# **FCC Test Report**

APPLICANT : BLU Products, Inc.

**EQUIPMENT**: Mobile phone

BRAND NAME : BLU

MODEL NAME : STUDIO SELFIE 2

MARKETING NAME : STUDIO SELFIE 2

FCC ID : YHLBLUSTSELFIE2

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Feb. 20, 2016 and testing was completed on Feb. 26, 2016. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2014 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 (KUNSHAN) INC., the test report shall not be reproduced except in full.

Prepared by: James Huang / Manager

James Huang

Approved by: Jones Tsai / Manager

UNSHAN) INC.

SPORTON INTERNATIONAL (KUNSHAN) INC. No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China

Page Number : 1 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

Testing Laboratory 2627

# **TABLE OF CONTENTS**

RE	REVISION HISTORY3					
SII	МΜΔΕ	Y OF TEST RESULT	,			
		ERAL DESCRIPTION				
	1.1. 1.2. 1.3. 1.4. 1.5. 1.6. 1.7.	Applicant  Manufacturer  Product Feature of Equipment Under Test  Product Specification of Equipment Under Test  Modification of EUT  Test Location  Applicable Standards	5 6			
2.	2.1. 2.2. 2.3. 2.4.	CONFIGURATION OF EQUIPMENT UNDER TEST  Test Mode  Connection Diagram of Test System  Support Unit used in test configuration and system  EUT Operation Test Setup	10 11			
3.	3.1. 3.2.	Test of AC Conducted Emission Measurement  Test of Radiated Emission Measurement	13			
		OF MEASURING EQUIPMENT				
ΑP	PEND	IX A. SETUP PHOTOGRAPHS				

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 2 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report No. : FC622002

# **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC622002	Rev. 01	Initial issue of report	Mar. 18, 2016

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 3 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

# **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 3.85 dB at 0.170 MHz
3.2	15.109	ICES003 Section 6.2	Radiated Emission	< 15.109 limits < ICES003 6.2 limits	PASS	Under limit 8.41 dB at 43.230 MHz

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 4 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

# 1. General Description

# 1.1. Applicant

**BLU Products, Inc.** 

10814 NW 33rd St # 100 Doral, FL 33172

#### 1.2. Manufacturer

**BLU Products, Inc.** 

10814 NW 33rd St # 100 Doral, FL 33172

# 1.3. Product Feature of Equipment Under Test

	Product Feature
Equipment	Mobile phone
Brand Name	BLU
Model Name	STUDIO SELFIE 2
Marketing Name	STUDIO SELFIE 2
FCC ID	YHLBLUSTSELFIE2
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(16QAM uplink is not supported) WLAN2.4GHz 802.11b/g/n HT20/HT40 Bluetooth v3.0+EDR/Bluetooth v4.0 LE
IMEI Code	Conduction: 868047010033860/868047010033878 Radiation: 868047010033803/868047010033811
HW Version	V1.2
SW Version	V0.2
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 (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 5 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

# 1.4. Product Specification of Equipment Under Test

Standa	rds-related Product Specification
	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
	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
Rx Frequency	WCDMA Band IV: 2112.4 MHz ~ 2152.6 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: Monopole Antenna
Antenna Type	WLAN: PIFA Antenna
Antenna Type	Bluetooth: PIFA Antenna
	GPS: Monopole Antenna
	GSM: GMSK
	GPRS: GMSK
	EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK
	WCDMA: QPSK (Uplink)
	HSDPA: QPSK (Uplink)
	HSUPA: QPSK (Uplink)
Type of Modulation	HSPA+: 16QAM (Uplink is not supported)
Type of modulation	802.11b: DSSS (DBPSK / DQPSK / CCK)
	802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM)
	Bluetooth LE : GFSK
	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: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 6 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

### 1.6. Test Location

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.					
	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P. R. China					
Test Site Location	TEL: +86-0512-5790-0158					
	FAX: +86-0512-5790-0958					
Toot Site No	Sporton S	FCC/IC Registration No.				
Test Site No.	CO01-KS	03CH03-KS	306251/4086E			

Note: The test site complies with ANSI C63.4 2014 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 C63.4-2014
- IC ICES-003 Issue 5
- IC RSS-Gen Issue 4

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

SPORTON INTERNATIONAL (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 7 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

# 2. Test Configuration of Equipment Under Test

### 2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2014 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	
		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</li>

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.

SPORTON INTERNATIONAL (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 8 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

Test Items	EUT Configure Mode	Function Type
	1/2	Mode 1: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Front) + SIM1 <fig.1></fig.1>
AC Conducted		Mode 2: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Back) + SIM2 <fig.1></fig.1>
Emission		Mode 3: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig.1></fig.1>
		Mode 4: WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>
	1/2	Mode 1: WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Front) + SIM1 <fig.1></fig.1>
Radiated		Mode 2: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera (Back) + SIM2 <fig.1></fig.1>
Emissions < 1GHz		Mode 3: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig.1></fig.1>
		Mode 4: WCDMA Band IV 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 IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig.2></fig.2>

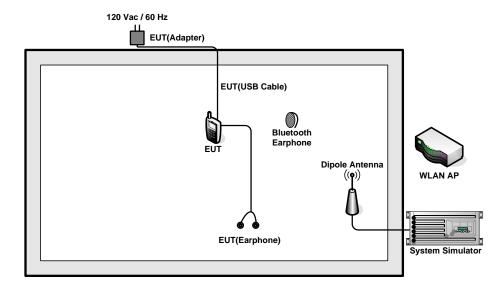
#### Remark:

- 1. The worst case of AC is mode 1; and the USB Link mode of AC is mode 4, only the test data of this mode was reported.
- 2. The worst case of RE < 1G is mode 4; only the test data of this mode was reported.
- Data Link with Notebook means data application transferred mode between EUT and Notebook.

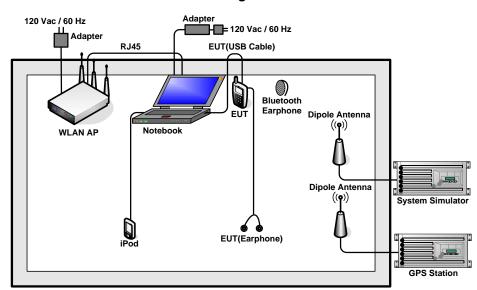
TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 9 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

# 2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 10 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

# 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	Anritsu	MT8820C	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-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
4.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded, 2.7 m with Core
5.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
6.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
7.	Bluetooth Earphone	Samsung	HS3000	A3LHS3000	N/A	N/A
8.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2 m	N/A
9.	iPod	Apple	MC525 ZP/A	FCC DoC	Shielded, 1.0 m	N/A
10.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 11 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

### 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 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. Data application is transferred between Notebook and 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.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 12 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

### 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		

<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.

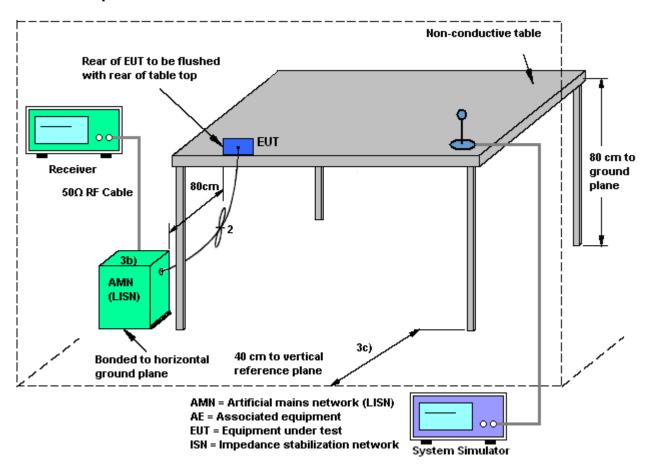
#### 3.1.3 Test Procedure

- 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 (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 13 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report No.: FC622002

### 3.1.4 Test Setup

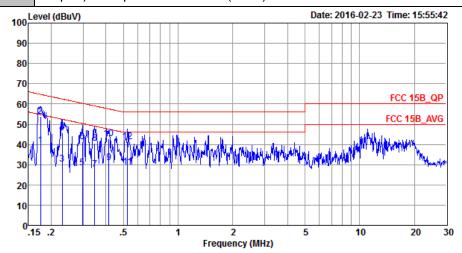


TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 14 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

### 3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1	Temperature :	21~23℃		
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%		
Test Voltage :	120Vac / 60Hz	Phase :	Line		
Function Type	WCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from				
Function Type :	Adapter) + Earphone + Camera (Front) + SIM1				



Condition: FCC 15B\_QP LISN\_L\_20160112 LINE

Project : (FC)622002 Mode : Mode 1

IMEI : 868047010033860/868047010033878

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∀	dB	dBu∀	dBu∀	dB	dB	
1	0.17	39.60	-15.12	54.72	28.80	0.48	10.32	Average
2	* 0.17	53.70	-11.02	64.72	42.90	0.48	10.32	QP
3	0.23	30.10	-22.34	52.44	19.30	0.54	10.26	Average
4	0.23	45.80	-16.64	62.44	35.00	0.54	10.26	QP
5	0.30	28.27	-22.05	50.32	17.50	0.57	10.20	Average
6	0.30	41.27	-19.05	60.32	30.50	0.57	10.20	QP
7	0.35	27.64	-21.41	49.05	16.89	0.56	10.19	Average
8	0.35	40.54	-18.51	59.05	29.79	0.56	10.19	QP
9	0.41	30.83	-16.72	47.55	20.10	0.56	10.17	Average
10	0.41	42.73	-14.82	57.55	32.00	0.56	10.17	QP
11	0.53	28.90	-17.10	46.00	18.10	0.65	10.15	Average
12	0.53	41.20	-14.80	56.00	30.40	0.65	10.15	QP

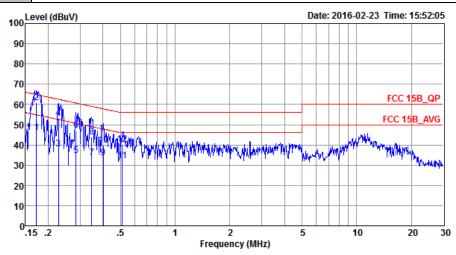
TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 15 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report No.: FC622002



Test Mode :	Mode 1	Temperature :	21~23℃						
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%						
Test Voltage :	120Vac / 60Hz	Phase :	Neutral						
Eurotion Type	WCDMA Band II Idle + Blue	VCDMA Band II Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from							

Function Type: Adapter) + Earphone + Camera (Front) + SIM1



Condition: FCC 15B\_QP LISN\_N\_20160112 NEUTRAL

Project : (FC) 622002

: Mode 1 : 868047010033860/868047010033878 IMEI

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBuV	dB	dBu∀	dBuV	dB	dB	
1	0.17	46.21	-8.65	54.86	35.40	0.48	10.33	Average
2 *	0.17	61.01	-3.85	64.86	50.20	0.48	10.33	QP
3	0.23	37.90	-14.62	52.52	27.10	0.54	10.26	Average
4	0.23	53.10	-9.42	62.52	42.30	0.54	10.26	QP
5	0.28	34.69	-15.99	50.68	23.90	0.58	10.21	Average
6	0.28	47.19	-13.49	60.68	36.40	0.58	10.21	QP
7	0.35	33.76	-15.29	49.05	23.00	0.57	10.19	Average
8	0.35	43.86	-15.19	59.05	33.10	0.57	10.19	QP
9	0.40	33.62	-14.19	47.81	22.90	0.55	10.17	Average
10	0.40	40.02	-17.79	57.81	29.30	0.55	10.17	QP
11	0.51	32.16	-13.84	46.00	21.39	0.61	10.16	Average
12	0.51	40.06	-15.94	56.00	29.29	0.61	10.16	QP

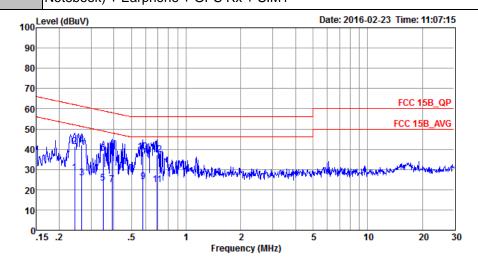
TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2

: 16 of 24 Page Number Report Issued Date: Mar. 18, 2016 Report Version : Rev. 01

Report No.: FC622002



Test Mode :	Mode 4	Temperature :	<b>21~23</b> ℃						
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%						
Test Voltage :	120Vac / 60Hz	Phase :	Line						
Function Type :	WCDMA Band IV Idle + Blu	WCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link wi							
Function Type :	Notebook) + Earphone + GF	PS Rx + SIM1							



Condition: FCC 15B\_QP LISN\_L\_20160112 LINE

Project : (FC) 622002 Mode : Mode 4

: 868047010033860/868047010033878 IMEI

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBu∀	dB	dBu∇	dBu∇	dB	dB	
1	0.24	28.29	-23.71	52.00	17.50	0.54	10.25	Average
2	0.24	41.39	-20.61	62.00	30.60	0.54	10.25	QP
3	0.27	25.68	-25.57	51.25	14.89	0.56	10.23	Average
4	0.27	42.18	-19.07	61.25	31.39	0.56	10.23	QP
5	0.35	23.34	-25.66	49.00	12.60	0.55	10.19	Average
6	0.35	38.14	-20.86	59.00	27.40	0.55	10.19	QP
7	0.39	22.62	-25.41	48.03	11.91	0.54	10.17	Average
8	0.39	38.92	-19.11	58.03	28.21	0.54	10.17	QP
9	0.58	23.97	-22.03	46.00	13.21	0.61	10.15	Average
10 *	0.58	38.57	-17.43	56.00	27.81	0.61	10.15	QP
11	0.69	22.39	-23.61	46.00	11.70	0.54	10.15	Average
12	0.69	37.39	-18.61	56.00	26.70	0.54	10.15	QP

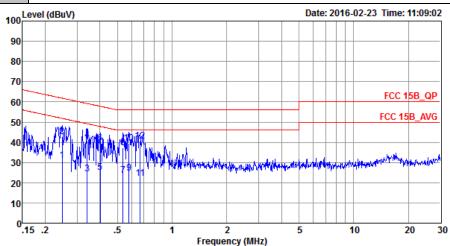
TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 17 of 24 Report Issued Date: Mar. 18, 2016 Report Version : Rev. 01

Report No. : FC622002



Test Mode :	Mode 4	Temperature :	21~23℃						
Test Engineer :	Jacky Yang	Relative Humidity :	41~43%						
Test Voltage :	120Vac / 60Hz	Phase :	Neutral						
Function Type:	WCDMA Band IV Idle + Blu	VCDMA Band IV Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link v							

Notebook) + Earphone + GPS Rx + SIM1



Condition: FCC 15B\_QP LISN\_N\_20160112 NEUTRAL

Project : (FC) 622002 Mode : Mode 4

IMEI : 868047010033860/868047010033878

		over	Limit	кеаа	LISN	Capie	
Freq	Level	Limit	Line	Level	Factor	Loss	Remark
MHz	dBu∀	dB	dBu∀	dBu∇	dB	dB	
0.25	31.00	-20.82	51.82	20.21	0.55	10.24	Average
0.25	42.90	-18.92	61.82	32.11	0.55	10.24	QP
0.34	24.36	-24.82	49.18	13.60	0.57	10.19	Average
0.34	40.86	-18.32	59.18	30.10	0.57	10.19	QP
0.40	24.92	-22.89	47.81	14.20	0.55	10.17	Average
0.40	39.42	-18.39	57.81	28.70	0.55	10.17	QP
0.54	23.45	-22.55	46.00	12.70	0.60	10.15	Average
0.54	37.25	-18.75	56.00	26.50	0.60	10.15	QP
0.58	24.64	-21.36	46.00	13.91	0.58	10.15	Average
0.58	39.34	-16.66	56.00	28.61	0.58	10.15	QP
0.67	22.31	-23.69	46.00	11.60	0.56	10.15	Average
0.67	40.71	-15.29	56.00	30.00	0.56	10.15	QP
	MHz 0.25 0.25 0.34 0.34 0.40 0.40 0.54 0.54 0.58 0.67	MHz dBuV  0.25 31.00 0.25 42.90 0.34 24.36 0.34 40.86 0.40 24.92 0.40 39.42 0.54 23.45 0.54 23.45 0.58 39.34 0.67 22.31	MHz dBuV dB  0.25 31.00 -20.82 0.25 42.90 -18.92 0.34 24.36 -24.82 0.34 40.86 -18.32 0.40 24.92 -22.89 0.40 39.42 -18.39 0.54 23.45 -22.55 0.54 37.25 -18.75 0.58 24.64 -21.36 0.58 39.34 -16.66 0.67 22.31 -23.69	Freq Level Limit Line  MHz dBuV dB dBuV  0.25 31.00 -20.82 51.82 0.25 42.90 -18.92 61.82 0.34 24.36 -24.82 49.18 0.34 40.86 -18.32 59.18 0.40 24.92 -22.89 47.81 0.40 39.42 -18.39 57.81 0.54 23.45 -22.55 46.00 0.54 37.25 -18.75 56.00 0.58 24.64 -21.36 46.00 0.58 39.34 -16.66 56.00 0.67 22.31 -23.69 46.00	Freq         Level         Limit         Line         Level           MHz         dBuV         dB         dBuV         dBuV           0.25         31.00         -20.82         51.82         20.21           0.25         42.90         -18.92         61.82         32.11           0.34         24.36         -24.82         49.18         13.60           0.34         40.86         -18.32         59.18         30.10           0.40         24.92         -22.89         47.81         14.20           0.40         39.42         -18.39         57.81         28.70           0.54         23.45         -22.55         46.00         12.70           0.54         37.25         -18.75         56.00         26.50           0.58         24.64         -21.36         46.00         13.91           0.58         39.34         -16.66         56.00         28.61           0.67         22.31         -23.69         46.00         11.60	Freq         Level         Limit         Line         Level         Factor           MHz         dBuV         dB         dBuV         dBuV         dB           0.25         31.00         -20.82         51.82         20.21         0.55           0.25         42.90         -18.92         61.82         32.11         0.55           0.34         24.36         -24.82         49.18         13.60         0.57           0.34         40.86         -18.32         59.18         30.10         0.57           0.40         24.92         -22.89         47.81         14.20         0.55           0.40         39.42         -18.39         57.81         28.70         0.55           0.54         23.45         -22.55         46.00         12.70         0.60           0.54         23.45         -22.55         46.00         12.70         0.60           0.58         24.64         -21.36         46.00         13.91         0.58           0.58         39.34         -16.66         56.00         28.61         0.58           0.67         22.31         -23.69         46.00         11.60         0.56	Freq         Level         Limit         Line         Level         Factor         Loss           MHz         dBuV         dB         dBuV         dBuV         dB         dB         dB           0.25         31.00         -20.82         51.82         20.21         0.55         10.24           0.25         42.90         -18.92         61.82         32.11         0.55         10.24           0.34         24.36         -24.82         49.18         13.60         0.57         10.19           0.34         40.86         -18.32         59.18         30.10         0.57         10.19           0.40         24.92         -22.89         47.81         14.20         0.55         10.17           0.40         39.42         -18.39         57.81         28.70         0.55         10.17           0.54         23.45         -22.55         46.00         12.70         0.60         10.15           0.58         24.64         -21.36         46.00         13.91         0.58         10.15           0.58         39.34         -16.66         56.00         28.61         0.58         10.15           0.67         22.31         -23

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 18 of 24 Report Issued Date: Mar. 18, 2016 Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

#### 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	Field Strength	Measurement Distance
(MHz)	(microvolts/meter)	(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.
- 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.
- 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

SPORTON INTERNATIONAL (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 19 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

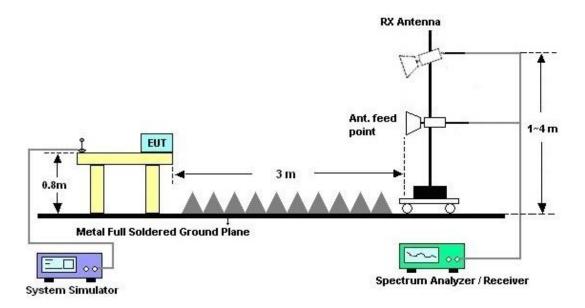
Report No.: FC622002

### 3.2.4. Test Setup of Radiated Emission

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



#### For radiated emissions above 1GHz



TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 20 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1

#### 3.2.5. Test Result of Radiated Emission

Test Mode :	Mode 4		Temperature	:	23~25°C		
Test Engineer :	Jeff Yao		Relative Hun	nidity :	48~52%		
Test Distance :	3m		Polarization	:	Horizontal		
Function Type :		nd IV Idle + Blu Earphone + GF		WLAN Id	le + USB C	able (Data Link wi	
Remark :	#7 is system	simulator signa	I which can be	e ignored	I.		
117 Level	(dBuV/m)					Date: 2016-02-26	
102.4							
87.8							
73.1						FCC CLASS-B	
58.5	7				F	CC CLASS-B (AVG)	
43.9	6 8	9		11	12	13	
29.3							
14.6							
030	1000. 3	000. 5000.	7000. Frequency (MHz)		000. 1	1000. 13000	
Site Condition Pretest Mode IMEI	: (FC) 622002 : Mode 4	S-B 3m LF_ANT(231	88)_151017 HORIZ				
	Freq Level Li	imit Line Leve		Factor	R	emark 	
1	MHz dBuV/m	dB dBuV/m dBu\ 8.41 40.00 43.00		dB 25.99	cm deg 100 0 P	eak	
2 3 2 4 3 5 4	99.93 25.23 -18 98.65 36.94 -9 00.00 33.95 -13 98.80 30.23 -19	8.27 43.50 38.13 9.06 46.00 46.20 2.05 46.00 43.13 5.77 46.00 35.03	7 11.70 1.14 9 14.07 1.71	25.78 25.04 25.04	P	eak eak eak	
6 9 7 21 8 25	60.10 33.56 -20 32.00 49.86	0.44 54.00 34.46 71.40 1.49 74.00 63.20	32.34 4.80 5 32.77 5.31	25.41 58.68	P-	eak eak	

60.11

59.01

57.47

59.11

59.63

100

11 12 13

44.91 -29.09 74.00

5366.00 41.82 -32.18 74.00 8572.00 43.23 -30.77 74.00

45.11 -28.89 44.69 -29.31

64.20

57.97

53.40

53.33 52.81

74.00 74.00

33.98

34.94

36.28

38.54

38.93

6.84

7.92

11.02

12.35 12.58

4126.00

8572.00 10568.00

11166.00

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 21 of 24 Report Issued Date: Mar. 18, 2016 Report Version : Rev. 01

--- Peak
--- Peak
0 Peak
--- Peak

Peak

Report Template No.: BU5-FC15B Version 1.1

Report No. : FC622002

Test Mode :	Mode 4			Tempe	rature	<b>:</b>	23~	-25°C			
Test Engineer :	Jeff Yao			Relativ	e Hur	nidity :	48~	52%			
Test Distance :	3m			Polariz	ation	:	Ver	tical			
Function Type :	WCDMA E	Band IV Idle +	- Blue	etooth I	dle + '	WLAN I	dle +	USB	Cable	(Data Lir	nk with
r unotion Type :	Notebook)	+ Earphone	+ GP	S Rx +	SIM1						
		m simulator s	signa	l which	can b	e ignore	d.				
117 Level	(dBuV/m)								Date	e: 2016-02-26	
102.4											
87.8											
01.0									-	CC CLASS B	
73.1										CC CLASS-B	
58.5									FCC CL	ASS-B (AVG)	
42.0	7	8 9	1	0	11			1	2	13	
43.9 3 5 <sub>6</sub>											
29.3											
14.6											
030	1000.	3000.	5000.	Frequen	7000. cy (MHz)		9000.		11000.	1300	0
Site Condition Pretest Mode IMEI	: (FC) 622 : Mode 4	ASS-B 3m LF_AN		-	7 VERTI	CAL					
	Freq Level	Over Limit Limit Line		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark		
	MHz dBuV/m	dB dBuV/m	dBu\		dB	dB	cm	deg			
2 19	99.02 28.82	-10.71 40.00 -14.68 43.50	40.98	11.60	1.50	25.99 25.26			Peak Peak		
		-10.51 46.00 -10.36 46.00			1.71 1.71	25.04 25.04	100		Peak Peak		
		-10.72 46.00			2.17	26.33 26.42			Peak Peak		
	32.00 49.87	-11.40 46.00		32.34	4.80				Peak		
8 250	04.00 42.87	-31.13 74.00	63.76	32.70	5.21	58.80			Peak		
		-29.72 74.00 -31.34 74.00			7.09 7.89				Peak Peak		
11 720	08.00 44.11	-29.89 74.00	56.68	36.18	9.60	58.35			Peak		
		-29.11 74.00				59.13	100		Peak Peak		
15 1194	+2.00 44.40	-29.60 74.00	52.52	. 59.4/	12.62	60.21			reak		

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 22 of 24 Report Issued Date: Mar. 18, 2016 Report Version : Rev. 01

# 4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz;	May 04, 2015	Feb. 23, 2016	May 03, 2016	Conduction (CO01-KS)
AC LISN	MessTec	AN3016	060103	9kHz~30MHz	Oct. 24, 2015	Feb. 23, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC LISN (for auxiliary equipment)	MessTec	AN3016	060105	9kHz~30MHz	Oct. 24, 2015	Feb. 23, 2016	Oct. 23, 2016	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	AC 0V~300V, 45Hz~1000Hz	Oct. 24, 2015	Feb. 23, 2016	Oct. 23, 2016	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESR7	101403	9kHz~7GHz;Ma x 30dBm	Sep. 10, 2015	Feb. 26, 2016	Sep. 09, 2016	Radiation (03CH03-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44GHz	Jun. 05, 2015	Feb. 26, 2016	Jun. 04, 2016	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	23182	25MHz-2GHz	Jan. 16, 2016	Feb. 26, 2016	Jan. 15, 2017	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Jun. 25, 2015	Feb. 26, 2016	Jun. 24, 2016	Radiation (03CH03-KS)
Amplifier	Burgeon	BPA-530	102212	0.01MHz-3000 MHz	Aug. 10, 2015	Feb. 26, 2016	Aug. 09, 2016	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 24, 2015	Feb. 26, 2016	Oct. 23, 2016	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Feb. 26, 2016	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Feb. 26, 2016	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Feb. 26, 2016	NCR	Radiation (03CH03-KS)

NCR: No Calibration Required

SPORTON INTERNATIONAL (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 23 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1



# 5. Uncertainty of Evaluation

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

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

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

Macauring Uncortainty for a Layel of	
Measuring Uncertainty for a Level of	4.5 dB
Confidence of 95% (U = 2Uc(y))	4.5 UD

SPORTON INTERNATIONAL (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: YHLBLUSTSELFIE2 Page Number : 24 of 24
Report Issued Date : Mar. 18, 2016
Report Version : Rev. 01

Report Template No.: BU5-FC15B Version 1.1