Test Report - RF Exposure Evaluation Report for SAR Exclusion
Applicant: ENTERPRISE ELECTRONICS, L.L.C.

Approved for Release By:

Signature: Bruno Clavier

Name & Title: Bruno Clavier, General Manager

Date of Signature 4/12/2024

This test report relates only to the items tested as identified and is not valid for any subsequent changes or modifications made to the equipment under test.

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1. Applicant Information

Applicant:	Enterprise Electronics, L.L.C.
Address:	1200 Kempar Avenue Madison Heights, MI, 48071 United States

2. Location of Testing

2.1 Test Laboratory

Timco Engineering Inc. is a subsidiary of Industrial Inspection & Analysis, Inc. ("IIA"). Testing was performed at IIA's permanent laboratory located at 13146 NW 86th Drive, Suite 400, Alachua, Florida 32615.

FCC test firm # 578780
FCC Designation # US1070
FCC site registration is under A2LA certificate # 0955.01
ISED Canada test site registration # 2056A
EU Notified Body # 1177
For all designations see A2LA scope # 0955.01

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2.2 Testing was performed, reviewed by

Dates of Testing: 5/29/2023 – 6/2/2023

Signature: Sr. EMC Engineer EMC-003838-NE

Name & Title: Tim Royer, EMC Engineer

Date of Signature 4/12/2024

Signature:

Name & Title: Terri Allen, Project Specialist

Date of Signature 4/12/2024

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3. Test Sample(s) (EUT/DUT)

The test sample was received: 5/29/2023

3.1 Description of the EUT

A description as well as unambiguous identification of the EUT(s) tested. Where more than one sample is required for technical reasons (such as the use of connected units for the purpose of conducted output power testing where the product units will have integral antennas), each specific test shall identify which unit was tested.

Identification	
FCC ID:	QV4-434
Brief Description	434 MHz Keypad
Model(s) #	PCBA004F434A
Firmware version	N/A
Software version	N/A
Serial Number	N/A

Technical Characteristics	
Technology	434 MHz
Frequency Range	F1D
Antenna Connector	N/A
Voltage Rating (AC or Batt.)	Battery

Antenna Characteristics			
Antenna	Frequency Range	Mode / BW	Antenna Gain
1	n/a	n/a	0 dBi

- Note: Information such as antenna gain, firmware/software numbers are provided by manufacturer and cannot be validated by the test lab.

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SAR EXCLUSION CALCULATION:

Section 4.3.1 General SAR test exclusion guidance

Equation:

For 100 MHz to 6 GHz and *test separation distances* ≤ 50 mm, the 1-g and 10-g *SAR test exclusion thresholds* are determined by the following:

[(*max. power of channel, including tune-up tolerance, mW*) / (*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,[30] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[31]
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as *numeric thresholds* in step b) below

RSS 102 Section 2.5 Exemption Limits for Routine Evaluation

Equation:

- below 20 MHz[6] and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 1 W (adjusted for tune-up tolerance);
- at or above 20 MHz and below 48 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $4.49/f^{0.5}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 48 MHz and below 300 MHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 0.6 W (adjusted for tune-up tolerance);
- at or above 300 MHz and below 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than $1.31 \times 10^{-2} f^{0.6834}$ W (adjusted for tune-up tolerance), where f is in MHz;
- at or above 6 GHz and the source-based, time-averaged maximum e.i.r.p. of the device is equal to or less than 5 W (adjusted for tune-up tolerance).

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Conclusion: SAR testing is not required

MPE

Frequency Band	Separation Distance (mm)	Max Power + Tolerance (dBm)	Max Power + Tolerance (mW)	SAR Exclusion Value	Limit for 1-g SAR	Limit for 10-g SAR (Extremeties)	SAR Exclusion
434-434 MHz	5	-31.63	0.00	0.00	3.0	7.5	SAR EXEMPT

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4. History of Test Report Changes

Test Report #	Revision #	Description	Date of Issue
TR_8165-23_RF Exp SAR Exclusion_	1	Initial release	4/16/2024

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END OF TEST REPORT

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