



# MPE REPORT

## FCC ID: 2A5K7-WRD36WRGBCCT

Product	:	Stage lights
Model Name	:	WRD36WRGBCCT,OK-094-APPWLx2,OK-095-24APPWL, OK-078-APPWL,YS-052-APPWLx2,OK-098-40WAPPFL, LA-051-40W FL,LA-055-40W FL,GL001,BCS-20w,RGBCW-20W, LS-6P-30W,FL-30W-RGBCW
Brand	:	N/A
Report No.	:	PTC22022106101E-FC01
		PTC22022106101-#1

### Prepared for

Shenzhen Wenrunda Technology Co., Ltd.

Room 402, No. 252, Daer Village, Dashuikeng Community, Fucheng Street, Longhua District,  
Shenzhen

### Prepared by

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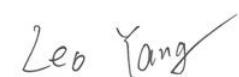
## 1 TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Wenrunda Technology Co., Ltd.  
Address : Room 402, No. 252, Daer Village, Dashiukeng Community, Fucheng Street, Longhua District, Shenzhen  
Manufacture's name : Shenzhen Wenrunda Technology Co., Ltd.  
Address : Room 402, No. 252, Daer Village, Dashiukeng Community, Fucheng Street, Longhua District, Shenzhen  
Product name : Stage lights  
Model name : WRD36WRGBCCT,OK-094-APPWLx2,OK-095-24APPWL, OK-078-APPWL,YS-052-APPWLx2,OK-098-40WAPPFL, LA-051-40W FL,LA-055-40W FL,GL001,BCS-20w,RGBCW-20W, LS-6P-30W,FL-30W-RGBCW  
Standards : FCC CFR47 Part 15 Section 15.247  
Test procedure : ANSI C63.10:2013  
Test Date : Feb.16, 2022 to Mar. 08, 2022  
Date of Issue : Mar. 09, 2022  
Test Result : Pass

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Test Engineer:



Leo Yang / Engineer

Technical Manager:



Chris Du / Manager

## RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

### Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

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

### MPE Calculation Method

Friis transmission formula:  $P_d = (P_{out} * G) / (4 * \pi * R^2)$

Where

Pd= Power density in mW/cm<sup>2</sup>

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

$\pi=3.1415926$

R= distance between observation point and center of the radiator in cm (20cm)

Pd the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

## Measurement Result

R=20cm BT:

Peak Power: [2480MHz,  $2.122 \pm 1\text{dBm}$  (2.052mW) output power]

Gain:0dBi=1

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$$

So ,  $P_d = 0.00041 \text{ mW/cm}^2$

### Conclusion:

For the max result:  $0.00041 \leq 1.0$  for 1g SAR, No SAR is required

----END OF REPORT----