

LT-CD™ XE ECO Series

Volumetric LED Troffer Center Diffuser

DESCRIPTION

The Aleo LT-CD™ XE Series Volumetric LED Troffer delivers industry-leading performance with deep energy savings and continuous dimming. The precision-formed diffuser produces comfortable and pleasant illumination, enhancing productive spaces in various applications.

APPLICATIONS

Provides architectural aesthetics for retail, schools, offices, healthcare, and other various commercial applications.

Specification Features



LT-CD Series

2x4 25W, 34W, 48W
2x2 18W, 26W, 34W

Construction

Simple construction with minimal parts allows for easy handling and installation. Low profile design optimizes shipping, storage, and handling. Luminaire features matte white durable finish. Integral T-Bar clips built into luminaire. Diffuser requires no additional frame or fastener for easy installation.

Optical System

Reflector systems features highly reflective coating and delivers balanced, comfortable illuminance for productive spaces. Diffuser lens reduces glare and improves occupant comfort while maintaining high efficiency emission.

Certification

UL Listed. All components have UL certification. UL Class 2. Driver: SCP, OTP, OVP protection, FCC Part 15 Class B, UL8750 Class 2. DLC Premium QPL

Warranty

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

Electrical

Luminaire utilizes high-efficacy LED packages maintained at cool temperatures for long life, high efficacy. Reliable driver features continuous dimming. Universal voltage (120-277V) for convenient installation. Comes equipped with luminaire quick-disconnect.

Installation / Mounting

Installs in most standard T-Bar ceiling grid systems. Flange kit available for hard-lid/drywall applications.

Controls / Dimming

Continuous dimming (0-10V) comes standard. Suitable for use with dimmers, sensors, daylight harvesting and other control strategies to achieve deeper energy-savings and code compliance.

Rated Life 75,000 hours
Limited Warranty 7-years
Efficacy Up to 133 LPW
Continuous Dimming



Quick Ship

LT-CD-22HE-26/840 G4 ECO
LT-CD-24LE-34/840 G4 ECO

Ordering Information

Example: LT-CD-24LE-34/840 XE G4 ECO

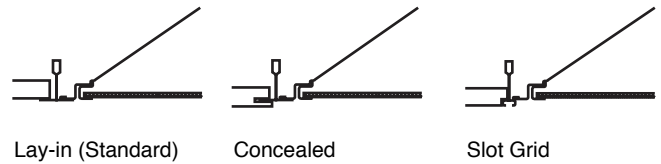
LT-CD	24	LE	34	8	40	[Blank]	[Blank]
Series	Form Factor	Lumen Package	Nominal Wattage	CRI	Color Temp	Input Voltage	Dimming
LT-CD	24 2'x4'	VLE Very Low Wattage	2'x4' 25 25W 18 18W	8 83+	35 3500K ¹	Blank	Blank
Volumetric LED Troffer - Center Diffuser	22 2'x2'	LE Low Wattage	34 34W 26 26W		40 4000K	120V-277V	0-10V Continuous Dimming
		HE High Lumen	48 48W 34 34W		50 5000K ¹		
Options							
Controls						Emergency Backup	
OSDL/BT		AleoBlue Wireless Bluetooth Occupancy Sensor				EM700 700lm	
WLC/BT		AleoBlue Wireless Bluetooth Lighting Control Node				EM1400 1400lm	
OSDL/BTEZ-B		SimpliBlue Occupancy Sensor					

Performance Summary

Input Voltage	120V-277V
Input Frequency	50/60 Hz
Rated Wattage	See Performance Table
Delivered Lumens	See Performance Table
Efficacy	> 128 LPW (typ.)
CRI	82+, R9 > 0
Available CCT ¹	3500K, 4000K, 5000K
Color Consistency ²	5-step MacAdam Ellipse
Rated Life	75,000 hours
L70 ³	> 72,000 hours
Power Factor	> 0.9
THD	< 20%
Dimming	0-10V Continuous (10-100%)
Operating Temp.	-20°C to 50°C



Mounting Information



* Fits 9/16, 15/16 and SS T-bar grid.
Flange kit available upon request

Performance Data

Form Factor	Catalog No.	Rated Wattage (W)	Tested Wattage (W)	3500K ¹		4000K		5000K ¹	
				Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)
2' x 4'	LT-CD-24VLE-25/8xx G4 ECO	25	25.53	3150	126	3175	127	3200	128
	LT-CD-24LE-34/8xx G4 ECO	34	35.03	4284	126	4318	127	4352	128
	LT-CD-48HE-48/8xx G4 ECO	45	45.81	5670	126	5715	127	5760	128
2' x 2'	LT-CD-22LE-18/8xx G4 ECO	18	18.2	2268	126	2286	127	2304	128
	LT-CD-22HE-26/8xx G4 ECO	25	24.67	3150	126	3175	127	3200	128
	LT-CD-22HE-34/8xx G4 ECO	35	34.56	4375	125	4410	126	4445	127

NOTES:

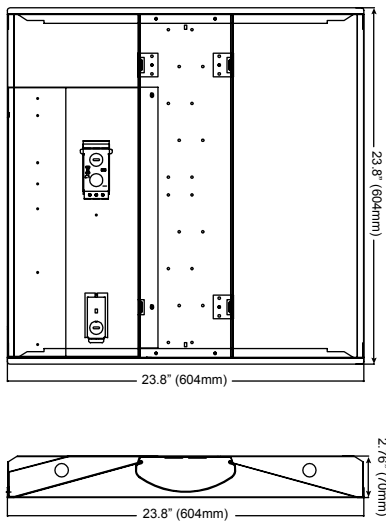
¹ Quick ship: 4000K. Other CCTs may require a lead time or be special order

² Typical color consistency. May vary or be changed.

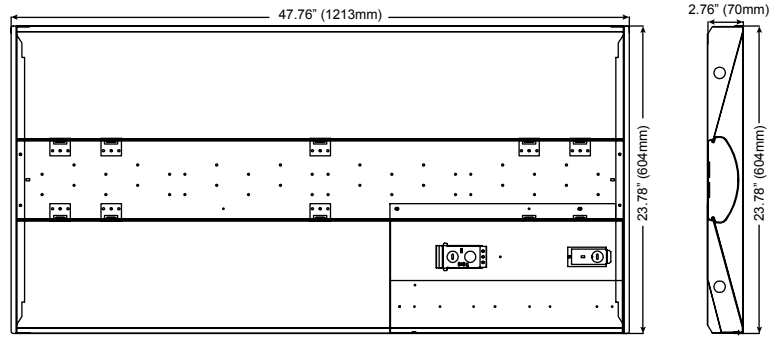
³ L70 hours calculated based on LED package manufacturer LM80 report and ISTMT report of LED in luminaire. Stated values are for select catalog numbers.

Product Dimensions

LT-CD-22



LT-CD-24



DLC QPL Data



QPL Model No.	Product ID	Technical Req.	Classification	Primary Use
LT-CD-22LE-18/835 G4 ECO	PLXXH5RQXGB9	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22LE-18/840 G4 ECO	PLMF4DW979ZC	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22LE-18/850 G4 ECO	PLDLAB1R0TPG	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22HE-26/835 G4 ECO	PLZRVIIPU0KY	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22HE-26/840 G4 ECO	PLMZBMTXYJV4	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22HE-26/850 G4 ECO	PLUPRRSZC8RE	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22HE-34/835 G4 ECO	PLRV8FQ3J58A	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22HE-34/840 G4 ECO	PLTTI7VJ2LS5	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-22HE-34/850 G4 ECO	PLYTPLQRY4RQ	4.4	Premium	2x2 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24VLE-25/835 G4 ECO	PLIGGDTUQQOO	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24VLE-25/840 G4 ECO	PLX1GZOB6NRO	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24VLE-25/850 G4 ECO	PL2AI1ZFIP5T	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24LE-34/835 G4 ECO	PLACXDP2KTGU	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24LE-34/840 G4 ECO	PLU34M9C4G7S	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24LE-34/850 G4 ECO	PLGCWMECBJ5F	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24HE-48/835 G4 ECO	PLDEAH8POCJV	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24HE-48/840 G4 ECO	PLTMPXZWB52W	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces
LT-CD-24HE-48/850 G4 ECO	PLXFC8PH03W8	4.4	Premium	2x4 Luminaires for Ambient Lighting of Interior Commercial Spaces



AleoBlue Wireless Bluetooth Controls



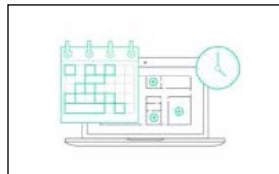
The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth Mesh lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

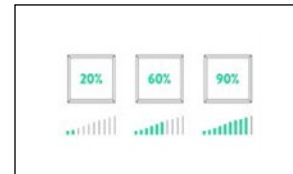
Features and Benefits

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

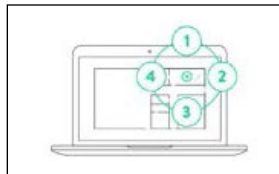
Scheduling



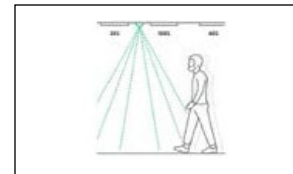
High and Low End Trim



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 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



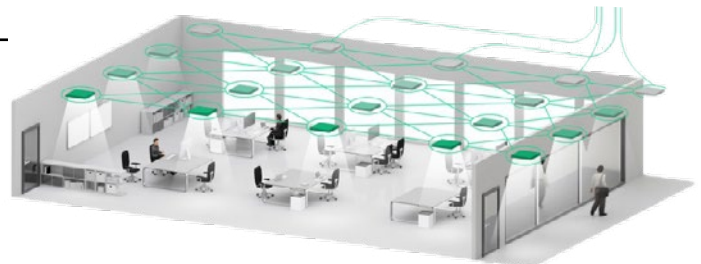
The most advanced encryption standards as well as the cutting-edge device authentication

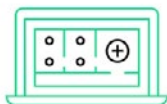


No single point of failure (no central device)



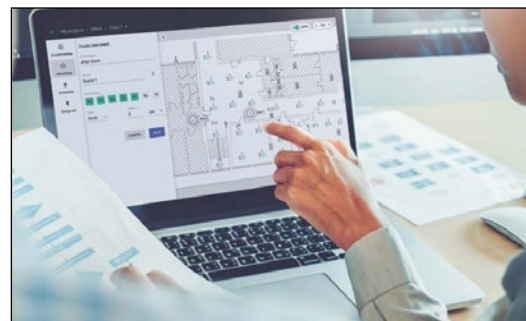
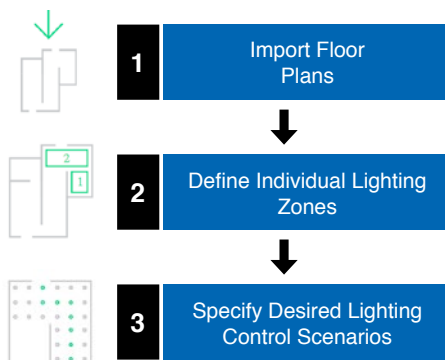
Compatibility with a widely available devices (smart phones & tablets – both with Bluetooth 4.0 and Bluetooth 5)





Planning

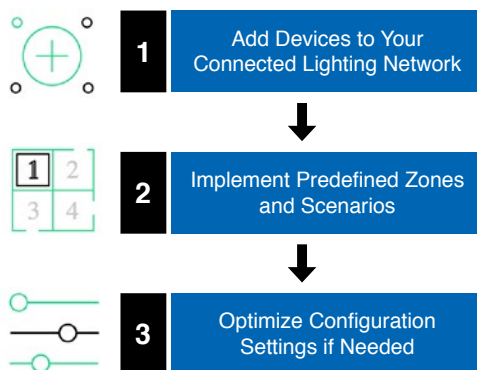
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



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 Occupancy Sensor
Model: -OSDL/BT



Wireless Bluetooth Lighting Control Node
Model: -WLC/BT



EnOcean BLE Single-Rocker Switch
Model: ESRPB



EnOcean BLE Double-Rocker Switch
Model: EDRPB

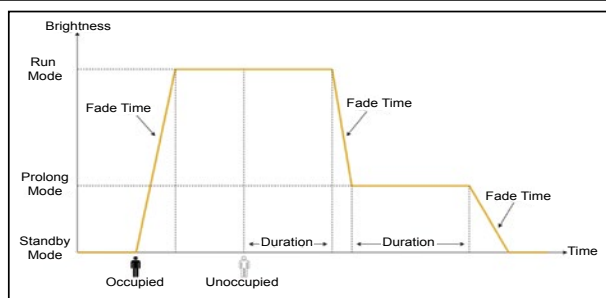
Lighting Control Scenarios

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.

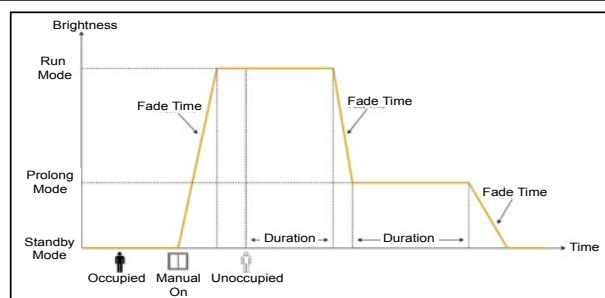


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight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

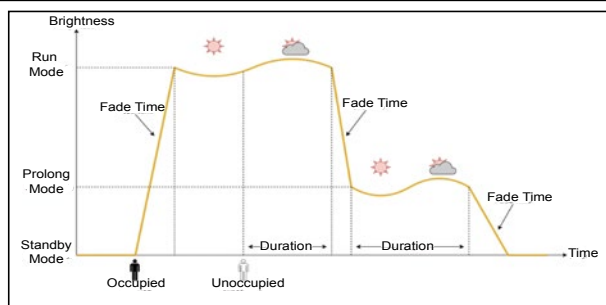
Occupancy Scenario



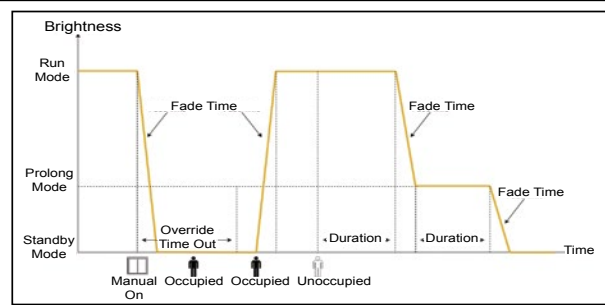
Vacancy Scenario



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

