

	TEST REPOR	T				
FCC ID:	2ATK8SH-PT-002					
Test Report No::	TCT240820E021	(5)				
Date of issue::	Aug. 26, 2024					
Testing laboratory:	SHENZHEN TONGCE TESTIN	G LAB				
Testing location/ address:	2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China					
Applicant's name::	Ningbo Shuanghe Hongsheng B	Electronic Technolo	gy Co., Ltd			
Address::	No.2 Binxi south Rd Dayin Indus	strial Park, Yuyao, 2	Zhejiang, China			
Manufacturer's name:	Ningbo Shuanghe Hongsheng B	Electronic Technolo	gy Co., Ltd			
Address::	No.2 Binxi south Rd Dayin Indus	strial Park, Yuyao, 2	Zhejiang, China			
Standard(s):	KDB 447498 D01 General RF E	Exposure Guidance	v06			
Product Name::	Circrane Solar Wireless Pool Th	nermometer				
Trade Mark:	□にいいい		%\			
Model/Type reference:	SH-PT-002	6				
Rating(s)::	Rechargeable Li-ion Battery DC	3.7V				
Date of receipt of test item:	Aug. 20, 2024					
Date (s) of performance of test:	Aug. 20, 2024 ~ Aug. 26, 2024		<u> </u>			
Tested by (+signature):	Ronaldo LUO	Rald Sidaz	E			
Check by (+signature):	Beryl ZHAO	Boyl TC	T			
Approved by (+signature):	Tomsin	forms of the				

#### General disclaimer:

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com





## **Table of Contents**

		-					
2. G	Seneral Inf	ormation					4
2	.1. Test envi	ironment a	and mode.				4
					3 3 4 4 4 5 5 6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7		
4. T	est Result .1. Requiren	s and Me	easuremo	ent Data		<u>(C)</u>	6
4	.2. Test Res	ult					6



# 1. General Product Information

## 1.1. EUT description

Product Name:	Circrane Solar Wireless Pool Thermometer	(C)
Model/Type reference:	SH-PT-002	
Sample Number:	TCT240820E020-0101	
Operation Frequency:	433.92MHz	
Modulation Type:	ASK	
Antenna Type:	Spiral Antenna	(C)
Antenna Gain:	0dBi	
Rating(s):	Rechargeable Li-ion Battery DC 3.7V	

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. N	arameter. <b>lodel(s) l</b> lone.	list			



## 2. General Information

## 2.1. Test environment and mode

Item	Normal condition					
Temperature	+25°C					
Voltage	DC 3.7V					
Humidity	56%					
Atmospheric Pressure:	1008 mbar					
Test Mode:						
Transmitting mode:	Keep the EUT in continuous transmitting by select channel					

## 2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name	
/	/	/	/	/	

#### Note:

- 1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
- 2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
- 3. For conducted measurements (Output Power, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.



### 3. Facilities and Accreditations

#### 3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

**Designation Number: CN1205** 

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

IC - Registration No.: 10668A

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

#### 3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339





#### 4. Test Results and Measurement Data

### 4.1. Requirements

According to KDB 447498 D01 General RF Exposure Guidance v06, 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 level in excess of the commission's guidance.

The 1-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- · Power and distance are rounded to the nearest mW and mm before calculation
- When the minimum test separation distance is < 5 mm, a distance of 5 mm according is applied to determine SAR test exclusion.
- · The result is rounded to one decimal place for comparison

#### 4.2. Test Result

Frequency (MHz)	Electric field strength (dBuV/m)@3m	Max. Power (dBm)	Tune up Power (dBm)	Max. Tune up Power (dBm)	Max. Tune up Power (mW)	Test distance (mm)	Result	exclusion thresholds for 1-g SAR
433.92	69.02	-26.18	-26±1	-25	0.003	5	0.0004	3.0

Note: computational formula

 $EIRP[dBm] = E[dB\mu V/m] + 20 log (d[m]) - 104.77;$ 

where

E is the electric field strength in V/m; d is the measurement distance in meters (m)

#### Result

Because the max tune up power is less than the exemption limit, so No SAR measurement is required.

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

Page 6 of 6

Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com