SGS-CSTC Standards Technical Services
(Shanghai) Co., Ltd.

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1 Cover Page

FCC MPE REPORT

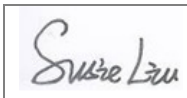
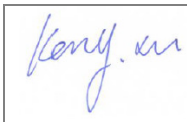
Application No.:	SHEM1511004181CR
Applicant:	Changzhou Sounddragon Electronics&Acoustics Co., Ltd
FCC ID:	2AGOQ-Y630
Equipment Under Test (EUT): **NOTE:** The following sample(s) submitted was/were identified on behalf of the client as	
Product Name:	LED OUTDOOR BLUTEOOTH SREAKER
Model No.(EUT):	Y630
Standards:	FCC Rules 47 CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v05r02
Date of Receipt:	November 16, 2015
Date of Test:	November 25, 2015 to November 26, 2015
Date of Issue:	December 11, 2015
Test Result:	**Pass***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Parlam Zhan
E&E Section Manager
SGS-CSTC (Shanghai) Co., Ltd.

2 Version

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
00	/	December 11, 2015	/	Original

Authorized for issue by:				
Engineer		Eddy Zong **Print Name**		
Clerk		Susie Liu **Print Name**		
Reviewer		Keny Xu **Print Name**		

3 Contents

4 General Information

4.1 Client Information

Applicant:	Changzhou Sounddragon Electronics&Acoustics Co., Ltd
Address of Applicant:	128 Zhenzhong road, Xixiashu, New District, Changzhou, Jiangsu, 213135, P.R.China
Manufacturer:	Changzhou Sounddragon Electronics&Acoustics Co., Ltd
Address of Manufacturer:	128 Zhenzhong road, Xixiashu, New District, Changzhou, Jiangsu, 213135, P.R.China
Factory:	Changzhou Sounddragon Electronics&Acoustics Co., Ltd
Address of Factory:	128 Zhenzhong road, Xixiashu, New District, Changzhou, Jiangsu, 213135, P.R.China

4.2 General Description of E.U.T.

Product Description:	Fixed product with BT function
Battery:	DC 3.7V rechargeable Li-ion battery
Rate Voltage:	DC 3.7V

4.3 Technical Specifications

Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	3.0+HS
Modulation Technique:	FHSS(GFSK, π/4DQPSK, 8DPSK)
Number of Channel:	79
Antenna Type	PCB Antenna
Antenna Gain	0 dBi

4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.

No.588 West Jindu Road, Songjiang District, Shanghai, China.201612.

Tel: +86 21 6191 5666

Fax: +86 21 6191 5678

4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing. Date of expiry: 2017-07-14.

- **FCC – Registration No.: 402683**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered and fully described in a report filed with the Federal Communications Commission (FCC). The acceptance letter from the FCC is maintained in our files. Registration No.: 402683, Expiry Date: 2017-09-16.

- **Industry Canada (IC) – IC Assigned Code: 8617A**

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 8617A-1. Expiry Date: 2017-06-18.

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-3868, C-4336, T-2221, G-830 respectively. Date of Expiry: 2017-11-16.

5 Test Standards and Limits

According to§1.1310 Radiofrequency radiation exposure limits:

The limit for general population/uncontrolled exposures

Frequency	Power density(mW/cm^2)	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30

6 Measurement and Calculation

6.1 Maximum transmit power

The Power Data is based on the RF Test Report SHEM151100418102

Test Mode	Test Frequency (MHz)	Output Power (dBm)	Reading Power (mW)
GFSK	2402	1.94	1.56
	2441	2.43	1.75
	2480	**2.77**	**1.89**
π/4DQPSK	2402	0.2	1.05
	2441	0.75	1.19
	2480	1.15	1.30
8DPSK	2402	0.51	1.12
	2441	1.09	1.29
	2480	1.39	1.38

6.2 MPE Calculation

According to the formula S= $\frac{PG}{4R^2\pi}$, we can calculate S which is MPE.

Note:

1) P (Watts) =Power Input to antenna = $10^{\frac{dBm}{10}}$ / 1000

2) G (Antenna gain in numeric) = 10^ (Antenna gain in dBi /10)

3) R = distance to the center of radiation of antenna (in meter) = 20cm

4) MPE limit = 1mW/cm²

The Max Conducted Peak Output Power is 1.89mW in middle channel of GFSK;
The best case gain of the antenna is 0dBi. 0dB logarithmic terms convert to numeric result is nearly 1.

$$S= \frac{PG}{4R^2\pi} = \frac{1.89 \times 1}{4 \times 400 \times 3.14} = 0.0003 \text{ mW/cm}^2$$

So the device is exclusion from SAR test.

7 EUT Constructional Details

Refer to the < Y630_External Photos > & < Y630_Internal Photos>.

--End of the Report--