

# **FCC RADIO TEST REPORT**

## **FCC ID: ZLE-RG725**

**Product :** LTE SMARTPHONE

**Trade Mark :** RugGear

**Model Name :** PSM01E

**Family Model :** RG725

**Report No. :** S20072200103004

### **Prepared for**

Power Idea Technology (Shenzhen) Co., Ltd.  
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### **Prepared by**

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## TEST RESULT CERTIFICATION

**Applicant's name** ..... : Power Idea Technology (Shenzhen) Co., Ltd.  
**Address** ..... : 4th Floor, A Section ,Languang Science&technology Xinx RD,  
 Hi-Tech Industrial Park North, Nanshan ShenZhen, 518057 China  
**Manufacturer's Name** ..... : RUGGEAR LIMITED  
**Address** ..... : RM1301,13/F WING TUCK COMM CTR 177-183 WING LOK ST  
 SHEUNG WAN HONG KONG

### Product description

**Product name** ..... : LTE SMARTPHONE  
**Model and/or type reference** : PSM01E  
**Family Model**..... : RG725

**Standards** ..... : FCC Part15.407

**Test procedure** ..... ANSI C63.10-2013 and KDB 789033 D02 General UNII Test  
 Procedures New Rules v01r01  
 FCC KDB 905462 D02 UNII DFS Compliance Procedures New  
 Rules v02

This device described above has been tested by NTEK, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements/ the Industry Canada requirements.. And it is applicable only to the tested sample identified in the report.

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### Date of Test .....

Date (s) of performance of tests ..... 24 Nov. 2018 ~ 29 Dec. 2018

Date of Issue ..... 12 Aug. 2020

Test Result..... **Pass**

*Note: All test data of this report are based on the original test report  
 S18112300402E004, dated by 2018-12-29.*

Testing Engineer : Loren Luo  
 (Loren Luo)

Technical Manager : Jason chen  
 (Jason Chen)

Authorized Signatory : Sam. Chen  
 (Sam Chen)

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## Revision History

[illegible]

## 1. SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

| FCC Part15 (15.407) , Subpart E                                                                 |                                         |          |                          |
|-------------------------------------------------------------------------------------------------|-----------------------------------------|----------|--------------------------|
| Standard Section                                                                                | Test Item                               | Judgment | Remark                   |
| 15.207                                                                                          | AC Power Line Conducted Emissions       | PASS     |                          |
| 15.209(a),<br>15.407 (b)(1)<br>15.407 (b)(2)<br>15.407 (b)(3)<br>15.407 (b)(4)<br>15.407 (b)(6) | Spurious Radiated Emissions             | PASS     |                          |
| 15.407 (a)<br>15.1049                                                                           | 26 dB and 99% Emission Bandwidth        | PASS     |                          |
| 15.407(e)                                                                                       | Minimum 6 dB bandwidth                  | PASS     |                          |
| 15.407 (a)                                                                                      | Maximum Conducted Output Power          | PASS     |                          |
| 2.1051,<br>15.407 (b)(1)<br>15.407 (b)(2)<br>15.407 (b)(3)<br>15.407 (b)(4)                     | Band Edge                               | PASS     |                          |
| 15.407 (a)                                                                                      | Power Spectral Density                  | PASS     |                          |
| 2.1051,<br>15.407(b)                                                                            | Spurious Emissions at Antenna Terminals | PASS     |                          |
| 15.407(h)                                                                                       | Dynamic Frequency Selection(DFS)        | PASS     | Subcontract test(note 2) |
| 15.203                                                                                          | Antenna Requirement                     | PASS     |                          |

### NOTE:

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

(2) Subcontracted laboratory information:

Firm Name:

Shenzhen Huatongwei International Inspection Co., Ltd.

Designation Number:CN1181

Test Firm Registration Number: 762235

A2LA Certificate Registration Number : 3902.01

## 1.1 FACILITIES AND ACCREDITATIONS

### FACILITIES

All measurement facilities used to collect the measurement data are located at  
1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen  
518126 P.R. China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and  
CISPR Publication 22.

### LABORATORY ACCREDITATIONS AND LISTINGS

#### Site Description

CNAS-Lab. : The Laboratory has been assessed and proved to be in compliance with  
CNAS-CL01:2006 (identical to ISO/IEC 17025:2005)  
The Certificate Registration Number is L5516.

IC-Registration The Certificate Registration Number is 9270A-1.

FCC- Accredited Test Firm Registration Number: 463705.  
Designation Number: CN1184

A2LA-Lab. The Certificate Registration Number is 4298.01  
This laboratory is accredited in accordance with the recognized  
International Standard ISO/IEC 17025:2005 General requirements for the  
competence of testing and calibration laboratories.  
This accreditation demonstrates technical competence for a defined  
scope and the operation of a laboratory quality management system  
(refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).

Name of Firm : Shenzhen NTEK Testing Technology Co., Ltd.

Site Location : 1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street,  
Bao'an District, Shenzhen 518126 P.R. China.

## 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   | Conducted Emission Test             | $\pm 2.80\text{dB}$       |
| 2   | RF power, conducted                 | $\pm 0.16\text{dB}$       |
| 3   | Spurious emissions, conducted       | $\pm 0.21\text{dB}$       |
| 4   | All emissions, radiated(30MHz~1GHz) | $\pm 2.64\text{dB}$       |
| 5   | All emissions, radiated(1GHz~6GHz)  | $\pm 2.40\text{dB}$       |
| 6   | All emissions, radiated(> 6GHz)     | $\pm 2.52\text{dB}$       |
| 7   | Temperature                         | $\pm 0.5^{\circ}\text{C}$ |
| 8   | Humidity                            | $\pm 2\%$                 |

## 2. GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

|                        |                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equipment              | LTE SMARTPHONE                                                                                                                                                   |                                                                                                                                                                                                                                                                                                              |
| Trade Mark             | N/A                                                                                                                                                              |                                                                                                                                                                                                                                                                                                              |
| Model Name             | PSM01E                                                                                                                                                           |                                                                                                                                                                                                                                                                                                              |
| FCC ID                 | ZLE-RG725                                                                                                                                                        |                                                                                                                                                                                                                                                                                                              |
| Product Description    | Mode Supported                                                                                                                                                   | <input checked="" type="checkbox"/> 802.11a<br><input checked="" type="checkbox"/> 802.11n(HT20)<br><input checked="" type="checkbox"/> 802.11n(HT40)<br><input checked="" type="checkbox"/> 802.11ac(HT20)<br><input checked="" type="checkbox"/> 802.11ac(HT40)<br><input type="checkbox"/> 802.11ac(HT80) |
|                        | Data Rate                                                                                                                                                        | 802.11a: 6,9,12,18,24,36,48,54Mbps;<br>802.11n(HT20/HT40):MCS0-MCS15;<br>802.11ac(VHT20): NSS1, MCS0-MCS8<br>802.11ac(VHT40):NSS1, MCS0-MCS9                                                                                                                                                                 |
|                        | Modulation                                                                                                                                                       | OFDM with BPSK/QPSK/16QAM/64QAM                                                                                                                                                                                                                                                                              |
|                        | Operating Frequency Range                                                                                                                                        | <input checked="" type="checkbox"/> U-NII-1: 5150 MHz ~5250MHz<br><input checked="" type="checkbox"/> U-NII-2A: 5250MHz~5350MHz<br><input checked="" type="checkbox"/> U-NII-2C: 5470MHz~5725MHz<br><input checked="" type="checkbox"/> U-NII-3: 5725 MHz ~5850 MHz                                          |
|                        | Function:                                                                                                                                                        | <input type="checkbox"/> Outdoor AP <input type="checkbox"/> Indoor AP <input type="checkbox"/> Fixed P2P<br><input checked="" type="checkbox"/> Client                                                                                                                                                      |
|                        | DFS type:                                                                                                                                                        | <input type="checkbox"/> master devices<br><input type="checkbox"/> Slave devices with radar detection<br><input checked="" type="checkbox"/> Slave devices without radar detection                                                                                                                          |
|                        | Antenna Type                                                                                                                                                     | PIFA Antenna                                                                                                                                                                                                                                                                                                 |
|                        | Antenna Gain                                                                                                                                                     | 0.8                                                                                                                                                                                                                                                                                                          |
|                        | Based on the application, features, or specification exhibited in User's Manual, More details of EUT technical specification, please refer to the User's Manual. |                                                                                                                                                                                                                                                                                                              |
| Ratings                | Battery 1:DC 3.8V from battery or DC 5V from USB Port.<br>Battery 2:DC 3.6V from battery or DC 5V from USB Port.                                                 |                                                                                                                                                                                                                                                                                                              |
| Adapter                | Model: HKC0115021-2D<br>Input: 100-240V~50/60Hz 0.5A<br>Output: 5V---2A                                                                                          |                                                                                                                                                                                                                                                                                                              |
| Battery                | Battery 1:<br>DC3.80V/5000mAh(19Wh)<br>Battery 2:<br>DC3.6V/3120mAh(11.232Wh)                                                                                    |                                                                                                                                                                                                                                                                                                              |
| Connecting I/O Port(s) | Please refer to the User's Manual                                                                                                                                |                                                                                                                                                                                                                                                                                                              |
| HW Version             | S955_V1.3                                                                                                                                                        |                                                                                                                                                                                                                                                                                                              |
| SW Version             | N/A                                                                                                                                                              |                                                                                                                                                                                                                                                                                                              |

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.
2. Frequency and Channel list:

| Band     | 20MHz   |           | 40MHz   |           | 80MHz   |           |
|----------|---------|-----------|---------|-----------|---------|-----------|
|          | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| U-NII-1  | 36      | 5180 MHz  | 38      | 5190 MHz  | N/A     | N/A       |
|          | 40      | 5200 MHz  | 46      | 5230 MHz  |         |           |
|          | 44      | 5220 MHz  |         |           |         |           |
|          | 48      | 5240 MHz  |         |           |         |           |
| U-NII-2A | 52      | 5260 MHz  | 54      | 5270 MHz  |         |           |
|          | 56      | 5280 MHz  | 62      | 5310 MHz  |         |           |
|          | 60      | 5300 MHz  |         |           |         |           |
|          | 64      | 5320 MHz  |         |           |         |           |
| U-NII-2C | 100     | 5500 MHz  | 102     | 5510 MHz  |         |           |
|          | 104     | 5520 MHz  | 110     | 5550 MHz  |         |           |
|          | 108     | 5540 MHz  | 118     | 5590 MHz  |         |           |
|          | 112     | 5560 MHz  | 126     | 5630 MHz  |         |           |
|          | 116     | 5580 MHz  | 134     | 5670 MHz  |         |           |
|          | 120     | 5600 MHz  |         |           |         |           |
|          | 124     | 5620 MHz  |         |           |         |           |
|          | 128     | 5640 MHz  |         |           |         |           |
|          | 132     | 5660 MHz  |         |           |         |           |
|          | 140     | 5700 MHz  |         |           |         |           |
| U-NII-3  | 149     | 5745 MHz  | 151     | 5755 MHz  |         |           |
|          | 153     | 5765 MHz  | 159     | 5795 MHz  |         |           |
|          | 157     | 5785 MHz  |         |           |         |           |
|          | 161     | 5805 MHz  |         |           |         |           |
|          | 165     | 5825 MHz  |         |           |         |           |

Tx Antenna

| Antenna | Antenna Type | Antenna Gain(dBi) |
|---------|--------------|-------------------|
|         |              | 5.0G              |
| A(main) | PIFA         | 0.8               |

## 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.

| Test Items                        | Mode             | Data Rate              | Channel                                    | Ant |
|-----------------------------------|------------------|------------------------|--------------------------------------------|-----|
| AC Power Line Conducted Emissions | Normal Link      | -                      | -                                          | -   |
| Maximum Conducted Output Power    | 11a/n(20)/ac(20) | 6 Mbps/ MCS0/ VHT1MCS0 | 36/40/48/52/56/64/100 /120/140/149/157/165 | 1   |
|                                   | 11n(40)/ac(40)   | MCS0/ VHT1MCS0         | 38/46/54/62/102/110 /118/134/151/159       | 1   |
| Power Spectral Density            | 11a/n(20)/ac(20) | 6 Mbps/ MCS0/ VHT1MCS0 | 36/40/48/52/56/64/100 /120/140/149/157/165 | 1   |
|                                   | 11n(40)/ac(40)   | VHT1MCS0               | 38/46/54/62/102/110 /118/134/151/159       | 1   |
| 26 dB and 99% Emission Bandwidth  | 11a/n(20)/ac(20) | 6 Mbps/ MCS0/ VHT1MCS0 | 36/40/48/52/56/64/100 /120/140/149/157/165 | 1   |
|                                   | 11n(40)/ac(40)   | MCS0/ VHT1MCS0         | 38/46/54/62/102/110 /118/134/151/159       | 1   |
| Minimum 6 dB bandwidth            | 11a/n(20)/ac(20) | 6 Mbps/ MCS0/ VHT1MCS0 | 36/40/48/52/56/64/100 /120/140/149/157/165 | 1   |
|                                   | 11n(40)/ac(40)   | VHT1MCS0               | 38/46/54/62/102/110 /118/134/151/159       | 1   |
| Radiated Emissions Below 1GHz     | Normal Link      | -                      | -                                          | -   |
| Radiated Emissions Above 1GHz     | 11a/n(20)/ac(20) | 6 Mbps/ MCS0/ VHT1MCS0 | 36/40/48/52/56/64/100 /120/140/149/157/165 | 1   |
|                                   | 11n(40)/ac(40)   | VHT1MCS0               | 38/46/54/62/102/110 /118/134/151/159       | 1   |
| Band Edge Emissions               | 11a/n(20)/ac(20) | 6 Mbps/ MCS0/ VHT1MCS0 | 36/40/48/52/56/64/100 /120/140/149/157/165 | 1   |
|                                   | 11n(40)/ac(40)   | MCS0/ VHT1MCS0         | 38/46/54/62/102/110 /118/134/151/159       | 1   |
| Dynamic Frequency Selection(DFS)  | ac(40)           | VHT1MCS0               | 58/106                                     | 1   |

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

## 2.3 BLOCK DIGRAM SHOWING THE CONFIGURATION OF SYSTEM TESTED

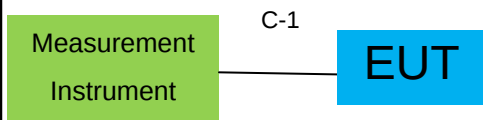
For AC Conducted Emission Mode



For Radiated Test Cases



For Conducted Test Cases



Note: 1. The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

1. EUT built-in battery-powered, the battery is fully-charged.

**2.4 DESCRIPTION OF SUPPORT UNITS(CONDUCTED MODE)**

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.

| Item | Equipment | Brand | Model/Type No. | Series No. | Note |
|------|-----------|-------|----------------|------------|------|
|      |           |       |                |            |      |
|      |           |       |                |            |      |
|      |           |       |                |            |      |
|      |           |       |                |            |      |
|      |           |       |                |            |      |

| Item | Cable Type | Shielded Type | Ferrite Core | Length | Note |
|------|------------|---------------|--------------|--------|------|
| C-1  | RF Cable   | YES           | NO           | 0.1m   |      |
|      |            |               |              |        |      |
|      |            |               |              |        |      |

Note:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in 『Length』 column.

## 2.5 EQUIPMENTS LIST FOR ALL TEST ITEMS

### Radiation& Conducted Test equipment

| Item | Kind of Equipment                  | Manufacturer | Type No.    | Serial No.    | Last calibration | Calibrated until | Calibration period |
|------|------------------------------------|--------------|-------------|---------------|------------------|------------------|--------------------|
| 1    | Spectrum Analyzer                  | Agilent      | E4407B      | MY45108040    | 2018.05.19       | 2019.05.18       | 1 year             |
| 2    | Spectrum Analyzer                  | Agilent      | N9020A      | MY49100060    | 2018.10.08       | 2019.10.07       | 1 year             |
| 3    | Spectrum Analyzer                  | R&S          | FSV40       | 101417        | 2018.10.08       | 2019.10.07       | 1 year             |
| 4    | Test Receiver                      | R&S          | ESPI7       | 101318        | 2018.05.19       | 2019.05.18       | 1 year             |
| 5    | Bilog Antenna                      | TESEQ        | CBL6111D    | 31216         | 2018.04.08       | 2019.04.07       | 1 year             |
| 6    | 50Ω Coaxial Switch                 | Anritsu      | MP59B       | 6200983705    | 2018.05.19       | 2020.05.18       | 2 year             |
| 7    | Horn Antenna                       | EM           | EM-AH-10180 | 2011071402    | 2018.04.08       | 2019.04.07       | 1 year             |
| 8    | Broadband Horn Antenna             | SCHWARZBECK  | BBHA 9170   | 803           | 2018.11.03       | 2019.11.02       | 1 year             |
| 9    | Amplifier                          | EMC          | EMC051835SE | 980246        | 2018.08.05       | 2019.08.04       | 1 year             |
| 10   | Active Loop Antenna                | SCHWARZBECK  | FMZB 1519B  | 055           | 2018.11.03       | 2019.11.02       | 1 year             |
| 11   | Power Meter                        | DARE         | RPR3006W    | 15100041SN084 | 2018.08.05       | 2019.08.04       | 1 year             |
| 12   | Test Cable (9KHz-30MHz)            | N/A          | R-01        | N/A           | 2017.04.21       | 2020.04.20       | 3 year             |
| 13   | Test Cable (30MHz-1GHz)            | N/A          | R-02        | N/A           | 2017.04.21       | 2020.04.20       | 3 year             |
| 14   | High Test Cable(1G-40G Hz)         | N/A          | R-03        | N/A           | 2017.04.21       | 2020.04.20       | 3 year             |
| 15   | High Test Cable(1G-40G Hz)         | N/A          | R-04        | N/A           | 2017.04.21       | 2020.04.20       | 3 year             |
| 16   | Filter                             | TRILTHIC     | 2400MHz     | 29            | 2017.04.19       | 2020.04.18       | 3 year             |
| 17   | temporary antenna connector (Note) | NTS          | R001        | N/A           | N/A              | N/A              | N/A                |

**Note:**

We will use the temporary antenna connector (soldered on the PCB board) When conducted test  
And this temporary antenna connector is listed within the instrument list

AC Conduction Test equipment

| Item | Kind of Equipment       | Manufacturer | Type No.  | Serial No. | Last calibration | Calibrated until | Calibration period |
|------|-------------------------|--------------|-----------|------------|------------------|------------------|--------------------|
| 1    | Test Receiver           | R&S          | ESCI      | 101160     | 2018.05.19       | 2019.05.18       | 1 year             |
| 2    | LISN                    | R&S          | ENV216    | 101313     | 2018.04.18       | 2019.04.19       | 1 year             |
| 3    | LISN                    | SCHWARZBECK  | NNLK 8129 | 8129245    | 2018.05.19       | 2019.05.18       | 1 year             |
| 4    | 50Ω Coaxial Switch      | ANRITSU CORP | MP59B     | 6200983704 | 2018.05.19       | 2020.05.18       | 2 year             |
| 5    | Test Cable (9KHz-30MHz) | N/A          | C01       | N/A        | 2017.04.21       | 2020.04.20       | 3 year             |
| 6    | Test Cable (9KHz-30MHz) | N/A          | C02       | N/A        | 2017.04.21       | 2020.04.20       | 3 year             |
| 7    | Test Cable (9KHz-30MHz) | N/A          | C03       | N/A        | 2017.04.21       | 2020.04.20       | 3 year             |

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& Aux Equipment which is scheduled for calibration every 3 years.

### 3. EMC EMISSION TEST

#### 3.1 CONDUCTED EMISSION MEASUREMENT

##### 3.1.1 APPLICABLE STANDARD

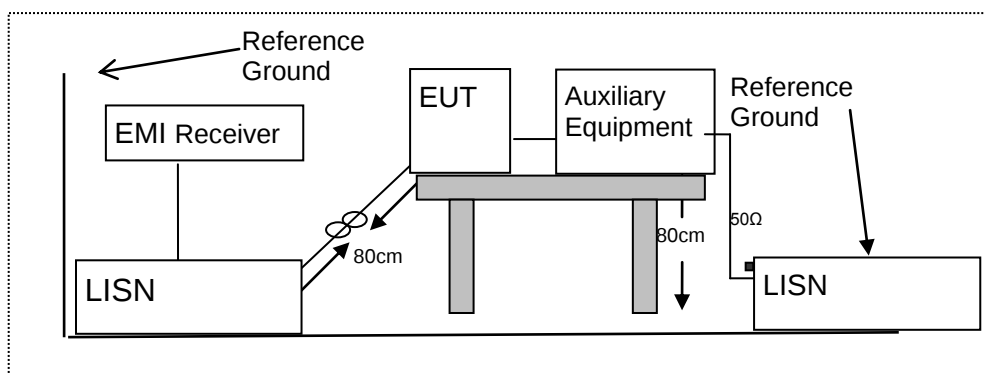
According to FCC Part 15.207(a) and KDB 174176 D01 Line Conducted FAQ v01r01

##### 3.1.2 CONFORMANCE LIMIT

| Frequency(MHz) | Conducted Emission Limit |         |
|----------------|--------------------------|---------|
|                | Quasi-peak               | Average |
| 0.15-0.5       | 66-56*                   | 56-46*  |
| 0.5-5.0        | 56                       | 46      |
| 5.0-30.0       | 60                       | 50      |

Note: 1. \*Decreases with the logarithm of the frequency  
2. The lower limit shall apply at the transition frequencies  
3. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

##### 3.1.3 TEST CONFIGURATION



##### 3.1.4 TEST PROCEDURE

According to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 Conducted emissions the EUT measured in the frequency range between 0.15 MHz and 30 MHz using CISPR Quasi-Peak and average detector mode.

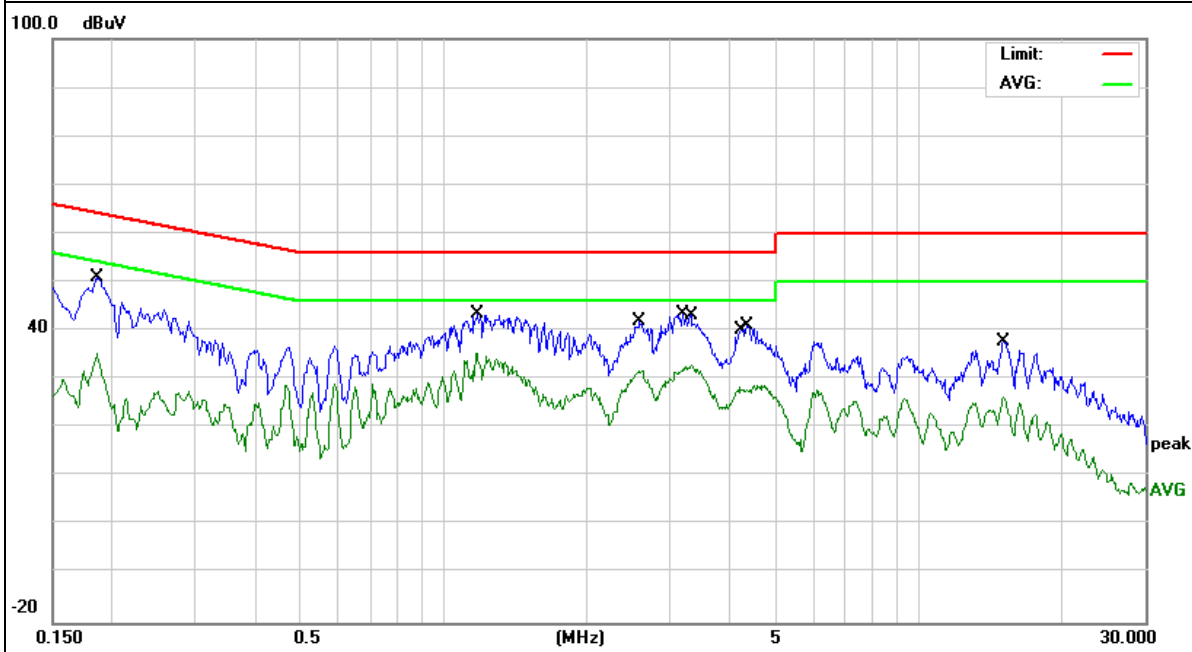
1. The EUT was placed 0.4 meter from the conducting wall of the shielding room.
2. The EUT was placed on a table which is 0.8m above ground plane.
3. Connect EUT to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
4. 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 40cm long.
5. 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.
6. LISN at least 80 cm from nearest part of EUT chassis.
7. The frequency range from 150KHz to 30MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth(IF bandwidth=9KHz) with Maximum Hold Mode
9. For the actual test configuration, please refer to the related Item –EUT Test Photos.

|                |                                 |                     |        |
|----------------|---------------------------------|---------------------|--------|
| EUT :          | LTE SMARTPHONE                  | Model Name. :       | PSM01E |
| Temperature :  | 26 °C                           | Relative Humidity : | 56%    |
| Pressure :     | 1010hPa                         | Phase :             | L      |
| Test Voltage : | DC 5V from Adapter AC 120V/60Hz | Test Mode :         | Mode 1 |

| Frequency<br>(MHz) | Reading Level<br>(dBμV) | Correct Factor<br>(dB) | Measure-ment<br>(dBμV) | Limits<br>(dBμV) | Margin<br>(dB) | Remark |
|--------------------|-------------------------|------------------------|------------------------|------------------|----------------|--------|
| 0.1859             | 25.48                   | 9.76                   | 35.24                  | 54.21            | -18.97         | AVG    |
| 0.1862             | 41.02                   | 9.76                   | 50.78                  | 64.20            | -13.42         | QP     |
| 1.1698             | 25.72                   | 9.74                   | 35.46                  | 46.00            | -10.54         | AVG    |
| 1.1818             | 33.69                   | 9.74                   | 43.43                  | 56.00            | -12.57         | QP     |
| 2.5899             | 32.07                   | 9.80                   | 41.87                  | 56.00            | -14.13         | QP     |
| 2.5899             | 22.09                   | 9.80                   | 31.89                  | 46.00            | -14.11         | AVG    |
| 3.1979             | 33.68                   | 9.83                   | 43.51                  | 56.00            | -12.49         | QP     |
| 3.326              | 23.00                   | 9.84                   | 32.84                  | 46.00            | -13.16         | AVG    |
| 4.1817             | 18.48                   | 9.85                   | 28.33                  | 46.00            | -17.67         | AVG    |
| 4.3459             | 31.04                   | 9.86                   | 40.90                  | 56.00            | -15.10         | QP     |
| 15.1257            | 27.54                   | 10.10                  | 37.64                  | 60.00            | -22.36         | QP     |
| 15.1257            | 16.27                   | 10.10                  | 26.37                  | 50.00            | -23.63         | AVG    |

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



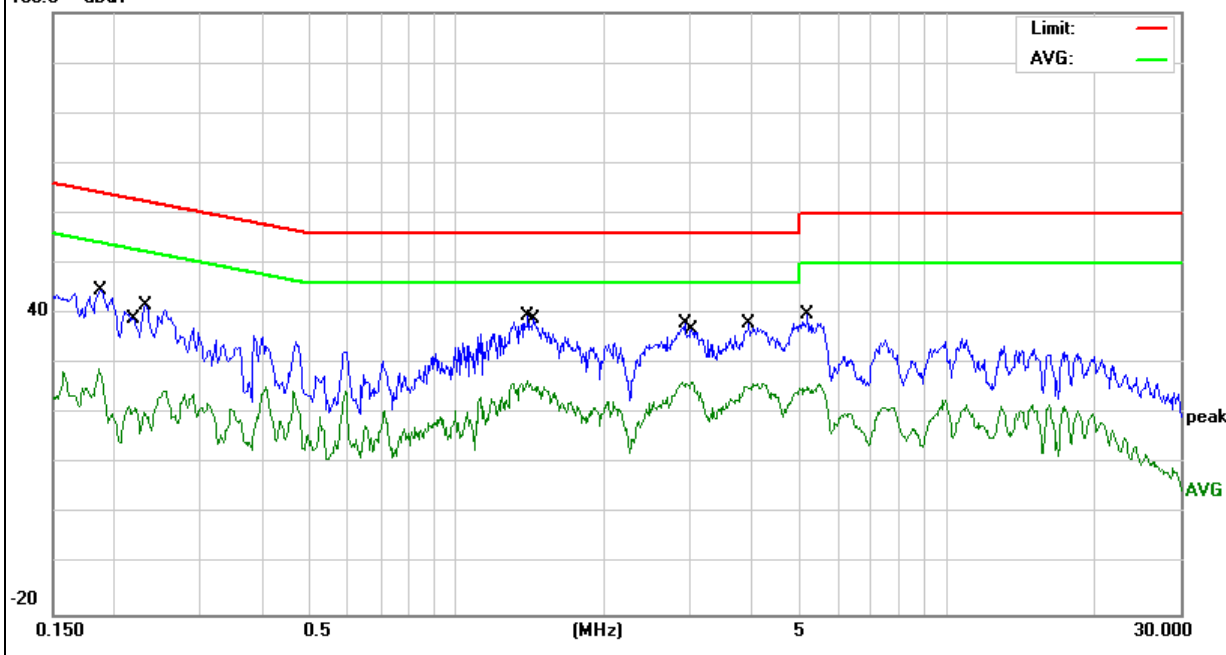
|                |                                 |                     |        |
|----------------|---------------------------------|---------------------|--------|
| EUT :          | LTE SMARTPHONE                  | Model Name. :       | PSM01E |
| Temperature :  | 26 °C                           | Relative Humidity : | 56%    |
| Pressure :     | 1010hPa                         | Phase :             | N      |
| Test Voltage : | DC 5V from Adapter AC 120V/60Hz | Test Mode :         | Mode 1 |

| Frequency | Reading Level | Correct Factor | Measure-ment | Limits | Margin | Remark |
|-----------|---------------|----------------|--------------|--------|--------|--------|
| (MHz)     | (dBμV)        | (dB)           | (dBμV)       | (dBμV) | (dB)   |        |
| 0.1859    | 19.29         | 9.73           | 29.02        | 54.21  | -25.19 | AVG    |
| 0.1872    | 34.93         | 9.73           | 44.66        | 64.16  | -19.50 | QP     |
| 0.222     | 11.59         | 9.73           | 21.32        | 52.74  | -31.42 | AVG    |
| 0.2316    | 31.80         | 9.74           | 41.54        | 62.39  | -20.85 | QP     |
| 1.3938    | 16.74         | 9.76           | 26.50        | 46.00  | -19.50 | AVG    |
| 1.4338    | 29.24         | 9.77           | 39.01        | 56.00  | -16.99 | QP     |
| 2.9219    | 28.31         | 9.86           | 38.17        | 56.00  | -17.83 | QP     |
| 3.0139    | 16.52         | 9.87           | 26.39        | 46.00  | -19.61 | AVG    |
| 3.91      | 15.67         | 9.92           | 25.59        | 46.00  | -20.41 | AVG    |
| 3.958     | 28.12         | 9.92           | 38.04        | 56.00  | -17.96 | QP     |
| 5.2057    | 29.79         | 9.94           | 39.73        | 60.00  | -20.27 | QP     |
| 5.2057    | 15.38         | 9.94           | 25.32        | 50.00  | -24.68 | AVG    |

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

100.0 dBμV

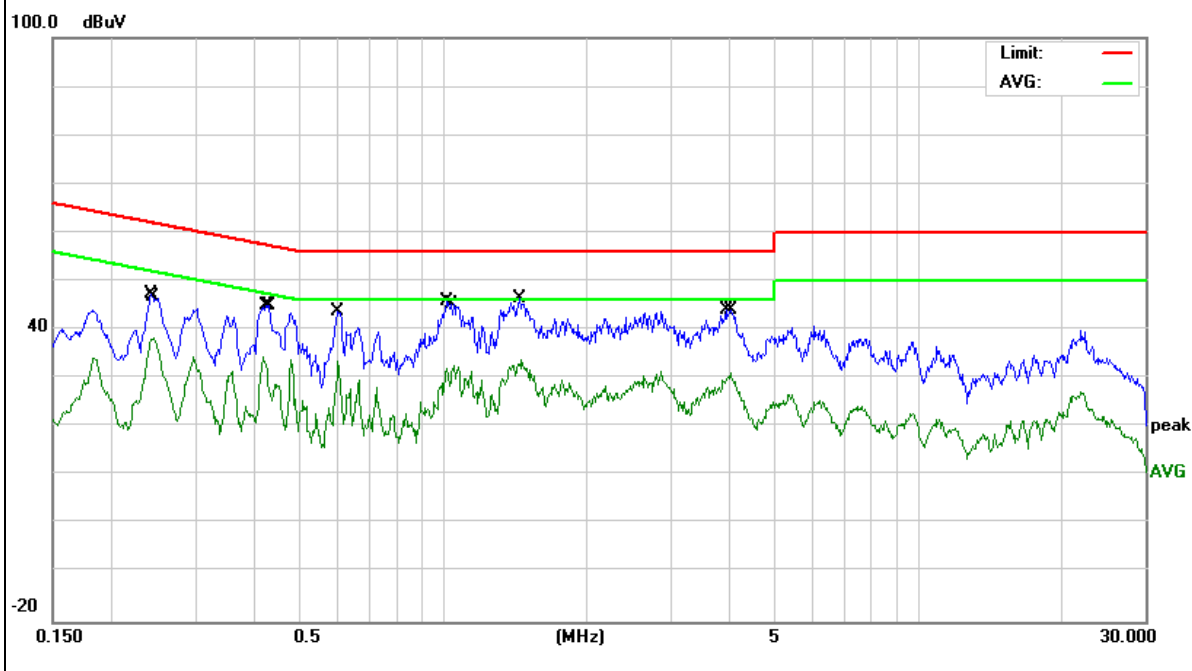


|                |                                 |                     |        |
|----------------|---------------------------------|---------------------|--------|
| EUT :          | LTE SMARTPHONE                  | Model Name. :       | PSM01E |
| Temperature :  | 26 °C                           | Relative Humidity : | 56%    |
| Pressure :     | 1010hPa                         | Phase :             | L      |
| Test Voltage : | DC 5V from Adapter AC 240V/60Hz | Test Mode :         | Mode 1 |

| Frequency<br>(MHz) | Reading Level<br>(dBμV) | Correct Factor<br>(dB) | Measure-ment<br>(dBμV) | Limits<br>(dBμV) | Margin<br>(dB) | Remark |
|--------------------|-------------------------|------------------------|------------------------|------------------|----------------|--------|
| 0.2419             | 37.62                   | 9.74                   | 47.36                  | 62.03            | -14.67         | QP     |
| 0.2459             | 28.70                   | 9.74                   | 38.44                  | 51.89            | -13.45         | AVG    |
| 0.4178             | 24.63                   | 9.75                   | 34.38                  | 47.49            | -13.11         | AVG    |
| 0.4299             | 35.31                   | 9.75                   | 45.06                  | 57.25            | -12.19         | QP     |
| 0.5978             | 34.03                   | 9.75                   | 43.78                  | 56.00            | -12.22         | QP     |
| 0.5978             | 23.80                   | 9.75                   | 33.55                  | 46.00            | -12.45         | AVG    |
| 1.018              | 35.95                   | 9.75                   | 45.70                  | 56.00            | -10.30         | QP     |
| 1.054              | 22.88                   | 9.75                   | 32.63                  | 46.00            | -13.37         | AVG    |
| 1.4418             | 36.65                   | 9.77                   | 46.42                  | 56.00            | -9.58          | QP     |
| 1.4618             | 23.94                   | 9.77                   | 33.71                  | 46.00            | -12.29         | AVG    |
| 3.93               | 34.22                   | 9.92                   | 44.14                  | 56.00            | -11.86         | QP     |
| 4.022              | 21.16                   | 9.92                   | 31.08                  | 46.00            | -14.92         | AVG    |

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.



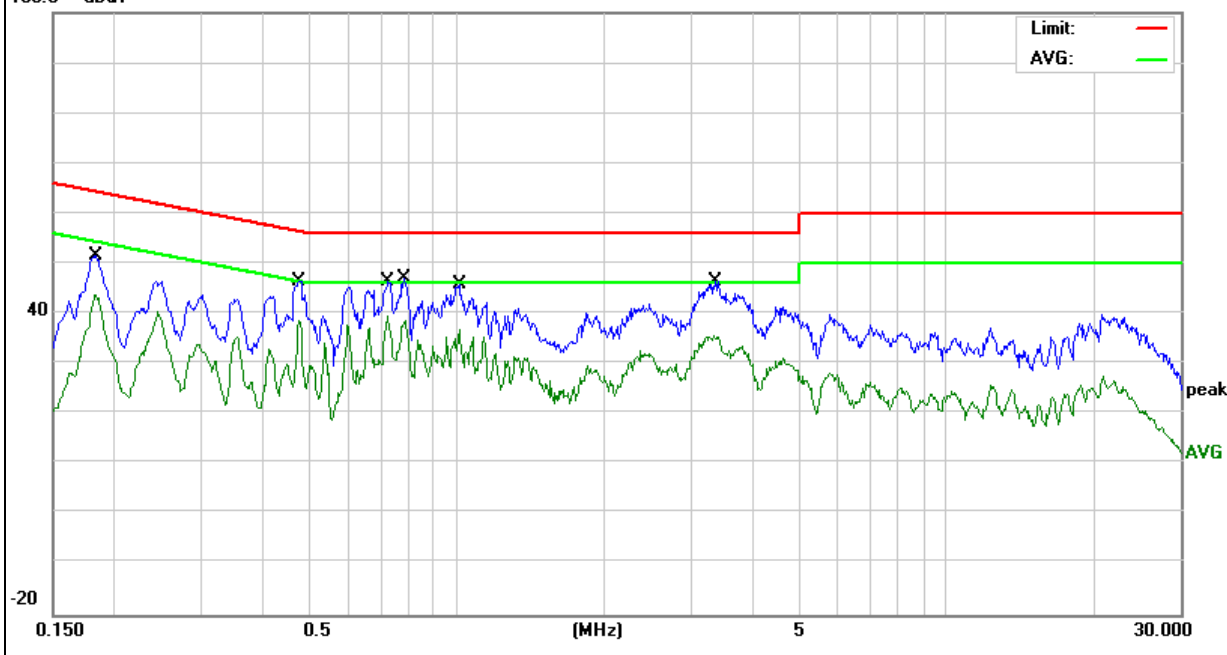
|                |                                     |                     |        |
|----------------|-------------------------------------|---------------------|--------|
| EUT :          | LTE SMARTPHONE                      | Model Name. :       | PSM01E |
| Temperature :  | 26 °C                               | Relative Humidity : | 56%    |
| Pressure :     | 1010hPa                             | Phase :             | N      |
| Test Voltage : | DC 12V from Adapter<br>AC 240V/60Hz | Test Mode :         | Mode 1 |

| Frequency<br>(MHz) | Reading Level<br>(dBμV) | Correct Factor<br>(dB) | Measure-ment<br>(dBμV) | Limits<br>(dBμV) | Margin<br>(dB) | Remark |
|--------------------|-------------------------|------------------------|------------------------|------------------|----------------|--------|
| 0.1833             | 41.93                   | 9.73                   | 51.66                  | 64.33            | -12.67         | QP     |
| 0.1833             | 34.13                   | 9.73                   | 43.86                  | 54.33            | -10.47         | AVG    |
| 0.4778             | 36.71                   | 9.75                   | 46.46                  | 56.38            | -9.92          | QP     |
| 0.4778             | 28.95                   | 9.75                   | 38.70                  | 46.38            | -7.68          | AVG    |
| 0.7258             | 36.69                   | 9.75                   | 46.44                  | 56.00            | -9.56          | QP     |
| 0.7258             | 29.85                   | 9.75                   | 39.60                  | 46.00            | -6.40          | AVG    |
| 0.782              | 37.26                   | 9.75                   | 47.01                  | 56.00            | -8.99          | QP     |
| 0.786              | 28.85                   | 9.75                   | 38.60                  | 46.00            | -7.40          | AVG    |
| 1.014              | 35.97                   | 9.75                   | 45.72                  | 56.00            | -10.28         | QP     |
| 1.014              | 27.06                   | 9.75                   | 36.81                  | 46.00            | -9.19          | AVG    |
| 3.346              | 25.65                   | 9.89                   | 35.54                  | 46.00            | -10.46         | AVG    |
| 3.366              | 36.59                   | 9.89                   | 46.48                  | 56.00            | -9.52          | QP     |

Remark:

1. All readings are Quasi-Peak and Average values.
2. Factor = Insertion Loss + Cable Loss.

100.0 dBμV



## 3.2 RADIATED EMISSION MEASUREMENT

### 3.2.1 APPLICABLE STANDARD

According to FCC Part 15.407(d) and 15.209

### 3.2.2 CONFORMANCE LIMIT

According to FCC Part 15.407(b)(7): radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).  
According to FCC Part 15.205, Restricted bands

| MHz               | MHz                 | MHz           | GHz         |
|-------------------|---------------------|---------------|-------------|
| 0.090-0.110       | 16.42-16.423        | 399.9-410     | 4.5-5.15    |
| 10.495-0.505      | 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   | 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     | (2)         |
| 13.36-13.41       |                     |               |             |

20dBc in any 100 kHz bandwidth outside the operating frequency band. In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

| Restricted Frequency(MHz) | Field Strength (μV/m) | Field Strength (dBμV/m) | Measurement Distance |
|---------------------------|-----------------------|-------------------------|----------------------|
| 0.009~0.490               | 2400/F(KHz)           | 20 log (uV/m)           | 300                  |
| 0.490~1.705               | 2400/F(KHz)           | 20 log (uV/m)           | 30                   |
| 1.705~30.0                | 30                    | 29.5                    | 30                   |
| 30-88                     | 100                   | 40                      | 3                    |
| 88-216                    | 150                   | 43.5                    | 3                    |
| 216-960                   | 200                   | 46                      | 3                    |
| Above 960                 | 500                   | 54                      | 3                    |

Limits of Radiated Emission Measurement(Above 1000MHz)

| Frequency(MHz) | Class B (dBuV/m) (at 3M) |         |
|----------------|--------------------------|---------|
|                | PEAK                     | AVERAGE |
| Above 1000     | 74                       | 54      |

Remark :1. Emission level in dBuV/m=20 log (uV/m)

2. Measurement was performed at an antenna to the closed point of EUT distance of meters.

3. For Frequency 9kHz~30MHz:

Distance extrapolation factor =40log(Specific distance/ test distance)(dB);

Limit line=Specific limits(dBuV) + distance extrapolation factor.

For Frequency above 30MHz:

Distance extrapolation factor =20log(Specific distance/ test distance)(dB);

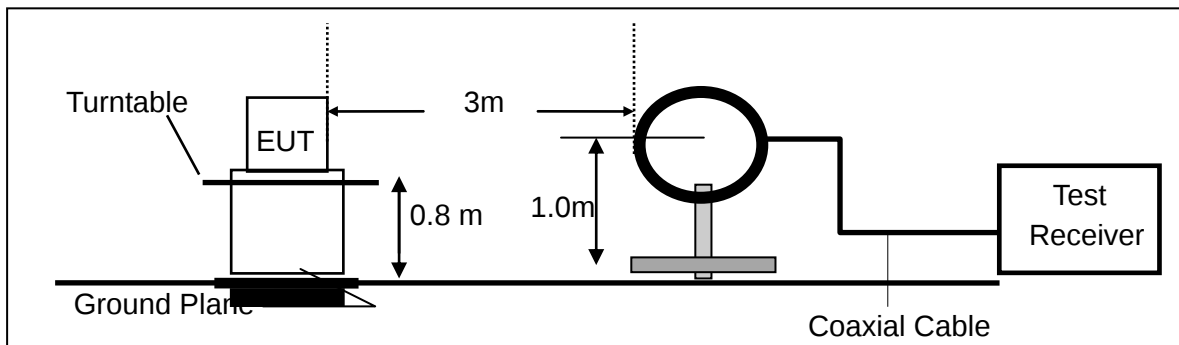
Limit line=Specific limits(dBuV) + distance extrapolation factor.

### 3.2.3 MEASURING INSTRUMENTS

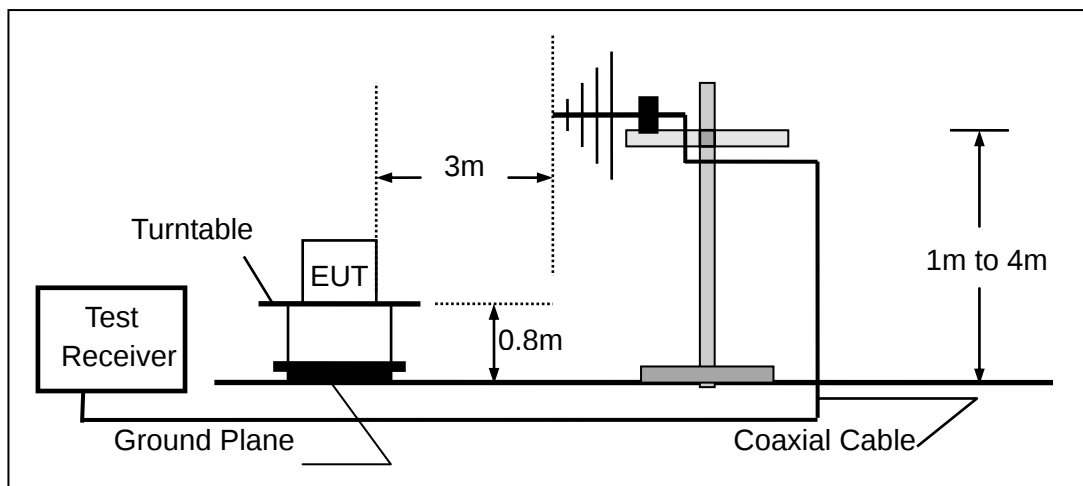
The Measuring equipment is listed in the section 6.3 of this test report.

### 3.2.4 TEST CONFIGURATION

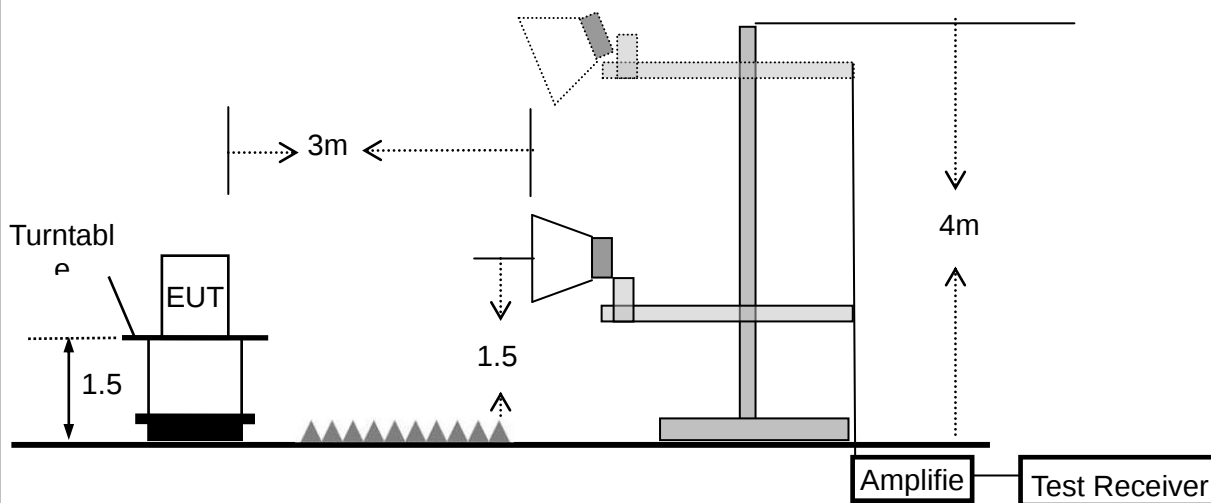
(a) For radiated emissions below 30MHz



(b) For radiated emissions from 30MHz to 1000MHz



(c) For radiated emissions above 1000MHz



### 3.2.5 TEST PROCEDURE

The test site semi-anechoic chamber has met the requirement of NSA tolerance 4 dB according to the standards: ANSI C63.10-2013. The test distance is 3m. The setup is according to the requirements in Section 13.1.4.1 of ANSI C63.10-2013 and CAN/CSA-CEI/IEC CISPR 22.

This test is required for any spurious emission that falls in a Restricted Band, as defined in Section 15.205. It must be performed with the highest gain of each type of antenna proposed for use with the EUT.

Use the following spectrum analyzer settings:

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

| Receiver Parameter     | Setting                          |
|------------------------|----------------------------------|
| Attenuation            | Auto                             |
| Start ~ Stop Frequency | 9kHz~150kHz / RB 200Hz for QP    |
| Start ~ Stop Frequency | 150kHz~30MHz / RB 9kHz for QP    |
| Start ~ Stop Frequency | 30MHz~1000MHz / RB 120kHz for QP |

- The measuring distance of at 3 m shall be used for measurements at frequency up to 1GHz. For frequencies above 1GHz, any suitable measuring distance may be used.
- The EUT was placed on the top of a rotating table 0.8 m for below 1GHz and 1.5m for above 1GHz the ground at a 3 meter. The table was rotated 360 degrees to determine the position of the highest radiation.
- The height of the equipment or of the substitution antenna shall be 0.8 m for below 1GHz and 1.5m for above 1GHz; the height of the test antenna shall vary between 1 m to 4 m. Both horizontal and vertical polarizations 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 then Quasi Peak detector mode re-measured.
- If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement 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

During the radiated emission test, the Spectrum Analyzer was set with the following configurations:

| Frequency Band (MHz) | Function | Resolution bandwidth | Video Bandwidth |
|----------------------|----------|----------------------|-----------------|
| 30 to 1000           | QP       | 120 kHz              | 300 kHz         |
| Above 1000           | Peak     | 1 MHz                | 1 MHz           |
|                      | Average  | 1 MHz                | 10 Hz           |

Note: for the frequency ranges below 30 MHz, a narrower RBW is used for these ranges but the measured value should add a RBW correction factor (RBWCF) where  $RBWCF [dB] = 10 \cdot \lg(100 [kHz] / \text{narrower RBW} [kHz])$ . , the narrower RBW is 1 kHz and RBWCF is 20 dB for the frequency 9 kHz to 150 kHz, and the narrower RBW is 10 kHz and RBWCF is 10 dB for the frequency 150 kHz to 30 MHz.

**3.2.6 TEST RESULTS (9KHZ – 30 MHZ)**

|              |                |                    |         |
|--------------|----------------|--------------------|---------|
| EUT:         | LTE SMARTPHONE | Model Name. :      | PSM01E  |
| Temperature: | 20 °C          | Relative Humidity: | 48%     |
| Pressure:    | 1010 hPa       | Test Voltage :     | DC 3.8V |
| Test Mode :  | TX             | Polarization :     | --      |

| Freq. | Reading  | Limit    | Margin | State |
|-------|----------|----------|--------|-------|
| (MHz) | (dBuV/m) | (dBuV/m) | (dB)   | P/F   |
| --    | --       | --       | --     | N/A   |
| --    | --       | --       | --     | N/A   |

**NOTE:**

The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

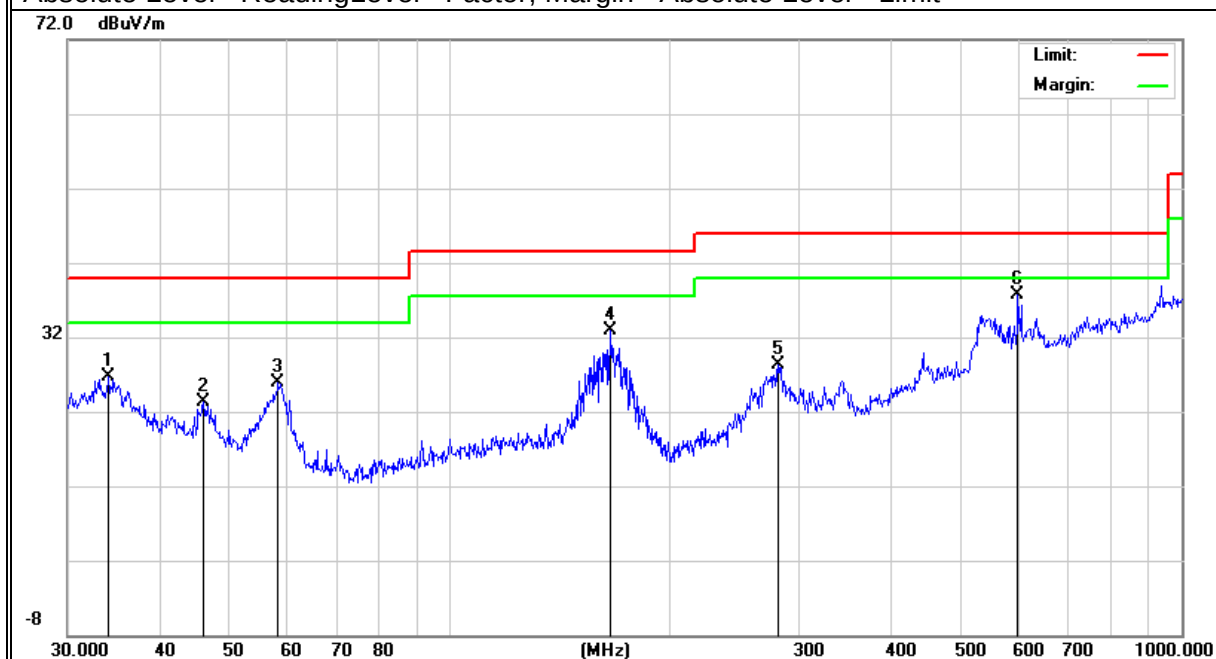
## 3.2.7 TEST RESULTS (30MHZ – 1GHZ)

|               |                             |                     |         |
|---------------|-----------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE              | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                       | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                    | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX(5.2G)- 802.11a (High CH) |                     |         |

| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| V              | 34.1561   | 9.65             | 17.05  | 26.70             | 40.00    | -13.30 | QP     |
| V              | 46.0162   | 11.99            | 11.24  | 23.23             | 40.00    | -16.77 | QP     |
| V              | 58.2030   | 19.21            | 6.72   | 25.93             | 40.00    | -14.07 | QP     |
| V              | 165.4866  | 21.59            | 11.41  | 33.00             | 43.50    | -10.50 | QP     |
| V              | 281.0074  | 11.34            | 17.00  | 28.34             | 46.00    | -17.66 | QP     |
| V              | 597.2232  | 14.01            | 23.76  | 37.77             | 46.00    | -8.23  | QP     |

## Remark:

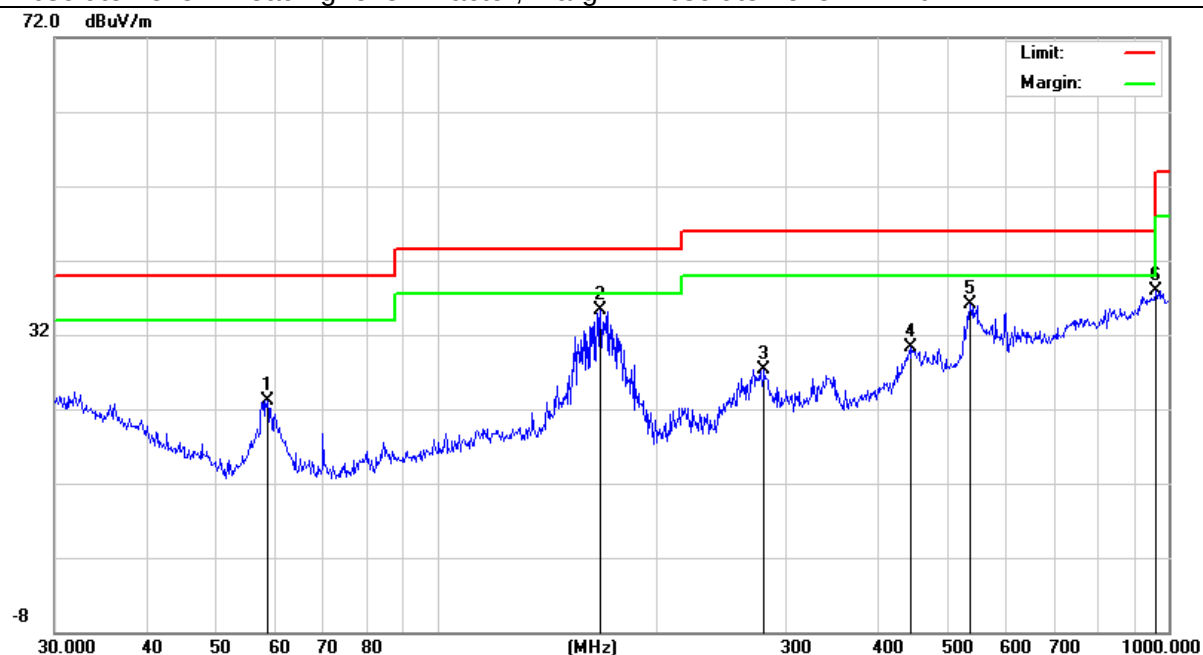
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| H              | 58.6126   | 16.49            | 6.66   | 23.15             | 40.00    | -16.85 | QP     |
| H              | 167.2366  | 23.96            | 11.39  | 35.35             | 43.50    | -8.15  | QP     |
| H              | 280.0237  | 10.02            | 17.37  | 27.39             | 46.00    | -18.61 | QP     |
| H              | 444.8514  | 10.01            | 20.32  | 30.33             | 46.00    | -15.67 | QP     |
| H              | 535.7073  | 13.14            | 23.04  | 36.18             | 46.00    | -9.82  | QP     |
| H              | 962.1621  | 6.79             | 31.17  | 37.96             | 54.00    | -16.04 | QP     |

**Remark:**

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

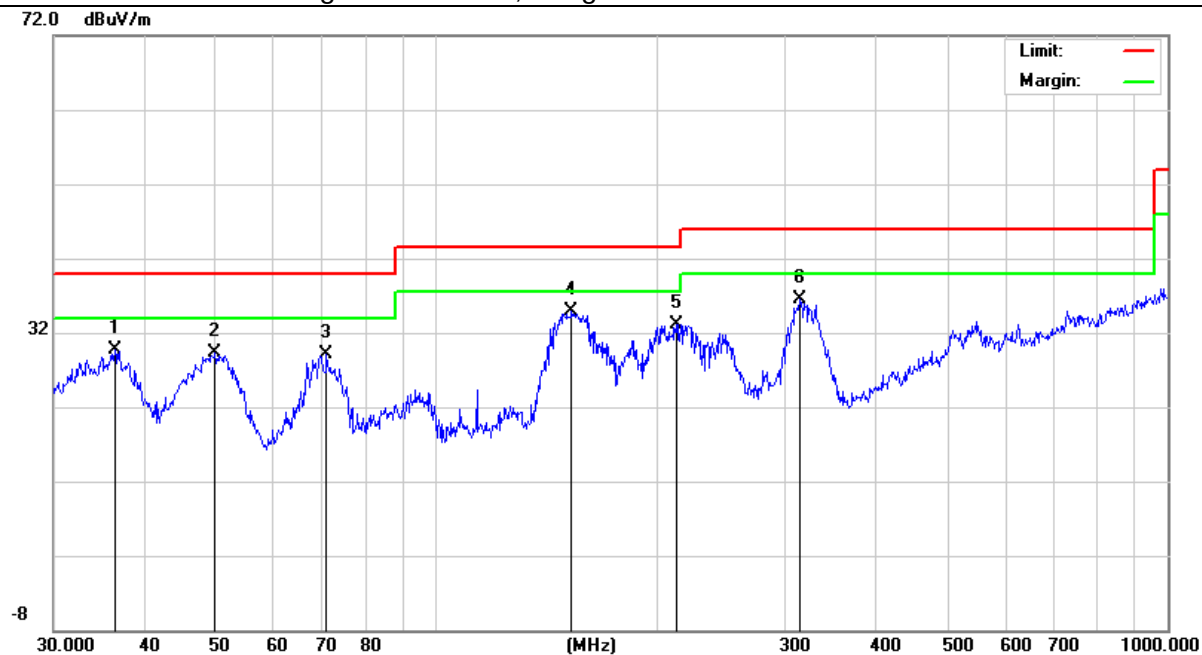


|               |                             |                     |         |
|---------------|-----------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE              | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                       | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                    | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX(5.3G)- 802.11a (High CH) |                     |         |

| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| V              | 36.3813   | 13.65            | 16.12  | 29.77             | 40.00    | -10.23 | QP     |
| V              | 49.8813   | 19.91            | 9.34   | 29.25             | 40.00    | -10.75 | QP     |
| V              | 70.8315   | 22.29            | 6.89   | 29.18             | 40.00    | -10.82 | QP     |
| V              | 153.2004  | 22.27            | 12.61  | 34.88             | 43.50    | -8.62  | QP     |
| V              | 213.0149  | 22.26            | 10.91  | 33.17             | 43.50    | -10.33 | QP     |
| V              | 314.3765  | 20.04            | 16.41  | 36.45             | 46.00    | -9.55  | QP     |

**Remark:**

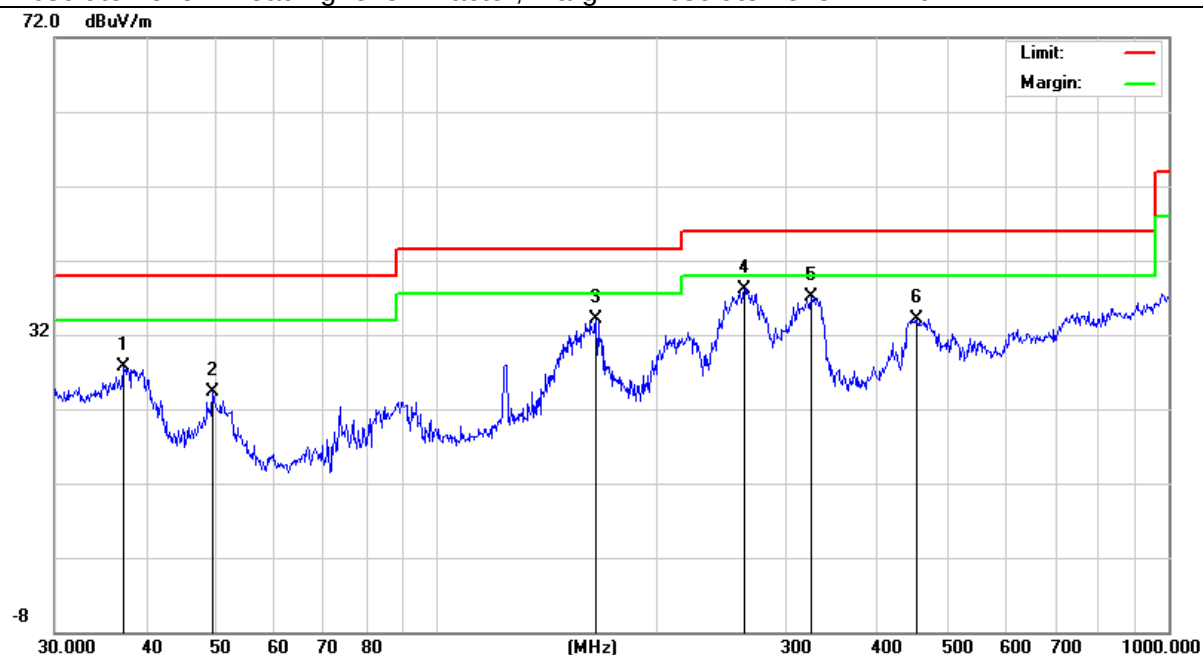
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| H              | 37.2854   | 12.08            | 15.62  | 27.70             | 40.00    | -12.30 | QP     |
| H              | 49.3594   | 14.34            | 9.89   | 24.23             | 40.00    | -15.77 | QP     |
| H              | 164.9072  | 22.76            | 11.41  | 34.17             | 43.50    | -9.33  | QP     |
| H              | 262.8955  | 22.28            | 15.81  | 38.09             | 46.00    | -7.91  | QP     |
| H              | 324.4560  | 20.40            | 16.63  | 37.03             | 46.00    | -8.97  | QP     |
| H              | 452.7196  | 13.58            | 20.49  | 34.07             | 46.00    | -11.93 | QP     |

**Remark:**

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

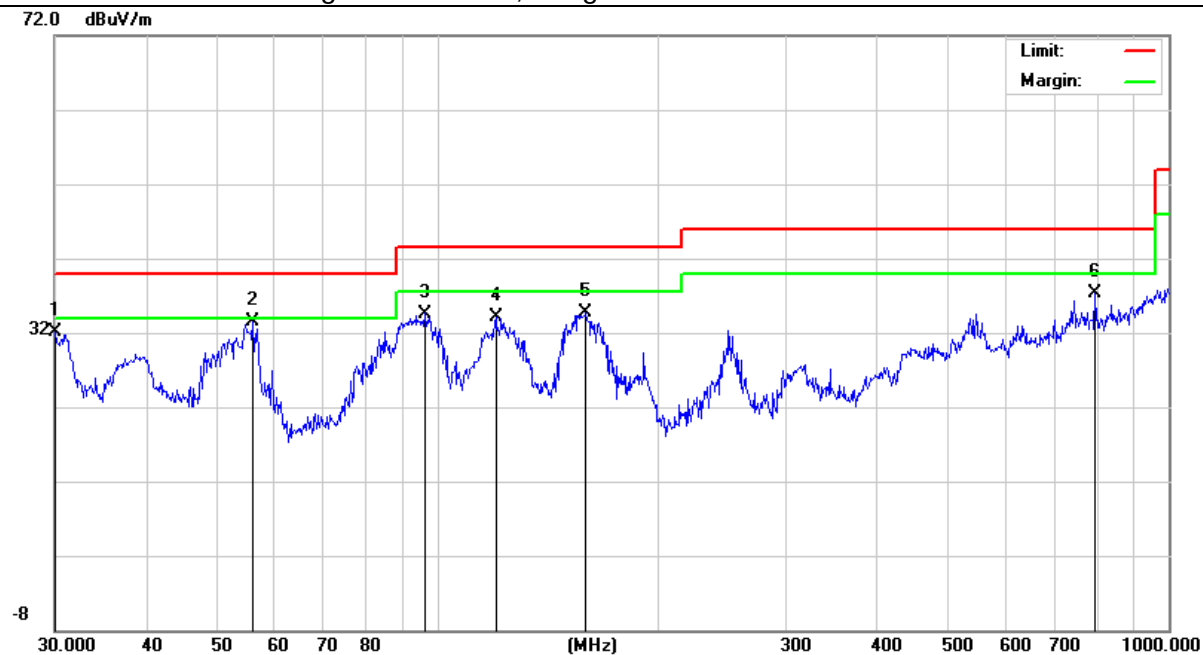


|               |                             |                     |         |
|---------------|-----------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE              | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                       | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                    | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX(5.6G)- 802.11a (High CH) |                     |         |

| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| V              | 30.1051   | 13.35            | 18.84  | 32.19             | 40.00    | -7.81  | QP     |
| V              | 56.0007   | 26.62            | 6.91   | 33.53             | 40.00    | -6.47  | QP     |
| V              | 96.0986   | 23.52            | 11.08  | 34.60             | 43.50    | -8.90  | QP     |
| V              | 120.2766  | 20.93            | 13.19  | 34.12             | 43.50    | -9.38  | QP     |
| V              | 159.7844  | 23.04            | 11.61  | 34.65             | 43.50    | -8.85  | QP     |
| V              | 793.3958  | 10.02            | 27.28  | 37.30             | 46.00    | -8.70  | QP     |

**Remark:**

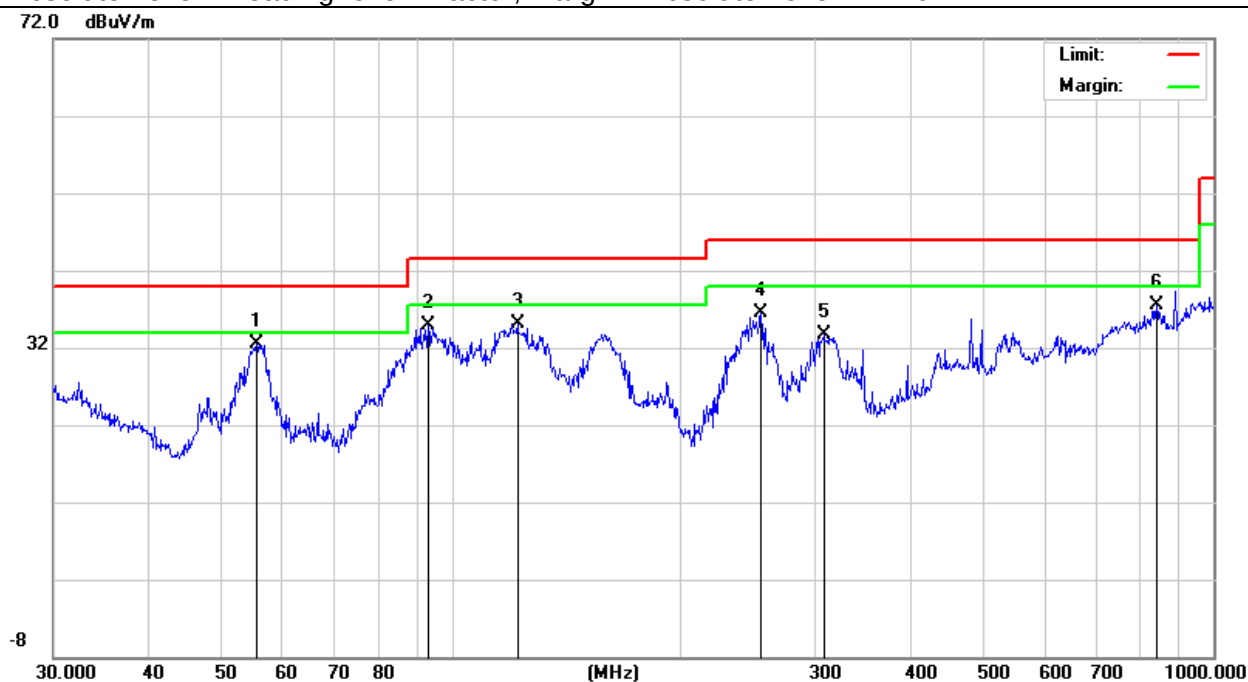
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| H              | 55.4147   | 25.48            | 7.10   | 32.58             | 40.00    | -7.42  | QP     |
| H              | 93.1132   | 23.94            | 10.99  | 34.93             | 43.50    | -8.57  | QP     |
| H              | 121.9753  | 21.82            | 13.24  | 35.06             | 43.50    | -8.44  | QP     |
| H              | 254.7281  | 21.37            | 15.23  | 36.60             | 46.00    | -9.40  | QP     |
| H              | 307.8312  | 17.40            | 16.29  | 33.69             | 46.00    | -12.31 | QP     |
| H              | 842.1295  | 8.97             | 28.62  | 37.59             | 46.00    | -8.41  | QP     |

**Remark:**

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit

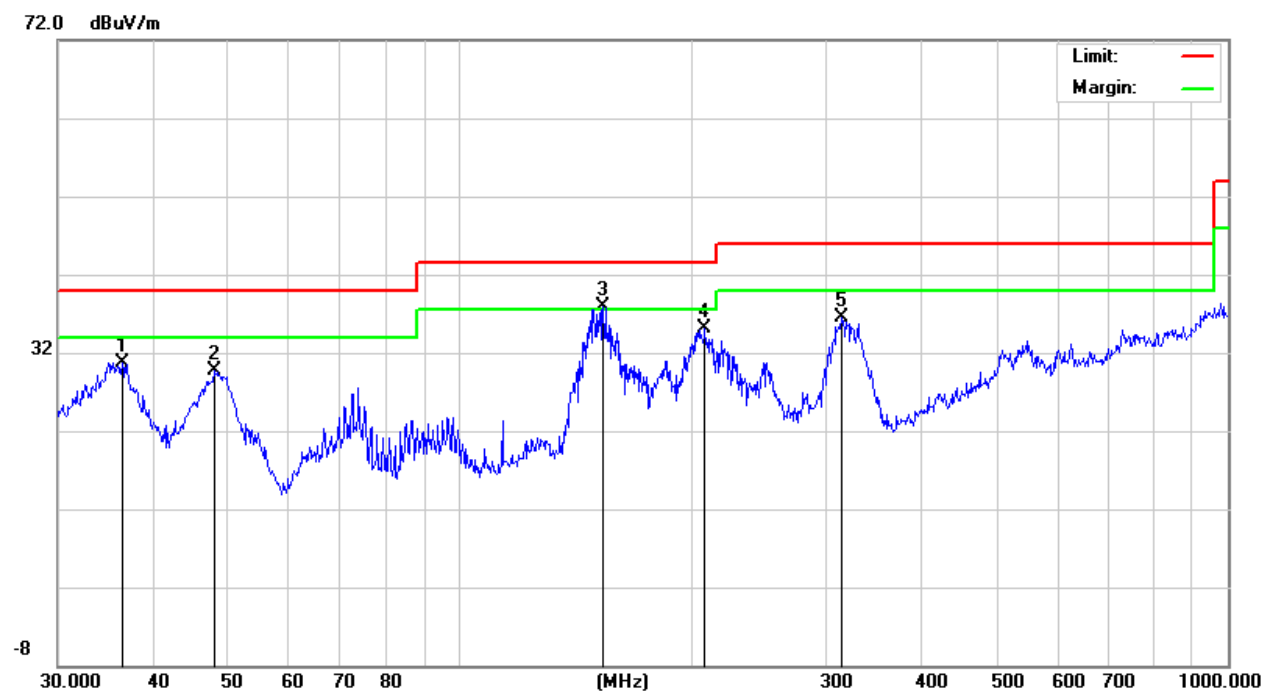


|               |                              |                     |         |
|---------------|------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE               | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                        | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                     | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX(5.8G) - 802.11a (High CH) |                     |         |

| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBuV)           | (dB)   | (dBuV/m)          | (dBuV/m) | (dB)   |        |
| V              | 36.3814   | 14.65            | 16.12  | 30.77             | 40.00    | -9.23  | QP     |
| V              | 47.994    | 18.34            | 11.33  | 29.67             | 40.00    | -10.33 | QP     |
| V              | 153.7385  | 25.28            | 12.58  | 37.86             | 43.50    | -5.64  | QP     |
| V              | 208.5803  | 24.17            | 10.90  | 35.07             | 43.50    | -8.43  | QP     |
| V              | 314.3765  | 20.04            | 16.41  | 36.45             | 46.00    | -9.55  | QP     |

**Remark:**

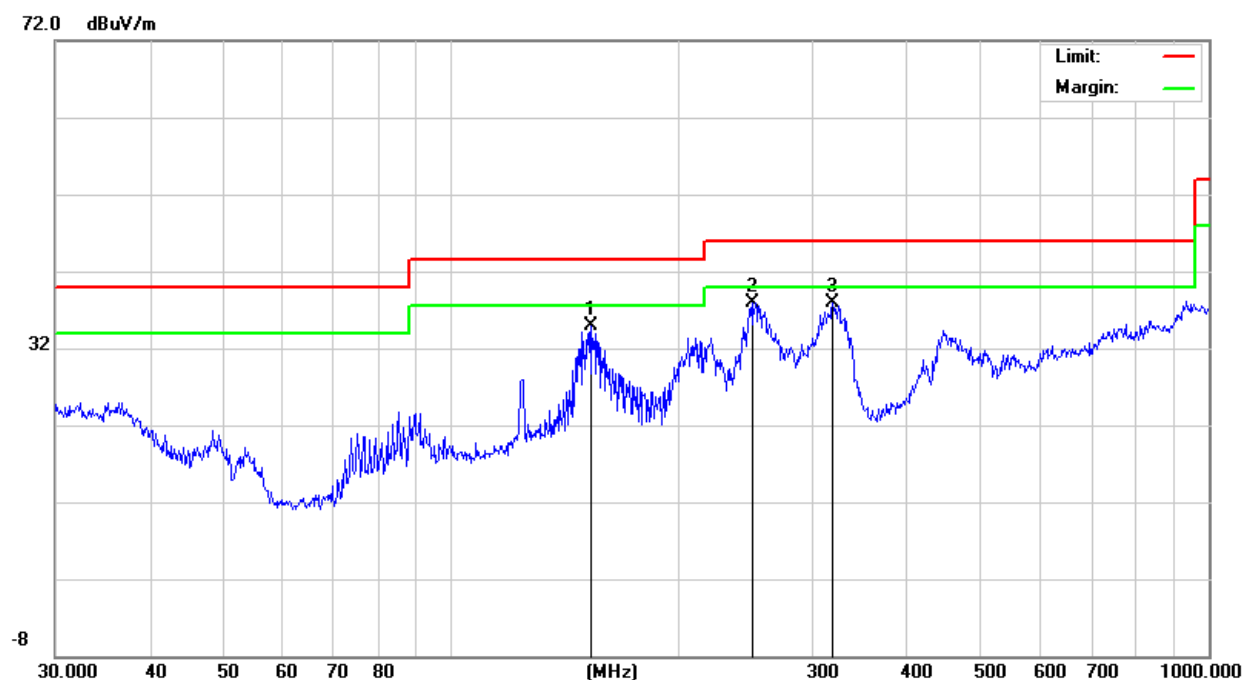
Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



| Polar<br>(H/V) | Frequency | Meter<br>Reading | Factor | Emission<br>Level | Limits   | Margin | Remark |
|----------------|-----------|------------------|--------|-------------------|----------|--------|--------|
|                | (MHz)     | (dBUV)           | (dB)   | (dBUV/m)          | (dBUV/m) | (dB)   |        |
| H              | 153.2004  | 22.38            | 12.61  | 34.99             | 43.50    | -8.51  | QP     |
| H              | 250.3012  | 22.97            | 14.95  | 37.92             | 46.00    | -8.08  | QP     |
| H              | 318.8170  | 21.38            | 16.49  | 37.87             | 46.00    | -8.13  | QP     |

**Remark:**

Absolute Level= ReadingLevel+ Factor, Margin= Absolute Level - Limit



### 3.2.8 TEST RESULTS (1GHz-26.5GHz)

|               |                                  |                     |         |
|---------------|----------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                   | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                            | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                         | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX(5.2G) - 802.11a _5180~5240MHz |                     |         |

| Polar                              | Frequency | Meter Reading | Cable loss | Antenna Factor | Preamp Factor | Emission Level | Limits   | Margin | Detector Type |
|------------------------------------|-----------|---------------|------------|----------------|---------------|----------------|----------|--------|---------------|
| (H/V)                              | (MHz)     | (dBuV)        | (dB)       | dB/m           | (dB)          | (dBuV/m)       | (dBuV/m) | (dB)   |               |
| Low Channel (5180 MHz)-Above 1G    |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4435.96   | 60.89         | 5.94       | 35.40          | 44.00         | 58.23          | 74.00    | -15.77 | Pk            |
| Vertical                           | 4435.96   | 40.17         | 5.94       | 35.40          | 44.00         | 37.51          | 54.00    | -16.49 | AV            |
| Vertical                           | 10370.37  | 62.95         | 8.46       | 39.75          | 44.50         | 66.66          | 74.00    | -7.34  | Pk            |
| Vertical                           | 10370.37  | 39.69         | 8.46       | 39.75          | 44.50         | 43.40          | 54.00    | -10.60 | AV            |
| Vertical                           | 15541.11  | 59.86         | 10.12      | 38.80          | 44.10         | 64.68          | 74.00    | -9.32  | Pk            |
| Vertical                           | 15541.11  | 36.93         | 10.12      | 38.80          | 42.70         | 43.15          | 54.00    | -10.85 | AV            |
| Horizontal                         | 4434.79   | 62.80         | 5.94       | 35.18          | 44.00         | 59.92          | 74.00    | -14.08 | Pk            |
| Horizontal                         | 4434.79   | 42.05         | 5.94       | 35.18          | 44.00         | 39.17          | 54.00    | -14.83 | AV            |
| Horizontal                         | 10370.86  | 56.33         | 8.46       | 38.71          | 44.50         | 59.00          | 74.00    | -15.00 | Pk            |
| Horizontal                         | 10370.86  | 41.38         | 8.46       | 38.71          | 44.50         | 44.05          | 54.00    | -9.95  | AV            |
| Horizontal                         | 10540.37  | 54.85         | 10.12      | 38.38          | 44.10         | 59.25          | 74.00    | -14.75 | Pk            |
| Horizontal                         | 10540.37  | 39.41         | 10.12      | 38.38          | 44.10         | 43.81          | 54.00    | -10.19 | AV            |
| middle Channel (5200 MHz)-Above 1G |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4592.77   | 56.93         | 6.48       | 36.35          | 44.05         | 55.71          | 74.00    | -18.29 | Pk            |
| Vertical                           | 4592.77   | 41.71         | 6.48       | 36.35          | 44.05         | 40.49          | 54.00    | -13.51 | AV            |
| Vertical                           | 10401.63  | 58.09         | 8.47       | 37.88          | 44.51         | 59.93          | 74.00    | -14.07 | Pk            |
| Vertical                           | 10401.63  | 40.50         | 8.47       | 37.88          | 44.51         | 42.34          | 54.00    | -11.66 | AV            |
| Vertical                           | 15601.23  | 58.20         | 10.12      | 38.80          | 44.10         | 63.02          | 74.00    | -10.98 | Pk            |
| Vertical                           | 15601.23  | 37.07         | 10.12      | 38.80          | 42.70         | 43.29          | 54.00    | -10.71 | AV            |
| Horizontal                         | 4592.82   | 58.04         | 6.48       | 36.37          | 44.05         | 56.84          | 74.00    | -17.16 | Pk            |
| Horizontal                         | 4592.82   | 43.07         | 6.48       | 36.37          | 44.05         | 41.87          | 54.00    | -12.13 | AV            |
| Horizontal                         | 10400.82  | 59.20         | 8.47       | 38.64          | 44.50         | 61.81          | 74.00    | -12.19 | Pk            |
| Horizontal                         | 10400.82  | 39.32         | 8.47       | 38.64          | 44.50         | 41.93          | 54.00    | -12.07 | AV            |
| Horizontal                         | 15600.85  | 57.45         | 10.12      | 38.38          | 44.10         | 61.85          | 74.00    | -12.15 | Pk            |
| Horizontal                         | 15600.85  | 39.93         | 10.12      | 38.38          | 44.10         | 44.33          | 54.00    | -9.67  | AV            |
| High Channel (5240 MHz)-Above 1G   |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4740.15   | 61.65         | 7.10       | 37.24          | 43.50         | 62.49          | 74.00    | -11.51 | Pk            |
| Vertical                           | 4740.15   | 41.22         | 7.10       | 37.24          | 43.50         | 42.06          | 54.00    | -11.94 | AV            |
| Vertical                           | 10481.02  | 58.47         | 8.46       | 37.68          | 44.50         | 60.11          | 74.00    | -13.89 | Pk            |
| Vertical                           | 10481.02  | 40.29         | 8.46       | 37.68          | 44.50         | 41.93          | 54.00    | -12.07 | AV            |
| Vertical                           | 15721.19  | 59.72         | 10.12      | 38.80          | 44.10         | 64.54          | 74.00    | -9.46  | Pk            |
| Vertical                           | 15721.19  | 36.59         | 10.12      | 38.80          | 42.70         | 42.81          | 54.00    | -11.19 | AV            |
| Horizontal                         | 4739.95   | 60.18         | 7.10       | 37.24          | 43.50         | 61.02          | 74.00    | -12.98 | Pk            |
| Horizontal                         | 4739.95   | 39.49         | 7.10       | 37.24          | 43.50         | 40.33          | 54.00    | -13.67 | AV            |
| Horizontal                         | 10482.64  | 59.31         | 8.46       | 38.57          | 44.50         | 61.84          | 74.00    | -12.16 | Pk            |
| Horizontal                         | 10482.64  | 39.58         | 8.46       | 38.57          | 44.50         | 42.11          | 54.00    | -11.89 | AV            |
| Horizontal                         | 15720.82  | 57.97         | 10.12      | 38.38          | 44.10         | 62.37          | 74.00    | -11.63 | Pk            |
| Horizontal                         | 15720.82  | 40.76         | 10.12      | 38.38          | 44.10         | 45.16          | 54.00    | -8.84  | AV            |

Note:"802.11n20(5G)" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record.

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

|               |                                  |                     |         |
|---------------|----------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                   | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                            | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                         | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX(5.3G) - 802.11a _5260~5320MHz |                     |         |

| Polar                              | Frequency | Meter Reading | Cable loss | Antenna Factor | Preamp Factor | Emission Level | Limits   | Margin | Detector Type |
|------------------------------------|-----------|---------------|------------|----------------|---------------|----------------|----------|--------|---------------|
| (H/V)                              | (MHz)     | (dBuV)        | (dB)       | dB/m           | (dB)          | (dBuV/m)       | (dBuV/m) | (dB)   |               |
| Low Channel (5260 MHz)-Above 1G    |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4581.32   | 60.24         | 5.44       | 35.40          | 44.00         | 57.09          | 74.00    | -16.91 | Pk            |
| Vertical                           | 4581.32   | 41.72         | 5.74       | 35.40          | 44.00         | 38.86          | 54.00    | -15.14 | AV            |
| Vertical                           | 10520.79  | 61.42         | 8.26       | 39.75          | 44.50         | 64.93          | 74.00    | -9.07  | Pk            |
| Vertical                           | 10520.79  | 40.93         | 8.01       | 39.75          | 44.50         | 44.19          | 54.00    | -9.81  | AV            |
| Vertical                           | 15780.18  | 59.00         | 10.12      | 38.80          | 44.10         | 63.82          | 74.00    | -10.18 | Pk            |
| Vertical                           | 15780.18  | 37.87         | 9.62       | 38.80          | 42.70         | 43.59          | 54.00    | -10.41 | AV            |
| Horizontal                         | 4680.28   | 62.39         | 5.57       | 35.18          | 44.00         | 59.13          | 74.00    | -14.87 | Pk            |
| Horizontal                         | 4680.28   | 41.65         | 5.74       | 35.18          | 44.00         | 38.57          | 54.00    | -15.43 | AV            |
| Horizontal                         | 11491.31  | 57.46         | 8.38       | 38.71          | 44.50         | 60.05          | 74.00    | -13.95 | Pk            |
| Horizontal                         | 11491.31  | 40.53         | 8.45       | 38.71          | 44.50         | 43.19          | 54.00    | -10.81 | AV            |
| Horizontal                         | 17236.21  | 55.61         | 9.88       | 38.38          | 44.10         | 59.77          | 74.00    | -14.23 | Pk            |
| Horizontal                         | 17236.21  | 38.61         | 9.94       | 38.38          | 44.10         | 42.83          | 54.00    | -11.17 | AV            |
| middle Channel (5280 MHz)-Above 1G |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4597.90   | 57.05         | 6.08       | 36.35          | 44.05         | 55.43          | 74.00    | -18.57 | Pk            |
| Vertical                           | 4597.90   | 40.68         | 6.39       | 36.35          | 44.05         | 39.37          | 54.00    | -14.63 | AV            |
| Vertical                           | 10560.53  | 57.79         | 8.28       | 37.88          | 44.51         | 59.44          | 74.00    | -14.56 | Pk            |
| Vertical                           | 10560.53  | 40.70         | 7.99       | 37.88          | 44.51         | 42.07          | 54.00    | -11.93 | AV            |
| Vertical                           | 15841.22  | 59.52         | 9.79       | 38.80          | 44.10         | 64.00          | 74.00    | -10.00 | Pk            |
| Vertical                           | 15841.22  | 37.67         | 9.70       | 38.80          | 42.70         | 43.47          | 54.00    | -10.53 | AV            |
| Horizontal                         | 4598.52   | 56.79         | 6.11       | 36.37          | 44.05         | 55.22          | 74.00    | -18.78 | Pk            |
| Horizontal                         | 4598.52   | 44.10         | 6.27       | 36.37          | 44.05         | 42.69          | 54.00    | -11.31 | AV            |
| Horizontal                         | 10560.65  | 60.27         | 8.33       | 38.64          | 44.50         | 62.74          | 74.00    | -11.26 | Pk            |
| Horizontal                         | 10560.65  | 39.17         | 8.07       | 38.64          | 44.50         | 41.37          | 54.00    | -12.63 | AV            |
| Horizontal                         | 15840.84  | 58.29         | 9.99       | 38.38          | 44.10         | 62.56          | 74.00    | -11.44 | Pk            |
| Horizontal                         | 15840.84  | 38.91         | 9.81       | 38.38          | 44.10         | 43.00          | 54.00    | -11.00 | AV            |
| High Channel (5320 MHz)-Above 1G   |           |               |            |                |               |                |          |        |               |
| Vertical                           | 6039.02   | 60.47         | 6.96       | 37.24          | 43.50         | 61.17          | 74.00    | -12.83 | Pk            |
| Vertical                           | 6039.02   | 41.47         | 7.07       | 37.24          | 43.50         | 42.27          | 54.00    | -11.73 | AV            |
| Vertical                           | 10641.27  | 59.86         | 8.14       | 37.68          | 44.50         | 61.18          | 74.00    | -12.82 | Pk            |
| Vertical                           | 10641.27  | 39.58         | 8.35       | 37.68          | 44.50         | 41.11          | 54.00    | -12.89 | AV            |
| Vertical                           | 15960.88  | 58.66         | 10.11      | 38.80          | 44.10         | 63.46          | 74.00    | -10.54 | Pk            |
| Vertical                           | 15960.88  | 36.94         | 9.64       | 38.80          | 42.70         | 42.69          | 54.00    | -11.31 | AV            |
| Horizontal                         | 6040.49   | 59.44         | 7.05       | 37.24          | 43.50         | 60.23          | 74.00    | -13.77 | Pk            |
| Horizontal                         | 6040.49   | 39.71         | 7.05       | 37.24          | 43.50         | 40.50          | 54.00    | -13.50 | AV            |
| Horizontal                         | 10640.94  | 58.64         | 8.20       | 38.57          | 44.50         | 60.91          | 74.00    | -13.09 | Pk            |
| Horizontal                         | 10640.94  | 41.39         | 8.03       | 38.57          | 44.50         | 43.49          | 54.00    | -10.51 | AV            |
| Horizontal                         | 15960.33  | 58.36         | 9.81       | 38.38          | 44.10         | 62.46          | 74.00    | -11.54 | Pk            |
| Horizontal                         | 15960.33  | 41.39         | 9.96       | 38.38          | 44.10         | 45.63          | 54.00    | -8.37  | AV            |

Note:"802.11n20(5G)" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record.

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value

has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

|               |                                    |                     |         |
|---------------|------------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                     | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                              | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                           | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX (5.6G) -- 802.11a _5500~5700MHz |                     |         |

| Polar                              | Frequency | Meter Reading | Cable loss | Antenna Factor | Preamp Factor | Emission Level | Limits   | Margin | Detector Type |
|------------------------------------|-----------|---------------|------------|----------------|---------------|----------------|----------|--------|---------------|
| (H/V)                              | (MHz)     | (dBuV)        | (dB)       | dB/m           | (dB)          | (dBuV/m)       | (dBuV/m) | (dB)   |               |
| Low Channel (5500 MHz)-Above 1G    |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4693.53   | 61.78         | 5.61       | 35.40          | 44.00         | 58.79          | 74.00    | -15.21 | Pk            |
| Vertical                           | 4693.53   | 42.61         | 5.76       | 35.40          | 44.00         | 39.77          | 54.00    | -14.23 | AV            |
| Vertical                           | 11000.43  | 57.55         | 8.24       | 39.75          | 44.50         | 61.04          | 74.00    | -12.96 | Pk            |
| Vertical                           | 11000.43  | 39.41         | 8.35       | 39.75          | 44.50         | 43.01          | 54.00    | -10.99 | AV            |
| Vertical                           | 16500.95  | 48.54         | 10.05      | 38.80          | 44.10         | 53.29          | 74.00    | -20.71 | Pk            |
| Vertical                           | 16500.95  | 40.29         | 9.65       | 38.80          | 42.70         | 46.04          | 54.00    | -7.96  | AV            |
| Horizontal                         | 4686.36   | 58.07         | 5.78       | 35.18          | 44.00         | 55.03          | 74.00    | -18.97 | Pk            |
| Horizontal                         | 4686.36   | 40.02         | 5.66       | 35.18          | 44.00         | 36.87          | 54.00    | -17.13 | AV            |
| Horizontal                         | 11000.99  | 55.75         | 8.22       | 38.71          | 44.50         | 58.18          | 74.00    | -15.82 | Pk            |
| Horizontal                         | 11000.99  | 39.11         | 8.14       | 38.71          | 44.50         | 41.46          | 54.00    | -12.54 | AV            |
| Horizontal                         | 16500.57  | 59.38         | 10.04      | 38.38          | 44.10         | 63.70          | 74.00    | -10.30 | Pk            |
| Horizontal                         | 16500.57  | 37.13         | 9.73       | 38.38          | 44.10         | 41.14          | 54.00    | -12.86 | AV            |
| middle Channel (5600 MHz)-Above 1G |           |               |            |                |               |                |          |        |               |
| Vertical                           | 4534.08   | 60.21         | 6.29       | 36.35          | 44.05         | 58.79          | 74.00    | -15.21 | Pk            |
| Vertical                           | 4534.08   | 41.77         | 6.24       | 36.35          | 44.05         | 40.31          | 54.00    | -13.69 | AV            |
| Vertical                           | 11200.50  | 57.42         | 8.24       | 37.88          | 44.51         | 59.04          | 74.00    | -14.96 | Pk            |
| Vertical                           | 11200.50  | 42.05         | 8.13       | 37.88          | 44.51         | 43.54          | 54.00    | -10.46 | AV            |
| Vertical                           | 16800.03  | 57.45         | 9.71       | 38.80          | 44.10         | 61.86          | 74.00    | -12.14 | Pk            |
| Vertical                           | 16800.03  | 38.32         | 10.12      | 38.80          | 42.70         | 44.53          | 54.00    | -9.47  | AV            |
| Horizontal                         | 4579.13   | 58.00         | 6.44       | 36.37          | 44.05         | 56.76          | 74.00    | -17.24 | Pk            |
| Horizontal                         | 4579.13   | 40.94         | 6.13       | 36.37          | 44.05         | 39.40          | 54.00    | -14.60 | AV            |
| Horizontal                         | 11200.96  | 58.39         | 8.31       | 38.64          | 44.50         | 60.84          | 74.00    | -13.16 | Pk            |
| Horizontal                         | 11200.96  | 40.63         | 8.04       | 38.64          | 44.50         | 42.81          | 54.00    | -11.19 | AV            |
| Horizontal                         | 16800.25  | 59.71         | 10.09      | 38.38          | 44.10         | 64.08          | 74.00    | -9.92  | Pk            |
| Horizontal                         | 16800.25  | 39.66         | 9.63       | 38.38          | 44.10         | 43.57          | 54.00    | -10.43 | AV            |
| High Channel (5700 MHz)-Above 1G   |           |               |            |                |               |                |          |        |               |
| Vertical                           | 6056.90   | 59.54         | 6.79       | 37.24          | 43.50         | 60.07          | 74.00    | -13.93 | Pk            |
| Vertical                           | 6056.90   | 40.15         | 6.85       | 37.24          | 43.50         | 40.74          | 54.00    | -13.26 | AV            |
| Vertical                           | 11400.30  | 58.79         | 8.10       | 37.68          | 44.50         | 60.07          | 74.00    | -13.93 | Pk            |
| Vertical                           | 11400.30  | 40.14         | 8.23       | 37.68          | 44.50         | 41.55          | 54.00    | -12.45 | AV            |
| Vertical                           | 17100.18  | 59.60         | 9.70       | 38.80          | 44.10         | 64.01          | 74.00    | -9.99  | Pk            |
| Vertical                           | 17100.18  | 38.28         | 9.70       | 38.80          | 42.70         | 44.08          | 54.00    | -9.92  | AV            |
| Horizontal                         | 6046.67   | 58.40         | 6.74       | 37.24          | 43.50         | 58.88          | 74.00    | -15.12 | Pk            |
| Horizontal                         | 6046.67   | 40.27         | 6.74       | 37.24          | 43.50         | 40.75          | 54.00    | -13.25 | AV            |
| Horizontal                         | 11400.36  | 57.89         | 8.25       | 38.57          | 44.50         | 60.21          | 74.00    | -13.79 | Pk            |
| Horizontal                         | 11400.36  | 39.80         | 8.35       | 38.57          | 44.50         | 42.22          | 54.00    | -11.78 | AV            |
| Horizontal                         | 17100.22  | 56.99         | 9.70       | 38.38          | 44.10         | 60.97          | 74.00    | -13.03 | Pk            |
| Horizontal                         | 17100.22  | 39.54         | 9.63       | 38.38          | 44.10         | 43.45          | 54.00    | -10.55 | AV            |

Note:"802.11a(5G)" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record.

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value

has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

|               |                                   |                     |         |
|---------------|-----------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                    | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                             | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                          | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX (5.8G) -- 802.11a_5745~5825MHz |                     |         |

| Polar                              | Frequency | Meter Reading | Cable loss | Antenna Factor | Preamplifier Factor | Emission Level | Limits   | Margin | Detector Type |
|------------------------------------|-----------|---------------|------------|----------------|---------------------|----------------|----------|--------|---------------|
| (H/V)                              | (MHz)     | (dBuV)        | (dB)       | dB/m           | (dB)                | (dBuV/m)       | (dBuV/m) | (dB)   |               |
| Low Channel (5745 MHz)-Above 1G    |           |               |            |                |                     |                |          |        |               |
| Vertical                           | 4680.45   | 61.70         | 5.94       | 35.40          | 44.00               | 59.04          | 74.00    | -14.96 | Pk            |
| Vertical                           | 4680.45   | 41.73         | 5.94       | 35.40          | 44.00               | 39.07          | 54.00    | -14.93 | AV            |
| Vertical                           | 11490.55  | 56.98         | 8.46       | 39.75          | 44.50               | 60.69          | 74.00    | -13.31 | Pk            |
| Vertical                           | 11490.55  | 39.97         | 8.46       | 39.75          | 44.50               | 43.68          | 54.00    | -10.32 | AV            |
| Vertical                           | 17236.36  | 48.70         | 10.12      | 38.80          | 44.10               | 53.52          | 74.00    | -20.48 | Pk            |
| Vertical                           | 17236.36  | 38.80         | 10.12      | 38.80          | 42.70               | 45.02          | 54.00    | -8.98  | AV            |
| Horizontal                         | 4680.21   | 58.42         | 5.94       | 35.18          | 44.00               | 55.54          | 74.00    | -18.46 | Pk            |
| Horizontal                         | 4680.21   | 39.48         | 5.94       | 35.18          | 44.00               | 36.60          | 54.00    | -17.40 | AV            |
| Horizontal                         | 11490.41  | 57.15         | 8.46       | 38.71          | 44.50               | 59.82          | 74.00    | -14.18 | Pk            |
| Horizontal                         | 11490.41  | 39.09         | 8.46       | 38.71          | 44.50               | 41.76          | 54.00    | -12.24 | AV            |
| Horizontal                         | 17235.25  | 58.55         | 10.12      | 38.38          | 44.10               | 62.95          | 74.00    | -11.05 | Pk            |
| Horizontal                         | 17235.25  | 38.13         | 10.12      | 38.38          | 44.10               | 42.53          | 54.00    | -11.47 | AV            |
| middle Channel (5785 MHz)-Above 1G |           |               |            |                |                     |                |          |        |               |
| Vertical                           | 4593.34   | 60.68         | 6.48       | 36.35          | 44.05               | 59.46          | 74.00    | -14.54 | Pk            |
| Vertical                           | 4593.34   | 40.17         | 6.48       | 36.35          | 44.05               | 38.95          | 54.00    | -15.05 | AV            |
| Vertical                           | 11570.91  | 57.66         | 8.47       | 37.88          | 44.51               | 59.50          | 74.00    | -14.50 | Pk            |
| Vertical                           | 11570.91  | 40.59         | 8.47       | 37.88          | 44.51               | 42.43          | 54.00    | -11.57 | AV            |
| Vertical                           | 17355.64  | 57.89         | 10.12      | 38.80          | 44.10               | 62.71          | 74.00    | -11.29 | Pk            |
| Vertical                           | 17355.64  | 38.56         | 10.12      | 38.80          | 42.70               | 44.78          | 54.00    | -9.22  | AV            |
| Horizontal                         | 4593.08   | 58.02         | 6.48       | 36.37          | 44.05               | 56.82          | 74.00    | -17.18 | Pk            |
| Horizontal                         | 4593.08   | 41.01         | 6.48       | 36.37          | 44.05               | 39.81          | 54.00    | -14.19 | AV            |
| Horizontal                         | 11570.59  | 59.62         | 8.47       | 38.64          | 44.50               | 62.23          | 74.00    | -11.77 | Pk            |
| Horizontal                         | 11570.59  | 41.05         | 8.47       | 38.64          | 44.50               | 43.66          | 54.00    | -10.34 | AV            |
| Horizontal                         | 17355.95  | 59.14         | 10.12      | 38.38          | 44.10               | 63.54          | 74.00    | -10.46 | Pk            |
| Horizontal                         | 17355.95  | 41.32         | 10.12      | 38.38          | 44.10               | 45.72          | 54.00    | -8.28  | AV            |
| High Channel (5825 MHz)-Above 1G   |           |               |            |                |                     |                |          |        |               |
| Vertical                           | 6039.79   | 60.51         | 7.10       | 37.24          | 43.50               | 61.35          | 74.00    | -12.65 | Pk            |
| Vertical                           | 6039.79   | 39.90         | 7.10       | 37.24          | 43.50               | 40.74          | 54.00    | -13.26 | AV            |
| Vertical                           | 11652.65  | 59.23         | 8.46       | 37.68          | 44.50               | 60.87          | 74.00    | -13.13 | Pk            |
| Vertical                           | 11652.65  | 40.29         | 8.46       | 37.68          | 44.50               | 41.93          | 54.00    | -12.07 | AV            |
| Vertical                           | 17473.88  | 58.53         | 10.12      | 38.80          | 44.10               | 63.35          | 74.00    | -10.65 | Pk            |
| Vertical                           | 17473.88  | 39.21         | 10.12      | 38.80          | 42.70               | 45.43          | 54.00    | -8.57  | AV            |
| Horizontal                         | 6039.73   | 57.75         | 7.10       | 37.24          | 43.50               | 58.59          | 74.00    | -15.41 | Pk            |
| Horizontal                         | 6039.73   | 41.54         | 7.10       | 37.24          | 43.50               | 42.38          | 54.00    | -11.62 | AV            |
| Horizontal                         | 11652.51  | 59.09         | 8.46       | 38.57          | 44.50               | 61.62          | 74.00    | -12.38 | Pk            |
| Horizontal                         | 11652.51  | 39.91         | 8.46       | 38.57          | 44.50               | 42.44          | 54.00    | -11.56 | AV            |
| Horizontal                         | 17475.52  | 56.64         | 10.12      | 38.38          | 44.10               | 61.04          | 74.00    | -12.96 | Pk            |
| Horizontal                         | 17475.52  | 39.09         | 10.12      | 38.38          | 44.10               | 43.49          | 54.00    | -10.51 | AV            |

Note:"802.11a(5G)" mode is the worst mode. PK value is lower than the Average value limit, So average didn't record.

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

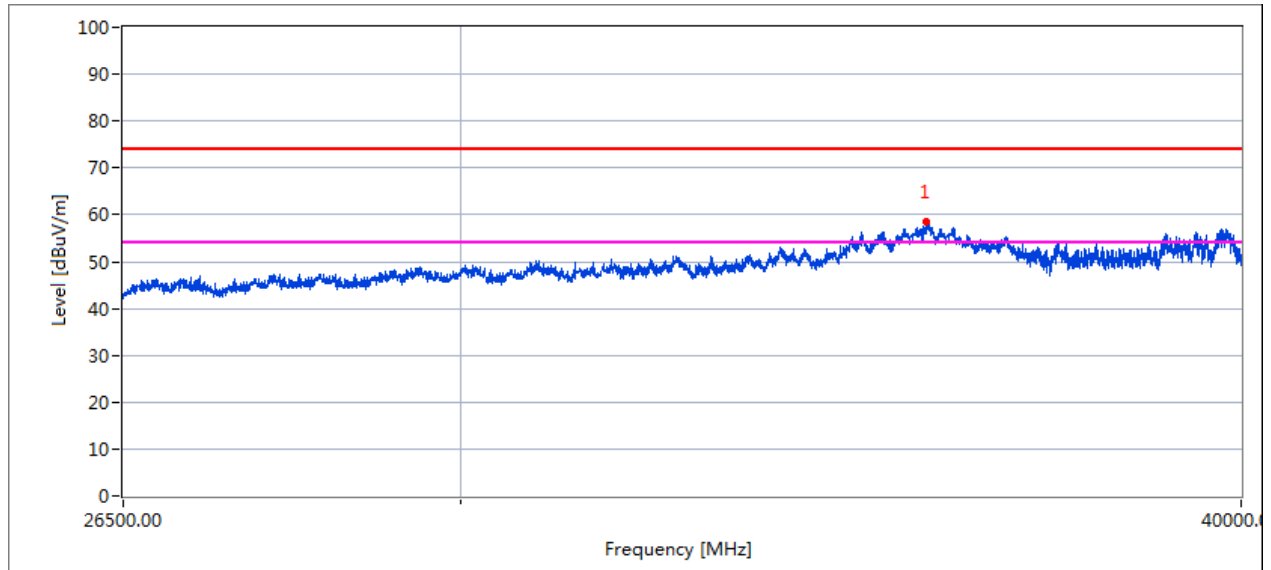
### 3.2.9 TEST RESULTS (26.5GHZ-40GHZ)

|               |                                                                                                                                                    |                     |         |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                                                                                                                                     | Model Name. :       | PSM01E  |
| Temperature : | 20 °C                                                                                                                                              | Relative Humidity : | 48%     |
| Pressure :    | 1010 hPa                                                                                                                                           | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX (5.2G)-802.11a 5180MHz~5240MHz ,<br>TX (5.3G)-802.11a 5250MHz~5350MHz<br>TX (5.6G)-802.11a 5470MHz~5725MHz<br>TX (5.8G)-802.11a 5745MHz~5825MHz |                     |         |

All the modulation modes have been tested, and the worst result was report as below:

Low Channel (5180 MHz)-Above 1G

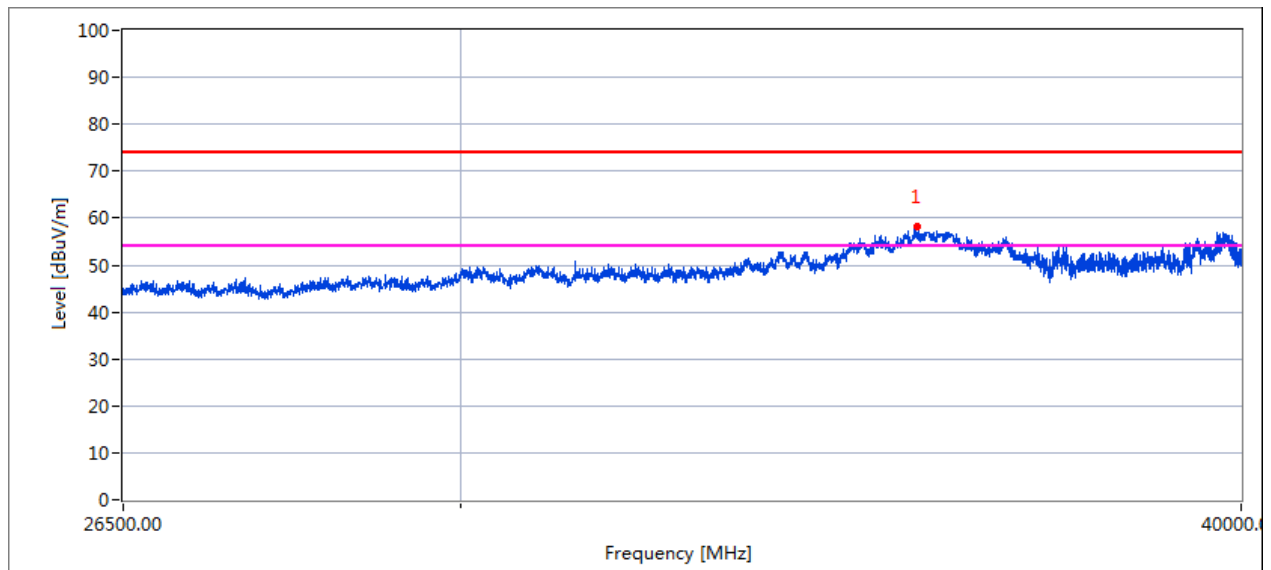
Horizontal



#### Measurement Result:

| Frequency MHz | Pre-scan Level MaxPeak dBuV/m | Final Test Level MaxPeak dBuV/m | Limit MaxPeak dBuV/m | Margin dB |
|---------------|-------------------------------|---------------------------------|----------------------|-----------|
| 35716.438     | 58.7                          | 55.5                            | 74.0                 | 18.5      |
| 35716.438     | 44.3                          | 43.4                            | 54.0                 | 10.6      |

Vertical

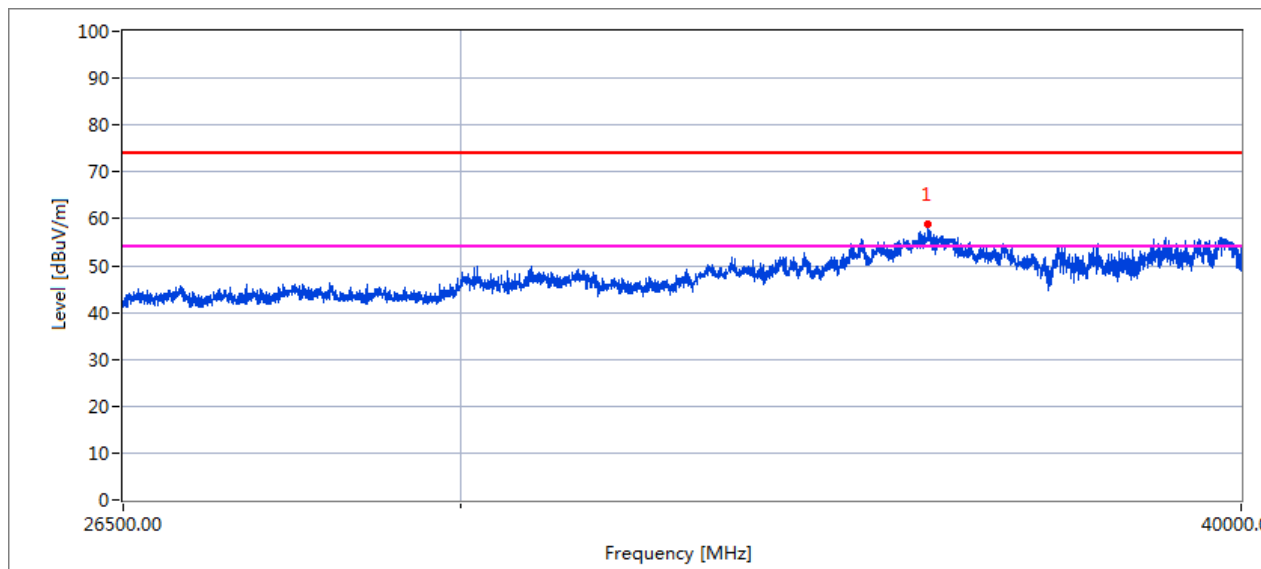


### Measurement Result:

| Frequency<br>MHz | Pre-scan<br>Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|----------------------------------------|---------------------------------------|----------------------------|--------------|
| 35463.336        | 58.5                                   | 54.7                                  | 74.0                       | 19.3         |
| 35463.336        | 45.8                                   | 43.1                                  | 54.0                       | 10.9         |

High Channel (5240 MHz)-Above 1G

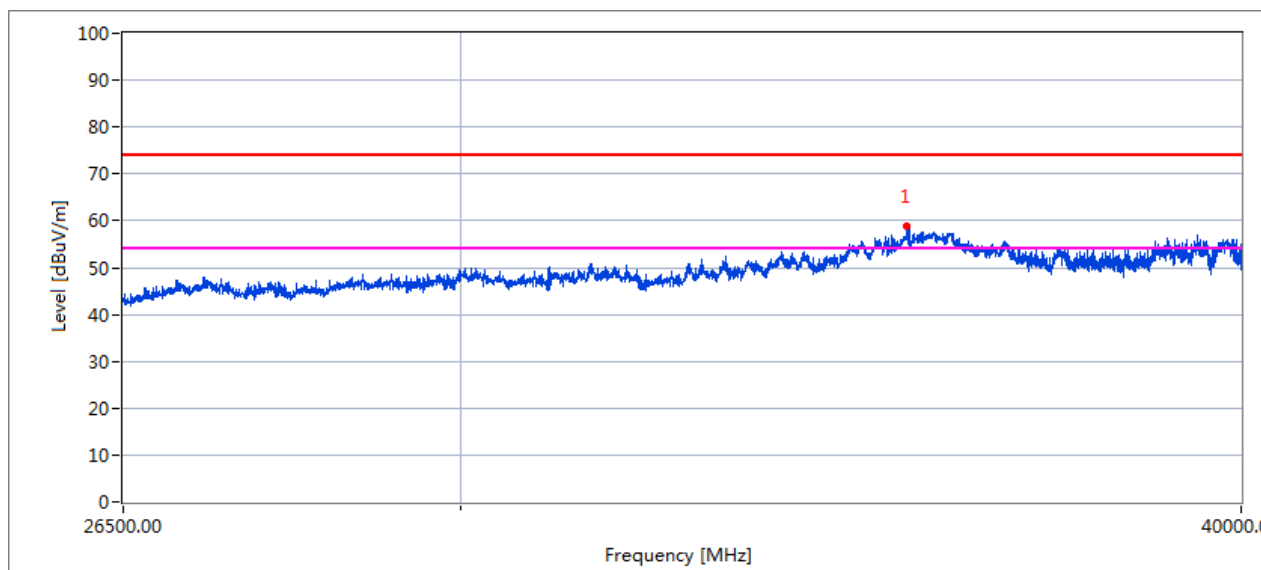
Horizontal



### Measurement Result:

| Frequency<br>MHz | Pre-scan Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|-------------------------------------|---------------------------------------|----------------------------|--------------|
| 35624.318        | 58.6                                | 55.6                                  | 74.0                       | 18.4         |
| 35624.318        | 42.3                                | 42.1                                  | 54.0                       | 11.9         |

Vertical

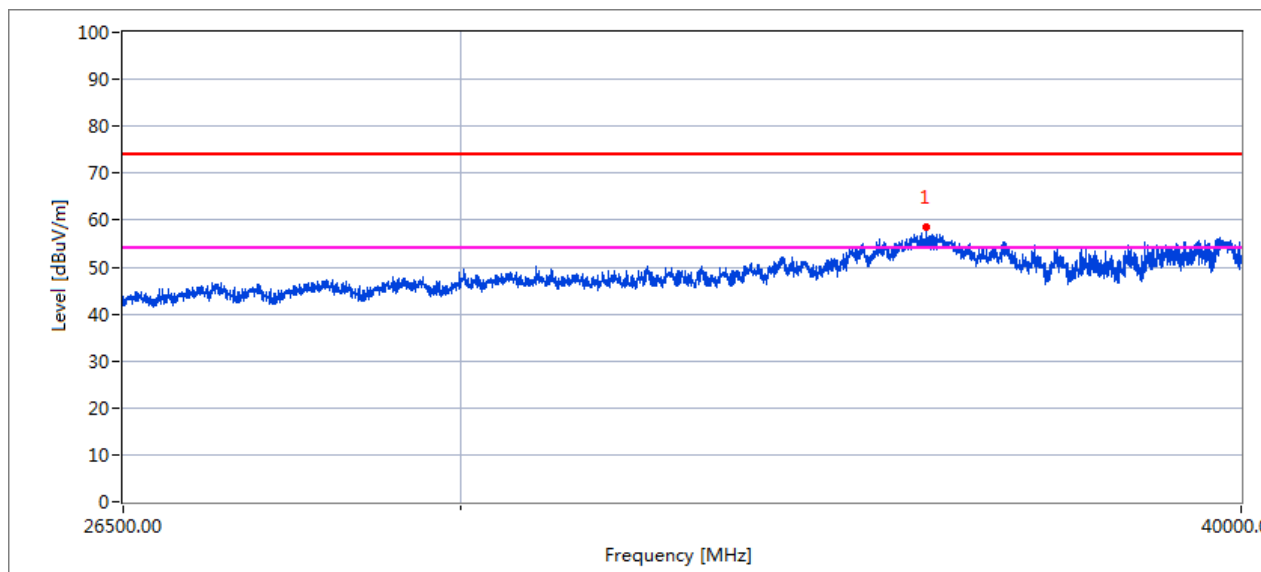


### Measurement Result:

| Frequency<br>MHz | Pre-scan Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|-------------------------------------|---------------------------------------|----------------------------|--------------|
| 35715.496        | 59.4                                | 57.4                                  | 74.0                       | 16.6         |
| 35715.496        | 43.2                                | 43.2                                  | 54.0                       | 10.8         |

# Low Channel (5260 MHz)-Above 1G

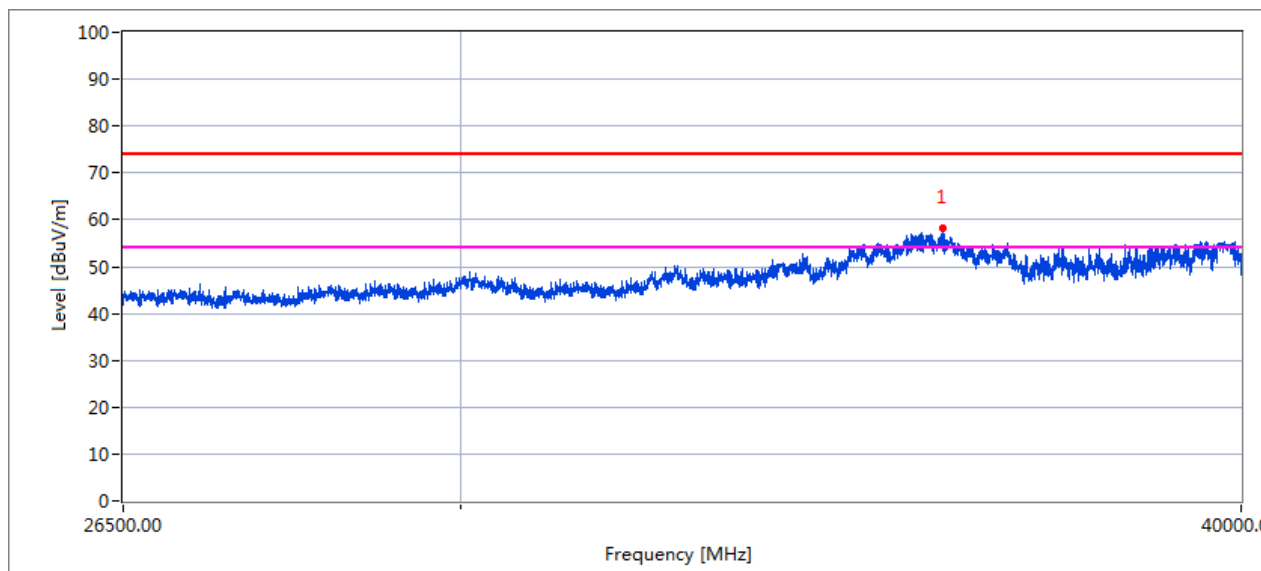
Horizontal



## Measurement Result:

| Frequency<br>MHz | Pre-scan Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|-------------------------------------|---------------------------------------|----------------------------|--------------|
| 35637.324        | 58.3                                | 48.3                                  | 74.0                       | 25.7         |
| 35637.324        | 42.3                                | 43.1                                  | 54.0                       | 10.9         |

Vertical

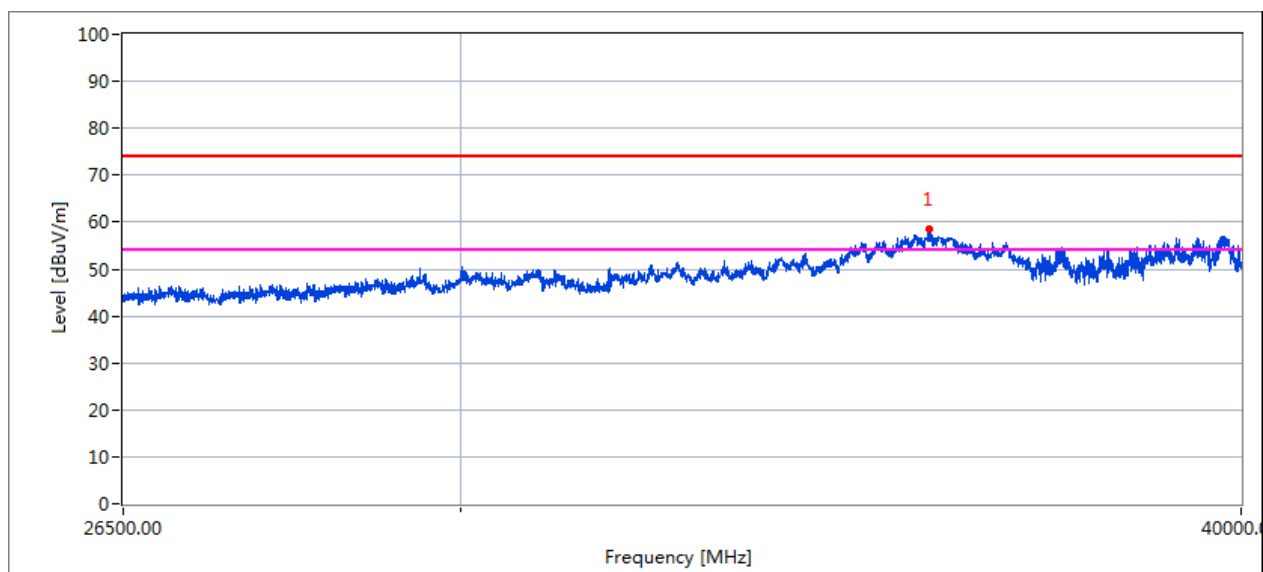


## Measurement Result:

| Frequency<br>MHz | Pre-scan Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|-------------------------------------|---------------------------------------|----------------------------|--------------|
| 35635.261        | 58.5                                | 54.2                                  | 74.0                       | 19.8         |
| 35635.261        | 42.4                                | 42.3                                  | 54.0                       | 11.7         |

# High Channel (5320 MHz)-Above 1G

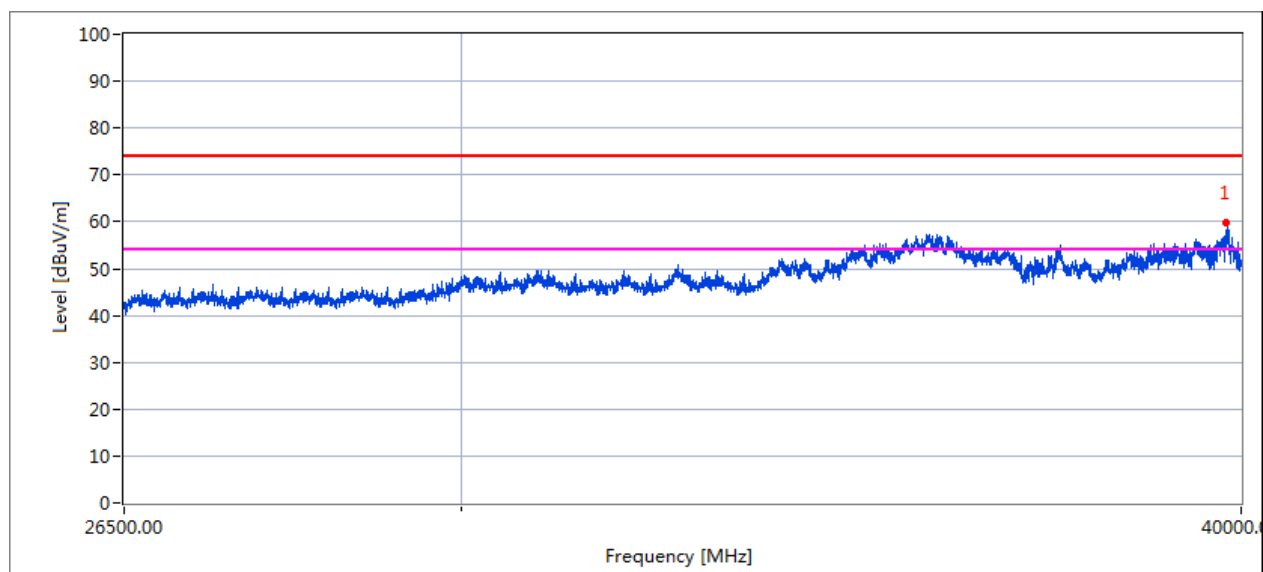
Horizontal



## Measurement Result:

| Frequency<br>MHz | Pre-scan Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|-------------------------------------|---------------------------------------|----------------------------|--------------|
| 35471.259        | 58.4                                | 57.1                                  | 74.0                       | 16.9         |
| 35471.259        | 43.6                                | 43.4                                  | 54.0                       | 10.6         |

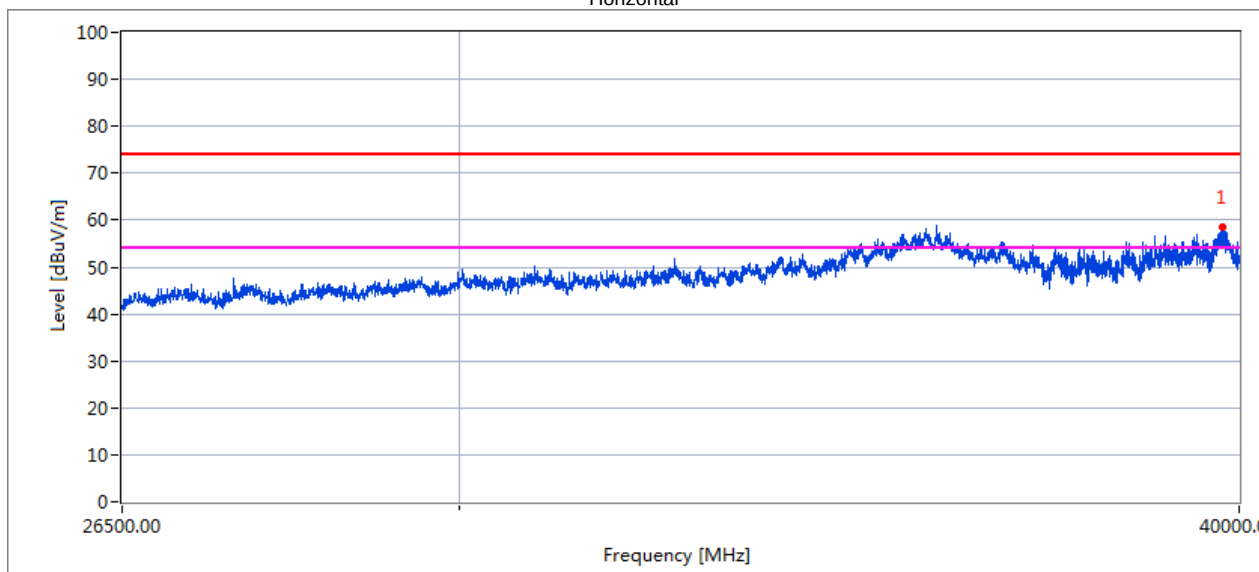
Vertical



## Measurement Result:

| Frequency<br>MHz | Pre-scan<br>Level<br>MaxPeak<br>dBuV/m | Final Test Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|----------------------------------------|---------------------------------------|----------------------------|--------------|
| 39759.547        | 58.3                                   | 58.1                                  | 74.0                       | 15.9         |
| 39759.547        | 43.2                                   | 43.2                                  | 54.0                       | 10.8         |

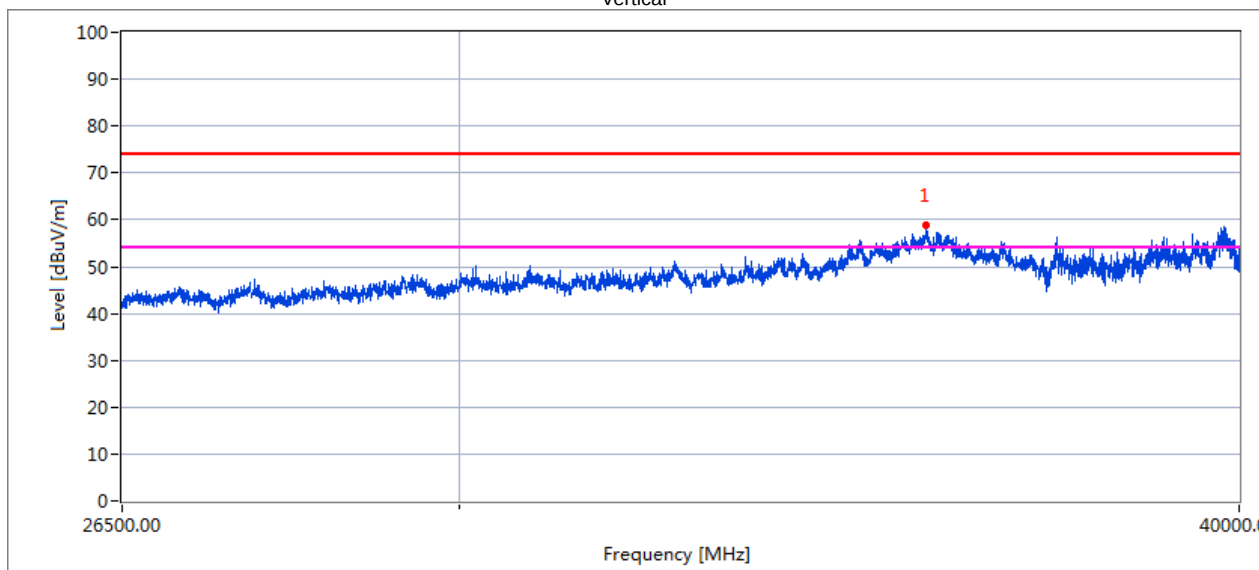
Low Channel (5500 MHz)-Above 1G  
Horizontal



Measurement Result:

| Frequency MHz | Pre-scan Level MaxPeak dBuV/m | Final Test Level MaxPeak dBuV/m | Limit MaxPeak dBuV/m | Margin dB |
|---------------|-------------------------------|---------------------------------|----------------------|-----------|
| 39724.175     | 58.4                          | 58.0                            | 74.0                 | 16.0      |
| 39724.175     | 43.5                          | 42.8                            | 54.0                 | 11.2      |

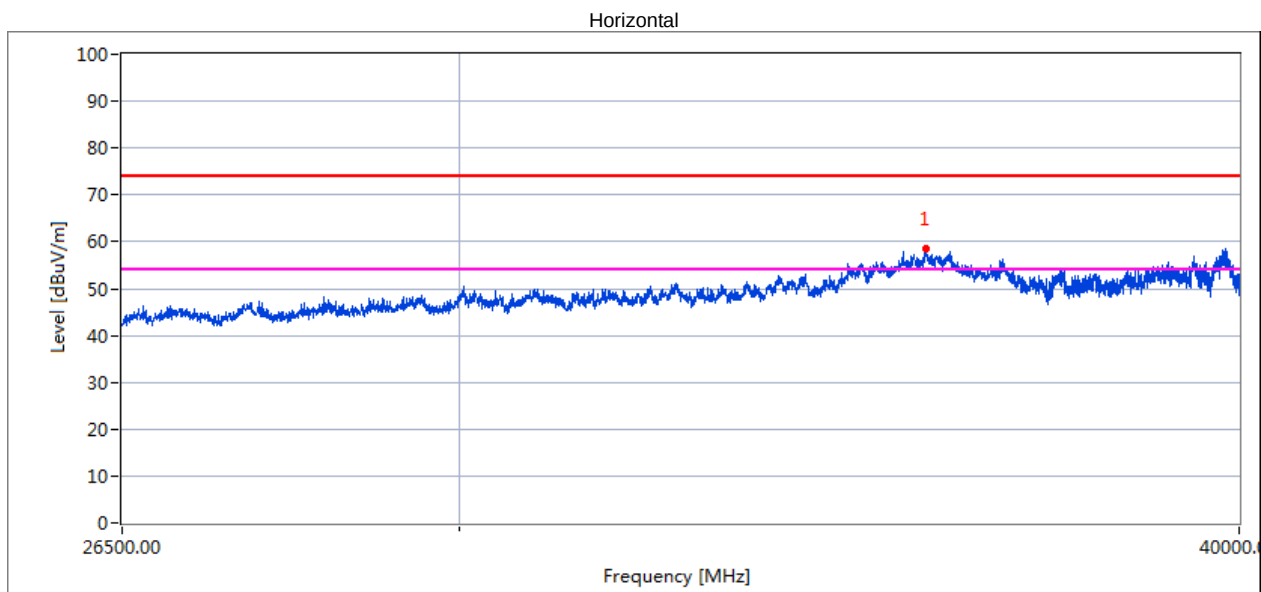
Vertical



Measurement Result:

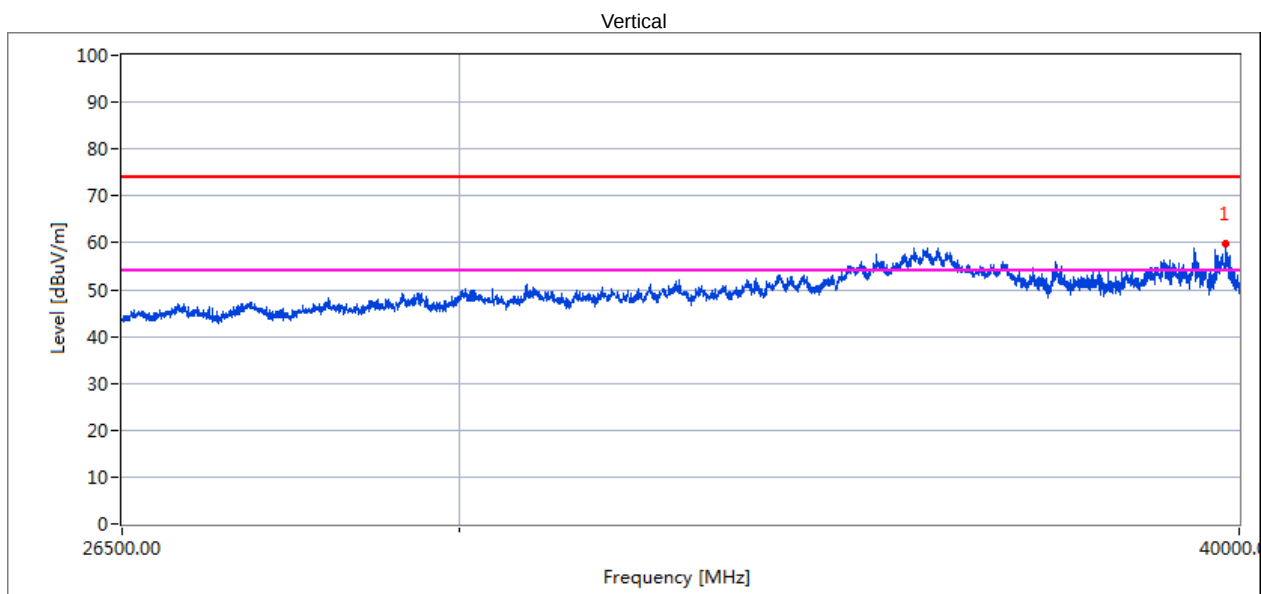
| Frequency MHz | Pre-scan Level MaxPeak dBuV/m | Final Test Level MaxPeak dBuV/m | Limit MaxPeak dBuV/m | Margin dB |
|---------------|-------------------------------|---------------------------------|----------------------|-----------|
| 35642.301     | 58.7                          | 56.3                            | 74                   | 17.7      |
| 35642.301     | 43.3                          | 42.3                            | 54.0                 | 11.7      |

### High Channel (5700 MHz)-Above 1G



#### Measurement Result:

| Frequency<br>MHz | Pre-scan<br>Level<br>MaxPeak<br>dBuV/m | Final Test<br>Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|----------------------------------------|------------------------------------------|----------------------------|--------------|
| 35641.711        | 58.6                                   | 56.1                                     | 74.0                       | 17.9         |
| 35641.711        | 44.3                                   | 43.2                                     | 54.0                       | 10.8         |

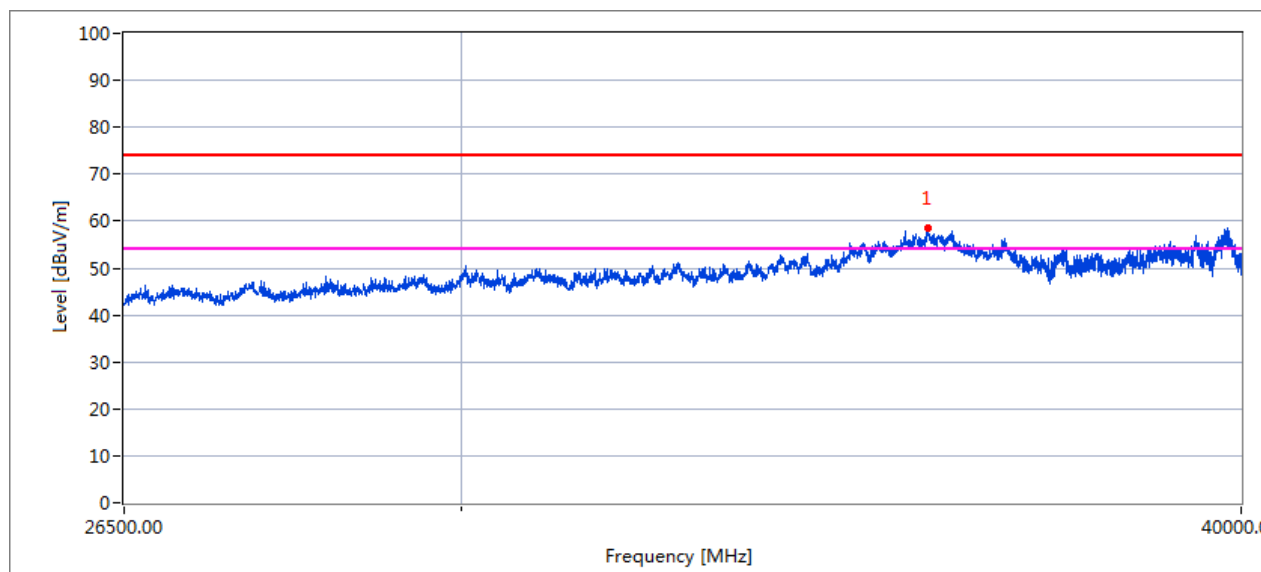


#### Measurement Result:

| Frequency<br>MHz | Pre-scan<br>Level<br>MaxPeak<br>dBuV/m | Final Test<br>Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|----------------------------------------|------------------------------------------|----------------------------|--------------|
| 39797.630        | 59.7                                   | 55.4                                     | 74.0                       | 18.6         |
| 39797.630        | 44.7                                   | 43.4                                     | 54.0                       | 10.6         |

# Low Channel (5745 MHz)-Above 1G

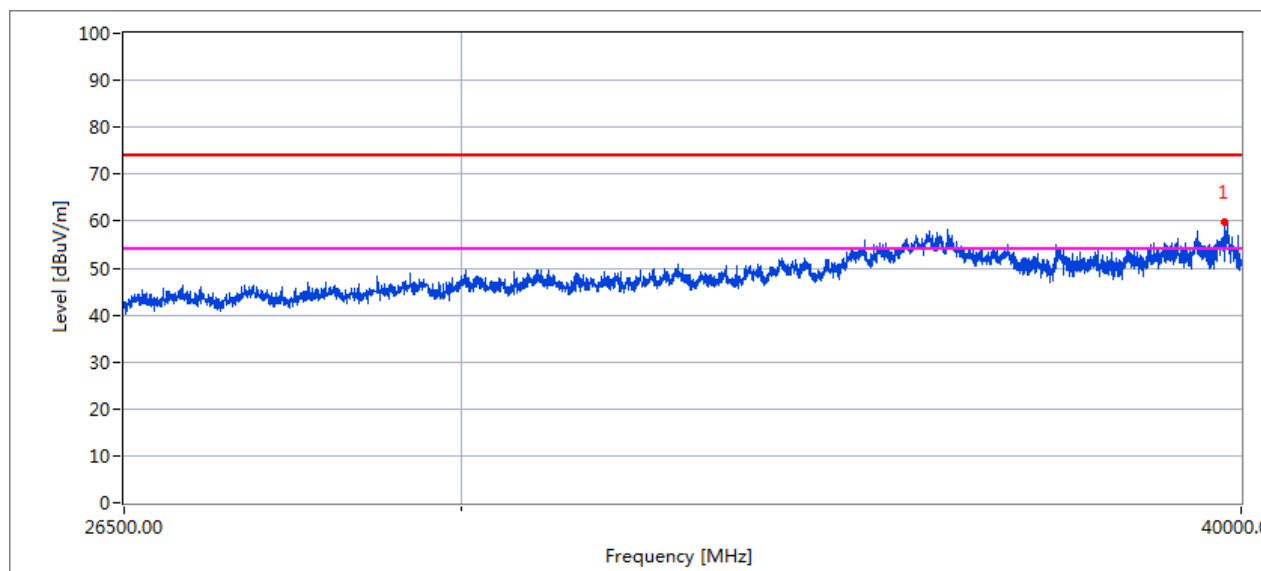
Horizontal



## Measurement Result:

| Frequency MHz | Pre-scan Level MaxPeak dBuV/m | Final Test Level MaxPeak dBuV/m | Limit MaxPeak dBuV/m | Margin dB |
|---------------|-------------------------------|---------------------------------|----------------------|-----------|
| 35613.673     | 58.3                          | 55.7                            | 74.0                 | 18.3      |
| 35613.673     | 43.7                          | 42.4                            | 54                   | 11.6      |

Vertical

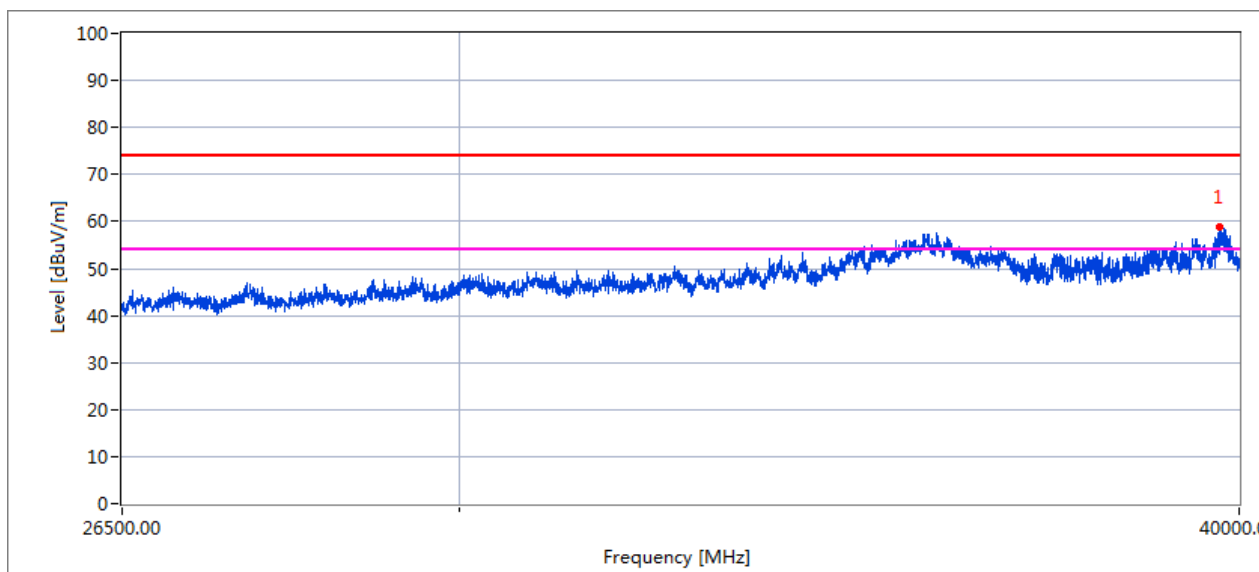


## Measurement Result:

| Frequency MHz | Pre-scan Level MaxPeak dBuV/m | Final Test Level MaxPeak dBuV/m | Limit MaxPeak dBuV/m | Margin dB |
|---------------|-------------------------------|---------------------------------|----------------------|-----------|
| 39753.375     | 59.9                          | 57.5                            | 74.0                 | 16.5      |
| 39753.375     | 44.5                          | 43.8                            | 54.0                 | 10.2      |

# High Channel (5825 MHz)-Above 1G

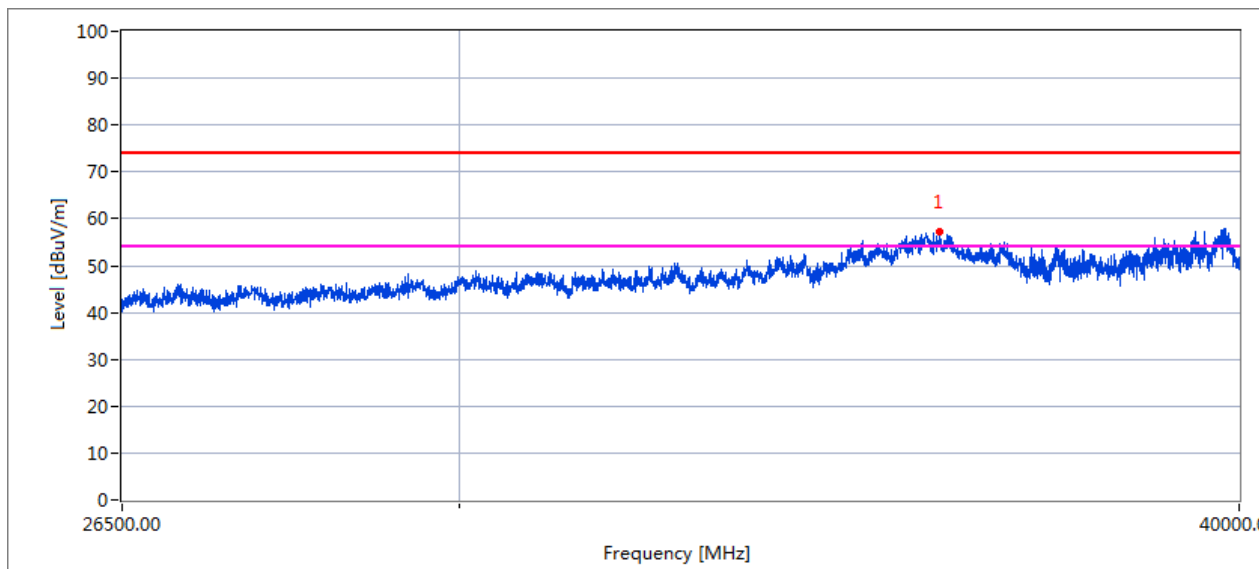
Horizontal



## Measurement Result:

| Frequency<br>MHz | Pre-scan<br>Level<br>MaxPeak<br>dBuV/m | Final Test<br>Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|----------------------------------------|------------------------------------------|----------------------------|--------------|
| 39712.914        | 59.0                                   | 53.0                                     | 74.0                       | 21.0         |
| 39712.914        | 44.2                                   | 43.7                                     | 54.0                       | 10.3         |

Vertical



## Measurement Result:

| Frequency<br>MHz | Pre-scan<br>Level<br>MaxPeak<br>dBuV/m | Final Test<br>Level<br>MaxPeak<br>dBuV/m | Limit<br>MaxPeak<br>dBuV/m | Margin<br>dB |
|------------------|----------------------------------------|------------------------------------------|----------------------------|--------------|
| 35811.975        | 57.2                                   | 53.3                                     | 74.0                       | 20.7         |
| 35811.975        | 43.6                                   | 43.1                                     | 54.0                       | 10.9         |

## 4. POWER SPECTRAL DENSITY TEST

### 4.1 APPLIED PROCEDURES / LIMIT

#### According to FCC §15.407(a)

For the band 5.15-5.25 GHz,

- (i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).
- (ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- (iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple colocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.
- (iv) For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz

- (3) For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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## 4.2 TEST PROCEDURE

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth (< 1 MHz, or < 500 kHz) and integrated over 1 MHz, or 500 KHz bandwidth, the following adjustments to the procedures apply:

- a) Set  $RBW \geq 1/T$ , where T is defined in section II.B.I.a).
- b) Set  $VBW \geq 3 RBW$ .
- c) If measurement bandwidth of Maximum PSD is specified in 500 kHz, add  $10\log(500\text{kHz}/RBW)$  to the measured result, whereas  $RBW (< 500 \text{ KHz})$  is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- d) If measurement bandwidth of Maximum PSD is specified in 1 MHz, add  $10\log(1\text{MHz}/RBW)$  to the measured result, whereas  $RBW (< 1 \text{ MHz})$  is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 KHz for the sections 5.c) and 5.d) above, since  $RBW=100 \text{ KHz}$  is available on nearly all spectrum analyzers.

## 4.3 DEVIATION FROM STANDARD

No deviation.

## 4.4 TEST SETUP



## 4.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 2.1 Unless otherwise a special operating condition is specified in the follows during the testing.

#### 4.6 TEST RESULTS

|               |                                    |                     |         |
|---------------|------------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                     | Model Name. :       | PSM01E  |
| Temperature : | 25 °C                              | Relative Humidity : | 56%     |
| Pressure :    | 1015 hPa                           | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX Frequency Band 1 (5150-5250MHz) |                     |         |

| Mode        | Frequency | Measured Power Density (dBm) | Limit (dBm/MHz) | Result |
|-------------|-----------|------------------------------|-----------------|--------|
| 802.11 a    | 5180 MHz  | 9.996                        | 11              | PASS   |
|             | 5200 MHz  | 9.600                        | 11              | PASS   |
|             | 5240 MHz  | 10.365                       | 11              | PASS   |
| 802.11 n20  | 5180 MHz  | 10.005                       | 11              | PASS   |
|             | 5200 MHz  | 9.433                        | 11              | PASS   |
|             | 5240 MHz  | 9.499                        | 11              | PASS   |
| 802.11 n40  | 5190 MHz  | 6.658                        | 11              | PASS   |
|             | 5230 MHz  | 5.815                        | 11              | PASS   |
| 802.11 ac20 | 5180 MHz  | 9.995                        | 11              | PASS   |
|             | 5200 MHz  | 9.877                        | 11              | PASS   |
|             | 5240 MHz  | 9.632                        | 11              | PASS   |
| 802.11 ac40 | 5190 MHz  | 6.555                        | 11              | PASS   |
|             | 5230 MHz  | 5.942                        | 11              | PASS   |

(802.11a) PSD plot on channel 36



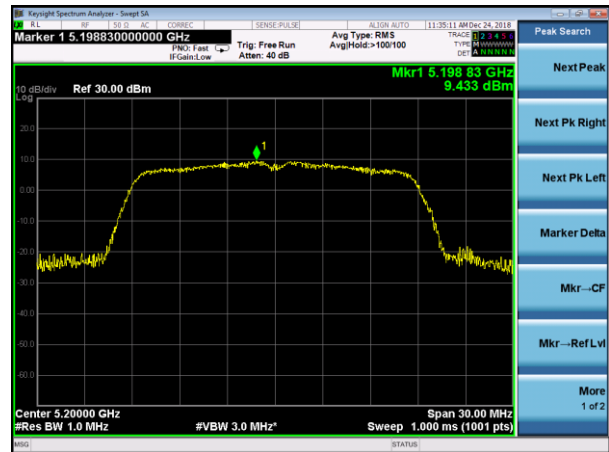
(802.11n20) PSD plot on channel 36



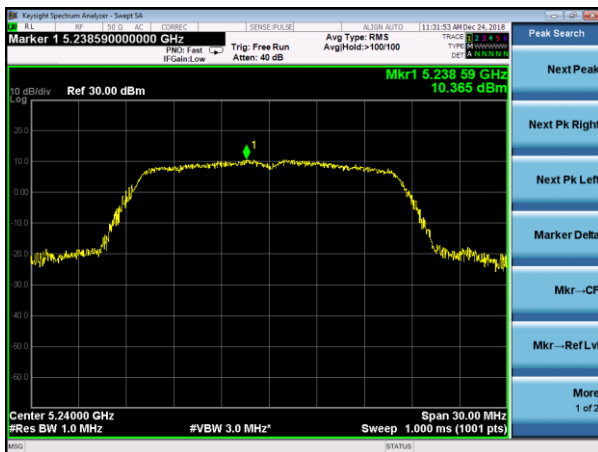
(802.11a) PSD plot on channel 40



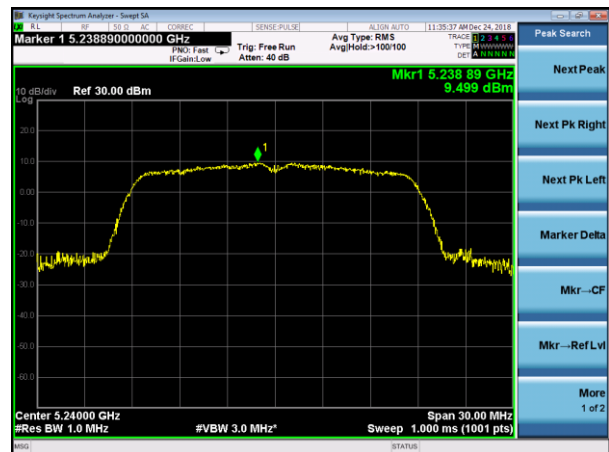
(802.11n20) PSD plot on channel 40



(802.11a) PSD plot on channel 48



(802.11n20) PSD plot on channel 48



(802.11n40) PSD plot on channel 38



(802.11ac20) PSD plot on channel 36



(802.11n40) PSD plot on channel 46



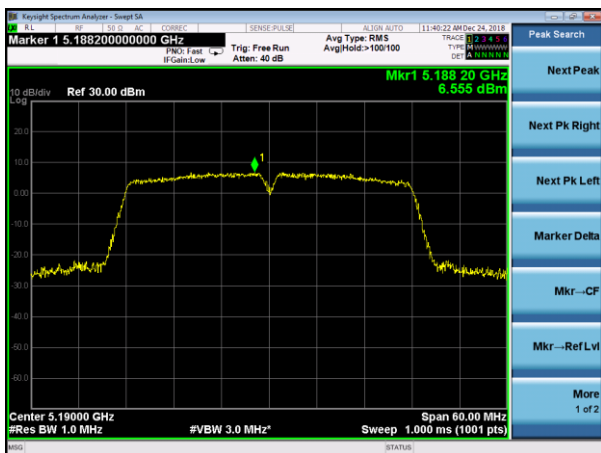
(802.11ac20) PSD plot on channel 40



(802.11ac20) PSD plot on channel 48



(802.11ac40) PSD plot on channel 38



(802.11ac40) PSD plot on channel 46



|               |                                     |                     |         |
|---------------|-------------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                      | Model Name. :       | PSM01E  |
| Temperature : | 25 °C                               | Relative Humidity : | 56%     |
| Pressure :    | 1015 hPa                            | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX Frequency Band 2A (5250-5350MHz) |                     |         |

| Mode        | Frequency | Measured Power Density (dBm) | Limit (dBm/MHz) | Result |
|-------------|-----------|------------------------------|-----------------|--------|
| 802.11 a    | 5260 MHz  | 10.212                       | 11              | PASS   |
|             | 5280 MHz  | 9.759                        | 11              | PASS   |
|             | 5320 MHz  | 10.402                       | 11              | PASS   |
| 802.11 n20  | 5260 MHz  | 10.131                       | 11              | PASS   |
|             | 5280 MHz  | 9.835                        | 11              | PASS   |
|             | 5320 MHz  | 10.276                       | 11              | PASS   |
| 802.11 n40  | 5270 MHz  | 6.725                        | 11              | PASS   |
|             | 5310 MHz  | 7.116                        | 11              | PASS   |
| 802.11 ac20 | 5260 MHz  | 10.069                       | 11              | PASS   |
|             | 5280 MHz  | 9.941                        | 11              | PASS   |
|             | 5320 MHz  | 9.345                        | 11              | PASS   |
| 802.11 ac40 | 5270 MHz  | 5.890                        | 11              | PASS   |
|             | 5310 MHz  | 6.665                        | 11              | PASS   |

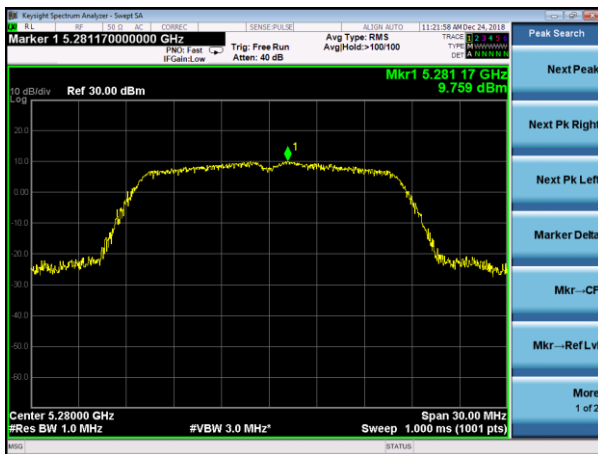
(802.11a) PSD plot on channel 52



(802.11n20) PSD plot on channel 52



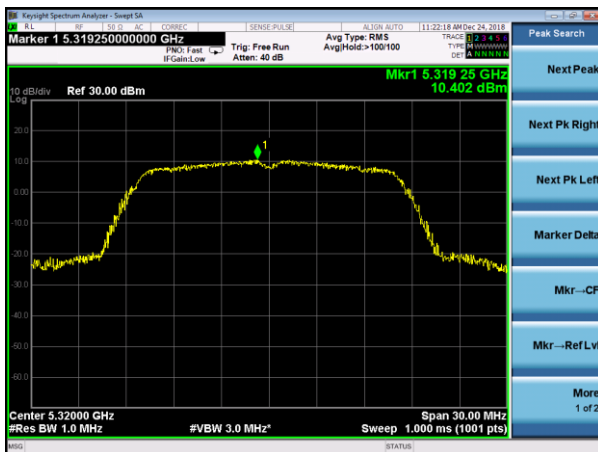
(802.11a) PSD plot on channel 56



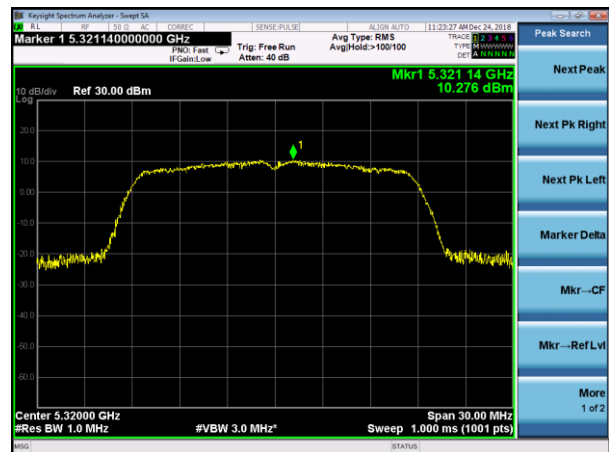
(802.11n20) PSD plot on channel 56



(802.11a) PSD plot on channel 64



(802.11n20) PSD plot on channel 64



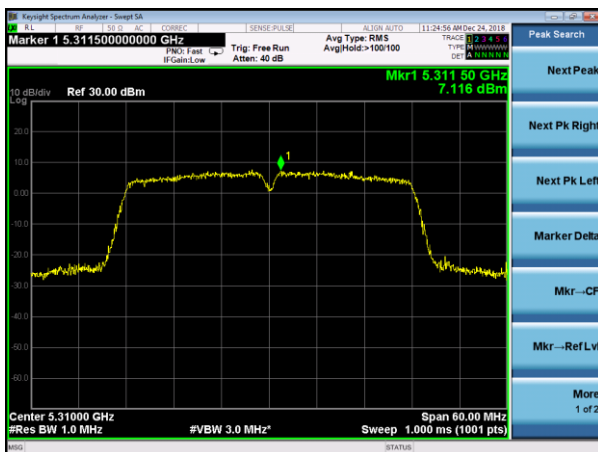
(802.11n40) PSD plot on channel 54



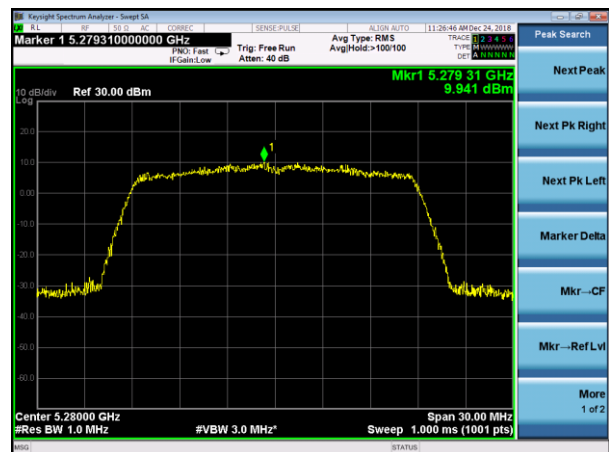
(802.11ac20) PSD plot on channel 52



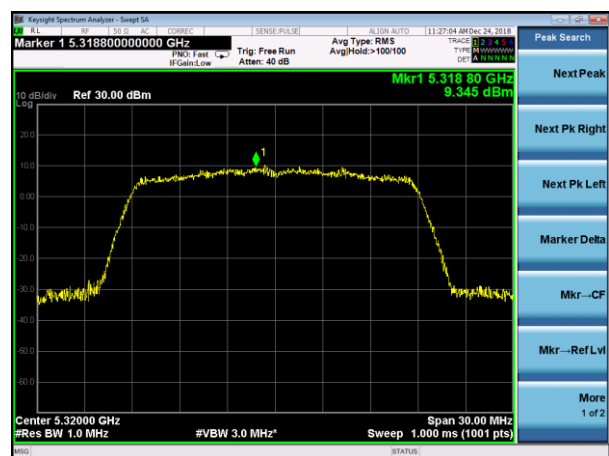
(802.11n40) PSD plot on channel 62



(802.11ac20) PSD plot on channel 56



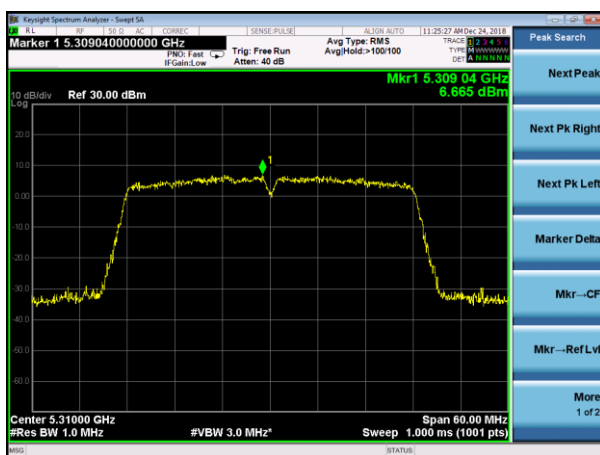
(802.11ac20) PSD plot on channel 64



(802.11ac40) PSD plot on channel 54



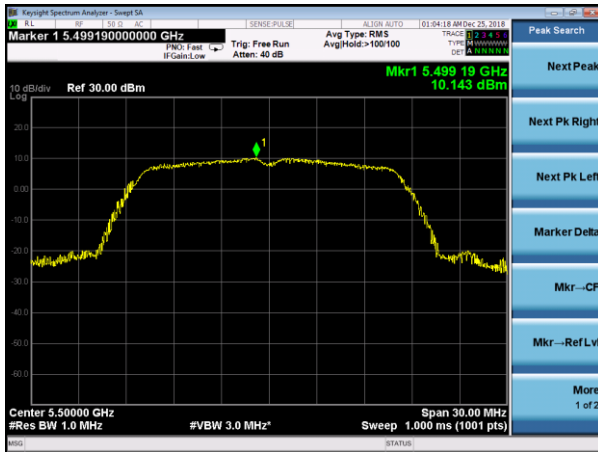
(802.11ac40) PSD plot on channel 62



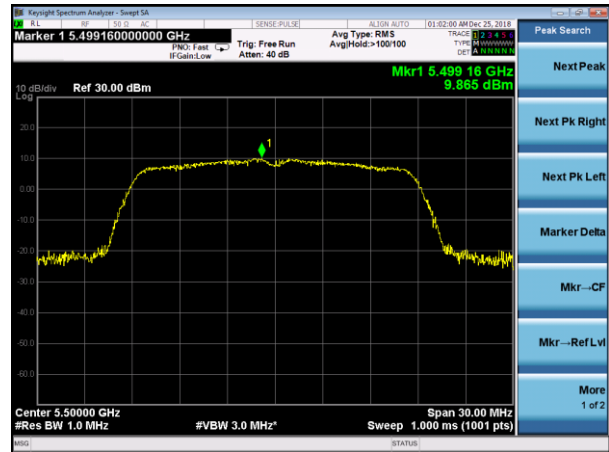
|               |                                     |                     |         |
|---------------|-------------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                      | Model Name. :       | PSM01E  |
| Temperature : | 25 °C                               | Relative Humidity : | 56%     |
| Pressure :    | 1015 hPa                            | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX Frequency Band 2C (5470-5725MHz) |                     |         |

| Mode        | Frequency | Measured Power Density (dBm) | Limit (dBm/MHz) | Result |
|-------------|-----------|------------------------------|-----------------|--------|
| 802.11 a    | 5500 MHz  | 10.143                       | 11              | PASS   |
|             | 5600 MHz  | 9.930                        | 11              | PASS   |
|             | 5700 MHz  | 9.918                        | 11              | PASS   |
| 802.11 n20  | 5500 MHz  | 9.865                        | 11              | PASS   |
|             | 5600 MHz  | 9.399                        | 11              | PASS   |
|             | 5700 MHz  | 10.394                       | 11              | PASS   |
| 802.11 n40  | 5510 MHz  | 7.297                        | 11              | PASS   |
|             | 5590 MHz  | 6.395                        | 11              | PASS   |
|             | 5670 MHz  | 6.143                        | 11              | PASS   |
| 802.11 ac20 | 5500 MHz  | 9.411                        | 11              | PASS   |
|             | 5600 MHz  | 9.729                        | 11              | PASS   |
|             | 5700 MHz  | 10.096                       | 11              | PASS   |
| 802.11 ac40 | 5510 MHz  | 6.220                        | 11              | PASS   |
|             | 5590 MHz  | 6.285                        | 11              | PASS   |
|             | 5670 MHz  | 6.143                        | 11              | PASS   |

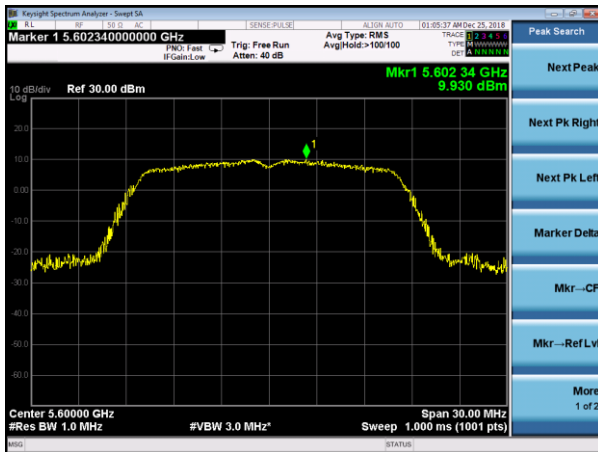
(802.11a) PSD plot on channel 100



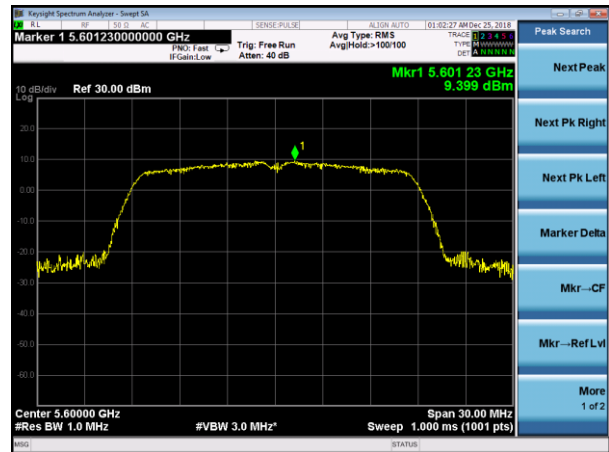
(802.11n20) PSD plot on channel 100



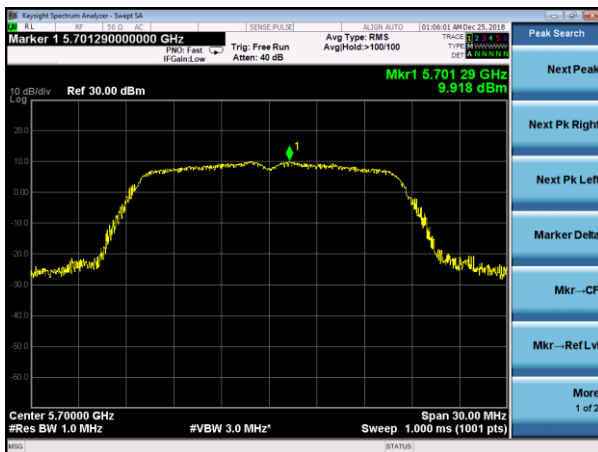
(802.11a) PSD plot on channel 120



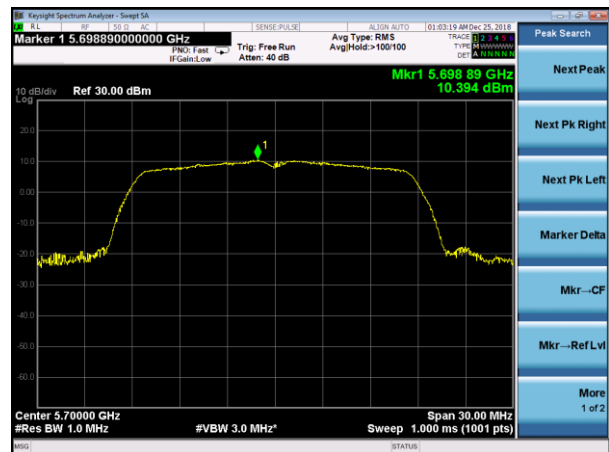
(802.11n20) PSD plot on channel 120



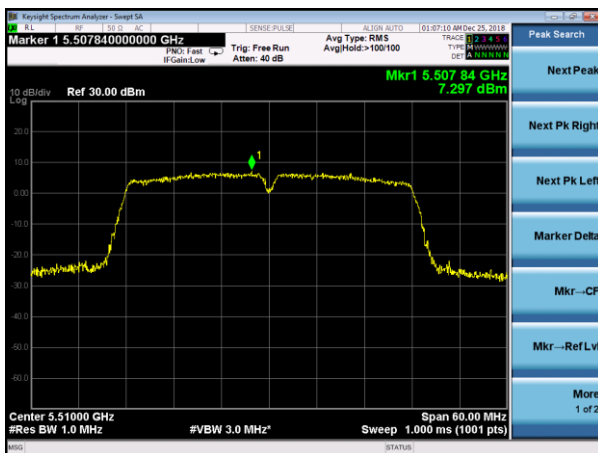
(802.11a) PSD plot on channel 140



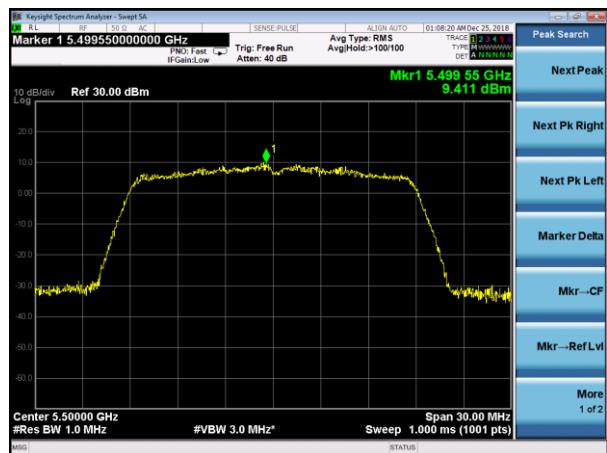
(802.11n20) PSD plot on channel 140



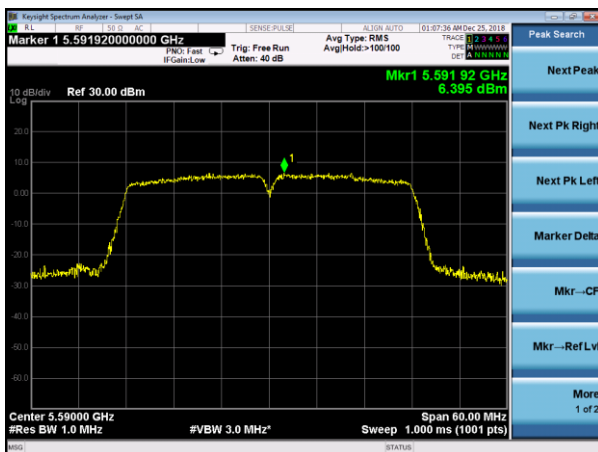
(802.11n40) PSD plot on channel 102



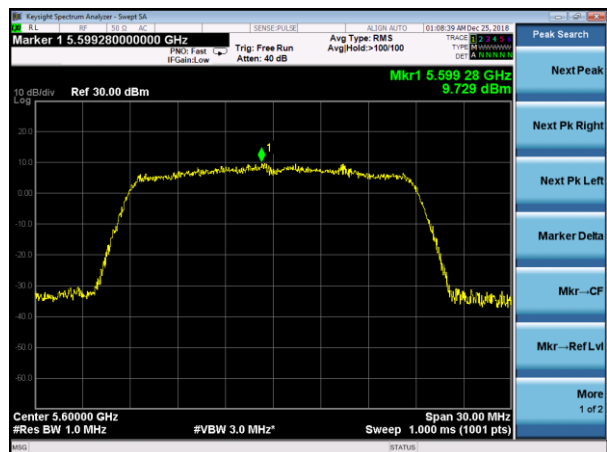
(802.11ac20) PSD plot on channel 100



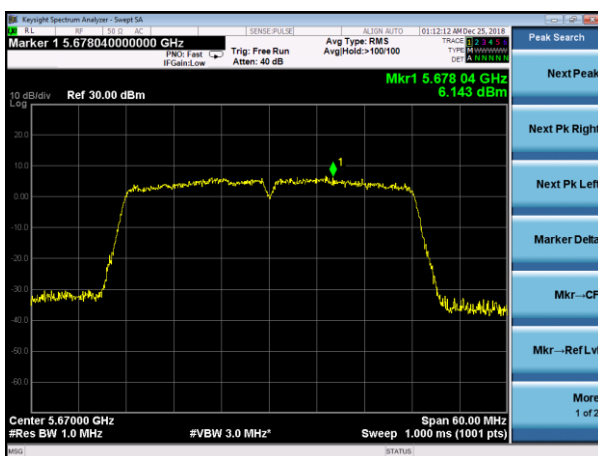
(802.11n40) PSD plot on channel 118



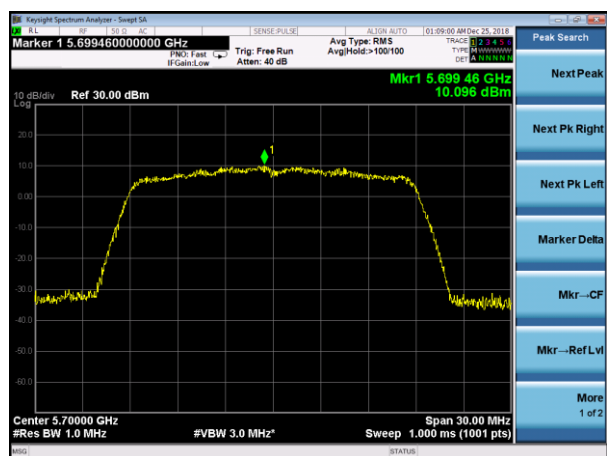
(802.11ac20) PSD plot on channel 120



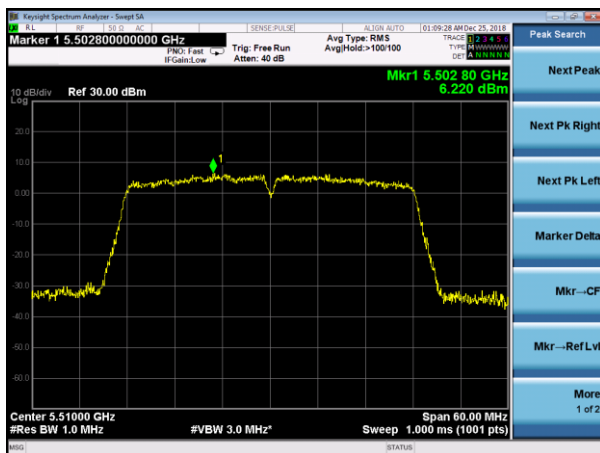
(802.11n40) PSD plot on channel 134



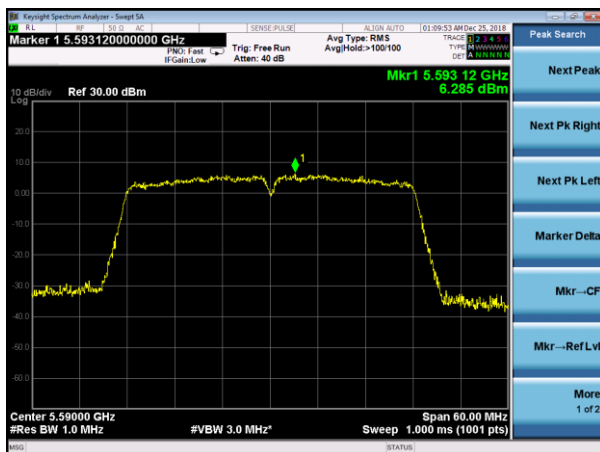
(802.11ac20) PSD plot on channel 140



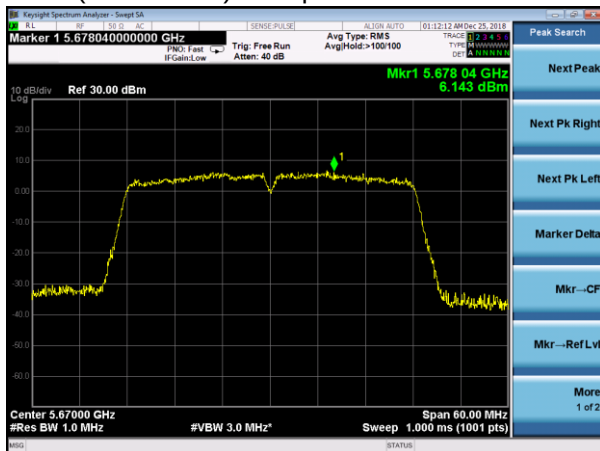
(802.11ac40) PSD plot on channel 102



(802.11ac40) PSD plot on channel 118



(802.11ac40) PSD plot on channel 134



|               |                                    |                     |         |
|---------------|------------------------------------|---------------------|---------|
| EUT :         | LTE SMARTPHONE                     | Model Name. :       | PSM01E  |
| Temperature : | 25 °C                              | Relative Humidity : | 56%     |
| Pressure :    | 1015 hPa                           | Test Voltage :      | DC 3.8V |
| Test Mode :   | TX Frequency Band 3 (5745-5825MHz) |                     |         |

| Mode        | Frequency | Measured Power Density (dBm) | Calculate power density (dBm)(Note 1) | Limit (dBm) | Result |
|-------------|-----------|------------------------------|---------------------------------------|-------------|--------|
| 802.11 a    | 5745 MHz  | 8.757                        | 8.671                                 | 30          | PASS   |
|             | 5785 MHz  | 8.938                        | 8.852                                 | 30          | PASS   |
|             | 5825 MHz  | 8.725                        | 8.639                                 | 30          | PASS   |
| 802.11 n20  | 5745 MHz  | 7.978                        | 7.892                                 | 30          | PASS   |
|             | 5785 MHz  | 7.518                        | 7.432                                 | 30          | PASS   |
|             | 5825 MHz  | 8.211                        | 8.125                                 | 30          | PASS   |
| 802.11 n40  | 5755 MHz  | 5.115                        | 5.029                                 | 30          | PASS   |
|             | 5795 MHz  | 4.679                        | 4.593                                 | 30          | PASS   |
| 802.11 ac20 | 5745 MHz  | 8.045                        | 7.959                                 | 30          | PASS   |
|             | 5785 MHz  | 8.060                        | 7.974                                 | 30          | PASS   |
|             | 5825 MHz  | 8.065                        | 7.979                                 | 30          | PASS   |
| 802.11 ac40 | 5755 MHz  | 4.747                        | 4.661                                 | 30          | PASS   |
|             | 5795 MHz  | 4.794                        | 4.708                                 | 30          | PASS   |

Note:

- (1) Calculate power density= Measured Power Density+10log(500kHz/RBW)= Measured Power Density+(-0.086)  
RBW=0.51MHz

(802.11a) PSD plot on channel 149



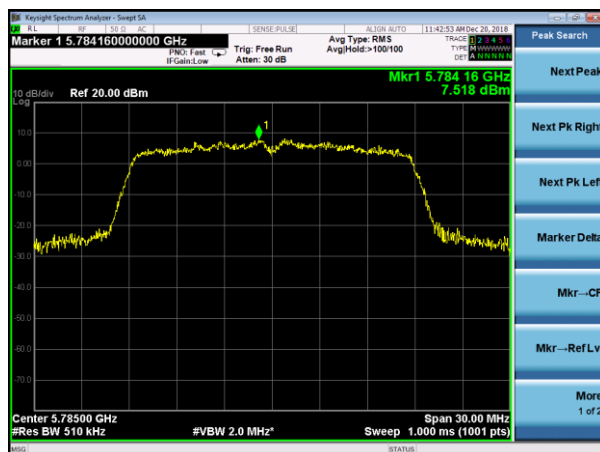
(802.11n20) PSD plot on channel 149



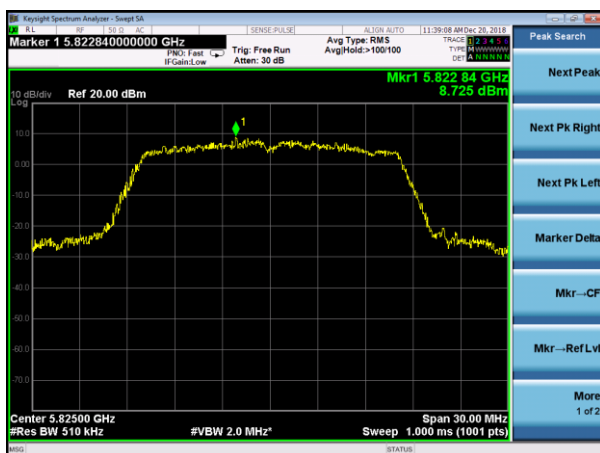
(802.11a) PSD plot on channel 157



(802.11n20) PSD plot on channel 157



(802.11a) PSD plot on channel 165



(802.11n20) PSD plot on channel 165

