

# Project Profile

## DALTON CONVENTION CENTER

### Dalton, GA

The Dalton Convention Center, in Dalton, Georgia, is a multi-use regional facility which includes Mashburn Arena, home court of the 2015 NAIA Champion Dalton State Roadrunners men's basketball team. It also features elegant ballrooms, versatile meeting rooms, and a lecture hall, as well as the Georgia Athletic Coaches Association Hall of Fame.



Meeting Rooms



Arena

#### Facility Type:

Convention Center and Sports Arena

#### Products:

Holophane Phuzion LED fixtures with advanced lighting controls and data dashboard

#### Savings:

\$55,320 annually

#### Situation

Outdated lighting technology was having an adverse effect on bookings and patrons in both the meeting rooms and the arena. Buzzing ballasts, flickering lights and dimmer issues often prevailed. Light quality in the arena was insufficient by TV broadcasting standards. Energy costs were high, maintenance expenses were significant and proving the business case to secure the required funding for a lighting upgrade was challenging.

#### Solution

A three phase approach was designed based upon comprehensive engineering grade audits of the arena, banquet halls and meeting spaces. The meeting rooms were converted to reduced wattage LED fixtures with improved color rendering and connected to occupancy sensors, dimmer controls and a complete data dashboard for metered savings. The banquet halls and arena soon followed. The control panels not only allowed for verification of energy savings, they enabled the pre-selection of up to a dozen different "scenes" for occasion based lighting effects accessible by any internet enabled device. Initial light levels in the arena were measured at static 20 foot candles, from fixtures that could not be turned off and then back on again without warm-up time. After conversion, the LEDs provided flexible output levels with up to 80 foot candles, quadrupling the light output using less than half the energy. Both the design/audit and implementation phases were conducted by Eco Engineering.

#### Results

The combined project reduced the lighting portion of electricity needs by 77% and gave the Convention Center a state-of-the-art facility which increased the number and variety bookings. The significantly improved quality of light now meets NCAA standards for national TV broadcasts.

- **Annual Demand Reductions**  
Over 1740 kW in the first year
- **Annual Consumption Savings**  
More than 461,000 kWh per year
- **Reduced Billings**  
Energy savings from metered verification forecast a five year reduction in energy costs of more than \$200,000. Coupled with reductions in air conditioning usage due to lower heat levels from new lighting technologies and reduced maintenance expenses, the total project savings will exceed \$275,000 over five years.

**Dalton!**  
Convention Center