

## RF Exposure Report

**Report No.:** SA181019C20

**FCC ID:** PY318300427

**Test Model:** SRC60

**Series Model:** WAC540

**Received Date:** Oct. 19, 2018

**Test Date:** Dec. 20, 2018 ~ Jan. 03, 2019

**Issued Date:** Jan. 22, 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

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

**Test Location:** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

**FCC Registration /  
Designation Number:** 788550 / TW0003



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## Table of Contents

|  |          |
|--|----------|
| <b>Release Control Record</b> .....                          | <b>3</b> |
| <b>1 Certificate of Conformity</b> .....                     | <b>4</b> |
| <b>2 RF Exposure</b> .....                                   | <b>5</b> |
| 2.1 Limits for Maximum Permissible Exposure (MPE) .....      | 5        |
| 2.2 MPE Calculation Formula .....                            | 5        |
| 2.3 Classification .....                                     | 5        |
| <b>3 Calculation Result of Maximum Conducted Power</b> ..... | <b>6</b> |

### Release Control Record

| Issue No.   | Description      | Date Issued   |
|-------------|------------------|---------------|
| SA181019C20 | Original release | Jan. 22, 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:** Dec. 20, 2018 ~ Jan. 03, 2019

**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 RF characteristics under the conditions specified in this report.

**Prepared by :** Celine Chou , **Date:** Jan. 22, 2019  
Celine Chou / Senior Specialist

**Approved by :** Bruce Chen , **Date:** Jan. 22, 2019  
Bruce Chen / 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 <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

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

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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 <sup>2</sup> ) | Limit (mW/cm <sup>2</sup> ) |
|----------------------|-----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| CDD Mode             |                 |                    |               |                                     |                             |
| 2412-2462            | 28.59           | 4.27               | 27            | 0.211                               | 1                           |
| 5180-5240            | 28.80           | 4.42               | 27            | 0.229                               | 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                           |
| 5745-5825            | 28.74           | 7.09               | 27            | 0.418                               | 1                           |

Note:

2412 ~ 2462MHz: Directional gain = 4.27dBi

5180 ~ 5240MHz: Directional gain = 4.42dBi

5745 ~ 5825MHz: Directional gain = 7.09dBi

#### Conclusion:

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

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

CPD = Calculation power density

LPD = Limit of power density

$2.4G + 5G \text{ Band } 1 + 5G \text{ Band } 4 = 0.211 / 1 + 0.229 / 1 + 0.518 / 1 = 0.958$

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

---END---