

BetaLED™ Project Brief Overview

The Prairie School, Racine, Wisconsin



PROJECT SUMMARY

THE EDGE™ uses **53% less energy**, has better uniformity and more perceived light output than HPS.

LED	ITEM	HPS
141W	Luminaire Total System Wattage	300W
53%	Energy Savings	-
Twin Type V	Optics	Twin Type IV
8,040	Avg. Delivered Lumens	19,000
1.01	Average Footcandles	1.96
8:1	Max/Min Ratio	27.75:1
3.37:1	Avg/Min Ratio	4.9:1

Note: Footcandles calculated at mean lumen output

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Project Details

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 Ruud Lighting.

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 generation A 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 footcandle level was achieved on the site with an improved max./min. ratio of 8:1.

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!"