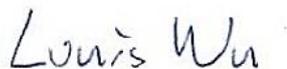


FCC Test Report

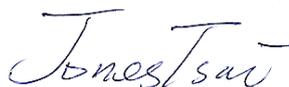
APPLICANT : Lenovo (Shanghai) Electronics Technology Co., Ltd.
EQUIPMENT : Tablet PC
BRAND NAME : Vodafone
MODEL NAME : Smart Tab III¹⁰
MARKETING NAME : Vodafone Smart Tab III10
FCC ID : O57S6000VDF3G
STANDARD : FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION : Certification

The product was received on Mar. 13, 2013 and completely tested on Jul. 02, 2013. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2009 and shown the compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Reviewed by: Louis Wu / Manager



Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C.



TABLE OF CONTENTS

REVISION HISTORY..... 3

SUMMARY OF TEST RESULT 4

1. GENERAL DESCRIPTION 5

 1.1. Applicant..... 5

 1.2. Manufacturer 5

 1.3. Feature of Equipment Under Test..... 5

 1.4. Product Specification of Equipment Under Test 6

 1.5. Test Site 7

 1.6. Applied Standards 7

2. TEST CONFIGURATION OF EQUIPMENT UNDER TEST 8

 2.1. Test Mode 8

 2.2. Connection Diagram of Test System 10

 2.3. Support Unit used in test configuration and system..... 12

 2.4. Test Software 13

3. TEST RESULT..... 14

 3.1. Test of AC Conducted Emission Measurement 14

 3.2. Test of Radiated Emission Measurement 19

4. LIST OF MEASURING EQUIPMENT 24

5. UNCERTAINTY OF EVALUATION 25

APPENDIX A. PHOTOGRAPHS OF EUT

APPENDIX B. SETUP PHOTOGRAPHS



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	Under limit 10.3 dB at 3.718 MHz
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	Under limit 3.43 dB at 240.040 MHz

1. General Description

1.1. Applicant

Lenovo (Shanghai) Electronics Technology Co., Ltd.
 No. 68 Building, 199 Fenju Road, Wai Gao Qiao FTZ, Shanghai, China

1.2. Manufacturer

Lenovo PC HK Limited
 23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay, Hong Kong

1.3. Feature of Equipment Under Test

Product Feature	
Equipment	Tablet PC
Brand Name	Vodafone
Model Name	Smart Tab III ¹⁰
Marketing Name	Vodafone Smart Tab III10
FCC ID	O57S6000VDF3G
EUT supports Radios application	GPRS/EGRPS/WCDMA/HSPA/HSPA+/WLAN 11bgn /Bluetooth 3.0/4.0
HW Version	H401
SW Version	S6000-S3
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are below types of I/O Ports of this project.

I/O Port Types	Q'TY	Tested With
Earphone Jack	1	1
SIM card slot	1	1
Mirco SD slot	1	1
Mirco USB port	1	1
Mirco HDMI port	1	1

1.4. Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx Frequency	GPRS850: 824.2 MHz ~ 848.8 MHz GPRS1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band II: 1852.4 MHz ~ 1907.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz
Rx Frequency Range	GPRS850: 869.2 MHz ~ 893.8 MHz GPRS1900: 1930.2 MHz ~ 1989.8 MHz WCDMA Band V: 871.4 MHz ~ 891.6 MHz WCDMA Band II: 1932.4 MHz ~ 1987.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS: 1.57542 GHz
Antenna Type	WWAN : Fixed Internal Antenna WLAN : Fixed Internal Antenna Bluetooth : Fixed Internal Antenna
Type of Modulation	GPRS: GMSK EDGE: GMSK / 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM (Uplink) DC-HSDPA: 64QAM (Uplink) 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n : OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth BR (1Mbps) : GFSK Bluetooth 3.0 EDR (2Mbps) : $\pi/4$ -DQPSK Bluetooth 3.0 EDR (3Mbps) : 8-DPSK Bluetooth 4.0 - LE: GFSK GPS : BPSK

1.5. Test Site

Test Site	SPORTON INTERNATIONAL INC.		
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan Hsiang, Tao Yuan Hsien, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978		
Test Site No.	Sporton Site No.		FCC/IC Registration No.
	CO05-HY	03CH06-HY	722060/4086B-1

1.6. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2009

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2009 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following tables are showing the test modes as the worst cases and recorded in this report.

Item	EUT Configuration	Test Condition		
		EMI AC	EMI RE<1G	EMI RE≥1G
1.	Charging Mode (EUT with adapter)	☒	☒	Note 1
2.	Data application transferred mode (EUT with notebook)	☒	☒	☒

Abbreviations:

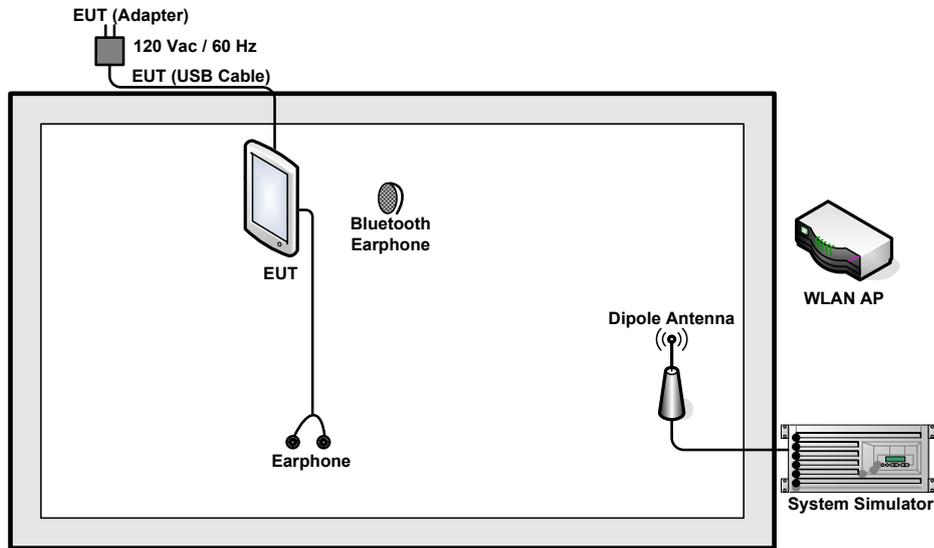
- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

Note 1: Testing for this mode is not required or not the worst case.

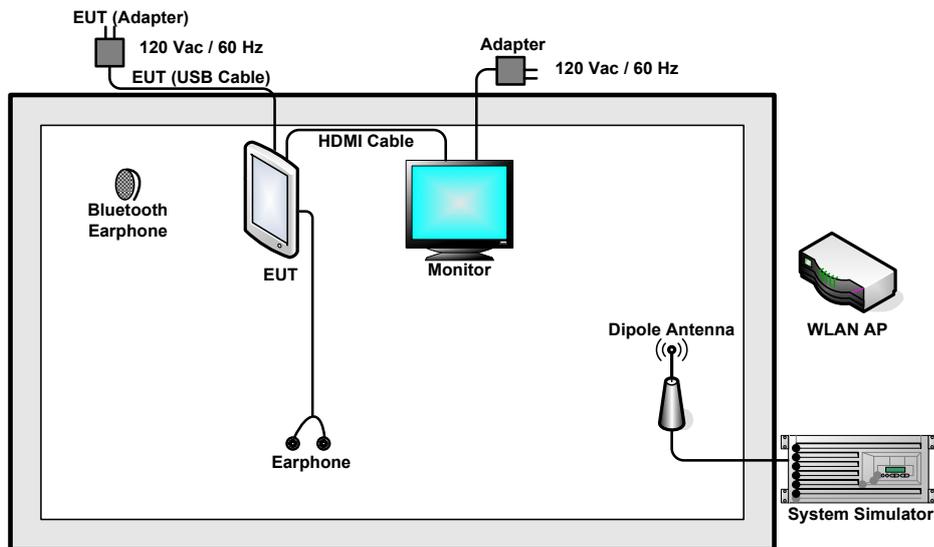
Remark: For signal above 1GHz, the worst case is test item 2.

Test Items	EUT Configure Mode	Function Type
AC Conducted Emission	1/2	Mode 1: GPRS850 Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + Camera + Battery 1 <Fig. 1> Mode 2: GPRS1900 Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + MPEG4 + Battery 1 + HDMI Cable <Fig. 2> Mode 3: WCDMA Band V Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 1 + HDMI Cable <Fig. 3> Mode 4: WCDMA Band II Idle + USB Cable 1 (Data Link with Notebook) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 1 + HDMI Cable <Fig. 4> Mode 5: GPRS1900 Idle + USB Cable 2 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + MPEG4 + Battery 2 + HDMI Cable <Fig. 2>
Radiated Emissions < 1GHz	1/2	Mode 1: GPRS850 Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + Camera + Battery 1 <Fig. 1> Mode 2: GPRS1900 Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + MPEG4 + Battery 1 + HDMI Cable <Fig. 2> Mode 3: WCDMA Band V Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 1 + HDMI Cable <Fig. 3> Mode 4: WCDMA Band II Idle + USB Cable 1 (Data Link with Notebook) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 1 + HDMI Cable <Fig. 4> Mode 5: WCDMA Band II Idle + USB Cable 2 (Data Link with Notebook) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 2 + HDMI Cable <Fig. 4>
Radiated Emissions ≥ 1GHz	2	Mode 1: WCDMA Band II Idle + USB Cable 2 (Data Link with Notebook) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 2 + HDMI Cable <Fig. 4>
Remark: <ol style="list-style-type: none"> 1. The worst case of AC is mode 2; only the test data of this mode is reported. 2. The worst case of RE < 1G is mode 5; only the test data of this mode is reported. 3. Data Link with Notebook means data application transferred mode between EUT and Notebook. 4. HDMI Cable means media application transferred between EUT and external display. 		

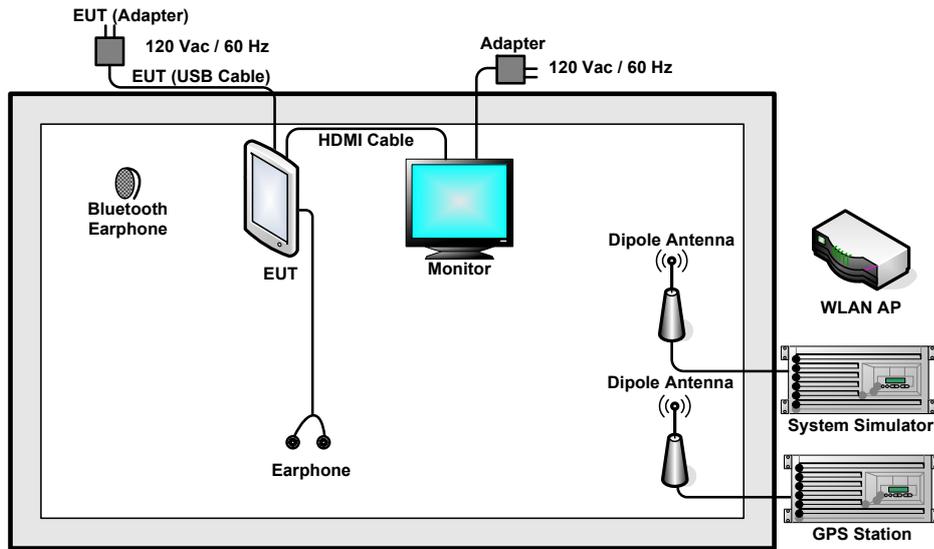
2.2. Connection Diagram of Test System



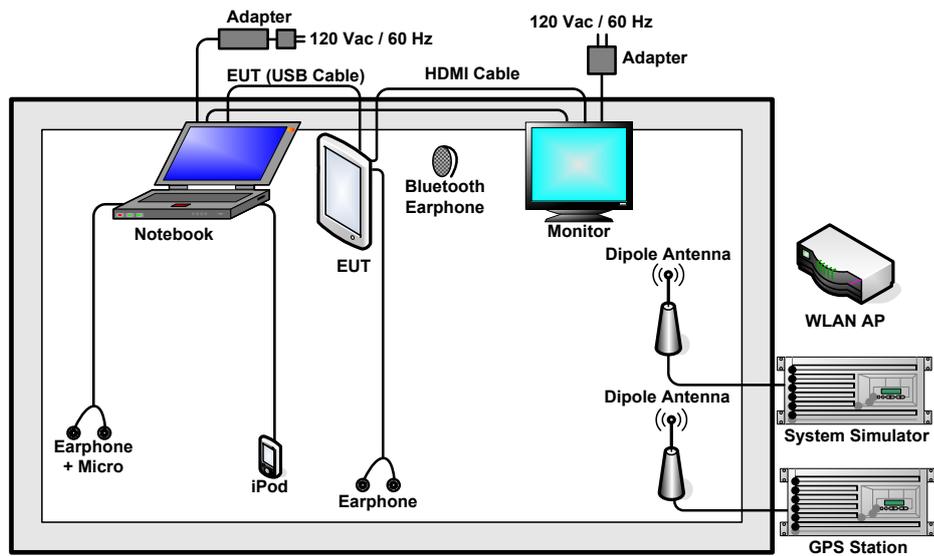
<Fig. 1>



<Fig. 2>



<Fig. 3>



<Fig. 4>

2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	Pendulum	GSG-54	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	Notebook	Lenovo	G480	PPD-AR5B195	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
5.	Monitor	Lenovo	L197WA	FCC DoC	N/A	Unshielded, 1.8m
6.	Bluetooth Earphone	Lenovo	LBH301	N/A	N/A	N/A
7.	Earphone	Lenovo	SH100	N/A	N/A	Unshielded, 1.2 m
8.	Earphone+Micro	Ergotech	ET-E200	FCC DoC	N/A	N/A
9.	iPod	Apple	A1285	DoC	Shielded, 1.0 m	N/A



2.4. Test Software

The EUT was in GPRS or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and is in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

1. Execute the program, "Winthrax" under WIN7 installed in notebook for files transfer with EUT via USB cable.
2. Turn on GPS function to make the EUT receive continuous signals from GPS station.
3. Execute "Video player" to play MPEG4 files.
4. Turn on camera to capture images.

3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dB μ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

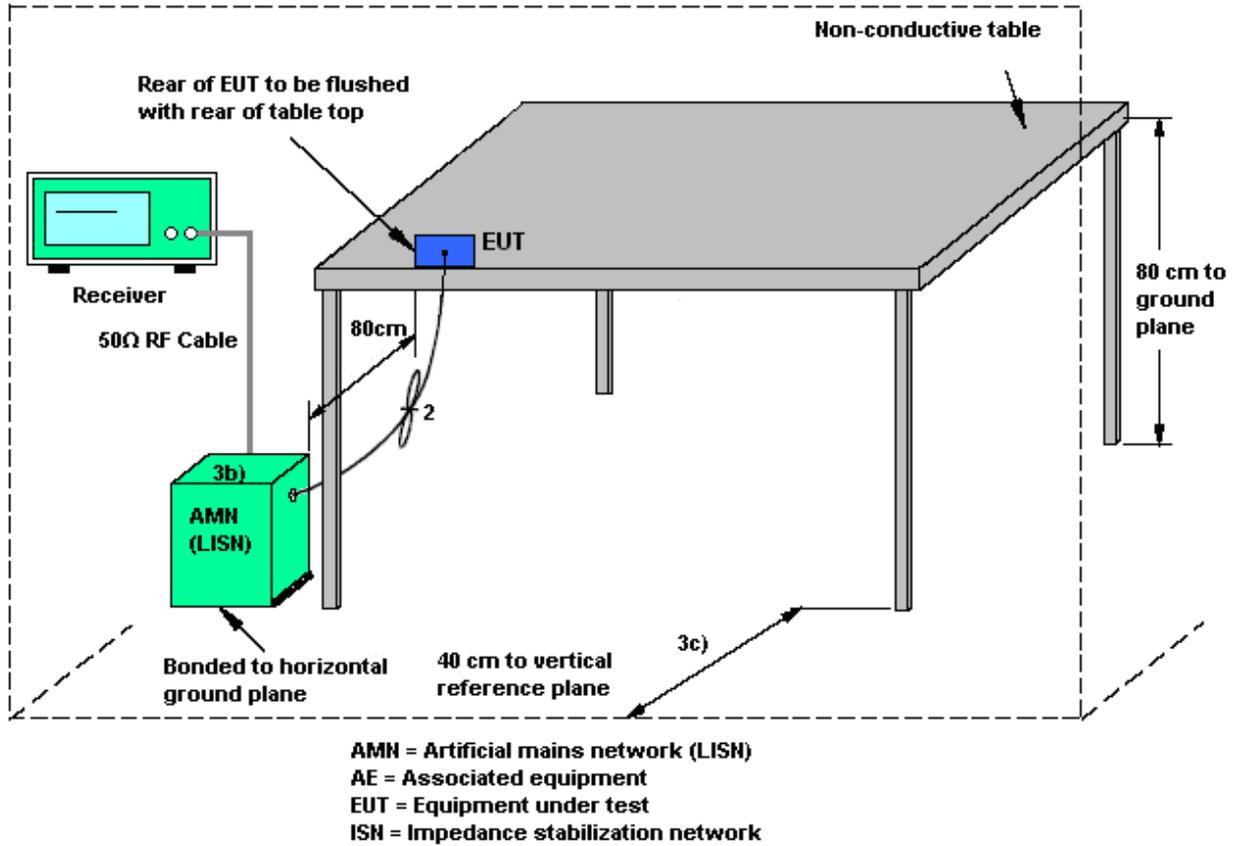
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedure

1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both sides of AC line were checked for maximum conducted interference.
7. The frequency range from 150 kHz to 30 MHz was searched.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

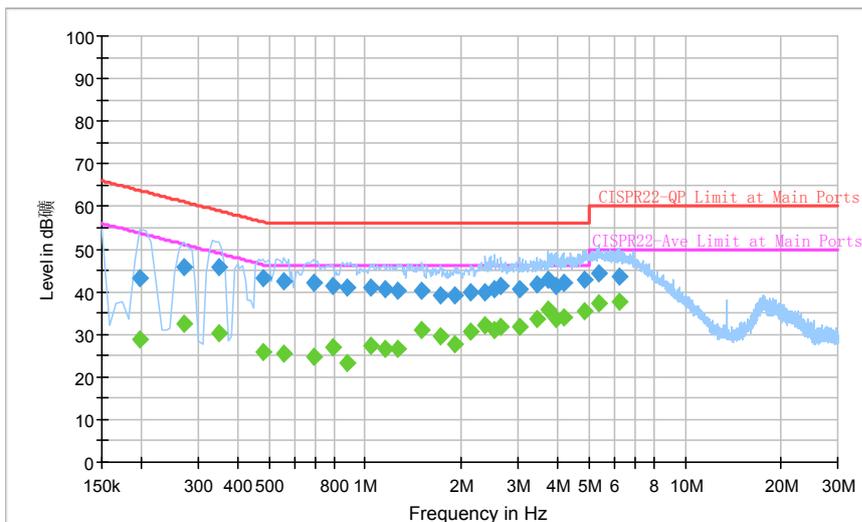
3.1.4 Test Setup



3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	20~22°C
Test Engineer :	Slash Chiang	Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type :	GPRS1900 Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + MPEG4 + Battery 1 + HDMI Cable		

ENV216 Auto Test



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.198000	43.1	Off	L1	19.3	20.6	63.7
0.270000	45.8	Off	L1	19.3	15.3	61.1
0.350000	45.7	Off	L1	19.4	13.3	59.0
0.478000	43.1	Off	L1	19.4	13.3	56.4
0.558000	42.3	Off	L1	19.4	13.7	56.0
0.694000	42.1	Off	L1	19.5	13.9	56.0
0.790000	41.3	Off	L1	19.5	14.7	56.0
0.878000	40.8	Off	L1	19.4	15.2	56.0
1.038000	41.0	Off	L1	19.4	15.0	56.0
1.150000	40.7	Off	L1	19.5	15.3	56.0
1.262000	40.2	Off	L1	19.5	15.8	56.0
1.502000	40.3	Off	L1	19.4	15.7	56.0
1.726000	39.2	Off	L1	19.5	16.8	56.0
1.910000	39.0	Off	L1	19.5	17.0	56.0
2.142000	39.9	Off	L1	19.5	16.1	56.0
2.374000	39.8	Off	L1	19.6	16.2	56.0
2.542000	40.6	Off	L1	19.6	15.4	56.0
2.654000	41.2	Off	L1	19.5	14.8	56.0
3.038000	40.6	Off	L1	19.6	15.4	56.0
3.438000	41.6	Off	L1	19.6	14.4	56.0



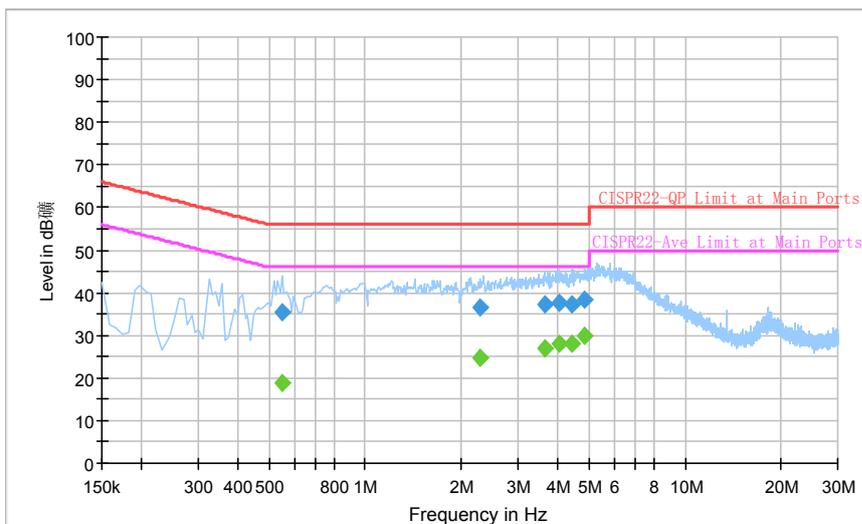
3.718000	42.8	Off	L1	19.6	13.2	56.0
3.950000	41.5	Off	L1	19.6	14.5	56.0
4.182000	41.9	Off	L1	19.6	14.1	56.0
4.854000	42.9	Off	L1	19.6	13.1	56.0
5.374000	44.3	Off	L1	19.6	15.7	60.0
6.214000	43.6	Off	L1	19.6	16.4	60.0

Final Result : Average

Frequency (MHz)	Average (dBμV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)
0.198000	28.8	Off	L1	19.3	24.9	53.7
0.270000	32.3	Off	L1	19.3	18.8	51.1
0.350000	30.4	Off	L1	19.4	18.6	49.0
0.478000	26.0	Off	L1	19.4	20.4	46.4
0.558000	25.6	Off	L1	19.4	20.4	46.0
0.694000	24.7	Off	L1	19.5	21.3	46.0
0.790000	26.8	Off	L1	19.5	19.2	46.0
0.878000	23.4	Off	L1	19.4	22.6	46.0
1.038000	27.5	Off	L1	19.4	18.5	46.0
1.150000	26.7	Off	L1	19.5	19.3	46.0
1.262000	26.5	Off	L1	19.5	19.5	46.0
1.502000	30.9	Off	L1	19.4	15.1	46.0
1.726000	29.6	Off	L1	19.5	16.4	46.0
1.910000	27.8	Off	L1	19.5	18.2	46.0
2.142000	30.7	Off	L1	19.5	15.3	46.0
2.374000	31.9	Off	L1	19.6	14.1	46.0
2.542000	31.2	Off	L1	19.6	14.8	46.0
2.654000	31.9	Off	L1	19.5	14.1	46.0
3.038000	31.9	Off	L1	19.6	14.1	46.0
3.438000	33.4	Off	L1	19.6	12.6	46.0
3.718000	35.7	Off	L1	19.6	10.3	46.0
3.950000	33.5	Off	L1	19.6	12.5	46.0
4.182000	34.0	Off	L1	19.6	12.0	46.0
4.854000	35.3	Off	L1	19.6	10.7	46.0
5.374000	37.3	Off	L1	19.6	12.7	50.0
6.214000	37.6	Off	L1	19.6	12.4	50.0

Test Mode :	Mode 2	Temperature :	20~22°C
Test Engineer :	Slash Chiang	Relative Humidity :	45~47%
Test Voltage :	120Vac / 60Hz	Phase :	Neutral
Function Type :	GPRS1900 Idle + USB Cable 1 (Charging from Adapter) + Bluetooth Idle + WLAN Idle + Earphone + MPEG4 + Battery 1 + HDMI Cable		

ENV216 Auto Test



Final Result : Quasi-Peak

Frequency (MHz)	Quasi-Peak (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.550000	35.5	Off	N	19.4	20.5	56.0
2.286000	36.7	Off	N	19.6	19.3	56.0
3.654000	37.3	Off	N	19.6	18.7	56.0
4.038000	37.6	Off	N	19.6	18.4	56.0
4.438000	37.4	Off	N	19.6	18.6	56.0
4.870000	38.4	Off	N	19.6	17.6	56.0

Final Result : Average

Frequency (MHz)	Average (dBµV)	Filter	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)
0.550000	18.8	Off	N	19.4	27.2	46.0
2.286000	24.6	Off	N	19.6	21.4	46.0
3.654000	26.9	Off	N	19.6	19.1	46.0
4.038000	27.9	Off	N	19.6	18.1	46.0
4.438000	28.0	Off	N	19.6	18.0	46.0
4.870000	29.9	Off	N	19.6	16.1	46.0

3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 1000	500	3

Note: Measurement below 1GHz follows the CISPR 22 limit line as below :

15.109 (g) As an alternative to the radiated emission limits shown in paragraphs (a) and (b) of this section, digital devices may be shown to comply with the standards contained in Third Edition of the International Special Committee on Radio Interference (CISPR), Pub. 22, "Information Technology Equipment - Radio Disturbance Characteristics - Limits and Methods of Measurement"

Frequency (MHz)	Field Strength (dBµV/meter)	Measurement Distance (meters)
30 – 230	30	10
230 – 1000	37	10

3.2.2. Measuring Instruments

See list of measuring instruments of this test report.

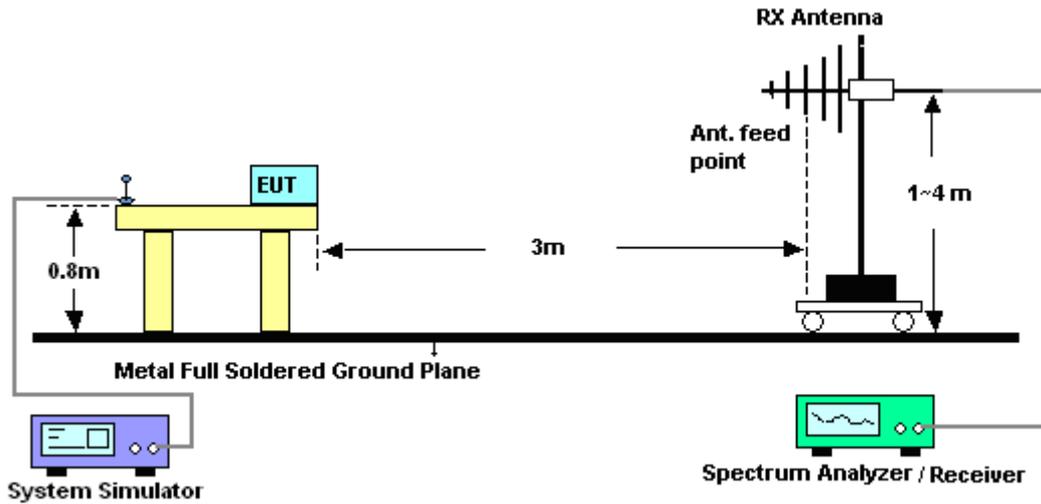


3.2.3. Test Procedures

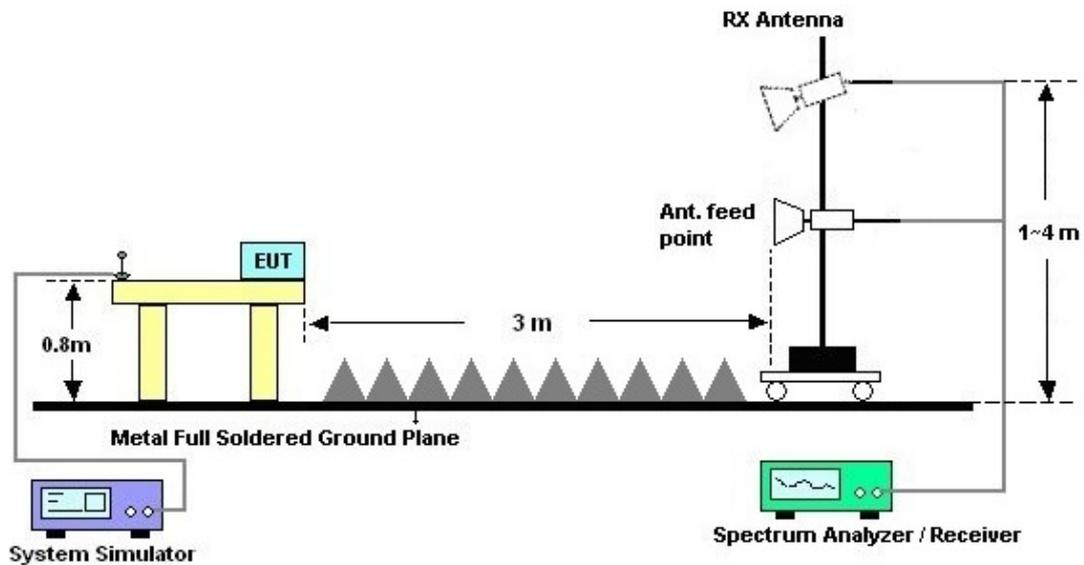
1. The EUT was placed on a turntable with 0.8 meter above ground.
2. The EUT was set 3 meters for frequency 30 MHz to 1 GHz and 3 meters for above 1 GHz from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest radiation.
4. The antenna height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor= Level

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



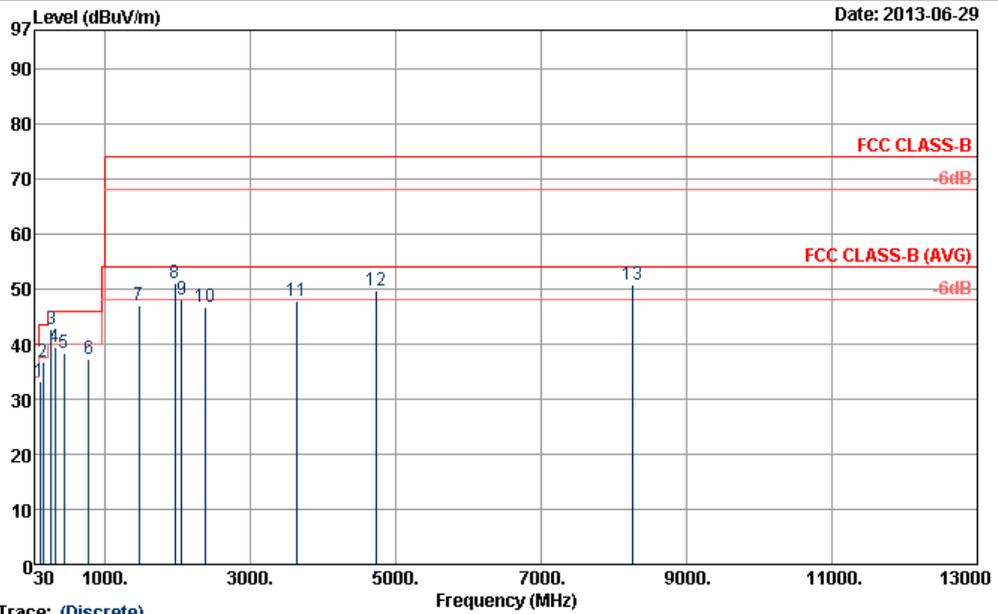
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 5	Temperature :	21~23°C
Test Engineer :	Lewis He	Relative Humidity :	42~43%
Test Distance :	3m	Polarization :	Horizontal
Function Type :	WCDMA Band II Idle + USB Cable 2 (Data Link with Notebook) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 2 + HDMI Cable		
Remark :	#8 is system simulator signal which can be ignored.		



Trace: (Discrete)

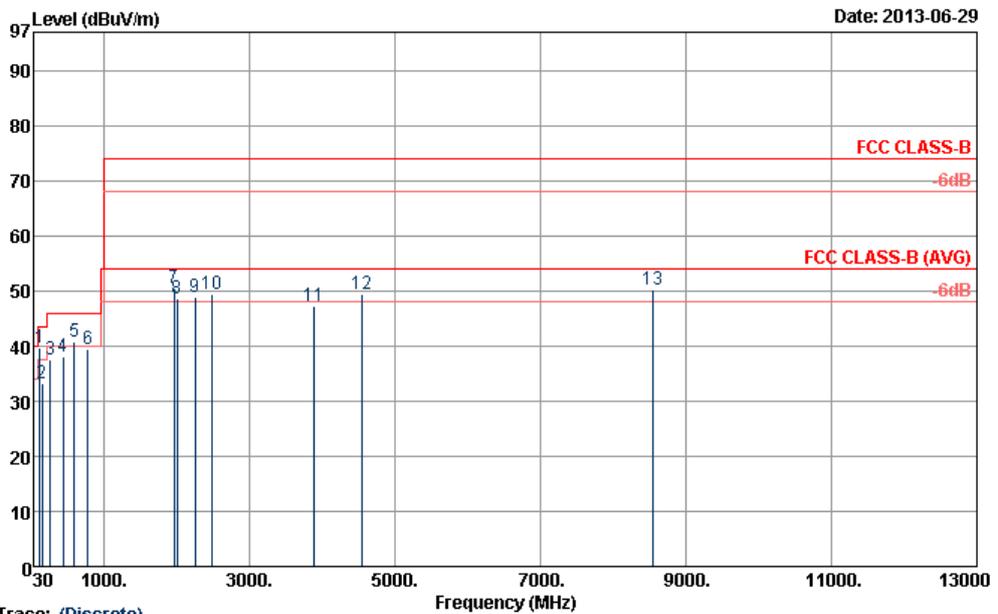
Site : 03CH06-HY
 Condition : FCC CLASS-B 3m HF-ANT_120801 HORIZONTAL

Power : From System
 Mode : Mode 5

	Freq	Level	Over	Limit	Read	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	112.35	33.27	-10.23	43.50	51.60	12.25	1.17	31.75	---	---	Peak
2	148.26	36.82	-6.68	43.50	56.92	10.32	1.33	31.75	---	---	Peak
3	260.04	42.57	-3.43	46.00	58.81	13.70	1.79	31.73	100	---	48 Peak
4	317.50	39.47	-6.53	46.00	55.79	13.47	1.95	31.74	---	---	Peak
5	438.60	38.35	-7.65	46.00	51.42	16.50	2.29	31.86	---	---	Peak
6	779.50	37.26	-8.74	46.00	46.36	19.80	3.06	31.96	---	---	Peak
7	1464.00	47.10	-26.90	74.00	68.57	27.80	4.64	53.91	---	---	Peak
8	1960.00	50.94			67.74	31.40	5.79	53.99	---	---	Peak
9	2052.00	48.12	-25.88	74.00	64.27	31.87	5.97	53.99	---	---	Peak
10	2390.00	46.65	-27.35	74.00	61.76	32.36	6.45	53.92	---	---	Peak
11	3644.00	47.94	-26.06	74.00	60.68	33.32	8.29	54.35	---	---	Peak
12	4724.00	49.76	-24.24	74.00	60.12	34.91	10.13	55.40	---	---	Peak
13	8252.00	50.70	-23.30	74.00	59.66	36.15	10.85	55.96	100	237	Peak



Test Mode :	Mode 5	Temperature :	21~23°C
Test Engineer :	Lewis He	Relative Humidity :	42~43%
Test Distance :	3m	Polarization :	Vertical
Function Type :	WCDMA Band II Idle + USB Cable 2 (Data Link with Notebook) + Bluetooth Idle + WLAN Idle + Earphone + GPS Rx + Battery 2 + HDMI Cable		
Remark :	#7 is system simulator signal which can be ignored.		



Trace: (Discrete)
 Site : 03CH06-HY
 Condition : FCC CLASS-B 3m HF-ANT_120801 VERTICAL
 Power : From System
 Mode : Mode 5

	Freq	Level	Over	Limit	ReadAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg
1	116.40	39.68	-3.82	43.50	57.76	12.48	1.19	31.75	100	143 Peak
2	152.85	33.26	-10.24	43.50	53.43	10.20	1.38	31.75	---	---
3	260.04	37.65	-8.35	46.00	53.89	13.70	1.79	31.73	---	---
4	438.60	38.17	-7.83	46.00	51.24	16.50	2.29	31.86	---	---
5	594.00	40.76	-5.24	46.00	51.27	18.80	2.74	32.05	---	---
6	779.50	39.34	-6.66	46.00	48.44	19.80	3.06	31.96	---	---
7	1960.00	50.61			67.41	31.40	5.79	53.99	---	---
8	2004.00	48.54	-25.46	74.00	64.84	31.80	5.90	54.00	---	---
9	2248.00	49.04	-24.96	74.00	64.61	32.14	6.24	53.95	---	---
10	2492.00	49.33	-24.67	74.00	64.14	32.50	6.59	53.90	---	---
11	3896.00	47.35	-26.65	74.00	59.66	33.66	8.76	54.73	---	---
12	4546.00	49.36	-24.64	74.00	59.39	34.98	10.08	55.09	---	---
13	8546.00	50.22	-23.78	74.00	59.47	36.24	10.68	56.17	100	211 Peak



4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver	Rohde & Schwarz	ESCS 30	100356	9kHz~2.75GHz	Nov. 13, 2012	Jul. 02, 2013	Nov. 12, 2013	Conduction (CO05-HY)
Two-LISN (for auxiliary equipment)	Rohde & Schwarz	ENV216	100081	9kHz~30MHz	Dec. 12, 2012	Jul. 02, 2013	Dec. 11, 2013	Conduction (CO05-HY)
Two-LISN	Rohde & Schwarz	ENV216	100080	9kHz~30MHz	Dec. 06, 2012	Jul. 02, 2013	Dec. 05, 2013	Conduction (CO05-HY)
AC Power Source	APC	APC-1000W	N/A	N/A	N/A	Jul. 02, 2013	N/A	Conduction (CO05-HY)
Spectrum Analyzer	R&S	FSP30	101352	9kHz~30GHz	Nov. 07, 2012	Jun. 29, 2013	Nov. 06, 2013	Radiation (03CH06-HY)
EMI Test Receiver	R&S	ESVS10	834468/0003	20MHz~1000M Hz	May 04, 2013	Jun. 29, 2013	May 03, 2014	Radiation (03CH06-HY)
Bilog Antenna	SCHAFFNER	CBL6112B	2885	30MHz~2GHz	Oct. 06, 2012	Jun. 29, 2013	Oct. 05, 2013	Radiation (03CH06-HY)
Double Ridge Horn Antenna	COM-POWER	AH-118	071025	1GHz~18GHz	Aug. 09, 2012	Jun. 29, 2013	Aug. 08, 2013	Radiation (03CH06-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	15GHz~40GHz	Sep. 28, 2012	Jun. 29, 2013	Sep. 27, 2013	Radiation (03CH06-HY)
Preamplifier	Agilent	8449B	3008A01917	1GHz~26.5GHz	Apr. 13, 2013	Jun. 29, 2013	Apr. 12, 2014	Radiation (03CH06-HY)
Amplifier	Agilent	310N	186713	9kHz~1GHz	Apr. 11, 2013	Jun. 29, 2013	Apr. 10, 2014	Radiation (03CH06-HY)
Pre Amplifier	EMCI	EMC051845	SN980048	1GHz~18GHz	Jul. 21, 2012	Jun. 29, 2013	Jul. 20, 2013	Radiation (03CH06-HY)
Turn Table	INN-CO	DS2000	420/650/00	0 ~ 360 degree	N/A	Jun. 29, 2013	N/A	Radiation (03CH06-HY)
Antenna Mast	INN-CO	MM4000	114/8000604/L	1 m – 4 m	N/A	Jun. 29, 2013	N/A	Radiation (03CH06-HY)



5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.26
---	------

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.54
---	------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.72
---	------



Appendix A. Photographs of EUT

Please refer to Sporton report number EP342901 as below.