

RF EXPOSURE REPORT



Report No.: 16021089-FCC-H1

Supersede Report No.: N/A

Applicant	Nanjing Kuailun Intelligent Technology Co. Ltd	
Product Name	Electric Scooter	
Main Model No.	F0	
Serial Model No.	F0-0210-RD; F0-0210-BL; F0-0210-BK; F0-0210-WH; F0-0160-RD; F0-0160-BL; F0-0160-BK; F0-0160-WH; S1	
Test Standard	FCC 2.1093	
Test Date	August 24 to August 31, 2016	
Issue Date	August 31, 2016	
Test Result	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
Equipment complied with the specification	<input checked="" type="checkbox"/>	
Equipment did not comply with the specification	<input type="checkbox"/>	
<i>Amos Xia</i>	<i>Miro Bao</i>	
Amos Xia Test Engineer	Miro Bao Checked By	
This test report may be reproduced in full only Test result presented in this test report is applicable to the tested sample only		

Issued by:

SIEMIC (Nanjing-China) Laboratories

2-1 Longcang Avenue Yuhua Economic and

Technology Development Park, Nanjing, China

Tel: +86(25)86730128/86730129 Fax: +86(25)86730127 Email: China@siemic.com.cn

Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety

Test Report No.	16021089-FCC-H1
Page	3 of 8

This page has been left blank intentionally.

CONTENTS

1	REPORT REVISION HISTORY.....	5
2	CUSTOMER INFORMATION	5
3	TEST SITE INFORMATION.....	5
4	EQUIPMENT UNDER TEST (EUT) INFORMATION	6
5	FCC §2.1093 - RF EXPOSURE	7

1 Report Revision History

Report No.	Report Version	Description	Issue Date
16021089-FCC-H1	NONE	Original	August 31, 2016

2 Customer information

Applicant Name	Nanjing Kuailun Intelligent Technology Co. Ltd
Applicant Add	15 Floor,Block B,Xingzhi science and technology Park,Economic Development Zone,Nanjing City,China
Manufacturer	Nanjing Kuailun Intelligent Technology Co. Ltd
Manufacturer Add	15 Floor,Block B,Xingzhi science and technology Park,Economic Development Zone,Nanjing City,China

3 Test site information

Lab performing tests	SIEMIC (Nanjing-China) Laboratories
Lab Address	2-1 Longcang Avenue Yuhua Economic and Technology Development Park, Nanjing, China
FCC Test Site No.	986914
IC Test Site No.	4842B-1
Test Software	EZ_EMG

4 Equipment under Test (EUT) Information

Description of EUT:	Electric Scooter
Main Model:	F0
Serial Model:	F0-0210-RD; F0-0210-BL; F0-0210-BK; F0-0210-WH; F0-0160-RD; F0-0160-BL; F0-0160-BK; F0-0160-WH; S1
Date EUT received:	August 17, 2016
Test Date(s):	August 24 to August 31, 2016
Max Output power	-3.882 dBm
Antenna Gain:	2dBi
Type of Modulation:	BLE: GFSK
RF Operating Frequency (ies):	BLE: 2402-2480 MHz
Number of Channels:	BLE: 40CH
Port:	Power Port, USB Port
Input Power:	Adapter: Model: HLT-180-4201500 Input: AC 100-240V~50/60Hz;2A MAX Output: DC 42V,1.5A Battery: Model: LG MF1 Spec: 36/4.4Ah
Trade Name :	N/A
FCC ID:	2AJIEF0

Note: the difference between these models please refer to DECLARATION OF SIMILARITY in this report.

5 FCC §2.1093 - RF Exposure

Standard Requirement:

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* ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}^{16} \text{ where}$$

- $f_{\text{(GHz)}}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum *test separation distance* is ≤ 5 mm, a distance of 5mm 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.

Test Result:

Type	Test mode	CH	Freq (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)
Output power	GFSK	Low	2402	-3.882	-4.5±1
		Mid	2440	-4.341	
		High	2480	-4.827	

One antenna is available for the EUT (BLE antenna).

GFSK Mode

The maximum peak output power (turn-up power) in low channel of BLE is -3.5 dBm=0.45mW

The calculation results= $0.45/5 \cdot \sqrt{2.402} = 0.14 < 3$

The maximum peak output power (turn-up power) in middle channel of BLE is -3.5 dBm=0.45mW

The calculation results= $0.45/5 \cdot \sqrt{2.440} = 0.14 < 3$

The maximum peak output power (turn-up power) in high channel of BLE is -3.5 dBm=0.45mW

The calculation results= $0.45/5 \cdot \sqrt{2.480} = 0.14 < 3$

Test Result: Pass

DECLARATION OF SIMILARITY

Nanjing Kuailun Intelligent Technology Co. Ltd

To: SIEMIC INC.

Declaration letter

Dear Sir,

For our business issue and marketing requirement, we would like to list different models numbers on the FCC certificates and reports, as following:

Model No.: F0

S1
F0-0160-RD
F0-0160-WH
F0-0160-BL
F0-0160-BK
F0-0210-RD
F0-0210-WH
F0-0210-BL
F0-0210-BK

The difference between the four models F0-0160-RD and F0-0160-WH and F0-0160-BL and F0-0160-BK are as follows:

The Serial Model Name: Different color only, like all the other.

The difference between the four models F0-0210-RD and F0-0210-WH and F0-0210-BL and F0-0210-BK are as follows:

The Serial Model Name: Different color only, like all the other.

The difference between models F0-0160-RD F0-0160-WH F0-0160-BL F0-0160-BK and F0-0210-RD F0-0210-WH F0-0210-BL F0-0210-BK are as follows:

The Serial Model Name: Different battery capacity only, like all the other.

Thank you!

FCC ID: 2AJIEF0

Signature:

Printed name/title: zhiJin / IP Engineer

Address: 15 Floor, Block B, Xingzhi science and technology Park, Economic Development Zone,
Nanjing, China