

RF Exposure Report

Project Number: 4458635

Proposal Number: 8652

Report Number: 4458635EMC04

Revision Level: 1

Client: Current Lighting Solutions, LLC

Equipment Under Test: Wireless People Counting Sensor

Model: WMZ10

FCC ID: 2AS3F-WMZ10

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

FCC KDB 447498 D01 General RF Exposure Guidance v06

Report issued on: 01 July 2019

Test Result: Compliant

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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1 General Information

1.1 Client Information

Name: Current Lighting Solutions, LLC
Address: 1975 Noble Rd
City, State, Zip, Country: East Cleveland, Ohio 44112, USA

1.1 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

1.2 General Information of EUT

Type of Product: Wireless People Counting Sensor
Model: WMZ10
Serial Number: Not labeled

FCC ID: 2AS3F-WMZ10

Frequency Range: 2402 – 2480 MHz (BLE)
2405 – 2480 MHz (ZigBee)
Antenna: Internal Surface-Mount Antenna
(2 suppliers) Johanson Technology (0.5 dBi)
Shenzhen Sunlord Electronics Co., Ltd. (1.5 dBi)

Rated Voltage: 9.5 – 24 Vdc
Test Voltage: 16 Vdc

Sample Received Date: 15 May 2019
Dates of testing: 15-16 May 2019

1.3 Operating Modes and Conditions

Continuous traffic was generated using test commands. The device was programmed to transmit at low, middle, and high channels. The DUT is not capable of simultaneous transmission.

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. Maximum antenna gain was assumed for this exercise.

2.3 Single transmission RF Exposure Levels (mW/cm²)

Band of Operation		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
Type	MHz				dBm	mW					
Bluetooth LE	2400-2483.5	2.6	1.5	0.0	4.1	3	20	0.001	1.00	0%	Pass
802.15.4	2400-2483.5	7.7	1.5	0.0	9.2	8	20	0.002	1.00	0%	Pass

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	20 June 2019
1	- Added information of two antenna suppliers (section 1.2) - Updated antenna gain and values based on it (section 2.3)	01 July 2019