

Project		Catalog #		Type	
Prepared by		Notes		Date	



WaveLinX

LITE Industrial Fixture Mount High Bay (WLS4-HB2)

Motion and closed loop daylighting including field installed shield

Typical Applications
Industrial • Manufacturing

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- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements
- NEMA WD-7 and NEMA 4 compliant

Product Features

-  LITE Mobile App
-  IEEE 802.15.1
-  Device Security
-  Customer Security
-  Daylighting Control
-  Occupancy Sensor

Compatibility



Overview

The industrial high bay sensor is an integral part of the WaveLinX LITE system and offer passive infrared (PIR) occupancy and a photocell for closed loop daylighting. WaveLinX industrial sensors offer installation heights up to 40 feet. When part of the WaveLinX LITE system, the sensor operates on a wireless mesh network based on IEEE 802.15.1 standards.

The sensors offer simple tool-less integration into WaveLinX industrial light fixtures equipped with the 3-pin audio jack style connector. Once installed, sensors receive power from their co-located light fixture with no batteries to replace. The sensor in combination with the WaveLinX LITE mobile application allows you to gain considerable energy savings from occupancy and daylight sensing lighting control. The WaveLinX LITE 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.

Product Features & Benefits

- Models suitable for High bay (up to 40ft) applications
- Out of the box functionality: Occupied to Full, Unoccupied to off, daylighting disabled
- Passive Infra-Red (PIR) motion sensor
- Integrated photocell for daylight harvesting
- Software configurable settings in networks of 40 devices with WaveLinX LITE mobile application
- Simple tool-less twist lock fixture connection via 3-pin audio jack style connector
- IP65 rating for warehouse and manufacturing environments
- WaveLinX LITE is DLC Listed for interior applications - meeting the NLC5 Technical Requirements

Order Information

WaveLinx LITE Industrial Fixture Mount High Bay Sensors are accessories to the WaveLinx LITE system which may be used with out-of-the-box functionality or commissioned via the WaveLinx LITE mobile application.

WaveLinx LITE Industrial Fixture Mount High 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.

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

Catalog Number

Catalog #	Description
WLS4-HB2	WaveLinx LITE Industrial Fixture Mount High Bay Sensor, White, 15 - 40ft (4.5 - 12.2m)
Notes	Notes
For use with industrial fixtures equipped with a 3-pin audio jack socket and compatible driver.	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. High mount models accommodate mounting height to 45ft (13.7m) for major motion (vehicles, fork trucks, etc.) - may not detect minor motion of people depending on conditions.

Optional Accessories

If the out-of-the-box behavior of the WaveLinx LITE Industrial 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

Key Features

- Models suitable for High bay (up to 40ft) applications
- Out of the Box Operation:
 - Occupied to Full
 - Unoccupied to 50% after 10minutes (Energy Saver Mode)
 - Unoccupied to OFF after 20 minutes total
 - Blink pattern - Green Blue
 - Daylighting - OFF
- Default provisioned Operation:
 - Entire Group Occupied to Full
 - Unoccupied to 50% after 10minutes (Energy Saver Mode)
 - Unoccupied to OFF after 20 minutes total
 - Blink pattern - White Blue
 - Daylighting - OFF
- Integrated photocell for closed loop daylight harvesting
- Software configurable settings with WaveLinx LITE mobile application
- Simple tool-less twist lock fixture connection via 3-pin audio jack style connector
- IP65 rating for warehouse and manufacturing environments

Mechanical

Size: Base Diameter 3.39" (86.1mm) Height: 1.33" (33.74mm)

Weight: 0.20 lbs (0.10 kg)

Environment:

- **Operating temperature:** -22°F to 130°F (-30°C to +55°C)
Sensor passive infrared (PIR) performance may become exceedingly sensitive below -4°F (-20°C)
- **Storage temperature:** -22°F to 130°F (-30°C to +55°C)
- **Relative humidity operating:** 5% to 95% non-condensing
- Default behavior intended for indoor use only

Mounting: Fixture mount

Mounting Height: High bay up to 40ft (12m)

Color: White

Housing: UV stabilized plastic

Ingress protection: IP65

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

Compatibility

Works with Cooper Lighting Metalux Industrial fixtures with "SP1" sensor port. Turn off power to fixture before installing or removing, failure to do so can result in device failure.

Electrical

Input Requirements: Fixture connection via 3-pin audio jack style connector

Input Voltage: 12-24VDC

0-10V Rating: 4mA

Software Specifications

- Mobile app configuration for Occupancy/Vacancy
- Remote Hold Time settings fully configurable via mobile app

Wireless Specifications

Radio: 2.4GHz

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

Range: Sensor to sensor; 100ft (30m) LOS (best practice)

System Performance

Maximum number of nodes supported: Best practice of 40 devices per space, maximum of 50 devices per commissioned network

Standards/Ratings*

- cULus Listed - Energy Management Equipment (UL916)
- FCC Part 15, Subpart B & C
- Meets latest ASHRAE Standard 90.1 requirements
- Meets latest IECC requirements
- Meets latest CEC Title 24 requirements
- NEMA WD-7 and NEMA 4 compliant
- CA Title 20 and Prop 65 compliant
- RoHS
- WaveLinx LITE is DLC Listed for interior applications - meeting the NLC5 Technical Requirements

Warranty

Five year warranty standard

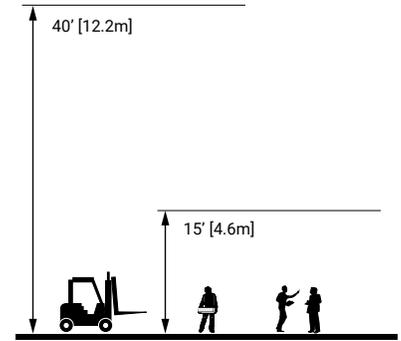
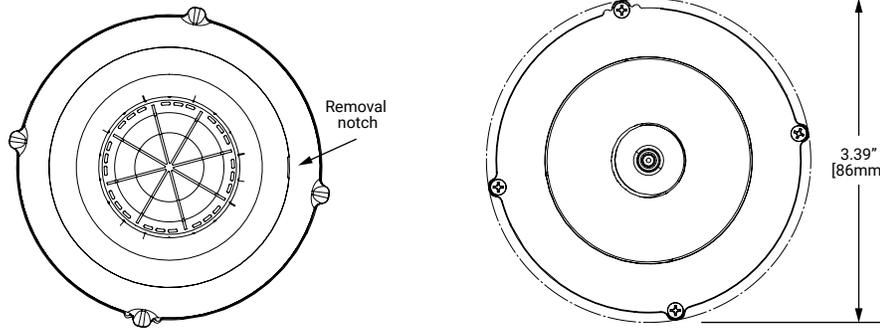


Download the WaveLinx LITE mobile application from either the Google Play or Apple Store®

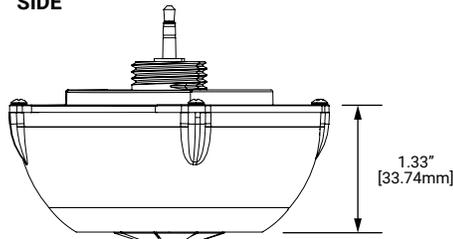
Dimensional Details

Mounting Height

TOP



SIDE



Installation

The WaveLinX WLS4-HB2 easily install into WaveLinX-ready LED fixtures equipped with 3 pin audio jack. Sensor connection is enabled via the simply twist-lock connection and provides immediate out-of-the-box functionality.

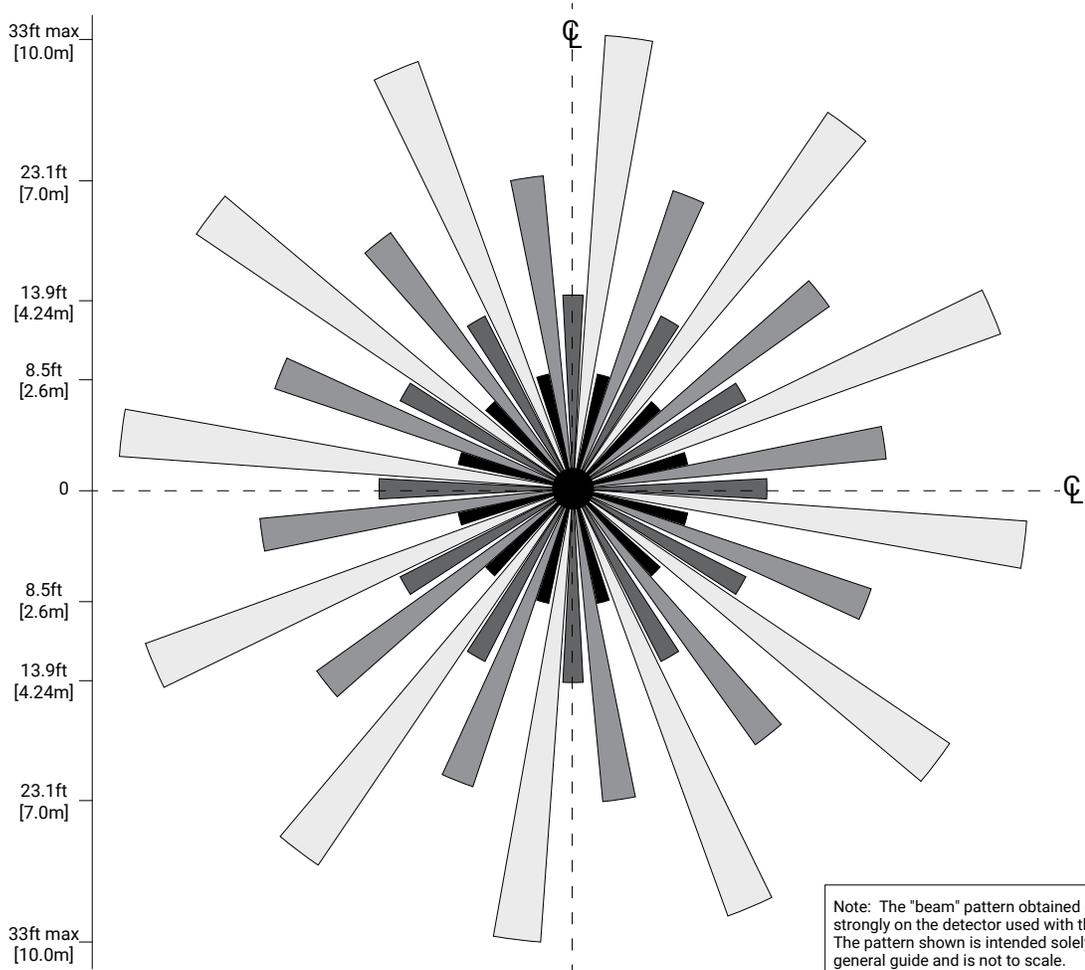


Out-of-the-Box Operation

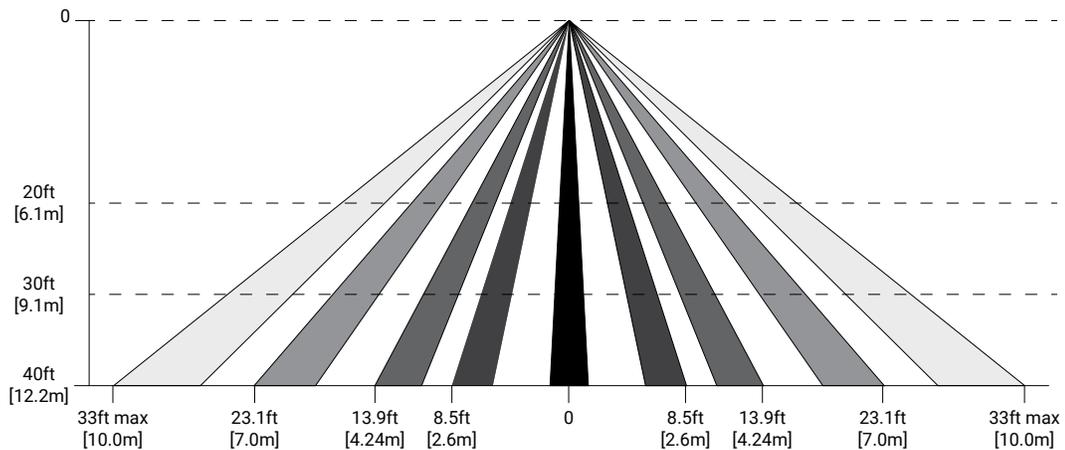
- Once power is applied, the attached fixture operates via the motion sensors
- The occupancy is set for high sensitivity
- If occupied, the fixture will go to 100%
- The fixture will dim to 50% after 10 minutes when the location is unoccupied. After 10 additional minutes, the fixture will dim to OFF and will remain at this level until the location is occupied again
- The daylight sensor is disabled
- LED flashes green (in sensor window) for 500ms, then blue for 500ms once every 3 seconds when motion is detected

Field of View - High Bay

TOP VIEW:



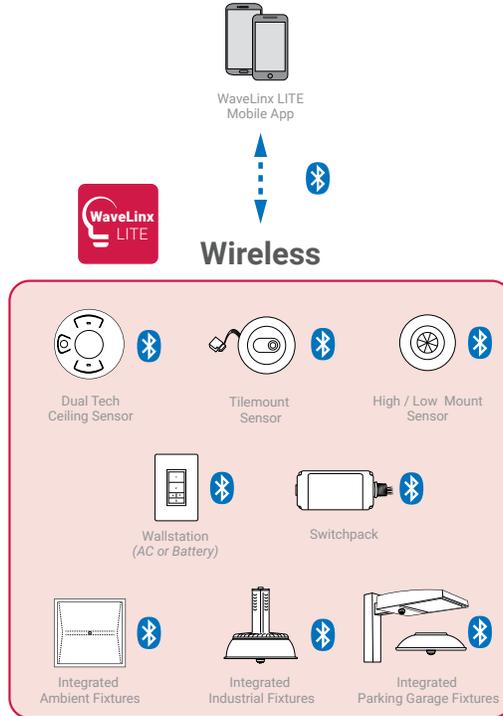
SIDE VIEW:



High mount models accommodate mounting height to 45ft (13.7m) for major motion (vehicles, fork trucks, etc.) - may not detect minor motion of people depending on conditions.

System Diagram:

This diagram shows the 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