

Church Converts to Energy Saving Benefits of LED Lighting from MaxLite

MaxLite[®]
A NEW WAVE OF LIGHT

CASE STUDY



Photos by Scott Evers

The First Baptist Church of Bethalto, Illinois was looking to update its facility with improved lighting that provided energy savings. The 25,000-square-foot building and exterior were lit by an aging system of fluorescent and metal halide fixtures that had become prohibitively expensive and labor intensive to maintain. Converting to LED was the ideal solution because of its lower energy consumption and longevity. Working with local representative agency Cool City Lights, the church replaced the lighting throughout the property with MaxLite LED lamps and fixtures.

The most dramatic transformation occurred on the exterior of the building, where many of the fixtures were no longer functional. Six 400-watt metal halide pole-top fixtures in the parking lot were replaced with QuadroMAX, MaxLite's universal and scalable outdoor luminaire, in a 160-watt, 5000K configuration. Delivering exceptional efficacy of 110 lumens per watt, QuadroMAX can be customized for virtually any type of outdoor lighting application by applying one of eight different mounting arms to a universal body to create a canopy, area, flood or wall pack luminaire.

MaxLite LED wall packs were installed on all sides of the building to enhance the safety and security of parishioners. Five 80-watt WallMax standard LED wall packs replaced 400-watt metal halide fixtures in front, while seven 175-watt metal halide wall packs in the receiving area at the rear of the building were exchanged for 30-watt full cutoff models. A higher output, 55-watt full cutoff model was selected to replace the 250-watt metal halide wall pack above the door on the east side of the building.



“We were very pleased with the lighting upgrades. The biggest improvement was in the parking lot. Previous dark spots have been eliminated, and the safety of those coming and going from the Church has improved.”

- Tom Howland, Trustee, First Baptist Church



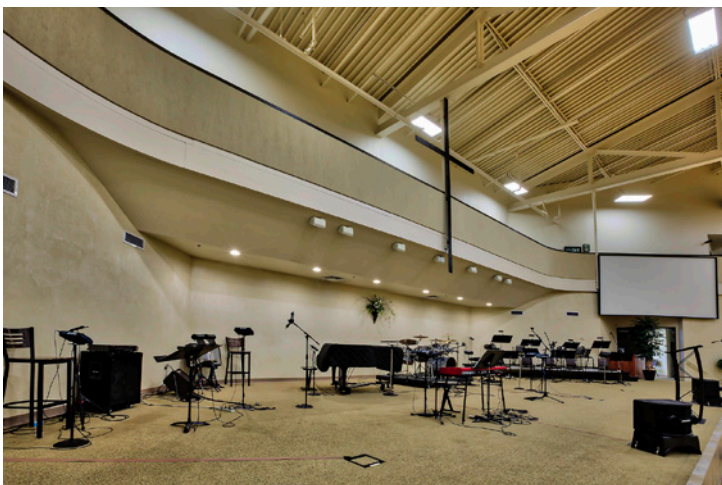
Inside the church, the goal was to create a more inviting atmosphere while cutting energy costs.

“The crew was challenged to provide lighting that was warm and welcoming to our congregation,” said church trustee Tom Howland. “This was accomplished by Richard [Tallerico, president of Cool City Lights] working closely with our worship pastors. The end result is very good, and we are anxious to see the energy savings.”

Forty MaxLite 14-watt downlight retrofits in 5000K were used to convert the 90-watt incandescent downlights above entranceways and the stage in the gymnasium and auditorium. The retrofits were installed into the existing 6” recessed cans using torsion springs, allowing the work to be completed without opening the ceiling. Twenty-six 2’x4’ fluorescent troffers in the stairwells and balcony walkway were replaced with 45-watt Direct Lit Flat Panels in 3500K and 4100K. Both the downlights and panels are dimmable, providing the church with additional energy savings and enabling members to tailor the light to preference.

Fluorescent linear fixtures throughout the gymnasium and auditorium were re-lamped with MaxLite LED T8 and T5 lamps in a range of color temperatures, while six lamp-ready highbay fixtures were installed in the main reception area.

By switching to LED, the church will save approximately 55,000 kWh and \$3,600 in energy costs annually, and recoup its investment in 2 ½ years.



MaxLite

MaxLite has been committed to providing energy efficient lighting products for more than 20 years, and was one of the first movers into LED technology in the industry. A four-time ENERGY STAR® Partner of the Year, MaxLite established the MaxLED® brand, an extensive line of indoor and outdoor lighting fixtures featuring innovative LED luminaires and lamps using the latest state-of-the-art LED technology.