

# **RF Exposure Report**

Report No.: SA160819E01C

FCC ID: COF-WMBNBM26A

Test Model: WM-BN-BM-26 A

Series Model: WM-BN-BM-26 A FF2

Received Date: Oct. 26, 2017

Test Date: Nov. 06 to 08, 2017

Issued Date: Nov. 17, 2017

Applicant: UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD.

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

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Reference No,:171026E01



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### **Release Control Record**

Issue No.	Description	Date Issued
SA160819E01C	Original release.	Nov. 17, 2017

Report No.: SA160819E01C Reference No,:171026E01



#### 1 Certificate of Conformity

**Product:** 802.11b/g/n + BT Wireless LAN Module

Brand: USI

Test Model: WM-BN-BM-26 A

Series Model: WM-BN-BM-26\_A\_FF2

Sample Status: ENGINEERING SAMPLE

Applicant: UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD.

Test Date: Nov. 06 to 08, 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 : \_\_\_\_\_\_, Date: \_\_\_\_\_\_, Nov. 17, 2017

May Chen / Manager



#### 2 RF Exposure

## 2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range Electric Field Magnetic Field (MHz) Strength (V/m) Strength (A/m)		Power Density (mW/cm <sup>2</sup> )	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<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

Brand	Model	Antenna Net Gain(dBi)	Frequency range (GHz to GHz)	Antenna Type	Connecter Type
YAGEO	ANT3216LL11R2400A	3.68	2.4~2.4835	Chip	NA



# 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 <sup>2</sup> )	Limit (mW/cm²)
2412-2462	271.644	3.68	20	0.12610	1

#### For BT-EDR:

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm²)
2402-2480	3.565	3.68	20	0.00165	1

### For BT-LE:

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
2402-2480	3.273	3.68	20	0.00152	1

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