FCC ID TEST REPORT

for

7" LCD Tablet PC with Wi-Fi

Model: APX071- Olympia

FCC ID: RAQAPX071

Prepared for: Giant Telecom Limited
33/F., Two Landmark East, 100 How Ming Road, Kwun Tong,
Kowloon, Hong Kong

Prepared by: Shenzhen TCT Testing Technology Co., Ltd.
1F, Building 1, Yibaolai Industrial Park, Qiaotou Village, Fuyong Town,
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Report Number: TCT130802044F2-4
Date of Test: August 5~21, 2013
Date of Issue: August 21, 2013

Tested By Beryl Zhao

Reviewed By Jack Kang

The results detailed in this test report relate only to the specific sample(s) tested. It is the Application's responsibility to ensure that all production units are manufactured with equivalent EMC characteristics. This report is not to be reproduced except in full, without written approval from TCT Testing Technology

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1.0 General Information

1.1 Client Information

Application:	Giant Telecom Limited
Address of Application:	33/F., Two Landmark East, 100 How Ming Road, Kwun Tong, Kowloon, Hong Kong
Manufacturer:	DONGGUAN WISETRONICS TELECOM EQUIPMENT CO. LTD
Address of Manufacturer:	Elite Industrial City, Melin District, Dailing Mount Town, Dongguan Guangdong, China

1.2 General Description of E.U.T.

Product Name:	7" LCD Tablet PC with Wi-Fi
Model No.:	APX071- Olympia
Additional Model:	APX071- HAVOC, R07- Aspera, TW1000- Intouch, AQX071- Olympia, ARX071- Olympia, ASX071- Olympia, APX-071- GTL, ATX071- GTL, AUX071- GTL, AP7- GTL, BP7- GTL, AX71- GTL, BX71- GTL
Power Supply:	DC 7.4V Via Lithium Battery & DC 12V Via Adapter
	Adapter Information Model:HK-AX-120A200-US Brand Name: HON-KWANG Input: AC 100-240V 0.8A, Output: DC 12V 2.0A
Test Accessory:	Keyboard/Mouse, Lenovo, FCC DOC
Remark:	--
Model Difference:	All modes above are identical in interior structure, electrical circuits and components, and just model names are different for the marketing requirement.

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1.3 Test Facility:

Name of Test Lab:	Shenzhen Tongce Testing Lab
Address of Test Lab:	1F, Leinuo Watch Building, Fuyong Town, Baoan Dist, Shenzhen, China
Telephone:	13410377511
Fax:	--

The test facility is recognized, certified, or accredited by the following organizations:

FCC Registration Number: 572331

Shenzhen TCT Testing Technology Co., Ltd., Shenzhen EMC Laboratory: Shenzhen Tongce Testing Lab
The 3m Semi-anechoic chamber has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.
Registration Number: 572331

Industry Canada (IC)

The 3m Semi-anechoic chamber of Shenzhen TCT Testing Technology Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing
Registration Number IC: 10668A-1

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2.0 List of Measurement Equipment

2.1 Conducted Emission Test

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
EMI Test Receiver	ESH3	860905/006	RS	July 08, 2013	July 07, 2014
Spectrum Analyzer	ESA-L1500A	US37451154	HP	July 08, 2013	July 07, 2014
PULSE LIMITER	ESH3-Z2	100281	RS	July 08, 2013	July 07, 2014
LISN	ESH3-Z5	100294	RS	July 08, 2013	July 07, 2014
LISN	ESH3-Z5	100253	RS	July 08, 2013	July 07, 2014
LISN	LS16C	10010947251	AFJ	July 08, 2013	July 07, 2014
LISN (Three Phase)	NSLK 8126	8126453	Schwarebeck	July 08, 2013	July 07, 2014

2.2 Radiated Emission Test

Name	Model No.	Serial No.	Manufacturer	Date of Cal.	Due Date
EMI Test Receiver	ESVD	1026.5506.10	RS	July 08, 2013	July 07, 2014
Coaxial Switch	MP59B	M70585	ANRITSU	N/A	N/A
Spectrum Analyzer	8595E	3441A00893	HP	July 08, 2013	July 07, 2014
Amplifier	8447D	2727A05017	HP	July 08, 2013	July 07, 2014
Bilog Antenna	VULB9163	9163/340	Schwarebeck	July 08, 2013	July 07, 2014
Horn Antenna	BBHA 9120D	9120D-631	Schwarebeck	July 08, 2013	July 07, 2014

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3.0 Technical Details

3.1 Investigations Requested

Perform Electromagnetic Interference [EMI] tests for FCC Requirement.

3.2 Test Standards

FCC Part 15 Subpart B:2012

3.3 Measurement Uncertainty（95% confidence levels, k=2)

No.	Item	MU
1.	Temperature	±0.1℃
2.	Humidity	±1.0%
3.	Spurious emissions, conducted	±3.70dB
4.	All emissions, radiated	±4.50dB

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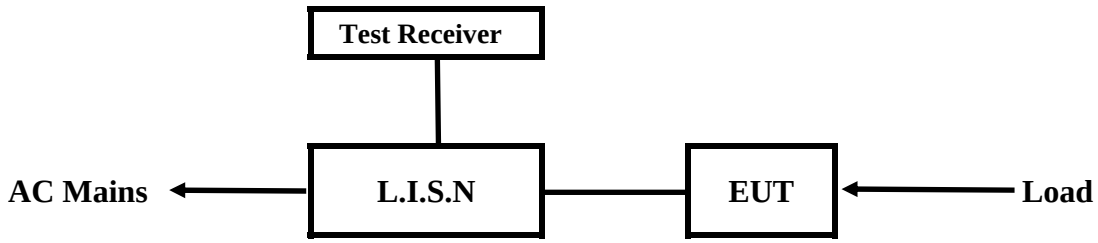
4.0 Power Line Conducted Emission Test

4.1 Schematics of the test



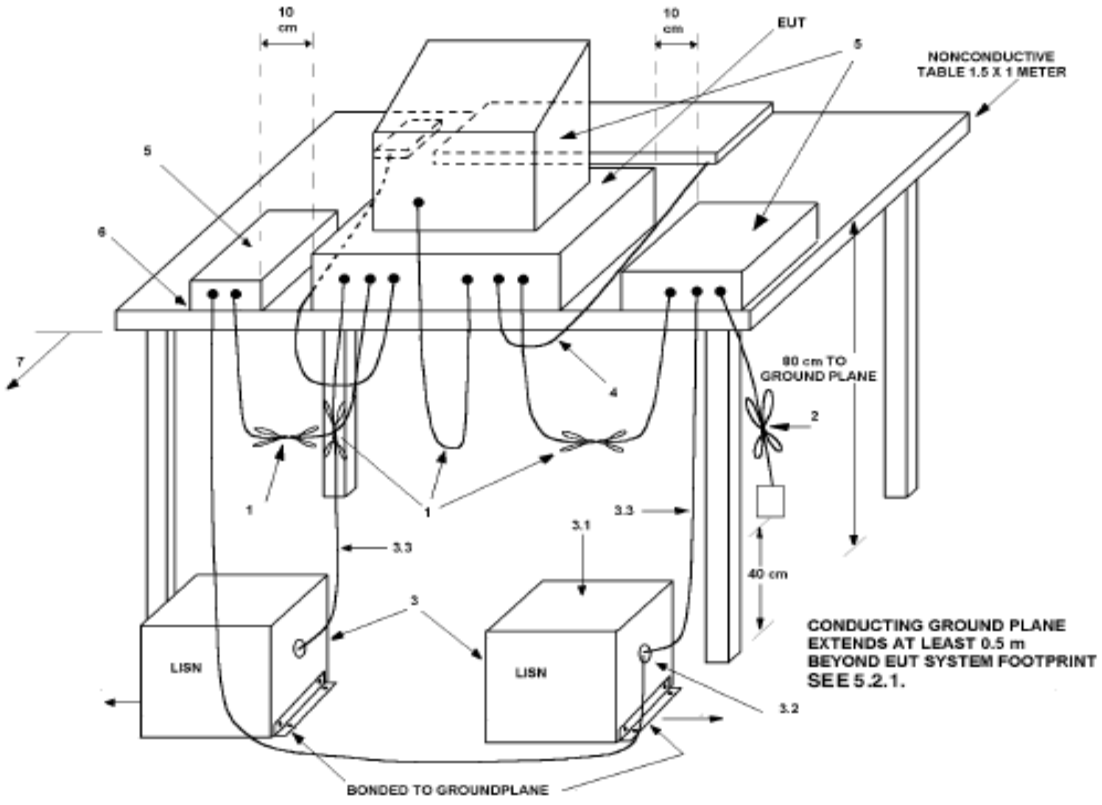
EUT: Equipment Under Test

4.2 Test Method and test Procedure

The EUT was tested according to ANSI C63.4-2009.The Frequency spectrum From 0.15MHz to 30MHz was investigated. The LISN used was 50ohm/50uH as specified by section 5.1 of ANSI C63.4 –2009.

Test Voltage: 120V~, 60Hz

Block diagram of Test setup



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4.3 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2009

1) Setup the EUT and simulators as shown on the following

2) Enable AF signal and confirm EUT active to normal condition

4.4 Test Equipment

Please refer to the Section 2

4.5 Power line conducted Emission Limit

Frequency(MHz)	Class A Limits (dBμV)		Class B Limits (dBμV)	
	Quasi-peak Level	Average Level	Quasi-peak Level	Average Level
0.15 ～ 0.50	79.0	66.0	66.0～56.0*	56.0～46.0*
0.50 ～ 5.00	73.0	60.0	56.0	46.0
5.00 ～ 30.00	73.0	60.0	60.0	50.0

Notes: 1. *Decreasing linearly with logarithm of frequency.

2. The tighter limit shall apply at the transition frequencies

4.6 Photo documentation of the test set-up

Please refer to the Section 7

4.7 Test specification:

Environmental conditions: Temperature: 24° C Humidity: 51% Atmospheric pressure: 103kPa

Frequency range: 0.15 MHz – 30 MHz

4.8 Test result

Min. limit margin >10dB from 0.15 MHz - 30MHz

The requirements are FULFILLED

Remarks: According to the FCC part 15 Subpart B:2012

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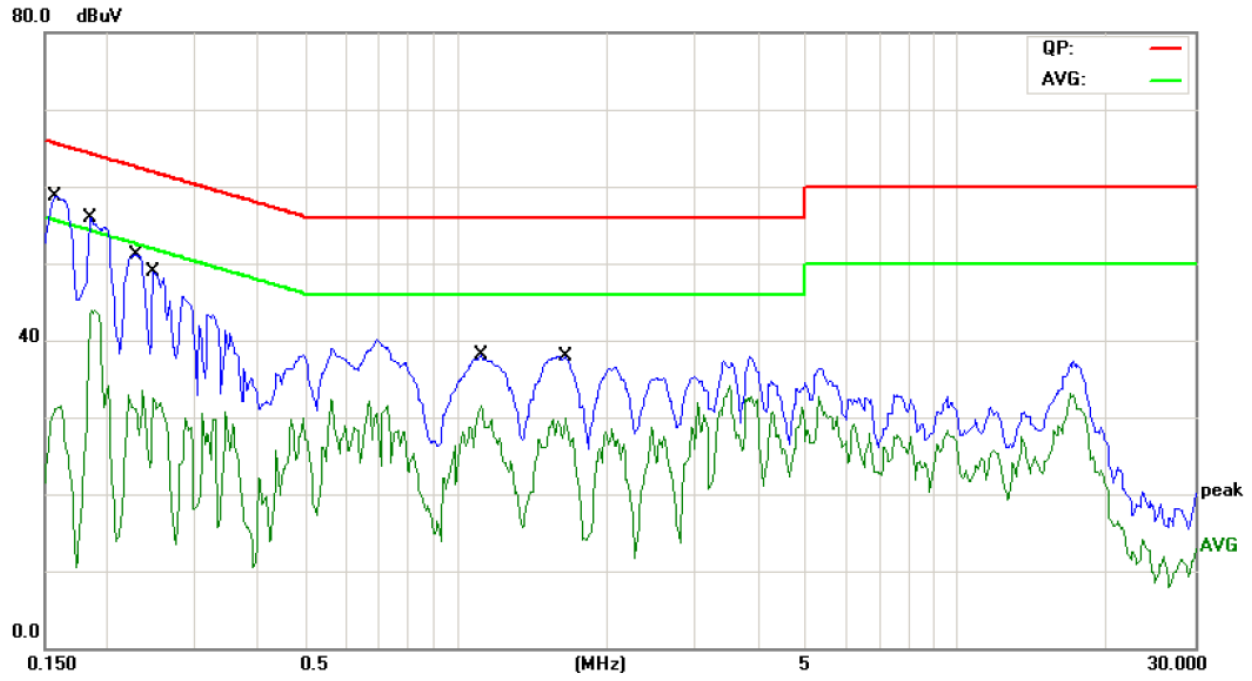
A Conducted Emission on Line Terminal of the power line (150kHz to 30MHz)

EUT Description: 7" LCD Tablet PC with Wi-Fi
Operation Mode: Full loading
Tested By: Beryl Zhao
Test date: Aug. 08, 2013
Test Result: PASS

Start Frequency	Stop Frequency	Step	IF BW	Detector	Final M-Time
0.15MHz	30MHz	4.5KHz	10KHz	QP+AV	1s



Frequency (MHz)	Reading(dBμV)				Limit (dBμV)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1578	55.26	38.33	--	--	65.57	55.57
0.1852	49.85	32.09	--	--	64.24	54.24
0.2280	46.97	33.84	--	--	62.52	52.52
0.2477	41.67	26.34	--	--	61.83	51.83
1.1227	35.79	27.42	--	--	56.00	46.00
1.6500	33.98	25.54	--	--	56.00	46.00

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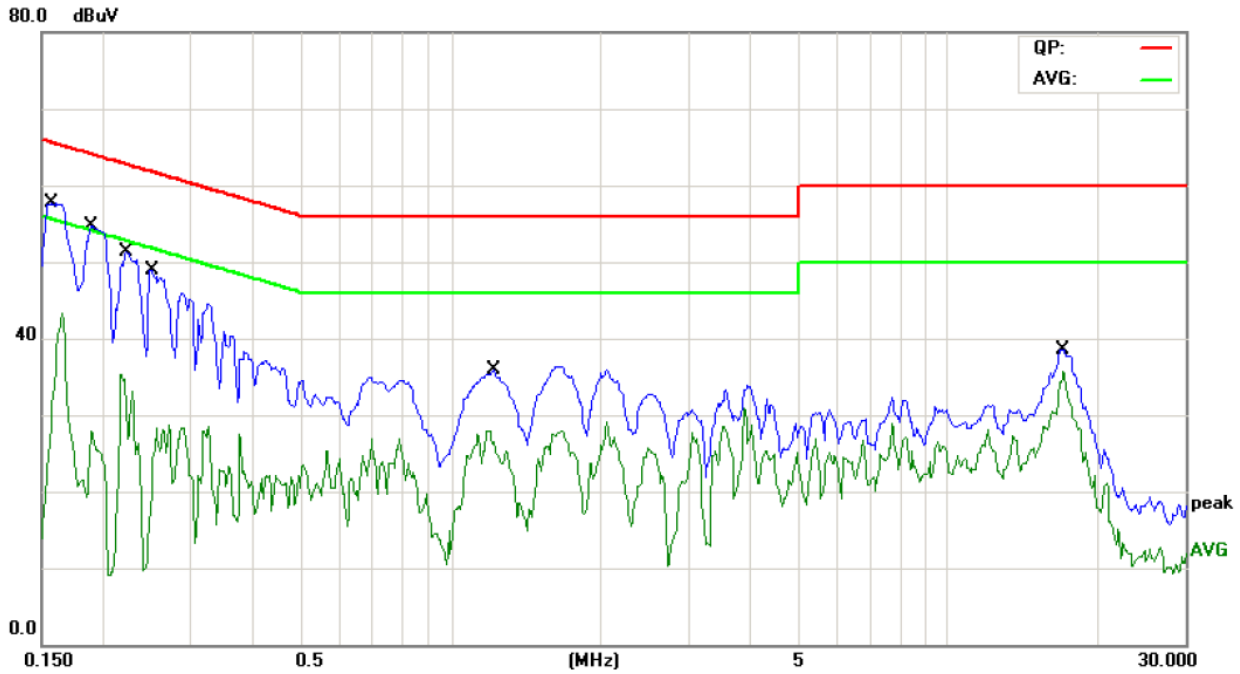
B Conducted Emission on Neutral Terminal of the power line (150kHz to 30MHz)

EUT Description: 7" LCD Tablet PC with Wi-Fi
Operation Mode: Full loading
Tested By: Beryl Zhao
Test date: Aug. 08, 2013
Test Result: PASS

Start Frequency	Stop Frequency	Step	IF BW	Detector	Final M-Time
0.15MHz	30MHz	4.5KHz	10KHz	QP+AV	1s



Frequency (MHz)	Reading(dBμV)				Limit (dBμV)	
	Live		Neutral			
	Quasi-peak	Average	Quasi-peak	Average	Quasi-peak	Average
0.1578	--	--	55.43	38.75	65.57	55.57
0.1891	--	--	50.96	32.26	64.07	54.07
0.2203	--	--	46.78	29.86	62.80	52.80
0.2516	--	--	44.46	28.90	61.70	51.70
1.2203	--	--	33.05	23.59	56.00	46.00
17.0937	--	--	38.59	25.92	60.00	50.00

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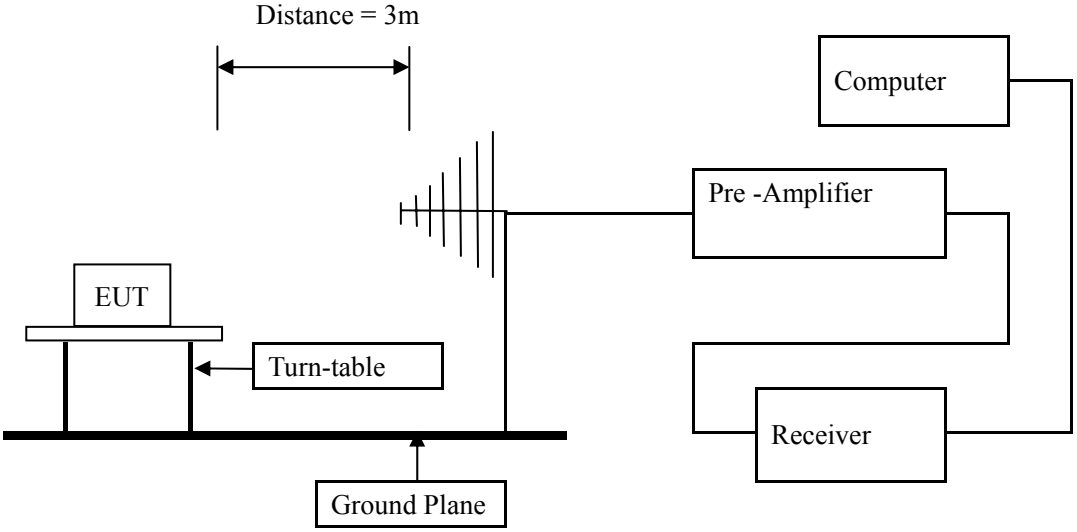
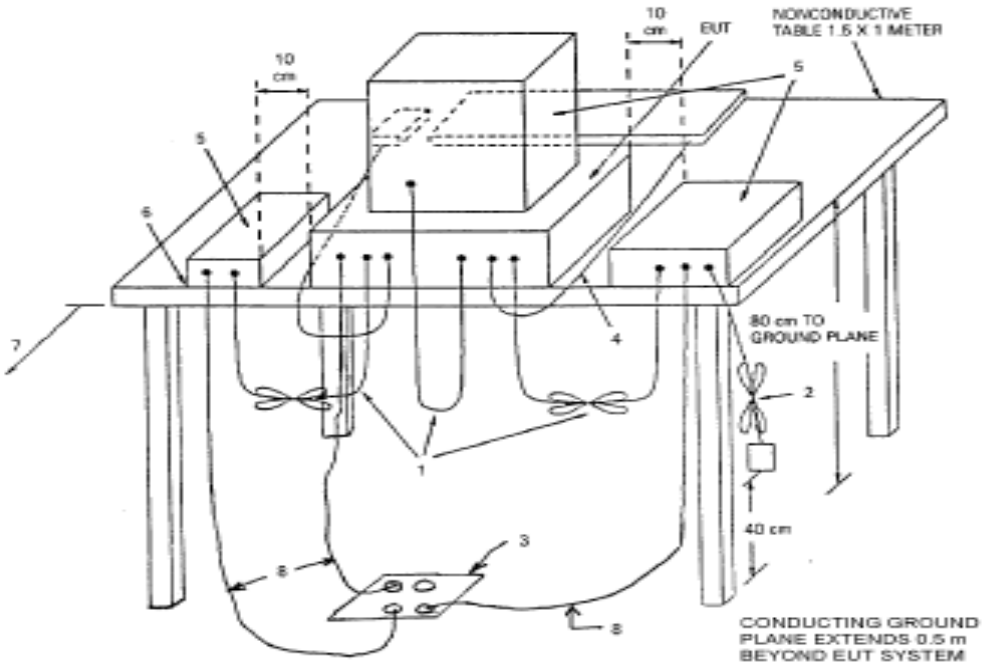
5.0 Radiated Emission Test

5.1 Test Method and test Procedure:

1) The EUT was tested according to ANSI C63.4 –2009.
2) The EUT, peripherals were put on the turntable which table size is 1m x 1.5 m, table high 0.8 m. All set up is according to ANSI C63.4-2009.
3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.
4) The antenna polarization: Vertical polarization and Horizontal polarization.

Block diagram of Test setup





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5.2 EUT Operating Condition

Operating condition is according to ANSI C63.4 -2009

5.3 Radiated Emission Limit

All emission from a digital device, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strength specified below:

Frequency Range (MHz)	Distance (m)	Field strength (dBμV/m)
30-88	3	40.0
88-216	3	43.5
216-960	3	46.0
Above 960	3	54.0

Note: 1) The frequency spectrum from 30MHz to 8GHz was investigated. All reading from 30MHz to 1GHz are quasi-peak values with a resolution bandwidth of 120KHz. For measurement above 1GHz, peak values with RBW=VBW=1MHz and PK detector. AV value with RBW=1MHz, VBW=10Hz and PK.

2) Measurements were made at 3 meters.

3) If measurement is not made at 3m distance, then F.S Limitation at 3m distance is adjusted by using the formula Ld1 = Ld2 * (d2/d1)

5.4 Photo documentation of the test set-up

Please refer to the Section 7

5.5 Test Equipment:

Please refer to the Section 2

5.6 Test specification:

Environmental conditions: Temperature 26° C Humidity: 53% Atmospheric pressure: 103kPa

5.7 Test result

Min. limit margin 2.29dB at 195.2305MHz

The requirements are FULFILLED

Remarks: The speed of the CPU in the EUT is 2 GHz, so measurements should be conducted up to 5th harmonics (10 GHz) of the Highest frequency per FCC part 15.33

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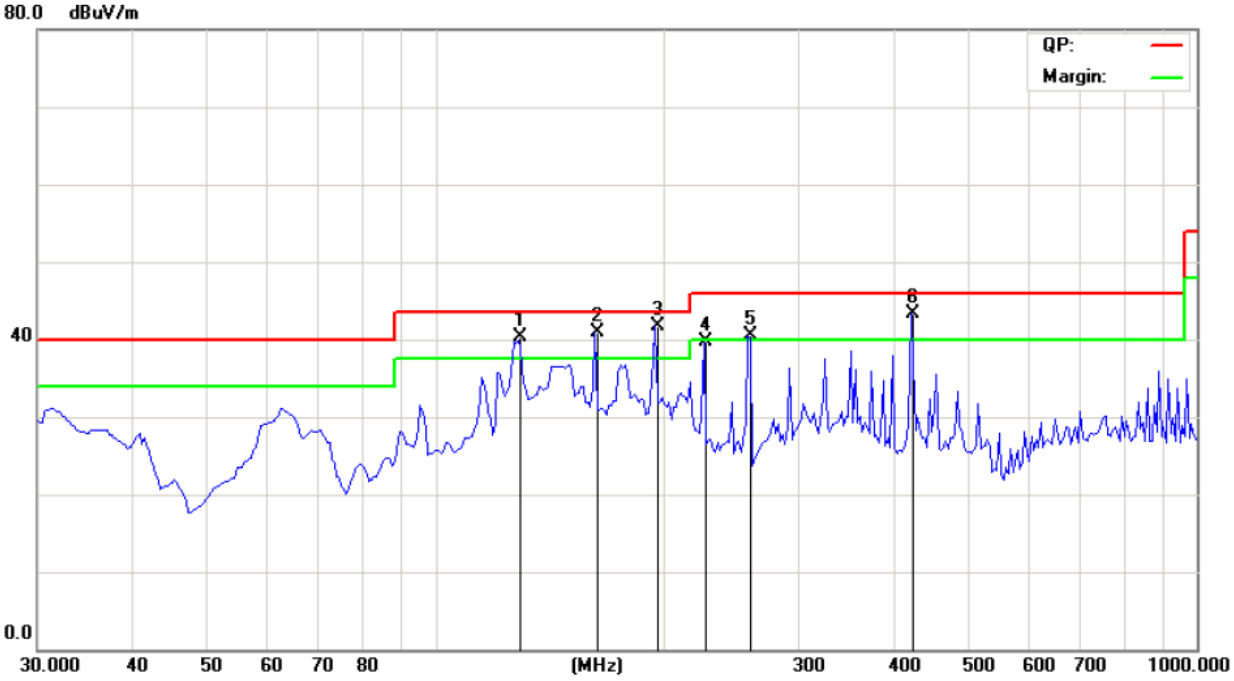
A. Radiated Emission In Horizontal (30MHz----1000MHz)

EUT Description: 7" LCD Tablet PC with Wi-Fi
Operation Mode: Full loading
Tested By: Beryl Zhao
Test date: Aug. 08, 2013
Test Result: PASS



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
129.1382	40.40	H	43.50
162.1939	40.52	H	43.50
195.2305	41.21	H	43.50
226.3481	40.05	H	46.00
260.0935	41.19	H	46.00
422.7469	43.18	H	46.00

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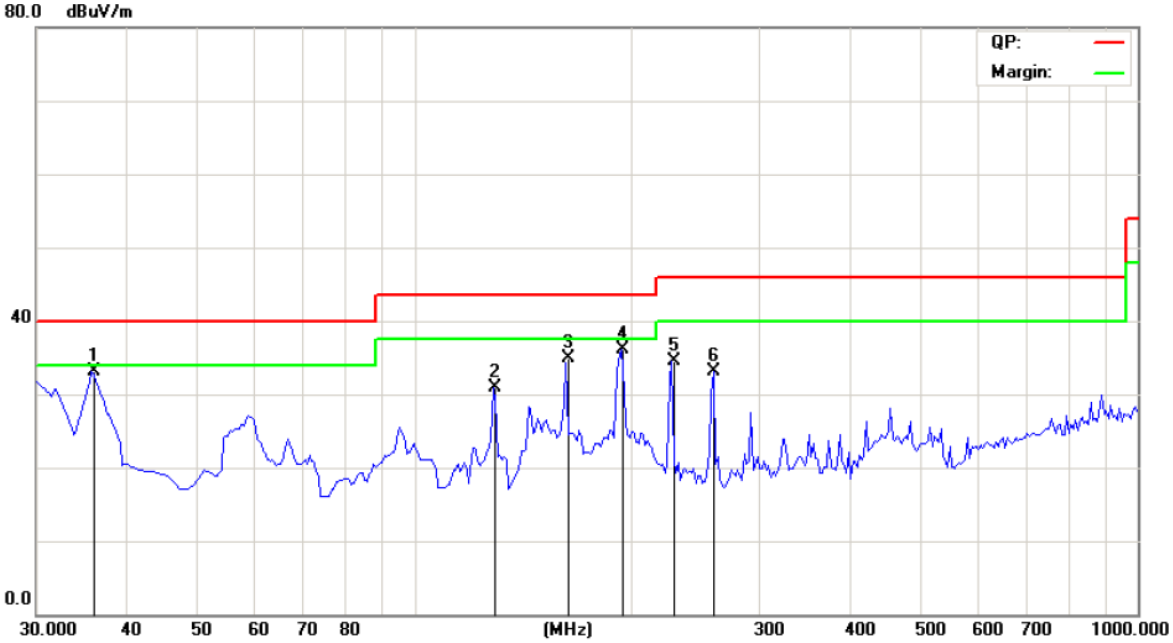
B. Radiated Emission In Vertical (30MHz----1000MHz)

EUT Description: 7" LCD Tablet PC with Wi-Fi
Operation Mode: Full loading
Tested By: Beryl Zhao
Test date: Aug. 08, 2013
Test Result: PASS



Frequency (MHz)	Level@3m (dBμV/m)	Antenna Polarity	Limit@3m (dBμV/m)
35.8429	33.85	V	40.00
130.0284	30.89	V	43.50
163.2975	35.12	V	43.50
193.2318	36.23	V	43.50
228.2766	34.53	V	46.00
259.3275	33.87	V	46.00

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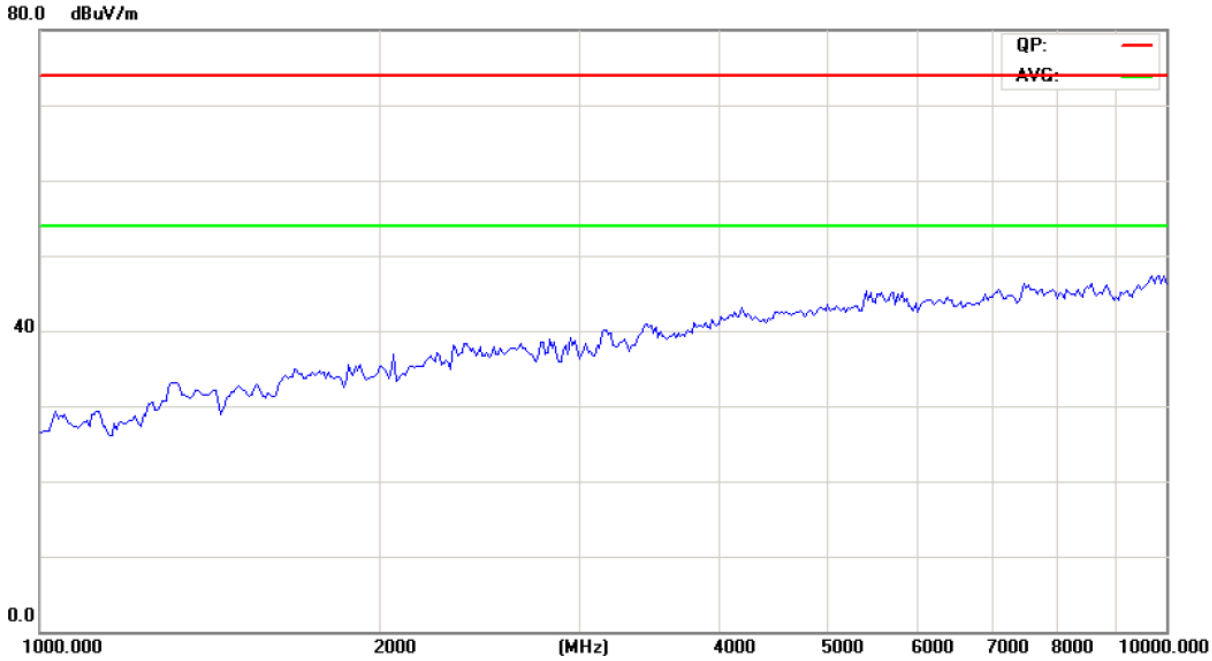
C. Radiated Emission In Horizontal (1000MHz----10000MHz)

EUT Description: 7" LCD Tablet PC with Wi-Fi
Operation Mode: Full loading
Tested By: Beryl Zhao
Test date: Aug. 08, 2013
Test Result: PASS



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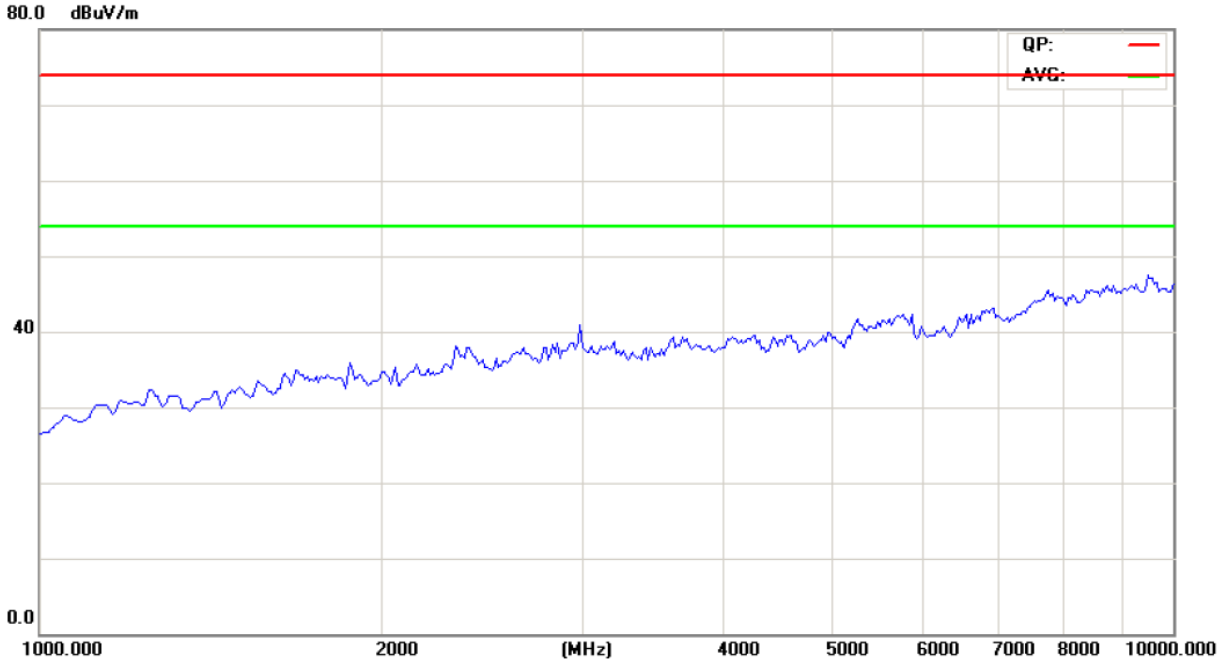
D. Radiated Emission In Vertical (1000MHz----10000MHz)

EUT Description: 7" LCD Tablet PC with Wi-Fi
Operation Mode: Full loading
Tested By: Beryl Zhao
Test date: Aug. 08, 2013
Test Result: PASS



The test data shows much less than the limit, no necessary take down the records.

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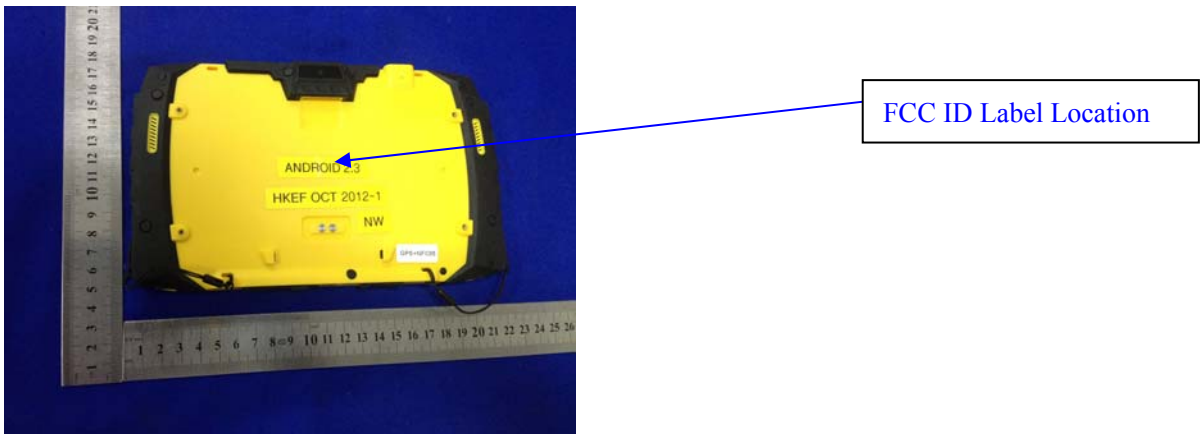
6.0 FCC Label

FCC ID: RAQAPX071

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The label must not be a stick-on paper label. The label on these products must be permanently affixed to the product and readily visible at the time of purchase and must last the expected lifetime of the equipment not be readily detachable.

Mark Location:



END OF THE REPORT

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