# RF EXPOSURE REPORT

Applicant:	Guangzhou Shikun Electronics Co., Ltd	
Address: No.6, Liankun Road, Huangpu District, Guangzhou, China		
Manufacturer: Guangzhou Shikun Electronics Co., Ltd		
Address:	No.6, Liankun Road, Huangpu District, Guangzhou, China	
<b>Product Description:</b>	IEEE 802.11 a/b/g/n/ac AP Model	
Brand Name:	N/A	
Tested Model/HVIN:	SKO.W2890.1	
FCC ID:	2AR82-SKOW28901	
Report No.:	JCF250530081-003	
Received Date: Jun. 01, 2025		
<b>Tested Date:</b> Jun. 01, 2025 - Jul. 01, 2025		
Issued Date: Jul. 01, 2025		
Test Standards:	KDB 447498 D01 General RF Exposure Guidance v06	
Test Result: Pass		
Prepared By:		
Kennys Zhang		
Kennys Zhang/Engineer	<b>Date:</b> Jul. 01, 2025	

Reviewed By:

Roger Li

Roger Li/Engineer Date: Jul. 01, 2025

Approved By:

Talent theng

<u>Talent Zhang/Engineer</u> **Date:** Jul. 01, 2025

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.

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# **Report Revise Record**

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0 /		Jul. 01, 2025	Original Report	1

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### 1. Test Report Declare

Applicant: Guangzhou Shikun Electronics Co., Ltd		
Address:	No.6, Liankun Road, Huangpu District, Guangzhou, China	
Manufacturer:	Guangzhou Shikun Electronics Co., Ltd	
Address:	No.6, Liankun Road, Huangpu District, Guangzhou, China	
Product Name	IEEE 802.11 a/b/g/n/ac AP Model	
Brand Name:	N/A	
Model Name:	SKO.W2890.1	
Difference Description:	N/A	

#### 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.

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### 2. Equipment Under Test

### 2.1. Description of EUT

EUT* Name:	IEEE 802.11 a/b/g/n/ac AP Model		
Model Number:	<b>nber:</b> SKO.W2890.1		
<b>EUT Function Description:</b>	Please refer to user manual of this device		
Power Supply:	DC 12V		
Sample No.	N/A		
Hardware Version:	N/A		
Software Version:	IEEE 802.11 a/b/g/n/ac AP Model		
Radio Specification:	IEEE 802.11a/b/g/n/ac		
Operation Frequency:	IEEE802.11b/g/n/a/ac: 2412MHz-2462MHz, 5180MHz-5825MHz		
Modulation:	GFSK, $\pi$ /4-DQPSK, 8DPSK IEEE 802.11b: DSSS (CCK, DQPSK, DBPSK) IEEE 802.11a/g: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac (VHT20/40/80): OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)		
Antenna Type:	2.4G WIFI: PCB Antenna1, MAX. Gain: 4.94 dBi 2.4G WIFI: PCB Antenna2, MAX. Gain: 4.94 dBi 5G WIFI: PCB Antenna1, MAX. Gain: 4.88 dBi 5G WIFI: PCB Antenna2, MAX. Gain: 4.88 dBi		
Product Type:	□Portable device ☑Mobile device □Fixed device		

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

### 2.2. Description of Available Antennas

Test Mode	Transmit and Receive Mode	Description	
2.4G WIFI	⊠ 2TX, 2RX	ANT 1 and ANT2 can be used as transmitting/receiving antenna.	
5G WIFI	⊠ 2TX, 2RX	ANT 1 and ANT2 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

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

### 4. RF Exposure Measurement

#### 4.1. Requirement

Systems operating under the provisions of FCC 47 CFR 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.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

4.2. Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	<b>,</b>		Average Time (Minutes)			
	Limits For General Population / Uncontrolled Exposure						
0.3–1.34	614	1.63	*(100)	30			
1.34–30	824/f	2.19/f *(180/f²)		30			
30–300	27.5 0.073 0.2		30				
300-1500		F/1500		30			
1500-100,000			1.0	30			

F = Frequency in MHz

#### 4.3. MPE Calculation Formula

 $Pd = (Pout*G) / (4*pi*R^2)$ 

where

Pd = power density in mW/cm<sup>2</sup>

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

#### 4.4. Classification

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as Mobile Device.

#### 4.5. Conducted Power

Band	Channel Frequency (MHz)	Average Power (dBm)	
2.4G WIFI	2437	15.74	
5G WIFI	5180	15.1	

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<sup>\* =</sup> Plane-wave equivalent power density.

# 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)	Power Density (mW/cm²)	Limit (mW/cm²)	PASS/FAIL
2.4G WIFI	2437	15.74	4.94	0.023	1	PASS
5G WIFI	5180	15.1	4.88	0.020	1	PASS

Both of the WLAN and plug-in device can transmit simultaneously, the formula of calculated the MPE is:

CPD1/LPD1+CPD2/LPD2+.....etc. < 1

CPD = Calculation power density

LPD = Limit of power density

Therefore the worst-case situation is 0.023/1.00+0.020/1.00=0.043, which is less than "1", This confirmed that the device comply with FCC 1.1310 MPE limit.

--END--

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