

# Compact Fluorescent Lamp Applications

**Q: Can a compact fluorescent (self-ballasted) lamp be used in any portable lamp or luminaire that is Listed for use with an incandescent lamp? Are there any wattage considerations?**

A: Yes, compact fluorescent (self-ballasted) lamps can be used in any portable lamp or luminaire in which they will physically fit. The lamp wattage of the compact fluorescent (self-ballasted) lamp cannot exceed the maximum replacement incandescent lamp wattage marked on the portable lamp or luminaire.

UL Lists compact fluorescent (self-ballasted) lamps under the product category "Lamps, Self-Ballasted and Lamp Adapters (OOLR)" Guide Information for this category can be found in UL's Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database)

and on page 222 of UL's 2007 Guide Information for Electrical Equipment (White Book). The OOLR category covers self-ballasted lamps consisting of a ballast, transformer or power supply and an integrated or replaceable lamp, for direct connection to a lampholder. The basic standard used to investigate products in this category is UL 1993, "The Standard for Safety for Self-Ballasted Lamps and Lamp Adapters."

UL also Lists lamps similar to compact fluorescents but employing light-emitting diode (LED) technology. The new product

category is "Lamps, Self-ballasted and Lamp Adapters, Light-emitting-diode Type (OOLV)." At this time, however, the LED products can be found in both categories.

These products are intended for connection to lampholders for outlet boxes and lampholders provided in luminaires, portable luminaires and signs. The point-of-supply connection (the lamp base for these products) can be an Edison screw-type as well as other ANSI lamp bases. These products are intended for operation at the voltage marked on the product. If a manufacturer chooses to mark on their products that they are not intended for use in supply circuits controlled by any type of dimmer switch or dimming control device, UL will still test the combination and consider the test as an abnormal condition.

Products in the OOLR category employ various lamp technologies including, but not limited to, fluorescent lamps and high-intensity-discharge (HID) lamps. Devices with an integral lamp are termed "self-ballasted;" devices with a replaceable lamp are termed "adapters."

These products are generally for use in indoor, dry locations, unless additionally investigated and marked for damp location applications (not directly exposed to water). Products investigated and marked for wet locations may have additional use or orientation restrictions.

These products have been investigated for use in the smaller of a 6- or 8-in. diameter recessed luminaire, if they will physically fit, and are tested and intended for use in totally enclosed, recessed luminaires unless marked and stated not for such use

These products are not intended for use in emergency lighting equipment or exit fixtures where brightness is a factor.

UL is in the process of promulgating a new edition of UL 1993. The next edition has numerous changes but, most significantly, includes harmonization with Canadian requirements and additional testing simulating end-of-lamp-life conditions.