



RF Exposure Evaluation Report

APPLICANT : Ningbo Fu Jin Garden Irrigation Equipment Co., Ltd.

EQUIPMENT : RF water timer

MODEL NAME : FJRF012C

FCC ID : 2BHDG-FJRF012C

STANDARD : 47 CFR Part 2.1091

FCC KDB 447498 D01 v06

The product evaluation date was started from Jul. 08, 2025 and completed on Jul. 08, 2025. We, Sporton International Inc. (Kunshan), would like to declare that the device has been evaluated in accordance with 47 CFR Part 2.1091 and FCC KDB 447498 D01 v06, and pass the limit. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.



Approved by: Si Zhang

Sportun International Inc. (Kunshan)

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People's Republic of China



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Revision History



1. Administration Data

1.1. Testing Laboratory

Sportun International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Testing Laboratory			
Test Firm	Sportun International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sportun Site No.	FCC Designation No.	FCC Test Firm Registration No.
	SAR01-KS	CN1257	314309

Applicant	
Company Name	Ningbo Fu Jin Garden Irrigation Equipment Co., Ltd.
Address	No. 3 Hengyi Road, Yangming Street, Yuyao City, Ningbo City, Zhejiang Province, China

Manufacturer	
Company Name	Ningbo Fu Jin Garden Irrigation Equipment Co., Ltd.
Address	No. 3 Hengyi Road, Yangming Street, Yuyao City, Ningbo City, Zhejiang Province, China



2. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	RF water timer
Model Name	FJRF012C
FCC ID	2BHDG-FJRF012C
Wireless Technology and Frequency Range	433.92MHz
Mode	FSK
Antenna Type	Spring Antenna
Antenna Gain	433.92MHz: -3.0 dBi
HW Version	1.0.0
SW Version	1.1.9
EUT Stage	Production Unit

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

Comments and Explanations:

1. The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.
2. The maximum RF output tune up power, antenna gain also the safe distance used for evaluate RF exposure were declared by manufacturer.



3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

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
3.0-30	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

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = Power Density

P = Output Power at Antenna Terminals

G = Gain of Transmit Antenna (linear gain)

R = Distance from Transmitting Antenna



4. Radio Frequency Radiation Exposure Evaluation

4.1. Standalone Power Density Calculation

Band	Frequency (MHz)	Maximum EIRP (dBm)	Average EIRP (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)
433.92MHz	433.92	-15.550	0.028	0.00001	0.289

Note:

1. Band (433.92 MHz) maximum EIRP power calculate from Band (410.125 MHz ~ 493.123 MHz) E-Field level from RF test report which can be referred to Sprotton No: FR532110.
 - 1) This device maximum E-Field level is 79.68 dBuV/m at 3m, so the EIRP power is -15.55dBm(0.028mW).
 - 2) Pout EIRP (dBm) = Field Strength of Fundamental (dBuV/m) - 95.23 (dB)

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

-----THE END-----