

APPLICATION FOR VERIFICATION  
On Behalf of  
Chuango Security Technology Corporation

Outdoor Strobe Siren  
Model No.: SS2800

FCC ID: RJY-SS2800

Prepared for : Chuango Security Technology Corporation  
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Economic & Technological Development Zone, Fuzhou  
350015, China  
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Report No. : ATE20150436  
Date of Test : Mar 3-13, 2015  
Date of Report : Mar 13, 2015

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## Test Report Declaration

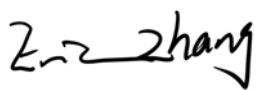
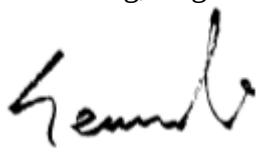
Applicant : Chuango Security Technology Corporation  
Manufacturer : Chuango Security Technology Corporation  
EUT Description : Outdoor Strobe Siren  
(A) MODEL NO.: SS2800  
(B) SERIAL NO.: N/A  
(C) POWER SUPPLY: AC 120V(Adapter)&DC 3.7V(Battery)

Measurement Procedure Used:

### **FCC Rules and Regulations Part 15 Subpart B ANSI C63.4: 2009**

The device described above is tested by Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B Class B limits both radiated and conducted emissions. The measurement results are contained in this test report and Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Accurate Technology Co., Ltd.

|                                |                                                                                      |
|--------------------------------|--------------------------------------------------------------------------------------|
| Date of Test :                 | Mar 3-13,2015                                                                        |
| Date of Report :               | Mar 13,2015                                                                          |
|                                |  |
| Prepared by :                  | (Eric Zhang, Engineer)                                                               |
|                                |  |
| Approved & Authorized Signer : | (Sean Liu, Manager)                                                                  |

## 1. TEST RESULTS SUMMARY

| Test Items                    | Test Standard         | Test Results |
|-------------------------------|-----------------------|--------------|
| Power Line Conducted Emission | FCC Part 15 Subpart B | Pass         |
| Radiated Emission             | FCC Part 15 Subpart B | Pass         |

## 2. GENERAL INFORMATION

### 2.1.Product of Device (EUT)

|                         |                                                                                                                    |
|-------------------------|--------------------------------------------------------------------------------------------------------------------|
| EUT                     | : Outdoor Strobe Siren                                                                                             |
| Model Number            | : SS2800                                                                                                           |
| Power Supply            | : AC 120V&DC 3.7V(Battery)                                                                                         |
| Modulation:             | : ASK                                                                                                              |
| Operation Frequency     | : 915MHz RX                                                                                                        |
| Applicant               | : Chuango Security Technology Corporation                                                                          |
| Address                 | : 6-17, Overseas Students Pioneer Park, No. 108, Jia Economic & Technological Development Zone,Fuzhou 350015,China |
| Manufacturer            | : Chuango Security Technology Corporation                                                                          |
| Address                 | : 6-17, Overseas Students Pioneer Park, No. 108, Jia Economic & Technological Development Zone,Fuzhou 350015,China |
| Date of sample received | : Mar 3,2015                                                                                                       |
| Date of Test            | : Mar 3-13,2015                                                                                                    |

### 2.2.Accessory and Auxiliary Equipment

NA

## 2.3. Description of Test Facility

EMC Lab : Accredited by TUV Rheinland Shenzhen, May 10, 2004

Listed by FCC  
The Registration Number is 253065  
Listed by FCC  
The Registration Number is 752051

Listed by Industry Canada  
The Registration Number is 5077A-1  
Listed by Industry Canada  
The Registration Number is 5077A-2

Accredited by China National Accreditation Committee for  
Laboratories  
The Certificate Registration Number is L3193

Name of Firm : Accurate Technology Co., Ltd.  
Site Location : F1, Bldg. A&D, Changyuan New Material Port, Keyuan  
Rd., Science & Industry Park, Nanshan District, Shenzhen  
518057, P.R. China

## 2.4. Measurement Uncertainty

Conducted emission expanded uncertainty : U=2.23dB, k=2  
Power disturbance expanded uncertainty : U=2.92dB, k=2  
Radiated emission expanded uncertainty : U=3.08dB, k=2  
(9kHz-30MHz)  
Radiated emission expanded uncertainty : U=4.42dB, k=2  
(30MHz-1000MHz)  
Radiated emission expanded uncertainty : U=4.06dB, k=2  
(Above 1GHz)

### 3. MEASURING DEVICE AND TEST EQUIPMENT

#### 3.1. The Equipments Used to Measure Conducted Disturbance

| Item | Equipment                              | Manufacturer    | Model No. | Serial No. | Last Cal.    | Cal. Interval |
|------|----------------------------------------|-----------------|-----------|------------|--------------|---------------|
| 1.   | Test Receiver                          | Rohde & Schwarz | ESCS30    | 100307     | Jan.10, 2015 | 1 Year        |
| 2.   | Test Receiver                          | Rohde & Schwarz | ESPI      | 100396/003 | Jan.10, 2015 | 1 Year        |
| 3.   | Test Receiver                          | Rohde & Schwarz | ESPI      | 101526/003 | Jan.10, 2015 | 1 Year        |
| 4.   | Test Receiver                          | Rohde & Schwarz | ESR       | 101817     | Jan.10, 2015 | 1 Year        |
| 5.   | L.I.S.N.                               | Schwarzbeck     | NLSK8126  | 8126431    | Jan.10, 2015 | 1 Year        |
| 6.   | L.I.S.N.                               | Rohde & Schwarz | ESH3-Z5   | 100305     | Jan.10, 2015 | 1 Year        |
| 7.   | L.I.S.N.                               | Rohde & Schwarz | ESH3-Z5   | 100310     | Jan.10, 2015 | 1 Year        |
| 8.   | L.I.S.N.                               | Rohde & Schwarz | ESH3-Z6   | 100132     | Jan.10, 2015 | 1 Year        |
| 9.   | L.I.S.N.                               | Rohde & Schwarz | ESH3-Z6   | 100979     | Jan.10, 2015 | 1 Year        |
| 10.  | Pulse Limiter                          | Rohde & Schwarz | ESH3-Z2   | 100305     | Jan.10, 2015 | 1 Year        |
| 11.  | Pulse Limiter                          | Rohde & Schwarz | ESH3-Z2   | 100312     | Jan.10, 2015 | 1 Year        |
| 12.  | Pulse Limiter                          | Rohde & Schwarz | ESH3-Z2   | 100815     | Jan.10, 2015 | 1 Year        |
| 13.  | 50Ω Coaxial Switch                     | Anritsu Corp    | MP59B     | 6200283936 | Jan.10, 2015 | 1 Year        |
| 14.  | 50Ω Coaxial Switch                     | Anritsu Corp    | MP59B     | 6200283933 | Jan.10, 2015 | 1 Year        |
| 15.  | 50Ω Coaxial Switch                     | Anritsu Corp    | MP59B     | 6200506474 | Jan.10, 2015 | 1 Year        |
| 16.  | VOLTAGE PROBE                          | Schwarzbeck     | TK9416    | N/A        | Jan.10, 2015 | 1 Year        |
| 17.  | RF CURRENT PROBE                       | Rohde & Schwarz | EZ-17     | 100048     | Jan.10, 2015 | 1 Year        |
| 18.  | 8-Wire Impedance Stabilisation Network | Schwarzbeck     | CAT5 8158 | 8158-0035  | Jan.10, 2015 | 1 Year        |
| 19.  | RF Coaxial Cable                       | SUHNER          | N-2m      | No.2       | Jan.10, 2015 | 1 Year        |
| 20.  | RF Coaxial Cable                       | SUHNER          | N-2m      | No.3       | Jan.10, 2015 | 1 Year        |
| 21.  | RF Coaxial Cable                       | SUHNER          | N-2m      | No.14      | Jan.10, 2015 | 1 Year        |

### 3.2. The Equipments Used to Measure Radiated Disturbance

| Item | Equipment                        | Manufacturer         | Model No.                | Serial No. | Last Cal.    | Cal. Interval |
|------|----------------------------------|----------------------|--------------------------|------------|--------------|---------------|
| 1.   | Spectrum Analyzer                | Agilent              | E7405A                   | MY45115511 | Jan.10, 2015 | 1 Year        |
| 2.   | Spectrum Analyzer                | Rohde&Schwarz        | FSV40                    | 101495     | Jan.10, 2015 | 1 Year        |
| 3.   | Test Receiver                    | Rohde&Schwarz        | ESCS30                   | 100307     | Jan.10, 2015 | 1 Year        |
| 4.   | Test Receiver                    | Rohde& Schwarz       | ESPI                     | 100396/003 | Jan.10, 2015 | 1 Year        |
| 5.   | Test Receiver                    | Rohde& Schwarz       | ESPI                     | 101526/003 | Jan.10, 2015 | 1 Year        |
| 6.   | Test Receiver                    | Rohde& Schwarz       | ESR                      | 101817     | Jan.10, 2015 | 1 Year        |
| 7.   | Bilog Antenna                    | Schwarzbeck          | VULB9163                 | 9163-194   | Jan.15, 2015 | 1 Year        |
| 8.   | Bilog Antenna                    | Schwarzbeck          | VULB9163                 | 9163-323   | Jan.15, 2015 | 1 Year        |
| 9.   | Log.-Per.Antenna                 | Schwarzbeck          | VUSLP<br>9111B           | 9111B-074  | Jan.15, 2015 | 1 Year        |
| 10.  | Biconical Broad Band Antenna     | Schwarzbeck          | VHBB<br>9124+BBA<br>9106 | 9124-617   | Jan.15, 2015 | 1 Year        |
| 11.  | Loop Antenna                     | Schwarzbeck          | FMZB1516                 | 1516131    | Jan.15, 2015 | 1 Year        |
| 12.  | Horn Antenna                     | Schwarzbeck          | BBHA9120D                | 9120D-655  | Jan.15, 2015 | 1 Year        |
| 13.  | Horn Antenna                     | Schwarzbeck          | BBHA9120D                | 9120D-1067 | Jan.15, 2015 | 1 Year        |
| 14.  | Vertical Active Monopole Antenna | Schwarzbeck          | VAMP 9243                | 9243-370   | Jan.15, 2015 | 1 Year        |
| 15.  | RF Switching Unit+PreAMP         | Compliance Direction | RSU-M2                   | 38322      | Jan.10, 2015 | 1 Year        |
| 16.  | Pre-Amplifier                    | Agilent              | 8447D                    | 294A10619  | Jan.10, 2015 | 1 Year        |
| 17.  | Pre-Amplifier                    | Rohde&Schwarz        | CBLU11835<br>40-01       | 3791       | Jan.10, 2015 | 1 Year        |
| 18.  | 50 Coaxial Switch                | Anritsu Corp         | MP59B                    | 6200237248 | Jan.10, 2015 | 1 Year        |
| 19.  | 50 Coaxial Switch                | Anritsu Corp         | MP59B                    | 6200506474 | Jan.10, 2015 | 1 Year        |
| 20.  | RF Coaxial Cable                 | Schwarzbeck          | N-5m                     | No.1       | Jan.10, 2015 | 1 Year        |
| 21.  | RF Coaxial Cable                 | Schwarzbeck          | N-1m                     | No.6       | Jan.10, 2015 | 1 Year        |
| 22.  | RF Coaxial Cable                 | Schwarzbeck          | N-1m                     | No.7       | Jan.10, 2015 | 1 Year        |
| 23.  | RF Coaxial Cable                 | SUHNER               | N-3m                     | No.8       | Jan.10, 2015 | 1 Year        |
| 24.  | RF Coaxial Cable                 | RESENBERGER          | N-3.5m                   | No.9       | Jan.10, 2015 | 1 Year        |
| 25.  | RF Coaxial Cable                 | SUHNER               | N-6m                     | No.10      | Jan.10, 2015 | 1 Year        |
| 26.  | RF Coaxial Cable                 | RESENBERGER          | N-12m                    | No.11      | Jan.10, 2015 | 1 Year        |
| 27.  | RF Coaxial Cable                 | RESENBERGER          | N-0.5m                   | No.12      | Jan.10, 2015 | 1 Year        |
| 28.  | RF Coaxial Cable                 | SUHNER               | N-2m                     | No.13      | Jan.10, 2015 | 1 Year        |
| 29.  | RF Coaxial Cable                 | SUHNER               | N-0.5m                   | No.15      | Jan.10, 2015 | 1 Year        |
| 30.  | RF Coaxial Cable                 | SUHNER               | N-2m                     | No.16      | Jan.10, 2015 | 1 Year        |
| 31.  | RF Coaxial Cable                 | RESENBERGER          | N-6m                     | No.17      | Jan.10, 2015 | 1 Year        |

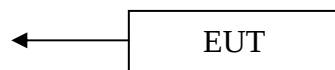
## 4. POWER LINE CONDUCTED MEASUREMENT

### 4.1. Block Diagram of Test Setup

#### 4.1.1. Block diagram of connection between the EUT and simulators

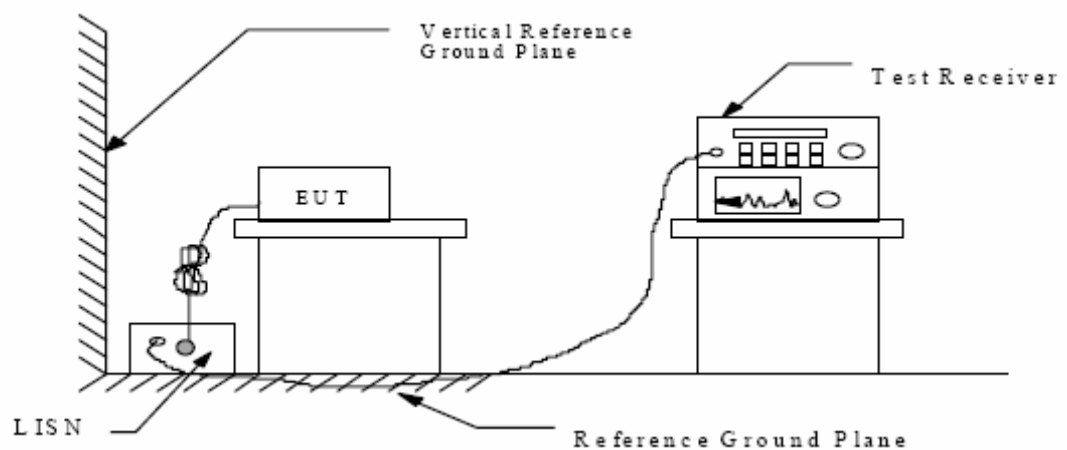
##### 4.1.1.1. For Transfer data

AC 120V/60Hz



(EUT: Outdoor Strobe Siren)

#### 4.1.2. Shielding Room Test Setup Diagram



(EUT: Outdoor Strobe Siren)

### 4.2. The Emission Limit

#### 4.2.1. Conducted Emission Measurement Limits According to Section 15.107(a)

| Frequency<br>(MHz) | Limit dB(μV)     |               |
|--------------------|------------------|---------------|
|                    | Quasi-peak Level | Average Level |
| 0.15 - 0.50        | 66.0 – 56.0 *    | 56.0 – 46.0 * |
| 0.50 - 5.00        | 56.0             | 46.0          |
| 5.00 - 30.00       | 60.0             | 50.0          |

\* Decreases with the logarithm of the frequency.

### 4.3. Configuration of EUT on Measurement

The following equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

#### 4.3.1. Outdoor Strobe Siren (EUT)

Model Number: SS2800

Serial Number: N/A

Manufacturer: Chuango Security Technology Corporation

### 4.4. Operating Condition of EUT

4.4.1. Setup the EUT and simulator as shown as Section 3.2.

4.4.2. Turn on the power of all equipment.

4.4.3. Let the EUT work in test mode and measure it.

### 4.5. Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4: 2009 on Conducted Emission Measurement.

The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

## 4.6. Power Line Conducted Emission Measurement Results

**PASS.**

|                                         |               |              |               |              |          |      |     |  |
|-----------------------------------------|---------------|--------------|---------------|--------------|----------|------|-----|--|
| Test Mode: RX                           |               |              |               |              |          |      |     |  |
| <b>MEASUREMENT RESULT: "349-2_fin"</b>  |               |              |               |              |          |      |     |  |
| 3/3/2015 10:32AM                        |               |              |               |              |          |      |     |  |
| Frequency<br>MHz                        | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |  |
| 0.430000                                | 45.80         | 10.7         | 57            | 11.5         | QP       | L1   | GND |  |
| 1.080000                                | 34.30         | 10.9         | 56            | 21.7         | QP       | L1   | GND |  |
| 5.580000                                | 36.30         | 11.2         | 60            | 23.7         | QP       | L1   | GND |  |
| <b>MEASUREMENT RESULT: "349-2_fin2"</b> |               |              |               |              |          |      |     |  |
| 3/3/2015 10:32AM                        |               |              |               |              |          |      |     |  |
| Frequency<br>MHz                        | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |  |
| 0.430000                                | 33.20         | 10.7         | 47            | 14.1         | AV       | L1   | GND |  |
| 1.250000                                | 22.00         | 10.9         | 46            | 24.0         | AV       | L1   | GND |  |
| 5.570000                                | 23.70         | 11.2         | 50            | 26.3         | AV       | L1   | GND |  |
| <b>MEASUREMENT RESULT: "349-1_fin"</b>  |               |              |               |              |          |      |     |  |
| 3/3/2015 10:28AM                        |               |              |               |              |          |      |     |  |
| Frequency<br>MHz                        | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |  |
| 0.430000                                | 39.90         | 10.7         | 57            | 17.4         | QP       | N    | GND |  |
| 1.595000                                | 28.50         | 10.9         | 56            | 27.5         | QP       | N    | GND |  |
| 5.700000                                | 29.40         | 11.2         | 60            | 30.6         | QP       | N    | GND |  |
| <b>MEASUREMENT RESULT: "349-1_fin2"</b> |               |              |               |              |          |      |     |  |
| 3/3/2015 10:28AM                        |               |              |               |              |          |      |     |  |
| Frequency<br>MHz                        | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |  |
| 0.430000                                | 26.20         | 10.7         | 47            | 21.1         | AV       | N    | GND |  |
| 4.890000                                | 18.30         | 11.1         | 46            | 27.7         | AV       | N    | GND |  |
| 5.570000                                | 19.80         | 11.2         | 50            | 30.2         | AV       | N    | GND |  |

Emissions attenuated more than 20 dB below the permissible value are not reported.

The spectral diagrams are shown in the following pages.

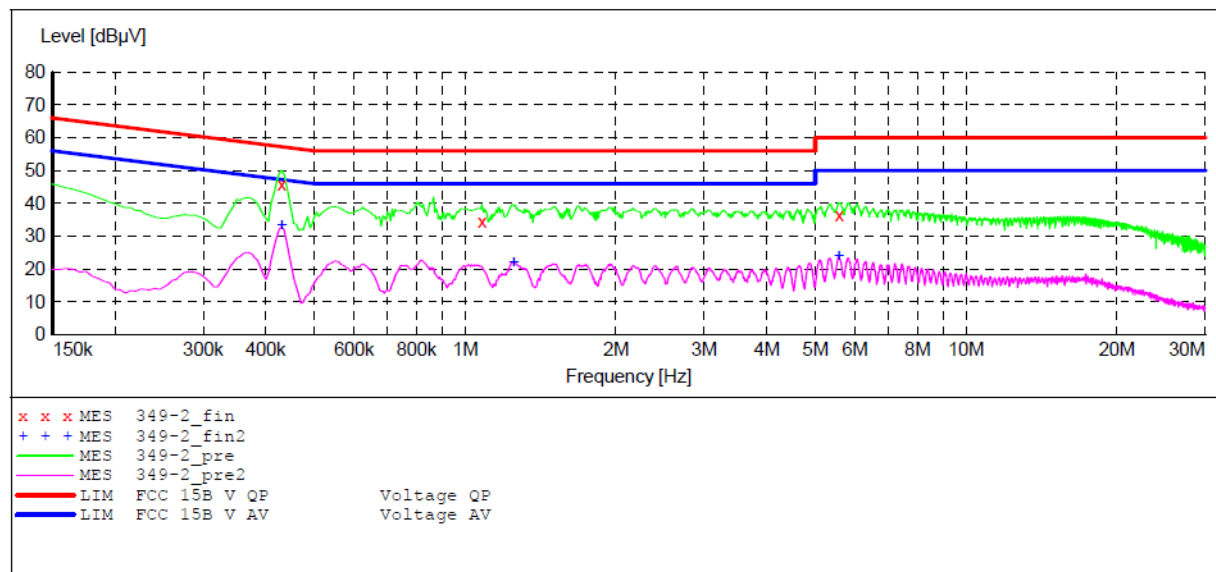
ACCURATE TECHNOLOGY CO., LTD

## CONDUCTED EMISSION STANDARD fcc part 15

EUT: Outdoor Strobe Siren M/N:SS2800  
 Manufacturer: RX  
 Operating Condition: Chuango  
 Test Site: 1#Shielding Room  
 Operator: Carry  
 Test Specification: L 120V/60Hz  
 Comment: Report No.:ATE20150436  
 Start of Test: 3/3/2015 / 10:30:00AM

### SCAN TABLE: "V 150K-30MHZ fin"

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "349-2\_fin"

3/3/2015 10:32AM

| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.430000         | 45.80         | 10.7         | 57            | 11.5         | QP       | L1   | GND |
| 1.080000         | 34.30         | 10.9         | 56            | 21.7         | QP       | L1   | GND |
| 5.580000         | 36.30         | 11.2         | 60            | 23.7         | QP       | L1   | GND |

### MEASUREMENT RESULT: "349-2\_fin2"

3/3/2015 10:32AM

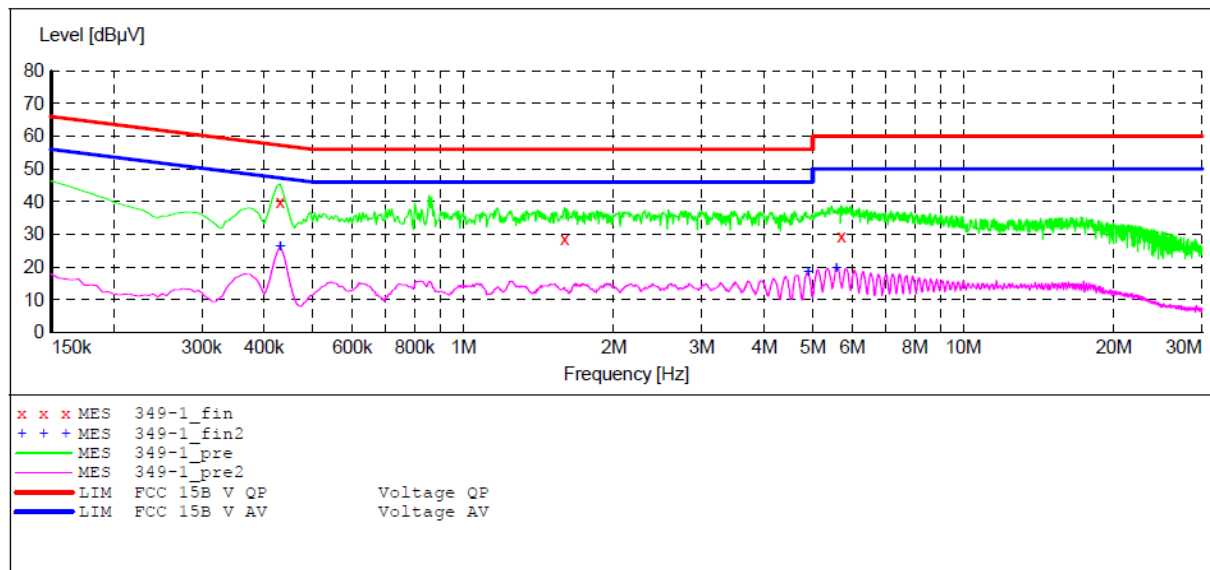
| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.430000         | 33.20         | 10.7         | 47            | 14.1         | AV       | L1   | GND |
| 1.250000         | 22.00         | 10.9         | 46            | 24.0         | AV       | L1   | GND |
| 5.570000         | 23.70         | 11.2         | 50            | 26.3         | AV       | L1   | GND |

## CONDUCTED EMISSION STANDARD fcc part 15

EUT: Outdoor Strobe Siren M/N:SS2800  
 Manufacturer: RX  
 Operating Condition: Chuango  
 Test Site: 1#Shielding Room  
 Operator: Carry  
 Test Specification: N 120V/60Hz  
 Comment: Report No.:ATE20150436  
 Start of Test: 3/3/2015 / 10:24:39AM

### SCAN TABLE: "V 150K-30MHz fin"

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 150.0 kHz 30.0 MHz 4.5 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "349-1\_fin"

3/3/2015 10:28AM

| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.430000         | 39.90         | 10.7         | 57            | 17.4         | QP       | N    | GND |
| 1.595000         | 28.50         | 10.9         | 56            | 27.5         | QP       | N    | GND |
| 5.700000         | 29.40         | 11.2         | 60            | 30.6         | QP       | N    | GND |

### MEASUREMENT RESULT: "349-1\_fin2"

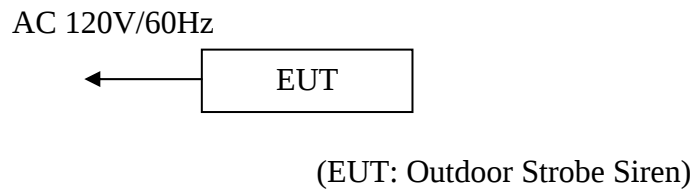
3/3/2015 10:28AM

| Frequency<br>MHz | Level<br>dBμV | Transd<br>dB | Limit<br>dBμV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.430000         | 26.20         | 10.7         | 47            | 21.1         | AV       | N    | GND |
| 4.890000         | 18.30         | 11.1         | 46            | 27.7         | AV       | N    | GND |
| 5.570000         | 19.80         | 11.2         | 50            | 30.2         | AV       | N    | GND |

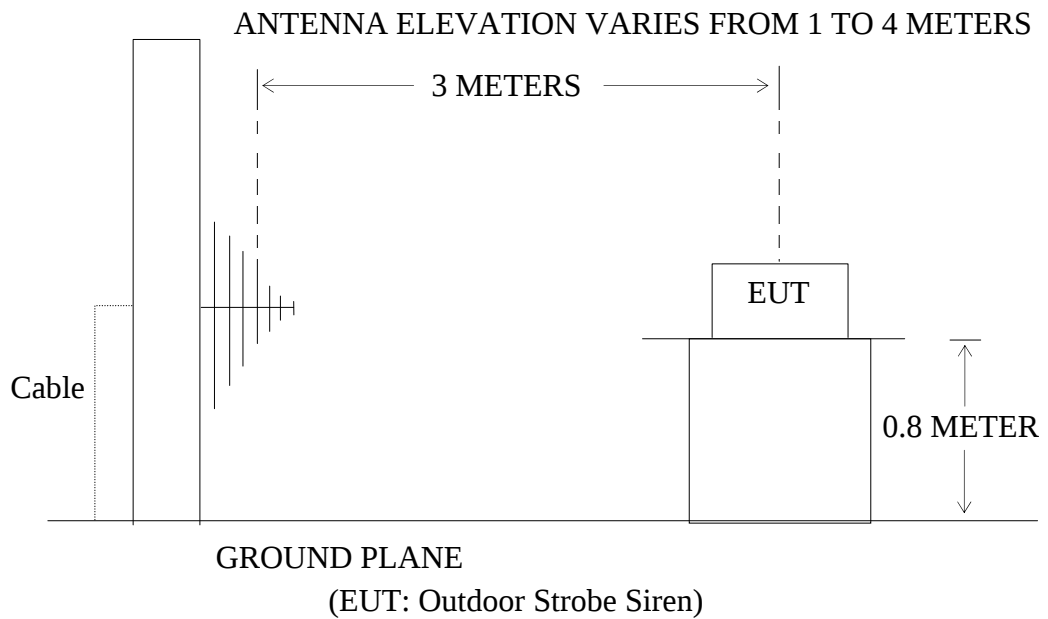
## 5. RADIATED EMISSION MEASUREMENT

### 5.1. Block Diagram of Test Setup

#### 5.1.1. Block diagram of connection between the EUT and simulators



#### 5.1.2. Semi-Anechoic Chamber Test Setup Diagram



## 5.2.The Emission Limit For Section 15.109 (a)

### 5.2.1.Radiation Emission Measurement Limits According to Section 15.109 (a).

| Frequency<br>MHz                                                                                                                                                                                                                                                                                                                | Distance<br>Meters | Field Strengths Limit |                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------------------|----------------------------|
|                                                                                                                                                                                                                                                                                                                                 |                    | $\mu\text{V/m}$       | $\text{dB}(\mu\text{V/m})$ |
| 30-88                                                                                                                                                                                                                                                                                                                           | 3                  | 100                   | 40.0                       |
| 88-216                                                                                                                                                                                                                                                                                                                          | 3                  | 150                   | 43.5                       |
| 216-960                                                                                                                                                                                                                                                                                                                         | 3                  | 200                   | 46.0                       |
| 960-1000                                                                                                                                                                                                                                                                                                                        | 3                  | 500                   | 54.0                       |
| Remark: (1) Emission level $\text{dB}(\mu\text{V}) = 20 \log$ Emission level $\mu\text{V/m}$ .<br>(2)The smaller limit shall apply at the cross point between two frequency bands.<br>(3)Distance is the distance in meters between the measuring instrument antenna and the closest point of any part of the device or system. |                    |                       |                            |

## 5.3.EUT Configuration on Measurement

The following equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 5.3.1.Outdoor Strobe Siren

Model Number: SS2800

Serial Number: N/A

Manufacturer: Chuango Security Technology Corporation

## 5.4.Operating Condition of EUT

5.4.1.Setup the EUT and simulator as shown as Section 4.2.

5.4.2.Turn on the power of all equipment.

5.4.3.Let the EUT work in test mode (Rx) and measure it.

## 5.5.Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground. The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4: 2009 on radiated emission measurement.

The bandwidth of the EMI test receiver (R&S ESCS30) is set at 120kHz from

30MHz to 5000MHz.

The frequency range from 30MHz to 5000MHz is checked.

## 5.6.Radiated Emission Noise Measurement Result

**PASS.**

|                      |     |                |                     |                |                    |                   |                |          |
|----------------------|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|
| Model Number: SS2800 |     |                |                     |                |                    |                   |                |          |
| Test mode: RX        |     |                |                     |                |                    |                   |                |          |
| Horizontal           | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
|                      | 1   | 36.2541        | 30.25               | -10.71         | 19.54              | 40.00             | -20.46         | QP       |
|                      | 2   | 68.6310        | 36.89               | -16.00         | 20.89              | 40.00             | -19.11         | QP       |
|                      | 3   | 159.2250       | 40.99               | -14.64         | 26.35              | 43.50             | -17.15         | QP       |
| Vertical             | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
|                      | 1   | 37.0248        | 44.44               | -10.87         | 33.57              | 40.00             | -6.43          | QP       |
|                      | 2   | 68.6310        | 45.15               | -16.00         | 29.15              | 40.00             | -10.85         | QP       |
|                      | 3   | 112.5243       | 39.32               | -13.52         | 25.80              | 43.50             | -17.70         | QP       |
| ABOVE1G              |     |                |                     |                |                    |                   |                |          |
| Horizontal           | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
|                      | 1   | 2742.200       | 46.21               | -6.14          | 40.07              | 54.00             | -13.93         | peak     |
|                      | 2   | 4081.772       | 45.58               | -1.51          | 44.07              | 54.00             | -9.93          | peak     |
|                      | 3   | 5799.177       | 45.31               | 1.98           | 47.29              | 54.00             | -6.71          | peak     |
| Vertical             | No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector |
|                      | 1   | 2722.617       | 47.61               | -6.23          | 41.38              | 54.00             | -12.62         | peak     |
|                      | 2   | 3705.344       | 46.01               | -2.39          | 43.62              | 54.00             | -10.38         | peak     |
|                      | 3   | 5254.944       | 45.07               | 0.87           | 45.94              | 54.00             | -8.06          | peak     |

Job No.: WCARRY2015 #1

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Outdoor Strobe Siren

Mode: RX

Model: SS2800

Manufacturer: Chuango

Polarization: Horizontal

Power Source: AC 120V/60Hz

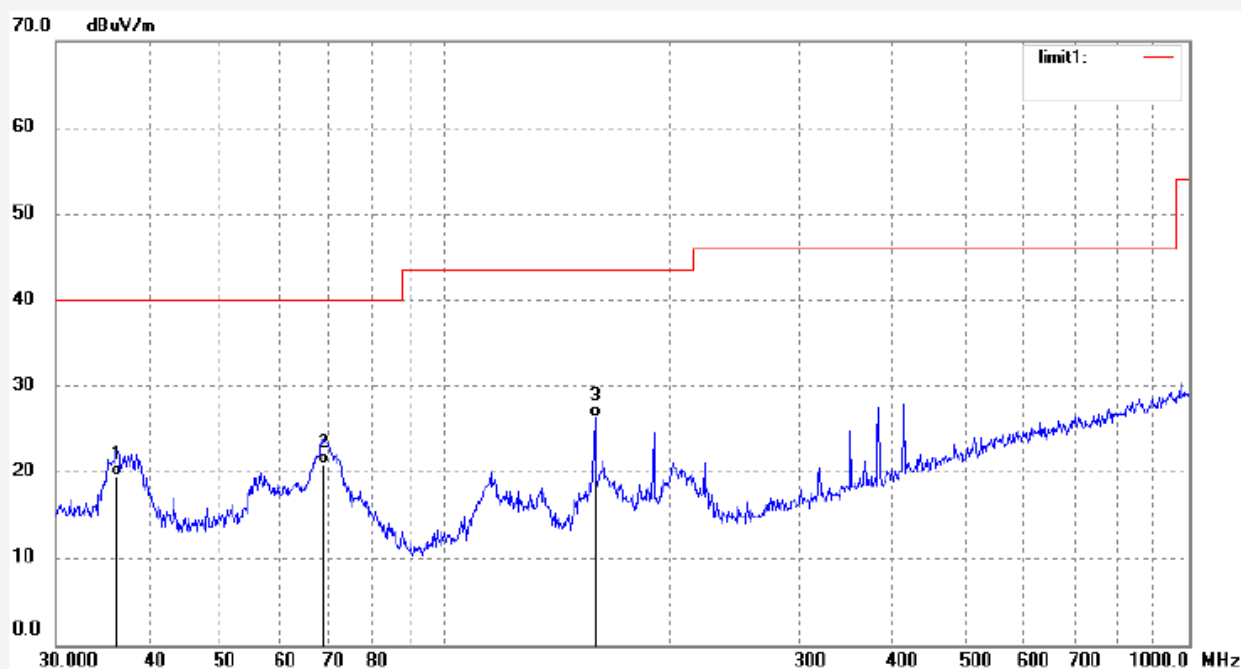
Date: 2015/03/11

Time: 13:45:59

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20150436



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 36.2541     | 30.25            | -10.71      | 19.54           | 40.00          | -20.46      | QP       |             |               |        |
| 2   | 68.6310     | 36.89            | -16.00      | 20.89           | 40.00          | -19.11      | QP       |             |               |        |
| 3   | 159.2250    | 40.99            | -14.64      | 26.35           | 43.50          | -17.15      | QP       |             |               |        |



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Job No.: WCARRY2015 #2

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Outdoor Strobe Siren

Mode: RX

Model: SS2800

Manufacturer: Chuango

Polarization: Vertical

Power Source: AC 120V/60Hz

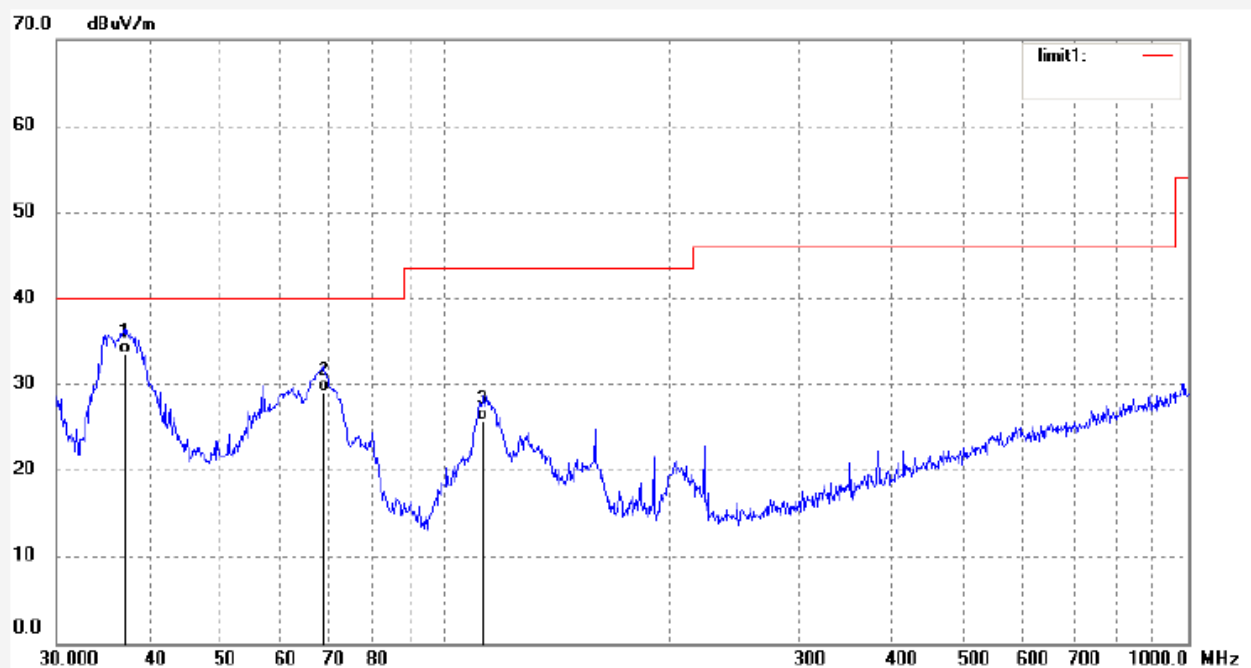
Date: 2015/03/11

Time: 13:47:11

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20150436



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 37.0248        | 44.44               | -10.87         | 33.57              | 40.00             | -6.43          | QP       |                |                  |        |
| 2   | 68.6310        | 45.15               | -16.00         | 29.15              | 40.00             | -10.85         | QP       |                |                  |        |
| 3   | 112.5243       | 39.32               | -13.52         | 25.80              | 43.50             | -17.70         | QP       |                |                  |        |

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Report No.: ATE20150436

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Job No.: WCARRY2015 #8

Standard: FCC Class B 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 23 C / 48 %

EUT: Outdoor Strobe Siren

Mode: RX

Model: SS2800

Manufacturer: Chuango

Polarization: Horizontal

Power Source: AC 120V/60Hz

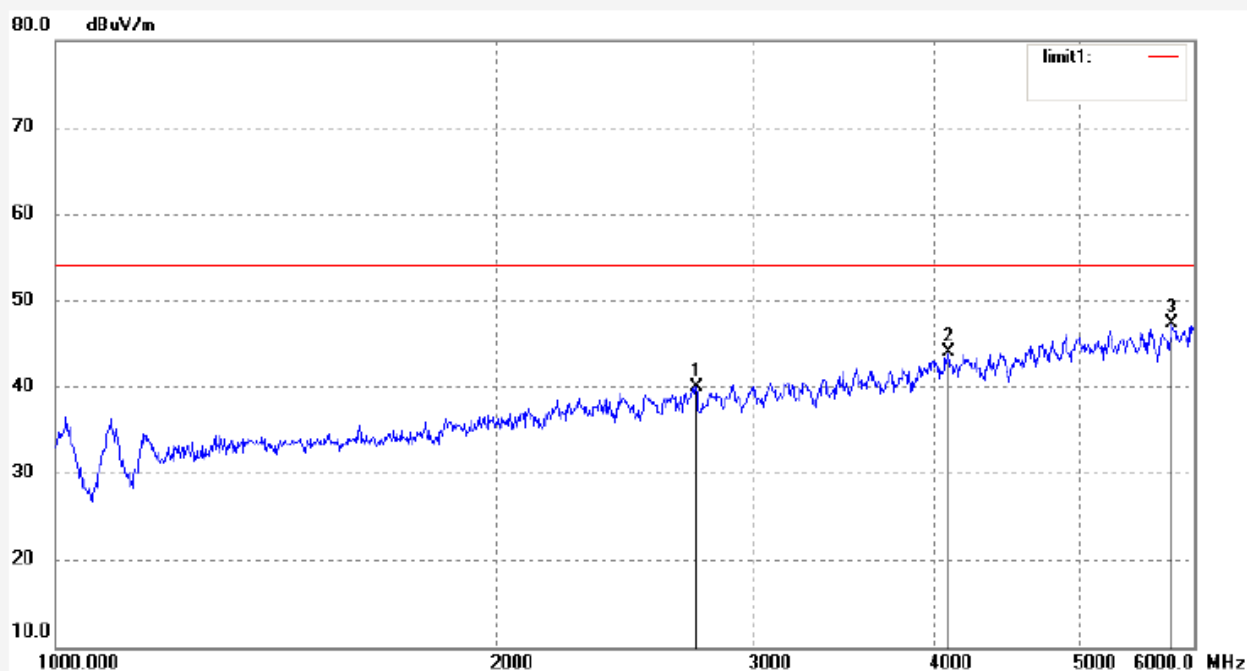
Date: 15/03/12/

Time: 8/42/02

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20150436

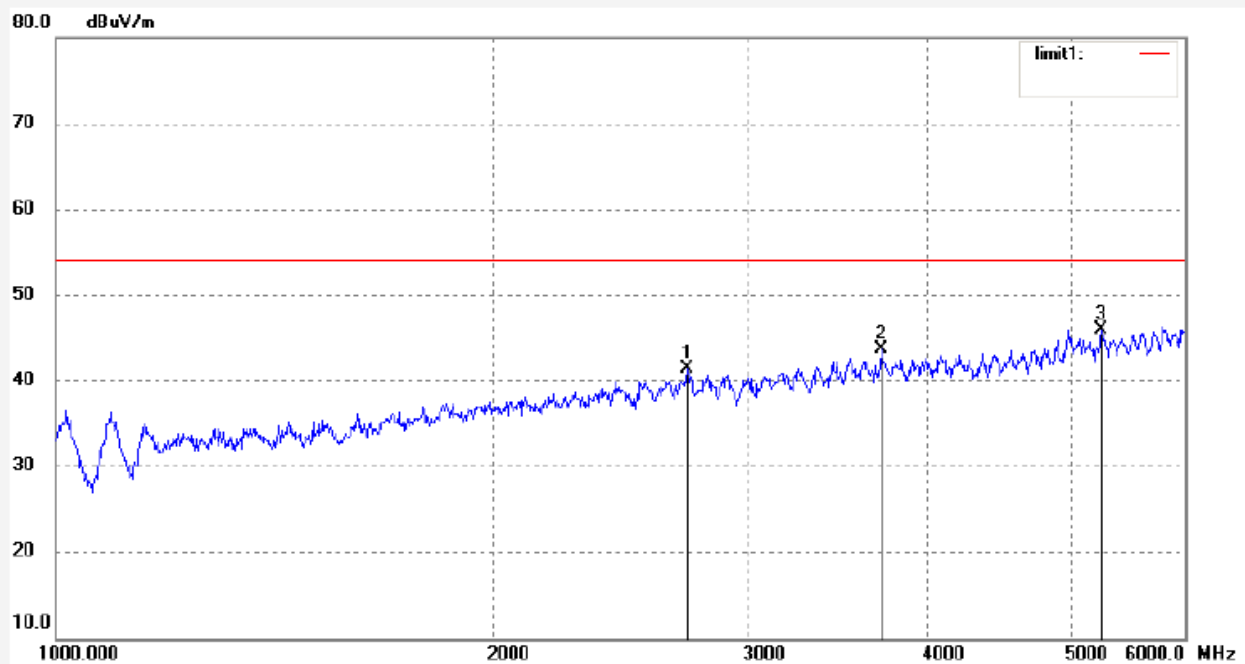


| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 2742.200       | 46.21               | -6.14          | 40.07              | 54.00             | -13.93         | peak     |                |                  |        |
| 2   | 4081.772       | 45.58               | -1.51          | 44.07              | 54.00             | -9.93          | peak     |                |                  |        |
| 3   | 5799.177       | 45.31               | 1.98           | 47.29              | 54.00             | -6.71          | peak     |                |                  |        |

Job No.: WCARRY2015 #9  
Standard: FCC Class B 3M Radiated  
Test item: Radiation Test  
Temp.( C)/Hum.(%) 23 C / 48 %  
EUT: Outdoor Strobe Siren  
Mode: RX  
Model: SS2800  
Manufacturer: Chuango

Polarization: Vertical  
Power Source: AC 120V/60Hz  
Date: 15/03/12/  
Time: 8/50/43  
Engineer Signature:  
Distance: 3m

Note: Report NO.:ATE20150436



| No. | Freq.<br>(MHz) | Reading<br>(dBuV/m) | Factor<br>(dB) | Result<br>(dBuV/m) | Limit<br>(dBuV/m) | Margin<br>(dB) | Detector | Height<br>(cm) | Degree<br>(deg.) | Remark |
|-----|----------------|---------------------|----------------|--------------------|-------------------|----------------|----------|----------------|------------------|--------|
| 1   | 2722.617       | 47.61               | -6.23          | 41.38              | 54.00             | -12.62         | peak     |                |                  |        |
| 2   | 3705.344       | 46.01               | -2.39          | 43.62              | 54.00             | -10.38         | peak     |                |                  |        |
| 3   | 5254.944       | 45.07               | 0.87           | 45.94              | 54.00             | -8.06          | peak     |                |                  |        |