At a university where brain power rules, installing Cree's CXB Series high-bay luminaire in the new Perry Field House turf room was a "no brainer."
Opportunity

At Bowling Green State University (BGSU), they take their sustainability efforts very seriously. They are a proud signatory of the American College & University Presidents’ Climate Commitment (PCC) since 2012, reflecting the university’s pledge to take actions to achieve climate neutrality. In support of that commitment, a few years ago, students set up the Student Green Initiatives Fund, an optional $5.00 per semester fee to further environmental sustainability on campus.

As Dr. Nick Hennessy, Sustainability Coordinator at BGSU, explains: “We were on the lookout for a project with great results in terms of cost savings and also reduction of emissions given our electricity profile and metric tons of CO2.” So when the need arose to upgrade lighting at the 100x60-yard turf indoor field in Perry Field House, Matt Rubel, Coordinator of Energy Management at BGSU, put together a plan of action.

Solution

According to Hennessy, “This was one of the projects we profiled in our climate action plan so the proposal for this project was submitted to the Student Green Initiatives Fund committee. It was a very popular project that was approved quickly and unanimously for reasons that included payback and emissions reductions. As a result, the Green Fund covered half the project’s cost.”

As Rubel states, “The original lighting wasn’t the greatest. We wanted to improve light quality, increase foot candles and also save energy. Our rep knew we wanted LED but couldn’t afford the traditional high-bay LED. We almost had the project kicked off with T5s but when Cree came out with the new CXB Series high-bay, it was really a no-brainer. And we felt very comfortable going with Cree because Cree is viewed as the leader in LED. They drive that technology.”

The Cree® CXB Series can replace up to 250W and 400W HID fixtures at the highest lumens per dollar among LED luminaires today. Rubel continues, “It was a little more money to go with LED but it was the same payback, a lot better light and hardly any maintenance, especially with Cree’s great 10-year warranty. Most fixtures don’t have that. When the CXB Series came out, we had good reviews from our engineers so we decided to go ahead.”

As Rubel states, “We were able to double the foot candles in the area, decrease the energy which helps out with the PCC by reducing our carbon footprint, and we were able to reduce the hum of all those ballasts. Another great benefit was instant on. They loved that.”

“CREE BRINGS THEIR ‘A’ GAME TO TURF FIELD WITH BIG LIGHT AND BIG SAVINGS”

“The Cree® LED lights are so much better than what we had before. When people walked in, their first impression was ‘Wow!’”

Matt Rubel | Coordinator of Energy Management
Bowling Green State University
Benefits

One feature of the CXB Series that BGSU did not anticipate was that since the CXB Series luminaires are instant-on, staff had to learn they could turn the lights on and off as needed. As Dr. Hennessy comments, “Now with instant-on, the lights are off a lot of the time when they aren’t in use as opposed to before. Because of the necessary warm-up process with the previous lights, lights would remain on between events, even when the facility wasn’t in use. That just created more waste. Now it’s so easy to shut the lights on and off.”

With the Cree CXB Series, BGSU also saw a tremendous improvement in the light quality. Rubel elaborates: “We were basically looking for an even light. The metal halides gave us a lot of hot spots and cool spots. So even when the old light fixtures were on, it was very dim in certain areas. We wanted something a lot more uniform as well as a certain foot candle level in the space to meet NCAA requirements.”

Dr. Hennessy elaborates: “The clientele we were dealing with on this regarding room usage, they expect and need the best. It needed to be just right in terms of the light quality and all the other features because the staff are fairly specific with their demands as a customer. It couldn’t be just any light. I know that Matt worked very hard to get it right and make sure we had the right number of fixtures and the light quality was correct. This was pretty sophisticated.” The CXB Series fit the bill as Rubel confirms, “They love ‘em. We’ve heard nothing but positive reviews.”

Maintenance considerations were also critical. Hennessy explains, “Because the lights were over brand new artificial turf, we couldn’t go into the space with normal lifts. So we needed an LED fixture that had very low maintenance. The CXB Series with the 10-year warranty fit the bill. Gone are the days when a maintenance call for the previous fixtures would cost $3000 with lift.” Rubel adds, “The fixtures were also very easy to install.”

In addition to helping secure the Green Fund backing, the Cree LED lighting qualified BGSU for a utility rebate. According to Rubel, “We worked with Efficiency Smart, American Municipal Power’s energy efficiency program, to secure $8,900 in rebates. Hennessy adds, “It’s a great incentive. In our case, that cut down the payback even further,” bringing it down to less than two years.

And about those old metal halide fixtures... Thanks to the ingenuity of the Sustainability team, those lights now have a new life... as patio table tops in many other locations.

“Being instant-on, the Cree® lights are so easy to shut off. The staff loves that they can turn them on and off at will without having to go through the warm-up process.”

Dr. Nick Hennessy, Ph.D, J.D.  |  Sustainability Coordinator  
Campus Operations, Bowling Green State University
Cree® LED Lighting Used

• CXB Series High-Bay

Participants

End User: Bowling Green State University
Agent: Michigan Lighting Systems East, LLC
Distributor: Crescent Electric Supply Company

Visit www.cree.com/lighting or contact a Cree lighting representative to learn more.