

FCC TEST REPORT
On Behalf of
T-Link Industrial Development Co., Ltd.

Tablet PC
Model No.: M910, NEXTab 9

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TEST REPORT VERIFICATION

Applicant : T-Link Industrial Development Co., Ltd.
Manufacturer : T-Link Industrial Development Co., Ltd.
EUT : Tablet PC
Model No. : M910, NEXTab 9
Trade Mark : NEXGeneration Electronics
Rating : DC 5.0V, 2.0A Via Adapter (Input AC 100-240V, 50/60Hz, 0.3A)

Measurement Procedure Used:

FCC Rules and Regulations Part 15 Subpart B 2012 & FCC / ANSI C63.4-2009

The device described above is tested by Shenzhen 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 Shenzhen 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.

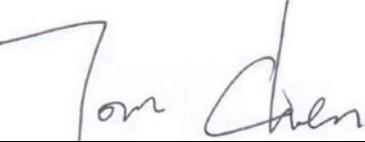
This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Anbotek Compliance Laboratory Limited.

Date of Test : Aug. 27~ Sep. 26, 2013



Prepared by : (Engineer/ Barak Ban)


Reviewer : (Project Manager/ Sally Zhang)


Approved & Authorized Signer : (Manager/ Tom Chen)


1. GENERAL INFORMATION

1.1. Description of Device (EUT)

Description : Tablet PC

Model Number : M910, NEXTab 9
(Note: All samples are the same except the model number and appearance color, so we prepare “NEXTab 9” for EMC test only.)

Test Power Supply : AC 120V/60Hz

Applicant : T-Link Industrial Development Co., Ltd.
Address : 2F A4th Bldg., Hekan Industrial Zone, WuHe Road S., Longgang District, Shenzhen, Guangdong, China 518129

Manufacturer : T-Link Industrial Development Co., Ltd.
Address : 2F A4th Bldg., Hekan Industrial Zone, WuHe Road S., Longgang District, Shenzhen, Guangdong, China 518129

Date of Sample received : Aug. 07, 2013

Date of Test : Aug. 27~ Sep. 26, 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
Printer	: Manufacturer:Brother M/N: MFC-3360C S/N: N/A CE, FCC:DOC
Power Cord of Printer	: Non-shielded, Detachable, 0.8m, w/o core
USB Cable for Printer	: Non-Shielded , 1.5m
Power Line	Non-Shielded, 1.5m
VGA Cable	: Non-Shielded, 1.5m
Network Cable	: Non-Shielded, 1.5m
USB Cable for EUT	: Non-Shielded, 1.2m

2. POWER LINE CONDUCTED MEASUREMENT

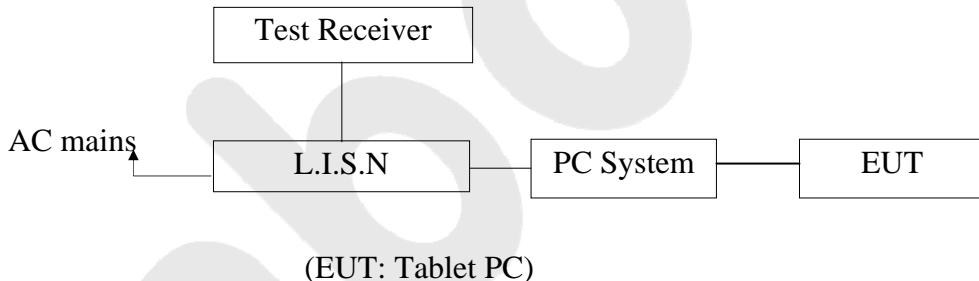
2.1. Test Equipment

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

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Two-Line V-network	Rohde & Schwarz	ENV216	100055	Apr. 23, 2013	1 Year
2.	EMI Test Receiver	Rohde & Schwarz	ESCI	100627	Apr. 23, 2013	1 Year
3.	RF Switching Unit	Compliance Direction	RSU-M2	38303	Apr. 23, 2013	1 Year

2.2. Block Diagram of Test Setup

2.2.1. Block diagram of connection between the EUT and simulators



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 : NEXTab 9
Applicant : T-Link Industrial Development Co., Ltd.

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 on mode (Charging and Communication) 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.

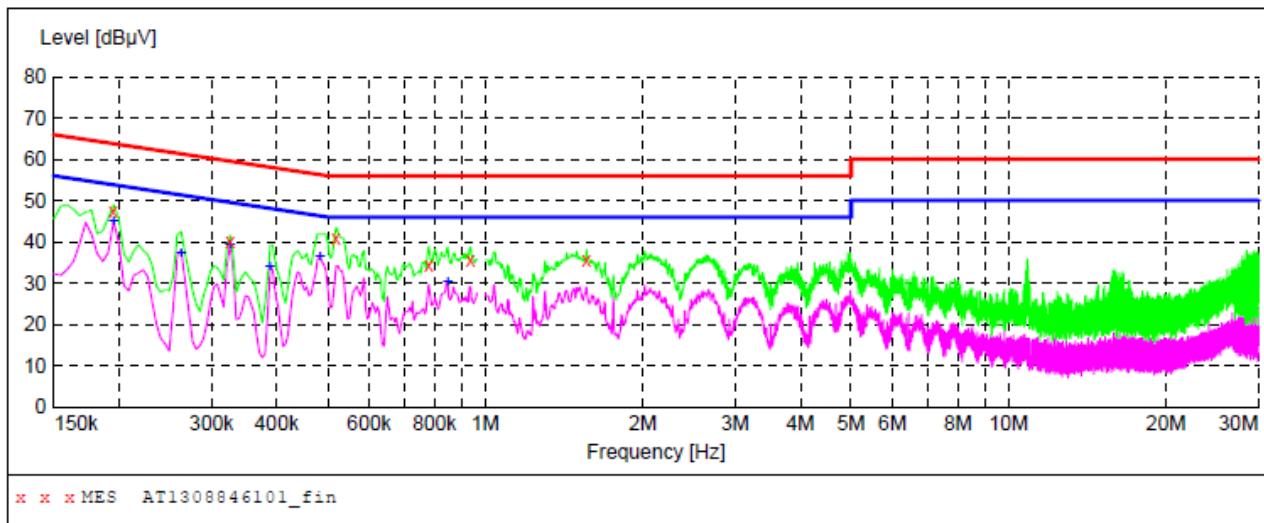
The test curves are shown in the following pages.

CONDUCTED EMISSION TEST DATA

EUT: Tablet PC M/N:NEXTab 9
 Operating Condition: Charging and Communication
 Test Site: 1# Shielded Room
 Operator: Barak Ban
 Test Specification: AC 120V/60Hz for PC
 Comment: L
 Tem:25°C Hum:50%



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

**MEASUREMENT RESULT: "AT1308846101_fin"**

8/29/2013 9:44AM

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.195000	47.40	20.1	64	16.4	QP	L1	GND
0.325500	39.90	20.1	60	19.7	QP	L1	GND
0.519000	41.00	20.1	56	15.0	QP	L1	GND
0.780000	34.60	20.1	56	21.4	QP	L1	GND
0.937500	35.60	20.1	56	20.4	QP	L1	GND
1.562500	35.60	20.3	56	20.4	QP	L1	GND

MEASUREMENT RESULT: "AT1308846101_fin2"

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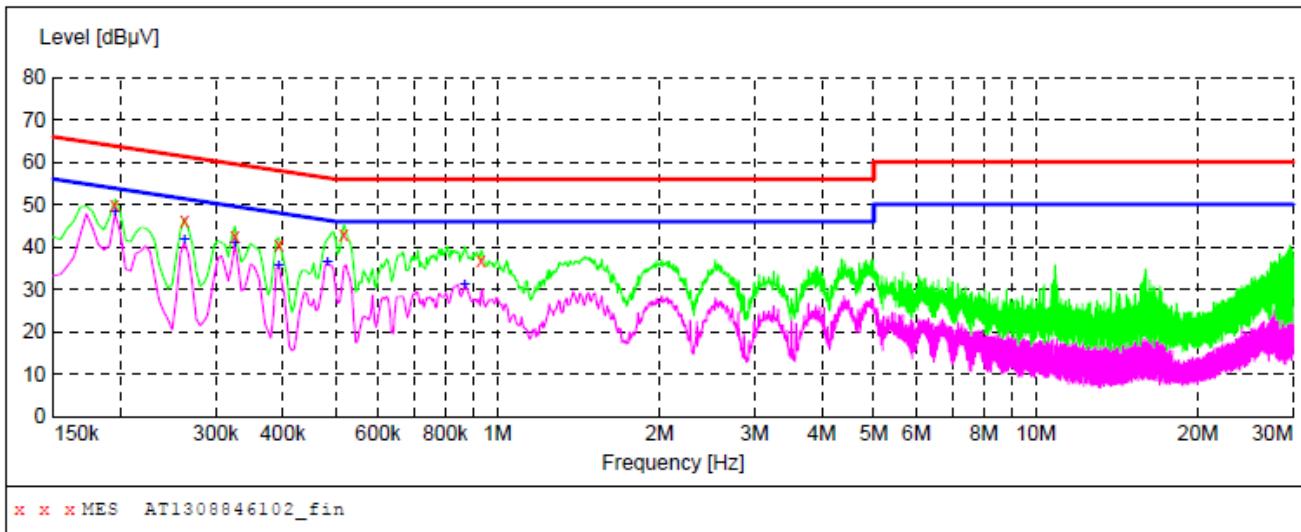
Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.195000	45.00	20.1	54	8.8	AV	L1	GND
0.262500	37.20	20.1	51	14.2	AV	L1	GND
0.325500	39.40	20.1	50	10.2	AV	L1	GND
0.388500	33.90	20.1	48	14.2	AV	L1	GND
0.483000	36.40	20.1	46	9.9	AV	L1	GND
0.847500	30.20	20.1	46	15.8	AV	L1	GND

CONDUCTED EMISSION TEST DATA

EUT: Tablet PC M/N:NEXTab 9
 Operating Condition: Charging and Communication
 Test Site: 1# Shielded Room
 Operator: Barak Ban
 Test Specification: AC 120V/60Hz for PC
 Comment: N
 Tem:25°C Hum:50%



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



MEASUREMENT RESULT: "AT1308846102_fin"

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.195000	50.00	20.1	64	13.8	QP	N	GND
0.262500	46.10	20.1	61	15.3	QP	N	GND
0.325500	42.40	20.1	60	17.2	QP	N	GND
0.393000	40.40	20.1	58	17.6	QP	N	GND
0.519000	43.00	20.1	56	13.0	QP	N	GND
0.933000	36.70	20.1	56	19.3	QP	N	GND

MEASUREMENT RESULT: "AT1308846102_fin2"

Frequency MHz	Level dB μ V	Transd dB	Limit dB μ V	Margin dB	Detector	Line	PE
0.195000	48.10	20.1	54	5.7	AV	N	GND
0.262500	41.80	20.1	51	9.6	AV	N	GND
0.325500	40.80	20.1	50	8.8	AV	N	GND
0.393000	35.70	20.1	48	12.3	AV	N	GND
0.483000	36.30	20.1	46	10.0	AV	N	GND
0.870000	31.10	20.1	46	14.9	AV	N	GND

3. RADIATED EMISSION MEASUREMENT

3.1. Test Equipment

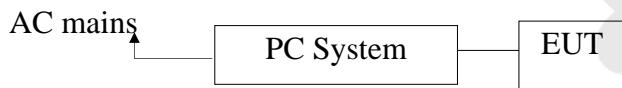
The following test equipments are used during the radiated emission measurement:

3.1.1. For Anechoic Chamber

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	EMI Test Receiver	Rohde & Schwarz	ESPI	101604	Apr. 23, 2013	1 Year
2.	Bilog Broadband Antenna	Schwarzbeck	VULB9163	VULB 9163-289	May 14, 2013	3 Year
3.	Pre-amplifier	SONOMA	310N	186860	Aug. 09, 2013	1 Year

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

ANTENNA TOWER

ANTENNA ELEVATION VARIES FROM 1 TO 4 METERS

3 METERS

EUT SYSTEM

TURN TABLE

0.8 METERS

GROUND PLANE

(EUT: Tablet PC)

3.3. Radiated Emission Limit (Subpart B Class B)

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		μ V/m	dB(μ V)/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) μ V = 20 log Emission level μ V/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 : NEXTab 9
 Applicant : T-Link Industrial Development Co., Ltd.

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.

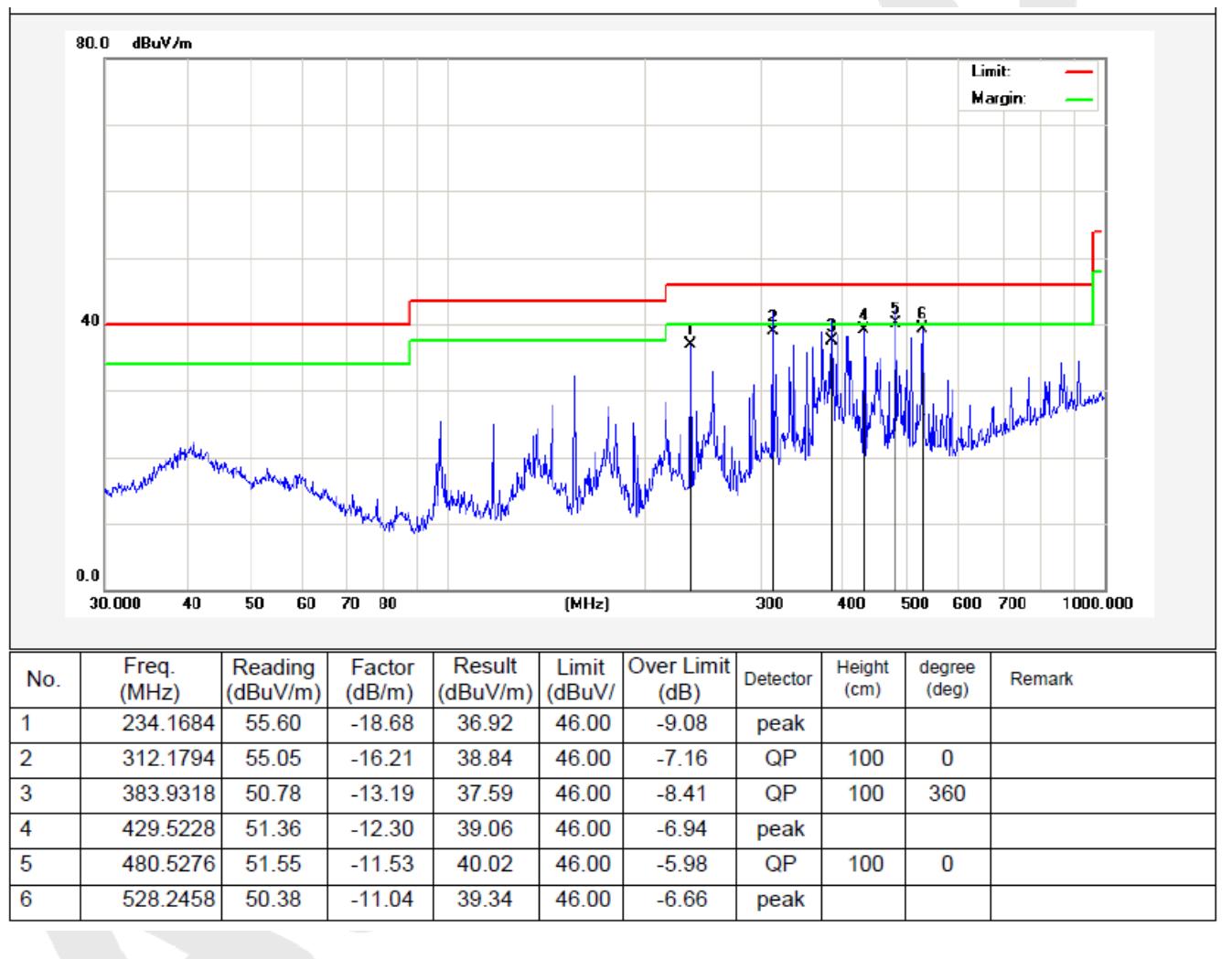
The test mode (Charging and Communication) is tested in chamber and all the test results are listed in Section 3.7.

3.7. Radiated Emission Measurement Results

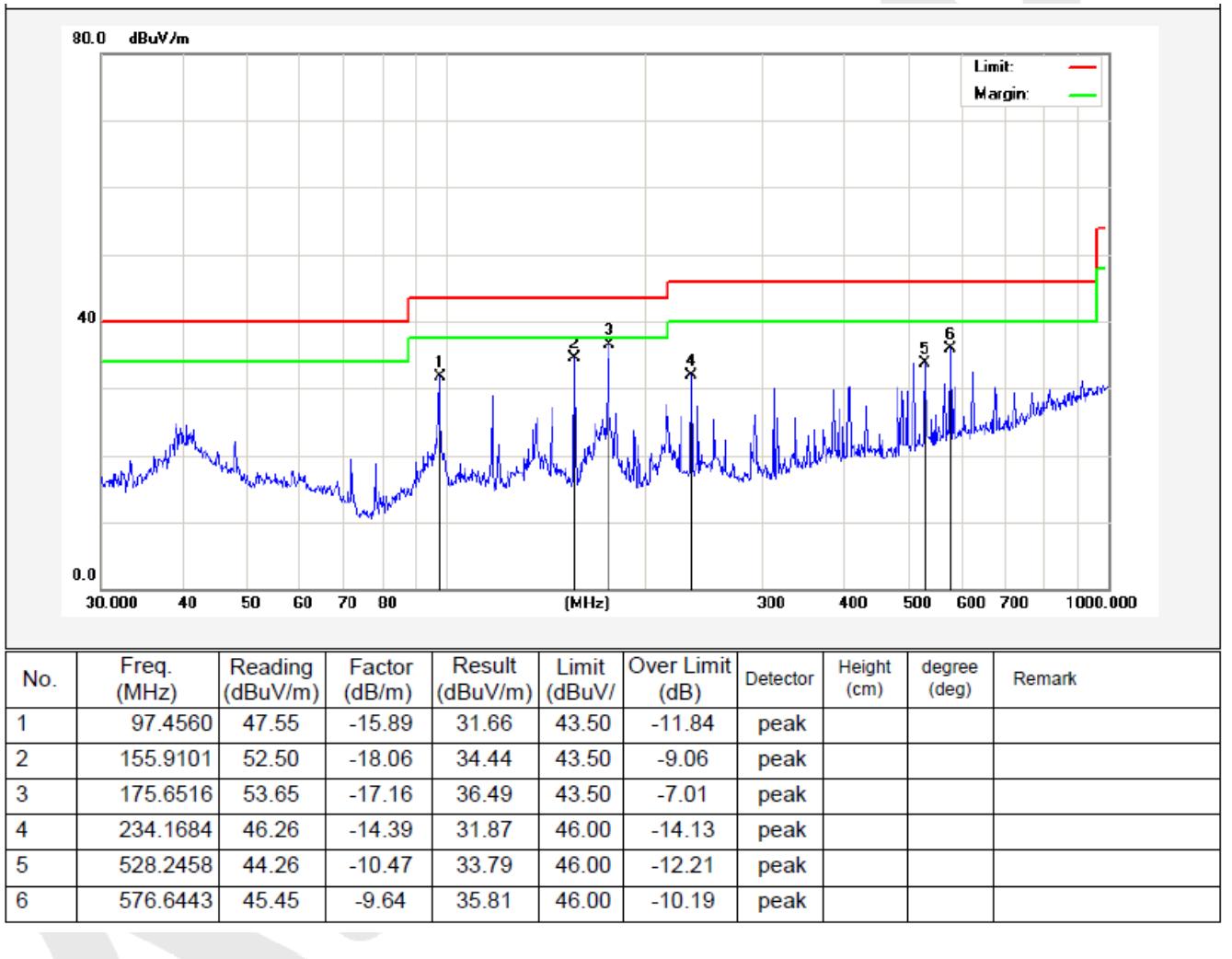
PASS.

The test curves are shown in the following pages.

Job No.:	AT1308846F	Polarziation:	Horizontal
Standard:	(RE)FCC PART15 B _3m	Power Source:	AC 120V/60Hz for PC
Test item:	Radiation Test	Date:	2013/08/28
Temp.(C)/Hum.(%RH):	24.3(C)/55%RH	Time:	19/57/28
EUT:	Tablet PC	Test By:	Barak Ban
Model:	NEXTab 9	Distance:	3m
Note:	Charging and Communication		



Job No.:	AT1308846F	Polarization:	Vertical
Standard:	(RE)FCC PART15 B _3m	Power Source:	AC 120V/60Hz for PC
Test item:	Radiation Test	Date:	2013/08/28
Temp.(C)/Hum.(%RH):	24.3(C)/55%RH	Time:	19/53/19
EUT:	Tablet PC	Test By:	Barak Ban
Model:	NEXTab 9	Distance:	3m
Note:	Charging and Communication		



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

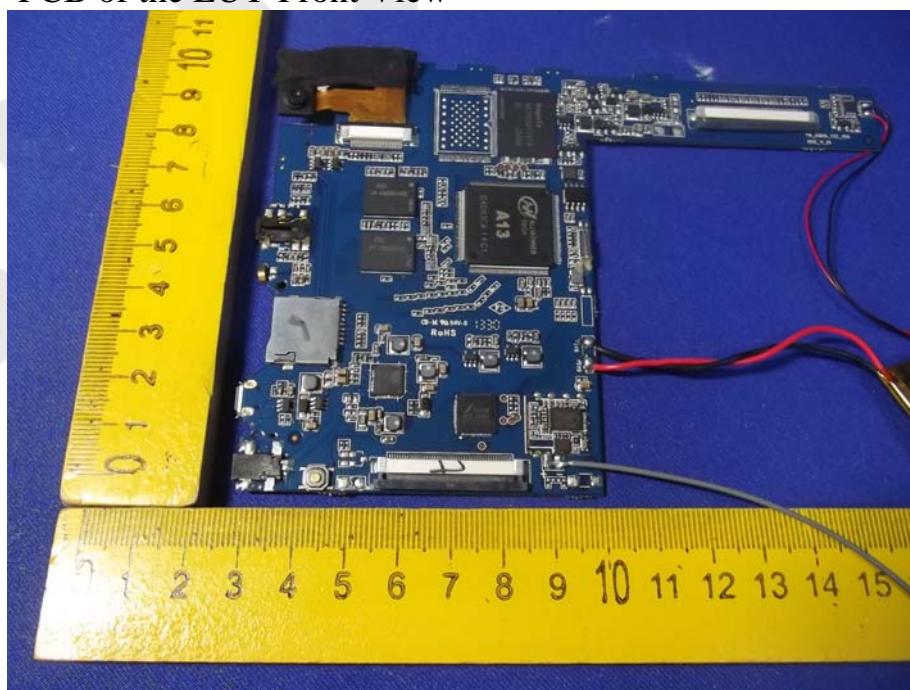


Figure 7
PCB of the EUT-Back View

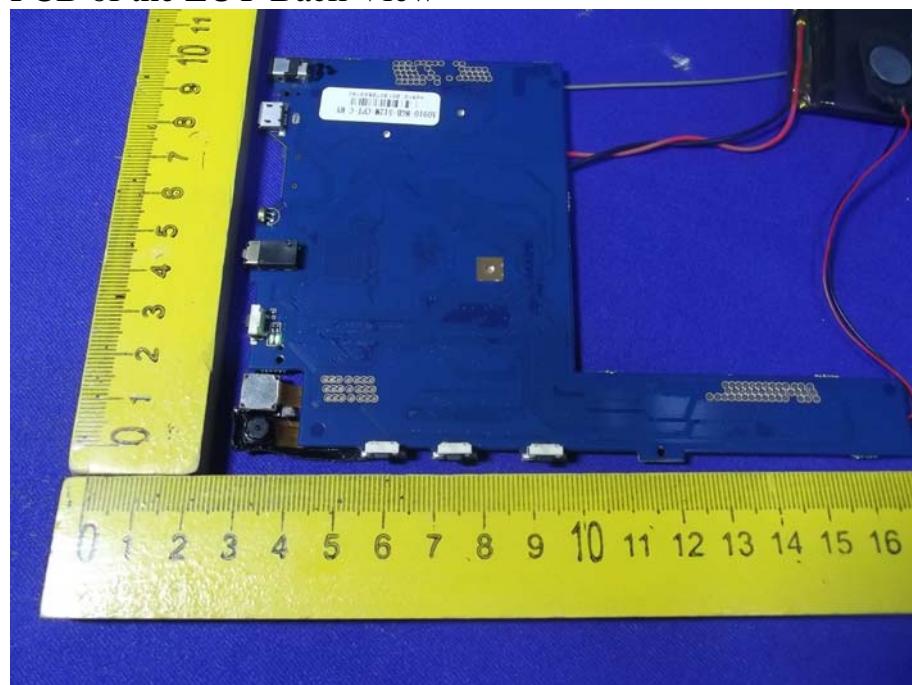


Figure 8
PCB of the EUT-Front View

