

RF Exposure Report

Report No.: SA190527E01

FCC ID: TLZ-CM382

Test Model: AW-CM382

Received Date: May 27, 2019

Test Date: June 11, 2019

Issued Date: July 10, 2019

Applicant: AzureWave Technologies, Inc.

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

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Taiwan R.O.C.

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
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**FCC Registration /
Designation Number:** 723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
SA190527E01	Original release.	July 10, 2019

1 Certificate of Conformity

Product: IEEE 802.11 a/b/g/n/ac MAC/baseband/radio and Bluetooth 5.0 Module

Brand: AzureWave

Test Model: AW-CM382

Sample Status: ENGINEERING SAMPLE

Applicant: AzureWave Technologies, Inc.

Test Date: June 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 : Wendy Wu , **Date:** July 10, 2019
Wendy Wu / Specialist

Approved by : May Chen , **Date:** July 10, 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 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

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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

Ant. Set	Transmitter Circuit	Antenna Gain (dBi)	Frequency range (GHz ~ GHz)	Antenna Type	Connector Type
1	Chain 0 (Main)	1	2.4~2.4835	PIFA	None
		6	5.15~5.85		
	Chain 1 (Aux)	1	2.4~2.4835	PIFA	None
		6	5.15~5.85		

Note: For Bluetooth will fix transmission on Chain 0.

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 2.4GHz	2437	301.301	1	20	0.07546	1
WLAN U-NII-1	5230	77.625	6	20	0.06148	1
WLAN U-NII-2A	5270	82.035	6	20	0.06497	1
WLAN U-NII-2C	5550	76.384	6	20	0.06050	1
WLAN U-NII-3	5755	81.846	6	20	0.06482	1
Bluetooth (BT-EDR)	2441	9.75	1	20	0.00244	1
Bluetooth (BT-LE)	2440	8.035	1	20	0.00201	1

NOTE:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

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