

RF EXPOSURE REPORT

REPORT NO.: SA140217C18A

MODEL NO.: PCE4502AN

FCC ID: TVE-120502

RECEIVED: Aug. 25, 2014

TESTED: Sep. 02 ~ Sep. 26, 2014

ISSUED: Oct. 03, 2014

APPLICANT: Fortinet Inc.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA140217C18A	Original release	Oct. 03, 2014

1. CERTIFICATION

PRODUCT: 802.11 ac Module

MODEL: PCE4502AN

BRAND: Fortinet

APPLICANT: Fortinet Inc.

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

The above equipment (Model: PCE4502AN) 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** : Oct. 03, 2014
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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

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

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 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 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)
5180-5240	22.78	8.76	20	0.284	1
5745-5825	22.88	8.76	20	0.290	1

NOTE: Directional gain = $10 \log[10^{G_1/20} + 10^{G_2/20}] = 8.76\text{dBi}$