- AzureWave Technologies, Inc. – 8F., No. 94, Baozhong Rd., Xindian Dist., New Taipei City Taiwan 231

Federal Communications Commission Authorization and Evaluation Division Equipment Authorization Branch 7435 Oakland Mills Road Columbia, MD 21046

Applicant's declaration concerning RF Radiation Exposure

We hereby indicate that the product

Product description: IEEE 802.11a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 4.2 Combo

Module (M.2 1216)

Model No: AW-CM308NF / AW-CM308HA

The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The integral antennas used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter within the host device.

A safety statement concerning minimum separation distances from enclosure of the Product: IEEE 802.11a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 4.2 Combo Module (M.2 1216)

will be integrated in the user's manual to provide end-users with transmitter operating conditions for satisfying RF exposure compliance.

The appropriate information can be drawn from the test report no: W6M21706-17141-C-1, W6M21706-17141-C-7 and the accompanying calculations.

Company: AzureWave Technologies, Inc.

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

Taiwan 231

Date: 2017/06/30

Signature '

Worldwide Testing Services (Taiwan) Co., Ltd.

For 2.4 GHz

Registration number: W6M21706-17141-C-1

FCC ID: TLZ-CM308NF

3.2 RF Exposure Compliance Requirements

FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a "worst case" or conservative prediction.

$$S = \frac{PG}{4 \pi R^2}$$

S – Power Density

P – Output power ERP

R – Distance

D – Cable Loss

AG – Antenna Gain

Item	Unit	Value	Remarks
P	mW	72.45	Peak value
D	dB		
AG	dBi	5.99	
G		3.972	Calculated Value
R	cm	20	Assumed value
S	mW/cm ²	0.057	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure		
Frequency (MHz)	Power Density (mW/cm ²)	
1500 – 100.000	1.0	



For 5 GHz

Registration number: W6M21706-17141-C-54

FCC ID: TLZ-CM308NF

3.9 Equivalent isotropic radiated power, FCC 15.407 (f)

FCC Rule: 15.407(b)(3)

Band 1

Test exclusion = max. conducted output power + adjusted for tune-up tolerance

Test exclusion = 17.97dBm

Band 2

Test exclusion = max. conducted output power + adjusted for tune-up tolerance Test exclusion = 19.22 dBm

Band 3

Test exclusion = max. conducted output power + adjusted for tune-up tolerance Test exclusion = 20.4 dBm

Band 4

Test exclusion = max. conducted output power + adjusted for tune-up tolerance Test exclusion = 19.77 dBm

Test equipment used: ETSTW-RE 055

3.10 RF Exposure Compliance Requirements

ystems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.25 m normally can be maintained between the user and the device. FCC OET Bulletin 65 Edition 97.01 determines the equations for predicting RF fields and applicable limits.

The prediction for power density in the far-field but will over-predict power density in the near field, where it could be used for walking a "worst case" or conservative prediction.

$$S = \frac{PG}{4 \pi R^2}$$

S – Power Density

P – Output power ERP

R – Distance

D - Cable Loss

AG – Antenna Gain

Band 1

Item	Unit	Value	Remarks
P	mW	62.6614	Peak value
D	dB		
AG	dBi	8.17	
G		6.56	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.0818	Calculated value



Worldwide Testing Services(Taiwan) Co., Ltd.

Registration number: W6M21706-17141-C-54

FCC ID: TLZ-CM308NF

Band 2

Item	Unit	Value	Remarks
P	$m\overline{\mathrm{W}}$	83.5603	Peak value
D	dB		
AG	dBi	8.17	
G		6.56	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.1091	Calculated value

Band 3

Item	Unit	Value	Remarks
P	mW	109.6478	Peak value
D	dB		
AG	dBi	8.17	
G		6.56	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.1431	Calculated value

Band 4

Item	Unit	Value	Remarks
P	mW	94.8418	Peak value
D	dB		
AG	dBi	8.17	
G		6.56	Calculated Value
R	cm	20	Assumed value
S	mW/cm2	0.1238	Calculated value

Limits:

Limit for General Population / Uncontrolled Exposure		
Frequency (MHz)	Power Density (mW/cm ²)	
1500 – 100.000	1.0	

3.11 Transmit Power Control (TPC)

Transmit power control (TPC). U-NII devices operating in the 5.25-5.35 GHz band and the 5.47-5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

Explanation: Max put power of the EUT is less than 500 mW (27dBm) so this test item is not required.