

## RF Exposure Report

**Report No.:** SA160819E01G

**FCC ID:** COF-WMBNBM26A

**Test Model:** WM-BN-BM-26\_A\_FF4

**Series Model:** WM-BN-BM-26\_A, WM-BN-BM-26\_A\_FF2, WM-BN-BM-26\_A\_FF3

**Received Date:** Aug. 26, 2019

**Test Date:** Sep. 11, 2019

**Issued Date:** Sep. 23, 2019

**Applicant:** UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD.

**Address:** 141, Lane 351, Sec. 1, Taiping Road., Tsautuen, Nantou 54261, Taiwan

**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.

**Test Location :** E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,  
Taiwan.

**FCC Registration /  
Designation Number:** 723255 / TW2022

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### Release Control Record

Issue No.	Description	Date Issued
SA160819E01G	Original release.	Sep. 23, 2019

## 1 Certificate of Conformity

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

**Brand:** USI

**Test Model:** WM-BN-BM-26\_A\_FF4

**Series Model:** WM-BN-BM-26\_A, WM-BN-BM-26\_A\_FF2, WM-BN-BM-26\_A\_FF3

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD.

**Test Date:** Sep. 11, 2019

**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:**

Sep. 23, 2019

Wendy Wu / Specialist

**Approved by :**



**Date:**

Sep. 23, 2019

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	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	Connector 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/cm <sup>2</sup> )
2412-2462	283.792	3.68	20	0.13174	1

For BT-EDR:

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	5.534	3.68	20	0.00257	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	5.284	3.68	20	0.00245	1

### NOTE:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. The Max. Power = Max. tune up power including tolerance.

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