FCC Test Report

APPLICANT : Planet Avvio LLC

EQUIPMENT: Mobile phone

BRAND NAME : Avvio MODEL NAME : 362

FCC ID : 2ALTA362X

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION: Certification

The product was received on Oct. 17, 2017 and testing was completed on Nov. 02, 2017. We, Sporton International (Shenzhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International (Shenzhen) Inc., the test report shall not be reproduced except in full.



Sporton International (Shenzhen) Inc.

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan Shenzhen City Guangdong Province 518055 China

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REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION | ISSUED DATE |
|------------|---------|-------------------------|---------------|
| FC7O1703 | Rev. 01 | Initial issue of report | Nov. 07, 2017 |
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SUMMARY OF TEST RESULT

| Report Section | FCC Rule | Description | Limit | Result | Remark |
|-------------------|----------|-----------------------|-----------------|--------|----------------|
| | | | | | Under limit |
| 3.1 | 15.107 | AC Conducted Emission | < 15.107 limits | PASS | 13.76 dB at |
| | | | | | 0.150 MHz |
| | | | | | Under limit |
| 2.2 | 15 100 | Dadiated Emission | < 15 100 limita | DACC | 1.63 dB at |
| 3.2 | 15.109 | Radiated Emission | < 15.109 limits | PASS | 647.890 MHz |
| | | | | | for Quasi-Peak |

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1. General Description

1.1. Applicant

Planet Avvio LLC

9725 NW 117th Ave., Medley, FL 33178, United States

1.2. Manufacturer

UTIME TECHNOLOGY (HK) COMPANY LIMITED

7/F., 5-A Building, Software IndustrialBase, No.1006 Keyuan Road, Nanshan District, Shenzhen, P.R.China

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1.3. Product Feature of Equipment Under Test

| | Product Feature |
|---------------------------------|---|
| Equipment | Mobile phone |
| Brand Name | Avvio |
| Model Name | 362 |
| FCC ID | 2ALTA362X |
| EUT supports Radios application | GSM/GPRS/EGPRS(Downlink Only)/WCDMA/HSPA/ Bluetooth v2.1 + EDR |
| IMEI Code | Conduction: 356778670090013 Radiation: 356778670000021 |
| HW Version | V0.2 |
| SW Version | Avvio362_PuertoRico_Claro_V01 |
| EUT Stage | Identical Prototype |

Remark:

The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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1.4. Product Specification of Equipment Under Test

| Standards-related Product Specification | | | | | |
|---|---|--|--|--|--|
| Tx Frequency | GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz Bluetooth: 2402 MHz ~ 2480 MHz | | | | |
| Rx Frequency | GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz Bluetooth: 2402 MHz ~ 2480 MHz FM: 87.5 MHz ~ 108 MHz | | | | |
| Antenna Type | WWAN : PIFA Antenna Bluetooth : PIFA Antenna FM: External headset Antenna | | | | |
| Type of Modulation | GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK(Downlink Only) WCDMA: BPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): \pi /4-DQPSK Bluetooth (3Mbps): 8-DPSK FM | | | | |

1.5. Modification of EUT

No modifications are made to the EUT during all test items.

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1.6. Test Location

Sporton Lab is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600156-0) and the FCC designation No are CN5018 and CN5019.

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| Test Site | Sporton International (Shenzhen) Inc. | | | |
|--------------------|---|--------|--|--|
| Test Site Location | 1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan Shenzhen City Guangdong Province 518055 China TEL: +86-755-8637-9589 | | | |
| | FAX: +86-755-8637-9595 | | | |
| Test Site No. | Sporton Site No. FCC Test Firm Registra | | | |
| rest site No. | CO01-SZ | 251365 | | |

| Test Site | Sporton International (Shenzhen) Inc. | | | | |
|--------------------|--|--------------------------------|--|--|--|
| Test Site Location | No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan District Shenzhen City Guangdong Province 518055 China TEL: +86-755-3320-2398 | | | | |
| Test Site No. | Sporton Site No. | FCC Test Firm Registration No. | | | |
| rest site No. | 03CH01-SZ | 577730 | | | |

Note: The test site complies with ANSI C63.4 2014 requirement.

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2014

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

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2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

| Test Items | Function Type |
|------------------------------|---|
| | Mode 1: GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera <fig.1></fig.1> |
| | Mode 2: GSM1900 Idle + Bluetooth Idle + Adapter + Earphone + MPEG4 <fig.1></fig.1> |
| Emission | Mode 3: WCDMA Band II Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + FM Rx(98MHz) <fig.2></fig.2> |
| | Mode 1: GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera <fig.1></fig.1> |
| | Mode 2: GSM1900 Idle + Bluetooth Idle + Adapter + Earphone + MPEG4 <fig.1></fig.1> |
| Emissions < 1GHz | Mode 3: WCDMA Band II Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + FM Rx(98MHz) <fig.2></fig.2> |
| | Mode 1: GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera <fig.1></fig.1> |
| Radiated Emissions ≥ 1GHz | Mode 2: WCDMA Band II Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Earphone + FM Rx(98MHz) <fig.2></fig.2> |

Remark:

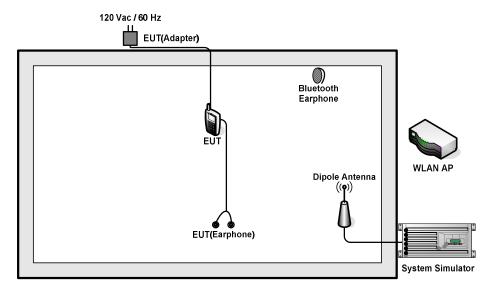
- 1. The worst case of AC is mode 1; and the USB Link mode of AC is mode 3, the test data of these modes are reported.
- The worst case of RE < 1G is mode 1; and the USB link mode of RE is mode 3, the test data of these modes are reported.
- Data Link with Notebook means data application transferred mode between EUT and Notebook.

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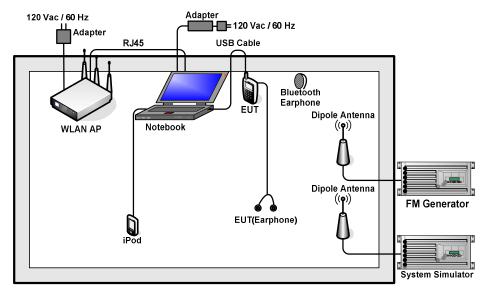
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2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

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2.3. Support Unit used in test configuration and system

| Item | Equipment | Trade Name | Model Name | FCC ID | Data Cable | Power Cord |
|------|-----------------------|------------|------------------|----------------|----------------|--|
| 1. | System Simulator | R&S | CMU 200 | N/A | N/A | Unshielded, 1.8 m |
| 2. | FM Station | R&S | SMB100A | N/A | N/A | Unshielded,1.8m |
| 3. | WLAN AP | ASUS | RT-AC66U | MSQ-RTAC66U | N/A | Unshielded,1.8m |
| 4. | Notebook | Lenovo | E540 | FCC DoC | N/A | AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m |
| 5. | Bluetooth Earphone | Samsung | EO-MG900 | PYAHS-107W | N/A | N/A |
| 6. | Bluetooth Earphone | Samsung | EO-MG900 | CCAH14LP1680T5 | N/A | N/A |
| 7. | iPod nano 8GB | Apple | MC690ZP/A | FCC DoC | Shielded, 1.2m | N/A |
| 8. | iPod | Apple | MC525 ZP/A | DoC | Shielded, 1.0m | N/A |
| 9. | USB Cable | Moto | N/A | FCC DoC | Shielded, 0.6m | N/A |
| 10. | USB cable | Motorola | SKN6378A | Fcc DoC | N/A | Unshielded,1m |
| 11. | SD Card | N/A | MicroSD HC | FCC DoC | N/A | N/A |
| 12. | SD Card | Kingston | SDC4/16GB 122 | Fcc DoC | N/A | N/A |

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone, and the following programs installed in the EUT were programmed during the test.

- 1. Data application is transferred between Notebook and EUT via USB cable.
- 2. Execute "Video Player" to play MPEG4 files.
- 3. Turn on camera to capture images.
- 4. Turn on FM function.

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3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of emission | Conducted limit (dBuV) | | | |
|-----------------------|------------------------|-----------|--|--|
| (MHz) | Quasi-peak | Average | | |
| 0.15-0.5 | 66 to 56* | 56 to 46* | | |
| 0.5-5 | 56 | 46 | | |
| 5-30 | 60 | 50 | | |

^{*}Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least
 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

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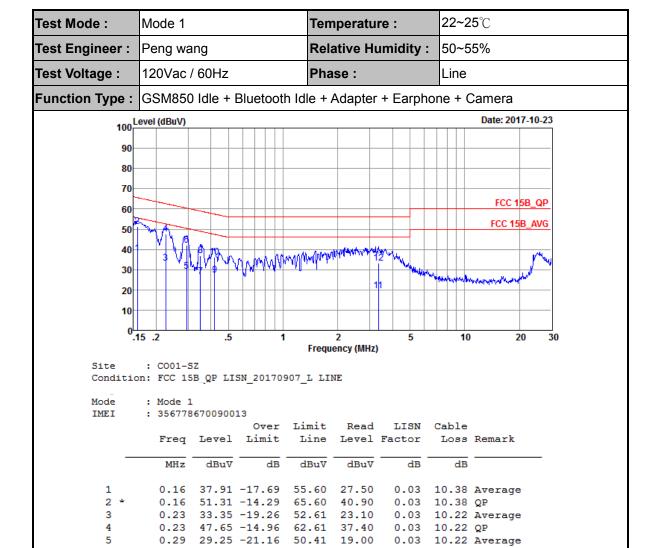
3.1.4 Test Setup



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3.1.5 Test Result of AC Conducted Emission



0.29 42.05 -18.36 60.41 31.80 0.35 26.73 -22.23 48.96 16.50

0.35 36.93 -22.03 58.96 26.70

0.42 27.22 -20.24 47.46 17.00 0.42 36.32 -21.14 57.46 26.10 3.35 19.59 -26.41 46.00 9.19

3.35 33.39 -22.61 56.00 22.99

6 7

8

9

10

11 12

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0.03 10.22 QP 0.03 10.20 Average

0.03 10.19 Average

0.03 10.20 QP

0.03 10.19 QP 0.17 10.23 Average

0.17 10.23 QP

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| Test Mode : | Mode 1 | | Temperatu | ıre : | 22~2 | 5℃ | |
|-----------------|-----------------------------------|---|--|---------------------|--------------|--------------------|--|
| Test Engineer : | Test Engineer : Peng wang | | | Relative Humidity : | | 50~55% | |
| Test Voltage : | Test Voltage: 120Vac / 60Hz | | | | Neutr | al | |
| Function Type : | | e + Bluetooth I | dle + Adapte | r + Earpho | ne + C | amera | |
| 100 Le | 100 Level (dBuV) Date: 2017-10-23 | | | | | | |
| 90 | | | | | | | |
| | | | | | | | |
| 80 | | | | | | | |
| 70 | | | | | | | |
| 60 | | | | | | FCC 15B_QP | |
| | | | | | | FCC 15B AVG | |
| 50 | MA | | | | | | |
| 40 | ** M | <u>νη μ</u> | And the second of the second o | An at | | r day | |
| 30 | 3 V 1 V | ^ℽ ֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈֈ | Myster and a second |) " Million II. | | J12 V | |
| | | . ' " | | Y What | PAN PANNANNA | white shall be all | |
| 20 | | | | | | | |
| 10 | | | | | | | |
| 0 | | | | | | | |
| .1 | 5 .2 | .5 1 | 2 Frequency (MHz | 5 | 10 | 20 30 | |
| Site | : CO01-SZ | | | • | | | |
| | | LISN 20170907 | N NEUTRAL | | | | |
| - | _ | _ | _ | | | | |
| Mode IMEI | : Mode 1 : 3567786700 | 100013 | | | | | |
| IMEI | : 336//86/00 | Over I | imit Read | LISN (| Cable | | |
| | Freq Le | | Line Level | | | Remark | |
| | | | | | | | |
| | MHz di | BuV dB | dBu∀ dBu∀ | dB | dB | | |
| 1 * | 0.15 42 | .02 -13.76 5 | 55.78 31.60 | 0.03 | 10.39 | Average | |
| 2 | | .22 -20.56 6 | | | | _ | |
| 3 | | .75 -21.73 5 | | | | Average | |
| 4 | | .45 -18.03 6 | | | 10.22 | | |
| 5 | | .75 -24.62 5 | | | | Average | |
| 6 7 | | .45 -21.92 6 | | | 10.22 | | |
| 8 | | .51 -31.17 4 .51 -27.17 5 | 67.68 6.30 | | | Average OP | |
| 9 | | .75 -28.25 4 | | | | ×- Average | |
| 10 | | .45 -25.55 5 | | | 10.22 | _ | |
| 11 | | | 0.00 7.50 | | | Average | |
| 12 | 26.28 32 | .07 -27.93 6 | 0.00 20.50 | 1.09 | 10.48 | QP | |

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| Test Mode : | Mode 3 | Temperature : | 22~25 ℃ | |
|-----------------|---|---------------------|----------------|--|
| Test Engineer : | Peng wang | Relative Humidity : | 50~55% | |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line | |
| Function Tune | WCDMA Band II Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + | | | |
| Function Type : | Earphone + FM Rx(98MHz) | | | |

100 Level (dBuV) Date: 2017-10-23 90 80 70 FCC 15B_QP 60 FCC 15B_AVG 50 40 30 20 10 .15 .2 10 Frequency (MHz)

: CO01-SZ Site

Condition: FCC 15B_QP LISN_20170907_L LINE

Mode : Mode 3

: 356778670090013 IMEI

| | | | Over | Limit | Read | LISN | Cable | |
|-----|-----|---------|--------|-------|-------|--------|-------|---------|
| | Fre | q Level | Limit | Line | Level | Factor | Loss | Remark |
| | | | | | | | | |
| | MH | z dBuV | dB | dBu∀ | dBuV | dB | dB | |
| | | | | | | | | |
| 1 | 0.1 | 9 29.94 | -24.17 | 54.11 | 19.65 | 0.03 | 10.26 | Average |
| 2 | 0.1 | 9 43.09 | -21.02 | 64.11 | 32.80 | 0.03 | 10.26 | QP |
| 3 | 0.3 | 7 27.63 | -20.93 | 48.56 | 17.40 | 0.03 | 10.20 | Average |
| 4 | 0.3 | 7 37.43 | -21.13 | 58.56 | 27.20 | 0.03 | 10.20 | QP |
| 5 | 0.4 | 7 28.50 | -17.95 | 46.45 | 18.30 | 0.02 | 10.18 | Average |
| 6 | 0.4 | 7 38.40 | -18.05 | 56.45 | 28.20 | 0.02 | 10.18 | QP |
| 7 | 0.5 | 7 28.29 | -17.71 | 46.00 | 18.10 | 0.02 | 10.17 | Average |
| 8 | 0.5 | 7 38.39 | -17.61 | 56.00 | 28.20 | 0.02 | 10.17 | QP |
| 9 * | 2.4 | 3 29.42 | -16.58 | 46.00 | 19.10 | 0.13 | 10.19 | Average |
| 10 | 2.4 | 3 36.52 | -19.48 | 56.00 | 26.20 | 0.13 | 10.19 | QP |
| 11 | 2.7 | 9 28.65 | -17.35 | 46.00 | 18.30 | 0.15 | 10.20 | Average |
| 12 | 2.7 | 9 35.45 | -20.55 | 56.00 | 25.10 | 0.15 | 10.20 | QP |
| | | | | | | | | |

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| SPORTON LAB. | FCC Test Report |
|--------------|-----------------|

| Test Mode : | Mode 3 | Temperature : | 22~25 ℃ |
|------------------|--|--|----------------------------------|
| Test Engineer : | Peng wang | Relative Humidity : | 50~55% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Neutral |
| Function Type : | WCDMA Band II Idle + Blue Earphone + FM Rx(98MHz) | tooth Idle + USB Cab | elle (Data Link with Notebook) + |
| 100L | evel (dBuV) | | Date: 2017-10-23 |
| 90 | | | |
| 80 | | | |
| 70 | | | |
| 60 | | | FCC 15B_QP |
| 50 | | | FCC 15B_AVG |
| 40 | March market and market and a second | | |
| 30 | "" "VIVIANIANIANIANIA MARINA M | white was a proper to the same of the same | |
| 20 | 1 1 2 2 2 1 | 9 11 | The Man Company |
| 10 | | | |
| 0 | | | |
| .1 | 15 .2 .5 1 | 2 5 Frequency (MHz) | 10 20 30 |
| Site Conditio | : CO01-SZ on: FCC 15B_QP LISN_20170907_1 | N NEUTRAL | |
| Mode IMEI | : Mode 3 : 356778670090013 | ait Danid IIow o | table. |
| | Freq Level Limit L: | | Cable Loss Remark |

| | | | Over | Limit | Read | LISN | Cable | |
|-----|------|-------|--------|-------|-------|--------|-------|---------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Remark |
| | | | | | | | | |
| | MHz | dBuV | dB | dBu∀ | dBu∀ | dB | dB | |
| | | | | | | | | |
| 1 | 0.16 | 32.21 | -23.39 | 55.60 | 21.80 | 0.03 | 10.38 | Average |
| 2 | 0.16 | 43.01 | -22.59 | 65.60 | 32.60 | 0.03 | 10.38 | QP |
| 3 * | 0.20 | 38.45 | -15.17 | 53.62 | 28.20 | 0.03 | 10.22 | Average |
| 4 | 0.20 | 42.55 | -21.07 | 63.62 | 32.30 | 0.03 | 10.22 | QP |
| 5 | 0.49 | 27.40 | -18.79 | 46.19 | 17.20 | 0.02 | 10.18 | Average |
| 6 | 0.49 | 33.80 | -22.39 | 56.19 | 23.60 | 0.02 | 10.18 | QP |
| 7 | 1.05 | 22.50 | -23.50 | 46.00 | 12.30 | 0.05 | 10.15 | Average |
| 8 | 1.05 | 29.70 | -26.30 | 56.00 | 19.50 | 0.05 | 10.15 | QP |
| 9 | 2.38 | 22.02 | -23.98 | 46.00 | 11.80 | 0.04 | 10.18 | Average |
| 10 | 2.38 | 27.32 | -28.68 | 56.00 | 17.10 | 0.04 | 10.18 | QP |
| 11 | 4.27 | 18.82 | -27.18 | 46.00 | 8.50 | 0.06 | 10.26 | Average |
| 12 | 4.27 | 26.12 | -29.88 | 56.00 | 15.80 | 0.06 | 10.26 | |
| | | | | | | | | |

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3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency | Field Strength | Measurement Distance | | |
|-----------|--------------------|----------------------|--|--|
| (MHz) | (microvolts/meter) | (meters) | | |
| 30 – 88 | 100 | 3 | | |
| 88 – 216 | 150 | 3 | | |
| 216 - 960 | 200 | 3 | | |
| Above 960 | 500 | 3 | | |

3.2.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- 6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

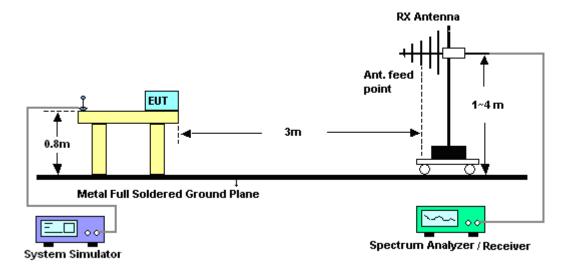
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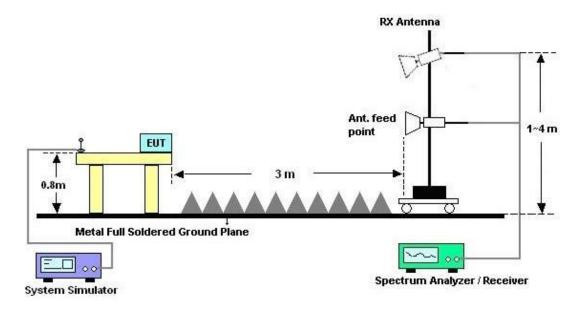
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3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



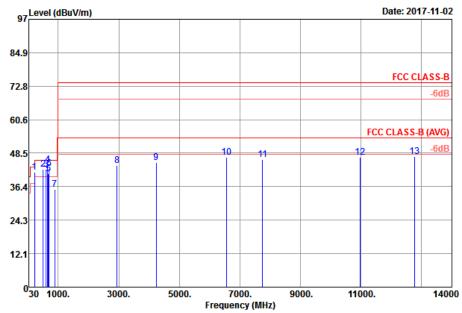
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3.2.5. Test Result of Radiated Emission

| Test Engineer : Jeff Yao Relative Humidity : 48~49% Test Distance : 3m Polarization : Horizontal Function Type : GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera | Test Mode : | Mode 1 | 24~25°C | | | | | | | |
|---|-----------------|--|---------------------|--------|--|--|--|--|--|--|
| | Test Engineer : | Jeff Yao | Relative Humidity : | 48~49% | | | | | | |
| Function Type: GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera | Test Distance : | Polarization : Horizontal | | | | | | | | |
| | Function Type : | GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera | | | | | | | | |
| Remark: #7 is system simulator signal which can be ignored. | Remark : | #7 is system simulator signal which can be ignored. | | | | | | | | |



Site : 03CH01-SZ

Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 HORIZONTAL

Mode : Mode 1

IMEI : 356778670000021

| | | Freq | Level | Over Limit | Limit Line | | Antenna Factor | | Preamp Factor | A/Pos | T/Pos | Remark |
|----|---|----------|--------|---------------|---------------|-------|-------------------|-------|------------------|-------|-------|--------|
| | | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | ! | 216.24 | 41.58 | -4.42 | 46.00 | 52.49 | 18.52 | 1.70 | 31.13 | 100 | 214 | QP |
| 2 | ! | 504.33 | 42.59 | -3.41 | 46.00 | 46.39 | 24.59 | 2.72 | 31.11 | | | Peak |
| 3 | ! | 600.36 | 42.73 | -3.27 | 46.00 | 44.12 | 26.80 | 3.01 | 31.20 | | | Peak |
| 4 | ! | 647.89 | 44.37 | -1.63 | 46.00 | 45.05 | 27.38 | 3.14 | 31.20 | 176 | 140 | QP |
| 5 | ! | 672.14 | 41.12 | -4.88 | 46.00 | 41.59 | 27.53 | 3.20 | 31.20 | 100 | 216 | QP |
| 6 | ! | 696.39 | 42.95 | -3.05 | 46.00 | 43.21 | 27.68 | 3.26 | 31.20 | | | Peak |
| 7 | | 881.66 | 35.39 | | | 35.03 | 27.89 | 3.77 | 31.30 | | | Peak |
| 8 | | 2938.00 | 43.95 | -30.05 | 74.00 | 59.18 | 32.97 | 8.62 | 56.82 | | | Peak |
| 9 | | 4240.00 | 45.16 | -28.84 | 74.00 | 59.59 | 32.65 | 10.38 | 57.46 | | | Peak |
| 10 | | 6562.00 | 46.97 | -27.03 | 74.00 | 52.85 | 35.99 | 15.47 | 57.34 | | | Peak |
| 11 | | 7746.00 | 46.26 | -27.74 | 74.00 | 54.91 | 35.25 | 12.70 | 56.60 | | | Peak |
| 12 | | 10960.00 | 47.09 | -26.91 | 74.00 | 50.02 | 37.99 | 14.75 | 55.67 | | | Peak |
| 13 | | 12766.00 | 47.29 | -26.71 | 74.00 | 50.52 | 39.01 | 15.10 | 57.34 | 100 | 266 | Peak |

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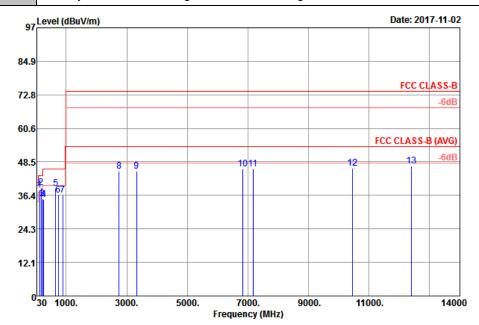
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Report No.: FC7O1703

| Test Mode : | Mode 1 | Temperature : | 24~25°C |
|-----------------|------------|---------------------|----------|
| Test Engineer : | Jeff Yao | Relative Humidity : | 48~49% |
| Test Distance : | 3m | Polarization : | Vertical |
| _ ,, _ | 0014050111 | | • |

Function Type: |GSM850 Idle + Bluetooth Idle + Adapter + Earphone + Camera

Remark: #7 is system simulator signal which can be ignored.



Site

: 03CH01-SZ : FCC CLASS-B 3m HF_ANT(3117)_119436 VERTICAL Condition

: Mode 1 : 356778670000021 IMEI

| | F | 1 1 | 0ver | Limit | | Antenna | | | A/Pos | T/Pos | Dame als |
|----|----------|--------|--------|--------|-------|---------|-------|--------|-------|-------|----------|
| | rreq | Level | Limit | Line | rever | Factor | LOSS | Factor | | | Remark |
| | MHz | dBuV/m | dB | dBuV/m | dBuV | dB/m | dB | dB | cm | deg | |
| 1 | ! 120.21 | 38.24 | -5.26 | 43.50 | 50.26 | 18.40 | 1.04 | 31.46 | 100 | 216 | QP |
| 2 | ! 167.74 | 39.06 | -4.44 | 43.50 | 51.05 | 17.92 | 1.42 | 31.33 | | | Peak |
| 3 | 216.24 | 35.04 | -10.96 | 46.00 | 45.95 | 18.52 | 1.70 | 31.13 | | | Peak |
| 4 | 263.77 | 34.72 | -11.28 | 46.00 | 43.66 | 20.18 | 1.91 | 31.03 | | | Peak |
| 5 | 647.89 | 38.87 | -7.13 | 46.00 | 39.55 | 27.38 | 3.14 | 31.20 | | | Peak |
| 6 | 743.92 | 36.42 | -9.58 | 46.00 | 38.42 | 25.85 | 3.44 | 31.29 | | | Peak |
| 7 | 881.66 | 36.45 | | | 36.09 | 27.89 | 3.77 | 31.30 | | | Peak |
| 8 | 2750.00 | 45.10 | -28.90 | 74.00 | 61.85 | 32.60 | 7.40 | 56.75 | | | Peak |
| 9 | 3326.00 | 45.23 | -28.77 | 74.00 | 60.42 | 32.71 | 9.23 | 57.13 | | | Peak |
| 10 | 6836.00 | 46.01 | -27.99 | 74.00 | 52.27 | 35.93 | 15.59 | 57.78 | | | Peak |
| 11 | 7172.00 | 45.81 | -28.19 | 74.00 | 54.51 | 35.62 | 13.75 | 58.07 | | | Peak |
| 12 | 10446.00 | 46.24 | -27.76 | 74.00 | 50.27 | 37.86 | 14.63 | 56.52 | | | Peak |
| 13 | 12390.00 | 47.05 | -26.95 | 74.00 | 50.64 | 38.80 | 15.05 | 57.44 | 100 | 304 | Peak |

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24~25°C Test Mode: Mode 3 Temperature: Test Engineer: Jeff Yao **Relative Humidity:** 48~49% Test Distance: 3m Polarization: Horizontal WCDMA Band II Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Function Type: Earphone + FM Rx(98MHz) #2 is Base station (FM option) signal which can be ignored. Remark: #8 is system simulator signal which can be ignored. 97 Level (dBuV/m) Date: 2017-11-02 84.9 FCC CLASS-B 72.8 60.6 FCC CLASS-B (AVG) 11 14 -6dB 9 10 48.5 36.4 24.3 12.1 ⁰30 1000. 3000. 5000. 7000. 9000. 11000. 14000 Frequency (MHz) : 03CH01-SZ Site Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 HORIZONTAL Mode : Mode 3 : 356778670000021 IMEI Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Loss Factor Remark dB dBuV/m MHz dBuV/m dBuV dB/m dB dB cm deg 30.97 26.31 -13.69 40.00 30.24 0.25 Peak 97.90 25.16 37.31 18.52 0.83 31.50 --- Peak ------ Peak 3 25.74 -20.26 46.00 299.66 35.20 19.60 2.04 31.10 440.31 28.84 -17.16 --- Peak 46.00 26.28 2.54 ---31.12 31.10 499.48 31.05 -14.95 46.00 34.90 24.54 2.71 31.10 --- Peak

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650.80

911.73

1960.00

2828.00

3314.00

6144.00

7242.00

9834.00

12572.00

10

12

13

31.66 -14.34

32.48 -13.52

54.35 47.26 -26.74

47.67 -26.33

50.09 -23.91

50.80 -23.20

50.56 -23.44

50.09 -23.91

46.00

46.00

74.00

74.00

74.00

74.00

74.00

74.00

32.30

31.22

77.05

63.50

62.87

56.84

59.91

55.16

53.70

28.71

28.56

32.77

32.73

35.51

37.72

38.87

3.85

6.03

7.77

9.18

13.79

13.46

13.93

15.08

31.30

57.29

56.78

57.11

58.08

56.25

100

150

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--- Peak

--- Peak

--- Peak

--- Peak

--- Peak

307 Peak

--- Peak

--- Peak

0 Peak

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24~25°C Test Mode: Mode 3 Temperature: Test Engineer: Jeff Yao **Relative Humidity:** 48~49% Test Distance: 3m Polarization: Vertical WCDMA Band II Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + Function Type: Earphone + FM Rx(98MHz) #2 is Base station (FM option) signal which can be ignored. Remark: #8 is system simulator signal which can be ignored. 97 Level (dBuV/m) Date: 2017-11-02 FCC CLASS-B 72.8 60.6 FCC CLASS-B (AVG) -6dB 10 48 5 36.4 12.1 1000. 5000. 9000. 11000. 14000 3000. 7000. Frequency (MHz) Site : 03CH01-SZ Condition : FCC CLASS-B 3m HF_ANT(3117)_119436 VERTICAL Mode : Mode 3 IMEI : 356778670000021 Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Remark Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB deg 41.64 28.72 -11.28 40.00 39.14 20.88 0.40 31.70 100 0 Peak 18.52 97.90 27.40 39.55 0.83 31.50 --- Peak 180.35 25.39 -18.11 43.50 37.38 17.80 1.48 31.27 --- Peak 299.66 27.62 -18.38 46.00 37.08 19.60 2.04 31.10 --- Peak 35.50 --- Peak 497.54 31.73 -14.27 46.00 24.63 2.70 31.10 651.77 31.63 -14.37 46.00 --- Peak 27.41 32.27 3.15 31.20 700.27 32.44 -13.56 32.67 27.70 --- Peak 46.00 31.20 1960.00 55.94 78.64 28.56 6.03 --- Peak 2738.00 46.37 -27.63 47.49 -26.51 74.00 63.15 32.57 7.40 56.75 --- Peak 10 3236.00 74.00 32.81 9.09 57.05 ------ Peak 62.64 11 6038.00 49.84 -24.16 74.00 56.77 36.19 13.37 56.49 --- Peak 57.19 49.34 -24.66 35.84 14.36 58.05 Peak

13

9878.00

12742.00

50.91 -23.09

50.54 -23.46

74.00

74.00

55.38

53.80

37.67

39.00

14.08

15.10

56.22

57.36

100

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243 Peak

Peak

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4. List of Measuring Equipment

| Instrument | Manufacturer | Model No. | Serial No. | Characteristics | Calibration Date | Test Date | Due Date | Remark |
|-----------------------------------|--------------|----------------------------------|------------------|-----------------|---------------------|---------------|---------------|--------------------------|
| EMI Receiver | R&S | ESR7 | 101630 | 9kHz~7GHz; | Jan. 06, 2017 | Oct. 23, 2017 | Jan. 05, 2018 | Conduction (CO01-SZ) |
| AC LISN | EMCO | 3816/2SH | 00103912 | 9kHz~30MHz | Jan. 05, 2017 | Oct. 23, 2017 | Jan. 04, 2018 | Conduction (CO01-SZ) |
| AC LISN (for auxiliary equipment) | MessTec | 3816/2SH | 00103892 | 9kHz~30MHz | Jan. 05, 2017 | Oct. 23, 2017 | Jan. 04, 2018 | Conduction (CO01-SZ) |
| AC Power Source | Chroma | 61602 | 61602000089 1 | 100Vac~250Vac | Jul. 19, 2017 | Oct. 23, 2017 | Jul. 18, 2018 | Conduction (CO01-SZ) |
| EMI Test Receiver&SA | Agilent | N9038A | MY52260185 | 20Hz~26.5GHz | Apr. 20, 2017 | Nov. 02, 2017 | Apr. 19, 2018 | Radiation (03CH01-SZ) |
| Bilog Antenna | TeseQ | CBL6112D | 23188 | 30MHz-2GHz | Apr. 25, 2017 | Nov. 02, 2017 | Apr. 24, 2018 | Radiation (03CH01-SZ) |
| Double Ridge Horn Antenna | ETS Lindgren | 3117 | 00119436 | 1GHz~18GHz | Nov. 19, 2016 | Nov. 02, 2017 | Nov. 18, 2017 | Radiation (03CH01-SZ) |
| LF Amplifier | Burgeon | BPA-530 | 102209 | 0.01~3000Mhz | Apr. 20, 2017 | Nov. 02, 2017 | Apr.19, 2018 | Radiation (03CH01-SZ) |
| HF Amplifier | MITEQ | AMF-7D-0010 1800-30-10P- R | 1707137 | 1GHz~18GHz | Oct. 19, 2017 | Nov. 02, 2017 | Oct. 18, 2018 | Radiation (03CH01-SZ) |
| AC Power Source | Chroma | 61601 | 61601000198 5 | N/A | NCR | Nov. 02, 2017 | NCR | Radiation (03CH01-SZ) |
| Turn Table | EM | EM1000 | N/A | 0~360 degree | NCR | Nov. 02, 2017 | NCR | Radiation (03CH01-SZ) |
| Antenna Mast | EM | EM1000 | N/A | 1 m~4 m | NCR | Nov. 02, 2017 | NCR | Radiation (03CH01-SZ) |

NCR: No Calibration Required

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5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

| | 4 |
|--------------------------------------|-------|
| Measuring Uncertainty for a Level of | 2.5dB |
| Confidence of 95% (U = 2Uc(y)) | 2.5ub |

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

| Measuring Uncertainty for a Level of | 5.1dB |
|--------------------------------------|--------|
| Confidence of 95% (U = 2Uc(y)) | 5. IUB |

<u>Uncertainty of Radiated Emission Measurement (1GHz ~ 18GHz)</u>

| Measuring Uncertainty for a Level of | |
|--------------------------------------|-------|
| | 5.2dB |
| Confidence of 95% (U = 2Uc(y)) | |

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