



AT A GLANCE

City Market
Burlington, VT

PROJECT

Second phase of
LED lighting retrofit and
wireless control system
implementation

SAVINGS

42,217 kWh of energy
saved per year

“The lights have been very well received and the whole store has a whole new dynamic of brightness and colors. The only problem is dirt is more visible so we are cleaning the floors more often!”

— Brent Demers,
Facilities Manager
City Market

City Market/Onion River Co-op LED Lighting Upgrade & Wireless Control System Implementation

Background

The City Market/Onion River Co-op is a 16,000 sq. ft. community-owned food cooperative located in beautiful downtown Burlington, Vermont. City Market is Burlington’s only downtown grocery store, open 363 days per year. City Market provides a critical service to the residents of Burlington and the larger community by providing conventional, organic and local products at a fair price. Over 3,000 customers pass through the doors each day and the Co-op is also extremely dedicated to supporting the local economy and enhancing the sustainability of agriculture. They work with over 1,000 Vermont vendors to feature the widest selection of local products in the state. 73% of the vendors they do business with are located in Vermont and over 60 cents of every dollar in sales stays in Vermont.

Leading Edge Design Group worked with City Market on their first LED lighting retrofit project. The initiative focused on improving track lighting output throughout the store including the produce and meat sections that needed to eliminate premature aging caused by metal halide task lighting ultra-violet spectrum. The new solution designed by LEDG not only saved the grocery store 42,217 kWh of energy per year, it accentuated the produce, meat, deli, and prepared foods sections and improved the customers overall experience. In addition, Burlington Electric Department provided a very generous energy efficiency financial incentive for City Market.

Challenge

Since the initial LED lighting retrofit was proving to decrease the market’s energy consumption and operating costs, facilities manager, Brent Demers, began to review their other lighting installations. After an evaluation of the next areas that would have the highest impact on the bottom line, City Market/Onion River Co-op chose to work with Leading Edge Design Group to replace of ceiling mounted metal halide canisters fixtures and freezer lighting. Upgrading these two areas had the potential of doubling their annual energy savings and significantly reducing their operating costs. The team at LEDG also approached Burlington Electric Department to consider additional incentives to help City Market achieve their goals.



Solution

After careful evaluation, Leading Edge Design Group installed the Digital Lumens Intelligent Lighting System, using the Midbay Intelligent Light Engines, which distribute light evenly in open spaces while reducing energy use. The LightRules lighting management software wirelessly controls light output, records the amount of power consumed, and provides City Market staff with web-based reports showing key performance data. By using dramatically less power than legacy fixtures and by intelligently managing light delivery, the Digital Lumens system is enabling City Market/Onion River Co-op to save 44,530 kWh per year. This system is performing well in this high-impact retail environment known for an aesthetic appeal that attract a steady stream of happy customers.

In addition, the Digital Lumens LighRules information is given to Burlington Electric Department to monitor their energy reduction in order to substantiate the rebate incentives that they received to support their initiatives.

To keep operation costs down as much as possible in the freezer section, LEDG and City Market selected ElectraLED® refrigerated display case product with motion sensors. By replacing the traditional fluorescent lamps used in freezers, City Market has reduced their energy consumption in this area by 50%. The motion sensors dim the LED lights when no activity is detected in thirty seconds. This simple strategy reduces the energy consumption another 50% which will result in an estimated 10,000 kWh savings per year.

Based on the documented energy savings and the substantial support from Burlington Electric Company, this phase of City Market/Onion River Co-op's lighting retrofit will achieve ROI in less than 1 ½ years. Now LEDG and City Market are working on more interiors lighting improvements and have moved outside to evaluate the parking lot lighting!



Digital Lumens
Midbay
Intelligent
Light Engine



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About

Leading Edge Design Group is a leading national provider of energy optimization services that delivers significant energy savings to the public and private marketplaces through efficient data center designs and emerging LED lighting and wireless lighting control technologies. Founded in 2007 with the goal of pursuing, promoting, and providing the finest energy optimization solutions available, we help our customers minimize the environmental impact of their businesses while improving operational reliability and reducing costs. Leading Edge Design Group is dedicated to encouraging, challenging, and contributing to energy industry innovation with an ongoing commitment to our community and our environment. Visit us at www.ledesigngroup.com and connect with us on Twitter @ledesigngroup.