

Project:

Sacramento Municipal Utility District LED Study
Raley's
Elk Grove, CA

Background:

Hussmann worked with the Sacramento Municipal Utility District (SMUD) to conduct a study on the energy efficiency of Always*Bright LED lights and motion sensors on Reach-in freezer cases. The LED lights and sensors were installed at Raley's supermarket in Elk Grove, CA.

Raley's has a reputation for being active in energy efficiency and open to trying new technologies. When they learned about SMUD's research opportunity, they readily agreed to participate.

Solution:

The existing T8 fluorescent lights on the Hussmann Reach-in freezer cases were changed to Always*Bright LED lights. We also added motion sensors and dimming power supplies to save energy by automatically dimming the lights when no one is near the freezer cases.



The LED lights and sensor combination reduced energy consumption by an impressive 68% (compared to T8 fluorescent lamps and electronic ballasts). Additionally, the low temperature refrigeration system energy usage was reduced by 20%.

Although Raley's used an energy management system to turn off the case lights when the store was closed, the motion sensors still produced dramatic savings – even during peak shopping periods. “My first thoughts about the motion detectors were that they would not save as much as it cost to install them,” said Randy Walthers, energy manager at Raley's. “I was wrong, and the slow ramp up and down of the lights is not annoying like I thought they might be – in fact, the customers actually like it.”

Raley's requires any light within a case to be repaired within 24 hours. Since LEDs have an estimated life span of 50,000 hours compared to T-8 fluorescents at 15,000 hours, the store's monthly service fees have dropped by 20%.

Over the past several years, Hussmann has launched a number of energy- and refrigerant-saving products and is currently working to develop several next generation Green products to meet customer needs. Hussmann Green products include Protocol refrigeration systems, Innovator II doors, Always*Bright LED lights, night curtains, Always*Clear glass coating, energy-efficient fan motors and coils, microchannel condensers and others.

For more information on Hussmann Green products, visit www.hussmann.com/alwaysgreen. To see a video on the SMUD LED study, go to <http://link.brightcove.com/services/player/bcpid1184508363?bclid=1184861919&bctid=1776464157>