

Assa Abloy Access and Egress Hardware Group, Inc.

SAR Exclusion REPORT

SCOPE OF WORK

SAR Exclusion Evaluation on LNK100 SAB

REPORT NUMBER

106550096BOX-018d.1

ISSUE DATE

August 11, 2026

[REVISED DATE]

August 27, 2026

DOCUMENT CONTROL NUMBER

Non-Specific Radio Report Shell Rev. October 2022
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RF EXPOSURE REPORT (FULL COMPLIANCE)

Report Number: 106550096BOX-018d.1

Project Number: G106550096

Report Issue Date: August 11, 2026

Report Revision Date: August 27, 2026

Model(s) Tested: LNK100 SAB

Model(s) Partially Tested: See Section 4.0

Model(s) Not Tested but declared equivalent by the client: None

Standards: FCC Part 1.1310 Limits for Maximum Permissible Exposure (MPE)
KDB 447498 D01 General RF Exposure Guidance v06 Section 4.3.1(a)
RSS-102 Issue 6 December 15, 2023

Tested by:
Intertek (ISED CAB ID: US0091)
70 Codman Hill Road
Boxborough, MA 01719
USA

Client:
Assa Abloy Access and Egress Hardware Group, Inc.
225 Episcopal Road
Berlin, CT 06037
USA

Report prepared by



Kouma Sinn / Senior Staff Engineer

Report reviewed by



Vathana Ven / Senior Staff Engineer

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1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 4.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test full name	Result
3	Client Information	--
4	Description of Equipment Under Test and Variant Models	--
5	FCC SAR Exclusion Criteria FCC Part 1.1310 Limits for Maximum Permissible Exposure (MPE) KDB 447498 D01 General RF Exposure Guidance v06 Section 4.3.1	Pass
6	CANADA SAR exemption RSS-102 Issue 6 December 15, 2023	Pass
7	Revision History	--

Notes: The EUT is battery powered. The radio does not transmit simultaneously in normal operation.

3 Client Information

This EUT was tested at the request of:

Client: Assa Abloy Access and Egress Hardware Group, Inc.
225 Episcopal Road
Berlin, CT 06037
USA

Contact: Steve Morse
Telephone: 203-499-6836
Email: steve.morse@assaabloy.com

4 Description of Equipment Under Test and Variant Models

Manufacturer: Assa Abloy Access and Egress Hardware Group, Inc.
225 Episcopal Road
Berlin, CT 06037
USA

Equipment Under Test					
Description	Manufacturer	Model Number	Serial Number	HVIN	PMN
Real-time wireless access control	Assa Abloy Access and Egress Hardware Group, Inc.	LNK100 SAB	1BBFD1	V3	LNK100-SAB, LNK100-SAM, LNK100-CRB, LNK100-CRM

Equipment Under Test Power Configuration			
Rated Voltage	Rated Current	Rated Frequency	Number of Phases
6 V (4 x 1.5 V Batteries)	1.5 A	DC	N/A

Variant Models:

The following variant models have been identified by the manufacturer as being electrically identical models, depopulated models, or with reasonable similarity to the model(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

LNK100 CRB
LNK100 CRM
LNK100 SAM

5 FCC SAR Exclusion Criteria**Per KDB 447498 D01 General RF Exposure Guidance v06 Section 4.3.1(a).**

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:

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

- $f_{\text{(GHz)}}$ is the RF channel transmit frequency in GHz

The 13.56 MHz RFID at test separation distance < 50 mm.**The 1-g SAR test exclusion thresholds for transmitting frequency below 100 MHz at a test separation distance ≤ 50 mm are calculated as below.**

Maximum Conducted Power = 15.69 dBm or 37.068 mW
(Data taken from Intertek Report # 106550096BOX-018c.2)

Per KDB 447498 D01 - Clause 4.3.1 Standalone SAR test exclusion considerations

P = power threshold in milliwatts at 100 MHz

D = distance in mm

F = Frequency in GHz

f = Frequency in MHz

Step 1: Solve For Power Threshold at 100 MHz at 5 mm

$(P / D) \cdot \sqrt{0.1} = 3$ [KDB447498 D01 (Section 4.3.1(a))]

$P = D \cdot (3 / \sqrt{0.1})$

$P = 5 \cdot (3 / \sqrt{0.1})$

$P = 5 \cdot (9.49)$

$P = 47.45$ mW

Step 2: Solve For Threshold Power at 13.56 MHz For Test Separation Distances > 50 mm and < 200 mm

$P \cdot (1 + \log(100/f))$ [KDB447498 D01 (Section 4.3.1(c)(1))]

$47.45 \cdot (1 + \log(100/13.56))$

$47.45 \cdot (1 + 0.8677)$

88.62 mW [Threshold limit at 13.56 MHz]

Step 3: Solve For Threshold Power at 13.56 MHz For Test Separation Distances ≤ 50 mm

$88.62 \text{ mW} \cdot 0.5$ [KDB447498 D01 (Section 4.3.1(c)(2))]

44.31 mW [Power threshold for 13.56 MHz at distance less than 50mm]

Conclusion: No SAR test is required as the Maximum Conducted Power is less than 44.31 mW.

6 CANADA SAR exemption

RSS-102 Issue 6, Section 6.3.

Table 11: Power limits for exemption from routine SAR evaluation based on the separation distance

Frequency (MHz)	≤ 5 mm (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	> 50 mm (mW)
≤ 300	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

The 13.56 MHz RFID at test separation distance < 50 mm.

The 1-g SAR test exclusion thresholds for transmitting frequency below 100 MHz at a test separation distance ≤ 50 mm are calculated as below.

Maximum Conducted Power = 15.69 dBm or 37.068 mW
(Data taken from Intertek Report # 106550096BOX-018c.2)

Conclusion: No SAR test is required as the Maximum Conducted Power is less than 45 mW for frequency ≤ 300 MHz

7 Revision History

Revision Level	Date	Report Number	Prepared By	Reviewed By	Notes
0	08/11/2026	106550096BOX-018d	KPS <i>KPS</i>	VFV <i>VFV</i>	Original Issue
1	08/27/2026	106550096BOX-018d.1	KPS <i>KPS</i>	VFV <i>VFV</i>	Note # 1

Note # 1:

- a) Added ISED CAB ID: US0091 in Intertek address on Page 2.
- b) Added HVIN and PMNs in EUT table on Page 5.
- c) Re-calculated SAR Exclusion on Pages 6 and 7