



RF Exposure Report

Report No.: SA150713E04

FCC ID: PY314100255

Test Model: 11AC-AR9880

Received Date: July 13, 2015

Test Date: July 28, 2015

Issued Date: Sep. 16, 2015

Applicant: NETGEAR, Inc.

Address: 350 East Plumeria Drive San Jose, CA 95134

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

Lab Address: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin
Chu Hsien 307, Taiwan R.O.C.

Test Location (1): No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin
Chu Hsien 307, Taiwan R.O.C.

Test Location (2): No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin
Chu Hsien 307, Taiwan R.O.C.

Test Location (3): E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City, Taiwan
R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
SA150713E04	Original release.	Sep. 16, 2015

1 Certificate of Conformity

Product: 802.11ac PCI Express Card

Brand: NETGEAR

Test Model: 11AC-AR9880

Sample Status: ENGINEERING SAMPLE

Applicant: NETGEAR, Inc.

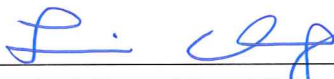
Test Date: July 28, 2015

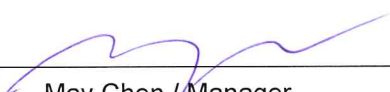
Standards: FCC Part 2 (Section 2.1091)

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 : , **Date:** Sep. 16, 2015
Lori Chung / Specialist

Approved by : , **Date:** Sep. 16, 2015
May Chen / 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

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

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 22cm away from the body of the user.
So, this device is classified as Mobile Device.

2.4 Antenna Gain

Antenna No.	PCB Chain No.	Brand	Model	Ant. Gain(dBi) <Including cable loss>	Frequency range (GHz to GHz)	Ant. Type	Connector Type
1	Chain (0)	NETGEAR	C6300	3.5	5.15~5.85	PIFA	i-pex(MHF)
2	Chain (1)	NETGEAR	C6300	4			
3	Chain (2)	NETGEAR	C6300	3.8			

3 Calculation Result of Maximum Conducted Power

CDD Mode

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
5180-5240	594.023	8.54	22	0.69783	1
5745-5825	783.739	8.54	22	0.92069	1

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.54\text{dBi}$$

Beamforming Mode

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
5180-5240	551.164	8.54	22	0.64748	1
5745-5825	555.46	8.54	22	0.65252	1

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.54\text{dBi}$$

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