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.
Address:	8F., No.94, Baozhong Rd. , Xindian Dist., New Taipei City , Taiwan 231
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
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.

Prepared by : _____ , **Date:** Jan. 13, 2020

Joyce Kuo / Specialist

Approved by : _____ , **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

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

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

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	516	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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