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RF Exposure Report

Report No.: SA151008E04

FCC ID: QWO-SWA51

Test Model: SWA51

Received Date: Oct. 08, 2015

Test Date: Oct. 27, 2015

Issued Date: Dec. 21, 2015

Applicant: Rayson Technology Co., Ltd

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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
SA151008E04	Original release.	Dec. 21, 2015




1 Certificate of Conformity

Product: SWA51 5GHz Wireless Module
Brand: Avnera
Test Model: SWA51
Sample Status: ENGINEERING SAMPLE
Applicant: Rayson Technology Co., Ltd
Test Date: Oct. 27, 2015
Standards: FCC Part 2 (Section 2.1091)
447498 D01 GENERAL RF EXPOSURE GUIDANCE V06
IEEE STD C95.1-2005

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. 21, 2015
Lori Chung / Specialist

Approved by :  , **Date:** Dec. 21, 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 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 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

3 Antenna Gain

The antennas spec provided to the EUT, please refer to the following table:

Antenna No.	Antenna Gain (dBi)	Frequency range (GHz to GHz)	Antenna Type	Connector Type
1	4.97	5.15~5.85	PCB	NA
2	5.08	5.15~5.85		

4 Calculation Result of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
5150-5250	2.831	5.08	20	0.00181	1
5725-5850	3.516	5.08	20	0.00225	1

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