RF Exposure Report

Report No.:	SA170322E05
FCC ID:	PY317100371
Test Model:	ABC1000
Received Date:	Mar. 22, 2017
Test Date:	Apr. 04 to 07, 2017
Issued Date:	Apr. 13, 2017
Applicant:	NETGEAR, INC
Address:	350 East Plumeria Drive San Jose, CA 95134
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
SA170322E05	Original release.	Apr. 13, 2017

1 Certificate of Conformity

Product:	Alro Baby
Brand:	NETGEAR
Test Model:	ABC1000
Sample Status:	ENGINEERING SAMPLE
Applicant:	NETGEAR, INC
Test Date:	Apr. 04 to 07, 2017
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.1-1992

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 EMC characteristics under the conditions specified in this report.

Prepared by : Wendy Wu , **Date:** Apr. 13, 2017

Wendy Wu / Specialist

Approved by : , **Date:** Apr. 13, 2017

May Chen / Manager

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 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.4 Antenna Gain

Chain No.	Ant. Gain(dBi)	Frequency range (GHz)	Antenna Type	Connecter Type
Chain 0	2.64	2.4~2.4835	PIFA	NA
	5.61	5.15~5.25		
	4.92	5.25~5.35		
	4.83	5.47~5.725		
	5.38	5.725~5.85		
Chain 1	3.18	2.4~2.4835	Monopole	NA
	4.13	5.15~5.25		
	4.23	5.25~5.35		
	3.14	5.47~5.725		
	2.82	5.725~5.85		

2.5 Calculation Result Of Maximum Conducted Power

For WLAN:

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2412-2462	162.555	3.18	20	0.06726	1
5180-5240	75.162	5.61	20	0.05442	1
5745-5825	79.799	5.38	20	0.05479	1

For Bluetooth:

BT-EDR

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2402-2480	10.093	3.18	20	0.00418	1

BT-LE

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
2402-2480	2.118	3.18	20	0.00088	1

Conclusion:

The formula of calculated the MPE is:

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

CPD = Calculation power density

LPD = Limit of power density

WLAN 5GHz + Bluetooth = 0.05479 / 1 + 0.00418 / 1 = 0.05897

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

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