RF Exposure Report

Report No.:	SA140224C17H
FCC ID:	2AGZF-WE2520
Test Model:	SWE2520
Received Date:	Feb. 24, 2014
Test Date:	Mar. 13 ~ Mar. 20, 2014 (For 2.4GHz Band) Jul. 14 ~ Jul. 22, 2015 (For 5GHz Band)
Issued Date:	Dec. 22, 2015
Applicant:	Siselectron Technology Ltd.
Address:	23451, 5F, No 232, Sec.2, Xiulang Rd.,Yonghe Dist., New Taipei City, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
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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Release Control Record

Issue No.	Description	Date Issued
SA140224C17H	Original release.	Dec. 22, 2015

1 Certificate of Conformity

Product:	Dual Band AC1750 Access Point
Brand:	Siselectron
Test Model:	SWE2520
Sample Status:	Engineering sample
Applicant:	Siselectron Technology Ltd.
Test Date:	Mar. 13 ~ Mar. 20, 2014 (For 2.4GHz Band) Jul. 14 ~ Jul. 22, 2015 (For 5GHz Band)
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 : _____ , **Date:** Dec. 22, 2015

Ivy Lin / Specialist

Approved by : _____ , **Date:** Dec. 22, 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^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/cm^2

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 30cm 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	28.69	8.77	30	0.493	1
5180-5240	27.68	9.77	30	0.492	1
5745-5825	26.22	9.77	30	0.351	1

NOTE:
2.4GHz Band: Directional gain = 4dBi + 10log(3) = 8.77dBi
5.0GHz Band: Directional gain = 5dBi + 10log(3) = 9.77dBi

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 = 0.493 + 0.492 = 0.985

Therefore the maximum calculations of above situations are less than the “1” limit.

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