

# Bollards

CONTEMPORARY AND TRADITIONAL LED

# Solid State Lighting

## CAVALIER T9 LED LUMEN TUBE



Complimenting any landscape is simple with the Cavalier T9 tall bollard LED with Lumen Tube column for visual accenting. With its slender appearance and distinguished appeal, this bollard is the perfect lighting accent. Featuring a 7" OD extruded aluminum shaft and 7" extruded acrylic lens, two handholes, a heavy duty cast aluminum removable dome top, and a spun aluminum cover this tall bollard is built with unparalleled quality and durability.

### CONSTRUCTION:

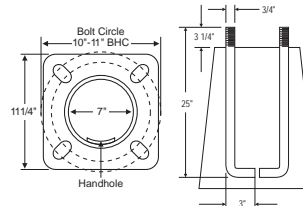
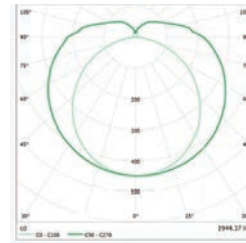
Bottom section is extruded 6061-T6 aluminum, 7" round x .125, with a cast A356-T6 base, welded circumferentially on the outside and underside. Two handholes along the shaft allow for easy access. Four

3/4" x 25" fully galvanized anchor bolts included. Top section is a heavy-duty cast aluminum removable dome top for relamping. See standard and custom colors below. Please consult the factory for additional custom finish options. Each bollard contains two tubes, standard.

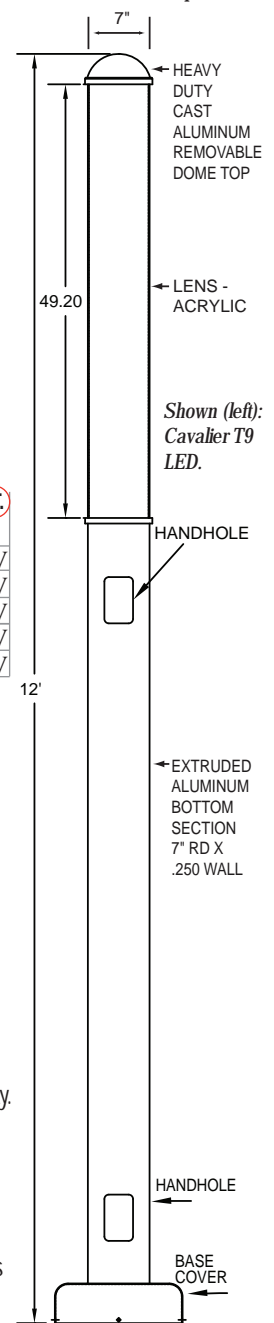
### Beam Angle of 300°

A uniquely patented LED technology, the Lumen Tube offers the widest beam angle in the LED lighting industry, making an ideal solution for supermarkets, schools, car dealerships, laboratories, factories, and so much more. Separate surge protectors in addition to all drivers, are installed in the circuitry as a company standard.

Isocurves of 300° beam angle



### Components



Shown (left): Cavalier T9 LED.

### LED LIGHT ENGINE SPECIFICATIONS:

MODEL#	TUBE LENGTH	2 TUBES WATTAGES	2 TUBES LUMENS	EFFICACY	CCT	CRI	IES DIST.
<b>LUMEN TUBE</b>							
1-Tube 17.74W-1992LM-T5	4FT	2 Tubes 35.48W	2 Tubes 3984lm	112	4K	> 80	Type V
1-Tube 20.64W-2369.8LM-T5DC	4FT	2 Tubes 41.28W	2 Tubes 4739.6lm	115	4K	> 80	Type V
1-Tube 29.61W-3832LM-T5HO	4FT	2 Tubes 59.22W	2 Tubes 7664lm	129	4K	> 80	Type V
1-Tube 14.64W-1662LM-T8-D-Lux*	4FT	2 Tubes 29.28W	2 Tubes 3324lm	111.69	4K	85	Type V
1-Tube 22.03W-2132LM-T8-Q-Lux*	4FT	2 Tubes 44.06W	2 Tubes 4264lm	97	4K	> 80	Type V

**Note: Additional CCT's Available - 3.0K, 3.5K, 5.0K at the same wattage and lumen values.**

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



Made in USA

\*T8-D-Lux are DesignLights Consortium (DLC) qualified products. The D-Lux lamps are designed to support electronic ballasts, saving energy and labor costs. They are top of the range offering the very best in quality, efficiency and energy saving. The D-Lux LED lamps are proven by DLC to be more luminous, operate at lower temperature, and use less than 50% of the energy compared with standard fluorescent lights. The T8-D-Lux offers an impressive efficacy rating of 111.69 lm/w, a CRI score of 85 and a service life of up to 50,000 hours. T8-D-Lux 4" lamps are under the DLC's list of qualified products.

\*T8-Q-Lux supports magnetic and standard electronic ballasts. Magnetic fluorescent luminaires have a much higher rate of power consumption than electronic ballast luminaires. Usually the only options out of this hybrid system are to rewire each lighting fixture or to completely replace the entire lighting system. The T8-Q-Lux offers a more cost effective and environmentally friendly alternative.

Pemco Lighting Products, Inc. uses the industry's leading LEDs, offering high-quality LED tubes that save energy and reduce costs. The world's first UL and DLC-qualified LED tube lights that are fully compatible with the e-ballasts of existing fluorescent lamp fixtures. Backed by more than fifty worldwide patents and numerous certifications/qualifications, these LEDs apply world-class technology to create efficient, long-lasting lighting solutions that reduce energy consumption for end users. Seamless solutions for commercial lighting needs.

### FEATURES

- Available in 3000K, 3500K, 4000K and 5000K CCT.
- Lifespan of 50,000 hours, reduces power consumption by over 50%.
- 50% reduction in energy consumption over traditional fluorescent tubes.
- Very low lamp operating temperature, guaranteed longer service life.
- 300° beam angle, providing stable and evenly distributed light. No other LED lamp can offer greater than 180°.
- UL and LM80 compliant: no flickering and stroboscopic effect.
- Supports instant, rapid and programmable starts.
- Highly reliable: 50,000 hours service life with a 5-year limited system warranty.
- Made in USA.
- No warm up time: Instant start with full output.
- No flickering or stroboscopic effect, stable lamp-to-lamp color.
- Vibration and impact resistant.
- No UV emissions, and free from hazardous material.
- Lumen Tubes operate at 27.7°C (82°F) compared to fluorescent lamp's 56.1°C (133°F). This means longer service life.

### ORDERING FORMAT

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

CAVT9-LED BRUSHED ACRYLIC 12' 17.74W-1992LM-T5 UNIVERSAL TYPE V PC BK

OPTIONS			FINISH		
<b>Lens</b> Brushed Acrylic	<b>Optical</b> Type V	<b>Electrical</b> PC=Photo Control Button FS=Fuse (single) FD=Fuse (double)	<b>Optional</b> DIM=0-10vDC Dimming	<b>Standard Colors</b> BK=Black BZ=Medium Bronze DBZ=Dark Bronze WH=White GR=Green SM=Silver Metallic	<b>Premium Colors</b> VP=Verde Patina PP=Pewter Patina SS=Silver Sparkle CC=Custom color HG= Hartford Green TBK= Textured Black