

RF EXPOSURE REPORT

Applicant:	Guangzhou Shirui Electronics Co., Ltd
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China
Manufacturer:	Guangzhou Shirui Electronics Co., Ltd
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China
Product Description:	Smart Pen
Brand Name:	NA
Tested Model:	SP30
FCC ID:	2AFG6-SP30
Report No.:	JCF240903041-005
Received Date:	Sep. 06, 2024
Tested Date:	Sep. 06, 2024 - Sep. 19, 2024
Issued Date:	Sep. 19, 2024
Test Standards:	KDB 447498 D01 General RF Exposure Guidance v06
Test Result:	Pass

Prepared By:



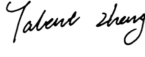
Kennys Zhang/Engineer **Date:** Sep. 19, 2024

Reviewed By:



Roger Li/Engineer **Date:** Sep. 19, 2024

Approved By:



Talent Zhang/Engineer **Date:** Sep. 19, 2024

Note: The test results in this report apply exclusively to the tested model / sample. Without written approval of Guangzhou Jingce Testing Technology Co., Ltd. the test report shall not be reproduced except in full.

Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 19, 2024	Original Report	/

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1. Test Report Declare

Applicant:	Guangzhou Shirui Electronics Co., Ltd
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China
Manufacturer:	Guangzhou Shirui Electronics Co., Ltd
Address:	192 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District, Guangzhou, Guangdong, China
Product Name	Smart Pen
Brand Name:	NA
Model Name:	SP30, SP30* (*=A-Z, or blank)
Difference Description:	All models are identical to each other, except for model name.

We Declare:

The equipment described above is tested by Guangzhou Jingce Testing Technology Co., Ltd. and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Guangzhou Jingce Testing Technology Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these tests except as provided information by clients.

2. Equipment Under Test

2.1. Description of EUT

EUT* Name:	Smart Pen
Model Number:	SP30
EUT Function Description:	Please refer to user manual of this device
Power Supply:	DC1.5V from Battery
Hardware Version:	/
Software Version:	/
Radio Specification:	Up to Bluetooth V5.1
Operation Frequency:	2402 MHz - 2480 MHz
Modulation:	GFSK
Data Rate:	1Mbps
Antenna Type:	PCB Antenna, MAX. Gain: 3.36 dBi
Product Type:	☒ Portable device ☐ Mobile device ☐ Fixed device

Note 1: EUT is the ab. of equipment under test.

Note 2: The antenna gain is declared by the customer and the laboratory is not responsible for the accuracy of the antenna gain.

2.2. Description of Available Antennas

Test Mode	Transmit and Receive Mode	Description
BLE	☒ 1TX, 1RX	ANT 1 can be used as transmitting/receiving antenna.

3. Test Laboratory

Guangzhou Jingce Testing Technology Co., Ltd.

Add.: No.10, Hefeng No.1 street, Huangpu District, Guangzhou, Guangdong, People's Republic of China

Association for Laboratory Accreditation(A2LA). Certificate Number: 6594.03

FCC Designation Number: CN1381. Test Firm Registration Number: 486550

IC Test Firm Registration Number: 31808

Conformity Assessment Body identifier: CN0173

4. RF Exposure Measurement

4.1. Requirement

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: $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, 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 The result is rounded to one decimal place for comparison

4.2. Limits for Maximum Permissible Exposure (MPE)

Band	Channel Frequency (MHz)	Limit (mW)	Limit (dBm)
BLE	2440	9.60	9.82

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

Limit = $[3.0 \cdot (\text{min. test separation distance, mm})] / [\sqrt{f(\text{GHz})}] = (3 \cdot 5) / [\sqrt{2.44(\text{GHz})}] = 9.60\text{mW}$

4.3. Conducted Power

Band	Channel Frequency (MHz)	Average Power (dBm)
BLE	2440	-1.55

5. RF Exposure Calculation

We used the maximum power between the conducted power and ERP/EIRP to perform RF exposure exemption evaluation.

Band	Channel Frequency (MHz)	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	PASS/FAIL
BLE	2440	-1.55	3.36	1.81	9.82	PASS

Then SAR evaluation is not required.

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