

# FCC 47 CFR PART 15 SUBPART B TEST REPORT

For

**Applicant: Social Mobile Telecommunications** 

Address: 801 NE 167th St. Suite#314, North Miami Beach. FL 33162, USA

**Product Name: Mobile Phone** 

Model Name: FB101

**Brand Name: Social** 

FCC ID: Z6RSMFB101

Report No.: DPH121111F01

Date of Issue: November 08, 2012

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## FCC ID: Z6RSMFB101

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| Revision History |                   |                     |  |  |
|------------------|-------------------|---------------------|--|--|
| Issue            | Date              | Reason for Revision |  |  |
| 1.0              | November 08, 2012 | First edition       |  |  |
|                  |                   |                     |  |  |

## 1. VERIFICATION OF CONFORMITY

| Equipment Under Test:     | Mobile Phone   |
|---------------------------|--|
| Brand Name:               | Social   |
| Model Number:             | FB101  |
| Series Model Name:        | N/A  |
| Difference description:   | N/A  |
| FCC ID:                   | Z6RSMFB101   |
| Applicant:                | Social Mobile Telecommunications   |
|                           | 801 NE 167th St. Suite#314, North Miami Beach. FL 33162, USA                     |
| Manufacturer:             | Skynet Technology Limitd   |
|                           | Room 2211-2215, Zhongshen Garden, Caitian Road, Futian District, Shenzhen, China |
| Technical Standards:      | 47 CFR Part 15 Subpart B   |
| File Number:              | DPH121111F01   |
| Date of test:             | April 16 ~ May 11, 2012  |
| Deviation:                | None   |
| Condition of Test Sample: | Normal   |
| Test Result:              | PASS   |

The above equipment was tested by Shenzhen Top-cert Service Co., Ltd. For compliance with the requirement 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):

Rex Luo

Test Engineer

Approved by (+ signature):

Joe Jia

Manager

## 2. GENERAL INFORMATION

## 2.1 PRODUCT INFORMATION

| EUT1- Mobile Phone   |                                       |
|----------------------|---------------------------------------|
| Description:         | Mobile Phone                          |
| Brand Name:          | Social                                |
| Model Name:          | FB101                                 |
| Hardware Version:    | Q123-79-01                            |
| Software Version:    | PQ1237901_SZKM_SW_PVT_16_20120314     |
| Frequency:           | Tx: 824.2-848.8 MHz 1850.2-1909.8 MHz |
| Frequency.           | Rx: 849.2-893.8 MHz 1930.2-1989.8 MHz |
| EUT2- Battery        |                                       |
| Description:         | Lithium-ion Battery                   |
| Model Name:          | BP101                                 |
| Brand Name:          | Social                                |
| Capacitance:         | 600 mAh                               |
| Rated Voltage:       | 3.7V                                  |
| Charge Limit:        | 4.2V                                  |
| EUT3 – Power Supply  |                                       |
| Description:         | Travel Charger                        |
| Model Name:          | PC 101                                |
| Brand Name:          | Social                                |
| Rated Input:         | AC 100-240V, 50/60Hz, 0.15A           |
| Rated Output:        | DC 5V, 0.6A                           |
| Length of USB cable: | 1.0m                                  |
|                      |                                       |

## NOTE:

- 1. The EUT is a model of GSM Portable Mobile Station (MS). It consists of **hand telephone set**, **Lithium battery**, **USB cable**, **headphone** and **Charger** as listed above.
- 2. 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:

| Standard                     |         | Item               | Result | Remarks            |
|------------------------------|---------|--------------------|--------|--------------------|
| FCC 47 CFR Part 15 Subpart B | §15.107 | Conducted Emission | PASS   | Meet Class B limit |
| (10-1-05 Edition)            | §15.109 | Radiated Emission  | 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

## 3. TEST FACILITY

## 3.1 TEST FACILITY

| Test Site:            | Most Technology Service Co., Ltd.  |
|-----------------------|--|
| Location:             | No.5, Langshan 2 <sup>nd</sup> 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

## **EUT Function and Test Mode**

The EUT has been tested under normal operating (TX) and standby (RX) condition.

Based on client request, all normal using modes of the normal function were tested but only the worst test data of the worst mode is reported by this report.

## **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:

| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | MHz   | MHz   | MHz  | GHz  |
|--|---|---|--|--|
| 8.37625 - 8.38675                                    | 10.495 - 0.505<br>2.1735 - 2.1905<br>4.125 - 4.128<br>4.17725 - 4.17775<br>4.20725 - 4.20775<br>6.215 - 6.218<br>6.26775 - 6.26825<br>6.31175 - 6.31225<br>8.291 - 8.294<br>8.362 - 8.366<br>8.37625 - 8.38675<br>8.41425 - 8.41475<br>12.29 - 12.293<br>12.51975 - 12.52025<br>12.57675 - 12.57725 | 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 |

<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 | Brand   | Model      | FCC ID | Series No. Data Cable |                      | Power Cord           |
|-------------|---------|------------|--------|-----------------------|----------------------|----------------------|
| Notebook    | Lenovo  | B460       | N/A    | WB03928113            | 1.6m<br>Un-shielding | 2.5m<br>Un-shielding |
| Mouse       | Lenovo  | M-UAE96    | N/A    | E-C011-05-3735(B)     | 1.6<br>Un-shi        |                      |
| Keyboard    | LONGSEN | N/A        | N/A    | N/A                   | 1.6m<br>Un-shielding |                      |
| Monitor     | ASUS    | VH232H DVT | N/A    | LE23Z5-617-929034     | HDMI<br>Cable        | 2.5m<br>Un-shielding |

#### Remark:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. 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     | 2013/4/21            |
| 2   | L.I.S.N.              | Rohde & Schwarz | ENV216     | 100093     | 2013/4/21            |
| 3   | Coaxial Switch        | Anritsu Corp    | MP59B      | 6200283933 | 2013/3/14            |
| 4   | Terminator            | Hubersuhner     | 50Ω        | No.1       | 2013/3/14            |
| 5   | RF Cable              | SchwarzBeck     | N/A        | No.1       | N/A                  |
| 6   | Test Receiver         | Rohde & Schwarz | ESPI       | 101202     | 2013/4/21            |
| 7   | Test Antenna – Horn   | Schwarzbeck     | BBHA 9120C |            | 2013/3/14            |
| 8   | Test Antenna – Bi-Log | Schwarzbeck     | VULB 9163  |            | 2013/3/14            |
| 9   | Cable                 | Resenberger     | N/A        | NO.1       | N/A                  |
| 10  | Cable                 | SchwarzBeck     | N/A        | NO.2       | N/A                  |
| 11  | Cable                 | SchwarzBeck     | N/A        | NO.3       | N/A                  |
| 12  | Signal Generator      | IFR             | 2032       | 203002/100 | 2013/4/21            |

| 13 | Universal Radio<br>Communication Tester | Rohde & Schwarz   | CMU200         | 0304789    | 2013/4/21  |
|----|---|-------------------|----------------|------------|------------|
| 14 | Telecommunication Antenna               | European Antennas | PSA 75301R/170 | 0304213    | 2012/03/14 |
| 15 | Spectrum Analyzer                       | Agilent           | 4408B          | MY41440460 | 2013/4/21  |
| 16 | Full-Anechoic Chamber                   | Albatross         | 9m*6m*6m       | (n.a.)     | 2013/4/15  |

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

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

#### 5.1 GENERAL INFORMATION

#### **EUT Function and Test Mode**

#### Mode 1: Idle Mode

The MS was registered to the base station simulator but no call was set up.

The EUT configuration of the emission test was MS + Battery+ Charger.

#### Mode 2: Call Mode

Before the measurement, the lithium battery was completely discharge.

During the measurement, the lithium battery and the charger were installed, and the MS were in charging state. A communication link was established between the MS and a System Simulator (SS). The MS operated at GSM 850/1900MHz mid ARFCN and maximum output power.

The EUT configuration of the emission test was MS + Battery+ Charger.

#### Mode 3: GPRS Mode

During the test, the MS was playing the GPRS function continuously.

The EUT configuration of the emission test was MS + Battery+ Charger.

#### Mode 4: MP3/MP4 Mode

During the test, the MS was playing the MP3/MP4 function continuously.

The EUT configuration of the emission test was MS + Battery + Charger.

#### **Mode 5: Camera Mode**

During the test, the MS was playing the camera function continuously.

The EUT configuration of the emission test was MS + Battery+ Charger.

#### Mode 6: FM Mode

During the test, the MS was playing the FM function continuously.

The EUT configuration of the emission test was **MS** + **Battery** + **Earphone**.

#### Mode 7: Bluetooth Mode

During the test, the MS was playing the Bluetooth function continuously.

The EUT configuration of the emission test was MS + Battery+ Charger.

#### Mode 8: TV Mode

During the test, the MS was playing the TV function continuously.

The EUT configuration of the emission test was **MS** + **Battery**+ **Charger**.

## Mode 9: USB Mode

During the test, the MS was connected with the notebook and made the data transmission function continuously.

The EUT configuration of the emission test was MS + Battery + USB Cable + Notebook + Mouse +Monitor + Keyboard.

Note: Due to the different configuration and test, in this list only some worse mode. The worst test data of the worse mode is reported by this report.

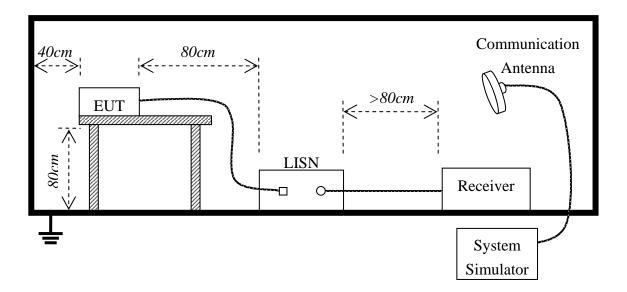
## 6. LINE CONDUCTED EMISSION TEST

## 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.

## 6.2. BLOCK DIAGRAM OF TEST SETUP



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

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

- 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 DC 5V by AC/DC adapter 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.
- 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:

| Preliminary Conducted Emission Test |              |                  |                |               |
|-------------------------------------|--------------|------------------|----------------|---------------|
| Frequency Range                     | Investigated | 150KHz TO 30 MHz |                |               |
| Mode of operation                   | Date         | Report No.       | Data#          | Worst<br>Mode |
| Idle Mode                           | 2012-4-18    | DPH121111F01     | FB101_1_(L, N) |               |
| Call Mode                           | 2012-4-18    | DPH121111F01     | FB101_2_(L, N) |               |
| GPRS Mode                           | 2012-4-18    | DPH121111F01     | FB101_3_(L, N) |               |
| MP3/MP4 Mode                        | 2012-4-18    | DPH121111F01     | FB101_4_(L, N) |               |
| Camera Mode                         | 2012-4-18    | DPH121111F01     | FB101_5_(L, N) |               |
| FM Mode                             | 2012-4-18    | DPH121111F01     | FB101_6_(L, N) |               |
| Bluetooth Mode                      | 2012-4-18    | DPH121111F01     | FB101_7_(L, N) |               |
| TV Mode                             | 2012-4-18    | DPH121111F01     | FB101_8_(L, N) |               |
| USB Mode                            | 2012-4-18    | DPH121111F01     | FB101_9_(L, N) |               |

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

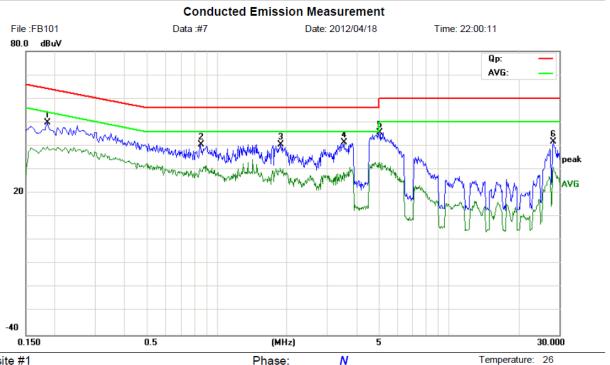
#### 6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

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



Site site #1

Limit: FCC Part15 B Class B QP

EUT: Mobile Phone M/N: FB101 Mode: USB Mode

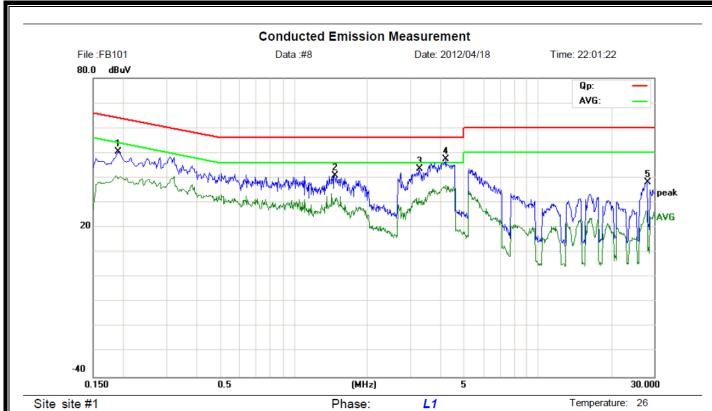
Note:

Phase: N
Power: DC 5V From PC Input
Ac120V/60Hz

5V From PC Input Humidity: 60 %

| No. Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|---------|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|         | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1       | 0.1860  | 38.73            | 11.16             | 49.89            | 64.21 | -14.32 | peak     |         |
| 2       | 0.8500  | 30.60            | 10.00             | 40.60            | 56.00 | -15.40 | peak     |         |
| 3       | 1.8820  | 31.58            | 9.12              | 40.70            | 56.00 | -15.30 | peak     |         |
| 4       | 3.5380  | 30.77            | 10.54             | 41.31            | 56.00 | -14.69 | peak     |         |
| 5 *     | 5.0060  | 33.72            | 12.00             | 45.72            | 60.00 | -14.28 | peak     |         |
| 6       | 28.2300 | 32.73            | 9.00              | 41.73            | 60.00 | -18.27 | peak     |         |

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



Limit: FCC Part15 B Class B QP

EUT: Mbile Phone M/N: FB101

Note:

Reading Correct MeasureNo. Mk. Freq. Level Factor ment Limit Over

Power: DC 5V From PC Input Ac120V/60Hz

| No. | Mk. | Freq.   | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit | Over   |          |         |
|-----|-----|---------|------------------|-------------------|------------------|-------|--------|----------|---------|
|     |     | MHz     | dBuV             | dB                | dBuV             | dBuV  | dB     | Detector | Comment |
| 1   |     | 0.1900  | 38.95            | 11.40             | 50.35            | 64.04 | -13.69 | peak     |         |
| 2   |     | 1.4660  | 31.43            | 9.53              | 40.96            | 56.00 | -15.04 | peak     |         |
| 3   |     | 3.2740  | 33.15            | 10.27             | 43.42            | 56.00 | -12.58 | peak     |         |
| 4   | *   | 4.1820  | 36.26            | 11.18             | 47.44            | 56.00 | -8.56  | peak     |         |
| 5   |     | 28.0820 | 29.30            | 9.00              | 38.30            | 60.00 | -21.70 | peak     |         |
|     |     |         |                  |                   |                  |       |        |          |         |

Humidity: 60 %

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

#### 7. RADIATED EMISSION TEST

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

According to FCC section 15.109, 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:

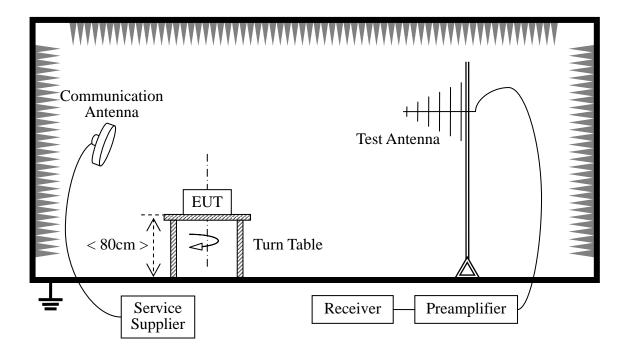
| Frequency (MHz) | Field Strength (μV/m) | Measurement Distance (m) |
|-----------------|-----------------------|--------------------------|
| 30 – 88         | 100                   | 3                        |
| 88 – 216        | 150                   | 3                        |
| 216 – 960     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

#### NOTE:

- 1. Field Strength  $(dB\mu V/m) = 20*log[Field Strength (Mv/m)].$
- 2. In the emission tables above, the tighter limit applies at the band edges.

## 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 Bluetooth 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.

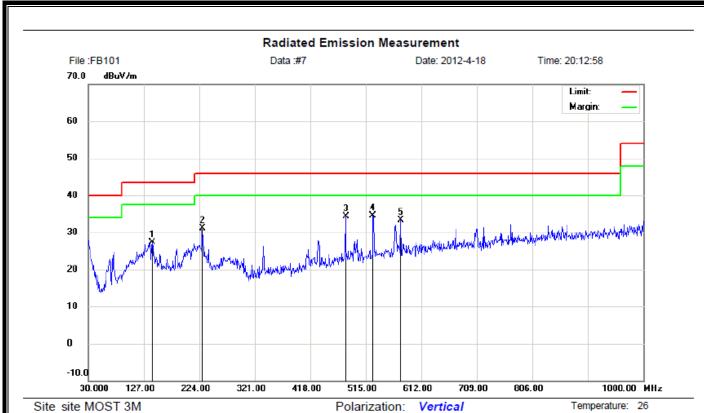
|                   | Preli          | minary Radiated Emi | ssion Test       |               |
|-------------------|----------------|---------------------|------------------|---------------|
| Frequency         | y Range Invest | igated              | 30 MHz TO 1000 M | Hz            |
| Mode of operation | Date           | Report No.          | Data#            | Worst<br>Mode |
| Idle Mode         | 2012-4-25      | STS120411F1         | FB101_1_(H, V)   |               |
| Call Mode         | 2012-4-25      | STS120411F1         | FB101_2_(H, V)   |               |
| GPRS Mode         | 2012-4-25      | STS120411F1         | FB101_3_(H, V)   |               |
| MP3/MP4 Mode      | 2012-4-25      | STS120411F1         | FB101_4_(H, V)   |               |
| Camera Mode       | 2012-4-25      | STS120411F1         | FB101_5_(H, V)   |               |
| FM Mode           | 2012-4-25      | STS120411F1         | FB101_6_(H, V)   |               |
| Bluetooth Mode    | 2012-4-25      | STS120411F1         | FB101_7_(H, V)   |               |
| TV Mode           | 2012-4-25      | STS120411F1         | FB101_8_(H, V)   |               |
| USB Mode          | 2012-4-25      | STS120411F1         | FB101_9_(H, V)   |               |

# 7.3 TEST RESULT

# Form 9 KHz to 30MHz:

| (MHz)   | H/V      | Reading | Reading | CF    | Actu     | аггэ     | Limit    | Limit    | Margin |
|---------|----------|---------|---------|-------|----------|----------|----------|----------|--------|
|         |          | (dBuV)  | (dBuV)  | (dB)  | Peak     | AV       | (dBuV/m) | (dBuV/m) | (dB)   |
|         |          |         |         |       | (dBuV/m) | (dBuV/m) |          |          |        |
| 2402.00 | Η        | 94.64   | 66.14   | 9.07  | 103.71   | 75.21    | 114.00   | 94.00    | -18.79 |
|         |          |         |         |       |          |          |          |          |        |
| 1612.50 | Ι        | 56.05   | 30.74   | 5.78  | 61.83    | 36.52    | 74.00    | 54.00    | -17.48 |
| 4815.00 | Ι        | 56.14   | 26.79   | 16.81 | 72.95    | 43.60    | 74.00    | 54.00    | -10.40 |
| N/A     |          |         |         |       |          |          |          |          | >20    |
|         |          |         |         |       |          |          |          |          |        |
| 2402.00 | V        | 94.51   | 72.36   | 9.07  | 103.58   | 77.18    | 114.00   | 94.00    | -16.82 |
|         |          |         |         |       |          |          |          |          |        |
| 1612.50 | <b>V</b> | 55.11   | 25.27   | 5.78  | 60.89    | 31.05    | 74.00    | 54.00    | -22.95 |
| 4815.00 | V        | 55.85   | 25.71   | 16.81 | 72.66    | 42.52    | 74.00    | 54.00    | -11.48 |
| N/A     |          |         |         |       |          |          |          |          | >20    |
|         |          |         |         |       |          |          |          |          |        |

-Note: No test data was detected in below 30MHz.



Site site MOST 3M

Limit: FCC Part15 B 3M Radiation

EUT: Mobile Phone

M/N: FB101 Mode: USB Mode

Note:

| No. | Mk |          | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          |    | Degree |         |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|----|--------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector | cm | degree | Comment |
| 1   |    | 141.5500 | 10.29            | 17.11             | 27.40            | 43.50  | -16.10 | peak     |    |        |         |
| 2   |    | 228.8500 | 14.55            | 16.48             | 31.03            | 46.00  | -14.97 | peak     |    |        |         |
| 3   |    | 480.0800 | 12.70            | 21.70             | 34.40            | 46.00  | -11.60 | peak     |    |        |         |
| 4   | *  | 527.6100 | 12.36            | 22.08             | 34.44            | 46.00  | -11.56 | peak     |    |        |         |
| 5   |    | 576.1100 | 10.45            | 22.82             | 33.27            | 46.00  | -12.73 | peak     |    |        |         |

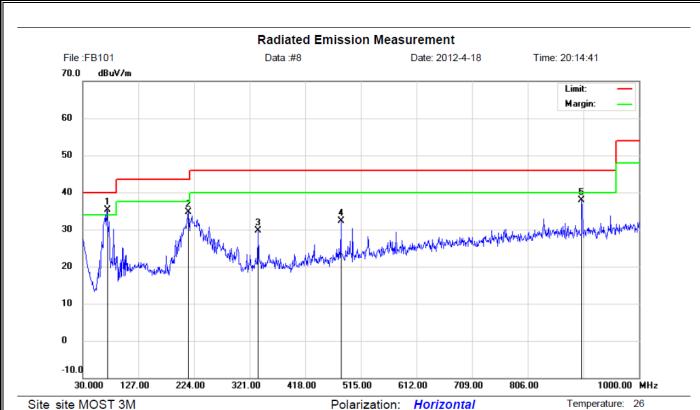
Power: AC 120V/60Hz

Humidity:

Distance:

61 %

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



Site site MOST 3M

Limit: FCC Part15 B 3M Radiation

EUT: Mobile Phone

M/N: FB101 Mode: USB Mode

Note:

| No. | Mk | . Freq.  | Reading<br>Level | Correct<br>Factor | Measure-<br>ment | Limit  | Over   |          | Antenna<br>Height | Table<br>Degree |         |
|-----|----|----------|------------------|-------------------|------------------|--------|--------|----------|-------------------|-----------------|---------|
|     |    | MHz      | dBuV             | dB                | dBuV/m           | dBuV/m | dB     | Detector | cm                | degree          | Comment |
| 1   | *  | 71.7100  | 23.64            | 11.68             | 35.32            | 40.00  | -4.68  | peak     |                   |                 |         |
| 2   |    | 214.3000 | 18.62            | 16.08             | 34.70            | 43.50  | -8.80  | peak     |                   |                 |         |
| 3   |    | 335.5500 | 12.73            | 17.06             | 29.79            | 46.00  | -16.21 | peak     |                   |                 |         |
| 4   |    | 480.0800 | 10.57            | 21.70             | 32.27            | 46.00  | -13.73 | peak     |                   |                 |         |
| 5   |    | 900.0900 | 10.43            | 27.40             | 37.83            | 46.00  | -8.17  | peak     |                   |                 |         |

Polarization: Horizontal

Distance:

Power: AC 120V/60Hz

Humidity:

61 %

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

## The worst test data above 1 GHz was showed as the follow:

Operation Mode: CALL(850MHz) Test Date: April.18, 2012

Temperature: 24°C Humidity: 70 % RH

| Freq.<br>(MHz) | Ant. Pol<br>H/V | Peak<br>Reading | AV<br>Reading | Ant./CL<br>CF | Actu             | al Fs          | Peak<br>Limit | AV<br>Limit | Peak<br>Margin | AV<br>Margin |
|----------------|-----------------|-----------------|---------------|---------------|------------------|----------------|---------------|-------------|----------------|--------------|
|                |                 | (dBuV)          | (dBuV)        | (dB)          | Peak<br>(dBuV/m) | AV<br>(dBuV/m) | (dBuV/m)      | (dBuV/m)    | (dB)           | (dB)         |
| 1548.50        | Н               | 51.45           | 28.45         | 14.32         | 65.77            | 42.77          | 70.00         | 50.00       | -4.23          | -7.23        |
| 1938.41        | Н               | 42.14           | 23.14         | 19.84         | 61.98            | 42.98          | 70.00         | 50.00       | -8.02          | -7.02        |
| N/A            |                 |                 |               |               |                  |                |               |             |                | >20          |
|                |                 |                 |               |               |                  |                |               |             |                |              |
| 1548.50        | V               | 51.49           | 31.01         | 14.32         | 65.81            | 45.33          | 70.00         | 50.00       | -4.19          | -4.67        |
| 1938.41        | V               | 45.34           | 25.28         | 19.84         | 65.18            | 45.12          | 70.00         | 50.00       | -4.82          | -4.88        |
| N/A            |                 |                 |               |               |                  |                |               |             |                | >20          |

#### 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.

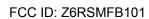
| FCC ID: Z6RSMFB101 |                           | Report No.: DPH121111F01 |
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|                    | APPENDIX 1                |                          |
|                    | PHOTOGRAPHS OF TEST SETUP |                          |
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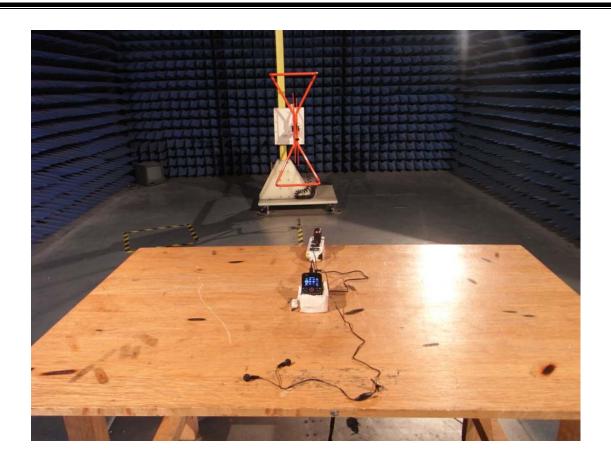
## CE TEST SETUP





RE TEST SETUP





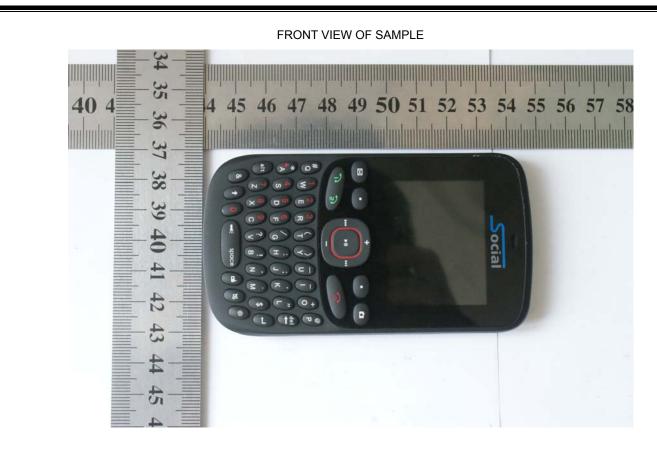


Report No.: DPH121111F01

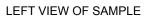




| APPENDIX 2 PHOTOGRAPHS OF EUT |
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| PHOTOGRAPHS OF EUT            |
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RIGHT VIEW OF SAMPLE







DOWN VIEW OF SAMPLE



## PHOTO OF HEADPHONE



PHOTO OF USB



## INTERNAL PHOTO OF SAMPLE - 1



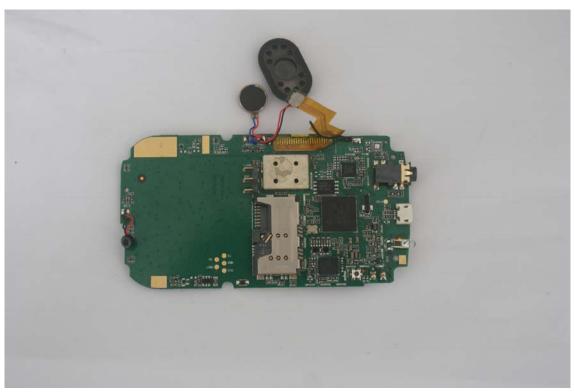
## INTERNAL PHOTO OF SAMPLE -2



## INTERNAL PHOTO OF SAMPLE - 3



INTERNAL PHOTO OF SAMPLE - 4



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