


# RF Exposure Report

**Project Number:** 4035896**Report Number:** 4035896EMC02**Revision Level:** 0**Client:** Sensorfield LLC**Equipment Under Test:** Wireless Monitoring Units (Sensor, Hub, Gateway)**Models:** S1-B / H1**FCC ID:** 2AJRESFNJR1**Applicable Standards:** 47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498**FCC OET Bulletin 65 Supplement****Report issued on:** 05 December 2016**Test Result:** Compliant**Reviewed by:**  
\_\_\_\_\_  
Jeremy Pickens, Senior EMC Engineer**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

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

## 1 General Information

### 1.1 Client Information

Name: Sensorfield LLC  
Address: 2503 Robinhood, Suite 165  
City, State, Zip, Country: Houston, TX 77005, 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

EUT: Wireless Monitoring Units (Sensor, Hub, Gateway)  
Model Number: S1-B / H1

Frequency Range: 903.074 to 926.826 MHz  
Number of channels: 15.247 Hybrid device employing 10 channels  
Modulation type: LoRa  
Channel spacing: 1 and 2.2 MHz  
Antenna: 9" Wire

Rated Voltage: 3.7 VDC Solar Power / Internal Battery

Sample Received Date: 07 September 2016

### 1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum measured power was considered. While the gain value of the wire antenna is unknown, radiated measurements showed that the gain is significantly less than 0 dBi. For the exposure calculations, 0 dBi was used as worst-case.

## 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 conducted power, the power density was calculated.

### 2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power w/tolerance	Antenna Gain	Cable Loss	Average EIRP		Distance (R)	Power Density EIRP <sub>Avg</sub> /(4 $\pi$ R <sup>2</sup> )	FCC	% of Limit	Verdict
Type	MHz	dBm			dBm	mW	cm	mW	mW/cm <sup>2</sup>		
LoRa	902-928	18.4	0.0	0.0	18.4	69	20	0.014	0.60	2%	Pass

### 3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	05 December 2016