

Lochmoor Club



CASE STUDY

Location: **Gross Pointe, MI**

Application: **Indoor Tennis Courts**



Essentials Series 3.2

The Essentials Series delivers superior performance, quality and versatility in low bay and high bay applications. The fixture offers superior lumen output and can be installed directing light upward for indirect lighting and low glare. The fixtures are also impact resistant, perfect for indoor sporting applications.

RESULTS

Lochmoor Club replaced 58 1000W metal halides with 236W Essentials Series LED High Bays. The upgrade resulted in increased energy savings and reduced maintenance costs for the facility. For athletes, the upgrade reduced hot spots and created even light coverage across the courts.

78%

ENERGY REDUCTION

244,236 kWh

DISPLACED ENERGY

1.1 YEAR

QUICK PAYBACK

OVERVIEW

Lochmoor Club, a family-oriented country club located in the suburbs of Detroit, Michigan, was seeking to reduce utility costs by replacing almost four-decade old lighting fixtures in their four indoor tennis courts. Recently celebrating their centennial year, they sought to improve light distribution and quality of their lighting on their indoor tennis courts for their members and tennis pros.

CHALLENGE

Lochmoor Club's board of directors was seeking a solution to save on energy costs at their facility. Through this exploration, they identified their indoor tennis courts were a large source of their monthly energy expense. They knew that upgrading to LED lighting would help reach their cost savings criteria, but sorting through the options was a challenge. The general manager of Lochmoor Club decided to reach out to Future Energy Group, a full-service energy solutions provider, to help.

SOLUTION

The Essentials Series was the top choice given past successes with sporting facility applications, overall fixture performance and 10-year warranty. Lochmoor Club replaced (58) 1000W MH with 236W Essentials Series LED High Bays, Wide Distribution 480V 5000K.

"We choose the particular LED high bay light for the wide angle of light optics of lumens per watt, knowing this was going to be installed indoors where you have a higher ceiling. Where these fixtures shine is they have a very high lumens per watt but we were able to keep the wattage down and give them more light output - while maintaining even distribution of light," explained Michael Abraham, Jr., Co-Founder and President of Future Energy Group.



“

You get a much even coverage on the courts then what you did before. The difference is night and day. It's a huge difference. That is what the tennis pros had expressed. They were thrilled we gained evenness of light all around the court – from baseline to baseline..”

- Tom Hauff, General Manager of Lochmoor Club

RESULTS

Utility savings were the main motivation for Lochmoor Club to embark on a LED lighting upgrade at their facility. "As we looked at our utility bills, it became obvious that we needed to upgrade to the LED lights to get some cost savings in that arena. Working with Future Energy Group, they provided us with criteria to consider when narrowing down the choices," shared Tom Hauff, General Manager of Lochmoor Club.

"Although the bids varied, Future Energy Group's recommendations for Essentials Series LED high bays were the right product for our application with substantial cost savings."

The new LED high bays were estimated to provide a 78% energy savings with a 244,236 annual kWh savings for Lochmoor. Factoring in all costs for the LED upgrade, including labor, their payback period was a quick 1.1-years. Despite this significant cost savings, what swayed the board of directors was all the fringe benefits that accompanied selecting the Essentials Series LED high bay as their solution.

Virtually eliminating any maintenance costs coupled with a 10-year warranty were important factors of consideration for the board. "The LED high bays are rated at 150,000 hours. Given the operating hours of the club, they shouldn't need replacement for 20-30 years," shared Abraham. "The cost and time of replacing their old bulbs and disruption to the members is virtually

eliminated. We were not just interested in selling them any LED lights but a long term solution."

"...and the differential was the 10-year warranty not to mention the risk of my maintenance crew having to climb tall ladders to replace the bulbs was eliminated too," added Hauff. Even distribution of light and improved light quality were some of the most noticeable benefits Lochmoor Club also gained with the LED upgrade.

Not only did the original incumbent lighting technology from the 1980's drain energy, it also failed to provide a well-lit tennis court for the pros and members. The lead tennis pro has been receiving a lot of great feedback from the members and comments regarding improved ball visibility in all areas of the courts.

The incumbent technology was down-point, which created a lot of hot spots on the court, leaving a lot of areas without proper light coverage.

Lastly, there was a reduction of noise, eliminating a constant buzzing sound from the original light ballasts. The new LED high bays brought quiet lights to their courts.

"It was a very positive experience working with Future Energy Group and we are very satisfied with the performance of the new LED high bays," Hauff concluded.





LOCHMOOR CLUB
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