

# USHIO

## FLUORESCENT LAMPS

### C<sup>3</sup> COLD CATHODE SERIES



### C<sup>3</sup> SERIES COLD CATHODE COMPACT FLUORESCENT LAMPS FOR GENERAL LIGHTING

Cold cathode lamps have been used for years in laptop displays, copiers and cell phones. Even some of the new flat panel LCD television screens and monitors utilize cold cathode technology because the technology is proven and reliable.

Recently, the technology has been adapted and applied to general illumination products that have an average life rating of 25,000 hours and are dimmable. These energy saving lamps replace higher wattage incandescent lamps making them ideal for applications where reduced maintenance and energy costs are desired.

The soft starting of the cathodes ensures long lamp life and unparalleled performance under difficult ambient conditions.

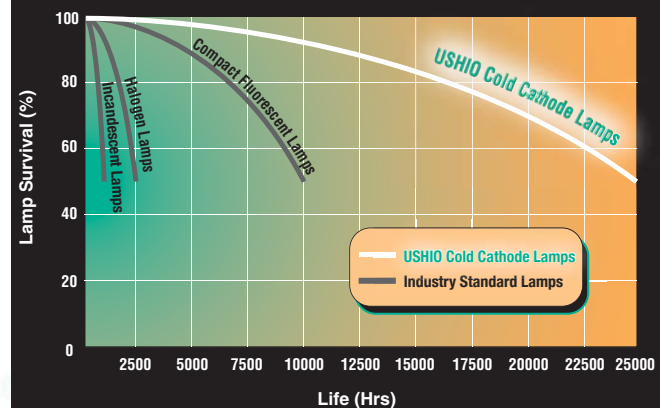
## APPLICATIONS

- 3W S14 C<sup>3</sup>, 5W A16 C<sup>3</sup> & 8W A19 Lamps: Ideal for signs, marquees and accent lighting.
- 8W, 13W & 18W C<sup>3</sup> Coilights: Direct replacements for higher wattage incandescent lamps.
- 18W C<sup>3</sup> Puck Lamps: Low profile product ideal for under cabinet, wall sconce, shallow recessed applications.
- 18W C<sup>3</sup> Flat PAR Lamp: Energy saving retrofit for higher wattage halogen and incandescent reflector lamps.

## FEATURES & BENEFITS

- Energy saving — Directly replaces higher wattage incandescent lamps.
- 25,000 Hour lamp life — Lasts up to 25 times longer than standard incandescent lamps.
- Dimmable — For a wide variety of applications.
- Minimizes the amount of maintenance required to support hard to reach lighting installations
- Dramatically reduces lamp costs — Eliminates up to 24 lamp replacements over the life of the cold cathode lamp.
- Specially designed cathodes allow the lamps to cycle, flash and dim with no impact on life.
- UL listed.
- 24-month limited warranty.

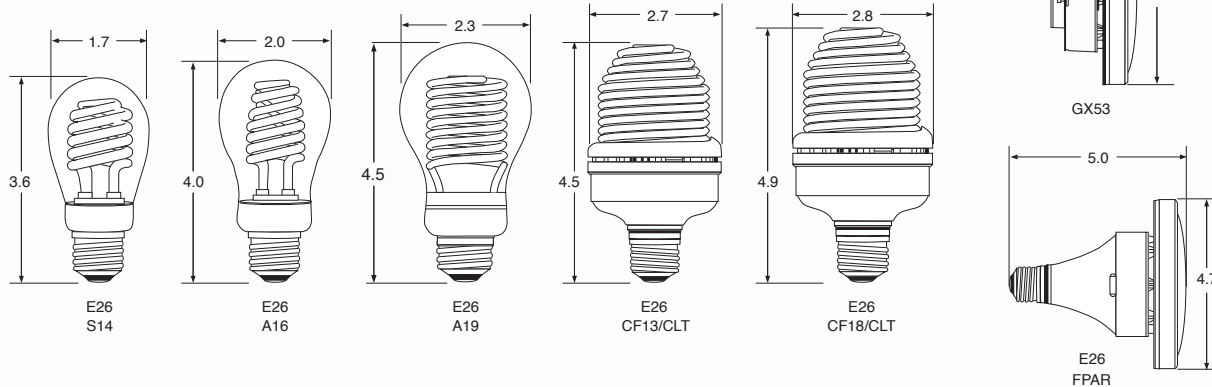
### MORTALITY CURVE OVER 25,000 HOURS



# USHIO

## CHARACTERISTICS & SPECIFICATIONS

### C<sup>3</sup> COLD CATHODE Universal Burn Position



Watts (W)	Ushio Ordering Code	Ushio Lamp Code	Dimensions				Color Temp (K)	Approx Lumens (lm)	Avg Life (h)	Case Qty
			Dia (in)	MOL (mm)	MOL (in)	CRI				
3	3000475	CF3CC/2700/E26	1.7	91.4	3.6	82	2700	120	25,000	12
5	3000476	CF5CC/2700/E26	2.0	101.6	4.0	82	2700	200	25,000	12
8	3000528	CF8CC/2700/E26	2.3	114.3	4.5	82	2700	300	25,000	12
8	3000529	CF8CC/FR/2700/E26	2.3	114.3	4.5	82	2700	290	25,000	12
13	3000510	CF13/CLT/2700/E26	2.7	114.3	4.5	82	2700	700	25,000	50
18	3000513	CF18/CLT/2700/E26	2.8	124.5	4.9	82	2700	1050	25,000	50
18	3000539	CF18CC/2700/GX53	4.7	61.0	2.4	82	2700	820	25,000	40
18	3000538	CF18CC/FPAR/2700/E26	4.7	127.0	5.0	82	2700	820	25,000	24

### Operating Characteristics

**DIMMING:**  
USHIO's dimmable C<sup>3</sup> Cold Cathode Compact Fluorescent lamps should only be used on modern analog dimmers. They will not work on digital dimming systems, which although uncommon, may still be found in certain new commercial installations.

Unlike their incandescent counterparts, CCFL's will not dim to 0%. This can be attributed to the differences in the lamp designs and technologies. A Cold Cathode lamp functions similarly to a linear fluorescent lamp, which requires that an arc be maintained between the cathodes / electrodes. A certain amount of power is required to maintain this arc. There is also power that is consumed in the operation of the ballast. Due to the power consumed by these two items, a dimmable CCFL lamp has a much more restricted dimming range than incandescent lamps. C<sup>3</sup> Cold Cathode lamps have a dimming range of 100% - 30%. Depending on the brand and type of dimmer used, you may experience flickering or shutdown with C<sup>3</sup> Cold Cathode lamps when dimmed below 30% of the lamp's power.

**ENVIRONMENT**  
The ideal ambient operating temperature for the C<sup>3</sup> Cold Cathode lamps is 25°C (77°F). These lamps will operate in ambient temperatures between -15°C (5°F) and 50°C (122°F).

The 3W, 5W and 8W C<sup>3</sup> lamps are suitable for use indoors or outdoors. The 13W and 18W C<sup>3</sup> lamps are for indoor use only.

**LAMP CONTAINS MERCURY - (Hg)**  
Manage in Accord with Disposal Laws  
See: [www.lamprecycle.org](http://www.lamprecycle.org) or 1-800-895-8842

Form No. S-CC3CFL/R-1208: The specifications on this sheet supercede all previously published specifications and may be subject to change for design and specification improvement without prior notice.



**C<sup>3</sup> Cold Cathode  
CFL Series**



**Incandescent  
Lamp**

3W C <sup>3</sup>	=	11W Incandescent
5W C <sup>3</sup>	=	25W Incandescent
8W C <sup>3</sup>	=	40W Incandescent
13W C <sup>3</sup>	=	60W Incandescent
18W C <sup>3</sup>	=	75W Incandescent

Distributed by:

© 2008 USHIO America, Inc. All rights reserved.