

CDL6

6" 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.

Construction

- 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

Warranty

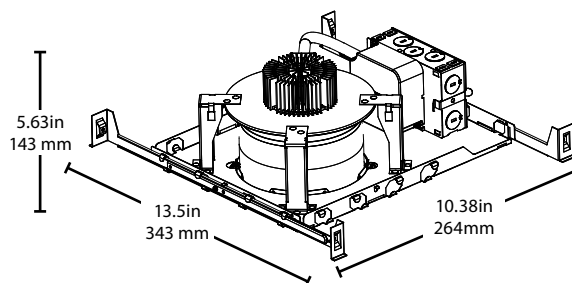
- 5-year limited system warranty standard
 - Warranty does not cover product failure due to an overvoltage event (power surge.)
- For installations where power surge may be possible, NICOR recommends installing additional surge protection at the fixture or electrical distribution panel

Project

Catalog

Type

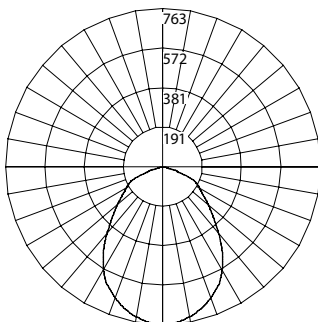
Date



Photometric Data

CDL6 2700K 220

Input Voltage (VAC)	120V/277V
System Level Power (W)	22.6
Delivered Lumens (Lm)	1593
System Efficacy (Lm/W)	70.6
Correlated Color Temp (K)	2635
Color Rendering Index (CRI)	90
Beam Angle	85.6°
Spacing Criteria	1.16



White Trim Scalar

CDL6-220-###-##K-WH 0.920

Intensity Summary (Candle Power)

Angle	Mean CP
0	763
5	757
15	713
25	637
35	506
45	350
55	241
65	175
75	55
85	2
90	0

CCT Data Multiplier

CDL6-220-###-30K-CL	1.142
CDL6-220-###-35K-CL	1.236
CDL6-220-###-40K-CL	1.242
CDL6-220-###-50K-CL	1.314

Cone of Light Tabulation

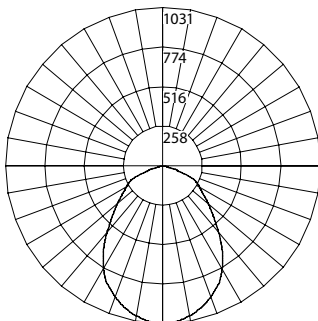
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	47.7	4.6
6	21.2	6.9
8	11.9	9.2
10	7.6	11.6
12	5.3	13.8
14	3.9	15.8
16	3.0	18.0

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	565	35.5%
0-40	879	55.2%
0-60	1369	86.0%
0-90	1593	100.0%
90-180	0	0.0%
0-180	1593	100.0%

CDL6 2700K 230

Input Voltage (VAC)	120V/277V
System Level Power (W)	35.6
Delivered Lumens (Lm)	2154
System Efficacy (Lm/W)	60.5
Correlated Color Temp (K)	2679
Color Rendering Index (CRI)	90
Beam Angle	85.6°
Spacing Criteria	1.16



White Trim Scalar

CDL6-230-###-##K-WH 0.920

Intensity Summary (Candle Power)

Angle	Mean CP
0	1031
5	1024
15	964
25	862
35	685
45	474
55	325
65	237
75	74
85	3
90	1

CCT Data Multiplier

CDL6-230-###-30K-CL	1.137
CDL6-230-###-35K-CL	1.230
CDL6-230-###-40K-CL	1.236
CDL6-230-###-50K-CL	1.308

Cone of Light Tabulation

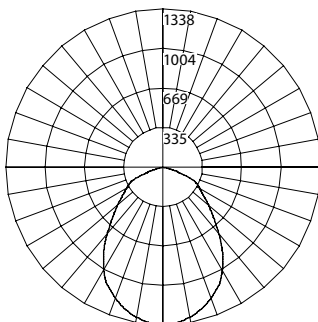
Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	64.5	4.6
6	28.6	6.9
8	16.1	9.2
10	10.3	11.4
12	7.2	13.7
14	5.3	15.8
16	4.0	18.7

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	764	35.5%
0-40	1190	55.2%
0-60	1852	86.0%
0-90	2154	100.0%
90-180	0	0.0%
0-180	2154	100.0%

CDL6 2700K 240

Input Voltage (VAC)	120V/277V
System Level Power (W)	49.9
Delivered Lumens (Lm)	2800
System Efficacy (Lm/W)	56.1
Correlated Color Temp (K)	2680
Color Rendering Index (CRI)	90
Beam Angle	85.3°
Spacing Criteria	1.16



White Trim Scalar

CDL6-240-###-##K-WH 0.920

Intensity Summary (Candle Power)

Angle	Mean CP
0	1338
5	1328
15	1250
25	1118
35	889
45	610
55	426
65	316
75	98
85	4
90	0

CCT Data Multiplier

CDL6-240-###-30K-CL	1.073
CDL6-240-###-35K-CL	1.160
CDL6-240-###-40K-CL	1.166
CDL6-240-###-50K-CL	1.234

Cone of Light Tabulation

Mounted height (Feet)	Footcandles Beam Center	Diameter (Feet)
4	83.6	4.6
6	37.2	6.9
8	20.9	9.2
10	13.4	11.5
12	9.3	13.7
14	6.8	16.0
16	5.2	18.5

Zonal Lumen Summary

Zone	Lumens	% of Luminaire
0-30	990	35.4%
0-40	1543	55.1%
0-60	2402	85.8%
0-90	2800	100.0%
90-180	0	0.0%
0-180	2800	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
CDL6-220-###-27K-CL	1593	22.6	70.6
CDL6-220-###-30K-CL	1820	22.6	80.7
CDL6-220-###-35K-CL	1969	22.6	87.3
CDL6-220-###-40K-CL	1978	22.6	87.7
CDL6-220-###-50K-CL	2093	22.6	92.6
CDL6-230-###-27K-CL	2154	35.6	60.5
CDL6-230-###-30K-CL	2450	35.6	68.8
CDL6-230-###-35K-CL	2650	35.6	74.4
CDL6-230-###-40K-CL	2662	35.6	74.7
CDL6-220-###-50K-CL	2817	35.6	79.1
CDL6-240-###-27K-CL	2800	49.9	56.1
CDL6-240-###-30K-CL	3004	49.9	60.2
CDL6-240-###-35K-CL	3249	49.9	65.1
CDL6-240-###-40K-CL	3264	49.9	65.4
CDL6-220-###-50K-CL	3454	49.9	69.2

White Trim Scalar

CDL6-###-###-##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: CDL6-220-120-30K-CL-E1

Series	Version	Lumens	Voltage	CCT's	Reflector	Emergency
CDL6	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)		EM (SL-60A)
				50K (5000 K)		

Specifications and dimensions subject to change without notice.