## **TEST REPORT**

Report No.: E201510156977-4 Application No.: E201510156977

**Applicant:** iSmart Alarm, Inc

Applicant

1290 Kifer Road, Suite 306 Sunnyvale, CA 94086 USA

Sample

**Address:** 

**SPOT** 

**Description:** 

Model: iSC5

**Adding Model:** /

FCC ID: SENISC5

**Test Specification:** FCC Part 1.1310

**Test Date:** 2015-10-20 to 2015-11-17

**Issue Date:** 2015-11-18

**Test Result:** PASS

Prepared By: Reviewed By: Approved By:

Brian Xiao / Test Engineer | Lynn Xiao / Technical Manager | Yong Dai / Technical Manager

Brian Xian

Lynneien Youg Pai

Date:2015-11-18 Date:2015-11-18

**Other Aspects:** 

/

**Abbreviations:** ok/P = passed; fail/F = failed; n.a./N = not applicable

The test result in this test report refers exclusively to the presented test sample. This report shall not be reproduced except in full, without the written approval of GRGT.

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# **RF Exposure Compliance Requirement**

### 1. LIMITS

The EUT is a WIFI device. Frequency range is 2412~2462MHz.

### According to FCC part §1.1310 and §Part 2.1091 (Mobile Devices) RF exposure is calculated.

Frequency	Electric Field	Magnetic Field	Power Density	Averaging Time
Range(MHz)	Stength(V/m)	Stength(A/m)	(mW/cm <sup>2</sup> )	(minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f=frequency in MHz

2. Prediction of MPE limit at given distance, equations from OET Bulletin 65, Edition 97 - 01:

$$S = (1.64 * P * G) / (4 * \pi * R^2)$$
 (where PG = ERP)

$$S = (P * G) / (4 * \pi * R^2)$$
 (where PG=EIRP) Where:

S = power density

P= power input to antenna

G= numeric gain of the antenna

R= distance to the center of radiation of the antenna

#### 1. 802.11 B mode

Prediction frequency (MHz): 2437

Maximum RF output power (ERP, dBm): 19.17

Maximum RF output power (ERP, mW): 82.60

MPE limit for uncontrolled exposure at predication frequency (mW/ cm²):

Prediction distance (cm) R= $\sqrt{\frac{P*G}{S*4*3.14}}$ : 2.56cm

So the distance between the transmitter's radiating structure(s) and the body of the user or nearby persons is cannot less than 0.0256m.

<sup>\*=</sup>Plane-wave equivalent power density