RF Exposure Report

Report No.:	SA171215C04G
FCC ID:	YZKECWO5211L
Test Model:	ECWO5213-L
Received Date:	Sep. 27, 2018
Test Date:	Oct. 12 ~ Oct. 27, 2018
Issued Date:	Nov. 09, 2018
Applicant:	Edgecore Networks Corporation
Address:	No.1, Creation 3rd Rd., Hsinchu Science Park, East Dist., Hsinchu City 30077, Taiwan, R.O.C.
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)
FCC Registration / Designation Number:	788550 / TW0003

Testing Laboratory
2021

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SA171215C04G	Original release.	Nov. 09, 2018

1 Certificate of Conformity

Product:	CONCURRENT DUAL-BAND 11AC WAVE 2 AP
Brand:	Edgecore
Test Model:	ECWO5213-L
Sample Status:	Engineering sample
Applicant:	Edgecore Networks Corporation
Test Date:	Oct. 12 ~ Oct. 27, 2018
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 RF characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Nov. 09, 2018

Suntee Liu / Specialist

Approved by : _____ , **Date:** Nov. 09, 2018

Bruce Chen / Project Engineer

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/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 31cm away from the body of the user. So, this device is classified as Mobile Device.

3 Calculation Result of Maximum Conducted Power

For WLAN

Frequency Band (MHz)	Mode	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
WLAN 2412~2462	-	21.71	14.41	31	**0.339**	1
WLAN 5180~5240	Master	22.93	13.51	31	0.365	1
	Client	19.14	13.51	31	0.152	1
WLAN 5720~5825	-	25.42	13.51	31	**0.647**	1

Note:
2412~2462MHz Max. Gain = 11.4dBi + 10log(2) = 14.41 dBi
5180~5825MHz Max. Gain = 10.5dBi + 10log(2) = 13.51dBi

For BT-LE (FCC ID: RC6-M2-TBT)

Frequency Band (MHz)	Mode	Max Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
BT LE 2402~2480	-	1.059	3.88	31	**0.0003**	1

Conclusion:
The formula of calculated the MPE is:
CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1
CPD = Calculation power density
LPD = Limit of power density

Worst case: WLAN 2.4GHz + WLAN 5GHz + BT = 0.339/1 + 0.647/1 + 0.0003/1 = 0.9863 < 1

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