Project		Catalog #		Type	
Prepared by		Notes		Date	

White

White, Bronze and Black colors available

Bronze

Black

WaveLinx Wireless

Outdoor Sensor Extender/Multiplier

Extend WaveLinx Wireless signal outdoors or add motion and daylight sensing to luminaires

Typical Applications

Outdoor • Parking areas • Pathways

Interactive Menu

Product Certification

c UL us FC

Part 15/ICES-003

Product Features

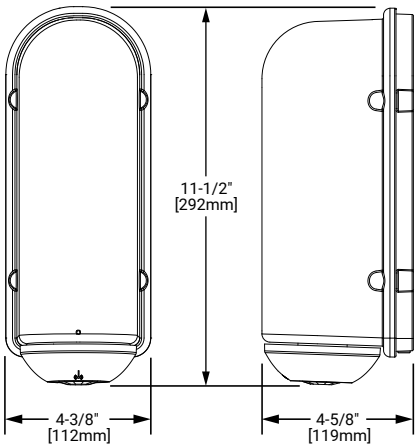
IEEE 802.15.4 · Device Security · Customer Security · Outdoor Control · Daylighting Control* · Occupancy Sensor*

*When wired to specific outdoor luminaires

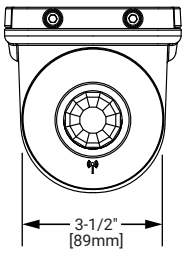
Top Product Features

- WaveLinx mains powered outdoor sensor option external to the luminaire
- Extends WaveLinx Wireless Area Controller (WAC) range to outdoor devices
- Externally mounted sensor option to control connected luminaires
- Provides control to multiple luminaires at once (in the Control Multiplier configuration)
- Mounts on round and square poles or a single wall mounted junction box
- Programming follows the same procedure as programming a connected WaveLinx luminaire

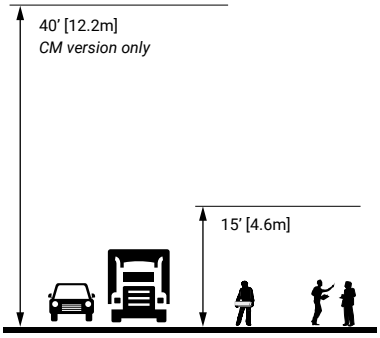
Dimensional and Mounting Details



Sensor Orientation



Mounting Height



additional product diagrams

Order Information

SAMPLE ORDER NUMBER: **RSWPD4-WE-U-WH**

Product Family	Motion Lens	Configuration Type	Voltage	Colors
RSWPD = WaveLinx Remote	**4** = Low Mount Sensor, 7 - 15ft (2.1 - 4.5m) **5** = High Mount Sensor, 15 - 40ft (4.5 - 12.2m) (applicable to RSWPD in CM configuration)	**WE** = Wireless Extender (hopper) * **CM** = Control Multiplier	Wireless Extender **U** = 120-277V **9** = 347V **8** = 480V Control Multiplier **1** = 120V **3** = 240V **4** = 277V	**BK** = Black **BZ** = Bronze **WH** = White
		Note * RSWPD-WE use the low mount sensor and be placed at a height no higher than 15 ft.		

Required Accessories

All Wireless 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

RSWPD-WE:

- Configuration suitable for installation up to 15ft (4m) high mounting applications

RSWPD-CM:

- Out-of-the-box functionality (on at dusk, off at dawn, occupied to 100%)
- Passive Infra-Red (PIR) motion sensor with coverage up to 5000 sq ft
- Integrated photocell for closed loop daylight switching

All configurations:

- Software configurable settings with WaveLinx Mobile Application
- Simple tool-less twist lock fixture connection via 4-pin Zhaga Book 18 socket
- IP66 rating and powder coated cast aluminum housing for outdoor applications

Mechanical

Size: 4.378" x 4.63" x 11.5" (112mm x 119mm x 292mm)
Weight: 11 lbs (5.0 kg)
Environment:

- **Operating temperature:** -40°F to 131°F (-40°C to 55°C)
- For outdoor use only

Mounting: Wall mount, square pole or round pole mount
Mounting Height:

- **CM version:** 40ft (12m) and 15ft (5m) options available
- **WE version:** 15ft (5m) only

Color: White, Bronze and Black colors available
Housing:

- One-piece, die-cast aluminum
- Finished in super durable TGIC polyester powder coat
- IP66 rated

Electrical

Power limitations for the RSWPD-CM configuration:

Voltage	Amperage	Max Wattage
120V	16A	1800W
240V	8A	1800W
277V	8A	2100W

Software Specifications

- Mobile app configuration for Occupancy/Vacancy
- Remote Hold Time settings fully configurable via mobile app
- Mobile app configuration of Occupied and Unoccupied light levels
- RSPWD-CM may appear as a dimmable point, but relay controlled only (no dimming)

Wireless Specifications

Radio: 2.4GHz
Standard: IEEE 802.15.4
Transmitter Power: + 8dBm
Range:

- RSWPD sensor to RSWPD sensor; 160ft (49m) LOS (best practice)
- Wireless Area Controller to RSWPD sensor; 125ft (38m) LOS (through window)

System Performance

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

Standards/Ratings

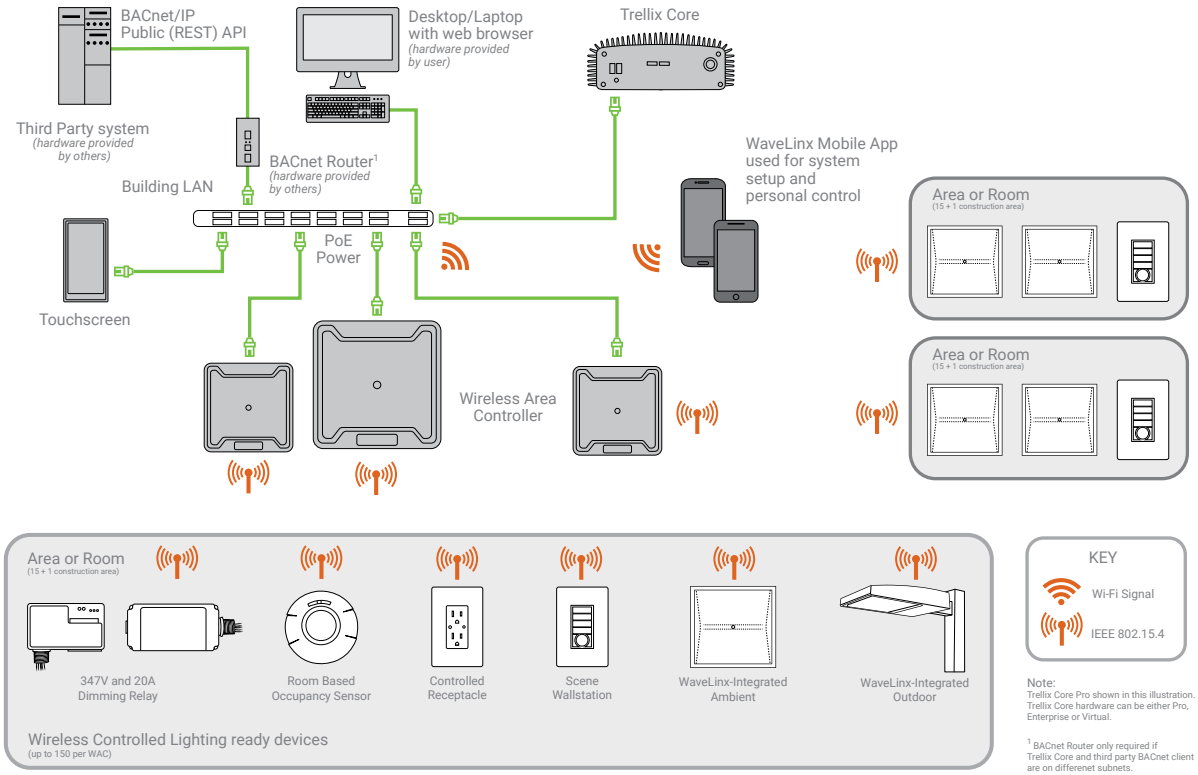
- UL Certified

Warranty

Five year warranty standard

System Architecture

This diagram shows the main components of the WaveLinx 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.



Note:
Trellix Core Pro shown in this illustration. Trellix Core hardware can be either Pro, Enterprise or Virtual.

[1] BACnet Router only required if Trellix Core and third party BACnet client are on differenet subnets.

Overview

The remote sensor housing incorporates a WaveLinx SWPD4 and SWPD5 wireless sensor, and is available in the following two possible configurations.

In the first configuration **(RSWPD-WE)**, the RSWPD acts as a Wireless Extender, which can be placed in a location where no WaveLinx enabled luminaire is present, thus providing a way for the WaveLinx wireless system to find a node from which to hop. This is an ideal configuration for when the WaveLinx WAC is too far from the first luminaire and needs to hop via an intermediate wireless node to reach it. Another use case for this configuration is to add this device between two nodes that are too far away from one-another – as a mid-point hopper between the two.

Note:

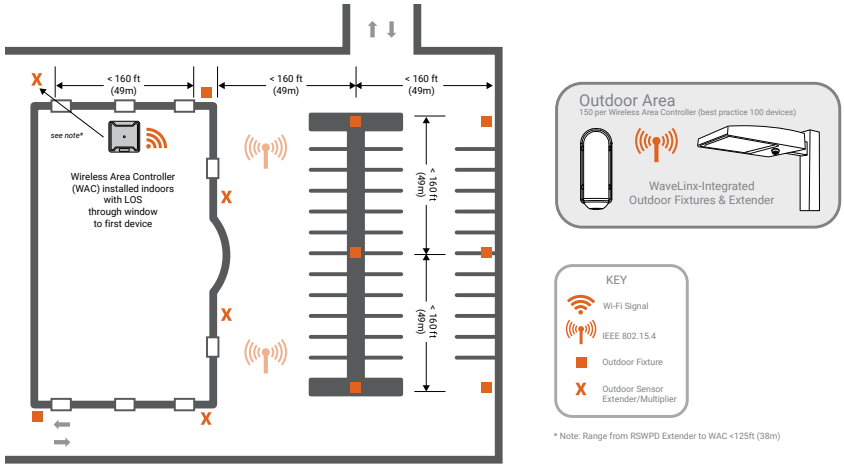
- It is recommended that the RSWPD-WE use the low mount sensor and be placed at a height no higher than 15ft (4m).
- Also, it is recommended that in large systems, two RSWPD-WE be used and that the first one be no more than 125ft (38m) from LOS of the WAC in case the RSWPD-WE is extending the range of the WAC.

In the second configuration **(RSWPD-CM)**, the RSWPD acts as a Control Multiplier to distribute the commands from the WaveLinx system solution to multiple luminaires at once that can not be fitted with WaveLinx directly. In this configuration, the RSWPD provides motion input, photo-sensing or remote management to the luminaires that are wired to this device. This RSWPD-CM configuration contains a relay for switching lighting loads ON/OFF.

Note:

- It is recommended that the RSWPD-CM be used in a system that is managed by a WAC.

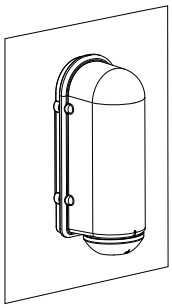
RSWPD-WE Configuration



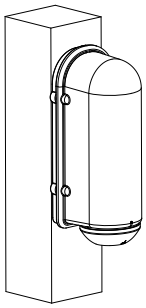
* Note: Range from RSWPD Extender to WAC <125ft (38m)

Mounting Option

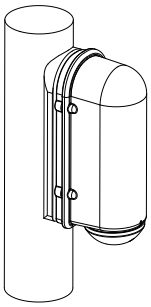
Wall Mount



Square Pole Mount

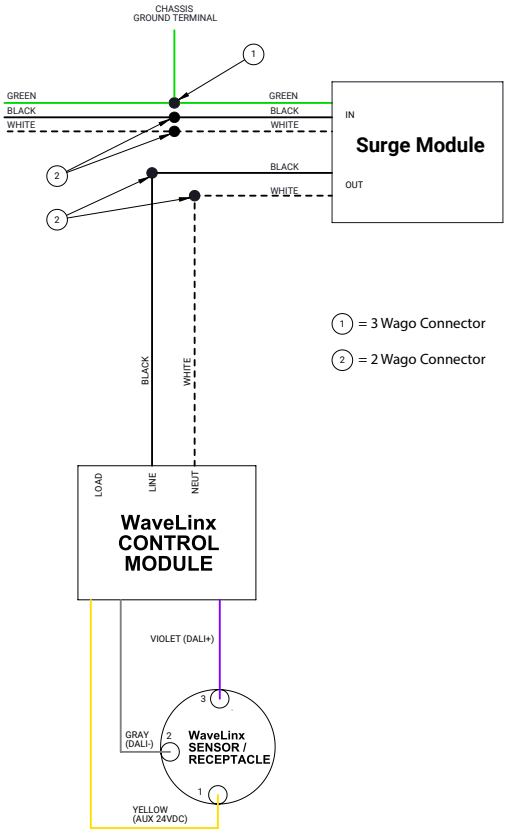


Round Pole Mount

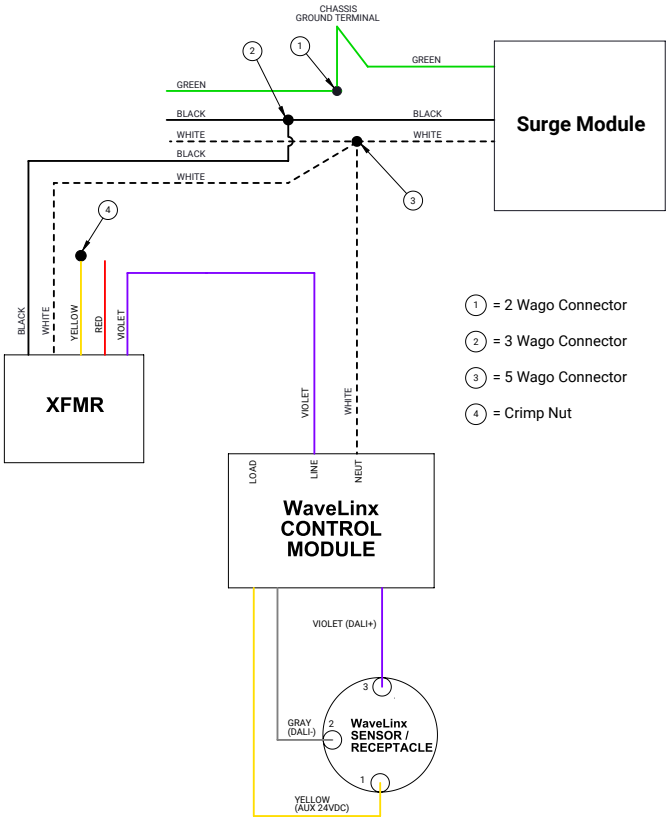


Wiring Diagrams

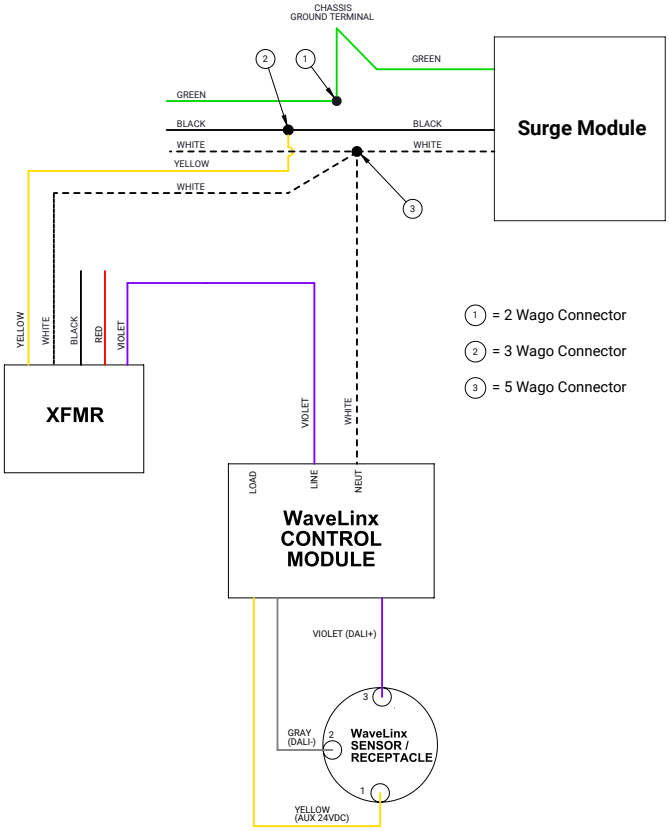
Wireless Extender 120-277V



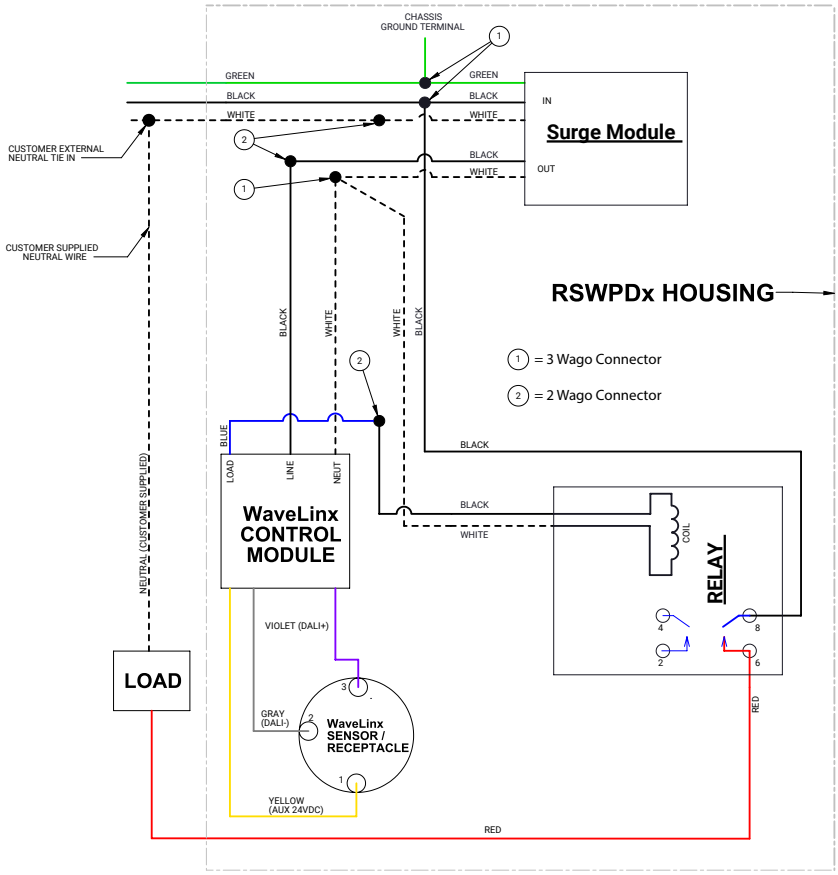
Wireless Extender 347V



Wireless Extender 480V

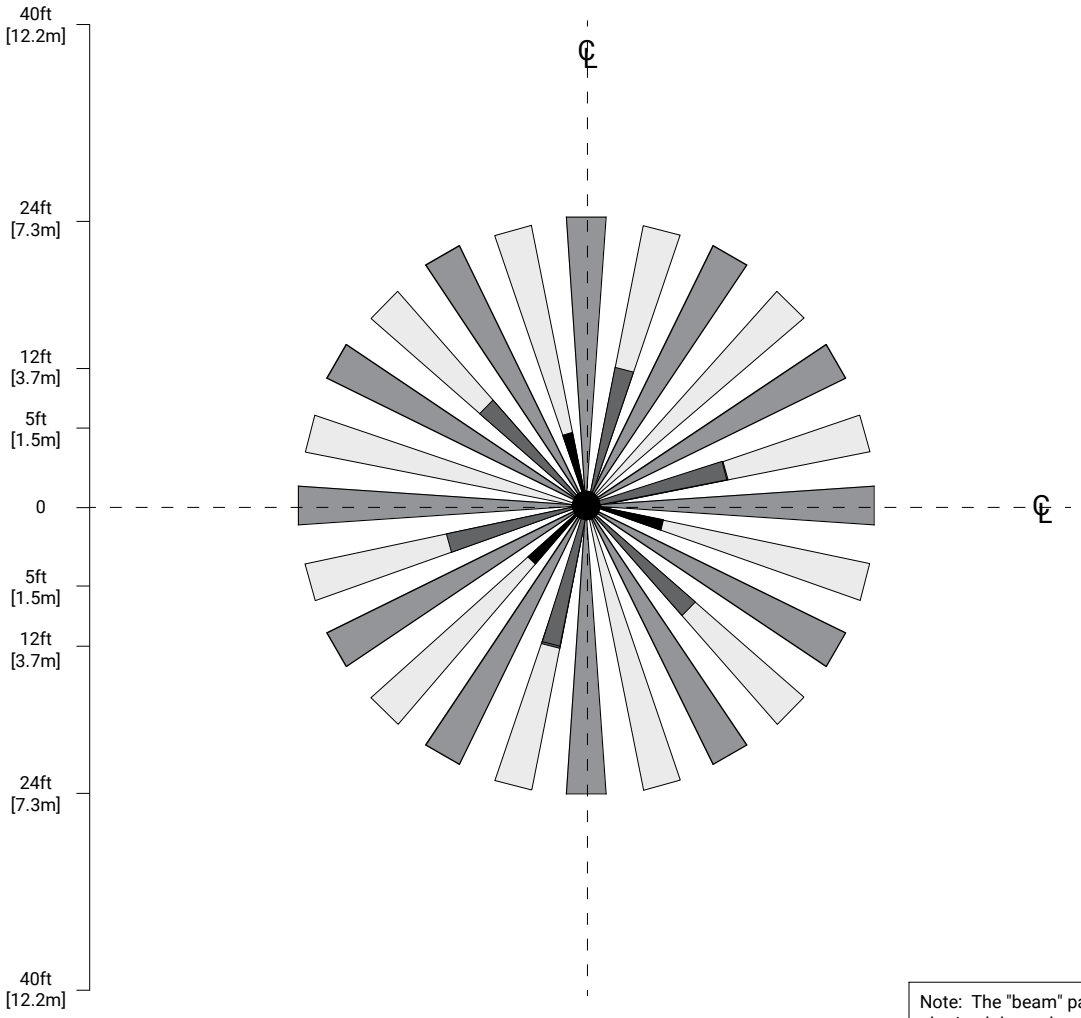


Control Multiplier 120V, 240V, 277V



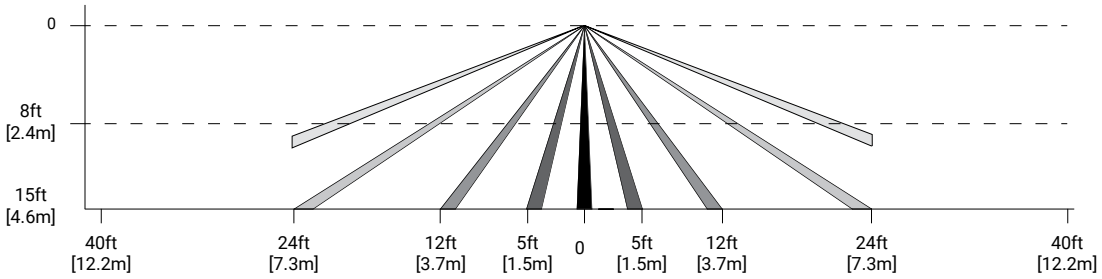
Field of View - Low Mount (Control Multiplier configuration)

TOP VIEW:



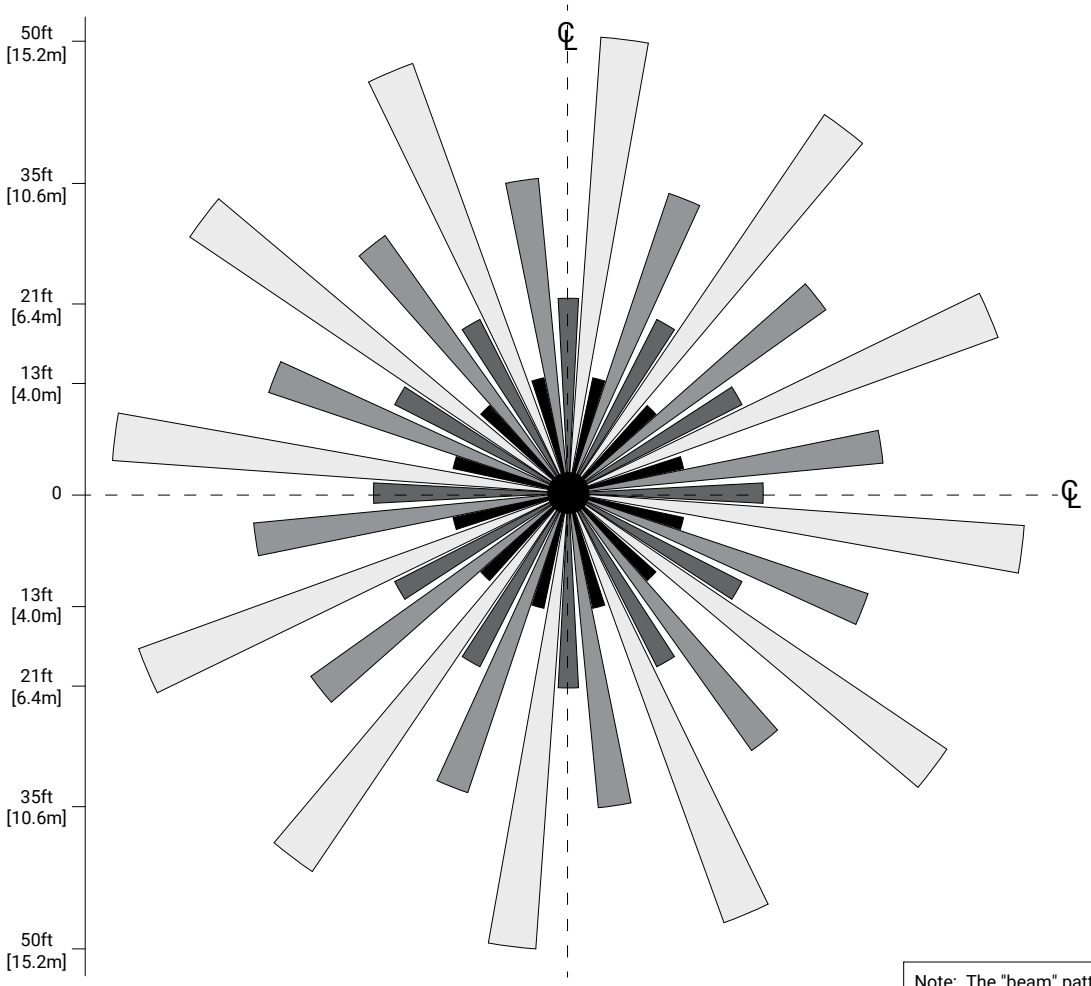
Note: The "beam" pattern obtained depends strongly on the detector used with this array. The pattern shown is intended solely as a general guide and is not to scale.

SIDE VIEW:



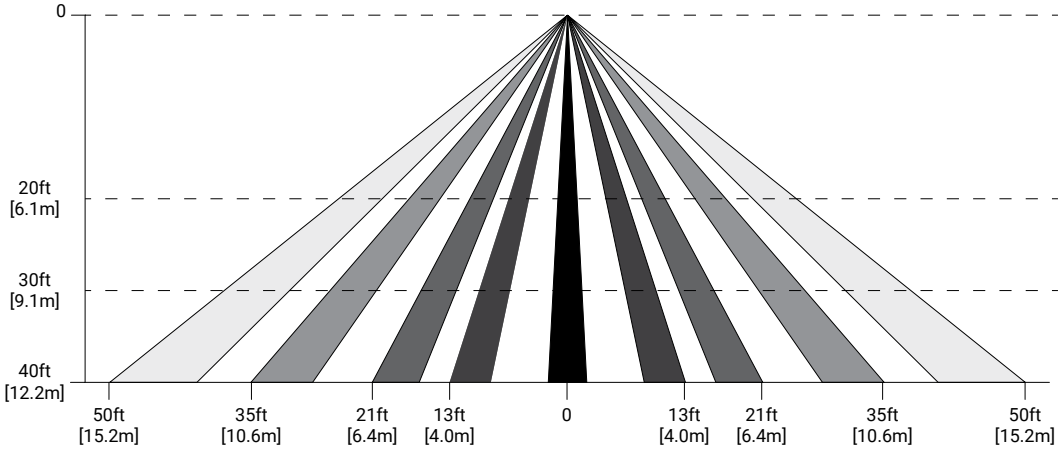
Field of View - High Mount (Control Multiplier configuration only)

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:



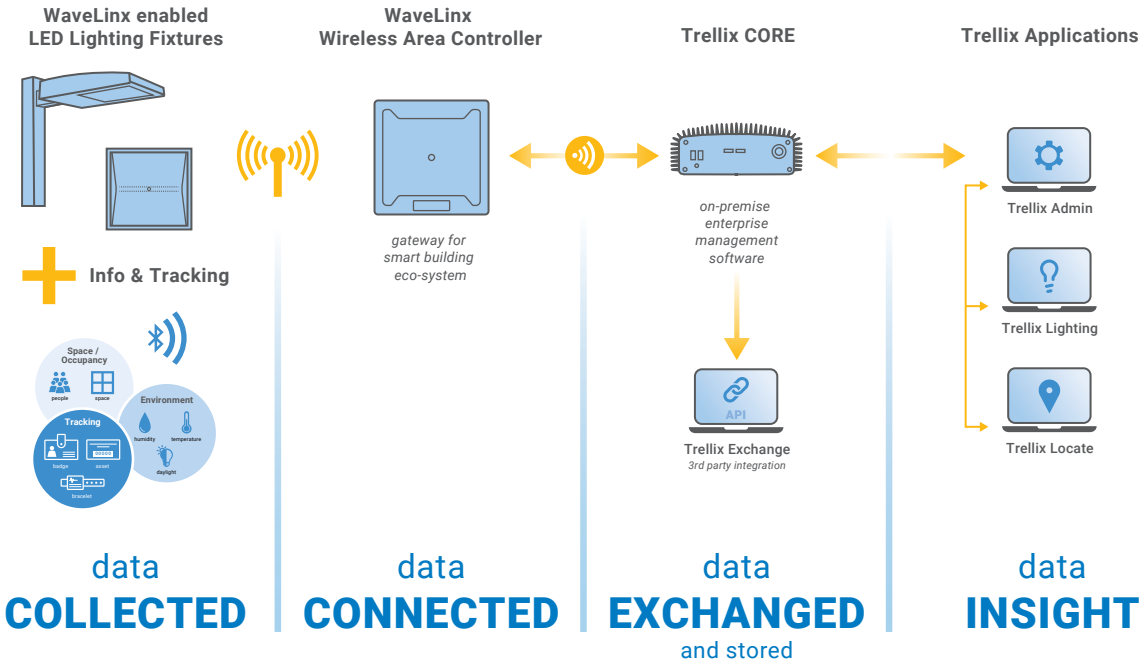
Connected Systems

- 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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