



# Parking Lot

## Case Study

### The Challenge

With lighting infrastructure for its stores' parking lots ranging in age from 15 to 30+ years, a nationwide general merchandise retailer sought to reduce energy and maintenance costs by switching from outdated 1,000-watt HID's to a more energy efficient LED solution. In addition, it wanted to incorporate advanced lighting controls to enhance nighttime safety and further extend energy savings by dimming unoccupied parking lot areas.

### The Solution

With thousands of stores, the retailer looked to EMC to audit and complete installations for approximately 750 locations across the continental U.S. and in Hawaii. Done during the day, EMC worked in sections to accommodate shoppers, with each lot taking two to five days to upgrade.

The new advanced controls allow the retailer to log in from anywhere to make little changes like adjusting the light levels of an individual lamp or more comprehensive updates to parking lot light levels, timers and occupancy sensors. It's also possible to reprogram different zones. Need to change where employees park? Simply adjust the new zone to be on when they come and go from work to provide optimized safety.

### The Savings

Making the switch from HID to LED lighting reduced energy output by over 23M kWh and delivered a 60-80 percent reduction in energy costs and about a million dollars in annual maintenance costs. The reduced CO2 emissions savings is the equivalent of 2,014 homes' energy use in one year.

## Investment Summary \*

Project Cost

**\$26,992**

Incentives

**\$6,250**

Annual Energy Savings

**\$7,120**

Annual Maintenance Savings

**\$1,475**

Payback

**2.4 Years**

\*Typical project financials