

RF Exposure Report

Report No.: SABBQZ-WTW-P21060951

FCC ID: PY321400546

Test Model: WAX630E, WAX620E

Received Date: May 05, 2021

Test Date: May 05 ~ Nov. 15, 2021

Issued Date: Nov. 29, 2021

Applicant and Manufacturer: 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



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Release Control Record

Issue No.	Description	Date Issued
SABBQZ-WTW-P21060951	Original release.	Nov. 29, 2021

1 Certificate of Conformity

Product: Insight Managed WiFi 6E AXE7800 Tri-band Multi-Gig Access Point,
Insight Managed WiFi 6E AXE5400 Tri-band Multi-Gig Access Point

Brand: NETGEAR

Test Model: WAX630E, WAX620E

Sample Status: Engineering Sample

Applicant: NETGEAR, INC

Test Date: May 05 ~ Nov. 15, 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 : Celine Chou , **Date:** Nov. 29, 2021
Celine Chou / Senior Specialist

Approved by : Jeremy Lin , **Date:** Nov. 29, 2021
Jeremy Lin / 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

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

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**.

3 Calculation Result of Maximum Conducted Power

TX Function	Frequency Band (MHz)	Max AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2TX	2412-2462	29.03	4.41	22	0.363	1.00
	5180-5240	27.04	4.42	22	0.230	1.00
	5260-5320	23.28	4.38	22	0.096	1.00
	5500-5720	23.26	4.17	22	0.091	1.00
	5745-5825	29.18	4.11	22	0.351	1.00
4TX	5180-5240	29.15	6.25	22	0.570	1.00
	5260-5320	23.24	6.26	22	0.147	1.00
	5500-5720	23.27	6.12	22	0.143	1.00
	5745-5825	29.19	6.06	22	0.551	1.00

TX Function	Frequency Band (MHz)	EIRP (dBm) (dBm)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2TX	5955-6415	25.93	22	0.064	1.00
	6435-6525	24.50	22	0.046	1.00
	6525-6875	24.51	22	0.046	1.00
	6875-7115	24.87	22	0.050	1.00

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2TX:

2412-2462MHz: Directional gain = 4.41dBi

5180-5240MHz: Directional gain = 4.42dBi

5260-5320MHz: Directional gain = 4.38dBi

5500-5720MHz: Directional gain = 4.17dBi

5745-5825MHz: Directional gain = 4.11dBi

4TX:

5180-5240MHz: Directional gain = 6.25dBi

5260-5320MHz: Directional gain = 6.26dBi

5500-5720MHz: Directional gain = 6.12dBi

5745-5825MHz: Directional gain = 6.06dBi

Conclusion:

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

For WAX630E

$$2.4\text{GHz} + 5\text{GHz} + 6\text{GHz} = 0.363 / 1 + 0.351 / 1 + 0.064 / 1 = 0.778 < 1$$

For WAX620E

$$2.4\text{GHz} + 5\text{GHz} + 6\text{GHz} = 0.363 / 1 + 0.570 / 1 + 0.064 / 1 = 0.997 < 1$$

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