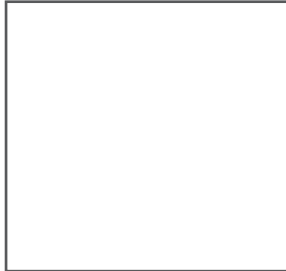




The Magic of Light®



Our Natatorium is open for the community twenty hours per day, seven days a week. Insufficient light reflection from ceiling, ground and walls using our current lighting created a cave like atmosphere in key areas such as the children's pool, the spectator area and the water slide. After retrofitting our facility with LED based luminaires not only did we significantly reduce our energy and maintenance costs, but our 15 year old pool now looks brand new. Actually, the lighting is now even better, with a more pleasant atmosphere, than when the lighting was first installed.

Treasure Valley Family YMCA
Jim Everett, CEO

CASE STUDY



Treasure Valley Family YMCA

CASE STUDY



The existing truss lighting system, consisting of 66 metal halide (MH) fixtures, reflects light from the ceiling to create ambient light. As the ceiling and walls have darkened over the years, the facility appeared gloomy and poorly illuminated. Each of the existing fixtures consumed 920 watts, resulting in high energy costs. In addition, the lighting fixtures were difficult to access requiring a lift and scaffolding for maintenance and lamp replacement. SimplyLEDs proposed a retrofit solution using LED arrays from Bridgelux that was one-third the cost of replacing the MH system while dramatically reducing annual energy and maintenance costs.



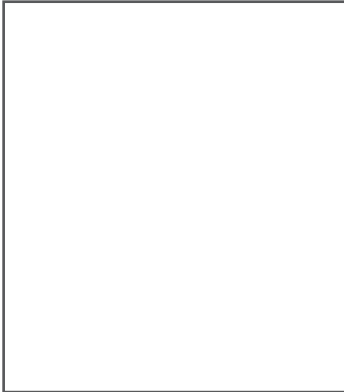
BACKGROUND

The Treasure Valley Family YMCA natatorium serves the community in Boise, Idaho. The water recreational facility, constructed 15 years ago, was originally designed with a metal halide (MH) indirect lighting system to reflect light from the ceiling to minimize glare on the surface of the water. Over the years the ceiling and walls darkened, reducing light levels and creating a cave like atmosphere.

The YMCA considered replacing the lighting system, but discovered the cost of installing a new MH system was prohibitively high. Since the recreational facility is open 20 hours per day, seven days per week, the energy and maintenance costs of a MH system was high. SimplyLEDs proposed a custom engineered solution leveraging the existing lighting infrastructure to minimize costs.

THE CHALLENGE

- › Light the indoor swimming and recreational facility
- › Retrofit the existing lighting system to improve illumination quality, safety and security while minimizing renovation costs
- › Reduce energy consumption and maintenance costs
- › Eliminate fire hazards due to the high operating temperature of metal halide lamps
- › Eliminate the 30 minute restart time after power loss



The Boise YMCA needed to upgrade the illumination in their recreational facility to make it more inviting but also to improve safety and security. Using high flux LED arrays from Bridgelux, simplifying the system design effort; we were able to engineer a custom indirect lighting retrofit system which resulted in minimal water glare while providing excellent illumination and increased light uniformity throughout the natatorium. Additionally, due to the use of solid state lighting, the entire installation is virtually maintenance free, further reducing operating costs for the YMCA.

Bob Deely
CEO SimplyLEDs, LLC

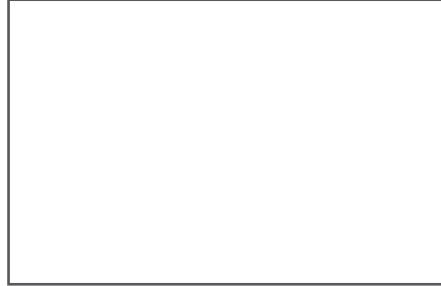


THE SOLUTION

- › Custom engineered 150W LED upgrade kit by SimplyLEDs utilizing much of the existing lighting system infrastructure
- › Replace 66 lighting fixtures using 2 MH lamps per fixture consuming 920 watts with 4 Piazza Series LED modules using Bridgelux ES Series LED arrays at 150W per fixture, an energy savings of 770W per fixture
- › Custom designed reflectors to achieve uniform light distribution with minimal water glare
- › Rapid overnight installation eliminating disruption to pool operation

BENEFITS

- › Annual energy savings of 80% or \$20,000, enabling an ROI of less than three years
- › More than \$100,000 in savings over the lifetime of the installation
- › 50% Increase to lux levels with increased lighting uniformity
- › Virtually maintenance free, eliminating more than \$5,000 per year in maintenance costs
- › Minimal water glare, enabling a safe and comfortable environment
- › Fire risk due to high temperature lamp operation eliminated
- › Instant on after power loss
- › No hazardous waste associated with lamp maintenance



FAST FACTS

Client

Treasure Valley Family YMCA

Project

Lighting Retrofit for Natatorium

Location

Boise, Idaho

Manufacturer

SimplyLEDs

LED technology

Bridgelux, Inc.



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