

**STANDARD LIGHTING IS  
“EVERYTHING FOR  
EVERYBODY”**

Office spaces typically rely on a uniform layout of ceiling mounted luminaires to evenly illuminate the space—lighting “everything for everyone” since user requirements may change over time.

Such lighting systems, illuminated to the highest levels that the lighting designer feels will be needed, are inefficient and inflexible.



The Portable Office Luminaire provides both ambient and task lighting and reduces lighting energy costs by 30-50% compared to conventional office applications.

Combined with low-level ambient lighting, the Portable Office Luminaire maximizes energy efficiency while improving lighting quality.

**PORTABLE OFFICE LUMINAIRE**

*THE PORTABLE OFFICE LUMINAIRE PROVIDES OFFICE WORKERS WITH A UNIQUE COMBINATION OF FLEXIBILITY, ENERGY EFFICIENCY, AND CONTROL. THE FLOOR LAMP, WITH ITS STATE-OF-THE-ART HIGH-OUTPUT COMPACT FLUORESCENT LAMP (CFL), INTEGRATED OCCUPANCY SENSOR, AND LOW-GLARE DIRECT/INDIRECT DESIGN, IS SPECIFICALLY DESIGNED TO BE USED AS THE PRIMARY LIGHT SOURCE IN AN OFFICE.*



*Portable Office Luminaire prototype developed under this PIER LRP project.*

Researchers from Finelite and the California Lighting Technology Center (CLTC) developed a prototype portable luminaire designed to be the primary source of illumination in office environments.

**FLEXIBLE, ENERGY-EFFICIENT OFFICE LIGHTING**

Portable office lighting systems offer more flexibility and control compared to standard ceiling systems while also providing better quality, glare-free direct/indirect lighting.

Although these systems use the same energy-efficient lighting components as ceiling mounted systems, they can be placed strategically in offices to provide high or low levels of illumination where needed and easily adapt to changing office layouts or tasks.

In a 150 square foot private office, a state-of-the art super T8 system uses 0.83 W/sq. ft. while the Portable Office Luminaire requires only 0.53 W/sq. ft.



*Dual lamps and a perforated fixture provide glare-free direct and indirect light.*

**Benefits**

- Cuts energy use 30–50% compared to ceiling-mounted systems.
- The 80W CFL with electronic ballast provides high light output and increased energy efficiency.
- A low glare direct/indirect design delivers superior light quality.
- An integrated occupancy sensor reduces energy use during unoccupied times.

## INTERESTED?

Office building owners/managers, small home/office users, lighting designers and specifiers, lighting equipment manufacturers, code developers, contractors, and utility staff can use the information on the prototype portable office luminaire.

Key next steps include:

- *Utility staff*— Work with CLTC to identify and support field demonstrations.
- *Luminaire manufacturers*— Consider manufacturing the portable office luminaire.
- *Code Developers*— Consider the impact of task-ambient lighting systems when considering code changes.
- *Lighting Designers*— Adopt task-ambient lighting designs using the portable luminaire.

To participate in field demonstrations or to get more information on this technology, contact Erik Page at the CLTC ([epage@ucdavis.edu](mailto:epage@ucdavis.edu)).

This project was part of the PIER Lighting Research Program. To view the project results, as well as other current research activities, visit [www.energy.ca.gov/pier](http://www.energy.ca.gov/pier).

Additional information about this technology can be found on the following websites:

- PIER contractor site:  
[www.archenergy.com/lrp/products/portable.htm](http://www.archenergy.com/lrp/products/portable.htm)
- PIER researcher site:  
[www.cltc.ucdavis.edu](http://www.cltc.ucdavis.edu) (under projects)



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## PORTABLE OFFICE LUMINAIRE



PROVIDING LIGHT  
WHEN AND WHERE  
USERS NEED IT



Public Interest  
Energy Research