# **FCC Test Report**

APPLICANT : CT Asia

**EQUIPMENT**: Mobile Phone

BRAND NAME : BLU

MODEL NAME : Jenny II

FCC ID : YHLBLUJENNY2

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Aug. 23, 2014 and testing was completed on Sep. 13, 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: YHLBLUJENNY2 Page Number : 1 of 26

2353

**Report No. : FC482302** 

Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

## **TABLE OF CONTENTS**

| RE   | VISIO  | N HISTORY  | 3  |
|------|--------|--|----|
| QI I |        | RY OF TEST RESULT                                  | 4  |
| 30   | IAIIAI | AT OF TEST 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  |    |
|      | 1.5.   | Modification of EUT                                | 6  |
|      | 1.6.   | Test Location                                      | 7  |
|      | 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 | 11 |
|      | 2.4.   | EUT Operation Test Setup                           | 12 |
| 3.   | TEST   | RESULT   | 13 |
|      | 3.1.   | Test of AC Conducted Emission Measurement          |    |
|      | 3.2.   | Test of Radiated Emission Measurement              | 19 |
| 4.   | LIST   | OF MEASURING EQUIPMENT                             | 25 |
| 5.   | UNC    | ERTAINTY OF EVALUATION                             | 26 |
|      |        |  |    |
| Α    | PPENI  | DIX A. SETUP PHOTOGRAPHS                           |    |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Report No.: FC482302

## **REVISION HISTORY**

| REPORT NO. | VERSION | DESCRIPTION             | ISSUED DATE   |
|------------|---------|-------------------------|---------------|
| FC482302   | Rev. 01 | Initial issue of report | Sep. 23, 2014 |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |
|            |         |                         |               |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 3 of 26
Report Issued Date : Sep. 23, 2014

Report No.: FC482302

## **SUMMARY OF TEST RESULT**

| Report<br>Section | FCC Rule Description |                          | Limit           | Result | Remark         |
|-------------------|----------------------|--------------------------|-----------------|--------|----------------|
|                   |                      |                          |                 |        | Under limit    |
| 3.1               | 15.107               | AC Conducted Emission    | < 15.107 limits | PASS   | 5.19 dB at     |
|                   |                      |                          |                 |        | 0.160 MHz      |
|                   |                      |                          |                 |        | Under limit    |
| 2.0               | 15.109               | 15.109 Radiated Emission | < 15.109 limits | PASS   | 1.16 dB at     |
| 3.2               |                      |                          |                 |        | 38.270 MHz for |
|                   |                      |                          |                 |        | Quasi-Peak     |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 4 of 26

Report No.: FC482302

Report Issued Date : Sep. 23, 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

#### Fortune Ship Technology (HK) Limited

7th. Floor, Kanghesheng Building, New Energy Innovation Industrial Park, No.1 ChuangSheng

## 1.3. Product Feature of Equipment Under Test

|                                 | Product Feature  |
|---------------------------------|--|
| Equipment                       | Mobile Phone   |
| Brand Name                      | BLU  |
| Model Name                      | Jenny II   |
| FCC ID                          | YHLBLUJENNY2   |
| EUT supports Radios application | GSM/GPRS/Bluetooth v2.1 + EDR                                      |
| HW Version                      | 2687-MB-V0.2   |
| SW Version                      | BLU-T177-V08-Generic_2687_CFZZ_C283_BLU_YPX_B3<br>1302_2014-08-20_ |
| EUT Stage                       | Production Unit  |

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: 86-755-3320-2398 F
FCC ID: YHLBLUJENNY2 F

Page Number : 5 of 26 Report Issued Date : Sep. 23, 2014

Report No.: FC482302

## 1.4. Product Specification subjective to this standard

| Product Specification subjective to this standard |                                   |  |  |  |  |
|---|-----------------------------------|--|--|--|--|
|   | GSM850 : 824.2 MHz ~ 848.8 MHz    |  |  |  |  |
| Tx Frequency                                      | GSM1900 : 1850.2 MHz ~ 1909.8MHz  |  |  |  |  |
|   | Bluetooth: 2402 MHz ~ 2480 MHz    |  |  |  |  |
|   | GSM850 : 869.2 MHz ~ 893.8 MHz    |  |  |  |  |
| Rx Frequency                                      | GSM1900 : 1930.2 MHz ~ 1989.8 MHz |  |  |  |  |
|   | Bluetooth: 2402 MHz ~ 2480 MHz    |  |  |  |  |
| Antonna Typa                                      | WWAN : PIFA Antenna               |  |  |  |  |
| Antenna Type                                      | Bluetooth : Wire Antenna          |  |  |  |  |
|   | GSM: GMSK                         |  |  |  |  |
|   | GPRS: GMSK                        |  |  |  |  |
| Type of Modulation                                | Bluetooth (1Mbps) : GFSK          |  |  |  |  |
|   | Bluetooth (2Mbps) : π /4-DQPSK    |  |  |  |  |
|   | Bluetooth (3Mbps) : 8-DPSK        |  |  |  |  |

## 1.5. Modification of EUT

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

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 6 of 26 Report Issued Date : Sep. 23, 2014

Report No. : FC482302

### 1.6. Test Location

| Test Site          | SPORTON INTERNATIONAL (SHENZHEN) INC.                                  |               |                      |  |  |
|--------------------|--|---------------|----------------------|--|--|
|                    | No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan |               |                      |  |  |
| Test Site Location | warehouse, Nanshan Dis   | gdong, P.R.C. |                      |  |  |
|                    | TEL: +86-755-3320-2398   |               |                      |  |  |
| Test Site No.      | Sporton S  | ite No.       | FCC Registration No. |  |  |
| Test Site NO.      | 03CH01-SZ  | CO01-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: YHLBLUJENNY2 Page Number : 7 of 26
Report Issued Date : Sep. 23, 2014

Report No. : FC482302

## 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         | EMI          | EMI         |
|      |                                   | AC          | RE<1G        | RE≥1G       |
| 1.   | Charging Mode (EUT with adapter)  | $\boxtimes$ | $\boxtimes$  | $\boxtimes$ |
| 2.   | Data application transferred mode | $\boxtimes$ | $\boxtimes$  | $\boxtimes$ |
|      | (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 1.

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 8 of 26

Report Issued Date: Sep. 23, 2014

**Report No. : FC482302** 

| Test Items                   | EUT<br>Configure<br>Mode | Function Type  |
|------------------------------|--------------------------|--|
|                              |                          | Mode 1: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + Camera + SIM1 <fig.1></fig.1> |
| AC Conducted<br>Emission     | 1/2                      | Mode 2: GSM1900 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + MP3 + SIM2 <fig.1></fig.1>   |
|                              |                          | Mode 3: GSM850 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + SIM1 <fig.2></fig.2>        |
|                              |                          | Mode 1: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + Camera + SIM1 <fig.1></fig.1> |
| Radiated<br>Emissions < 1GHz | 1/2                      | Mode 2: GSM1900 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + MP3 + SIM2 <fig.1></fig.1>   |
|                              |                          | Mode 3: GSM850 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + SIM1 <fig.2></fig.2>        |
| Radiated                     |                          | Mode 1: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + Camera + SIM1 <fig.1></fig.1> |
| Emissions ≥ 1GHz             | 1/2                      | Mode 2: GSM850 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + SIM1                        |

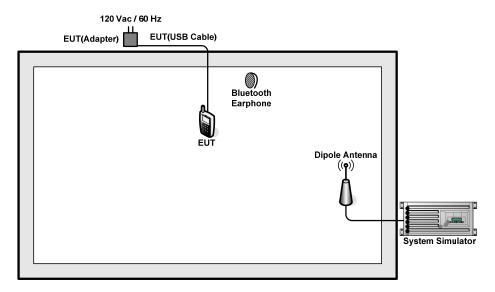
#### Remark:

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

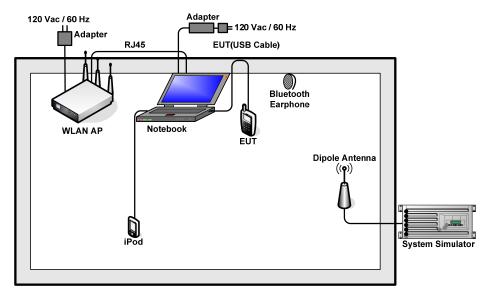
TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 9 of 26 Report Issued Date : Sep. 23, 2014

Report No. : FC482302

## 2.2. Connection Diagram of Test System



<Fig.1>



<Fig.2>

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2

Page Number : 10 of 26
Report Issued Date : Sep. 23, 2014

Report No. : FC482302

## 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    | 8960       | N/A          | N/A               | Unshielded, 1.8 m  |
| 3.   | WLAN AP               | ASUS       | RT-AC66U   | MSQ- RTAC66U | N/A               | Unshielded, 1.8 m  |
| 4.   | Bluetooth<br>Earphone | Nokia      | BH-108     | 2010DP1340   | N/A               | N/A  |
| 5.   | Notebook              | Lenovo     | G480       | N/A          | N/A               | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 6.   | Notebook              | Lenovo     | E540       | FCC DoC      | N/A               | AC I/P:<br>Unshielded, 1.2 m<br>DC O/P:<br>Shielded, 1.8 m |
| 7.   | iPod                  | Apple      | MC525 ZP/A | FCC DoC      | Unshielded, 1.0 m | N/A  |
| 8.   | IPod nano 8GB         | Apple      | MC525 ZP/A | FCC DoC      | Unshielded, 1.2 m | N/A  |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 11 of 26
Report Issued Date : Sep. 23, 2014

Report No.: FC482302

### 2.4. EUT Operation Test Setup

The EUT was in GSM 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 , 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. Execute "Music Player" to play MP3 file.
- 3. Turn on camera to capture images.

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 12 of 26
Report Issued Date : Sep. 23, 2014

Report No.: FC482302

### 3. Test Result

### 3.1. Test of AC Conducted Emission Measurement

#### 3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

| Frequency of emission | Conducted limit (dBuV) |           |  |  |
|-----------------------|------------------------|-----------|--|--|
| (MHz)                 | Quasi-peak             | Average   |  |  |
| 0.15-0.5              | 66 to 56*              | 56 to 46* |  |  |
| 0.5-5                 | 56                     | 46        |  |  |
| 5-30                  | 60                     | 50        |  |  |

<sup>\*</sup>Decreases with the logarithm of the frequency.

### 3.1.2 Measuring Instruments

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

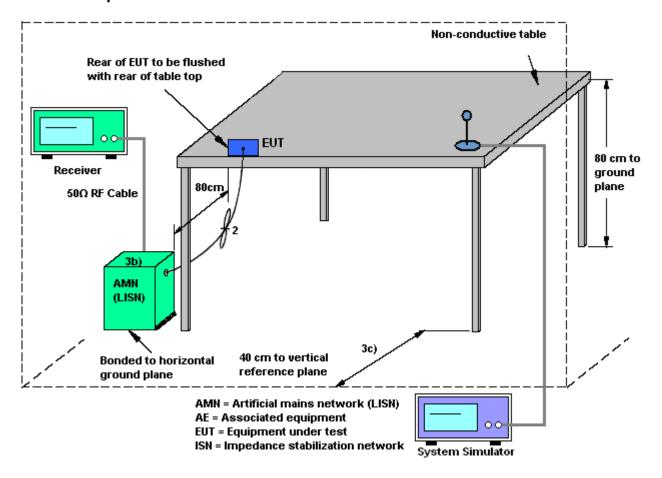
#### 3.1.3 Test Procedure

- The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth (IF Bandwidth = 9kHz) with Maximum Hold Mode. Then measurement is also conducted by Average Detector and Quasi-Peak Detector Function respectively.

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 13 of 26 Report Issued Date : Sep. 23, 2014

**Report No. : FC482302** 

### 3.1.4 Test Setup

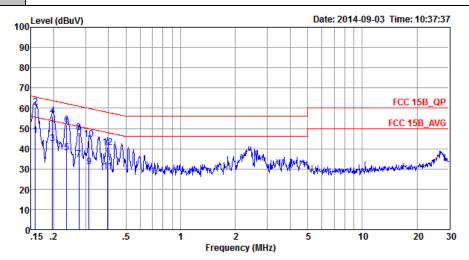


TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 14 of 26
Report Issued Date : Sep. 23, 2014

Report No.: FC482302

### 3.1.5 Test Result of AC Conducted Emission

| Test Mode :     | Mode 2  | Temperature :       | 21~23℃ |  |  |
|-----------------|---|---------------------|--------|--|--|
| Test Engineer : | Jack Tian   | Relative Humidity : | 41~42% |  |  |
| Test Voltage :  | 120Vac / 60Hz   | Phase :             | Line   |  |  |
| Franctica Trace | GSM1900 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + MP3 + |                     |        |  |  |
| Function Type : | SIM2  |                     |        |  |  |



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20140304 LINE

Project : (FC)482302 Mode : Mode 2

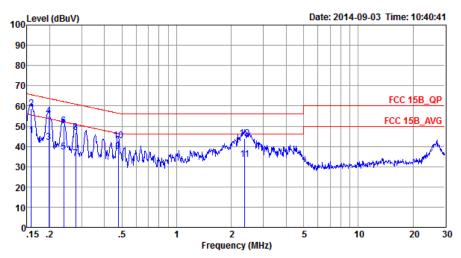
|     | Freq | Level | Over<br>Limit | Limit<br>Line | Read<br>Level | LISN<br>Factor | Cable<br>Loss | Remark  |
|-----|------|-------|---------------|---------------|---------------|----------------|---------------|---------|
|     | MHz  | dBuV  | dB            | dBu∀          | dBu∀          | dB             | dB            |         |
| 1   | 0.16 | 46.57 | -8.99         | 55.56         | 36.00         | 0.22           | 10.35         | Average |
| 2 1 | 0.16 | 60.37 | -5.19         | 65.56         | 49.80         | 0.22           | 10.35         | QP      |
| 3   | 0.20 | 42.52 | -11.24        | 53.76         | 32.00         | 0.22           | 10.30         | Average |
| 4   | 0.20 | 56.02 | -7.74         | 63.76         | 45.50         | 0.22           | 10.30         | QP      |
| 5   | 0.24 | 38.09 | -14.17        | 52.26         | 27.60         | 0.23           | 10.26         | Average |
| 6   | 0.24 | 51.49 | -10.77        | 62.26         | 41.00         | 0.23           | 10.26         | QP      |
| 7   | 0.28 | 34.87 | -16.07        | 50.94         | 24.40         | 0.25           | 10.22         | Average |
| 8   | 0.28 | 48.07 | -12.87        | 60.94         | 37.60         | 0.25           | 10.22         | QP      |
| 9   | 0.31 | 31.16 | -18.72        | 49.88         | 20.70         | 0.26           | 10.20         | Average |
| 10  | 0.31 | 44.56 | -15.32        | 59.88         | 34.10         | 0.26           | 10.20         | QP      |
| 11  | 0.40 | 28.65 | -19.30        | 47.95         | 18.20         | 0.28           | 10.17         | Average |
| 12  | 0.40 | 40.55 | -17.40        | 57.95         | 30.10         | 0.28           | 10.17         | QP      |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 15 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

Report No. : FC482302



| Test Mode :     | Mode 2                   | Temperature :        | 21~23℃                        |  |  |  |
|-----------------|--------------------------|----------------------|-------------------------------|--|--|--|
| Test Engineer : | Jack Tian                | Relative Humidity :  | 41~42%                        |  |  |  |
| Test Voltage :  | 120Vac / 60Hz            | Phase :              | Neutral                       |  |  |  |
| Franctica Trace | GSM1900 Idle + Bluetooth | Idle + USB Cable (Ch | narging from Adapter) + MP3 + |  |  |  |
| Function Type : | SIM2                     |                      |                               |  |  |  |



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_N\_20140304 NEUTRAL

Project : (FC)482302 Mode : Mode 2

|     | Freq | Level | Over<br>Limit | Limit<br>Line | Read<br>Level | LISN<br>Factor | Cable<br>Loss | Remark  |
|-----|------|-------|---------------|---------------|---------------|----------------|---------------|---------|
|     | MHz  | dBu∀  | dB            | dBu∇          | dBu∇          | dB             | dB            |         |
| 1   | 0.16 | 45.28 | -10.28        | 55.56         | 34.60         | 0.33           | 10.35         | Average |
| 2 * | 0.16 | 58.78 | -6.78         | 65.56         | 48.10         | 0.33           | 10.35         | QP      |
| 3   | 0.20 | 42.02 | -11.69        | 53.71         | 31.40         | 0.32           | 10.30         | Average |
| 4   | 0.20 | 54.92 | -8.79         | 63.71         | 44.30         | 0.32           | 10.30         | QP      |
| 5   | 0.24 | 37.39 | -14.74        | 52.13         | 26.80         | 0.34           | 10.25         | Average |
| 6   | 0.24 | 50.19 | -11.94        | 62.13         | 39.60         | 0.34           | 10.25         | QP      |
| 7   | 0.28 | 34.07 | -16.83        | 50.90         | 23.50         | 0.35           | 10.22         | Average |
| 8   | 0.28 | 46.97 | -13.93        | 60.90         | 36.40         | 0.35           | 10.22         | QP      |
| 9   | 0.48 | 37.56 | -8.85         | 46.41         | 26.99         | 0.41           | 10.16         | Average |
| 10  | 0.48 | 42.96 | -13.45        | 56.41         | 32.39         | 0.41           | 10.16         | QP      |
| 11  | 2.37 | 33.59 | -12.41        | 46.00         | 23.00         | 0.39           | 10.20         | Average |
| 12  | 2.37 | 43.79 | -12.21        | 56.00         | 33.20         | 0.39           | 10.20         | QP      |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2

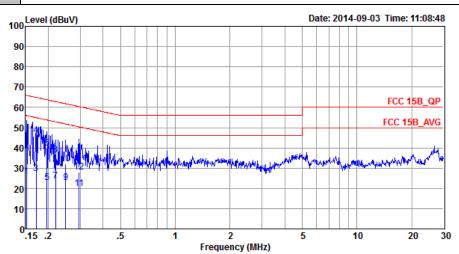
Page Number : 16 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

Report No.: FC482302

Report No. : FC482302

| Test Mode :     | Mode 3        | Temperature :       | 21~23℃ |
|-----------------|---------------|---------------------|--------|
| Test Engineer : | Jack Tian     | Relative Humidity : | 41~42% |
| Test Voltage :  | 120Vac / 60Hz | Phase :             | Line   |
|                 |               |                     |        |

Function Type: GSM850 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + SIM1



: CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20140304 LINE Project : (FC)482302

Mode : Mode 3

|     |      |       | Over   | Limit | Read  | LISN   | Cable |         |
|-----|------|-------|--------|-------|-------|--------|-------|---------|
|     | Freq | Level | Limit  | Line  | Level | Factor | Loss  | Remark  |
|     | MHz  | dBu∀  | dB     | dBu∇  | dBuV  | dB     | dB    |         |
|     |      | aza.  |        | aza.  |       |        |       |         |
| 1   | 0.15 | 25.98 | -29.93 | 55.91 | 15.40 | 0.22   | 10.36 | Average |
| 2   | 0.15 | 43.98 | -21.93 | 65.91 | 33.40 | 0.22   | 10.36 | QP      |
| 3   | 0.17 | 27.35 | -27.55 | 54.90 | 16.80 | 0.22   | 10.33 | Average |
| 4 * | 0.17 | 46.05 | -18.85 | 64.90 | 35.50 | 0.22   | 10.33 | QP      |
| 5   | 0.20 | 22.82 | -30.94 | 53.76 | 12.30 | 0.22   | 10.30 | Average |
| 6   | 0.20 | 39.82 | -23.94 | 63.76 | 29.30 | 0.22   | 10.30 | QP      |
| 7   | 0.22 | 23.70 | -29.13 | 52.83 | 13.20 | 0.23   | 10.27 | Average |
| 8   | 0.22 | 36.70 | -26.13 | 62.83 | 26.20 | 0.23   | 10.27 | QP      |
| 9   | 0.25 | 22.78 | -29.00 | 51.78 | 12.30 | 0.24   | 10.24 | Average |
| 10  | 0.25 | 32.28 | -29.50 | 61.78 | 21.80 | 0.24   | 10.24 | QP      |
| 11  | 0.30 | 19.76 | -30.61 | 50.37 | 9.31  | 0.25   | 10.20 | Average |
| 12  | 0.30 | 28.16 | -32.21 | 60.37 | 17.71 | 0.25   | 10.20 | QP      |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 17 of 26 Report Issued Date : Sep. 23, 2014 Report Version : Rev. 01

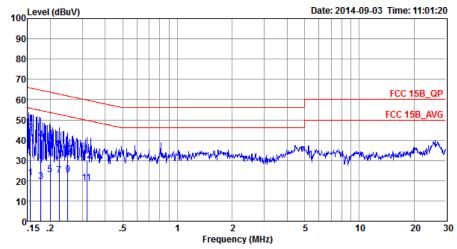


 Test Mode :
 Mode 3
 Temperature :
 21~23°C

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

 Test Voltage :
 120Vac / 60Hz
 Phase :
 Neutral

 Function Type :
 GSM850 Idle + Bluetooth Idle + USB Cable (Data Link with Notebook) + SIM1



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_N\_20140304 NEUTRAL

Project : (FC)482302 Mode : Mode 3

|     | Freq | Level | Over<br>Limit | Limit<br>Line | Read<br>Level | LISN<br>Factor | Cable<br>Loss | Remark  |
|-----|------|-------|---------------|---------------|---------------|----------------|---------------|---------|
|     | MHz  | dBu∇  | dB            | dBu∀          | dBu₹          | dB             | dB            |         |
| 1   | 0.16 | 21.58 | -34.11        | 55.69         | 10.90         | 0.33           | 10.35         | Average |
| 2 * | 0.16 | 43.58 | -22.11        | 65.69         | 32.90         | 0.33           | 10.35         | QP      |
| 3   | 0.18 | 19.64 | -34.95        | 54.59         | 9.00          | 0.32           | 10.32         | Average |
| 4   | 0.18 | 40.34 | -24.25        | 64.59         | 29.70         | 0.32           | 10.32         | QP      |
| 5   | 0.20 | 22.91 | -30.71        | 53.62         | 12.30         | 0.32           | 10.29         | Average |
| 6   | 0.20 | 39.31 | -24.31        | 63.62         | 28.70         | 0.32           | 10.29         | QP      |
| 7   | 0.22 | 22.40 | -30.30        | 52.70         | 11.80         | 0.33           | 10.27         | Average |
| 8   | 0.22 | 35.50 | -27.20        | 62.70         | 24.90         | 0.33           | 10.27         | QP      |
| 9   | 0.25 | 22.89 | -28.89        | 51.78         | 12.31         | 0.34           | 10.24         | Average |
| 10  | 0.25 | 32.89 | -28.89        | 61.78         | 22.31         | 0.34           | 10.24         | QP      |
| 11  | 0.32 | 18.96 | -30.84        | 49.80         | 8.40          | 0.37           | 10.19         | Average |
| 12  | 0.32 | 29.96 | -29.84        | 59.80         | 19.40         | 0.37           | 10.19         | QP      |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 18 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

Report No. : FC482302

#### 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.
- For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- 6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode (RBW=120kHz/VBW=300kHz for frequency below 1GHz; RBW=1MHz VBW=3MHz (Peak), RBW=1MHz/VBW=10Hz (Average) for frequency above 1GHz).
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level (dB $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

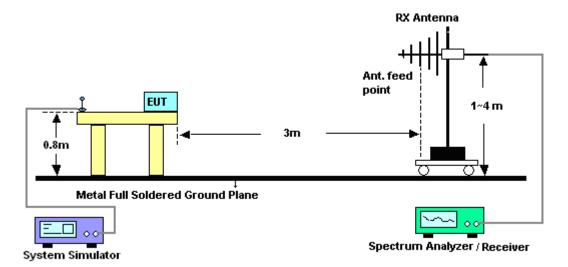
TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 19 of 26
Report Issued Date : Sep. 23, 2014

Report No.: FC482302

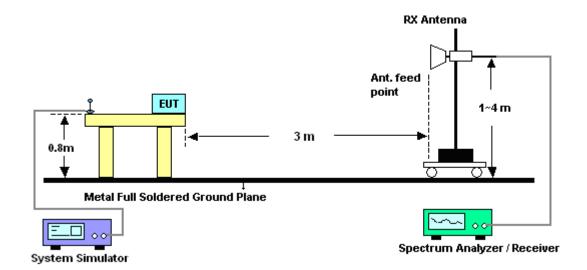
CC Test Report No.: FC482302

### 3.2.4. Test Setup of Radiated Emission

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

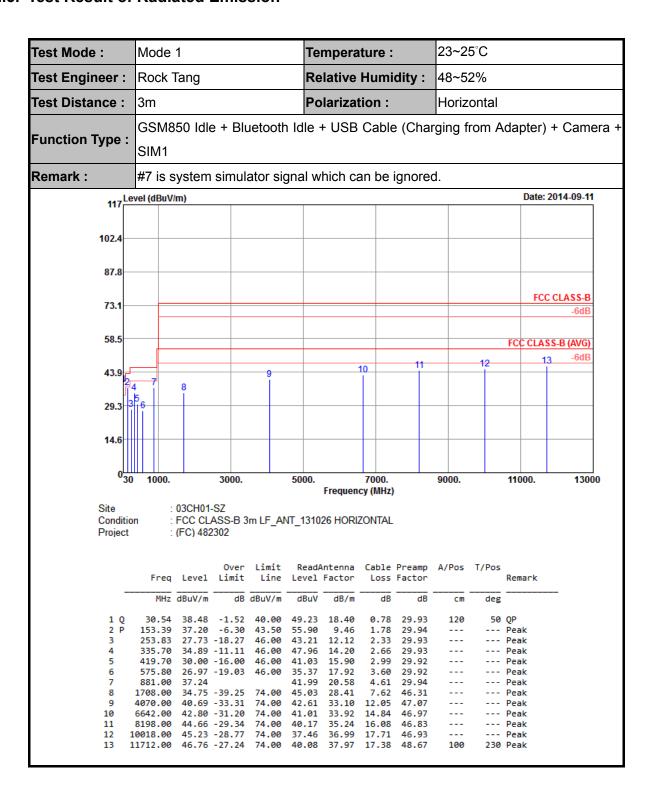


#### For radiated emissions above 1GHz



TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 20 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

#### 3.2.5. Test Result of Radiated Emission

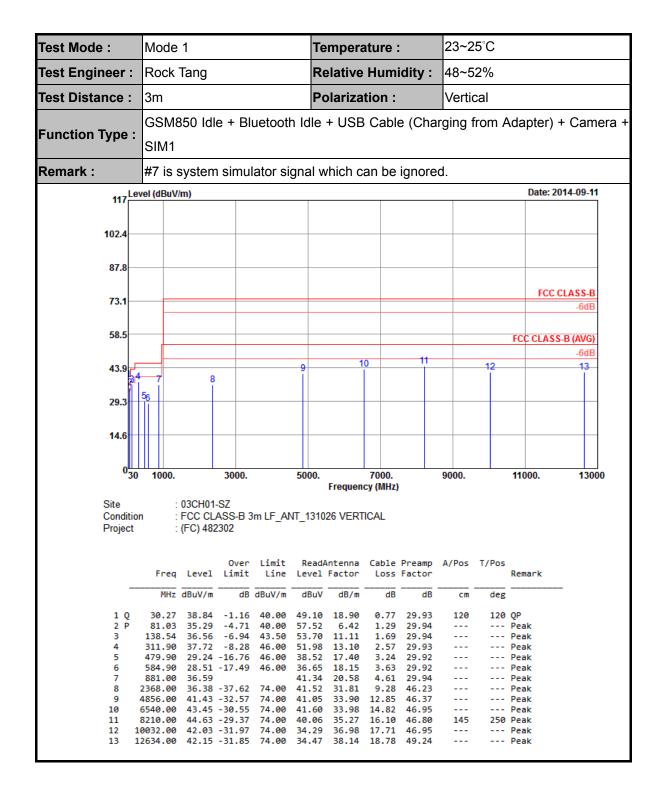


TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2

Page Number : 21 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

**Report No. : FC482302** 

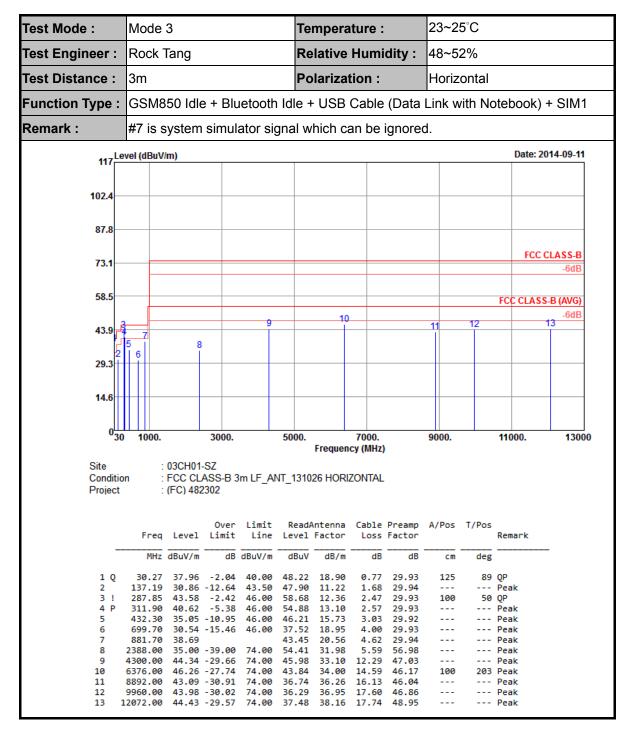
**Report No. : FC482302** 



TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2

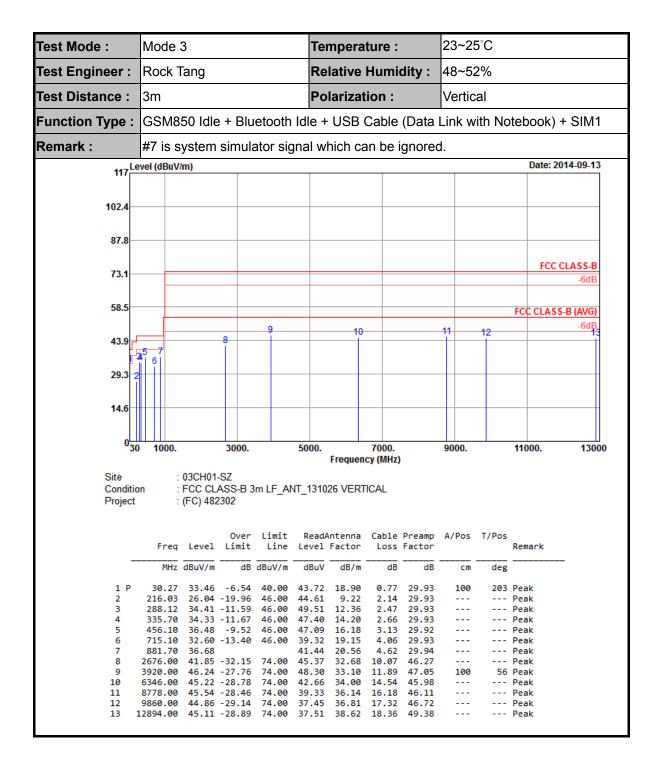
: 22 of 26 Page Number Report Issued Date: Sep. 23, 2014 Report Version : Rev. 01

FCC Test Report No.: FC482302



TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 23 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

**Report No. : FC482302** 



TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 24 of 26 Report Issued Date: Sep. 23, 2014 Report Version : Rev. 01

## 4. List of Measuring Equipment

| Instrument                        | Manufacturer         | Model No. | Serial No.       | Characteristics | Calibration<br>Date | Test Date                       | Due Date      | Remark                   |
|-----------------------------------|----------------------|-----------|------------------|-----------------|---------------------|---------------------------------|---------------|--------------------------|
| ESCIO TEST<br>Receiver            | R&S                  | ESCI      | 100724           | 9kHz~3GHz       | Feb. 21, 2014       | Sep. 11 ,2014~<br>Sep. 13 ,2014 | Feb. 20, 2015 | Radiation<br>(03CH01-SZ) |
| Spectrum<br>Analyzer              | Agilent Technologies | N9038A    | MY52260185       | 20Hz~26.5GHz    | May 26, 2014        | Sep. 11 ,2014~<br>Sep. 13 ,2014 | May 25, 2015  | Radiation<br>(03CH01-SZ) |
| Bilog Antenna                     | TESEQ                | CBL 6112D | 23188            | 30MHz~2GHz      | Oct. 26, 2013       | Sep. 11 ,2014~<br>Sep. 13 ,2014 | Oct. 25, 2014 | Radiation<br>(03CH01-SZ) |
| Double Ridge<br>Horn Antenna      | ETS Lindgren         | 3117      | 00119436         | 1GHz~18GHz      | Oct. 26, 2013       | Sep. 11 ,2014~<br>Sep. 13 ,2014 | Oct. 25, 2014 | Radiation (03CH01-SZ)    |
| Amplifier                         | ADVANTEST            | BB525C    | E9007003         | 9kHz~3000MHz    | Feb. 21, 2014       | Sep. 11 ,2014~<br>Sep. 13 ,2014 | Feb. 20, 2015 | Radiation<br>(03CH01-SZ) |
| Amplifier                         | Yiai                 | AV3860B   | 04030            | 2GHz~26.5GHz    | May 08, 2014        | Sep. 11 ,2014~<br>Sep. 13 ,2014 | May 07, 2015  | Radiation<br>(03CH01-SZ) |
| AC<br>Source(AVR)                 | Chroma               | 61601     | 61601000198<br>5 | 100Vac~250Vac   | Mar. 25, 2014       | Sep. 11 ,2014~<br>Sep. 13 ,2014 | Mar. 24, 2015 | Radiation<br>(03CH01-SZ) |
| Turn Table                        | EM Electronics       | EM 1000   | N/A              | 0~360 degree    | NCR                 | Sep. 11 ,2014~<br>Sep. 13 ,2014 | NCR           | Radiation<br>(03CH01-SZ) |
| Antenna Mast                      | EM Electronics       | EM 1000   | N/A              | 1 m~4 m         | NCR                 | Sep. 11 ,2014~<br>Sep. 13 ,2014 | NCR           | Radiation<br>(03CH01-SZ) |
| ESCIO TEST<br>Receiver            | R&S                  | ESCI      | 100724           | 9kHz~3GHz       | Feb. 21, 2014       | Sep. 03, 2014                   | Feb. 20, 2015 | Conduction<br>(CO01-SZ)  |
| AC LISN                           | EMCO                 | 3816/2SH  | 00103912         | 9kHz~30MHz      | Mar. 04, 2014       | Sep. 03, 2014                   | Mar. 03, 2015 | Conduction<br>(CO01-SZ)  |
| AC LISN (for auxiliary equipment) | EMCO                 | 3816/2SH  | 00103892         | 9kHz~30MHz      | Mar. 04, 2014       | Sep. 03, 2014                   | Mar. 03, 2015 | Conduction<br>(CO01-SZ)  |
| AC Power<br>Source                | Chroma               | 61602     | 61602000089<br>1 | 100Vac~250Vac   | Dec. 17, 2013       | Sep. 03, 2014                   | Dec. 16, 2014 | Conduction<br>(CO01-SZ)  |

TEL: 86-755-3320-2398 FCC ID: YHLBLUJENNY2 Page Number : 25 of 26
Report Issued Date : Sep. 23, 2014

Report No.: FC482302



## 5. Uncertainty of Evaluation

### <u>Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)</u>

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

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

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

FCC ID: YHLBLUJENNY2

Page Number : 26 of 26
Report Issued Date : Sep. 23, 2014
Report Version : Rev. 01

Report No.: FC482302