

Report on the Testing of the

Entrust

RFID PWA 534455-002

In accordance with:

FCC Rule Part: 47 CFR Part 2.1091

RSS-102 Issue 6:2023

RF Exposure Certification Exhibit - MPE

Prepared for: Deere & Company
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COMMERCIAL-IN-CONFIDENCE

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America

**Add value.
Inspire trust.**

SIGNATURE

A handwritten signature in black ink, appearing to read "Sean Sellergren".

NAME	JOB TITLE	RESPONSIBLE FOR	ISSUE DATE
Sean Sellergren	Sr EMC Engineer	Authorized Signatory	23 September 2024

Signatures in this approval box have checked this document in line with the requirements of TÜV SÜD America, Inc. document control rules.

FCC Accreditation	Innovation, Science, and Economic Development Canada
Designation Number US1148 New Brighton, MN Test	Accreditation
Laboratory	Site Number 4512A New Brighton, MN Test Laboratory

EXECUTIVE SUMMARY

A sample of this product was tested and found to be compliant with the standards listed above.



A2LA Cert. No. 2955.11

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ACCREDITATION

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**General Information:**

Applicant: Entrust
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

FCC ID: GDI-534455002
 IC: 889B-534455002
 Antenna Type: coil
 Antenna Gain: 1 dBi

Maximum Transmitter radiated power: 64.60 dBm, 0.000865 mW
 Exposure Conditions: ≥ 20 centimeters

MPE Calculation FCC

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Calculation - FCC

Technology	Transmit Frequency (MHz)	Radio Power (dBm)	Radio Power (mW)	Antenna Gain (dBi)	Power Density (mW/cm ²)	Power Density Limit (mW/cm ²)	Distance (cm)	Result
RFID	13.56	-30.629	0.000865	1	0.00000017	0.978	20	Meets Requirements @ 20 cm



MPE Calculation ISED

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. W/cm²)

P = power input to the antenna (in appropriate units, e.g., W)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Routine Evaluation - ISED

Technology	Transmit Frequency (MHz)	Radio Power (dBm)	Radio Power (mW)	Antenna Gain (dBi)	Power Density (W/m ²)	Power Density Limit (W/m ²)	Evaluation Distance (cm)	Result
RFID	13.56	-30.629	0.000865	1	<0.000	2	20	Meets Requirements @ 20 cm