

Project Overview

Reading Area Community College (RACC), Reading, PA

College/University

11 stairwells
5 buildings



Lutron stairwell retrofit fixture solution helps RACC save energy and reduce costs.

Challenge

Reading Area Community College is committed to providing affordable access, and to meeting the identified educational needs of the community. Like virtually all educational facilities, the ability to provide affordable access depends, in part, on keeping operating costs in line despite increasing energy and facility maintenance costs.

Mike Hodowanec, Purchasing Manager, recognized that saving energy saves money, and worked with Lutron to analyze and evaluate how light controls could contribute to reduced electricity bills.

A walk-through of campus buildings revealed that stairwell lighting stood out as an obvious place to gain efficiencies. Building code dictates that stairwells be illuminated 24 hours a day, 7 days a week, but, keeping those lights on at full brightness all the time results in a significant amount of wasted energy.

Eleven stairwells in five buildings were chosen for the lighting retrofit, including some stairwells that are typically used for less than two hours per week. Altogether, these stairwells accounted for 53,000 KWh of power use, costing more than \$5,000 per year.

“Controlling the stairwell lighting was easily quantifiable as a method of saving energy.”

*Mike Hodowanec,
Purchasing Manager,
Reading Area
Community College*



Lutron® stairwell retrofit fixture and Radio Powr Savr™ corner-mount occupancy/vacancy sensor

Solution

Energy TriPak™ stairwell retrofit fixtures with Radio Powr Savr™ occupancy/vacancy sensors

Lutron stairwell retrofit fixtures enable lights to stay on at minimum levels, and automatically raise the light level as soon as the space becomes occupied.

The Lutron solution offers field adjustable high-end and low-end light levels. Working with the Lutron field service team, Mike determined that a high-end level of 60% for an occupied stairwell met the need for occupied light, and a 10% low-end was in compliance with minimum code requirements.

After presenting the energy analysis and gaining approval from the RACC Board of Trustees, the college installed 110 fixture retrofit kits and 60 occupancy/vacancy sensors in the stairwells.

Results

Reaction to the light control has been overwhelmingly positive. Teachers, staff, and students appreciate the feeling of security – light levels increase as soon as they enter the stairwell. The Assistant Director of Custodial Services, William Hitchcock, was noticeably impressed when he walked up the stairs and the lighting one floor above and one floor below him remained at occupied levels as he completed his maintenance routine.

In the rarely used Yocum Library, stairwells lighting returns to an unoccupied level after one minute. In other building stairwells, the settings vary from 5-, 10- or 15-minutes depending upon use, ensuring both maximum energy savings and security for building occupants.

Initial analysis indicates lighting energy savings between 80% and 82% as a result of the new light control solution. These savings have motivated the college to institute an energy audit of all campus buildings to determine where else light control can be used to reduce electricity demand.

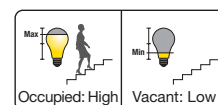
www.lutron.com/casestudies

World Headquarters 1.610.282.3800

Technical Support Center 1.800.523.9466 (Available 24/7)

Customer Service 1.888.LUTRON1

Energy-saving strategies



Stairwell occupancy/vacancy sensing

save
energy
with
Lutron™ 