

# **RF EXPOSURE REPORT**

 REPORT NO.:
 SA110418C22

 MODEL NO.:
 EMP9605H

 FCC ID:
 U2M-MP9605H

- APPLICANT: Senao Networks, Inc.
  - ADDRESS: 3F, No. 529, Chung Cheng Rd., Hsintien, Taipei, Taiwan, R.O.C.
- **ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
- LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, Taiwan, R.O.C.
- **TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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# RELEASE CONTROL RECORD

| ISSUE NO.        | REASON FOR CHANGE | DATE ISSUED   |  |
|------------------|-------------------|---------------|--|
| Original release | NA                | Jun. 02, 2011 |  |



#### 1. CERTIFICATION

PRODUCT:Wireless LAN CardMODEL:EMP9605HBRAND:EnGeniusAPPLICANT:Senao Networks, Inc.TESTED:Mar. 16 ~ Mar. 18, 2011TEST SAMPLE:ENGINEERING SAMPLESTANDARDS:FCC Part 2 (Section 2.1091)FCC OET Bulletin 65, Supplement C (01-01)IEEE C95.1

The above equipment (model: EMP9605H) have 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

Ivy Lin / Specialist

DATE: Jun. 02, 2011

APPROVED BY

Gary Chang / Assistant Manager

DATE: Jun. 02, 2011



### 2 RF EXPOSURE

#### 2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

| FREQUENCY<br>RANGE (MHz)                              | ELECTRIC FIELD<br>STRENGTH (V/m) | MAGNETIC FIELD<br>STRENGTH (A/m) |        | AVERAGE TIME<br>(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/cm2

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**.



| MODULATION<br>MODE | FREQUENCY<br>BAND<br>(MHz) | MAX<br>POWER<br>(dBm) | ANTENNA<br>GAIN<br>(dBi) | DISTANCE<br>(cm) | POWER<br>DENSITY<br>(mW/cm <sup>2</sup> ) | LIMIT<br>(mW/cm²) |
|--------------------|----------------------------|-----------------------|--------------------------|------------------|---|-------------------|
| 802.11b            | 2412-2462                  | 21.6                  | 5.01                     | 20               | 0.091                                     | 1                 |
| 802.11g            | 2412-2462                  | 29.6                  | 5.01                     | 20               | 0.575                                     | 1                 |
| 802.11n<br>(20MHz) | 2412-2462                  | 29.6                  | 2.0                      | 20               | 0.288                                     | 1                 |
| 802.11n<br>(40MHz) | 2422-2452                  | 29.7                  | 2.0                      | 20               | 0.294                                     | 1                 |

#### 2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

**NOTE:** Directional gain =2dBi + 10log(2)=5.01dBi