



Eagle Arts Academy
Wellington, Florida

LED Lighting Case Study

Lighting That Supports Educational Environments

Founded in 2013 by Gregory Blount, Eagle Arts Academy Charter School in Wellington, Florida, believes in educating the whole child using challenging 21st century curriculum that focuses on the arts. Their innovative facilities provide practical knowledge and hands on experience in the performing and production arts.

Even though the school is only a couple years old, the gymnasium lighting was dim and seemed antiquated. Additionally, a local church that utilizes the school's gym for Sunday service was complaining of poor light levels and the lighting color temperature.

Eagle Arts Academy was also faced with increasing

energy costs and extremely high maintenance fees for their current gymnasium lighting due to the 26 foot high ceilings.

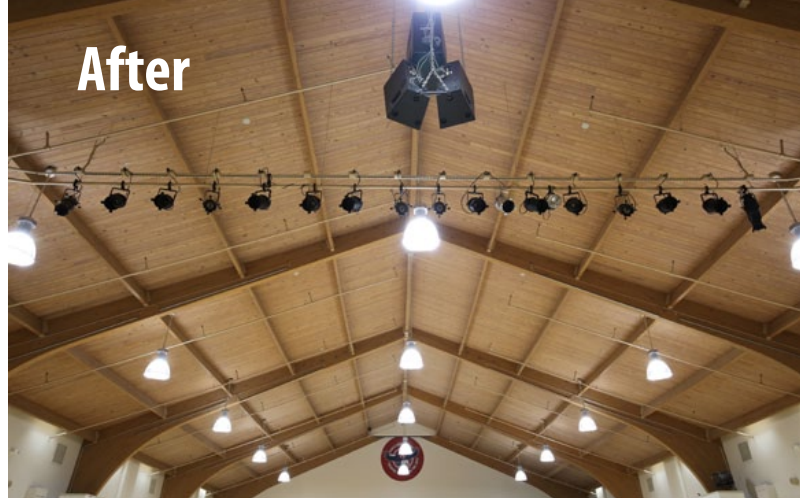
The school knew it needed a change and worked with the experts at LED Source® to meet their desired goals of saving money while improving the overall lighting.



Before



After



“Seeing is truly believing. We did this with a goal to save on electricity costs, but the lighting improved so much, we are now updating the rest of the school.” - Gregory Blount

TOTAL SAVINGS



Lighting Energy
\$3,907



Operating Costs
\$2,893



Annual Savings
\$6,800*



Energy Savings
74%

*Savings listed is an estimate only and based upon information provided.
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EAGLE ARTS ACADEMY

The Solution

The previous lighting for Eagle Arts Academy Charter School consisted of (30) 400-watt mercury vapor fixtures and (40) 32-watt fluorescent 4-foot T8 tubes. Consuming 13,280 watts, the traditional lighting measured only 18 foot-candles on the ground and created a green hue in the gymnasium. The extremely low light levels made it difficult for the school to host activities such as sporting events and church services.

The LED Source® Design Team utilized the eFFINION® DecaBay® HighBay and determined that the new fixture would increase light levels to 34 foot-candles, while reducing the number to (18) 150-watt high bay fixtures and one-for-one replacement using (40) eFFINION® DecaLux® 18-watt T8 LED tubes. Both the highbay fixtures and tubes feature a 10-year warranty.

The Results

It is estimated that Eagle Arts Academy Charter School will reduce annual lighting energy consumption by 74%. Additionally the school will save annually \$3,907 in lighting energy, \$1,464 in maintenance and \$1,429 in HVAC costs. Total annual saving is estimated at \$6,800 with a return-on-investment in under 2 years. The school also elected to finance the project, with nothing out-of-pocket, through LouMan Money®.

