

# DR Series Generation 1

DR6™ LED Downlight – 6"

## Product Description

The DR6™ LED downlight, engineered with Cree TrueWhite® Technology, delivers up to 1,100 lumens with unmatched 90+ CRI light while achieving up to 73 lumens per watt. The DR6 is available in a warm 2700K color temperature or cool 5000K (65W equivalent) 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 six-inch recessed IC or non-IC housings.

**Applications:** New construction or upgrade for residential and commercial lighting

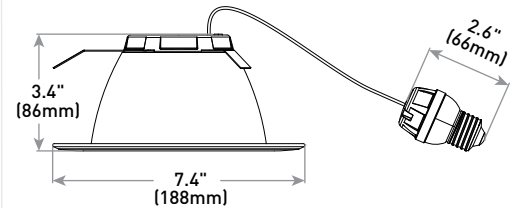
## Performance Summary

Utilizes Cree TrueWhite® Technology
<b>Initial Delivered Lumens:</b> 625-1,100 lumens
<b>Input Power:</b> 12.5 watts (65W equivalent); 15 watts (100W equivalent)
<b>CRI:</b> 90
<b>CCT:</b> 2700K, 5000K (65W equivalent)
<b>Limited Warranty<sup>†</sup>:</b> 5 years
<b>Lifetime:</b> Designed to last 35,000 hours
<b>Dimming:</b> Dimmable to 5% with select dimmers
Must order in multiples of master carton (MC) quantities; MC= 4

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

## Accessories

Trims	
<b>DR6T-BLK-U1</b> 6" Downlight Trim – Black	<b>DR6T-COP-U1</b> 6" Downlight Trim – Copper
<b>DR6T-SNK-U1</b> 6" Downlight Trim – Satin Nickel	<b>DR6T-ELD-WH-U1</b> 6" Downlight Eyelid Trim – White



## Ordering Information

Example: DRDL6-06227009-12DE26-1C100

Ordering Number	Unit UPC (MOQ* = 4 Units)	Master Carton UPC	Downlights per Master Carton*	Watts	Pallet Qty	CRI	Lumens	Rated Life (Hrs)
DRDL6-06227009-12DE26-1C100	810048029952	10810048029959	4	12.5	50	90+	625	35,000
DRDL6-06250009-12DE26-1C100	849665002857	10849665002854	4	12.5	50	90+	625	35,000
DRDL6-11027009-12DE26-1C110	849665002840	30849665002841	4	15	50	90+	1,100	35,000

\* DR6 must be ordered in quantities of 4 units



US: [lighting.cree.com](http://lighting.cree.com)

T (800) 236-6800 F (262) 504-5415

Rev. Date: V6\_Renewed 06/14/2017

Canada: [www.cree.com/canada](http://www.cree.com/canada)



T (800) 473-1234 F (800) 890-7507

**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 LEDs and power supply. Adjustable flip clips resist heat while providing retention for flush ceiling fit
- Thermal management system uses 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, 60Hz
- Dimmable to 5% with most incandescent dimmers
- Use only lighting controls with neutral connection or controls intended for use with LED fixtures
- **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]

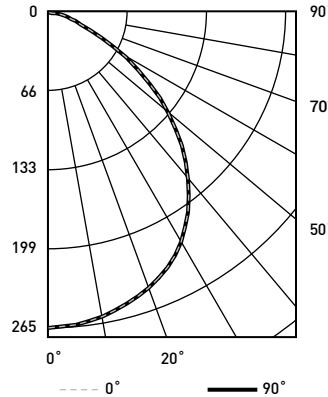
**REGULATORY & VOLUNTARY QUALIFICATIONS**

- cULus Classified
- Suitable for wet locations for covered ceilings only
- Meets FCC Part 15, Subpart B, Class B standards for conducted and radiated emissions
- RoHS Compliant. Consult factory for additional details

**Photometry**

**DRDL6-06227009-12DE26-1C100 BASED ON CESTL REPORT TEST #: PL03441-001**

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/m <sup>2</sup> )				
		Horizontal Angle		
		0°	45°	90°
Vertical Angle	45°	16,073	16,073	16,073
	55°	12,950	12,950	12,950
	65°	8,238	8,238	8,238
	75°	5,571	5,571	5,571
	85°	4,833	4,833	4,833

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

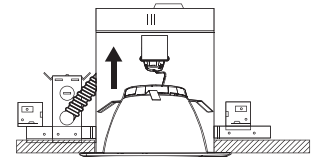
Coefficients Of Utilization – Zonal Cavity Method				
RC %:	80			
RW %:	70	50	30	10
RCR: 0	119	119	119	119
1	110	106	102	99
2	101	94	88	83
3	93	84	76	70
4	86	75	67	61
5	79	67	59	53
6	73	61	53	47
7	68	56	47	41
8	64	51	43	37
9	60	47	39	34
10	56	43	36	31

Effective Floor Cavity Reflectance: 20%

Zonal Lumen Summary			
Zone	Lumens	% Lamp	Luminaire
0-30	206	N/A	32.9%
0-40	333	N/A	53.3%
0-60	548	N/A	87.6%
0-90	625	N/A	100.0%

**Installation**

- Designed to easily install in standard 6" (152mm), and most 5" (127mm) downlight housings with minimum depth 5.5" (140mm) and diameter of 5.25" - 6.5" (133mm - 165mm)
- Quick install system utilizes a unique retention feature. Simply attach socket to DR6. 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/ft <sup>2</sup>	Average FC
4 x 4	625	12.5	50	0.75	37
6 x 6				0.35	17
8 x 8				0.19	9
10 x 10				0.13	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/ft <sup>2</sup>	Average FC
4' on Center	625	12.5	50	0.50	12
6' on Center				0.33	8
8' on Center				0.25	6
10' on Center				0.21	5

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