

RF Exposure Report

Report No.: SA140318C23D

FCC ID: 2AGZF-WM3530

Test Model: SWM3530

Received Date: Jan. 14, 2016

Test Date: Jan. 30 ~ Feb. 19, 2016

Issued Date: Apr. 08, 2016

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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 |
|--------------|-------------------|---------------|
| SA140318C23D | Original release. | Apr. 08, 2016 |

1 Certificate of Conformity

Product: Wireless Access Point

Brand: Siselectron

Test Model: SWM3530

Sample Status: Engineering sample

Applicant: Siselectron Technology Ltd.

Test Date: Jan. 30 ~ Feb. 19, 2016

Standard: FCC Part 2 (Section 2.1091)

KDB 447498 D01 (October 23, 2015)

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 : Ivy Lin, **Date:** Apr. 08, 2016

Ivy Lin / Specialist

Approved by : Ken Liu, **Date:** Apr. 08, 2016

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 ²) | 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/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 37cm 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 ²) | Limit (mW/cm ²) |
|----------------------|-----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412-2462 | 29.88 | 9.77 | 37 | 0.536 | 1 |
| 5180-5240 | 24.76 | 11.77 | 37 | 0.261 | 1 |
| 5745-5825 | 27.11 | 11.77 | 37 | 0.449 | 1 |

Note:

1. 2.4GHz Band: Directional gain = 5dBi + 10log(3) = 9.77dBi

2. 5GHz Band: Directional gain = 7dBi + 10log(3) = 11.77dBi

Conclusion:

The formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 +etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz = 0.536 + 0.449 = 0.985

Therefore the maximum calculation of above situation is less than the "1" limit.

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