

## DOUBLE-LAMP CATHODE LIGHT STRIP (Model CLSD)



Patent 7,293,895  
Patent 6,454,431  
Patent 5,564,818




The Double-Lamp Cathode Light Strip provides an infinite and accurate high-output color range. With independent brightness control for each pre-selected lamp color precise, stable color blending is easily achievable...day in and day out.



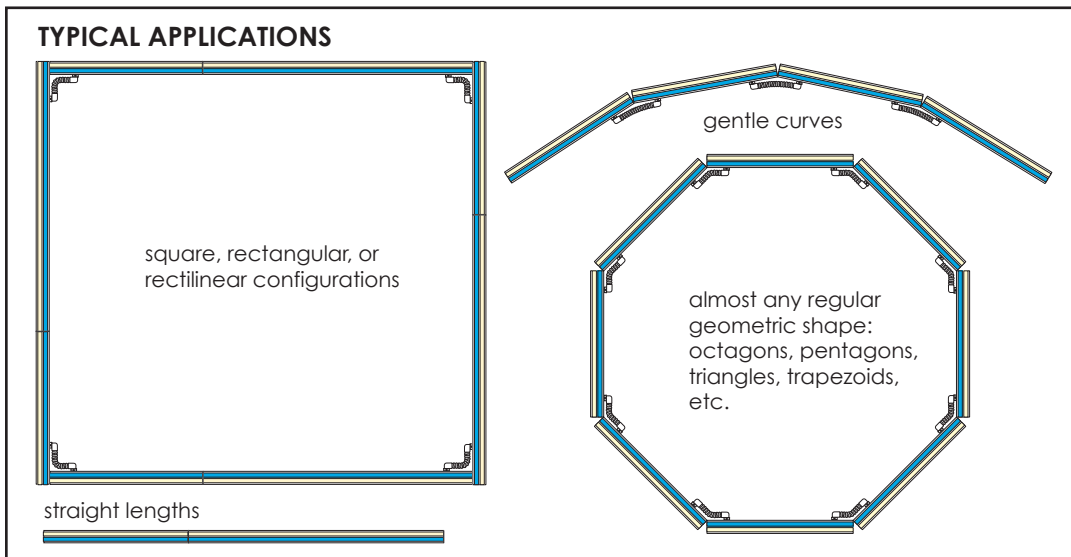
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**CATHODE LIGHT STRIP (Model CLSD)**

**FEATURES & BENEFITS**

- Illumination is seamless from end to end, with no dark spots or socket shadow
- Each lamp within the luminaire is independently dimmable for the highest quality color changing effects
- Luminaires are available in 10 standard sizes, from 3' to 7.5' (in 6" increments)
- Reliable, long-life high color-rendering T6 cold cathode lamps (up to 50,000 hours of life)
- High brightness - up to 780 lumens per foot for each lamp
- 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
- Low profile - only 3.5" tall with lamp installed
- All luminaires come equipped with integral 1% dimming ballasts and are compatible with 3-wire fluorescent dimmers
- Uniform dimming regardless of fixture length
- Wide color selection
- UL-Listed 

**TYPICAL APPLICATIONS**



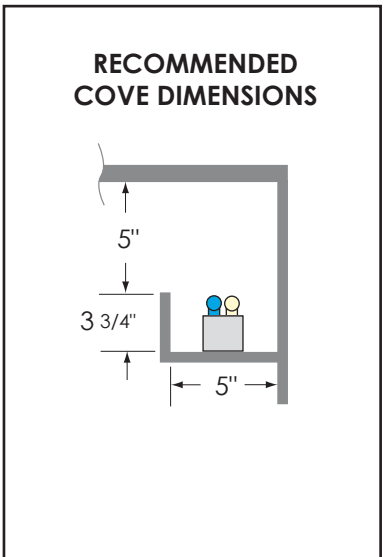
square, rectangular, or rectilinear configurations

gentle curves

almost any regular geometric shape: octagons, pentagons, triangles, trapezoids, etc.

straight lengths











**RECOMMENDED COVE DIMENSIONS**

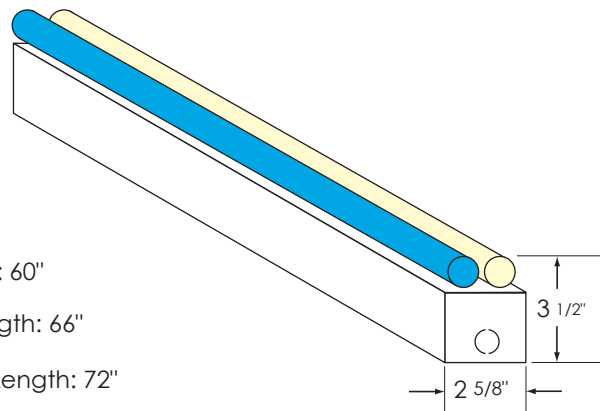


5"

3 3/4"

5"

- |                |   |             |
|----------------|---|-------------|
| Model CLSD-3   |  | Length: 36" |
| Model CLSD-3.5 |  | Length: 40" |
| Model CLSD-4   |  | Length: 48" |
| Model CLSD-4.5 |  | Length: 54" |
| Model CLSD-5   |  | Length: 60" |
| Model CLSD-5.5 |  | Length: 66" |
| Model CLSD-6   |  | Length: 72" |
| Model CLSD-6.5 |  | Length: 78" |
| Model CLSD-7   |  | Length: 84" |
| Model CLSD-7.5 |  | Length: 90" |



**DOUBLE-LAMP CATHODE LIGHT STRIP (Model H-CLSD)**

**LAMP COLORS**

**WHITE LAMPS:** All whites are triphosphor with a CRI of 92,  
**NOTE: LUMEN VALUES ARE FOR EACH INDIVIDUAL LAMP (TWO LAMPS PER LUMINAIRE)**

Cat. No.	Shade of White	Lumens per foot	Efficacy
28TC	Incandescent - 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**



**Fixture Type:**

**CLSD**  
Double-Lamp  
Cathode Light  
Strip

**Length:**

Lengths must be shown in decimal format (12' 6" = 12.5) and in increments of 6" (.5 feet) only.

**Lamp color:**

See color chart above for correct catalog numbers. Two lamp colors must be indicated in this box, even if both lamps are the same color.

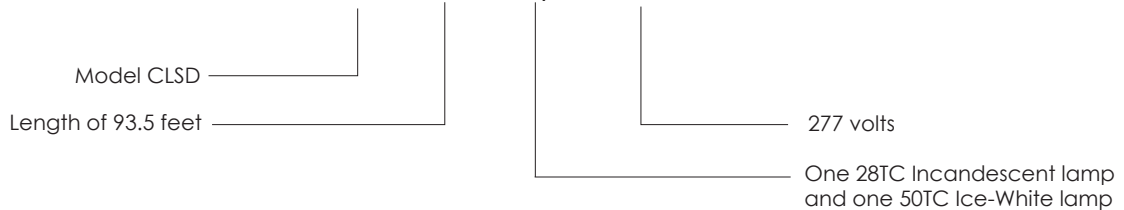
If color has not been chosen at time of specification, please write: **TBD**

**Voltage:**

**120** - 120 volts  
**277** - 277 volts

Example: One straight light cover, 93.5' in length. Lamp colors are 28TC (Incandescent 2800°K) and 50TC (Ice White 5000°K). Luminaires will operate at 277 volts.

**H-CLSD - 93.5 - 28TC/50TC - 277**



**DOUBLE-LAMP CATHODE LIGHT STRIP (Model CLSD)**

**ELECTRICAL & SPECIFICATION INFORMATION**

**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	1.7 amps / 204 VA	27.2	3-wire fluorescent	9 @ 120 volts	67 feet
Electronic	277 volts 50/60 Hz	.74 amps / 204 VA	27.2	3-wire fluorescent	21 @ 277 volts	157 feet

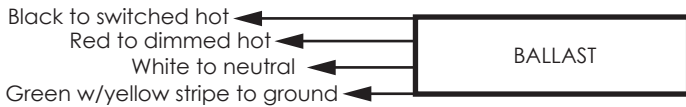
\*Values are based on fixture lengths at 7'6". Actual values may vary dependent upon the selection of luminaire lengths.

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

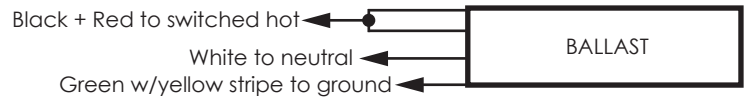
**Branch circuit requirements:** CLSD luminaires must be powered by a dedicated circuit only. Maximum breaker size is 20 amps (16-amp maximum operating load).

**DIMMING:** Luminaires are dimmable utilizing 3-wire fluorescent dimmers. Lutron is preferred.

Ballast wiring diagram for dimming operation (note: each luminaire contains two ballasts)



Ballast wiring diagram for switched "on/off" operation (note: each luminaire contains two ballasts)



**SPECIFICATIONS:**

**Luminaire:** Shall be Cathode Lighting Systems model CLSD (Double-Lamp Cathode Light Strip), and shall be available in ten (10) standardized straight lengths from 3 feet to 7.5 feet long. Luminaires will accommodate two (2) independently dimmable lamps. Luminaires shall provide a continuous, uninterrupted line of light when installed as instructed. Luminaires shall be pre-assembled, satin-anodized .060" aluminum with a snap-fit cover and two (2) integral, dimmable electronic ballasts.

**Lamps:** Shall be 50,000-hour T6 cold-cathode fluorescent, color as specified. 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 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. Each lamp shall produce 780 lumens per foot (35TC Soft White Triphosphor) 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

**Dimming:** Each lamp shall be independently dimmable via a 3-wire fluorescent dimming system. Low-end lamp performance shall be 1%. Lutron dimming is recommended.

**Approvals:** Luminaires 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](http://www.CathodeLightingSystems.com)