Report on the Testing of the

Deere & Company
SX00A

In accordance with:
FCC Rule Part: 47 CFR Part 2.1091
RSS-102 Issue 5

RF Exposure Certification Exhibit - MPE

Prepared for: Deere & Company
One John Deere Place
Moline, IL 61265

America

Add value.
Inspire trust.

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NAME	**JOB TITLE**	**RESPONSIBLE FOR**	**ISSUE DATE**
Sean Sellergren	Sr EMC Engineer	**Authorized Signatory**	22 July 2021

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

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

ACCREDITATION
Our A2LA Accreditation does not cover opinions and interpretations and any expressed are outside the scope of our A2LA Accreditation.

General Information:

Applicant: Deere & Company
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information:

FCC ID: NTV-SX00A
Antenna Type: Patch
Antenna Gain: 7 dBi

Maximum Transmitter Conducted Power: 24.91 dBm, 310 mW
Exposure Conditions: ≥ 20 centimeters

MPE Calculation FCC

The Power Density (mW/cm^2) 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)	EIRP (W)	Power Density (mW/cm2)	Power Density Limit (mW/cm2)	Distance (cm)	Result
900 MHz RFID	902-928	24.91	310	7	1.55	0.309	0.601	20	**Meets Requirements @ 20 cm**

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MPE Calculation ISED

The Power Density (mW/cm^2) 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)	EIRP (W)	Power Density (W/m2)	Power Density Limit (W/m2)	Evaluation Distance (cm)	Result
900 MHz RFID	902-928	24.91	310	7	1.55	3.09	2.79	20	**Meets Requirements @ 66.50 cm**