

# RF Exposure Report

**Project Number:** 2199

**Report Number:** 2199EMC03

**Revision Level:** 0

**Client:** ARRIS Group, Inc.

**Equipment Under Test:** Battery Backup

**Model:** XBB1-A

**FCC ID:** UIDXBB1


**Applicable Standards:** 47 C.F.R. §§ 2.1091 and 2.1093; FCC KDB 447498

**FCC OET Bulletin 65 Supplement**

**Report issued on:** 05 October 2016

**Test Result:** Compliant

Tested by:

  
\_\_\_\_\_  
Fabian Nica, Senior Engineering Technician

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.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or Testing done by SGS International Electrical Approvals in connection with distribution or use of the product described in this report must be approved by SGS international Electrical Approvals in writing.

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## 1 General Information

### 1.1 Client Information

Name: ARRIS Group, Inc.  
Address: 3871 Lakefield Drive, Suite 300  
City, State, Zip, Country: Suwanee, GA 30024, 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

Type of Product: Battery Backup  
Model Number: XBB1-A  
Serial Number: G76BWX222200055 (Conducted)  
G76BWX222200084 (Radiated)

FCC ID: UIDXBB1

Frequency Range: 2405-2480MHz  
Modulation: 802.15.4  
Antenna: PCB – Inverted F

Rated Voltage: 12 Vdc  
Test Voltage: 12Vdc

Sample Received Date: 08 August 2016

### 1.4 Operating Modes and Conditions

For this assessment, the EUT's maximum power across the band 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 measured conducted power, the power density was calculated. A maximum antenna gain of 2dBi was assumed for this exercise.

### 2.3 Single transmission RF Exposure Levels

Band of Operation		Conducted Power w/tolerance dBm	Antenna Gain	Cable Loss	Average EIRP		Distance (R) cm	Power Density $EIRP_{avg}/(4\pi R^2)$ mW	FCC mW/cm <sup>2</sup>	% of Limit	Verdict
Type	MHz				dBm	mW					
Zigbee 2.4	2400-2483.5	10.0	2.0	0.0	12.0	16	2	0.315	1.00	32%	Pass

### 3 Revision History

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