

# TEST REPORT

**Product Name** : LED Battery Light  
**Model Number** : B.Flex, B.Flex mini  
**FCC ID** : 2A2LS-BFLEX

Prepared for : ROXX GmbH  
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Report Number : EDG2207290022E03002R  
Date(s) of Tests : August 10, 2022 to December 14, 2022  
Date of issue : December 14, 2022

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## 1. TEST RESULT CERTIFICATION

Applicant : ROXX GmbH  
 Address : Hansestrasse No. 91 | 51149 Cologne | Germany  
 Manufacturer : ROXX GmbH  
 Address : Hansestrasse No. 91 | 51149 Cologne | Germany  
 EUT : LED Battery Light  
 Model Name : B.Flex, B.Flex mini  
 Trademark : **ROXX**®

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
§ 15.247(i), § 2.1093	PASS

The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC § 15.247(i), § 2.1093.

The test results of this report relate only to the tested sample identified in this report

Date of Test : August 10, 2022 to December 14, 2022

Prepared by : 

Xia Yang /Editor

Reviewer : 

Tim Dong/ Supervisor

Approve & Authorized Signer :  

Sam Lv / Manager

## Modified History

Version	Report No.	Revision Date	Summary
	EDG2207290022E03002R	/	Original Report



## 2. EUT Specification

Characteristics	Description
<b>Product:</b>	LED Battery Light
<b>Model Number:</b>	B.Flex, B.Flex mini All products are the same, only the model number and color of appearance are different Here we selected B.Flex for all the test
<b>Sample:</b>	1#
<b>Device Type:</b>	Bluetooth V5.0
<b>Data Rate:</b>	1Mbps for GFSK modulation
<b>Modulation:</b>	GFSK
<b>Operating Frequency Range(s) :</b>	2402-2480MHz
<b>Number of Channels:</b>	40 Channels
<b>Transmit Power Max:</b>	1.45 dBm(0.001396 W)
<b>Antenna Gain:</b>	-2.33 dBi
<b>Power supply:</b>	Adaptor: AC 100-240V~50/60Hz Battery: DC 25.2V
<b>Evaluation applied:</b>	<input type="checkbox"/> MPE Evaluation <input checked="" type="checkbox"/> SAR Evaluation

### 3. Test Requirement:

## RF EXPOSURE EVALUATION

According to §15.247(i) and §1.1307(b)(1), systems 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 level in excess of the Commission's guidelines.

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

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR,<sup>24</sup> where

- $f_{(\text{GHz})}$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation<sup>25</sup>
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum *test separation distance* is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is  $< 5$  mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval. One antenna is available for the EUT. The minimum separation distance is 5mm.

## 4. Measurement Result

Antenna gain:-2.33 dBi

BLE\_1M

Transmit Frequency(MHz)	Mode	Measured Power (dBm)	Tune upPower (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2402	GFSK	1.45	1±1	2	0.4912658	3
2441	GFSK	1.34	1±1	2	0.4951365	3
2480	GFSK	0.62	0±1	1	0.3965115	3

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

\*\*\* End of Report \*\*\*