

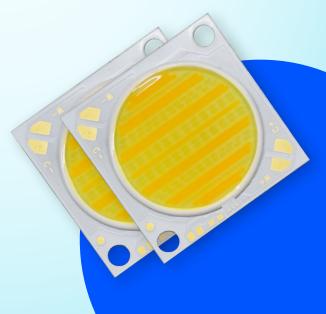
# The Brightest LED

# CCT TUNABLE DATASHEET ES-24-EQ-100-2600-2770T80

# **VERSION : V1/05.24**

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#### ES-24-EQ-100-2600-2770T80

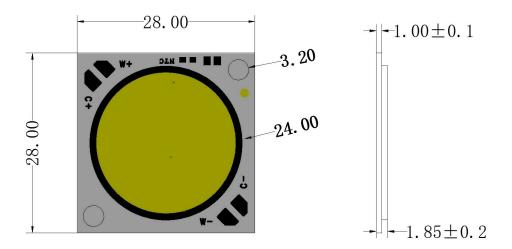
#### **Features**

- Size(mm) : 28\*28\*1.85mm
- Specular aluminium substrates and silicone package
- Viewing Angle : 120°
- High reliability
- RoHS compliant

#### **Applications**

- Spotlight
- Downlight
- Par lamp PAR
- Bulb, Restaurant lights, Outdoor landscape lights

#### **Package Dimensions**



#### Notes:

- 1. All dimensions are millimeter.
- 2. Tolerance is ±0.1mm unless otherwise noted.

# Typical Electrical/Optical Characteristic

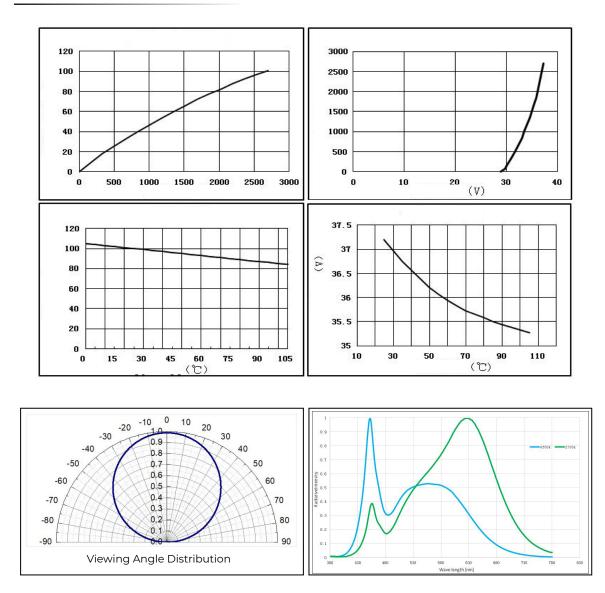
Product	Power (W)	Color Temperature (K)	Climax (Ra)	Luminous flux (lm)	Voltage (V)	Current (mA)
ES-24-EQ-100-2600-2770T80	100	2700±100	>80	12000	34-40	2600
ES-24-EQ-100-2600-2770T80	100	6500±300	>80	13000	34-40	2600

## Electrical-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	PD	100	W
Forward Current	IF	2600	mA
Max Forward Current	Max IF	3000	mA
Peak Forward Current	IFP	3200	mA
Junction temperature	Tj	125	°C
Operation Temperature Range	Topr	-30 to +80	°C
Storage Temperature Range	Tstg	-40 to +80	°C
Thermal Resistance	RJ-B	0.12	°C/W
ESD Sensitivity (HBM)		4000	V
Hand Soldering Temperature	350±20°C/3~5sec		sec

#### Notes:

Test Tolerance VF : ±1% Φe:±10%

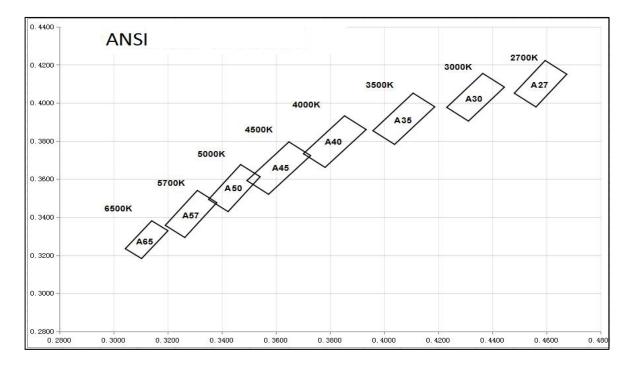


# **Typical Electrical/Optical Characteristic Curves**

## Notes:

- 1. Related to the temperature test based on the right current.
- 2. All measurements were made under the standardized environment of XUYU.

# **CIE Chromaticity Diagram**



#### ES-24-EQ-100-2600-2770T80

# Color Rank :(TA=25°C)

CODE

A35

CODE

A45

CODE	ССТ	Х	Y
A27	2700K	0.4595	0.4223
		0.4481	0.4051
		0.4561	0.3979
		0.4675	0.4151

X 0. 4107

0.3959

0.4039

0.4187

X 0. 3649

0.3493

0.3573

0.3729

CCT

3500K

CCT

4500K

Y

0.4052

0.3854

0.3782

0.3980

Y

0.3796

0.3592

0.3520

0.3724

CODE	CCT	Х	Y
A30	3000K	0.4365	0.4155
		0. 4231	0.3977
		0.4311	0.3905
		0.4445	0.4083

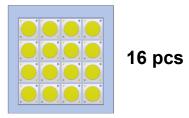
CODE	CCT	Х	Y
A40	4000K	0.3854	0.3932
		0.3702	0.3734
		0.3782	0.3662
		0.3934	0.3860

CODE	CCT	Х	Y
A50	5000K	0.3470	0.3677
		0.3352	0.3493
		0.3424	0.3429
		0.3542	0.3613

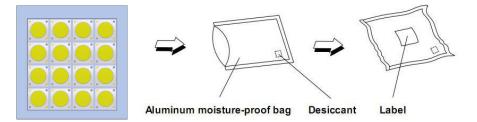
CODE	ССТ	Х	Y
A57	5700K	0.3310	0.3541
		0.3192	0.3357
		0.3264	0. 3293
		0.3382	0.3477

CODE	CCT	Х	Y
A65	6500K	0.3142	0.3381
		0.3044	0.3235
		0.3104	0.3183
		0.3202	0.3329

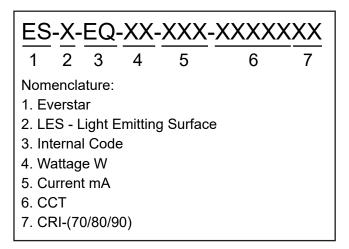
# **Packaging Specifications**



# Packaging Specification



#### Encoding



#### Cautions

Storage/Use:

1. In order to avoid moisture absorption, it is suggested to store the products in a drying cabinet with desiccant. The storage temperature is  $5^{\circ}C\sim30^{\circ}C$ , and the humidity is  $\leq 60\%$  HR.

2. The encapsulated material of the LEDs is silicone. Therefore the LEDs have a soft surface on the top of package. The pressure to the top surface will be influence to the reliability of the LEDs. Precautions should be taken to avoid the strong pressure on the encapsulated part. So when use the picking up nozzle, the pressure on the silicone resin should be proper.

3. Handle the component along the side surface by using forceps or appropriate tools; do not directly touch or Handle the silicone lens surface, it may damage the internal circuitry.

4.Electrostatic protection. LED is a chip sensitive electronic component. Various measures should be taken to avoid static electricity, such as wearing an electrostatic bracelet or anti-static gloves during use. All devices, equipment and instruments should be well grounded.

#### Label

₹VE	<b>The Bright</b>	<u> </u>	CCT TUNABLE	RoHS
Model No	).			
Lot no.	ot no. Qty :			
VF (v)	IV (lm)	IF (mA)	CCT (K)	Ra
Part Code :	-			