CFR Title 47 FCC Part 2.1093

Report Exhibit

Prepared for JADAK, a business unit of Novanta Corporation

This report presents the environmental impact of human exposure to radiofrequency radiation for

M1-MINI-EX

Prepared by	Approved by
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Cert No. 1627-01

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Contents

1 Device Under Test Information

1.1 Product Information

Project Number:	EY0102
Applicant Information:	JADAK, a business unit of Novanta Corporation
	7279 William Barry Blvd. N. Syracuse, New York, 13212, USA
Test Item Description:	13.56MHz RFID Module
Model Number:	M1-MINI-EX
Separation Distance:	0mm
Exposure Category of DUT:	Portable
Multiple Simultaneous RF Sources:	No
Type of Evaluation:	Extremity SAR Exemption Calculation
Evaluation Method:	447498 D01 General RF Exposure Guidance v06
Deviations from Standard:	None

Technical Information

FCC ID:	2AAVI-M1MINI
Transmit Frequency:	13.56MHz
Exposure Category of Transmitter:	Portable
Maximum field strength (dBuV/m @ 3m):	58.2dBµV/m at 3m
Maximum EIRP (mW):	0.0002mW (converted from maximum field strength)
Maximum Tune-up Tolerance (dB):	N/A

2 Test Laboratory Information

Location of Test Lab:	One Distribution Center Circle #1 Littleton, MA 01460 (978) 486-8880
Key Contact:	Yunus Faziloglu Yunus.faziloglu@bureauveritas.com
Laboratory Accreditations:	BUREAU VERITAS CONSUMER PRODUCTS SERVICES, INC is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories.
ISO/IEC 17025:2017:	1627-01
FCC Test Site Number:	US1028

3 RF Exposure – Determination of Exemption

3.1 SAR-based Exemption per 447498 D01 General RF Exposure Guidance v06

3.1.1 13.56MHz RFID

SAR exemption calculation for 13.56MHz at 0mm is based on

Per 447498 D01 General RF Exposure Guidance v06 Section 4.3.1 a), b)1) using 50mm separation and 0.1GHz and applying it to 13.56MHz using c)2) as follows,

a) (7.5/√0.1GHz) * 50mm = 1185.9mW

b)1) 1185.9 + ((50-50) * (100/150)) = 1185.9mW

c)2) 1185.9 * (1+log(100/13.56)) * ½ = 1107.4mW

EUT EIRP is 0.0002mW and therefore EUT is exempt from stand-alone SAR testing.

3.1.2 Conclusion

Device meets the SAR test exemption criteria based on the calculations shown above.

Document Revisions

Issue No.	Summary of Changes	Date Issued	Prepared by	Approved by
1	Original Release	May 16, 2024	YF	AA

End of Report