

## RF Exposure Report

**Report No.:** SA171114D24

**FCC ID:** RFHAF0BOT

**Test Model:** AfoBot

**Received Date:** Nov. 16, 2017

**Test Date:** Dec. 4 ~ 19, 2017

**Issued Date:** Jan. 10, 2018

**Applicant:** IEI Integration Corp.

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)



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### Release Control Record

Issue No.	Description	Date Issued
SA171114D24	Original release.	Jan. 10, 2018

## 1 Certificate of Conformity

**Product:** Smart Video Device

**Brand:** iEi,QNAP

**Test Model:** AfoBot

**Sample Status:** Engineering sample

**Applicant:** IEI Integration Corp.

**Test Date:** Dec. 4 ~ 19, 2017

**Standards:** FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.1-1992

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

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**Approved by :** Rex Lai, **Date:** Jan. 10, 2018  
Rex Lai / Associate Technical Manager

## 2 RF Exposure

### 2.1 Limits For Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

### 2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

### 2.3 Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

## 2.4 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462 WLAN	24.38	5.01	20	0.1729	1
5180-5240 WLAN	14.95	5.01	20	0.0197	1
5260-5320 WLAN	14.82	5.01	20	0.0191	1
5500-5700 WLAN	14.90	5.01	20	0.0195	1
5745-5825 WLAN	15.80	5.01	20	0.0240	1
2402-2480 Bluetooth EDR	-3.79	2	20	0.0001	1
2402-2480 Bluetooth LE	6.92	2	20	0.0016	1

**NOTE:**

2.4GHz Directional gain =  $2\text{dBi} + 10\log(2) = 5.01\text{dBi}$

5.0GHz Directional gain =  $2\text{dBi} + 10\log(2) = 5.01\text{dBi}$

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