



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

## **TEST REPORT**

*For*

**Product Name: MID**

**Model Number: GT-7120**

**Brand Name: N/A**

**FCC ID: ZSOGT7120**

**Report No.: MOST110810F1**

**Date of Issue: August. 26, 2011**

**Applicant: SK Mtek Microelectronics (Shenzhen) Limited**

**Address: 12/F, Microprofit B.D., South 6 Road, High-Tech Industrial Park,  
Nanshan District, Shenzhen, China**

**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**

*The report consists 35 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 MOST. 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 .....	4
2.3 TEST STANDARDS AND RESULTS.....	4
2.4 ENVIRONMENTAL CONDITIONS .....	5
2.5 MEASUREMENT UNCERTAINTY .....	5
<b>3. TEST METHODOLOGY.....</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 .....	9
<b>5. 47 CFR PART 15B REQUIREMENTS.....</b>	<b>10</b>
5.1 GENERAL INFORMATION.....	10
<b>6. LINE CONDUCTED EMISSION TEST .....</b>	<b>11</b>
6.1. LIMITS OF LINE CONDUCTED EMISSION TEST .....	11
6.2. BLOCK DIAGRAM OF TEST SETUP.....	11
6.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST .....	12
6.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST .....	12
6.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST .....	13
<b>7. RADIATED EMISSION TEST .....</b>	<b>15</b>
7.1. LIMITS OF RADIATED DISTURBANCES AT 3M DISTANCES FOR CLASS B .....	15
7.2 TEST DESCRIPTION.....	16
7.3 TEST RESULT .....	17
<b>APPENDIX 1 .....</b>	<b>22</b>
<b>PHOTOGRAPHS OF TEST SETUP .....</b>	<b>22</b>
<b>APPENDIX 2.....</b>	<b>25</b>
<b>PHOTOGRAPHS OF EUT .....</b>	<b>25</b>

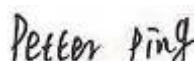
**1. VERIFICATION OF CONFORMITY**

**Equipment Under Test:** MID  
**Brand Name:** N/A  
**Model Number:** GT-7120  
**FCC ID:** ZSOGT7120  
**Applicant:** SK Mtek Microelectronics (Shenzhen) Limited  
12/F, Microprofit B.D., South 6 Road, High-Tech Industrial Park, Nanshan District, Shenzhen, China  
**Manufacturer:** SK Mtek Microelectronics (Shenzhen) Limited  
12/F, Microprofit B.D., South 6 Road, High-Tech Industrial Park, Nanshan District, Shenzhen, China  
**Technical Standards:** FCC Part 15 B  
**File Number:** MOST110810F1  
**Date of test:** August. 19 - August. 25, 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.

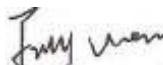
The test results of this report relate only to the tested sample identified in this report.

Tested by (+ signature):



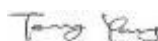
Petter Ping April. 26, 2011

Review by (+ signature):



July Wen April. 26, 2011

Approved by (+ signature):



Terry Yang April. 26, 2011

## 2. GENERAL INFORMATION

### 2.1 PRODUCT INFORMATION

<b>Housing Type:</b>	Plastic
<b>EUT Rating Voltage:</b>	DC: 7.4V by Li-ion Battery; DC: 9V by AC Adapter(100V-240V 50/60Hz);
<b>Voltage During Test:</b>	DC: 9V by AC Adapter(120V 60Hz)
<b>Model Number:</b>	GT-7120
<b>Series Number:</b>	N/A
<b>Description of Differences:</b>	N/A

#### 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
	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,  $U_c = \pm 1.8\text{dB}$
- Uncertainty of Radiated Emission,  $U_c = \pm 3.2\text{dB}$

### 3. TEST METHODOLOGY

#### 3.1 TEST FACILITY

Test Site:	Most Technology Service Co., Ltd.
Location:	No.5, Langshan 2nd Rd, North Hi-Tech Industrial park, Nanshan, Shenzhen, Guangdong, China
Description:	<p>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>.</p> <p>The <b>CNAS</b> Registration Number is <b>CNAS L3573</b>.</p>
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.

The field strength of radiation emission was measured in the following position: EUT stand-up position (Y axis), lie-down position (X, Z axis).

The following data show only with the worst case setup.

The worst case of Y axis was reported.

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	Manufacturer	Model Name	Serial No.	Data Cable	Power Cable
Nokebook	Samsung	NP-R428-DS0 YCN	ZVC093FZ800422X	N/A	1.8M Un-Shielded
Micro SD CARD	Kingston	1G	0907T139090	N/A	
Mouse	DELL	MS111-L	CN-09RRC7-48723-148- 08XR	1.5M Un-Shielded	

*Remark:*

*All the equipment/cables were placed in the worst-case [-configuration to maximize the emission during the test.*

#### 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 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 Impedence Network	Kikusui	LIN40MA-PCR-L	LM002352	2012/03/14
22	ESD Tester	Kikusui	KES4021	LM003537	2012/03/14
23	EMC PRO 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 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**

#### **EUT Test Procedure:**

1. Put EUT on the test table.
2. Power on the EUT.
3. Make sure the EUT operates normally during the test.

#### **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: USB Mode**

During the measurement, the lithium battery was installed and connected with the notebook. And EUT and computer kept for data transmission continuously.

#### **Mode 4: WiFi Mode**

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

#### **Mode 5: Bluetooth 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

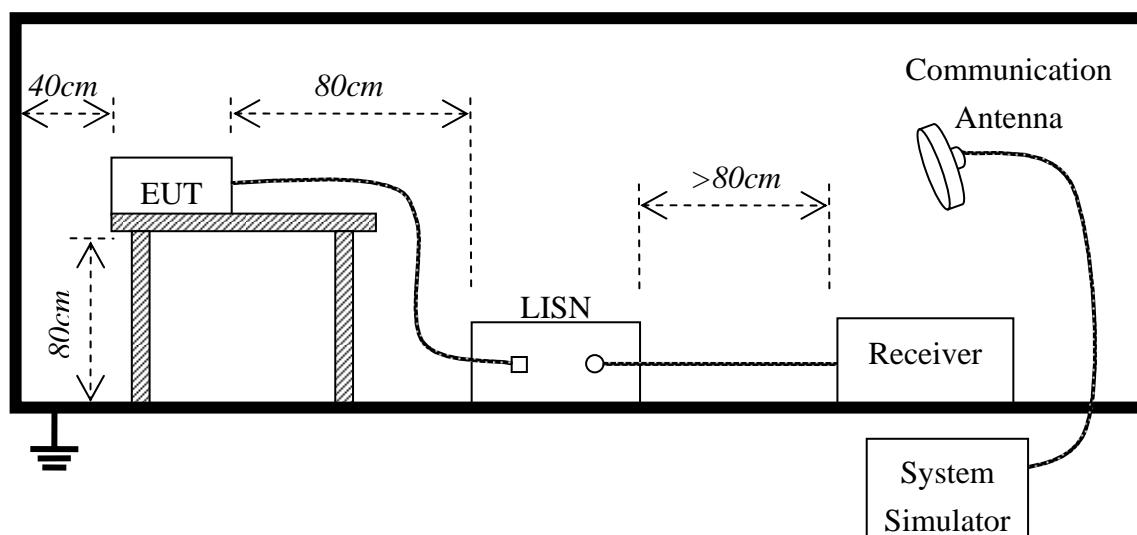
### 6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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 9V by AC/DC adapter or DC 5V by USB port of the notebook 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
Standby Mode	2011-8-20	MOST110810F1	GT-712_0_(L, N)	<input type="checkbox"/>
Full Load Mode	2011-8-20	MOST110810F1	GT-7120_1_(L, N)	<input checked="" type="checkbox"/>
USB Mode	2011-8-20	MOST110810F1	GT-7120_2_(L, N)	<input type="checkbox"/>
WIFI Mode	2011-8-20	MOST110810F1	GT-7120_3_(L, N)	<input type="checkbox"/>
Bluetooth Mode	2011-8-20	MOST110810F1	GT-7120_4_(L, N)	<input 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 -20dB 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

### Conducted Emission Measurement

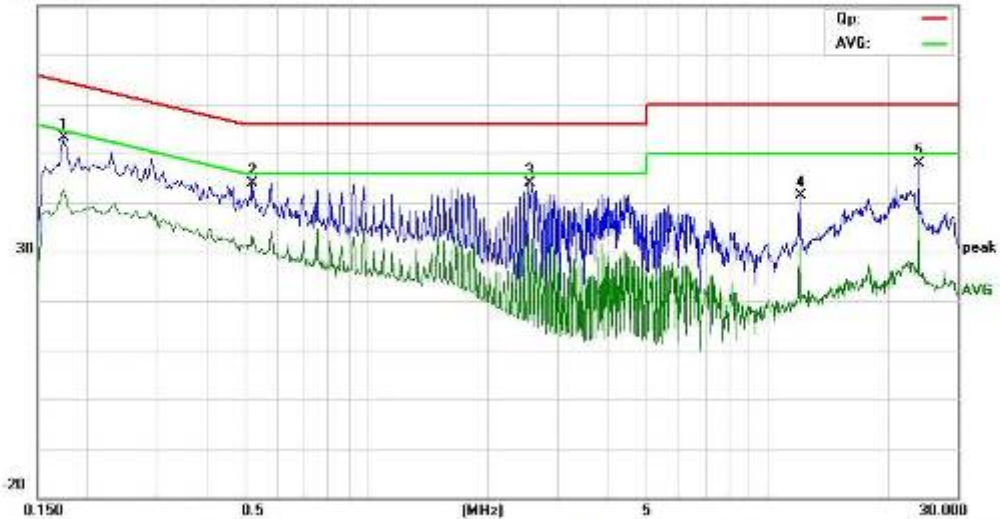
File: GT-7120

Data: #5

Date: 2011/08/20

Time: 15:26:51

80.0 dBuV



Site: site #1

Phase: L1

Temperature: 26

Limit: FCC Part 15 B Class B GP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: MID

M/N: GT-7120

Mode: FULL LOAD

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1740	42.70	10.44	53.14	64.77	-11.63	peak	
2		0.5180	33.89	10.00	43.89	58.00	-12.01	peak	
3		2.5420	34.45	9.54	43.99	58.00	-12.01	peak	
4		11.9960	32.27	9.00	41.27	60.00	-18.73	peak	
5		24.0020	38.95	9.00	47.95	60.00	-12.05	peak	

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



Address No.5,Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong,China  
Tel: 0755-86170300 Fax: 0755-86170310

### Conducted Emission Measurement

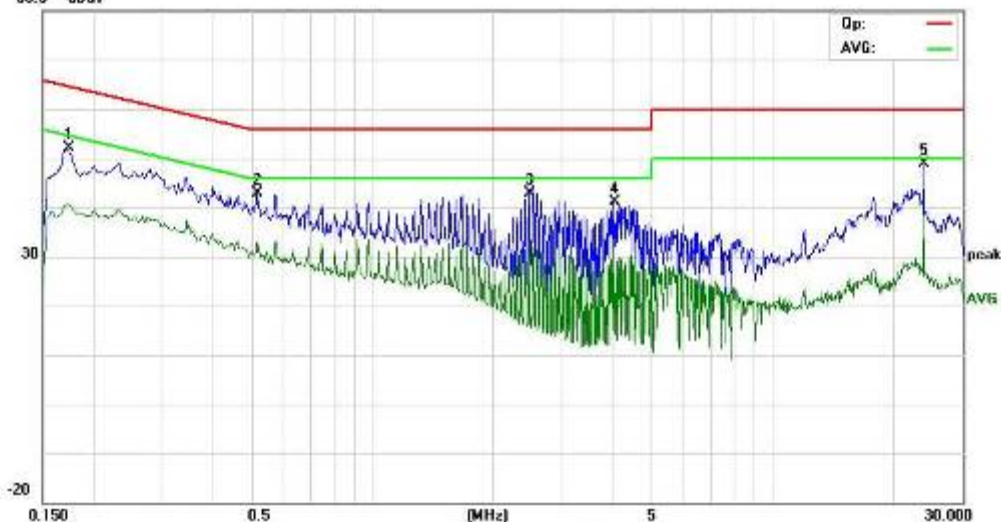
File: GT-7120

Data: #5

Date: 2011/08/20

Time: 15:28:44

00.0 dBuV



Site: site #1

Phase: N

Temperature: 26

Limit: FCC Part15 B Class B GP

Power: AC 120V/60Hz

Humidity: 60 %

EUT: MID

MN: GT-7120

Mode: FULL LOAD

Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1740	41.58	10.44	52.02	64.77	-12.75	peak	
2		0.5180	33.00	10.00	43.00	56.00	-13.00	peak	
3		2.4780	33.45	9.48	42.93	56.00	-13.07	peak	
4		4.0380	30.21	11.04	41.25	56.00	-14.75	peak	
5	*	24.0020	39.85	9.00	48.85	60.00	-11.15	peak	

\* Maximum data    x Over limit    ! Over margin

## 7. RADIATED EMISSION TEST

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

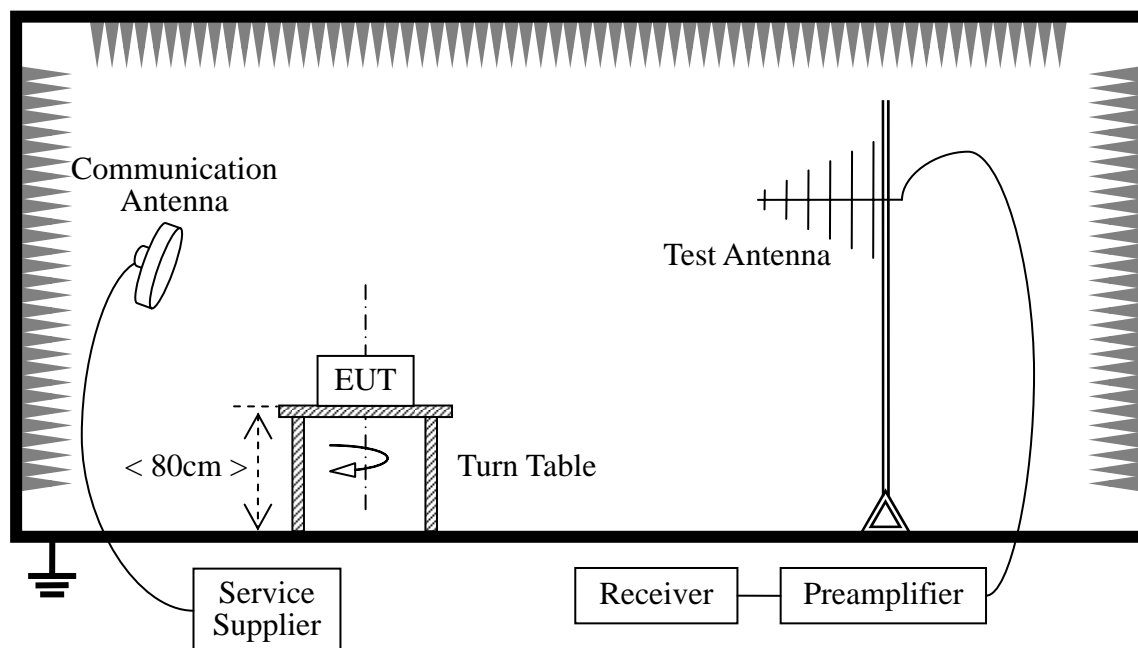
According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ( $\mu\text{V/m}$ )	Measurement Distance (m)
0.009 - 0.490	$2400/F(\text{kHz})$	300
0.490 - 1.705	$24000/F(\text{kHz})$	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 received AC 120V/60Hz. 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:

- 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.
- 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
Standby Mode	2011-8-19	MOST110810F1	GT-712_0_(H, V)	<input type="checkbox"/>
Full Load Mode	2011-8-19	MOST110810F1	GT-7120_1_(H, V)	<input type="checkbox"/>
USB Mode	2011-8-19	MOST110810F1	GT-7120_2_(H, V)	<input checked="" type="checkbox"/>
WIFI Mode	2011-8-19	MOST110810F1	GT-7120_3_(H, V)	<input type="checkbox"/>
Bluetooth Mode	2011-8-19	MOST110810F1	GT-7120_4_(H, V)	<input type="checkbox"/>

## 7.3 TEST RESULT



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

## Radiated Emission Measurement

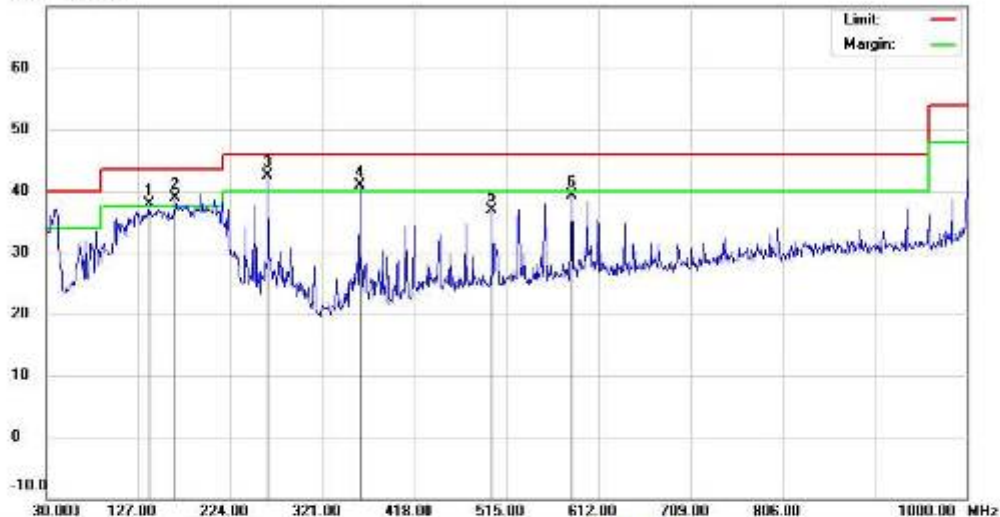
File: GT-7120

Data: #10

Date: 2011-8-19

Time: 20:30:34

70.0 dBuV/m



Site: site #1

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part 15 B 3M Radiation

Power: AC 120V/60Hz

Humidity: 51 %

EUT: MID

Distance:

M/N: GT-7120

Mode: FULL LOAD

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	Comment
1	I	138.6399	20.70	17.27	37.97	43.50	-5.53	QP		
2	I	188.7700	21.80	17.20	39.00	43.50	-4.50	QP		
3	F	283.7698	24.49	18.09	42.58	46.00	-3.42	QP		
4	I	359.8000	22.53	18.30	40.83	46.00	-5.17	QP		
5		500.4499	15.51	21.40	36.91	46.00	-9.09	QP		
6		583.8700	16.33	22.94	39.27	46.00	-6.73	QP		

\*:Maximum data x:Over limit l:lower margin



Address No.5,Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

### Radiated Emission Measurement

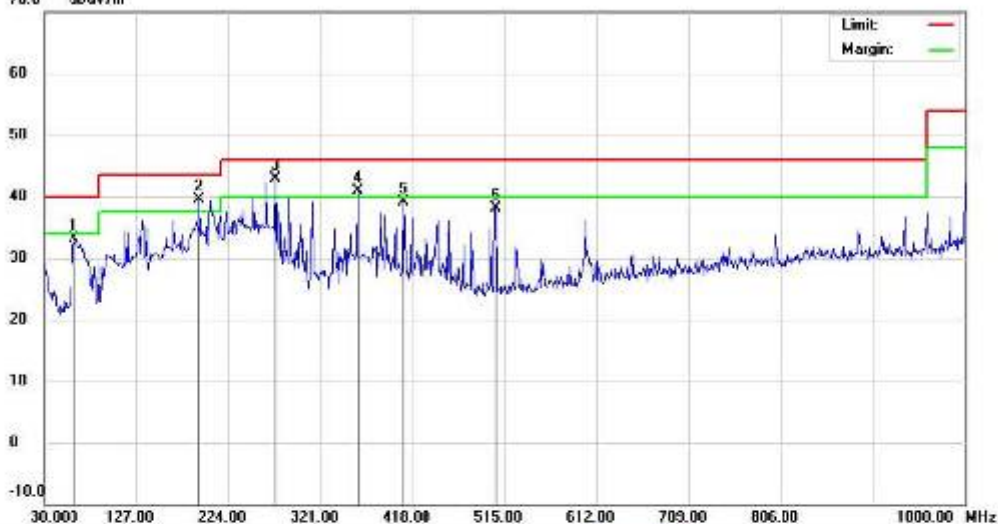
File: GT-7120

Data: #11

Date: 2011-8-19

Time: 20:31:50

70.0 dBuV/m



Site: site #1

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part15 B 3M Radiation

Power: AC 120V/60Hz

Humidity: 81 %

EUT: MID

Distance:

MN: GT-7120

Mode: FULL LOAD

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		62.0099	22.02	11.00	33.02	40.00	-6.98	QP			
2	!	193.9300	22.80	16.80	39.60	43.50	-3.90	QP			
3	*	273.4700	23.78	19.11	42.89	46.00	-3.11	QP			
4	!	359.8000	22.67	18.30	40.97	46.00	-5.03	QP			
5		408.3000	20.13	19.00	39.13	46.00	-6.87	QP			
6		506.2699	18.75	21.43	38.18	46.00	-7.82	QP			

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



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

### Radiated Emission Measurement

File: GT-7120

Data: #12

Date: 2011-8-19

Time: 20:38:32

70.0 dBuV/m



Site: site #1

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part 15 B 3M Radiation

Power: DC 5V

Humidity: 51 %

EUT: MID

Distance:

M/N: GT-7120

Mode: USB

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	*	138.6399	23.57	17.27	40.84	43.50	-2.66	QP		
2	I	250.1899	24.95	17.40	42.35	46.00	-3.65	QP		
3	I	319.0600	24.12	18.96	41.08	46.00	-4.92	QP		
4	I	400.5400	22.71	18.71	41.42	46.00	-4.58	QP		
5		500.4499	17.39	21.40	38.79	46.00	-7.21	QP		
6		980.2300	12.67	28.00	40.67	54.00	-13.33	peak		

\*:Maximum data    x:Over limit    I:lower margin



Address: No.5, Langshan 2nd Rd., North Hi-Tech Industrial park  
Guangdong, China  
Tel: 0755-86170306 Fax: 0755-86170310

### Radiated Emission Measurement

File: GT-7120

Data: #13

Date: 2011-8-19

Time: 20:39:53

70.0 dBuV/m



Site: site #1

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part 15 B 3M Radiation

Power: DC 5V

Humidity: 51 %

EUT: MID

Distance:

M/N: GT-7120

Mode: USB

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	*	55.2200	28.60	10.70	37.30	40.00	-2.70	QP		
2	1	138.6400	23.46	17.27	40.73	43.50	-2.77	QP		
3		248.2500	19.86	17.40	37.26	46.00	-8.64	QP		
4	1	719.6700	16.81	24.70	41.51	46.00	-4.49	QP		
5		960.2300	12.07	28.00	40.07	54.00	-13.93	peak		

\*:Maximum data    x:Over limit    1:over margin

**Above 1 GHz****Operation Mode:** Full Load Mode**Test Date:** August. 19, 2011**Temperature:** 24°C**Tested by:** Petter Ping**Humidity:** 70 % RH**Polarity:** Ver. / Hor.

Freq. (MHz)	Ant. Pol H/V	Peak Reading (dBuV)	AV Reading (dBuV)	Ant./CL CF (dB)	Actual Fs		Peak Limit (dBuV/m)	AV Limit (dBuV/m)	Peak Margin (dB)	AV Margin (dB)
					Peak (dBuV/m)	AV (dBuV/m)				
1135.50	H	60.57	40.38	4.87	65.44	45.25	74.00	54.00	-8.56	-8.75
1700.50	H	55.46	36.71	9.45	64.91	46.16	74.00	54.00	-9.09	-7.84
N/A										>10
1135.50	V	58.78	39.06	4.87	63.65	43.93	74.00	54.00	-10.35	-10.07
1700.50	V	52.83	33.91	9.45	62.28	43.36	74.00	54.00	-11.72	-10.64
N/A										>10

**Notes:**

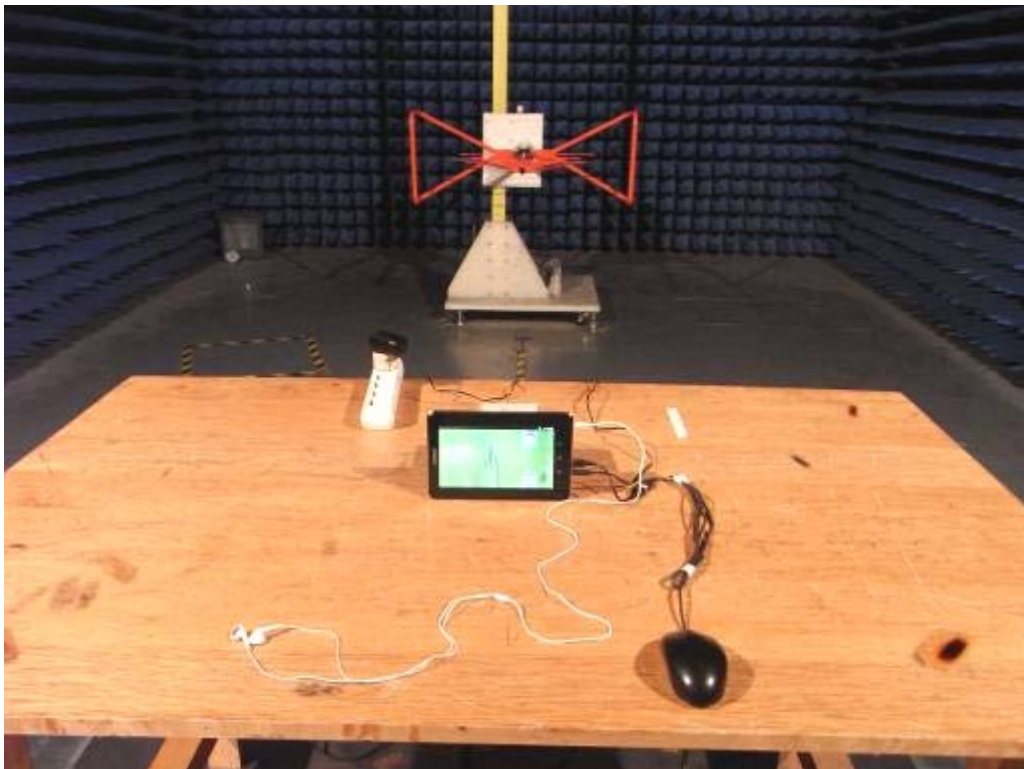
1. Measuring frequencies from 1 GHz to 6GHz.
2. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
3. The frequency that above 3GHz is mainly from the environment noise.

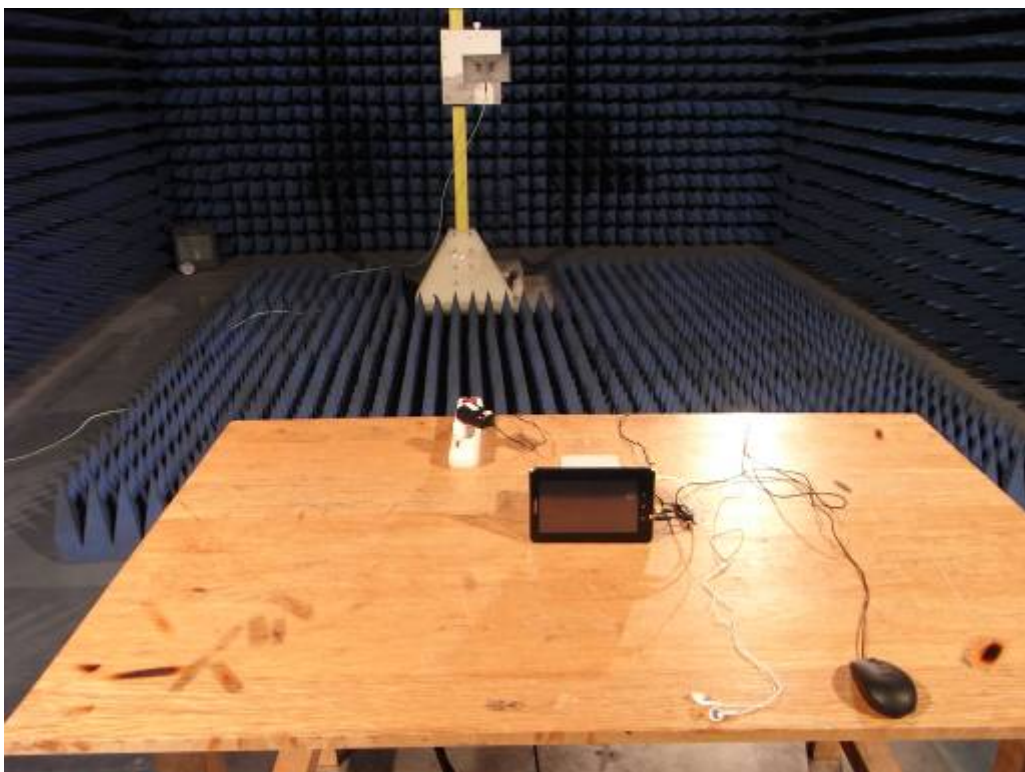
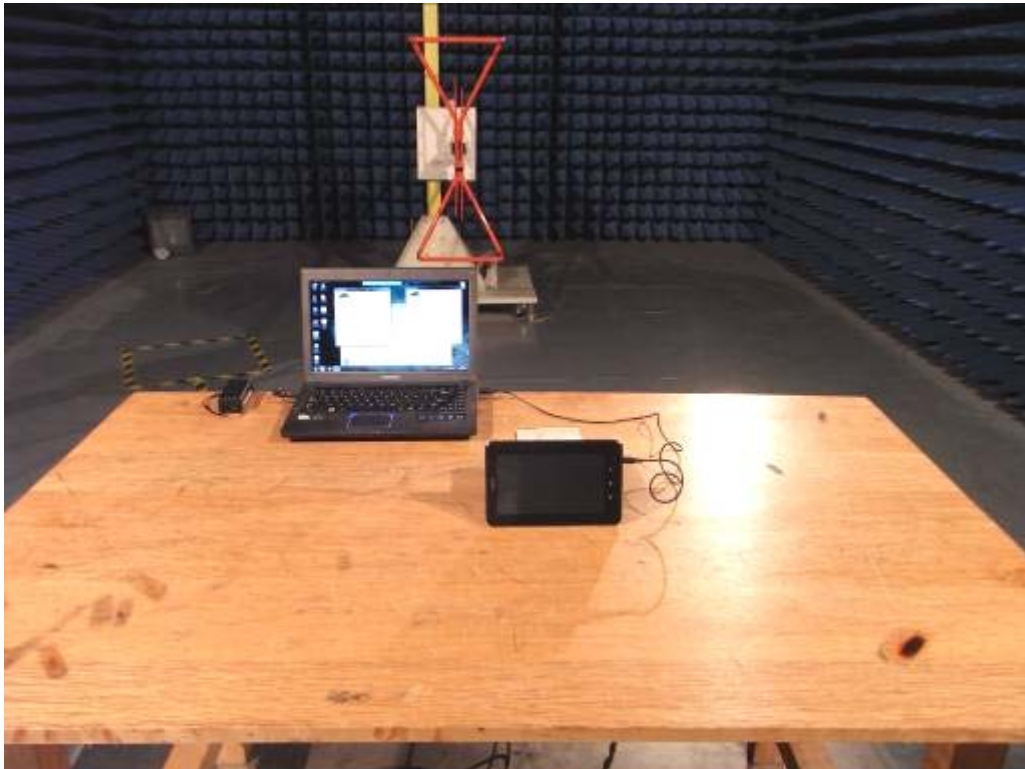
**APPENDIX 1**  
**PHOTOGRAPHS OF TEST SETUP**

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



VIEW OF AC/DC ADAPTER



VIEW OF EARPHONE



VIEW OF USB CABLE



VIEW OF USB TRANSFER LINE



VIEW OF ENTIRE SAMPLE



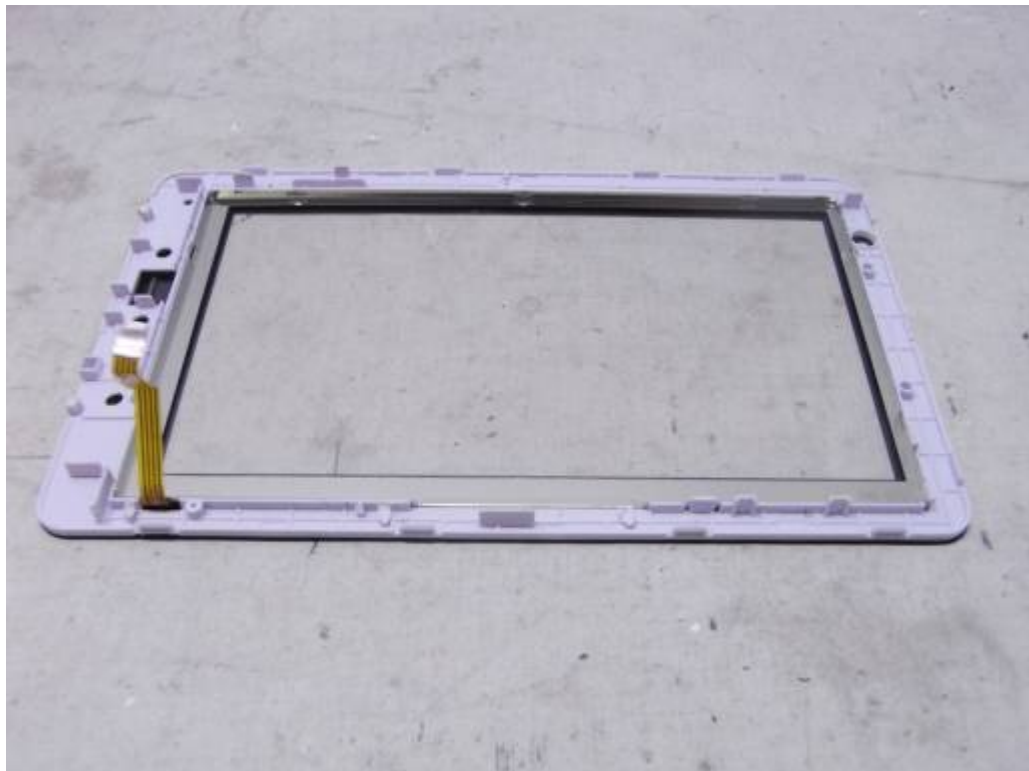
VIEW OF BATTERY



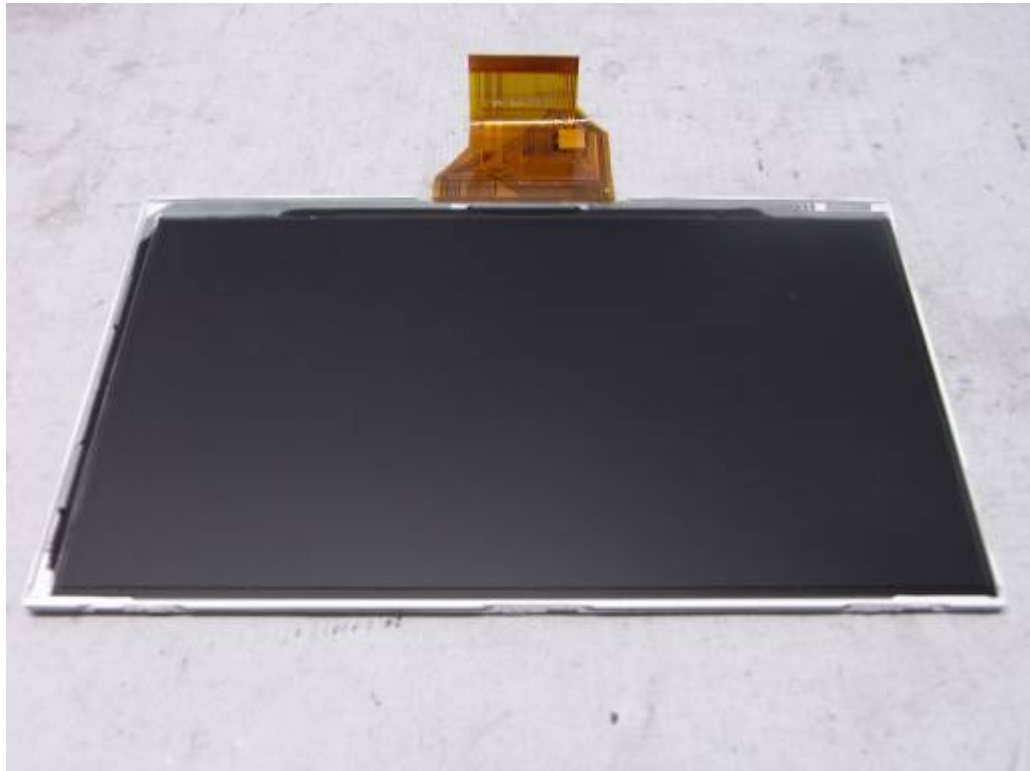
INTERNAL PHOTO OF SAMPLE - 1



INTERNAL PHOTO OF SAMPLE - 2



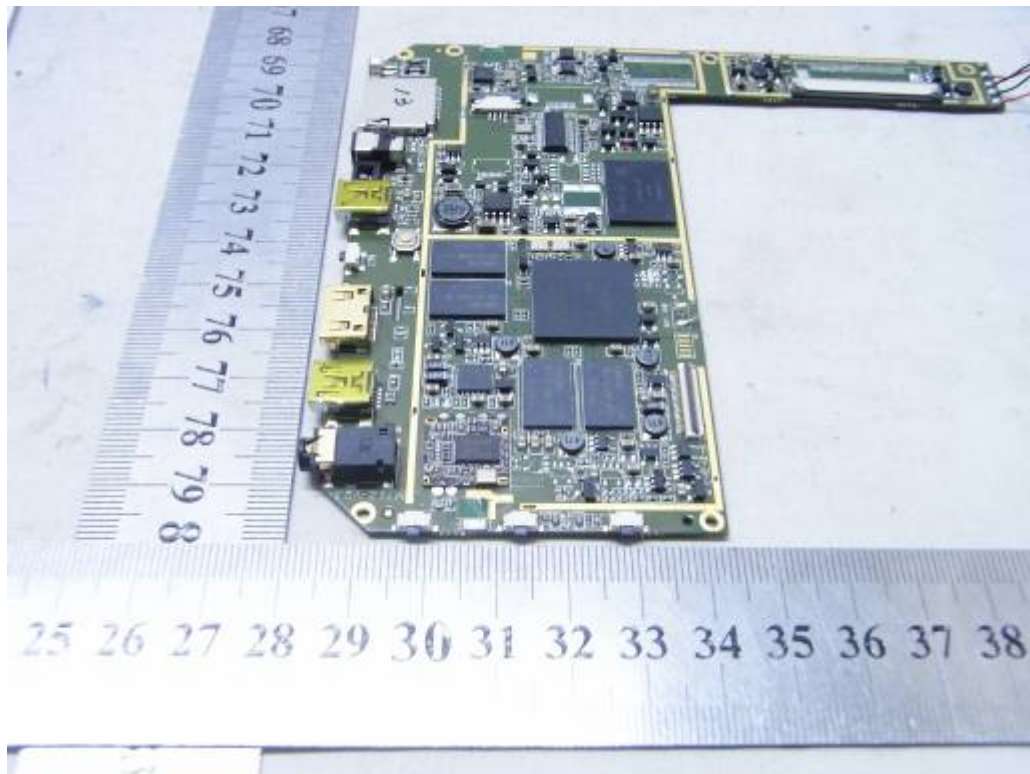
INTERNAL PHOTO OF SAMPLE - 3



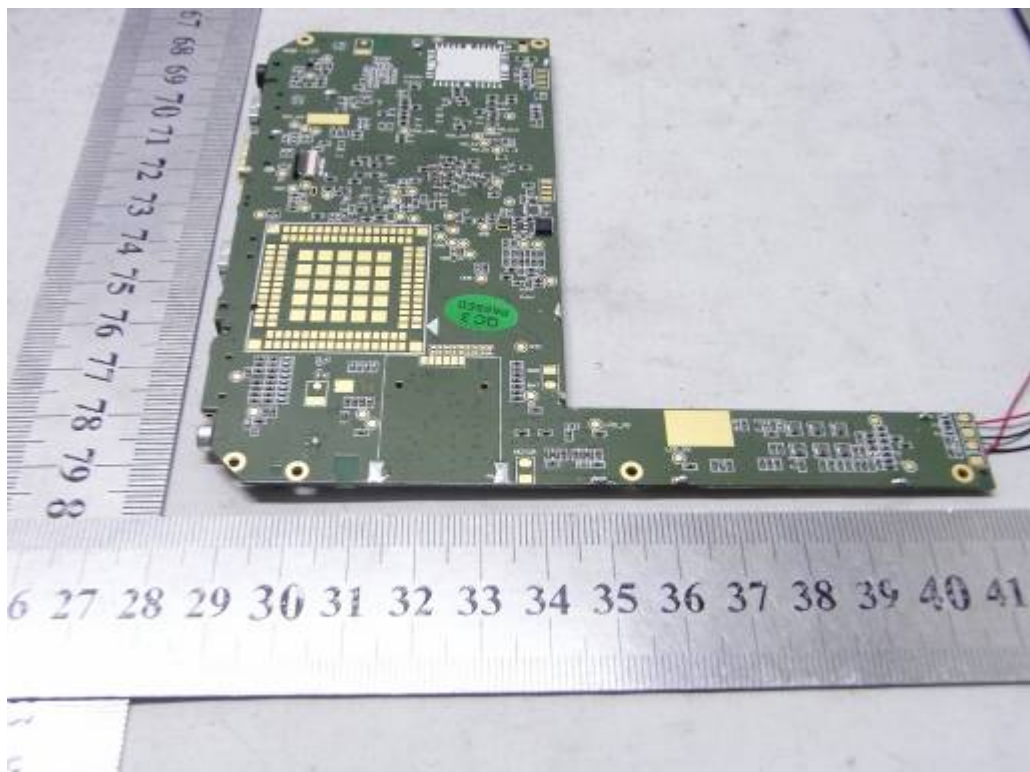
INTERNAL PHOTO OF SAMPLE - 4



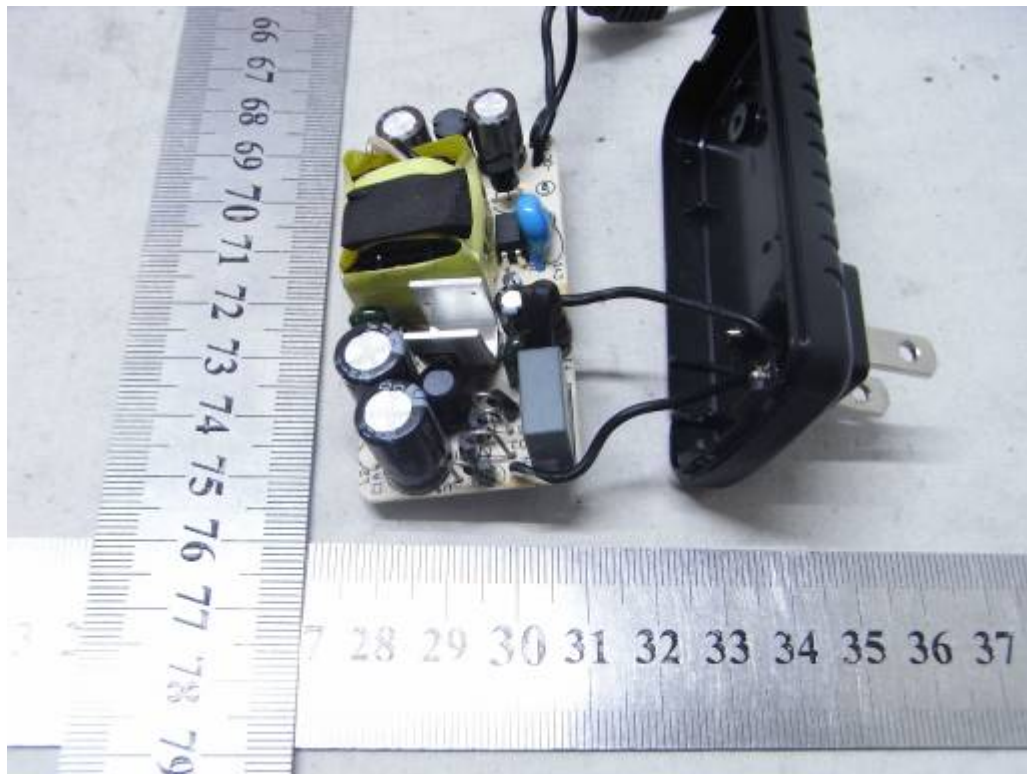
INTERNAL PHOTO OF SAMPLE - 5



INTERNAL PHOTO OF SAMPLE - 6



INTERNAL PHOTO OF AC/DC ADAPTER - 1



INTERNAL PHOTO OF AC/DC ADAPTER - 2



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