



# FCC 47 CFR PART 15 SUBPART B

## TEST REPORT

*For*

**Applicant:** Outform Ltd.

**Address:** Room.103 105, Block A, #1019-17, Nanhai Road, Nanshan District, Shenzhen

**Product Name:** Retail Tablet

**Model Number:** UID0350: RETAIL TABLET S, UID0354: RETAIL TABLET M, UID0350-XXX, UID0354-XXX (The first "X" is A-Z which stand for the color, The second "X" is A-Z which stand for the country, the third "X" is 0 or 1(0 is light color, 1 is dark color))

**Brand Name:** I-DISPLAY

**FCC ID:** Y34-UID0350

**Report No.:** MTE/EAH/E11121710

**Date of Issue:** Jan. 12, 2012

**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

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**1. VERIFICATION OF CONFORMITY**

**Equipment Under Test:** Retail Tablet

**Brand Name:** I-DISPLAY

**Model Number:** UID0350: RETAIL TABLET S, UID0354: RETAIL TABLET M

**Series Number:** UID0350-XXX, UID0354-XXX (The first "X" is A-Z which stand for the color, The second "X" is A-Z which stand for the country, the third "X" is 0 or 1(0 is light color, 1 is dark color))

**FCC ID:** Y34-UID0350

**Applicant:** Outform Ltd.  
Room.103 105, Block A, #1019-17, Nanhai Road, Nanshan District, Shenzhen

**Manufacturer:** Outform Ltd.  
Room.103 105, Block A, #1019-17, Nanhai Road, Nanshan District, Shenzhen

**Technical Standards:** FCC Part 15 B

**File Number:** MTE/EAH/E11121710

**Date of test:** Jan. 05, 2012

**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.

Prepare by (+ signature):



Dona Liu

Jan. 05, 2012

Review by (+ signature):



Elva Wong

Jan. 09, 2012



Approved by (+ signature):



Yvett Zhou(Manager)

Jan. 12, 2012

## 2. GENERAL INFORMATION

### 2.1 PRODUCT INFORMATION

Description:	Retail Tablet
Model Name:	UID0350: RETAIL TABLET S, UID0354: RETAIL TABLET M
Series Number:	UID0350-XXX, UID0354-XXX (The first "X" is A-Z which stand for the color, The second "X" is A-Z which stand for the country, the third "X" is 0 or 1(0 is light color, 1 is dark color))
Model Difference description:	The series models are different in model name and size with the same functions.
Frequency Range:	WIFI Mode: 2412MHz – 2462MHz BT Mode: 2402MHz -2480MHz
Number of Channels:	WIFI Mode: IEEE 802.11b/g/n mode: 11 Channels BT Mode: 79
Modulation Technique:	WIFI Mode: IEEE 802.11b mode: DSSS (1, 2, 5.5 and 11 Mbps) IEEE 802.11g mode: OFDM (6, 9, 12, 18, 24, 36, 48 and 54 Mbps) 802.11n Standard-20 MHz Channel mode: OFDM (6.5, 13, 19.5, 26, 39, 52, 58.5, 65.0Mbps) BT Mode: FHSS(GFSK, Pi/4-DOPS, 8-DPSK)
I/O Ports:	Output Port: Headphone Port, HDMI Port Input Port: SD Port, USB1 Port, USB2 Port, SIM Card, DC Power Port
Antenna Type:	Internal Fixed
Antenna Gain:	2.0dBi
Power Supply:	DC 9V by AC adapter 100-240V, 50/60Hz
Temperature Range:	-20°C ~ +50°C

**NOTE:**

1. For a more detailed features description about the EUT, please refer to User's Manual.
2. The USB1 Port was Playing function with USB Stick, the USB2 Port was connected with the Mouse, Two USB Ports are without data exchange function, The HDMI Port was connected with LCD Monitor through Link Line.

## 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 below:

EMISSION			
Standard	Item	Result	Remarks
FCC 47 CFR Part 15 Subpart B (10-1-05 Edition)	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: There is one 3m semi-anechoic an area test sites and two line conducted labs for final test. The Open Area Test Sites and the Line Conducted labs are constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009 and CISPR 16 requirements. The FCC Registration Number is **490827**.  
The **CNAS** Registration Number is **CNAS L3573**.

Site Filing: The site description is on file with the Federal Communications Commission, 7435 Oakland Mills Road, Columbia, MD 21046.

Instrument Tolerance: All measuring equipment is in accord with ANSI C63.4:2009 and CISPR 16 requirements that meet industry regulatory agency and accreditation agency requirement.

Ground Plane: Two conductive reference ground planes were used during the Line Conducted Emission, one in vertical and the other in horizontal. The dimensions of these ground planes are as below. The vertical ground plane was placed distancing 40 cm to the rear of the wooden test table on where the EUT and the support equipment were placed during test. The horizontal ground plane projected 50 cm beyond the footprint of the EUT system and distanced 80 cm to the wooden test table. For Radiated Emission Test, one horizontal conductive ground plane extended at least 1m beyond the periphery of the EUT and the largest measuring antenna, and covered the entire area between the EUT and the antenna. It has no holes or gaps having longitudinal dimensions larger than one-tenth of a wavelength at the highest frequency of measurement up to 1GHz.

#### 3.2 GENERAL TEST PROCEDURES

##### Conducted Emissions

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

##### Radiated Emissions

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

### 3.3 FCC PART 15.205 RESTRICTED BANDS OF OPERATIONS

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

MHz	MHz	MHz	GHz
0.090 - 0.110	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
MONITOR	Philips	220EW8FB/93	CJ2A0727038455	1.6M Un-Shielded	1.8M Un-Shielded
Headphone	AKG	K450	N/A	1.1M Un-Shielded	
Mouse	Lenovo	M-UAE96	E-C011-05-3735(B)	1.6M Un-Shielded	
Micro SD CARD	Kingston	1G	0907T139090	N/A	
USB Stock	Kingston	DTG2	N/A	N/A	

*Remark:*

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

*Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.*

#### 4. 3 TEST EQUIPMENT LIST

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

No.	Equipment	Manufacturer	Model No.	S/N	Calibration due date
1	Test Receiver	Rohde & Schwarz	ESCI	100492	2012/03/14
2	L.I.S.N.	Rohde & Schwarz	ENV216	100093	2012/03/14
3	Coaxial Switch	Anritsu Corp	MP59B	6200283933	2012/03/14
4	Terminator	Hubersuhner	50Ω	No.1	2012/03/14
5	RF Cable	SchwarzBeck	N/A	No.1	2012/03/14
6	Test Receiver	Rohde & Schwarz	ESPI	101202	2012/03/14
7	Bilog Antenna	Sunol	JB3	A121206	2012/03/14
8	Test Antenna - Horn	Schwarzbeck	BBHA 9120C	--	2012/03/14
9	Test Antenna - Bi-Log	Schwarzbeck	VULB 9163	--	2012/03/14
10	Cable	Resenberger	N/A	NO.1	2012/03/14
11	Cable	SchwarzBeck	N/A	NO.2	2012/03/14
12	Cable	SchwarzBeck	N/A	NO.3	2012/03/14
13	DC Power Filter	DuoJi	DL2×30B	N/A	2012/03/14
14	Single Phase Power Line 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 Impedance Network	Kikusui	LIN40MA-PCR-L	LM002352	2012/03/14
22	ESD Tester	Kikusui	KES4021	LM003537	2012/03/14
23	EMCPRO System	EM Test	UCS-500-M4	V0648102026	2012/03/14
24	Signal Generator	IFR	2032	203002/100	2012/03/14
25	Amplifier	A&R	150W1000	301584	2012/03/14
26	CDN	FCC	FCC-801-M2-25	47	2012/03/14
27	CDN	FCC	FCC-801-M3-25	107	2012/03/14
28	EM Injection Clamp	FCC	F-203I-23mm	403	2012/03/14
29	RF Cable	MIYAZAKI	N/A	No.1/No.2	2012/03/14
30	Universal Radio 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: Idle Mode**

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

#### **Mode 2: SD Playing Mode**

During the test, the EUT was playing the SD function continuously.

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

#### **Mode 3: USB Playing Mode**

During the test, the EUT was playing the USB function continuously.

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

#### **Mode 4: Running Mode**

During the test, the EUT was connected with Load and made the work continuously.

The EUT configuration of the emission test was **EUT+ Charger+Battery+Load(Headphone)**.

#### **Mode 5: HDMI Mode**

During the test, the EUT was connected with the LCD via HDMI cable and made the HDMI function continuously.

The EUT configuration of the emission test was **EUT+ Charger+Battery+ HDMI Cable+ LCD (M/N: HEW8220Q, Manufacturer: PHILIPS)**.

## 6. LINE CONDUCTED EMISSION TEST

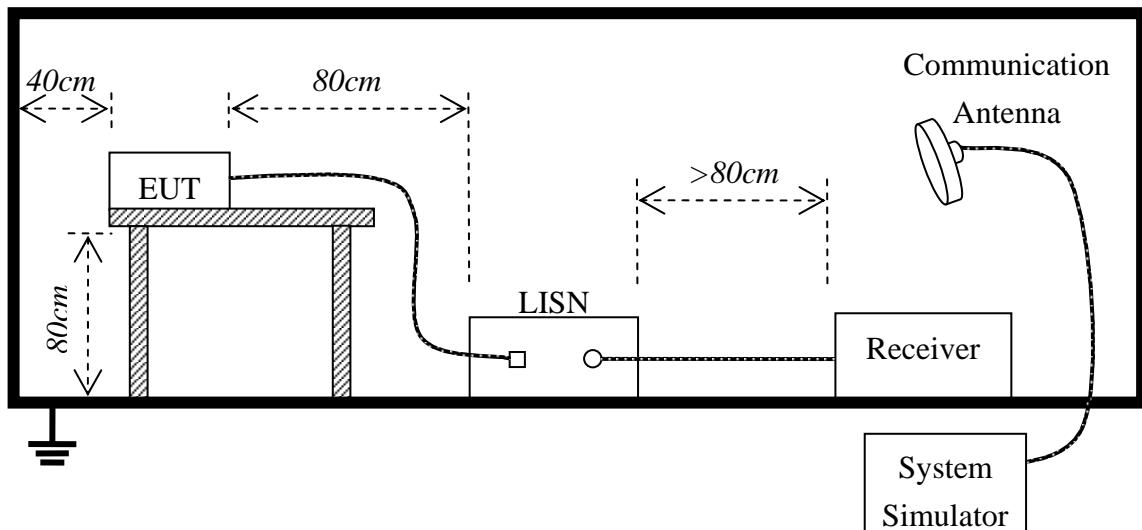
### 6.1. LIMITS OF LINE CONDUCTED EMISSION TEST

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 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
HDMI Mode	2012-01-05	MTE/EAH/E11121710	UID0350_0_(L, N) UID0354_0_(L, N)	<input checked="" type="checkbox"/>
Idle Mode	2012-01-05	MTE/EAH/E11121710	UID0350_1_(L, N) UID0354_1_(L, N)	<input type="checkbox"/>
USB Playing Mode	2012-01-05	MTE/EAH/E11121710	UID0350_2_(L, N) UID0354_2_(L, N)	<input type="checkbox"/>
SD Playing Mode	2012-01-05	MTE/EAH/E11121710	UID0350_3_(L, N) UID0354_3_(L, N)	<input type="checkbox"/>
Running Mode	2012-01-05	MTE/EAH/E11121710	UID0350_4_(L, N) UID0354_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.

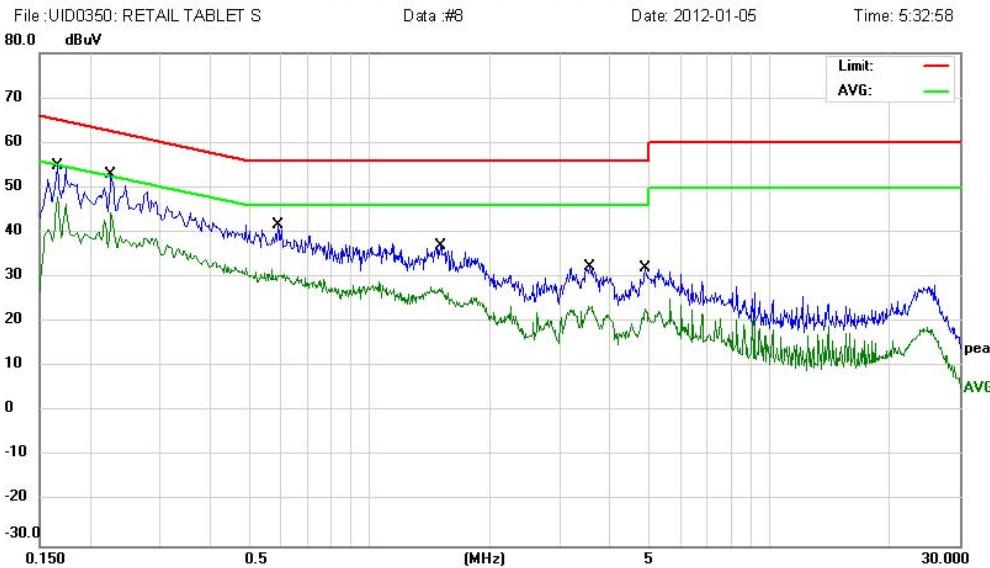
The test modes were carried out for all operation modes, The worst data was shown as the follow.

## 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



Site: site MOST 3M Phase: **L1** Temperature: 26  
Limit: FCC Part15 B Class B QP Power: DC 9V Adapter AC 120V/60Hz Humidity: 60 %  
EUT: Retail Tablet  
M/N: UID0350: RETAIL TABLET S  
Mode: HDMI Mode  
Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dB			
1		0.1660	44.89	9.96	54.85	65.15	-10.30	QP	
2	*	0.2260	41.01	11.83	52.84	62.59	-9.75	QP	
3		0.5940	31.59	10.00	41.59	56.00	-14.41	QP	
4		1.5100	27.55	9.49	37.04	56.00	-18.96	QP	
5		3.5780	21.71	10.58	32.29	56.00	-23.71	QP	
6		4.9138	20.17	11.91	32.08	56.00	-23.92	QP	

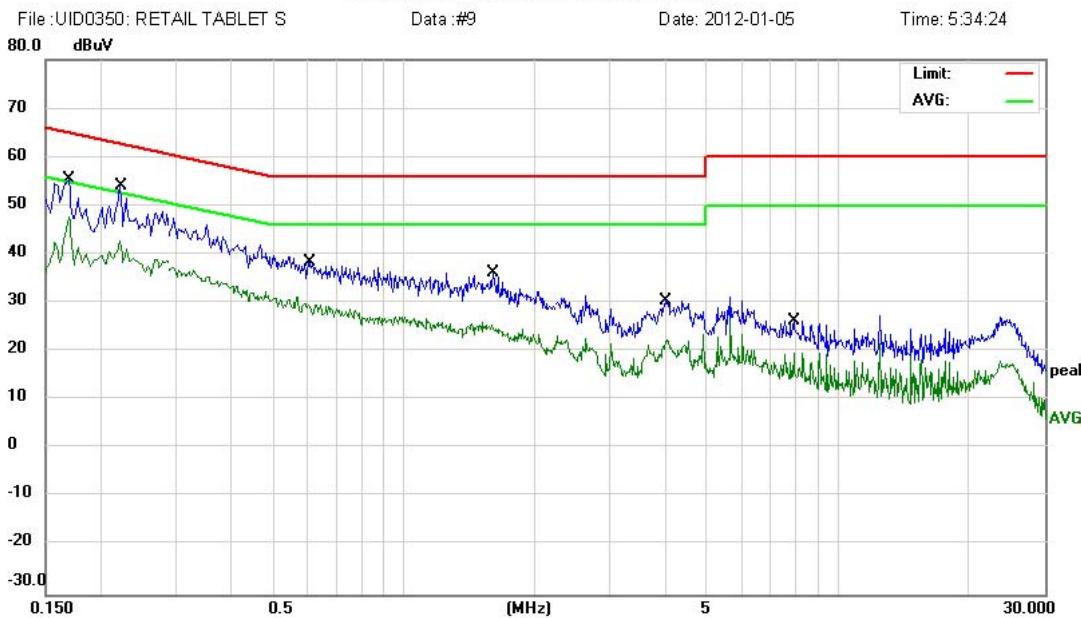
\*:Maximum data x:Over limit !:over margin

Engineer Signature: Rex



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

### Conducted Emission Measurement



Site: site MOST 3M

Phase: **N**

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: DC 9V Adapter AC 120V/60Hz

Humidity: 60 %

EUT: Retail Tablet

M/N: UID0350: RETAIL TABLET S

Mode: HDMI Mode

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dB	Detector	Comment
1		0.1700	45.10	10.20	55.30	64.96	-9.66	QP
2	*	0.2220	42.03	11.85	53.88	62.74	-8.86	QP
3		0.6099	28.27	10.00	38.27	56.00	-17.73	QP
4		1.6060	26.84	9.39	36.23	56.00	-19.77	QP
5		4.0179	19.46	11.02	30.48	56.00	-25.52	QP
6		7.9339	16.14	10.24	26.38	60.00	-33.62	QP

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

Engineer Signature: Rex



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

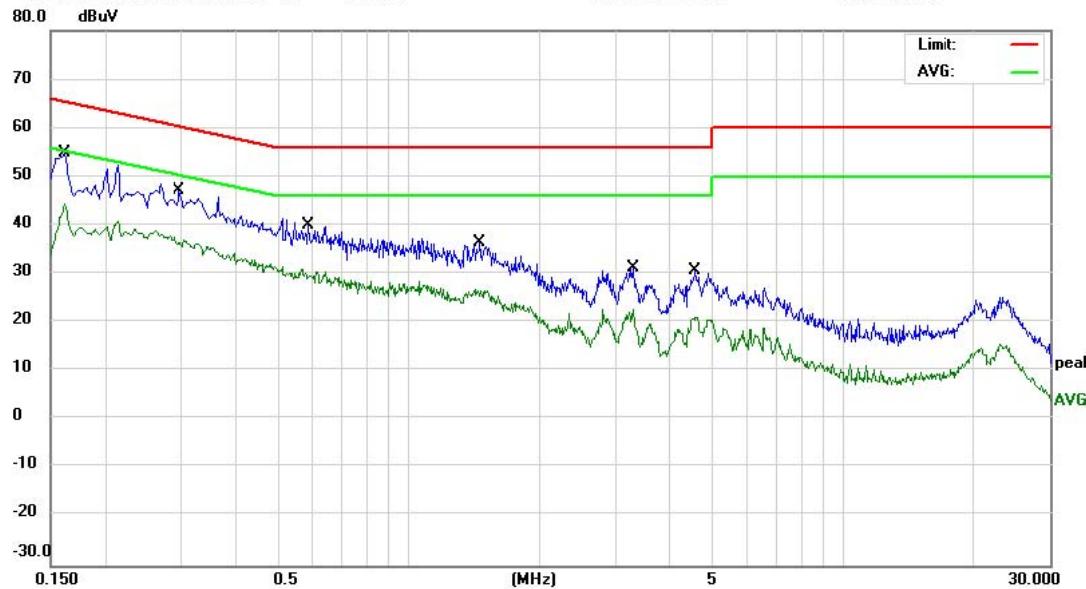
### Conducted Emission Measurement

File: UID0354: RETAIL TABLET M

Data #1

Date: 2012-01-05

Time: 5:59:26



Site: site MOST 3M

Phase: **N**

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: DC 9V Adapter AC 120V/60Hz

Humidity: 60 %

EUT: Retail Tablet

M/N: UID0354: RETAIL TABLET M

Mode: HDMI Mode

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dB	Detector	Comment
1	*	0.1620	44.99	9.72	54.71	65.36	-10.65	QP
2		0.2980	35.78	11.35	47.13	60.30	-13.17	QP
3		0.5899	30.03	10.00	40.03	56.00	-15.97	QP
4		1.4580	26.82	9.54	36.36	56.00	-19.64	QP
5		3.2980	20.83	10.30	31.13	56.00	-24.87	QP
6		4.5739	19.11	11.57	30.68	56.00	-25.32	QP

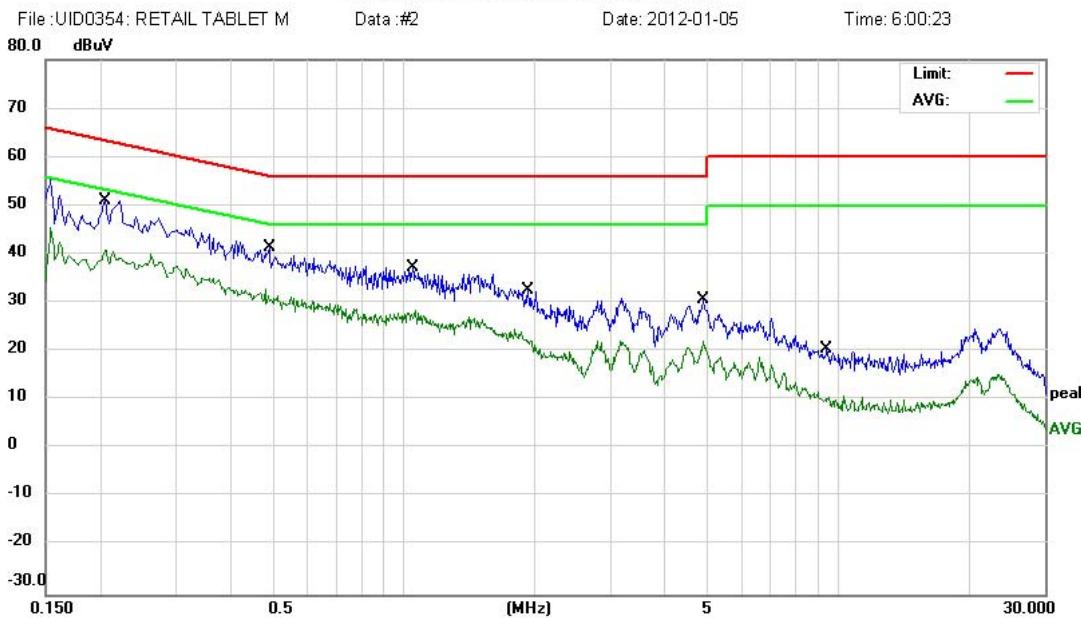
\*:Maximum data    x:Over limit    l:over margin

Engineer Signature: Allen



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

### Conducted Emission Measurement



Site: site MOST 3M

Phase: *L1*

Temperature: 26

Limit: FCC Part15 B Class B QP

Power: DC 9V Adapter AC 120V/60Hz

Humidity: 60 %

EUT: Retail Tablet

M/N: UID0354: RETAIL TABLET M

Mode: HDMI Mode

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dB	Detector	Comment
1	*	0.2060	39.14	11.96	51.10	63.36	-12.26	QP
2		0.4940	31.34	10.04	41.38	56.10	-14.72	QP
3		1.0500	27.15	9.95	37.10	56.00	-18.90	QP
4		1.9300	23.51	9.07	32.58	56.00	-23.42	QP
5		4.9179	18.59	11.92	30.51	56.00	-25.49	QP
6		9.4459	11.09	9.33	20.42	60.00	-39.58	QP

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

Engineer Signature: Allen

## 7. RADIATED EMISSION TEST

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

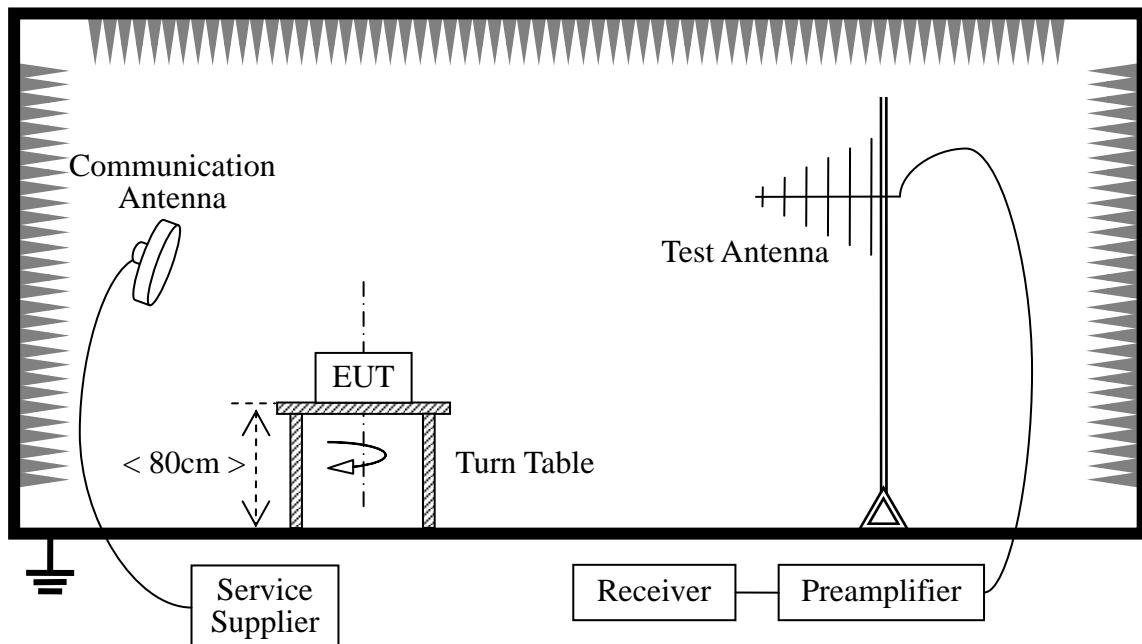
According to FCC section 15.209 (a), except as provided elsewhere in this subpart, the emissions from an intentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength ( $\mu$ 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:



- (1) The EUT was placed on a turntable with 0.8 meter above ground.
- (2) The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- (3) The table was rotated 360 degrees to determine the position of the highest radiation.
- (4) The antenna is a Bi-Log antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- (5) For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1m to 4m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- (6) Set the test-receiver system to Peak Detect Function and specified bandwidth with maximum hold mode.
- (7) If the emission level of the EUT in peak mode was 3Db lower than the limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be repeated one by one using the quasi-peak method and reported.
- (8) Emission level(dBuV/m)=20 log Emission level(uV/m).
- (9) Corrected reading: Antenna Factor + cable loss + read level - Preamp Factor = level

### 7.3 TEST RESULT

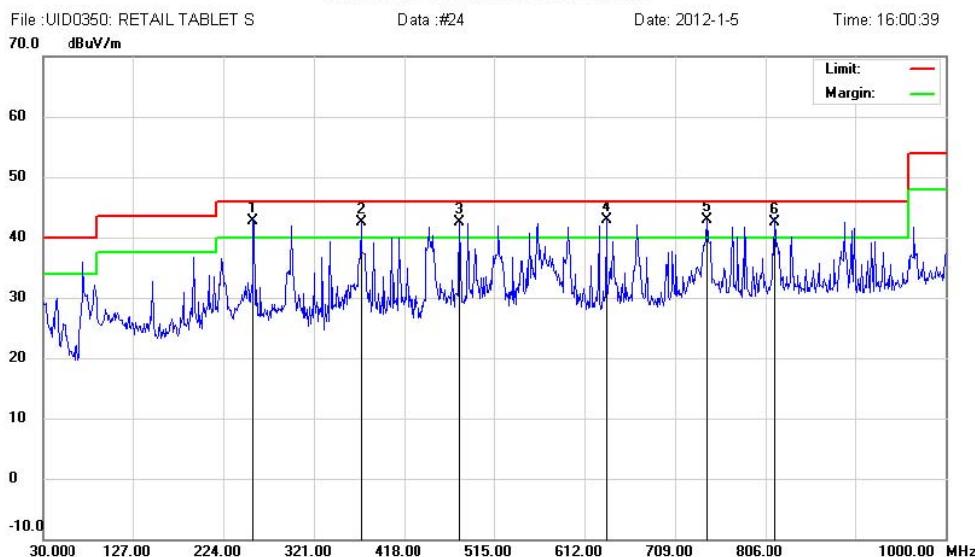
Preliminary Radiated Emission Test				
Frequency Range Investigated			30 MHz TO 1000 MHz	
Mode of operation	Date	Report No.	Data#	Worst Mode
HDMI Mode	2012-01-05	MTE/EAH/E11121710	UID0350_0_(L, N) UID0354_0_(L, N)	<input checked="" type="checkbox"/>
Idle Mode	2012-01-05	MTE/EAH/E11121710	UID0350_1_(L, N) UID0354_1_(L, N)	<input type="checkbox"/>
USB Playing Mode	2012-01-05	MTE/EAH/E11121710	UID0350_2_(L, N) UID0354_2_(L, N)	<input type="checkbox"/>
TF Playing Mode	2012-01-05	MTE/EAH/E11121710	UID0350_3_(L, N) UID0354_3_(L, N)	<input type="checkbox"/>
Running Mode	2012-01-05	MTE/EAH/E11121710	UID0350_4_(L, N) UID0354_4_(L, N)	<input type="checkbox"/>

**Note:**

The test modes were carried out for all operation modes, The worst data was shown as the follow.

**Below 1GHz**

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

**Radiated Emission Measurement**

Site: site MOST 3M Polarization: **Vertical** Temperature: 26  
 Limit: FCC Part 15 B 3M Radiation Power: DC 9V Adapter AC 120V/60Hz Humidity: 61 %  
 EUT: Retail Tablet Distance:  
 M/N: UID0350: RETAIL TABLET S  
 Mode: HDMI Mode  
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
			Level	Factor	ment					Comment
		MHz	dBuV	dB	dBuV/m	dB	Detector	cm	degree	
1	I	256.0099	25.20	17.44	42.64	46.00	-3.36	QP		
2	I	371.4399	24.36	18.21	42.57	46.00	-3.43	QP		
3	I	478.1400	20.85	21.59	42.44	46.00	-3.56	QP		
4	*	635.2800	19.10	23.81	42.91	46.00	-3.09	QP		
5	I	742.9500	17.19	25.68	42.87	46.00	-3.13	QP		
6	I	816.6700	16.30	26.27	42.57	46.00	-3.43	QP		

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

Engineer Signature: Allen



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

#### Radiated Emission Measurement

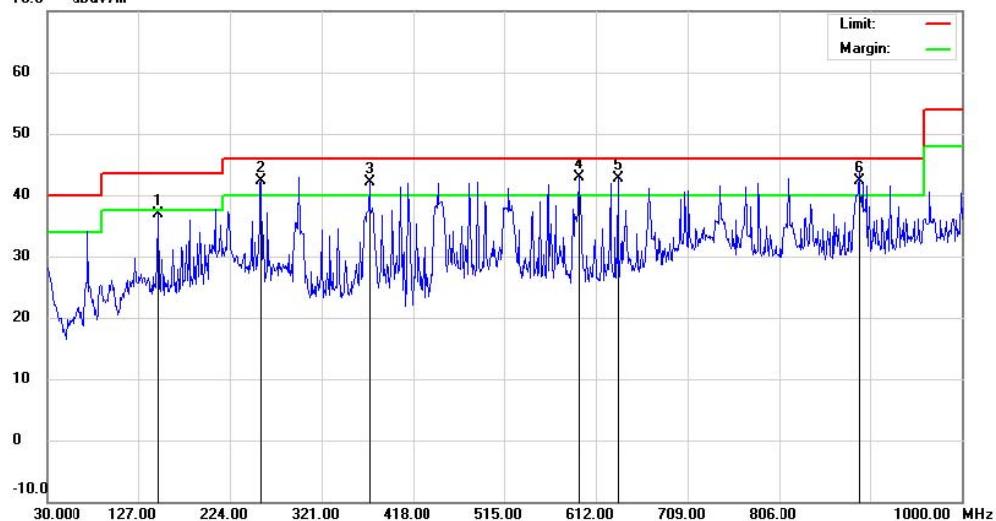
File : UID0350: RETAIL TABLET S

Data : #25

Date: 2012-1-5

Time: 16:07:11

70.0 dBuV/m



Site site MOST 3M

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part 15 B 3M Radiation

Power: DC 9V Adapter AC 120V/60Hz

Humidity: 61 %

EUT: Retail Tablet

Distance:

M/N: UID0350: RETAIL TABLET S

Mode: HDMI Mode

Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna	Table	
								Height	Degree	
MHz								cm	degree	Comment
1		148.3400	20.33	16.63	36.96	43.50	-6.54	QP		
2	I	256.9800	24.88	17.48	42.36	46.00	-3.64	QP		
3	I	371.4399	23.93	18.21	42.14	46.00	-3.86	QP		
4	*	594.5400	20.10	22.85	42.95	46.00	-3.05	QP		
5	I	635.2800	18.88	23.81	42.69	46.00	-3.31	QP		
6	I	891.3600	15.00	27.31	42.31	46.00	-3.69	QP		

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

Engineer Signature: Allen



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

### Radiated Emission Measurement

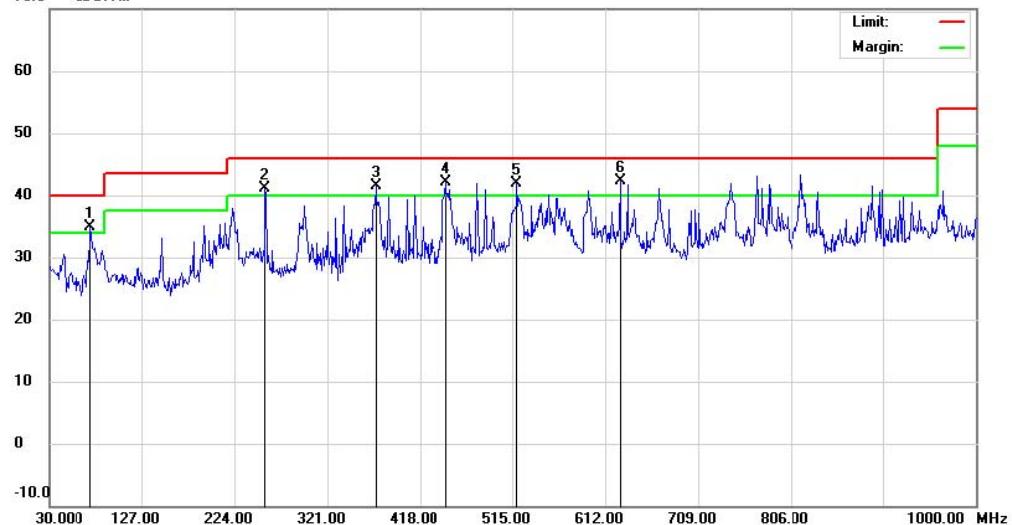
File : UID0354: RETAIL TABLET M

Data : #23

Date: 2012-1-5

Time: 8:49:43

70.0 dBuV/m



Site: site MOST 3M

Polarization: **Vertical**

Temperature: 26

Limit: FCC Part 15 B 3M Radiation

Power: DC 9V Adapter AC 120V/60Hz

Humidity: 61 %

EUT: Retail Tablet

Distance:

M/N: UID0354: RETAIL TABLET M

Mode: HDMI Mode

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	Comment
			Level	Factor	ment			Height	Degree	
		MHz	dBuV	dB	dBuV/m	dB	Detector	cm	degree	
1	!	73.6500	23.31	11.66	34.97	40.00	-5.03	QP		
2	!	256.0099	23.72	17.44	41.16	46.00	-4.84	QP		
3	!	371.4399	23.36	18.21	41.57	46.00	-4.43	QP		
4	!	445.1600	21.93	20.20	42.13	46.00	-3.87	QP		
5	!	519.8500	20.11	21.79	41.90	46.00	-4.10	QP		
6	*	627.5198	18.66	23.70	42.36	46.00	-3.64	QP		

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

Engineer Signature: Allen



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

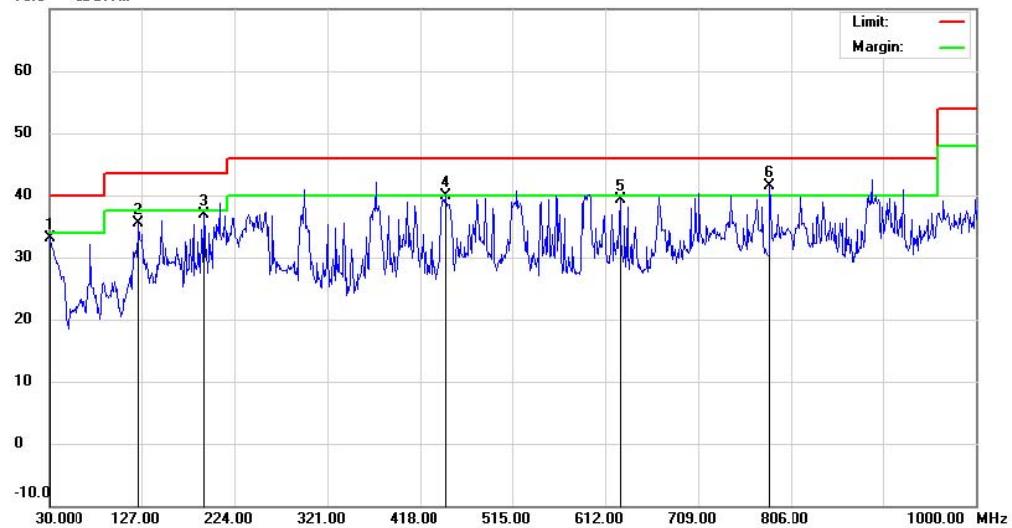
### Radiated Emission Measurement

File : UID0354: RETAIL TABLET M

Data #: 24

Date: 2012-1-5

Time: 8:55:09

70.0 dB<sub>uV/m</sub>

Site: site MOST 3M

Polarization: **Horizontal**

Temperature: 26

Limit: FCC Part 15 B 3M Radiation

Power: DC 9V Adapter AC 120V/60Hz

Humidity: 61 %

EUT: Retail Tablet

Distance:

M/N: UID0354: RETAIL TABLET M

Mode: HDMI Mode

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
			Level	Factor	ment					
		MHz	dB <sub>uV</sub>	dB	dB <sub>uV/m</sub>	dB	Detector	cm	degree	Comment
1		30.0000	8.28	24.80	33.08	40.00	-6.92	QP		
2		124.0900	17.92	17.66	35.58	43.50	-7.92	QP		
3		191.9900	20.12	16.70	36.82	43.50	-6.68	QP		
4		445.1600	19.71	20.20	39.91	46.00	-6.09	QP		
5		627.5198	15.62	23.70	39.32	46.00	-6.68	QP		
6	*	783.6900	15.28	26.13	41.41	46.00	-4.59	QP		

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

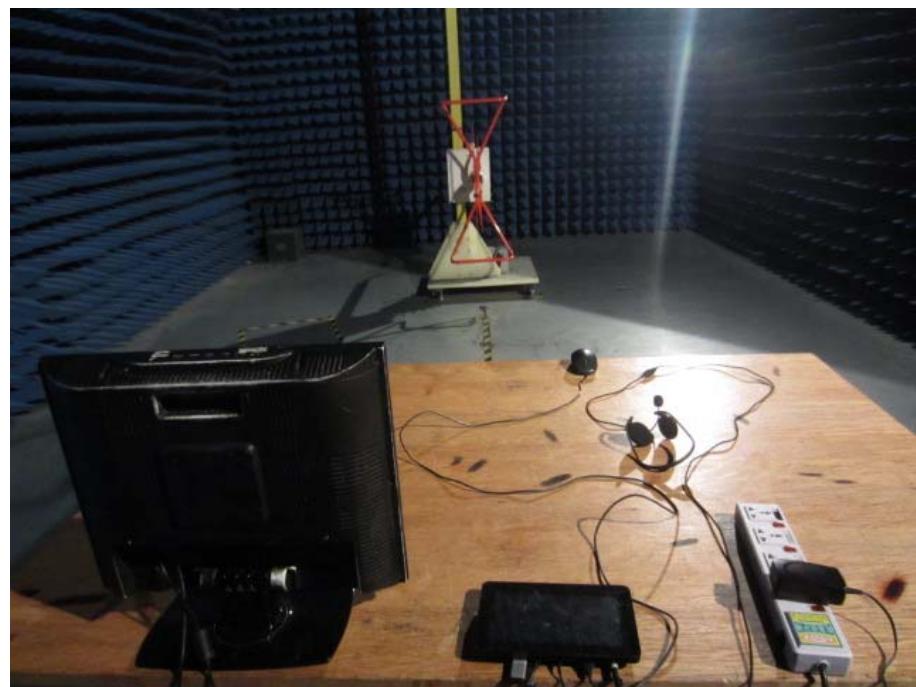
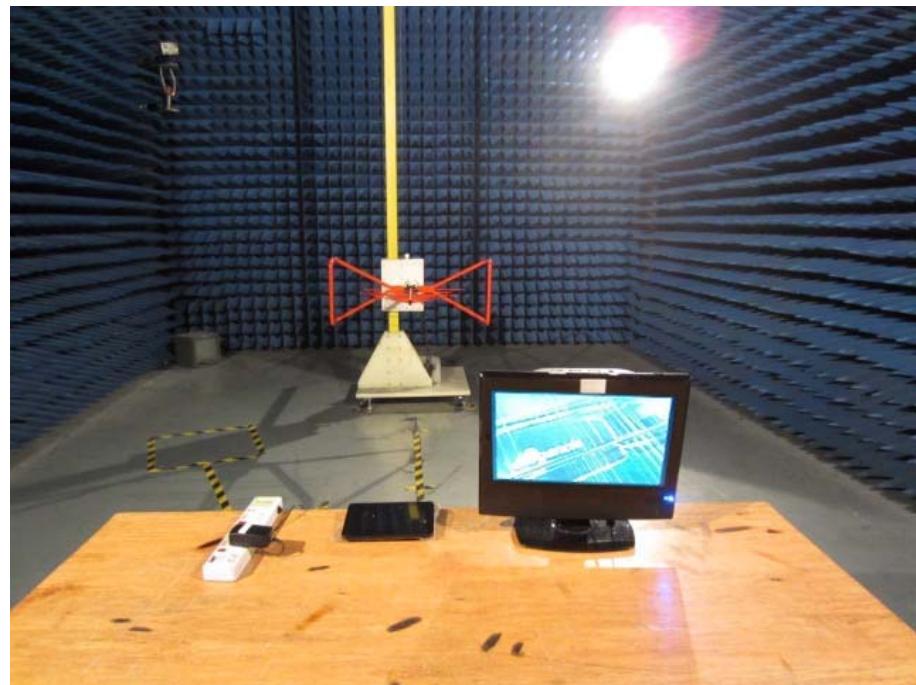
Engineer Signature: Allen

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

CE TEST SETUP



RE TEST SETUP



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