

## RF Exposure Report

**Report No.:** MFBBQZ-WTW-P22040440

**FCC ID:** PY322100554

**Test Model:** WAX625

**Received Date:** Apr. 13, 2022

**Test Date:** May 07 ~ Jun. 27, 2022

**Issued Date:** Jul. 14, 2022

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

**Address:** 350 East Plumeria Drive, San Jose, CA 95134, USA

**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
MFBBQZ-WTW-P22040440	Original release	Jul. 14, 2022

## 1 Certificate of Conformity

**Product:** Insight Managed WiFi 6 AX5400 Access Point

**Brand:** NETGEAR

**Test Model:** WAX625

**Sample Status:** Engineering sample

**Applicant:** NETGEAR, INC.

**Test Date:** May 07 ~ Jun. 27, 2022

**FCC Rule Part:** FCC Part 2 (Section 2.1091)

**Standards:** 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 :** Pettie Chen , **Date:** Jul. 14, 2022  
Pettie Chen / Senior Specialist

**Approved by :** Jeremy Lin , **Date:** Jul. 14, 2022  
Jeremy Lin / Senior 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				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1500	...	...	f/1500	30
1500-100,000	...	...	1.0	30

f = Frequency in MHz; \*Plane-wave equivalent power density

### 2.2 MPE Calculation Formula

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

Pd = power density in mW/cm<sup>2</sup>

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 21cm 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 AV Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
CDD Mode					
2412-2462	29.39	2.49	21	0.278	1
5180-5240	29.14	2.87	21	0.287	1
5260-5320	23.52	2.98	21	0.081	1
5500-5720	23.84	2.95	21	0.086	1
5745-5825	29.33	2.89	21	0.301	1
Beamforming Mode					
2412-2462	28.85	3.27	21	0.294	1
5180-5240	29.14	6.02	21	0.592	1
5260-5320	23.52	6.11	21	0.166	1
5500-5720	23.84	6.15	21	0.180	1
5745-5825	29.33	6.20	21	0.645	1

Frequency Band (MHz)	EIRP (dBm)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
CDD Mode				
5845-5885	29.90	21	0.176	1
Beamforming Mode				
5845-5885	34.34	21	0.490	1

**Note:**

- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
- The detailed antenna information, please refer to the Operational Description-Antenna Specification report.

2412-2462MHz: Directional gain = 3.27dBi

5180-5240MHz: Directional gain = 6.02dBi

5260-5320MHz: Directional gain = 6.11dBi

5500-5720MHz: Directional gain = 6.15dBi

5745-5825MHz: Directional gain = 6.20dBi

**Conclusion:**

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

$$2.4G + 5GHz = 0.294 / 1 + 0.645 / 1 = 0.939$$

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

**---END---**