

# Bollards

CONTEMPORARY AND TRADITIONAL LED

# Solid State Lighting

## CAVALIER 402 LED - Lantern Top

Components



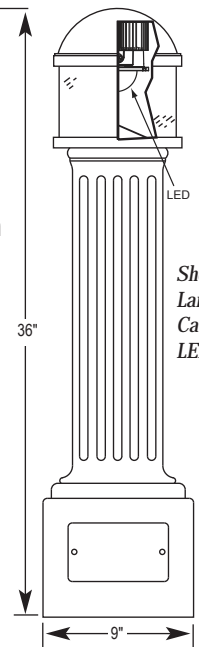
Cavalier luminaires accent fine architecture with pleasing illumination and style for walkways, courtyards, malls and landscape areas.

### CONSTRUCTION:

The bollard is heavy gauge decorative cast aluminum. The lantern top (LT) lens is frosted or white acrylic, sealed into top and bottom in heavy castings and accommodates the LED system. The bollard is attached to the ground by means of four steel galvanized anchor bolts, and fea-

tures a serviceable handhole with S.S. tamper proof fasteners. The bollard also features a cast aluminum removable cap for easy relamping. See standard and custom colors below. All exposed fasteners are stainless steel and tamper resistant. This model is also available with open flutes (OF) and an internal lens to diffuse the light. PLEASE NOTE: Bollard heights shown are for reference only; actual height may vary with decorative top selection. Consult factory for clarification.

Separate surge protectors in addition to all drivers, are installed in the circuitry as a company standard.



Shown (left): Lantern Top (LT) Cavalier 402 LED.

### LED LIGHT ENGINE SPECIFICATIONS:

| MODEL#                   | WATTAGE | INITIAL LUMENS | SYSTEM EFFICACY | CCT                    | CRI | IES DISTRIBUTIONS |
|--------------------------|---------|----------------|-----------------|------------------------|-----|-------------------|
| SINGLE MODULE LED SYSTEM |         |                |                 |                        |     |                   |
| 8W-850LM                 | 9       | 850            | 97              | 2.7K, 3.0K, 3.5K, 4.0K | 90  | Type V            |
| 12W-1250LM               | 13      | 1250           | 97              | 2.7K, 3.0K, 3.5K, 4.0K | 90  | Type V            |
| 19W-2000LM               | 21      | 2000           | 97              | 2.7K, 3.0K, 3.5K, 4.0K | 90  | Type V            |
| 32W-3000LM               | 31      | 3000           | 97              | 2.7K, 3.0K, 3.5K, 4.0K | 90  | Type V            |
| 37W-4000LM               | 37      | 4000           | 108             | 2.7K, 3.0K, 3.5K, 4.0K | 90  | Type V            |

Note: The lumen values remain the same regardless of CCT.

SURGE PROTECTION DEVICE MEETS IEEE C62.41 2002 C HIGH 10kA. See spec sheet on page J12.

### Dimming Options:

White Light Dimming - Provides consistent color across the entire dimming range.

### FEATURES

- Available in 2700K, 3000K, 3500K and 4000K CCT
- ≥ 90 CRI for all CCTs
- Minimum 95 CRI available for 3500K at 3000 lm
- 5-year limited system warranty
- No UV in light output
- No mercury in light source
- A revolutionary way to generate white light with LEDs that delivers high efficiency with beautiful light characteristics and color accuracy while maintaining color consistency over the life of the product.
- Industry-leading efficacy of up to 108 lm/W, measured at a case temperature (Tc) of 55 °C at steady state.
- Known and predictable correlated color temperature (CCT).
- LM 70 of 35,000 - 50,000 hours, depending on the Tc.

### ORDERING FORMAT

MODEL # - LENS - SIZE-HEIGHT - LED MODEL # - VOLTAGE - IES DIST. - OPTIONS - FINISH

CAV402LED-LT CL-ACR 36" 8W-850LM UNIVERSAL TYPE V PC BK

| OPTIONS   |                   |   |   | FINISH   |  |
|---|-------------------|---|---|--|--|
| Lens<br>OP-ACR=Opal Acrylic<br>FR-ACR=Frosted Acrylic<br>CL-ACR=Clear Acrylic | Optical<br>Type V | Electrical<br>PC=Photo Control Button<br>FS=Fuse (single)<br>FD=Fuse (double) | Optional<br>EB=Eyebolt mounted on bollard<br>CLD=Custom logos cast into access door<br>HSS=House side shield<br>BT=Ball Top DT=Dome Top<br>AF=Acorn Finial OF=Open Flutes<br>LT=Lantern Top | Standard Colors<br>BK=Black<br>BZ=Medium Bronze<br>DBZ=Dark Bronze<br>WH=White<br>GR=Green<br>SM=Silver Metallic | Premium Colors<br>VP=Verde Patina<br>PP=Pewter Patina<br>SS=Silver Sparkle<br>CC=Custom color<br>HG= Hartford Green<br>TBK= Textured Black |



**RoHS**

## CAVALIER 402 LED - Opti-FLUX™ Open Flutes



Cavalier luminaires accent fine architecture with pleasing illumination and style for walkways, courtyards, malls and landscape areas.

### CONSTRUCTION:

The bollard is heavy gauge decorative cast aluminum.

The lantern top (LT) lens is frosted or white acrylic, sealed into top and bottom in heavy castings and

accommodates the LED system.

The bollard is attached to the ground by means of four steel galvanized anchor bolts, and features a serviceable handhole with S.S. tamper proof fasteners. The bollard also features a cast aluminum removable cap for easy relamping.

See standard and custom colors below.

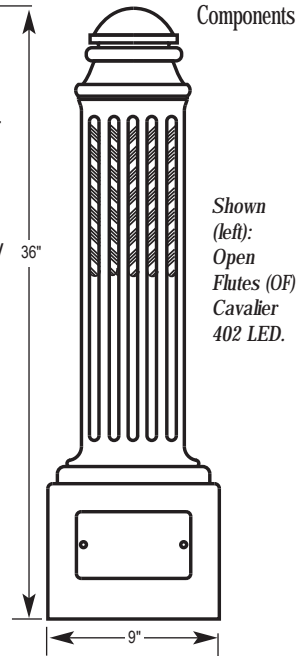
All exposed fasteners are stainless steel and tamper resistant.

This model is also available with open flutes (OF) and an internal lens to diffuse the light.

### PLEASE NOTE:

Bollard heights shown are for reference only; actual height may vary with decorative top selection. Consult factory for clarification.

Separate surge protectors in addition to all drivers, are installed in the circuitry as a company standard.



### LED LIGHT ENGINE SPECIFICATIONS:

| MODEL#                   | WATTAGE | INITIAL LUMENS | SYSTEM EFFICACY | CCT   | CRI | Tj | IES DISTRIBUTIONS |
|--------------------------|---------|----------------|-----------------|-------|-----|----|-------------------|
| OPEN FLUTES - LED SYSTEM |         |                |                 |       |     |    |                   |
| 31W4C5K                  | 31      | 3974LM         | 700mA           | 128   | 5K  | 70 | 85 Type V         |
| 31W4C4K                  | 31      | 3437LM         | 700mA           | 111   | 4K  | 70 | 85 Type V         |
| 31W4C3K                  | 31      | 3050LM         | 700mA           | 98    | 3K  | 70 | 85 Type V         |
| 22W4C5K                  | 22      | 2741LM         | 500mA           | 124   | 5K  | 70 | 85 Type V         |
| 22W4C4K                  | 22      | 2680LM         | 500mA           | 121   | 4K  | 70 | 85 Type V         |
| 22W4C3K                  | 22      | 2400LM         | 500mA           | 108.7 | 3K  | 70 | 85 Type V         |
| 15W4C5K                  | 15      | 1926LM         | 350mA           | 126   | 5K  | 70 | 85 Type V         |
| 15W4C4K                  | 15      | 1926LM         | 350mA           | 126   | 4K  | 70 | 85 Type V         |
| 15W4C3K                  | 15      | 1700LM         | 350mA           | 111.3 | 3K  | 70 | 85 Type V         |

**SURGE PROTECTION DEVICE MEETS IEEE C62.41 2002 C HIGH 10kA. See spec sheet on page J12.**

### Dimming Options:

Dimming drivers are designed to allow LEDs to be dimmed down to 10-25% light output, depending on model. Standard dimming is 0-10Vdc and is compatible with most dimming controls, by others. Consult factory for other options.

### FEATURES

- Available in 3000K, 4000K and 5000K.
- ≥ 70 CRI for all CCTs
- 5-year limited system warranty
- No UV in light output
- No mercury in light source
- A revolutionary way to generate white light with LEDs that delivers high efficiency with beautiful light characteristics and color accuracy while maintaining color consistency over the life of the product.
- Industry-leading efficacy of up to 1080 LM/W, measured at a case temperature (Tc) of 55 °C at steady state.
- Known and predictable correlated color temperature (CCT).

### ORDERING FORMAT

MODEL # - LENS - SIZE-HEIGHT - LED MODEL # - VOLTAGE - IES DIST. - OPTIONS - FINISH  
 CAV402-OF CL-ACR 36" 31W4C3K UNIVERSAL TYPE V PC BK

| OPTIONS   |                   |   |   | FINISH   |  |
|---|-------------------|---|---|--|--|
| Lens<br>OP-ACR=Opal Acrylic<br>FR-ACR=Frosted Acrylic<br>CL-ACR=Clear Acrylic | Optical<br>Type V | Electrical<br>PC=Photo Control Button<br>FS=Fuse (single)<br>FD=Fuse (double) | Optional<br>EB=Eyebolt mounted on bollard<br>CLD=Custom logos cast into access door<br>HSS=House side shield<br>BT=Ball Top DT=Dome Top<br>AF=Acorn Finial OF=Open Flutes<br>LT=Lantern Top | Standard Colors<br>BK=Black<br>BZ=Medium Bronze<br>DBZ=Dark Bronze<br>WH=White<br>GR=Green<br>SM=Silver Metallic | Premium Colors<br>VP=Verde Patina<br>PP=Pewter Patina<br>SS=Silver Sparkle<br>CC=Custom color<br>HG= Hartford Green<br>TBK= Textured Black |

