FCC Test Report

APPLICANT : CT Asia

EQUIPMENT: Mobile phone

BRAND NAME : BLU

MODEL NAME : STUDIO C

FCC ID : YHLBLUSTUDIOC

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION: Certification

The product was received on Jan. 28, 2015 and testing was completed on Apr. 10, 2015. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2009 and has been in 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 (SHENZHEN) INC., the test report shall not be reproduced except in full.

Reviewed by: Louis Wu / Manager

Louis Wu

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (SHENZHEN) INC.

1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China

SPORTON INTERNATIONAL (SHENZHEN) INC.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUSTUDIOC Page Number : 1 of 25 Report Issued Date : Apr. 22, 2015

Testing Laboratory 2353

Report No. : FC512802

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC512802	Rev. 01	Initial issue of report	Apr. 22, 2015

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SUMMARY OF TEST RESULT

Report Section	FCC Rule Description		FCC Rule Description Limit		Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	14.58 dB at
					0.470 MHz
					Under limit
3.2	15.109	15.109 Radiated Emission	< 15.109 limits	PASS	4.83 dB at
					175.260 MHz

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1. General Description

1.1. Applicant

CT Asia

Unit 01, 15/F, Seaview Centre, 139-141 Hoi bun road, Kwun Tong, Kowloon, Hongkong

1.2. Manufacturer

Shanghai Huaqin telecom technology co., ltd.

Building 1, NO.399, Keyuan Road, Zhangjiang Hi-tech Park, Pudong New District, Shanghai

1.3. Product Feature of Equipment Under Test

Product Feature					
Equipment	Mobile phone				
Brand Name	BLU				
Model Name	STUDIO C				
FCC ID	YHLBLUSTUDIOC				
EUT supports Radios application	GSM/GPRS/EGPRS(Downlink Only)/ WCDMA/HSPA/HSPA+(Downlink Only)/ WLAN 2.4GHz 802.11b/g/n HT20/HT40/ Bluetooth v3.0 + EDR/Bluetooth v4.0 LE				
HW Version	AW1055PD V2.0				
SW Version	BLU_ZAW1055U_V03_GENERIC				
EUT Stage	Pre-Production				

Remark:

The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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1.4. Product Specification subjective to this standard

Product Specification subjective to this standard				
	GSM850 : 824.2 MHz ~ 848.8 MHz			
	GSM1900 : 1850.2 MHz ~ 1909.8MHz			
	WCDMA Band V : 826.4 MHz ~ 846.6 MHz			
Tx Frequency	WCDMA Band IV : 1712.4 MHz ~ 1752.6 MHz			
1 x 1 requeries	WCDMA Band II : 1852.4 MHz ~ 1907.6 MHz			
	802.11b/g/n: 2412 MHz ~ 2462 MHz			
	Bluetooth: 2402 MHz ~ 2480 MHz			
	GSM850 : 869.2 MHz ~ 893.8 MHz			
	GSM1900 : 1930.2 MHz ~ 1989.8 MHz			
	WCDMA Band V : 871.4 MHz ~ 891.6 MHz			
	WCDMA Band IV : 871.4 MHz ~ 891.0 MHz			
Rx Frequency	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			
	WWAN : FPC Antenna			
Antenna Type	WLAN: SMT Antenna			
· ·	Bluetooth : SMT Antenna			
	GPS : SMT Antenna			
	GSM: GMSK			
	GPRS: GMSK			
	EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK (Downlink Only)			
	WCDMA: QPSK (Uplink)			
	HSDPA: QPSK (Uplink)			
	HSUPA: QPSK (Uplink)			
Type of Modulation	HSPA+ : 16QAM (Downlink Only)			
Type of Modulation	802.11b: DSSS (DBPSK / DQPSK / CCK)			
	802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)			
	Bluetooth v4.0 LE : GFSK			
	Bluetooth (1Mbps): GFSK			
	Bluetooth (2Mbps) : π /4-DQPSK			
	Bluetooth (3Mbps) : 8-DPSK			
	GPS : BPSK			

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1.5. Modification of EUT

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

1.6. **Test Location**

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.
	1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili
Test Site Location	Town, Nanshan District, Shenzhen, Guangdong, P. R. China
rest Site Location	TEL: +86-755-8637-9589
	FAX: +86-755-8637-9595
Took Cita No	Sporton Site No.
Test Site No.	CO01-SZ

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.					
	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan					
Test Site Location	warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China					
	TEL: +86-755- 3320-2398					
Took Oito No	Sporton Site No.	FCC Registration No.				
Test Site No.	03CH01-SZ 831040					

Note: The test site complies with ANSI C63.4 2009 requirement.

1.7. Applicable 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.

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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 C63.4-2009 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.

		Te	st Condition	on
Item	EUT Configuration	EMI AC	EMI RE<1G	EMI RE≥1G
1.	Charging Mode (EUT with adapter)	\boxtimes	\boxtimes	Note 1
2.	Data application transferred mode (EUT connected with notebook)		\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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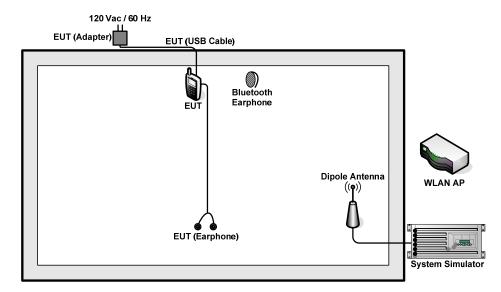
Test Items	EUT Configure Mode	Function Type
	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig.1></fig.1>
AC Conducted Emission		Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig.1></fig.1>
EMISSION		Mode 3: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
		Mode 4: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig.3></fig.3>
	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig.1></fig.1>
Radiated Emissions < 1GHz		Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig.1></fig.1>
EIIIISSIOIIS < TGHZ		Mode 3: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
		Mode 4: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig.3></fig.3>
Radiated Emissions ≥ 1GHz	2	Mode 1: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig.3></fig.3>

Remark:

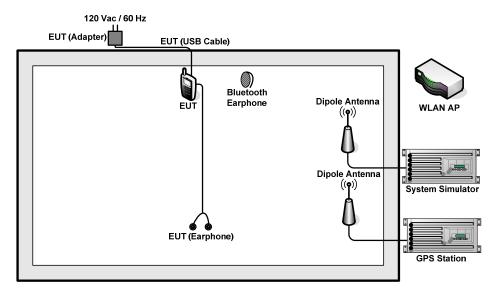
- 1. The worst case of AC is mode 1; and the USB Link mode of AC is mode 4, the test data of these modes are reported.
- 2. The worst case of RE < 1G is mode 4; the test data of this mode is reported.
- 3. Link with notebook means data application transferred mode between EUT and notebook.

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2.2. Connection Diagram of Test System



<Fig.1>

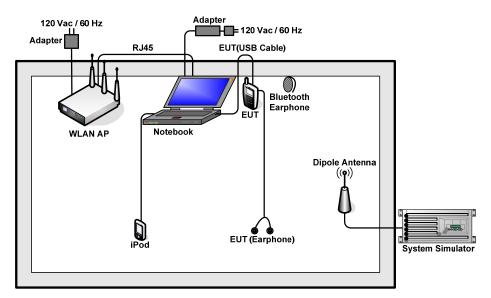


<Fig.2>

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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.	System Simulator	Agilent	8960	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
3.	WLAN AP	D-link	DIR-615	N/A	N/A	Unshielded,1.8m
4.	WLAN AP	D-link	DIR-815	KA2IR815A1	N/A	Unshielded,1.8m
5.	WLAN AP	ASUSTek	RT-AC66U	MSQ- RTAC66U	N/A	Unshielded,1.2m with Core
6.	Bluetooth Earphone	Lenovo	LBH301	N/A	N/A	N/A
7.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
8.	Notebook	Lenovo	G540	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
9.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
10.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2 m	N/A
11.	iPod	Apple	MC525ZP/A	FCC DoC	Shielded, 1.0 m	N/A

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2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA 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.

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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

The measuring equipment is listed in the section 4 of this test report.

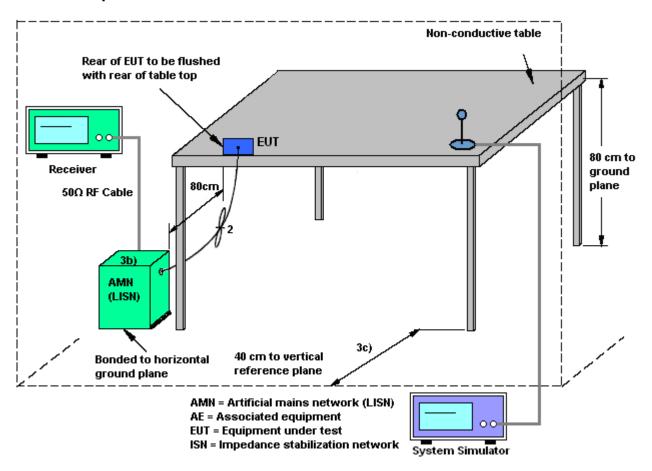
3.1.3 Test Procedure

- 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.
- Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

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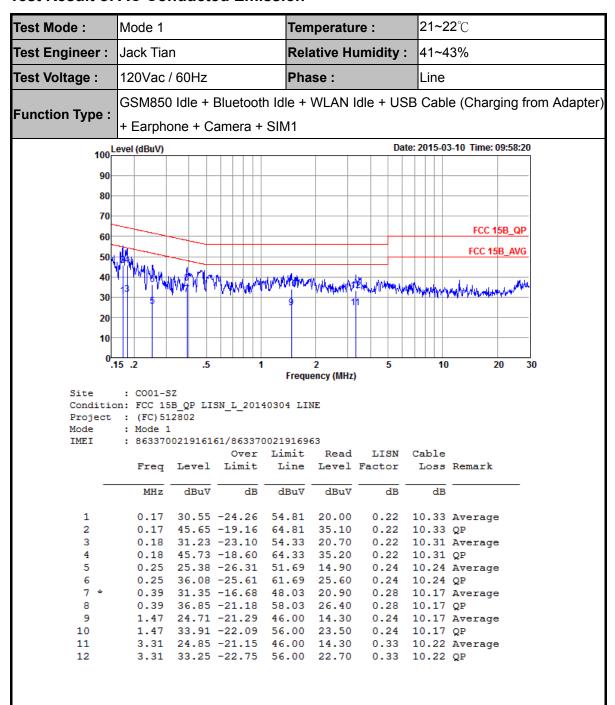
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3.1.4 Test Setup



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3.1.5 Test Result of AC Conducted Emission



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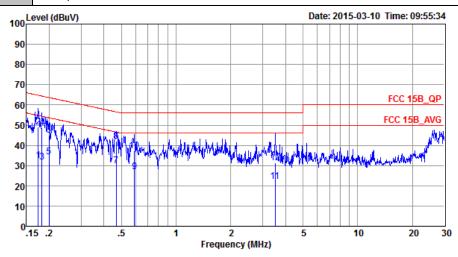
 Test Mode :
 Mode 1
 Temperature :
 21~22°C

 Test Engineer :
 Jack Tian
 Relative Humidity :
 41~43%

 Test Voltage :
 120Vac / 60Hz
 Phase :
 Neutral

 GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter)

Function Type : GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20140304 NEUTRAL

Project : (FC)512802

Mode : Mode 1

IMEI : 863370021916161/863370021916963

	Freq	Level	Over	Limit Line	Read Level	LISN Factor	Loss	Remark
	MHz	dBu∇	dB	dBuV	dBu∇	dB	dB	
1	0.17	32.45	-22.32	54.77	21.80	0.32	10.33	Average
2	0.17	49.25	-15.52	64.77	38.60	0.32	10.33	QP
3	0.18	31.64	-22.73	54.37	21.01	0.32	10.31	Average
4	0.18	48.84	-15.53	64.37	38.21	0.32	10.31	QP
5	0.20	34.31	-19.31	53.62	23.70	0.32	10.29	Average
6	0.20	44.91	-18.71	63.62	34.30	0.32	10.29	QP
7	0.47	30.06	-16.48	46.54	19.50	0.40	10.16	Average
8 *	0.47	41.96	-14.58	56.54	31.40	0.40	10.16	QP
9	0.59	26.88	-19.12	46.00	16.40	0.33	10.15	Average
10	0.59	37.18	-18.82	56.00	26.70	0.33	10.15	QP
11	3.51	22.16	-23.84	46.00	11.50	0.44	10.22	Average
12	3.51	31.26	-24.74	56.00	20.60	0.44	10.22	QP

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Test Mode: Mode 4

Temperature: 21~22°C

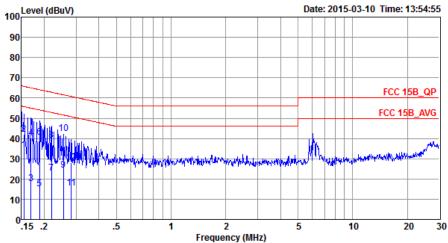
Test Engineer: Jack Tian

Relative Humidity: 41~43%

Test Voltage: 120Vac / 60Hz

Phase: Line

WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1



Site : CO01-SZ

Condition: FCC 15B_QP LISN_L_20140304 LINE

Project : (FC) 512802

Mode : Mode 4

IMEI : 863370021916161/863370021916963

Over Limit Read LISN Cable

Freq	Level	Limit	Line	Level	Factor	Loss	Remark
MHz	dBuV	dB	dBuV	dBu∀	dB	dB	
0.15	34.17	-21.57	55.74	23.60	0.22	10.35	Average
0.15	42.17	-23.57	65.74	31.60	0.22	10.35	QP
0.17	17.75	-37.24	54.99	7.20	0.22	10.33	Average
0.17	40.15	-24.84	64.99	29.60	0.22	10.33	QP
0.19	15.03	-39.08	54.11	4.50	0.22	10.31	Average
0.19	40.63	-23.48	64.11	30.10	0.22	10.31	QP
0.22	22.90	-29.93	52.83	12.40	0.23	10.27	Average
0.22	39.10	-23.73	62.83	28.60	0.23	10.27	QP
0.25	24.28	-27.32	51.60	13.80	0.24	10.24	Average
0.25	42.28	-19.32	61.60	31.80	0.24	10.24	QP
0.28	15.47	-35.29	50.76	5.01	0.25	10.21	Average
0.28	28.07	-32.69	60.76	17.61	0.25	10.21	QP
	MHz 0.15 0.17 0.17 0.19 0.19 0.22 0.22 0.25 0.25 0.28	MHz dBuV 0.15 34.17 0.15 42.17 0.17 17.75 0.17 40.15 0.19 15.03 0.19 40.63 0.22 22.90 0.22 39.10 0.25 24.28 0.25 42.28 0.28 15.47	0.15 34.17 -21.57 0.15 42.17 -23.57 0.17 17.75 -37.24 0.17 40.15 -24.84 0.19 15.03 -39.08 0.19 40.63 -23.48 0.22 22.90 -29.93 0.22 39.10 -23.73 0.25 24.28 -27.32 0.25 42.28 -19.32 0.28 15.47 -35.29	MHz dBuV dB dBuV 0.15 34.17 -21.57 55.74 0.15 42.17 -23.57 65.74 0.17 17.75 -37.24 54.99 0.17 40.15 -24.84 64.99 0.19 15.03 -39.08 54.11 0.19 40.63 -23.48 64.11 0.22 22.90 -29.93 52.83 0.22 39.10 -23.73 62.83 0.25 24.28 -27.32 51.60 0.25 42.28 -19.32 61.60 0.28 15.47 -35.29 50.76	MHz dBuV dB dBuV dBuV 0.15 34.17 -21.57 55.74 23.60 0.15 42.17 -23.57 65.74 31.60 0.17 17.75 -37.24 54.99 7.20 0.17 40.15 -24.84 64.99 29.60 0.19 40.63 -39.08 54.11 4.50 0.19 40.63 -23.48 64.11 30.10 0.22 22.90 -29.93 52.83 12.40 0.22 39.10 -23.73 62.83 28.60 0.25 24.28 -27.32 51.60 13.80 0.28 15.47 -35.29 50.76 5.01	MHz dBuV dB dBuV dBuV dB 0.15 34.17 -21.57 55.74 23.60 0.22 0.15 42.17 -23.57 65.74 31.60 0.22 0.17 17.75 -37.24 54.99 7.20 0.22 0.17 40.15 -24.84 64.99 29.60 0.22 0.19 15.03 -39.08 54.11 4.50 0.22 0.19 40.63 -23.48 64.11 30.10 0.22 0.22 22.90 -29.93 52.83 12.40 0.23 0.22 39.10 -23.73 62.83 28.60 0.23 0.25 24.28 -27.32 51.60 13.80 0.24 0.25 42.28 -19.32 61.60 31.80 0.24 0.28 15.47 -35.29 50.76 5.01 0.25	MHz dBuV dB dBuV dBuV dB dB 0.15 34.17 -21.57 55.74 23.60 0.22 10.35 0.15 42.17 -23.57 65.74 31.60 0.22 10.35 0.17 17.75 -37.24 54.99 7.20 0.22 10.33 0.17 40.15 -24.84 64.99 29.60 0.22 10.33 0.19 15.03 -39.08 54.11 4.50 0.22 10.31 0.19 40.63 -23.48 64.11 30.10 0.22 10.31 0.22 22.90 -29.93 52.83 12.40 0.23 10.27 0.22 39.10 -23.73 62.83 28.60 0.23 10.27 0.25 24.28 -27.32 51.60 13.80 0.24 10.24 0.25 42.28 -19.32 61.60 31.80 0.24 10.24 0.28 15.47 -35.29 50.76 5.01 0.25 10.21

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21~22℃ Test Mode: Mode 4 Temperature: Test Engineer: Jack Tian Relative Humidity: 41~43% Phase: 120Vac / 60Hz Test Voltage: Neutral WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + SIM1 100 Level (dBuV) Date: 2015-03-10 Time: 13:52:23 90 80 70 FCC 15B_QP 60 FCC 15B_AVG 50 20 10 20 15 2 .5 5 10 30 Frequency (MHz) : CO01-SZ Site Condition: FCC 15B QP LISN N 20140304 NEUTRAL Project : (FC) 512802 Mode : Mode 4 : 863370021916161/863370021916963 Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark dBu∀ MHz dB dBu∀ dBuV dB 0.16 22.67 -32.85 55.52 11.99 0.33 10.35 Average 0.16 41.17 -24.35 65.52 30.49 0.33 10.35 QP 0.18 21.04 -33.38 54.42 10.40 0.18 41.84 -22.58 64.42 31.20 0.32 10.32 Average 0.32 10.32 QP 5 0.21 25.11 -28.21 53.32 14.50 0.32 10.29 Average 0.21 36.41 -26.91 63.32 25.80 0.23 19.60 -33.01 52.61 9.00 0.32 10.29 QP 0.33 10.27 Average 6 7 8 * 0.23 42.50 -20.11 62.61 31.90 0.33 10.27 QP 0.26 17.78 -33.60 51.38 7.20 0.26 31.68 -29.70 61.38 21.10 0.35 10.23 Average 0.35 10.23 QP 9 10 0.28 17.37 -33.31 50.68 6.80 0.36 10.21 Average 11 0.28 30.47 -30.21 60.68 19.90 12 0.36 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:

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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

The measuring equipment is listed in the section 4 of this test report.

3.2.3. Test Procedures

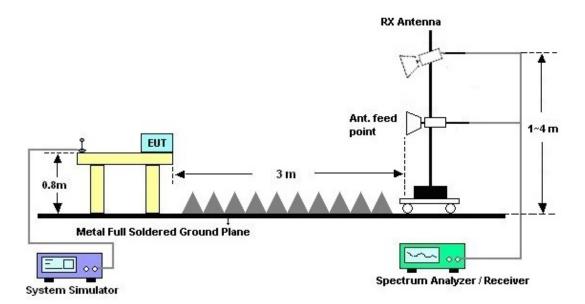
- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The 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.
- 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 (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
- 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



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3.2.5. Test Result of Radiated Emission

Test Mode :		Mode 4					Temperature :			23~	23~25°C			
Test Engineer	r:	Gavin Zhang					Relative Humidity :			: 48~	48~52%			
Test Distance	:	3m					Polarization :			Hor	Horizontal			
WCDMA Band V Idle + Blu				Blue	tooth le	dle + \	WLAN	ldle +	USB	Cable (I	Data Link			
Function Type	e :	Notebook) + Earphone + SIM1												
Remark :		#7 is	s syste	m sim	ulator	signal	which	can b	e ignor	ed.				
117 ^L	.evel	(dBuV	//m)									Date: 2	2015-04-10	
""														
102.4														
87.8-														
												FCC	CLASS-B	
73.1														
58.5												FCC CLAS	S-B (AVG)	
43.0						9	1	0	11		12	13		
43.9	1 3 -	6 ⁷	8	}										
29.3	4 5													
14.6														
03	80	1000.		3000.		5000.	Frequen	7000.		9000.		11000.	13000	
Site Condit Projec Mode		:	: 03CH01- : FCC CL/ : (FC) 512 : Mode 4	ASS-B 3	m LF_AN	NT_1411	07 HORIZ	ZONTAL						
		Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark		
-		MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg		_	
1 2			38.67 32.70						25.38 25.12	100		Peak Peak		
3 4	29 39	98.65 90.30	35.30 29.45	-10.70 -16.55	46.00 46.00	43.54 36.78	14.07 15.27	2.73	25.04 25.74			Peak Peak		
5 6	7	36.10	29.98 36.71	-9.29		37.49	21.09	4.09 4.43	26.30			Peak Peak		
7 8	24	86.00	39.07 39.82	-34.18		48.79		8.78	25.93 50.43			Peak Peak		
9 10			42.30 46.67									Peak Peak		
11 12	83	52.00	46.14 49.76	-27.86	74.00	43.30	36.29	16.22	49.67			Peak Peak		
13			50.74							100		Peak		

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23~25°C Test Mode: Mode 4 Temperature: Test Engineer: **Relative Humidity:** 48~52% Gavin Zhang Polarization: Test Distance: 3m Vertical WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + SIM1 Remark: #7 is system simulator signal which can be ignored. 117 Level (dBuV/m) Date: 2015-04-08 102.4 87.8 FCC CLASS-B 58.5 FCC CLASS-B (AVG) 10 43.9 29.3 0<mark>30</mark> 1000. 3000. 5000. 7000. 9000. 11000. 13000 Frequency (MHz) : 03CH01-SZ Condition : FCC CLASS-B 3m LF_ANT_141107 VERTICAL Project : (FC) 512802 Mode : Mode 4 A/Pos T/Pos Over Limit ReadAntenna Cable Preamp Freq Level Limit Line Level Factor Remark Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cmdeg 119.37 28.09 -15.41 43.50 37.63 14.46 1.68 25.68 --- Peak 168.24 30.53 -12.97 43.50 11.90 25.41 Peak 298.65 32.43 -13.57 30.92 -15.08 46.00 40.67 14.07 2.73 25.04 ---Peak --- Peak 358.10 46.00 38.55 14.86 3.00 25.49 498.10 34.20 -11.80 46.00 37.64 3.57 100 200 Peak 19.32 26.33 33.25 -12.75 738.90 46.00 33.95 21.15 26.29 --- Peak 881.66 37.83 37.10 4.89 25.93 Peak 2020.00 38.63 -35.37 74.00 49.40 32.22 8.03 51.02 --- Peak --- Peak 40.88 -33.12 74.00 45.61 34.21 ---4514.00 12.79 51.73 45.44 -28.56 Peak 6622.00 74.00 45.17 36.25 14.48 10 50.46 46.43 -27.57 74.00 43.61 36.31 16.25 49.74 11 Peak 9880.00 49.54 -24.46 74.00 43.53 37.96 17.97 49.92 --- Peak

11716.00 50.72 -23.28 74.00

42.74

39.32

18.67

50.01

200

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360 Peak

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI TEST Receiver	R&S	ESCI7	100768	9kHz~3GHz	May 04, 2014	Mar. 10, 2015	May 03, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Feb. 02, 2015	Mar. 10, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Feb. 02, 2015	Mar. 10, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Sep. 29, 2014	Mar. 10, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
EMI Test Receiver&SA	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2014	Apr. 08, 2015~ Apr. 10, 2015	May 25, 2015	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz; Max 30dBm	Sep. 25, 2014	Apr. 08, 2015~ Apr. 10, 2015	Sep. 24, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	Apr. 08, 2015~ Apr. 10, 2015	Sep. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Apr. 08, 2015~ Apr. 10, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan. 28, 2015	Apr. 08, 2015~ Apr. 10, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	MITEQ	AMF-7D-001 01800-30-10 P-R	1707137	1GHz~18GHz	May 08, 2014	Apr. 08, 2015~ Apr. 10, 2015	May 07, 2015	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 08, 2014	Apr. 08, 2015~ Apr. 10, 2015	May 07, 2015	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Apr. 08, 2015~ Apr. 10, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Apr. 08, 2015~ Apr. 10, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Apr. 08, 2015~ Apr. 10, 2015	NCR	Radiation (03CH01-SZ)

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5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of	2.3dB
Confidence of 95% (U = 2Uc(y))	2.5uB

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

Measuring Uncertainty for a Level of	0.040
Confidence of 95% (U = 2Uc(y))	3.9dB

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