

**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  
Hsin Chu Laboratory

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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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## Table of Contents

<b>Release Control Record</b> .....	<b>3</b>
<b>1 Certificate of Conformity</b> .....	<b>4</b>
<b>2 RF Exposure</b> .....	<b>5</b>
2.1 Limits for Maximum Permissible Exposure (MPE) .....	5
2.2 MPE Calculation Formula .....	5
2.3 Classification .....	5
2.4 Antenna Gain .....	5
2.5 Calculation Result of Maximum Conducted Power .....	6

### 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 <sup>2</sup> )	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 <sup>2</sup> )*	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<sup>2</sup>

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

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 <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
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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