

RF Exposure Report

Report No.: SA190902E13

FCC ID: TLZ-CM358SM

Test Model: AW-CM358SM

Received Date: Sep. 02, 2019

Test Date: Sep. 12 to Oct. 07, 2019

Issued Date: Jan. 13, 2020

Applicant: AzureWave Technologies, Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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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
SA190902E13	Original release.	Jan. 13, 2020

1 Certificate of Conformity

Product: IEEE 802.11a/b/g/n/ac WLAN with Bluetooth 5 Combo Stamp Module

Brand: AzureWave

Test Model: AW-CM358SM

Sample Status: ENGINEERING SAMPLE

Applicant: AzureWave Technologies, Inc.

Test Date: Sep. 12 to Oct. 07, 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.

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Joyce Kuo / Specialist

Approved by : Clark Lin , **Date:** Jan. 13, 2020
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				
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

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

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

Antenna No.	Brand	Model	Ant. Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type
1	NA	NA	2.98	2.4~2.4835	PIFA	i-pex(MHF)
			5.16	5.15~5.85		

2.5 Calculation Result of Maximum Conducted Power

Operation Mode	Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
WLAN 2.4GHz	2437	553.35	2.98	20	0.21864	1
WLAN U-NII-1	5200	135.519	5.16	20	0.08846	1
WLAN U-NII-2A	5300	122.744	5.16	20	0.08012	1
WLAN U-NII-2C	5690	100.313	5.16	20	0.06548	1
WLAN U-NII-3	5785	136.458	5.16	20	0.08907	1
Bluetooth (BT-EDR)	2402	23.714	2.98	20	0.00937	1
Bluetooth (BT-LE)	2402	23.768	2.98	20	0.00939	1

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. WLAN and Bluetooth technology can't transmit simultaneously.

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