aleo™
LED LIGHTING

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

WET LOCATION RATED | ETL LISTED c us Intertek | ADJUSTABLE WATTAGE | CCT FIELD ADJUSTABLE | 7 LIMITED WARRANTY | ENERGY STAR | aleoblue™

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. 0-10V dimming.

Installation / Mounting

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

Controls / Dimming

Continuous dimming (0-10V) comes standard.

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 (3) different CCTs via switch on driver box

CDL Series	
6" LE	750lm - 1500lm
8" LE	1500lm - 2500lm
8" HE	3000lm - 5000lm
10" LE	2000lm - 3200lm

Rated Life 50,000 hours
Limited Warranty 7-years
Efficacy 88-100 lm/W
Continuous Dimming

CONTINUOUS DIMMING
0-10V Continuous

Quick Ship

CDL-6LE-UX/9CT
CDL-8LE-UX/9CT
CDL-8HE-UX/9CT
CDL-10LE-UX/9CT

Ordering Information

Example: CDL-8LE-UX/9CT

CDL	**8**	**LE**	**UX**	**9**	**CT**	**[Blank]**
Series	**Form Factor**	**Lumen Package**	**Lumen Package**	**CRI**	**Color Temp**	**Dimming**
CDL Commercial Downlight	**6** 6" nom. **8** 8" nom. **10** 9.5" nom.	**LE** Low Wattage **HE** High Lumen	**UX** Field Adjustable	**9** 90+	**CT** Field Adjust. 3000K 3500K 4000K * Utilize 3-way switch to select	**Blank** 0-10V Continuous Dimming
					Options	
					Controls **WLC/BT** Wireless Bluetooth Lighting Control Node	

Specifications and Dimensions subject to change without notice.

Form CDL-SS / Rev. 07   **Aleo Lighting, Inc.** I www.aleolighting.com I Ph: 877-358-8825

Performance Summary

Input Voltage	120V-277V
Input Frequency	50/60 Hz
Rated Wattage	See Performance Table
Delivered Lumens	See Performance Table
Efficacy	> 88 LPW (typ.)
CRI	90+
Available CCT[1]	3000K / 3500K / 4000K
Rated Life	50,000 hours
L70	54,000 hours
Power Factor	> 0.95
THD	< 15%
Dimming	0-10V Continuous
Operating Temp.	-20ºC to 40ºC

Performance Data

Form Factor	Catalog No.	Rated Wattage (W)	3000K		3500K		4000K	
			Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)
6"	CDL-6LE-UX/9CT	9	756.2	93.86	816.3	103.67	760	94.52
		13	1145	93.78	1228	102.68	1154	94.75
		19	1577	87.12	1691	95.75	1589	88.23
8"	CDL-8LE-UX/9CT	17	1534	94.46	1657	106.29	1599	99.69
		23	2069	90.03	2235	101.31	2156	94.94
		29	2542	88.52	2729	99.16	2620	92.45
	CDL-8HE-UX/9CT	34	3241	95.58	3585	108.64	3284	96.87
		42	3818	91.23	4224	103.70	3869	92.47
		52	4562	87.87	5047	99.88	4623	89.06
10"	CDL-10LE-UX/9CT	21	1995	98.42	2094	109.35	2048	102.09
		30	2711	94.72	2822	104.29	2759	97.59
		38	3347	90.39	3513	99.94	3437	95.31

Specifications and Dimensions subject to change without notice.

Form CDL-SS / Rev. 07   **Aleo Lighting, Inc.** I www.aleolighting.com I Ph: 877-358-8825

Product **Dimensions**

Model No.	Size	D1	D2	H	Cut-out Min.	Cut-out Max.
CDL-6LE-UX/9CT	6"	8-7/16"	5-7/8"	4-7/16"	ø6-1/8"	ø7-3/16"
CDL-8LE-UX/9CT	8"	10-1/16"	7-3/8"	4-3/4"	ø7-9/16"	ø8-11/16"
CDL-8HE-UX/9CT	8"	10-1/16"	7-3/8"	4-3/4"	ø7-9/16"	ø8-11/16"
CDL-10LE-UX/9CT	10"	11-3/8"	8-11/16"	5-1/4"	ø8-7/8"	ø10"
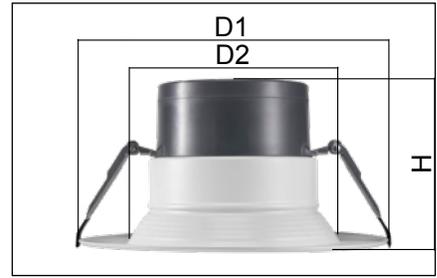
Field-Adjustable Wattage & CCT

Model	Adjustable Wattage Low	Adjustable Wattage Med	Adjustable Wattage High	Adjustable Color Temp		
CDL-6LE-UX/9CT	9W	13W	19W	4000K	3500K	3000K
CDL-8LE-UX/9CT	17W	23W	29W			
CDL-8HE-UX/9CT	32W	42W	52W			
CDL-10LE-UX/9CT	21W	30W	38W			

Accessory **Options**

Goof Ring

GFR-CDL-6	Goof Ring for 6" Downlight, Matte White, 10.5" outer diameter
GFR-CDL-8	Goof Ring for 8" Downlight, Matte White, 12.5" outer diameter
GFR-CDL-10	Goof Ring for 10" (9.5") Downlight, Matte White, 14" outer diameter

Model	Outer Diameter	Inner Diameter
GFR-CDL-6	ø10.5"	ø5.9"
GFR-CDL-8	ø12.5"	ø7.4"
GFR-CDL-10	ø14"	ø8.7"

Emergency Backup - Micro Inverter

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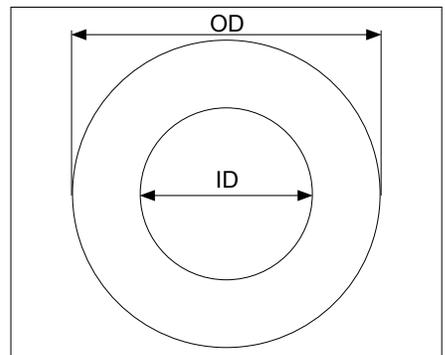
Other Accessories

CDL-JBX   Junction Box for CDL Downlight, standalone version
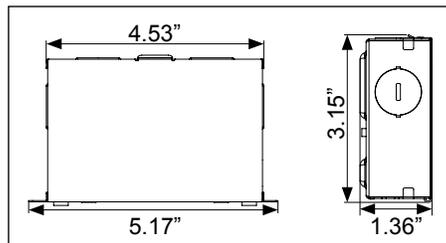
aleoblue™

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.

DLC LISTED

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

Scheduling	High and Low End Trim
	20% 60% 90%

Scenes	Occupancy Sensing

- Optimized Energy Consumption
- Less Hassle with On-Site Adjustments
- More Savings
- Increased Safety
- More Flexibility
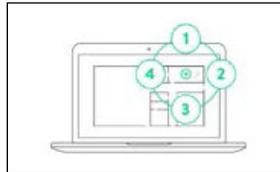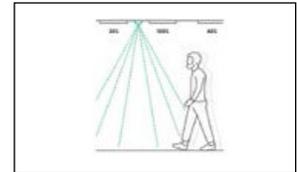
- Intuitive and user-friendly web and iOS apps
- No specialized training or lighting control expertize required
- Optimized for commercial spaces of any size
- No additional wiring or central control box
- Customizable lighting control parameters
- Future proof with Software Updates
- Multiple Zone Configurable
- 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)


Specifications and Dimensions subject to change without notice.

Form CDL-SS / Rev. 07   **Aleo Lighting, Inc.** I www.aleolighting.com I Ph: 877-358-8825
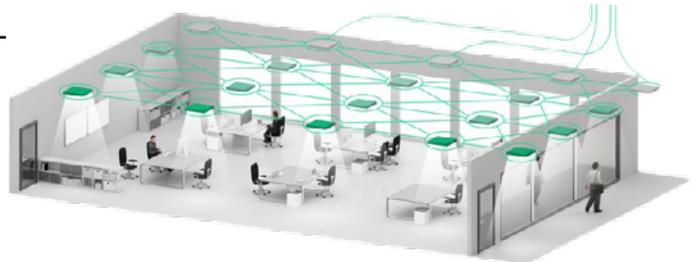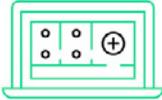
Planning

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.

1	Import Floor Plans
2	Define Individual Lighting Zones
3	Specify Desired Lighting Control Scenarios
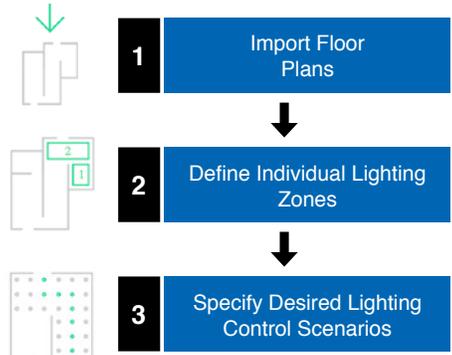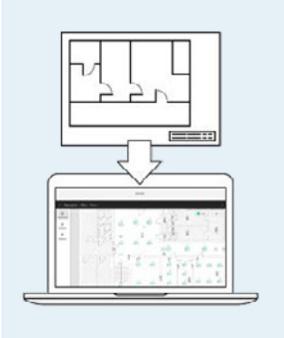
Implementation

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.

1	Add Devices to Your Connected Lighting Network
2	Implement Predefined Zones and Scenarios
3	Optimize Configuration Settings if Needed
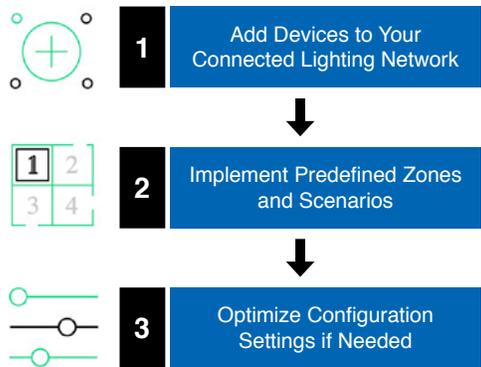
Provisioning / Configurations

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

EnOcean BLE Single-Rocker Switch
Model: ESRPB

EnOcean BLE Double-Rocker Switch
Model: EDRPB

Wireless, AC Powered, Ceiling-Mount Occ. Sensor
Model: CM-AC-OS/BT

Specifications and Dimensions subject to change without notice.

Form CDL-SS / Rev. 07   **Aleo Lighting, Inc.** I www.aleolighting.com I Ph: 877-358-8825

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
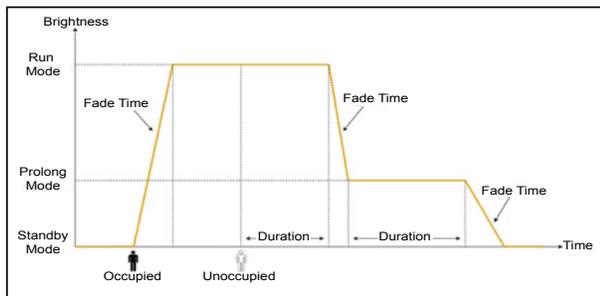
Vacancy Scenario
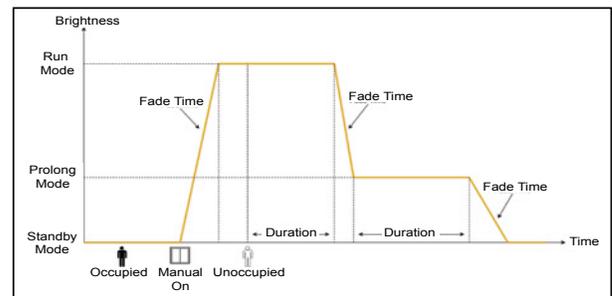
Occupancy Scenario - with Daylight Harvesting
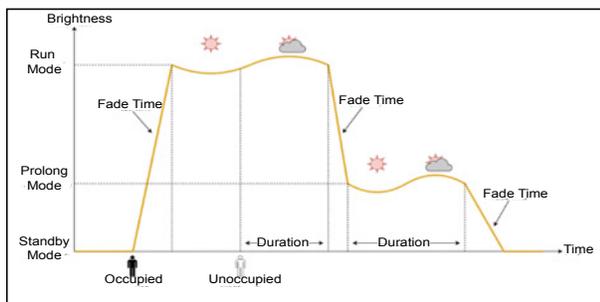
Occupancy Scenario with Manual Override
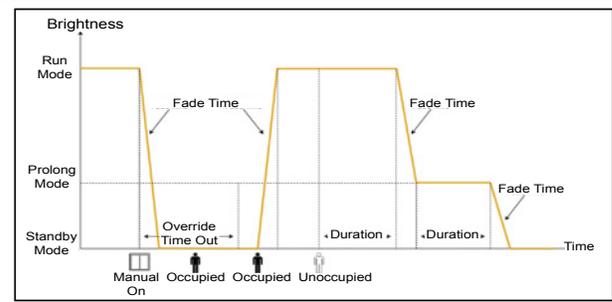
## Occupancy Detection Pattern

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

Form CDL-SS / Rev. 07

Aleo Lighting, Inc.
www.aleolighting.com
10988 Bloomfield Ave.
Santa Fe Springs, CA 90670
Ph: 877-358-8825

aleo™ LED LIGHTING