

Report No.: FC422801

FCC Test Report

APPLICANT : CT Asia

Mobile Phone EQUIPMENT

BRAND NAME : BLU

MODEL NAME : Studio 6.0 HD

FCC ID : YHLBLUST60HD

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION : Certification

The product was received on Feb. 28, 2014 and testing was completed on Mar. 13, 2014. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown to be compliant with the applicable technical standards.

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

Reviewed by: Louis Wu / Manager

Louis Win

Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL (SHENZHEN) INC.

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

SPORTON INTERNATIONAL (SHENZHEN) INC.

TEL: 86-755-3320-2398 FCC ID: YHLBLUST60HD Page Number : 1 of 26

Testing Laboratory 2353

Report Issued Date: Mar. 19, 2014 : Rev. 01 Report Version



TABLE OF CONTENTS

RE	VISIO	N HISTORY	3
SU	MMAF	RY OF TEST RESULT	4
1.	GEN	ERAL DESCRIPTION	5
	1.1. 1.2. 1.3. 1.4. 1.5. 1.6. 1.7.	Applicant	5
2.	2.1. 2.2. 2.3. 2.4.	Support Unit used in test configuration and system	10
3.	3.1. 3.2.	1 Set St. 7 to Schladeled Emission Meddel Smoth	13
		OF MEASURING EQUIPMENT	
		ERTAINTY OF EVALUATION	26

TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 2 of 26

Report No. : FC422801

Report Issued Date : Mar. 19, 2014 Report Version : Rev. 01

REVISION HISTORY

Report No.: FC422801

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC422801	Rev. 01	Initial issue of report	Mar. 19, 2014

Page Number : 3 of 26 TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01

SUMMARY OF TEST RESULT

Report No.: FC422801

: 4 of 26

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	7.90 dB at
					2.640 MHz
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	6.14 dB at
					240.060 MHz

 TEL: 86-755- 3320-2398
 Report Issued Date : Mar. 19, 2014

 FCC ID: YHLBLUST60HD
 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

Report No.: FC422801

1.2. Manufacturer

Ragentek Technology Group

Building D10-D11, No. 58-60, Lane 3188, Xiupu Road, PuDong District, Shanghai, PRC

1.3. Feature of Equipment Under Test

Product Feature					
Equipment	Mobile Phone				
Brand Name	BLU				
Model Name	Studio 6.0 HD				
FCC ID	YHLBLUST60HD				
EUT supports Radios application	GSM/GPRS/WCDMA/HSPA/HSPA+(Downlink Only)/ WLAN2.4GHz 802.11b/g/n HT20/ Bluetooth v3.0+EDR/Bluetooth v4.0 LE				
HW Version	Q106_MAIN_PCB_V1.1				
SW Version	J805_BLU_A1A_V3.2.6_S0218				
EUT Stage	Identical Prototype				

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.

Page Number : 5 of 26 TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01

1.4. Product Specification of Equipment Under Test

Product Specifi	cation 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 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 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 : Fixed Internal Antenna WLAN : PIFA Antenna Bluetooth : PIFA Antenna				
Type of Modulation	GSM: GMSK GPRS: GMSK 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 v4.0 LE: GFSK Bluetooth v3.0 + EDR: GFSK, π/4-DQPSK, 8-DPSK GPS: BPSK				

Report No.: FC422801

: 6 of 26

: Rev. 01

Page Number TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version

1.5. Modification of EUT

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

1.6. Test Site

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.C.					
	TEL: +86-755- 3320-2398					
Took Cita No	Sporton	FCC Registration No.				
Test Site No.	CO01-SZ	03CH01-SZ	831040			

Report No.: FC422801

: 7 of 26

: Rev. 01

Page Number

1.7. Applied Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2003

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

TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version

2. Test Configuration of Equipment Under Test

2.1. Test Mode

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

Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower).

The following tables are showing the test modes as the worst cases and recorded in this report.

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

SPORTON INTERNATIONAL (SHENZHEN) INC.

 TEL: 86-755- 3320-2398
 Report

 FCC ID: YHLBLUST60HD
 Report

Page Number : 8 of 26

Report No.: FC422801

Report Issued Date : Mar. 19, 2014
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.>
AC Conducted Emission	1/2	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig. 1=""></fig.>
		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig. 2=""></fig.>
		Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig. 1=""></fig.>
Radiated Emissions < 1GHz	1/2	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig. 1=""></fig.>
		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig. 2=""></fig.>
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.>

Report No.: FC422801

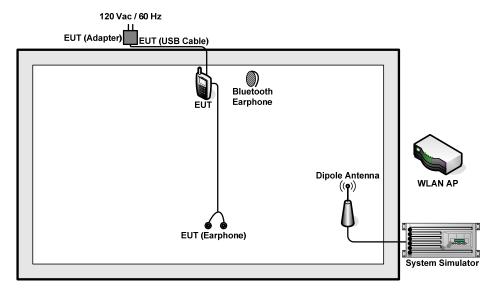
Remark:

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

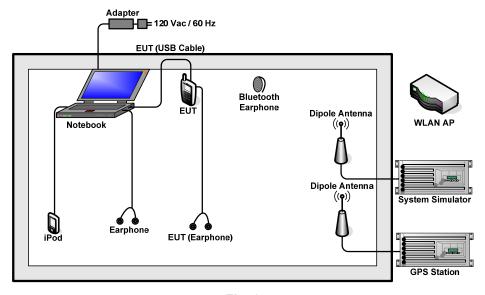
: 9 of 26 Page Number TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01



2.2. Connection Diagram of Test System



<Fig. 1>



<Fig. 2>

TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 10 of 26
Report Issued Date : Mar. 19, 2014

Report No.: FC422801



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	CMW500	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-815	KA2IR815A1	N/A	Unshielded,1.8m
4.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
5.	Notebook	DELL	Vostro2420	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
6.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
7.	MicroSD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
8.	iPod nano 8GB	Apple	MC690 ZP/A	FCC DoC	Unshielded, 1.2 m	N/A
9.	Earphone	Apple	N/A	FCC DoC	Unshielded, 1.2 m	N/A

TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 11 of 26

Report No.: FC422801

Report Issued Date : Mar. 19, 2014 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. Execute the program, "Winthrax" under WIN7 installed in notebook for files transfer with EUT via USB cable.
- 2. Turn on GPS function or execute "GPS Test" 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.

SPORTON INTERNATIONAL (SHENZHEN) INC.

TEL: 86-755-3320-2398 FCC ID: YHLBLUST60HD Page Number : 12 of 26
Report Issued Date : Mar. 19, 2014

Report No.: FC422801

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.

Report No.: FC422801

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

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- Both sides of AC line were checked for maximum conducted interference. 6.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.

FCC ID: YHLBLUST60HD

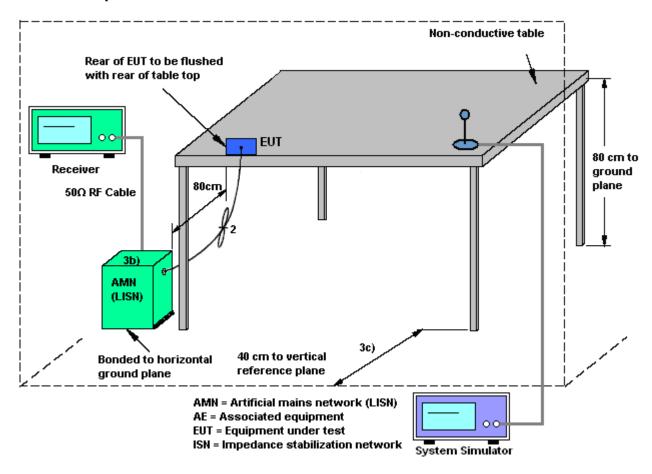
Page Number Report Issued Date: Mar. 19, 2014 Report Version : Rev. 01

: 13 of 26



Report No. : FC422801

3.1.4 Test Setup



TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 14 of 26
Report Issued Date : Mar. 19, 2014





3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 1			Tem	perature	e:	21~22	21~22 ℃		
Test Engineer :	Jack Tian			Rela	tive Hui	midity :	41~42%			
Test Voltage :	120Vac / (60Hz		Phas	Phase: Line					
Function Type :	GSM850	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter)								
i diretion Type .	+ Earphone + Camera + SIM1									
100	Level (dBuV)				Date: 2014-03-11 Time: 16:34:44					
90										
80										
70									_	
60								FCC 15B_Q	P	
50				ويعط اطيد الدائد	u. uw ^m Nu	. Pak		FCC 15B_AV	<u>G</u>	
40	Low you	- Japan F	A PART AND AND A PART OF THE P	7 8 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 4 4 6 18 4	1222 <u>4</u> 0	Walan II	المراجع ال		
30	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Whi	13	5 7 %	135 19 17	21 25 "	Y PAY	hadren Hambarl William 28	¹1 3—	
20								2	7_	
10										
	.15 .2	.5	1	Frequ	2 ency (MHz)	5	10	20	30	
Site	: CO01-S	Z								
	on: FCC 15	_	SN_L_2013	0328 LII	NE .					
Mode	: Mode 1		Orror	Limit	Bond	TTOM	Cabla			
	Freq	Level	Limit		Read Level		Cable	Remark		
_	MHz	dBuV	dB	-dp	-dp					
	MHZ	abuv	αb	dBuV	dBu∀	dB	dB			
1 *	0.55		-11.00					Average		
2			-11.60 -15.59		34.10	0.15		QP Average		
4			-16.39			0.16		_		
5			-14.93					Average		
			44 00					OP		
6	1.24	41.77	-14.23	56.00	31.40	0.21	10.16	* -		
7	1.50	32.49	-13.51	46.00	22.10	0.22	10.17	Average		
7 8	1.50 1.50	32.49 40.49	-13.51 -15.51	46.00 56.00	22.10 30.10	0.22	10.17 10.17	Average QP		
7 8 9	1.50 1.50 1.72	32.49 40.49 32.20	-13.51 -15.51 -13.80	46.00 56.00 46.00	22.10 30.10 21.80	0.22 0.22 0.22	10.17 10.17 10.18	Average QP Average		
7 8 9 10	1.50 1.50 1.72 1.72	32.49 40.49 32.20 41.30	-13.51 -15.51 -13.80 -14.70	46.00 56.00 46.00 56.00	22.10 30.10 21.80 30.90	0.22 0.22 0.22 0.22	10.17 10.17 10.18 10.18	Average QP Average QP		
7 8 9 10 11	1.50 1.50 1.72 1.72 1.85	32.49 40.49 32.20 41.30 29.18	-13.51 -15.51 -13.80 -14.70 -16.82	46.00 56.00 46.00 56.00 46.00	22.10 30.10 21.80 30.90 19.00	0.22 0.22 0.22 0.22 0.00	10.17 10.17 10.18 10.18 10.18	Average QP Average QP Average		
7 8 9 10	1.50 1.50 1.72 1.72	32.49 40.49 32.20 41.30 29.18 40.18	-13.51 -15.51 -13.80 -14.70	46.00 56.00 46.00 56.00 46.00 56.00	22.10 30.10 21.80 30.90 19.00 30.00	0.22 0.22 0.22 0.22	10.17 10.17 10.18 10.18 10.18 10.18	Average QP Average QP Average		
7 8 9 10 11 12	1.50 1.50 1.72 1.72 1.85 1.85	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20	0.22 0.22 0.22 0.22 0.00 0.00	10.17 10.18 10.18 10.18 10.18 10.18	Average QP Average QP Average QP Average		
7 8 9 10 11 12 13 14	1.50 1.50 1.72 1.72 1.85 1.85 2.21 2.21 2.36	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39 32.84	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61 -13.16	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20 22.40	0.22 0.22 0.22 0.22 0.00 0.00 0.00 0.00	10.17 10.18 10.18 10.18 10.18 10.19 10.19	Average QP Average QP Average QP Average QP Average QP Average		
7 8 9 10 11 12 13 14 15	1.50 1.50 1.72 1.72 1.85 1.85 2.21 2.21 2.36 2.36	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39 32.84 41.24	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61 -13.16 -14.76	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20 22.40 30.80	0.22 0.22 0.22 0.22 0.00 0.00 0.00 0.00	10.17 10.18 10.18 10.18 10.18 10.19 10.19 10.20 10.20	Average QP Average QP Average QP Average QP Average QP Average		
7 8 9 10 11 12 13 14 15 16	1.50 1.50 1.72 1.72 1.85 1.85 2.21 2.21 2.36 2.36 2.61	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39 32.84 41.24 27.20	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61 -13.16 -14.76 -18.80	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20 22.40 30.80 17.00	0.22 0.22 0.22 0.22 0.00 0.00 0.00 0.00	10.17 10.18 10.18 10.18 10.18 10.19 10.19 10.20 10.20	Average QP Average QP Average QP Average QP Average QP Average QP Average		
7 8 9 10 11 12 13 14 15 16 17	1.50 1.50 1.72 1.72 1.85 1.85 2.21 2.21 2.36 2.36 2.61 2.61	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39 32.84 41.24 27.20 41.00	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61 -13.16 -14.76 -18.80 -15.00	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20 22.40 30.80 17.00 30.80	0.22 0.22 0.22 0.22 0.00 0.00 0.00 0.24 0.24	10.17 10.18 10.18 10.18 10.18 10.19 10.19 10.20 10.20 10.20	Average QP Average QP Average QP Average QP Average QP Average QP Average		
7 8 9 10 11 12 13 14 15 16 17 18	1.50 1.50 1.72 1.72 1.85 1.85 2.21 2.36 2.36 2.61 2.61 2.85	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39 32.84 41.24 27.20 41.00 33.87	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61 -13.16 -14.76 -18.80 -15.00 -12.13	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20 22.40 30.80 17.00 30.80 23.40	0.22 0.22 0.22 0.22 0.00 0.00 0.00 0.24 0.24	10.17 10.18 10.18 10.18 10.18 10.19 10.19 10.20 10.20 10.20 10.20 10.21	Average QP Average QP Average QP Average QP Average QP Average QP Average		
7 8 9 10 11 12 13 14 15 16 17	1.50 1.50 1.72 1.72 1.85 1.85 2.21 2.36 2.36 2.61 2.61 2.85 2.85	32.49 40.49 32.20 41.30 29.18 40.18 32.19 40.39 32.84 41.24 27.20 41.00 33.87 42.17	-13.51 -15.51 -13.80 -14.70 -16.82 -15.82 -13.81 -15.61 -13.16 -14.76 -18.80 -15.00	46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	22.10 30.10 21.80 30.90 19.00 30.00 22.00 30.20 22.40 30.80 17.00 30.80 23.40 31.70	0.22 0.22 0.22 0.22 0.00 0.00 0.00 0.24 0.24	10.17 10.18 10.18 10.18 10.18 10.19 10.19 10.20 10.20 10.20 10.20 10.21	Average QP Average QP Average QP Average QP Average QP Average QP Average		

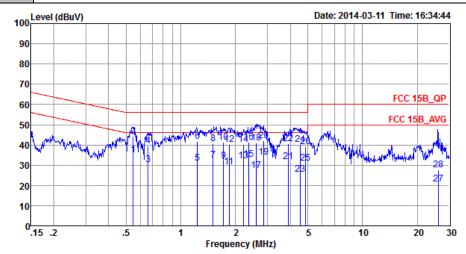
TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 15 of 26
Report Issued Date : Mar. 19, 2014

Report No. : FC422801



21~22℃ Test Mode: Mode 1 Temperature : Jack Tian Relative Humidity: 41~42% Test Engineer: 120Vac / 60Hz Phase: Test Voltage : Line GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) Function Type: + Earphone + Camera + SIM1

Report No.: FC422801



: CO01-SZ

Condition: FCC 15B_QP LISN_L_20130328 LINE

Project : (FC) 422801

: Mode 1 Mode

	Freq	Level				Factor		Remark
	MHz	dBu∇	dB	dBu∀	dBuV	dB	dB	
23	4.53	25.33	-20.67	46.00	15.10	0.00	10.23	Average
24	4.53	40.23	-15.77	56.00	30.00	0.00	10.23	QP
25	4.85	30.85	-15.15	46.00	20.30	0.31	10.24	Average
26	4.85	39.15	-16.85	56.00	28.60	0.31	10.24	QP
27	26.28	20.51	-29.49	50.00	8.00	1.94	10.57	Average
28	26.28	27.61	-32.39	60.00	15.10	1.94	10.57	OP

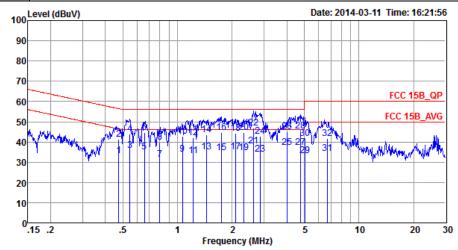
Page Number : 16 of 26 TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01



FCC Test Report

Test Mode :	Mode 1	Temperature :	21~22 ℃					
Test Engineer :	Jack Tian	Relative Humidity :	41~42%					
Test Voltage :	120Vac / 60Hz	Phase :	Neutral					
Eurotion Type	GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Ada							
Function Type :	+ Earphone + Camera + SIM1							

Report No.: FC422801



: CO01-SZ Site

Condition: FCC 15B_QP LISN_N_20130328 NEUTRAL

Project : (FC) 422801 Mode : Mode 1

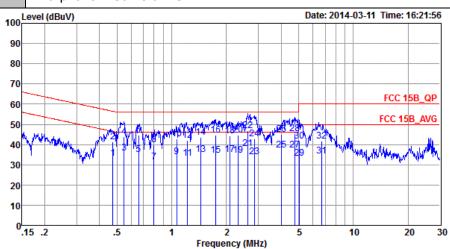
	Freq	Level	Over Limit	Limit Line	Read	LISN Factor	Cable	Remark
	rreq	пелет	шшс	птие	пелет	ractor	повв	Remark
	MHz	dBu₹	dB	dBuV	dBuV	dB	dB	
1	0.47	33.30	-13.15	46.45	23.10	0.04	10.16	Average
2	0.47	41.20	-15.25	56.45	31.00	0.04	10.16	QP
3	0.55	35.79	-10.21	46.00	25.60	0.04	10.15	Average
4	0.55	43.99	-12.01	56.00	33.80	0.04		_
5	0.66	35.19	-10.81	46.00	25.00	0.04	10.15	Average
6	0.66	44.69	-11.31	56.00	34.50	0.04		
7	0.80	31.29	-14.71	46.00	21.10	0.04	10.15	Average
8	0.80	39.99	-16.01	56.00	29.80	0.04		
9	1.07	34.00	-12.00	46.00	23.81	0.04	10.15	Average
10	1.07	42.90	-13.10	56.00	32.71	0.04		
11	1.22	33.11	-12.89	46.00	22.90	0.05	10.16	Average
12	1.22	42.11	-13.89	56.00	31.90	0.05	10.16	QP
13	1.45	35.22	-10.78	46.00	25.00	0.05	10.17	Average
14	1.45	43.62	-12.38	56.00	33.40	0.05	10.17	QP
15	1.75	34.84	-11.16	46.00	24.60	0.06	10.18	Average
16	1.75	44.64	-11.36	56.00	34.40	0.06		
17	2.09	34.99	-11.01	46.00	24.80	0.00	10.19	Average
18	2.09	44.39	-11.61	56.00	34.20	0.00	10.19	QP
19	2.32	34.70	-11.30	46.00	24.50	0.00	10.20	Average
20	2.32	44.80	-11.20	56.00	34.60	0.00	10.20	QP
21 *	2.64	38.10	-7.90	46.00	27.90	0.00	10.20	Average
22	2.64	46.90	-9.10	56.00	36.70	0.00		
23	2.87	33.91	-12.09	46.00	23.70	0.00	10.21	Average

Page Number : 17 of 26 TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01



21~22℃ Test Mode: Mode 1 Temperature : 41~42% Jack Tian Relative Humidity: Test Engineer: 120Vac / 60Hz Phase: Test Voltage : Neutral GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) Function Type: + Earphone + Camera + SIM1

Report No.: FC422801



: CO01-SZ

Condition: FCC 15B_QP LISN_N_20130328 NEUTRAL

Project : (FC) 422801 : Mode 1

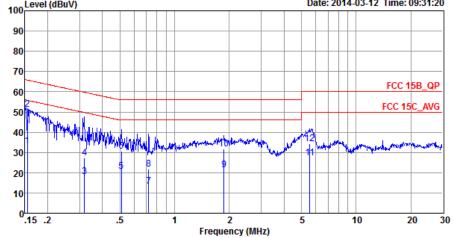
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBu∀	dB	dBu∀	dBu∀	dB	dB	
24	2.87	42.91	-13.09	56.00	32.70	0.00	10.21	QP
25	4.03	37.43	-8.57	46.00	27.10	0.10	10.23	Average
26	4.03	45.03	-10.97	56.00	34.70	0.10	10.23	QP
27	4.75	37.24	-8.76	46.00	27.00	0.00	10.24	Average
28	4.75	45.34	-10.66	56.00	35.10	0.00	10.24	QP
29	5.06	33.35	-16.65	50.00	23.00	0.11	10.24	Average
30	5.06	41.55	-18.45	60.00	31.20	0.11	10.24	QP
31	6.70	34.14	-15.86	50.00	23.71	0.16	10.27	Average
32	6.70	41.84	-18.16	60.00	31.41	0.16	10.27	QP

Page Number : 18 of 26 TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01



FCC Test Report

Test Mode :	Mode 3	Temperature :	21~22 ℃					
Test Engineer :	Jack Tian	Relative Humidity :	41~42%					
Test Voltage :	120Vac / 60Hz	Phase :	Line					
F 4' T	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with							
Function Type :	Notebook) + Earphone + GPS Rx + SIM1							
100	Level (dBuV)	Date: 2014-03-12 Time: 09:31:20						
90								
80								



Site : CO01-SZ

Condition: FCC 15B_QP LISN_L_20130328 LINE

Mode : Mode 3

				Over	Limit	Read	LISN	Cable	
		Freq	Level	Limit	Line	Level	Factor	Loss	Remark
		MHz	dBu∀	dB	dBu₹	dBu₹	dB	dB	
1		0.15	33.11	-22.63	55.74	22.70	0.06	10.35	Average
2	*	0.15	51.21	-14.53	65.74	40.80	0.06	10.35	QP
3		0.32	18.20	-31.55	49.75	7.90	0.11	10.19	Average
4		0.32	27.20	-32.55	59.75	16.90	0.11	10.19	QP
5		0.51	20.50	-25.50	46.00	10.20	0.14	10.16	Average
6		0.51	30.60	-25.40	56.00	20.30	0.14	10.16	QP
7		0.72	13.11	-32.89	46.00	2.80	0.16	10.15	Average
8		0.72	21.71	-34.29	56.00	11.40	0.16	10.15	QP
9		1.87	21.31	-24.69	46.00	10.90	0.23	10.18	Average
10		1.87	31.71	-24.29	56.00	21.30	0.23	10.18	QP
11		5.56	27.20	-22.80	50.00	16.60	0.35	10.25	Average
12		5.56	34.30	-25.70	60.00	23.70	0.35	10.25	QP

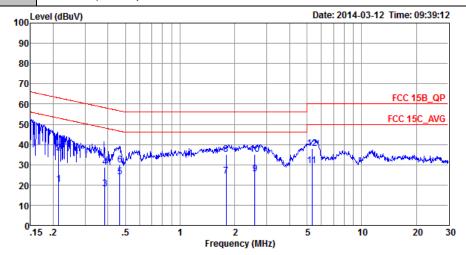
TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 19 of 26
Report Issued Date : Mar. 19, 2014

Report No.: FC422801



FCC Test Report

Test Mode :	Mode 3	Temperature :	21~22 ℃					
Test Engineer :	Jack Tian	Relative Humidity :	41~42%					
Test Voltage :	120Vac / 60Hz	Phase :	Neutral					
Function Type	WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Dat							
Function Type :	Notebook) + Earphone + GF	Notebook) + Earphone + GPS Rx + SIM1						



Site : CO01-SZ

Condition: FCC 15B_QP LISN_N_20130328 NEUTRAL

Mode : Mode 3

	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
	MHz	dBu∀	dB	dBuV	dBu₹	dB	dB	
1	0.21	20.42	-32.63	53.05	10.10	0.04	10.28	Average
2	0.21	35.92	-27.13	63.05	25.60	0.04	10.28	QP
3	0.39	18.22	-29.95	48.17	8.00	0.04	10.18	Average
4	0.39	28.62	-29.55	58.17	18.40	0.04	10.18	QP
5	0.47	24.10	-22.48	46.58	13.90	0.04	10.16	Average
6	0.47	29.86	-26.72	56.58	19.70	0.00	10.16	QP
7	1.79	24.24	-21.76	46.00	14.00	0.06	10.18	Average
8	1.79	35.24	-20.76	56.00	25.00	0.06	10.18	QP
9 *	2.58	25.58	-20.42	46.00	15.31	0.07	10.20	Average
10	2.58	35.08	-20.92	56.00	24.81	0.07	10.20	QP
11	5.33	29.57	-20.43	50.00	19.20	0.12	10.25	Average
12	5.33	37.87	-22.13	60.00	27.50	0.12	10.25	QP

 TEL: 86-755- 3320-2398
 Rep

 FCC ID: YHLBLUST60HD
 Rep

Page Number : 20 of 26 Report Issued Date : Mar. 19, 2014

Report No.: FC422801

Test of Radiated Emission Measurement 3.2.

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:

Report No.: FC422801

: 21 of 26

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 5. 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 6. Hold Mode.
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level ($dB\mu V/m$) = 20 log Emission level ($\mu V/m$)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

SPORTON INTERNATIONAL (SHENZHEN) INC. Page Number TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014

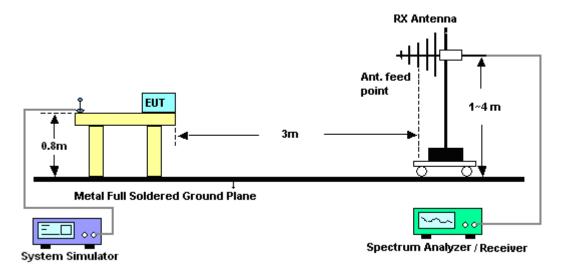
FCC ID: YHLBLUST60HD Report Version : Rev. 01



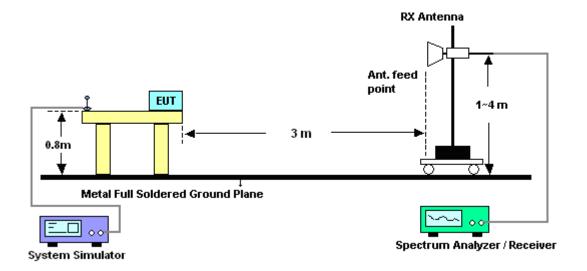
Report No.: FC422801

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



TEL: 86-755-3320-2398 FCC ID: YHLBLUST60HD Page Number : 22 of 26 Report Issued Date: Mar. 19, 2014

3.2.5. Test Result of Radiated Emission

Test Mode :		Mod	e 3			-	Tempe	rature	:	24~	-25°C			
Test Engine	er:	Leo	Liao				Relativ	e Hui	midity	: 48~	48~49%			
Test Distanc	e :	3m				ı	Polarization :			Hor	Horizontal			
		WCE	DMA B	and V	' Idle +	Blue	etooth Idle + WLAN Idle + USB Cable (Data Link wi							
Function Typ	e:						S Rx + SIM1							
Remark :									e ignor	ed.				
		(dBuV/										Date	: 2014-03-13	3
117		(ubuvi	,											
102.4	ļ													
07.6														
87.8														
73.1	-											FC	CC CLASS-B -6dB	
58.5												F00 01 4	CC D (1110)	
00.0		6										FCC CLF	ASS-B (AVG) -6dB	
43.9	2		8	3	!	9	10		1	1	12 		13_	
29.3	4	5 7												
14.6														
(30	1000.		3000.		5000.		7000.		9000.		11000.	1300] 00
			0201104	07			Frequen	cy (MHz)					
Site Cond Proje Mode	ct	:	03CH01- FCC CL (FC)422 Mode 3	ASS-B 3	ßm LF_Al	NT13102	26 HORIZ	ONTAL						
		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	2	40.06	38.87	-7.13		55.63	11.35	1.82	29.94 29.93	100	135	Peak Peak		
3	4	79.90	32.58	-13.42	46.00	42.62	12.28	2.48	29.93			Peak Peak		
5	P 8	81.70	46.00			52.09	19.30	3.29	29.93			Peak Peak		
7 8	24	76.00	39.95	-34.05	74.00	58.61	21.30 32.41	5.71	29.94 56.78			Peak Peak		
9 10							33.14 34.00		57.80 56.41			Peak Peak		
11	86	06.00	38.08	-35.92		46.70	35.92	11.06	55.60			Peak Peak		
12														

TEL: 86-755- 3320-2398 FCC ID: YHLBLUST60HD Page Number : 23 of 26
Report Issued Date : Mar. 19, 2014

Report No.: FC422801

Test Mode :	Mode 3		Temperatui	re:	24~25°C					
Test Engineer :	Leo Liao		Relative Hu	ımidity :	48~49%					
Test Distance :	3m		Polarization	Polarization : Vertical						
Function Type :		VCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1								
Remark :	#6 is system simulator signal which can be ignored.									
117 Level	(dBuV/m)					Date: 2014-03-13	3			
102.4										
87.8						FCC CLASS-B				
58.5						FCC CLASS-B (AVG)				
43.9	8				40	-6dB				
29.3	67	9	10	11	12					
14.6										
030	1000.	3000. 50	00. 7000 Frequency (MH		000.	11000. 1300	00			
Site Condition Project Mode	: 03CH01- : FCC CL : (FC)4226 : Mode 3	ASS-B 3m LF_ANT1: 801	31026 VERTICAL		/Pos T/Pos					
	Freq Level		eadAntenna Cabl vel Factor Los	s Factor	7705 17705	Remark				
	MHz dBuV/m		BuV dB/m d		cm deg					
2 1 3 P 2 4 4	89.84 27.08 40.06 39.86 79.90 27.68	-12.76 40.00 38 -16.42 43.50 46 -6.14 46.00 56 -18.32 46.00 37 -20.00 46.00 34	.67 8.70 1.6 .62 11.35 1.8 .72 17.40 2.4	8 29.93 5 29.94 2 29.93 8 29.92 4 29.93	200 0	Peak Peak Peak Peak Peak				
6 8 7 9 8 23 9 47	81.70 35.52 60.10 35.77 90.00 45.53 96.00 38.26	41 -18.23 54.00 46 -28.47 74.00 64 -35.74 74.00 53	.61 20.56 3.2 .98 21.30 3.4 .68 31.98 5.6 .51 33.74 8.3	9 29.94 3 29.94 2 56.75 3 57.32	100 360	Peak Peak Peak Peak				
11 87 12 101	30.00 38.25 08.00 40.32	-36.37 74.00 50 -35.75 74.00 46 -33.68 74.00 47 -31.85 74.00 45	.53 36.08 11.0 .64 36.93 12.7	2 56.97		Peak Peak Peak Peak				

Report No.: FC422801

Page Number : 24 of 26 TEL: 86-755-3320-2398 Report Issued Date: Mar. 19, 2014 FCC ID: YHLBLUST60HD Report Version : Rev. 01

4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
ESCIO Test Receiver	R&S	ESCI	100724	9kHz~3GHz	Mar. 29, 2013	Mar. 11, 2014~ Mar. 12, 2014	Mar. 28, 2014	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Mar. 28, 2013	Mar. 11, 2014~ Mar. 12, 2014	Mar. 27, 2014	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Mar. 28, 2013	Mar. 11, 2014~ Mar. 12, 2014	Mar. 27, 2014	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Nov. 19, 2013	Mar. 11, 2014~ Mar. 12, 2014	Nov. 18, 2014	Conduction (CO01-SZ)
Spectrum Analyzer	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	Apr. 04, 2013	Mar. 13, 2014	Apr. 03, 2014	Radiation (03CH01-SZ)
Bilog Antenna	SCHAFFNER	CBL6112B	2614	30MHz~2GHz	Dec. 26, 2013	Mar. 13, 2014	Dec. 25, 2014	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 26, 2013	Mar. 13, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz Gain 30db	Mar. 29, 2013	Mar. 13, 2014	Mar. 28, 2014	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	Mar. 29, 2013	Mar. 13, 2014	Mar. 28, 2014	Radiation (03CH01-SZ)
Turn Table	EM Electronics	EM 1000	N/A	0 ~ 360 degree	N/A	Mar. 13, 2014	N/A	Radiation (03CH01-SZ)
Antenna Mast	EM Electronics	EM 1000	N/A	1 m ~ 4 m	N/A	Mar. 13, 2014	N/A	Radiation (03CH01-SZ)

SPORTON INTERNATIONAL (SHENZHEN) INC.
TEL: 86-755-3320-2398

FCC ID : YHLBLUST60HD

Page Number : 25 of 26
Report Issued Date : Mar. 19, 2014

Report No.: FC422801



FCC Test Report

5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of	2.24
Confidence of 95% (U = 2Uc(y))	2.31

Report No.: FC422801

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

Measuring Uncertainty for a Level of	3.90
Confidence of 95% (U = 2Uc(y))	3.90

SPORTON INTERNATIONAL (SHENZHEN) INC.Page Number: 26 of 26TEL: 86-755- 3320-2398Report Issued Date: Mar. 19, 2014

FCC ID : YHLBLUST60HD Report Version : Rev. 01