



THE ENERGY OF THINGS

GROCERY STORE CASE STUDY Brookhaven Marketplace - Burr Ridge, IL



PROJECT SUMMARY

For more than 10 years Brookhaven Marketplace in Burr Ridge, Illinois has focused on creating the most enjoyable shopping environment for its customers. With an aim to improve indoor lighting quality and achieve deep energy savings, Brookhaven Marketplace set out to minimize lighting costs, reduce O&M costs, and improve the overall shopping experience for its customers by installing a high-bay LED lighting retrofit.

High quality LED fixtures provided by U.S. Global Glow with Amatis' 6LoWireless Lighting Controls improve product presentation with the highest CRI available and control for smooth dimming, occupancy sensing, daylight linking and advanced scheduling. Amatis programming helps reduce overall energy usage in unoccupied zones with precise occupancy sensors, enables reduced light output when natural daylight is available, and allows the operations manager to program detailed schedules that further enhance overall cost savings.

PROJECT GOALS

- Improve shopper experience
- Reduce energy usage with high-bay LED fixtures
- Use advanced lighting controls to reduce ROI
- Provide real-time lighting energy analytics
- Decrease operation and maintenance costs
- Minimize business interruption during installation

ADVANCED CONTROLS STRATEGY

Traditional lighting controls typically save energy by turning lights off when rooms or zones are unoccupied. However, dark zones are not acceptable for grocery stores or any other retail store. With Amatis 6LoWireless lighting controls Brookhaven Marketplace can now dim fixtures to acceptable levels in unoccupied zones, saving energy and maintaining a comfortable shopping environment. Wireless occupancy sensors signal Amatis controllers to raise light levels when a customer enters the zone creating a welcoming effect and highlighting the products on display. The ability to dim smoothly with a variable fade rate, instead of simply turning lights on or off enables the business to save as much energy as possible, without negatively affecting the shoppers' experience. Brookhaven Marketplace also uses the Amatis Control App to program unique schedules for open and closed hours in both the retail space and storage areas. Amatis Controls' 6LoWireless technology offers customers like Brookhaven the most advanced functionality at a very low cost.

SIMPLE INSTALLATION & PROGRAMMING

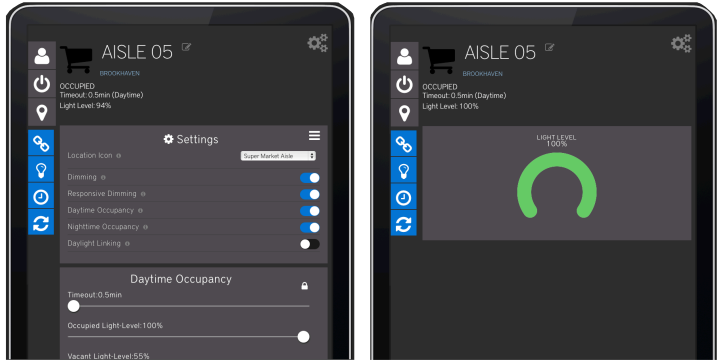
Amatis 6LoWireless lighting controls are quick and easy to install. Installation and programming is completed during closed hours minimizing business disruption. Amatis' advanced technology dramatically reduces the need for rewiring and allows commissioning to be completed easily by anyone with the Amatis Configuration App on a smartphone or computer.

Using the Amatis Control App, installers simply scan QR codes on devices and enter the physical location of the device. Brookhaven's Director of Operations, John Peter Bertakis, completed the programming by specifying appropriate light levels, occupancy timeouts, daylight linking values, and time scheduling.

"It was very easy. We set the lights to smoothly fade from 55% brightness to 100% when customers enter an aisle, and then back down to 55% after just 30 seconds of vacancy."

- JP Bertakis, Director of Operations

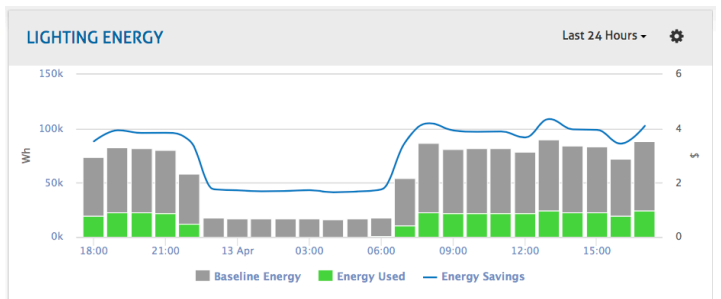
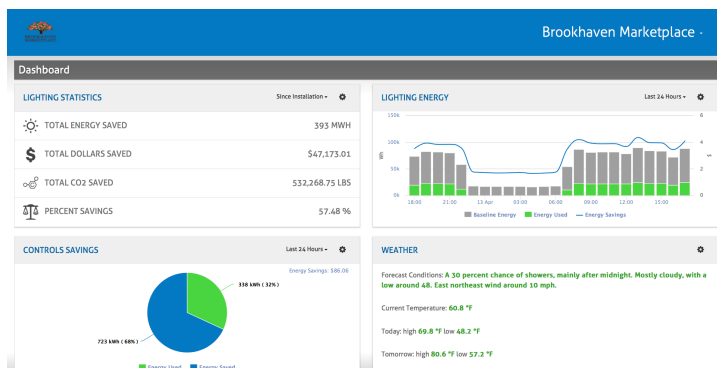
Mr. Bertakis also programmed unique light levels for closed hours, dimming zones up from 0% to 10% when occupied by his staff. This gives the employees enough light to work while saving as much money as possible.



Very little training is required to commission Amatis lighting controls. Simply download the app and modify settings.

ENERGY DASHBOARD

The Amatis Energy Dashboard shows real-time energy data including daily energy use, energy savings, and statistics. Baseline information is collected before the lighting retrofit and energy savings is quantified every hour based on real-time information from Amatis devices.



LIGHTING & CONTROLS HARDWARE

- 115 LED 90+CRI high bay fixtures (USGG-200W-HB)
- 24 LED 40W T5 replacements (USGG-PGF-40W)
- 80 Amatis low voltage controllers (DC-DIM)
- 70 Amatis motion and light sensors (SensorML)
- 3 Amatis border routers (AMBR)

LIGHTING ENERGY USAGE (average numbers)

Before	31.9 MWh per month
After	10.2 MWh per month
Total Savings	21.7 MWh per month