

HIGH PERFORMANCE COMMERCIAL LIGHTING SYSTEMS



Overview: The initial focus of the High Performance Commercial Lighting Systems Initiative is national coordination in defining efficient, high-performance lighting products. The initiative is currently addressing higher-lumen, 4-foot, 32-watt T8 lighting systems and reduced-wattage T8 systems. Future efforts will address other technologies.

CEE posts a list of qualifying products (lamps and ballasts) on its Web site (www.cee1.org).

For the long term, CEE proposes to enhance energy savings by:

- Evaluating opportunities to support efficient lighting technologies and practices
- Encouraging the adoption and promotion of common specifications for high-performance lighting systems
- Developing effective program approaches to increase market share of high-performance lighting equipment

About this Market: Lighting is the single largest end-use for energy consumption in the commercial buildings sector, accounting for about 26 percent total energy usage. Much of the market, however, is still using older lighting technologies. About 23 percent of existing commercial fixtures use standard-performance T8s and ballasts, and an additional 58 percent use inefficient T12s. It is estimated that only about 5 percent of commercial lighting systems utilizing a high-performance lamp-ballast combination.

The higher lumen, 4-foot, 32-watt T8 lamp/ballast system was chosen for the initial specification development because it is one of the most common lighting systems found in the commercial sector.

CEE's High Performance Specification: The CEE specifications, posted on the CEE Web site (www.cee1.org), establish performance levels for higher lumen, 4-foot, 32-watt T8 lamp/ballast systems and reduced-wattage T8 systems.

When compared to a T12 system, electricity savings of a high-performance T8 system can be as high as 40 percent. Lighting systems meeting the CEE specification are generally 10-20 percent more efficient than standard T8 systems.

It should be noted that CEE specifications address the performance of the lighting system not the application, which can vary greatly from building to building.

By establishing specifications, CEE aims to:

- Eliminate confusion as to what constitutes high performance
- Bring consistency to member programs
- Promote to industry the best available T8 lighting systems

FACT SHEET

Market Barriers: Prior to CEE's specification, there was no universally accepted definition of high-performance commercial lighting. With a specification in place, one of the major barriers to widespread adoption of this product class has been addressed.

Other market barriers include: (1) a higher initial cost, (2) product availability and/or longer lead times, (3) lack of understanding and (4) market confusion regarding application.

Contact: Additional information about CEE's High-Performance Lighting Systems Initiative is available at www.cee1.org or by contacting Kate Baldacci at 617-589-3949, ext. 209, or kbaldacci@cee1.org.