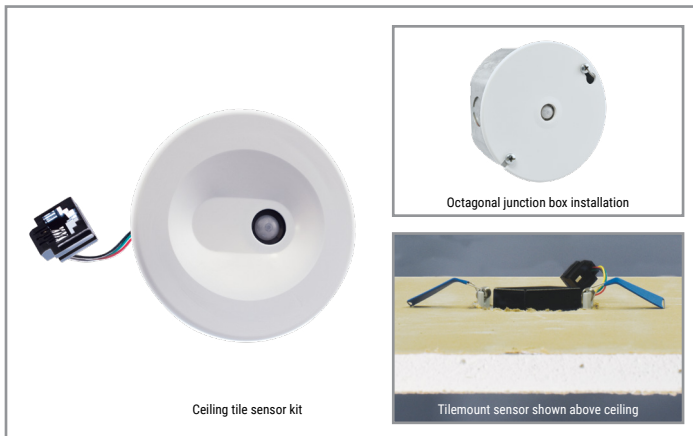


Project		Catalog #		Type	
Prepared by		Notes		Date	



## WaveLinX

### LITE Wireless Tilemount Sensor Kit (WTK)

Provides daylight dimming and control for connected luminaires that do not support the WaveLinX LITE integrated sensor

#### Typical Applications

Office • Education • Healthcare • Hospitality • Retail  
Industrial • Manufacturing

#### Interactive Menu

- Order Information [page 2](#)
- Additional Resources [page 3](#)
- Connected Systems [page 7](#)
- Product Warranty



- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

#### Product Features



#### Compatibility



## Overview

The LITE Tilemount sensor kit provides lighting control for non-WaveLinX LITE enabled luminaires. The kit is composed of a Tilemount sensor and a control module. The sensor provides motion detection up to 500 sqft and daylighting. The control module offers 120-277VAC 3 amp relay and one 0-10V dimming output that allows it to control (on/off/raise/dim) LED and non LED loads. The control module also provides power to the Tilemount sensor.

The Tilemount Sensor Kit is powered by the 120-277VAC circuit it is controlling and allows simple electrical junction box mounting via 1/2" knock out or direct connection to the junction box attached to connected luminaire. The WaveLinX LITE Tilemount Sensor Kit operates on a wireless mesh network based on IEEE 802.15.1 standards.

## Product Features & Benefits

- Easily enable 0-10V luminaires to be controlled by the WaveLinX LITE system
- 120-277VAC with 3 amp zero cross relay and 0-10V continuous dimming
- 10mA 0-10V sink (refer to driver specifications to calculate quantity supported)
- Mounting heights of 8 to 15ft (2.4 to 4.5m)
- Provides passive infrared (PIR) motion coverage up to 500 sq-ft (46m2)
- Provides closed loop daylighting control of non-integrated luminaires
- Control module mounting to junction box or luminaire driver compartment
- Sensor installs into 1/2 - 3/4" (12 - 19mm) ceilings or octagonal junction boxes
- WaveLinX LITE is DLC Listed for interior applications - meeting the NLC5 Technical Requirements

## Order Information

The Tilemount Sensor Kit is an accessory to the WaveLinX LITE system which may be used with out-of-the-box functionality or commissioned via the WaveLinX LITE mobile application. The wireless tilemount sensor kit is typically used to provide occupancy sensing and daylight dimming for luminaires that cannot include integrated occupancy and daylight sensors.

WaveLinX LITE devices are not currently compatible with the WaveLinX Area Controller.

### Catalog Number

Catalog Number	Description
<b>WTK</b>	WaveLinX LITE Tilemount Sensor Kit
<b>Note</b>	
When used as a component in the WaveLinX LITE system, design best practices (including the number of devices, installation locations, device to device spacing, etc. must strictly adhered.	

## Optional Accessories

If the out-of-the-box behavior of the WaveLinX LITE Sensor does not satisfy project requirements, download and register the WaveLinX LITE mobile application from either the Google Play or Apple Store®. This mobile application can be used to form a lighting network - creating control zones, occupancy sets, setting occupancy or vacancy modes of operation, configuring daylighting, etc.

## Product Specifications

### Mechanical

**Tilemount Sensor Size:** 2.8" x 2.8" x 1.2" (70mm x 70mm x 31mm)

**J-Box Sensor Size:** 4.1" x 4.1" x 1.0" (105mm x 105mm x 24mm)

#### Environment:

- **Operating temperature:** -4°F to 131°F (-20°C to 55°C)
- **Storage temperature:** -40°F to 158°F (-40°C to 70°C)
- **Relative humidity operating:** 5% to 95% non-condensing
- For indoor use only

**Mounting Height:** 8-15ft (2.4 to 4.5m)

**Ceiling hole diameter:** 2.9" (73mm)

**Ceiling thickness:** 0.5 to 0.75" (12 - 19mm) drop ceiling thickness

**Color:** Matte white (field paintable trim)

**Housing:** UV stabilized plastic

### Electrical

- 120/277VAC incoming and switched power
- 10mA 0-10V sink (refer to driver specifications to calculate quantity supported)
- 3A LED loads

### Wireless Specifications

**Radio:** 2.4GHz

**Standard:** IEEE 802.15.1 - Bluetooth® 4.2 Low Energy (BLE)

**Transmitter Power:** +7dBm

**Range:** Device to device; 100ft (30m) LOS (best practice)

### Software Specifications

- Any number of sensors can be mapped to any number of zones
- Remote configuration of occupancy sensing and closed loop daylighting

### Standards/Ratings\*

- cULus Listed
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements
- WaveLinX LITE is DLC Listed for interior applications - meeting the NLC5 Technical Requirements

### Environmental Regulations:

- RoHS Directive 2011/65/EU

### Warranty

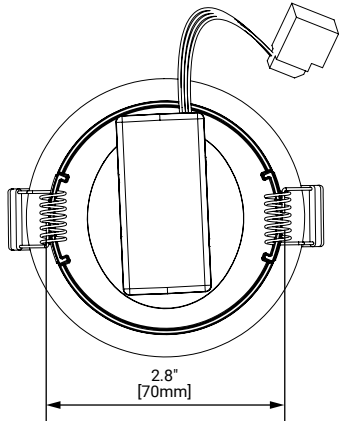
- Five year warranty standard



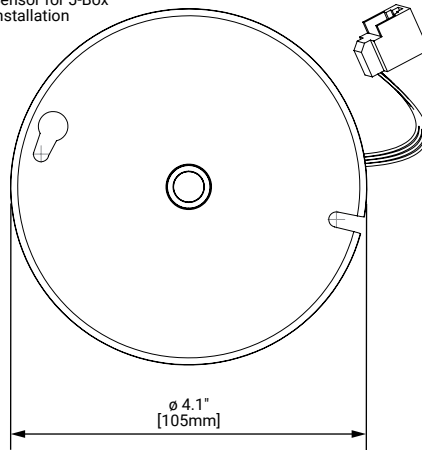
Download the WaveLinX LITE Mobile App from either the Google Play or Apple Store®

## Dimensional Details

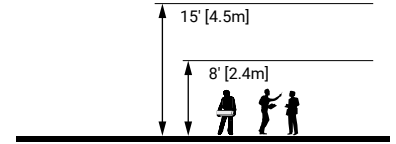
Sensor for Tilemount installation



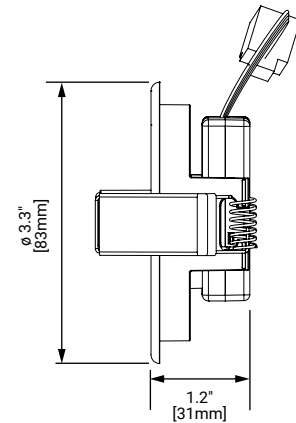
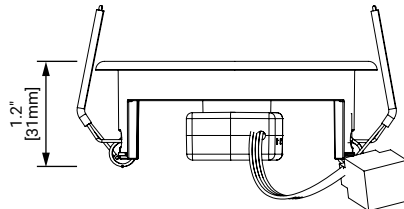
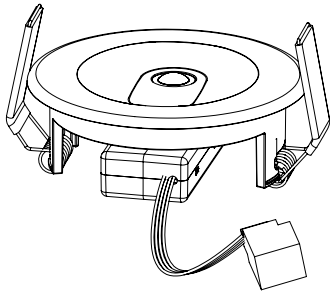
Sensor for J-Box installation



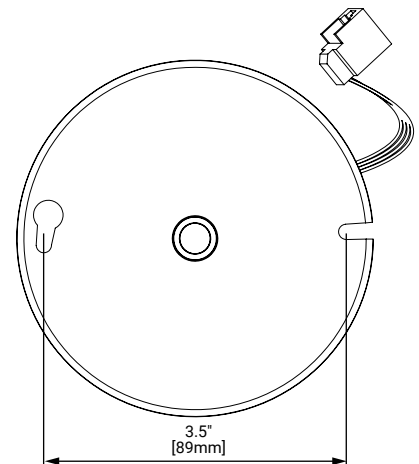
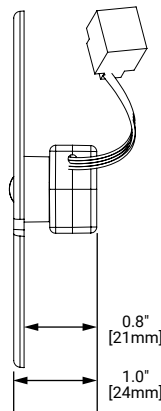
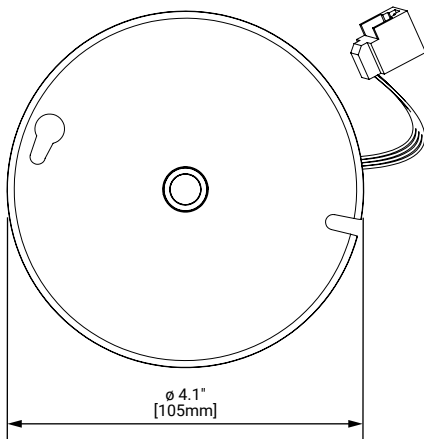
## Mounting Height



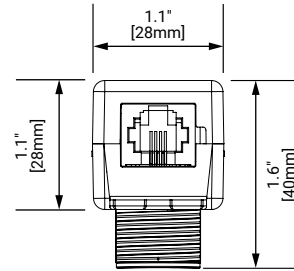
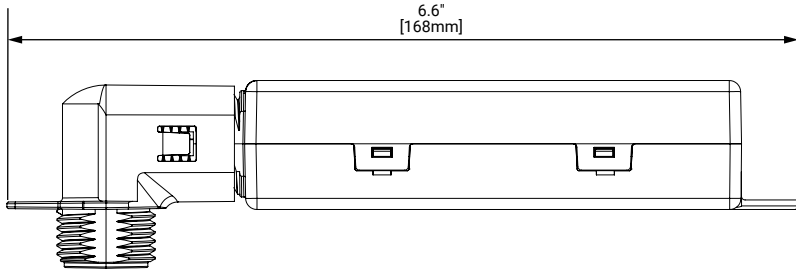
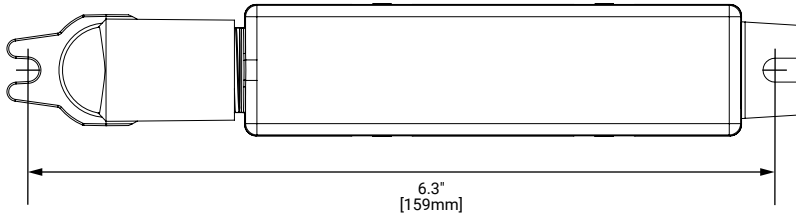
## Dimensional Details - Tilemount Sensor



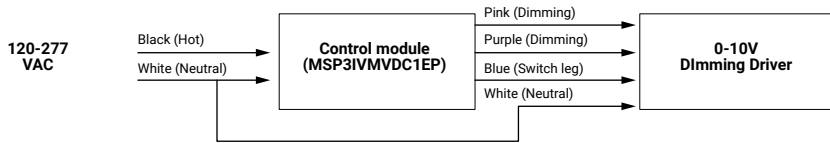
## Dimensional Details - J-Box Sensor



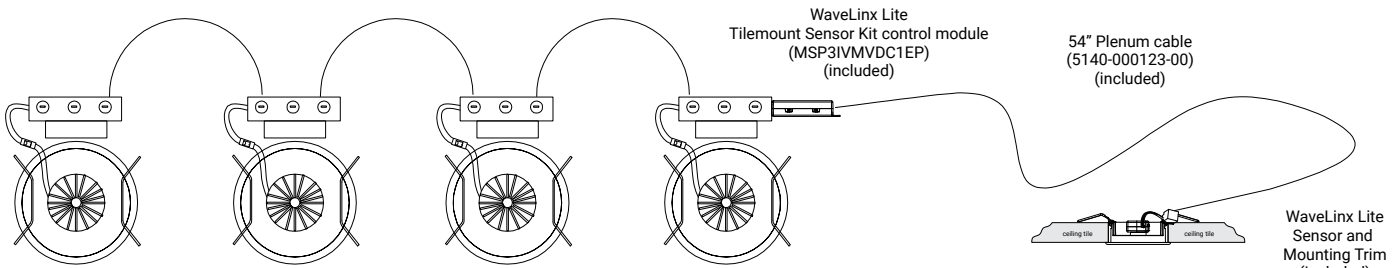
## Additional Dimensional Details - Control module



## Wiring Diagrams



Includes switch leg (Blue load out wire) and 0-10V to each fixture controlled



120-277 VAC 3A downlights with 0-10V control

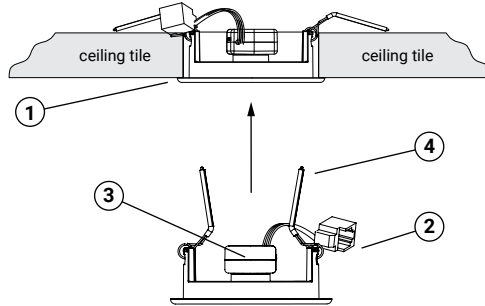
## Tilemount Installation

**Step 1:**  
Cut 2-7/8" (73mm) to 3" (76mm) diameter hole in ceiling tile.

**Step 2:**  
Connect plenum cable connectors.

**Step 3:**  
Snap sensor body into ceiling trim.

**Step 4:**  
Squeeze trim springs and insert through hole.



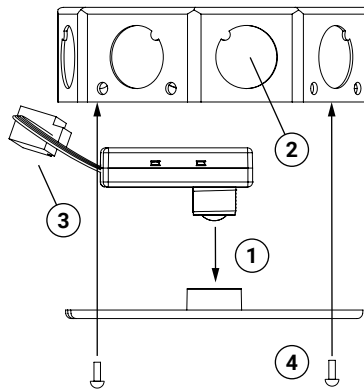
## J-Box Installation

**Step 1:**  
Snap sensor body into cover plate.

**Step 2:**  
Pull plenum sensor cable through junction box knockout.

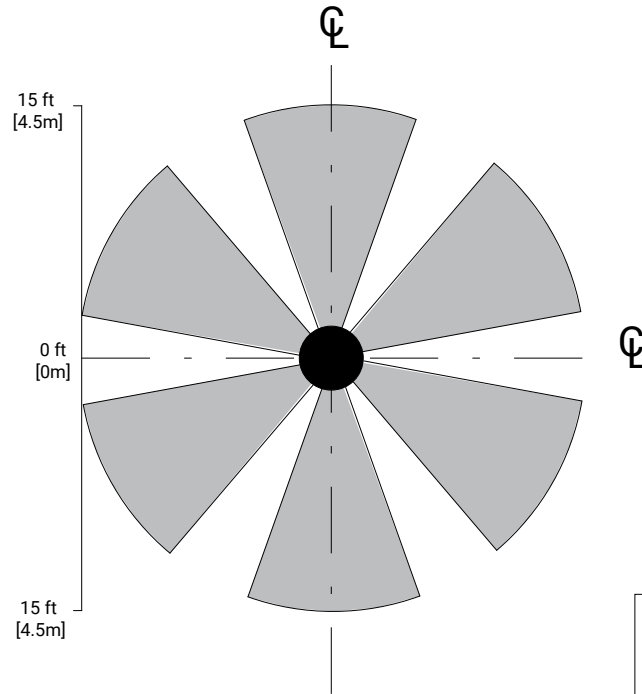
**Step 3:**  
Connect plenum cable connectors.

**Step 4:**  
Secure sensor kit to junction box.



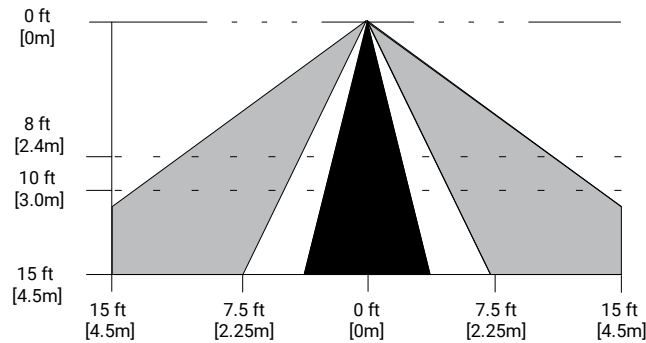
## Field of View

### TOP VIEW:



Notes: (1) The coverage pattern shown above depicts the area below the luminaire where the integrated sensor system can detect occupancy. (2) Spacing between fixtures should not exceed the coverage pattern of the sensor. (3) Mounting height should not exceed coverage shown. (4) Exceeding these spacing/height guidelines will result in reduced integrated sensor performance.

### SIDE VIEW:

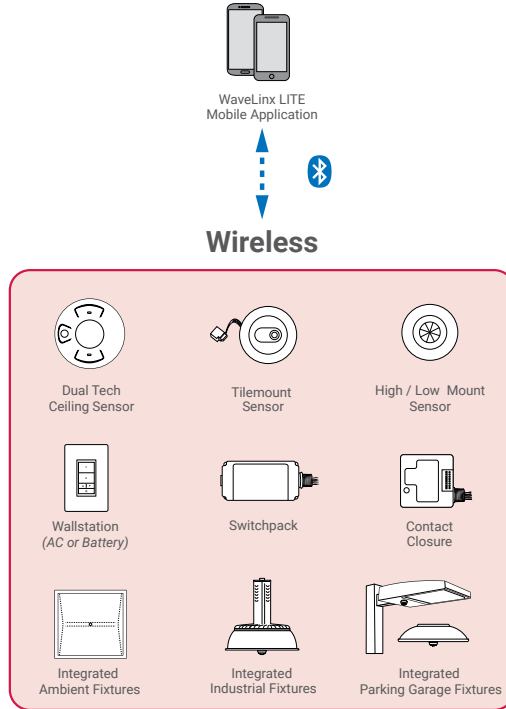



**Recommended Mounting Height 8 to 15 ft [2.4 to 4.5m].**

Note - coverage pattern not to scale

## System Diagram:

This diagram shows the main components and topology of the WaveLinx system with LITE devices. The WaveLinx LITE devices use standardized IEEE 802.15.1 (Bluetooth® 4.2 Low Energy) mesh technology for device to device communications without the requirement of a gateway. The WaveLinx LITE enabled luminaires provide out-of-the-box functionality for independent operation when energized. With the use of the WaveLinx LITE mobile application with MyApps secure cloud portal access, groups of independent luminaires may be created and maintained with areas, control zones, and occupancy sets. WaveLinx LITE devices are not currently compatible with the WaveLinx Area Controller.



 **Control Systems**  
• WaveLinx