

Project	
Notes	
Type	Date
Cat. No.	

### LLS™ UX G5 Series

### LED Linear Strip Luminaire Field Adjustable

#### DESCRIPTION

The Aleo LLS™ UX Series Field Adjustable Linear Strip Luminaire delivers industry-leading performance with deep energy savings and continuous dimming. Low profile design offers easy handling and storage. This versatile luminaire produces energy-efficient, comfortable illumination for a myriad of applications.

#### APPLICATIONS

Excellent for general utility applications: Parking garage, warehouse, offices, restrooms, storage units, stairwell.



#### Specification Features



#### Construction

Integral LED gear tray and reflector with driver on board allows for easy installation and handling. Luminaire features matte white durable finish. Diffuser requires no additional frame or fastener for easy installation.

#### Optical System

Reflector systems features highly reflective coating and delivers balanced, comfortable luminance 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.

#### 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

Luminaire back housing includes holes and slots for various mounting methods.

#### 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. Sensor accessory available: occupancy sensing with daylight cut-off.

#### 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

#### LLS Series

2' 15W / 20W / 25W  
4' 25W / 30W / 40W  
8' 55W / 60W / 65W

Rated Life 75,000 hours  
Limited Warranty 7-years  
Efficacy Up to 130 LPW  
Continuous Dimming



#### Quick Ship

LLS-2-UXH-25/8CT G5 (SR)  
LLS-4-UXH-40/8CT G5 (SR)  
LLS-8-UXH-65/8CT G5 (SR)

#### Ordering Information

Example: LLS-4-UXH-40/8CT G5 (SR)

LLS	4	UXH	40	8	CT	[Blank]	[Blank]	(SR)
<b>Series</b> LLS LED Linear Strip Luminaire - Field Adjustable	<b>Form Factor</b> 2 2' 4 4' 8 8'	<b>Lumen Package</b> UXH Field Adjustable	<b>Nominal Max Wattage</b> 2' 25 15W / 20W /25W 4' 40 25W / 30W /40W 8' 65 55W / 60W / 65W * Utilize 3-way switch to select	<b>CRI</b> 8 83+	<b>Color Temp</b> CT Field Adjust. 3500K 4000K 5000K * Utilize 3-way switch to select	<b>Input Voltage</b> Blank 120V-277V 480 480V	<b>Dimming</b> Blank 0-10V Continuous Dimming	<b>Controls (SR)</b> Sensor Ready

#### Options

##### Emergency Backup¹

**EM700** 700lm **EMLC/DR** Emergency Lighting Control  
**EM1400** 1400lm Dimming Relay  
**EM2000** 2000lm

##### Controls

**OSDL/BT** Wireless Bluetooth Occupancy Sensor  
**OSDL/BTEZ** SimpliBlue Bluetooth PIR Occ. Sensor w/ Daylight  
**PCS1P** Pull chain, Single Pole, On/Off

See Pg. 3 for Sensor Details

##### BAA Option

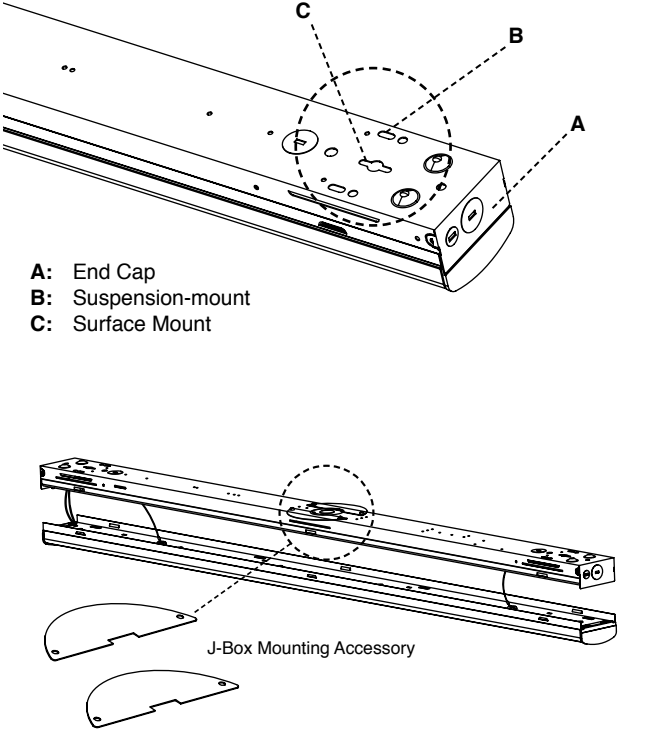
**BAA**  
Buy American Act Compliant  
**BABAA**  
Build America, Buy America Act Compliant

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	> 130 LPW (typ.)
CRI	84+, R9 > 0
Available CCT	3500K, 4000K, 5000K
Color Consistency	5-step MacAdam Ellipse
Rated Life	75,000 hours
L90	> 54,000 hours
Power Factor	> 0.9
THD	< 20%
Dimming	0-10V Continuous (10-100%)
Operating Temp.	-20°C to 40°C
Environment	Suitable for Damp Location

Mounting Information



Performance Data

Form Factor	Catalog No.	Rated Wattage (W)	3500K		4000K		5000K	
			Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)	Delivered Lumens (lm)	Efficacy (lm/W)
2'	LLS-2-UXH-25/8CT G5 (SR)	15	2,247	149.8	2,334	155.6	2,180	145.3
		20	2,912	145.6	3,082	154.1	2,878	143.9
		25	3,495	139.8	3,815	152.6	3,563	142.5
4'	LLS-4-UXH-40/8CT G5 (SR)	25	3,598	143.9	3,795	151.8	3,620	144.8
		30	4,332	144.4	4,509	150.3	4,302	143.4
		40	5,536	138.4	5,952	148.8	5,680	142.0
8'	LLS-8-UXH-65/8CT G5 (SR)	55	7,728	140.5	8,355	151.9	7,717	140.3
		60	8,202	136.7	9,024	150.4	8,334	138.9
		65	8,691	133.7	9,679	148.9	8,938	137.5

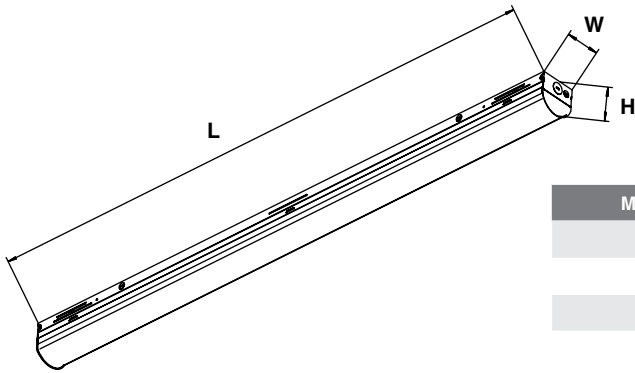
<sup>1</sup> IMPORTANT: THE BATTERY MUST BE RECHARGED EVERY THREE (3) MONTHS. IF NOT RECHARGED ACCORDINGLY, BATTERY MAY FAIL AND VOID WARRANTY  
Specifications and Dimensions subject to change without notice.

DLC QPL Data



QPL Model No.	Product ID	Technical Req.	Classification	Primary Use
LLS-2-UXH-25/8CT G5 (SR) (15) [-YYXX/ZZ]	S-U72ZH8	5.1	Standard	Direct Linear Ambient Luminaires
LLS-2-UXH-25/8CT G5 (SR) (20) [-YYXX/ZZ]	S-DNZWHC	5.1	Standard	Direct Linear Ambient Luminaires
LLS-2-UXH-25/8CT G5 (SR) (25) [-YYXX/ZZ]	S-WE3DYT	5.1	Standard	Direct Linear Ambient Luminaires
LLS-4-UXH-40/8CT G5 (SR) (25) [-YYXX/ZZ]	S-H2J6R4	5.1	Standard	Direct Linear Ambient Luminaires
LLS-4-UXH-40/8CT G5 (SR) (30) [-YYXX/ZZ]	S-C82ABX	5.1	Standard	Direct Linear Ambient Luminaires
LLS-4-UXH-40/8CT G5 (SR) (40) [-YYXX/ZZ]	S-8ES9LH	5.1	Standard	Direct Linear Ambient Luminaires
LLS-8-UXH-65/8CT G5 (SR) (55) [-YYXX/ZZ]	S-7IZSH9	5.1	Standard	Direct Linear Ambient Luminaires
LLS-8-UXH-65/8CT G5 (SR) (60) [-YYXX/ZZ]	S-XEAFDY	5.1	Standard	Direct Linear Ambient Luminaires
LLS-8-UXH-65/8CT G5 (SR) (65) [-YYXX/ZZ]	S-0N46U9	5.1	Standard	Direct Linear Ambient Luminaires
LLS-4-UXH-40/8CT G5 (SR) (40) [-YYXX/ZZ]	S-ETJ2YZ	5.1	Standard	Low-Bay Luminaires for Commercial and Industrial Buildings
LLS-8-UXH-65/8CT G5 (SR) (55) [-YYXX/ZZ]	S-35URF1	5.1	Standard	Low-Bay Luminaires for Commercial and Industrial Buildings
LLS-8-UXH-65/8CT G5 (SR) (60) [-YYXX/ZZ]	S-QX4RTD	5.1	Standard	Low-Bay Luminaires for Commercial and Industrial Buildings
LLS-8-UXH-65/8CT G5 (SR) (65) [-YYXX/ZZ]	S-XQ4OBP	5.1	Standard	Low-Bay Luminaires for Commercial and Industrial Buildings

Product Dimensions



Model No.	L	W	H
LLS-2	22.2" (564mm)	2.8" (72mm)	2.9" (73.3mm)
LLS-4	47.3" (1202mm)	2.8" (72mm)	2.9" (73.3mm)
LLS-8	94.2" (2392mm)	2.8" (72mm)	2.9" (73.3mm)

Sensors Options

	Catalog No.	Description	Ordering	Shipping	Remote Control	Sensor Mounting
	IFS08-ET	Multi-level High Frequency Occ Sensor w/ Photocell Function, snap-in with quick connector, IR remote setting	Order and Ship Separately	Field Install	SRC-A01	Snap in Gear Tray / Behind Lens
	OSDL/BT	AleoBlue Multi-level Wireless Bluetooth Occupancy Sensor	Order with Model No.	Factory Installed	AleoBlue App	Sensor Box / End-mount
	-WLC/BT	AleoBlue Wireless Bluetooth Lighting Control Node	Order with Model No.	Factory Installed	AleoBlue App	Sensor Box / End-mount
	OSDL/BTEZ	SimpliBlue Bluetooth PIR Occ. Sensor w/ Daylight	Order with Model No.	Factory Installed	SimpliBlue App	Sensor Box / End-mount

Surge Protector Option

Catalog No.	Description	Ordering	Shipping
SP10	10kA Surge Protector	Order with Model No.	Factory Installed

Specifications and Dimensions subject to change without notice.

## Cord Set Options

Catalog No.	Description	Ordering	Shipping
CRD-A	SO CORD 6' 18/3	Order with Model No.	Partially Factory Installed - Snap-in in the Field
CRD-B	SO CORD 10' 18/3	Order with Model No.	Partially Factory Installed - Snap-in in the Field
CRD-C	SO CORD 12' 18/3	Order with Model No.	Partially Factory Installed - Snap-in in the Field
CRD-D	SO CORD 15' 18/3	Order with Model No.	Partially Factory Installed - Snap-in in the Field
CRD-E	SO CORD 20' 18/3	Order with Model No.	Partially Factory Installed - Snap-in in the Field
CRD-F	SO CORD 25' 18/3	Order with Model No.	Partially Factory Installed - Snap-in in the Field

## Plug Options

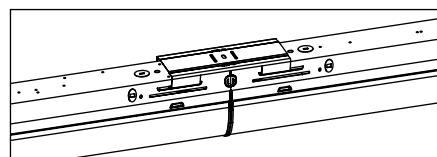
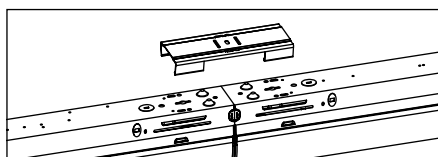
Catalog No.	Description	Ordering	Shipping
PLG-1	Straight plug, 125V, NEMA 5-15P	Order with Model No.	Factory Installed
PLG-2	Twist-lock, 125V, NEMA L5-15P	Order with Model No.	Factory Installed
PLG-4	Twist-lock, 277V, NEMA L7-15P	Order with Model No.	Factory Installed
PLG-5	Twist-lock, 480V, NEMA L8-20P	Order with Model No.	Factory Installed
PLG-6	Twist-lock, 250V, NEMA L6-15P	Order with Model No.	Factory Installed

## Mounting Options

Catalog No.	Description	Ordering	Shipping
CHS-105	Jack chain, 40" length (Set of 2)	Order and Ship Separately	Field Install
V-HOOK-LLS	V-hangers, 2 pcs of top mount fixture hangers .135DIA	Order and Ship Separately	Field Install
ACC	Aircraft Cable - 10' 1/16 cable toggle kit with grip lock	Order and Ship Separately	Field Install
ACC-20ft	Aircraft Cable - 20' 1/16 cable toggle kit with grip lock	Order and Ship Separately	Field Install
ACC-25ft	Aircraft Cable - 25' 1/16 cable toggle kit with grip lock	Order and Ship Separately	Field Install

## Daisy Chain Bracket Option

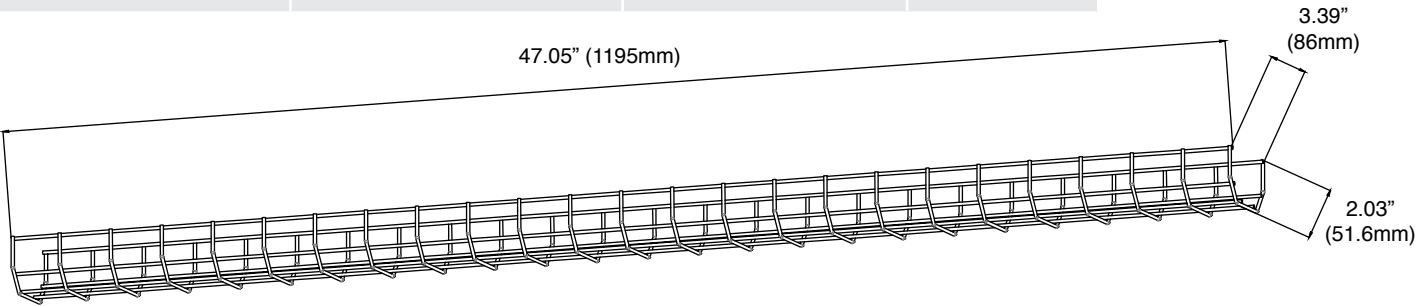
Catalog No.	Description	Ordering	Shipping
LLS-DC-BRK G5	Daisy Chain Bracket for LLS G5	Order and Ship Separately	Field Install



Specifications and Dimensions subject to change without notice.

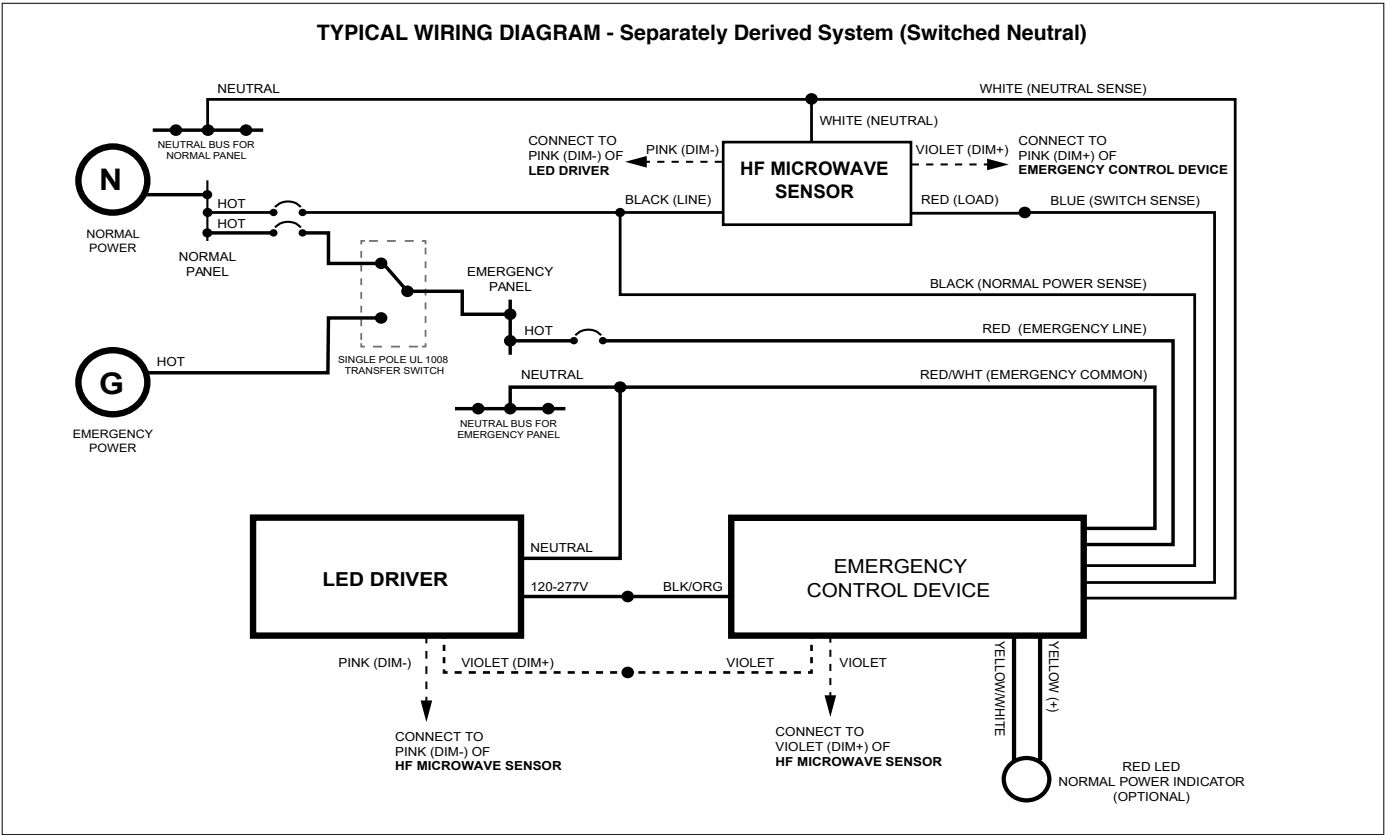
Wire Guard Option

Catalog No.	Description	Ordering	Shipping
LLS-WG-4 G5	Wire Guard for LLS-4 G5	Order and Ship Separately	Field Install



EMLC/DR - Emergency Lighting Control Dimming Relay (EMLC/DR) Option

Allows full brightness operation of the luminaire from the generator or inverter, regardless of local controls/sensor settings. Senses the loss of normal AC power and bypasses the local switch device or dimmed setting, allowing emergency power directly to the fixture.



BAA and BABAA Compliant



**BAA - Buy America Act Compliant**

Complies and Qualifies for projects requiring Buy America Act (BAA) compliant product

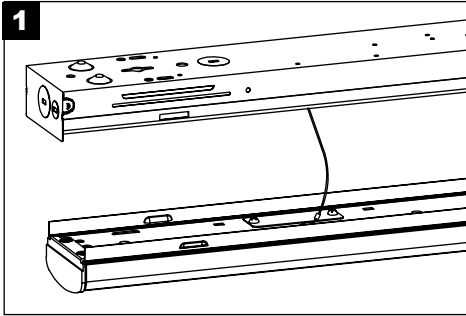
**BABAA - Build America, Buy America Compliant**

Complies and Qualifies for projects requiring Build America, Buy America Act (BABAA) compliant product

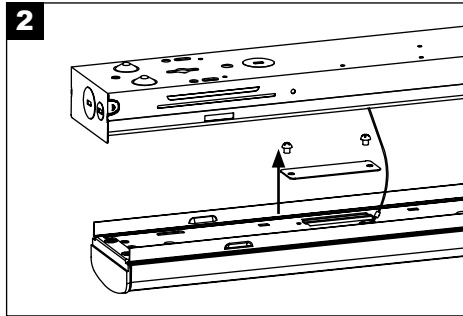
\*Note: BAA and BABAA product will require lead times approximately ranging from 12-18 weeks. Contact your Aleo representative for more information

Specifications and Dimensions subject to change without notice.

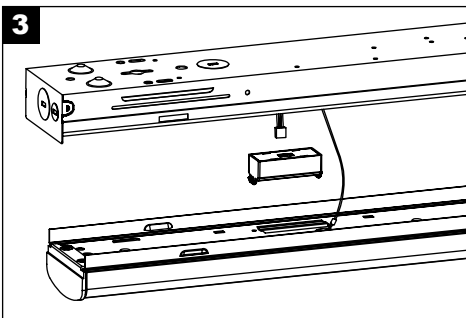
## Sensor Installation



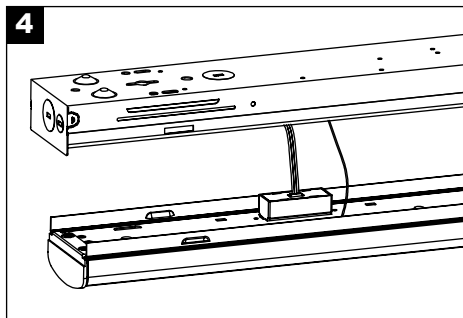
Detach lens/gear tray from the base of the fixture.



From the back of the gear tray, remove the (2) screws from the sensor plate to access the sensor wire connector and sensor cut-out.



Connect and mate the connector from the wiring harness to the terminal connectors on the sensor.



Snap the sensor into the sensor cut-out from the back of the gear tray to complete installation.



Scan QR Code to  
Watch Sensor  
Installation Video



## AleoBlue Wireless Bluetooth Controls



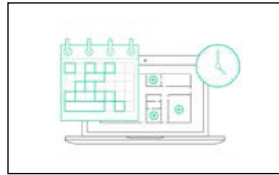
The AleoBlue is a complete solution for managing connected lighting systems using a Bluetooth Mesh lighting network. This enables seamless implementation of simple to complex lighting control scenarios without specialized training or lighting control engineering expertise.

DLC NLC Qualified.

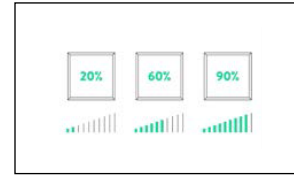
### Features and Benefits

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

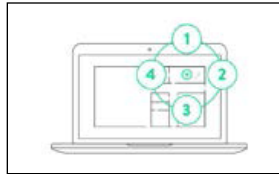
#### Scheduling



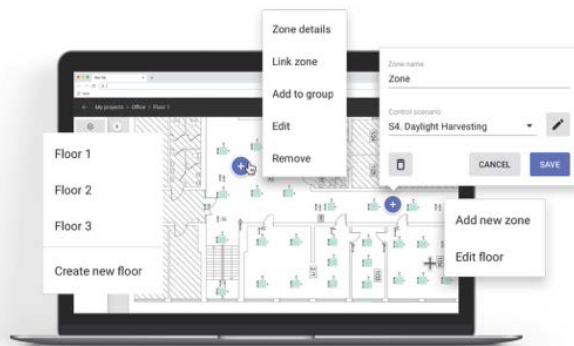
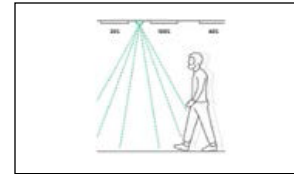
#### High and Low End Trim



#### 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



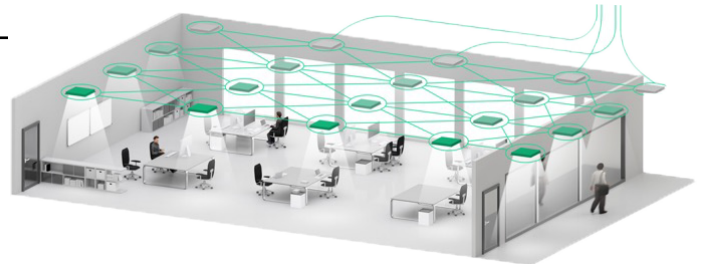
The most advanced encryption standards as well as the cutting-edge device authentication



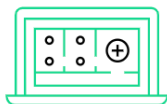
No single point of failure (no central device)



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

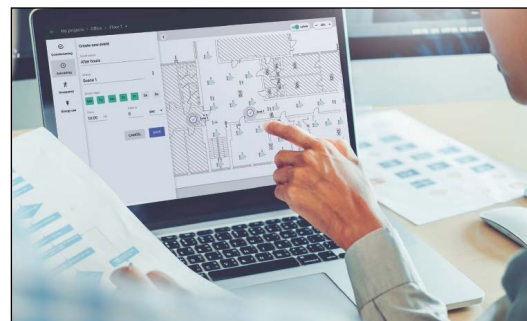
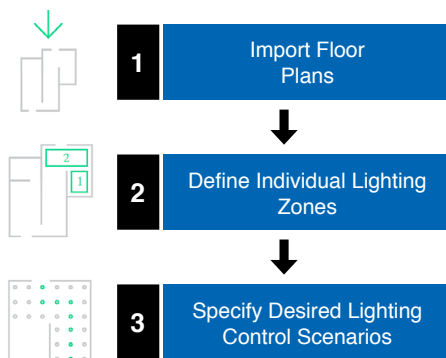
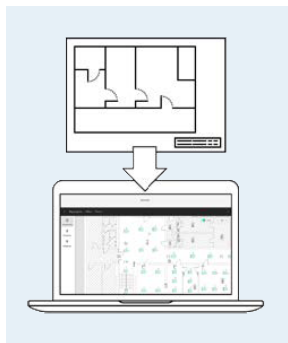






## Planning

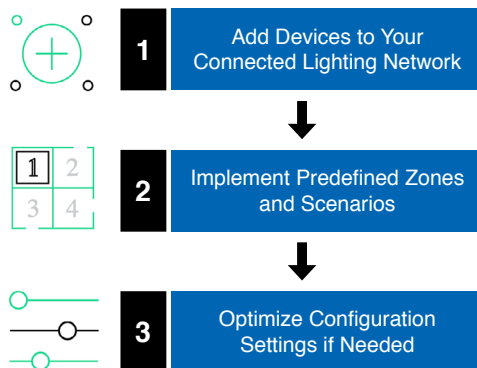
Remote preparation of a retrofit project with the use of our web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios.



## 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



**ILLUMRA Self-powered Single-Rocker Switch**  
Model: AB-BTT-S1A(xx)



**ILLUMRA Self-powered Double-Rocker Switch**  
Model: AB-BTT-S2A(xx)



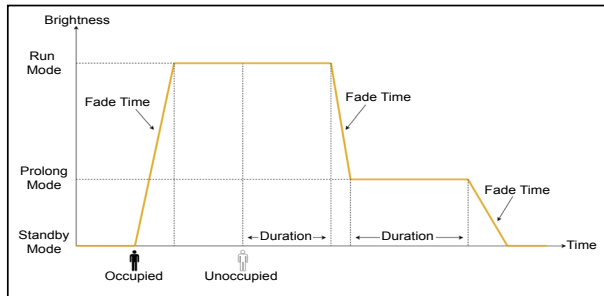
## Lighting Control Scenarios

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.

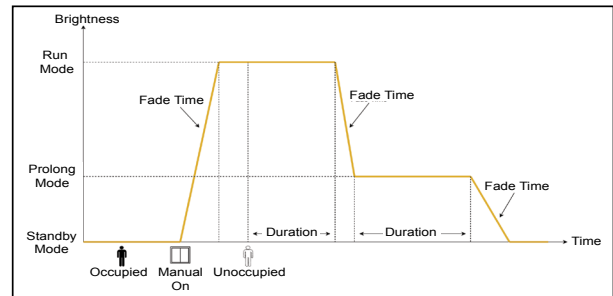


Mode / Scenario	Wireless Switch	Occupancy Sensor	Ambient Light Sensor
Unprovisioned Mode	-	-	-
Switch	On / Off / Scenes	-	-
Occupancy	On / Off / Scenes	Auto On / Off	-
Vacancy	On / Off / Scenes	Auto Off	-
Occupancy with Daylight Harvesting	On / Off / Scenes	Auto On / Off	Enabled
Vacancy with Daylight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

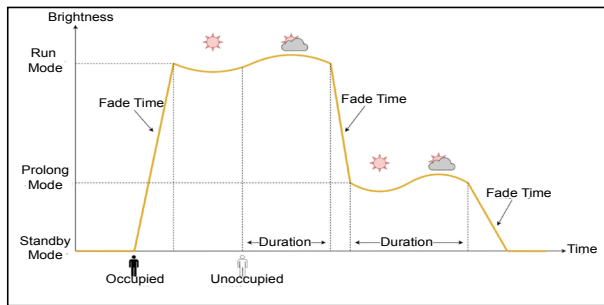
### Occupancy Scenario



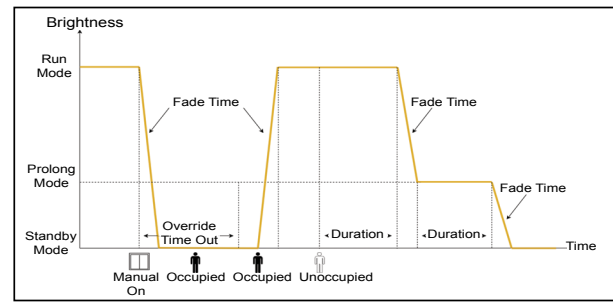
### Vacancy Scenario



### 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

