Focus on Environmental Issues

# The Green Cab Lighting Guide Corrections

by Jed Shapiro

The article on Green Cab Lighting that ran under my byline in the April 2010 issue (starting on page 74) contained some inaccurate information that an astute reader has brought to my attention. I'd like to set the record straight.

The "Lighting Alternatives Comparison at a Glance" table incorrectly portrayed Halogen light quality as a B against CabLite's® A-. Halogen should have been rated A.

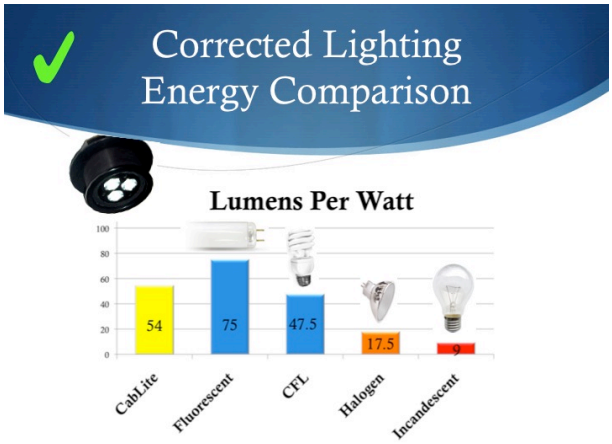
**Lighting Alternatives Comparison at a Glance**

| Lighting Type | Power Efficiency | Light Quality | Waste Heat | Bulb Replacement |
|---|---|---|---|---|
| ECI CabLite | A | A- | A | A |
| Screw-in LEDs | B | C | B | F |
| Fluorescent Tube | B | F | C | B |
| CFLs | C | F | C | C |
| Halogen | D | ~~B~~ A | F | B |
| Incandescent | F | A | F | F |

The article incorrectly implied that all low voltage halogen bulbs have a power supply integrated into the bulb. Some low voltage halogen bulbs have no integrated power supply and rely instead on reusable external power supplies that don't end up in the waste stream along with the bulbs at end of life.

The original Table 2 has been updated to reflect information from the CabLite® Installation Manual dated 08/18/09. The table on the right shows CabLite lumen per watt output of 54 based on the average of available light temperatures (6300K @ 65 Lm/watt and 3000K @ 43 Lm/watt).




Fixtures for fluorescent tubes using white-painted metal were described as redirecting very little light energy toward the subject. A more accurate statement would be that some light energy is lost in the typical white painted fixture but a more highly reflective surface would improve the amount of light directed where desired.

The original article stated that LEDs do not burn out but instead gradually lose brightness over time. It should have also been noted that, although rare, LEDs can "burn out" in the same way other lighting types fail.

There are multiple opinions about the delivered service life of LEDs. Industry labeling typically shows 'Up to 50,000 hours'. The US Department of Energy is advocating standards for longevity testing and labeling.

The 10 year savings comparison for CabLite® vs screw-in LED lamps should have more clearly illustrated the assumptions and impact actual lamp life can have on calculations:

| | **Original** | **Corrected** |
|---|---|---|
| Presumed lamp life | 3,000 hrs | 50,000 hrs |
| Relamping cycles in 10 years | 29.2 | 1.75 |
| Replacement lamp cost | $75 each | $75 each |
| Number of lamps per cab | 9 | 9 |
| Ten year relamping cost, lamps | $19,710 | $1,181 |
| Ten year relamping cost, labor @ $25 | $6,570 | $393 |
| CabLite LED Relamping Cost Savings | **$26,280** | **$1,574** |

The article stated that every lighting type except LEDs contains some mercury. The author is unable to locate the original authority for this statement. Correctly stated, LEDs, halogen bulbs and incandescent lamps contain no mercury. Disposal of fluorescent tubes and CFL's, which do contain mercury, is the principal environmental concern.

To clarify, CabLite® is certified by TUV and not listed or certified by CSA or UL.

Thanks for the opportunity to provide these clarifications for your readers. Jed Shapiro, VP Marketing, Lift Solutions.