

# TEST REPORT

**Applicant:** Jiangsu Niu Electric Technology Co., Ltd  
**Address:** No.387 Changting Road West Taihu Science and Technology Industrial Park Changzhou City, Jiangsu, 213100 China  
**Equipment Type:** NIU KICK SCOOTER  
**Model Name:** KQi3 Max  
**Brand Name:** NIU  
**FCC ID:** 2AZ6G-K3MC22K  
**Test Standard:** 47 CFR Part 2.1093  
KDB 447498 D01 v06  
**Test Date:** Mar. 17, 2022- Mar. 23, 2022  
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**ISSUED BY:**

Shenzhen BALUN Technology Co., Ltd.

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### Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Apr. 08, 2022</u>	<u>Initial Issue</u>
<u>Rev. 02</u>	<u>May. 24, 2022</u>	<u>Update Section 2.4, Section 2.6, Section 3.1, Section 4 and Section 5</u>

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# 1 GENERAL INFORMATION

## 1.1 Identification of the Testing Laboratory

Company Name	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, GuangDong Province, China
Phone Number	+86 755 6685 0100

## 1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, GuangDong Province, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.
Description	All measurement facilities used to collect the measurement data are located at Block B, 1/F, Baisha Science and Technology Park, Shahe West Road, Nanshan District, ShenZhen, GuangDong Province, China

## 2 PRODUCT INFORMATION

### 2.1 Applicant Information

Applicant	Jiangsu Niu Electric Technology Co., Ltd
Address	No.387 Changting Road West Taihu Science and Technology Industrial Park Changzhou City, Jiangsu, 213100 China

### 2.2 Manufacturer Information

Manufacturer	Jiangsu Niu Electric Technology Co., Ltd
Address	No.387 Changting Road West Taihu Science and Technology Industrial Park Changzhou City, Jiangsu, 213100 China

### 2.3 Factory Information

Factory	Changzhou Niu Electric Technology Co., Ltd.
Address	No.5 Lingxiang Road, West Taihu Science and Technology Industrial Park, Wujin, Changzhou, Jiangsu Province, China

### 2.4 General Description for Equipment under Test (EUT)

EUT Name	NIU KICK SCOOTER
Model Name Under Test	KQi3 Max
Series Model Name	K3T331B3A11
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A
CAB ID	CN0030

### 2.5 Ancillary Equipment

Ancillary Equipment 1	Battery	
	Brand Name	N/A
	Model No.	NIU-48M13A0
	Serial No.	N/A
	Capacitance	13000mAh
	Rated Voltage	46.8 V
	Limit Charge Voltage	54.6 V

## 2.6 Technical Information

Network and Wireless connectivity	Bluetooth (BLE)
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	Bluetooth	
Frequency Range	Bluetooth	2400 ~ 2483.5 MHz
Antenna Type	Bluetooth	Meander IFA
Exposure Category	General Population/Uncontrolled Exposure	
EUT Stage	Portable Device	

### 3 SUMMARY OF TEST RESULT

#### 3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	KDB 447498 D01 v06	KDB 447498 General RF Exposure Guidance D01 v06

## 4 DEVICE CATEGORY AND LEVELS LIMITS

### Portable Derives:

CFR Title 47 §2.1093(b)

(b) For purposes of this section, a portable device is defined as a transmitting device designed to be used so that the radiating structure(s) of the device is/are within 20 centimeters of the body of the user.

### FCC KDB 447498 D01 General RF Exposure Guidance v06 Limit

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.

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:

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

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

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 is applied to determine SAR test exclusion.

## 5 ASSESSMENT RESULT

### 5.1 Output Power

Bluetooth			
Mode	GFSK (BLE)		
	Low Channel	Middle Channel	High Channel
Peak Power (dBm)	-3.632	-3.601	<b>-3.482</b>
Note: This report listed the worst case peak power value, please refer to RF test report for more details.			

### 5.2 Turn-up power

Mode	Conducted Power Range (dBm)
Bluetooth	-4~-3

### 5.3 RF Exposure Evaluation Result

Mode	Tune-up power (dBm)	Distance (mm)	Calculation Frequency (MHz)	Calculation Results	Threshold Value	Verdict
Bluetooth	-3	5	2480	0.16	3.0	Compliance

### 5.4 Conclusion

This EUT is deemed to comply with the reference level limits, therefore the basic restrictions are compliant with human exposure limits.



## Statement

1. The laboratory guarantees the scientificity, accuracy and impartiality of the test, and is responsible for all the information in the report, except the information provided by the customer. The customer is responsible for the impact of the information provided on the validity of the results.
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--END OF REPORT--