FCC TEST REPORT
On Behalf of
Cheng Fong International Limited

Tablet PC
Model No.: TBDG773B

Prepared for	:	Cheng Fong International Limited
Address	:	Rm 19HG, HangDu Building, HuaFu Road, Fu Tian District, Shenzhen, China Tel: 0755-61627636 Fax: 0755-61627608
Prepared By	:	Anbotek Compliance Laboratory Limited
Address	:	1/F, 1 /Building, SEC Industrial Park, No. 4 Qianhai Road, Nanshan District, Shenzhen, 518054, China Tel: (86) 755-26066544 Fax: (86) 755-26014772

Report Number	:	201304815F
Date of Test	:	Apr. 17~ May 06, 2013
Date of Report	:	May 06, 2013

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TEST REPORT VERIFICATION

Applicant	:	Cheng Fong International Limited
Manufacturer	:	Cheng Fong International Limited
EUT	:	Tablet PC
Model No.	:	TBDG773B
Rating	:	DC 5V
Trade Mark	:	N.A.

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B 2011 & FCC / ANSI C63.4-2009

The device described above is tested by Anbotek Compliance Laboratory Limited To determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Anbotek Compliance Laboratory Limited Is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Anbotek Compliance Laboratory Limited

Date of Test : Apr. 17~ May 06, 2013

Prepared by : Barak Ban
(Engineer/ Barak Ban)

Reviewer : Sally. zhang
(Project Manager/ Sally Zhang)

Approved & Authorized Signer : Tom. Chen
(Manager/ Tom Chen)

1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description	:	Tablet PC
Model Number	:	TBDG773B
Test Power Supply	:	DC 5V
Applicant	:	Cheng Fong International Limited
Address	:	Rm 19HG, HangDu Building, HuaFu Road, Fu Tian District, Shenzhen, China
Manufacturer	:	Cheng Fong International Limited
Address	:	Rm 19HG, HangDu Building, HuaFu Road, Fu Tian District, Shenzhen, China
Date of Sample received	:	Apr. 17, 2013
Date of Test	:	Apr. 17~ May 06, 2013

1.2. Auxiliary Equipment Used during Test

PC	:	Manufacturer: DELL M/N: OPTIPLEX 380 S/N: 1J63X2X CE , FCC: DOC
MONITOR	:	Manufacturer: DELL M/N: E170Sc S/N: CN-00V539-64180-055-0UPS CE , FCC: DOC
KEYBOARD	:	Manufacturer: DELL M/N: SK-8115 S/N: CN-0DJ313-71616-06C-02XN CE , FCC: DOC Cable: 1m, unshielded
MOUSE	:	Manufacturer: DELL M/N: M-UARDEL7 S/N: N/A CE , FCC: DOC Cable: 1m, unshielded
Power Line		Non-Shielded, 1.5m
VGA Cable	:	Non-Shielded, 1.5m
Network Cable	:	Non-Shielded, 1.5m

2. POWER LINE CONDUCTED MEASUREMENT

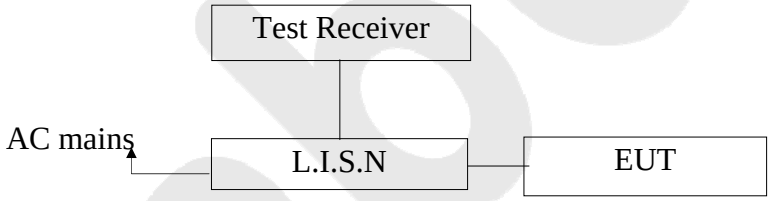
2.1. Test Equipment

The following test equipments are used during the power line conducted measurement:

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Receiver	Rohde & Schwarz	ESCI	100627	Nov. 12, 2012	1 Year
2.	LISN	SchwarzBeck	NSLK 8126	8126377	May 19, 2012	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	May 19, 2012	1 Year
4.	EMI Test Software ES-K1	Rohde & Schwarz	N/A	N/A	N/A	N/A

2.2. Block Diagram of Test Setup

2.2.1. Block diagram of connection between the EUT and simulators



(EUT: Tablet PC)

2.3. Power Line Conducted Emission Measurement Limits (FCC Part 15 Class B)

Frequency MHz	Limits dB(μV)	
	Quasi-peak Level	Average Level
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. *Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

2.4. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

EUT	:	Tablet PC
Model Number	:	TBDG773B
Applicant	:	Cheng Fong International Limited

2.5. Operating Condition of EUT

2.5.1. Setup the EUT and simulator as shown as Section 2.2.
2.5.2. Turn on the power of all equipment.
2.5.3. Let the EUT work measure it.

2.6. Test Procedure

The EUT system is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to FCC ANSI C63.4-2009 on Conducted Emission Measurement.

The bandwidth of test receiver (ESCI) set at 9KHz.

The frequency range from 150KHz to 30MHz is checked.

The test result are reported on Section 2.7.

2.7. Power Line Conducted Emission Measurement Results

PASS.

The frequency range from 150KHz to 30 MHz is investigated.

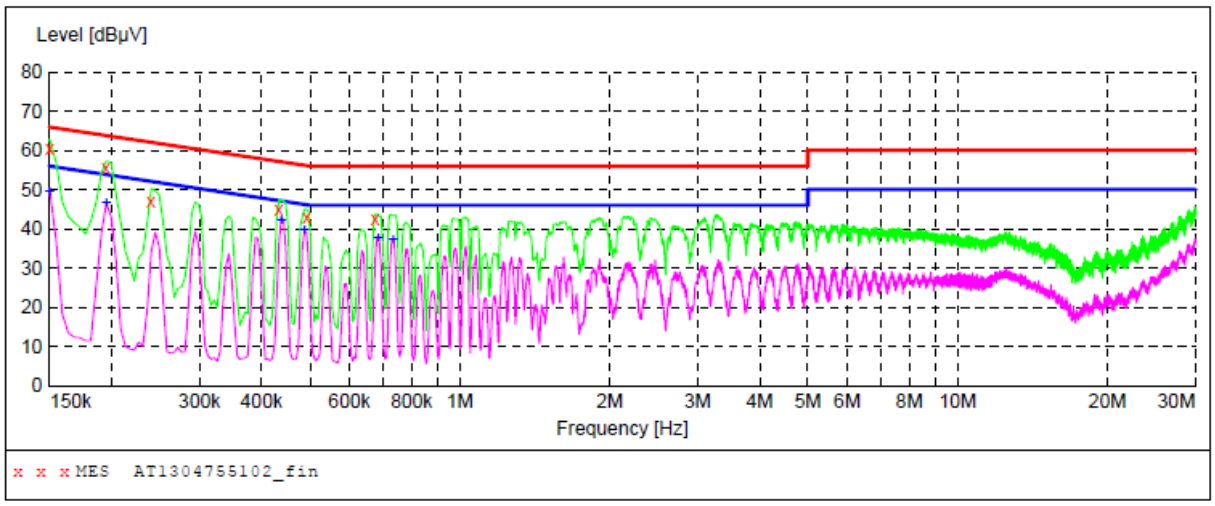
The test curves are shown in the following pages.

CONDUCTED EMISSION TEST DATA

EUT:	Tablet PC M/N:TBDG773B
Operating Condition:	USB Charging and Playing
Test Site:	1# Shielded Room
Operator:	Barak Ban
Test Specification:	DC 5V
Comment:	L
	Tem:25℃ Hum:50%

SCAN TABLE: "Voltage(150K~30M)FIN"

Short Description: 150K-30M Disturbance Voltages



MEASUREMENT RESULT: "AT1304755102_fin"

5/2/2013 2:38PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	60.70	20.1	66	5.3	QP	L1	GND
0.195000	55.80	20.1	64	8.0	QP	L1	GND
0.240000	46.90	20.1	62	15.2	QP	L1	GND
0.433500	45.00	20.1	57	12.2	QP	L1	GND
0.492000	43.00	20.1	56	13.1	QP	L1	GND
0.676500	42.40	20.1	56	13.6	QP	L1	GND

MEASUREMENT RESULT: "AT1304755102_fin2"

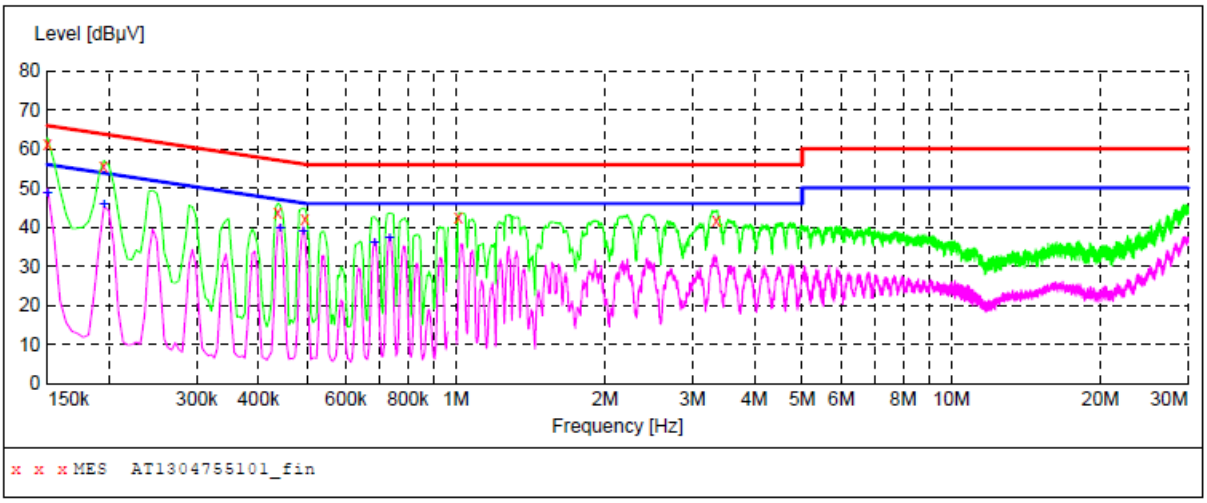
5/2/2013 2:38PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	49.60	20.1	56	6.4	AV	L1	GND
0.195000	46.50	20.1	54	7.3	AV	L1	GND
0.438000	42.30	20.1	47	4.8	AV	L1	GND
0.487500	39.70	20.1	46	6.5	AV	L1	GND
0.685500	37.80	20.1	46	8.2	AV	L1	GND
0.735000	37.20	20.1	46	8.8	AV	L1	GND

CONDUCTED EMISSION TEST DATA

EUT:	Tablet PC M/N:TBDG773B
Operating Condition:	USB Charging and Playing
Test Site:	1# Shielded Room
Operator:	Barak Ban
Test Specification:	DC 5V
Comment:	N
	Tem:25℃ Hum:50%

SCAN TABLE: "Voltage(150K~30M)FIN"
Short Description: 150K-30M Disturbance Voltages



MEASUREMENT RESULT: "AT1304755101_fin"

5/2/2013 2:35PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	61.40	20.1	66	4.6	QP	N	GND
0.195000	55.70	20.1	64	8.1	QP	N	GND
0.438000	43.90	20.1	57	13.2	QP	N	GND
0.496500	42.20	20.1	56	13.9	QP	N	GND
1.013500	42.60	20.2	56	13.4	QP	N	GND
3.353500	41.90	20.4	56	14.1	QP	N	GND

MEASUREMENT RESULT: "AT1304755101_fin2"

5/2/2013 2:35PM

Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.150000	48.70	20.1	56	7.3	AV	N	GND
0.195000	45.90	20.1	54	7.9	AV	N	GND
0.442500	39.70	20.1	47	7.3	AV	N	GND
0.492000	38.70	20.1	46	7.4	AV	N	GND
0.685500	36.20	20.1	46	9.8	AV	N	GND
0.735000	37.30	20.1	46	8.7	AV	N	GND

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

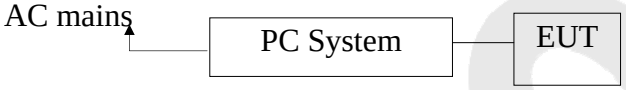
The following test equipments are used during the radiated emission measurement:

3.1.1. For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
7	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Nov. 12, 2012	1 Year
8	Trilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	May 17, 2012	1 Year
9	Pre-amplifier	Compliance Direction	PAP-0203	22008	May 19, 2012	1 Year
10	EMI Test Software	SHURPLE	N/A	N/A	N/A	N/A

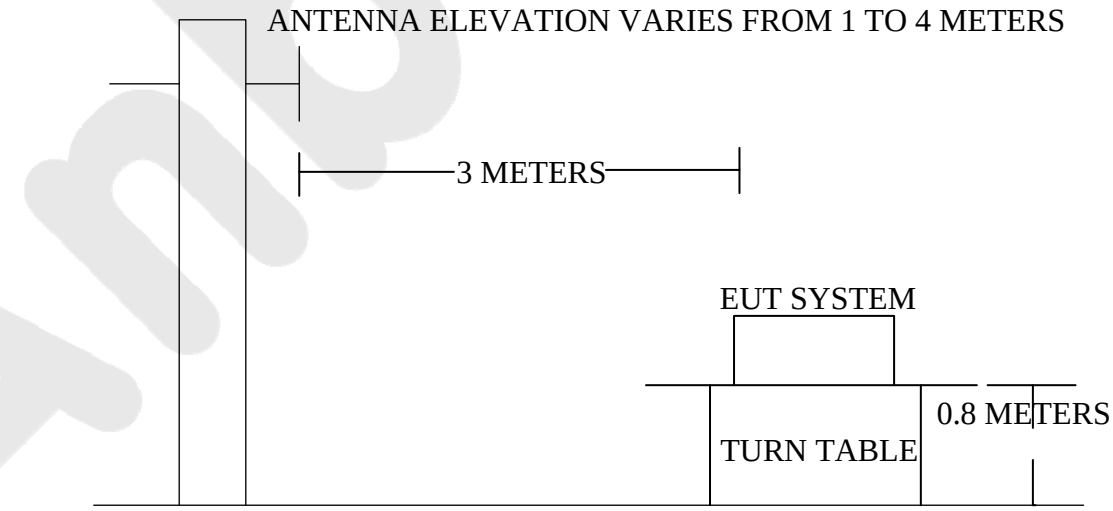
3.2. Block Diagram of Test Setup

3.2.1. Block diagram of connection between the EUT and simulators



(EUT: Tablet PC)

3.2.2. Anechoic Chamber Test Setup Diagram



(EUT: Tablet PC)

3.3. Radiated Emission Limit (Subpart B Class B)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μV/m	dB(μV)/m
30~88	3	100	40.0
88~216	3	150	43.5
216~960	3	200	46.0
Above 960	3	500	54.0

Remark： (1) Emission level (dB)μV = 20 log Emission level μV/m
(2) The smaller limit shall apply at the cross point between two frequency bands.
(3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

3.4. EUT Configuration on Measurement

The following equipments are installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

EUT	:	Tablet PC
Model Number	:	TBDG773B
Applicant	:	Cheng Fong International Limited

3.5. Operating Condition of EUT

3.5.1. Setup the EUT as shown in Section 3.2.

3.5.2. Let the EUT work measure it.

3.6. Test Procedure

EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (Trilog Broadband Antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission measurement.

The bandwidth of the EMI test receiver (ESPI) is set at 120kHz.

The frequency range from 30MHz to 1000MHz is checked.

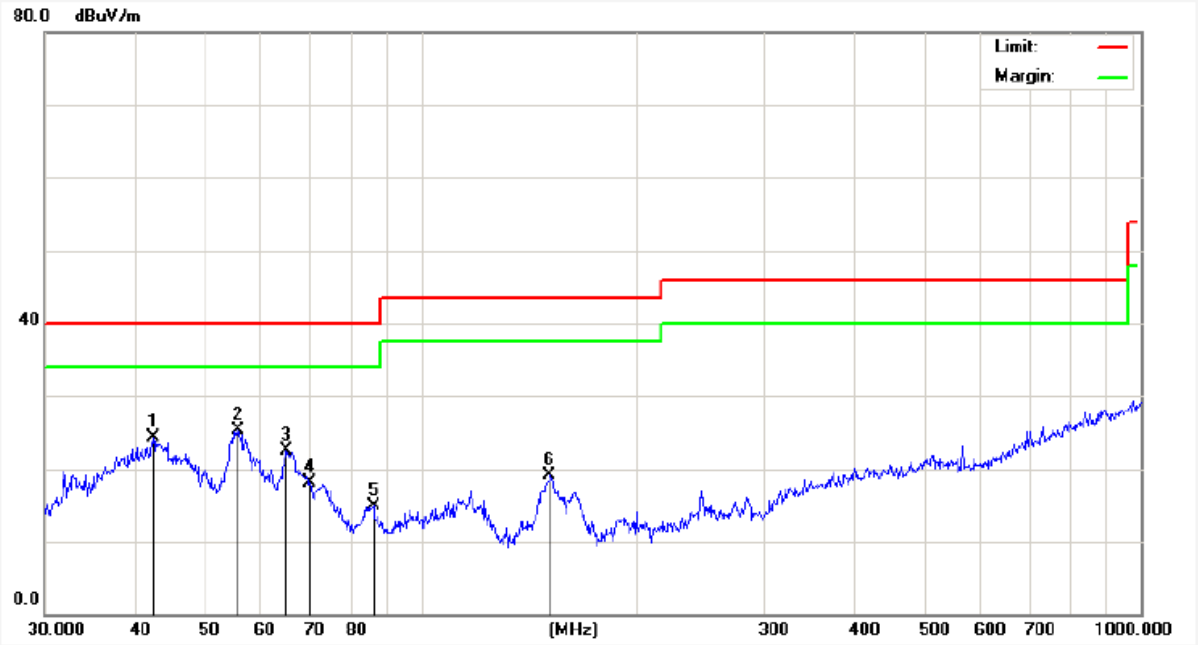
The test mode (USB Charging and Playing, Communication) is tested in chamber and all the test results are listed in Section 3.7.

3.7. Radiated Emission Measurement Results

PASS.

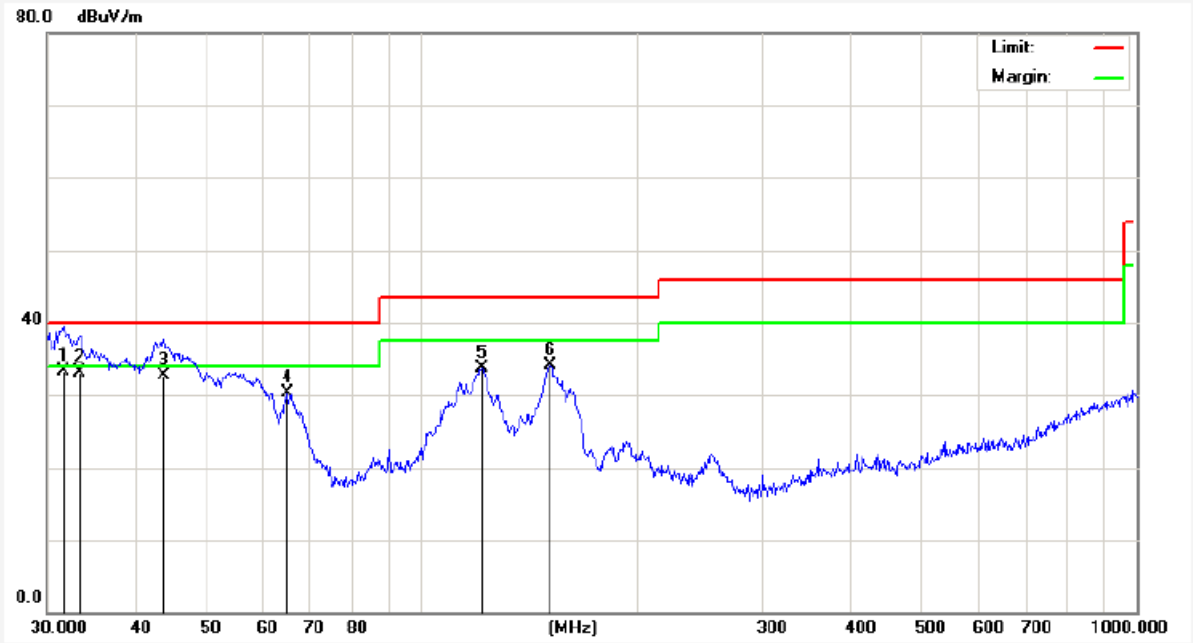
The test curves are shown in the following pages.

Job No.:	**AT1304755I**	**Polarziation:**	**Horizontal**
Standard:	**(RE)FCC PART15 B _3m**	**Power Source:**	**DC 5V**
Test item:	**Radiation Test**	**Date:**	**2012/04/25**
Temp.(C)/Hum.(%RH):	**24.3(C)/55%RH**	**Time:**	**14:06:24**
EUT:	**Tablet PC**	**Test By:**	**Barak Ban**
Model:	**TBDG773B**	**Distance:**	**3m**
Note:	**USB Charging and Playing**		



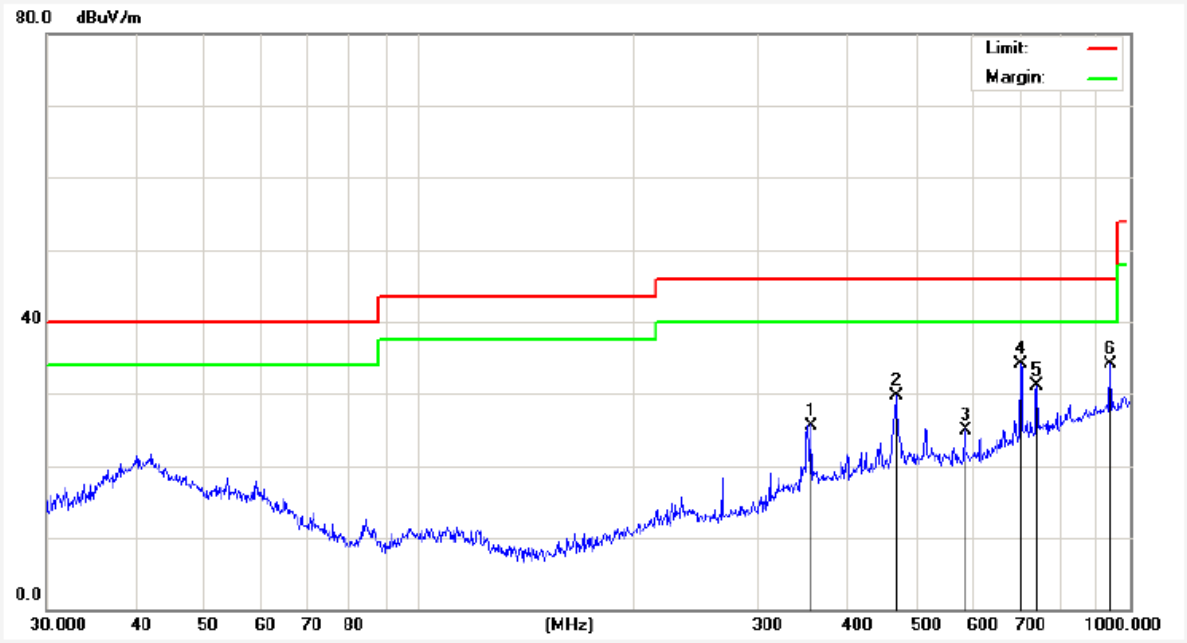
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	42.4508	35.55	-11.33	24.22	40.00	-15.78	peak			
2	55.6094	40.23	-14.99	25.24	40.00	-14.76	peak			
3	64.8865	39.90	-17.43	22.47	40.00	-17.53	peak			
4	70.0903	37.76	-19.64	18.12	40.00	-21.88	peak			
5	85.8984	35.74	-20.79	14.95	40.00	-25.05	peak			
6	151.0666	42.38	-23.30	19.08	43.50	-24.42	peak			

Job No.:	**AT1304755I**	**Polarziation:**	**Vertical**
Standard:	**(RE)FCC PART15 B _3m**	**Power Source:**	**DC 5V**
Test item:	**Radiation Test**	**Date:**	**2012/04/25**
Temp.(C)/Hum.(%RH):	**24.3(C)/55%RH**	**Time:**	**14:09:33**
EUT:	**Tablet PC**	**Test By:**	**Barak Ban**
Model:	**TBDG773B**	**Distance:**	**3m**
Note:	**USB Charging and Playing**		



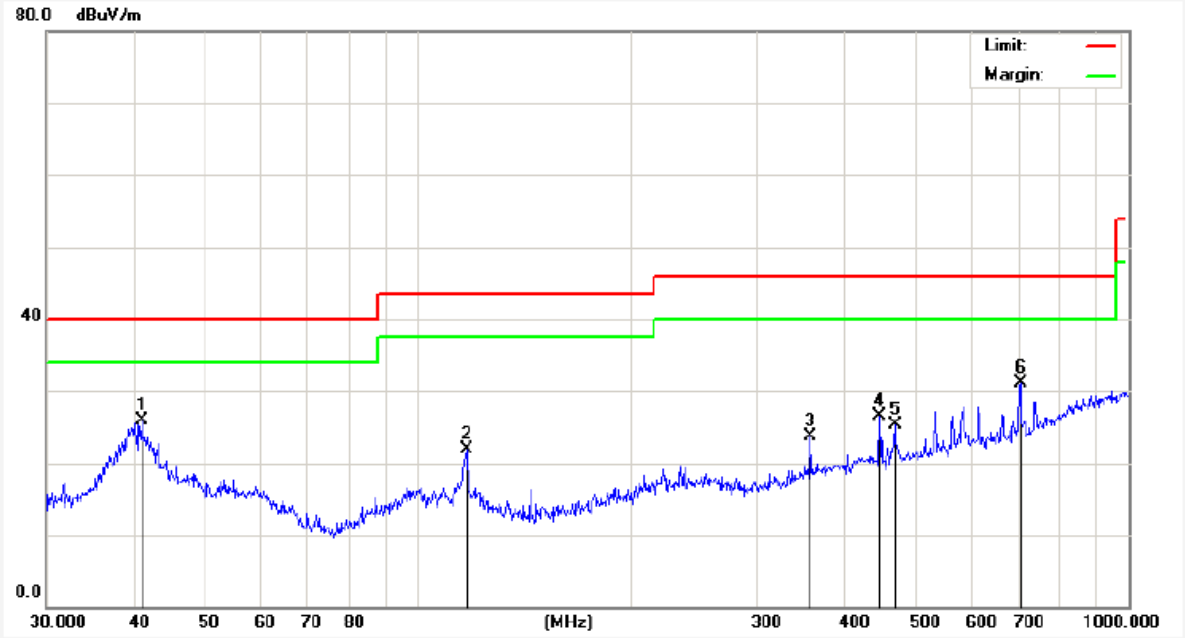
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	31.6102	49.40	-16.09	33.31	40.00	-6.69	QP	100	360	
2	33.3279	48.37	-15.18	33.19	40.00	-6.81	QP	100	0	
3	43.6584	44.51	-11.80	32.71	40.00	-7.29	QP	100	360	
4	64.8865	47.66	-17.43	30.23	40.00	-9.77	peak			
5	121.5486	50.25	-16.56	33.69	43.50	-9.81	peak			
6	151.5972	52.28	-18.27	34.01	43.50	-9.49	peak			

Job No.:	**AT1304755I**	**Polarziation:**	**Horizontal**
Standard:	**(RE)FCC PART15 B _3m**	**Power Source:**	**DC 5V**
Test item:	**Radiation Test**	**Date:**	**2012/04/25**
Temp.(C)/Hum.(%RH):	**24.3(C)/55%RH**	**Time:**	**14:13:55**
EUT:	**Tablet PC**	**Test By:**	**Barak Ban**
Model:	**TBDG773B**	**Distance:**	**3m**
Note:	**Communication**		



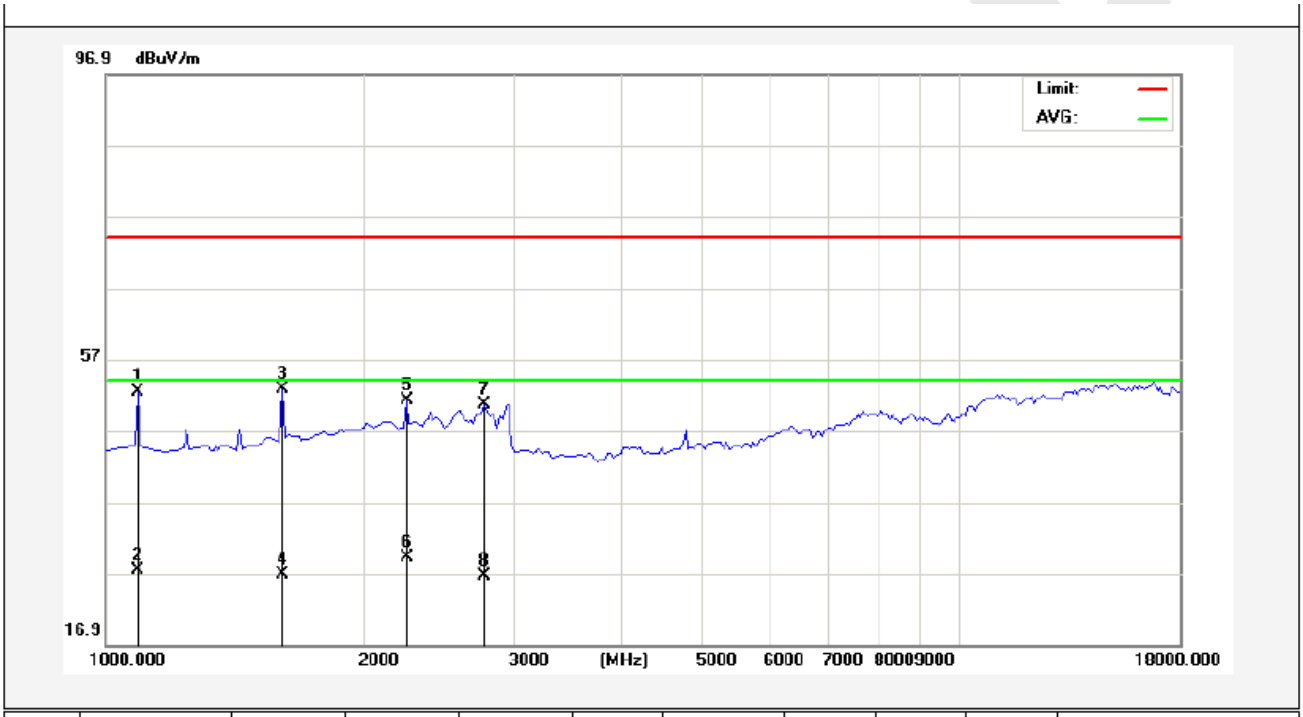
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	356.6758	39.38	-13.78	25.60	46.00	-20.40	peak			
2	468.8762	41.57	-11.85	29.72	46.00	-16.28	peak			
3	586.8437	36.20	-11.20	25.00	46.00	-21.00	peak			
4	701.7610	42.58	-8.44	34.14	46.00	-11.86	peak			
5	739.6604	38.83	-7.68	31.15	46.00	-14.85	peak			
6	938.8326	38.27	-4.15	34.12	46.00	-11.88	peak			

Job No.:	**AT1304755I**	**Polarziation:**	**Vertical**
Standard:	**(RE)FCC PART15 B _3m**	**Power Source:**	**DC 5V**
Test item:	**Radiation Test**	**Date:**	**2012/04/25**
Temp.(C)/Hum.(%RH):	**24.3(C)/55%RH**	**Time:**	**14:16:38**
EUT:	**Tablet PC**	**Test By:**	**Barak Ban**
Model:	**TBDG773B**	**Distance:**	**3m**
Note:	**Communication**		



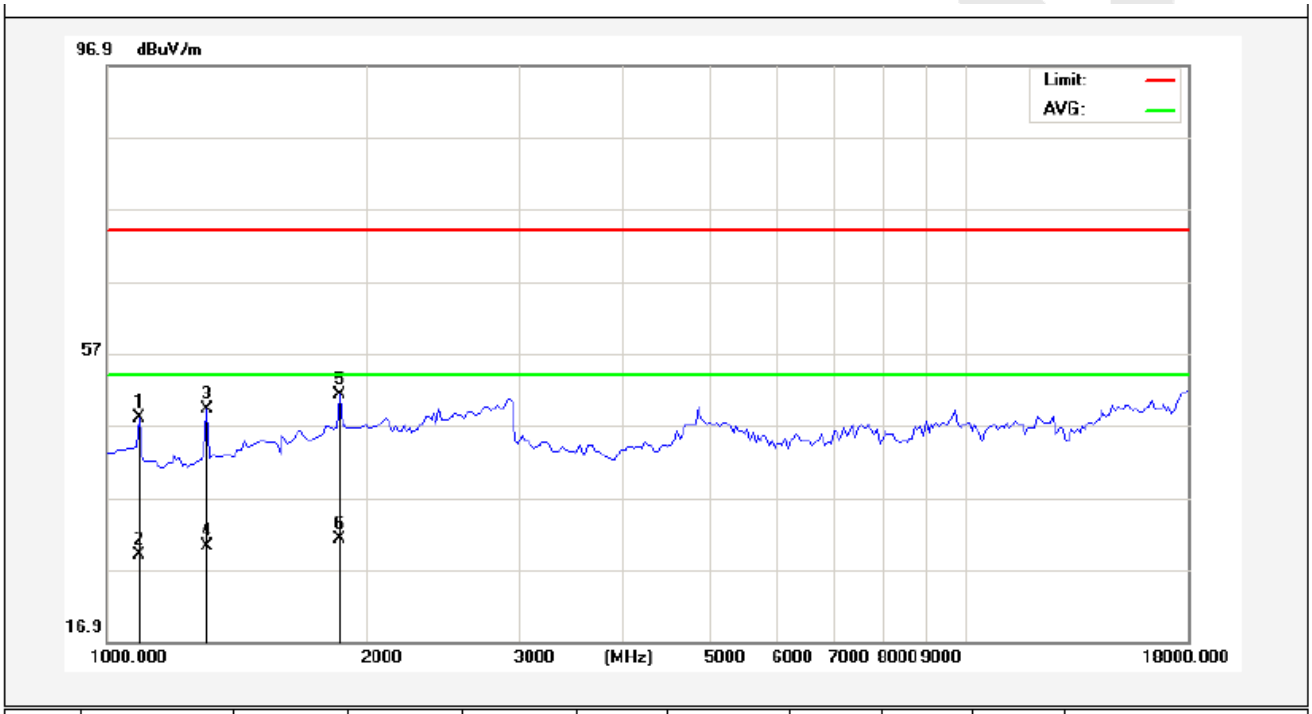
No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	40.8445	36.66	-10.71	25.95	40.00	-14.05	peak			
2	116.9495	37.96	-16.12	21.84	43.50	-21.66	peak			
3	356.6757	36.57	-12.78	23.79	46.00	-22.21	peak			
4	446.4141	37.93	-11.49	26.44	46.00	-19.56	peak			
5	468.8761	37.15	-11.85	25.30	46.00	-20.70	peak			
6	704.2260	39.35	-8.34	31.01	46.00	-14.99	peak			

Job No.:	**AT1304755I**	**Polarziation:**	**Horizontal**
Standard:	**(RE)FCC PART15 B _3m**	**Power Source:**	**DC 5V**
Test item:	**Radiation Test**	**Date:**	**2012/04/25**
Temp.(C)/Hum.(%RH):	**24.3(C)/55%RH**	**Time:**	**14:20:19**
EUT:	**Tablet PC**	**Test By:**	**Barak Ban**
Model:	**TBDG773B**	**Distance:**	**3m**
Note:	**Communication**		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	1090.582	59.10	-6.76	52.34	74.00	-21.66	peak			
2	1090.582	34.10	-6.76	27.34	54.00	-26.66	AVG			
3	1611.091	58.40	-5.63	52.77	74.00	-21.23	peak			
4	1611.091	32.40	-5.63	26.77	54.00	-27.23	AVG			
5	2246.344	53.96	-2.83	51.13	74.00	-22.87	peak			
6	2246.344	31.96	-2.83	29.13	54.00	-24.87	AVG			
7	2785.000	51.49	-0.88	50.61	74.00	-23.39	peak			
8	2785.000	27.49	-0.88	26.61	54.00	-27.39	AVG			

Job No.:	**AT1304755I**	**Polarziation:**	**Vertical**
Standard:	**(RE)FCC PART15 B _3m**	**Power Source:**	**DC 5V**
Test item:	**Radiation Test**	**Date:**	**2012/04/25**
Temp.(C)/Hum.(%RH):	**24.3(C)/55%RH**	**Time:**	**14:24:55**
EUT:	**Tablet PC**	**Test By:**	**Barak Ban**
Model:	**TBDG773B**	**Distance:**	**3m**
Note:	**Communication**		



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB/m)	Result (dBuV/m)	Limit (dBuV/	Over Limit (dB)	Detector	Height (cm)	degree (deg)	Remark
1	1090.582	43.24	4.77	48.01	74.00	-25.99	peak			
2	1090.582	24.24	4.77	29.01	54.00	-24.99	AVG			
3	1306.510	43.81	5.33	49.14	74.00	-24.86	peak			
4	1306.510	24.81	5.33	30.14	54.00	-23.86	AVG			
5	1861.588	44.11	7.13	51.24	74.00	-22.76	peak			
6	1861.588	24.11	7.13	31.24	54.00	-22.76	AVG			

4. PHOTOGRAPH

4.1. Photo of Power Line Conducted Emission Test

4.2. Photo of Radiated Emission Test

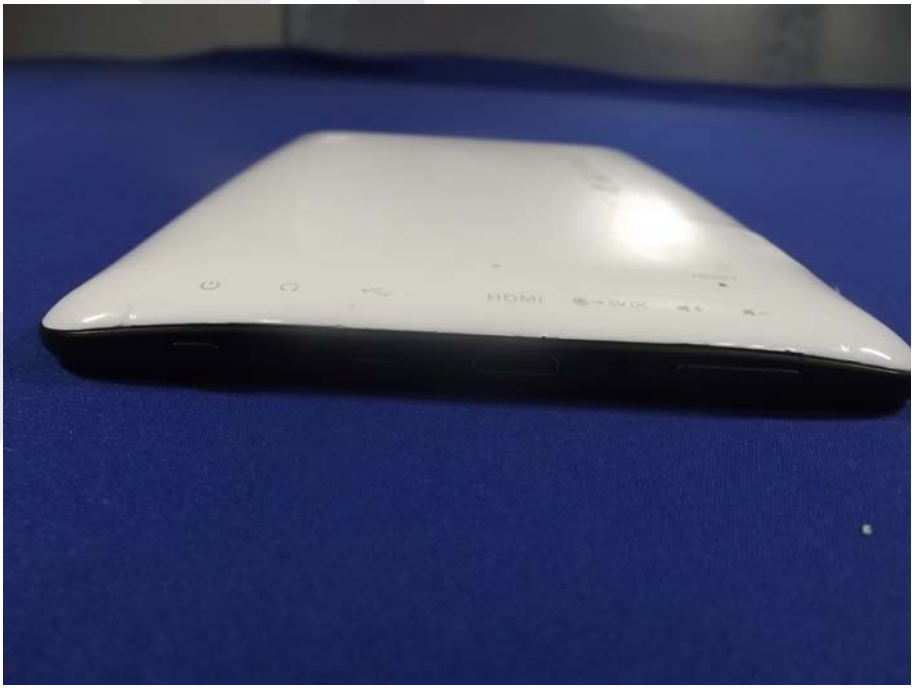
Appendix Ⅰ (External Photos)

Figure 1
The EUT-Overall View

Figure 2
The EUT-Front View

Figure 3
The EUT-Back View

Figure 4
The EUT-Port View



Appendix Ⅱ (Internal Photos)

Figure 5
The EUT-Inside View

Figure 6
PCB of the EUT-Front View

Figure 7
PCB of the EUT-Back View

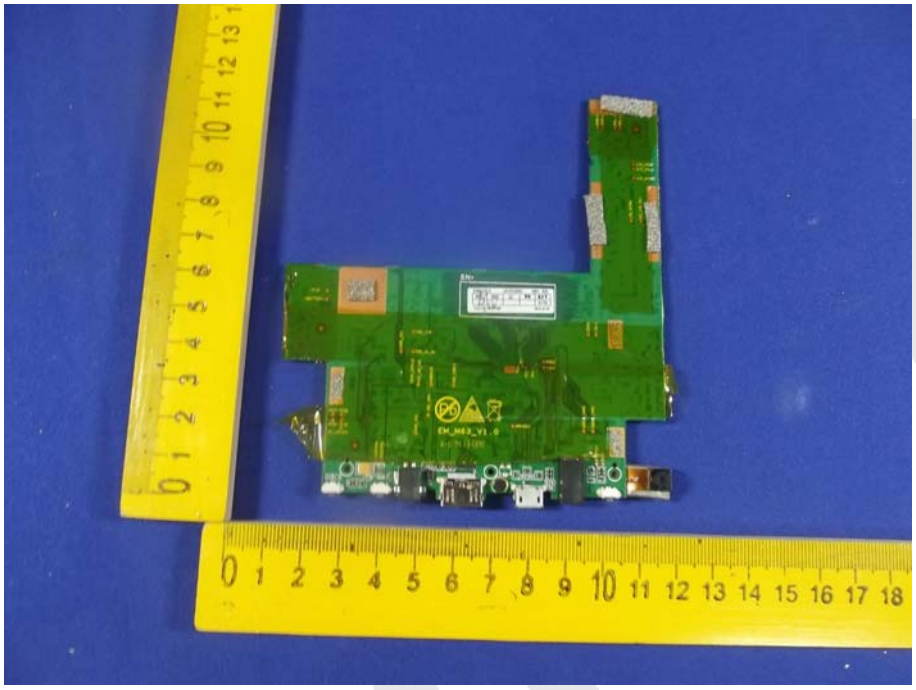


Figure 8
PCB of the EUT-Battery View

Figure 9
PCB of the EUT-Front View