

RF Exposure Report

Report No.: SABBQZ-WTW-P20120983

FCC ID: PY321100533

Test Model: WAX206

Received Date: Dec. 30, 2020

Test Date: Jan. 15 ~ May 21, 2021

Issued Date: May 27, 2021

**Applicant and
Manufacturer:** NETGEAR, Inc.

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



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Release Control Record

| Issue No. | Description | Date Issued |
|----------------------|------------------|--------------|
| SABBQZ-WTW-P20120983 | Original Release | May 27, 2021 |

1 Certificate of Conformity

Product: NETGEAR WiFi 6 AX3200 Dual Band Access Point

Brand: NETGEAR

Test Model: WAX206

Sample Status: Engineering Sample

Applicant: NETGEAR, Inc.


Test Date: Jan. 15 ~ May 21, 2021

Standards: FCC Part 2 (Section 2.1091)

References Test Guidance: KDB 447498 D01 General RF Exposure Guidance v06

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 : , **Date:** May 27, 2021
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Approved by : , **Date:** May 27, 2021
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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 26 cm 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 | 29.03 | 6.81 | 26 | 0.452 | 1 |
| 5180-5240 | 28.97 | 6.85 | 26 | 0.450 | 1 |
| 5745-5825 | 29.14 | 7.02 | 26 | 0.486 | 1 |
| Beamforming Mode | | | | | |
| 2412-2462 | 28.47 | 6.81 | 26 | 0.397 | 1 |
| 5180-5240 | 28.97 | 6.85 | 26 | 0.450 | 1 |
| 5745-5825 | 28.89 | 7.02 | 26 | 0.459 | 1 |

Note:

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

2412-2462MHz: Directional gain = 6.81 dBi

5180-5240MHz: Directional gain = 6.85 dBi

5745-5825MHz: Directional gain = 7.02 dBi

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

$$2.4G + 5G = 0.452 / 1 + 0.486 / 1 = 0.938$$

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

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