

MPE TEST REPORT

Applicant Jiangsu Jilong Sport And Leisure Products Co., Ltd.

FCC ID 2BC95-SPAPUMP-8

Product SPA

Brand avenli

Model XXX14aaaYYVbbW
(Note: aaa represents numbers 051 to 130, indicating that the heating + filtration power is 1380W. X stands for 26 letters or blank Spaces, and XXX is used for customer code names. Y represents 26 English letters or blank Spaces, YY is the country distinction code. b represents the numbers 0 to 9 or blank, the first digit after V (the first b) is the printing color, material color distinction code, the second digit after V (the second b) is the product configuration distinction code, V can be blank. The last letter represents the SPA model, W is the WiFi base model, and C is the base model)

Report No. R2405A0499-M1V1

Issue Date July 11, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC 47 CFR Part 1 1.1310**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.



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Version	Revision Description	Issue Date
Rev.0	Initial issue of report.	June 25, 2025
Rev.1	Updated information.	July 11, 2025
Note: This revised report (Report No.: R2405A0499-M1V1) supersedes and replaces the previously issued report (Report No.: R2405A0499-M1). Please discard or destroy the previously issued report and dispose of it accordingly.		

1 Test Laboratory

1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

1.2 Test Facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.
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1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 20%, Max. = 80%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

2 Description of Equipment Under Test

Client Information

Applicant	Jiangsu Jilong Sport And Leisure Products Co., Ltd.
Applicant address	No.1 Industrial Area, South Zhongchen Road, Zhongyang Town Suqian Jiangsu, P.R. China
Manufacturer	Jiangsu Jilong Sport And Leisure Products Co., Ltd.
Manufacturer address	No.1 Industrial Area, South Zhongchen Road, Zhongyang Town Suqian Jiangsu, P.R. China

General Technologies

EUT Description			
Model	XXX14aaaYYVbbW (Note: aaa represents numbers 051 to 130, indicating that the heating + filtration power is 1380W. X stands for 26 letters or blank Spaces, and XXX is used for customer code names. Y represents 26 English letters or blank Spaces, YY is the country distinction code. b represents the numbers 0 to 9 or blank, the first digit after V (the first b) is the printing color, material color distinction code, the second digit after V (the second b) is the product configuration distinction code, V can be blank. The last letter represents the SPA model, W is the WiFi base model, and C is the base model)		
Lab internal SN	R2405A0499/S01		
Hardware Version	V1.0		
Software Version	V1.0		
Frequency	Band	TX (MHz)	RX (MHz)
	Bluetooth LE	2400 ~ 2483.5	2400 ~ 2483.5
	Wi-Fi 2.4G	2400 ~ 2483.5	2400 ~ 2483.5
Date of Testing	June 17, 2024 ~ July 13, 2024		
Date of Sample Received	May 23, 2024		
Note: 1. The EUT is sent from the applicant to Eurofins TA and the information of the EUT is declared by the applicant. 2. All indications of Pass/Fail in this report are opinions expressed by Eurofins TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.			

3 Maximum Output Power (Measured) Antenna Gain

The numeric gain (G) of the antenna with a gain specified in dB is determined by
Numeric gain (G)=10^{^(antenna gain/10)}

Band	Maximum Output Power		Antenna Gain (dBi)	Numeric Gain
	(dBm)	(mW)		
Wi-Fi 2.4G	14.64	29.11	3.37	2.17
Bluetooth (Low Energy)	-6.78	0.21	3.37	2.17

4 MPE Limit

According to section 1.1310 of FCC 47 CFR Part 1, limits for maximum permissible exposure (MPE) are as following.

TABLE 1 – LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3-30	1842/f	4.89/f	*(900/f ²)	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				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	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

* = Plane-wave equivalent power density

Note1. Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational / controlled limits apply provided he or she is made aware of the potential for exposure.

Note2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

The maximum permissible exposure for 1500~100,000MHz is 1.0. So

Band	The Maximum Permissible Exposure (mW/cm ²)
Wi-Fi 2.4GHz	1.000
Bluetooth (Low Energy)	1.000

5 RF Exposure Evaluation Result

RF exposure evaluation method is based on KDB 447498 D01, this calculation is based on the conducted power, maximum power and antenna gain with provides the minimum separation distance. The formula shown below is from OET Bulletin 65 Edition 97-01 Per KDB 447498 D01:

$$S = PG / 4\pi R^2$$

Where: S = power density (in appropriate units, e.g. mW/cm²)

P = Time-average maximum tune up procedure (in appropriate units, e.g., mW)

G = the numeric gain of the antenna

R = distance to the center of radiation of the antenna (20 cm = limit for MPE)

Band	Maximum Output Power (dBm)	Antenna Gain (dBi)	Maximum EIRP (dBm)	PG (mW)	Result (mW/cm ²)	Limit Value (mW/cm ²)
Wi-Fi 2.4GHz	14.64	3.37	18.01	63.24	0.0126	1.000
Bluetooth (Low Energy)	-6.78	3.37	-3.41	0.46	0.0001	1.000
Note: R = 20cm π= 3.1416						

Note: For transmitters, minimum separation distance is 20cm, even if calculations indicate MPE distance is less.

*****END OF REPORT *****