Frequently Asked Questions Regarding CFLs and Dimming

Q: Should a non-dimmable CFL be used with a dimmer?

A: No. A CFL that is not specifically designed for dimming should not be used on a dimmer. The CFL may flash or flicker and the reliability of the CFL or the dimmer may be reduced. In 2010, Underwriter's Laboratories published the results of a study that examined the use of non-dimmable CFLs with dimmers. They observed no conditions, however, that violated safety concerns. For more information on the UL study, please contact Underwriters Laboratories Manager of Media Relations, Joseph Hirschmugl, at joseph.f.hirschmugl@us.ul.com.

Q: Are all CFL bulbs dimmable?

A: No. The majority of CFL bulbs sold today are not dimmable. A CFL bulb that cannot be used on a dimmer will have the statement "not for use with dimmers" or "do not use with dimmers" marked directly on the bulb. Additional information regarding the CFL's ability to be used with dimmers can be found on the package in which it was sold.

Q: Can I use any dimmable CFL with an incandescent dimmer?

A: Dimmable CFLs which meet UL standard 1993 can be used with dimmers. Recently, dimmers have been introduced designed specifically for CFL (and LED) bulbs. Use these dimmers to maximize performance of the lamp/dimmer combination. Contact the dimmer or CFL manufacturer for further information.

Q: Can I use dimmable CFL and LED bulbs on the same dimmer at the same time? What about using dimmable CFL, LED, and incandescent/halogen bulbs on the same dimmer?

A: Maybe. Use of different types of bulbs on the same dimmer is determined by the dimmer design, and not all dimmers will be approved for use with different loads. Contact the dimmer manufacturer for details.

Q: Can I use CFL bulbs from different manufacturers on the same dimmer?

A: Yes, but dimming performance may vary from bulb to bulb due to variations between manufacturers.

Q: Why won't my CFLs dim as low as incandescent or halogen bulbs?

A: Incandescent/halogen bulbs will typically dim below 1% of maximum measured light output. Most dimmable self-ballasted CFLs dim to 10% to 30% of the CFL's full light output. This performance is a compromise between the size and the cost of the CFL bulb. Please note that the actual lamp/dimmer combination determines the dimming range of the CFL bulb.

Q: Do dimmable CFL bulbs save energy?

A: Yes. Replacing incandescent and halogen bulbs with dimmable CFLs saves energy. Dimming them increases energy savings.

Q: How much energy can be saved by using a dimmable CFL?

A: Savings depends on your usage. Contact the dimmer manufacturer for calculation assumptions and details.

Q: Can I use CFLs with occupancy/vacancy sensors and motion detectors?

A: Many CFLs can be used with ON/OFF occupancy/vacancy sensors and motion detectors. The lamp life may be shortened when used with these controls if the lamp is repeatedly operated less than 3 hours at a time. Check the CFL packaging or contact the CFL or sensor manufacturer to confirm compatibility.

Q: Does dimming a CFL reduce the CFL's reliability?

A: Dimming a CFL which indicates it is dimmable does not reduce the CFL reliability. Dimming a CFL which is not designed for use with dimmers is not advised and may reduce the CFL reliability. Contact the CFL manufacturer for details.

Q: Does dimming a CFL reduce the dimmer reliability?

A: Dimming a CFL which indicates it is dimmable does not reduce the dimmer reliability, provided the ratings of the dimmer are not exceeded. Dimming a CFL which says "not for use with dimmers" is not advised and may reduce the dimmer reliability. Contact the dimmer manufacturer for details.