

Product Description

The ZR24™ LED troffer delivers 4000 lumens of superior 90 CRI light quality and is perfect for both new construction or renovation. Powered by Cree TrueWhite® Technology, the slim and lightweight ZR24 LED troffer boasts an efficacious 90 LPW performance along with 0-10V dimming to meet local energy codes. The ZR24 LED troffer embodies a breakthrough in balancing energy savings, visual comfort and initial cost.

Performance Summary

Utilizes Cree TrueWhite® Technology

Assembled in the US & Mexico

Efficacy: 90 LPW

Delivered Light Output: 4000 lumens

Input Power: 44 watts

CRI: 90 CRI

CCT: 3500K, 4000K

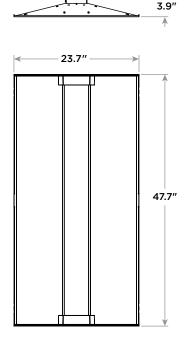
Input Voltage: 120-277 VAC
Limited Warranty: 10 years†

Lifetime: Designed to last up to 75,000 hours

Controls: 0-10V (Standard)*

Mounting: Recessed





Ordering Information

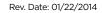
Example: ZR24-40L-35K-10V

Example: 2124 402 331 10V						
	ZR24	40L			10V	
	Product	Lumen Output	Color Temp	Voltage	Control	Options
	ZR24™	40L 44W, 4000 Lumens	35K 3500 Kelvin 40K 4000 Kelvin	Blank 120-277 Volt (Standard)	10V 0-10V Dimming 5%	EB Emergency Backup**

 $^{^{\}scriptsize +}$ See www.cree.com/lighting/products/warranty for warranty terms









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

^{**} EB option available Q2 2014

ZR24™ LED Troffer

Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high efficacy light with superior color rendering and lifelong color consistency. Cree TrueWhite Technology delivers a no compromise solution to enhance any space.

LUMEN MAINTENANCE FACTORS

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

CONSTRUCTION & MATERIALS

- · Durable cold rolled steel housing provides strength and uniformity
- · Ultra-thin 3.9" fixture height and lightweight design effectively target a broad range of plenum spaces and allow for easy installations
- · Fixture is pre-painted for enhanced smooth finish
- Provided t-bar clips and holes for mounting support wires enable recessed or suspended
- Fixture sides and ends are hemmed in for safe, easy handling

OPTICAL SYSTEM

- Unique fixture design creates perfect balance of both horizontal and vertical illumination
- Optimized smooth lens eliminates pixelation and delivers a low-glare, diffused light

ELECTRICAL SYSTEM

- Cree born components including highly efficacious Cree® LED chips along with an integral high-efficiency Cree® driver
- Power Factor = 0.9 nominal
- Input Power: Stays constant over life
- Input Voltage: 120-277V, 50/60Hz
- Battery Backup: Consult factory
- Temperature Rating: Designed to operate in temperatures 0-35°C and below room side and plenum side
- Total Harmonic Distortion: <20%

CONTROLS

· Continuous dimming to 5% with 0-10V controls comes standard*

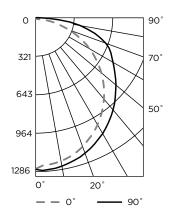
REGULATORY & VOLUNTARY QUALIFICATIONS

- UL924 (EB option)
- · cULus Listed
- Suitable for damp locations
- · Designed for Indoor use

Photometry

ZR24 BASED ON CESTL REPORT TEST #: 2014-0005

Fixture photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.



Coefficients Of Utilization RCC %: 80 RW %: 70 50 30 10 RCR: 0 119 119 119 119 1 110 106 102 73 97 2 107 102 93 3 88 76 68 61 51 4 80 67 58 5 73 60 50 43 6 68 54 44 38 7 33 49 40 58 44 36 29 9 55 41 32 26

51 Effective Floor Cavity Reflectance: 20%

10

Average Luminance Table (cd/m2)

		Horizontal Angle				
		0°	45°	90°		
•	٥°	1269	1269	1269		
Vertical Angle	45°	813	879	940		
cal A	55°	634	718	809		
/erti	65°	438	558	693		
	75°	231	406	511		
	85°	58	152	195		

Zonal Lumen Summary

37

29

24

Zone	Lumens	% Lamp	Luminaire
0-30	990	N/A	24.4%
0-40	1628	N/A	40.1%
0-60	2949	N/A	72.6%
0-90	4064	N/A	100%
0-180	4064	N/A	100%

Reference www.cree.com/lighting for detailed photometric data.

Application Reference

	Open Space						
Spacing	Lumens	Wattage	LPW	w/ft²	Average fc		
8 x 10	4000L	44W	90	0.66	56		
8 x 10	4000L	44W	90	0.55	46		
10 x 10	4000L	44W	90	0.44	37		
10 x 12	4000L	44W	90	0.35	30		

9' ceiling: 80/50/20 reflectances; 2.5' workplane, open room. LLF: 1.0 Initial Open Space: 50' x 40' x 10'



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