



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

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China  
Telephone: +86 (0) 21 6191 5666  
Fax: +86 (0) 21 6191 5678  
ee.shanghai@sgs.com

Report No.: SHEM160800532303  
Page: 1 of 7

## 1 Cover Page

# RF Exposure REPORT

|  |                             |
|--|-----------------------------|
| Application No.:   | SHEM1608005323CR            |
| Applicant:   | HCS (Suzhou) Limited        |
| FCC ID:  | 2AGOFRC360                  |
| Equipment Under Test (EUT):<br><b>NOTE:</b> The following sample(s) submitted was/were identified on behalf of the client as |                             |
| Product Name:  | Remote Control              |
| Model No.(EUT):  | RC3602301/01BR              |
| Standards:   | FCC PART 15 Subpart C: 2015 |
| Date of Receipt:   | 2016-08-10                  |
| Date of Test:  | 2016-08-10 to 2016-08-18    |
| Date of Issue:   | 2016-08-18                  |
| Test Result:   | <b>Pass*</b>                |

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



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

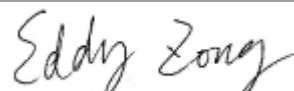

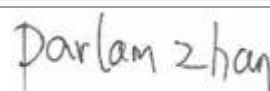
The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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## 2 Version

| Revision Record |         |            |          |          |
|-----------------|---------|------------|----------|----------|
| Version         | Chapter | Date       | Modifier | Remark   |
| 00              | /       | 2016-08-18 | /        | Original |
|                 |         |            |          |          |
|                 |         |            |          |          |
|                 |         |            |          |          |
|                 |         |            |          |          |

|                          |             |  |   |
|--------------------------|-------------|--|---|
| Authorized for issue by: |             |  |   |
| Engineer                 | Eddy Zong   |  |  |
|                          | Print Name  |  |   |
| Clerk                    | Vincent Zhu |  |  |
|                          | Print Name  |  |   |
| Reviewer                 | Parlam Zhan |  |  |
|                          | Print Name  |  |   |

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## 4 General Information

### 4.1 Client Information

|                          |   |
|--------------------------|---|
| Applicant:               | HCS (Suzhou) Limited  |
| Address of Applicant:    | 19F-20F, Building B-3 <sup>rd</sup> , No.209 Zhuyuan Road, New District, Suzhou China           |
| Manufacturer:            | HCS (Suzhou) Limited  |
| Address of Manufacturer: | 19F-20F, Building B-3 <sup>rd</sup> , No.209 Zhuyuan Road, New District, Suzhou China           |
| Factory:                 | WuJiang Century Billion Electronic Technology Co., Ltd  |
| Address of Factory:      | No.149, Tuncun West Road, Tongli Town, Wujiang County, Suzhou City, Jiangsu Province, P.R.China |

### 4.2 General Description of E.U.T.

|                      |  |
|----------------------|--|
| Product Description: | Portable product with BT function              |
| Battery:             | DC 3V by 4* AAA.LR03 batteries for transmitter |

### 4.3 Technical Specifications

|                       |                                  |
|-----------------------|----------------------------------|
| Operation Frequency:  | 2402MHz~2480MHz                  |
| Bluetooth Version:    | 4.1 BT Single mode               |
| Modulation Technique: | FHSS (GFSK, $\pi/4$ QPSK, 8DPSK) |
| Number of Channel:    | 79                               |
| Antenna Type:         | Monopole                         |
| Antenna Gain:         | -1.7dBi                          |

#### 4.4 Test Location

All tests were performed at:

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

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China.

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

### 5.1 FCC Radiofrequency radiation exposure limits:

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in KDB447498 D01 section 4.3.1 must be applied to determine SAR test exclusion.

| MHz  | 5  | 10 | 15  | 20  | 25  | 30  | 35  | 40  | 45  | 50  | mm   |
|------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 150  | 39 | 77 | 116 | 155 | 194 | 232 | 271 | 310 | 349 | 387 | (mW) |
| 300  | 27 | 55 | 82  | 110 | 137 | 164 | 192 | 219 | 246 | 274 |      |
| 450  | 22 | 45 | 67  | 89  | 112 | 134 | 157 | 179 | 201 | 224 |      |
| 835  | 16 | 33 | 49  | 66  | 82  | 98  | 115 | 131 | 148 | 164 |      |
| 900  | 16 | 32 | 47  | 63  | 79  | 95  | 111 | 126 | 142 | 158 |      |
| 1500 | 12 | 24 | 37  | 49  | 61  | 73  | 86  | 98  | 110 | 122 |      |
| 1900 | 11 | 22 | 33  | 44  | 54  | 65  | 76  | 87  | 98  | 109 |      |
| 2450 | 10 | 19 | 29  | 38  | 48  | 57  | 67  | 77  | 86  | 96  |      |
| 3600 | 8  | 16 | 24  | 32  | 40  | 47  | 55  | 63  | 71  | 79  |      |
| 5200 | 7  | 13 | 20  | 26  | 33  | 39  | 46  | 53  | 59  | 66  |      |
| 5400 | 6  | 13 | 19  | 26  | 32  | 39  | 45  | 52  | 58  | 65  |      |
| 5800 | 6  | 12 | 19  | 25  | 31  | 37  | 44  | 50  | 56  | 62  |      |

## 6 Measurement and Calculation

### 6.1 Maximum transmit power

The Power Data is based on the RF Test Report SHEM160800532302.

**Test Data:**

| Test Mode | Channel | Peak Power (dBm) | Peak Power (mW) |
|-----------|---------|------------------|-----------------|
| GFSK      | 2402    | 6.83             | 4.82            |
|           | 2441    | 6.98             | 4.99            |
|           | 2480    | 6.58             | 4.55            |
| π/4DQPSK  | 2402    | 6.92             | 4.92            |
|           | 2441    | <b>7.19</b>      | <b>5.24</b>     |
|           | 2480    | 7.04             | 5.06            |
| 8DPSK     | 2402    | 6.0              | 3.98            |
|           | 2441    | 6.25             | 4.22            |
|           | 2480    | 5.91             | 3.90            |

### 6.2 RF Exposure Calculation

The Max Conducted Peak Output Power is 5.24mW. The best case gain of the antenna is -1.7dBi.

-1.7dBi logarithmic terms convert to numeric result is nearly 0.68

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 5.24 \text{ mW} \times 0.68 = 3.56 \text{ mW} < 10 \text{ mW}$$

So the SAR report is not required.

## 7 EUT Constructional Details

Refer to the < RC3602301/01BR \_External Photos > & < RC3602301/01BR \_Internal Photos >.

**--End of the Report--**