

## RF Exposure Report

**Report No.:** SA110304C12J

**FCC ID:** PY311100154

**Test Model:** WNDAP360

**Received Date:** Mar. 04, 2011

**Test Date:** Mar. 07 ~ Mar. 31, 2011 (Band 1)  
Jul. 24 ~ Aug. 01, 2015 (Band 4)

**Issued Date:** Aug. 04, 2015

**Applicant:** NETGEAR, INC.

**Address:** 350 East Plumeria Drive, San Jose, CA 95134, USA

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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### Release Control Record

Issue No.	Description	Date Issued
SA110304C12J	Original release	Aug. 04, 2015



# 1 Certificate of Conformity

**Product:** ProSafe Dual Band Wireless-N Access Point  
**Brand:** NETGEAR  
**Test Model:** WNDAP360  
**Sample Status:** Engineering sample  
**Applicant:** NETGEAR, INC.  
**Test Date:** Mar. 07 ~ Mar. 31, 2011 (Band 1)  
Jul. 24 ~ Aug. 01, 2015 (Band 4)  
**Standards:** FCC Part 2 (Section 2.1091)  
KDB 447498 D03  
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:** Aug. 04, 2015  
Suntee Liu / Specialist

**Approved by :** Ken Liu , **Date:** Aug. 04, 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 <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<sup>2</sup>

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 22cm 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 <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2412-2462	26.20	8.60	22	0.497	1
5180-5240	16.50	9.30	22	0.063	1
5745-5825	25.30	9.30	22	0.474	1

Note:

2412-2462MHz Directional gain =  $5.59\text{dBi} + 10\log(2) = 8.60\text{dBi}$

5180-5240MHz Directional gain =  $6.29\text{dBi} + 10\log(2) = 9.30\text{dBi}$

5745-5825MHz Directional gain =  $6.29\text{dBi} + 10\log(2) = 9.30\text{dBi}$

#### Conclusion:

The formula of calculated the MPE is:

$\text{CPD1} / \text{LPD1} + \text{CPD2} / \text{LPD2} + \dots\text{etc.} < 1$

CPD = Calculation power density

LPD = Limit of power density

$\text{WLAN } 2.4\text{GHz} + \text{WLAN } 5\text{GHz} = 0.497 + 0.474 = 0.971$

Therefore all the maximum calculations of above situations are less than the "1" limit.

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