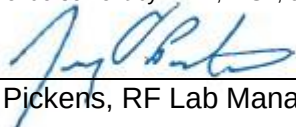


RF Exposure Report

Project Number: 4724254**Proposal:** SUW-202101000320**Report Number:** 4724254EMC13**Revision Level:** 2**Client:** Deere & Company**Equipment Under Test:** JDLINK R Modem - 4G**Model Number:** MA4R**FCC ID:** OV5-MA4R**Applicable Standards:** 47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498**FCC OET Bulletin 65 Supplement****Report issued on:** 12 May 2022**Test Result:** Compliant

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

Prepared by:

Jeremy Pickens, RF Lab Manager**Reviewed by:**

David Schramm, Operations Manager

Remarks: This report details the results of the testing carried out on one sample; the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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TABLE OF CONTENTS

1	GENERAL INFORMATION.....	3
1.1	CLIENT INFORMATION.....	3
1.2	TEST LABORATORY.....	3
1.3	GENERAL INFORMATION OF EUT.....	3
1.4	OPERATING MODES AND CONDITIONS.....	3
2	RF EXPOSURE.....	4
2.1	TEST RESULT.....	4
2.2	TEST METHOD.....	4
2.3	SINGLE TRANSMISSION RF EXPOSURE LEVELS.....	4
2.4	SIMULTANEOUS TRANSMISSION RF EXPOSURE LEVELS.....	4
3	REVISION HISTORY.....	5

1 General Information

1.1 Client Information

Name: Deere & Company
Address: One John Deere Place
City, State, Zip, Country: Moline, IL 61265, USA

1.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

1.3 General Information of EUT

Product Description: JDLINK R Modem - 4G
Model Number: MA4R
Serial Number: PCMA4MA200091

Modes of Operation: LTE Bands 2/4/5/7/12/13/26/38/41/66
WCDMA Bands II / IV / V
GSM 850 / 1900
802.11 a/b/g/nHT20/nHT40
BT GFSK/ Pi/4DQPSK/8DPSK/LE

Antenna Type: External Proprietary
IMEI: 004401083921102

Sample Received Date: 10 April 2021
Dates of testing: 08 May 2021 – 27 April 2022

1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum power including the maximum tolerance was considered.

2 RF Exposure

2.1 Test Result

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

2.2 Test Method

Using the maximum power (including tune-up tolerances), the power density was calculated. Maximum antenna gain was assumed for this exercise.

2.3 Single transmission RF Exposure Levels

Band of Operation	Type	MHz	Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density EIRP _{avg} /(4πR ²) mW/cm ²	FCC mW/cm ²	% of Limit	Verdict
						dBm	mW					
LTE Band 2		1850-1910	25.0	-0.1	0.0	24.9	309	20	0.061	1.00	6.15%	Pass
LTE Band 4		1710-1755	25.0	0.7	0.0	25.7	372	20	0.074	1.00	7.4%	Pass
LTE Band 5		824-849	25.0	-0.3	0.0	24.7	295	20	0.059	0.55	10.69%	Pass
LTE Band 7		2500-2570	25.0	2.4	0.0	27.4	551	20	0.110	1.00	10.96%	Pass
LTE Band 12		699-716	25.0	-0.2	0.0	24.8	302	20	0.060	0.47	12.89%	Pass
LTE Band 13		777-787	25.0	-0.2	0.0	24.8	302	20	0.060	0.52	11.60%	Pass
LTE Band 26		814-849	25.0	3.5	0.0	28.5	708	20	0.141	0.54	25.95%	Pass
LTE Band 38		2570-2620	25.0	3.5	0.0	28.5	708	20	0.141	1.00	14.08%	Pass
LTE Band 41		2496-2620	25.0	3.5	0.0	28.5	708	20	0.141	1.00	14.08%	Pass
LTE Band 66		1710-1780	25.0	0.7	0.0	25.7	372	20	0.074	1.00	7.39%	Pass
WCDMA Band II		1850-1910	24.0	-0.1	0.0	23.9	245	20	0.049	1.00	4.88%	Pass
WCDMA Band IV		1710-1755	24.0	0.7	0.0	24.7	295	20	0.059	1.00	5.87%	Pass
WCDMA Band V		824-849	24.0	-0.3	0.0	23.7	237	20	0.047	0.55	8.57%	Pass
GSM 850		824-849	27.6	-0.3	0.0	27.3	542	20	0.108	0.55	19.63%	Pass
GSM 1900		1850-1910	24.6	-0.1	0.0	24.5	282	20	0.056	1.00	5.61%	Pass
WLAN 2.4		2400-2483.5	17.8	-0.4	0.0	17.4	54	20	0.011	1.00	1.08%	Pass
Bluetooth		2400-2483.5	10.0	-0.4	0.0	9.6	9	20	0.002	1.00	0.18%	Pass
Bluetooth LE		2400-2483.5	5.4	-0.4	0.0	5.0	3	20	0.001	1.00	0.06%	Pass

2.4 Simultaneous transmission RF Exposure Levels

	WLAN 2.4	Bluetooth	Bluetooth LE
LTE Band 2	7.2%	6.3%	6.2%
LTE Band 4	8.5%	7.6%	7.5%
LTE Band 5	11.8%	10.9%	10.8%
LTE Band 7	12.0%	11.1%	11.0%
LTE Band 12	14.0%	13.1%	13.0%
LTE Band 13	12.7%	11.8%	11.7%
LTE Band 26	27.0%	26.1%	26.0%
LTE Band 38	15.2%	14.3%	14.1%
LTE Band 41	15.2%	14.3%	14.1%
LTE Band 66	8.5%	7.6%	7.5%
WCDMA Band II	6.0%	5.1%	4.9%
WCDMA Band IV	7.0%	6.1%	5.9%
WCDMA Band V	9.7%	8.7%	8.6%
GSM 850	20.7%	19.8%	19.7%
GSM 1900	6.7%	5.8%	5.7%
WLAN 2.4	--	1.3%	1.1%
Bluetooth	1.3%	--	--
Bluetooth LE	1.1%	--	--

Note: Highlighted value only indicates worst-case.

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	25 August 2021
1	- Updated product marketing name throughout report	12 January 2022
2	- Added LTE Bands 26 and 66 and Bluetooth LE to the RF exposure calculations - Corrected antenna gain values	10 May 2022