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SAR EXEMPTION REPORT

Manufacturer: SECO S.p.A.
Via Achille Grandi 20
Arezzo 52100 ITALY

Applicant: Same As Above

Product Name: KarL4 MDB

Model: KarL4 Contactless Payment Controller LTE USA

FCC ID: 2ALZB-PN5180

Contains FCC ID: XMR202008EG91NAXD

Standard(s):

- KDB447498 D04 Interim General RF Exposure Guidance v01
- FCC Rule Part 1.1307(b)(3)(i)(A)

Report Constructed by:

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TABLE OF CONTENTS

1	<u>ADMINISTRATIVE INFORMATION</u>
2	<u>SUMMARY OF TEST RESULTS/MODIFICATIONS</u>
3	<u>ENGINEERING STATEMENT</u>
4	<u>EUT INFORMATION AND DATA</u>
5	<u>RESULTS</u>



1 ADMINISTRATIVE INFORMATION

1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

1.2 Document History

Document Number	Description	Issue Date	Approved By
F2X36998-C1-02E	First Issue	2026-05-12	K. Littell



2 SUMMARY OF RESULTS

	Standard(s)	Results
SAR Exemption	- KDB447498 D04 Interim General RF Exposure Guidance v01 - FCC Rule Part 1.1307(b)(3)(i)(A)	Complies

Modifications Made to the Equipment
No modifications were made to the EUT.

3 ENGINEERING STATEMENT

This report has been prepared on behalf of SECO S.p.A., to provide documentation for the SAR Exemption herein. This equipment has been tested and found to comply with the SAR Exemption levels per FCC Rule Part 1.1307(b)(3)(i)(A) or Part 1.1307(b)(3)(i)(B) and KDB447498 D04 Interim General RF Exposure Guidance v01.

(3) Determination of exemption.

(i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold P_{th} (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

Where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right) \text{ and } f \text{ is in GHz;}$$

and

$$ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases}$$

d = the separation distance (cm);



4 EUT INFORMATION AND DATA

4.1 Equipment Under Test:

Product: KarL4 MDB

Model(s): KarL4 Contactless Payment Controller LTE USA

Serial Number: 04884662

KarL4 Firmware Version: 238a1cde

KarL4 Software Version: (identified as KarL4 Firmware above)

FCC ID: 2ALZB-PN5180**Contains FCC ID: XMR202008EG91NAXD**

4.2 Trade Name: KarL4

4.3 Power Supply:

Device	Manufacturer	Model Number	Serial Number
Power Supply	Hewlett Packard	6206B	2228A-07438

4.4 Applicable Rules:

FCC Part 1.1307

KDB447498

4.5 Antenna:

SECO S.p.A. 4GH903-0657RE-01P PCB Trace

4.6 Accessories:

Device	Manufacturer	Model Number	Serial Number
Simulated Vending Machine	S.E.C.O S.p.A.	SANTOKA	03025809



5.0 RESULTS

Max ERIP is 37.071 dBuV/m

$$P(\text{dBm}) = E(\text{dBuV/m}) + 20\text{LOG}(d) - G - 104.77$$

$$37.071 + 9.542425 + 0 - 104.77 = -58.2 \text{ dBm}$$

$$P(\text{dBm}) = -58.2 \text{ which is } 0.000002 \text{ mW}$$

Power is less than 1mW and is exempt from the RF Exposure at any distance.