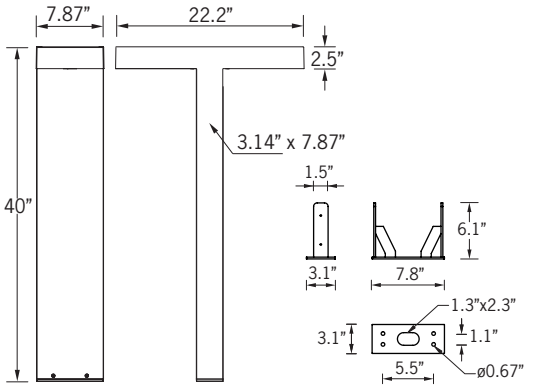
ULI-10031

Light Linear PT 2 Double Head Bollard

microVOS TECHNOLOGY

LIGMAN NORTH AMERICA

2x29w LED 2x3169 Lumens
IP65 · Suitable For Wet Locations
IK08 · Impact Resistant (Vandal Resistant)
Weight 32.8 lbs



Mounting Detail

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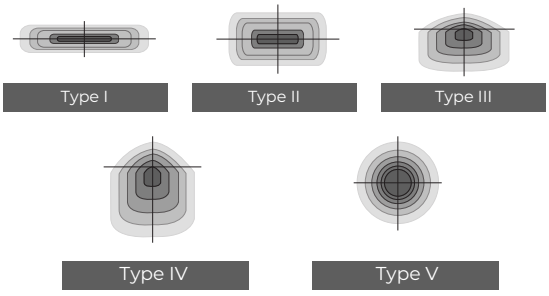
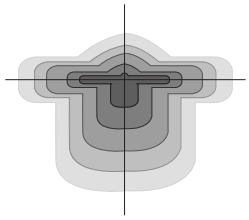
Ligman’s micro Variable Optical System provides the ability to interchange, mix & rotate optics to provide specific light distributions for optimized spacing and uniformity.



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.

MicroPRIM Finishes

MicroPRIM is Ligman’s trade marked decorative powder coating technology that permanently infuses colors, patterns, or imagery directly into the surface of luminaires and poles while providing protections that standard powder coating does not offer.

MicroPRIM finishes include nature-inspired wood grains and stone aesthetics, material-inspired finishes such as brushed metal, concrete, and carbon fiber, Solid colors in Ligman standard colors, as well as any RAL or Pantone color, Decorative patterns, custom imagery and more.

Coating and Infusion Process

Metal components are pre-treated and powder coated with a proprietary polyurethane-based coating engineered for outdoor architectural use. Decorative patterns or imagery are then permanently infused into the cured powder coat through a heat-based process, creating a durable, integrated finish.

Performance and Validation

MicroPRIM finishes are suitable for indoor and outdoor applications and meet AAMA2605 architectural coating requirements. Performance is validated through laboratory and real-world testing to ASTM standards for UV exposure, adhesion, abrasion, impact, salt spray, chemical resistance, and graffiti resistance.

All MicroPRIM finishes are backed by Ligman’s 10-year warranty.

Key Performance Attributes
•Anti-graffiti resistance
•UV and weather resistance
•Scratch and abrasion resistance
•Natatorium Rated for installation in corrosive environments)

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)

Area distribution bollard-integrated projectors. Stylish but technically precise area lighting solutions as part of a large flexible family.

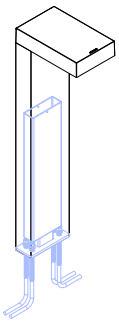
Light Linear PT Bollard is an elegant minimalistic bollard that is suitable for both modern and classic architecture. Ideal for creating visual guidance with exceptional visual comfort. The dual sealed optical chamber with integrated heat sinks houses a range of field interchangeable optically controlled 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 29w and 55w options, as single & double head styles.

Customer specific wattages can be provided, contact the factory for more information.

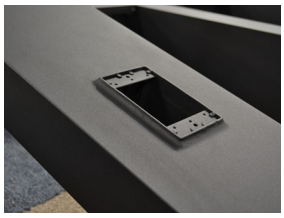
Bollards can be provided with GFCI boxes positioned to specific heights specified by the customer.
Internal house side shields are available as an option.

To meet International Dark Sky criteria, 3000k or warmer LEDs must be selected.

Additional Options (Consult Factory For Pricing)



PRB
Pedestrian Rated
Bollard Insert
(Not traffic-rated. Maximum impact: 2,430 lbs at 4 mph with 3.3 ft penetration)



GFCI
GFCI Box

RGBW or Static Color Laser Cut Lettering, Logos & Designs
(LLVT Bollard shown for visual reference)

Ligman can provide custom logos and signage in the Light Linear Bollard
The images above show this feature in the Light Linear VT Bollard

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 NORTH AMERICA

PROJECT		DATE	

QUANTITY		TYPE		NOTE	

ORDERING EXAMPLE || ULI - 10031 - 2x29w - T2 - W30 - 02 - 120/277v - Options

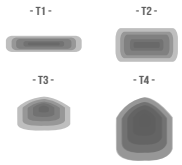
ULI-10031					
	LAMP	BEAM	LED COLOR	FINISH COLOR	VOLTAGE

LAMP

2x29w LED
2x3169 Lumens

BEAM

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



LED COLOR

W27 - 2700K
W30 - 3000K
W35 - 3500K
W40 - 4000K
AMB - TURTLE FRIENDLY Amber LED

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

VOLTAGE

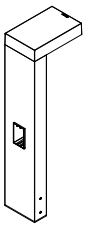
120/277v

			WORDS FRONT	WORDS BACK

ADDITIONAL OPTIONS

NAT - Natatorium Rated
F - Frosted Lens
HGT- Custom Bollard Height (Specify HGT)
DIM - 0-10v Dimming

HSS - House Side Shield
PRB - Pedestrian Rated Bollard Insert
GFCI - GFCI Box
[Standard location on back of bollard, consult factory for different location]



GFCI

LASER CUT LETTERING (Cannot be used in conjunction with Pedestrian Rated Bollard)

SC - Static Color (Choose Color e.g Red, Blue etc.)

CONSULT FACTORY FOR CUSTOM DESIGNS, LOGOS AND OTHER SPECIAL REQUIREMENTS
FACTORY DRAWINGS WILL BE PROVIDED PRIOR TO PRODUCTION

More Custom Finishes Available Upon Request

Consult factory for pricing and lead times

MicroPRIM 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
- CSM - Custom Image/Pattern

MicroPRIM FINISHES

- MP - MAPLE FINISH
- MHG - MAHOGANY FINISH
- BH - BEECH FINISH
- CN - CHESTNUT FINISH
- WMBL - WHITE MARBLE FINISH
- MBL - MARBLE FINISH
- GRNT - GRANITE FINISH
- BGD - BRUSHED GOLD FINISH
- BBRZ - BRUSHED BRONZE FINISH
- CAMO - CAMOUFLAGE FINISH

- MP01 - MicroPRIM RAL 9011 Black (Glossy)
- MP02 - MicroPRIM RAL 7043 Dark Grey (Glossy)
- MP03 - MicroPRIM RAL 9003 White (Glossy)
- MP04 - MicroPRIM RAL 9006 Metallic Silver (Glossy)
- MP05 - MicroPRIM RAL 9006 Matte Silver (Matte/Textured)
- MP06 - MicroPRIM Ligman Bronze (Glossy)
- MP07 - MicroPRIM Custom Color (Glossy)

MicroPRIM Finish

10 YEAR WARRANTY LIGMAN LIGHTING USA

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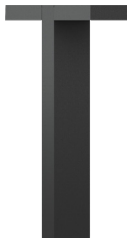
Intertek

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

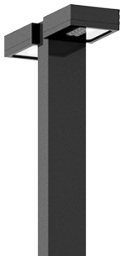
- ULI-21182-2x105w-2x12518lm
- ULI-21321-2x155w-2x16891lm

Light Linear PT 7

- ULI-21231-28w-3169lm

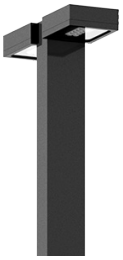
Light Linear PT 8

- 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

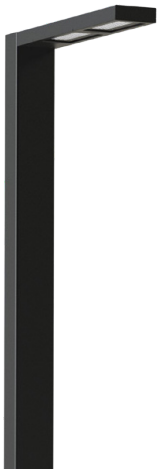
Light Linear PT 12

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

Light Linear PT-X

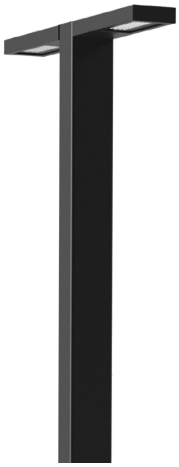
Light Linear PT-X 13

- ULI-21331-104w-15294lm
- ULI-21332-136w-19320lm



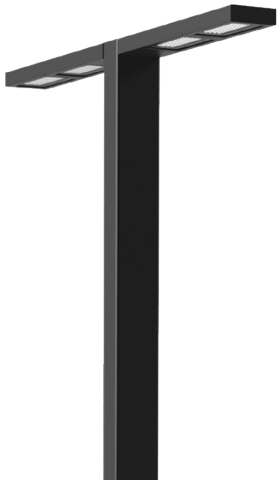
Light Linear PT-X 14

- ULI-21333-215w-30588lm
- ULI-21334-272w-38640lm



Light Linear PT-X 15

- ULI-21341-2x104w-2x15294lm
- ULI-21342-2x136w-2x19320lm



Light Linear PT-X 16

- ULI-21343-2x215w-2x30588lm
- ULI-21344-2x272w-2x38640lm