

## EMC TEST REPORT



Applicant:	Corporativo Lanix S.A. de C.V.
Address:	Carretera Internacional Hermosillo-Nogales Km 8.5, Hermosillo Sonora, Mexico

Manufacturer or Supplier	Tinno Mobile Technology Corp.
Address	4/F., H-3 Building, OCT Eastern Industrial Park. NO.1 XiangShan East Road., Nan Shan District, Shenzhen, P.R.China.
Product	smartphone
Brand Name	LANIX
Model Name	Ilium X510
FCC ID	ZC4X510
Date of tests	Fed. 19, 2016 ~ Mar. 02, 2016

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

- FCC Part 15, Subpart B, Class B**
- ANSI C63.4:2009**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Amyee Qian Engineer / Mobile Department	Approved by William Chung Manager / Mobile Department
	  Date: Mar. 03, 2016

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification



## Table of Contents

RELEASE CONTROL RECORD.....	3
1 GENERAL INFORMATION.....	4
1.1 GENERAL DESCRIPTION OF EUT.....	4
1.2 SUMMARY OF TEST RESULTS.....	5
1.3 MEASUREMENT UNCERTAINTY .....	5
1.4 DESCRIPTION OF TEST MODES.....	6
1.5 DESCRIPTION OF SUPPORT UNITS.....	7
1.6 CONFIGURATION OF SYSTEM UNDER TEST .....	8
2 EMISSION TEST.....	9
2.1 CONDUCTED EMISSION MEASUREMENT.....	9
2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....	9
2.1.2 TEST INSTRUMENTS.....	9
2.1.3 TEST PROCEDURES.....	10
2.1.4 DEVIATION FROM TEST STANDARD .....	10
2.1.5 TEST SETUP.....	11
2.1.6 EUT OPERATING CONDITIONS.....	11
2.1.7 TEST RESULTS.....	12
2.2 RADIATED EMISSION MEASUREMENT.....	14
2.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT.....	14
2.2.2 TEST INSTRUMENTS.....	15
2.2.3 TEST PROCEDURE .....	16
2.2.4 DEVIATION FROM TEST STANDARD .....	16
2.2.5 TEST SETUP.....	17
2.2.6 EUT OPERATING CONDITIONS .....	17
2.2.7 TEST RESULTS.....	18
3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.....	21



**BUREAU**  
**VERITAS**

Test Report No.: FV160218W004

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FV160218W004	Original release	Mar. 03, 2016

# 1 GENERAL INFORMATION

## 1.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	smartphone	
<b>MODEL NAME</b>	Ilium X510	
<b>NOMINAL VOLTAGE</b>	5.0Vdc (adapter or host equipment) 3.8Vdc (Li-ion, battery)	
<b>BATTERY</b>	Brand Name: LANIX Model Name: Ilium X510-BAT Power Rating: DC 3.8V, 2000mAh, Li-ion	
<b>MODULATION TYPE</b>	<b>WLAN</b>	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
	<b>Bluetooth</b>	GFSK, $\pi/4$ -DQPSK, 8DPSK
	<b>GSM/EDGE</b>	GMSK, 8PSK
	<b>WCDMA</b>	BPSK/QPSK
<b>OPERATING FREQUENCY</b>	<b>WLAN</b>	2412 ~ 2462MHz for 11b/g/n(HT20) 2422 ~ 2452MHz for 11n(HT40)
	<b>Bluetooth</b>	2402MHz ~ 2480MHz
	<b>GSM/EDGE</b>	824.2MHz ~ 848.8MHz (FOR GSM 850) 1850.2MHz ~ 1909.8MHz (FOR PCS 1900)
	<b>WCDMA</b>	1852.4MHz ~ 1907.6MHz (FOR WCDMA 850) 826.4MHz ~ 846.6MHz (FOR WCDMA 1900)
<b>HW Version</b>	V1.0	
<b>SW Version</b>	Ilium X510_TELCEL_SW_01	
<b>I/O PORTS</b>	Refer to user's manual	
<b>CABLE</b>	USB cable: Unshielded, detachable, 1.0m Earphone cable: Unshielded, detachable, 1.0m	
<b>ACCESSORY DEVICES</b>	Refer to note as below	

**NOTE:**

- For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
- The EUT was powered by the following adapter:

<b>ADAPTER</b>	
<b>BRAND:</b>	LANIX
<b>MODEL:</b>	Ilium X510-C
<b>INPUT:</b>	AC 100-240V,150mA
<b>OUTPUT:</b>	DC 5V, 1000mA

- The EUT matched the following USB cable and Earphone:

<b>USB CABLE</b>	
<b>BRAND:</b>	N/A
<b>MODEL:</b>	N/A
<b>SIGNAL LINE:</b>	1.0 METER

EARPHONE	
BRAND:	LANIX
MODEL:	N/A
SIGNAL LINE:	1.0 METER

4. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

## 1.2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart B			
Standard Section	Test Item	Result	Remark
FCC Part 15, Subpart B, Class B ANSI C63.4:2009	Conducted Test	PASS	Meets limits minimum passing margin is -2.88dB at 0.456000MHz.
	Radiated Emission Test (30MHz ~ 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -5.35dB at 85.30MHz
	Radiated Emission Test (Above 1GHz)	PASS	Meets Class B Limit Minimum passing margin is -5.89dB at 5692MHz

## 1.3 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	+/-2.66dB
Radiated emissions	30MHz ~ 1GHz	+/-4.06dB
	1GHz ~ 18GHz	+/-4.58dB

## 1.4 DESCRIPTION OF TEST MODES

Test Mode	Test Condition
<b>Radiated emission test</b>	
1	GSM850 Idle + Adapter + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Mpeg4
2	WCDMA B5 Idle + Adapter + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Camera
3	WCDMA B2 Idle + Adapter + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Mpeg4
4	PCS1900 Idle + USB Link + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Camera
<b>Conducted emission test</b>	
1	GSM850 Idle + Adapter + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Mpeg4
2	WCDMA B5 Idle + Adapter + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Camera
3	WCDMA B2 Idle + Adapter + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Mpeg4
4	PCS1900 Idle + USB Link + USB cable + Battery+ Earphone + BT Idle + Wifi Idle(2.4G) + Camera

**NOTE:**

1. For conducted emission test, test mode 2 was the worst case and only this mode was presented in this report.
2. For radiated emission test, test mode 4 was the worst case and only this mode was presented in this report.

## 1.5 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

### FOR EMISSION TESTS

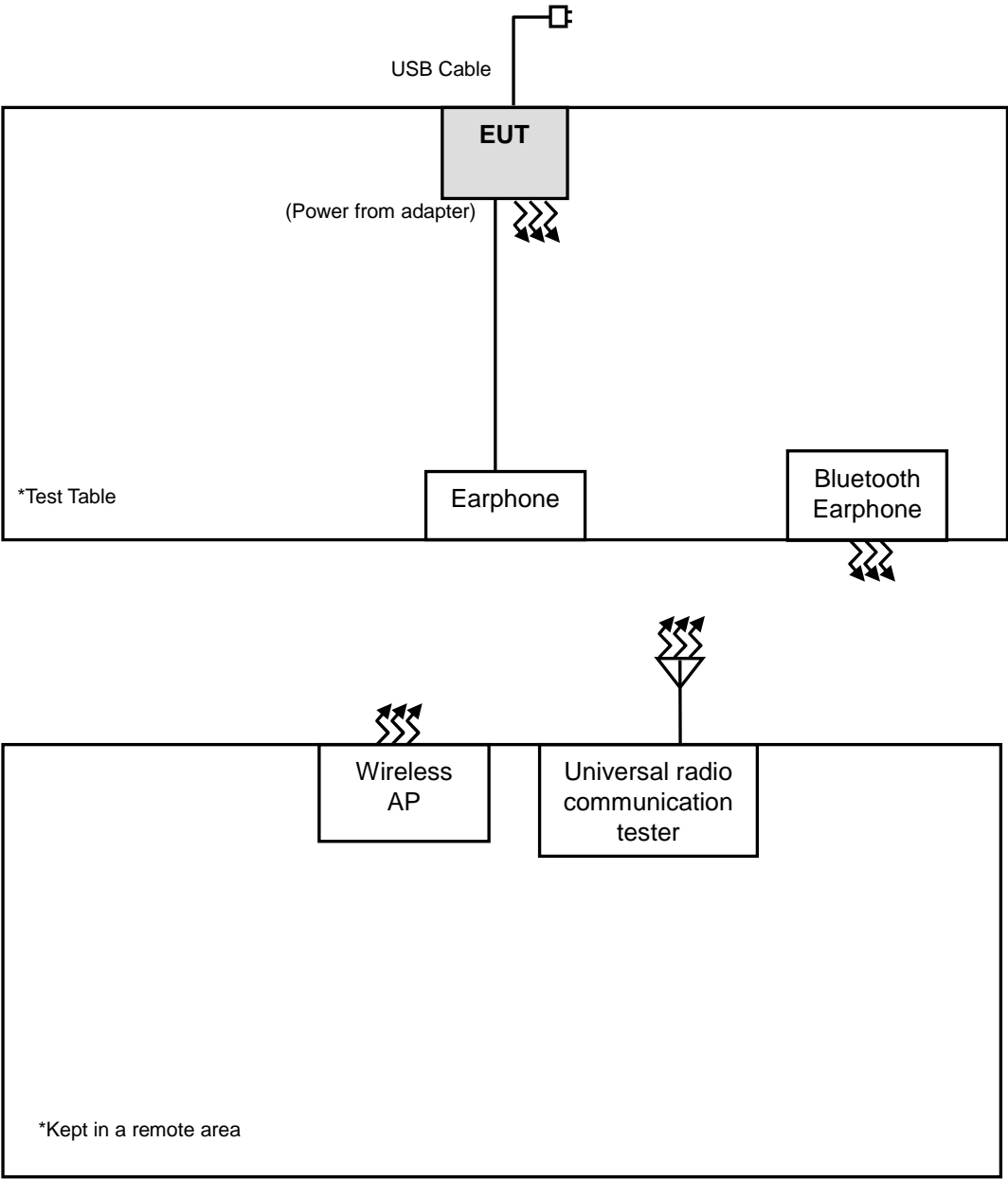
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Universal Radio Communication Tester	R&S	CMU200	123259	N/A
2	Wireless AP	ABOCOM	WR224GR	060500749P	D43064
3	Bluetooth Earphone	FAP00	H6080	12098	N/A
4	Notebook	DELL	E6420	9H12FS1	N/A
5	Mouse	DELL	M056UOA	01688082	N/A
6	Printer	HP	hp LaserJet 1300	CNSJF75989	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	N/A
2	N/A
3	N/A
4	DC Line: Unshielded, Undetachable, 2.0m
5	USB Line: Unshielded, Undetachable 1.8m;
6	USB Line: Shielded, Detachable 1.5m;

#### NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Items 3-4 acted as communication partners.

# 1.6 CONFIGURATION OF SYSTEM UNDER TEST





## 2 EMISSION TEST

### 2.1 CONDUCTED EMISSION MEASUREMENT

#### 2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

TEST STANDARD: FCC Part 15, Subpart B (Section: 15.107)

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 2.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESCS30	100340	May 11,15	May 10,16
Artificial Mains Network	Rohde&Schwarz	ENV216	101173	May 11,15	May 10,16
Artificial Mains Network	Rohde&Schwarz	ESH3-Z5	100317	May 11,15	May 10,16
Test software	ADT	ADT_Cond_V7.3.7	N/A	N/A	N/A

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  2. The test was performed in Dongguan Shielded Room 553.

### 2.1.3 TEST PROCEDURES

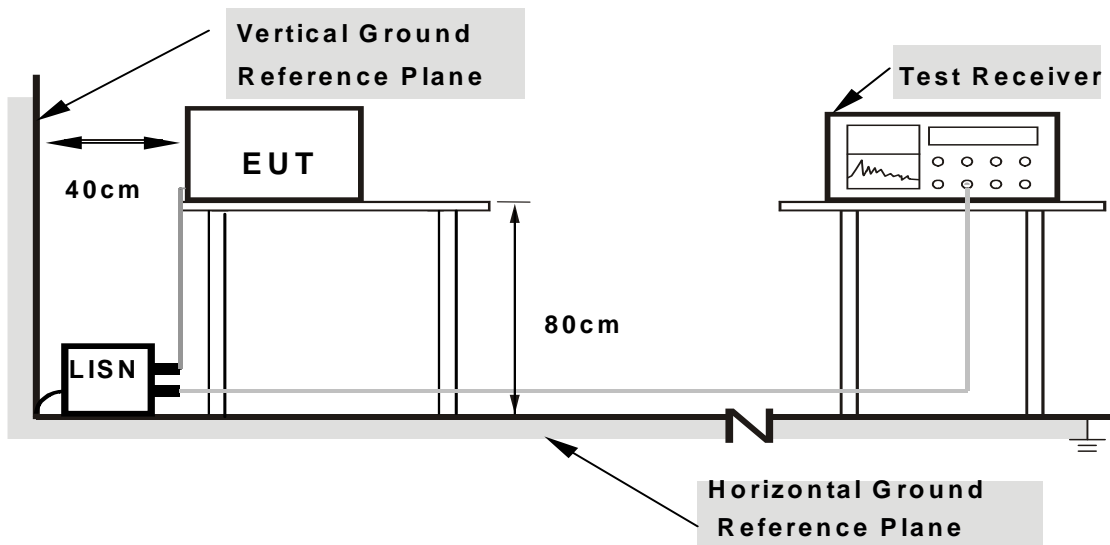
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.

### 2.1.4 DEVIATION FROM TEST STANDARD

No deviation.

## 2.1.5 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
  2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

## 2.1.6 EUT OPERATING CONDITIONS

- a. Turned on the power and connected of all equipment.
- b. EUT was operated according to the use type described in the manufacturer's specifications or the user's manual.

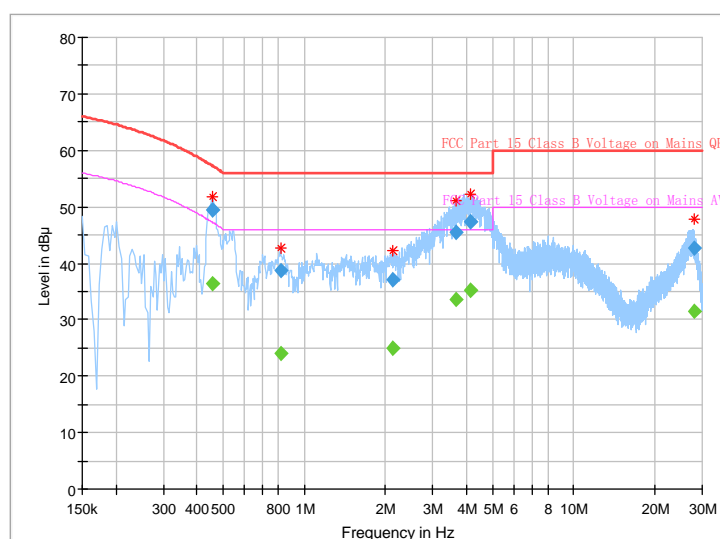
## 2.1.7 TEST RESULTS

<b>TEST VOLTAGE</b>	DC 5V From Adapter Input 230 Vac, 50 Hz	<b>6dB BANDWIDTH</b>	9 kHz
<b>ENVIRONMENTAL CONDITIONS</b>	24deg. C, 55RH	<b>TESTED BY</b>	Aizhong Tang

Frequency (MHz)	QuasiPeak (dB $\mu$ V)	CAverage (dB $\mu$ V)	Limit (dB $\mu$ V)	Margin (dB)	Line	Filter	Corr. (dB)
0.456000	---	36.31	47.26	-10.95	L	ON	9.7
0.456000	49.37	---	57.26	-7.89	L	ON	9.7
0.820000	---	24.07	46.00	-21.93	L	ON	9.7
0.820000	38.80	---	56.00	-17.20	L	ON	9.7
2.132000	---	24.85	46.00	-21.15	L	ON	9.7
2.132000	37.19	---	56.00	-18.81	L	ON	9.7
3.644000	---	33.69	46.00	-12.31	L	ON	9.7
3.644000	45.52	---	56.00	-10.48	L	ON	9.7
4.146000	---	35.32	46.00	-10.68	L	ON	9.7
4.146000	47.25	---	56.00	-8.75	L	ON	9.7
27.890000	---	31.51	50.00	-18.49	L	ON	10.2
27.890000	42.61	---	60.00	-17.39	L	ON	10.2

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

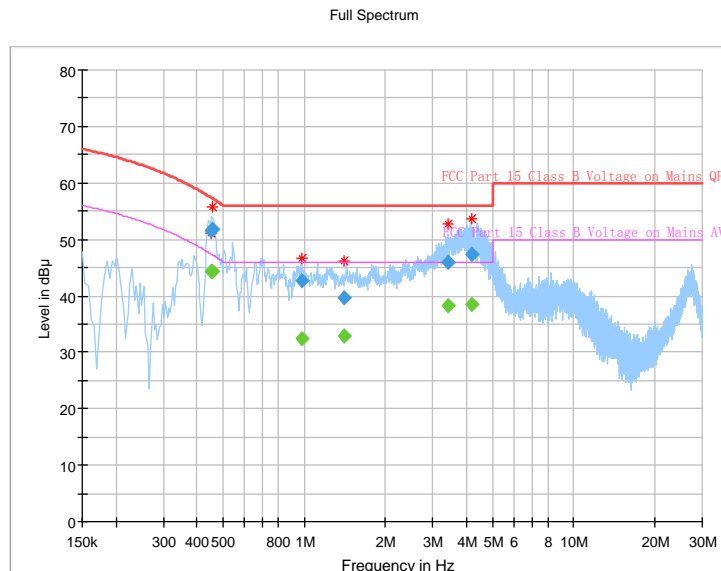
Full Spectrum



<b>TEST VOLTAGE</b>	DC 5V From Adapter Input 230 Vac, 50 Hz	<b>6dB BANDWIDTH</b>	9 kHz
<b>ENVIRONMENTAL CONDITIONS</b>	24deg. C, 55RH	<b>TESTED BY</b>	Aizhong Tang

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.454000	---	44.31	47.31	-3.00	N	ON	10.1
0.454000	51.56	---	57.31	-5.75	N	ON	10.1
<b>0.456000</b>	---	<b>44.38</b>	<b>47.26</b>	<b>-2.88</b>	<b>N</b>	<b>ON</b>	<b>10.1</b>
0.456000	51.73	---	57.26	-5.53	N	ON	10.1
0.980000	---	32.34	46.00	-13.66	N	ON	9.9
0.980000	42.69	---	56.00	-13.31	N	ON	9.9
1.412000	---	32.82	46.00	-13.18	N	ON	9.9
1.412000	39.55	---	56.00	-16.45	N	ON	9.9
3.412000	---	38.14	46.00	-7.86	N	ON	9.8
3.412000	46.06	---	56.00	-9.94	N	ON	9.8
4.184000	---	38.51	46.00	-7.49	N	ON	9.8
4.184000	47.29	---	56.00	-8.71	N	ON	9.8

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.



## 2.2 RADIATED EMISSION MEASUREMENT

### 2.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

**TEST STANDARD: FCC Part 15, Subpart B (Section: 15.109)**

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

Radiated Emissions Limits at 10 meters (dB $\mu$ V/m)				
Frequencies (MHz)	FCC 15B / ICES-003, Class A	FCC 15B / ICES-003, Class B	CISPR 22, Class A	CISPR 22, Class B
30-88	39	29.5	40	30
88-216	43.5	33.1		
216-230	46.4	35.6		
230-960			47	37
960-1000	49.5	43.5	Not defined	Not defined
1000-3000	Avg: 49.5	Avg: 43.5		
3000+	Peak: 69.5	Peak: 63.5	Not defined	Not defined

Radiated Emissions Limits at 3 meters (dB $\mu$ V/m)				
Frequencies (MHz)	FCC 15B / ICES-003, Class A	FCC 15B / ICES-003, Class B	CISPR 22, Class A	CISPR 22, Class B
30-88	49.5	40	50.5	40.5
88-216	54	43.5		
216-230	56.9	46		
230-960			57.5	47.5
960-1000	60	54	Avg: 56 Peak: 76	Avg: 50 Peak: 70
1000-3000	Avg: 60	Avg: 54		
3000+	Peak: 80	Peak: 74	Avg: 60 Peak: 80	Avg: 54 Peak: 74

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. Emission level (dB $\mu$ V/m) = 20 log Emission level (uV/m).
  3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.
  4. QP detector shall be applied if not specified.

## 2.2.2 TEST INSTRUMENTS

### For frequency below 1G

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
EMI Test Receiver	Rohde&Schwarz	ESR7	101494	Apr. 27,15	Apr. 26,16
Bilog Antenna	Teseq	CBL 6111D	30643	Jul. 16, 15	Jul. 15, 16
Amplifier (9kHz-1GHz)	SONOMA	310D	186955	Mar. 04,15	Mar. 03, 16
3m Semi-anechoic Chamber	ETS-LINDGREN	9m*6m*6m	NSEMC003	Apr. 19,14	Apr. 18,16
Test software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

### Frequency range above 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
Horn Antenna	ETS-Lindgren	3117	00062558	May 30,14	May 29,16
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170242	Feb. 13,14	Feb. 12,17
Signal and Spectrum Analyzer	Rohde&Schwarz	FSV40	101094	Apr. 23,15	Apr. 22,16
Pre-Amplifier (0.5~18GHz)	SCHWARZBECK	BBV 9718	9718-266	Mar. 26,14	Mar. 25,16
Pre-Amplifier (18GHz-40GHz)	EMCI	EMC 184045	980102	Nov. 19,15	Nov. 18,16
Test Software	ADT	ADT_Radiated_V7.6.15.9.2	N/A	N/A	N/A

- NOTE:**
1. The test was performed in 966m Chamber.
  2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  3. The FCC Site Registration No. is 494399.

## 2.2.3 TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.4:2009 (section 12).

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters Semi-anechoic chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters (below 1GHz) and 3 meters (above 1GHz) away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. The bore sight should be used during the test above 1GHz.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test receiver/spectrum was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

### NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Average detection (AV) at frequency above 1GHz.
3. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
4. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
5. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) (if the raw value not contains the amplifier);
6. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) – Amplifier Gain(dB) (if the raw value contains the amplifier).
7. Margin value = Emission level – Limit value.

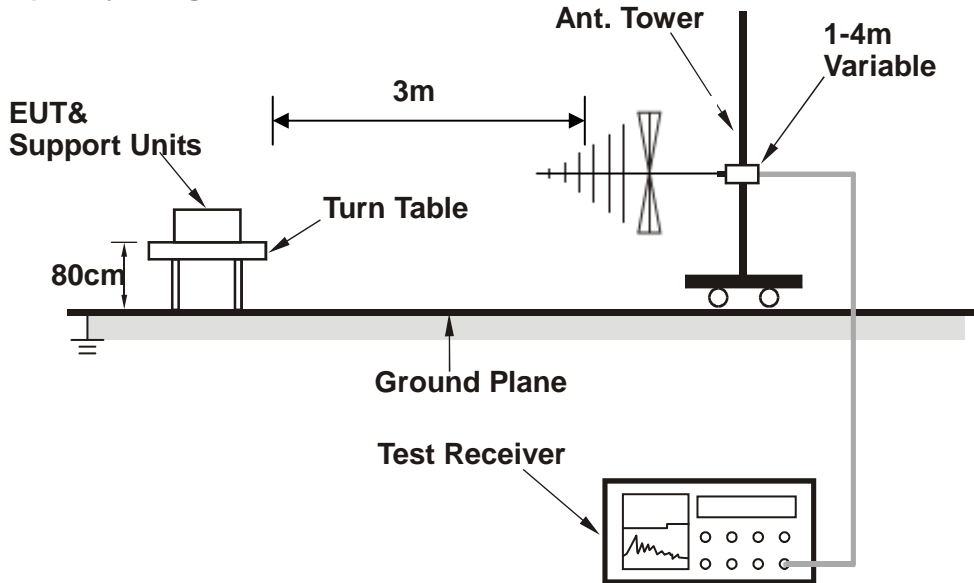
## 2.2.4 DEVIATION FROM TEST STANDARD

No deviation.

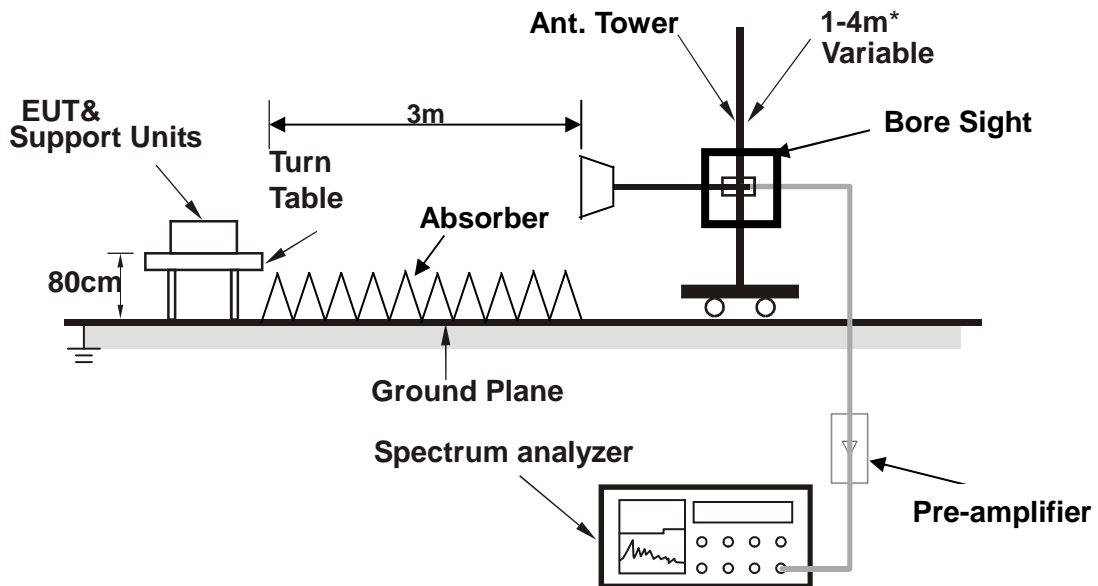


## 2.2.5 TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



\* : depends on the EUT height and the antenna 3dB beamwidth both, refer to section 7.3 of CISPR 16-2-3.

## 2.2.6 EUT OPERATING CONDITIONS

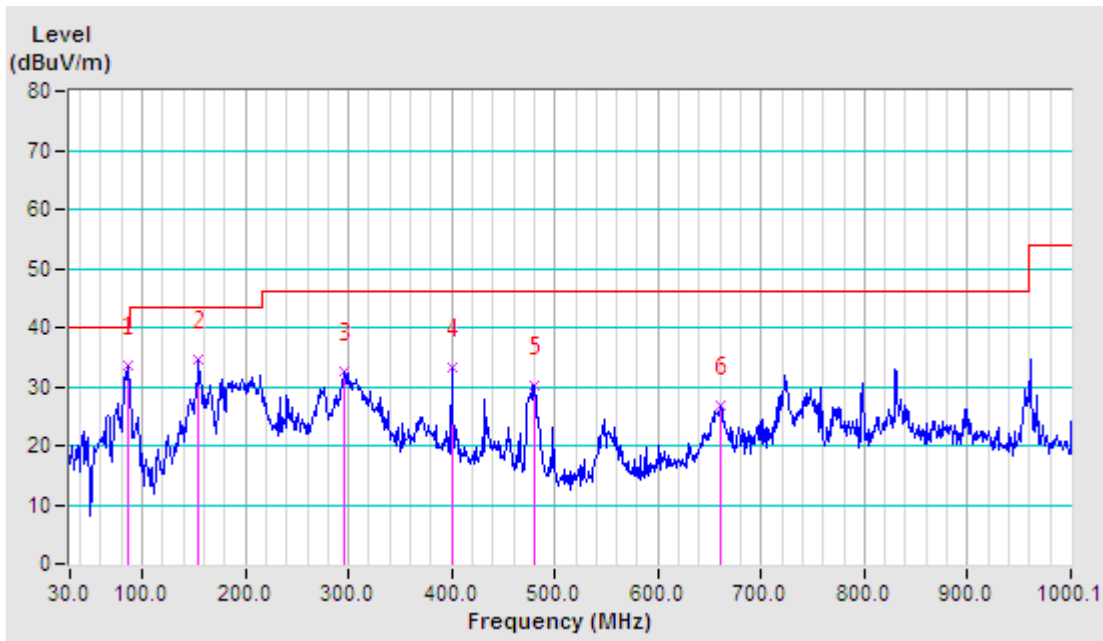
Same as item 2.1.6.

## 2.2.7 TEST RESULTS

<b>TEST VOLTAGE</b>	DC 5V From Adapter Input 120Vac, 50 Hz	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 61 %RH	<b>DETECTOR FUNCTION &amp; BANDWIDTH</b>	Quasi-Peak , 120 kHz
<b>TESTED BY</b>	Alex Chen		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	85.30	-33.91	67.33	33.42	40.00	-6.58	200	315
2	154.17	-30.25	64.82	34.57	43.50	-8.93	200	208
3	295.81	-25.85	58.32	32.47	46.00	-13.53	200	118
4	399.61	-21.39	54.46	33.07	46.00	-12.93	200	58
5	480.13	-20.35	50.57	30.22	46.00	-15.78	200	178
6	660.57	-16.15	42.86	26.71	46.00	-19.29	200	286

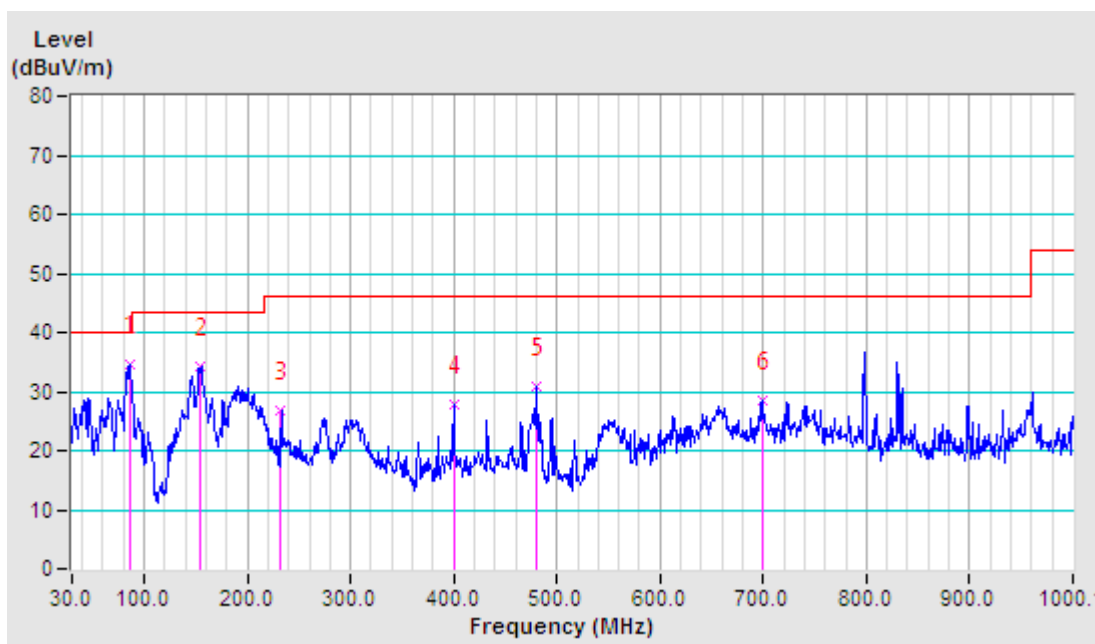
- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 30MHz to 1000MHz.
  4. Only emissions significantly above equipment noise floor are reported.



<b>TEST VOLTAGE</b>	DC 5V From Adapter Input 120 Vac, 50 Hz	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 61 %RH	<b>DETECTOR FUNCTION &amp; BANDWIDTH</b>	Quasi-Peak , 120 kHz
<b>TESTED BY</b>	Alex Chen		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	85.30	-33.91	68.56	34.65	40.00	-5.35	100	223
2	155.14	-30.14	64.30	34.16	43.50	-9.34	100	189
3	232.75	-27.57	54.33	26.76	46.00	-19.24	100	246
4	399.61	-21.39	49.27	27.88	46.00	-18.12	100	88
5	480.13	-20.35	51.15	30.80	46.00	-15.20	100	296
6	698.40	-15.02	43.50	28.48	46.00	-17.52	100	149

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 30MHz to 1000MHz.
  4. Only emissions significantly above equipment noise floor are reported.



<b>TEST VOLTAGE</b>	DC 5V From Adapter Input 120 Vac, 50 Hz	<b>FREQUENCY RANGE</b>	1-6 GHz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 61 %RH	<b>DETECTOR FUNCTION &amp; BANDWIDTH</b>	Peak/Average, 1 MHz
<b>TESTED BY</b>	Alex Chen		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3M</b>								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	1816 PK	-10.60	54.49	43.89	74.00	-30.11	100	215
2	1816 AV	-10.60	44.82	34.22	54.00	-19.78	100	215
3	3533 PK	-5.36	53.68	48.32	74.00	-25.68	100	148
4	3533 AV	-5.36	44.35	38.99	54.00	-15.01	100	148
5	5692 PK	1.95	55.47	57.42	74.00	-16.58	100	295
6	<b>5692 AV</b>	<b>1.95</b>	<b>46.16</b>	<b>48.11</b>	<b>54.00</b>	<b>-5.89</b>	<b>100</b>	<b>295</b>

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3M</b>								
No.	Freq. (MHz)	Correction Factor (dB/m)	Raw Value (dBuV)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (cm)	Table Angle (Degree)
1	2037 PK	-8.89	52.24	43.35	74.00	-30.65	200	88
2	2037 AV	-8.89	45.15	36.26	54.00	-17.74	200	88
3	3737 PK	-4.75	53.67	48.92	74.00	-25.08	200	176
4	3737 AV	-4.75	45.69	40.94	54.00	-13.06	200	176
5	5573 PK	1.05	53.87	54.92	74.00	-19.08	200	231
6	5573 AV	1.05	45.76	46.81	54.00	-7.19	200	231

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 1GHz to 6GHz.
  4. Only emissions significantly above equipment noise floor are reported.

### **3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No any modifications were made to the EUT by the lab during the test.

**---END---**