

■ **Report No.:** DDT-R19052410-2E3

■Issued Date: Jun. 24, 2019

# RF EXPOSURE REPORT

### **FOR**

Applicant	:	Rockford Corporation
Address	:	600 S. Rockford Drive Tempe AZ, 85281 U.S.A
Equipment under Test	••	BLE Mesh RGB Controller
Model No. ONG		M30-S ESTING
Trade Mark		N/A
FCC ID	•	2AA7SM30SCXZJ
Manufacturer	F	Rayrun Technology Co., Ltd.
Address	-	3Floor East, G building, XingHui Industry Park, HuaNing W Road, Dalang, Longhua District, ShenZhen, Guangdong, China

## Issued By: Dongguan Dongdian Testing Service Co., Ltd.

**Add:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

**Tel:** +86-0769-38826678, **E-mail:** ddt@dgddt.com, http://www.dgddt.com



## **TABLE OF CONTENTS**

	Test report declares	3
1.	General information	5
1.1.	Description of Equipment	5
1.2.	Assess laboratory	5
2.	RF Exposure evaluation for FCC	5

### **TEST REPORT DECLARE**

Applicant	:	Rockford Corporation	
Address	: 600 S. Rockford Drive Tempe AZ, 85281 U.S.A		
Equipment under Test	:	BLE Mesh RGB Controller	
Model No.	:	M30-S	
Trade mark	:	N/A	
Manufacturer	:	Rayrun Technology Co., Ltd.	
Address	:	3Floor East, G building, XingHui Industry Park, HuaNing W Road, Dalang, Longhua District, ShenZhen, Guangdong, China	

Standard Used: KDB447498 D01 General RF Exposure Guidance v06

#### We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No:	DDT-R19052410-2E3		
Date of Receipt:	Jun. 11, 2019	Date of Test:	Jun. 11, 2019~ Jun. 24, 2019

Prepared By:

Ella Gong/Engineer

Ella Gong

Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

# **Revision history**

Rev.	Revisions	Issue Date	Revised By
	Initial issue	Jun. 24, 2019	

### 1. General information

### 1.1. Description of Equipment

EUT* Name	:	BLE Mesh RGB Controller
Model Number	:	M30-S
EUT function description	:	Please reference user manual of this device
Power supply	:	DC 12V
Radio Specification	:	Bluetooth V4.0
Operation frequency	:	2402MHz-2480MHz
Modulation	:	GFSK
Data rate	:	1Mbps
Antenna Type	:	Integrated antenna, maximum PK gain: 3 dBi
Sample Type	:	Series production

### 1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City,

Guangdong Province, China, 523808

Tel: +86-0769-38826678, http://www.dgddt.com, Email: ddt@dgddt.com

## 2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

 $\hbox{[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,}\\$ 

mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR, where:

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

Worse case is as below: [2480 MHz, 3.37 dBm 2.17 mW) output power]

 $(2.17/5) \cdot [\sqrt{2.402}(GHz)] = 0.683 < 3.0 \text{ for } 1-g \text{ SAR}$ 

Then SAR evaluation is not required

#### **END OF REPORT**