Project		Catalog #		Type	
Prepared by		Notes		Date	

4-pin Zhaga Book 18 socket

WaveLinx Wireless

Industrial Fixture Mount High Bay / Low Bay Sensor

Motion and Closed Loop Daylighting including Field Installed Aisle Shield

Typical Applications

Industrial • Manufacturing

Interactive Menu

Product Certification

Energy Management Equipment (UL916)

Part 15/ECES-003

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

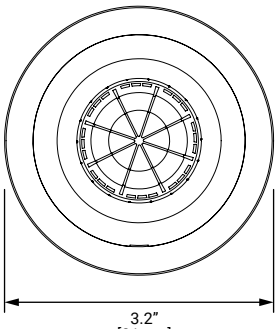
Product Features

IEEE 802.15.4 | Device Security | Customer Security | Daylighting Control | Occupancy Sensor

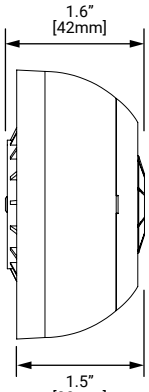
Top Product Features

- Models suitable for High bay (up to 40ft) and Low bay (up to15ft) applications
- Out of the box functionality: Occupied to Full, Unoccupied to 10%, daylighting disabled
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 square feet
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx Mobile application
- Simple tool-less twist lock fixture connection via 4-pin Zhaga Book 18 socket
- IP66 rating for warehouse and manufacturing environments
- Energy calculations available through Trellix

Dimensional Details

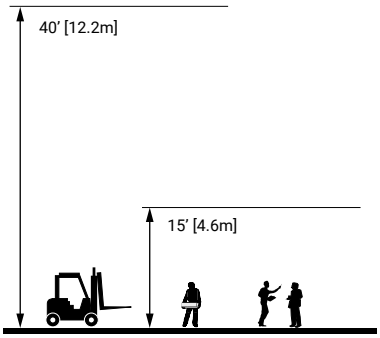


TOP



SIDE

Mounting Height



additional product diagrams

Order Information

WaveLinx Industrial Fixture Mount High Bay / Low Bay Sensors are accessories to the WaveLinx Connected Lighting (WCL) system and requires a Wireless Area Controller (WAC) for full functionality.

WaveLinx Industrial Fixture Mount High Bay / Low Bay Sensors are used to provide occupancy and daylight dimming to spaces from the industrial light fixture. For energy code compliance, additional sensors may not be required.

Catalog Number

Catalog #	Description
SWPD2-WH	WaveLinx Industrial Fixture Mount Low Bay Sensor, White, 7 - 15ft (2.1 - 4.5m)
SWPD3-WH	WaveLinx Industrial Fixture Mount High Bay Sensor, White, 15 - 40ft (4.5 - 12.2m)
Notes For use with industrial light fixtures equipped with the WaveLinx Zhaga compliant 4-pin socket only.	**Notes** When used as a component in the WaveLinx Connected Lighting system, WaveLinx system design best practices (including Wireless Area Controller placement, line of sight distances, number of hops, etc.) must be followed.

Required Accessories

All WaveLinx Connected Lighting (WCL) system accessories require at least one Wireless Area Controller (WAC) for communications.
Ensure the bill of material includes one of the following components.

Catalog Number

Catalog Number	Description
WAC-POE	Wireless Area Controller, POE powered

Optional Accessories

For connection to 120VAC outlets.

Catalog Number

Catalog Number	Description
WPOE-120	120VAC to PoE Injector

Product Specifications

Key Features

- Models suitable for High bay (up to 40ft) and Low bay (up to15ft) applications
- Out of the box functionality:Occupied to Full, Unoccupied to 10%, daylighting disabled
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 square feet
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx Mobile application
- Simple tool-less twist lock fixture connection via 4-pin Zhaga Book 18 socket
- IP66 rating for warehouse and manufacturing environments

Mechanical

Size: Base Diameter 3.2” (82mm) Height: 1.6” (41mm)
Weight: 0.20 lbs (0.10 kg)
Environment:

- **Operating temperature:** -40°F to 131°F (-40°C to 55°C)
  Sensor passive infrared (PIR) performance may become exceedingly sensitive below -4°F (-20°C)
  Note: Wireless Area Controller should be installed in an indoor conditioned envirionment, preferably with line of sight through a window to one or more WaveLinx wireless devices.
- **Storage temperature:** -40°F to 158°F (-40°C to 70°C)
- **Relative humidity operating:** 0% to 95% non-condensing
- For indoor use only

Mounting: Fixture mount
Mounting Height: High bay up to 40ft (12m) and Low bay up to15ft (5m)
Color: White
Housing: UV stabilized plastic
Ingress protection: IP66
Light Sensor Detector Shields: Field configured shield included
Daylighting Installation:

- Ensure that sensor is not looking directly at artificial light
- Ensure that sensor is not obstructed
- Use configurable lens mask for desired directionality

Electrical

Input Requirements: Fixture connection via 4-pin Zhaga Book 18 socket

Software Specifications

- Any number of sensors can be mapped to any number of zones
- Mobile app configuration for Occupancy/Vacancy
- Remote Hold Time settings fully configurable via mobile app
- Mobile app configuration of Occupied and Unoccupied light levels
- Energy calculations available through Trellix

Wireless Specifications

Radio: 2.4GHz
Standard: IEEE 802.15.4
Transmitter Power: + 8dBm
Range: Sensor to sensor; 160ft (49m) LOS (best practice)

System Performance

Maximum number of nodes supported: 150 per Wireless Area Controller (best practice 100 devices)

Standards/Ratings

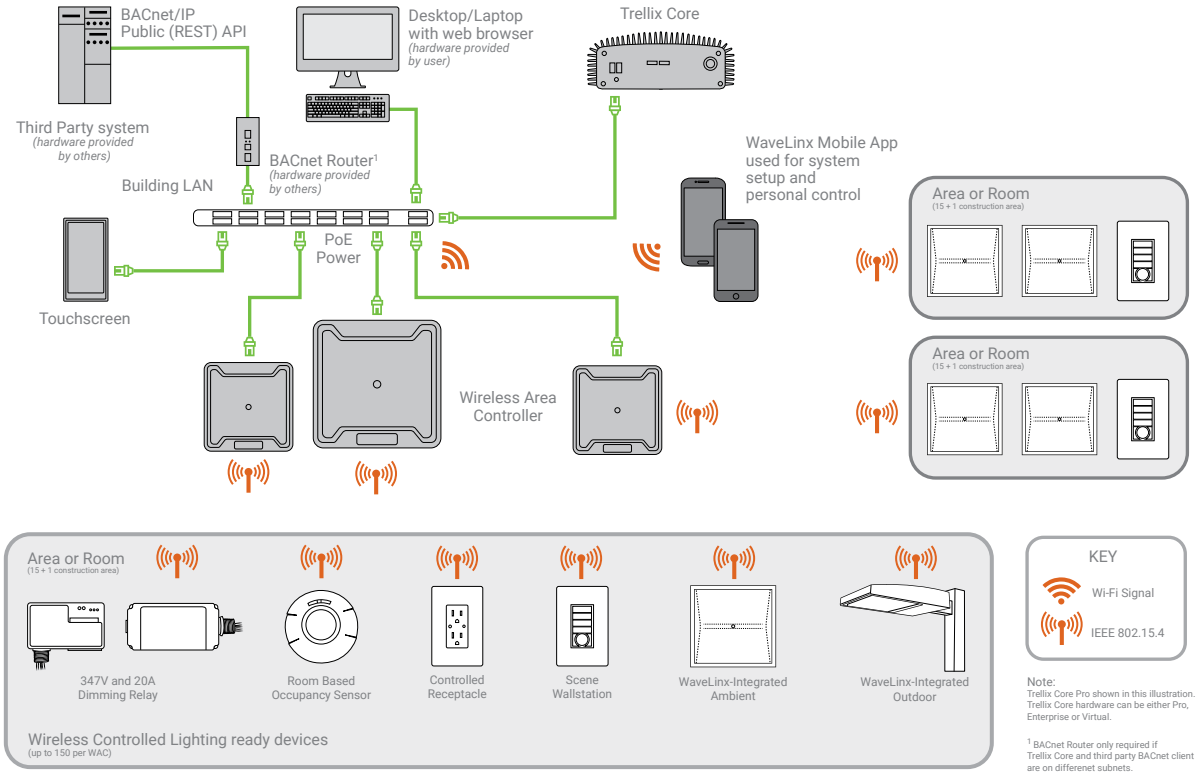
- cULus Listed - Energy Management Equipment (UL916)
- FCC Part 15/ECES-003
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements

Warranty

Five year warranty standard

System Architecture

This diagram shows the main components of the Eaton Wireless Connected Lighting (WCL) system. The WCL system communicates using wireless mesh technology based on the 802.15.4 standard. A POE LAN connection for each Wireless Area Controller (WAC) is required for power and data access to the building wireless network. System setup is achieved through a simple mobile application via wireless communication to the system.



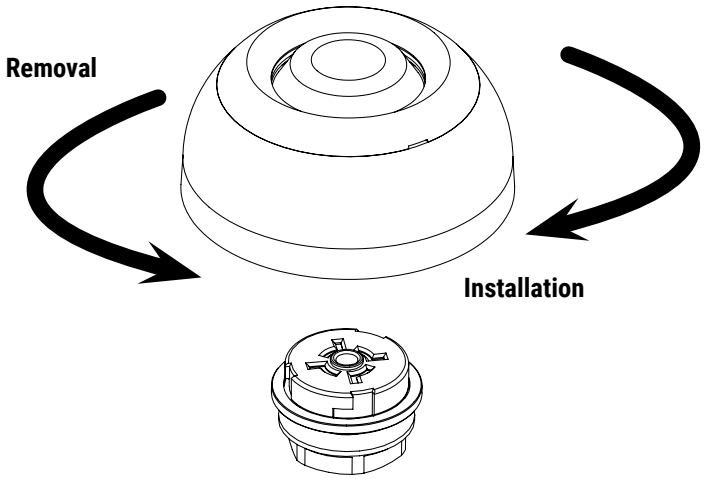
Overview

The industrial high bay and low bay sensors are an integral part of the WaveLinx Connected Lighting System and offer passive infrared (PIR) occupancy and a photocell for closed loop daylighting. WaveLinx industrial sensors offer installation heights up to 40 feet and have coverage patterns up to 5000 square feet (see sensor specifications - field of view). When part of WaveLinx, the sensor operates on a wireless mesh network based on IEEE 802.15.4 standards.

The sensors offer simple tool-less integration into WaveLinx industrial light fixtures equipped with the 4-pin Zhaga Book 18 compliant socket. Once installed, sensors receive power from their co-located light fixture with no batteries to replace. The sensor in combination with the WaveLinx Mobile application allows you to gain considerable energy savings from occupancy and daylight sensing lighting control. The WaveLinx Mobile application allows you to map the sensor to any area or control zone, select occupancy or vacancy, occupied and unoccupied light levels and set the hold time.

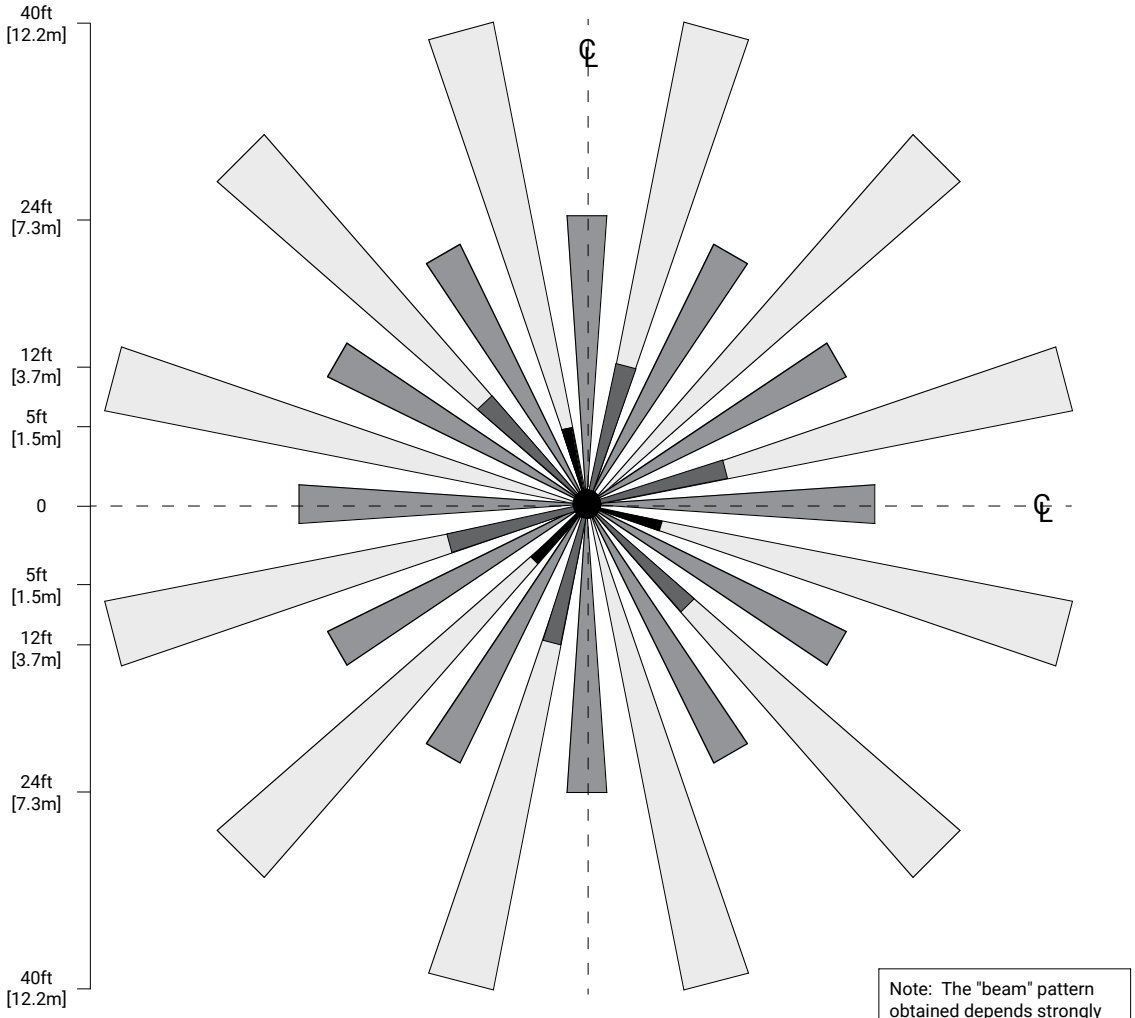
Installation

Both the SWPD2 and SWPD3 easily install into WaveLinx-ready LED fixtures equipped with Zhaga Book 18 4-pin sockets. Sensor connection is enabled via the simply twist-lock connection and provides immediate out-of-the-box functionality.



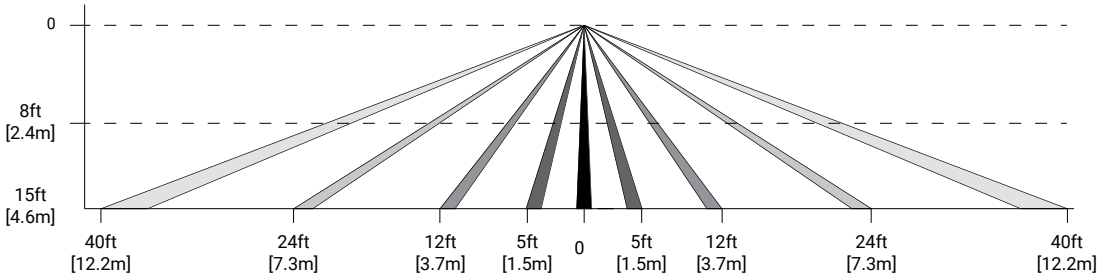
Field of View - Low Bay

TOP VIEW:



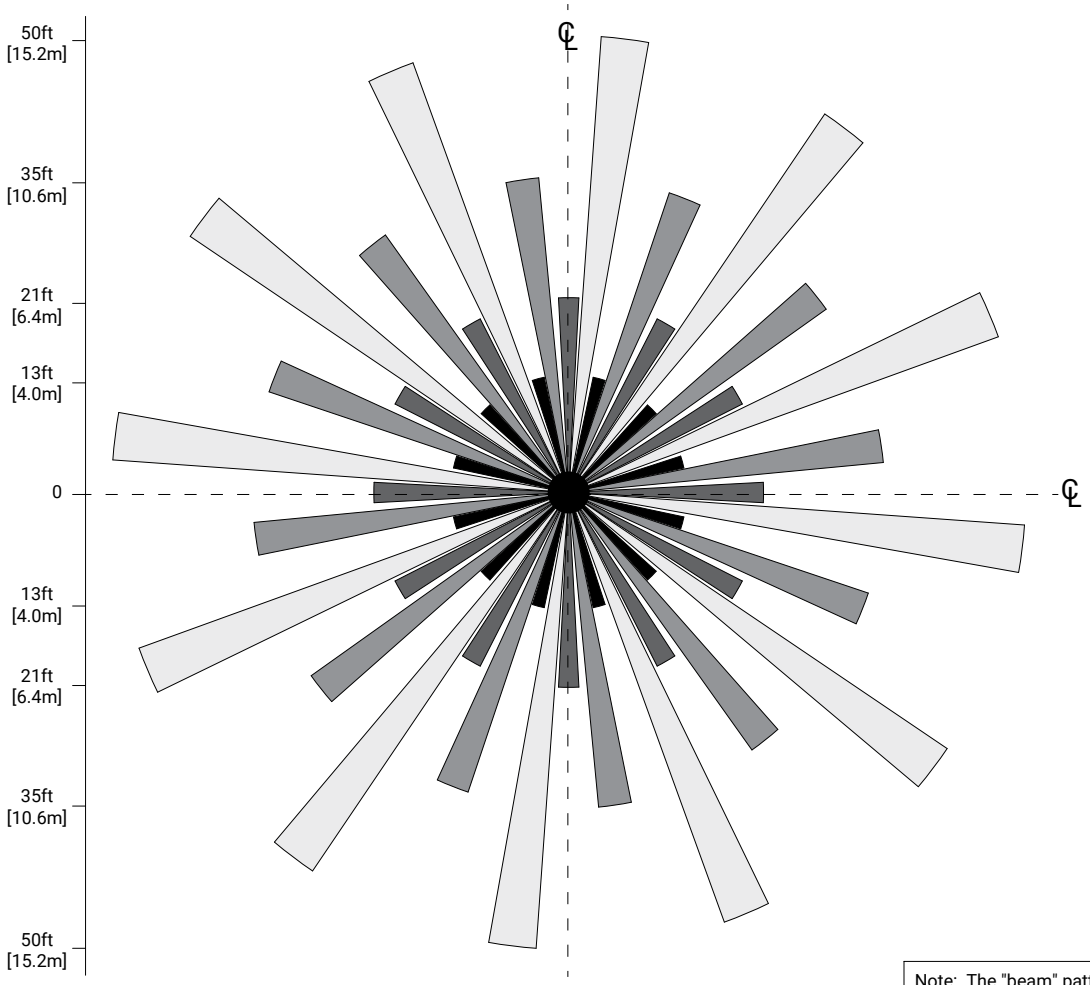
Note: The "beam" pattern obtained depends strongly on the detector used with this array. The pattern shown is intended solely as a general guide and is not to scale.

SIDE VIEW:



Field of View - High Bay

TOP VIEW:



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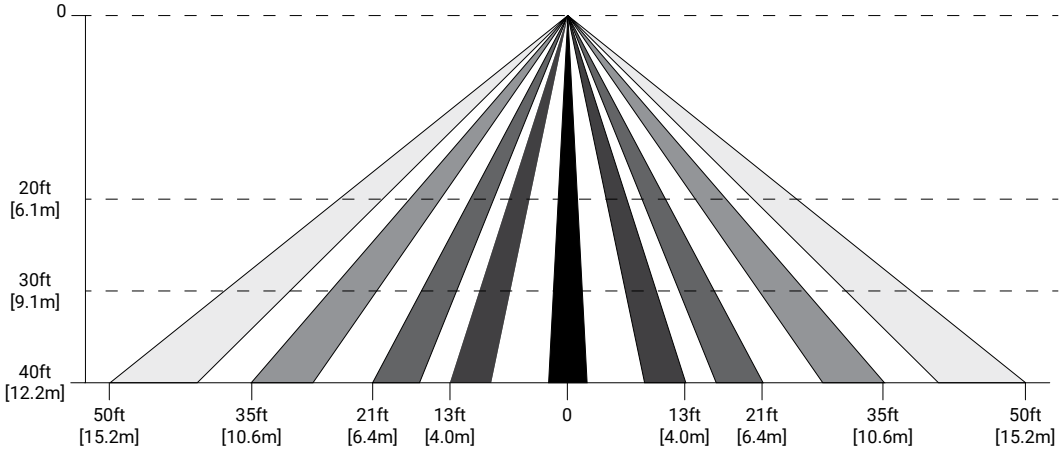


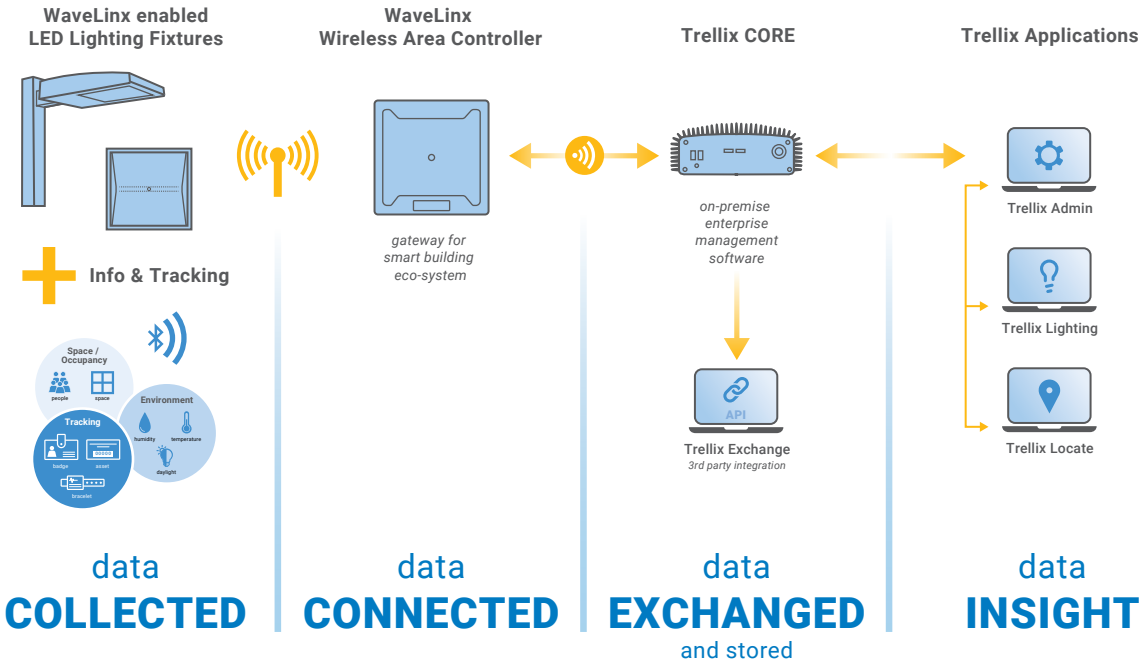
Connected Systems

- Trellix

Better Data. Better Decisions.

Trellix combined with our WaveLinx Connected Lighting System is a distributed network of LED lighting fixtures with integrated sensing and beacon technology that captures real-time data; making your facility smarter so you can make smarter decisions.

Trellix provides an open IoT platform and infrastructure that connects intelligent sensors leveraging the real-estate of the physical light fixture to solve higher complexity problems in a commercial building to deliver actionable insights through the aggregation of valuable data.



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