

Report No.: FC340403

FCC Test Report

APPLICANT : Yulong Computer Telecommunication

Scientific (Shenzhen) Co., Ltd.

EQUIPMENT : Mobile Phone

BRAND NAME : Vodafone Smart 4G/Smartphone

Android™ by SFR STARADDICT III

: Coolpad 8860U/Coolpad 8861U MODEL NAME **MARKETING NAME**: Vodafone Smart 4G/Smartphone

Android™ by SFR STARADDICT III

FCC ID : R38YL8860U

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION : Certification

The product was received on Apr. 04, 2013 and testing was completed on Sep. 04, 2013. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown to be compliant with the applicable technical standards.

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

Reviewed by: Louis Wu / Manager

Lunis Wu

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (SHENZHEN) INC.

No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C.

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Testing Laboratory 2353



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC340403	Rev. 01	Initial issue of report	Sep. 14, 2013

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SUMMARY OF TEST RESULT

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Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	9.23 dB at
					0.190 MHz
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	7.08 dB at
					719.670 MHz

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1. General Description

1.1. Applicant

Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd.

Coolpad Information Harbor, 2nd Mengxi Road, Northern Part of Science&Technology Park, Nanshan district, Shenzhen, P.R.China

1.2. Manufacturer

Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd.

Coolpad Information Harbor, 2nd Mengxi Road, Northern Part of Science&Technology Park, Nanshan district, Shenzhen, P.R.China

1.3. Feature of Equipment Under Test

	Product Feature
Equipment	Mobile Phone
Brand Name	Vodafone Smart 4G/Smartphone Android™ by SFR STARADDICT III
Model Name	Coolpad 8860U/Coolpad 8861U
Marketing Name	Vodafone Smart 4G/Smartphone Android™ by SFR STARADDICT III
FCC ID	R38YL8860U
EUT supports Radios application	GSM/GPRS/EGPRS/LTE/WLAN 802.11abgn HT 20/ Bluetooth v3.0 + EDR/Bluetooth v4.0/NFC
HW Version	Т3
SW Version	082.12.T3.130819.CP8860U (for Vodafone Smart 4G) 082.12.T3.130819.CP8861U (for Smartphone Android™ by SFR STARADDICT III)
EUT Stage	Production Unit

Remark:

FCC ID: R38YL8860U

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 two types of EUT for this project. The differences between them are summary below:

Sample List	Function Type	Brand name	Model name
Sample 1	With NFC	Vodafone Smart 4G	Coolpad 8860U
Sample 2	With NFC	Smartphone Android™ by SFR STARADDICT III	Coolpad 8861U

Sample 1 and sample 2 are identical on hardware. The only difference is for different market purpose. In this report, we use with sample 1 to perform the test.

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1.4. Product Specification of Equipment Under Test

Product Specifi	ication subjective to this standard
Tx Frequency	GSM1900: 1850.2 MHz ~ 1909.8MHz LTE Band 7: 2506.5 MHz ~ 2534.5 MHz and 2562.5 MHz ~ 2567.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC: 13.56 MHz
Rx Frequency	GSM1900: 1930.2 MHz ~ 1989.8 MHz LTE Band 7: 2626.5MHz ~ 2654.5 MHz and 2666.5 MHz ~ 2697.5 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz 802.11a/n: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz; 5745 MHz ~ 5825 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS: 1.57542 GHz NFC: 13.56 MHz
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS: PIFA Antenna NFC: Loop Antenna
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK LTE: QPSK / 16QAM 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth v4.0: GFSK Bluetooth: GFSK, π /4-DQPSK, 8-DPSK GPS: BPSK NFC: ASK

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1.5. Modification of EUT

No modifications are made to the EUT during all test items.

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1.6. Test Site

Test Site	SPORTON INTERI	NATIONAL (SHENZI	HEN) INC.			
Test Site Location	O .		nth, Shahe River west, Fengzeyuan n, Guangdong, P.R.C.			
	TEL: +86-755- 3320-2398					
Toot Site No	Sporton	Site No.	FCC Registration No.			
Test Site No.	CO01-SZ	03CH01-SZ	831040			

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1.7. 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 C63.4-2003

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

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2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

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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.

		Те	st Condition	on
Item	EUT Configuration	EMI	EMI	EMI
		AC	RE<1G	RE≥1G
1.	Charging Mode (EUT with adapter)	\boxtimes	\boxtimes	Note 1
2.	Data application transferred mode (EUT with notebook)	\boxtimes	\boxtimes	\boxtimes

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 was test item 2.

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Test Items	EUT Configure Mode	Function Type
		Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN (5GHz) Idle + USB Cable (Charging from Adapter) + Camera + Battery 1 + Earphone <fig.1></fig.1>
AC Conducted Emission	1/2	Mode 2: LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + MPEG4 + Battery 2 + Earphone <fig.2></fig.2>
	1/2	Mode 3: GSM1900 Idle + Bluetooth Idle + WLAN (5GHz) Idle + USB Cable (Charging from Adapter) + NFC on + Battery 1 + Earphone <fig.1></fig.1>
		Mode 4: LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + GPS Rx + Battery 2 + Earphone <fig.3></fig.3>
		Mode 1: GSM1900 Idle + Bluetooth Idle + WLAN (5GHz) Idle + USB Cable (Charging from Adapter) + Camera + Battery 1 + Earphone <fig.1></fig.1>
Radiated	1/2	Mode 2: LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Charging from Adapter) + MPEG4 + Battery 2 + Earphone <fig.2></fig.2>
Emissions < 1GHz	1/2	Mode 3: GSM1900 Idle + Bluetooth Idle + WLAN (5GHz) Idle + USB Cable (Charging from Adapter) + NFC on + Battery 1 + Earphone <fig.1></fig.1>
		Mode 4: LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + GPS Rx + Battery 2 + Earphone <fig.3></fig.3>
Radiated Emissions ≥ 1GHz	2	Mode 1: LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + GPS Rx + Battery 2 + Earphone <fig.3></fig.3>

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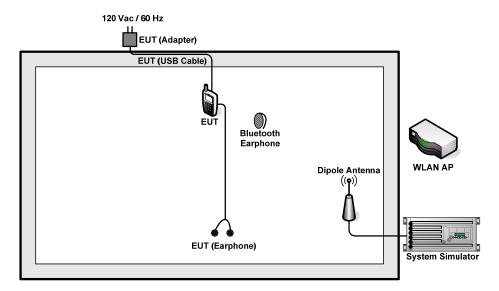
Remark:

- The worst case of AC Conducted Emission is mode 4; only the test data of this mode is reported.
- The worst case of Radiated Emissions < 1G is mode 4; only the test data of this mode is reported.
- Link with Notebook means data application transferred mode between EUT and Notebook. 3.

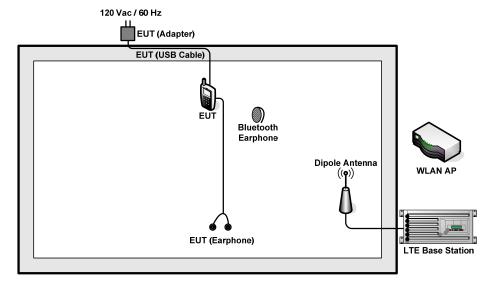
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2.2. Connection Diagram of Test System



<Fig.1>

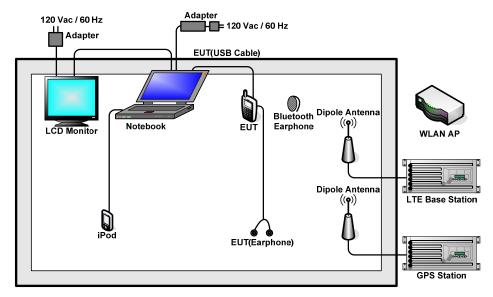


<Fig.2>

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<Fig.3>

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2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	FCC DoC	Shielded, 1.5 m	N/A
2.	System Simulator	Agilent	E5515C	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	T&E	GS-50	N/A	N/A	Unshielded, 1.8 m
4.	GPS Station	ADIVIE	MP9000	N/A	N/A	Unshielded, 1.8 m
5.	WLAN AP	D-Link	DIR-612	N/A	N/A	Unshielded, 1.8 m
6.	WLAN AP	D-Link	DIR-615	N/A	N/A	Unshielded, 1.8 m
7.	Bluetooth Earphone	Nokia	BH-108	N/A	N/A	N/A
8.	Bluetooth Earphone	Nokia	HS-12W	PYAHS-12W	N/A	N/A
9.	Notebook	DELL	P08S	FCC DoC	N/A	AC I/P: Unshielded, 1.8 m DC O/P: Shielded, 1.8 m
10.	LCD Monitor	DELL	1707FPt	FCC DoC	Shielded, 1.2 m	Unshielded, 1.8 m
11.	LCD Monitor	DELL	IN1940MWB	FCC DoC	Shielded, 1.2 m	Unshielded, 1.8 m
12.	iPod	Apple	MC525 ZP/A	FCC DoC	Unshielded, 1.0 m	N/A

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2.4. EUT Operation Test Setup

The EUT was in GSM and LTE idle mode during the testing. The EUT was synchronized to the BCCH, and was 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.
- 5. Turn on NFC function.

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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	Conducted	limit (dBuV)
(MHz)	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.

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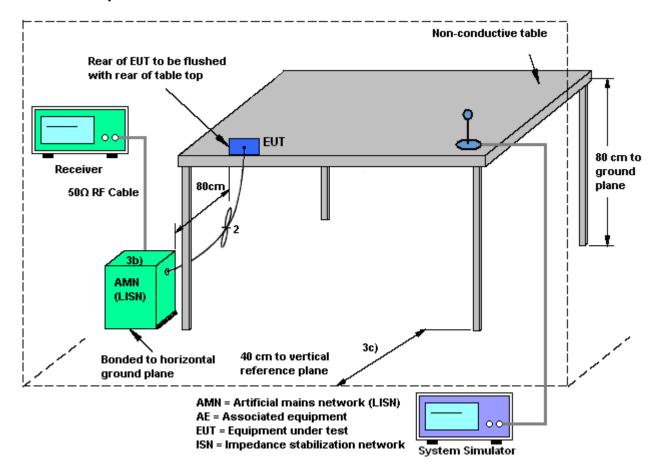
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3.1.4 Test Setup



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3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 4			Tem	peratur	re:	22~23	3℃	
Гest Engineer :	Henry Ch	en		Rela	tive Hu	ımidity :	49~50	0%	
Test Voltage :	120Vac /	60Hz		Phas	se:		Line		
	LTE Band	d 7 Idle	+ Blueto	oth Idle	+ WLA	N (2.4GI	Hz) Idle	+ USB	Cable (Data L
Function Type :	with Note	book) +	- GPS R	c + Batte	ery 2 + I	Earphone	÷		·
	_evel (dBuV)					Dat	te: 2013-0	9-03 Time: 1	17:44:04
100	Level (ubuv)							0 00 111101 1	
90	-				9				0
80									
93							100		
70								12000	100.00
60						7 7 1		FCC 1	5B_QP
50	W Awa							FCC 15	B_AVG
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30									
20									
20- 10-									
20- 10-	15 .2	.5	1		2 ency (MHz	5	10) 2	0 30
20 10 0	15 .2 : CO01-S	Z		Frequ	ency (MHz		10) 2	0 30
20- 10- 0- Site	: C001-S	Z		Frequ	ency (MHz		10) 2	0 30
20 10 0	: C001-S	Z		Frequ	ency (MHz)	10		0 30
20 10 0	: CO01-S	Z B_QP LI	SN_L_2013	Frequ 30328 LII Limit	ency (MHz NE Read)	Cable		0 30
20 10 0	: CO01-S	Z B_QP LI	SN_L_2013 Over	Frequ 30328 LII Limit	ency (MHz NE Read	lisn	Cable		0 30
20 10 0	: CO01-S on: FCC 15 Freq	Z B_QP LI Level	SN_L_2013 Over Limit	Frequ 30328 LII Limit Line dBuV	Read Level	LISN Factor	Cable Loss dB	Remark	_
20- 10- 0- Site Condition	: CO01-S on: FCC 15 Freq MHz	Level dBuV 23.41	SN_L_2013 Over Limit dB	Frequence Freque	Read Level dBuV	LISN Factor dB	Cable Loss dB	Remark Average	_
20 10 0 Site Condition	: C001-s on: FCC 15 Freq MHz 0.16 0.16 0.19	Z B_QP LI Level dBuV 23.41 44.71 37.85	Over Limit dB -32.15 -20.85 -16.13	Frequence Freque	Read Level dBuV	LISN Factor dB 0.06 0.06	Cable Loss dB 10.34 10.34	Remark Average	_
20 10 0 Site Condition	: C001-S on: FCC 15 Freq MHz 0.16 0.16 0.19 0.19	Z B_QP LI Level dBuV 23.41 44.71 37.85 54.75	Over Limit dB -32.15 -20.85 -16.13 -9.23	Limit Line dBuV 55.56 65.56 53.98 63.98	Read Level dBuV 13.01 34.31 27.50 44.40	LISN Factor dB 0.06 0.06 0.07 0.07	Cable Loss dB 10.34 10.34 10.28 10.28	Remark Average QP Average QP	
10 Site Condition	: C001-S on: FCC 15 Freq MHz 0.16 0.16 0.19 0.19 0.20	Z B_QP LI Level dBuV 23.41 44.71 37.85 54.75 37.74	Over Limit dB -32.15 -20.85 -16.13 -9.23 -15.75	Limit Line dBuV 55.56 65.56 53.98 63.98 53.49	Read Level dBuV 13.01 34.31 27.50 44.40 27.40	LISN Factor dB 0.06 0.07 0.07 0.07	Cable Loss dB 10.34 10.28 10.28	Average QP Average QP Average	
10 Site Condition	Freq MHz 0.16 0.19 0.19 0.20 0.20	Z B_QP LI Level dBuV 23.41 44.71 37.85 54.75 37.74 52.84	Over Limit dB -32.15 -20.85 -16.13 -9.23 -15.75 -10.65	Limit Line dBuV 55.56 65.56 53.98 63.98 53.49 63.49	Read Level dBuV 13.01 34.31 27.50 44.40 27.40 42.50	LISN Factor dB 0.06 0.07 0.07 0.07 0.07 0.07	Cable Loss dB 10.34 10.34 10.28 10.27 10.27	Remark Average QP Average QP Average QP	
20 10 0 Site Conditio	Freq MHz 0.16 0.16 0.19 0.20 0.20 0.26	Level dBuV 23.41 44.71 37.85 54.75 37.74 52.84 34.81	Over Limit ———————————————————————————————————	Limit Line dBuV 55.56 65.56 65.3.98 63.98 53.49 63.49 51.56	Read Level dBuV 13.01 34.31 27.50 44.40 27.40 42.50 24.50	LISN Factor dB 0.06 0.07 0.07 0.07 0.07 0.07 0.09	Cable Loss dB 10.34 10.34 10.28 10.27 10.27	Remark Average QP Average QP Average QP Average	
20 10 0 Site Conditio	Freq MHz 0.16 0.19 0.19 0.20 0.20 0.26 0.26	Level dBuV 23.41 44.71 37.85 54.75 37.74 52.84 34.81 48.11	Over Limit ———————————————————————————————————	Limit Line dBuV 55.56 65.56 53.98 63.98 53.49 63.49 51.56 61.56	Read Level dBuV 13.01 34.31 27.50 44.40 27.40 42.50 24.50 37.80	LISN Factor dB 0.06 0.07 0.07 0.07 0.07 0.07 0.09 0.09	Cable Loss dB 10.34 10.34 10.28 10.27 10.27 10.27	Remark Average QP Average QP Average QP Average QP	
10 Site Condition 1 2 3 4 * 5 6 7 8 9	: CO01-S on: FCC 15 Freq MHz 0.16 0.16 0.19 0.19 0.20 0.20 0.26 0.26 0.27	Level dBuV 23.41 44.71 37.85 54.75 37.74 52.84 34.81 48.11 32.40	Over Limit dB -32.15 -20.85 -16.13 -9.23 -15.75 -10.65 -16.75 -13.45 -18.58	Limit Line dBuV 55.56 65.56 53.98 63.98 53.49 63.49 51.56 61.56 50.98	Read Level dBuV 13.01 34.31 27.50 44.40 42.50 24.50 37.80 22.10	LISN Factor dB 0.06 0.07 0.07 0.07 0.07 0.07 0.09 0.09 0.09	Cable Loss dB 10.34 10.28 10.27 10.22 10.22 10.22	Remark Average QP Average QP Average QP Average QP Average QP	
10 - 0 - 5 ite Condition 1 2 3 4 * 5 6 7 8	Freq MHz 0.16 0.19 0.20 0.20 0.26 0.26 0.27 0.27	Level dBuV 23.41 44.71 37.85 54.75 37.74 52.84 34.81 48.11 32.40 46.60	Over Limit dB -32.15 -20.85 -16.13 -9.23 -15.75 -10.65 -16.75 -13.45 -18.58 -14.38	Limit Line dBuV 55.56 65.56 53.98 63.98 53.49 63.49 63.49 61.56 60.98	Read Level dBuV 13.01 34.31 27.50 44.40 27.40 42.50 24.50 37.80 22.10 36.30	LISN Factor dB 0.06 0.07 0.07 0.07 0.07 0.07 0.09 0.09 0.09	Cable Loss dB 10.34 10.28 10.27 10.27 10.27 10.22 10.21 10.21	Remark Average QP Average QP Average QP Average QP Average QP	

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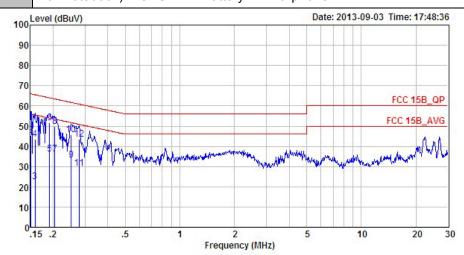


 Test Mode :
 Mode 4
 Temperature :
 22~23°C

 Test Engineer :
 Henry Chen
 Relative Humidity :
 49~50%

 Test Voltage :
 120Vac / 60Hz
 Phase :
 Neutral

Function Type : LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link with Notebook) + GPS Rx + Battery 2 + Earphone



Site : C001-SZ Condition: FCC 15B_QP LISN_N_20130328 NEUTRAL

		Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
		MHz	dBuV	dB	dBuV	dBu∇	dB	dB	-
1		0.15	27.00	-29.00	56.00	16.60	0.04	10.36	Average
2		0.15	45.40	-20.60	66.00	35.00	0.04	10.36	QP
3		0.16	22.38	-33.14	55.52	12.00	0.04	10.34	Average
4		0.16	43.38	-22.14	65.52	33.00	0.04	10.34	QP
5		0.19	36.12	-17.86	53.98	25.80	0.04	10.28	Average
6	4	0.19	51.84	-12.14	63.98	41.52	0.04	10.28	QP
7		0.20	36.01	-17.44	53.45	25.70	0.04	10.27	Average
8		0.20	49.81	-13.64	63.45	39.50	0.04	10.27	QP
9		0.25	33.36	-18.33	51.69	23.10	0.04	10.22	Average
10		0.25	45.86	-15.83	61.69	35.60	0.04	10.22	QP
11		0.28	29.05	-21.85	50.90	18.80	0.04	10.21	Average
12		0.28	43.55	-17.35	60.90	33.30	0.04	10.21	QP

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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)
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

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 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

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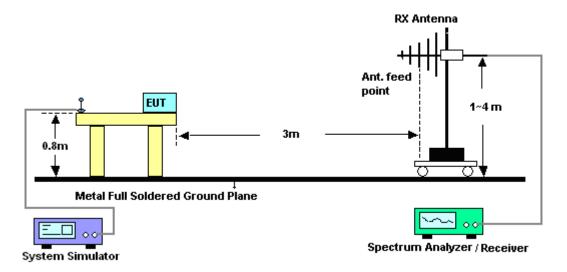
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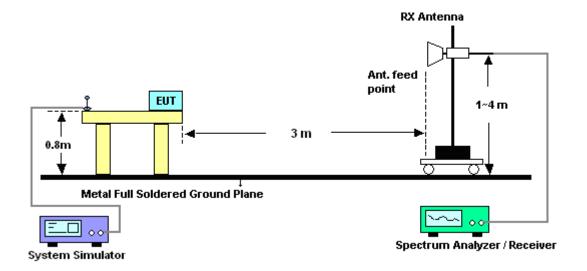
Report No.: FC340403

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

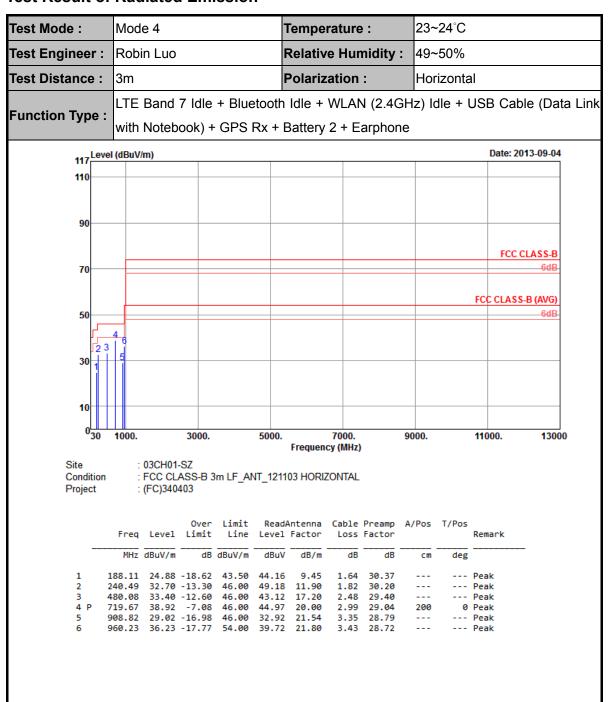


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3.2.5. Test Result of Radiated Emission



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23~24°C Test Mode: Mode 4 Temperature: **Relative Humidity:** 49~50% Test Engineer: Robin Luo Polarization: Test Distance: 3m Vertical LTE Band 7 Idle + Bluetooth Idle + WLAN (2.4GHz) Idle + USB Cable (Data Link Function Type: with Notebook) + GPS Rx + Battery 2 + Earphone 117 Level (dBuV/m) Date: 2013-09-04 110 90 FCC CLASS-B 70 FCC CLASS-B (AVG) 50 10 0<mark>30</mark> 1000. 3000. 5000. 7000. 9000. 11000. 13000 Frequency (MHz) Site : 03CH01-SZ : FCC CLASS-B 3m LF_ANT_121103 VERTICAL Condition Project : (FC)340403 ReadAntenna Cable Preamp A/Pos T/Pos Over Limit Freq Level Limit Line Level Factor Remark Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB deg 104.69 22.67 -20.83 43.50 40.23 11.80 1.29 30.65 --- Peak 23.62 -22.38 46.00 40.83 11.20 1.81 30.22 --- Peak 232.73 ---3 364.65 22.68 -23.32 46.00 34.89 15.38 2.19 29.78 --- Peak 504.33 32.98 -13.02 46.00 758.47 34.09 -11.91 46.00 42.15 17.62 2.54 29.33 --- Peak 5 P 360 Peak 39.62 20.38 3.08 28.99 100 960.23 30.11 -23.89 54.00 33.60 21.80 --- Peak 3.43 28.72

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4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
ESCIO TEST Receiver	R&S	1142.8007.03	100724	9kHz~3GHz	Mar. 28, 2013	Sep. 03, 2013	Mar. 27, 2014	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Mar. 28, 2013	Sep. 03, 2013	Mar. 27, 2014	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Mar. 28, 2013	Sep. 03, 2013	Mar. 27, 2014	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	N/A	Nov. 20, 2012	Sep. 03, 2013	Nov. 19, 2013	Conduction (CO01-SZ)
Spectrum Analyzer	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	Apr. 04, 2013	Sep. 04, 2013	Apr. 03, 2014	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 12, 2012	Sep. 04, 2013	Oct. 11, 2013	Radiation (03CH01-SZ)
Bilog Antenna	SCHAFFNER	CBL6112B	2614	30MHz~2GHz	Nov. 03, 2012	Sep. 04, 2013	Nov. 02, 2013	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz-3000MHz GAIN 30db	Mar. 28, 2013	Sep. 04, 2013	Mar. 27, 2014	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	Mar. 28, 2013	Sep. 04, 2013	Mar. 27, 2014	Radiation (03CH01-SZ)
Turn Table	EM Electronice	EM 1000	N/A	0 ~ 360 degree	N/A	Sep. 04, 2013	N/A	Radiation (03CH01-SZ)
Antenna Mast	EM Electronice	EM 1000	N/A	1 m - 4 m	N/A	Sep. 04, 2013	N/A	Radiation (03CH01-SZ)

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5. Uncertainty of Evaluation

<u>Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)</u>

Management II and the formal and of	
Measuring Uncertainty for a Level of	2.26
Confidence of 95% (U = 2Uc(y))	2.20

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<u>Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)</u>

Measuring Uncertainty for a Level of	2.54
Confidence of 95% (U = 2Uc(y))	2.04

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

Measuring Uncertainty for a Level of	
Confidence of 95% (U = 2Uc(y))	4.72
201111401100 01 0078 (3 200(3))	

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