

# **RF EXPOSURE REPORT**

REPORT NO.: SA141016C15

MODEL NO.: FORTIAP-112Dxxxxx, FortiAP-112Dxxxxx, FAP-112Dxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)

FCC ID: TVE-121233

**RECEIVED:** Oct. 15, 2014

**TESTED:** Oct. 15 ~ Nov. 28, 2014

**ISSUED:** Dec. 02, 2014

**APPLICANT:** Fortinet Inc.

ADDRESS: 899 Kifer Road Sunnyvale, CA 94086 USA

**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, R.O.C.
- **TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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## **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA141016C15	Original release.	Dec. 02, 2014



## 1. CERTIFICATION

PRODUCT: Secured Wireless Access Point

**MODEL:** FORTIAP-112Dxxxxxx, FortiAP-112Dxxxxxx, FAP-112Dxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)

BRAND: Fortinet Inc.

**APPLICANT:** Fortinet Inc.

TESTED: Oct. 15 ~ Nov. 28, 2014

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

The above equipment (Model: FORTIAP-112D) 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 :	Pettie Chen / Senior Spec	<b>, DATE :</b>	Dec. 02, 2014	
APPROVED BY :	Ken Liu / Senior Manag		Dec. 02, 2014	



## 2. RF EXPOSURE

#### 2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

		MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	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 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 <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	20.67	6.5	20	0.104	1
5180-5240	13.49	7.5	20	0.025	1
5745-5825	19.62	7.5	20	0.103	1

\*The 2.4 and 5GHz cannot transmit simultaneously.