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^2)	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	($180/f^2$)*	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^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 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^2)	Limit (mW/cm^2)
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^2)	Limit (mW/cm^2)
CDD Mode				
5845-5885	29.90	21	0.176	1
Beamforming Mode				
5845-5885	34.34	21	0.490	1

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

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