

RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2307000774HS
Applicant: ZHUHAI SPECIAL ECONOMIC ZONE RUNWIN ELECTRIC CO., LTD
Address of Applicant: QINSHI INDUSTRIAL ZONE, NO.33 SANZAO TOWN, ZHUHAI, 519040, GUANGDONG PROVINCE, CHINA.
Manufacturer: ZHUHAI SPECIAL ECONOMIC ZONE RUNWIN ELECTRIC CO., LTD
Address of Manufacturer: QINSHI INDUSTRIAL ZONE, NO.33 SANZAO TOWN, ZHUHAI, 519040, GUANGDONG PROVINCE, CHINA.
Factory: ZHUHAI SPECIAL ECONOMIC ZONE RUNWIN ELECTRIC CO., LTD
Address of Factory: QINSHI INDUSTRIAL ZONE, NO.33 SANZAO TOWN, ZHUHAI, 519040, GUANGDONG PROVINCE, CHINA.
Equipment Under Test (EUT):
EUT Name: ELECTRIC PATIO HEATER
Model No.: ZHQ1848-SPK-RM
Standard(s) : 47 CFR Part 1.1310
KDB447498D01 General RF Exposure Guidance v06
Date of Receipt: 2023-07-26
Date of Evaluation: 2023-08-25
Date of Issue: 2023-09-05

Evaluation Result:	Pass*
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* In the configuration evaluated, the EUT complied with the standards specified above.

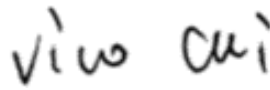
Ricky Liu

Ricky Liu
Manager



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Revision Record			
Version	Report No.	Date	Remark
01	GZCR230700077403	2023-09-05	Original

Authorized for issue by:			
			
		<u>Michael Huang/Project Engineer</u>	
			
		<u>Vico Cui/Reviewer</u>	



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SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center EEC Laboratory

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2 Evaluation Summary

Item	Standard	Method	Requirement	Result
RF Exposure	KDB447498D01 General RF Exposure Guidance v06	KDB447498D01 General RF Exposure Guidance v06	47 CFR Part 1.1310	Pass

Note:

E.U.T./EUT means Equipment Under Test.

Pass means the test result passed the test standard requirement, please find the detailed decision rule in the report relative section.

3 Contents

	Page
1 Cover Page	1
2 Evaluation Summary.....	3
3 Contents.....	4
4 General Information	5
4.1 Details of E.U.T.	5
4.2 Evaluating Location	5
4.3 Facility	6
4.4 Deviation from Standards.....	6
4.5 Abnormalities from Standard Conditions	6
5 Technical Requirements Specification	7
5.1 RF Exposure Evaluation.....	7
5.1.1 Limit & Test Method	7
5.1.2 Conclusion	7
6 EUT Constructional Details (EUT Photos)	8



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4 General Information

4.1 Details of E.U.T.

Power supply:	AC 120V, 60Hz
Cable(s):	3 wires x about 1.8m unscreened AC mains cable.
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.0 classic only
Modulation Type:	GFSK, $\pi/4$ DQPSK
Number of Channels:	79
Channel Spacing:	1MHz
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Antenna Type:	PIFA
Antenna Gain:	1.9 dBi

4.2 Evaluating Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
198 Kezhu Road, Sciotech Park, Guangzhou Economic & Technology Development District,
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.



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4.3 Facility

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

- **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

- **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

- **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

- **ISED (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

- **VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)**

The 10m Semi-anechoic chamber, 966 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.: R-12460, C-12584, G-20107 and T-11179 respectively.

- **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

4.4 Deviation from Standards

None

4.5 Abnormalities from Standard Conditions

None



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5 Technical Requirements Specification

5.1 RF Exposure Evaluation

5.1.1 Limit & Test Method

KDB447498D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot \sqrt{f(\text{GHz})} \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

5.1.2 Conclusion

Normal use condition for Distance between antenna and body: 20cm declared by applicant

Antenna Gain:		1.9 dBi				
Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2402	1.548816619	1.02	1.26	0.00039	1	Complies
2441	1.548816619	1.07	1.28	0.00039	1	Complies
2480	1.548816619	0.74	1.19	0.00037	1	Complies
So SAR report is not required.						

Note: Refer to report No. GZCR230700077402 for EUT test Max Conducted Peak Output Power value.

6 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZCR2307000774HS

- End of the Report -