



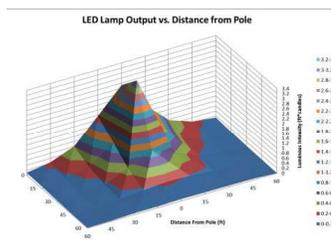
CASE STUDY

Energy Assessment for LED Display Technology, Inc. (USAPG)

LED Display Technology, Inc. (dba US Applied Physics Group) manufactures lighting fixtures that use proprietary optical components, innovative heat management technology and LED's. USAPG is located at the Stony Brook Incubator in Calverton, NY.

Challenge

USAPG requested an independent third-party analysis of electrical energy savings resulting from use of their LED lamps in parking lot applications. USAPG feels that this analysis will support an increase in total sales and is targeting the addition of 25 jobs in New York State.



Solution

NYSP21's Green Technology Accelerator Center provided a comparison of USAPG's LED parking lot lamps (shown in photo below) and metal halide parking lot lamps at the Stony Brook Incubator. Potential energy savings were calculated for various lamp replacement scenarios to determine the energy advantage of using USAPG's LED lamps.

NYSP21 measured lamp illumination patterns, total lamp output and electrical energy use for USAPG's LED parking lot lamps and KD 400M-R5S metal halide lamps at the Stony Brook Incubator. NYSP21 also calculated efficiency improvements for direct lamp replacement and equivalent illumination lamp replacement scenarios.

Results

Due to variations in lamp illumination between USAPG's LED lamps and the existing metal halide lamps, NYSP21 calculated energy savings for direct lamp replacement projects and for equivalent illumination projects. The comparative evaluation showed that:

- Replacement of existing KD 400M-R5S metal halide lamps with USAPG's LED lamps would consume 79% less energy for equivalent levels of illumination



Testimonial

"LED Display Technology, Inc. was pleased to partner with NYSP21 to evaluate the energy efficiency of our innovative lighting fixtures. NYSP21's independent third-party assessment of our new lighting technology confirmed an energy savings of >79% for our latest generation lighting product compared to the existing product. As we introduce new technology to the market, we anticipate the addition of 25 new jobs supporting new product design and manufacturing. We sincerely appreciate the independent product evaluation provided by NYSP21 in support of our efforts."

- James Hoffman, LED Display Technology, Inc.

CHALLENGE

- USAPG sought to find an environmentally & cost conscious alternative to the metal halide parking lot lamps located at the Stony Brook University Incubator

SOLUTION

- NYSP21 provided an energy comparison of USAPG's new LED lamps vs. the current KD 400M-R5S metal halide lamps

RESULTS

- Replacement of existing KD 400M-R5S metal halide lamps with USAPG's LED lamps would consume 79% less energy for equivalent levels of illumination

NYSP21 PARTNERS



10 Regional Technology Development Centers

Funding provided by the New York State Department of Environmental Conservation.

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