

CDL8

8" Commercial LED Downlight

Product Description

The CDL LED Commercial Downlight is a perfect solution for commercial, retail, and institutional applications in the new construction market where high efficiency, low energy lighting is desired. The CDL offers greater than 90 CRI, high efficacy and exceptional color rendering making this luminaire an ideal choice in places such as corridors, conference rooms, lobbies, and large offices. The CDL is available with many different color temperature and lumen options to fit any project. NICOR's commercial LED downlights are energy efficient and environmentally responsible, allowing you to light larger commercial spaces with peace of mind.

Constructions

- Durable galvanized steel frame, with adjustable hanger bars to fit securely into most spaces
- Aluminum heat sink routes heat away from electrical components

Optical System

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

Electrical

- Utilizes a high performing COB with greater than 90 CRI and an R9 greater than 50
- Driver delivers full-range dimming from 0 - 10VDC
- External driver ensures steady performance and long lifespan
- Operating temperature rating of 0°F to 120°F (-18°C to 49°C)
- Insulation detector prevents overheating from improper installation
- Input voltage based on insulation detector 120 or 277V
- TM-21 Projected L70(10K) life > 75,000 hrs
- LM-80 testing performed in accordance to IESNA standards

Finish

- Galvanized steel frame

Installation

- NICOR captive hanger bars allows housing to be positioned at any point up to a 24" joist span
- Unique hanger bar lip design helps align can to joist
- Bars fit onto T-bar spine for quick alignment and can be permanently secured
- Score lines allow bars to be shortened without tools to accommodate a 12" joist span
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Warranty

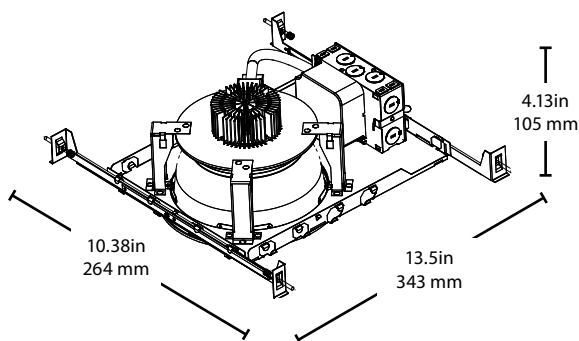
- 5-year limited system warranty standard
- Warranty does not cover product failure due to an overvoltage event (power surge.)

Project

Catalog

Type

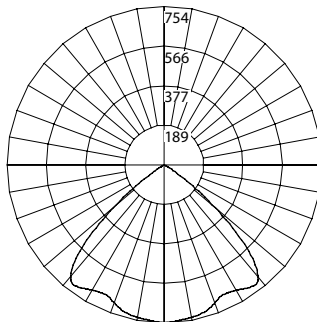
Date



Photometric Data

CDL8 2700K 220

Input Voltage (VAC)	120V/277V
System Level Power (W)	22.4
Delivered Lumens (Lm)	1585
System Efficacy (Lm/W)	70.7
Correlated Color Temp (K)	2635
Color Rendering Index (CRI)	90
Beam Angle	98.1°
Spacing Criteria	1.48



White Trim Scalar

CDL8-220-###-##K-WH 0.920

Intensity Summary (Candle Power)

Angle	Mean CP
0	754
5	748
15	730
25	682
35	716
45	561
55	118
65	4
75	2
85	0
90	0

CCT Data Multiplier

CDL8-220-###-30K-CL	1.143
CDL8-220-###-35K-CL	1.237
CDL8-220-###-40K-CL	1.242
CDL8-220-###-50K-CL	1.314

Cone of Light Tabulation

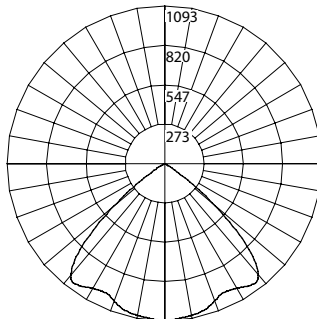
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	47.1	5.9
6	20.9	8.8
8	11.8	11.8
10	7.5	14.6
12	5.2	18.0
14	3.8	21.0
16	2.9	23.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	595	37.6%
0-40	1042	65.7%
0-60	1577	99.5%
0-90	1585	100.0%
90-180	0	0.0%
0-180	1585	100.0%

CDL6 2700K 230

Input Voltage (VAC)	120V/277V
System Level Power (W)	35.6
Delivered Lumens (Lm)	2298
System Efficacy (Lm/W)	64.5
Correlated Color Temp (K)	2679
Color Rendering Index (CRI)	90
Beam Angle	98.1°
Spacing Criteria	1.48



White Trim Scalar

CDL8-230-###-##K-WH 0.920

Intensity Summary (Candle Power)

Angle	Mean CP
0	1093
5	1084
15	1059
25	989
35	1038
45	813
55	171
65	6
75	3
85	0
90	0

CCT Data Multiplier

CDL8-230-###-30K-CL	1.138
CDL8-230-###-35K-CL	1.230
CDL8-230-###-40K-CL	1.236
CDL8-230-###-50K-CL	1.308

Cone of Light Tabulation

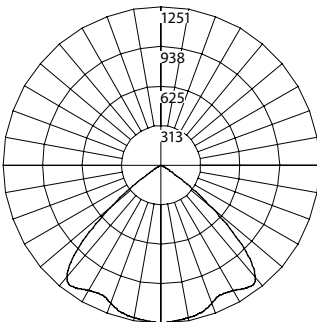
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	68.3	5.9
6	30.4	8.7
8	17.1	11.8
10	10.9	14.6
12	7.6	17.5
14	5.6	20.7
16	4.3	23.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	863	37.6%
0-40	1510	65.7%
0-60	2286	99.5%
0-90	2298	100.0%
90-180	0	0.0%
0-180	2298	100.0%

CDL6 2700K 240

Input Voltage (VAC)	120V/277V
System Level Power (W)	49.9
Delivered Lumens (Lm)	2629
System Efficacy (Lm/W)	52.6
Correlated Color Temp (K)	2680
Color Rendering Index (CRI)	90
Beam Angle	98.1°
Spacing Criteria	1.48



White Trim Scalar

CDL8-240-###-##K-WH 0.920

Intensity Summary (Candle Power)

Angle	Mean CP
0	1251
5	1241
15	1212
25	1132
35	1187
45	930
55	196
65	7
75	3
85	0
90	0

CCT Data Multiplier

CDL8-240-###-30K-CL	1.137
CDL8-240-###-35K-CL	1.230
CDL8-240-###-40K-CL	1.236
CDL8-240-###-50K-CL	1.308

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	78.2	5.9
6	34.7	8.7
8	19.5	11.8
10	12.5	15.3
12	8.7	17.8
14	6.4	20.7
16	4.9	23.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	987	37.6%
0-40	1728	65.7%
0-60	2616	99.5%
0-90	2629	100.0%
90-180	0	0.0%
0-180	2629	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

Performance Data			
Model Number	Lumens	Watts	Lumens/Watt
CDL8-220-###-27K-CL	1585	22.4	70.7
CDL8-220-###-30K-CL	1812	22.4	80.9
CDL8-220-###-35K-CL	1960	22.4	87.5
CDL8-220-###-40K-CL	1969	22.4	87.9
CDL8-220-###-50K-CL	2083	22.4	92.9
CDL8-230-###-27K-CL	2298	35.6	64.5
CDL8-230-###-30K-CL	2614	35.6	73.4
CDL8-230-###-35K-CL	2827	35.6	79.4
CDL8-230-###-40K-CL	2840	35.6	79.7
CDL8-220-###-50K-CL	3005	35.6	84.4
CDL6-240-###-27K-CL	2629	49.9	52.6
CDL6-240-###-30K-CL	2990	49.9	59.9
CDL8-240-###-35K-CL	3234	49.9	64.7
CDL8-240-###-40K-CL	3249	49.9	65.0
CDL6-220-###-50K-CL	3438	49.9	68.8

White Trim Scalar

CDL8-###-###-##K-WH 0.920

Recommended Dimmers*

Lutron NTSTV
Lutron DVSTV
Cooper SF10P
Legrand RH4FBL3PW

*Not a complete list. Check compatibility before installation.

Ordering Information

Example: CDL8-220-120-30K-CL-E1

Series	Version	Lumens	Voltage	CCT's	Reflector	Emergency
CDL8	2 (Version 2.0)	20 (2000 Lm)	120 (120V)	27K (2700 K)	CL (clear)	E1 (EMB45)
		30 (2600 Lm)	277 (277V)	30K (3000 K)	WH (white)	E2 (EMB80)
		40 (3200 Lm)		35K (3500 K)		E3 (EMB250)
				40K (4000 K)		
				50K (5000 K)		

Specifications and dimensions subject to change without notice.