

Shenzhen Huatongwei International Inspection Co., Ltd.

Keji S,12th, Road, Hi-tech Industrial Park, Shenzhen, Guangdong, China http://www.szhtw.com.cn

Phone:86-755-26748099

Fax:86-755-26748089





guchao.wang
Wemliamy



FCC TEST REPORT

47 CFR FCC Part 15 Subpart B

Report Reference No..... TRE1311014602 R/C: 53113

FCC ID.....: 2AASXMT-901

Compiled by

(position+printed name+signature)... File administrators Eric Wang

Supervised by

Test Engineer Yuchao Wang (position+printed name+signature)..:

Approved by

(position+printed name+signature)... Manager Wenliang Li

Date of issue..... Dec 10, 2013

Shenzhen Huatongwei International Inspection Co., Ltd Testing Laboratory Name:

Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China Address:

Applicant's name..... **MEERA INTERNATIONAL LIMITED**

301 Kam On Building, 176A Queen's Road Central, Central, Hong Address:

Kong

Test specification:

ANSI C63.4: 2009

Master TRF.....: Dated 2006-06

Shenzhen Huatongwei International Inspection Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen Huatongwei International Inspection Co., Ltd is acknowledged as copyright owner and source of the material. Shenzhen Huatongwei International Inspection Co., Ltd takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.

Test item description: TABLET PC

Trade Mark /

Model/Type reference...... MT-901

Listed Models MT-901,NTB-901

Manufacturer SHENZHEN LUCKYSTARS TECHNOLOGY CO., LTD

Rating: DC 3.70V/DC 5.0V adapter from AC120V/60Hz

Android version Android 4.1.1

Result....: **PASS** Report No.: TRE1311014602 Page 2 of 23 Issued:2013-12-10

TEST REPORT

Equipment under Test : TABLET PC

Model /Type : MT-901

Listed Models : MT-901,NTB-901

Applicant : MEERA INTERNATIONAL LIMITED

Address : 301 Kam On Building, 176A Queen's Road Central,

Central, Hong Kong

Manufacturer SHENZHEN LUCKYSTARS TECHNOLOGY CO., LTD

Address : 21st Fl., Fuchun Orient Bldg., 7006# Shennan Ave.,

Futian CBD, Shenzhen 518040, P.R.C

Test Result	PASS

The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Report No.: TRE1311014602 Page 3 of 23 Issued:2013-12-10

Contents

<u>1.</u>	IESI SIANDARDS	<u> 4</u>
<u>2.</u>	SUMMARY	5
2.1.	General Remarks	5
2.2.	Product Description	5
2.3.	Equipment Under Test	5
2.4.	EUT operation mode	5
2.5.	Related Submittal(s) / Grant (s)	5
2.6.	Internal Identification of AE used during the test	5
2.7.	Modifications	6
2.8.	EUT configuration	6
2.9.	Configuration of Tested System	6
2.10.	NOTE	7
<u>3.</u>	TEST ENVIRONMENT	8
3.1.	Address of the test laboratory	8
3.2.	Test Facility	8
3.3.	Environmental conditions	9
3.4.	Statement of the measurement uncertainty	9
3.5.	Equipments Used during the Test	9
<u>4.</u>	TEST CONDITIONS AND RESULTS	10
4.1.	Conducted Emissions Test	10
4.2.	Radiated Emission Test	12
<u>5.</u>	TEST SETUP PHOTOS OF THE EUT	16
6	EXTERNAL AND INTERNAL PHOTOS OF THE FUT	17

Report No.: TRE1311014602 Page 4 of 23 Issued:2013-12-10

1. TEST STANDARDS

The tests were performed according to following standards:

47 CFR FCC Part 15 Subpart B - Unintentional Radiators

<u>ANSI C63.4: 2009</u> – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40GHz

Report No.: TRE1311014602 Page 5 of 23 Issued:2013-12-10

2. SUMMARY

2.1. General Remarks

Date of receipt of test sample	:	Nov 29, 2013
Testing commenced on	:	Dec 05, 2013
Testing concluded on	:	Dec 05, 2013

2.2. Product Description

The **MEERA INTERNATIONAL LIMITED**'s Model: MT-901 or the "EUT" as referred to in this report; more general information as follows, for more details, refer to the user's manual of the EUT.

Name of EUT	TABLET PC
Model Number	MT-901,NTB-901
FCC ID	2AASX-MT901
WLAN	Supported 802.11b/802.11g/802.11n
Antenna Type	Internal
	IEEE 802.11b: 2412MHz—2462MHz
WLAN FCC Operation frequency	IEEE 802.11g: 2412MHz—2462MHz
WEAR FCC Operation frequency	IEEE 802.11n HT20: 2412MHz—2462MHz
	IEEE 802.11n HT40: 2422MHz—2452MHz
	IEEE 802.11b: DSSS(CCK,DQPSK,DBPSK)
WLAN Modulation	IEEE 802.11g: OFDM(64QAM, 16QAM, QPSK, BPSK)
WLAN MODULATION	IEEE 802.11n HT20: OFDM (64QAM, 16QAM, QPSK,BPSK)
	IEEE 802.11n HT40: OFDM (64QAM, 16QAM, QPSK,BPSK)
Android Version	Android 4.1.1

2.3. Equipment Under Test

Power supply system utilised

Power supply voltage	0	120V / 60 Hz	0	115V / 60Hz
	0	12 V DC	0	24 V DC
	•	Other (specified in blank below))

DC 3.70V/DC 5.0V Adapter from AC 120V/60Hz

2.4. EUT operation mode

The EUT has been tested under typical operating condition.

2.5. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for **FCC ID:2AASXMT-901** filing to comply with the FCC Part 15, Subpart B Rules.

2.6. Internal Identification of AE used during the test

AE ID*	Description
Adapter	Charger

Report No.: TRE1311014602 Page 6 of 23 Issued:2013-12-10

Adapter

Model: THX-050200KE

Input: 100-240V~50/60Hz 0.65A Output: OUTPUT: 5.0V DC 2.0A

Power Cable: 100cm

○ Shielded Unshielded

*AE ID: is used to identify the test sample in the lab internally. Note: We not used Charger when FCC Part 15B test.

2.7. **Modifications**

No modifications were implemented to meet testing criteria.

2.8. EUT configuration

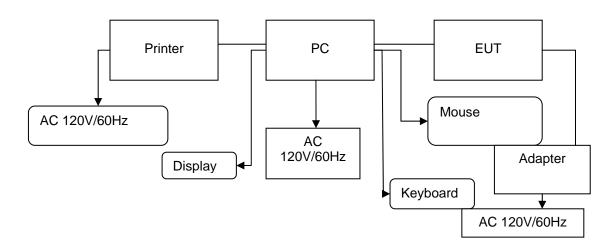
The following peripheral devices and interface cables were connected during the measurement:

- supplied by the manufacturer
- O supplied by the lab

0	Power Cable	Length (m):	/
		Shield :	/
		Detachable :	/
0	Multimeter	Manufacturer:	/
		Model No.:	/

2.9. Configuration of Tested System

Configuration of Tested System



	Equipment Used in Tested System							
No.	Equipment	Manufacturer	Model No.	Serial No.	Length	shielded/unshielded	Notes	
1	PC	DELL	DIMEN SION E520	1RNN42X	/	/	DOC	
2	Printer	ESPOn	C3990	C3990A	/	/	DOC	
3	Mouse	DELL	MO56U OA	G0E02SY7	1.00m	unshielded	DOC	
4	Display	DELL	1707FPt	CN-OFC237-71618- 65G-AAKC	/	/	DOC	
5	Keyboard	DELL	L100	CNRH65665890726	/	/	DOC	

Report No.: TRE1311014602 Page 7 of 23 Issued:2013-12-10

				009L			
6	USB Cable (EUT to PC)	Star Computer Group	USB 2.0	N/A	0.80m	unshielded	N/A
7	USB Cable (Printer to PC)	Genshuo	USB 2.0	N/A	1.20m	unshielded	N/A
8	Power line	/	/	N/A	1.00m	unshielded	N/A

2.10. NOTE

1. The EUT is a TABLET PC with WLAN fuction, The functions of the EUT listed as below:

	Test Standards	Reference Report
WLAN 802.11b/g/n	FCC Part 15 Subpart C	TRE1311014601
USB Port	FCC Part 15 Subpart B	TRE1311014602
RF Exposure	FCC Per 47 CFR 2.1093(d)	TRE1311014603

Report No.: TRE1311014602 Page 8 of 23 Issued:2013-12-10

3. TEST ENVIRONMENT

3.1. Address of the test laboratory

Shenzhen Huatongwei International Inspection Co., Ltd Keji Nan No.12 Road, Hi-tech Park, Shenzhen, China Phone: 86-755-26715686 Fax: 86-755-26748089

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 (2003) and CISPR Publication 22.

3.2. Test Facility

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

CNAS-Lab Code: L1225

Shenzhen Huatongwei International Inspection Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2005 General Requirements) for the Competence of Testing and Calibration Laboratories, Date of Registration: Mar. 29, 2012. Valid time is until Feb. 28, 2015.

A2LA-Lab Cert. No. 2243.01

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. Valid time is until Sept. 30, 2015.

FCC-Registration No.: 662850

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Registration 662850, Renewal date June. 01, 2012, valid time is until June. 01, 2015.

IC-Registration No.: 5377A

The 3m Alternate Test Site of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 5377A on Jan. 25, 2011, valid time is until Jan. 24, 2014.

ACA

Shenzhen Huatongwei International Inspection Co., Ltd. EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our A2LA accreditation.

VCCI

The 3m Semi-anechoic chamber $(12.2m\times7.95m\times6.7m)$ and Shielded Room $(8m\times4m\times3m)$ of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-292. Date of Registration: Dec. 24, 2010. Valid time is until Dec. 23, 2013.

Main Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: C-2726. Date of Registration: Dec. 20, 2009. Valid time is until Dec. 19, 2012.

Telecommunication Ports Conducted Interference Measurement of Shenzhen Huatongwei International Inspection Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: T-1837. Date of Registration: May 07, 2010. Valid time is until May 06, 2013.

DNV

Shenzhen Huatongwei International Inspection Co., Ltd. has been found to comply with the requirements of DNV towards subcontractor of EMC and safety testing services in conjunction with the EMC and Low voltage Directives and in the voluntary field. The acceptance is based on a formal quality Audit and follow-ups according to relevant parts of ISO/IEC Guide 17025 (2005), in accordance with the requirements of the DNV Laboratory Quality Manual towards subcontractors. Valid time is until Aug. 24, 2016.

Report No.: TRE1311014602 Page 9 of 23 Issued:2013-12-10

3.3. Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature: 15-35 ° C

Humidity: 30-60 %

Atmospheric pressure: 950-1050mbar

3.4. Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to CISPR 16 - 4 "Specification for radio disturbance and immunity measuring apparatus and methods – Part 4: Uncertainty in EMC Measurements" and is documented in the Shenzhen Huatongwei International Inspection Co., Ltd quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen Huatongwei laboratory is reported:

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	30~1000MHz	4.24 dB	(1)
Radiated Emission	1~18GHz	5.16 dB	(1)
Radiated Emission	18-40GHz	5.54 dB	(1)
Conducted Disturbance	0.15~30MHz	3.39 dB	(1)

⁽¹⁾ This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3.5. Equipments Used during the Test

Cond	Conducted Emission							
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Due			
1	EMI TEST RECEIVER	Rohde & Schwarz	ESCI	100106	2014/10/25			
2	ARTIFICIAL MAINS	Rohde & Schwarz	ESH2-Z5	100028	2014/10/25			
3	PULSE LIMITER	Rohde & Schwarz	ESHSZ2	100044	2014/10/25			
4	EMI TEST SOFTWARE	Rohde & Schwarz	ES-K1	N/A	N/A			

Radia	Radiated Emission									
Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal. Due					
1	Ultra-Broadband Antenna	Rohde&Schwarz	HL562	100015	2014/10/25					
2	EMI TEST RECEIVER	Rohde&Schwarz	ESI 26	100009	2014/10/25					
3	EMI TEST Software	Rohde&Schwarz	ES-K1 V1.71	N/A	2014/10/25					
4	TURNTABLE	ETS	2088	2149	N/A					
5	ANTENNA MAST	ETS	2075	2346	N/A					
6	EMI TEST OFTWARE	Rohde&Schwarz	ESK1	N/A	N/A					
7	HORN ANTENNA	Rohde&Schwarz	HF906	100023	2014/10/25					
8	Amplifer	Sonoma	310N	E009-13	2014/10/25					
9	JS amplifer	Rohde&Schwarz	JS4-00101800- 28-5A	F201504	2014/10/25					
10	Amplifer Compliance Direction systems		PAP1-4060	120	2014/10/25					
11	Loop Antenna	Rohde&Schwarz	HFH2-Z2	100020	2014/10/25					
12	Horn Antenna	SCHWARZBECK	BBHA9170	25841	2014/10/25					
13	EMI TEST OFTWARE	Audix	E3	N/A	N/A					

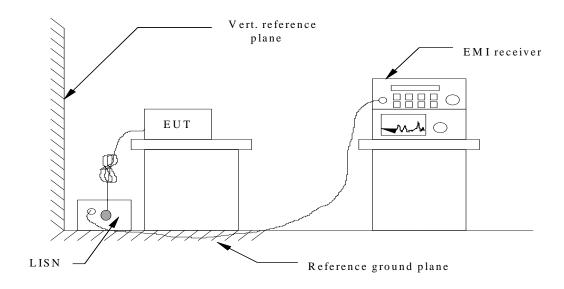
The calibration interval was one year.

Report No.: TRE1311014602 Page 10 of 23 Issued:2013-12-10

4. TEST CONDITIONS AND RESULTS

4.1. Conducted Emissions Test

TEST CONFIGURATION



TEST PROCEDURE

- 1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. 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 ANSI C63.4-2009.
- 2. Support equipment, if needed, was placed as per ANSI C63.4-2009.
- 3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4-2009.
- 4. The EUT received DC 5.0 from USB powered from AC120V/60Hz power through a Line Impedance Stabilization Network (LISN) which supplied power source and was grounded to the ground plane.
- 5. All support equipments received AC power from a second LISN, 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 30MHz for emissions in each of the test modes.
- 8. During the above scans, the emissions were maximized by cable manipulation.

CONDUCTED POWER LINE EMISSION LIMIT

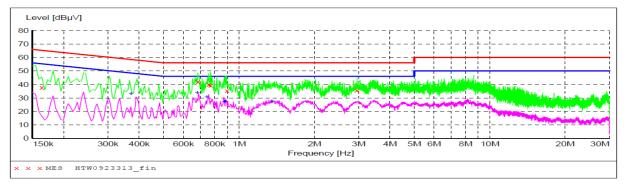
For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following:

Fraguanay		Maximum RF Lin	e Voltage (dBµV)				
Frequency (MHz)	CLAS	SS A	CLA	SS B			
(IVITIZ)	Q.P.	Ave.	Q.P.	Ave.			
0.15 - 0.50	79	66	66-56*	56-46*			
0.50 - 5.00	73	60	56	46			
5.00 - 30.0	73	60	60	50			

^{*} Decreasing linearly with the logarithm of the frequency

TEST RESULTS

SCAN TABLE: "Voltage (9K-30M)FIN" Short Description: 150K-30M Voltage



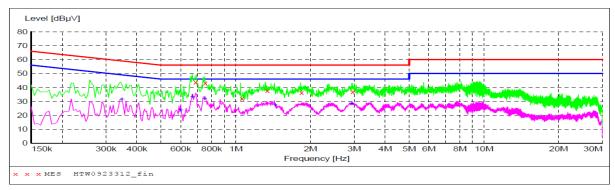
MEASUREMENT RESULT: "HTW0923313_fin"

1:	2/05/2013 1:	55PM						
	Frequency MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
	0.163500	37.60	10.1	65	27.7	QP	N	GND
	0.685500	42.10	10.2	56	13.9	OP	N	GND
	0.757500	39.80	10.2	56	16.2	ÕP	N	GND
	0.771000	39.20	10.2	56	16.8	ÕP	N	GND
	0.897000	35.40	10.2	56	20.6	ÕP	N	GND
	2.953500	35.60	10.3	56	20.4	~	N	GND

MEASUREMENT RESULT: "HTW0923313_fin2"

ctc	Dete	gin dB	Maı	Limit dBµV		Trans d	vel BµV		2013 quency MHz	
	AV	5.6	1	49	1	10.	.90	32	370500	0
	AV	2.3	1	46	2	10.	.70	33	681000	0
	AV	5.6	1	46	2	10.	.40	30	744000	0
	AV	8.9	1	46	2	10.	.10	27	874500	0
	AV	8.9	1	46	2	10.	.10	27	879000	0
	AV	8.6	1	46	3	10.	.40	27	351500	1

SCAN TABLE: "Voltage (9K-30M)FIN"
Short Description: 150K-30M Voltage



MEASUREMENT RESULT: "HTW0923312_fin"

12/05/2013 1 Frequency MHz		Transd dB	Limit dBµV	Margin dB	Detector	Line	PE
0.690000	43.70	10.2	56	12.3	QP	L1	GND
0.753000	43.10	10.2	56	12.9	QP	L1	GND
1.063500	32.00	10.3	56	24.0	QP	L1	GND
1.342500	37.60	10.3	56	18.4	QP	L1	GND
1.842000	36.30	10.3	56	19.7	QP	L1	GND
2.962500	36.70	10.3	56	19.3	QP	L1	GND

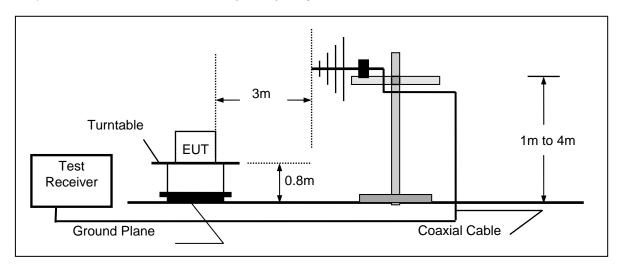
MEASUREMENT RESULT: "HTW0923312_fin2"

				_			
12/05/2013 1:	41PM						
Frequency					Detector	Line	PΕ
MHz	dBµV	dB	dBµV	dB			
0.348000	31.50	10.1	49	17.5	ΔV	L1	GND
0.600000	23.60	10.2	46		AV	L1	GND
0.667500	33.10	10.2	46	12.9	AV	L1	GND
0.748500	31.70	10.2	46	14.3	AV	L1	GND
1.441500	27.50	10.3	46	18.5	AV	L1	GND
2.931000	28.30	10.3	46	17.7	AV	L1	GND

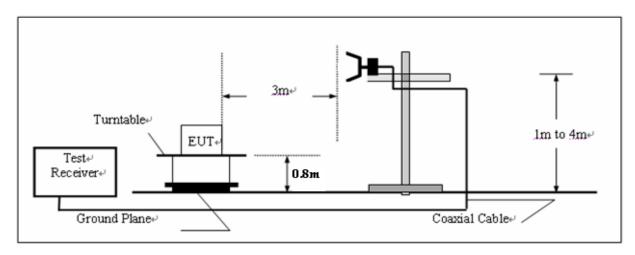
4.2. Radiated Emission Test

TEST CONFIGURATION

a) Radiated Emission Test Set-Up, Frequency below 1000MHz



b) Radiated Emission Test Set-Up, Frequency above 1000MHz



TEST PROCEDURE

- 1. The EUT is placed on a turntable, which is 0.8m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.
- 7. The maximum operation frequency was 512MHz, the radiated emission test frequency from 30MHz to 18GHz.

FIELD STRENGTH CALCULATION

The field strength is calculated by adding the Antenna Factor and Cable Factor and subtracting the Amplifier Gain and Duty Cycle Correction Factor (if any) from the measured reading. The basic equation with a sample calculation is as follows:

FS = RA + AF + CL - AG

Where FS = Field Strength	CL = Cable Attenuation Factor (Cable Loss)
RA = Reading Amplitude	AG = Amplifier Gain
AF = Antenna Factor	

For example

Frequency	FS	RA	AF	CL	AG	Transd
(MHz)	(dBµV/m)	(dBµV/m)	(dB)	(dB)	(dB)	(dB)
300.00	40	58.1	12.2	1.6	31.90	

Transd=AF +CL-AG

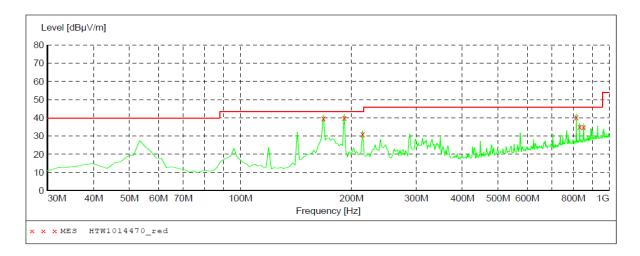
RADIATION LIMIT

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency (MHz)	Distance (Meters)	Radiated (dBµV/m)	Radiated (µV/m)
30-88	3	40.0	100
88-216	3	43.5	150
216-960	3	46.0	200
Above 960	3	54.0	500

TEST RESULTS

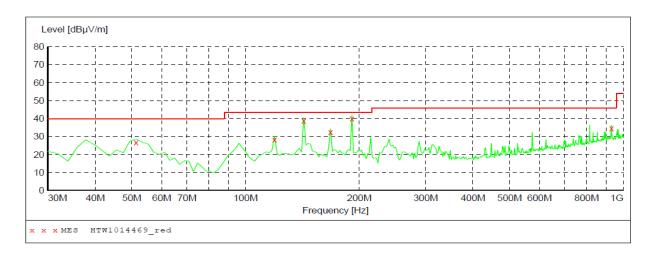
SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength



MEASUREMENT RESULT: "HTW1014470_red"

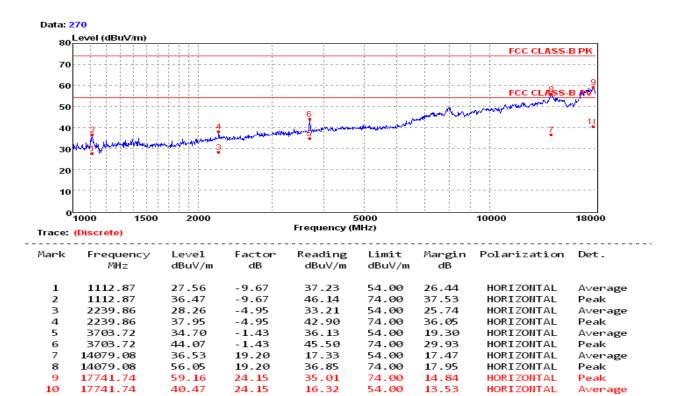
12/05/2013 8	:36PM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBµV/m	dB	dBµV/m	dB		cm	deg	
168.016032	39.70	-19.6	43.5	3.8	Qp	100.0	323.00	HORIZONTAL
191.342685	40.10	-17.8	43.5	3.4	Qp	100.0	258.00	HORIZONTAL
214.669339	31.00	-17.3	43.5	8.5	Qp	100.0	77.00	HORIZONTAL
815.330661	40.30	-5.6	46.0	5.7	Qp	300.0	24.00	HORIZONTAL
832.825651	35.20	-5.4	46.0	10.8	Qp	200.0	18.00	HORIZONTAL
854.208417	34.90	-4.9	46.0	11.1	Qp	100.0	18.00	HORIZONTAL

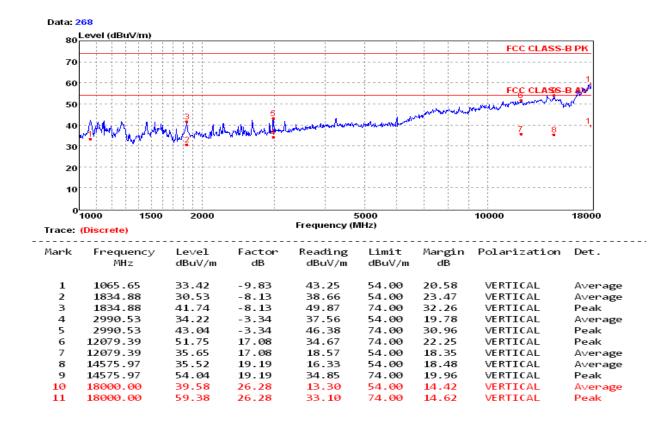
SWEEP TABLE: "test (30M-1G)"
Short Description: Field Strength



MEASUREMENT RESULT: "HTW1014469 red"

12/05/2013 8	:33PM							
Frequency	Level	Transd	Limit	Margin	Det.	Height	Azimuth	Polarization
MHz	dBμV/m	dB	dBμV/m	dB		cm	deg	
51.382766	26.60	-15.7	40.0	13.4	Qp	100.0	142.00	VERTICAL
119.418838	28.30	-18.8	43.5	11.2	Qp	100.0	6.00	VERTICAL
142.745491	38.70	-20.4	43.5	4.8	Qp	100.0	88.00	VERTICAL
168.016032	32.30	-19.6	43.5	11.2	Qp	100.0	77.00	VERTICAL
191.342685	39.90	-17.8	43.5	3.6	Qp	100.0	119.00	VERTICAL
931.963928	34.40	-4.0	46.0	11.6	Qp	100.0	6.00	VERTICAL





5. Test Setup Photos of the EUT

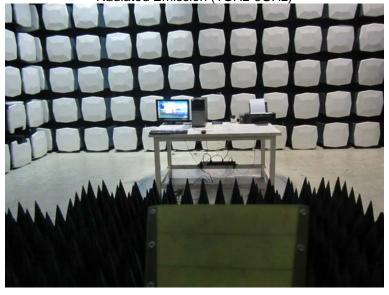
Conducted Emission (AC Mains)



Radiated Emission (30MHz-1GHz)



Radiated Emission (1GHz-6GHz)



Report No.: TRE1311014602 Page 17 of 23 Issued:2013-12-10

6. External and Internal Photos of the EUT

External Photos











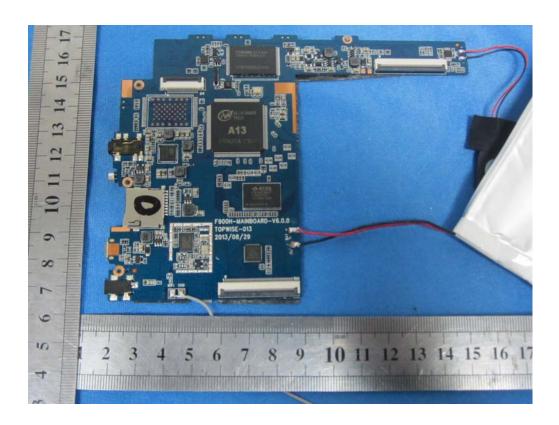




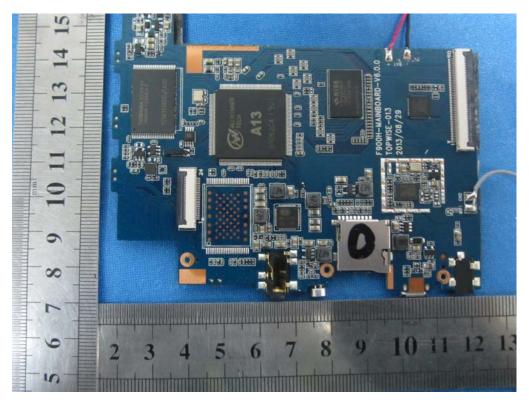


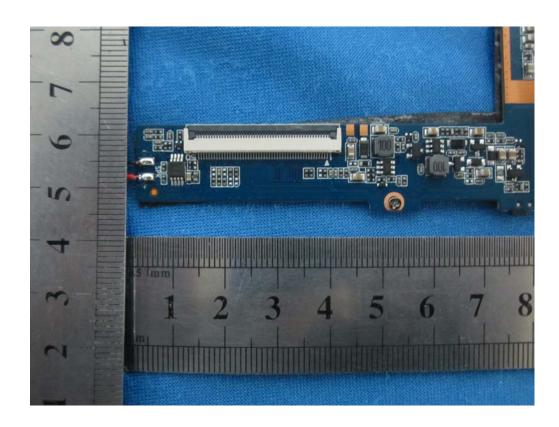
Internal Photos

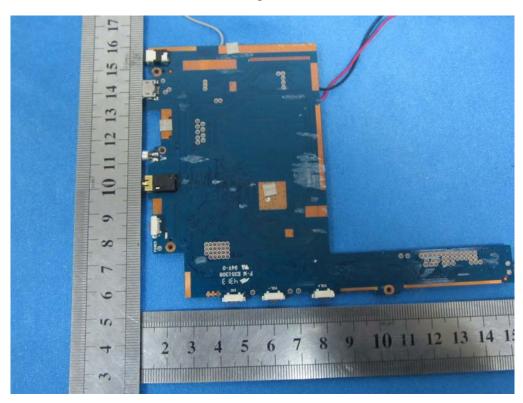


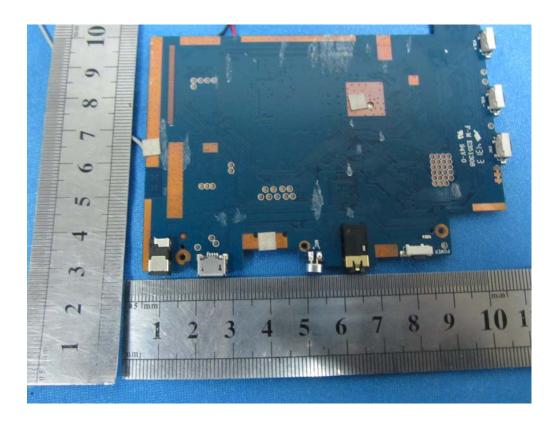


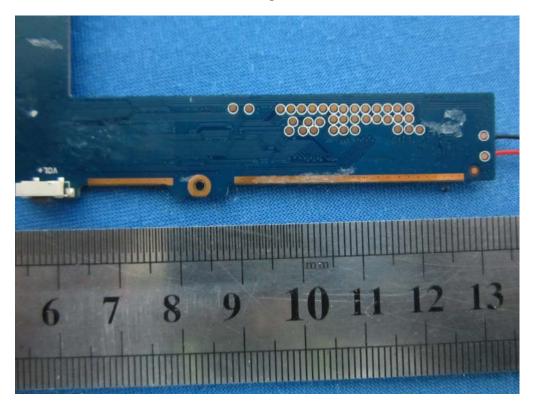














.....End of Report.....