ULI-21173

Light Linear PT 3 Single Head Streetlight

microVOS TECHNOLOGY

LIGMAN LIGHTING USA

80w LED
8448 Lumens

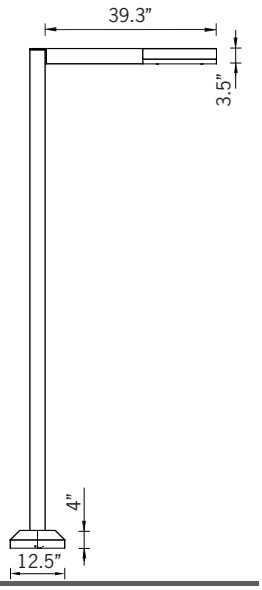
Weight 65 lbs

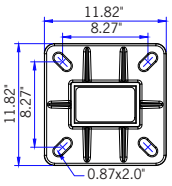
IP65
Suitable for wet locations

IK08
Impact Resistant [Vandal Resistant]

EPA - 1.20

POLE INCLUDED

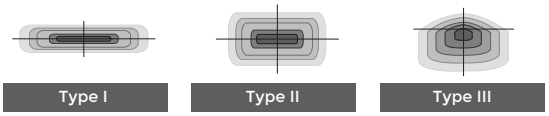




Mounting Detail

microVOS TECHNOLOGY

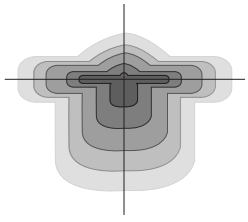
Ligman's micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



Type I | Type II | Type III

Type IV | Type V

The variable optic system allows for the designer to create hybrid distributions for precise lighting requirements.



HYBRID
TYPE I & TYPE IV

Construction

Aluminum
Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 Aluminum High Pressure die casting provides excellent mechanical strength , clean detailed product lines and excellent heat dissipation.

Pre paint
8 step degrease and phosphate process that includes deoxidizing and etching as well as a zinc and nickel phosphate process before product painting.

Memory Retentive -Silicon Gasket
Provided with special injection molded "fit for purpose" long life high temperature memory retentive silicon gaskets. Maintains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman used in conjunction with the driver, controls thermals below critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

BUG Rating
B1 - U0 - G1

Finishing
All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint
UV Stabilized 4.9Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

Inspired by Nature Finishes
The Inspired by nature Finishing is a unique system of decorative powder coating. Our metal decoration process can easily transform the appearance of metal or aluminum product into a wood grain finish.

This patented technology enables the simulation of wood grain, and even marble or granite finish through the use of decorative powder coating.

The wood grain finish is so realistic that it's almost undistinguishable from real wood, even from a close visual inspection. The system of coating permeates the entire thickness of the coat and as a result, the coating cannot be removed by normal rubbing, chipping, or scratching.

The Coating Process
After pre-treatment the prepared parts are powder coated with a specially formulated polyurethane powder. This powder provides protection against wear, abrasion, impact and corrosion and acts as the relief base color for the finalized metal decoration.

The component is then wrapped with a sheet of non-porous film with the selected decoration pattern printed on it using special high temperature inks.

This printed film transfer is vacuum-sealed to the surface for a complete thermo print and then transferred into a customized oven. The oven transforms the ink into different forms within the paint layer before it becomes solid. Finally, the film is removed, and a vivid timber look on aluminum remains.

Wood grain coating can create beautiful wood-looking products of any sort. There are over 300 combinations of designs currently in use. Wood grains can be made with different colors, designs, etc.

Our powder coatings are certified for indoor and outdoor applications and are backed by a comprehensive warranty. These coatings rise to the highest conceivable standard of performance excellence and design innovation.

Added Benefits
- Resistance to salt-acid room, accelerated aging
- Boiling water, lime and condensed water resistant
- Anti-Graffiti, Anti-Slip, Anti-Microbial, Anti-Scratch
- Super durable (UV restant)
- TGIC free (non-toxic)

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are infused with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens
Provided with tempered, impact resistant crystal clear low iron glass ensuring no green glass tinge.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieve 80% of their original flux)

Public realm contemporary column family. Stylish but technically precise area lighting solutions as part of a large flexible family.

Light Linear PT is an elegant minimalistic lighting column that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual sealed optical chamber with integrated heat sinks houses a range of field interchangeable optically controlled LED's, providing Type II, III, IV & V distribution, as well as variations of this for precise light distribution requirements.

An example of this, is using a combination of Type II and Type IV distribution optics inside the same fixture. This product range is available in multiple wattage options and as single & double head styles. Customer specific wattages can be provided, contact the factory for more information.

This luminaire complies to Dark Sky requirements.
The sleek and minimalistic shape provides distinctive lighting effects by night and decorative urban effect during the day. Suitable for use in pedestrian precincts, building surrounds, shopping centers, squares, parks and parking lots.

This product range is complemented with high performance optics in the bollard and wall mounted luminaires, to provide a consistent range of design aesthetics for the project. See website for more information. Poles can be provided with GFCI boxes positioned to specific heights specified by the customer. A flat low profile hand hole cover with vandal resistant screws is provided for easy installation.

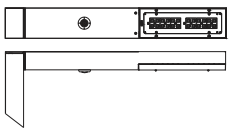
Internal house side shields are available as an option.
Available with a selection of integral electronic drivers and dimming electronic drivers as well as a provision to install wireless lighting controls to integrate with building management systems, as well as pole mounted occupancy sensors [contact the factory for more information] Easy access to the luminaire for maintenance.
(WATT-ADJ) This luminaire is provided with a programmable driver so that specific wattage requirements can be achieved. These settings are done at the factory during assembly. (See options on page 2)

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected and luminaire fix mounted (+/- 15˚ allowable to permit leveling).

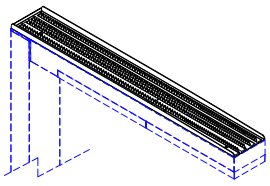
Additional Options (Consult Factory For Pricing)

A90991
Zhaga Book 18

A90891
NEMA 7



OS
Occupancy Sensor



BSP
Bird Spikes

LIGHTCONNECT IoT Ready Light Linear

(Shown with up & down configuration)

Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice.

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LIGMAN LIGHTING USA

PROJECT		DATE	
QUANTITY		TYPE		NOTE	

ORDERING EXAMPLE || ULI - 21173 - 80w - T2 - W30 - 02 - 18' - 120/277v - Options

ULI-21173						
	LAMP	BEAM	LED COLOR	FINISH COLOR	POLE HEIGHT	VOLTAGE

LAMP

80w LED
8448 Lumens

WATT-ADJ
Specify Watts
(80w MAX)

BEAM

T1 - Type I Distribution
T2 - Type II Distribution
T3 - Type III Distribution
T4 - Type IV Distribution
T5 - Type V Distribution

LED COLOR

W27 - 2700K
W30 - 3000K
W35 - 3500K
W40 - 4000K

FINISH COLOR

01 - BLACK RAL 9011
02 - DARK GREY RAL 7043
03 - WHITE RAL 9003
04 - METALLIC SILVER RAL 9006
05 - MATTE SILVER RAL 9006
06 - LIGMAN BRONZE
07 - CUSTOM RAL

INSPIRED BY NATURE FINISHES

SW01 - OAK FINISH
SW02 - WALNUT FINISH
SW03- PINE FINISH
DF - DOUGLAS FIR FINISH
CW - CHERRY WOOD FINISH
NW - NATIONAL WALNUT FINISH
SU01 - CONCRETE FINISH
SU02 - SOFTSCAPE FINISH
SU03 - STONE FINISH
SU04 - CORTEN FINISH

THERE IS AN ADDITIONAL COST FOR THESE FINISHES

POLE HEIGHT

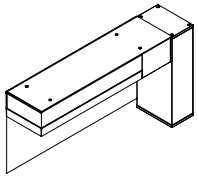
8' - 20'
(For over 20', contact factory)

VOLTAGE

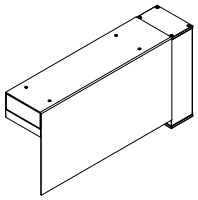
120/277v
Other - Specify

ADDITIONAL OPTIONS

DIM - 0-10v Dimming
NAT - Natatorium Rated
AMB - Turtle Friendly Amber LED
GFCI - GFCI Box
WLC - Wireless Lighting Controls
F - Frosted Lens
BSP - Bird Spikes
A90891 - NEMA 7
A90991-U - Zhaga Book 18 Mounted On Top of Fixture
A90991-D - Zhaga Book 18 Mounted Below Fixture
OS - FSP Occupancy Sensor [See last page]
HSS - Integral House Side Shield
ERHSS - External Right House Side Shield
ELHSS - External Left House Side Shield
FSIR - Occupancy Sensor Remote Programmer
[See last page]

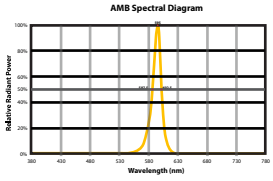


ERHSS
External Right House Side Shield



ELHSS
External Left House Side Shield

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT



Narrow-Spectrum Amber LEDs
Peak wavelength between 585 & 595 nanometers and a full width of 50% power no greater than 15 nanometers.t

More Custom Finishes Available Upon Request

Consult factory for pricing and lead times

Oak

Cherry

Beech

Carbon

Walnut

Chestnut

Bamboo

Galvanized

Pine

Mahogany

Birch

Steel

Example: Inspired by Nature Finish

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Intertek

Light Linear PT Product Family

Light Linear PT 1

- ULI-10021-28w-3169lm
- ULI-10022-54w-6240lm

Light Linear PT 2

- ULI-10031-2x28w-2x3169lm
- ULI-10032-2x54w-2x6240lm

Light Linear PT 3

- ULI-21171-54w-6193lm
- ULI-21173-82w-8448lm

Light Linear PT 4

- ULI-21172-105w-12518lm
- ULI-21291-155w-16891lm

Light Linear PT 5

- ULI-21181-2x54w-2x6193lm
- ULI-21183-2x82w-2x8448lm

Light Linear PT 6

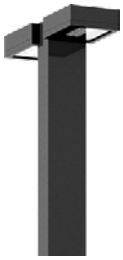
- ULI-21182-2x105w-2x12518lm
- ULI-21321-2x155w-2x16891lm

Light Linear PT 7

- ULI-21231-28w-3169lm

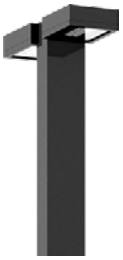
Light Linear PT 8

- ULI-21241-54w-6193lm



Light Linear PT 9

- ULI-21181-2x54w-2x6193lm
- ULI-21183-2x82w-2x8448lm



Light Linear PT 10

- ULI-21182-2x105w-2x12518lm
- ULI-21321-2x155w-2x16891lm

Light Linear PT 11

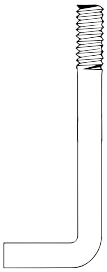
- ULI-30021-28w-3169lm
- ULI-30022-37w-4636lm

Light Linear PT 12

- ULI-30011-37w-4601lm
- ULI-30012-54w-6193lm

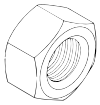
Anchor Bolt Installation for Poles

What's Included Per Pole

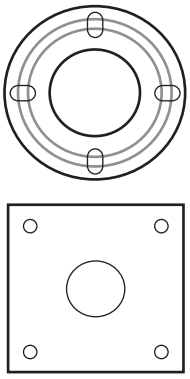


x 4

x 4

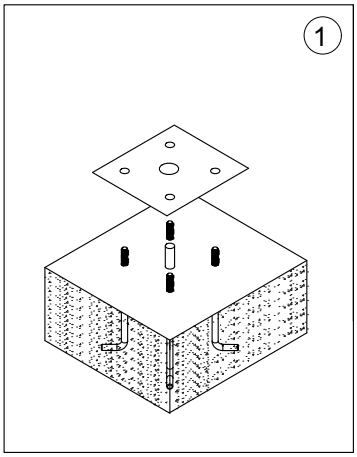


x 4

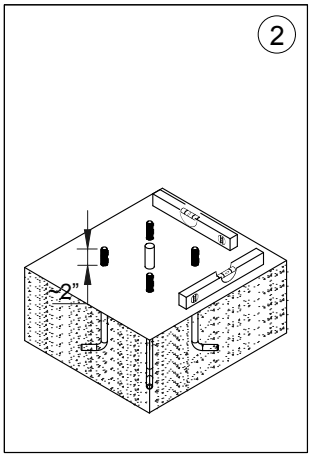


A single anchor bolt template is provided per pole size to be used for the poles on the project.

Anchor bolt template may be round or square dependant upon which pole is being used.



Use anchor bolt template to set anchor bolts into concrete as per civil engineering instructions.



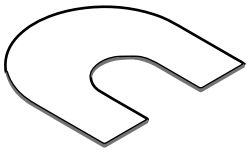
Ensure that the concrete is plumb using a level. Failing to do this will result in pole being uneven or tilted.

Ligman does not provide foundation details A local engineer that is familiar with the site soil conditions should provide this information.

NOTE:

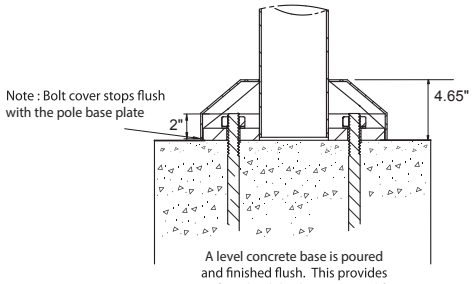
Ligman does not recommend using leveling bolts for pole installations.

Leveling shims can be provided, contact Ligman for more information.



Leveling Shim Example

Preferred Pole Installation



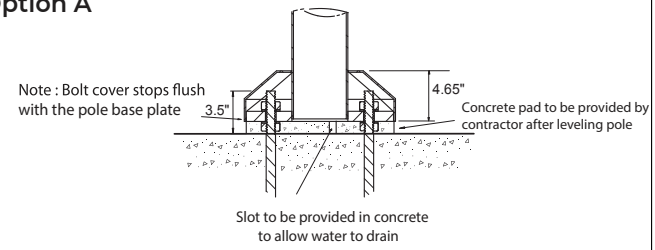
A level concrete base is poured and finished flush. This provides a uniform load displacement pad for the forces created by wind and luminaire weight

Failing to do this voids pole warranty

Foundation and Design by Others

In rare instances where leveling bolts have to be used, it is important that a flush concrete surface is created to mount the pole base plate.
NOTE: When using leveling bolts, bolt projection should be 3.5"

Using Leveling Bolts Option A



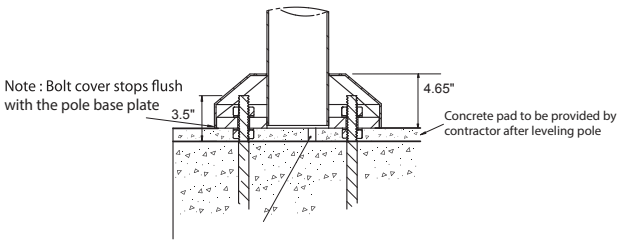
When using leveling bolts.

After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

Foundation and Design by Others

Using Leveling Bolts Option B



When using leveling bolts.

After establishing a level platform the space between the original concrete surface and the pole base should be filled with concrete and finished flush.

This provides a uniform load displacement pad for the forces created by wind and luminaire weight

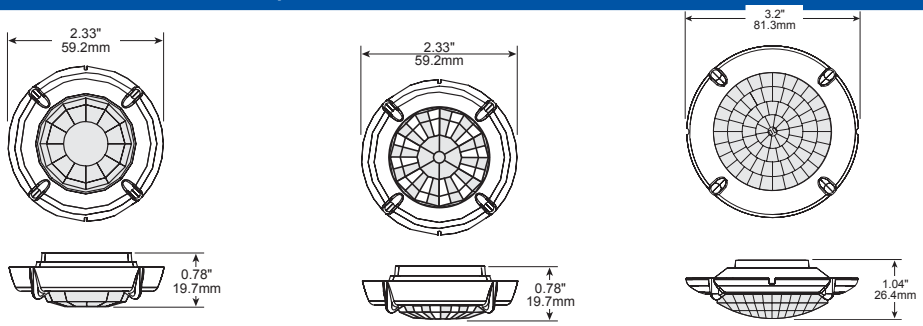
HIGH/LOW/OFF PIR OUTDOOR PHOTO/MOTION SENSOR IP66 - legrand® Integrated photocell

LIGMAN LIGHTING USA

Ligman provides integrated photocell control using the wattstopper legrand FSP-211B. These units are installed inside the fixture housing with only the external lenses being visible

FSP-211B

Dimensions of Lens Options



FSP-L2 dimensions | FSP-L3 dimensions | FSP-L7 dimensions

Product Overview

The FSP-221B is a family of passive infrared (PIR) outdoor sensors that raise or lower the electric lighting level to high, low or off based on motion and/or daylight contribution. Typically, once the sensor stops detecting movement and the time delay elapses, lights will first fade to low mode, and eventually switch off. When motion is detected, the sensor ramps the light level to high mode unless the daylight contribution is sufficient.

The integral photocell can also switch the lights on and off for dusk to dawn control, so that lighting remains on overnight even without motion detection.

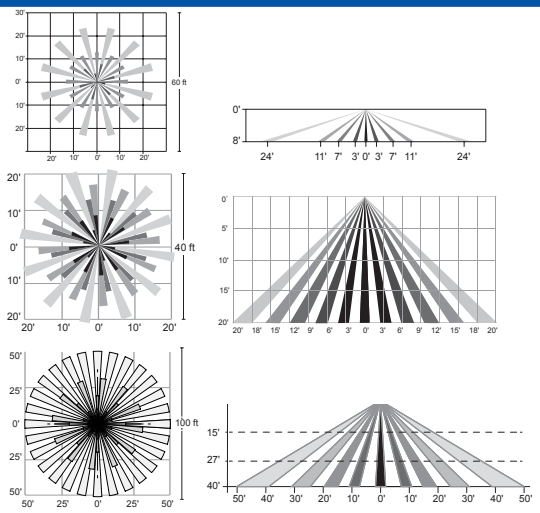
The sensors control 0-10VDC or nondimming LED drivers or ballasts.

The low voltage FSP-201B may be used with dim-to-off drivers or ballasts.

Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of sensor parameters including high/low mode, sensitivity, time delay, cut off and more.

The FSIR-100 can read current parameter settings, and stores up to six sensor parameter profiles to speed commissioning of multiple sensors.

Coverage



FSP-L2 top and side coverage patterns

FSP-L3 top and side coverage patterns

FSP-L7 top and side coverage patterns

Models

FSP-211B, 120-277 VAC

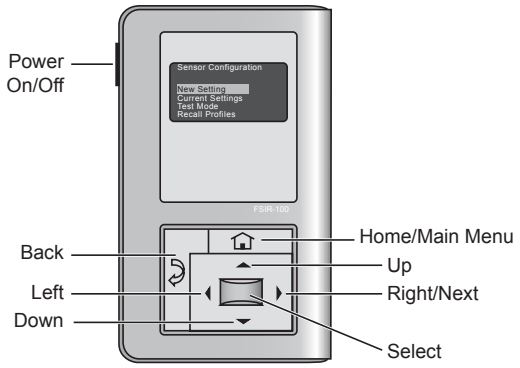
FSP-221B, 100-347 VAC

Specifications and Features

- Three interchangeable lenses for mounting between 8' and 40'
- Remote setup and adjustment with handheld wireless configuration tool
- Adjustable high and low modes (high: 0 to 10V, low: off, 0 to 9.8V)
- Adjustable time delay (30 seconds, 1 to 30 minutes)
- Adjustable cut off delay (none, 1 to 59 minutes, 1 to 5 hours)
- Adjustable sensitivity/service mode (low, med, max; on-fix, off-fix)
- Adjustable setpoints: hold off setpoint (none, 1 to 250 fc, auto); photocell on/off setpoint (1 to 250 fc)
- Adjustable ramp and fade times (1 to 60 seconds)
- Operating temperature: -40°F to +167°F (-40°C to +75°C)
- IP66 rated
- Five year warranty

Factory Defaults

High mode:	10V
Low mode:	1V
Time delay:	5 minutes
Cut off:	1 hour
Setpoint:	Disabled
Sensitivity:	Max
Ramp up time:	Disabled
Fade down time:	Disabled
Photocell On/Off:	Disabled



The **FSIR-100** is a convenient handheld remote tool for sensor setting. Adjustable settings can be changed as needed for specific applications.

Catalog #	Color	Description
FSP-L2	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 48' diameter from 8' height
FSP-L3	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 40' diameter from 20' height
FSP-L7	White/Grey/Black/Brown The Trim color option will be selected to closest match fixture color. e.g [Matte silver fixture - grey trim]	360° lens, maximum coverage 100' diameter from 40' height
FSIR-100	Black	Remote Handheld Configuration Tool