

Bollards

CONTEMPORARY AND TRADITIONAL LED

Solid State Lighting

CAVALIER 412 LED - Lantern Top Components



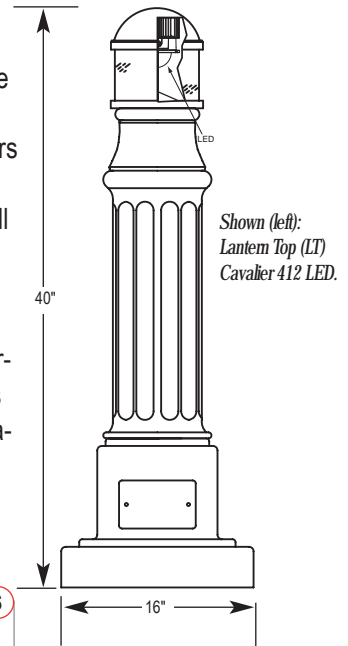
Cavalier luminaires accent fine architecture with pleasing illumination and style for walkways, courtyards, malls and landscape areas.

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 features a serviceable hand-hole 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	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

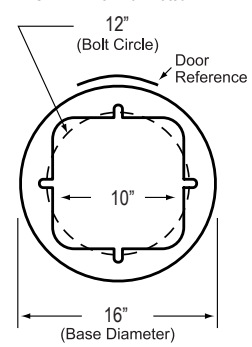
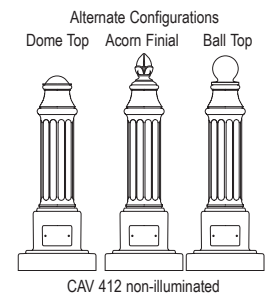
- Available in 2700K, 3000K, 3500K and 4000K CCT
- ≥ 90 CRI for all CCTs
- Minimum 95 CRI available for 3500K at 3000 lm
- 5-year limited system warranty
- No UV in light output
- No mercury in light source
- A revolutionary way to generate white light with LEDs that delivers high efficiency with beautiful 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

CAV412LED-LT CL-ACR 40"+/- 8W-850LM UNIVERSAL TYPE V PC BK

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



RoHS

CAVALIER 412 LED - Opti-FLUX™ Open Flutes



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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.

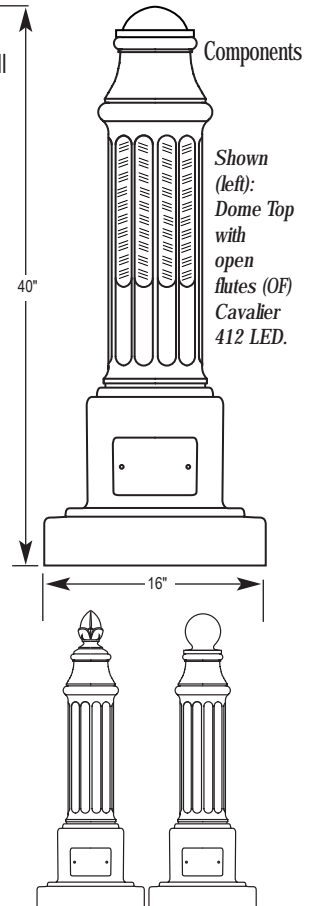
All exposed fasteners are stainless steel and tamper resistant.

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

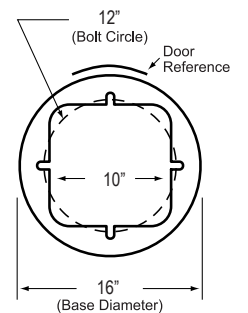
PLEASE NOTE:

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.



Acorn Finial Ball Top
CAV 412 non-illuminated



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
 CAV412-OF CL-ACR 40"+/- 31W4C3K UNIVERSAL TYPE V PC BK

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