

# RF Exposure Evaluation

## FCC ID: 2AHHF-JL651S

### 1. Client Information

<b>Applicant</b>	: Shenzhen JILU Smart Technology CO.,LTD.
<b>Address</b>	: 10th Floor, Building 3, Hanhaida Industrial Park, Gongming Town, Guangming New District, Shenzhen, China
<b>Manufacturer</b>	: Shenzhen JILU Smart Technology CO.,LTD.
<b>Address</b>	: 10th Floor, Building 3, Hanhaida Industrial Park, Gongming Town, Guangming New District, Shenzhen, China

### 2. General Description of EUT

<b>EUT Name</b>	:	Electric scooter
<b>Models No.</b>	:	JL651S, JL451S, JL801S, JL1001S, JL1001E, JL651E, JL452S, JL652S, JL802S, JL1002S, JL1002E, JL652E
<b>Model difference</b>	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.
<b>Product Description</b>	:	Operation Frequency: Bluetooth 3.0:2402~2480MHz
	:	Number of Channel: Bluetooth:79 Channels
	:	Max Peak Output Power: Bluetooth: 3.32 dBm( $\pi$ /4-DQPSK)
	:	Antenna Gain: 1.2 dBi PCB Antenna
	:	Modulation Type: GFSK 1Mbps(1 Mbps) $\pi$ /4-DQPSK(2 Mbps)
<b>Power Supply</b>	:	DC Voltage supplied from Switching Power Supply. DC power by Li-ion Battery.
<b>Power Rating</b>	:	Switching Power Supply: Input: AC 100~240V, 50/60Hz 2.5A. Output: DC 42V, 2A. DC 36V 4400mAh Li-ion Battery.
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual

#### Note:

More test information about the EUT please refer the RF Test Report.

## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance  $\leq 5$  mm are determined by:

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}]}{\leq 3.0 \text{ for 1-g SAR}}$$

$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}]}{\leq 7.5.0 \text{ for 10-g SAR}}$$

## 2.

**Calculation:**

Test separation: 5mm					
Bluetooth Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	2.33	±0.5	1.919	0.595	3.0
2.441	2.41	±0.5	1.954	0.611	3.0
2.480	2.34	±0.5	1.923	0.606	3.0
Bluetooth Mode ( $\pi/4$ -DQPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	3.18	±0.5	2.333	0.723	3.0
2.441	3.32	±0.5	2.410	0.753	3.0
2.480	3.26	±0.5	2.377	0.749	3.0

**So standalone SAR measurements are not required.**