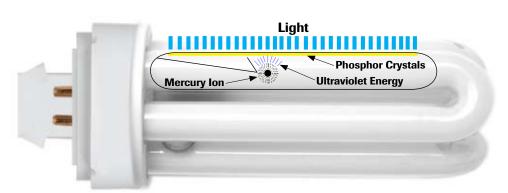
## DUAL LITE UFO-CF Application Guide

## BATTERY PACKS FOR LOW MERCURY COMPACT FLUORESCENT LAMPS

Dual-Lite announces the introduction of a new series of compact fluorescent battery packs! The new UFO-CF series are designed to optimize lumen output for today's low-mercury, compact fluorescent while operating in emergency mode.

To address environmental concerns, today's compact fluorescent lamps are



manufactured with much lower mercury content or use amalgam to reduce the mercury content in the lamp. The effect of low mercury content is exaggerated when a luminaire operates in emergency mode with a traditional battery pack having DC drive output.

All fluorescent lamps operated by battery packs utilizing DC drive output technology experience a phenomenon known as cataphoresis, commonly called mercury migration. Cataphoresis is a condition where the mercury in a lamp migrates to one side of the cathode in the lamp, which ultimately reduces light output caused by mercury starvation within the arc stream. This can occur when the discharge is operating asymmetrically, aka when operating using DC output technology. When this happens, one end of the lamp will become more negative than the other. Mercury is a positive atom so it is attracted to the more negative end of the lamp. If the asymmetry is significant enough, then over time most if not all the mercury will be transported to the negative end leaving the rest of the lamp dim and/or pink.

Dual-Lite prevents this reduced lumen output phenomenon with the introduction of its new UFO-CF series of battery packs that incorporate AC drive output technology. In addition to operating low mercury compact fluorescent lamps, the new UFO-CF battery packs also operate a greater variety of traditional fluorescent lamps. Please see your local Hubbell sales rep to learn more about Dual-Lite's new UFO-CF series battery packs!



## **PARTIAL LISTING OF LAMPS OPERATED**

	Initial Lumens <sup>1</sup>		
Low Mercury Lamp	UFO-CF1	UFO-CF2	UFO-CF2-CLD
PL-T 32W	550	1100	1100
CF42DT	660	850	850
F42BX	860	850	850
PL-T 42W	840	850	850

<sup>&</sup>lt;sup>1</sup>UL allows no more than a drop that is 60% of the initial lumen output by the end of 90 minutes.

