

DR Series

DR4™ LED Downlight – 4"

Product Description

At Cree®, we believe in better lighting. Better light is beautiful light. But it's more than just beautiful. It is light that makes you feel more productive, more relaxed and safer. Better light changes everything. That's why the new and improved Cree LED bulbs feature high color rendering that enhances your space and makes the colors of your décor appear vibrant, richer and more natural – true colors the way they are meant to be experienced.

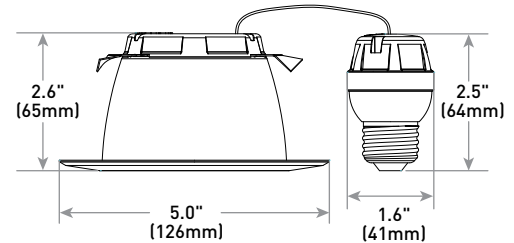
The DR4™ LED downlight, engineered with Cree TrueWhite® Technology, delivers 575 lumens with unmatched 90+ CRI light while achieving up to 72 lumens per watt. The DR4 is available in a soft white 2700K color temperature, uses up to 85% less energy and is designed to last 35 times longer than a traditional incandescent. It easily installs into most standard four-inch recessed IC or non-IC housings.

Applications: New construction or upgrade for residential and commercial lighting

Performance Summary

Utilizes Cree TrueWhite® Technology
Initial Delivered Lumens: 575 lumens
Input Power: 8-9 watts (50W equivalent)
CRI: 90+
CCT: 2700K, 5,000K
Limited Warranty*: 5 years Commercial use
Lifetime: Designed to last 35,000 hours
Dimming: Dimmable to 5% with select dimmers
ENERGY STAR® Certified
Must order in multiples of master carton (MC) quantities; MC = 4

*See <http://lighting.cree.com/warranty> for warranty terms



Ordering Information

Example: DR4-575L-27K-B1

DR	4		27K			B1
Series	Size	Initial Delivered Lumens	CCT	Voltage	Base	Packaging Options
DR	4	575L 27K: 9W, 575 Lumens - 64 LPW 50K: 8W, 575 Lumens - 72 LPW	27K 2700K 50K 5000K	Blank 120 Volt	Blank E26 (screw base)	B1 (1) Single Pack (MC = 4)

Ordering Number	Product Number	Unit UPC	Master Carton ITF-14	Lamps per Master Carton	Watts	Pallet Qty	CRI	CCT	Lumens	Rated Life (Hrs)
DR4-575L-27K-B1	SRDL4-0572700FH-12DE26-1-11004S0	849665011927	10849665011924	4	9	200	90+	2700K	575	35,000
DR4-575L-50K-B1	SRDL4-0575000FH-12DE26-1-11004S0	849665011941	10849665011948	4	8	200	90+	5000K	575	35,000



Rev. Date: V7 09/14/2016



Product Specifications

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that 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.

CONSTRUCTION & MATERIALS

- Durable housing protects LED and power supply. Adjustable flip clips resist heat while providing retention for flush ceiling fit
- Thermal management system uses the lower reflector to conduct heat away from LEDs and transfer it to the plenum space for optimal performance. LED junction temperatures stay below specified maximum
- Suitable for insulated and non-insulated ceilings
- One-piece aluminum lower reflector redirects light while also conducting heat away from LEDs. It creates a comfortable visual transition from the lens to the ceiling plane

OPTICAL SYSTEM

- Unique combination of reflective and refractive optical components achieves a uniform, comfortable appearance while eliminating pixelation and color fringing. This ensures smooth light patterns are projected with no hot spots and minimal striations
- 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 polycarbonate lens shields 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 power supply
- **Power Factor:** > 0.9
- **Total Harmonic Distortion:** < 20%
- **Input Voltage:** 120V, 50/60Hz
- **Dimming:** Dimmable to 5% with most incandescent dimmers. Reference <http://lighting.cree.com/products/indoor/retrofit-downlights/dr-series> for recommended dimmers
- **Operating Temperature Range:** -25°C - +35°C (-13°F - +95°F)

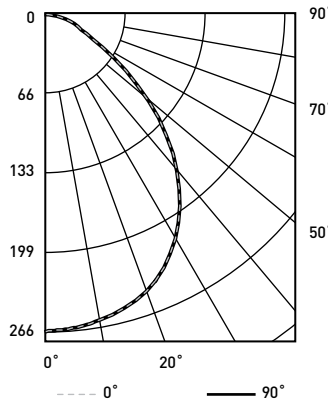
REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Classified
- Suitable for wet locations for covered ceilings only
- EnergyStar® certified. Please refer to <https://www.energystar.gov/productfinder/product/certified-light-fixtures/results> for most current information
DR4-575L-27K-B1: SRDL4-0572700FH-12DE26-1
DR4-575L-50K-B1: SRDL4-0575000FH-12DE26-1
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions
- RoHS Compliant. Consult factory for additional details

Photometry

DRDL4-05727009-12DE26-1C100 BASED ON CESTL REPORT TEST #: PL03421-001*

Luminaire 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 luminaire efficiency of 100%.



Average Luminance Table (cd/m²)				
		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	37,825	37,825	37,825
	55°	26,635	26,635	26,635
	65°	16,520	16,520	16,520
	75°	15,247	15,247	15,247
	85°	11,759	11,759	11,759

Reference <http://lighting.cree.com/products/indoor/retrofit-downlights/dr-series> for detailed photometric data

* Updated photometry coming soon

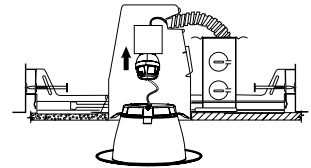
Coefficients Of Utilization – Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	110	106	103	99
2	102	94	89	84
3	94	84	77	71
4	87	76	68	62
5	80	69	60	54
6	74	62	54	48
7	69	57	49	43
8	65	52	44	39
9	61	48	40	35
10	57	45	37	32

Effective Floor Cavity Reflectance: 20%

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	205	N/A	35.4%
0-40	327	N/A	56.6%
0-60	510	N/A	88.4%
0-90	578	N/A	100.0%

Installation

- Designed to easily install in standard 4" (102mm) downlight housings with minimum housing height of 4.4" (112mm) and diameter of 4.0" - 4.1" (102mm - 104mm)
- Quick install system utilizes a unique retention feature. Simply attach socket to DR4. Move light to ready position and slide into housing



NOTE:

Reference <http://lighting.cree.com/products/indoor/retrofit-downlights/dr-series> for detailed installation instructions

Application Reference

Open Space					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4 x 4	575	9	64	0.54	34
6 x 6				0.25	16
8 x 8				0.13	9
10 x 10				0.09	6

10' Ceiling, 80/50/20 Reflectances, 2.5' workplane, LLF: 1.0 Initial. Open Space: 50' x 40' x 10'

Corridor					
Spacing	Lumens	Wattage	LPW	w/ft²	Average FC
4' on Center	575	9	64	0.36	11
6' on Center				0.24	8
8' on Center				0.18	6
10' on Center				0.15	5

10' Ceiling, 80/50/20 Reflectances, Light levels on the ground. LLF: 1.0 Initial. Corridor: 6' Wide x 100' Long