RF Exposure Report

Report No.:	SA181019C20F
FCC ID:	PY318300427
Test Model:	SRC60
Series Model:	WAC540
Received Date:	Oct. 19, 2018
Test Date:	Sep. 10 ~ Sep. 11, 2019
Issued Date:	Sep. 11, 2019
Applicant:	NETGEAR, INC.
Address:	350 East Plumeria Drive San Jose, CA 95134
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, Taiwan
FCC Registration / Designation Number:	788550 / TW0003

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SA181019C20F	Original release	Sep. 11, 2019

1 Certificate of Conformity

Product:	Orbi Pro AC3000 Tri-band Ceiling Add-on Satellite SRC60, Insight Managed Smart Cloud Wireless Access Point (WAC540)
Brand:	NETGEAR
Test Model:	SRC60
Series Model:	WAC540
Sample Status:	Engineering sample
Applicant:	NETGEAR, INC.
Test Date:	Sep. 10 ~ Sep. 11, 2019
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.3 -2002

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 RF characteristics under the conditions specified in this report.

Prepared by : Pettie Chen , **Date:** Sep. 11, 2019

Pettie Chen / Senior Specialist

Approved by : Bruce Chen , **Date:** Sep. 11, 2019

Bruce Chen / Senior Project Engineer

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 27cm 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)
CDD Mode					
2412-2462	28.59	4.27	27	0.211	1
5180-5240	28.80	4.42	27	0.229	1
5260-5320	23.23	4.15	27	0.060	1
5500-5700	23.34	7.04	27	0.119	1
5745-5825	29.67	7.09	27	0.518	1
Beamforming Mode					
2412-2462	28.57	4.27	27	0.210	1
5180-5240	28.80	4.42	27	0.229	1
5260-5320	23.15	4.15	27	0.059	1
5500-5700	22.13	7.04	27	0.090	1
5745-5825	28.74	7.09	27	0.418	1

Note:

1. 2412 ~ 2462MHz: Directional gain = 4.27dBi
   5180 ~ 5240MHz: Directional gain = 4.42dBi
   5260 ~ 5320MHz: Directional gain = 4.15dBi
   5500 ~ 5700MHz: Directional gain = 7.04dBi
   5745 ~ 5825MHz: Directional gain = 7.09dBi

2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

Conclusion:

Both of the WLAN 2.4G & WLAN 5G can transmit simultaneously, the formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

2.4G + 5G Band 1 + 5G Band 4 = 0.211 / 1 + 0.229 / 1 + 0.518 / 1 = 0.958
2.4G + 5G Band 2 + 5G Band 3 = 0.211 / 1 + 0.060 / 1 + 0.119 / 1 = 0.390

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

---END---