

Report No.: SA180927E05

FCC ID: W59XWC2000

Test Model: XWC-2000

Received Date: Nov. 06, 2018

Test Date: Jan. 30, 2019

Issued Date: Mar.13, 2019

Applicant: Luxul Wireless

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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**FCC Registration /
Designation Number:** 723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
SA180927E05	Original release.	Mar.13, 2019

1 Certificate of Conformity

Product: Wireless Controller

Brand: Luxul

Test Model: XWC-2000

Sample Status: ENGINEERING SAMPLE

Applicant: Luxul Wireless

Test Date: Jan. 30, 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 : Phoenix Huang , **Date:** Mar.13, 2019
Phoenix Huang / Specialist

Approved by : May Chen , **Date:** Mar.13, 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

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

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

Ant. No.	Brand	Model	Antenna Gain (dBi)	Frequency range (MHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Walsin Technology Coporation	RFPCA302207IMAB301	1.51	2400~2500	PCB	i-pex(MHF)	70
2	Alpha	1WC2000ANTA1G	0.93	2400~2500	PCB	i-pex(MHF)	70

Note: Max. gain was selected for the final test.

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)
BT-EDR	2480	7.43	1.51	20	0.00209	1
BT-LE	2480	7.311	1.51	20	0.00206	1

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