

## RF Exposure Report

**Report No.:** SA150716C07D

**FCC ID:** U2M-OAP7250AG

**Test Model:** OAP7250AG

**Received Date:** Aug. 27, 2015

**Test Date:** Sep. 04 ~ Sep. 18, 2015

**Issued Date:** Sep. 25, 2015

**Applicant:** Senao Networks, Inc.

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

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**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)



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### Table of Contents

<b>Release Control Record</b> .....	<b>3</b>
<b>1 Certificate of Conformity</b> .....	<b>4</b>
<b>2 RF Exposure</b> .....	<b>5</b>
2.1 Limits for Maximum Permissible Exposure (MPE).....	5
2.2 MPE Calculation Formula .....	5
2.3 Classification .....	5
<b>3 Calculation Result Of Maximum Conducted Power</b> .....	<b>5</b>



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### Release Control Record

Issue No.	Description	Date Issued
SA150716C07D	Original release	Sep. 25, 2015



# 1 Certificate of Conformity

**Product:** Wireless 802.11ac/b/g/n access point  
**Brand:** Senao Networks  
**Test Model:** OAP7250AG  
**Sample Status:** Engineering Sample  
**Applicant:** Senao Networks, Inc.  
**Test Date:** Sep. 04 ~ Sep. 18, 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 :** Celine Chou , **Date:** Sep. 25, 2015  
Celine Chou / Specialist

**Approved by :** Ken Liu , **Date:** Sep. 25, 2015  
Ken Liu / Senior 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

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

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 21 cm 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 (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	24.71	10.18	21	0.556	1
5180-5240	23.13	2.44	21	0.065	1
5745-5825	22.40	10.80	21	0.377	1

Note:

2412 ~ 2462MHz: Directional gain = 5.41dBi + 10log(3) = 10.18dBi

5180 ~ 5240MHz: Directional gain = -2.33dBi + 10log(3) = 2.44dBi

5745 ~ 5825MHz: Directional gain = 6.03dBi + 10log(3) = 10.80dBi

### CONCLUSION:

Both of the WLAN 2.4G & WLAN 5G can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

$$\text{WLAN 2.4G} + \text{WLAN 5.0G} = 0.556 + 0.377 = 0.933$$

Therefore, the maximum calculation of this situation is 0.933, which is less than the "1" limit.

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