

CDR8

8" Commercial LED Downlight Retrofit

Product Description

The CDR8 is an 8 inch Recessed LED Commercial Retrofit Kit, designed to replace less efficient, traditional lighting fixtures with energy efficient LEDs. This 8 inch retrofit kit can replace most manufacturers incandescent, CFL, or HID fixtures with apertures of 7.72" min. to 8.26" max diameter. Easy conversion and installation can be performed from below the ceiling without removing the existing frame. The CDR8 is a great lighting solution for all commercial, retail, and institutional applications where high efficiency, low energy lighting is desired.

Construction

- Spun aluminum reflector with integrated trim
- Aluminum heat sink routes heat away from electrical components

Optical System

- Highly reflective faceted optical cone and textured diffuser create a uniform distribution of light

Electrical

- Driver delivers full-range dimming from 0 - 10VDC
- External driver ensures steady performance and long lifespan
- Operating temperature rating of -4°F to 122°F (-20°C to 50°C)
- Universal input 120-277VAC
- LM-80 testing performed in accordance to IESNA standards

Finish

- Satin aluminum reflector with integrated white trim

Installation

- Easy installation into most 8" incandescent or fluorescent frames
- Integrated safety cable

Warranty

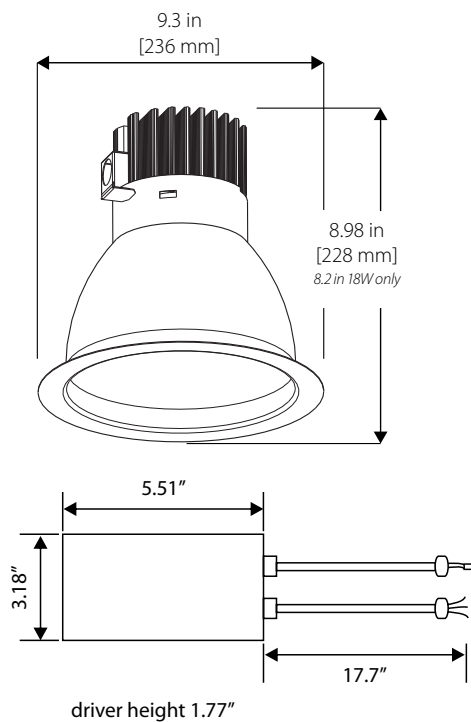
- 5-year limited system warranty standard
 - Warranty does not cover product failure due to an overvoltage event (power surge.)
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Project

Catalog

Type

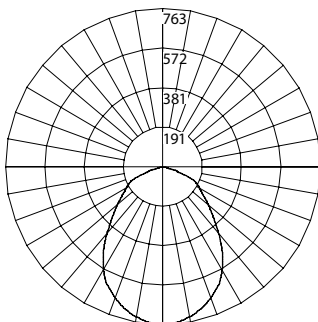
Date



Photometric Data

CDR8 3500K 18W

Input Voltage (VAC)	120-277V
System Level Power (W)	18.0
Delivered Lumens (Lm)	1501
System Efficacy (Lm/W)	83.4
Correlated Color Temp (K)	3493
Color Rendering Index (CRI)	81
Beam Angle	41°
Spacing Criteria	0.64



Intensity Summary (Candle Power)

Angle	Mean CP
0	2556
5	2444
15	1680
25	990
35	288
45	97
55	33
65	13
75	5
85	1
90	0

CCT Data Multiplier

CDR8-18W-UNV-40K	1.015
CDR8-18W-UNV-50K	1.036

Cone of Light Tabulation

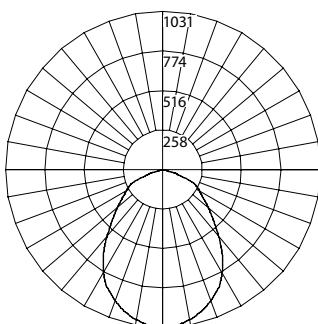
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	159.8	2.7
6	71.0	3.9
8	39.9	5.2
10	25.6	6.4
12	17.8	7.6
14	13.0	9.0
16	10.0	10.2

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	1150	76.6%
0-40	1373	91.4%
0-60	1481	98.7%
0-90	1501	100.0%
90-180	0	0.0%
0-180	1501	100.0%

CDR8 3500K 27W

Input Voltage (VAC)	120-277V
System Level Power (W)	27.0
Delivered Lumens (Lm)	2113
System Efficacy (Lm/W)	78.3
Correlated Color Temp (K)	3496
Color Rendering Index (CRI)	81
Beam Angle	39.4°
Spacing Criteria	0.62



Intensity Summary (Candle Power)

Angle	Mean CP
0	3755
5	3516
15	2381
25	1386
35	401
45	128
55	46
65	19
75	8
85	2
90	0

CCT Data Multiplier

CDR8-27W-UNV-40K	1.016
CDR8-27W-UNV-50K	1.036

Cone of Light Tabulation

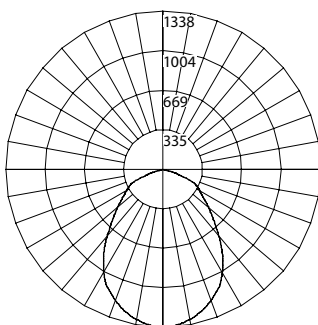
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	234.7	2.6
6	104.3	3.7
8	58.7	5.0
10	37.5	6.2
12	26.1	7.4
14	19.2	8.6
16	14.7	9.8

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	1626	77.0%
0-40	1936	91.6%
0-60	2081	98.5%
0-90	2113	100.0%
90-180	0	0.0%
0-180	2113	100.0%

CDR8 3500K 40W

Input Voltage (VAC)	120-277V
System Level Power (W)	40.0
Delivered Lumens (Lm)	2778
System Efficacy (Lm/W)	69.5
Correlated Color Temp (K)	3501
Color Rendering Index (CRI)	81
Beam Angle	37.7°
Spacing Criteria	0.60



Intensity Summary (Candle Power)

Angle	Mean CP
0	5128
5	4678
15	3096
25	1809
35	481
45	185
55	77
65	33
75	12
85	2
90	0

CCT Data Multiplier

CDR8-40W-UNV-40K	1.015
CDR8-40W-UNV-50K	1.036

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	320.5	2.4
6	142.4	3.6
8	80.1	4.8
10	51.3	5.9
12	35.6	7.1
14	26.2	8.2
16	20.0	9.5

Zonal Lumen Summary

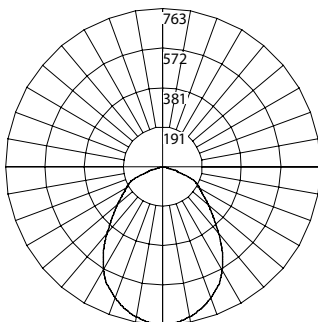
Zone	Lumens	% of Luminaire
0-30	2124	76.4%
0-40	2510	90.3%
0-60	2728	98.2%
0-90	2778	100.0%
90-180	0	0.0%
0-180	2778	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Photometric Data

CDR8 3500K 54W

Input Voltage (VAC)	120-277V
System Level Power (W)	54
Delivered Lumens (Lm)	3540
System Efficacy (Lm/W)	65.6
Correlated Color Temp (K)	3501
Color Rendering Index (CRI)	81
Beam Angle	37.7°
Spacing Criteria	0.60



Intensity Summary (Candle Power)

Angle	Mean CP
0	6535
5	5961
15	3945
25	2306
35	613
45	236
55	99
65	42
75	15
85	3
90	0

CCT Data Multiplier

CDR8-54W-UNV-40K	1.015
CDR8-54W-UNV-50K	1.036

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	408.4	2.4
6	181.5	3.6
8	102.1	4.8
10	65.4	5.9
12	45.4	7.1
14	33.4	8.2
16	25.5	9.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	2707	76.4%
0-40	3199	90.3%
0-60	3476	98.2%
0-90	3540	100.0%
90-180	0	0.0%
0-180	3540	100.0%

Fixture tested per LM-79-08. Photometric data is of the performance of a representative fixture. Results may vary in the field.

Performance Data

Model Number	Lumens	Watts	Lumens/Watt
CDR8-18W-UNV-35K	1501	18.0	83.4
CDR8-18W-UNV-40K	1524	18.0	84.7
CDR8-18W-UNV-50K	1555	18.0	86.4
CDR8-27W-UNV-35K	2113	27.0	78.3
CDR8-27W-UNV-40K	2146	27.0	79.5
CDR8-27W-UNV-50K	2189	27.0	81.1
CDR8-40W-UNV-35K	2778	40.0	69.5
CDR8-40W-UNV-40K	2821	40.0	70.5
CDR8-40W-UNV-50K	2877	40.0	71.9
CDR8-54W-UNV-35K	3540	54.0	65.6
CDR8-54W-UNV-40K	3595	54.0	66.6
CDR8-54W-UNV-50K	3666	54.0	67.9

Recommended Dimmers*

Lutron NTSTV
Lutron DVSTV
Cooper SF10P
Legrand RH4FBL3PW

*Not a complete list. Check compatibility before installation.

Ordering Information

Example: CDR8-18W-35K-SN

Series	Wattage	CCT	Reflector
CDR8	18W	35K (3500 K)	SN (Satin)
	27W	40K (4000 K)	
	40W	50K (5000 K)*	
	54W		

Specifications and dimensions subject to change without notice.

*Only available as special order. Contact NICOR for more info.