



GUANGZHU EVERGLOW LIGHTING CO., LTD

SPECIFICATION

PART NO. : EG-2824-50CW-L140-2B12C



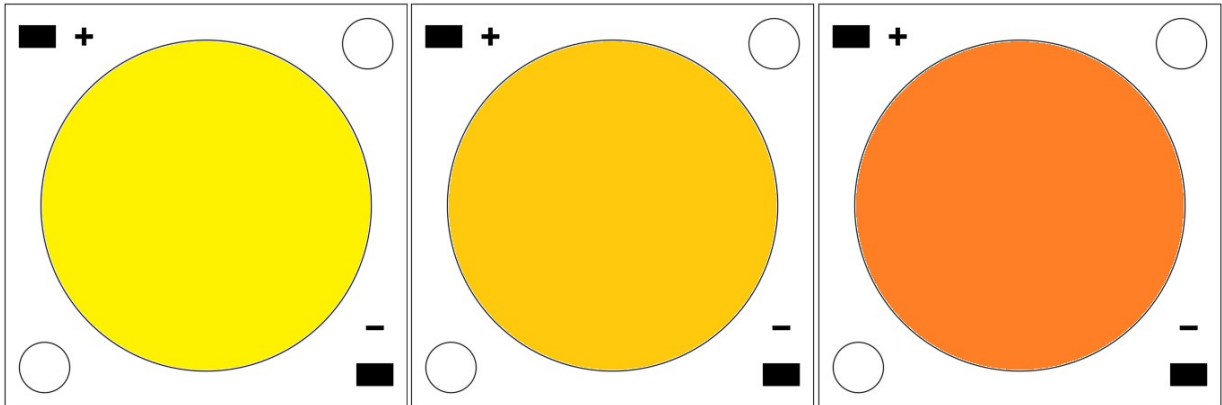
Approved by	Checked by	Prepared by



EVERGLOW

EG-2824-50CW-L140-2B12C

Package Dimensions



Notes:

- 1. All dimensions are in millimeters. 2. Tolerance is ± 0.25 unless otherwise noted.

Description

Part No.	LED Chip		Silica gel Color
	Material	Emitting Color	
EG-2824-50CW-L140-2B12C	AL/GaN /GaN	White	Water Clear

Electrical/Optical Characteristics (At $T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Conditions	Min.	Avg.	Max.	Units
Luminous Flux	Φ	$I_F=1200\text{mA}$	6300	-	6500	lm
Color Temperature	CCT	$I_F=1200\text{mA}$	5500	5700	6000	K
CRI	Ra	$I_F=1200\text{mA}$	-	80	--	-
Forward Voltage	V_F	$I_F=1200\text{mA}$	36	--	38.5	V
Thermal Resistance Junction To Board	$R_{\Theta J-B}$	$I_F=1200\text{mA}$	-	10	-	$^{\circ}\text{C}/\text{W}$
Temperature Coefficient of Forward Voltage	$\Delta V_F/\Delta T$	$I_F=1200\text{mA}$	-	2	-	$\text{mV}/^{\circ}\text{C}$
Reverse Current	I_R	$V_R=7\text{V}$	-	-	5	μA
Viewing Angle ^[1]	$2\Theta_{1/2}$	$I_F=1200\text{A}$	-	120	-	Deg

Absolute Maximum Rating(At $T_A=25^{\circ}\text{C}$)

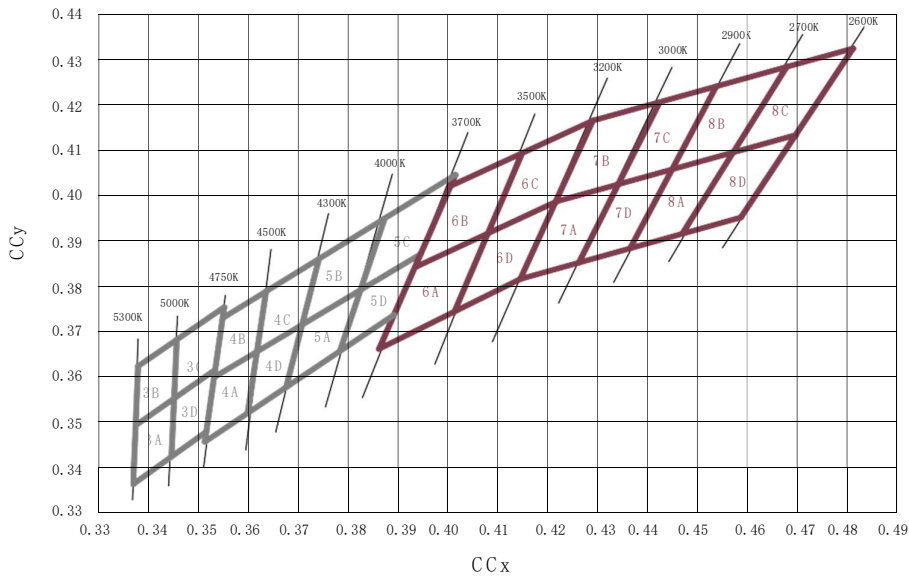
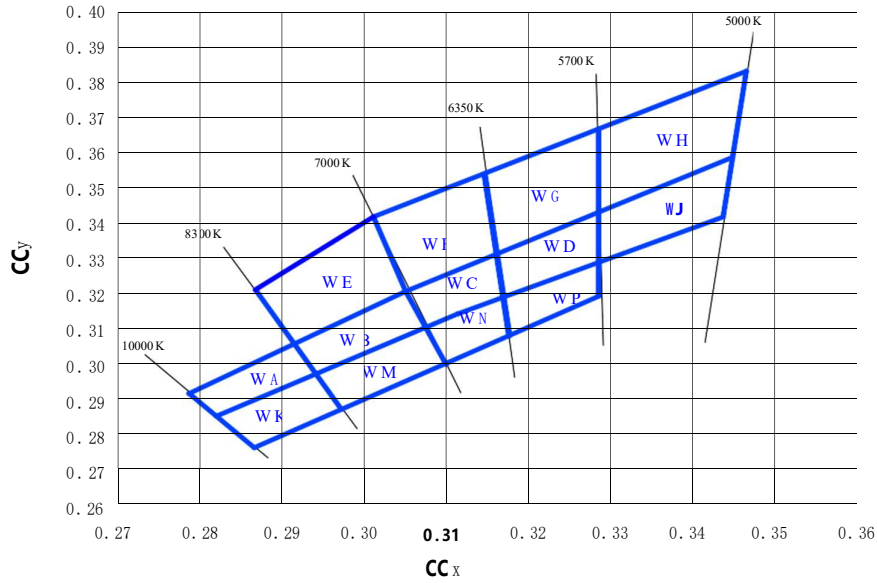
Parameter	Symbol	Ratings	Units
Power Dissipation	P_D	53.28	W
Continuous Forward Current	I_F	1440	mA
Peak Forward Current ^[2]	$I_F(\text{Peak})$	1440	mA
LED Junction Temperature	T_J	125	$^{\circ}\text{C}$
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-40 $^{\circ}\text{C}$ To +105 $^{\circ}\text{C}$	
Storage Temperature Range	T_{STG}	-40 $^{\circ}\text{C}$ To +85 $^{\circ}\text{C}$	
Manual Soldering Temperature	T_{SOL}	250 $^{\circ}\text{C} \pm 20^{\circ}\text{C}$ For 3~5 Seconds	
ESD Sensitivity	ESD	1000V HBM	

Notes:

[1]. Tolerance Θ :10%.

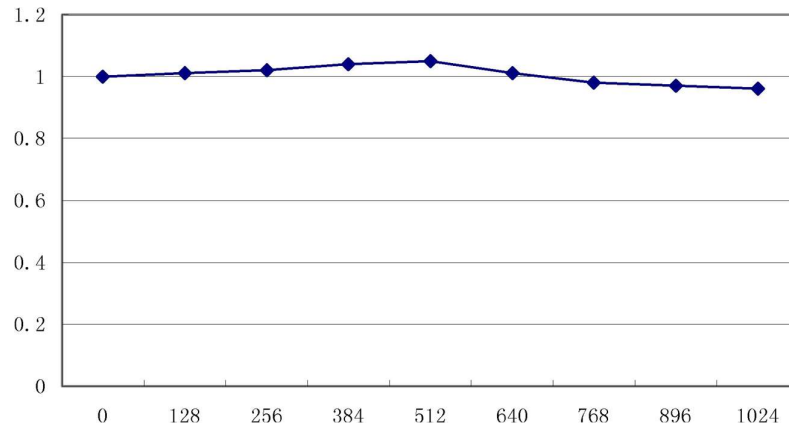
[2].1/10 Duty Cycle 0.1ms Pulse Width.

Bin Structure



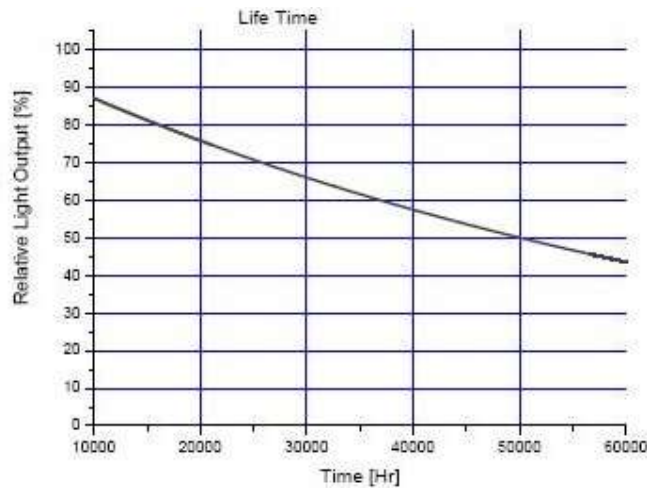
Room Temperature Operating Life Reliability Test Result

($T_a=25^{\circ}\text{C}$, $I_f=850\text{mA}$) Use SSC circuit board&heat sink($T_j=50^{\circ}\text{C}$)



1000HR 3% degradation

Life Time graph (使用寿命)



50000HR 50% degradation