conducted        | $\pm 0.68\text{dB}$  |
| 2   | Unwanted Emissions, conducted     | $\pm 2.988\text{dB}$ |
| 3   | All emissions, radiated 9K-30MHz  | $\pm 2.84\text{dB}$  |
| 4   | All emissions, radiated 30M-1GHz  | $\pm 4.39\text{dB}$  |
| 5   | All emissions, radiated 1G-6GHz   | $\pm 5.10\text{dB}$  |
| 6   | All emissions, radiated >6G       | $\pm 5.48\text{dB}$  |
| 7   | Conducted Emission (9KHz-150KHz)  | $\pm 2.79\text{dB}$  |
| 8   | Conducted Emission (150KHz-30MHz) | $\pm 2.80\text{dB}$  |



## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF THE EUT

|                                                                               |                                                                       |                                                                                                                                                  |
|-------------------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name                                                                  | Smartphone                                                            |                                                                                                                                                  |
| Trademark                                                                     | INOI                                                                  |                                                                                                                                                  |
| Model Name                                                                    | A180                                                                  |                                                                                                                                                  |
| Series Model                                                                  | N/A                                                                   |                                                                                                                                                  |
| Model Difference                                                              | There're have 128 +4GB and 258+8GB two kinds of memory configurations |                                                                                                                                                  |
| Product Description                                                           | The EUT is a Smartphone                                               |                                                                                                                                                  |
|                                                                               | Operation Frequency:                                                  | IEEE 802.11a/n(HT20)/ac(VHT20): 5.180GHz-5.240GHz<br>IEEE 802.11n(HT40)/ac(VHT40): 5.190GHz-5.230GHz<br>IEEE 802.11ac(VHT80): 5.210GHz           |
|                                                                               |                                                                       | IEEE 802.11a/n(HT20)/ac(VHT20): 5.260GHz-5.320GHz<br>IEEE 802.11 n(HT40)/ac(VHT40): 5.270GHz-5.310GHz<br>IEEE 802.11ac(VHT80): 5.290GHz          |
|                                                                               |                                                                       | IEEE 802.11a/n(HT20)/ac(VHT20): 5.500GHz-5.700GHz<br>IEEE 802.11 n(HT40)/ac(VHT40): 5.510GHz-5.670GHz<br>IEEE 802.11ac(VHT80): 5.530GHz-5.610GHz |
|                                                                               |                                                                       | IEEE 802.11a/n(HT20)/ac(VHT20): 5.745GHz-5.825GHz<br>IEEE 802.11a/n(HT40)/ac(VHT40): 5.755GHz-5.795GHz<br>IEEE 802.11ac(VHT80): 5.775GHz         |
|                                                                               | Modulation Type:                                                      | 802.11a(OFDM): BPSK, QPSK, 16-QAM, 64-QAM<br>802.11n(OFDM): BPSK, QPSK, 16-QAM, 64-QAM<br>802.11ac (OFDM): BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM   |
|                                                                               | Antenna Designation:                                                  | Please refer to the Note 3.                                                                                                                      |
|                                                                               |                                                                       | Antenna Gain(dBi)                                                                                                                                |
|                                                                               |                                                                       | 0.77                                                                                                                                             |
| More details of EUT technical specification, please refer to the User Manual. |                                                                       |                                                                                                                                                  |
| Test Channel                                                                  | Please refer to the Note 2.                                           |                                                                                                                                                  |
| Adapter                                                                       | Model: IN-C01/19<br>Input: 100-240V, 50/60Hz, 0.25A<br>Output: 5V, 2A |                                                                                                                                                  |
| Battery                                                                       | Capacity: 5000mAh<br>Rated Voltage: 3.85V                             |                                                                                                                                                  |
| Hardware Version                                                              | J535A_9230MB_MB_D4XEF_V1.3                                            |                                                                                                                                                  |
| Software Version                                                              | TP1A.220624.014 release-keys                                          |                                                                                                                                                  |
| Connecting I/O Port(s)                                                        | Please refer to the Note 1.                                           |                                                                                                                                                  |

#### Note

1. For a more detailed features description, please refer to the manufacturer's specifications or the User Manual.



2.

| Operation Frequency of channel |           |                   |           |
|--------------------------------|-----------|-------------------|-----------|
| 5.180GHz-5.240GHz              |           | 5.260GHz-5.320GHz |           |
| Channel                        | Frequency | Channel           | Frequency |
| 36                             | 5180      | 52                | 5260      |
| 38                             | 5190      | 54                | 5270      |
| 40                             | 5200      | 56                | 5280      |
| 42                             | 5210      | 58                | 5290      |
| 44                             | 5220      | 60                | 5300      |
| 46                             | 5230      | 62                | 5310      |
| 48                             | 5240      | 64                | 5320      |
|                                |           |                   |           |
| 5.500GHz-5.720GHz              |           | 5.745GHz-5.825GHz |           |
| Channel                        | Frequency | Channel           | Frequency |
| 100                            | 5500      | 149               | 5745      |
| 102                            | 5510      | 151               | 5755      |
| 104                            | 5520      | 153               | 5765      |
| 108                            | 5540      | 157               | 5785      |
| 110                            | 5550      | 159               | 5795      |
| 112                            | 5560      | 161               | 5805      |
| 116                            | 5580      | 165               | 5825      |
| 118                            | 5590      |                   |           |
| 120                            | 5600      |                   |           |
| 124                            | 5620      |                   |           |
| 126                            | 5630      |                   |           |
| 128                            | 5640      |                   |           |
| 132                            | 5660      |                   |           |
| 134                            | 5670      |                   |           |
| 136                            | 5680      |                   |           |
| 140                            | 5700      |                   |           |
| 142                            | 5710      |                   |           |
| 144                            | 5720      |                   |           |
|                                |           |                   |           |

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:

Carrier Frequency Channel

| Channel List for 802.11a/n/ac(20MHz) |                 |         |                 |         |                 |         |                 |
|--------------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| Channel                              | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 36                                   | 5180            | 52      | 5260            | 100     | 5500            | 149     | 5745            |
| 40                                   | 5200            | 60      | 5300            | 116     | 5580            | 157     | 5785            |
| 48                                   | 5240            | 64      | 5320            | 140     | 5700            | 165     | 5825            |



| Channel List for 802.11n/ac(40MHz) |                 |         |                 |         |                 |         |                 |
|------------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| Channel                            | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 38                                 | 5190            | 54      | 5270            | 102     | 5510            | 151     | 5755            |
| 46                                 | 5230            | 62      | 5310            | 110     | 5550            | 159     | 5795            |
| 134                                | 5670            |         |                 |         |                 |         |                 |

| Channel List for 802.11ac(80MHz) |                 |         |                 |         |                 |         |                 |
|----------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|-----------------|
| Channel                          | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) | Channel | Frequency (MHz) |
| 42                               | 5210            | 58      | 5290            | 106     | 5530            | 155     | 5775            |
| 122                              | 5610            |         |                 |         |                 |         |                 |

3.

| Ant | Brand | Model Name | Ant Type     | Connector | Gain (dBi) | NOTE     |
|-----|-------|------------|--------------|-----------|------------|----------|
| 1   | INOI  | A180       | PIFA antenna | N/A       | 0.77       | WLAN Ant |

Note: The antenna information refer the manufacturer provide report, applicable only to the tested sample identified in the report.



## 2.2 DESCRIPTION OF TEST MODES

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned above was evaluated respectively.

| Worst Mode | Description                              | Data Rate |
|------------|------------------------------------------|-----------|
| Mode 1     | TX IEEE 802.11a HT20 CH36&CH40&CH48      | 6 Mbps    |
| Mode 2     | TX IEEE 802.11a HT20 CH52&CH60&CH64      | 6 Mbps    |
| Mode 3     | TX IEEE 802.11a HT20 CH149&CH157&CH165   | 6 Mbps    |
| Mode 4     | TX IEEE 802.11n HT20 CH36&CH40&CH48      | MCS 0     |
| Mode 5     | TX IEEE 802.11ac VHT20 CH36&CH40&CH48    | NSS1 MCS0 |
| Mode 6     | TX IEEE 802.11n HT20 CH52&CH60&CH64      | MCS 0     |
| Mode 7     | TX IEEE 802.11ac VHT20 CH52&CH60&CH64    | NSS1 MCS0 |
| Mode 8     | TX IEEE 802.11n HT20 CH149&CH157&CH165   | MCS 0     |
| Mode 9     | TX IEEE 802.11ac VHT20 CH149&CH157&CH165 | NSS1 MCS0 |
| Mode 10    | TX IEEE 802.11n HT40 CH38&CH46           | MCS 0     |
| Mode 11    | TX IEEE 802.11ac VHT40 CH38&CH46         | NSS1 MCS0 |
| Mode 12    | TX IEEE 802.11n HT40 CH54 &CH62          | MCS 0     |
| Mode 13    | TX IEEE 802.11ac VHT40 CH54 &CH62        | NSS1 MCS0 |
| Mode 14    | TX IEEE 802.11n HT40 CH151&CH159         | MCS 0     |
| Mode 15    | TX IEEE 802.11ac VHT40 CH151&CH159       | NSS1 MCS0 |
| Mode 16    | TX IEEE 802.11ac VHT80 CH42              | NSS1 MCS0 |
| Mode 17    | TX IEEE 802.11ac VHT80 CH58              | NSS1 MCS0 |
| Mode 18    | TX IEEE 802.11ac VHT80 CH155             | NSS1 MCS0 |

- Note: (1) The measurements are performed at the highest, middle, lowest available channels.  
 (2) The measurements are performed at all Bit Rate of Transmitter, the worst data was reported.  
 (3) We have be tested for all avaiable U.S. voltage and frequencies(For 120V,50/60Hz and 240V, 50/60Hz) for which the device is capable of operation.  
 (4) The battery is fully-charged during the radited and RF conducted test.

### AC Conducted Emission

| Test Case             |                  |
|-----------------------|------------------|
| AC Conducted Emission | Mode 19: TX Mode |



### 2.3 TEST SOFTWARE AND POWER LEVEL

During testing channel & power controlling software provided by the customer was used to control the operating channel as well as the output power level.

| Test software Version           | Test program: 5G WIFI B1 |    |
|---------------------------------|--------------------------|----|
| engineering mode<br>*##83781##* | a                        | 14 |
|                                 | n20                      | 14 |
|                                 | n40                      | 14 |
|                                 | ac20                     | 14 |
|                                 | ac40                     | 14 |
|                                 | ac80                     | 14 |
| Test software Version           | Test program: 5G WIFI B2 |    |
| engineering mode<br>*##83781##* | a                        | 14 |
|                                 | n20                      | 14 |
|                                 | n40                      | 14 |
|                                 | ac20                     | 14 |
|                                 | ac40                     | 14 |
|                                 | ac80                     | 14 |
| Test software Version           | Test program: 5G WIFI B3 |    |
| engineering mode<br>*##83781##* | a                        | 14 |
|                                 | n20                      | 14 |
|                                 | n40                      | 14 |
|                                 | ac20                     | 14 |
|                                 | ac40                     | 14 |
|                                 | ac80                     | 14 |
| Test software Version           | Test program: 5G WIFI B4 |    |
| engineering mode<br>*##83781##* | a                        | 14 |
|                                 | n20                      | 14 |
|                                 | n40                      | 14 |
|                                 | ac20                     | 14 |
|                                 | ac40                     | 14 |
|                                 | ac80                     | 14 |



## 2.4 DESCRIPTION OF NECESSARY ACCESSORIES AND SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

### Accessories Equipment

| Description             | Manufacturer | Model     | S/N | Rating                                               |
|-------------------------|--------------|-----------|-----|------------------------------------------------------|
| Adapter                 | INOI         | IN-C01/19 | N/A | Input: 100-240V ~<br>50/60Hz 0.25A<br>Output: 5V, 2A |
| USB-A to USB-C<br>Cable | N/A          | N/A       | N/A | 1m, unshielded,<br>without ferrite core              |
|                         |              |           |     |                                                      |
|                         |              |           |     |                                                      |

### Auxiliary Equipment

| Description | Manufacturer | Model  | S/N | Rating |
|-------------|--------------|--------|-----|--------|
| Laptop      | HUAWEI       | HKF-16 | N/A | N/A    |
|             |              |        |     |        |
|             |              |        |     |        |
|             |              |        |     |        |
|             |              |        |     |        |

Note:

- (1) For detachable type I/O cable should be specified the length in cm in 『Length』 column.



## 2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

### Conducted Emission

| Equipment              | Manufacturer        | Model No. | Serial No.  | Cal. Date  | Cal. Until |
|------------------------|---------------------|-----------|-------------|------------|------------|
| EMI Test Receiver      | R&S                 | ESU       | 100372      | 2023.04.10 | 2024.04.09 |
| LISN                   | COM-POWER           | LI-115    | 02032       | 2023.04.10 | 2024.04.09 |
| LISN                   | SCHWARZBECK         | NNLK 8121 | 00847       | 2022.08.19 | 2023.08.18 |
| CE Cable               | N.A                 | C01       | N.A         | 2022.05.05 | 2023.05.04 |
| Transient Limiter      | CYBERTEK            | EM5010A   | E2250100049 | 2022.08.19 | 2023.08.18 |
| Temperature & Humidity | KTJ                 | TA218B    | N.A         | 2022.05.05 | 2023.05.04 |
| Testing Software       | EMC-I_V1.4.0.3_SKET |           |             |            |            |

### Radiation Test equipment

| Kind of Equipment         | Manufacturer        | Type No.      | Serial No. | Last calibration | Calibrated until |
|---------------------------|---------------------|---------------|------------|------------------|------------------|
| EMI Test Receiver         | R&S                 | ESU           | 100372     | 2023.04.10       | 2024.04.09       |
| Spectrum Analyzer         | Keysight            | N9010B        | MY60242508 | 2022.04.29       | 2023.04.28       |
| Bilog Antenna             | SCHWARZBECK         | VULB 9168     | 01447      | 2022.12.12       | 2025.12.11       |
| Horn Antenna(18GHz)       | SCHWARZBECK         | 3115          | 10SL0060   | 2022.06.02       | 2025.06.01       |
| Horn Antenna(40 GHz)      | A-INFO              | LB-180400-KF  | J211060273 | 2022.03.28       | 2025.03.27       |
| Pre-amplifier (9kHz-1GHz) | EMtrace             | RP01A         | 02017      | 2023.04.10       | 2024.04.09       |
| Pre-amplifier(1-26.5G)    | Agilent             | 8449B         | 3008A4722  | 2023.04.10       | 2024.04.09       |
| Pre-amplifier(40 GHz)     | com-mw              | LNPA_18-40-01 | 18050001   | 2022.06.08       | 2023.06.07       |
| RE Cable (9K-1G)          | N.A                 | R01           | N.A        | 2022.05.05       | 2023.05.04       |
| RE Cable (1-26G)          | N.A                 | R02           | N.A        | 2022.05.05       | 2023.05.04       |
| Temperature & Humidity    | KTJ                 | TA218B        | N.A        | 2022.05.05       | 2023.05.04       |
| Testing Software          | EMC-I_V1.4.0.3_SKET |               |            |                  |                  |

### RF Connected Test equipment

| Kind of Equipment                  | Manufacturer               | Type No. | Serial No. | Last calibration | Calibrated until |
|------------------------------------|----------------------------|----------|------------|------------------|------------------|
| Signal Generator                   | Keysight                   | N5182B   | MY59100717 | 2022.04.30       | 2023.04.29       |
| Signal Analyzer                    | Keysight                   | N9010B   | MY60242508 | 2022.04.29       | 2023.04.28       |
| Temperature & Humidity             | KTJ                        | TA218B   | N/A        | 2022.05.05       | 2023.05.04       |
| Temperature& Humidity test chamber | AISRY                      | LX-1000L | 171200018  | 2022.05.10       | 2023.05.09       |
| Attenuator                         | eastsheep                  | 90db     | N/A        | 2022.04.29       | 2023.04.28       |
| Testing Software                   | MTS 8310_2.0.0.0_MWRF-TEST |          |            |                  |                  |



### 3. EMC EMISSION TEST

#### 3.1 CONDUCTED EMISSION MEASUREMENT

##### 3.1.1 POWER LINE CONDUCTED EMISSION Limits (Frequency Range 150KHz-30MHz)

| FREQUENCY (MHz) | Class B (dBuV) |           | Standard |
|-----------------|----------------|-----------|----------|
|                 | Quasi-peak     | Average   |          |
| 0.15 -0.5       | 66 - 56 *      | 56 - 46 * | CISPR    |
| 0.50 -5.0       | 56.00          | 46.00     | CISPR    |
| 5.0 -30.0       | 60.00          | 50.00     | CISPR    |

|           |           |           |     |
|-----------|-----------|-----------|-----|
| 0.15 -0.5 | 66 - 56 * | 56 - 46 * | FCC |
| 0.50 -5.0 | 56.00     | 46.00     | FCC |
| 5.0 -30.0 | 60.00     | 50.00     | FCC |

Note:

- (1) The tighter limit applies at the band edges.
- (2) The limit of “ \* ” marked band means the limitation decreases linearly with the logarithm of the frequency in the range.

The following table is the setting of the receiver

| Receiver Parameters | Setting  |
|---------------------|----------|
| Attenuation         | 10 dB    |
| Start Frequency     | 0.15 MHz |
| Stop Frequency      | 30 MHz   |
| IF Bandwidth        | 9 kHz    |



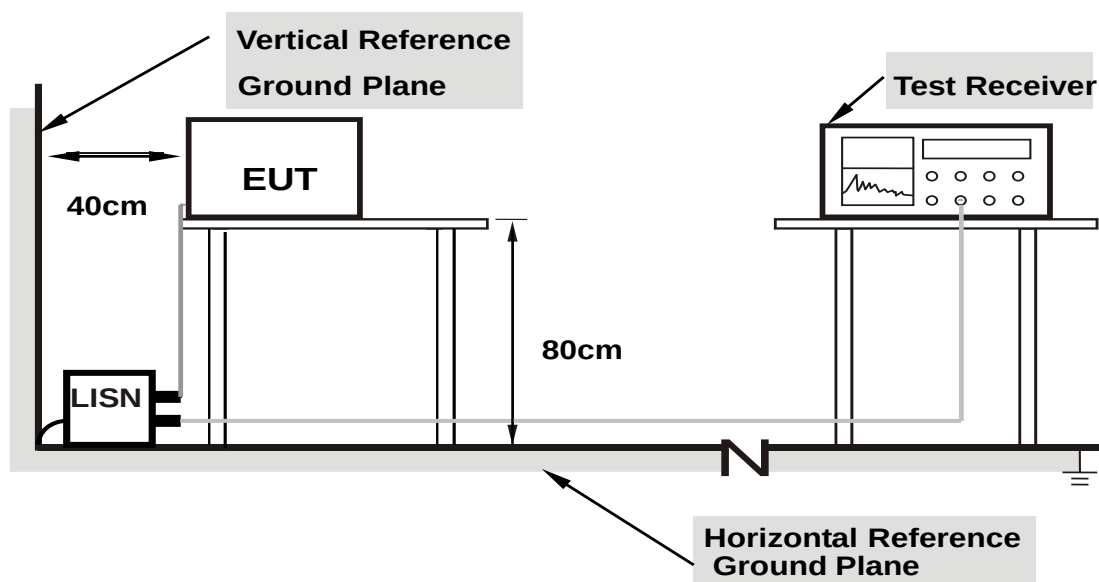
### 3.1.2 TEST PROCEDURE

- The EUT is 0.8 m from the horizontal ground plane and 0.4 m from the vertical ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments are powered from additional LISN(s). The LISN provides 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back and forth in the center forming a bundle 30 to 40 cm long.
- I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.
- LISN is at least 80 cm from the nearest part of EUT chassis.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

### 3.1.3 DEVIATION FROM TEST STANDARD

No deviation

### 3.1.4 TEST SETUP



**Note: 1. Support units were connected to second LISN.**

**2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes support units.**

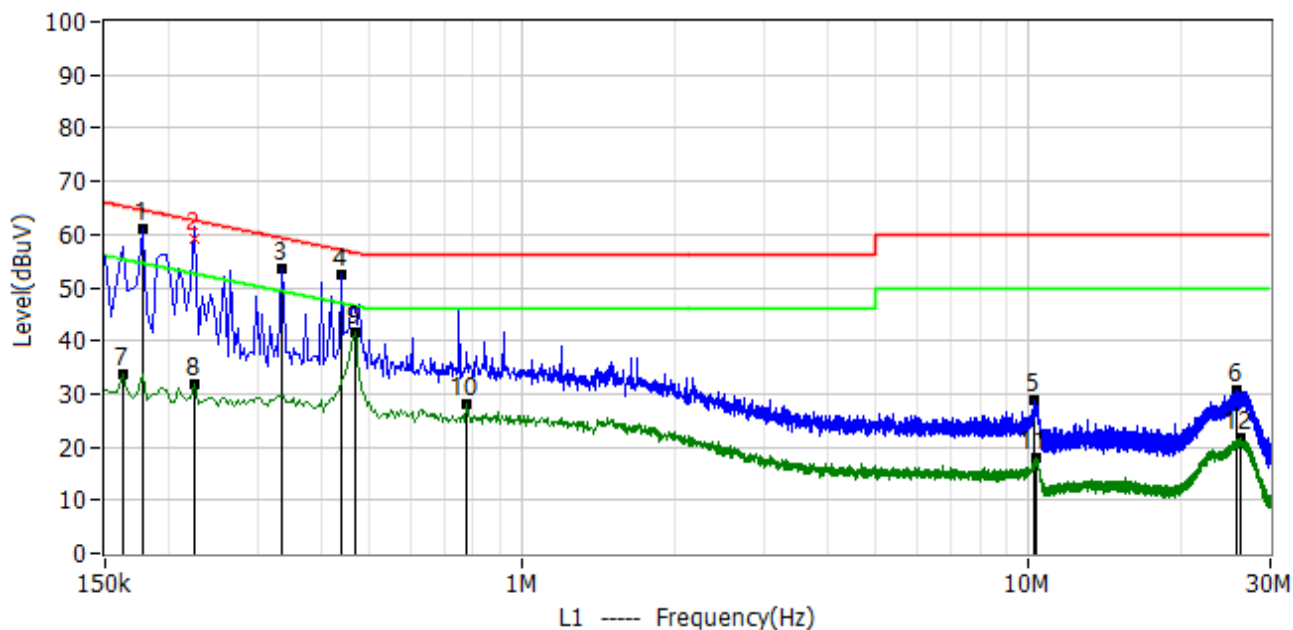
### 3.1.5 EUT OPERATING CONDITIONS

The EUT was configured for testing in a typical fashion (as a customer would normally use it). The EUT has been programmed to continuously transmit during test. This operating condition was tested and used to collect the included data.



### 3.1.6 TEST RESULTS

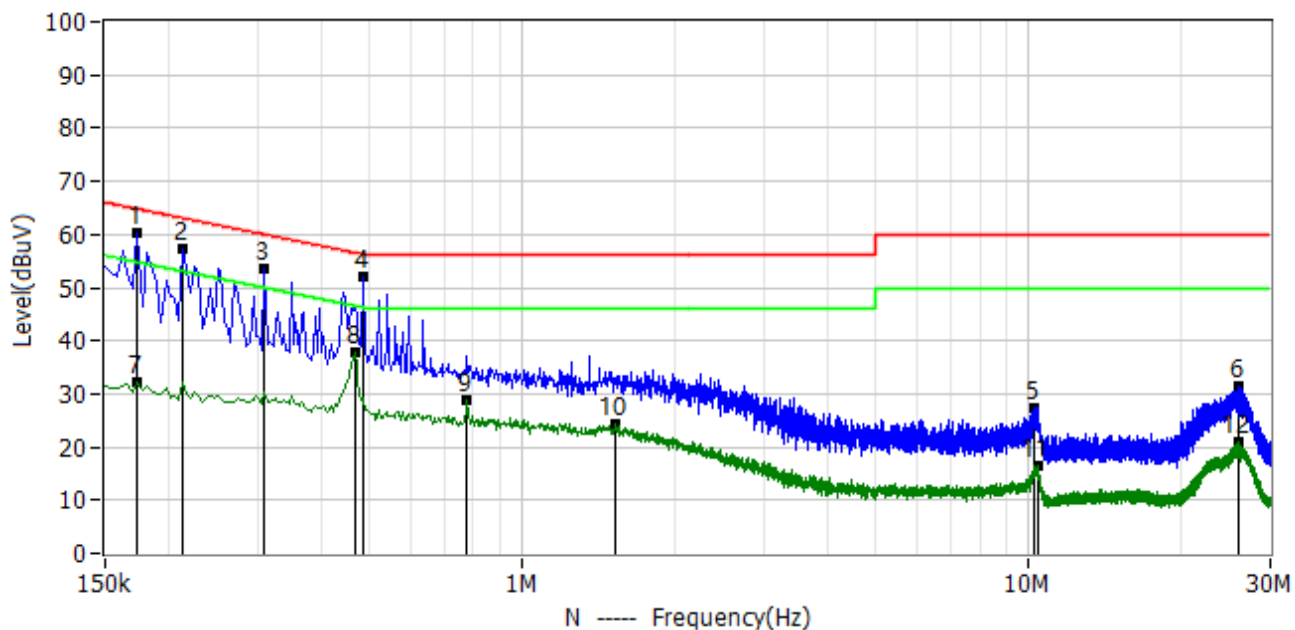
|                            |                          |
|----------------------------|--------------------------|
| Project: LGT23C066         | Test Engineer: Dylan.shi |
| EUT: Smartphone            | Temperature: 26.3°C      |
| M/N: A180                  | Humidity: 60%RH          |
| Test Voltage: AC 120V/60Hz | Test Data: 2023-04-12    |
| Test Mode: 5G Wi-Fi TX     |                          |
| Note:                      |                          |



| No. | Frequency  | Reading dBuV | Factor dB | Level dBuV | Limit dBuV | Margin dB | Detector | Polar |
|-----|------------|--------------|-----------|------------|------------|-----------|----------|-------|
| 1*  | 178.000kHz | 50.57        | 10.58     | 61.15      | 64.58      | -3.43     | QP       | L1    |
| 2   | 226.000kHz | 48.64        | 10.60     | 59.24      | 62.60      | -3.36     | QP       | L1    |
| 3*  | 334.000kHz | 42.96        | 10.59     | 53.55      | 59.35      | -5.80     | QP       | L1    |
| 4*  | 438.000kHz | 41.89        | 10.58     | 52.47      | 57.10      | -4.63     | QP       | L1    |
| 5*  | 10.246MHz  | 17.93        | 10.86     | 28.79      | 60.00      | -31.21    | QP       | L1    |
| 6*  | 25.766MHz  | 19.48        | 11.32     | 30.80      | 60.00      | -29.20    | QP       | L1    |
| 7*  | 162.000kHz | 23.18        | 10.57     | 33.75      | 55.36      | -21.61    | AV       | L1    |
| 8*  | 226.000kHz | 21.24        | 10.60     | 31.84      | 52.60      | -20.76    | AV       | L1    |
| 9*  | 466.000kHz | 31.16        | 10.58     | 41.74      | 46.58      | -4.85     | AV       | L1    |
| 10* | 778.000kHz | 17.50        | 10.58     | 28.08      | 46.00      | -17.92    | AV       | L1    |
| 11* | 10.374MHz  | 7.26         | 10.86     | 18.12      | 50.00      | -31.88    | AV       | L1    |
| 12* | 26.130MHz  | 10.28        | 11.32     | 21.60      | 50.00      | -28.40    | AV       | L1    |



|                            |                          |
|----------------------------|--------------------------|
| Project: LGT23C066         | Test Engineer: Dylan.shi |
| EUT: Smartphone            | Temperature: 26.3°C      |
| M/N: A180                  | Humidity: 60%RH          |
| Test Voltage: AC 120V/60Hz | Test Data: 2023-04-12    |
| Test Mode: 5G Wi-Fi TX     |                          |
| Note:                      |                          |



| No. | Frequency  | Reading dBuV | Factor dB | Level dBuV | Limit dBuV | Margin dB | Detector | Polar |
|-----|------------|--------------|-----------|------------|------------|-----------|----------|-------|
| 1*  | 174.000kHz | 49.73        | 10.58     | 60.31      | 64.77      | -4.46     | QP       | N     |
| 2*  | 214.000kHz | 46.64        | 10.60     | 57.24      | 63.05      | -5.81     | QP       | N     |
| 3*  | 310.000kHz | 43.07        | 10.59     | 53.66      | 59.97      | -6.31     | QP       | N     |
| 4*  | 486.000kHz | 41.55        | 10.58     | 52.13      | 56.24      | -4.11     | QP       | N     |
| 5*  | 10.294MHz  | 16.61        | 10.88     | 27.49      | 60.00      | -32.51    | QP       | N     |
| 6*  | 26.074MHz  | 19.91        | 11.45     | 31.36      | 60.00      | -28.64    | QP       | N     |
| 7*  | 174.000kHz | 21.79        | 10.58     | 32.37      | 54.77      | -22.40    | AV       | N     |
| 8*  | 466.000kHz | 27.07        | 10.58     | 37.65      | 46.58      | -8.94     | AV       | N     |
| 9*  | 778.000kHz | 18.22        | 10.58     | 28.80      | 46.00      | -17.20    | AV       | N     |
| 10* | 1.522MHz   | 13.78        | 10.67     | 24.45      | 46.00      | -21.55    | AV       | N     |
| 11* | 10.402MHz  | 5.47         | 10.88     | 16.35      | 50.00      | -33.65    | AV       | N     |
| 12* | 25.970MHz  | 9.36         | 11.45     | 20.81      | 50.00      | -29.19    | AV       | N     |



### 3.2 RADIATED EMISSION AND ( BANDEGE) MEASUREMENT

#### 3.2.1 RADIATED EMISSION LIMITS (Frequency Range 9kHz-1000MHz)

In case the emission fall within the restricted band specified on 15.407(b)7&15.205/209(a), then the limit in the table below has to be followed.

| Frequencies (MHz) | Field Strength (micorvolts/meter) | Measurement Distance (meters) |
|-------------------|-----------------------------------|-------------------------------|
| 0.009~0.490       | 2400/F(KHz)                       | 300                           |
| 0.490~1.705       | 24000/F(KHz)                      | 30                            |
| 1.705~30.0        | 30                                | 30                            |
| 30~88             | 100                               | 3                             |
| 88~216            | 150                               | 3                             |
| 216~960           | 200                               | 3                             |
| Above 960         | 500                               | 3                             |

#### LIMITS OF RADIATED EMISSION MEASUREMENT (Above 1000MHz)

| FREQUENCY (MHz) | Class B (dBuV/m) (at 3M) |         |
|-----------------|--------------------------|---------|
|                 | PEAK                     | AVERAGE |
| Above 1000      | 68.2                     | 54      |

Notes:

- (1) The limit for radiated test was performed according to FCC PART 15E.
- (2) The tighter limit applies at the band edges.
- (3) Emission level (dBuV/m)=20log Emission level (uV/m).

#### LIMITS OF RESTRICTED FREQUENCY BANDS

| FREQUENCY (MHz)   | FREQUENCY (MHz)     | FREQUENCY (MHz) | FREQUENCY (GHz) |
|-------------------|---------------------|-----------------|-----------------|
| 0.090-0.110       | 16.42-16.423        | 399.9-410       | 4.5-5.15        |
| 0.495-0.505       | 16.69475-16.69525   | 608-614         | 5.35-5.46       |
| 2.1735-2.1905     | 16.80425-16.80475   | 960-1240        | 7.25-7.75       |
| 4.125-4.128       | 25.5-25.67          | 1300-1427       | 8.025-8.5       |
| 4.17725-4.17775   | 37.5-38.25          | 1435-1626.5     | 9.0-9.2         |
| 4.20725-4.20775   | 73-74.6             | 1645.5-1646.5   | 9.3-9.5         |
| 6.215-6.218       | 74.8-75.2           | 1660-1710       | 10.6-12.7       |
| 6.26775-6.26825   | 108-121.94          | 1718.8-1722.2   | 13.25-13.4      |
| 6.31175-6.31225   | 123-138             | 2200-2300       | 14.47-14.5      |
| 8.291-8.294       | 149.9-150.05        | 2310-2390       | 15.35-16.2      |
| 8.362-8.366       | 156.52475-156.52525 | 2483.5-2500     | 17.7-21.4       |
| 8.37625-8.38675   | 156.7-156.9         | 2690-2900       | 22.01-23.12     |
| 8.41425-8.41475   | 162.0125-167.17     | 3260-3267       | 23.6-24.0       |
| 12.29-12.293      | 167.72-173.2        | 3332-3339       | 31.2-31.8       |
| 12.51975-12.52025 | 240-285             | 3345.8-3358     | 36.43-36.5      |
| 12.57675-12.57725 | 322-335.4           | 3600-4400       | Above 38.6      |
| 13.36-13.41       |                     |                 |                 |

Note: In case the emission radiated emission above 1000MHz fall within the restricted band the restricted frequency bands, the peak limit is 74 dBuV/m.



## LIMITS OF EMISSIONS OUTSIDE OF THE FREQUENCY BANDS

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
  - (i) 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.

Note: dBuV/m(at 3M) = EIRP(dBm) + 95.3.

Peak Limit = -27dBm/MHz + 95.3 = 68.3 dBuV/m.

| Spectrum Parameter                    | Setting                         |
|---------------------------------------|---------------------------------|
| Attenuation                           | Auto                            |
| Detector                              | Peak                            |
| Start Frequency                       | 1000 MHz(Peak/AV)               |
| Stop Frequency                        | 10th carrier harmonic (Peak/AV) |
| RB / VB (emission in restricted band) | 1 MHz / 1 MHz, AV=1 MHz /3 MHz  |

For Band edge

| Spectrum Parameter                    | Setting                        |
|---------------------------------------|--------------------------------|
| Detector                              | Peak                           |
| RB / VB (emission in restricted band) | 1 MHz / 1 MHz, AV=1 MHz /3 MHz |

| Receiver Parameter     | Setting                              |
|------------------------|--------------------------------------|
| Attenuation            | Auto                                 |
| Start ~ Stop Frequency | 9kHz~90kHz / RB 200Hz for PK & AV    |
| Start ~ Stop Frequency | 90kHz~110kHz / RB 200Hz for QP       |
| Start ~ Stop Frequency | 110kHz~490kHz / RB 200Hz for PK & AV |
| Start ~ Stop Frequency | 490kHz~30MHz / RB 9kHz for QP        |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP     |

### 3.2.2 TEST PROCEDURE

- The measuring distance at 3 m shall be used for measurements at frequency 0.009MHz up to 1GHz, and above 1GHz.
- The EUT was placed on the top of a rotating table 0.8 m (above 1GHz is 1.5 m) above the ground at a 3 m anechoic chamber test site. The table was rotated 360 degree to determine the position of the highest radiation.
- The height of the equipment shall be 0.8 m (above 1GHz is 1.5 m); the height of the test antenna shall vary between 1 m to 4 m. Horizontal and vertical polarization of the antenna are set to make the measurement.
- The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and QuasiPeak detector mode will be re-measured.
- If the Peak Mode measured value is compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and no additional QP Mode measurement was performed.
- For the actual test configuration, please refer to the related Item –EUT Test Photos.

Note:

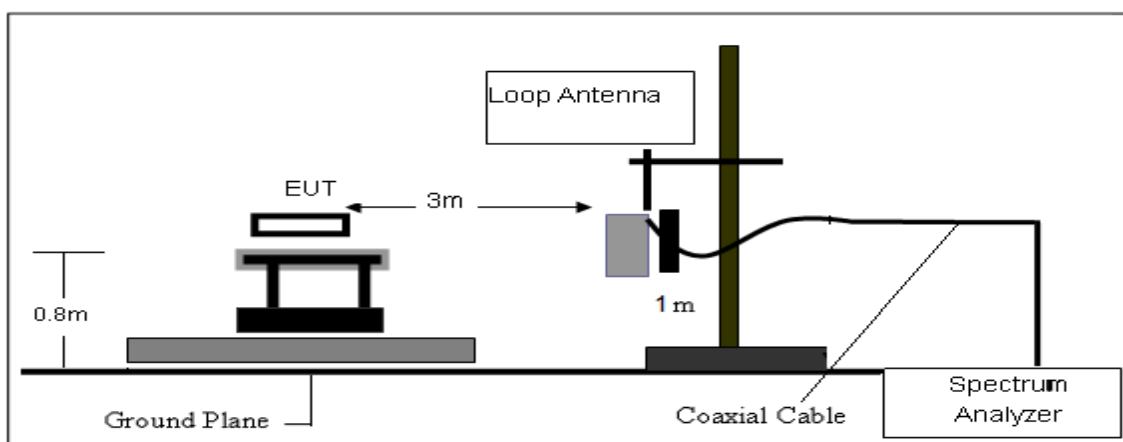
Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

### 3.2.2 DEVIATION FROM TEST STANDARD

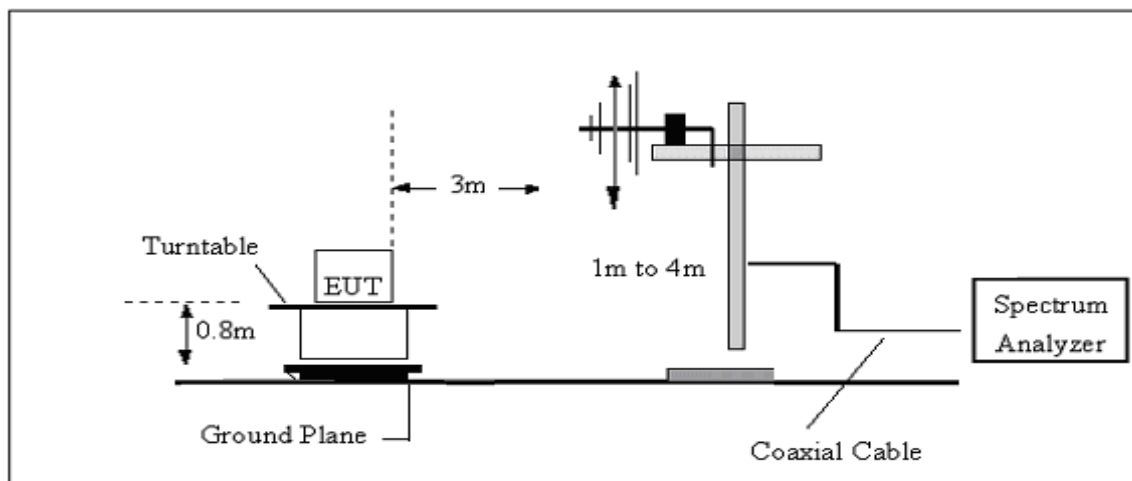
No deviation

### 3.2.3 TEST SETUP

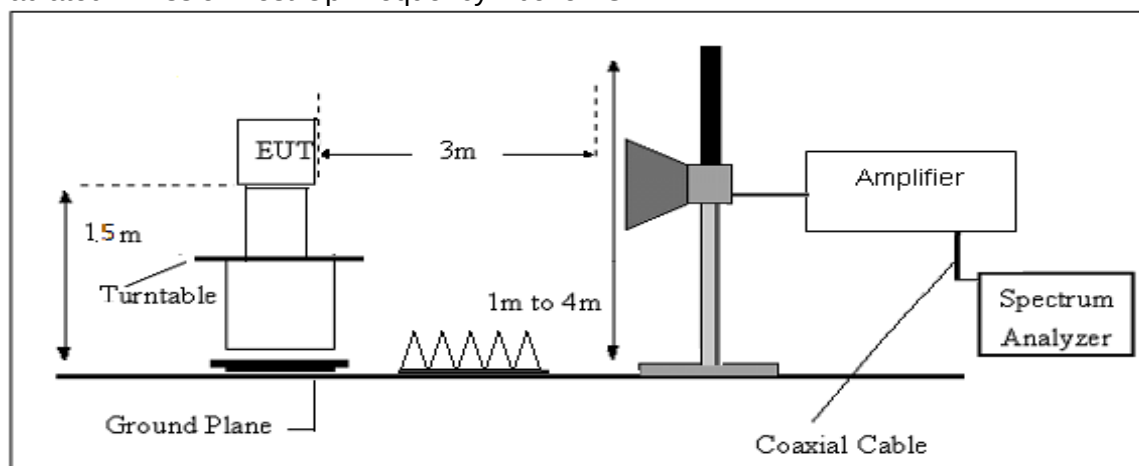
(A) Radiated Emission Test-Up Frequency Below 30MHz



(B) Radiated Emission Test-Up Frequency 30MHz~1GHz



(C) Radiated Emission Test-Up Frequency Above 1GHz





### 3.2.4 EUT OPERATING CONDITIONS

The EUT tested system was configured as the statements of 2.4 Unless otherwise a special operating condition is specified in the follows during the testing.

### 3.2.5 FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CL - AG$$

Where

FS = Field Strength

CL = Cable Attenuation Factor (Cable Loss)

RA = Reading Amplitude

AG = Amplifier Gain

AF = Antenna Factor

For example

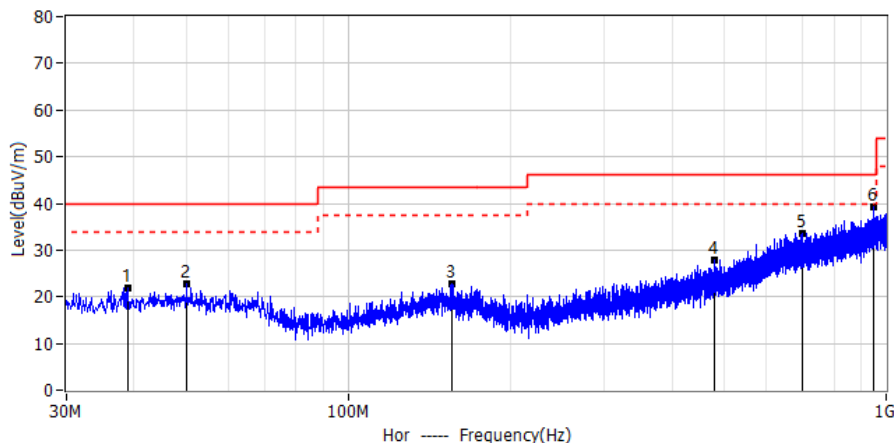
| Frequency | FS       | RA       | AF   | CL   | AG   | Factor |
|-----------|----------|----------|------|------|------|--------|
| (MHz)     | (dBμV/m) | (dBμV/m) | (dB) | (dB) | (dB) | (dB)   |
| 300       | 40       | 58.1     | 12.2 | 1.6  | 31.9 | -18.1  |

$$\text{Factor} = \text{AF} + \text{CL} - \text{AG}$$

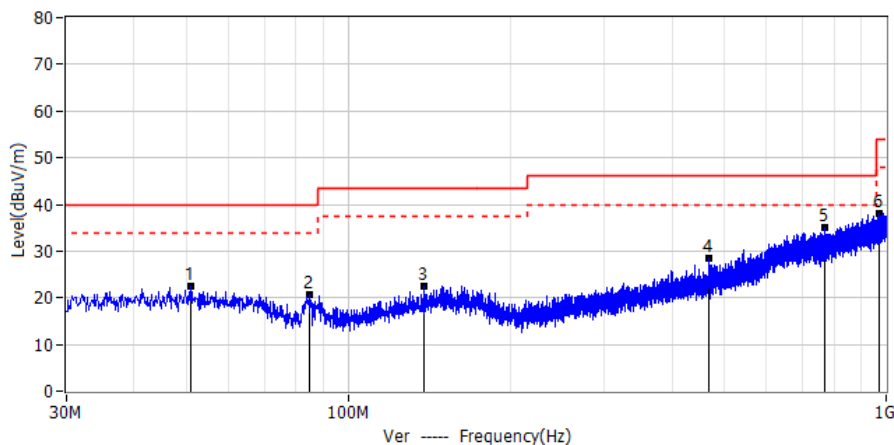


### 3.2.6 TEST RESULTS

|                        |                          |
|------------------------|--------------------------|
| Project: LGT23C066     | Test Engineer: Dylan.shi |
| EUT: Smartphone        | Temperature: 23.4°C      |
| M/N: A180              | Humidity: 65%RH          |
| Test Voltage: Battery  | Test Data: 2023-03-31    |
| Test Mode: 5G Wi-Fi TX |                          |
| Note:                  |                          |



| No. | Frequency  | Reading dBuV | Factor dB/m | Level dBuV/m | Limit dBuV/m | Margin dB | Detector | Polar |
|-----|------------|--------------|-------------|--------------|--------------|-----------|----------|-------|
| 1*  | 38.973MHz  | 2.78         | 19.21       | 21.99        | 40.00        | -18.01    | QP       | Hor   |
| 2*  | 50.128MHz  | 3.46         | 19.35       | 22.81        | 40.00        | -17.19    | QP       | Hor   |
| 3*  | 155.858MHz | 3.01         | 19.90       | 22.91        | 43.50        | -20.59    | QP       | Hor   |
| 4*  | 479.474MHz | 3.39         | 24.54       | 27.93        | 46.00        | -18.07    | QP       | Hor   |
| 5*  | 697.360MHz | 3.77         | 29.84       | 33.61        | 46.00        | -12.39    | QP       | Hor   |
| 6*  | 947.256MHz | 5.29         | 33.89       | 39.18        | 46.00        | -6.82     | QP       | Hor   |



| No. | Frequency  | Reading dBuV | Factor dB/m | Level dBuV/m | Limit dBuV/m | Margin dB | Detector | Polar |
|-----|------------|--------------|-------------|--------------|--------------|-----------|----------|-------|
| 1*  | 51.098MHz  | 3.23         | 19.28       | 22.51        | 40.00        | -17.49    | QP       | Ver   |
| 2*  | 84.805MHz  | 5.56         | 15.13       | 20.69        | 40.00        | -19.31    | QP       | Ver   |
| 3*  | 138.761MHz | 3.60         | 18.98       | 22.58        | 43.50        | -20.92    | QP       | Ver   |
| 4*  | 468.925MHz | 4.17         | 24.31       | 28.48        | 46.00        | -17.52    | QP       | Ver   |
| 5*  | 769.868MHz | 4.26         | 30.78       | 35.04        | 46.00        | -10.96    | QP       | Ver   |
| 6*  | 969.324MHz | 3.67         | 34.33       | 38.00        | 54.00        | -16.00    | QP       | Ver   |



### 3.2.7 TEST RESULTS(Above 1GHz)

|                           |                          |
|---------------------------|--------------------------|
| Project: LGT23C066        | Test Engineer: Dylan.shi |
| EUT: Smartphone           | Temperature: 25°C        |
| M/N: A180                 | Humidity: 62%RH          |
| Test Voltage: Battery     | Test Data: 2023-04-08    |
| Test Mode: 802.11n20 5180 |                          |
| Note:                     |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.476GHz  | 60.93           | -20.97         | 39.96           | 74.00           | -34.04       | PK       | Hor   |
| 2*  | 2.092GHz  | 58.13           | -15.26         | 42.87           | 74.00           | -31.13       | PK       | Hor   |
| 3*  | 3.321GHz  | 53.77           | -8.45          | 45.32           | 74.00           | -28.68       | PK       | Hor   |
| 4*  | 4.802GHz  | 53.88           | -5.99          | 47.89           | 74.00           | -26.11       | PK       | Hor   |
| 5*  | 9.020GHz  | 54.71           | -1.17          | 53.54           | 74.00           | -20.46       | PK       | Hor   |
| 6*  | 17.569GHz | 48.78           | 8.22           | 57.00           | 74.00           | -17.00       | PK       | Hor   |
| 7*  | 17.569GHz | 38.08           | 8.22           | 46.30           | 54.00           | -7.70        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 1.342GHz  | 61.44           | -21.84         | 39.60           | 74.00           | -34.40       | PK       | Ver   |
| 2*  | 3.231GHz  | 54.05           | -8.42          | 45.63           | 74.00           | -28.37       | PK       | Ver   |
| 3*  | 4.793GHz  | 53.48           | -5.98          | 47.50           | 74.00           | -26.50       | PK       | Ver   |
| 4*  | 8.941GHz  | 54.28           | -1.34          | 52.94           | 74.00           | -21.06       | PK       | Ver   |
| 5*  | 11.391GHz | 53.19           | 1.86           | 55.05           | 74.00           | -18.95       | PK       | Ver   |
| 6*  | 17.726GHz | 48.80           | 8.33           | 57.13           | 74.00           | -16.87       | PK       | Ver   |
| 7*  | 11.391GHz | 42.94           | 1.86           | 44.80           | 54.00           | -9.20        | AV       | Ver   |
| 8*  | 17.726GHz | 38.77           | 8.33           | 47.10           | 54.00           | -6.90        | AV       | Ver   |



|                           |                          |
|---------------------------|--------------------------|
| Project: LGT23C066        | Test Engineer: Dylan.shi |
| EUT: Smartphone           | Temperature: 25°C        |
| M/N: A180                 | Humidity: 62%RH          |
| Test Voltage: Battery     | Test Data: 2023-04-08    |
| Test Mode: 802.11n20 5200 |                          |
| Note:                     |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.385GHz  | 60.66           | -21.50         | 39.16           | 74.00           | -34.84       | PK       | Hor   |
| 2*  | 1.927GHz  | 58.57           | -16.97         | 41.60           | 74.00           | -32.40       | PK       | Hor   |
| 3*  | 2.738GHz  | 54.55           | -9.72          | 44.83           | 74.00           | -29.17       | PK       | Hor   |
| 4*  | 4.859GHz  | 53.98           | -6.03          | 47.95           | 74.00           | -26.05       | PK       | Hor   |
| 5*  | 8.705GHz  | 55.09           | -2.00          | 53.09           | 74.00           | -20.91       | PK       | Hor   |
| 6*  | 16.464GHz | 50.19           | 6.98           | 57.17           | 74.00           | -16.83       | PK       | Hor   |
| 7*  | 16.464GHz | 40.12           | 6.98           | 47.10           | 54.00           | -6.90        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 1.623GHz  | 60.46           | -19.96         | 40.50           | 74.00           | -33.50       | PK       | Ver   |
| 2*  | 2.621GHz  | 54.43           | -10.34         | 44.09           | 74.00           | -29.91       | PK       | Ver   |
| 3*  | 3.097GHz  | 53.80           | -8.37          | 45.43           | 74.00           | -28.57       | PK       | Ver   |
| 4*  | 5.004GHz  | 54.36           | -6.15          | 48.21           | 74.00           | -25.79       | PK       | Ver   |
| 5*  | 9.417GHz  | 55.76           | -1.17          | 54.59           | 74.00           | -19.41       | PK       | Ver   |
| 6*  | 17.839GHz | 49.53           | 8.41           | 57.94           | 74.00           | -16.06       | PK       | Ver   |
| 7*  | 9.417GHz  | 44.97           | -1.17          | 43.80           | 54.00           | -10.20       | AV       | Ver   |
| 8*  | 17.839GHz | 39.79           | 8.41           | 48.20           | 54.00           | -5.80        | AV       | Ver   |



|                           |                          |
|---------------------------|--------------------------|
| Project: LGT23C066        | Test Engineer: Dylan.shi |
| EUT: Smartphone           | Temperature: 25°C        |
| M/N: A180                 | Humidity: 62%RH          |
| Test Voltage: Battery     | Test Data: 2023-04-08    |
| Test Mode: 802.11n20 5240 |                          |
| Note:                     |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 2.009GHz  | 57.35           | -16.13         | 41.22           | 74.00           | -32.78       | PK       | Hor   |
| 2*  | 3.357GHz  | 54.08           | -8.46          | 45.62           | 74.00           | -28.38       | PK       | Hor   |
| 3*  | 4.704GHz  | 52.98           | -5.91          | 47.07           | 74.00           | -26.93       | PK       | Hor   |
| 4*  | 8.074GHz  | 55.49           | -3.79          | 51.70           | 74.00           | -22.30       | PK       | Hor   |
| 5*  | 14.281GHz | 50.13           | 5.90           | 56.03           | 74.00           | -17.97       | PK       | Hor   |
| 6*  | 17.911GHz | 49.28           | 8.46           | 57.74           | 74.00           | -16.26       | PK       | Hor   |
| 7*  | 14.281GHz | 38.80           | 5.90           | 44.70           | 54.00           | -9.30        | AV       | Hor   |
| 8*  | 17.911GHz | 38.24           | 8.46           | 46.70           | 54.00           | -7.30        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 1.389GHz  | 60.85           | -21.47         | 39.38           | 74.00           | -34.62       | PK       | Ver   |
| 2*  | 2.358GHz  | 57.49           | -12.48         | 45.01           | 74.00           | -28.99       | PK       | Ver   |
| 3*  | 3.144GHz  | 53.74           | -8.39          | 45.35           | 74.00           | -28.65       | PK       | Ver   |
| 4*  | 4.842GHz  | 53.45           | -6.02          | 47.43           | 74.00           | -26.57       | PK       | Ver   |
| 5*  | 11.338GHz | 52.67           | 1.83           | 54.50           | 74.00           | -19.50       | PK       | Ver   |
| 6*  | 14.303GHz | 51.02           | 5.90           | 56.92           | 74.00           | -17.08       | PK       | Ver   |
| 7*  | 11.338GHz | 43.17           | 1.83           | 45.00           | 54.00           | -9.00        | AV       | Ver   |
| 8*  | 14.303GHz | 40.00           | 5.90           | 45.90           | 54.00           | -8.10        | AV       | Ver   |



|                           |                          |
|---------------------------|--------------------------|
| Project: LGT23C066        | Test Engineer: Dylan.shi |
| EUT: Smartphone           | Temperature: 25°C        |
| M/N: A180                 | Humidity: 62%RH          |
| Test Voltage: Battery     | Test Data: 2023-04-08    |
| Test Mode: 802.11n20 5260 |                          |
| Note:                     |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.682GHz  | 59.48           | -19.39         | 40.09           | 74.00           | -33.91       | PK       | Hor   |
| 2*  | 2.475GHz  | 55.34           | -11.25         | 44.09           | 74.00           | -29.91       | PK       | Hor   |
| 3*  | 4.902GHz  | 53.90           | -6.06          | 47.84           | 74.00           | -26.16       | PK       | Hor   |
| 4*  | 8.091GHz  | 55.80           | -3.74          | 52.06           | 74.00           | -21.94       | PK       | Hor   |
| 5*  | 11.491GHz | 52.55           | 1.92           | 54.47           | 74.00           | -19.53       | PK       | Hor   |
| 6*  | 17.779GHz | 48.76           | 8.37           | 57.13           | 74.00           | -16.87       | PK       | Hor   |
| 7*  | 11.491GHz | 41.68           | 1.92           | 43.60           | 54.00           | -10.40       | AV       | Hor   |
| 8*  | 17.779GHz | 39.13           | 8.37           | 47.50           | 54.00           | -6.50        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 1.427GHz  | 61.51           | -21.23         | 40.28           | 74.00           | -33.72       | PK       | Ver   |
| 2*  | 2.492GHz  | 55.69           | -11.07         | 44.62           | 74.00           | -29.38       | PK       | Ver   |
| 3*  | 3.350GHz  | 55.00           | -8.46          | 46.54           | 74.00           | -27.46       | PK       | Ver   |
| 4*  | 4.370GHz  | 53.94           | -6.30          | 47.64           | 74.00           | -26.36       | PK       | Ver   |
| 5*  | 8.960GHz  | 54.63           | -1.28          | 53.35           | 74.00           | -20.65       | PK       | Ver   |
| 6*  | 17.949GHz | 49.39           | 8.48           | 57.87           | 74.00           | -16.13       | PK       | Ver   |
| 7*  | 17.949GHz | 39.52           | 8.48           | 48.00           | 54.00           | -6.00        | AV       | Ver   |



|                           |                          |
|---------------------------|--------------------------|
| Project: LGT23C066        | Test Engineer: Dylan.shi |
| EUT: Smartphone           | Temperature: 25°C        |
| M/N: A180                 | Humidity: 62%RH          |
| Test Voltage: Battery     | Test Data: 2023-04-08    |
| Test Mode: 802.11n20 5300 |                          |
| Note:                     |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.421GHz  | 60.99           | -21.27         | 39.72           | 74.00           | -34.28       | PK       | Hor   |
| 2*  | 2.545GHz  | 55.42           | -10.75         | 44.67           | 74.00           | -29.33       | PK       | Hor   |
| 3*  | 3.369GHz  | 53.78           | -8.46          | 45.32           | 74.00           | -28.68       | PK       | Hor   |
| 4*  | 4.840GHz  | 54.05           | -6.02          | 48.03           | 74.00           | -25.97       | PK       | Hor   |
| 5*  | 8.943GHz  | 54.66           | -1.33          | 53.33           | 74.00           | -20.67       | PK       | Hor   |
| 6*  | 17.958GHz | 49.67           | 8.49           | 58.16           | 74.00           | -15.84       | PK       | Hor   |
| 7*  | 17.958GHz | 38.81           | 8.49           | 47.30           | 54.00           | -6.70        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 2.275GHz  | 56.52           | -13.35         | 43.17           | 74.00           | -30.83       | PK       | Ver   |
| 2*  | 3.015GHz  | 54.27           | -8.34          | 45.93           | 74.00           | -28.07       | PK       | Ver   |
| 3*  | 4.774GHz  | 53.44           | -5.97          | 47.47           | 74.00           | -26.53       | PK       | Ver   |
| 4*  | 8.761GHz  | 54.81           | -1.85          | 52.96           | 74.00           | -21.04       | PK       | Ver   |
| 5*  | 14.424GHz | 51.38           | 5.91           | 57.29           | 74.00           | -16.71       | PK       | Ver   |
| 6*  | 17.894GHz | 49.19           | 8.45           | 57.64           | 74.00           | -16.36       | PK       | Ver   |
| 7*  | 14.424GHz | 40.69           | 5.91           | 46.60           | 54.00           | -7.40        | AV       | Ver   |
| 8*  | 17.894GHz | 38.65           | 8.45           | 47.10           | 54.00           | -6.90        | AV       | Ver   |



|                           |                          |
|---------------------------|--------------------------|
| Project: LGT23C066        | Test Engineer: Dylan.shi |
| EUT: Smartphone           | Temperature: 25°C        |
| M/N: A180                 | Humidity: 62%RH          |
| Test Voltage: Battery     | Test Data: 2023-04-08    |
| Test Mode: 802.11n20 5320 |                          |
| Note:                     |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.842GHz  | 57.66           | -17.83         | 39.83           | 74.00           | -34.17       | PK       | Hor   |
| 2*  | 2.851GHz  | 54.12           | -9.13          | 44.99           | 74.00           | -29.01       | PK       | Hor   |
| 3*  | 4.313GHz  | 52.69           | -6.55          | 46.14           | 74.00           | -27.86       | PK       | Hor   |
| 4*  | 5.705GHz  | 56.44           | -7.66          | 48.78           | 74.00           | -25.22       | PK       | Hor   |
| 5*  | 7.590GHz  | 56.44           | -4.24          | 52.20           | 74.00           | -21.80       | PK       | Hor   |
| 6*  | 17.898GHz | 48.64           | 8.45           | 57.09           | 74.00           | -16.91       | PK       | Hor   |
| 7*  | 17.898GHz | 39.15           | 8.45           | 47.60           | 54.00           | -6.40        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 1.999GHz  | 58.77           | -16.24         | 42.53           | 74.00           | -31.47       | PK       | Ver   |
| 2*  | 3.272GHz  | 54.79           | -8.43          | 46.36           | 74.00           | -27.64       | PK       | Ver   |
| 3*  | 4.795GHz  | 55.42           | -5.98          | 49.44           | 74.00           | -24.56       | PK       | Ver   |
| 4*  | 8.999GHz  | 55.82           | -1.17          | 54.65           | 74.00           | -19.35       | PK       | Ver   |
| 5*  | 11.391GHz | 52.91           | 1.86           | 54.77           | 74.00           | -19.23       | PK       | Ver   |
| 6*  | 17.709GHz | 49.86           | 8.32           | 58.18           | 74.00           | -15.82       | PK       | Ver   |
| 7*  | 11.391GHz | 42.94           | 1.86           | 44.80           | 54.00           | -9.20        | AV       | Ver   |
| 8*  | 17.709GHz | 38.58           | 8.32           | 46.90           | 54.00           | -7.10        | AV       | Ver   |



|                            |                          |
|----------------------------|--------------------------|
| Project: LGT23C066         | Test Engineer: Dylan.shi |
| EUT: Smartphone            | Temperature: 25°C        |
| M/N: A180                  | Humidity: 62%RH          |
| Test Voltage: Battery      | Test Data: 2023-04-08    |
| Test Mode: 802.11ac20 5500 |                          |
| Note:                      |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.451GHz  | 60.00           | -21.11         | 38.89           | 74.00           | -35.11       | PK       | Hor   |
| 2*  | 2.881GHz  | 53.41           | -8.97          | 44.44           | 74.00           | -29.56       | PK       | Hor   |
| 3*  | 4.247GHz  | 53.00           | -6.83          | 46.17           | 74.00           | -27.83       | PK       | Hor   |
| 4*  | 7.581GHz  | 56.59           | -4.25          | 52.34           | 74.00           | -21.66       | PK       | Hor   |
| 5*  | 11.340GHz | 52.53           | 1.83           | 54.36           | 74.00           | -19.64       | PK       | Hor   |
| 6*  | 17.828GHz | 47.99           | 8.40           | 56.39           | 74.00           | -17.61       | PK       | Hor   |
| 7*  | 11.340GHz | 42.47           | 1.83           | 44.30           | 54.00           | -9.70        | AV       | Hor   |
| 8*  | 17.828GHz | 38.80           | 8.40           | 47.20           | 54.00           | -6.80        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 1.852GHz  | 58.29           | -17.73         | 40.56           | 74.00           | -33.44       | PK       | Ver   |
| 2*  | 2.983GHz  | 53.62           | -8.43          | 45.19           | 74.00           | -28.81       | PK       | Ver   |
| 3*  | 4.831GHz  | 53.17           | -6.01          | 47.16           | 74.00           | -26.84       | PK       | Ver   |
| 4*  | 7.585GHz  | 56.55           | -4.24          | 52.31           | 74.00           | -21.69       | PK       | Ver   |
| 5*  | 11.196GHz | 52.59           | 1.75           | 54.34           | 74.00           | -19.66       | PK       | Ver   |
| 6*  | 17.941GHz | 49.76           | 8.48           | 58.24           | 74.00           | -15.76       | PK       | Ver   |
| 7*  | 11.196GHz | 41.55           | 1.75           | 43.30           | 54.00           | -10.70       | AV       | Ver   |
| 8*  | 17.941GHz | 38.42           | 8.48           | 46.90           | 54.00           | -7.10        | AV       | Ver   |



|                            |                          |
|----------------------------|--------------------------|
| Project: LGT23C066         | Test Engineer: Dylan.shi |
| EUT: Smartphone            | Temperature: 25°C        |
| M/N: A180                  | Humidity: 62%RH          |
| Test Voltage: Battery      | Test Data: 2023-04-08    |
| Test Mode: 802.11ac20 5580 |                          |
| Note:                      |                          |

| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
|-----|-----------|-----------------|----------------|-----------------|-----------------|--------------|----------|-------|
| 1*  | 1.927GHz  | 59.22           | -16.97         | 42.25           | 74.00           | -31.75       | PK       | Hor   |
| 2*  | 2.966GHz  | 54.23           | -8.52          | 45.71           | 74.00           | -28.29       | PK       | Hor   |
| 3*  | 5.652GHz  | 55.41           | -7.68          | 47.73           | 74.00           | -26.27       | PK       | Hor   |
| 4*  | 8.990GHz  | 54.00           | -1.20          | 52.80           | 74.00           | -21.20       | PK       | Hor   |
| 5*  | 11.415GHz | 51.89           | 1.87           | 53.76           | 74.00           | -20.24       | PK       | Hor   |
| 6*  | 17.720GHz | 48.97           | 8.32           | 57.29           | 74.00           | -16.71       | PK       | Hor   |
| 7*  | 17.720GHz | 39.38           | 8.32           | 47.70           | 54.00           | -6.30        | AV       | Hor   |
| No. | Frequency | Reading<br>dBuV | Factor<br>dB/m | Level<br>dBuV/m | Limit<br>dBuV/m | Margin<br>dB | Detector | Polar |
| 1*  | 2.041GHz  | 56.86           | -15.80         | 41.06           | 74.00           | -32.94       | PK       | Ver   |
| 2*  | 3.323GHz  | 53.93           | -8.45          | 45.48           | 74.00           | -28.52       | PK       | Ver   |
| 3*  | 4.840GHz  | 52.87           | -6.02          | 46.85           | 74.00           | -27.15       | PK       | Ver   |
| 4*  | 8.969GHz  | 53.85           | -1.26          | 52.59           | 74.00           | -21.41       | PK       | Ver   |
| 5*  | 11.272GHz | 52.12           | 1.79           | 53.91           | 74.00           | -20.09       | PK       | Ver   |
| 6*  | 17.979GHz | 48.29           | 8.51           | 56.80           | 74.00           | -17.20       | PK       | Ver   |
| 7*  | 17.979GHz | 37.89           | 8.51           | 46.40           | 54.00           | -7.60        | AV       | Ver   |