RF Exposure Report

Report No.:	SABBQZ-WTW-P20080343
FCC ID:	PY320200498
Test Model:	WAX610Y
Received Date:	Aug. 19, 2020
Test Date:	Aug. 25 ~ Sep. 04, 2020
Issued Date:	Sep. 15, 2020
Applicant:	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

Testing Laboratory
2021

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SABBQZ-WTW-P20080343	Original release	Sep. 15, 2020

1 Certificate of Conformity

Product:	WiFi 6 AX1800 Outdoor Access Point WAX610Y
Brand:	NETGEAR
Test Model:	WAX610Y
Sample Status:	Engineering sample
Applicant:	NETGEAR INC.
Test Date:	Aug. 25 ~ Sep. 04, 2020
Standards:	FCC Part 2 (Section 2.1091) IEEE C95.3 -2002
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:** Sep. 15, 2020
Polly Chien / Specialist

Approved by : _____ , **Date:** Sep. 15, 2020
Bruce Chen / Senior 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

$Pd = (Pout*G) / (4*pi*r^2)$
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 22cm 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	29.05	5.11	22	0.428	1
5180-5240	16.60	5.30	22	0.025	1
5260-5320	23.39	5.28	22	0.121	1
5500-5720	23.48	5.92	22	0.143	1
5745-5825	29.41	5.81	22	0.547	1
Beamforming Mode					
2412-2462	29.05	5.11	22	0.428	1
5180-5240	15.63	5.30	22	0.020	1
5260-5320	23.39	5.28	22	0.121	1
5500-5720	23.48	5.92	22	0.143	1
5745-5825	29.38	5.81	22	0.543	1

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.

Conclusion:

WLAN 2.4GHz & WLAN 5GHz technology can transmit at same time, the formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

2.4G + 5G = 0.428 / 1 + 0.547 / 1 = 0.975

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

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