

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.

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

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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	6



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 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 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 ²)	Limit (mW/cm ²)
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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