FCC Test Report

APPLICANT : CT Asia

EQUIPMENT : Smartphone

BRAND NAME : BLU

MODEL NAME : Vivo Selfie

FCC ID : YHLBLUVIVOSELF

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION : Certification

The product was received on Apr. 27, 2015 and testing was completed on May 15, 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: YHLBLUVIVOSELF Page Number : 1 of 26

Report Issued Date: Jun. 04, 2015

2353

Report No. : FC542702

TABLE OF CONTENTS

RE	VISIO	N HISTORY	3
SII	ΜΜΔΕ	RY OF TEST RESULT	4
		ERAL DESCRIPTION	
	1.1. 1.2. 1.3. 1.4. 1.5. 1.6. 1.7.	Applicant	6
2.	2.1. 2.2. 2.3. 2.4.	Support Unit used in test configuration and system	
3.	3.1. 3.2.		13
		OF MEASURING EQUIPMENT	
ΑP	PEND	IX A. SETUP PHOTOGRAPHS	

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 2 of 26
Report Issued Date : Jun. 04, 2015
Report Version : Rev. 01

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC542702	Rev. 01	Initial issue of report	Jun. 04, 2015

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 3 of 26
Report Issued Date : Jun. 04, 2015

Report No.: FC542702

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	10.73 dB at
					0.160 MHz
					Under limit
3.2	15.109	15.109 Radiated Emission	< 15.109 limits	PASS	4.43 dB at
3.2					48.900 MHz for
					Quasi-Peak

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 4 of 26

Report No.: FC542702

Report Issued Date : Jun. 04, 2015 Report Version : Rev. 01

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

Tinno Mobile Technology Corp.

4/F, H-3 Building, OCT Eastern industrial Park, No.1 XiangShan East Road, Nan Shan District, Shenzhen, P.R. China

1.3. Product Feature of Equipment Under Test

Product Feature				
Equipment	Smartphone			
Brand Name	BLU			
Model Name	Vivo Selfie			
FCC ID	YHLBLUVIVOSELF			
	GSM/GPRS/EGPRS/WCDMA/HSPA/			
EUT supports Radios application	HSPA+(Downlink Only)			
EOT Supports Radios application	WLAN 2.4GHz 802.11b/g/n HT20/ HT40			
	Bluetooth v3.0 + EDR/Bluetooth v4.0 LE			
IMEI Code	Radiation:353919026814404/353924026753206			
INIEI Code	Conduction:353919026814701/353924026753503			
HW Version	V1.0			
SW Version	S4800BLU_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: YHLBLUVIVOSELF Page Number : 5 of 26
Report Issued Date : Jun. 04, 2015
Report Version : Rev. 01

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		
	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 : 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 : PIFA Antenna		
<u> </u>	WLAN : PIFA Antenna		
Antenna Type	Bluetooth :PIFA Antenna		
	GPS: PIFA Antenna		
	GSM: GMSK		
	GPRS: GMSK		
	EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK		
	WCDMA: QPSK (Uplink)		
	HSDPA: QPSK (Uplink)		
	HSUPA: QPSK (Uplink)		
Time of Madulation	HSPA+: 16QAM (Downlink Only)		
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) : π /4-DQPSK		
	Bluetooth (3Mbps) : 8-DPSK		
	GPS: BPSK		

1.5. Modification of EUT

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

SPORTON INTERNATIONAL (SHENZHEN) INC.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 6 of 26 Report Issued Date : Jun. 04, 2015

Report No. : FC542702

1.6. Test Location

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

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

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: YHLBLUVIVOSELF Page Number : 7 of 26
Report Issued Date : Jun. 04, 2015

Report No. : FC542702

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	
			RE<1G	RE≥1G	
1.	Charging Mode (EUT with adapter)	\boxtimes	\boxtimes	\boxtimes	
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

SPORTON INTERNATIONAL (SHENZHEN) INC.

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 8 of 26 Report Issued Date : Jun. 04, 2015

Report No.: FC542702

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

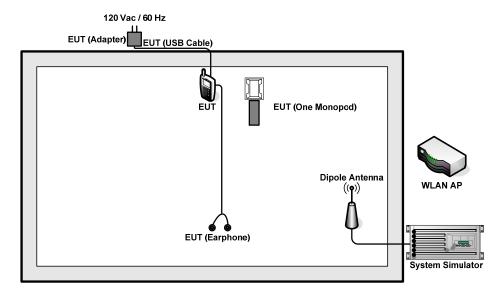
Remark:

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

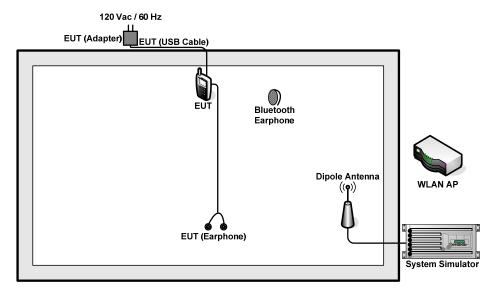
TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 9 of 26
Report Issued Date : Jun. 04, 2015

Report No.: FC542702

2.2. Connection Diagram of Test System



<Fig.1>



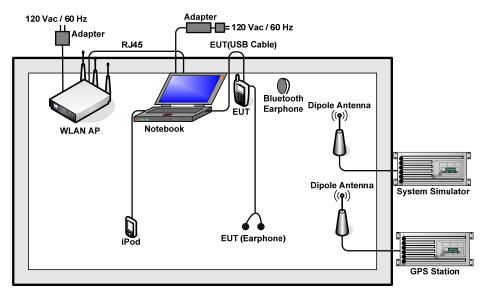
<Fig.2>

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 10 of 26

Report No. : FC542702

Report Issued Date: Jun. 04, 2015





<Fig.3>

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 11 of 26 Report Issued Date: Jun. 04, 2015 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	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Agilent	8960	N/A	N/A	Unshielded, 1.8 m
3.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
4.	WLAN AP	D-Link	DIR-615	N/A	N/A	Unshielded, 1.8 m
5.	WLAN AP	D-Link	DIR-628	KA2DIR628A2	N/A	Unshielded, 1.8 m
6.	WLAN AP	ASUSTek	RT-AC66U	MSQ-RTAC66U	N/A	Unshielded,2.7m
7.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
8.	Bluetooth Earphone	Lenovo	LBH301	N/A	N/A	N/A
9.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
10.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
11.	iPod	Apple	MC525 ZP/A	FCC DoC	Shielded, 1.0 m	N/A

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: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 12 of 26

Report No. : FC542702

Report Issued Date: Jun. 04, 2015

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.
- 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: YHLBLUVIVOSELF Page Number : 13 of 26
Report Issued Date : Jun. 04, 2015

Report No. : FC542702

3.1.4 Test Setup

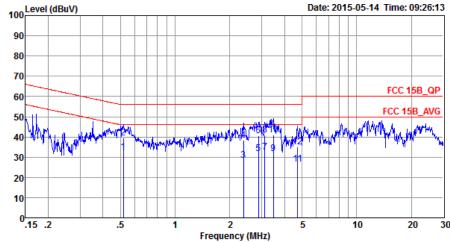


TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 14 of 26
Report Issued Date : Jun. 04, 2015

Report No.: FC542702

3.1.5 Test Result of AC Conducted Emission

Test Mode : Mode 1 Tempera		Temperature :	22~23 ℃
Test Engineer :	Min Yang	Relative Humidity :	41~42%
Test Voltage :	120Vac / 60Hz	Phase :	Line
Function Type .	GSM850 Idle + Bluetooth Link with One Monopod + WLAN Idle + USB Cable		
Function Type :	(Charging from Adapter) + E	Earphone + Camera + S	SIM 1
100L	evel (dBuV) Date: 2015-05-14 Time: 09:26:13		2015-05-14 Time: 09:26:13
100			



Site : CO01-SZ

Condition: FCC 15B_QP LISN_L_20140304 LINE

Project : (FC)542702 Mode : Mode 1

IMEI : 353919026814701/353924026753503

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBu∀	dB	dBu₹	dBuV	dB	dB	
1 2 3 4 5 6 7 *	0.52 0.52 2.38 2.38 2.88 2.88 3.12	39.44 28.56 38.46 31.61 40.61 32.43	-13.66 -16.56 -17.44 -17.54 -14.39 -15.39 -13.57 -15.17	46.00 56.00 46.00 56.00 46.00 56.00	21.89 28.99 18.10 28.00 21.10 30.10 21.90 30.30	0.29 0.29 0.26 0.26 0.30 0.30 0.32	10.16 10.20 10.20 10.21 10.21	Average QP Average QP Average
9 10 11 12	3.47 3.47 4.72 4.72	31.76 40.86 26.44	-14.24 -15.14 -19.56 -20.86	46.00 56.00 46.00 56.00	21.20 30.30 15.79 24.49	0.34 0.34	10.22 10.22	Average QP Average

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 15 of 26
Report Issued Date : Jun. 04, 2015

Report No. : FC542702

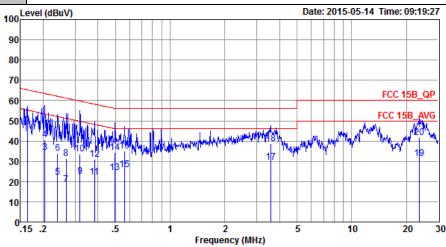


 Test Mode :
 Mode 1
 Temperature :
 22~23℃

 Test Engineer :
 Min Yang
 Relative Humidity :
 41~42%

 Test Voltage :
 120Vac / 60Hz
 Phase :
 Neutral

Function Type : GSM850 Idle + Bluetooth Link with One Monopod + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM 1



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20140304 NEUTRAL

Project : (FC)542702 Mode : Mode 1

Mode : mode :
IMEI : 353919026814701/353924026753503

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∀	dB	dBuV	dBu∀	dB	dB	
1 *	0.16	44.57	-10.73	55.30	33.90	0.33	10.34	Average
2	0.16	47.37	-17.93	65.30	36.70	0.33	10.34	QP
3	0.20	34.21	-19.24	53.45	23.60	0.32	10.29	Average
4	0.20	40.51	-22.94	63.45	29.90	0.32	10.29	QP
5	0.24	21.99	-30.09	52.08	11.40	0.34	10.25	Average
6	0.24	34.09	-27.99	62.08	23.50	0.34	10.25	QP
7	0.27	18.58	-32.62	51.20	8.00	0.35	10.23	Average
8	0.27	31.48	-29.72	61.20	20.90	0.35	10.23	QP
9	0.32	22.66	-27.09	49.75	12.10	0.37	10.19	Average
10	0.32	33.56	-26.19	59.75	23.00	0.37	10.19	QP
11	0.38	22.06	-26.15	48.21	11.50	0.38	10.18	Average
12	0.38	30.96	-27.25	58.21	20.40	0.38	10.18	QP
13	0.50	24.47	-21.58	46.05	13.90	0.41	10.16	Average
14	0.50	34.37	-21.68	56.05	23.80	0.41	10.16	QP
15	0.56	26.01	-19.99	46.00	15.50	0.36	10.15	Average
16	0.56	35.21	-20.79	56.00	24.70	0.36	10.15	QP
17	3.58	29.47	-16.53	46.00	18.80	0.45	10.22	Average
18	3.58	38.77	-17.23	56.00	28.10	0.45	10.22	QP
19	23.51	31.53	-18.47	50.00	18.81	2.15	10.57	Average
20	23.51	41.63	-18.37	60.00	28.91	2.15	10.57	QP

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 16 of 26
Report Issued Date : Jun. 04, 2015
Report Version : Rev. 01



Test Mode :	Mode 3	Temperature :	22~23 ℃				
Test Engineer :	Min Yang	Relative Humidity :	41~42%				
Test Voltage :	120Vac / 60Hz	Phase :	Line				
	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + USB Cable						
Function Type :	(Data Link with Notebook) + GPS Rx + SIM 2						

100 Level (dBuV) Date: 2015-05-14 Time: 10:01:11 90 80 70 FCC 15B_QP 60 FCC 15B_AVG 20 10 .15 .2 .5 2 5 10 20 Frequency (MHz)

: CO01-SZ

Condition: FCC 15B QP LISN L 20140304 LINE

Project : (FC) 542702

Mode : Mode 3

: 353919026814701/353924026753503 IMEI

	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBu∇	dB	dBu∇	dBu∇	dB	dB	
1	0.18	23.84	-30.75	54.59	13.30	0.22	10.32	Average
2	0.18	48.54	-16.05	64.59	38.00	0.22	10.32	QP
3	0.22	24.70	-28.31	53.01	14.19	0.23	10.28	Average
4	0.22	42.10	-20.91	63.01	31.59	0.23	10.28	QP
5	0.26	20.78	-30.73	51.51	10.30	0.24	10.24	Average
6	0.26	45.08	-16.43	61.51	34.60	0.24	10.24	QP
7	0.46	18.45	-28.22	46.67	8.00	0.29	10.16	Average
8 *	0.46	41.05	-15.62	56.67	30.60	0.29	10.16	QP
9	0.65	19.36	-26.64	46.00	9.00	0.21	10.15	Average
10	0.65	36.96	-19.04	56.00	26.60	0.21	10.15	QP
11	6.29	21.16	-28.84	50.00	10.50	0.39	10.27	Average
12	6.29	33.46	-26.54	60.00	22.80	0.39	10.27	QP

Over Limit Read

LISN Cable

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

: 17 of 26 Page Number Report Issued Date: Jun. 04, 2015

Report No. : FC542702



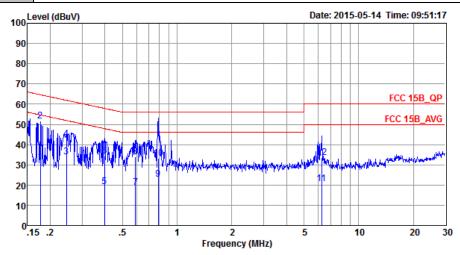
 Test Mode :
 Mode 3
 Temperature :
 22~23°C

 Test Engineer :
 Min Yang
 Relative Humidity :
 41~42%

 Test Voltage :
 120Vac / 60Hz
 Phase :
 Neutral

 WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + USB Cable

Function Type : | WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + USB Cable (Data Link with Notebook) + GPS Rx + SIM 2



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20140304 NEUTRAL

Project : (FC) 542702

Mode : Mode 3

IMEI : 353919026814701/353924026753503

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBu∀	dB	dBu∇	dBu∀	dB	dB	
1	0.18		-23.09	54.64	20.91	0.32		Average
2 '	* 0.18	51.65	-12.99	64.64	41.01	0.32	10.32	QP
3	0.25	33.79	-18.12	51.91	23.20	0.34	10.25	Average
4	0.25	42.79	-19.12	61.91	32.20	0.34	10.25	QP
5	0.40	19.26	-28.64	47.90	8.70	0.39	10.17	Average
6	0.40	34.16	-23.74	57.90	23.60	0.39	10.17	QP
7	0.59	18.88	-27.12	46.00	8.40	0.33	10.15	Average
8	0.59	34.08	-21.92	56.00	23.60	0.33	10.15	QP
9	0.79	22.83	-23.17	46.00	12.40	0.28	10.15	Average
10	0.79	33.23	-22.77	56.00	22.80	0.28	10.15	QP
11	6.25	20.72	-29.28	50.00	9.99	0.46	10.27	Average
12	6.25	33.52	-26.48	60.00	22.79	0.46	10.27	QP

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 18 of 26
Report Issued Date : Jun. 04, 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	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.
- 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

SPORTON INTERNATIONAL (SHENZHEN) INC.

FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF

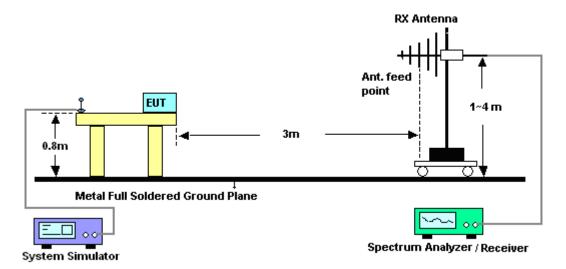
TEL: 86-755-8637-9589

Page Number : 19 of 26
Report Issued Date : Jun. 04, 2015

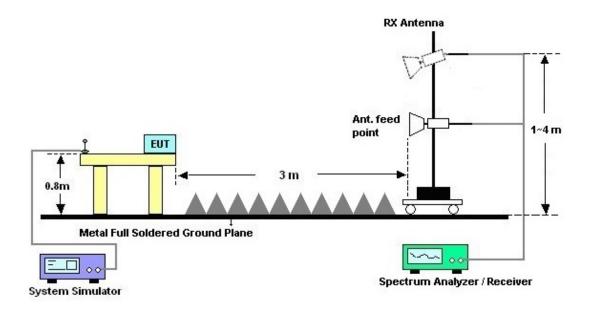
Report No. : FC542702

For radiated emissions from 30MHz to 1GHz

3.2.4. Test Setup of Radiated Emission



For radiated emissions above 1GHz

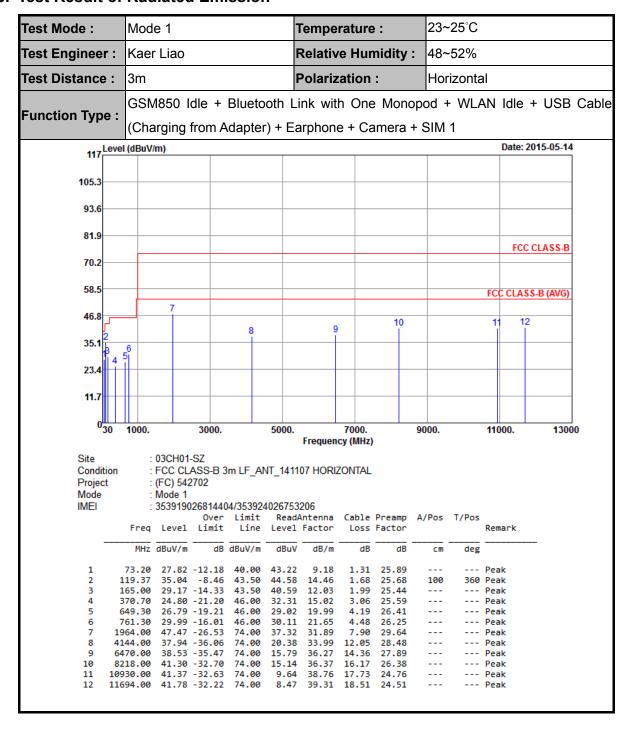


TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 20 of 26

Report No. : FC542702

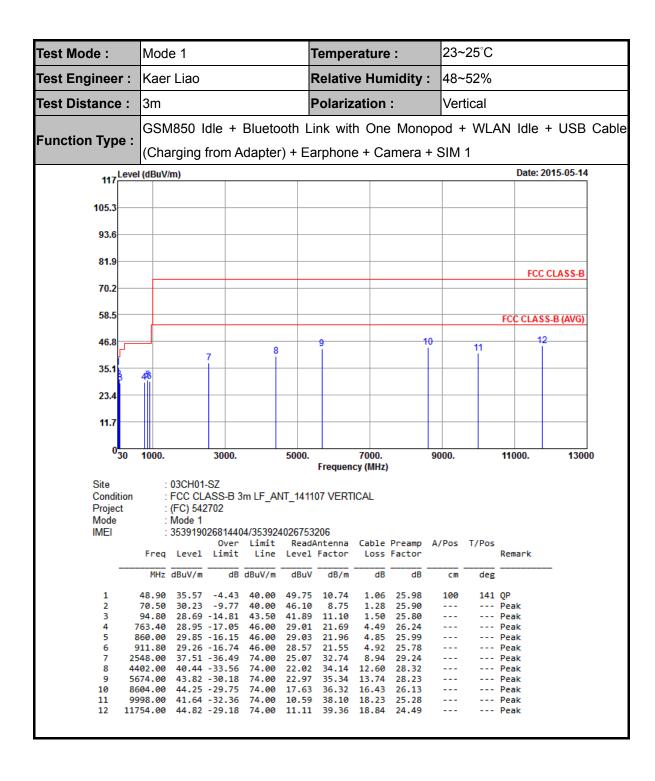
Report Issued Date : Jun. 04, 2015 Report Version : Rev. 01

3.2.5. Test Result of Radiated Emission



TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 21 of 26
Report Issued Date : Jun. 04, 2015
Report Version : Rev. 01





TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 22 of 26 Report Issued Date: Jun. 04, 2015 Report Version : Rev. 01



23~25°C Test Mode: Mode 3 Temperature: Test Engineer: Kaer Liao **Relative Humidity:** 48~52% Test Distance: Polarization: 3m Horizontal WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + Earphone + USB Cable **Function Type:** (Data Link with Notebook) + GPS Rx + SIM 2 Remark: #7 is system simulator signal which can be ignored. 117 Level (dBuV/m) Date: 2015-05-15 105.3 93.6 81.9 FCC CLASS-B 70.2 58.5 FCC CLASS-B (AVG) 46.8 10 35.1 23.4 11.7 030 1000. 3000. 5000. 7000. 9000. 11000. 13000 Frequency (MHz) : 03CH01-SZ Site Condition : FCC CLASS-B 3m LF_ANT_141107 HORIZONTAL Project : (FC) 542702 Mode : Mode 3 IMEI : 353919026814404/353924026753206 Over Limit ReadAntenna Cable Preamp A/Pos T/Pos Freq Level Limit Line Level Factor Loss Factor Remark MHz dBuV/m dB dBuV/m dBuV dB/m dB dB deg cm118.56 38.60 -4.90 43.50 48.29 14.32 1.67 25.68 --- Peak 137.46 39.32 -4.18 43.50 49.12 13.97 1.81 25.58 120 80 Peak --- Peak 192.00 38.17 -5.33 43.50 49.74 11.56 2.16 25.29 ---367.90 37.32 46.00 44.85 14.98 --- Peak -8.68 3.05 25.56 44.10 408.50 37.21 -8.79 46.00 Peak 504.40 37.72 -8.28 46.00 41.06 19.41 3.59 26.34 --- Peak --- Peak 881.00 41.30 40.58 21.77 4.88 25.93 45.39 -28.61 74.00 --- Peak 2414.00 33.56 32.61 8.60 29.38 4350.00 44.11 -29.89 74.00 25.82 34.11 12.53 28.35 Peak 5682.00 41.97 -32.03 74.00 21.11 35.34 13.74 --- Peak 7750.00 40.96 -33.04 44.25 -29.75 74.00 15.62 36.40 15.59 26.65 Peak --- Peak 74.00 17.97 12 9886.00 13.66 37.98 25.36 11786.00 43.29 -30.71 74.00 9.67 --- Peak 39.37 18.73 24.48

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 23 of 26
Report Issued Date : Jun. 04, 2015
Report Version : Rev. 01

FCC Test Report

Test Mode :	Mode 3			Tempe	rature):	23~	-25°C			
Test Engineer :	Kaer Liao			Relativ	e Hur	nidity	: 48~	48~52%			
Test Distance :	3m			Polariz	ation	:	Ver	tical			
Function Type :		and V Idle with Noteboo					N Idle	+ Ea	rphone	+ USB	Cable
Remark :	#8 is syste	m simulator	signa	I which	can b	e ignor	ed.				
117 Level	(dBuV/m)								Date:	2015-05-15	i
105.3											
93.6											
81.9									-	CCLASS D	
70.2									FC	C CLASS-B	
58.5									FCC CLA	SS-B (AVG)	
46.8	9	1	0	11		12		13		14	
35.1 3 6	7 ⁸										
23.4											
11.7											
030	1000.	3000.	5000.	Fromion	7000.	<u> </u>	9000.		11000.	1300	0
Site Condition Project Mode IMEI	Condition : FCC CLASS-B 3m LF_ANT_141107 VERTICAL Project : (FC) 542702 Mode : Mode 3										
	MHz dBuV/m	dB dBuV/m	dBu\		dB	dB	cm	deg			
2 3 1 4 1 5 4 6 4 7 7 8 8 9 18 10 45 11 64	54.57 34.02 33.68 33.17 92.00 28.83 08.50 31.41 79.90 32.81 15.10 33.00 80.30 35.79 90.00 40.70 10.00 42.01 26.00 43.65	-5.84 40.00 -5.98 40.00 -10.33 43.50 -14.67 43.50 -14.59 46.00 -13.19 46.00 -33.30 74.00 -31.99 74.00 -30.35 74.00 -30.35 74.00	49.52 42.88 40.46 38.36 36.95 34.42 35.07 31.35 23.27 21.03	9.34 3 14.11 9 11.56 9 15.75 5 18.59 2 20.62 7 21.77 5 31.13 7 34.20 3 36.22	1.12 1.78 2.16 3.22 3.50 4.30 4.88 7.64 12.79 14.31	25.60 25.29 25.86 26.23 26.34 25.93 29.42 28.25 27.91	150		Peak Peak Peak Peak Peak Peak Peak Peak		
13 104	08.00 42.23	-32.38 74.00 -31.77 74.00 -30.60 74.00	11.47	38.42	17.39	25.05			Peak Peak Peak		

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 24 of 26
Report Issued Date : Jun. 04, 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, 2014	May 14, 2015~ May 15, 2015	May 25, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	May 14, 2015~ May 15, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	May 14, 2015~ May 15, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan. 28, 2015	May 14, 2015~ May 15, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	Agilent Technologies	83017A	MY39501302	500MHz~26.5G Hz	Jan. 28, 2015	May 14, 2015~ May 15, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	May 14, 2015~ May 15, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 14, 2015~ May 15, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 14, 2015~ May 15, 2015	NCR	Radiation (03CH01-SZ)
EMI Receiver	R&S	ESCI7	100724	9kHz~3GHz	Jan. 28, 2015	May 14, 2015	Jan. 27, 2016	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Feb. 02, 2015	May 14, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Feb. 02, 2015	May 14, 2015	Feb. 01, 2016	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Sep. 29, 2014	May 14, 2015	Sep. 28, 2015	Conduction (CO01-SZ)
Pulse Limiter	COM-POWER	LIT-153 Transient Limiter	53139	150kHz~30MHz	Oct. 24, 2014	May 14, 2015	Oct. 23, 2015	Conduction (CO01-SZ)

TEL: 86-755-8637-9589 FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF Page Number : 25 of 26
Report Issued Date : Jun. 04, 2015

Report No.: FC542702



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)

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

SPORTON INTERNATIONAL (SHENZHEN) INC.

FAX: 86-755-8637-9595 FCC ID: YHLBLUVIVOSELF

TEL: 86-755-8637-9589

Page Number : 26 of 26
Report Issued Date : Jun. 04, 2015

Report No.: FC542702