

RF Exposure Report

Project Number: 5214055**Proposal: SUW-202408006976****Report Number: 5214055EMC11****Revision Level: 3****Client: Alarm.com Incorporated****Equipment Under Test: Alarm.com 4MP Indoor/Outdoor Spotlight Battery Camera****Model: ADC-V731B****FCC ID: YL6-143V731B****IC ID: 9111A-143V731B****Applicable Standards: 47 CFR §§ 2.1091****FCC KDB 447498 D01 General RF Exposure Guidance v06****FCC OET Bulletin 65****RSS-102, Issue 6 (December 15, 2023)****Report issued on: 23 April 2025****Report revised on: 29 May 2025****Result: Compliant**

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

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1 General Information

1.1 Client Information

Company Name: Alarm.com Incorporated
Address: 8281 Greensboro Drive, Suite 100
City, State, Zip, Country: Tysons, VA 22102, 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

Manufacturer: Alarm.com Incorporated
Product Marketing Name (PMN): Alarm.com 4MP Indoor/Outdoor Spotlight Battery Camera
Model Number: ADC-V731B
Serial Number: 50407410F2F1 (Conducted Sample); 50407410F2B2 (Radiated Sample)

Type / Frequency / Data Modes: Bluetooth Low Energy / 2402 – 2480 MHz / 1Mbps / 2Mbps
Type / Frequency / Data Modes: 2.4GHz WLAN / 2412 – 2462 MHz / (802.11b; 11g; 11n)
Type / Frequency / Data Modes: 5 GHz WLAN / 5180 – 5825 MHz / (802.11a; 11n; 11ac)

Antenna*:

2.4GHz	Frequency(MHz)	2400	2450	2500
Ant.1	Peak Gain(dBi)	1.7	1.5	1.4
	Efficiency(%)	62	60	59
Ant.2	Peak Gain(dBi)	1.9	2.0	1.7
	Efficiency(%)	62	60	57
5GHz	Frequency(MHz)	5150	5550	5850
Ant.1	Peak Gain(dBi)	3.2	2.3	4.0
	Efficiency(%)	60	59	63
Ant.2	Peak Gain(dBi)	3.8	2.9	3.8
	Efficiency(%)	61	59	65

Max Conducted Output Power:

BLE	2.4GHz WLAN	5GHz WLAN	
5.05	24.22	16.74	dBm

**Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous regulatory filing or other.*

1.4 Operating Modes and Conditions

Maximum power levels were utilized for calculations.

2 RF Exposure

2.1 Test Results

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310 & RSS-102	Compliant

2.2 Test Method

The formula below calculates power density.

$$S = \frac{PG}{4\pi R^2} \quad \text{Or} \quad S = \frac{EIRP}{4\pi R^2}$$

where;

S = Power density (mW/cm²)

P = Maximum sourced based average power delivered to antenna port (mW)

G = Maximum numeric power gain of antenna relative to an isotropic radiator (dBi -> linear)

R = Distance between by-stander and antenna (cm)

EIRP = Equivalent (or effective) isotropically radiated power

The limits for general population / uncontrolled exposure were used at a distance of 20cm.

2.3 FCC Single transmission RF Exposure Levels (mW/cm²)

Band of Operation		Conducted Power w/tolerance	Antenna Gain	Cable Loss	Average EIRP		Distance (R)	Power Density EIRP _{avg} /(4πR ²)	FCC	% of Limit	Verdict
Type	MHz	dBm			dBm	mW	cm	mW/cm ²	mW/cm ²		
WLAN 2.4	2400-2483.5	24.2	2.0	0.0	26.2	419	20	0.083	1.00	8%	Pass
Bluetooth	2400-2483.5	5.1	2.0	0.0	7.1	5	20	0.001	1.00	0%	Pass
WLAN 5 GHz (UNII-2)	5250-5700	16.7	4.0	0.0	20.7	119	20	0.024	1.00	2%	Pass

2.4 ISED Single transmission RF Exposure Levels (W/m²)

Band of Operation		Conducted Power w/tolerance	Antenna Gain	Cable Loss	Average EIRP		Distance (R)	Power Density EIRP _{avg} /(4πR ²)	IC	% of Limit	Verdict
Type	MHz	dBm			dBm	mW	cm	W/m ²	W/m ²		
WLAN 2.4	2400-2483.5	24.2	2.0	0.0	26.2	419	20	0.833	5.35	16%	Pass
Bluetooth	2400-2483.5	5.1	2.0	0.0	7.1	5	20	0.010	5.35	0%	Pass
WLAN 5 GHz (UNII-2)	5250-5700	16.7	4.0	0.0	20.7	119	20	0.236	9.13	3%	Pass

2.5 Simultaneous Conditions

No Simultaneous transmission.

3 Revision History

Revision Level	Description of changes	Revision Date
Draft	Draft Release	25 February 2025
0	Initial Release	23 April 2025
1	Corrected equipment under test	02 May 2025
2	Updated Equipment Under Test	14 May 2025
3	Updated BLE measured value.	29 May 2025