

BetaLED® Project Brief Overview

Sentry Equipment—Oconomowoc, Wisconsin



PROJECT SUMMARY

The use of LED lighting is one way to address our nation's energy challenges. LEDs consume considerably less energy and last longer than HID thus reducing carbon emissions and hazardous waste.

End User:	Sentry Equipment Corp.
Application:	Outdoor lighting system for a 51,000 square foot
Product:	THE EDGE™ area luminaires, wall packs and bollards
Energy Cost Savings:	Nearly \$40,000/year anticipated a 53 percent reduction from their previous annual expense
Other Benefits:	<ul style="list-style-type: none">• Maintenance cost reduction• Environmentally friendly
Project Specification:	<ul style="list-style-type: none">• Parking lot luminaires are mounted at 27' AFG 11,200 initial delivered lumens (eight light bars) with Type III distribution.• Wall pack luminaires are 5,600 initial delivered lumens (four light bars) with Type III distribution; 10' mounting height• Bollards are dome top 1,000 initial delivered lumens



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The Advantages of Going Green



When 85 year-old, Wisconsin-based Sentry Equipment began the process of designing and constructing a new facility, it researched using high efficiency LED lighting and discovered the tremendous payback these lights would provide. Because of his commitment to the environment and making prudent business decisions, the CEO of the company, Michael Farrell, set out to build the facility to meet green standards.

“We don’t want our energy use to add greenhouse gases like carbon dioxide into the atmosphere. So we’re measuring our impact and reducing where we can, such as using high efficient lighting,” commented Farrell.

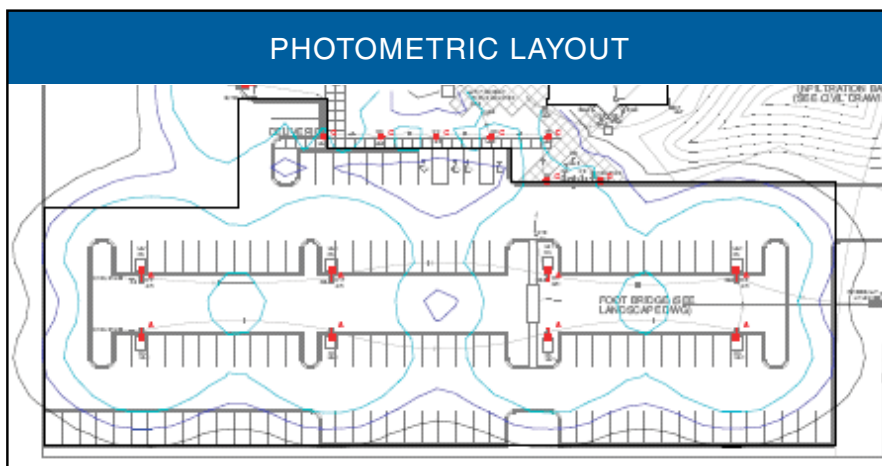
Working with design/build firm Opus North Corporation, several options were considered for the company’s outdoor illumination including simply installing more high pressure sodium fixtures. However, one of the challenges with other lighting technology is that

30 percent of all U.S. outdoor lighting is wastefully directed skyward. Since LED fixtures use dozens of individual LEDs, light control is managed via individual optics on each LED making it inherently easier to prevent light pollution. Considerable attention was also given to the issues of spill light control and glare.

Farrell championed the building’s green design and challenged Opus to find technologically advanced solutions to accommodate his commitment to the environment. With this in mind, the team turned to Wisconsin-based BetaLED, a leading manufacturer of high-quality, specification-grade LED luminaires for outdoor applications. Rob Ezerins, Senior Design Architect with Opus North Corporation, began working with the BetaLED team to determine appropriate luminaires for the 51,000 square-foot parking lot.

BetaLED’s THE EDGE™ Area Luminaire was chosen. One advantage Sentry is anticipating is the estimated 53 percent less energy usage than their former facility’s HPS lights. Farrell expects their energy bill will be slashed from \$75,000/year to \$35,250/year and virtually eliminate maintenance costs. Sentry Equipment also installed a remote mounted photo control system to further maximize energy savings. Because of the high-efficient lumen output of THE EDGE, 1/3 fewer fixtures were used than if more traditional lighting sources were installed.

“Working with BetaLED has been both a logical business decision and a responsible choice for the environment,” said Farrell. “I know we’re going to realize an excellent ROI on these lights. Their long-life and virtually maintenance-free operation made it an easy choice.”



Photometric layout depicts THE EDGE by BetaLED installation with single mounted Type III area lights at 27' AFG: Total system watts of 188.

Wall packs total system watts of 118.

Bollards total system watts of 21.

Parking lot light level: 1.28 avg. fc.