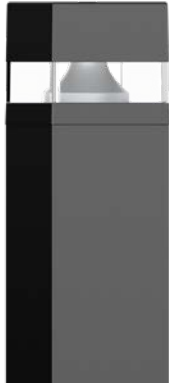# ULH-10685
Lightsoft 2 Square Bollard

LIGMAN LIGHTING USA

🐢 TURTLE FRIENDLY

27w LED 1050 Lumens
IP65 • Suitable For Wet Locations
IK08 • Impact Resistant (Vandal Resistant)
Weight 20.7 lbs

7"

39.3"

7.3"

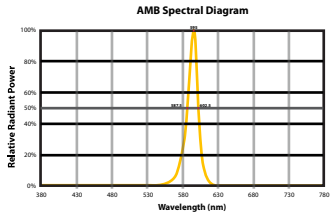### Top View

7.3"

ø.67"
ø3.3"

3" 7.3"
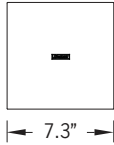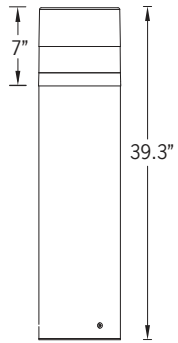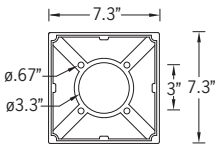
Mounting Detail
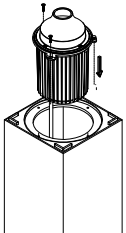
IP65 – Internal top access driver housing, prewired with SO cord and waterproof cable gland for easy installation.

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT

AMB Spectral Diagram

Relative Radiant Power (%) vs Wavelength (nm)

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

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 - 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.

<u>Inspired by Nature Finishes</u>
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 resistant)
• 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)

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 the 5 year warranty. For this natatorium rated process please specify NAT in options.

Additional Options (Consult Factory For Pricing)

A10831
90˚ Light Shield

A10731
180˚ Light Shield

Occupancy Sensor

A91791
Lockable In Use GFCI Receptacle Outlet Box

PROJECT		DATE	
QUANTITY		TYPE		NOTE	

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

OCCUPANCY SENSOR OPTIONS

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

OCC2
DUAL OCCUPANCY SENSOR DETECTION RANGE
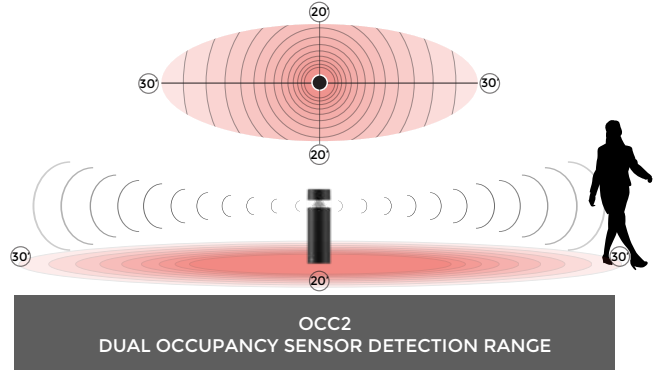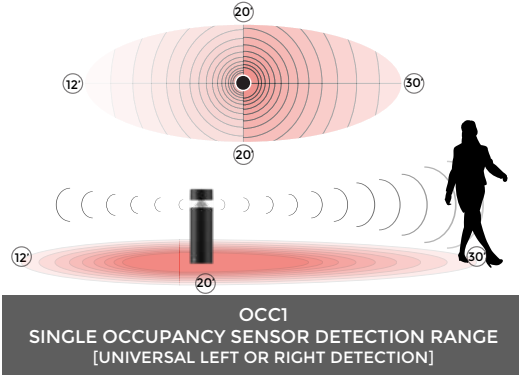
* The integrated, smart occupancy sensor can be programmed on site to function in a variety of ways.

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

ULH-10685

LAMP	LED COLOR	FINISH COLOR	VOLTAGE
27w LED	W27 - 2700K	01 - BLACK RAL 9011	120/277v
1050 Lumens	W30 - 3000K	02 - DARK GREY RAL 7043	Other - Specify
	W35 - 3500K	03 - WHITE RAL 9003	
	W40 - 4000K	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

ADDITIONAL OPTIONS

A10731 - 180° Light Shield	HGT - Custom Bollard Height [Specify HGT=XX"]
A10831 - 90° Light Shield	DIM - 0-10v Dimming
GFCI - GFCI Box	OCC1 - Single Occupancy Sensor
NAT - Natatorium Rated	OCC2 - Dual Occupancy Sensor
AMB - Turtle Friendly Amber LED	A91791 - Lockable In Use GFCI Receptacle Outlet Box

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

Example: Two-Tone Style

ETL
c   us
Intertek

DIP Switch Settings (HC403VRC-KD)

1 Detection Range

Sensor sensitivity can be adjusted by selecting the combination on the DIP switches to fit precisely for each specific application.

	1	2	
I	●	●	100%
II	●	○	75%
III	○	●	50%
IV	○	○	10%

I – 100%
II – 75%
III – 50%
IV – 10%

2 Hold-time

Select the dip switch configuration for the full brightness on-time after presense detection.

Please note that this function is disabled when the natural daylight exceeds the daylight threshold setting for more than 5 minutes.

	1	2	3	
I	●	●	●	5s
II	●	●	○	30s
III	●	○	●	1min
IV	●	○	○	5min
V	○	●	●	10min
VI	○	●	○	20min
VII	○	○	○	30min

I – 5s
II – 30s
III – 1min
IV – 5min
V – 10min
VI – 20min
VII – 30min

3 Daylight Threshold

Set the level according to the fixture and environment. The light will not turn on if ambient lux level exceeds the daylight threshold preset.
Please note that the ambient lux level refers to internal light reaching the sensor.

Disabling the daylight sensor will put the sensor into occupancy detection only mode.

	1	2	
I	●	●	Disable
II	●	○	5.0fc
III	○	●	1.0fc
IV	○	○	0.2fc

I – Disable
II – 5.0fc
III – 1.0fc
IV – 0.2fc

4 Stand-by period (corridor function)

This is the time period you would like to keep at the low light output level before it is completely switched off in the long absence of people.

Note: "0s" means on/off control;
"+ ∞ "means the stand-by time is infinite and the fixture never switches off.

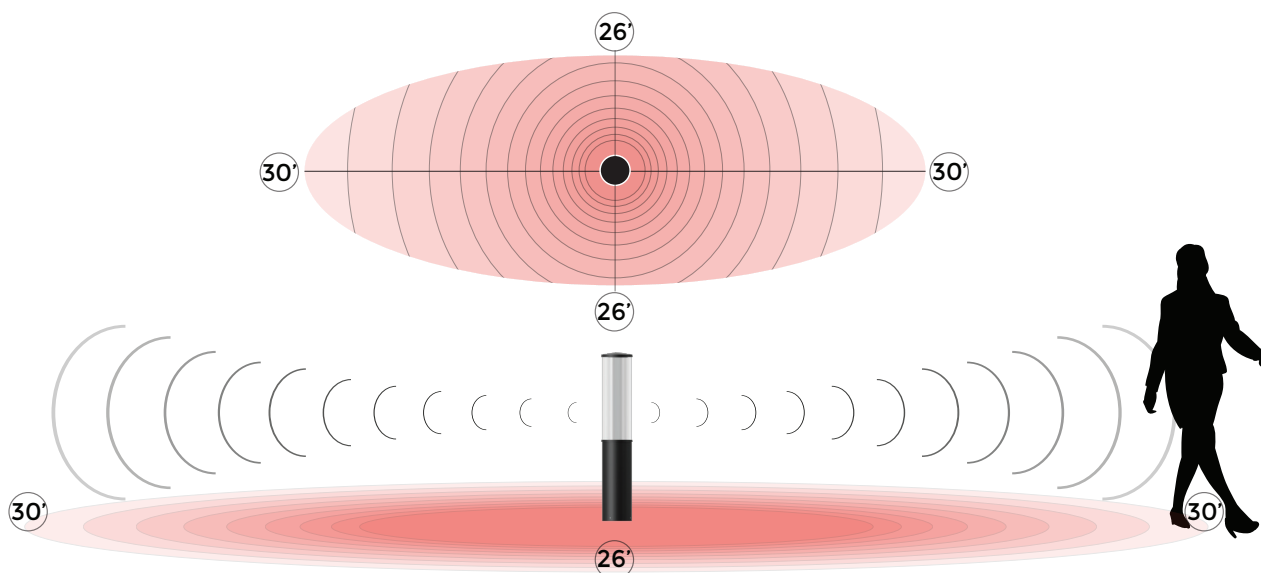|	1	2	3	
I	●	●	●	0s
II	●	●	○	10s
III	●	○	●	1min
IV	●	○	○	5min
V	○	●	●	10min
VI	○	●	○	30min
VII	○	○	●	1H
VIII	○	○	○	+∞

I – 0s
II – 10s
III – 1min
IV – 5min
V – 10min
VI – 30min
VII – 1H
VIII – +∞

5 Stand-by dimming level

The setting is used to select the desired dimmed light level used in periods of absence for enhanced comfort and safety.

	1	2	
I	●	●	10%
II	●	○	20%
III	○	●	30%
IV	○	○	50%

I – 10%
II – 20%
III – 30%
IV – 50%

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