

RF Exposure Report

Report No.: SA161021C22

FCC ID: TVE-140601

Test Model: PCE5501AN-FT

Received Date: Oct. 21, 2016

Test Date: Nov. 17 ~ Dec. 21, 2016

Issued Date: Jan. 05, 2017

Applicant: Fortinet 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

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

Release Control Record

Issue No.	Description	Date Issued
SA161021C22	Original release.	Jan. 05, 2017

1 Certificate of Conformity

Product: 802.11 ac wave2 4x4 module

Brand: Fortinet Inc.

Test Model: PCE5501AN-FT

Sample Status: Engineering sample

Applicant: Fortinet Inc.

Test Date: Nov. 17 ~ Dec. 21, 2016

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

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 : *Suntee Liu* , **Date:** Jan. 05, 2017
Suntee Liu / Specialist

Approved by : *Ken Liu* , **Date:** Jan. 05, 2017
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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 26cm away from the body of the user. So, this device is classified as Mobile Device.

3 Calculation Result of Maximum Conducted Power

Mode	Band	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
CDD	WLAN 5180~5240MHz	25.49	12.02	26	0.664	1
	WLAN 5745~5825MHz	27.25	12.02	26	0.995	1
Beamforming	WLAN 5180~5240MHz	19.47	12.02	26	0.166	1
	WLAN 5745~5825MHz	21.11	12.02	26	0.242	1

Note: Max. Directional gain = 6dBi + 10log(4) = 12.02dBi

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