

# **RF Exposure Report**

Report No.: SA190823E05

FCC ID: 2AUDBFR1A1

Test Model: FR1A01US00

Received Date: Aug. 23, 2019

Test Date: Sep. 10, 2019

**Issued Date:** Nov. 20, 2019

**Applicant:** Ardomus Networks Corporation

Address: 1F., No. 295-2, Shixing Rd., Zhubei City, Hsinchu County 30286, Taiwan

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

Hsin Chu Laboratory

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,

laiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,

Taiwan

FCC Registration / Designation Number:

723255 / TW2022

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### **Release Control Record**

Issue No.	Description	Date Issued
SA190823E05	Original release.	Nov. 20, 2019



#### 1 Certificate of Conformity

Product: Flora Switch

Brand: Ardomus

Test Model: FR1A01US00

Sample Status: ENGINEERING SAMPLE

**Applicant:** Ardomus Networks Corporation

Test Date: Sep. 10, 2019

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.

Prepared by : , Date: Nov. 20, 2019

Claire Kuan / Specialist

**Approved by : , Date:** Nov. 20, 2019

Clark Lin / Technical Manager



#### 2 RF Exposure

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

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Power Density Strength (A/m) (mW/cm²)		Average Time (minutes)			
Limits For General Population / Uncontrolled Exposure							
0.3-1.34	614	1.63	(100)*	30			
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	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; \*Plane-wave equivalent power density

#### 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**.

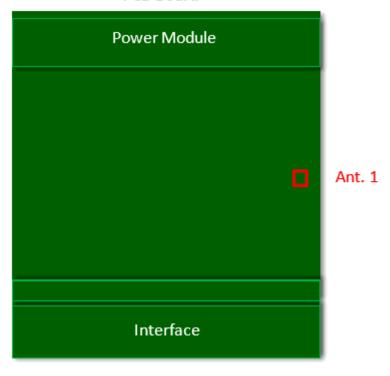
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### 2.4 Antenna Gain

Brand	Model No.	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length (mm)
Cingxin	65-031-050414B	2.1	2.4 – 2.4835	Dipole	i-pex(MHF)	60

# **PCB Board**





## 2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Evaluation Frequency (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)
Zigbee	2405	101.391	2.1	20	0.03271	1

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