

CATHODE
LIGHTING
SYSTEMS

INNOVATIVE LIGHTING TECHNOLOGY®



Designing your luminaires around standard fluorescent lamp sizes can feel like...well you know.

Why not design the lamp to fit the luminaire?

Unblock your creativity...

OEM Solutions from Cathode Lighting Systems provides freedom from the limitations of standard fluorescent lamp sizes, shapes and colors.

Cold cathode lamp & component options for custom-designed luminaires

Cathode Lighting Systems' OEM products and service offering allows original equipment manufacturers (OEMs) and designers the opportunity to bring their vision to life. As the world's premier manufacturer of specification-grade, modular cold-cathode fixtures and lamps, we take great pride in the exceptional quality of our products.

Our dedicated and experienced team will work directly with you to custom-tailor a solution that meets your specific needs whether it is a custom shaped lamp, new design or retro-fitted luminaire. Cathode Lighting Systems offers a variety of custom length and shape lamping solutions for almost any application. Cathode Lighting Systems also provides specialized lampholders for the lamps easily snap into and out of a universal voltage dimmable ballast, so there's no need to shop for ballasts or drivers. We've thought of almost everything for you, and it couldn't be easier.

Tailor-made product design based on our innovative custom lamp and component technologies offer unlimited possibilities...

Our high-performance product offering and custom shaping capabilities enable us to provide the right lighting products and services that most standard fluorescent lamps cannot achieve. If your requirement is for straight luminaires, we can manufacture almost any length required in a range of colors and brightnesses. If you desire a curved or angled luminaire, the lamp can easily be fabricated in these shapes as well.

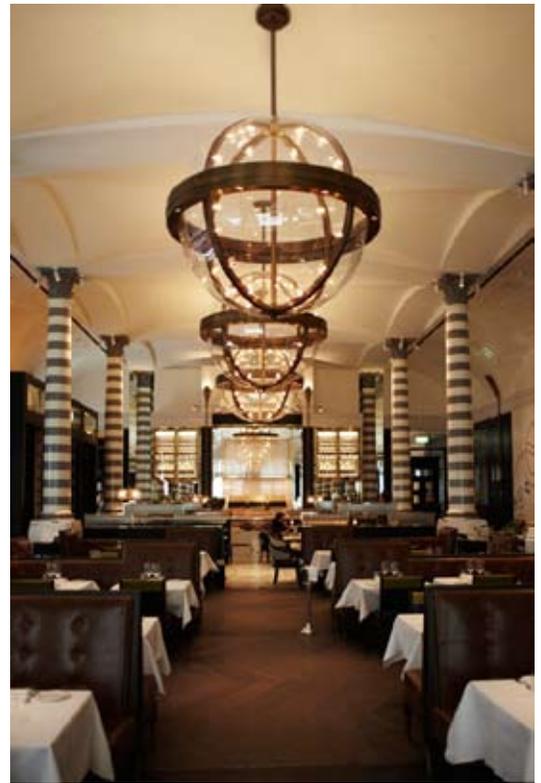
We manufacture all lamps in our Maryland, USA state-of-the-art factory, making product development and delivery faster and easier for OEM customers. Using our patented end-to-end illuminated lamps which snap easily into our lampholders, these cold cathode fluorescent lamps are extremely long lived and dimmable, with a phenomenal variety of white, and colored lamps available.

We provide the custom lamp, the UL-listed electronic ballast and UL-recognized lampholders, allowing manufacturers and designers the freedom to design outside the constraints of standard fluorescent lamp sizes and colors.

These lamp and component combinations usually offer a less expensive higher performance alternative to LEDs in a comparable lumen range, with the added benefit of easy dimming compatibility with standard fluorescent 3-wire dimming systems.

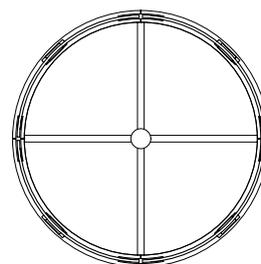
Innovative OEM Solutions:

- Unique end-to-end illumination of the lamp eliminates traditional socket shadows
- Ability to factory shape and curve the lamps to customer requirements:
 - Curves – to almost any radius
 - Bent lamps – almost any angle
 - Serpentine shapes – Multiple radii within the same lamp
 - Straight – from 18" up to 90" long
- Extensive variety of white and colored lamps available:
 - 11 shades of Whites
 - From Candelight (1900°K) to Daylight (8300°K)
 - 20 Pastel and Neon Colors
- Low profile lamps and lamp holders
- Electronic ballasts dimmable to 1% with 3-wire fluorescent dimmers
- Universal voltage and Power Factor corrected ballasts

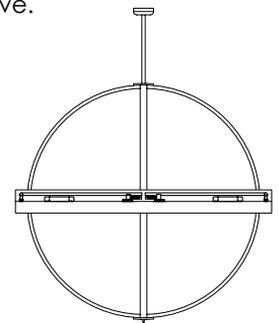


Massimo Restaurant and Oyster Bar • London

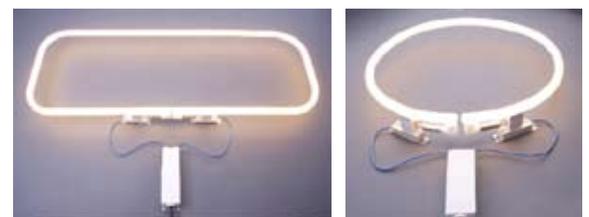
These gorgeous chandeliers were designed and manufactured by Neidhardt Lighting and David Collins Studio. Concealed curved cold cathode lamps within the Saturn-like ring around each chandelier cast a beautiful soft glow on the ceiling above. (see schematic below)



view from above



section view



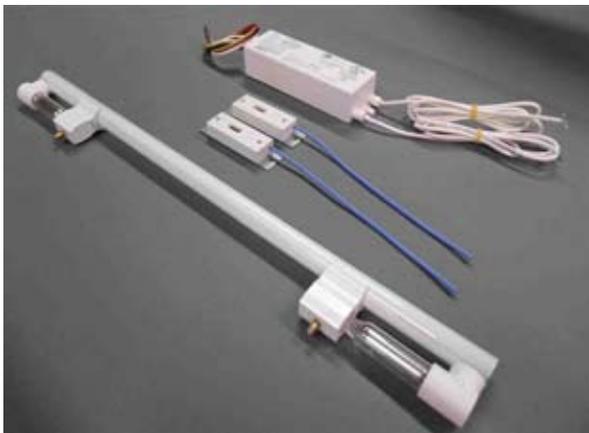
Examples of custom lamps, shown with lampholders and ballast.

Examples of lamp shapes



The heart of this long-life fluorescent product is the time-proven cold cathode lamp design. Developed in the late 1930's, it was the first commercially available fluorescent lamp. Traditionally, larger diameter (20mm and larger) cold cathode has been a specialty product used by a handful of manufacturers specifically for indirect cove applications. Because of the unique end-to-end illumination of the lamp, traditional socket shadows are eliminated.

The ability to factory shape and curve the lamps allows the illumination to remain seamless while transitioning through almost any architectural detail. This same degree of design flexibility is now available to the design community to be incorporated into other luminaires.



Typical lamp, lampholder and ballast assembly for a custom 22" linear luminaire

Benefits:

- Lamps are extremely long lived and dimmable
- UL compliance means that these components may be incorporated easily into many standard and customized luminaire designs
- Often delivers a less expensive higher performance alternative to LEDs in a comparable lumen range, with the added benefit of easy dimming compatibility with standard fluorescent 3-wire dimming systems
- US based manufacturer expediting shipment and delivery

Whether your primary focus is aesthetics, engineering, performance, energy efficiency, or all of the above, we are committed to providing superior lighting products that deliver on all points and that includes our unique ability to provide the right solution for our customers. Whatever the shape, every fixture we manufacture utilizes revolutionary, energy efficient, noiseless electronic technology to power our ultra long-life lamps.

The possibilities are limitless...

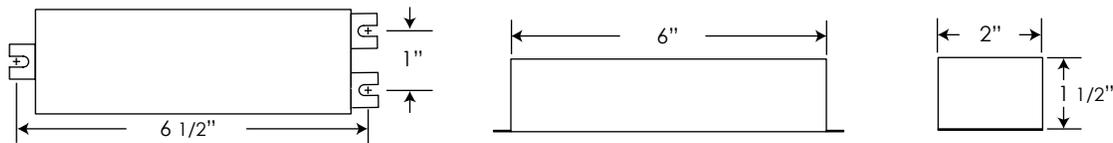
Detailed Specifications

Ballast Information



Ballast Type	Description	Primary Voltage	Primary Amps	Secondary Voltage	Lamp Lumens 35TC (3500°K)
CLS-EB6	High Output	120/277 Universal voltage	.78 @ 120 volts .34 @ 277 volts	990 volts	780 lumens per foot
CLS-EB4	Reduced Output High Efficiency	120/277 Universal voltage	.30 @ 120 volts .14 @ 277 volts	990 volts	328 lumens per foot

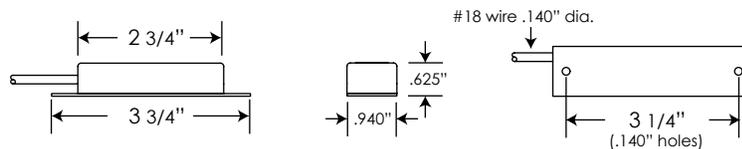
All ballasts are high power factor correction and may be dimmed using 3-wire fluorescent dimmers. 240 Volt 50 Hz (CE approved) ballasts are also available, please consult factory for electrical and dimensional information.



Lampholder Information

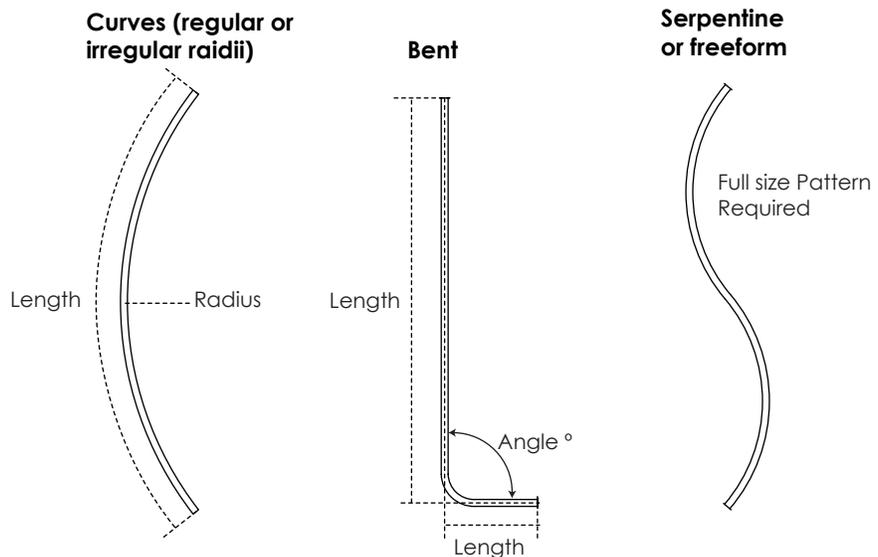
Materials: Glass-filled phenolic, stainless steel and phosphor bronze
Voltage rating: 1000 volts

Approvals:

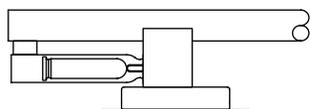


Lamp Information

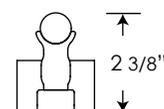
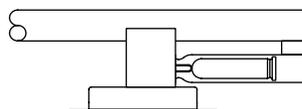
Type: T6 Instant-start cold cathode fluorescent
Diameter: .75"
Length range: Any length between 18" and 90" long
Lamp wattage: Dependent upon length of lamp and which ballast type used (please consult factory)
Lamp life: 50,000 hours when used with ballast CLS-EB6 / 100,000 hours when used with ballast CLS-EB4



Mounting Information



Min. lamp length: 18"
Max. lamp length: 90"



Lamp & Light Output Information

	Lamp Color	Kelvin Temperature	Catalog Number	Lumens/Ft. Ballast EB6	Lumens/Ft. Ballast EB4
	Candlelight	1900° K	19TC	410	191
	Golden White	2300° K	23TC	602	280
	Sunrise	2400° K	24TC	668	311
	Incandescent	2500° K	25TC	649	302
	Warmtone	2700° K	27TC	583	271
	Warm White	2900° K	29TC	673	313
	Warmlight	3000° K	30TC	688	320
	Soft White	3500° K	35TC	705	328
	Satin White	4200° K	42TC	682	317
	Ice White	6300° K	63TC	662	308
	Day Light	8300° K	83TC	656	305
	Pink White	N/A	PW	N/A	N/A
	Deep Blue	N/A	DB	N/A	N/A
	Sky Blue	N/A	SB	N/A	N/A
	Aqua	N/A	AQ	N/A	N/A
	Turquoise	N/A	TQ	N/A	N/A
	Green	N/A	GR	N/A	N/A
	Light Green	N/A	LG	N/A	N/A
	Gold	N/A	GD	N/A	N/A
	Yellow	N/A	YL	N/A	N/A
	Salmon	N/A	SL	N/A	N/A
	Purple	N/A	PR	N/A	N/A
	Pink	N/A	PK	N/A	N/A
	Red	N/A	RD	N/A	N/A
	Orange	N/A	OR	N/A	N/A

Please note: Lumen per foot values are available for colored lamps. Please consult factory.
Lamps operated with ballast EB6 will be approximately 100% brighter than lamps operated with ballast EB4.