

BetaLED® Project Brief Overview

The Prairie School—Racine, Wisconsin



PROJECT SUMMARY

LED Outperforms HPS!

THE EDGE™ uses **53% less energy**, has better uniformity and more perceived light output than HPS. Refer to the comparison chart on the right to see the difference.

LED		HPS
141W	Total System Wattage*	300W
53%	Energy Savings	—
Twin Type V	Optics	Twin Type IV
8040	Avg. Delivered Lumens* (photopic)	19000
1.01	Average Footcandles (photopic)	1.96
8:1	Max/Min Ratio	27.75:1
3.37:1	Avg/Min Ratio	4.9:1
* per fixture	Footcandles calculated at mean lumen output	



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Main Parking Lot – Retrofit Project

Improved lighting quality, reduced maintenance cost and over 50 percent energy savings were achieved with the recent installation of THE EDGE™ LED area lights in the main parking lot of The Prairie School in Racine, Wisconsin. The project involved a one-for-one replacement of an old high pressure sodium lighting installation with the new, energy efficient LED system from BetaLED®.

School officials were impressed by the astounding visual impact of the new lighting and the realization of 53 percent energy savings with virtually no maintenance costs.

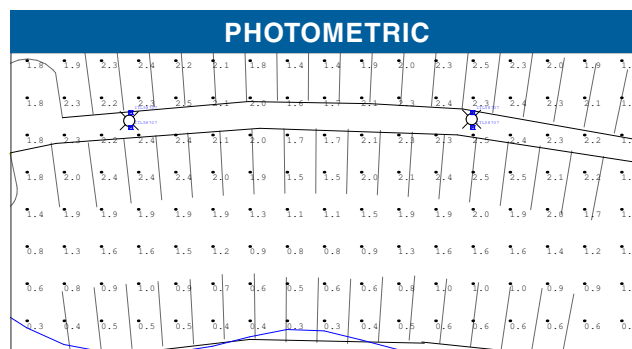
This beautiful, 1965 Frank Lloyd Wright inspired, K-12 school is well established within the community. Maintaining the contemporary design of the campus while blending within the wooded, rural setting was an important consideration in the installation of new outdoor lighting. The low profile design of THE EDGE area lights (in bronze Colorfast DeltaGuard® finish) successfully met that criteria.

The 250-watt high pressure sodium system (consuming 300 system watts per fixture) was replaced with six-light bar area lights (8040 avg. delivered lumens - consuming 141 system watts each) mounted in twin- and triple-head configurations onto existing poles. Pole height is 22-feet AFG with 100 x 135-foot spacing.

A 1.01 average mean footcandle level was achieved on the site with an improved max./min. ratio of 8:1. Even though, photopically, footcandle levels are reduced from the high pressure sodium installation, the scotopic impact of the new LED system provides a dramatic increase in perceived light levels and safety for pedestrian and vehicular traffic.

On the energy consumption side, each LED fixture is providing 53-percent or 159 system watts of savings over the original installation. Taking into account the over 50,000 hours of fixture life, the facility will be looking forward to over 16 years of maintenance-free operation.

Wm. H. Mark Murphy, headmaster and president of The Prairie School commented, “We’re not only happy with the impressive light levels of the new LED fixtures but we’re also looking forward to realizing the cost savings on our utility bills from the reduced energy usage. They’re great!”



Photometric layout depicts the new BetaLED THE EDGE™ installation with twin mounted Type V area lights providing a photopic mean average footcandle level of 1.01 and a max./min. ratio of 8:1.

