

RF Exposure Report

Report No.: SA160819E01H

FCC ID: COF-WMBNBM26A

Test Model: WM-BN-BM-26_A_FF5

Series Model: WM-BN-BM-26_A, WM-BN-BM-26_A_FF2, WM-BN-BM-26_A_FF3,
WM-BN-BM-26_A_FF4

Received Date: Nov. 21, 2019

Test Date: Nov. 30, 2019

Issued Date: Dec. 20, 2019

Applicant: UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD.

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

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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 |
|--------------|-------------------|---------------|
| SA160819E01H | Original release. | Dec. 20, 2019 |

1 Certificate of Conformity

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

Brand: USI

Test Model: WM-BN-BM-26_A_FF5

Series Model: WM-BN-BM-26_A, WM-BN-BM-26_A_FF2, WM-BN-BM-26_A_FF3,
WM-BN-BM-26_A_FF4

Sample Status: ENGINEERING SAMPLE

Applicant: UNIVERSAL GLOBAL SCIENTIFIC INDUSTRIAL CO., LTD.

Test Date: Nov. 30, 2019

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

IEEE C95.3 -2002

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 : Phoenix Huang , **Date:** Dec. 20, 2019
Phoenix Huang / Specialist

Approved by : Clark Lin , **Date:** Dec. 20, 2019
Clark Lin / Technical 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 | | | | |
| 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/cm²

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 20 cm 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

| Operation Mode | Evaluation Frequency (MHz) | Max Power (mW) | Antenna Gain (dBi) | Distance (cm) | Power Density (mW/cm ²) | Limit (mW/cm ²) |
|----------------|----------------------------|----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| WLAN | 2437 | 281.19 | 3.68 | 20 | 0.13054 | 1 |
| BT-EDR | 2441 | 5.495 | 3.68 | 20 | 0.00255 | 1 |
| BT-LE | 2480 | 4.92 | 3.68 | 20 | 0.00228 | 1 |

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. WLAN and BT technology cannot transmit at the same time.
3. The Max. Power = Max. tune up power including tolerance.

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