

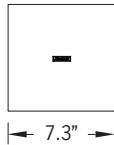
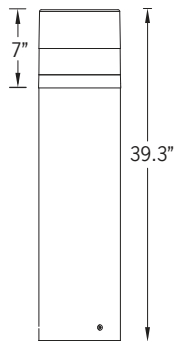
ULH-10685

Lightsoft 2 Square Bollard

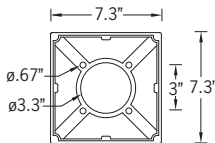
LIGMAN
NORTH AMERICA



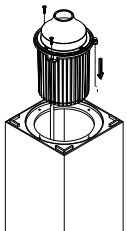
27w LED 1050 Lumens
IP65 • Suitable For Wet Locations
IK10 • Impact Resistant (Vandal Resistant)
Weight 20.7 lbs



Top View

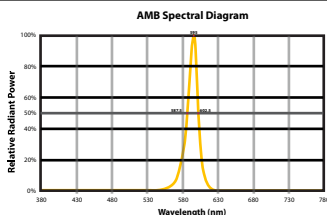


Mounting Detail



IP65 - Internal top access driver housing, prewired with SO cord and waterproof cable gland for easy installation.

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.

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 thermal 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 - U3 - 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)

Indirect light-emitting bollard range. Smooth and sharp devised bollard family with wonderful soft controlled lighting options.

The innovative reflector technology of the Lightsoft bollard guarantees a high degree of efficiency and optimal visual comfort. Lightsoft has been developed to have excellent controlled downward light providing wide spacing ratios. It has three light shield accessories with different light distributions. The Lightsoft is available in a cylindrical or square shape design with two different heights. The Lightsoft Bollard comes standard with a unique waterproof internal driver housing compartment that is situated at the top of the pole to stop water and dust from entering the electrical components. This fixture is supplied completely wired with powercord and waterproof gland from the driver enclosure to the base of the bollard ensuring quick trouble-free installation. Custom bollard heights are available, please specify. Color temperature 2700K, 3000K, 3500K and 4000K. Custom wattages can be provided to suit customer and Title 24 requirements. (Specify total watts per fixture)

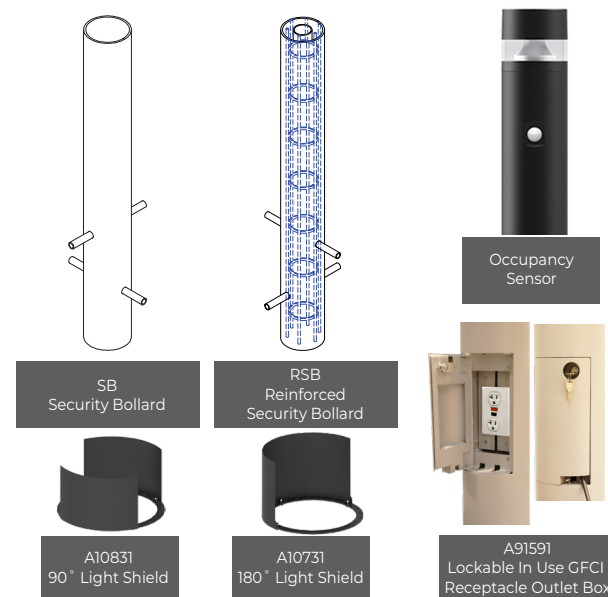
All Ligman fixtures can be manufactured using a special pre-treatment and coating process that ensures the fixture can be installed in natatoriums as well as environments with high concentrations of chlorine or salt and still maintain Ligman's 10-year warranty. For this natatorium rated process please specify NAT in options.

Security Bollard:

This product can be modified with optional Security Bollard cores. Ligman has **two** security bollard options designed to deter unauthorized vehicular access in restricted areas. Ligman's **Standard Security Bollards [SB]** are structurally engineered and simulated to meet the performance criteria of a typical traffic-rated bollard system, which corresponds to a 5,000 lb vehicle impact up to 30mph with less than 4ft of penetration. Ligman **Reinforced Security Bollards [RSB]** are structurally engineered for impact resistance and simulated to meet the performance criteria of ASTM F2656 M30 P1 (formerly known as K4), which corresponds to a 15,000 lb vehicle impact up to 30mph with less than 3.3 ft of penetration. These bollards are not certified as crash-rated. Please refer to the product installation sheet for additional requirements and installation guidelines

NOTE: This product is available with integrated occupancy sensor detection, please see page 2 for more information.

Additional Options (Consult Factory For Pricing)



ULH-10685

Lightsoft 2 Square Bollard

PROJECT					DATE	
QUANTITY		TYPE		NOTE		

ORDERING EXAMPLE || ULH - 10685 - 27w - W30 - 02 - 120/277v - Options

ULH-10685				
LAMP	LED COLOR	FINISH COLOR	VOLTAGE	
27w LED 1050 Lumens	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K AMB - TURTLE FRIENDLY Amber LED 	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	120/277v	

ADDITIONAL OPTIONS		

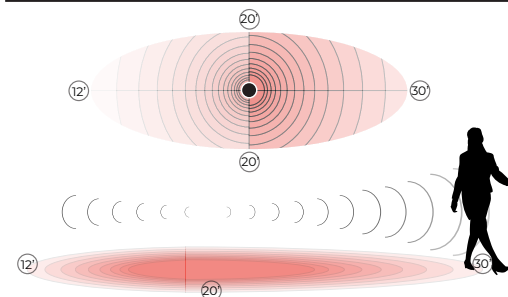
GFCI - GFCI Box
NAT - Natatorium Rated
DIM - 0-10v Dimming
SB - Security Bollard
RSB - Reinforced Security Bollard
HGT - Custom Bollard Height
[Specify HGT=XX"]



A14291 - Remote Controller for Occupancy Sensor

OCC1 - Single Occupancy Sensor
A91591 - Lockable In Use GFCI Receptacle Outlet Box
A14291 - Remote Controller for Occupancy Sensor
A10731 - 180° Light Shield
A10831 - 90° Light Shield
UL - Non-Illuminated (Unlit Bollard)

OCCUPANCY SENSOR OPTION



OCC1
SINGLE OCCUPANCY SENSOR DETECTION RANGE
[UNIVERSAL LEFT OR RIGHT DETECTION]

* The integrated, smart occupancy sensor can be programmed on site to function in a variety of ways.

Example: Simple on-off mode || DIM -> full light output on detection -> DIM | Off -> full bright on detection -> DIM for a set time with no detection -> off | DIM -> full bright on detection -> DIM

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		MP01 - MicroPRIM RAL 9011 Black (Glossy)
	MHG - MAHOGANY FINISH		MP02 - MicroPRIM RAL 7043 Dark Grey (Glossy)
	BH - BEECH FINISH		MP03 - MicroPRIM RAL 9003 White (Glossy)
	CN - CHESTNUT FINISH		MP04 - MicroPRIM RAL 9006 Metallic Silver (Glossy)
	WMBL - WHITE MARBLE FINISH		MP05 - MicroPRIM RAL 9006 Matte Silver (Matte/Textured)
	MBL - MARBLE FINISH		MP06 - MicroPRIM Ligman Bronze (Glossy)
	GRNT - GRANITE FINISH		MP07 - MicroPRIM Custom Color (Glossy)
	BGD - BRUSHED GOLD FINISH		
	BBRZ - BRUSHED BRONZE FINISH		
	CAMO - CAMOUFLAGE FINISH		



MicroPRIM Finish + Two-Tone Style



Lightsoft Product Family



Lightsoft 1

- ULH-10655-27w-1188lm [23.6"]
- ULH-10665-27w-1188lm [39.3"]



Lightsoft 2

- ULH-10675-27w-1050lm [23.6"]
- ULH-10685-27w-1050lm [39.3"]



Lightsoft 3

- ULH-10573-14w-447lm [23.6"]
- ULH-10583-14w-447lm [39.3"]



Lightsoft 4

- ULH-10593-14w-346lm [23.6"]
- ULH-10603-14w-346lm [39.3"]



Lightsoft 5

- ULH-31146-14w-447lm



Lightsoft 6

- ULH-31156-14w-346lm