

**FLEXIBLE CATHODE LIGHT STRIP
(MODEL FCLS)**



Crystal Plaza - Alexandria, VA • Lighting design: C.M. Kling & Associates

Photo: Eric Long

The Flexible Cathode Light Strip (FCLS) effectively brings cold cathode lighting into the 21st century. All the best features of shadowless long-life, cold-cathode fluorescent lighting have been engineered into a simple, self-contained, discreet, flexible luminaire. FCLS combines low electricity consumption and high lumens, and long lamp life, effectively eliminating the need for the bulky inefficient magnetic transformers, ballasts, and fixture dimensions associated with traditional component-based cold-cathode lighting systems.

Each beautifully-designed luminaire can conform to almost any shape or size (straight, curved or bent) of our custom or standardized lamps, in an almost infinite variety of deeply-saturated colors and high color-rendering whites. The Flexible Cathode Light Strip (FCLS) is completely modular, low profile (only 2 3/4" tall, including the lamp), installs in minutes, and offers the convenience of "plug-and-play" connections between fixtures. Lamps simply snap in and out, and all luminaires are provided as standard with integral, inaudible 1% electronic dimming ballasts.

"FLEXIBLE CATHODE LIGHT STRIP...BECAUSE THE WORLD IS ROUND"




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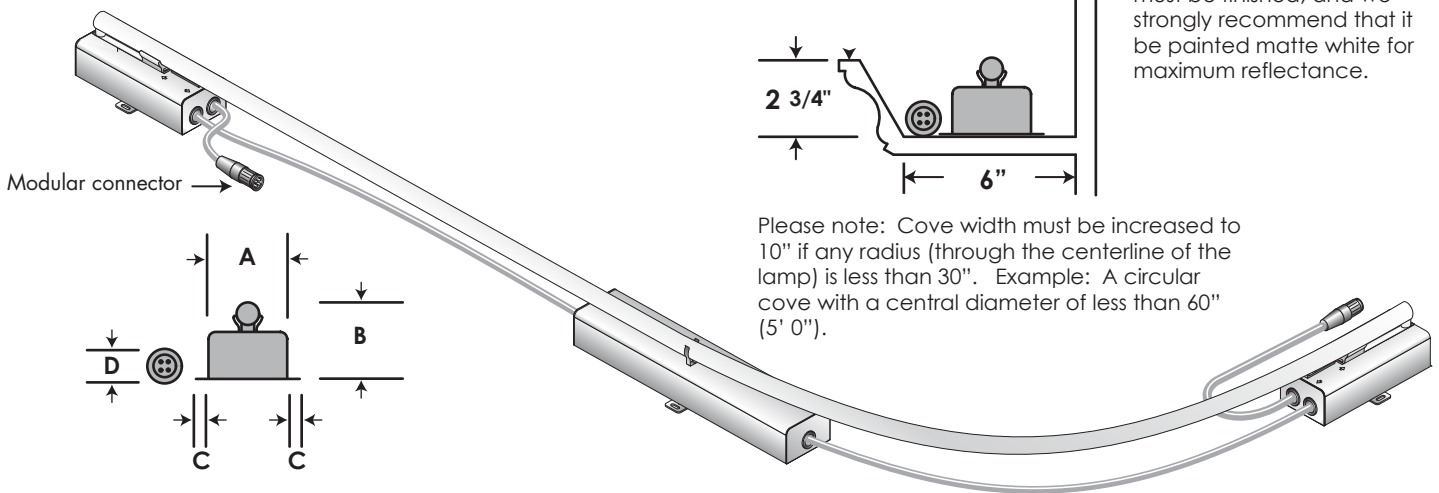
Patent 7,293,895
Patent 6,454,431

FLEXIBLE CATHODE LIGHT STRIP (FCLS)

FEATURES & BENEFITS

- Illumination is seamless from end to end, with no dark spots or socket shadow
- Each luminaire can flex or conform to almost any shape or size of lamp (straight, curved or bent) up to 7' 6" long
- Reliable, long-life high-output T6 cold cathode lamps (up to 50,000 hours of life) are available in standard or custom straight lengths, and can be custom-curved or bent to conform to almost any architectural requirement
- Up to 322 feet of fixtures on one 20-amp circuit @ 277 volts, or 135 feet of fixtures @ 120 volts
- Lamps snap in and out of luminaires via innovative zero-clearance lamp bases and lampholders
- New electronic ballast technology offers inaudible operation and a power factor >.95
- Extremely low profile - only 2 3/4" tall with lamp installed
- External "plug and play" modular connectors allow rapid installation and eliminate all manual wiring between luminaires
- Luminaires are completely self contained. Absolutely no disassembly of the luminaire is required to install. Simply install the luminaire on its mounting surface, snap lamp in, and plug into the next luminaire.
- All luminaires come equipped with 1% dimming ballasts, and are compatible with 3-wire fluorescent dimmers
- All luminaires dim at the same rate, regardless of variations in lamp length or shape.
- Wide color selection, and up to 10 different white hues from to choose from
- UL-Listed 

DIMENSIONAL INFORMATION & MOUNTING RECOMMENDATIONS



- A. Width: 2 3/4"
- B. Height (with lamp): 2 3/4"
- C. Mounting tab width: 5/8"
- D. Modular connector diameter: 1 5/16"

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LAMP COLORS & ORDERING INFORMATION

LAMP COLORS

WHITE LAMPS: All whites are triphosphor with a CRI of 92

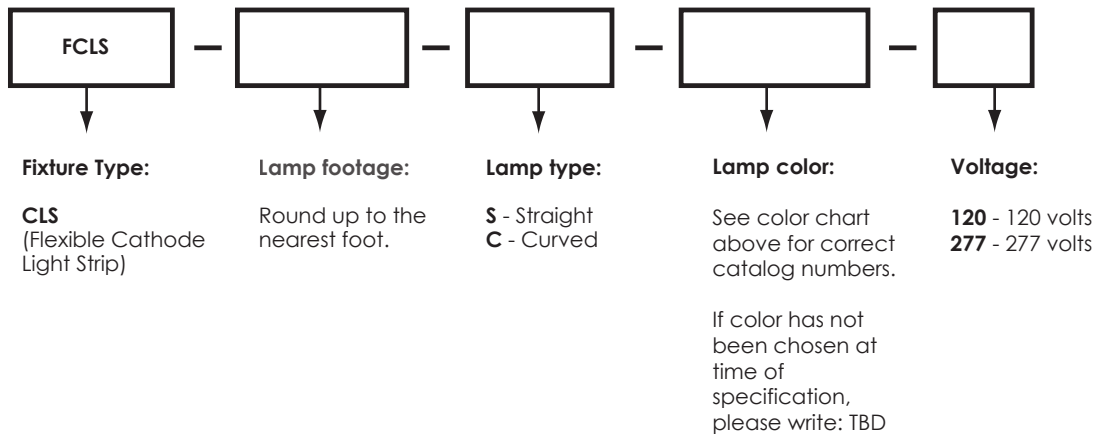
Cat. No.	Shade of White	Lumens per foot	Efficacy
28TC	Incandescent white - 2800°K	772	77.2 lumens/watt
30TC	Warm white - 3000°K	759	76.2 lumens/watt
35TC	Soft white - 3500°K	780	78.2 lumens/watt
42TC	Cool white - 4200°K	750	75.3 lumens/watt
50TC	Ice white - 5000°K	738	73.2 lumens/watt
65TC	Daylight - 6500°K	751	75.4 lumens/watt

COLORED LAMPS:

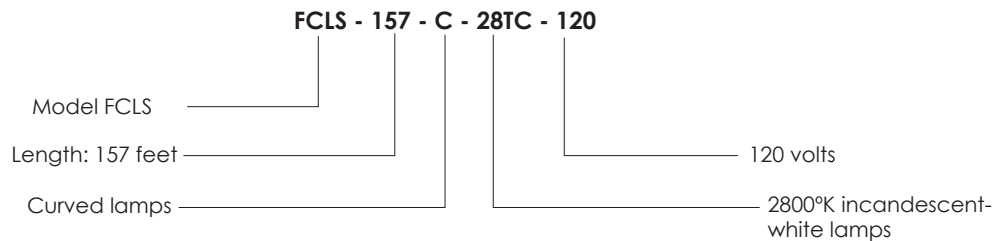
- Pink White (PW)
- Hot Pink (HP)
- Red (RD)
- Lavender (LV)
- Purple (PR)
- Sky Blue (SB)
- Deep Blue (DB)
- Turquoise (TQ)
- Aquamarine (AQ)
- Standard Green (GR)
- Bright Green (BG)
- Gold (GD)
- Canary Yellow (CY)
- Orange (OR)
- Amber (AM)

Photometric information: All photometric values provided by LTL (Luminaire Testing Laboratories, Allentown, PA) .

ORDERING INFORMATION



Example: One circular light cove, 157' in circumference. Lamp color is 2800°K Incandescent white. Fixtures will operate at 120 volts.



FLEXIBLE CATHODE LIGHT STRIP (FCLS)

ELECTRICAL INFORMATION & SPECIFICATIONS

ELECTRICAL INFORMATION

Ballast type	Primary voltage	Primary amps / VA	Watts per foot*	Dimming protocol	Maximum luminaires per 20-amp circuit*	Maximum lamp footage per 20-amp circuit*
Electronic	120 volts 50/60 Hz	.85 amps / 102 VA	13.6	3-wire fluorescent	18 @ 120 volts	135 feet
Electronic	277 volts 50/60 Hz	.37 amps / 102 VA	13.6	3-wire fluorescent	43 @ 277 volts	322 feet

*Values are based on maximizing all lamp lengths at 7'6". Actual values may vary depending upon the selection of luminaire lengths.

Dimming: Three-wire fluorescent (switched hot, dimmed hot, and neutral). Lutron is recommended.

Primary Wiring: Branch circuit wiring must contain three (3) conductors + ground in order to utilize dimming feature.

Branch circuit requirements: H-FCLS must be powered by a dedicated circuit only. Maximum breaker size is 20 amps.

SPECIFICATIONS

Luminaire: Shall be Cathode Lighting Systems model FCLS (Flexible Cathode Light Strip), and shall be field-adjustable to accommodate straight, curved or bent lamps up to 7'6" in length. Luminaires shall provide a continuous, uninterrupted line of light when installed as instructed. Luminaires shall be provided with integral male and female power connectors at each end to electrically connect each luminaire to the next. Luminaires shall be satin-anodized .050" aluminum and stainless steel and shall be permanently connected with matching flexible cable. No disassembly or entry into the internal parts of the luminaire shall be required during installation, either for wiring or for mounting.

Lamps: Shall be 50,000-hour T6 cold-cathode fluorescent, color as specified, in curvatures, shapes and sizes dictated by the architectural requirements. Lamps shall be provided with single-pin bases for zero-clearance snap-in installation and removal from lampholders. (Lamps that are hard-wired to the power supply in parallel or series are not acceptable alternatives). Lamps shall be manufactured with butt-sealed ends to provide complete illumination at each lamp end and shall have provisions to be locked into place, utilizing the luminaire's lamp-locking clips. Lamps shall produce 759 lumens per foot (35TC) and manufacturer shall provide independent test lab reports to substantiate.

Integral Ballasts: Shall be noiseless, electronic 990-volt, high-output, instant-start cold cathode, class P thermally protected, and shall automatically de-energize upon removal of lamps from the luminaire. Ballast power factor shall be >.95

Approvals: Luminaire shall be UL and cUL-listed under UL category: IEUZ Fluorescent surface-mounted luminaires.

Manufacturer: Shall be Cathode Lighting Systems Inc., Gaithersburg, MD - USA (800) 551-5012.

Website: www.CathodeLightingSystems.com



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