

# TEST REPORT

**Reference No.**..... : WTD22D05106650W V1  
**FCC ID** ..... : 2A7DBGT44T5  
**Applicant**..... : Shenzhen Fuxin Canrui Technology Co. , Ltd.  
**Address**..... : 1108, No 51, North Pingxin Road, Shangmugu, Pinghu Street,  
Longgang District, Shenzhen, China.  
**Manufacturer** ..... : Shenzhen Fuxin Canrui Technology Co. , Ltd.  
**Address**..... : 1108, No 51, North Pingxin Road, Shangmugu, Pinghu Street,  
Longgang District, Shenzhen, China.  
**Product**..... : Solar Lights outdoor 182 Leds  
**Model(s)** ..... : Aotek-GT44T5, Aotek-GT44T6, Aotek-GT44T8  
**Standards** ..... : FCC PART15 SUBPART B  
**Date of Receipt sample** .... : 2022-03-29  
**Date of Test** ..... : 2022-03-29 to 2022-03-31  
**Date of Issue**..... : 2022-06-28  
**Test Result**..... : **Pass**  
**Remark**..... : This report is based on WTD22D03052710E for updated applicant  
and manufacturer information, product name.

**Remarks:**

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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## 2 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTD22D05106650W	2022-03-29	2022-03-29 to 2022-03-31	2022-06-15	Original	-	Replaced
WTD22D05106650W V1	2022-03-29	2022-03-29 to 2022-03-31	2022-06-28	Version 1	Updated	Valid

### 3 General Information

#### 3.1 General Description of E.U.T.

Product ..... : Solar Lights outdoor 182 Leds  
Model(s)..... : Aootek-GT44T5, Aootek-GT44T6, Aootek-GT44T8  
Model Difference ..... : Only the model name is different.  
Remark ..... : The model Aootek-GT44T5 was tested in this report.

#### 3.2 Details of E.U.T.

Highest frequency generated ..... : Below 108MHz  
Ratings ..... : Battery: Lithium Battery 3.7Vdc, 1800mAh. Max/6.6Wh charging Voltage 4.25Vdc, Max charging current 1800mA.  
Solar panel:  
Output: 5.5Vdc, Max 1.8W  
Power of LEDs: Max 3.5W

#### 3.3 Subcontracted

Whether parts of tests for the product have been subcontracted to other labs:

Yes       No

If Yes, list the related test items and lab information:

Test Lab:      N/A

Lab address: N/A

Test items:    N/A

#### 3.4 Abnormalities from Standard Conditions

None.

## 4 Test Summary

Test Item	Test Requirement	Test Result
AC Power Line Conducted Emission (150kHz to 30MHz)	FCC PART 15, SUBPART B section 15.107	N/A*
Disturbance voltage at the antenna terminals (30MHz to 2150MHz)	FCC PART 15, SUBPART B section 15.111	N/A**
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B section 15.109	Pass
Radiated Emission (Above 1GHz)	FCC PART 15, SUBPART B section 15.109	N/A***

Remark:

Pass Test item meets the requirement

Fail Test item does not meet the requirement

N/A \* Test case does not apply to DC input device.

N/A \*\* Test case does not apply to the device has not antenna terminals.

N/A \*\*\* Test case does not apply to the device with highest frequency generated is below 108MHz.

## 5 Equipment Used during Test

### 5.1 Equipment List

3m Semi-anechoic Chamber for Radiation (TDK)						
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date
1	Test Receiver	R&S	ESCI	101296	2021-04-26	2022-04-25
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	2021-10-31	2022-10-30
3	Amplifier	ANRITSU	MH648A	M43381	2021-04-26	2022-04-25
4	Cable	HUBER+SUHNER	CBL2	525178	2021-04-26	2022-04-25

### 5.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
/	/	/	/

### 5.3 Measurement Uncertainty

Parameter	Uncertainty (Note 1)
Temperature	$\pm 1^{\circ}\text{C}$
Humidity	$\pm 5\%$
DC and low frequency voltages	$\pm 3\%$
Radiated Emission(30MHz-1GHz)	$\pm 5.03\text{dB}$

Note 1: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=2$ .

#### 5.4 Test Mode

Test Item	Test Mode	Test Voltage
Radiated Emissions (30MHz-1GHz)	Working mode	DC 3.7V
“*” shows the worst case mode which were recorded in this report.		

## 6 Emission Test Results

### 6.1 Radiation Emission, 30MHz to 1000MHz

Test Requirement..... : FCC PART 15, SUBPART B section 15.109  
 Test Method..... : ANSI C63.4  
 Test Result ..... : Pass  
 Frequency Range..... : 30MHz to 1000MHz  
 Class..... : Class B  
 Limit..... :

Frequency (MHz)	Distance (Meter)	Limit (dB $\mu$ V/m)
		Quasi-peak
30 to 88	3	40
88 to 216	3	43.5
216 to 960	3	46
960 to 1000	3	54

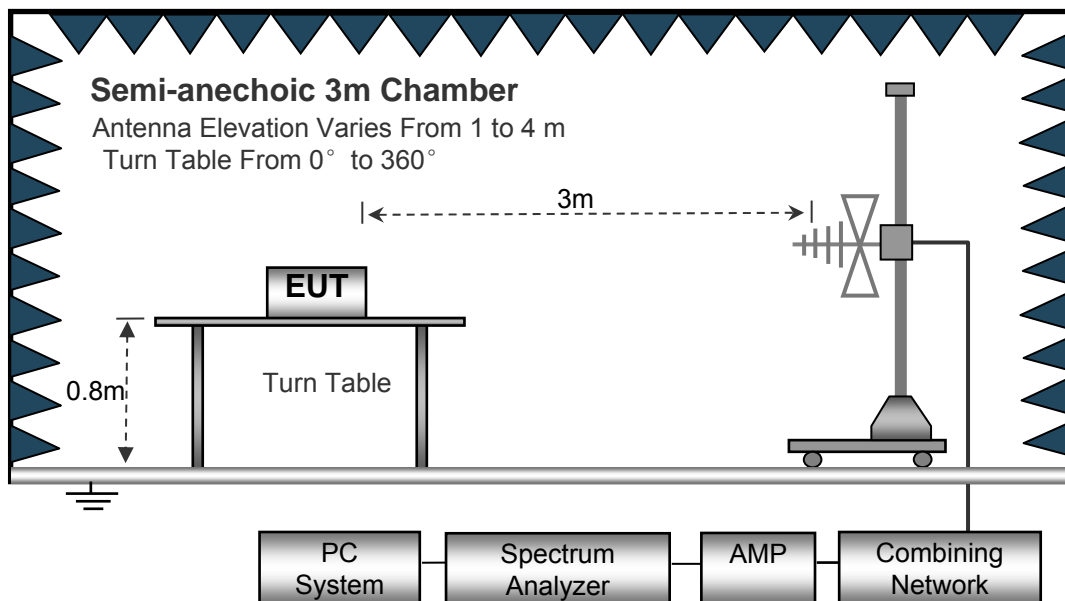
#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature..... : 22.5°C  
 Humidity..... : 52.6%RH  
 Atmospheric Pressure..... : 101.8kPa  
 EUT Operation ..... : Refer to section 5.4.

#### 6.1.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.



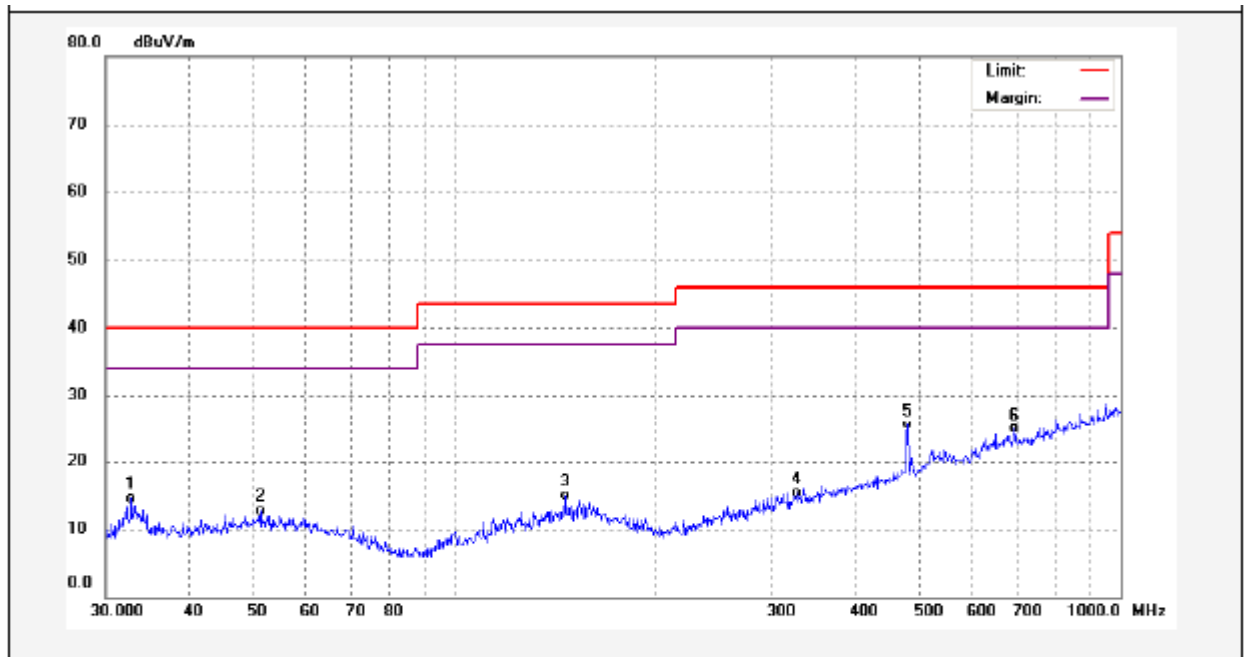


### 6.1.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Quasi-peak measurements were performed if peak emissions were within 6dB of the Quasi-peak limit line.

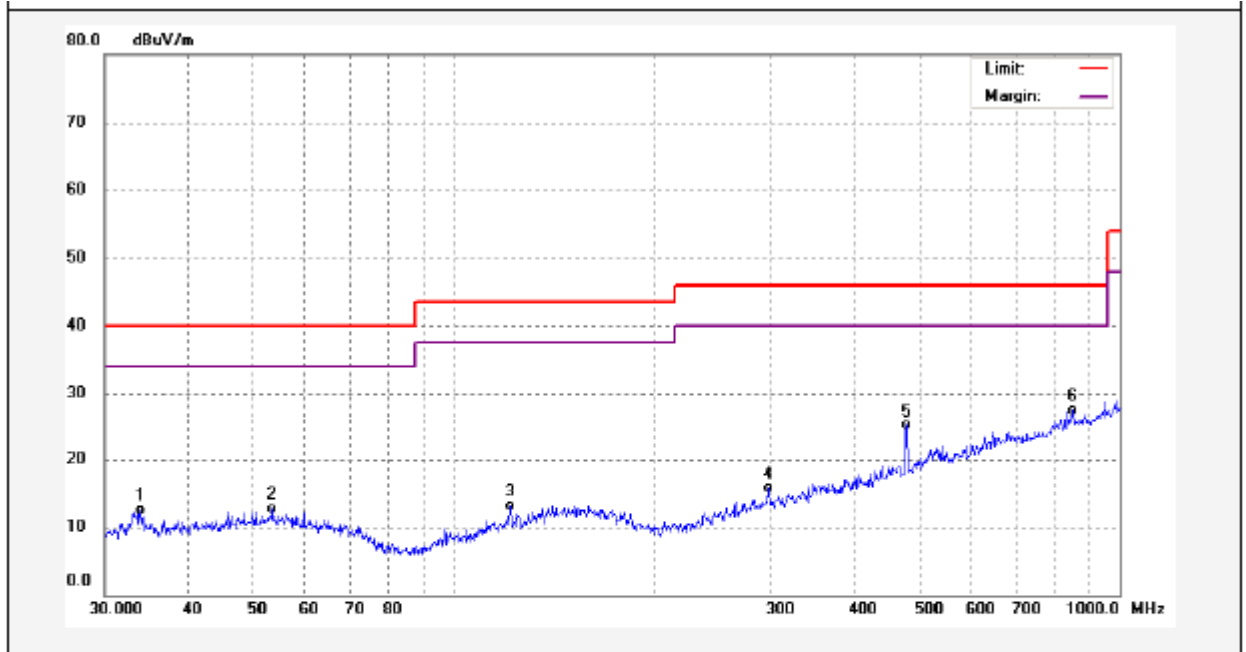
### 6.1.4 Radiated Emission Test Data, 30MHz to 1000MHz

Antenna Polarization: Vertical



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	32.7486	32.48	-18.05	14.43	40.00	-25.57	QP	
2	51.1209	29.57	-16.90	12.67	40.00	-27.33	QP	
3	146.8877	30.33	-15.47	14.86	43.50	-28.64	QP	
4	326.7395	29.51	-14.24	15.27	46.00	-30.73	QP	
5	478.8456	36.07	-10.56	25.51	46.00	-20.49	QP	
6	691.9867	31.08	-6.19	24.89	46.00	-21.11	QP	

Antenna Polarization: Horizontal



No.	Freq. (MHz)	Reading (dBuV/m)	Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Remark
1	33.9174	30.51	-18.00	12.51	40.00	-27.49	QP	
2	53.5052	29.68	-17.00	12.68	40.00	-27.32	QP	
3	121.5486	30.15	-17.05	13.10	43.50	-30.40	QP	
4	297.2241	30.46	-14.81	15.65	46.00	-30.35	QP	
5	478.8456	35.65	-10.56	25.09	46.00	-20.91	QP	
6	851.0353	31.16	-3.67	27.49	46.00	-18.51	QP	

====End of Report=====