



Industrial - New Construction

Innovative Cold Storage Enterprises

San Diego, CA

- \$408,000 annual energy savings
- 150,000 maintenance-free hours
- Excellent fit for cold temperature applications as LED performance inherently increases as operating temperatures drop

CREE 



“ Utilizing the Cree fixtures was a final touch to an already phenomenal project concerning energy savings. We sought to pursue energy efficiency in every facet, as well as cutting-edge technology, which is clearly demonstrated in the application of these industrial LEDs. ”

Phoebe Hamann, *Green Building Specialist, LEED AP, Hamann Construction*

COLD STORAGE DESIGNED TO SAVE COLD CASH

OPPORTUNITY

Innovative Cold Storage Enterprises, Inc. (ICE) opened its second warehouse, ICE II, in March 2009. That same month, the Department of Energy adopted mandatory energy conservation standards, effective January 2012. The standards in the Energy Conservation Program for Commercial and Industrial Equipment forecasts significant energy savings for cold storage facilities. The ICE II warehouse achieves conservation using a forward-thinking design.

SOLUTION

The ICE II freezer warehouse is designed to save more than \$408,000 annually at current utility prices and uses 62 percent less electricity than standard storage facilities. The 132,000-square-foot warehouse costs half as much to operate as the old ICE facility, yet it can hold four times more product. The investment to design the warehouse around energy efficiency earned incentives from the local utility, SDG&E®, including nearly \$80,000 to offset the cost of energy-efficient Cree LED lighting.

“Utilizing the Cree fixtures was a final touch to an already phenomenal project concerning energy savings. We sought to pursue energy efficiency in every facet, as well as cutting-edge technology, which is clearly demonstrated in the application of these industrial LEDs,” said Phoebe Hamann, Green Building Specialist, LEED AP, Hamann Construction. Hamann stated the ICE II facility is five points above the requirement to achieve Gold rating for certification through the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™.

BENEFITS

Lighting storage areas designed to be kept at cold temperatures are a direct imbalance with the heat generated by traditional lighting sources. LED performance inherently increases as the operating temperatures drop, making LED luminaires a natural fit for cold storage facilities. Cree LED luminaires provide more than 150,000 maintenance-free hours in the minus 20°C refrigerated warehouse—a large benefit since lamp replacement would be laborious and expensive due to 60-foot ceilings.

The ICE II project was originally designed with 321 HID lights at approximately 465 system watts each. Cree Edge™ Series canopy and parking structure luminaires were installed instead and included 230 LED luminaires at 86 system watts each and another 49 LED luminaires at 321 system watts each. The Cree 35,509 total watt system consumes 76 percent less energy than the originally designed HID 149,265 total watt system. In addition, motion sensors were installed for further energy conservation.

Cree IS LED Lighting

Learn more at: www.cree.com/lighting | info@cree.com | 800.236.6800

© 2013 Cree, Inc. All rights reserved. For informational purposes only. Not a warranty or specification. See www.cree.com/lighting for warranty and specifications. Cree® and the Cree logo are registered trademarks, and Cree Edge™ is a trademark of Cree, Inc. SDG&E® is a registered trademark of San Diego Gas & Electric Company. LEED® is a registered trademark and Green Building Rating System™ is a trademark of the U.S. Green Building Council.

CAT/CCS-C080 11/2013

