RF Exposure Report

Report No.: SA170120D03

FCC ID: PY316400359

Test Model: R6080

Received Date: Jan. 20, 2017

Test Date: Jan. 23 ~ Feb. 18, 2017

Issued Date: Feb. 20, 2017

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

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
SA170120D03	Original release.	Feb. 20, 2017

1 Certificate of Conformity

Product:	AC1000 WiFi Router
Brand:	NETGEAR
Test Model:	R6080
Sample Status:	Engineering sample
Applicant:	NETGEAR INC.
Test Date:	Jan. 23 ~ Feb. 18, 2017
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1-1992

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 : Annie Chang , **Date:** Feb. 20, 2017

Annie Chang / Senior Specialist

Approved by : Rex. Lai , **Date:** Feb. 20, 2017

Rex Lai / Assistant 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/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^2)	Limit (mW/cm^2)
2412-2462	26.18	4.52	20	0.2337	1
5180-5240	24.84	6.04	20	0.2436	1
5745-5825	24.59	6.37	20	0.2482	1

NOTE:
2.4GHz: Directional gain = 4.52dBi
5180-5240MHz: Directional gain = 6.04dBi
5745-5825MHz: Directional gain = 6.37dBi

Conclusion:

The formula of calculated the MPE is:

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4GHz + WLAN 5GHz = 0.2337 + 0.2482 = 0.4819

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