

Cherry Creek School District Swims Into Energy Savings with LED Lighting Upgrade



CASE STUDY

“When we completed this project, it felt as though we had renewed these spaces. The new LEDs have a great spread in these large areas and are able to illuminate the bleachers and pool decks so much better than the previous application. I have received very positive feedback in regards to the new lighting.”

-- Jim Barber, Electrical Department Supervisor, Cherry Creek School District #5



Cherokee Trail High School, Arapahoe County, Colorado

The Cherry Creek School District in Arapahoe County, Colorado is a powerhouse in swimming, with more than 27 state titles won by the girls' and boys' high school teams. Practices and swim meets are held at indoor pools across the district, so the quality and reliability of light in each location is critical to the safety and performance of student athletes and staff.

In four district high schools - Smoky Hill, Eaglecrest, Cherokee Trail and Grandview - the metal halide fixtures in the pool areas were becoming increasingly difficult to maintain. Components such as ballasts were deteriorating, and fixtures were failing at a high rate. The frequent occupancy of the pools, which are in use from 5 am until 10 pm each day, also posed a significant challenge to scheduling repair work. The district sought to replace the legacy lighting with LED fixtures that would not only be long lasting and energy-efficient, but would improve visibility in the pool and surrounding deck.

Flint Hansell, principal of Integrity Sales in Arvada, Colorado, and Ted Lunn, energy specialist for the 19 Colorado locations of CES, assessed the lighting at each of the high schools and recommended MaxLite's high output StaxMax LED Flood Lights for the retrofit project. StaxMax is an IP65-rated modular lighting system that can be specified in 180-watt configurations to achieve outputs from 18,000 to 56,000-plus lumens. Each module can be customized with either narrow, medium or wide beam optics, enabling light to be optimally dispersed upward or downward according to the application. Hansell and Lunn arranged for MaxLite to send a sample of the 180-watt StaxMax to Jim Barber, the school district's electrical department supervisor, for a trial installation at the Eaglecrest pool. Happy with the results, the district chose to move forward with StaxMax for the lighting project.



Eaglecrest High School, Arapahoe County, Colorado

The reduction in energy usage with the switch to LED was most significant at Eaglecrest High School. The school was able to lower the fixture count from 72 to 38 and still achieve comparable light levels. Replacing 400-watt metal halide fixtures with single-module, 180-watt StaxMax luminaires resulted in a 55% wattage reduction per fixture. One-to-one retrofits were implemented at the remaining high schools, with 83 180- and 360-watt StaxMax models replacing the existing 400- and 1000-watt metal halide fixtures.

In total, the Cherry Creek School District is saving 258,376 kWh and \$24,494 annually by switching to LED lighting.

MaxLite

MaxLite has been committed to providing energy-efficient lighting products since 1993. One of the first movers into LED technology in the industry, MaxLite offers an extensive line of quality, certified indoor and outdoor LED lamps and luminaires. A five-time recipient of the ENERGY STAR Partner of the Year Award for its industry leadership, MaxLite continues to be at the forefront of energy-efficient technologies through the innovative research and development capabilities of its teams and facilities in New Jersey, California and Indiana.

