

# F2 Labs 16740 Peters Road Middlefield, Ohio 44062 United States of America

www.f2labs.com

#### SAR EXCLUSION REPORT

Manufacturer: Dow AgroSciences LLC

9330 Zionsville Road

Indianapolis, Indiana 46268 USA

Applicant: Same as Above

Product Name: Scout

**Product Description:** The Scout device is an extended range 125kHz RFID reader

with Bluetooth connectivity that is swept across the ground to

detect and read RFID tag data.

Operating

Voltage/Frequency: Battery-Operated

Model: Scout

FCC ID: QFG-SCOUT

Standard(s):

KDB447498 Appendix A

**Report Constructed by:** 

Julius Chiller, EMC/Wireless Engineer

Report Reviewed by:

Ken Littell, Director of EMC & Wireless Operations

F2 Labs F2 Labs F2 Labs

Jin Chilled

 26501 Ridge Road
 16740 Peters Road
 8583 Zionsville Road

 Damascus, MD 20872
 Middlefield, OH 44062
 Indianapolis, IN 46268

 Ph 301.253.4500
 Ph 440.632.5541
 Ph 317.610.0611

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Applicant: Dow AgroSciences LLC FCC ID: QFG-SCOUT

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**Applicant: Dow AgroSciences LLC** 

FCC ID: QFG-SCOUT

#### 1 ADMINISTRATIVE INFORMATION

### 1.1 Measurement Location:

F2 Labs in Middlefield, Ohio. Site description and attenuation data are on file with the FCC's Sampling and Measurement Branch at the FCC Laboratory in Columbia, MD.

## 1.2 Document History

Document Number Description		Issue Date	Approved By
F2P22228C-02E	First Issue	2020-08-12	K. Littell

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Applicant: Dow AgroSciences LLC FCC ID: QFG-SCOUT Order Number: F2P22228C

#### 2 **SUMMARY OF RESULTS**

	Standard(s)	Results
SAR Exclusion	KDB447498, Appendix A	Complies

Modifications Made to the Equipment
None

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#### 3 ENGINEERING STATEMENT

This report has been prepared on behalf of Dow AgroSciences LLC to provide documentation for the SAR Exclusion herein. This equipment has been tested and found to comply with the SAR Exclusion levels listed in Appendix A of KDB447498. The minimum distance from the BT module antenna is 5mm. The output power of the BT is 8.55dBm which equals 7.2mW and is below the exclusion limit of 10mW at 5mm.

 $\label{eq:Appendix A} Appendix \, A$  SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and  $\leq$  50 mm

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table. The equation and threshold in section 4.3.1 must be applied to determine SAR test exclusion.

MHz	5	10	15	20	25	mm
150	39	77	116	155	194	SAR Test Exclusion Threshold (mW)
300	27	55	82	110	137	
450	22	45	67	89	112	
835	16	33	49	66	82	
900	16	32	47	63	79	
1500	12	24	37	49	61	
1900	11	22	33	44	54	
2450	10	19	29	38	48	
3600	8	16	24	32	40	
5200	7	13	20	26	33	
5400	6	13	19	26	32	
5800	6	12	19	25	31	

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FCC ID: QFG-SCOUT

#### 4 EUT INFORMATION AND DATA

### 4.1 Equipment Under Test:

Product: RFID Tag Reader

Model: Scout

Serial Number: EPAUN1A

Software Version: Model 500G, SW Version 1.0.3

FCC ID: QFG-SCOUT

#### 4.2 Trade Name:

Dow AgroSciences LLC

### 4.3 Power Supply:

Battery-Operated

### 4.4 Applicable Rules:

KDB447498

#### 4.5 Equipment Category:

RFID Tag Reader with Bluetooth capabilities

#### 4.6 Antenna:

Internal loop

#### 4.7 Accessories:

N/A

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