# **FCC Test Report**

APPLICANT : CT Asia (HK) Ltd. EQUIPMENT : 3G Smart Phone

BRAND NAME : BLU

MODEL NAME : NEO 5.0

FCC ID : YHLBLUNEO50

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Jun. 03, 2015 and testing was completed on Jul. 06, 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

Lunis Win

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

Testing Laboratory 2353

**Report No. : FC560303** 

Report Version : Rev. 01

## **TABLE OF CONTENTS**

RE	VISIO	N HISTORY	3			
SU	MMAF	RY OF TEST RESULT				
		ERAL DESCRIPTION	5			
	1.1. 1.2.	Applicant Manufacturer	5			
	1.3. 1.4.	Product Feature of Equipment Under Test	ε			
	1.5. 1.6. 1.7.	Modification of EUT  Test Location  Applicable Standards	7			
2.		TEST CONFIGURATION OF EQUIPMENT UNDER TEST				
	2.1. 2.2. 2.3. 2.4.	Test Mode  Connection Diagram of Test System  Support Unit used in test configuration and system  EUT Operation Test Setup	10 1			
3.	TEST	RESULT				
	3.1. 3.2.					
4.	LIST	OF MEASURING EQUIPMENT	23			
5.	UNC	ERTAINTY OF EVALUATION	24			
ΑP	PEND	IX A. SETUP PHOTOGRAPHS				

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 2 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

## **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC560303	Rev. 01	Initial issue of report	Aug. 14, 2015

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 3 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

## **SUMMARY OF TEST RESULT**

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.107	ICES003 Section 6.1	AC Conducted Emission	< 15.107 limits < ICES003 6.1 limits	PASS	Under limit 4.39 dB at 0.520 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 5.69 dB at 720.000 MHz

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 4 of 24 Report Issued Date : Aug. 14, 2015

Report No.: FC560303

Report Version : Rev. 01

## 1. General Description

## 1.1. Applicant

CT Asia (HK) Ltd.

Unit1309-11, 13th Floor 9 Wing Hong Street Cheung Sha Wan Kowloon, Hong Kong

#### 1.2. Manufacturer

CT Asia (HK) Ltd.

Unit1309-11, 13th Floor 9 Wing Hong Street Cheung Sha Wan Kowloon, Hong Kong

### 1.3. Product Feature of Equipment Under Test

Product Feature					
Equipment	3G Smart Phone				
Brand Name	BLU				
Model Name	NEO 5.0				
FCC ID	YHLBLUNEO50				
	GSM/GPRS/EGPRS(Downlink Only)/WCDMA/HSPA/				
EUT supports Radios application	HSPA+(Downlink Only)				
EOT Supports Radios application	WLAN2.4GHz 802.11b/g/n HT20				
	Bluetooth v2.1+EDR				
IMEI Code	Conduction: 359767050215871/359767050215889				
I IVIET Code	Radiation: 359767050215855/359767050215863				
HW Version	FS251-V0.2				
SW Version	v01				
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.

SPORTON INTERNATIONAL (SHENZHEN) INC.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 5 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

## 1.4. Product Specification subjective to this standard

Product Specification subjective to this standard						
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz WCDMA Band V: 826.4 MHz ~ 846.6 MHz WCDMA Band IV: 1712.4 MHz ~ 1752.6 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	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: 2112.4 MHz ~ 2152.6 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: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS: PIFA Antenna					
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK/(MCS 5-9): 8PSK(Downlink Only) WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM(Downlink Only) 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): \pi /4-DQPSK Bluetooth (3Mbps): 8-DPSK GPS: BPSK					

### 1.5. Modification of EUT

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

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 6 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

#### 1.6. Test Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.				
	1F & 2F, Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili				
Took Site Leastion	Town, Nanshan District, Shenzhen, Guangdong, P. R. China				
Test 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 Site No	Sporton Site No. FCC/IC Registration No.				
Test Site No.	03CH01-SZ 831040/4086F				

### 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.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 7 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

## 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.

		Test Condition			
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	$\boxtimes$	$\boxtimes$	$\square$	
۷.	(EUT connected 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 was test item 2.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 8 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

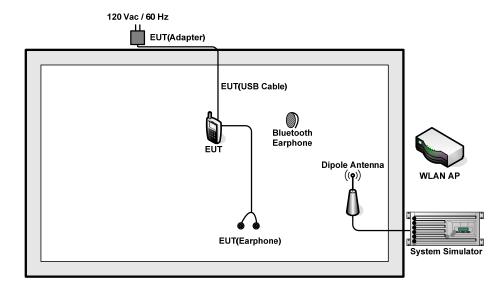
Test Items	EUT Configure Mode	Function Type
		Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig.1></fig.1>
AC Conducted Emission	1/2	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM2 <fig.1></fig.1>
		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
	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 + SIM2 <fig.1></fig.1>
		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
Radiated Emissions ≥ 1GHz	2	Mode 1: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>

#### Remark:

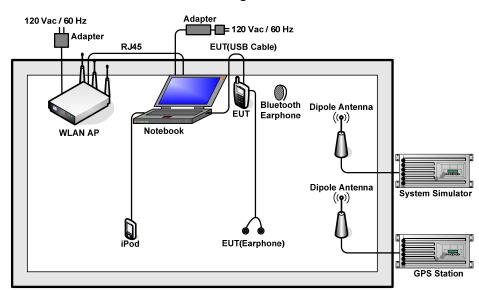
- 1. The worst case of AC is mode 1, and the USB Link mode of AC is mode 3, the test data of these modes were reported.
- 2. The worst case of RE < 1G is mode 3, the test data of this mode was reported.
- 3. Link with Notebook means data application transferred mode between EUT and Notebook.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 9 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

## 2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 10 of 24
Report Issued Date : Aug. 14, 2015

Report No.: FC560303

Report Version : Rev. 01

## 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	CMU200	N/A	N/A	Unshielded, 1.8 m
2.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
3.	Notebook	Lenovo	E540	PRC4	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
4.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
5.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
6.	WLAN AP	D-Link	DIR-615	N/A	N/A	Unshielded, 1.8 m with Core
7.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 2.7 m with Core
8.	iPod	Apple	A1199	FCC DoC	N/A	N/A
9.	SD Card	SanDisk	4G class 4	FCC DoC	Unshielded, 1.2 m	N/A
10.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Unshielded, 1.2 m	N/A

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 11 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

### 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. Data application is transferred between Notebook and EUT via USB cable.
- 2. Execute "Video Player" to play MPEG4 files.
- 3. Turn on camera to capture images.
- 4. Turn on GPS function to make the EUT receive continuous signals from GPS station.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 12 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

#### 3. Test Result

#### **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		

<sup>\*</sup>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

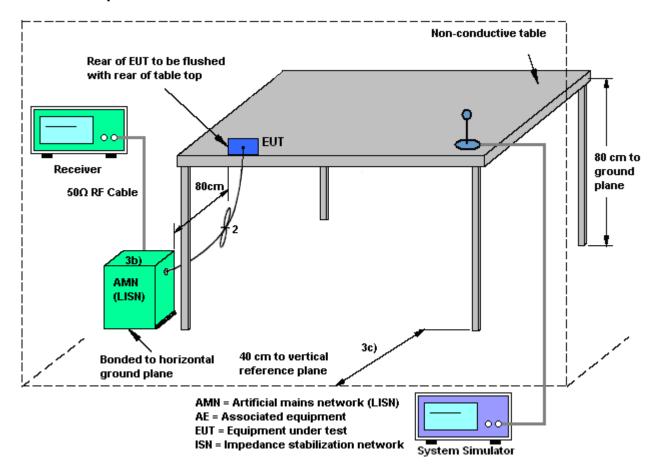
- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- The FCC states that a 50 ohm, 50 microhenry LISN should be used. 5.
- 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 (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50

: 13 of 24 Page Number Report Issued Date: Aug. 14, 2015 Report Version

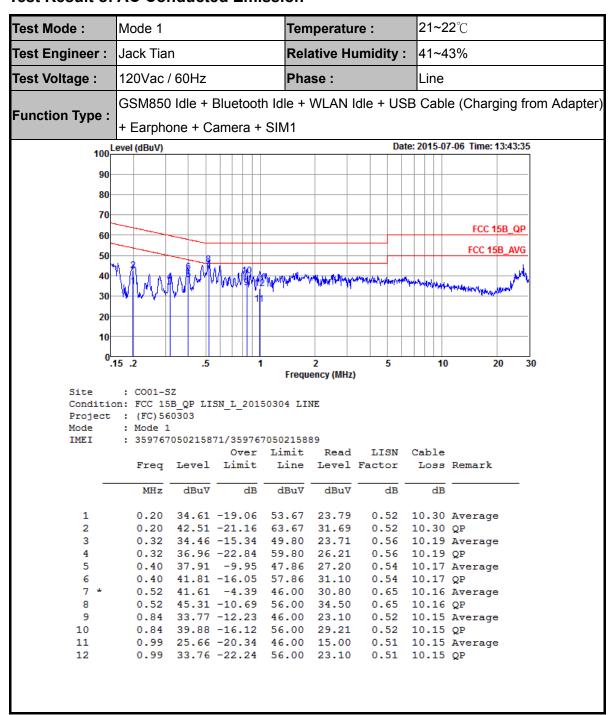
: Rev. 01

#### 3.1.4 Test Setup



TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 14 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

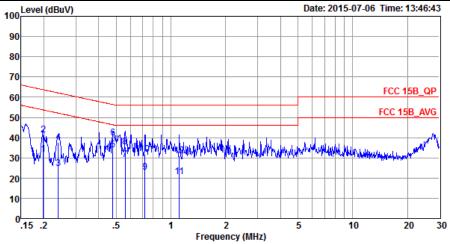
#### 3.1.5 Test Result of AC Conducted Emission



TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 15 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01



**21~22**℃ Test Mode: Mode 1 Temperature: 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: + Earphone + Camera + SIM1 100 Level (dBuV) Date: 2015-07-06 Time: 13:46:43



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_N\_20150304 NEUTRAL

Project : (FC)560303 Mode : Mode 1

Mode : mode :

IMEI : 359767050215871/359767050215889

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBu∀	dBuV	dB	dB	
1	0.20	31.60	-22.07	53.67	20.79	0.51	10.30	Average
2	0.20	41.30	-22.37	63.67	30.49	0.51	10.30	QP
3	0.24	24.80	-27.28	52.08	14.00	0.55	10.25	Average
4	0.24	37.80	-24.28	62.08	27.00	0.55	10.25	QP
5 *	0.48	33.96	-12.40	46.36	23.20	0.60	10.16	Average
6	0.48	39.86	-16.50	56.36	29.10	0.60	10.16	QP
7	0.56	29.04	-16.96	46.00	18.30	0.59	10.15	Average
8	0.56	35.24	-20.76	56.00	24.50	0.59	10.15	QP
9	0.72	22.90	-23.10	46.00	12.20	0.55	10.15	Average
10	0.72	31.80	-24.20	56.00	21.10	0.55	10.15	QP
11	1.11	20.72	-25.28	46.00	10.00	0.56	10.16	Average
12	1.11	31.02	-24.98	56.00	20.30	0.56	10.16	QP

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 16 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01



**21~22**℃ Test Mode: Mode 3 Temperature: Test Engineer: Jack Tian **Relative Humidity:** 41~43% 120Vac / 60Hz Phase: Test Voltage: Line WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + GPS Rx + SIM1 100 Level (dBuV) Date: 2015-07-06 Time: 14:08:21 90 80 70 FCC 15B\_QP 60 FCC 15B\_AVG 50 40 30 20 10 0<u>.15</u> 5 10 20 30 Frequency (MHz) Site : CO01-SZ Condition: FCC 15B\_QP LISN\_L\_20150304 LINE Project : (FC) 560303 Mode : Mode 3 IMEI : 359767050215871/359767050215889 Over Limit Read LISN Cable Freq Level Limit Line Level Factor Loss Remark dB dBuV dBuV dBu∀ dB MHz dB 0.24 27.30 -24.92 52.22 16.51 0.24 41.60 -20.62 62.22 30.81 1 0.54 10.25 Average 0.54 10.25 QP 2 3 0.26 28.88 -22.41 51.29 18.09 0.56 10.23 Average 0.26 41.98 -19.31 61.29 31.19 0.35 25.94 -23.11 49.05 15.19 0.56 10.23 QP 0.56 10.19 Average 4 5 0.35 38.34 -20.71 59.05 27.59 0.56 10.19 QP 0.40 22.71 -25.15 47.86 12.00 0.40 36.81 -21.05 57.86 26.10 7 0.54 10.17 Average 10.17 QP 8 0.54 0.57 23.17 -22.83 46.00 12.40 9 0.62 10.15 Average 0.57 37.97 -18.03 56.00 27.20 0.67 21.61 -24.39 46.00 10.90 0.67 35.11 -20.89 56.00 24.40 10 \* 0.62 10.15 QP 0.56 10.15 Average 0.56 10.15 QP 11 12

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 17 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01



**21~22**℃ Test Mode: Mode 3 Temperature: Test Engineer: Jack Tian Relative Humidity: 41~43% 120Vac / 60Hz Phase: Test Voltage: Neutral WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + GPS Rx + SIM1 Date: 2015-07-06 Time: 14:10:44 100 Level (dBuV) 90 80 70 FCC 15B\_QP 60 FCC 15B AVG 50 40 30 20 10 0<mark>.15 .2</mark> 2 5 10 20 30 Frequency (MHz) Site : CO01-SZ Condition: FCC 15B QP LISN N 20150304 NEUTRAL Project : (FC) 560303 Mode : Mode 3 IMEI : 359767050215871/359767050215889 LISN Cable Over Limit Read Freq Level Limit Line Level Factor Loss Remark dBu∀ dB dBuV dBuV MHz dB dB 0.56 10.23 Average 0.56 10.23 QP 0.26 33.90 -17.57 51.47 23.11 61.47 0.26 42.90 -18.57 2 32.11 0.34 25.46 -23.72 49.18 14.70 0.57 10.19 Average 0.34 38.36 -20.82 59.18 27.60 0.40 24.02 -23.79 47.81 13.30 0.57 10.19 QP 0.55 10.17 Average 4 5 0.40 38.32 -19.49 57.81 27.60 0.55 10.17 QP 0.46 20.15 -26.61 46.76 7 9.40 0.59 10.16 Average 8 0.46 35.25 -21.51 56.76 24.50 0.59 10.16 QP 0.58 24.74 -21.26 46.00 14.01 0.58 10.15 Average 9 10 \* 0.58 39.34 -16.66 56.00 28.61 0.58 10.15 QP 0.65 21.61 -24.39 46.00 10.90 0.65 36.61 -19.39 56.00 25.90 0.56 10.15 Average 0.56 10.15 QP 11 12

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 18 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

#### 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

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

#### 3.2.3. Test Procedures

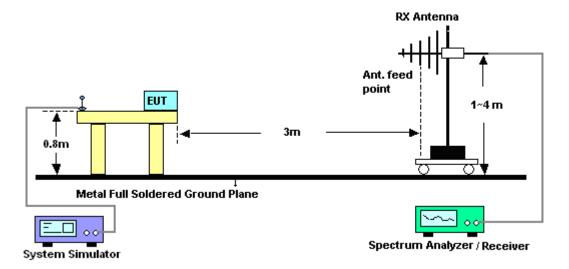
- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a Bi-Log antenna and its 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 $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 19 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

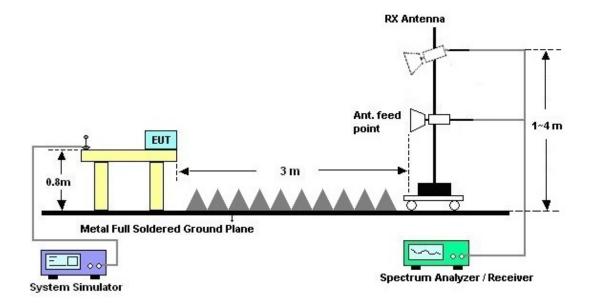
FCC Test Report No. : FC560303

### 3.2.4. Test Setup of Radiated Emission

#### For radiated emissions from 30MHz to 1GHz

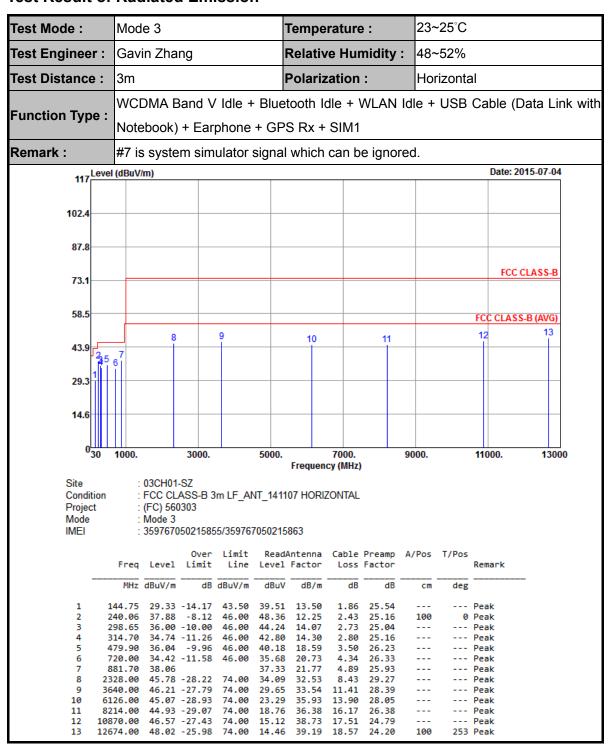


#### For radiated emissions above 1GHz



TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 20 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

#### 3.2.5. Test Result of Radiated Emission



TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 21 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01

Test Mode :	Mode 3			Temperature :			23~2	23~25°C			
Test Engineer :	Gavin Zhang			Relative Humidity :			48~	48~52%			
Test Distance :	3m			Polariz	ation	: Vertical					
Function Type :	n Type : WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link wind Notebook) + Earphone + GPS Rx + SIM1									nk with	
Remark :											
117 Leve	l (dBuV/m)								Date:	2015-07-03	
102.4											
87.8											
73.1									FCC	C CLASS-B	
58.5									FCC CLAS	SS-B (AVG)	
43.9	6 <sub>7</sub> 7		9	10		•	11	12	1	3	
29.3											
030	1000.	3000.	5000.	Eroguon	7000.		9000.		11000.	1300	0
Site : 03CH01-SZ Condition : FCC CLASS-B 3m LF_ANT_141107 VERTICAL Project : (FC) 560303 Mode : Mode 3 IMEI : 359767050215855/359767050215863  Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Loss Factor Remark											
1 1	MHz dBuV/m	dB dBuV/m -14.31 43.50	dBu\ 40.63		dB 2.01	dB 25.42	cm	deg	Peak		
3 2 4 3 5 4 6 7 7 8	299.73 32.11 300.00 32.14 499.50 31.06 720.00 40.31 381.70 38.09		40.32 40.35 34.46 41.57 37.36	14.10 14.10 19.36 20.73 21.77	2.73 2.73 3.57 4.34 4.89	25.04 25.04 26.33 26.33 25.93	100	  200	Peak Peak Peak Peak Peak Peak		
9 49 10 63 11 88	942.00 44.67 328.00 45.44 340.00 46.19	-27.39 74.00 -29.33 74.00 -28.56 74.00 -27.81 74.00 -26.47 74.00	25.34 23.07 19.05	34.47 36.12 36.60	13.04 14.21 16.52	28.18 27.96 25.98			Peak Peak Peak Peak Peak		
		-25.81 74.00					100		Peak		

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50

: 22 of 24 Page Number Report Issued Date: Aug. 14, 2015 Report Version : Rev. 01

## 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Test Receiver&SA	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2015	Jul. 03, 2015~ Jul. 04, 2015	May 25, 2016	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz; Max 30dBm	Sep. 25, 2014	Jul. 03, 2015~ Jul. 04, 2015	Sep. 24, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	Jul. 03, 2015~ Jul. 04, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Jul. 03, 2015~ Jul. 04, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan 28, 2015	Jul. 03, 2015~ Jul. 04, 2015	Jan 27, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5G Hz	Jan. 28, 2015	Jul. 03, 2015~ Jul. 04, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 05, 2015	Jul. 03, 2015~ Jul. 04, 2015	May 04, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	61601000198 5	N/A	NCR	Jul. 03, 2015~ Jul. 04, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jul. 03, 2015~ Jul. 04, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jul. 03, 2015~ Jul. 04, 2015	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESCI7	100724	9kHz~3GHz	Jan. 28, 2015	Jul. 06, 2015	Jan. 27, 2016	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	103892	9kHz~30MHz	Feb. 02, 2015	Jul. 06, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	MessTec	AN3016	16850	9kHz~30MHz	Feb. 02, 2015	Jul. 06, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000089 1	100Vac~250Vac	Sep. 29, 2014	Jul. 06, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
Pulse Limiter	COM-POWER	LIT-153 Transient Limiter	53139	150kHz~30MHz	Oct. 24, 2014	Jul. 06, 2015	Oct. 24, 2015	Conduction (CO01-SZ)

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 23 of 24
Report Issued Date : Aug. 14, 2015
Report Version : Rev. 01



## 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

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

Managerian Unacetainty for a Lavel of	T
Measuring Uncertainty for a Level of	3.9dB
Confidence of 95% (U = 2Uc(y))	0.5dB

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUNEO50 Page Number : 24 of 24 Report Issued Date: Aug. 14, 2015

Report No. : FC560303

Report Version : Rev. 01