

CR-LE

1'x4' or 1'x2' LED Light Engine

Product Description

The CR-LE LED light engine delivers up to 130 lumens per watt of exceptional 90 CRI light at 4000 lumens. This breakthrough performance is achieved by combining the high efficacy and high-quality light of Cree TrueWhite® Technology with a unique thermal management design. The CR22 High Definition (HD) option delivers enhanced spectrum 80+ CRI color quality. The CR-LE product family is available in warm, neutral, cool, or daylight color temperatures and has step, 0-10V, or Lutron EcoSystem® Enabled dimming options. Its compact, lightweight design easily accommodates recessed, surface mount, or suspended installations, making the CR-LE perfect for use in commercial new construction or renovated spaces.

Performance Summary

Utilizes Cree TrueWhite® Technology
Active Color Management
Room-Side Heat Sink
Assembled in the US & Mexico
Efficacy: 90-130 LPW
Delivered Light Output: 2000, 2200, 3100, 3200, 4000, 5000 lumens
Input Power: 22-50 watts
CRI: 80-90
CCT: 3000K, 3500K, 4000K, 5000K
Input Voltage: 120-277 VAC
Warranty: 10 years
Lifetime: Designed to last from 50,000 hours up to 100,000 hours with HE Option
Dimming: Step Level to 50%, 0-10V Dimming or Lutron EcoSystem Enabled to 5%
Mounting: Recessed

CR-LE (1'x4')



CR-LE (1'x2')



NOTE: Use of Expanded Junction Box will expand the depth to 6.67" and Emergency Backup will expand the depth to 6.30".

Ordering Information

Example: CR-LE-40L-35K-S

CR-LE					
Product	Lumen Output	Color Temp.	Voltage	Control	Options
CR-LE	20L (1x2) 22W 2000 lumens - 90 LPW	30K 3000 Kelvin	Blank 120-277 Volt (Standard)	S Step Dimming to 50%	HD⁵ High Definition Color - CRI 80+ 35W 3200 lumens - 90 LPW 44W 4000 lumens - 90 LPW
	32L (1x2) 32W 3200 lumens - 100 LPW	35K 3500 Kelvin			
	22L (1x4) 22W 2200 lumens - 100 LPW	40K 4000 Kelvin			
	31L (1x4) 34W 3100 lumens - 90 LPW	50K 5000 Kelvin			
	40L (1x4) 40W 4000 lumens - 100 LPW				
	40L HE (1x4) 30.5W 4000 lumens - 130 LPW (30K) 32W 4000 lumens - 125 LPW (35K) 33W 4000 lumens - 120 LPW (40K) 34.5W 4000 lumens - 115 LPW (50K)				
	50L (1x4) 50W 5000 lumens - 100 LPW				

1. Reference www.cree.com/lighting for recommended dimming control options. 2. Not available with EB14 option. Use EB14 SMK. 3. EB14 nor for use with SMK Kits 4. Includes surface mount kit accessory (SMK-LE-L or SMK-LE-S) SMK-LE-EL must be ordered separately. 5. HD only available in 32L or 40L. Suggested MSRP for the adder over the standard CR Series fixture for the Lutron EcoSystem® Enabled feature is \$49. *See www.cree.com/lighting for warranty terms.

Product Specifications

CREE TRUEWHITE[®] TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite[®] Technology mixes the light from the highest performing red and unsaturated yellow LEDs. This patented approach delivers an exclusive combination of 90+ CRI, beautiful light characteristics, and lifelong color consistency, all while maintaining high luminous efficacy—a true no compromise solution.

ROOM-SIDE HEAT SINK

An innovative thermal management system designed to maximize cooling effectiveness by integrating a unique room-side heat sink into the diffusing lens. This breakthrough design creates a pleasing architectural aesthetic while conducting heat away from LEDs in a temperature-controlled environment. This enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy, and color consistency.

LUMEN MAINTENANCE FACTORS

- Reference www.cree.com/lighting for detailed lumen maintenance factors.

CONSTRUCTION & MATERIALS

- Light engine integrates LEDs, driver, power supply, thermal management, and optical mixing components.
- Hanging tabs enable suspended installation.

NOTE: Reference www.cree.com/lighting for detailed instructions on field replacement of the light engine.

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing.
- Components work together to optimize distribution, balancing the delivery of high illuminance levels on horizontal surfaces with an ideal amount of light on walls and vertical surfaces. This increases the perception of spaciousness.
- Diffusing lens integrated with upward-facing LED strip eliminates direct view of LEDs while lower reflector balances brightness of lens with the ceiling to create a low-glare high angle appearance.

ELECTRICAL SYSTEM

- Integral, high-efficiency driver and power supply.
- **Power Factor** = 0.9 nominal
- **Input Power:** Stays constant over life.
- **Input Voltage:** 120V-277V, 50/60Hz
- **Battery Backup:** Consult factory.
- **Temperature Rating:** Designed to operate in temperatures 0-35C and below room side and plenum side.
- **Total Harmonic Distortion:** < 20%

CONTROLS

- Step dimming to 50% comes standard.*
- Optional continuous dimming to 5% with 0-10V DC control protocol.*
- Optional Lutron EcoSystem[®] Enabled option allows seamless integration with Lutron EcoSystem controls.*

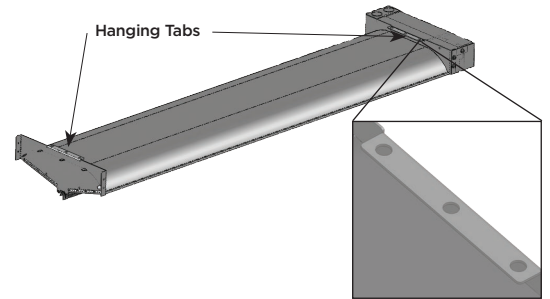
REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed.
- DLC qualified.**
- Suitable for damp locations.
- Designed for Indoor use.

*Reference www.cree.com/lighting for recommended dimming controls and wiring diagrams.

**Does not apply to -LES models.

Installation



NOTE: Hanging materials not included. Must be purchased separately.

Housings & Accessories

Accessories

SMK-LE-L²

Surface Mount Kit for CR Series 1'x4' Light Engines 2200, 4000 and 5000 lumens

SMK-LE-S²

Surface Mount Kit for CR Series 1'x2' Light Engines 2000 and 3200 lumens

SMK-LE-EC

End Caps (2 pack, required for all SMK installations, must be ordered separately)

SMK-LE-JP

Joiner Plate (optional for continuous row installation)

CR-347V

347 Volt

CR-347V-SD

Step Dimming to 50%

PW-18/4-06-9T/SS-CR

Power Whip

AC5-18/4-72-PD8-JB

Adjustable Cable

AC5-72-PD8-JB

Adjustable Cable

EJBCR-5PK

Expanded size junction box for through wiring (5 pack)