

RF Exposure Evaluation Report

Application No.: SZEM1904013417CR
Applicant: HUAJIA TECHNOLOGY INDUSTRY CO., LTD.
Address of Applicant: Jiafa Mansion, NO. 9, Guangyi Road, Chenghai District, Shantou City, Guangdong Province, China
Equipment Under Test (EUT):
Product Name: remote control toys
Model No.: Please refer to section 2 *
 * Please refer to section 3 of this report which indicates which model was actually tested and which were electrically identical.
Standards: EN 62479:2010
Date of Receipt: 2019-04-30(for original report SZEM190401341603)
Date of Test: 2019-05-05 to 2019-05-08(for original report SZEM190401341603)
 2019-05-10(for original report SZEM190401341603)
Date of Issue: 2019-06-03(for new report SZEM190401341703)

Test Result:	PASS *
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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.

Keny Xu
 EMC Laboratory Manager





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

Report No.: SZEM190401341703

Page: 2 of 9

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2019-06-03		Original

Authorized for issue by:			
			
		<hr/> Bill Chen /Project Engineer	
			
		<hr/> Eric Fu /Reviewer	



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

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2 CONTENTS

	Page
1 COVER PAGE	1
2 CONTENTS	3
3 GENERAL INFORMATION OF EUT	4
3.1 TEST LOCATION	6
3.2 TEST FACILITY	6
3.3 DEVIATION FROM STANDARDS	7
3.4 ABNORMALITIES FROM STANDARD CONDITIONS	7
3.5 OTHER INFORMATION REQUESTED BY THE CUSTOMER	7
4 EN 62479 REQUIREMENT	8
4.1 GENERAL DESCRIPTION OF APPLIED STANDARDS	8
4.2 HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS	8
4.3 RF EXPOSURE EVALUATION	8
4.3.1 Limit	8
4.3.2 Test Result	8
5 EUT PHOTOS	9





3 General Information of EUT

Power supply:	TX:DC 3.0V by 1.5V x 2"AA" batteries RX:Rechargeable battery DC 4.8V 500mAh(Charge by USB)
USB cable:	55cm unshielded
Operation Frequency:	2405MHz to 2480MHz
Modulation Type:	GFSK
Number of Channels:	76
Channel Spacing:	1MHz
Antenna Type:	Integral antenna
Antenna Gain:	0dBi
EIRP:	-1.85dBm(0.65mW)*
*	The EIRP data refer to the report SZEM190401341702.



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Remark for report SZEM190401341703:

Original model No. in report SZEM190401341603: RQ2023, RQ2024, RQ2022, RQ2024, RQ2024A, RQ2025, RQ2044, RQ2045, RQ2046, RQ2027, RQ2028, RQ2051, RQ2052, RQ2053, RQ2054, RQ2055, RQ2056, RQ2057, RQ2058, RQ2059, RQ2060, RQ2061, RQ2062, RQ2063, RQ2064, RQ2065, RQ2066, RQ2067, RQ2068, RQ2069, RQ2070, RQ2071, RQ2072, RQ2073, RQ2074, RQ2075, RQ2076, RQ2077, RQ2078, RQ2079, RQ2080, RQ2081, RQ2082, RQ2083, RQ2084, RQ2085, RQ2086, RQ2087, RQ2088, RQ2089, RQ2090, RQ2040, RQ2041, RQ2042, RQ2043, RQ77-27, RQ77-28, RQ77-31, RQ77-31A, RQ77-32, RQ77-33, RQ77-34, RQ77-35, RQ2047, RQ2020A, RQ2020B, YR577-2, YR577-3, 9053G, RQ77-14W, RQ77-15W, RQ77-16W, RQ77-17W, RQ77-18W, RQ77-24, 008, 333-165, 333-220, 333-240, 333-360

Only the model RQ2023 was tested in report SZEM190401341603, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the above models, with only difference on color, appearance and packaging.

New model No. in report SZEM190401341703: RC1101, RC1102, RC1103, RC1104, RC1105, RC1106, RC1107, RC1108, RC1109, RC1110, RC1111, RC1112, RC1113, RC1114, RC1115, RC1116, RC1117, RC1118, RC1119, RC1120, RC1121, RC1122, RC1123, RC1124, RC1125, RC1126, RC1127, RC1128, RC1129, RC1130, RC1131, RC1132, RC1133, RC1134, RC1135, RC1136, RC1137, RC1138, RC1139, RC1140, RC1141, RC1142, RC1143, RC1144, RC1145, RC1146, RC1147, RC1148, RC1149, RC1150, RC1151, RC1152, RC1153, RC1154, RC1155, RC1156, RC1157, RC1158, RC1159, RC1160, RC1161, RC1162, RC1163, RC1164, RC1165, RC1166, RC1167, RC1168, RC1169, RC1170, RC1171, RC1172, RC1173, RC1174, RC1175, RC1176, RC1177, RC1178, RC1179, RC1180

This report was an additional report copied from the report SZEM190401341603, just changed the information of applicant and model No.. Since the electrical circuit design, layout, components used and internal wiring for the models in this report were exactly the same as the models in the original report SZEM190401341603, with only difference on color, appearance and packaging.

Therefore original data were kept in this report.



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3.1 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.

3.2 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 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.





3.3 Deviation from Standards

None.

3.4 Abnormalities from Standard Conditions

None.

3.5 Other Information Requested by the Customer

None.



4 EN 62479 REQUIREMENT

4.1 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)

4.2 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.

4.3 RF Exposure Evaluation

4.3.1 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_{max}.

P_{max} = 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.

4.3.2 Test Result

The EIRP of the EUT is -1.85dBm(0.65mW) which is below the max permitted sending level of 20 mW, and then the EUT is deemed to comply with the RF exposure requirement.



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5 EUT Photos

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1904013417CR.

- End of the Report -

