

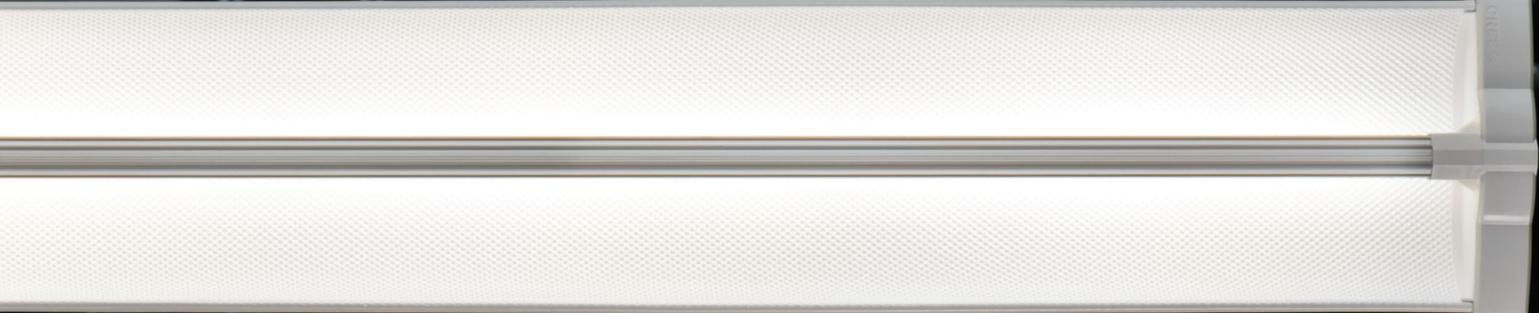
CS Series

LED Linear Luminaire





Built for Performance, Designed to Impress.



RECORD-SETTING

Performance

Innovative technology and incredibly efficient luminaire design give the high-efficacy CS Series its unmatched performance combination of 90 CRI and minimum L85 at 75,000 hours.

FAST INSTALL,

Faster Payback

A lightweight, intuitive design minimizes installation time for upfront savings that speed up payback, while the CS Series' longevity can virtually eliminate costly high-ceiling maintenance year after year.

ARCHITECTURAL

Look & Quality

In addition to beautiful light quality, the CS Series' appeal is heightened by a stylish open design, which transforms the heat sink into a sleek aesthetic element that brings architectural appeal to any space.

TOTAL

Versatility

Engineered for versatility, the CS Series features integral through-wiring and several quick connection features that make suspended, surface mount and continuous row installation simple and easy.

WHY CREE?

PROVEN PERFORMANCE, REVOLUTIONARY TECHNOLOGY

Cree TrueWhite® Technology

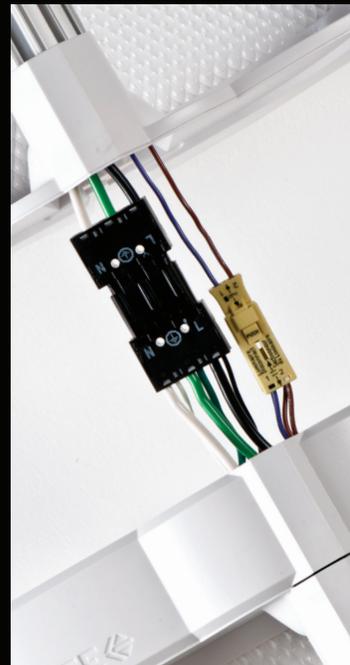
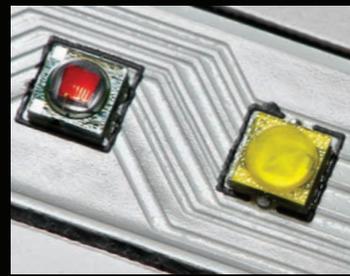
Powered by Cree TrueWhite® Technology, the CS Series delivers an exclusive combination of 90 CRI and lifetime color consistency. Our quality advantage begins by mixing the light from red and Cree® unsaturated yellow LEDs, among the highest-performing and most efficient LEDs on the market. Once built, every CS Series LED linear luminaire is then precisely color-tuned for the utmost consistency.

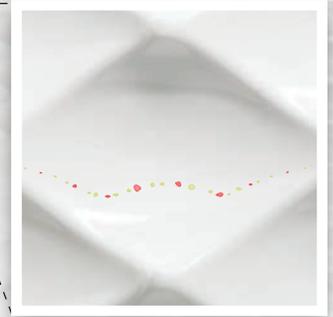
The result is beautiful white light with superior color accuracy using significantly less power—a true no-compromise solution for applications where energy savings and color quality are equally important—applications like retail and grocery. With Cree TrueWhite® Technology, store owners and grocers alike will benefit from the beautiful, high-impact lighting making their merchandise more attractive to shoppers.

Quick-Connect Design

The CS Series' compact, lightweight form includes several intelligent design features that enable quick and easy installation in a variety of configurations. The multi-functional heat sink doubles as a channel for the through-wires, which are capped with quick-connect plug connectors and are easily accessible from a snap-close door at each end of the luminaire. This quick-connect design minimizes branch-circuit wiring for simplified continuous row installations.

CREE 
TRUE WHITE
TECHNOLOGY





Cree MicroMixing™ Optics

The CS Series LED linear luminaire uses a highly-efficient optical design approach that integrates an upward-facing LED light strip with Cree TrueWhite® Technology and an ultra-lightweight upper reflector featuring all-new Cree MicroMixing™ Optics.

Cree MicroMixing™ Optics are formed from thousands of tiny impressions imprinted on the state-of-the-art, highly-reflective polymer material. Together, these individual optics form a complex multi-faceted pattern that blends and softens the intense direct light from the light source and then redirects it into the space with precise control and color-mixing. The result is comfortable and beautifully balanced white light with optimal distribution within the desired area.

What's more, all of this is accomplished with hardly any effect on light output, enabling the CS Series to deliver high output up to 8200 lumens, making it a perfect option for higher ceiling, low-bay applications such as retail, offices, schools, light manufacturing spaces and warehouses.



The Result:

The Best of Everything.

From our brightest LED chips to our most advanced optics and luminaire design, Cree breakthrough innovations exist throughout the CS Series luminaire. This integrated approach brings architectural aesthetics, rugged mechanics and optimal performance all together in one complete solution.

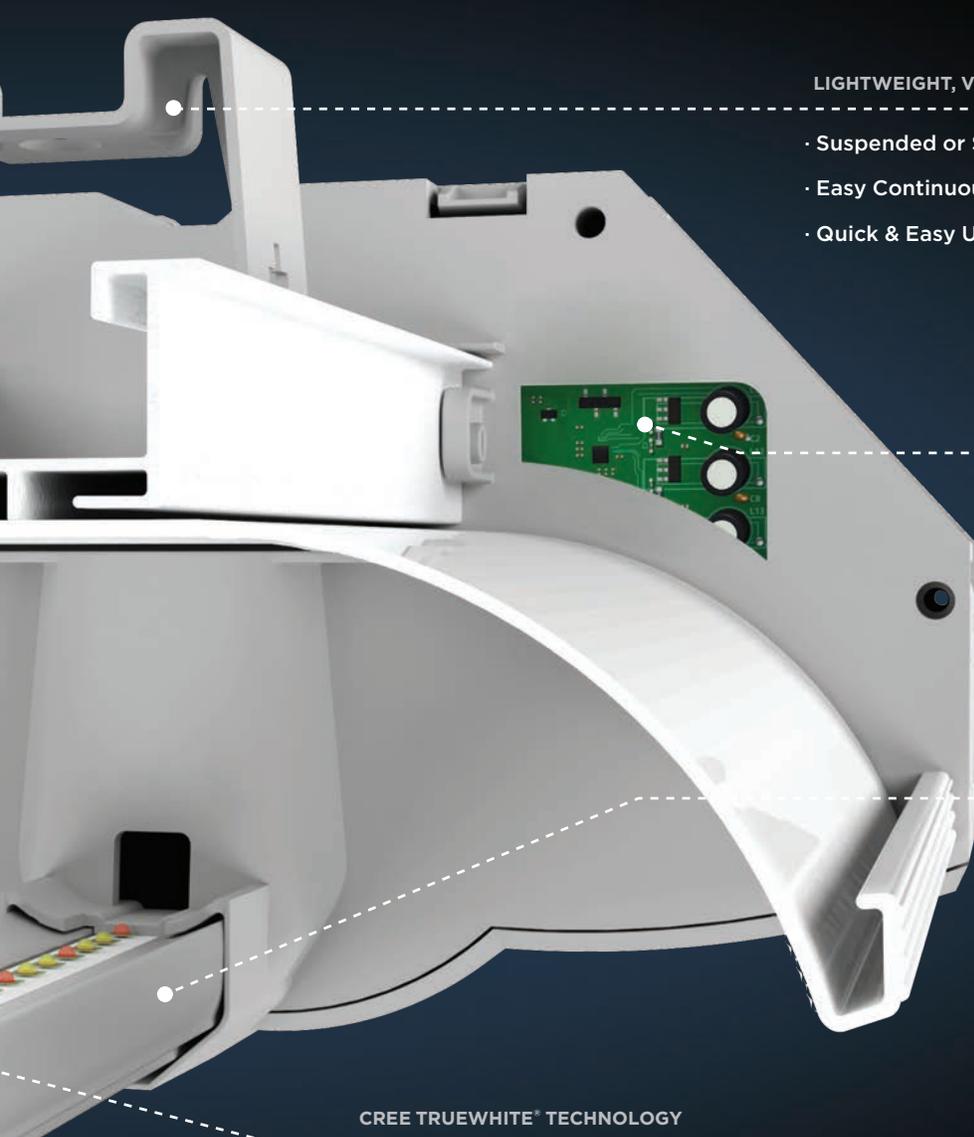
CREE MICROMIXING™ OPTICS

- Soft, Comfortable Light
- Perfectly Blended White Light
- Precise Optical Control

INTEGRAL THROUGH-WIRING

- Minimize Branch-Circuit Wiring
- Easy Access to Wiring Compartment
- Quick-Connect Plug Connectors





LIGHTWEIGHT, VERSATILE DESIGN

- Suspended or Surface Mount
- Easy Continuous Row Installations
- Quick & Easy Upgrade

NEXT-GENERATION DRIVER

- High Power, High Efficacy
- 0-10V Dimming Standard
- Highly Cost-Effective

OPEN-AIR HEAT SINK DESIGN

- Extended Life, Higher Performance
- Stylish Architectural Aesthetic
- Softer, Indirect Light

CREE TRUEWHITE® TECHNOLOGY

- High CRI & High Efficacy
- Beautiful Light Characteristics
- Lifetime Color Consistency

Architectural Design and Light Quality. Hardworking Form and Function.

The CS Series LED linear luminaire delivers up to 8200 lumens of exceptional 90 CRI light in either a 4' or 8' length. With a rated lifetime of up to 75,000 hours (L85), the CS Series not only delivers beautiful, high-quality light and big energy savings, it also drives faster payback and more savings by virtually eliminating maintenance costs.

PERFORMANCE SUMMARY

All CS Series fixtures are designed to deliver an optimal amount of light.

Cree TrueWhite® Technology

Cree MicroMixing™ Optics

CRI: 90

CCT: 3500K or 4000K

INPUT VOLTAGE: 120V or 277V, 50-60Hz

HIGH EFFICACY LIFETIME: Designed to last 75,000 hours minimum

BASE LIFETIME: Designed to last 50,000 hours minimum

WARRANTY: 10 years

DIMMING: 0-10V dimming to 5%

Made in the U.S.A. of U.S. and imported parts

REGULATORY: cULus listed; Suitable for damp locations. CS14: DLC qualified; CS18: LDL (Lighting Design Lab) qualified

CS Series

LED Linear Luminaire

CS18™

1' x 8' LED Linear Luminaire

CS18-82L HE (High Efficacy)

- 8200 lumens 72W
- 75,000 hours / 10-year warranty

CS18-80L HE (High Efficacy)

- 8000 lumens 73W
- 75,000 hours / 10-year warranty

CS18-75L

- 7500 lumens 75W
- 50,000 hours / 10-year warranty

CS18-44L

- 4400 lumens 44W
- 50,000 hours / 10-year warranty

Dimensions: L 96" x W 10" x H 5.8"



CS14™

1' x 4' LED Linear Luminaire

CS14-40L HE (High Efficacy)

- 4000 lumens 37W
- 75,000 hours / 10-year warranty

CS14-38L HE (High Efficacy)

- 3800 lumens 33W
- 75,000 hours / 10-year warranty

CS14-38L

- 3800 lumens 38W
- 50,000 hours / 10-year warranty

CS14-22L

- 2200 lumens 22W
- 50,000 hours / 10-year warranty

Dimensions: L 48" x W 10" x H 5.8"



Product specifications subject to change at any time. Visit www.cree.com/lighting to find the most up-to-date information and for recommended dimming control options.

CONSTRUCTION & MATERIALS

- High-strength, lightweight polymer forms the reflector and driver housing to provide maximum durability with minimal weight.
- Hangers are provided for surface or suspended installation and move freely along the fixture to accommodate existing mounting points, simplifying field installation for upgrade projects. Mounting accessories sold separately.
- Individual fixtures can be easily connected end to end for continuous row mounting as well as easily removed from mid-row.

THERMAL MANAGEMENT

- An innovative multi-functional heat sink is designed to maximize cooling effectiveness by allowing free air movement around it and through the fixture. This breakthrough design enables the LEDs to consistently run cooler, providing significant boosts to lifetime, efficacy and color consistency.
- The heat sink also doubles as the wire way for the through-wiring harness, which simplifies installation, making continuous row illumination quick and easy.

OPTICAL SYSTEM

- A high-efficiency upper reflector uses Cree MicroMixing™ Optics to blend the intense direct light from the LED light bar and then comfortably disperses it as uniformly colored, indirect white light.
- The indirect LED strip eliminates direct view of the highly-efficient, lighting-quality LEDs, further improving visual comfort.
- For more detailed photometry, visit www.cree.com/lighting.

ELECTRICAL SYSTEM

- High-efficiency driver and power supply offer robust performance with input power staying constant over the life.
- Integral through-wiring harness with quick-connect plug connectors make continuous row installations easy and efficient, while also minimizing branch-circuit wiring. A room-side wiring access chamber with a hinged door provides tool-less electrical access to these connectors.

LUMEN MAINTENANCE FACTORS

The CS Series is designed to last a minimum of L85 at 75,000 hours with the high-efficacy options and L88 at 50,000 hours base options.

CS18-80L HE / CS14-40L HE

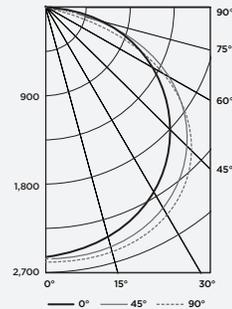
Ambient Temp	Operating Hours			
	25,000	35,000	50,000	75,000
25°C (77° F)	0.96	0.94	0.92	0.87
30°C (86° F)	0.96	0.94	0.91	0.86
35°C (95° F)	0.95	0.93	0.90	0.85

CS18-75L / CS14-40L

Ambient Temp	Operating Hours		
	25,000	35,000	50,000
25°C (77° F)	0.95	0.93	0.90
30°C (86° F)	0.94	0.92	0.89
35°C (95° F)	0.94	0.91	0.88

PHOTOMETRY

CS18-80L HE-40K-10V / Based on DTC Report Test #: 11135-G



Zonal Lumen Summary

Zone	Lumens	Luminaire
0-30	2,059	24.8%
0-40	3,456	41.7%
0-60	6,429	77.6%
0-90	8,233	99.3%
0-180	8,288	100%

Coefficients Of Utilization

RCC %:	80			
RW %:	70	50	30	0
RCR: 0	119	119	119	119
1	108	103	99	95
2	98	90	83	77
3	89	79	70	63
4	82	69	60	53
5	75	62	52	46
6	69	55	46	40
7	64	50	41	35
8	59	45	37	31
9	55	42	33	28
10	52	38	30	25

Effective Floor Cavity Reflectance: 20%

Visit www.cree.com/lighting for an explanation of calculations for these recommended CS Series Lumen Maintenance Factors. Reference www.cree.com/lighting for detailed photometric data.



America's Leading Innovator of LED Lighting

The CS Series is a modern lighting system that gives businesses the freedom to light their space exactly as they choose. This system is built on innovative thinking and revolutionary technology that reflect America's pioneering spirit. How fitting, then, that it was designed and assembled right here in the U.S. by Cree, America's leading innovator of LED lighting.

Join the LED Lighting Revolution.

Visit www.cree.com/lighting or contact a Cree lighting representative to learn more.

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