



### 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

B2 - U0 - G0

#### 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 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.

#### 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)

### Robust shielded bollard family. Human-scale rural bollard aesthetic with an exquisite unidirectional lighting effect.

The innovative internal adjustable optic technology of the Lightzone bollard guarantees a high degree of efficiency and optimal visual comfort while fulfilling the dark sky criteria. Lightzone has been developed to have excellent controlled downward light eliminating any glare.

The Lightzone is available in a straight or taper shape design with two different heights. Designed for lighting of entrances and residential areas by providing wide spread illumination on driveways, pathways and squares. The Lightzone is provided with four, fully adjustable optics that allow the light to be focused in specific directions around the base of the bollard.

Color temperature 2700K, 3000K, 3500K and 4000K, LED CRI >80 and life time 50,000 Hours.

The Lightwave 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 on the straight bollard, please specify.

#### Security Bollard:

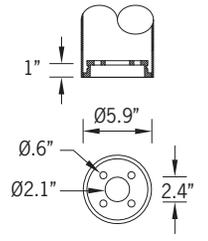
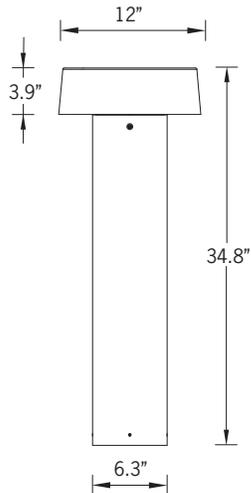
This product can be modified with optional Security Bollard cores. Ligman has **two** security bollard options designed to deter unauthorized vehicular access in restricted areas. Ligman **Standard Security Bollards SB** are structurally engineered and simulated to meet the performance criteria of a 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.

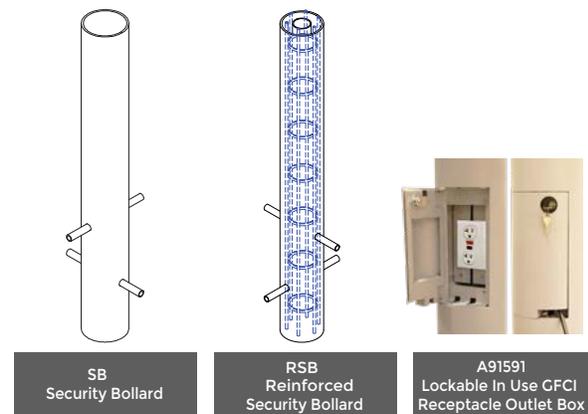
These bollards are not certified as crash-rated. Please refer to the product installation sheet for additional requirements and installation guidelines.

### Additional Options (Consult Factory For Pricing)

39w COB 2814 Lumens  
IP65 • Suitable For Wet Locations  
IK08 • Impact Resistant (Vandal Resistant)  
Weight 19.8 lbs



Mounting Detail



SB Security Bollard

RSB Reinforced Security Bollard

A91591 Lockable In Use GFCI Receptacle Outlet Box

# ULZ-10894

Lightzone 2 Straight Bollard

<b>PROJECT</b>		<b>DATE</b>	
----------------	--	-------------	--

<b>QUANTITY</b>		<b>TYPE</b>		<b>NOTE</b>	
-----------------	--	-------------	--	-------------	--

ORDERING EXAMPLE || ULZ - 10894 - 39w - W30 - 02 - 120/277v - Options

<b>ULZ-10894</b>				
<b>LAMP</b>	<b>LED COLOR</b>	<b>FINISH COLOR</b>	<b>VOLTAGE</b>	
39w COB 2814 Lumens	W27 - 2700K W30 - 3000K W35 - 3500K W40 - 4000K	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 Other - Specify	
<b>INSPIRED BY NATURE FINISHES</b>			THERE IS AN ADDITIONAL COST FOR THESE FINISHES	
SW01 - OAK FINISH				
SW02 - WALNUT FINISH				
SW03- PINE FINISH				
SU01 - CONCRETE FINISH				
SU02 - SOFTSCAPE FINISH				
SU03 - STONE FINISH				
SU04 - CORTEN FINISH				

<b>ADDITIONAL OPTIONS</b>		

- NAT - Natatorium Rated
- DIM - 0-10v Dimming
- SB - Standard Security Bollard (A12891)
- RSB - Reinforced Security Bollard (A12891-M)
- GFCI - GFCI Receptacle
- A91591 - Lockable In Use GFCI Receptacle Outlet Box

## More Custom Finishes Available Upon Request

Consult factory for pricing and lead times



# Lightzone Product Family



Lightzone 1

- ULZ-10891-39w-2814lm [22.8"]
- ULZ-10892-39w-2814lm [34.8"]



Lightzone 2

- ULZ-10893-39w-2814lm [22.8"]
- ULZ-10894-39w-2814lm [34.8"]