

Project	
Notes	
Type	Date
Cat. No.	



CDL™ Series Commercial Downlight - Field Adjustable

DESCRIPTION

The Aleo CDL Series is the perfect energy-saving solution for commercial downlight applications. The CDL recessed downlight offers extreme versatility with field-adjustable lumen output and color temperature. No can is needed for installation. Perfect for new construction or retrofit of CFL and HID downlights of varying mounting heights.

APPLICATIONS

Commercial, retail, education, hospitality, covered outdoor ceilings. Retrofit / remodel or new construction

Specification Features



Construction

Rugged, one-piece design with integrated driver with selectable lumen and CCT. Comes equipped with spring-action clips and flex conduit. Wet Location Rated.

Optical System

Reflector system features highly reflective coating and delivers balanced, comfortable illuminance. Optimal glare control. Baffled trim.

Certification

ETL Listed. ENERGY STAR. FCC Part 15 Class B

Warranty

7-year Limited Warranty. See warranty documentation for more information.

Electrical

Field Selectable lumen output and color temp. Universal voltage:120V-277V input. Flicker-free driver.

Installation / Mounting

Quick and easy installation. Installs with no can / housing needed. Integral spring clips.

Controls / Dimming

Tri-Mode Dimming: 0-10V + TRIAC (120V) + ELV (120V)

Field-Adjustable CCT / Wattage

Increased versatility and reduced inventory burden. Wattage and Color Temp. Can be adjusted in the field by selecting (3) different wattages and (5) different CCTs via switch on driver box

CDL Series	
6" LE	600lm - 1200lm
8" LE	750lm - 1500lm
8" HE	1000lm - 2500lm
10" LE	2000lm - 3500lm

Rated Life 50,000 hours
 Limited Warranty 7-years
 Efficacy 95-115 lm/W
 Continuous Dimming



Quick Ship

CDL-4LE-UX/9CT G2
 CDL-6LE-UX/9CT G2
 CDL-8LE-UX/9CT G2
 CDL-10LE-UX/9CT G2

Ordering Information

Example: CDL-8LE-UX/9CT G2

CDL	8	LE	UX	9	CT	[Blank]
Series	Form Factor	Lumen Package	Lumen Package	CRI	Color Temp	Dimming
CDL Commercial Downlight	4 4" nom. 6 6" nom. 8 8" nom. 10 9.5" nom.	LE Low Wattage	UX Field Adjustable	9 90+	CT Field Adjust. 2700K 3000K 3500K 4000K 5000K * Utilize 5-way switch to select	Blank Tri-Mode Dimming: 0-10V / TRIAC / ELV
Options						
Controls						
WLC/BT Wireless Bluetooth Lighting Control Node						

Specifications and Dimensions subject to change without notice.

Performance Summary

Input Voltage	120V-277V
Input Frequency	50/60 Hz
Rated Wattage	See Performance Table
Delivered Lumens	See Performance Table
Efficacy	> 95 LPW (typ.)
CRI	90+
Available CCT ¹	2700K/3000K/3500K/4000K/5000K
Rated Life	50,000 hours
L70	54,000 hours
Power Factor	> 0.9
THD	< 25%
Dimming	0-10V + TRIAC (120V) + ELV (120V)
Operating Temp.	-25°C to 40°C



Performance Data

Form Factor	Catalog No.	Nominal Wattage	Color Temperature	Lumens (lm)	Wattage (W)	Efficacy (lm/W)
4"	CDL-4LE-UX/9CT G2	6	2700K	606	5.8	104.4
			3000K	636	5.8	109.7
			3500K	657	5.7	115.2
			4000K	666	5.7	116.8
			5000K	658	5.8	113.5
		8	2700K	781	7.7	101.4
			3000K	821	7.7	106.6
			3500K	839	7.5	111.9
			4000K	863	7.6	113.5
			5000K	849	7.7	110.3
		12	2700K	1143	11.6	98.5
			3000K	1190	11.5	103.5
			3500K	1228	11.3	108.7
			4000K	1256	11.4	110.2
			5000K	1242	11.6	107.1

Continued on next page

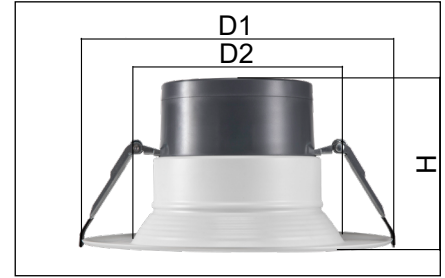
Performance Data (Cont'd)

Form Factor	Catalog No.	Nominal Wattage	Color Temperature	Lumens (lm)	Wattage (W)	Efficacy (lm/W)
6"	CDL-6LE-UX/9CT G2	7	2700K	732	7.0	104.5
			3000K	770	6.8	113.3
			3500K	814	6.7	121.5
			4000K	829	6.7	123.7
			5000K	815	6.8	119.8
		10	2700K	1015	10.0	101.5
			3000K	1068	9.7	110.1
			3500K	1122	9.5	118.1
			4000K	1154	9.6	120.2
			5000K	1141	9.8	116.4
		15	2700K	1469	14.9	98.6
			3000K	1561	14.6	106.9
			3500K	1640	14.3	114.7
			4000K	1669	14.3	116.7
			5000K	1661	14.7	113.0
8"	CDL-8LE-UX/9CT G2	10	2700K	1062	9.9	107.3
			3000K	1077	9.8	109.9
			3500K	1114	9.8	113.7
			4000K	1152	9.8	117.6
			5000K	1178	9.7	121.4
		20	2700K	2063	19.8	104.2
			3000K	2104	19.7	106.8
			3500K	2166	19.6	110.5
			4000K	2238	19.6	114.2
			5000K	2301	19.5	118.0
		25	2700K	2500	24.7	101.2
			3000K	2551	24.6	103.7
			3500K	2640	24.6	107.3
			4000K	2717	24.5	110.9
			5000K	2796	24.4	114.6
10"	CDL-10LE-UX/9CT G2	20	2700K	2058	19.9	103.4
			3000K	2087	19.5	107.0
			3500K	2146	19.4	110.6
			4000K	2208	19.3	114.4
			5000K	2293	19.4	118.2
		25	2700K	2492	24.8	100.5
			3000K	2538	24.4	104.0
			3500K	2612	24.3	107.5
			4000K	2680	24.1	111.2
			5000K	2778	24.2	114.8
		36	2700K	3494	35.8	97.6
			3000K	3552	35.2	100.9
			3500K	3654	35.0	104.4
			4000K	3744	34.7	107.9
			5000K	3891	34.9	111.5

Specifications and Dimensions subject to change without notice.

Product Dimensions

Model No.	Size	D1	D2	H	Cut-out	
					Min.	Max.
CDL-4LE-UX/9CT G2	4"	6"	4-7/16"	4-3/16"	ø4-9/16"	ø5-3/4"
CDL-6LE-UX/9CT G2	6"	8-7/16"	5-3/4"	4-13/16"	ø6-1/16"	ø8-3/16"
CDL-8LE-UX/9CT G2	8"	10-1/16"	7-3/16"	5-3/16"	ø7-5/16"	ø9-13/16"
CDL-10LE-UX/9CT G2	10"	11-3/8"	8-9/16"	5-5/8"	ø8-5/8"	ø11-1/8"



Field-Adjustable Wattage & CCT



Model	Adjustable Wattage			Adjustable Color Temp				
	Low	Med	High	2700K	3000K	3500K	4000K	5000K
CDL-4LE-UX/9CT G2	5W	8W	12W					
CDL-6LE-UX/9CT G2	7W	10W	15W					
CDL-8LE-UX/9CT G2	10W	20W	25W					
CDL-10LE-UX/9CT G2	20W	25W	36W					

Accessory Options

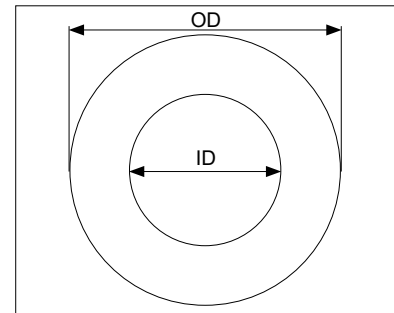
Goof Ring

- GFR-CDL-4 Goof Ring for 4" Downlight, Matte White
- GFR-CDL-6 Goof Ring for 6" Downlight, Matte White
- GFR-CDL-8 Goof Ring for 8" Downlight, Matte White
- GFR-CDL-10 Goof Ring for 10" (9.5") Downlight, Matte White

Model	OD	ID
GFR-CDL-4	ø6.5"	ø4.6"
GFR-CDL-6	ø10.5"	ø6.3"
GFR-CDL-8	ø12.5"	ø8.1"
GFR-CDL-10	ø14.2"	ø9.1"

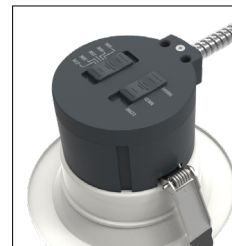
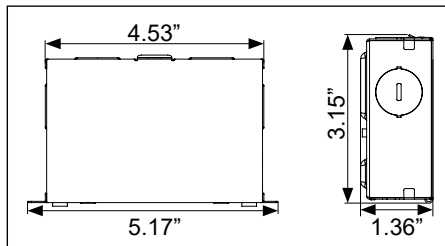
Emergency Backup - Micro Inverter

EM-AC-V200-UNV-H-FI-16 15W Micro-Inverter, 120V-277V, 90 min.



Other Accessories

CDL-JBX Junction Box for CDL Downlight, standalone version



Specifications and Dimensions subject to change without notice.



AleoBlue Wireless Bluetooth Controls

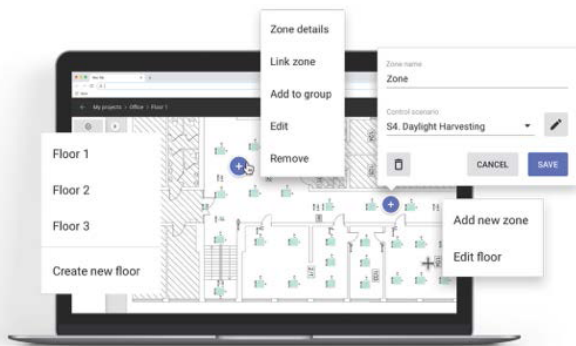


The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth Mesh lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

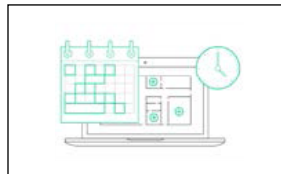
Features and Benefits

- Lighting Zones / Grouping
- Manual control of individual lights
- On Power up Behavior
- Zone Linking
- Vacancy Sensing
- Per fixture Daylight Control
- Per zone Daylight Control

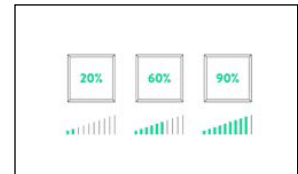


- Optimized Energy Consumption
- Less Hassle with On-Site Adjustments
- More Savings
- Increased Safety
- More Flexibility

Scheduling



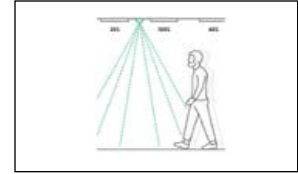
High and Low End Trim



Scenes



Occupancy Sensing



- Intuitive and user-friendly web and iOS apps
- No specialized training or lighting control expertise required
- Optimized for commercial spaces of any size
- No additional wiring or central control box
- Customizable lighting control parameters
- Future proof with Software Updates
- Multiple Zone Configurable
- Built-In Scenarios + Customization

Bluetooth Mesh Technology Advantages



The fastest low-power communication



Scalability to thousands of devices



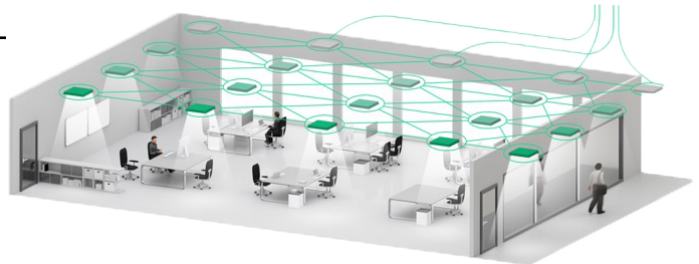
The most advanced encryption standards as well as the cutting-edge device authentication

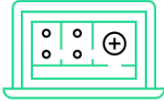


No single point of failure (no central device)



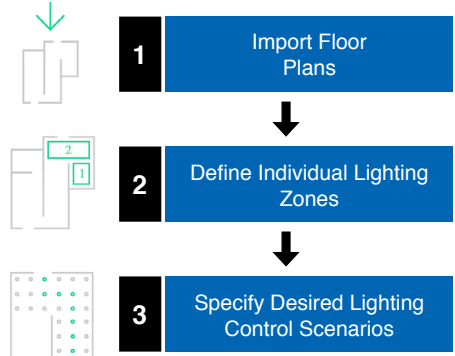
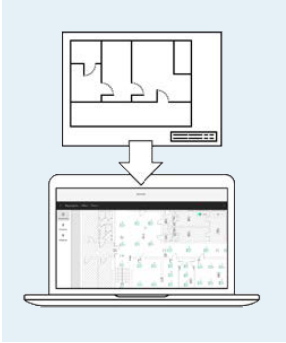
Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth 4.0 and Bluetooth 5)





Planning

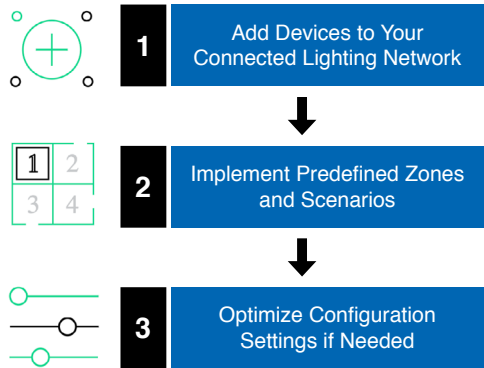
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



Implementation

Adding lighting devices to the Bluetooth mesh network on-site with the use of an iOS app.

Customization and calibration of lighting control parameters during and after the commissioning process. Defining scenes for specific working activities.



Provisioning / Configurations

The Bluetooth mesh Node is in the Unprovisioned Mode until it is provisioned by a "Provisioner", which typically is a smart phone with a Bluetooth mesh compatible app.

Ordering Information



Wireless Bluetooth Lighting Control Node
Model: -WLC/BT



AleoBlue, Kinetic Powered Single-Rocker Switch
Model: WM-KN-DMSR/BT-200



AleoBlue, Wireless Bluetooth PIR Occ Sensor w/ Daylight Harvesting
Model: SPIR-ODSL/BT-CM-DC201

Specifications and Dimensions subject to change without notice.

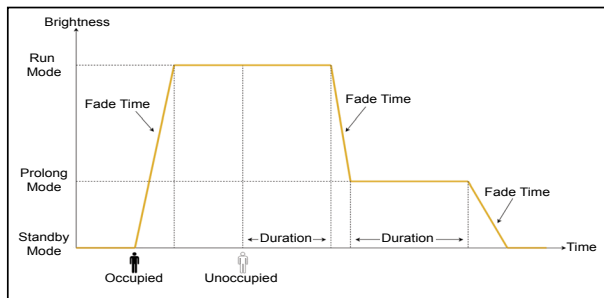
Lighting Control Scenarios

Multiple lighting control scenarios are available once the Bluetooth mesh Node is provisioned. At each scenario, duration, fade time and target brightness can be configured at any time with the iOS app.

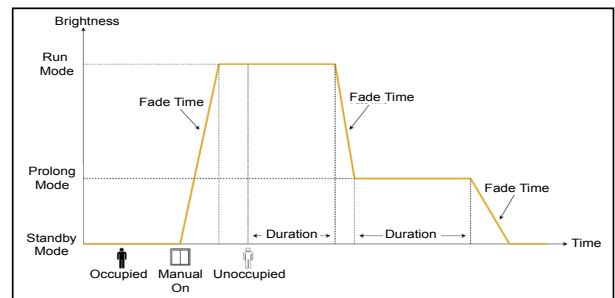


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight Harvesting	On / Off / Scenes	Auto Off	Enabled

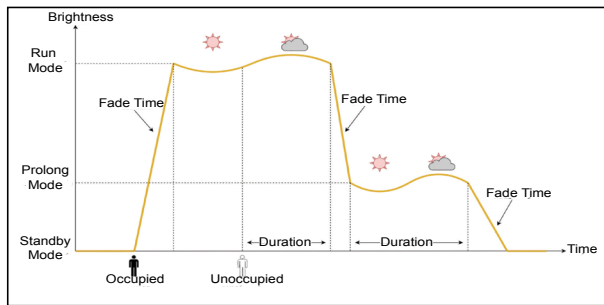
Occupancy Scenario



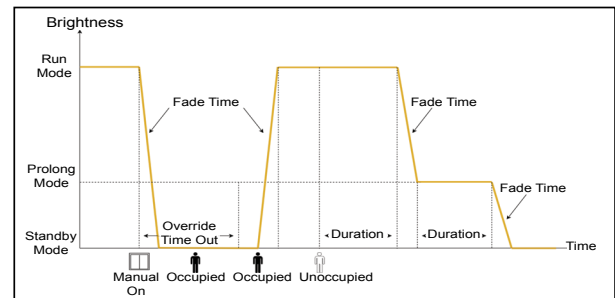
Vacancy Scenario



Occupancy Scenario - with Daylight Harvesting



Occupancy Scenario with Manual Override



Occupancy Detection Pattern

H	X	Y
7.9' (2.4m)	16.4' (5.0m)	16.4' (5.0m)
8.9' (2.7m)	18.4' (5.6m)	18.4' (5.6m)
9.8' (3.0m)	20.3' (6.2m)	20.3' (6.2m)

Orientation Indicators

