

# **RF Exposure Report**

**Report No.:** SA150925E07

FCC ID: PY315200316

Test Model: VMC3040

Received Date: Sep. 25, 2015

Test Date: Oct. 23, 2015

**Issued Date:** Nov. 02, 2015

**Applicant:** NETGEAR, Inc.

Address: 350 East Plumeria Drive San Jose, CA 95134

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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### **Release Control Record**

Issue No.	Description	Date Issued
SA150925E07	Original release.	Nov. 02, 2015



#### 1 Certificate of Conformity

Product: Arlo Q

**Brand: NETGEAR** 

Test Model: VMC3040

Sample Status: ENGINEERING SAMPLE

**Applicant:** NETGEAR, Inc.

**Test Date:** Oct. 23, 2015

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D03

**IEEE C95.1** 

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 :	TM	, Date:	Nov. 02, 2015	
***	Elsie Hsu / Specialist	7,594		
Approved by :	mn	, Date:	Nov. 02, 2015	
	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 <sup>2</sup> )	Average Time (minutes)				
	Limits For General Population / Uncontrolled Exposure							
300-1500 F/1500								
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<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 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

#### 2.4 Antenna Gain

The antennas provided to the EUT, please refer to the following table:

Antenna No.	Transmitter Circuit	Brand	Model	Antenna Gain (dBi) including cable loss	Antenna Type	Connecter Type	Frequency range (GHz to GHz)
	Chain (0)	Netgear	NA	0.91	PIFA	i-pex(MHF)	2.4~2.4835
				1.83			5.15~5.25
1				1.91			5.25~5.35
				1.29			5.47~5.725
				2.12			5.725~5.85
		hain (1) Netgear	NA	1.01	Monopole	i-pex(MHF)	2.4~2.4835
				1.12			5.15~5.25
2	Chain (1)			1.91			5.25~5.35
				2.18			5.47~5.725
				2.27			5.725~5.85



#### 3 Calculation Result Of Maximum Conducted Power

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm²)
2412-2462	562.159	3.97	20	0.27899	1
5180-5240	200.775	4.49	20	0.11232	1
5260-5320	196.592	4.92	20	0.03025	1
5500-5700	192.896	4.76	20	0.11483	1
5745-5825	182.872	5.21	20	0.12075	1

#### Note:

1. For 2412-2462MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 3.97dBi$ 

2. For 5150~5250MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 4.49dBi$ 

3. For 5250~5350MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 4.92dBi$ 

4. For 5470~5725MHz: Directional gain =  $10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 4.76dBi$ 

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