

# FCC 47 CFR PART 15 SUBPART B TEST REPORT

For

Applicant: GUANGZHOU CHUANGQI TELECOM EQUIPMENT COMPANY LTD

Address: No. 9 Shenzhou Road, Science City, Guangzhou, P.R.China

**Product Name: Android PMP** 

Model Number: V701, V702

**Brand Name: N/A** 

FCC ID: ZL3-V70X

Report No.: MOST110509F1

Date of Issue: May. 30, 2011

Issued by: Most Technology Service Co., Ltd.

Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park, Nanshan,

Shenzhen, Guangdong, China

Tel: 86-755-8617 0306

Fax: 86-755-8617 0310

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#### Report No.: MOST110509F1

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#### 1. VERIFICATION OF CONFORMITY

Equipment Under Test: Android PMP

Brand Name: N/A

Model Number: V701, V702

FCC ID: ZL3-V70X

Applicant: GUANGZHOU CHUANGQI TELECOM EQUIPMENT COMPANY LTD

No. 9 Shenzhou Road, Science City, Guangzhou, P.R.China

Manufacturer: GUANGZHOU CHUANGQI TELECOM EQUIPMENT COMPANY LTD

No. 9 Shenzhou Road, Science City, Guangzhou, P.R.China

**Technical Standards:** FCC Part 15 B **File Number:** MOST110509F1

**Date of test:** May. 19 — May. 29, 2011

**Deviation:** None **Condition of Test Sample:** Normal

The above equipment was tested by MOST for compliance with the requirements set forth in FCC Part 15 and the Technical Standards mentioned above. This said equipment in the configuration described in this report shows the maximum emission levels emanating from equipment and the level of the immunity endurance of the equipment are within the compliance requirements.

The test results of this report relate only to the tested sample identified in this report.

Tested by (+ signature):

Petter Ping May. 30, 2011

Review by (+ signature):

July Wen May. 30, 2011

Approved by (+ signature):

Terry Yang May. 30, 2011

#### 2. GENERAL INFORMATION

#### 2.1 PRODUCT INFORMATION

Housing Type: Plastic

DC: 7.4V by Li-ion Battery;

EUT Rating Voltage:

DC: 5V by AC Adapter(100V-240V 50/60Hz);

Voltage During Test: 120VAC 60Hz

Model Number: V701

Series Number: V702

**Description of Differences:** Only the appearance is different.

**Frequency Range:**802.11b: 2412MHz – 2462MHz 802.11g: 2412MHz – 2462MHz

Number of Channels: IEEE 802.11b/g mode: 11 Channels

Modulation Technique: IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mpbs)

IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mpbs)

Antenna Type: Internal

**EUT Rating Voltage:** DC: 7.4V by Li-ion Battery;

DC: 5V by AC Adapter(100V-240V 50/60Hz);

Voltage During Test: 120VAC 60Hz

#### NOTE:

1. Please refer to Appendix 2 for the photographs of the EUT. For a more detailed features description about the EUT, please refer to User's Manual.

#### 2.2 OBJECTIVE

Perform FCC Part 15 Subpart B tests for FCC Marking.

#### 2.3 TEST STANDARDS AND RESULTS

Test items and the results are as bellow:

| EMISSION                     |           |        |                    |  |  |  |
|------------------------------|-----------|--------|--------------------|--|--|--|
| Standard                     | Item      | Result | Remarks            |  |  |  |
| FCC 47 CFR Part 15 Subpart B | Conducted | PASS   | Meet Class B limit |  |  |  |
| FOC 47 CFK Fait 15 Subpait B | Radiated  | PASS   | Meet Class B limit |  |  |  |

Note: 1. The test result judgment is decided by the limit of measurement standard

2. The information of measurement uncertainty is available upon the customer's request.

#### 2.4 ENVIRONMENTAL CONDITIONS

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15-35°C - Humidity: 30-60 %

- Atmospheric pressure: 86-106 kPa

#### 2.5 MEASUREMENT UNCERTAINTY

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

- Uncertainty of Conducted Emission, Uc = ±1.8dB
- Uncertainty of Radiated Emission, Uc = ±3.2dB

#### 3. TEST METHODOLOGY

#### 3. 1TEST FACILITY

Test Site: Most Technology Service Co., Ltd.

Location: No.5, Langshan 2nd Rd, North Hi-Tech Industrial park, Nanshan, Shenzhen,

Guangdong, China

Description: There is one 3m semi-anechoic an area test sites and two line conducted labs for final

test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009 and CISPR

16 requirements. The FCC Registration Number is 490827.

The CNAS Registration Number is CNAS L3573.

Site Filing: The site description is on file with the Federal Communications

Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4:2009 and CISPR 16

requirements that meet industry regulatory agency and accreditation agency

requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted

Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond

the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal

dimensions larger than one-tenth of a wavelength at the highest frequency of

measurement up to 1GHz.

#### 3.2 GENERAL TEST PROCEDURES

#### Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4:2009, Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

#### Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3m away from the receiving antenna, which varied from 1m to 4m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the maximum emissions, exploratory radiated emission measurements were made according to the requirements in Section 13.1.4.1 of ANSI C63.4:2009.

#### 3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

(a) Except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz   | MHz   | MHz  | GHz  |
|---|---|--|--|
| 0.090 0.110 10.495 0.505 2.1735 2.1905 4.125 - 4.128 4.17725 - 4.17775 4.20725 - 4.20775 6.215 - 6.218 6.26775 - 6.26825 6.31175 - 6.31225 8.291 - 8.294 8.362 8.366 8.37625 - 8.38675 8.41425 - 8.41475 12.29 - 12.293 12.51975 - 12.52025 | 16.42 - 16.423<br>16.69475 - 16.69525<br>16.80425 - 16.80475<br>25.5 - 25.67<br>37.5 - 38.25<br>73 - 74.6<br>74.8 - 75.2<br>108 - 121.94<br>123 - 138<br>149.9 - 150.05<br>156.52475 - 156.52525<br>156.7 - 156.9<br>162.0125 - 167.17<br>167.72 - 173.2<br>240 - 285 | 399.9 - 410<br>608 - 614<br>960 - 1240<br>1300 - 1427<br>1435 - 1626.5<br>1645.5 - 1646.5<br>1660 - 1710<br>1718.8 - 1722.2<br>2200 - 2300<br>2310 - 2390<br>2483.5 - 2500<br>2655 - 2900<br>3260 - 3267<br>3332 - 3339<br>3345.8 - 3358 | 4.5 - 5.15<br>5.35 - 5.46<br>7.25 - 7.75<br>8.025 - 8.5<br>9.0 - 9.2<br>9.3 - 9.5<br>10.6 - 12.7<br>13.25 - 13.4<br>14.47 - 14.5<br>15.35 - 16.2<br>17.7 - 21.4<br>22.01 - 23.12<br>23.6 - 24.0<br>31.2 - 31.8<br>36.43 - 36.5 |
| 12.57675 - 12.57725<br>13.36 13.41  | 322 - 335.4   | 3600 - 4400  | (2)  |

<sup>&</sup>lt;sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz.

(b) Except as provided in paragraphs (d) and (e), the field strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000 MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi peak detector. Above 1000 MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

<sup>&</sup>lt;sup>2</sup> Above 38.6

### 4 SETUP OF EQUIPMENT UNDER TEST

#### **4.1 SETUP CONFIGURATION OF EUT**

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

#### **4.2 SUPPORT EQUIPMENT**

| Device Type   | Manufacturer | Model Name | Serial No.        | Data Cable | Power Cable   |
|---------------|--------------|------------|-------------------|------------|---------------|
| MOUSE         | Lenovo       | M-UAE96    | E-C011-05-3735(B) |            | 6M<br>nielded |
| Micro SD CARD | Kingston     | 1G         | 0907T139090       | N          | /A            |
| U DISK        | I.P.S        |            | 4G                | N.         | /A            |

#### Remark:

All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.

#### 4. 3 TEST EQUIPMENT LIST

**Instrumentation:** The following list contains equipment used at MOST for testing. The equipment conforms to the CISPR 16-1 / ANSI C63.2 Specifications for Electromagnetic Interference and Field Strength Instrumentation from 10 kHz to 1.0 GHz or above.

| No. | Equipment                               | Manufacturer      | Model No.         | S/N         | Calibration due date |
|-----|---|-------------------|-------------------|-------------|----------------------|
| 1   | Test Receiver                           | Rohde & Schwarz   | ESCI              | 100492      | 2012/03/14           |
| 2   | L.I.S.N.                                | Rohde & Schwarz   | ENV216            | 100093      | 2012/03/14           |
| 3   | Coaxial Switch                          | Anritsu Corp      | MP59B             | 6200283933  | 2012/03/14           |
| 4   | Terminator                              | Hubersuhner       | 50Ω               | No.1        | 2012/03/14           |
| 5   | RF Cable                                | SchwarzBeck       | N/A               | No.1        | 2012/03/14           |
| 6   | Test Receiver                           | Rohde & Schwarz   | ESPI              | 101202      | 2012/03/14           |
| 7   | Bilog Antenna                           | Sunol             | JB3               | A121206     | 2012/03/14           |
| 8   | Test Antenna - Horn                     | Schwarzbeck       | BBHA 9120C        |             | 2012/03/14           |
| 9   | Test Antenna - Bi-Log                   | Schwarzbeck       | VULB 9163         |             | 2012/03/14           |
| 10  | Cable                                   | Resenberger       | N/A               | NO.1        | 2012/03/14           |
| 11  | Cable                                   | SchwarzBeck       | N/A               | NO.2        | 2012/03/14           |
| 12  | Cable                                   | SchwarzBeck       | N/A               | NO.3        | 2012/03/14           |
| 13  | DC Power Filter                         | DuoJi             | DL2×30B           | N/A         | 2012/03/14           |
| 14  | Single Phase Power Line<br>Filter       | DuoJi             | FNF 202B30        | N/A         | 2012/03/14           |
| 15  | 3 Phase Power Line Filter               | DuoJi             | FNF 402B30        | N/A         | 2012/03/14           |
| 16  | Test Receiver                           | Rohde & Schwarz   | ESCI              | 100492      | 2012/03/14           |
| 17  | Absorbing Clamp                         | Luthi             | MDS21             | 3635        | 2012/03/14           |
| 18  | Coaxial Switch                          | Anritsu Corp      | MP59B             | 6200283933  | 2012/03/14           |
| 19  | AC Power Source                         | Kikusui           | AC40MA            | LM003232    | 2012/03/14           |
| 20  | Test Analyzer                           | Kikusui           | KHA1000           | LM003720    | 2012/03/14           |
| 21  | Line Impendence Network                 | Kikusui           | LIN40MA-<br>PCR-L | LM002352    | 2012/03/14           |
| 22  | ESD Tester                              | Kikusui           | KES4021           | LM003537    | 2012/03/14           |
| 23  | EMCPRO System                           | EM Test           | UCS-500-M4        | V0648102026 | 2012/03/14           |
| 24  | Signal Generator                        | IFR               | 2032              | 203002/100  | 2012/03/14           |
| 25  | Amplifier                               | A&R               | 150W1000          | 301584      | 2012/03/14           |
| 26  | CDN                                     | FCC               | FCC-801-M2-25     | 47          | 2012/03/14           |
| 27  | CDN                                     | FCC               | FCC-801-M3-25     | 107         | 2012/03/14           |
| 28  | EM Injection Clamp                      | FCC               | F-203I-23mm       | 403         | 2012/03/14           |
| 29  | RF Cable                                | MIYAZAKI          | N/A               | No.1/No.2   | 2012/03/14           |
| 30  | Universal Radio<br>Communication Tester | ROHDE&SCHWARZ     | CMU200            | 0304789     | 2012/03/14           |
| 31  | Telecommunication Antenna               | European Antennas | PSA 75301R/170    | 0304213     | 2012/03/14           |

**NOTE:** Equipments listed above have been calibrated and are in the period of validation.

#### 5. 47 CFR PART 15B REQUIREMENTS

#### **5.1 GENERAL INFORMATION**

#### Mode 1: Standby Mode

During the measurement, and the EUT was in charging Mode.

#### Mode 2: Full load Mode

During the measurement, the lithium battery was installed, and the system of EUT was running continuously.

#### Mode 3: WiFi Mode

During the measurement, the lithium battery was installed. A communication link was established between the EUT and a System Simulator.

#### 6. LINE CONDUCTED EMISSION TEST

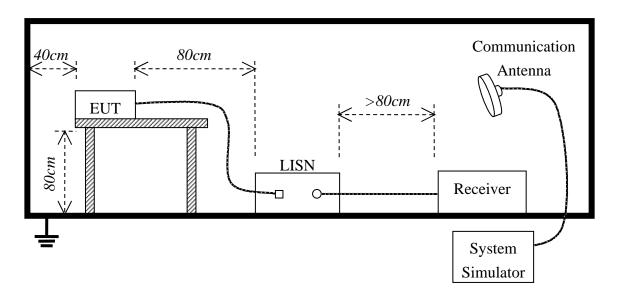
#### 6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

| Fraguency     | Maximum RF  | Line Voltage   |
|---------------|-------------|----------------|
| Frequency     | Q.P.( dBuV) | Average( dBuV) |
| 150kHz-500kHz | 66-56       | 56-46          |
| 500kHz-5MHz   | 56          | 46             |
| 5MHz-30MHz    | 60          | 50             |

<sup>\*\*</sup>Note: 1. the lower limit shall apply at the transition frequency.

2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz

#### 6.2. BLOCK DIAGRAM OF TEST SETUP



#### 6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1) The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per FCC Part 15 (see Test Facility for the dimensions of the ground plane used). When the EUT is floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.

- 2) Support equipment, if needed, was placed as per FCC Part 15.
- 3) All I/O cables were positioned to simulate typical actual usage as per FCC Part 15.
- 4) The EUT received AC120V/60Hz which through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5) All support equipments received power from a second LISN supplying power of AC 120V/60Hz, if any.
- 6) The EUT test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
- 7) Analyzer / Receiver scanned from 150 kHz to 30 MHz for emissions in each of the test modes.
- 8) During the above scans, the emissions were maximized by cable manipulation.
- 9) The following test mode(s) were scanned during the preliminary test:

|                    | Prelin     | ninary Conducted Em | ission Test      |             |
|--------------------|------------|---------------------|------------------|-------------|
| Frequency Range In | vestigated |                     | 150KHz TO 30 MHz |             |
| Mode of operation  | Date       | Report No.          | Data#            | Worst Mode  |
| Standby Mode       | 2011-5-21  | MOST110519F1        | V701_0_(L, N)    |             |
| Full Load Mode     | 2011-5-21  | MOST110519F1        | V701_1_(L, N)    | $\boxtimes$ |
| WIFI Mode          | 2011-5-21  | MOST110519F1        | V701_2_(L, N)    |             |

Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

#### 6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

EUT and support equipment was set up on the test bench as per step 9 of the preliminary test.

A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less –2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.

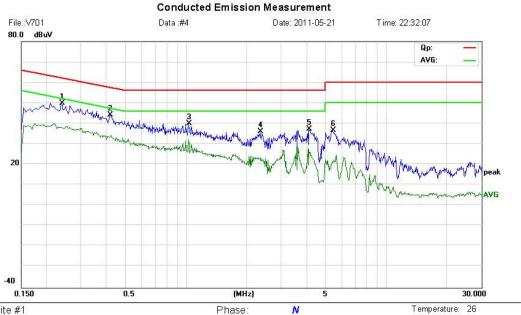
The test data of the worst case condition(s) was reported on the Summary Data page.

#### 6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 120V/60Hz

Humidity: 60 %

Site site #1

Limit: FCC Part15 B Class B QP

EUT: ANDROID PMP

M/N: V701

Mode: FULL LOAD

Note:

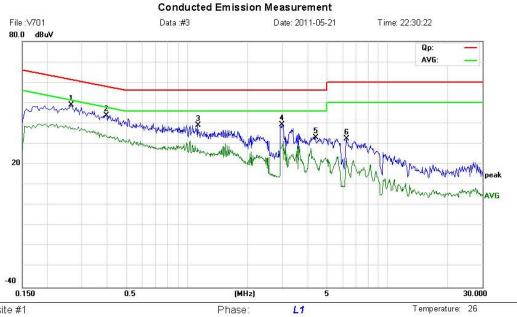
| No. | Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |  |
|-----|-----|--------|------------------|-------------------|------------------|-------|--------|----------|---------|--|
|     |     | MHz    | dBu∨             | dB                | dBu∀             | dBu√  | dB     | Detector | Comment |  |
| 1   | *   | 0.2380 | 38.21            | 11.75             | 49.96            | 62.17 | -12.21 | peak     |         |  |
| 2   |     | 0.4180 | 33.67            | 10.55             | 44.22            | 57.49 | -13.27 | peak     |         |  |
| 3   |     | 1.0300 | 30.00            | 9.97              | 39.97            | 56.00 | -16.03 | peak     |         |  |
| 4   |     | 2.3580 | 26.75            | 9.36              | 36.11            | 56.00 | -19.89 | peak     |         |  |
| 5   |     | 4.1260 | 26.19            | 11.13             | 37,32            | 56.00 | -18.68 | peak     |         |  |
| 6   |     | 5.4260 | 25.02            | 11.74             | 36.76            | 60.00 | -23.24 | peak     |         |  |

<sup>\*:</sup>Maximum data x:Over limit I:over margin



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 120V/60Hz

Humidity: 60 %

Site site #1 Limit: FCC Part15 B Class B QP

EUT: ANDROID PMP

M/N: V701

Mode: FULL LOAD

Note:

| No. Mk. | Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |  |
|---------|--------|------------------|-------------------|------------------|-------|--------|----------|---------|--|
|         | MHz    | dBu∨             | dB                | dBuV             | dBu√  | dB     | Detector | Comment |  |
| 1 *     | 0.2620 | 37.27            | 11.59             | 48.86            | 61.37 | -12.51 | peak     |         |  |
| 2       | 0.3940 | 33.11            | 10.71             | 43.82            | 57.98 | -14.16 | peak     |         |  |
| 3       | 1.1300 | 29.26            | 9.87              | 39.13            | 56.00 | -16.87 | peak     |         |  |
| 4       | 2.9900 | 29.50            | 9.99              | 39.49            | 56.00 | -16.51 | peak     |         |  |
| 5       | 4.4020 | 21.58            | 11.40             | 32.98            | 56.00 | -23.02 | peak     |         |  |
| 6       | 6.2540 | 21.21            | 11.25             | 32.46            | 60.00 | -27.54 | peak     |         |  |

<sup>\*:</sup>Maximum data x:Over limit I:over margin

#### 7. RADIATED EMISSION TEST

#### 7.1. LIMITS OF RADIATED DISTURBANCES AT 3M DISTANCES FOR CLASS B

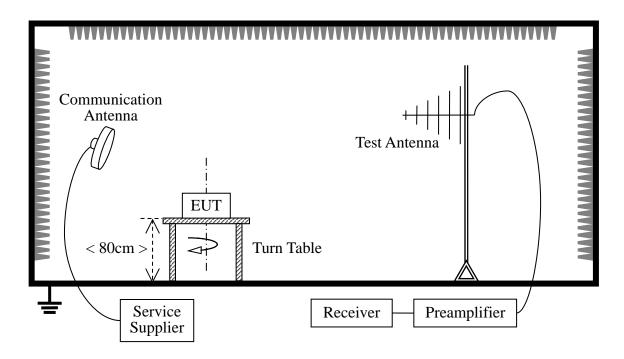
According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

| Frequency (MHz) | Field Strength (µV/m) | Measurement Distance (m) |
|-----------------|-----------------------|--------------------------|
| 0.009 - 0.490   | 2400/F(kHz)           | 300                      |
| 0.490 - 1.705   | 24000/F(kHz)          | 30                       |
| 1.705 - 30.0    | 30                    | 30                       |
| 30 - 88         | 100                   | 3                        |
| 88 - 216        | 150                   | 3                        |
| 216 - 960       | 200                   | 3                        |
| Above 960       | 500                   | 3                        |

As shown in FCC section 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector. When average radiated emission measurements are specified in this part, including emission measurements below 1000MHz, there also is a limit on the radio frequency emissions, as measured using instrumentation with a peak detector function, corresponding to 20dB above the maximum permitted average limit for the frequency being investigated unless a different peak emission limit is otherwise specified in the rules.

#### 7.2 TEST DESCRIPTION

#### **Test Setup:**



The EUT is powered by the Battery charged with the AC Adapter which is powered by 120V, 60Hz AC mains supply. The Module is located in a 3m Semi-Anechoic Chamber; the antenna factors, cable loss and so on of the site as factors are calculated to correct the reading. During the measurement, the EUT is activated and transmitting with the other WIFI device (Supply by the Applicant) during the test.

#### For the Test Antenna:

- (a) In the frequency range of 9 kHz to 30MHz, magnetic field is measured with Loop Test Antenna. The Test Antenna is positioned with its plane vertical at 1m distance from the EUT. The center of the Loop Test Antenna is 1m above the ground. During the measurement the Loop Test Antenna rotates about its vertical axis for maximum response at each azimuth about the EUT.
- (b) In the frequency range above 30MHz, Bi-Log Test Antenna (30MHz to 1GHz) and Horn Test Antenna (above 1GHz) are used. Test Antenna is 3m away from the EUT. Test Antenna height is varied from 1m to 4m above the ground to determine the maximum value of the field strength. The emission levels at both horizontal and vertical polarizations should be tested.

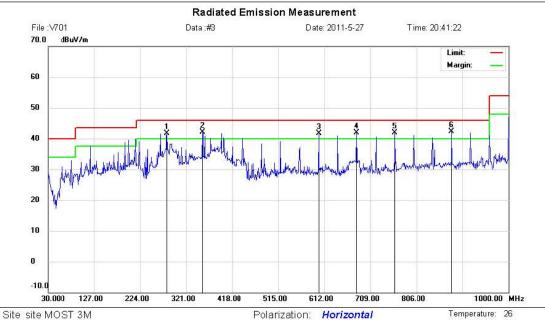
|                   | Pr             | eliminary Radiated Emi | ssion Test     |             |
|-------------------|----------------|------------------------|----------------|-------------|
| Freque            | ency Range Inv | estigated              | 30 MHz TO 1000 | MHz         |
| Mode of operation | Date           | Report No.             | Data#          | Worst Mode  |
| Standby Mode      | 2011-5-27      | MOST110509F1           | V701_0_(H, V)  |             |
| Full Load Mode    | 2011-5-27      | MOST110509F1           | V701_1_(H, V)  | $\boxtimes$ |
| WIFI Mode         | 2011-5-27      | MOST110509F1           | V701_2_(H, V)  |             |

#### 7.3 TEST RESULT



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Power: AC 120V/60Hz

Humidity:

Distance:

Limit: FCC Part15 B 3M Radiation

Ellitte i ee i altio bolwika

EUT: ANDROID PMP

M/N: V701

Mode: FULL LOAD

Note:

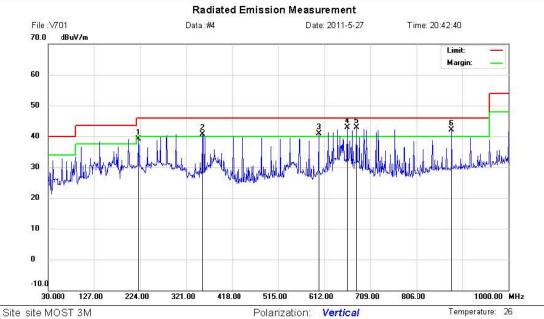
| No. | MI | k. Freq  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over  |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|--------|-------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB    | Detector | cm                | degree          | Comment |
| 1   | Ī  | 280.2599 | 9 22.25          | 19.40             | 41.65            | 46.00  | -4.35 | QP       |                   |                 |         |
| 2   | 1  | 354.9499 | 9 23.88          | 18.20             | 42.08            | 46.00  | -3.92 | QP       |                   |                 |         |
| 3   | Ţ  | 600.3600 | 18.62            | 23.01             | 41.63            | 46.00  | -4.37 | QP       |                   |                 |         |
| 4   | Ţ  | 679.8999 | 9 17.45          | 24.50             | 41.95            | 46.00  | -4.05 | QP       |                   |                 |         |
| 5   | J. | 760.4099 | 16.35            | 25.62             | 41,97            | 46.00  | -4.03 | QP       |                   |                 |         |
| 6   | *  | 880.6900 | 15.13            | 27.11             | 42.24            | 46.00  | -3.76 | QP       |                   |                 |         |

<sup>\*:</sup>Maximum data x:Over limit I:over margin



Address:No.5,Langshan 2nd Rd., North Hi-Tech Industrial park Guangdong ,China

Tel: 0755-86170306 Fax: 0755-86170310



Limit: FCC Part15 B 3M Radiation

EUT: ANDROID PMP

M/N: V701 Mode: FULL LOAD

Note:

Power: AC 120V/60Hz

Distance:

Humidity:

61 %

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over  |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|--------|-------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBu∨             | dB                | dBuV/m           | dBuV/m | dB    | Detector | cm                | degree          | Comment |
| 1   |    | 220.1200 | 22.87            | 16.30             | 39.17            | 46.00  | -6.83 | QP       |                   |                 |         |
| 2   | 1  | 354.9499 | 22.43            | 18.20             | 40.63            | 46.00  | -5.37 | QP       |                   |                 |         |
| 3   | Ţ  | 600.3600 | 17.89            | 23.01             | 40.90            | 46.00  | -5.10 | QP       |                   |                 |         |
| 4   | ļ  | 660.5000 | 18.60            | 24.21             | 42.81            | 46.00  | -3.19 | QP       |                   |                 |         |
| 5   | *  | 679.8999 | 18.45            | 24.50             | 42.95            | 46.00  | -3.05 | QP       |                   |                 |         |
| 6   | 1  | 880.6900 | 15.00            | 27.11             | 42.11            | 46.00  | -3.89 | QP       |                   |                 |         |

<sup>\*:</sup>Maximum data x:Over limit !:over margin

#### Above 1 GHz

Operation Mode: Full Load Mode Test Date: May. 27, 2011

Temperature: 24°C Tested by: Petter Ping

**Humidity:** 70 % RH **Polarity:** Ver. / Hor.

| Freq.<br>(MHz) | Ant. Pol<br>H/V |        | AV<br>Reading | Ant./CL<br>CF | Actual Fs |          | Peak<br>Limit | AV<br>Limit | Peak<br>Margin | AV<br>Margin |
|----------------|-----------------|--------|---------------|---------------|-----------|----------|---------------|-------------|----------------|--------------|
|                |                 | (dBuV) | (dBuV)        | (dB)          | Peak      |          | ,             | (dBuV/m)    | (dB)           | (dB)         |
|                |                 |        |               |               | (dBuV/m)  | (abuv/m) |               |             |                |              |
| 1285.50        | Н               | 55.23  | 36.74         | 13.15         | 68.38     | 49.89    | 74.00         | 54.00       | -5.62          | -4.11        |
| 2527.40        | Н               | 50.14  | 31.26         | 17.48         | 67.62     | 48.74    | 74.00         | 54.00       | -6.38          | -5.26        |
| N/A            |                 |        |               |               |           |          |               |             |                | >10          |
| 1357.50        | V               | 53.87  | 34.59         | 13.26         | 67.13     | 47.85    | 74.00         | 54.00       | -6.87          | -6.15        |
| 2356.00        | V               | 51.28  | 31.67         | 15.78         | 67.06     | 47.45    | 74.00         | 54.00       | -6.94          | -6.55        |
| N/A            |                 |        |               |               |           |          |               |             |                | >10          |

#### Notes:

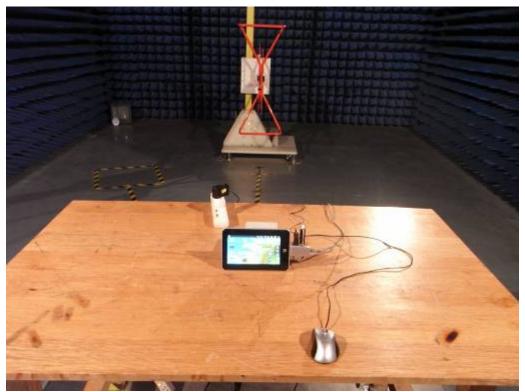
- 1. Measuring frequencies from 1 GHz to 6GHz.
- 2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 3. The frequency that above 3GHz is mainly from the environment noise.

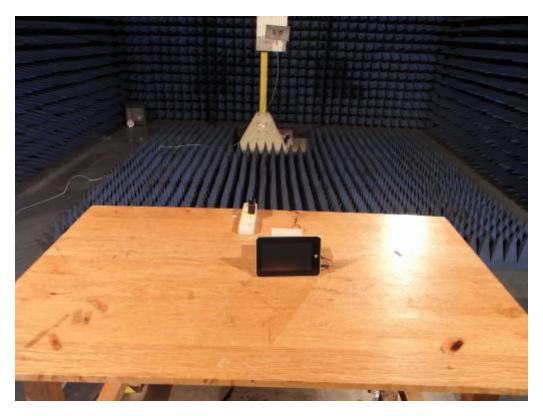
## APPENDIX 1 PHOTOGRAPHS OF TEST SETUP

CE TEST SETUP



RE TEST SETUP





## APPENDIX 2 PHOTOGRAPHS OF EUT

FRONT VIEW OF SAMPLE



BACK VIEW OF SAMPLE



LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE

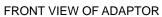


TOP VIEW OF SAMPLE



BOTTOM VIEW OF SAMPLE







BACK VIEW OF ADAPTOR



LEFT VIEW OF ADAPTOR



RIGHT VIEW OF ADAPTOR



TOP VIEW OF ADAPTOR



BOTTOM VIEW OF ADAPTOR



PHOTO OF POWER SUPPLY



PHOTO OF THE ENTIRE SAMPLE



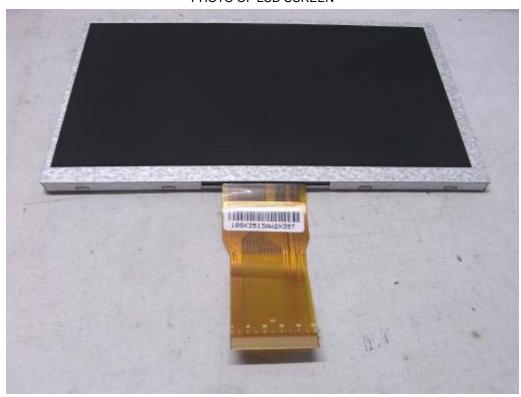
#### PHOTO OF THE BATTERY



PHOTO OF TOUCH SCREEN



PHOTO OF LCD SCREEN

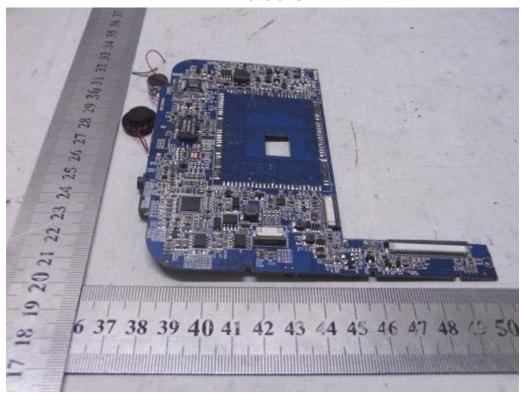




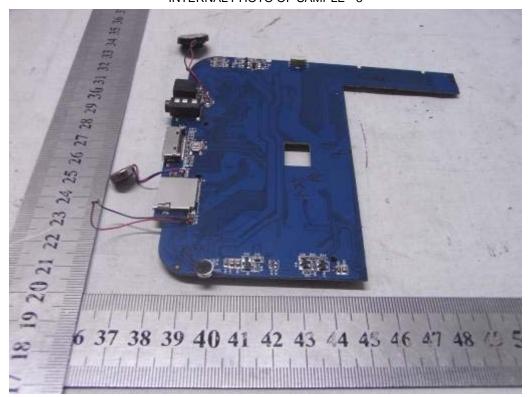
INTERNAL PHOTO OF SAMPLE - 1



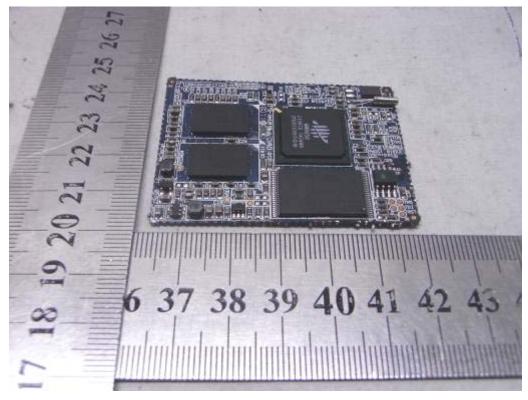
INTERNAL PHOTO OF SAMPLE -2



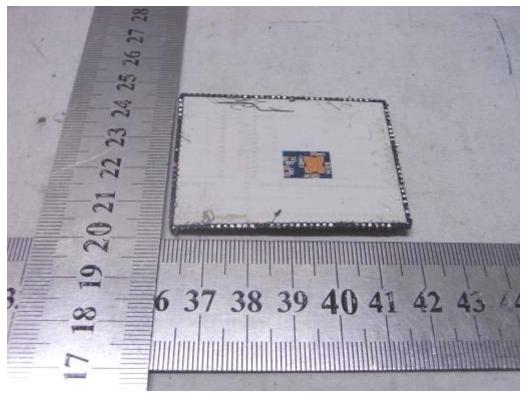
INTERNAL PHOTO OF SAMPLE - 3



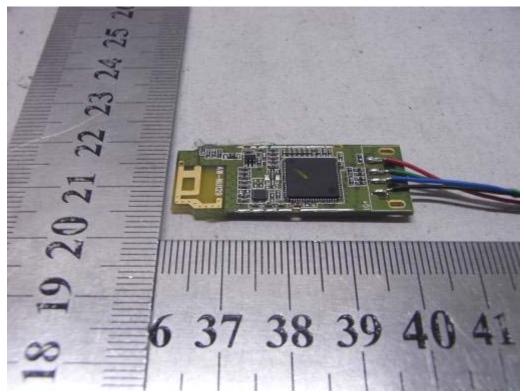
INTERNAL PHOTO OF SAMPLE - 4



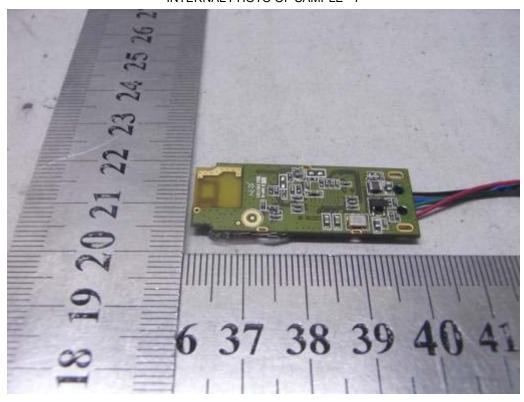
INTERNAL PHOTO OF SAMPLE - 5



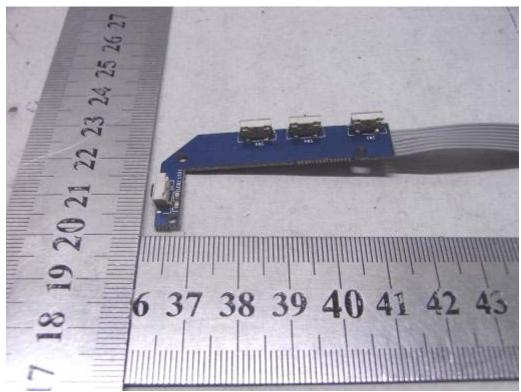
INTERNAL PHOTO OF SAMPLE - 6



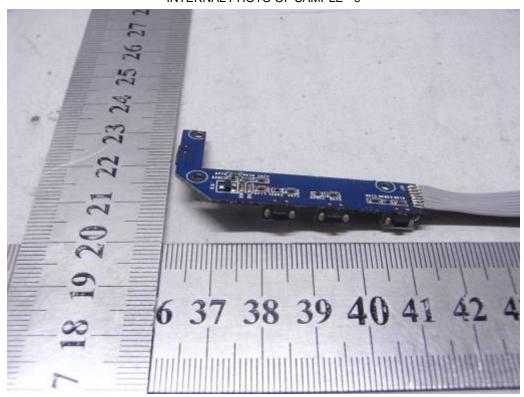
INTERNAL PHOTO OF SAMPLE - 7



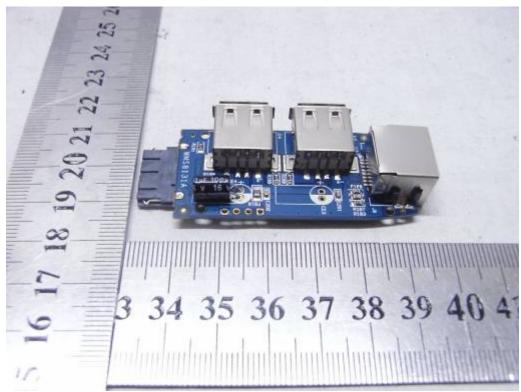
INTERNAL PHOTO OF SAMPLE - 8



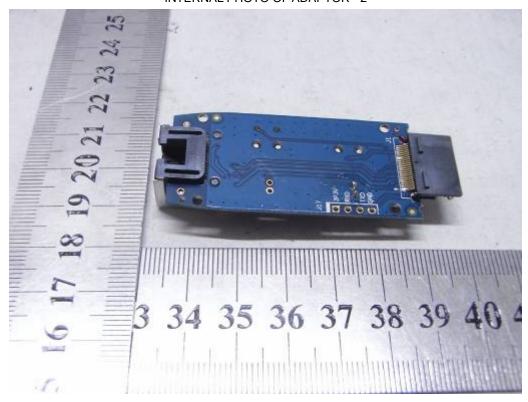
INTERNAL PHOTO OF SAMPLE - 9



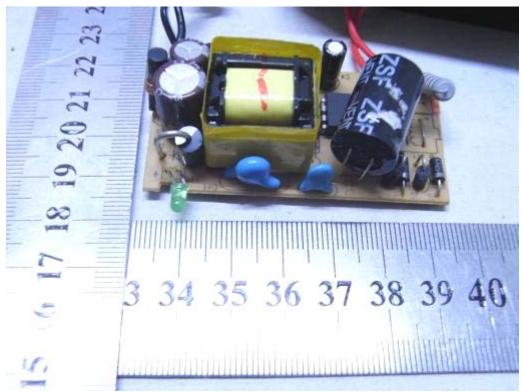
INTERNAL PHOTO OF ADAPTOR - 1



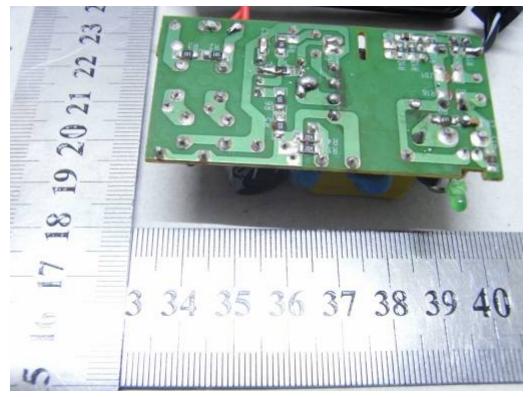
INTERNAL PHOTO OF ADAPTOR - 2



INTERNAL PHOTO OF POWER SUPPLY-1



#### INTERNAL PHOTO OF POWER SUPPLY-2



-----END OF REPORT-----