



# FCC TEST REPORT

## FCC ID: 2BGV6-S11

Product	:	Projector
Model Name	:	S11
Brand	:	N/A
Report No.	:	PTC23032009902E-FC03

### Prepared for

Guangzhou Ruixing Electronic Technology Co., Ltd.

Room 206-210, Building A, 238 Fujia East Road, Huangpu District, Guangzhou, Guangdong

### Prepared by

Precise Testing & Certification Co., Ltd.

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## TEST RESULT CERTIFICATION

Applicant's name : Guangzhou Ruixing Electronic Technology Co., Ltd.

Address : Room 206-210, Building A, 238 Fujia East Road, Huangpu District, Guangzhou, Guangdong

Manufacturer's name : Guangzhou Ruixing Electronic Technology Co., Ltd.

Address : Room 206-210, Building A, 238 Fujia East Road, Huangpu District, Guangzhou, Guangdong

Product name : Projector

Model name : S11

Test procedure : FCC CFR47 Part 1.1307(b)(1)

Test Date : Jun. 12, 2024 to Jun. 15, 2024

Date of Issue : Jun. 15, 2024

Test Result : PASS

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:

A handwritten signature in black ink, appearing to read "Jack Zhou".

Jack Zhou / Engineer

Technical Manager:

A handwritten signature in black ink, appearing to read "Simon Pu".

Simon Pu / Manager



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## 2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	15.247 (i)	PASS
Remark:		
N/A: Not Applicable		

### 3 General Information

#### 3.1 General Description of E.U.T.

Product Name	:	Projector
Model Name	:	S11
Additional model	:	N/A
Specification	:	802.11b/g/n HT20/HT40 802.11a/n HT20/HT40
Operation Frequency	:	2412-2462MHz for 802.11b/g/ n(HT20) 2422-2452MHz for 802.11 n(HT40) 5G Wifi: 5180-5240MHz 5.8G Wifi: 5745-5825MHz
Number of Channel	:	11 channels for 802.11b/g/ n(HT20) 7 channels for 802.11n(HT40) 4 channels for 802.11a/n20 5180-5240MHz 5 channels for 802.11a/n20 5745MHz~5825MHz 2 channels for 802.11n40 5190-5230 MHz 2 channels for 802.11n40 5755MHz~5795MHz
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n/a
Antenna installation	:	FPC antenna
Antenna Gain	:	2.4G WiFi:5.29 dBi 5180-5240MHz:5.18 dBi 5745-5825MHz:5.08 dBi
Power supply	:	Input: 100-240VAC 3.8A 120W Adapter: Model: S11 Input: 100-240V~50/60Hz Output: DC 12V
Hardware Version	:	N/A
Software Version	:	N/A



## 4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v06

### 4.1 Requirements

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 levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### 4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; \*Plane-wave equivalent power density



### 4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2} \theta \varphi$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

### 4.4 Test Result

Mode	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Tune up tolerance (dBm)	Max Tune Up Power (mW)	Power Density (mW/cm <sup>2</sup> )	Limit of Power Density (mW/cm <sup>2</sup> )	Result
11B	3.38	21.39	21.39±1	173.380400	0.075462	1	Pass
11N20SISO	3.30	19.06	19.06±1	101.391139	0.066486	1	Pass
11A	3.22	15.18	15.18±1	41.495404	0.026591	1	Pass

Conclusion:

1. Calculate in the worst-case mode.
2. Max. Tune Up Power is declared by manufacturer, and used to calculate.
3. 2.4GHz WIFI and 5G WIFI can't transmit simultaneously.

\*\*\*\*\*THE END REPORT\*\*\*\*\*