



**No. 23T04Z80808-02**

**for**

**Baicells Technologies Co., Ltd.**

**5G Outdoor CPE**

**Model Name: SRT853L**

**FCC ID: 2AG32SRT853L**

**with**

**Hardware Version: SRT853L\_PCB\_V1.00**

**Software Version: SRT853L\_8.0.6\_EQ100**

**Issued Date: 2024-04-23**

**Note:**

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of CTTL.

**Test Laboratory:**

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No. 23T04Z80808-02

## **REPORT HISTORY**

<b>Report Number</b>	<b>Revision</b>	<b>Issue Date</b>	<b>Description</b>
23T04Z80808-02	Rev.0	2024-04-15	Initial creation of test report
23T04Z80808-02	Rev.1	2024-04-23	Revise the Maximum Rated Power and Antenna gain on section7.



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## **1. Test Laboratory**

### **1.1. Testing Location**

Company Name: CTTL  
Address: No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China  
100191.  
Postal Code: 100191  
Telephone: 00861062304633  
Fax: 00861062304793

### **1.2. Testing Environment**

Normal Temperature: 15-35°C  
Relative Humidity: 20-75%

### **1.3. Project data**

Project Leader: Lin Hao  
Testing Start Date: 2024-04-12  
Testing End Date: 2024-04-12

### **1.4. Signature**

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**Yao Juming**  
**(Prepared this test report)**

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**Qi Dianyuan**  
**(Reviewed this test report)**

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**Lu Bingsong**  
**Deputy Director of the laboratory**  
**(Approved this test report)**



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## **2. Client Information**

### **2.1. Applicant Information**

Company Name: Baicells Technologies Co., Ltd.  
Address /Post: 9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China  
Contact: Back Huang  
Email: contact@Baicells.com  
Telephone: 400-108-0167  
Fax: /

### **2.2. Manufacturer Information**

Company Name: Baicells Technologies Co., Ltd.  
Address /Post: 9-10F,1stBldg.,No.81BeiqingRoad,Haidian District,Beijing,China  
Contact: Back Huang  
Email: contact@Baicells.com  
Telephone: 400-108-0167  
Fax: /



### 3. Equipment Under Test (EUT) and Ancillary Equipment (AE)

#### 3.1. About EUT

Description	5G Outdoor CPE
Model name	SRT853L
Operation mode	n261

#### 3.2. Internal Identification of EUT

EUT ID*	IMEI	HW Version	SW Version
EUT1	/	SRT853L_PCB_V1.00	SRT853L_8.0.6_EQ100

\*EUT ID: is used to identify the test sample in the lab internally.

#### 3.3. Internal Identification of AE

AE ID*	Description	SN
AE1	/	/

\*AE ID: is used to identify the test sample in the lab internally.

## 4. Reference Documents

### 4.1. Reference Documents for testing

The following documents listed in this section are referred for testing.

**ANSI C95.1-1999:** IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

**KDB 447498 D01 General RF Exposure Guidance v06:** Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

**Canadian RSS-102:** Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)

Standard for uncontrolled environment requires the RF-exposure value in W/m<sup>2</sup> unit, therefore the MPE limit value determined in mW/cm<sup>2</sup> unit, should be multiplied by 10 to have the required unit. The MPE limits are the same like on FCC § 1.1301 at table 1.

## 5. RF Exposure Limit

### Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time  E  <sup>2</sup> ,  H  <sup>2</sup> or S (minutes)
0.3-1.34	614	1.63	<b>(100)*</b>	30
1.34-30	824/f	2.19/f	<b>(180/f<sup>2</sup>)*</b>	30
30-300	27.5	0.073	<b>0.2</b>	30
300-1500	--	--	<b>f/1500</b>	30
1500-100,000	--	--	<b>1.0</b>	30

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

$$\text{Friis transmission formula: } P_d = \frac{P_{out} * G}{4 * \pi * r^2}$$

where

$P_d$  = power density (mW/cm<sup>2</sup>)

$P_{out}$  = output power to antenna (mW)

G = gain of antenna (linear scale)

r = distance between antenna and observation point (cm)

## 6. Classification

The antenna of this product, under normal use condition, is at least 100cm away from the body of the user. So, this device is classified as Mobile Device.

## **7. Test Results**

### **7.1. The maximum antenna gain**

The maximum gain for each frequency band is:

Frequency band	Antenna gain
n261	30.4

### **7.2. The maximum rated power limits**

Maximum peak output power for antenna:

Frequency band	Maximum Rated Power (dBm)
n261	27.22

### **7.3. Output Power Into Antenna & RF Exposure value at distance 20cm**

The worst cases conducted output power for every frequency band is:

According above test result, the device complies with the exposure requirements.

Frequency band	Maximum Rated Power (dBm)	Maximum Rated Power (mW)	Antenna gain (dBi)	d (cm)	Calculation (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
n261	27.22	527.230	30.4	220	0.951	1.000

## **8. Simultaneous Transmission**

N/A

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