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Report No.: SZEM170400319503  
 Page : 1 of 7

# RF Exposure Evaluation Report

**Application No.:** SZEM1704003195CR  
**Applicant:** MEKBAO PLASTIC ELECTRONIC INDUSTRIAL CO., LTD  
**Product Name:** Remote control car series

**Model No.(EUT):** 5588-01, 5588-02, 5588-03, 5588-04, 5588-05, 5588-06, 5588-07, 5588-08,  
 5588-09, 5588-10, 5588-11, 5588-12, 5588-13, 5588-14, 5588-15, 5588-16,  
 5588-17, 5588-18, 5588-19, 5588-20, 5588-21, 5588-22, 5588-23, 5588-24,  
 5588-25, 5588-26, 5588-27, 5588-28, 5588-29, 5588-30, 5588-31, 5588-32,  
 5588-33, 5588-34, 5588-35, 5588-36, 5588-37, 5588-38, 7777-01, 7777-02,  
 7777-03, 7777-04, 7777-05, 7777-06, 7777-07, 7777-08, 7777-09, 7777-10,  
 7777-37, 7777-38, 7777-39, 7777-40, 7777-21, 7777-22, 7777-23, 7777-24,  
 7777-25, 7777-26, 7777-27, 7777-28, 7777-31, 7777-32, 7777-33, 7777-34,  
 7777-35, 7777-36 ♣

♣ Please refer to section 1.2 of this report which indicates which model was actually tested and which were electrically identical.

**Standards:** EN 62479:2010  
**Date of Receipt:** 2017-04-13  
**Date of Test:** 2017-04-19 to 2017-05-12  
**Date of Issue:** 2017-05-18

<b>Test Result:</b>	<b>PASS *</b>
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\* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

The CE mark as shown below can be used, under the responsibility of the manufacturer, after completion of an EU Declaration of Conformity and compliance with all relevant EU Directives.

Authorized Signature:



Jack Zhang  
 EMC Laboratory Manager

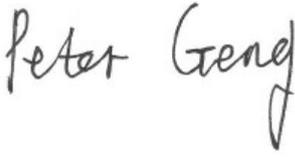
The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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### REVISION HISTORY

<i>Revision Record</i>				
<i>Version</i>	<i>Chapter</i>	<i>Date</i>	<i>Modifier</i>	<i>Remark</i>
01		2017-05-18		Original

Authorized for issue by:			
			
		<hr/> <b>Peter Geng /Project Engineer</b>	
			
		<hr/> <b>Eric Fu /Reviewer</b>	



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## 1 General Information

### 1.1 Client Information

Applicant:	MEKBAO PLASTIC ELECTRONIC INDUSTRIAL CO., LTD
Address of Applicant:	JIAOXI INDUSTRY AREAS LIANXIA CHENGHAI SHANTOU CITY, GD CHINA

### 1.2 General Description of EUT

Product Name:	Remote control car series
Model No.:	5588-01
Nominal Frequency:	27.145MHz
Antenna Type:	Integral antenna
Battery:	Remote: DC 3V by 2*1.5V "AAA" batteries Car: DC 4.5V by 3*1.5V "AAA" batteries
ERP:	-18.38 dBm (0.0145mW)*
*	The ERP data refer to the report SZEM170400319502.

#### Declaration of EUT Family Grouping:

Model No.: 5588-01, 5588-02, 5588-03, 5588-04, 5588-05, 5588-06, 5588-07, 5588-08, 5588-09, 5588-10, 5588-11, 5588-12, 5588-13, 5588-14, 5588-15, 5588-16, 5588-17, 5588-18, 5588-19, 5588-20, 5588-21, 5588-22, 5588-23, 5588-24, 5588-25, 5588-26, 5588-27, 5588-28, 5588-29, 5588-30, 5588-31, 5588-32, 5588-33, 5588-34, 5588-35, 5588-36, 5588-37, 5588-38, 7777-01, 7777-02, 7777-03, 7777-04, 7777-05, 7777-06, 7777-07, 7777-08, 7777-09, 7777-10, 7777-37, 7777-38, 7777-39, 7777-40, 7777-21, 7777-22, 7777-23, 7777-24, 7777-25, 7777-26, 7777-27, 7777-28, 7777-31, 7777-32, 7777-33, 7777-34, 7777-35, 7777-36

Only the model 5588-01 was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above models, with only difference on colour, appearance and packaging



### **1.3 Test Location**

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China  
518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

### **1.4 Test Facility**

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

• **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab 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.

• **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• **VCCI**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

• **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

• **Industry Canada (IC)**

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

### **1.5 Deviation from Standards**

None.

### **1.6 Abnormalities from Standard Conditions**

None.

### **1.7 Other Information Requested by the Customer**

None.



## 2 Equipment List

RF test system						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
1	Power Meter	Agilent Technologies	U2021XA_Ch1	SEM009-01	2016-10-09	2017-10-09
2	Power Meter	Agilent Technologies	U2021XA_Ch2	SEM009-02	2016-10-09	2017-10-09
3	Power Meter	Agilent Technologies	U2021XA_Ch3	SEM009-03	2016-10-09	2017-10-09
4	Power Meter	Agilent Technologies	U2021XA_Ch4	SEM009-04	2016-10-09	2017-10-09
5	DAQ Device	Agilent Technologies	U2531A	SEN005-01	N/A	N/A
6	EXG Analog Signal Generator	KEYSIGHT	N5171B	SEM006-04	2014-08-27	2017-08-27
7	EXA Signal Analyzer	Agilent Technologies	N9010A	SEM004-09	2016-07-19	2017-07-19
8	ESG vector signal generator	Agilent Technologies	E4438C	SEM006-03	2016-07-19	2017-07-19

### **3 EN 62479 REQUIREMENT**

#### **3.1 General Description of Applied Standards**

Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)

#### **3.2 Human exposure to the Electromagnetic fields**

This International Standard provides simple conformity assessment methods for low-power electronic and electrical equipment to an exposure limit relevant to electromagnetic fields (EMF). If such equipment cannot be shown to comply with the applicable EMF exposure requirements using the methods included in this standard for EMF assessment, then other standards, including IEC 62311 or other (EMF) product standards, may be used for conformity assessment.

#### **3.3 RF Exposure Evaluation**

##### **3.3.1 Limit**

According to EN 62479 clause 4.2 Low-power electronic and electrical equipment is deemed to comply with the provisions of this standard if it can be demonstrated using routes B, C or D that the available antenna power and/or the average total radiated power is less than or equal to the applicable low-power exclusion level P<sub>max</sub>.

P<sub>max</sub> = 20 mW (13 dBm) according to ICNIRP guidelines, since the EUT is General public used.

**Remark:**

- B: The input power level to electrical or electronic components that are capable of radiating electromagnetic energy in the relevant frequency range is so low that the available antenna power and/or the average total radiated power cannot exceed the low-power exclusion level defined in EN 62479 clause 4.2
- C: The available antenna power and/or the average total radiated power are limited by product standards for transmitters to levels below the low-power exclusion level defined in EN 62479 clause 4.2
- D: Measurements or calculations show that the available antenna power and/or the average total radiated power are below the low-power exclusion level defined in EN 62479 clauses 4.2.

##### **3.3.2 Test Result**

The ERP of the EUT is -18.38 dBm (0.0145mW) which is below the max permitted sending level of 20 mW, and then the EUT is not need to conduct SAR measurement.

### **4 EUT Photos**

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1704003195CR.