



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

EMC-TRF-03 Rev 2.0

Report No.: GZCR250800127703

Page: 1 of 8

FCC ID: P36-2325

RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2508001277HS
Applicant: Milwaukee Electric Tool Corporation
Address of Applicant: 13135 W. Lisbon Road Brookfield WI 53005 United States Of America
Manufacturer: Milwaukee Electric Tool Corporation
Address of Manufacturer: 13135 W. Lisbon Road Brookfield WI 53005 United States Of America
Product Name: Heated Gear 3.5Ah Battery w/ App Control
Model No.: 48-11-2325
Trade Mark: Milwaukee
Standard(s) : KDB 447498 D01 V06
Date of Receipt: 2025-08-20
Date of Evaluation: 2025-09-08 to 2025-09-08
Date of Issue: 2025-11-20

Evaluation Result:

Pass*

* In the configuration evaluated, the EUT complied with the standards specified above.



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Revision Record			
Version	Report No.	Date	Remark
01	GZCR250800127703	2025-11-20	Original

Authorized for issue by:			
		Pank Feng	
		Pank Feng/Project Engineer	
Approved By		Vico Cui	
		Vico Cui/Reviewer	



2 Evaluation Summary

Item	Standard	Method	Requirement	Result
RF Exposure	KDB 447498 D01 V06	KDB 447498 D01 V06	KDB 447498 D01 V06	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.

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4 General Information

4.1 Details of E.U.T.

Power supply:	AC/DC adaptor:
	Model: 4931 4817 37
	Input: AC 100-240V 50/60Hz
	output: DC 5V 3A
	Battery pack:
	DC 7.7V 3.55Ah 25Wh
	USB-C Input: DC 5V,3A
	DC Jack Output: 1.8A
Cable(s):	USB Cable: about 0.4m with filter
Operation Frequency:	2402MHz to 2480MHz
Modulation Type:	GFSK
Number of Channels:	40
Channel Spacing:	2MHz
Antenna Type:	PCB antenna
Antenna Gain:	-0.8dBi Max according to antenna test report SZ25090170E02
Antenna Number:	1

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

4.2 Evaluating Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,
No.198, Kezhu Road, Science City, Economic & Technological Development Area, Guangzhou,
Guangdong, China 510663

Tel: +86 20 82155555

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 General Description of Applied Standards

KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.2 RF Exposure Evaluation

5.2.1 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:

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

- $f(\text{GHz})$ 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

5.2.2 Conclusion

The Maximum Conducted Peak Output Power is -1.10 dBm in channel 2.402 GHz;
-1.1 dBm logarithmic terms convert to numeric result is nearly 0.776 mW

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

$$\text{General RF Exposure} = \frac{0.77624712 \text{ mW}}{5 \text{ mm}} \times \sqrt{2.402 \text{ GHz}} = 0.241 \quad (1);$$

$$\text{SAR requirement: } S = 3.0 \quad (2);$$

$\therefore (1) < (2). \therefore$ the SAR report is not required.

Note: Refer to report No. GZCR250800127702 for EUT test Max Conducted Peak Output Power value.

6 EUT Constructional Details (EUT Photos)

Refer to External and Internal Photos for GZCR2508001277HS

- End of the Report -

