

## RF Exposure Report

**Report No.:** SA150703E06

**FCC ID:** U8G-P1AC1

**Test Model:** AP One Enterprise

**Series Model:** Pismo AC1

**Received Date:** July 03, 2015

**Test Date:** Aug. 13, 2015

**Issued Date:** Aug. 24, 2015

**Applicant:** Pismo Labs Technology Limited

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

Issue No.	Description	Date Issued
SA150703E06	Original release.	Aug. 24, 2015

## 1 Certificate of Conformity

**Product:** Pepwave / Peplink / Pismo Wireless Product

**Brand:** Pepwave / Peplink / Pismo

**Test Model:** AP One Enterprise

**Series Model:** Pismo AC1

**Sample Status:** MASS-PRODUCTION

**Applicant:** Pismo Labs Technology Limited

**Test Date:** Aug. 13, 2015

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

KDB 447498 D03

IEEE C95.1

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 :** Phoenix Huang, **Date:** Aug. 24, 2015  
Phoenix Huang / Specialist

**Approved by :** May Chen, **Date:** Aug. 24, 2015  
May Chen / 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

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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**.

### 3 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	270.521	8.74	20	0.40265	1
5180-5240, 5745-5825	121.128	10.57	20	0.27477	1

Note:

2.4GHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.74\text{dBi}$

5GHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 10.57\text{dBi}$

#### Conclusion:

Both of the 2.4GHz and 5GHz WLAN can transmit simultaneously, the formula of calculated the MPE is:

$$CPD_1 / LPD_1 + CPD_2 / LPD_2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is  $0.40265 / 1 + 0.27477 / 1 = 0.677$ , which is less than "1". This confirmed that the device comply with FCC 1.1310 MPE limit.

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