



# **FCC 47 CFR PART 15 SUBPART B**

## **TEST REPORT**

*For*

**Applicant:** Tecmobile (International) Ltd

**Address:** Santok House, Unit L Braintree Industrial Estate, Braintree Road,  
Ruislip, Middlesex, United Kingdom

**Product Name:** Mobile Phone

**Model Name:** TEC/Y40

**Brand Name:** Tecmobile

**FCC ID:** O4FY4035618905

**Report No.:** DPH130304F01

**Date of Issue:** March 18, 2013

**Issued by:** Shenzhen Top-cert Service Co., Ltd.

**Address:** Room 506, Hongyu Commercial Building, Gushu 2nd Road,  
Baoan District, Shenzhen, China

**Tel:** 0755-61196328

**Fax:** 0755-61196328

**E-mail:** [service@top-cert.com](mailto:service@top-cert.com)

**Web:** [www.top-cert.com](http://www.top-cert.com)

*The report consists 36 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The client should not use it to claim product endorsement by Top-cert. The test results in the report only apply to the tested sample. The test report shall be invalid without all the signatures of testing engineers, reviewer and approver.*

## TABLE OF CONTENTS

<b>1. VERIFICATION OF CONFORMITY .....</b>	<b>3</b>
<b>2. GENERAL INFORMATION.....</b>	<b>4</b>
2.1 PRODUCT INFORMATION.....	4
2.2 OBJECTIVE .....	5
2.3 TEST STANDARDS AND RESULTS .....	5
2.4 ENVIRONMENTAL CONDITIONS .....	5
<b>3. TEST FACILITY .....</b>	<b>6</b>
3.1 TEST FACILITY.....	6
3.2 GENERAL TEST PROCEDURES .....	6
3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS.....	7
<b>4. SETUP OF EQUIPMENT UNDER TEST .....</b>	<b>8</b>
4.1 SETUP CONFIGURATION OF EUT.....	8
4.2 SUPPORT EQUIPMENT.....	8
4.3 TEST EQUIPMENT LIST .....	8
<b>5. 47 CFR PART 15B REQUIREMENTS .....</b>	<b>10</b>
5.1 GENERAL INFORMATION.....	10
<b>6. LINE CONDUCTED EMISSION TEST.....</b>	<b>12</b>
6.1 LIMITS OF LINE CONDUCTED EMISSION TEST .....	12
6.2 BLOCK DIAGRAM OF TEST SETUP.....	12
6.3 PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST .....	13
6.4 FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST .....	14
<b>7. RADIATED EMISSION TEST .....</b>	<b>17</b>
7.1 LIMITS OF RADIATED DISTURBANCES AT 3M DISTANCES FOR CLASS B .....	17
7.2 TEST DESCRIPTION.....	17
7.3 TEST RESULT .....	19
<b>APPENDIX 1 .....</b>	<b>23</b>
<b>PHOTOGRAPHS OF TEST SETUP .....</b>	<b>23</b>
<b>APPENDIX 2.....</b>	<b>27</b>
<b>PHOTOGRAPHS OF EUT .....</b>	<b>27</b>

Revision History		
Issue	Date	Reason for Revision
1.0	March 18, 2013	First edition

## 1. VERIFICATION OF CONFORMITY

<b>Equipment Under Test:</b>	Mobile Phone
<b>Brand Name:</b>	Tecmobile
<b>Model Number:</b>	TEC/Y40
<b>Series Model Name:</b>	N/A
<b>Difference description:</b>	N/A
<b>FCC ID:</b>	O4FY4035618905
<b>Applicant:</b>	Tecmobile (International) Ltd
	Santok House, Unit L Braintree Industrial Estate, Braintree Road, Ruislip, Middlesex, United Kingdom
<b>Manufacturer:</b>	Tecmobile (International) Ltd
	Santok House, Unit L Braintree Industrial Estate, Braintree Road, Ruislip, Middlesex, United Kingdom
<b>Technical Standards:</b>	47 CFR Part 15 Subpart B
<b>File Number:</b>	DPH130304F01
<b>Date of test:</b>	March 01, 2013- March 13, 2013
<b>Date of issue:</b>	March 18, 2013
<b>Condition of Test Sample:</b>	Normal
<b>Test Result:</b>	PASS

The above equipment was tested by Top-cert. 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*

Rex Luo

Test Engineer



Approved by (+ signature):

*Joe Jia*

Joe Jia

Manager

## 2. GENERAL INFORMATION

### 2.1 PRODUCT INFORMATION

EU9300- Mobile Phone	
Description:	Mobile Phone
Brand Name:	Tecmobile
Model Name:	TEC/Y40
Hardware Version:	SPR-XP4501_V3.0
Software Version:	N/A
Frequency:	Tx: 824.2-848.8 MHz 1850.2-1909.8 MHz Rx: 849.2-893.8 MHz 1930.2-1989.8 MHz
Ancillary Equipment – Power Supply	
Description:	Travel Charger
Model Name:	TEC/Y40
Brand Name:	Tecmobile
Rated Input:	AC 100-240V, 50/60Hz, 0.2A
Rated Output:	DC 5V, 500mA
Length USB cable:	1.0m
Ancillary Equipment – Battery	
Description:	Lithium-ion Battery
Model Name:	TEC/Y40
Brand Name:	Tecmobile
Capacitance:	1800 mAh
Rated Voltage:	3.7V
Charge Limit:	4.2V

**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:

EMISSION				
Standard	Item		Result	Remarks
FCC 47 CFR Part 15 Subpart B (10-1-05 Edition)	§15.107	Conducted Emission	PASS	Meet Class B limit
	§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 <b>490827</b> . The <b>CNAS</b> Registration Number is <b>CNAS L3573</b> .
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:

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
<sup>1</sup> 0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2655 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	( <sup>2</sup> )
13.36 - 13.41			

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

<sup>2</sup> Above 38.6

- (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.

## 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 Un-shielding	2.5m Un-shielding
Mouse	Lenovo	M-UAE96	N/A	E-C011-05-3735(B)	1.6m Un-shielding	
Keyboard	LONGSEN	N/A	N/A	N/A	1.6m Un-shielding	
Monitor	ASUS	VH232H DVT	N/A	LE23Z5-617-929034	HDMI Cable	2.5m 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	2013/5/21
13	Universal Radio 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

#### 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/EGPRS 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: WCDMA/HSDPA 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 WCDMA/HSDPA/HSUPA Mode and maximum output power.

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

#### Mode 5: 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 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: GPS Mode

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

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

**Mode 9: WiFi Mode**

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

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

**Mode 10: 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

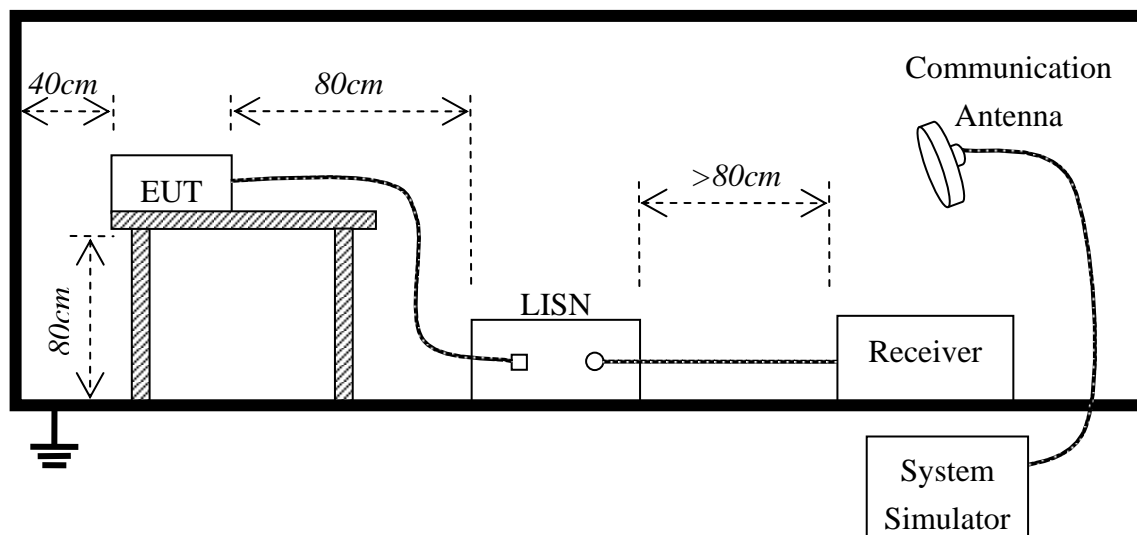
### 6.1 LIMITS OF LINE CONDUCTED EMISSION TEST

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

**\*\*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 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.
- 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:

Preliminary Conducted Emission Test				
Frequency Range Investigated		150KHz To 30 MHz		
Mode of operation	Date	Report No.	Data#	Worst Mode
Idle Mode	2013-03-02	DPH130304F01	TEC/YOU40_1_(L, N)	<input type="checkbox"/>
Call Mode	2013-03-02	DPH130304F01	TEC/YOU40_2_(L, N)	<input type="checkbox"/>
GPRS/EGPRS Mode	2013-03-02	DPH130304F01	TEC/YOU40_3_(L, N)	<input type="checkbox"/>
WCDMA/HSDPA Mode	2013-03-02	DPH130304F01	TEC/YOU40_4_(L, N)	<input type="checkbox"/>
MP3/MP4 Mode	2013-03-02	DPH130304F01	TEC/YOU40_5_(L, N)	<input type="checkbox"/>
FM Mode	2013-03-02	DPH130304F01	TEC/YOU40_6_(L, N)	<input type="checkbox"/>
Bluetooth Mode	2013-03-02	DPH130304F01	TEC/YOU40_7_(L, N)	<input type="checkbox"/>
WiFi Mode	2013-03-02	DPH130304F01	TEC/YOU40_8_(L, N)	<input type="checkbox"/>
GPS Mode	2013-03-02	DPH130304F01	TEC/YOU40_9_(L, N)	<input type="checkbox"/>
USB Mode	2013-03-02	DPH130304F01	TEC/YOU40_10_(L, N)	<input checked="" type="checkbox"/>

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

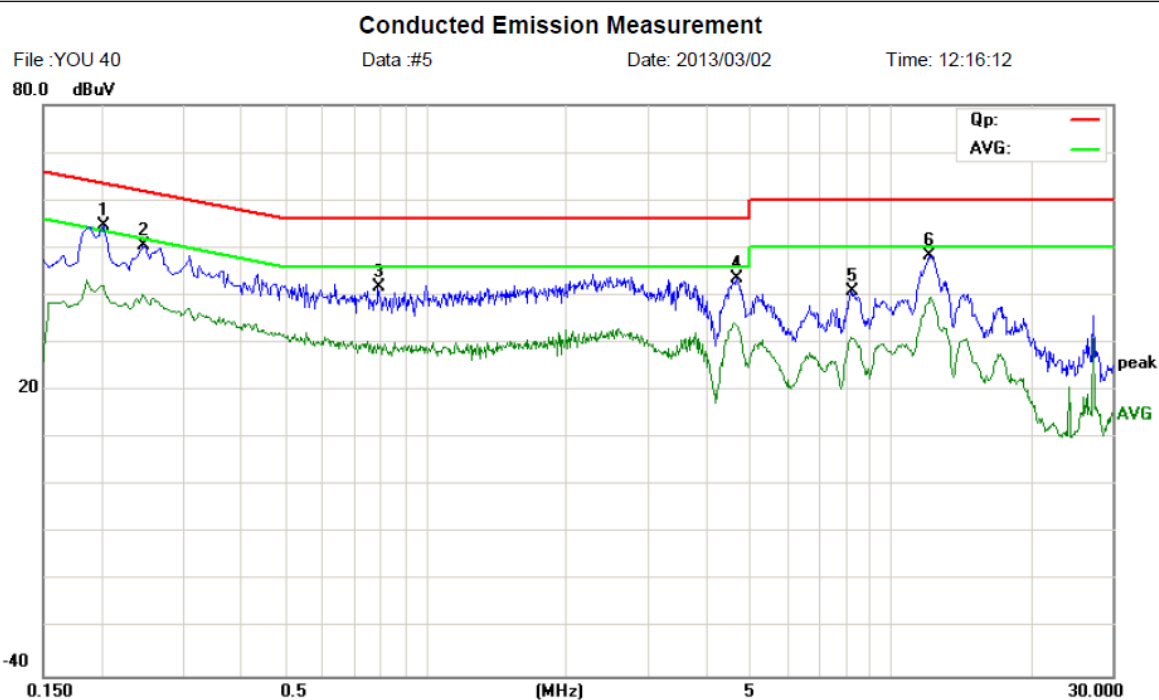
#### **6.4 FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST**

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

Phase: **L1**

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: MOBILE PHONE

M/N: YOU 40

Mode: USB MODE

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.2020	42.67	11.99	54.66	63.53	-8.87	peak	
2		0.2460	38.79	11.69	50.48	61.89	-11.41	peak	
3		0.7900	31.78	10.00	41.78	56.00	-14.22	peak	
4		4.6540	31.94	11.65	43.59	56.00	-12.41	peak	
5		8.2300	30.92	10.06	40.98	60.00	-19.02	peak	
6		12.1020	39.23	9.00	48.23	60.00	-11.77	peak	

\*:Maximum data    x:Over limit    !:over margin

## Conducted Emission Measurement

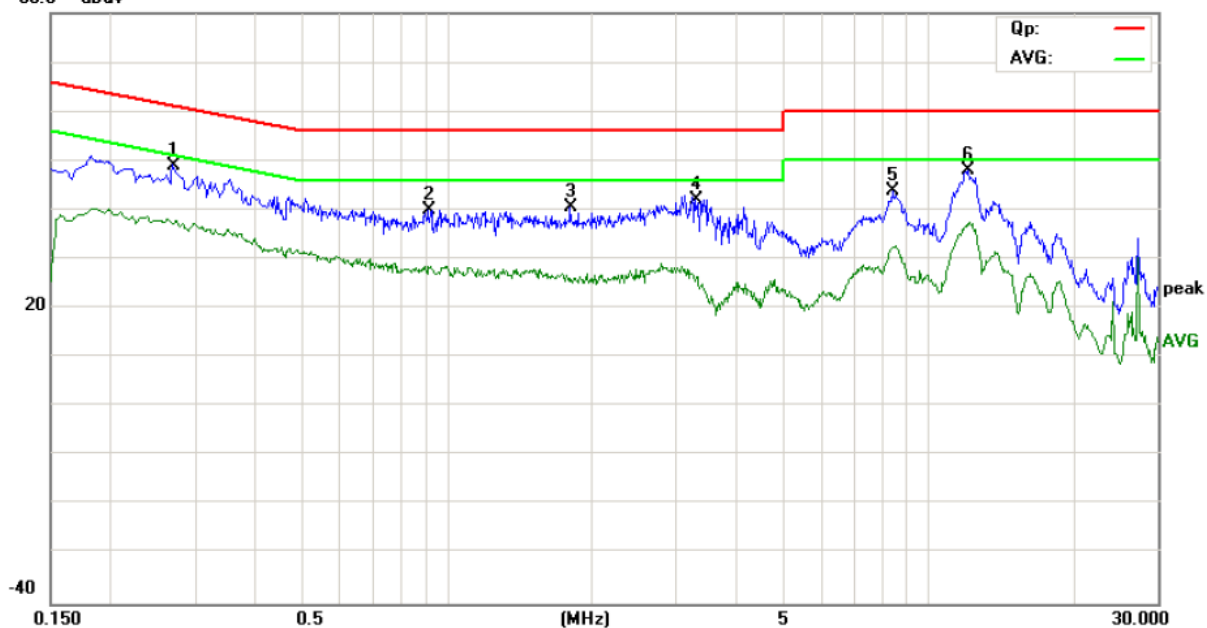
File :YOU 40

Data :#6

Date: 2013/03/02

Time: 13:32:33

80.0 dBuV



Site site #1

Phase: N

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: MOBILE PHONE

M/N: YOU 40

Mode: USB MODE

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.2700	37.57	11.53	49.10	61.12	-12.02	peak	
2		0.9180	30.06	10.00	40.06	56.00	-15.94	peak	
3		1.8060	31.36	9.19	40.55	56.00	-15.45	peak	
4		3.2780	31.88	10.28	42.16	56.00	-13.84	peak	
5		8.4180	33.84	9.95	43.79	60.00	-16.21	peak	
6	*	12.0660	39.06	9.00	48.06	60.00	-11.94	peak	

\*: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:

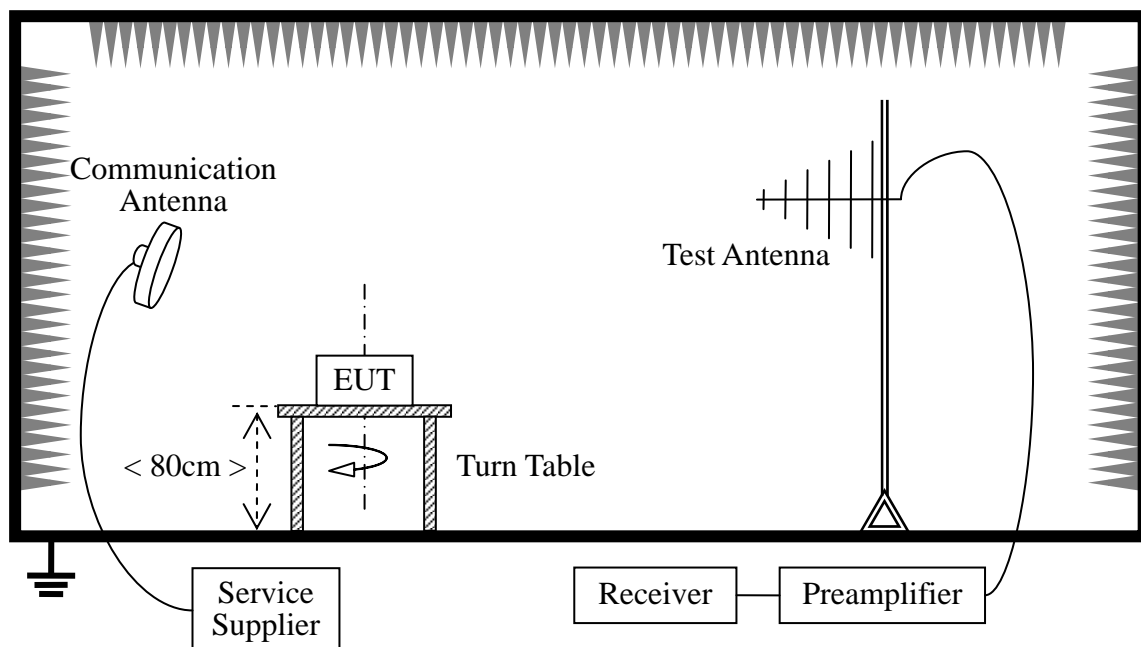
Frequency (MHz)	Field Strength ( $\mu\text{V/m}$ )	Measurement Distance (m)
30 – 88	100	3
88 – 216	150	3
216 – 960	200	3
Above 960	500	3

#### NOTE:

1. Field Strength ( $\text{dB}\mu\text{V/m}$ ) =  $20 \cdot \log[\text{Field Strength (Mv/m)}]$ .
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.

Preliminary Radiated Emission Test				
Frequency Range Investigated			30 MHz To 1000 MHz	
Mode of operation	Date	Report No.	Data#	Worst Mode
Idle Mode	2013-03-02	DPH130304F01	TEC/YOU40_1_(H, V)	<input type="checkbox"/>
Call Mode	2013-03-02	DPH130304F01	TEC/YOU40_2_(H, V)	<input type="checkbox"/>
GPRS/EGPRS Mode	2013-03-02	DPH130304F01	TEC/YOU40_3_(H, V)	<input type="checkbox"/>
WCDMA/HSDPA/HSU PA Mode	2013-03-02	DPH130304F01	TEC/YOU40_4_(H, V)	<input type="checkbox"/>
MP3/MP4 Mode	2013-03-02	DPH130304F01	TEC/YOU40_5_(H, V)	<input type="checkbox"/>
FM Mode	2013-03-02	DPH130304F01	TEC/YOU40_6_(H, V)	<input type="checkbox"/>
Bluetooth Mode	2013-03-02	DPH130304F01	TEC/YOU40_7_(H, V)	<input type="checkbox"/>
WiFi Mode	2013-03-02	DPH130304F01	TEC/YOU40_8_(H, V)	<input type="checkbox"/>
GPS Mode	2013-03-02	DPH130304F01	TEC/YOU40_9_(H, V)	<input type="checkbox"/>
USB Mode	2013-03-02	DPH130304F01	TEC/YOU40_10_(H, V)	<input checked="" type="checkbox"/>

### 7.3 TEST RESULT

Form 9 KHz to 30MHz:

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	Ant. / CL CF (dB)	Actual Fs Peak (dBuV/m)	Peak Limit (dBuV/m)	Peak Margin (dB)
	H					
	H					
	H					
N/A						>20
	V					
	V					
	V					
N/A						>20

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

## Radiated Emission Measurement

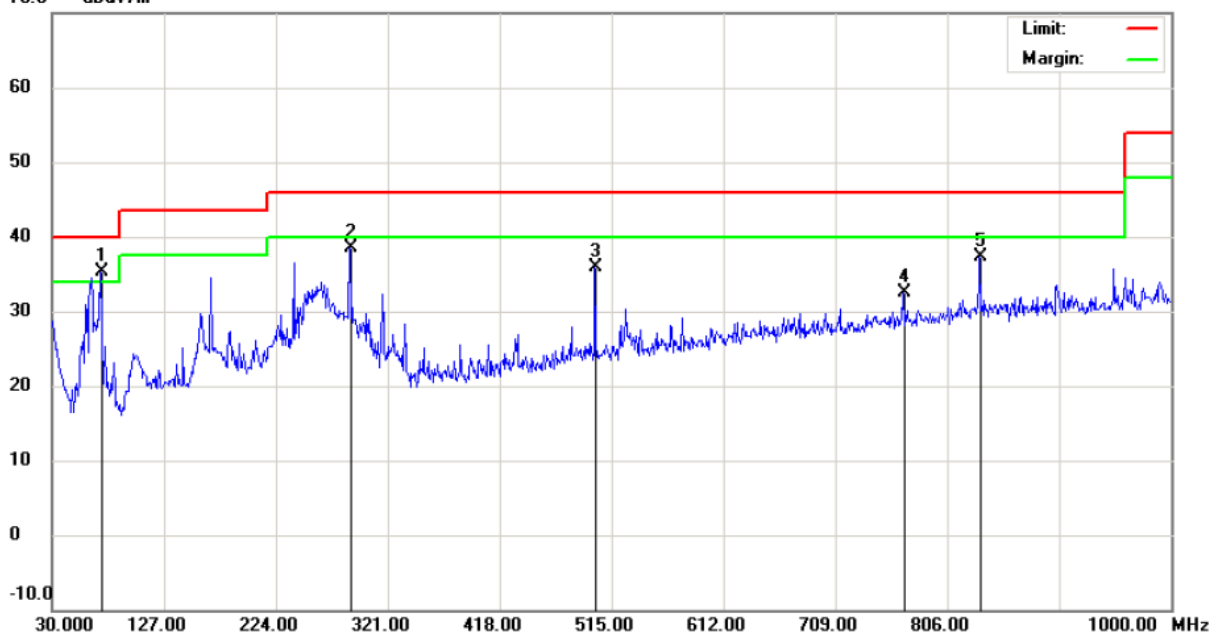
File :YOU 40

Data :#5

Date: 2013-3-2

Time: 12:05:47

70.0 dBuV/m



Site site MOST 3M

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: DC 5V From PC

Humidity: 61 %

EUT: Mobile Phone

Distance:

M/N: YOU 40

Mode: USB Mode

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1	*	71.7100	23.61	11.68	35.29	40.00	-4.71	peak		
2		288.0200	18.99	19.42	38.41	46.00	-7.59	peak		
3		500.4500	14.56	21.40	35.96	46.00	-10.04	peak		
4		768.1700	6.71	25.86	32.57	46.00	-13.43	peak		
5		834.1300	10.25	27.08	37.33	46.00	-8.67	peak		

\*:Maximum data    x:Over limit    !:over margin

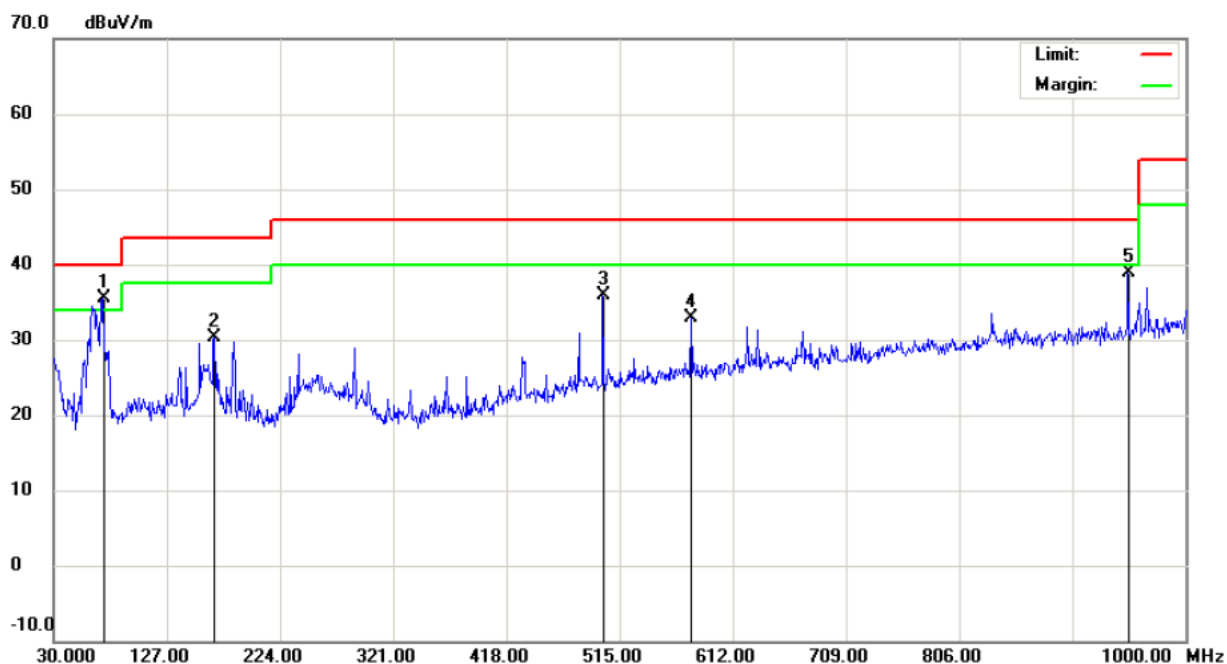
## Radiated Emission Measurement

File :YOU 40

Data :#6

Date: 2013-3-2

Time: 12:12:46



Site site MOST 3M

Polarization: *Vertical*

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: DC 5V From PC

Humidity: 61 %

EUT: Mobile Phone

Distance:

M/N: YOU 40

Mode: USB Mode

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector	Antenna Height cm	Table Degree degree	Comment
1	*	71.7100	23.74	11.68	35.42	40.00	-4.58	peak			
2		167.7400	13.05	17.20	30.25	43.50	-13.25	peak			
3		500.4500	14.47	21.40	35.87	46.00	-10.13	peak			
4		576.1100	10.01	22.82	32.83	46.00	-13.17	peak			
5		950.5300	10.91	27.92	38.83	46.00	-7.17	peak			

\*:Maximum data    x:Over limit    !:over margin

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

Operation Mode: USB Mode

Test Date: 2013-03-02

Temperature: 24°C

Humidity: 65 % RH

Freq.	Ant. Pol	Peak	AV	Ant./CL	Actual Fs		Peak	AV	Peak	AV
(MHz)	H/V	Reading	Reading	CF			Limit	Limit	Margin	Margin
		(dBuV)	(dBuV)	(dB)	Peak	AV	(dBuV/m)	(dBuV/m)	(dB)	(dB)
					(dBuV/m)	(dBuV/m)				
1334.5	H	50.48	32.61	9.96	60.44	42.57	70.00	50.00	-9.56	-7.43
1583.48	H	46.78	25.32	14.14	60.92	39.46	70.00	50.00	-9.08	-10.54
N/A										>20
1334.5	V	51.54	31.47	9.96	61.50	41.43	70.00	50.00	-8.50	-8.57
1583.48	V	48.31	26.67	14.14	62.45	40.81	70.00	50.00	-7.55	-9.19
N/A										>20

**Notes:**

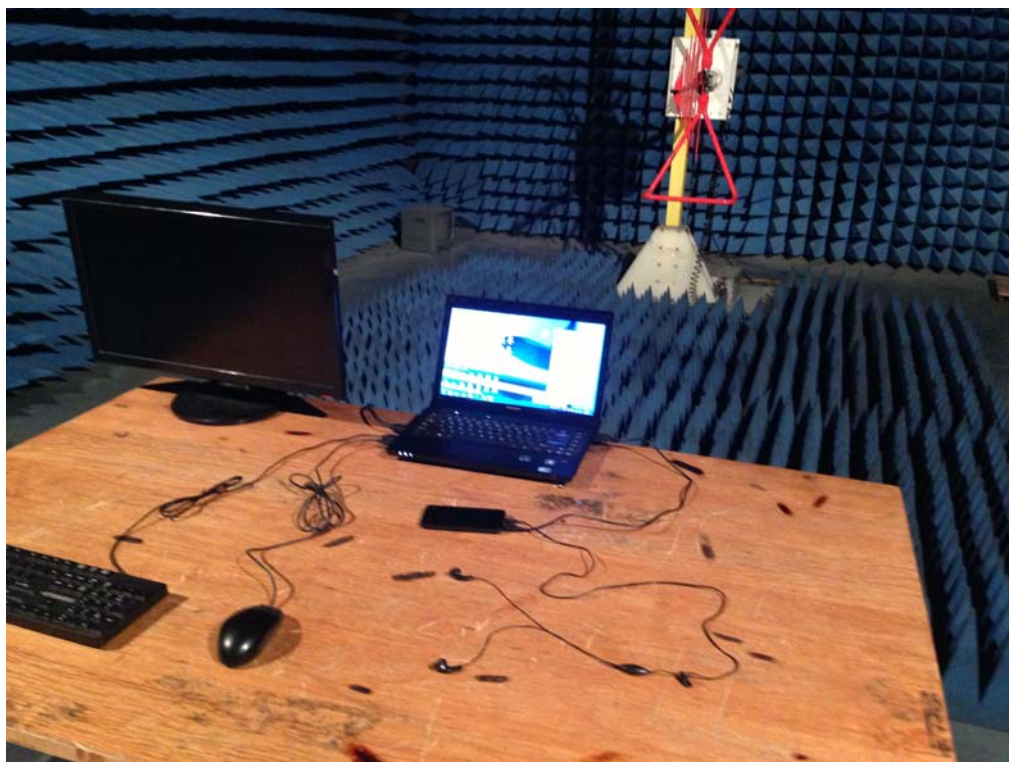
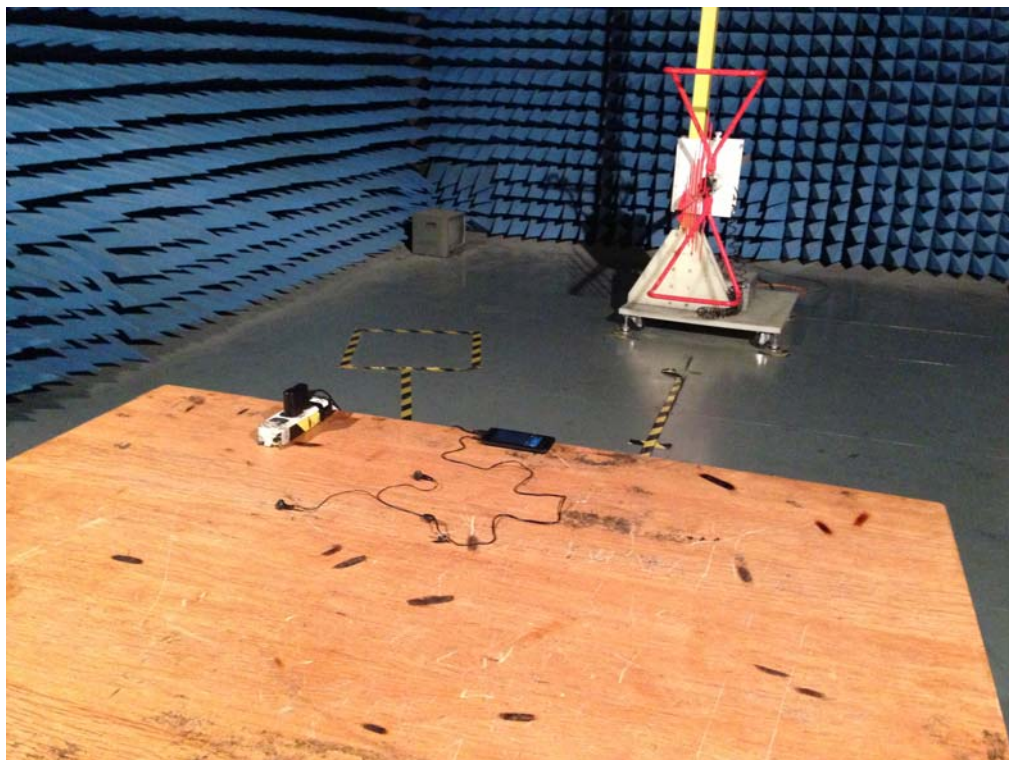
1. Measuring frequencies from 1 GHz to 12.75GHz.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
3. The frequency that above 3GHz is mainly from the environment noise.

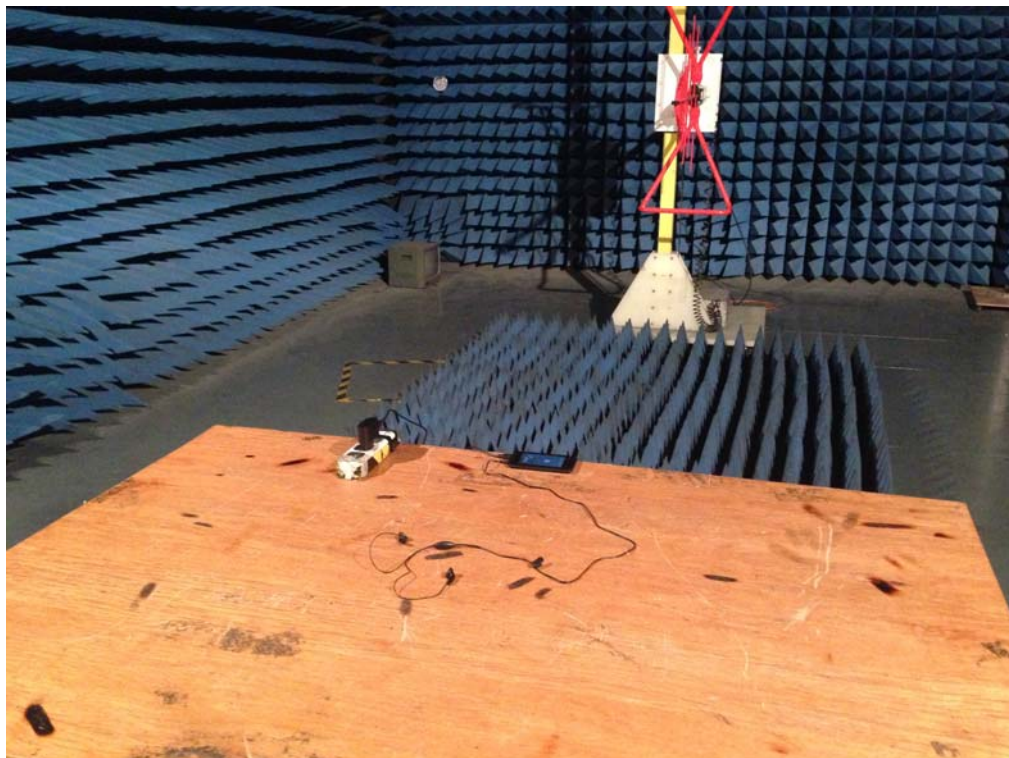
**APPENDIX 1**  
**PHOTOGRAPHS OF TEST SETUP**

CE TEST SETUP



RE TEST SETUP





**APPENDIX 2**  
**PHOTOGRAPHS OF EUT**

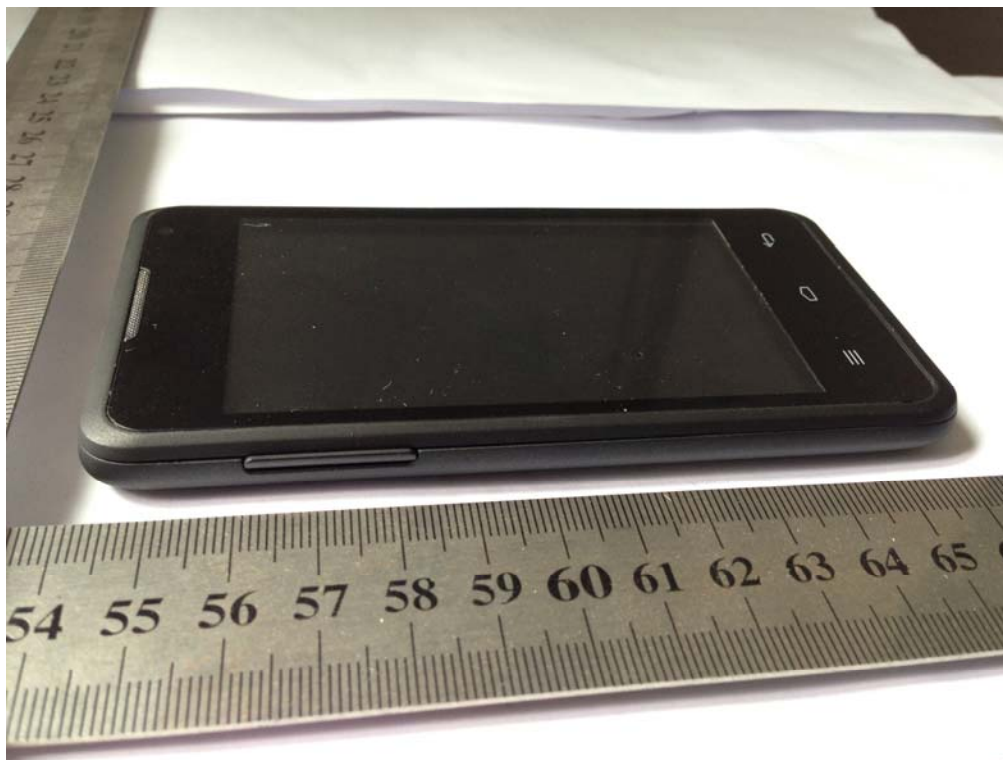
FRONT VIEW OF SAMPLE



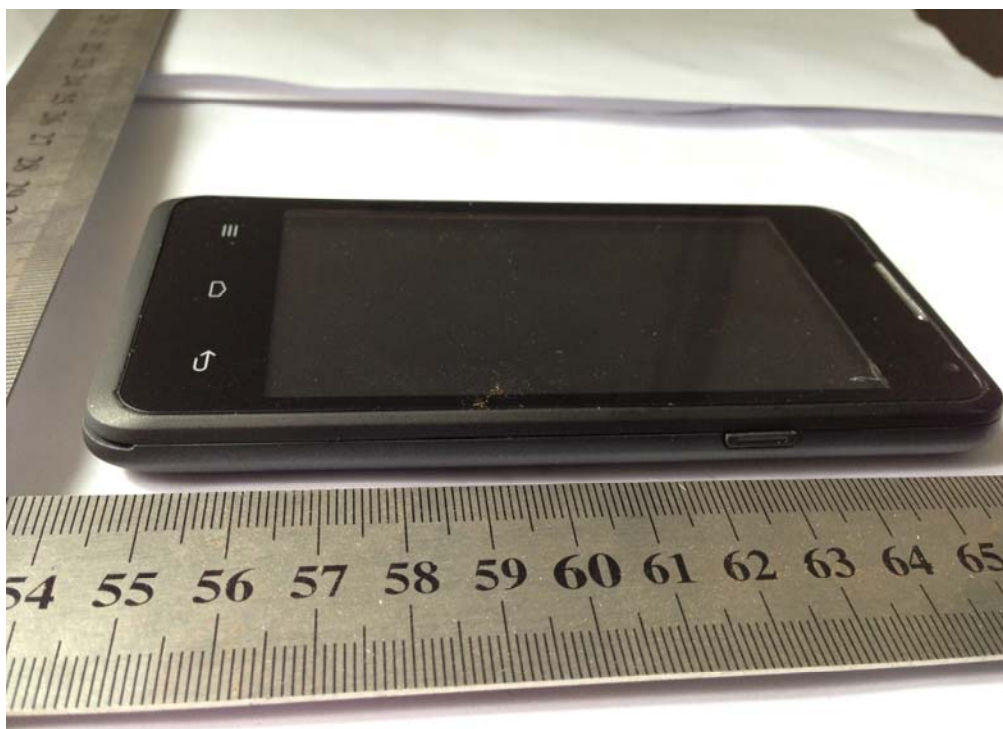
BACK VIEW OF SAMPLE



LEFT VIEW OF SAMPLE



RIGHT VIEW OF SAMPLE



UP VIEW OF SAMPLE



DOWN VIEW OF SAMPLE



PHOTO OF EARPHONE



PHOTO OF CHARGER



PHOTO OF USB CABLE



INTERNAL PHOTO OF SAMPLE - 1



INTERNAL PHOTO OF SAMPLE -2



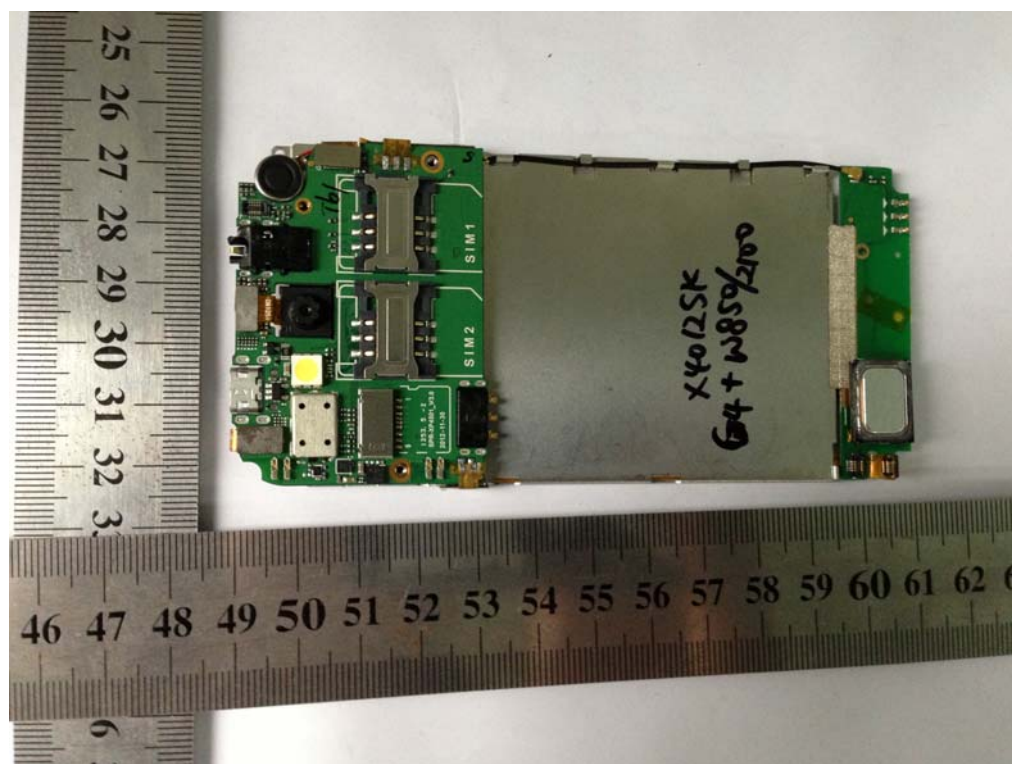
INTERNAL PHOTO OF SAMPLE - 3



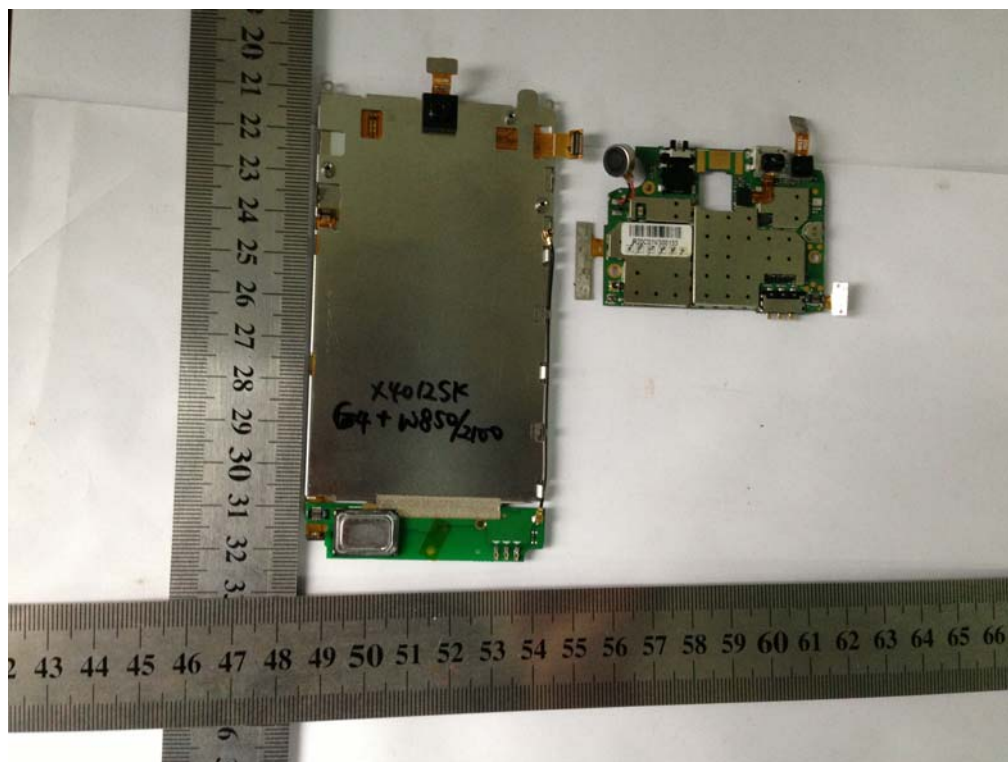
INTERNAL PHOTO OF SAMPLE - 4



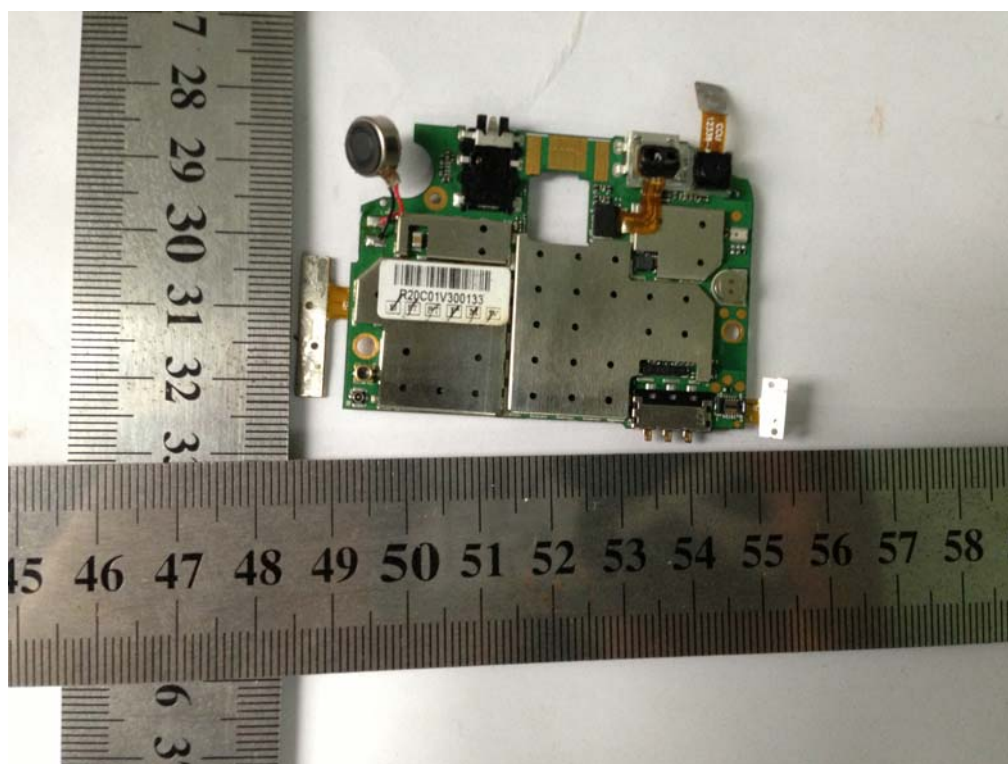
INTERNAL PHOTO OF SAMPLE - 5



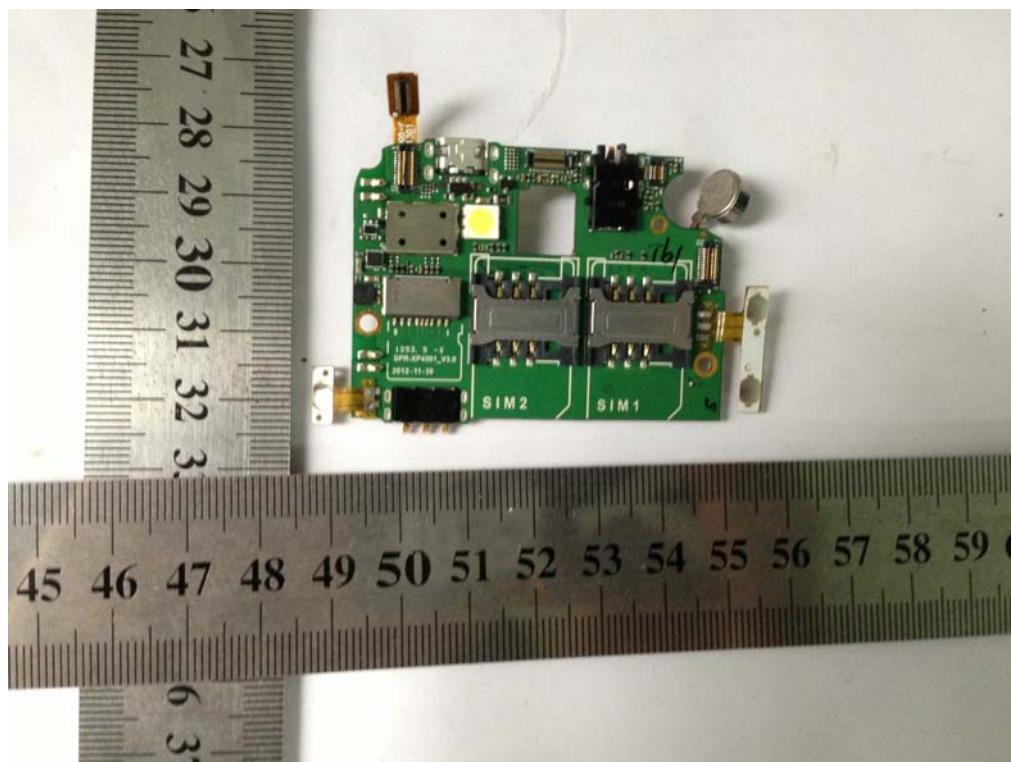
INTERNAL PHOTO OF SAMPLE - 6



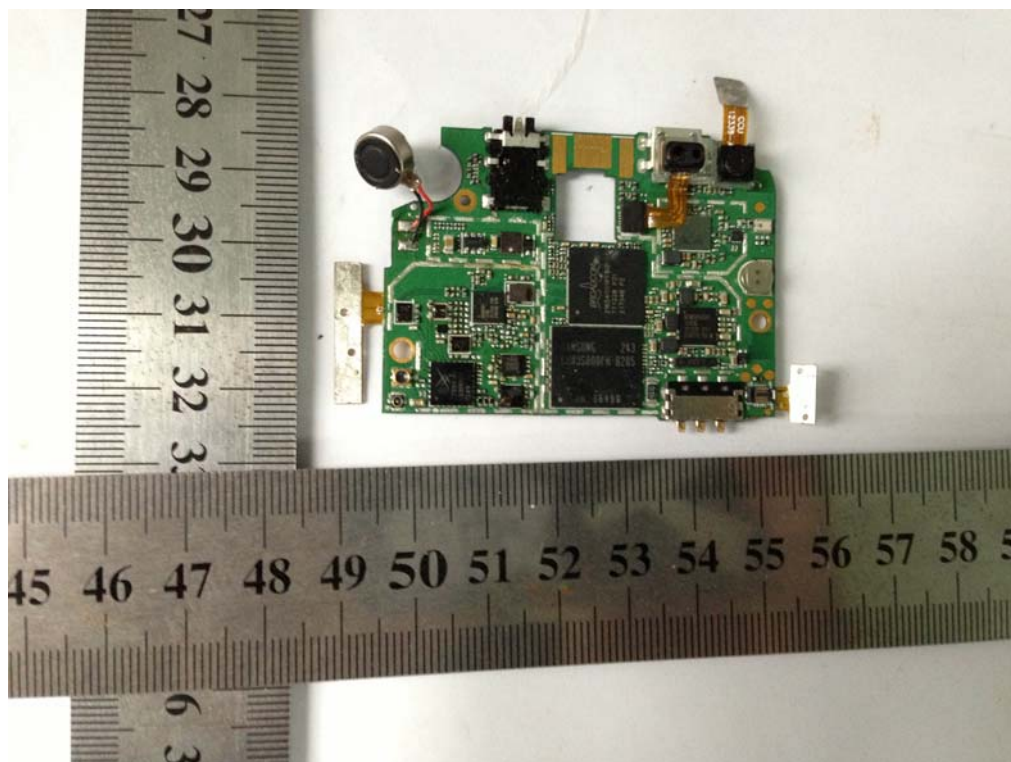
INTERNAL PHOTO OF SAMPLE - 7



INTERNAL PHOTO OF SAMPLE – 8



INTERNAL PHOTO OF SAMPLE – 9



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