



中认信通

CHINA CERTIFICATION ICT CO., LTD (DONGGUAN)



TEST REPORT

Applicant: Shenzhen Huafurui Technology Co., Ltd

Address: Unit 1401 14/F, Jin qi zhi gu mansion Liu xian street ,Xili, Nan shan district Shenzhen China

FCC ID: 2AHZ5SW

Product Name: Projector

Model Number: SW10

**Standard(s): 47 CFR §1.1307,47 CFR §1.1310, 47 CFR §2.1091,
47 CFR §15.247(i),7 CFR §15.407(f)
KDB 447498 D04 Interim General RF Exposure
Guidance v01**

The above equipment has been tested and found compliant with the requirement of the relative standards by China Certification ICT Co., Ltd (Dongguan)

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Test Facility

The Test site used by China Certification ICT Co., Ltd (Dongguan) to collect test data is located on the No. 113, Pingkang Road, Dalang Town, Dongguan, Guangdong, China.

The lab has been recognized as the FCC accredited lab under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No. : 442868, the FCC Designation No. : CN1314.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0123.

Declarations

China Certification ICT Co., Ltd (Dongguan) is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with a triangle symbol “▲”. Customer model name, addresses, names, trademarks etc. are not considered data.

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1. GENERAL INFORMATION

1.1 Product Description for Equipment under Test (EUT)

1.1.1 General Information:

EUT Name:	Projector
EUT Model:	SW10
Rated Input Voltage:	AC 120V/60Hz
Serial Number:	CR22060046-RF-S1
EUT Received Date:	2022.6.30
EUT Received Status:	Good

1.1.2 Conducted Output power ▲:

Operation Modes	Operation Frequency (MHz)	Conducted output power including Tune-up Tolerance (dBm)
Bluetooth	2402-2480	4
WLAN 2.4G	2412-2462	23
WLAN 5G	5150-5250	15

The Above Parameters were provided by the manufacturer.
The 2.4G Wi-Fi or 5G Wi-Fi can transmit simultaneously with Bluetooth.

1.1.3 Antenna Information Detail ▲:

Antenna Usage	Manufacturer	Antenna Type	input impedance (Ohm)	Antenna Gain /Frequency Range
Bluetooth	Shenzhen Huafurui Technology Co., Ltd	FPC	50	1.17 dBi/ 2.4~2.5GHz
WiFi		FPC	50	1.24 dBi/ 2.4~2.5GHz 0.08 dBi/ 5.15~5.25GHz

2.1 MPE-Based Exemption

2.1.1 Applicable Standard

According to §1.1307(b)(3)(i)

(C) Or using Table 1 and the minimum separation distance (R in meters) from the body of a nearby person for the frequency (f in MHz) at which the source operates, the ERP (watts) is no more than the calculated value prescribed for that frequency. For the exemption in Table 1 to apply, R must be at least $\lambda/2\pi$, where λ is the free-space operating wavelength in meters. If the ERP of a single RF source is not easily obtained, then the available maximum time-averaged power may be used in lieu of ERP if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole (1.64 linear value).

Table 1 to § 1.1307(b)(3)(i)(C) - Single RF Sources Subject to Routine Environmental Evaluation

RF Source frequency (MHz)	Threshold ERP (watts)
0.3-1.34	$1,920 R^2$.
1.34-30	$3,450 R^2/f^2$.
30-300	$3.83 R^2$.
300-1,500	$0.0128 R^2 f$.
1,500-100,000	$19.2R^2$.

2.1.2 Measurement Result

Radio	Frequency (MHz)	$\lambda/2\pi$ (mm)	Distance (mm)	Exemption ERP		Maximum ERP including Tune-up Tolerance (dBm)	Antenna Gain (dBi)	ERP		MPE-Based Exemption
				(mW)	(dBm)			(dBm)	(mW)	
Bluetooth	2402-2480	19.89	200	768	28.85	4	1.17	3.02	2.00	Compliant
2.4G WiFi	2412-2462	19.81	200	768	28.85	23	1.24	22.09	161.81	Compliant
5.2G WiFi	5150-5250	9.22	200	768	28.85	15	0.08	12.93	19.63	Compliant

The 2.4G Wi-Fi or 5G Wi-Fi can transmit simultaneously with Bluetooth:

$$\sum_{j=1}^b \left(\frac{ERP_j}{ERP_{th_j}} \right)$$

$$\begin{aligned}
 &= ERP_{BT}/ERP_{th_BT} + ERP_{wifi}/ERP_{th_wifi} \\
 &= 2.0/768 + 161.81/768 \\
 &= 0.213 \\
 &< 1
 \end{aligned}$$

Result: The device compliant the MPE-Based Exemption at 20cm distances.

===== END OF REPORT =====