FCC Test Report

APPLICANT : CT Asia

EQUIPMENT: Smart phone

BRAND NAME : BLU

MODEL NAME : Win JR

FCC ID : YHLBLUWINJR

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION: Certification

The product was received on Jul. 17, 2014 and testing was completed on Aug. 07, 2014. 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 C63.4-2003 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.

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 FCC ID: YHLBLUWINJR

Page Number : 1 of 25
Report Issued Date : Aug. 14, 2014

Testing Laboratory 2353

Report No. : FC471701

TABLE OF CONTENTS

| RE | VISIO | N HISTORY | 3 |
|-----|----------|--|----|
| CII | | RY OF TEST RESULT | 4 |
| 30 | IVIIVIAT | TOF 1E31 RESULT | 4 |
| 1. | GEN | ERAL DESCRIPTION | 5 |
| | 1.1. | Applicant | 5 |
| | 1.2. | Manufacturer | |
| | 1.3. | Product Feature of Equipment Under Test | |
| | 1.4. | Product Specification subjective to this standard | 6 |
| | 1.5. | Modification of EUT | 7 |
| | 1.6. | Test Location | |
| | 1.7. | Applicable Standards | 7 |
| 2. | TEST | CONFIGURATION OF EQUIPMENT UNDER TEST | 8 |
| | 2.1. | Test Mode | 8 |
| | 2.2. | Connection Diagram of Test System | |
| | 2.3. | Support Unit used in test configuration and system | |
| | 2.4. | EUT Operation Test Setup | 13 |
| 3. | TEST | RESULT | 14 |
| | 3.1. | Test of AC Conducted Emission Measurement | 14 |
| | 3.2. | Test of Radiated Emission Measurement | |
| 4. | LIST | OF MEASURING EQUIPMENT | 24 |
| 5. | UNC | ERTAINTY OF EVALUATION | 25 |
| ΔΡ | PFND | IX A. SETUP PHOTOGRAPHS | |
| | | /// !! V= V | |

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR

Page Number : 2 of 25
Report Issued Date : Aug. 14, 2014

Report No. : FC471701

REVISION HISTORY

| REPORT NO. | VERSION | DESCRIPTION | ISSUED DATE |
|------------|---------|-------------------------|---------------|
| FC471701 | Rev. 01 | Initial issue of report | Aug. 14, 2014 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR

Page Number : 3 of 25
Report Issued Date : Aug. 14, 2014

Report No. : FC471701

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 | 5.37 dB at |
| | | | | | 0.150 MHz |
| | | | | | Under limit |
| 3.2 | 15.109 | Radiated Emission | < 15.109 limits | PASS | 8.47 dB at |
| | | | | | 34.860 MHz |

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR Page Number : 4 of 25

Report No. : FC471701

Report Issued Date : Aug. 14, 2014 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

BEIJING BENYWAVE TECHNOLOGY CO., LTD.

NO. 55 Jiachang 2 road, OPTO-Mechatronics Industrial Park, Tongzhou district, Beijing 101111

1.3. Product Feature of Equipment Under Test

| | Product Feature |
|---------------------------------|---|
| Equipment | Smart phone |
| Brand Name | BLU |
| Model Name | Win JR |
| FCC ID | YHLBLUWINJR |
| | GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/HSPA+(|
| EUT supports Radios application | Downlink Only) |
| LOT Supports Radios application | WLAN2.4GHz 802.11b/g/n HT20 |
| | Bluetooth v3.0+EDR |
| HW Version | TBW5703B2_P3 |
| SW Version | 01068.00016.57032.01048 |
| 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.

Report No.: FC471701

: 5 of 25

Page Number

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

TEL: 86-755- 3320-2398 Report Issued Date: Aug. 14, 2014 FCC ID: YHLBLUWINJR Report Version: Rev. 01

1.4. Product Specification subjective to this standard

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

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR Page Number : 6 of 25
Report Issued Date : Aug. 14, 2014

: Rev. 01

Report Version

Report No. : FC471701

1.5. Modification of EUT

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

1.6. Test Location

| Test Site | SPORTON INTERNATIONAL (SHENZHEN) INC. | | | | |
|--------------------|---|-----------|----------------------|--|--|
| 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 | | | | |
| Test Site No. | Sporton Site No. | | FCC Registration No. | | |
| rest Site No. | CO01-SZ | 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 C63.4-2003

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

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR Page Number : 7 of 25
Report Issued Date : Aug. 14, 2014

Report No.: FC471701

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.

| | | | Test Condition | | | |
|------|-----------------------------------|-------------|----------------|-----------|--|--|
| Item | EUT Configuration | EMI | ЕМІ | EMI | | |
| | | AC | RE<1G | RE≥1G | | |
| 1. | Charging Mode (EUT with adapter) | \boxtimes | \boxtimes | Note 1 | | |
| 2. | Data application transferred mode | | | \square | | |
| | (EUT connected with notebook) | | | | | |

Abbreviations:

EMI AC: AC conducted emissions

EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz

• EMI RE < 1G: EUT radiated emissions < 1GHz

Note 1: Testing for this mode is not required or not the worst case.

Remark: For signal above 1GHz, the worst case was test item 2.

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR Page Number : 8 of 25

Report No. : FC471701

Report Issued Date : Aug. 14, 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 + SIM 1 |
| | | <fig.1></fig.1> |
| AC Conducted | | Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM 1 |
| Emission | 1/2 | <fig.1></fig.1> |
| | | Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + GPS Rx + SIM1 <fig.2></fig.2> |
| | | Mode 4: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig.3></fig.3> |
| | z 1/2 | Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM 1 |
| | | <fig.1></fig.1> |
| Dedicted | | Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM 1 |
| Radiated Emissions < 1GHz | | <fig.1></fig.1> |
| | | Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + GPS Rx + SIM1 <fig.2></fig.2> |
| | | Mode 4: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig.3></fig.3> |
| Radiated Emissions ≥ 1GHz | 2 | Mode 1: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig.3></fig.3> |

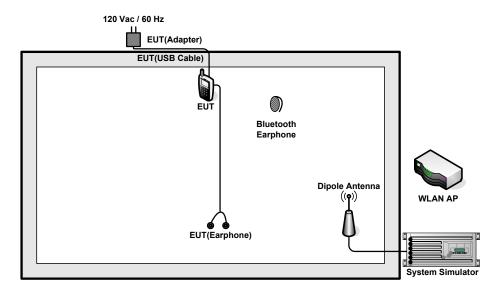
Report No.: FC471701

Remark:

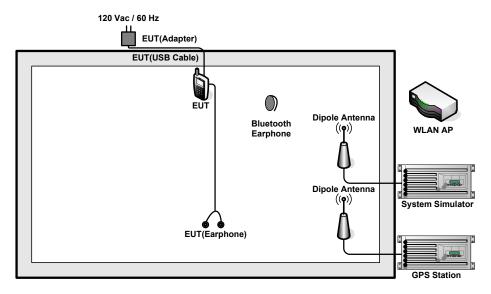
- 1. The worst case of AC is mode 1, and the USB Link mode of AC is mode 4, the test data of these modes were reported.
- The worst case of RE < 1G is mode 4; only the test data of this mode was reported. 2.
- 3. Link with Notebook means data application transferred mode between EUT and Notebook.

Page Number : 9 of 25 TEL: 86-755-3320-2398 Report Issued Date: Aug. 14, 2014 FCC ID: YHLBLUWINJR Report Version : Rev. 01

2.2. Connection Diagram of Test System



<Fig.1>



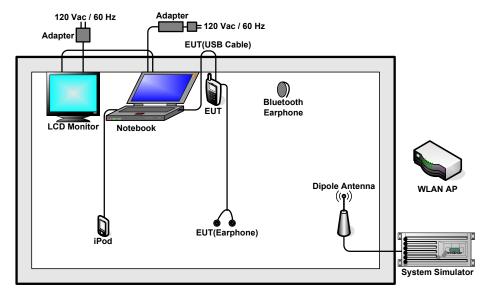
<Fig.2>

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR

Page Number : 10 of 25
Report Issued Date : Aug. 14, 2014

Report No.: FC471701





<Fig.3>

TEL : 86-755- 3320-2398 FCC ID : YHLBLUWINJR Page Number : 11 of 25
Report Issued Date : Aug. 14, 2014
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 | CMW 500 | N/A | N/A | Unshielded, 1.8 m |
| 2. | System Simulator | Agilent | E5515C | 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-628 | KA2DIR628A2 | N/A | Unshielded, 1.8 m |
| 5. | WLAN AP | D-Link | DIR-615 | N/A | N/A | Unshielded, 1.8 m |
| 6. | Bluetooth Earphone | Nokia | BH-108 | PYAHS-107W | N/A | N/A |
| | | | | | | AC I/P: |
| 7. | Notebook | Lenovo | E540 | FCC DoC | N/A | Unshielded, 1.8 m |
| | | | | | | DC O/P: |
| | | | | | | Shielded, 1.8 m |
| | | | | | | AC I/P: |
| | Nistalasala | | 0.400 | N/A | N/A | Unshielded, 0.9 m |
| 8. | Notebook | Lenovo | G480 | | | DC O/P: |
| | | | | | | Shielded, 1.8 m |
| 9. | Monitor | Dell | IN1940MWB | FCC DoC | Shielded, 1.2m | Unshielded, 1.8 m |
| 10. | Television | changhong | LT19920EX | N/A | N/A | Unshielded, 1.8 m |
| 11. | SD Card | SanDisk | 4G class 4 | FCC DoC | N/A | N/A |
| 12. | iPod | Apple | MC525 ZP/A | FCC DoC | Shielded, 1.0m | N/A |
| 13. | iPod nano 8GB | Apple | MC690 ZP/A | FCC DoC | Shielded, 1.2m | N/A |

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR

Page Number : 12 of 25
Report Issued Date : Aug. 14, 2014
Report Version : Rev. 01

Report No. : FC471701

2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and was in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

- 1. Data application is transferred between Notebook and EUT via USB cable.
- 2. 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.

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

FCC ID : YHLBLUWINJR

Page Number : 13 of 25
Report Issued Date : Aug. 14, 2014

Report No. : FC471701

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.: FC471701

: 14 of 25

Page Number

| 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.

TEL: 86-755- 3320-2398 Report Issued Date: Aug. 14, 2014 Report Version: Rev. 01

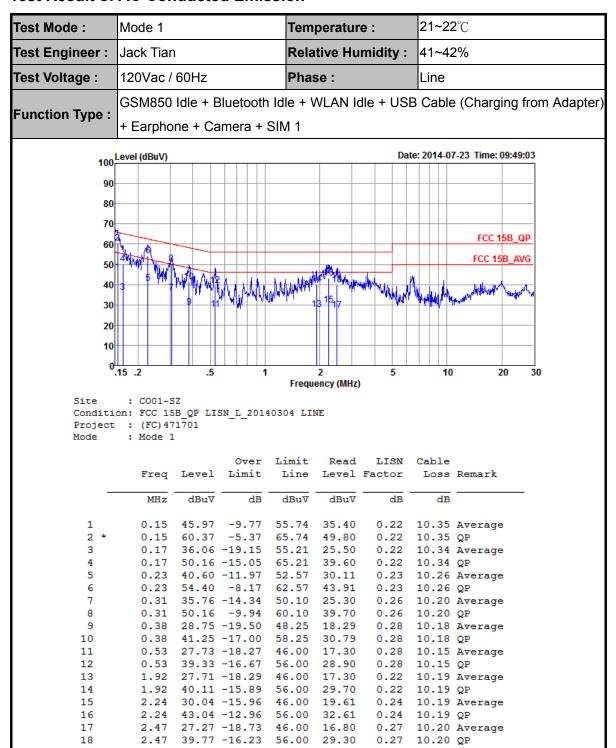
3.1.4 Test Setup



TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR Page Number : 15 of 25
Report Issued Date : Aug. 14, 2014
Report Version : Rev. 01

Report No.: FC471701

3.1.5 Test Result of AC Conducted Emission



TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR Page Number : 16 of 25
Report Issued Date : Aug. 14, 2014
Report Version : Rev. 01

Report No. : FC471701



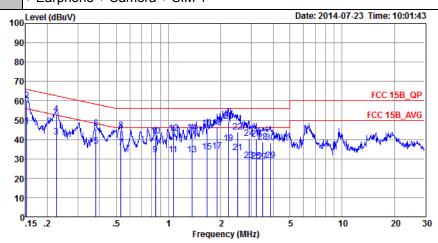
Test Mode: Mode 1 Temperature: 21~22°C

Test Engineer: Jack Tian Relative Humidity: 41~42%

Test Voltage: 120Vac / 60Hz Phase: Neutral

GSM850 Idle + Rivetooth Idle + WI AN Idle + USB Cable (Charging from Adapter

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



Site : CO01-SZ

Condition: FCC 15B QP LISN N 20140304 NEUTRAL

Project : (FC)471701 Mode : Mode 1

| | | | Over | Limit | Read | LISN | Cable | |
|-----|------|-------|--------|-------|-------|--------|-------|---------|
| | Freq | Level | Limit | Line | Level | Factor | Loss | Remark |
| | MHz | dBuV | dB | dBuV | dBuV | dB | dB | |
| | | | | | | | | |
| 1 | 0.15 | 46.99 | -8.88 | 55.87 | 36.30 | 0.33 | 10.36 | Average |
| 2 * | 0.15 | 60.29 | -5.58 | 65.87 | 49.60 | | | |
| 3 | 0.23 | 41.50 | -11.11 | 52.61 | 30.90 | 0.33 | 10.27 | Average |
| 4 | 0.23 | 53.00 | -9.61 | 62.61 | 42.40 | 0.33 | 10.27 | QP |
| 5 | 0.38 | 36.36 | -11.89 | 48.25 | 25.80 | 0.38 | 10.18 | Average |
| 6 | 0.38 | 45.86 | -12.39 | 58.25 | 35.30 | 0.38 | 10.18 | QP |
| 7 | 0.53 | 35.83 | -10.17 | 46.00 | 25.30 | 0.38 | 10.15 | Average |
| 8 | 0.53 | 44.53 | -11.47 | 56.00 | 34.00 | 0.38 | 10.15 | QP |
| 9 | 0.84 | 32.14 | -13.86 | 46.00 | 21.70 | 0.29 | 10.15 | Average |
| 10 | 0.84 | 41.84 | -14.16 | 56.00 | 31.40 | 0.29 | 10.15 | QP |
| 11 | 1.07 | 32.29 | -13.71 | 46.00 | 21.81 | 0.33 | 10.15 | Average |
| 12 | 1.07 | 43.29 | -12.71 | 56.00 | 32.81 | 0.33 | 10.15 | QP |
| 13 | 1.37 | 32.02 | -13.98 | 46.00 | 21.50 | 0.35 | 10.17 | Average |
| 14 | 1.37 | 43.62 | -12.38 | 56.00 | 33.10 | 0.35 | | |
| 15 | 1.67 | 33.74 | -12.26 | 46.00 | 23.20 | 0.36 | 10.18 | Average |
| 16 | 1.67 | 45.74 | -10.26 | 56.00 | 35.20 | 0.36 | 10.18 | QP |
| 17 | 1.91 | 33.95 | -12.05 | 46.00 | 23.39 | 0.37 | 10.19 | Average |
| 18 | 1.91 | 46.15 | -9.85 | 56.00 | 35.59 | 0.37 | 10.19 | QP |
| 19 | 2.21 | 37.88 | -8.12 | 46.00 | 27.31 | 0.38 | 10.19 | Average |
| 20 | 2.21 | 49.38 | -6.62 | 56.00 | 38.81 | 0.38 | | |
| 21 | 2.50 | 33.20 | -12.80 | 46.00 | 22.60 | 0.40 | 10.20 | Average |
| 22 | 2.50 | 43.90 | -12.10 | 56.00 | 33.30 | 0.40 | 10.20 | QP |
| 23 | 2.90 | | -16.67 | | 18.70 | 0.42 | 10.21 | Average |
| 24 | 2.90 | 40.53 | -15.47 | 56.00 | 29.90 | | | _ |
| 25 | 3.19 | 28.95 | -17.05 | 46.00 | 18.31 | 0.43 | 10.21 | Average |
| 26 | 3.19 | 40.15 | -15.85 | 56.00 | 29.51 | 0.43 | 10.21 | QP |
| 27 | 3.49 | 28.56 | -17.44 | | 17.90 | 0.44 | 10.22 | Average |
| 28 | 3.49 | 38.66 | -17.34 | 56.00 | 28.00 | 0.44 | 10.22 | QP |
| 29 | 3.86 | 29.08 | -16.92 | 46.00 | 18.39 | 0.46 | 10.23 | Average |
| 30 | 3.86 | | -17.52 | | 27.79 | 0.46 | 10.23 | OP |

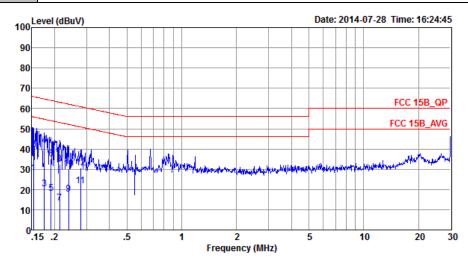
TEL: 86-755-3320-2398 FCC ID: YHLBLUWINJR Page Number : 17 of 25
Report Issued Date : Aug. 14, 2014
Report Version : Rev. 01

Report No. : FC471701



| Test Mode : | Mode 4 | Temperature : | 21~22 ℃ |
|-----------------|---------------|-----------------------|--------------------------------|
| Test Engineer : | Jack Tian | Relative Humidity : | 41~42% |
| Test Voltage : | 120Vac / 60Hz | Phase : | Line |
| Function Type : | | etooth Idle + WLAN Id | le + USB Cable (Data Link with |

Notebook) + Earphone + SIM1



: CO01-SZ

Condition: FCC 15B_QP LISN_L_20140304 LINE

Project : (FC)471701 Mode : Mode 4

| | Freq | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Remark |
|----------|--------------|-------|------------------|----------------|----------------|----------------|---------------|---------------|
| | MHz | dBu∀ | dB | dBu₹ | dBu∀ | dB | dB | |
| 1 | 0.15 | | -27.94 | 55.82 | 17.30 | 0.22 | | Average |
| 2 3 | 0.15 0.18 | 20.34 | -25.94 -34.34 | 65.82 54.68 | 29.30 9.80 | 0.22 | | Average |
| 4 * 5 | 0.18 | | -22.94 -36.06 | 64.68 53.98 | 31.20 7.40 | | | QP Average |
| 6 7 | 0.19 0.21 | | -28.96 -39.89 | 63.98 53.10 | 24.50 | | | QP Average |
| 8 | 0.21 | | -30.59 -34.44 | 63.10 52.13 | 22.00 | 0.23 | 10.28 | _ |
| 10 | 0.24 | 30.39 | -31.74 | 62.13 | 19.90 | 0.24 | 10.25 | QP |
| 11 12 | 0.28 0.28 | | -29.23 -30.13 | 50.90 60.90 | 11.20 20.30 | 0.25 0.25 | 10.22 | Average QP |

TEL: 86-755-3320-2398 FCC ID: YHLBLUWINJR Page Number : 18 of 25 Report Issued Date: Aug. 14, 2014 Report Version : Rev. 01

Report No.: FC471701



| Test Mode : | Mode 4 | 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 (Data Link with | | | | | | |
| Function Type : | Notebook) + Earphone + SIM1 | | | | | | |

100 Level (dBuV) Date: 2014-07-28 Time: 16:44:06 90 80 70 FCC 15B_QP 60 FCC 15B_AVG 50 20

Frequency (MHz)

5

20

30

: CO01-SZ

Condition: FCC 15B QP LISN N 20140304 NEUTRAL Project : (FC) 471701 Mode : Mode 4

.5

| | Freq | Level | Over Limit | Limit Line | Read Level | LISN Factor | Cable Loss | Remark |
|-----|------|-------|---------------|---------------|---------------|----------------|---------------|---------|
| | MHz | dBuV | dB | dBu∀ | dBu∀ | dB | dB | |
| 1 | 0.16 | 20.58 | -35.07 | 55.65 | 9.90 | 0.33 | 10.35 | Average |
| 2 * | 0.16 | 39.48 | -26.17 | 65.65 | 28.80 | 0.33 | 10.35 | QP |
| 3 | 0.18 | 15.95 | -38.73 | 54.68 | 5.31 | 0.32 | 10.32 | Average |
| 4 | 0.18 | 37.05 | -27.63 | 64.68 | 26.41 | 0.32 | 10.32 | QP |
| 5 | 0.19 | 19.82 | -34.02 | 53.84 | 9.20 | 0.32 | 10.30 | Average |
| 6 | 0.19 | 34.72 | -29.12 | 63.84 | 24.10 | 0.32 | 10.30 | QP |
| 7 | 0.22 | 15.60 | -37.23 | 52.83 | 5.00 | 0.33 | 10.27 | Average |
| 8 | 0.22 | 32.00 | -30.83 | 62.83 | 21.40 | 0.33 | 10.27 | QP |
| 9 | 0.28 | 21.07 | -29.83 | 50.90 | 10.50 | 0.35 | 10.22 | Average |
| 10 | 0.28 | 30.27 | -30.63 | 60.90 | 19.70 | 0.35 | 10.22 | QP |
| 11 | 0.36 | 18.46 | -30.23 | 48.69 | 7.90 | 0.38 | 10.18 | Average |
| 12 | 0.36 | 29.06 | -29.63 | 58.69 | 18.50 | 0.38 | 10.18 | QP |

TEL: 86-755-3320-2398 FCC ID: YHLBLUWINJR Page Number : 19 of 25 Report Issued Date: Aug. 14, 2014

Report No.: FC471701

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.: FC471701

| 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.

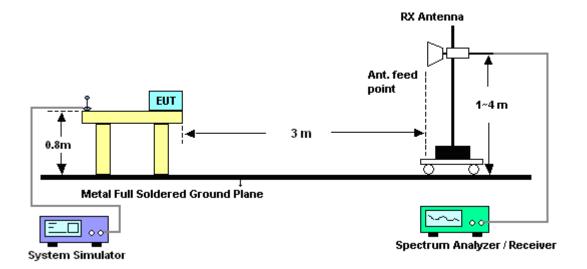
: 20 of 25 Page Number TEL: 86-755-3320-2398 Report Issued Date: Aug. 14, 2014 FCC ID: YHLBLUWINJR Report Version : Rev. 01

3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz

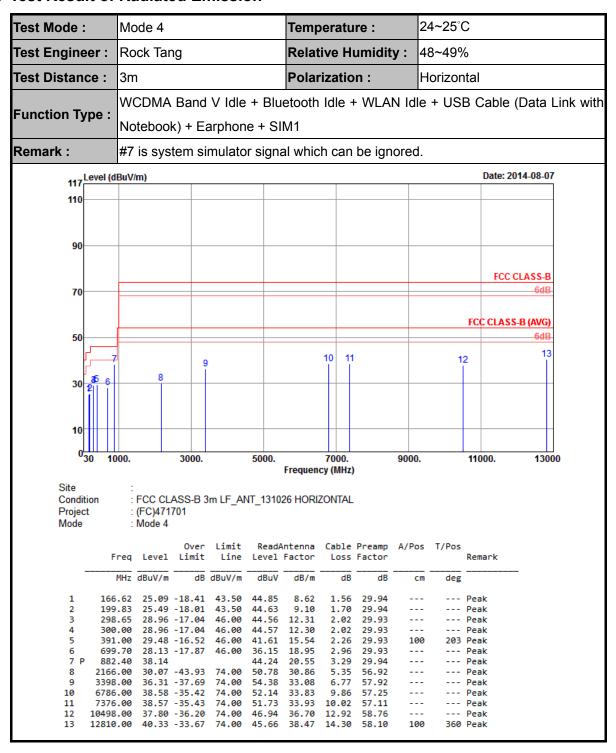


TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR

Page Number : 21 of 25
Report Issued Date : Aug. 14, 2014
Report Version : Rev. 01

Report No.: FC471701

3.2.5. Test Result of Radiated Emission



TEL: 86-755-3320-2398 FCC ID: YHLBLUWINJR Page Number : 22 of 25 Report Issued Date : Aug. 14, 2014

Report No. : FC471701



24~25°C Test Mode: Mode 4 Temperature: Test Engineer: **Relative Humidity:** 48~49% Rock Tang Test Distance: Polarization: 3m Vertical WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Function Type: Notebook) + Earphone + SIM1 Remark: #7 is system simulator signal which can be ignored. 117 Level (dBuV/m) Date: 2014-08-07 110 90 70 FCC CLASS-B (AVG) 50 12 13 30 10 030 1000. 3000. 5000. 7000. 9000. 11000. 13000 Frequency (MHz) Site : FCC CLASS-B 3m LF_ANT_131026 VERTICAL Condition Project (FC)471701 Mode : Mode 4 Limit ReadAntenna Cable Preamp A/Pos Over T/Pos Freq Level Limit Remark Line Level Factor Loss Factor MHz dBuV/m dB dBuV/m dBuV dB/m dB dB cm deg 34.86 31.53 -8.47 40.00 44.55 16.10 0.81 29.93 100 360 Peak 44.68 24.92 -18.58 43.50 Peak 8.62 1.56 298.65 27.95 -18.05 46.00 43.55 12.31 2.02 29.93 Peak 27.22 -18.78 300.00 46.00 42.83 12.30 2.02 29.93 ------ Peak 27.31 -18.69 5 498.10 46.00 37.67 17.04 2.52 29.92 ------ Peak 6 715.10 27.98 -18.02 46.00 35.77 19.15 2.99 29.93 --- Peak 880.30 38.75 44.83 --- Peak 8 2044.00 34.28 -39.72 74.00 55.79 30.17 5.20 56.88 --- Peak 3200.00 ------ Peak 9 34.21 -39.79 74.00 52.12 33.04 6.57 57.52 10 6848.00 33.51 -40.49 74.00 47.17 33.79 9.87 57.32 ------ Peak 34.62 -39.38 45.91 11 7902.00 74.00 34.72 10.59 56.60 --- Peak 9828.00 38.87 -35.13 74.00 47.92 36.76 13 12816.00 39.05 -34.95 74.00 44.38 38.47 14.30 58.10 100 360 Peak

TEL: 86-755-3320-2398 FCC ID: YHLBLUWINJR Page Number : 23 of 25
Report Issued Date : Aug. 14, 2014

Report No. : FC471701

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 | Feb. 21, 2014 | Jul. 23, 2014~ Jul. 28, 2014 | Feb. 20, 2015 | Conduction (CO01-SZ) |
| AC LISN | EMCO | 3816/2SH | 00103912 | 9kHz~30MHz | Mar. 04, 2014 | Jul. 23, 2014~ Jul. 28, 2014 | Mar. 03, 2015 | Conduction (CO01-SZ) |
| AC LISN (for auxiliary equipment) | EMCO | 3816/2SH | 00103892 | 9kHz~30MHz | Mar. 04, 2014 | Jul. 23, 2014~ Jul. 28, 2014 | Mar. 03, 2015 | Conduction (CO01-SZ) |
| AC Power Source | Chroma | 61602 | 61602000089 1 | 100Vac~250Vac | Dec. 17, 2013 | Jul. 23, 2014~ Jul. 28, 2014 | Dec. 16, 2014 | Conduction (CO01-SZ) |
| ESCIO TEST Receiver | R&S | ESCI | 100724 | 9kHz~3GHz | Feb. 21, 2014 | Aug. 07, 2014 | Feb. 20, 2015 | Radiation (03CH01-SZ) |
| Spectrum Analyzer | Agilent Technologies | N9038A | MY52260185 | 20Hz~26.5GHz | May 26, 2014 | Aug. 07, 2014 | May 25, 2015 | Radiation (03CH01-SZ) |
| Bilog Antenna | TESEQ | CBL 6112D | 23188 | 30MHz~2GHz | Oct. 26, 2013 | Aug. 07, 2014 | Oct. 25, 2014 | Radiation (03CH01-SZ) |
| Double Ridge Horn Antenna | ETS Lindgren | 3117 | 00119436 | 1GHz~18GHz | Oct. 26, 2013 | Aug. 07, 2014 | Oct. 25, 2014 | Radiation (03CH01-SZ) |
| Amplifier | ADVANTEST | BB525C | E9007003 | 9kHz~3000MHz | Feb. 21, 2014 | Aug. 07, 2014 | Feb. 20, 2015 | Radiation (03CH01-SZ) |
| Amplifier | Yiai | AV3860B | 04030 | 2GHz~26.5GHz | May 08, 2014 | Aug. 07, 2014 | May 07, 2015 | Radiation (03CH01-SZ) |
| AC Source(AVR) | Chroma | 61601 | 61601000198 5 | 100Vac~250Vac | Mar. 25, 2014 | Aug. 07, 2014 | Mar. 24, 2015 | Radiation (03CH01-SZ) |
| Turn Table | EM Electronics | EM 1000 | N/A | 0~360 degree | NCR | Aug. 07, 2014 | NCR | Radiation (03CH01-SZ) |
| Antenna Mast | EM Electronics | EM 1000 | N/A | 1 m~4 m | NCR | Aug. 07, 2014 | NCR | Radiation (03CH01-SZ) |

TEL: 86-755- 3320-2398 FCC ID: YHLBLUWINJR

Page Number : 24 of 25 Report Issued Date : Aug. 14, 2014

Report No. : FC471701



5. Uncertainty of Evaluation

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

| Measuring Uncertainty for a Level of | 2.2 |
|--------------------------------------|-----|
| Confidence of 95% (U = 2Uc(y)) | 2.3 |

Report No. : FC471701

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

| Measuring Uncertainty for a Level of | 2.0 |
|--------------------------------------|-----|
| Confidence of 95% (U = 2Uc(y)) | 3.9 |

SPORTON INTERNATIONAL (SHENZHEN) INC.Page Number: 25 of 25TEL: 86-755- 3320-2398Report Issued Date: Aug. 14, 2014FCC ID: YHLBLUWINJRReport Version: Rev. 01