LACKAWANNA COLLEGE LIGHTING UPGRADE

Television-Ready Court Lighting for Historic NCAA Transition

PROJECT OVERVIEW

Location:
Lackawanna College Basketball Court, Scranton, PA

Project Type:
Athletic Facility Lighting Upgrade

Team:
Lackawanna Falcons Basketball

ABOUT LACKAWANNA COLLEGE :

Lackawanna College is a private institution in Scranton, Pennsylvania, serving close to 2000 students. In June 2025, the college made history by becoming the third school nationally to be invited to transition from the National Junior College Athletic Association (NJCAA) to NCAA Division II.

Once approved, the Lackawanna Falcons will be joining the prestigious Pennsylvania State Athletic Conference (PSAC) as its 18th member institution, making them the first Division II program in Lackawanna or Luzerne counties.

THE CHALLENGE:

Television-Ready Standards Required

With Lackawanna's transition to NCAA Division II, their basketball court needed to meet television broadcast standards for potential game coverage. The existing lighting consisted of outdated metal halide corn cob fixtures that provided insufficient and uneven lighting.

Key Issues:

- Old metal halide fixtures in aging infrastructure
- Inadequate light levels for television broadcasting
- Uneven light distribution across court and bleachers
- Need for improved visual quality for NCAA Division II standards

What began as court-only lighting quickly expanded to include upper bleacher sections and catwalk areas when stakeholders noticed the dramatic difference in light quality.

THE SOLUTION:

BAYE3 LED High Bay Fixtures

Primary Court Lighting – BAYE3 240W (32 fixtures)

- Power and color select technology
- Easy installation with 10-foot power and dimming cords
- Controls-ready for future sensors
- Prismatic reflectors for optimal light distribution

Upper Bleacher Lighting - BAYE3 100W (18 fixtures)

- 5000K color temperature for consistent appearance
- Lower wattage appropriate for spectator area requirements
- Prismatic reflectors for even light distribution
- Same fixture family ensures design consistency

VP3 Vapor Tight Linear Fixtures

Catwalk Lighting: VP3 45W (3 fixtures)

- IP66 rated for demanding environments
- NEMA 4X, IK10 impact rating, NSF approved, ideal for a high traffic area
- DLC Premium listed with power and color select

Pre-Installation Planning

Lighting Layout & 3D Rendering: Comprehensive lighting calculations and 3D modeling were provided to help Lackawanna understand expected light levels before purchase, ensuring the solution would meet their television broadcast requirements.

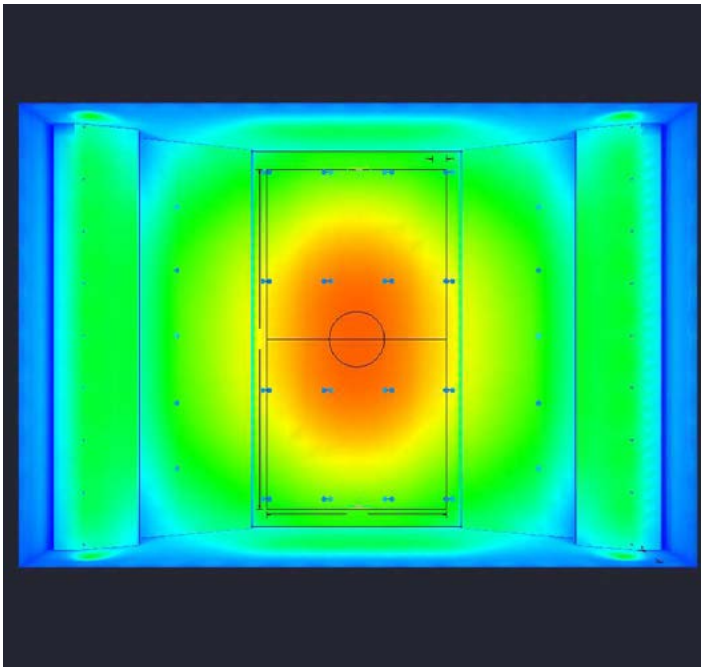
Installation Advantage

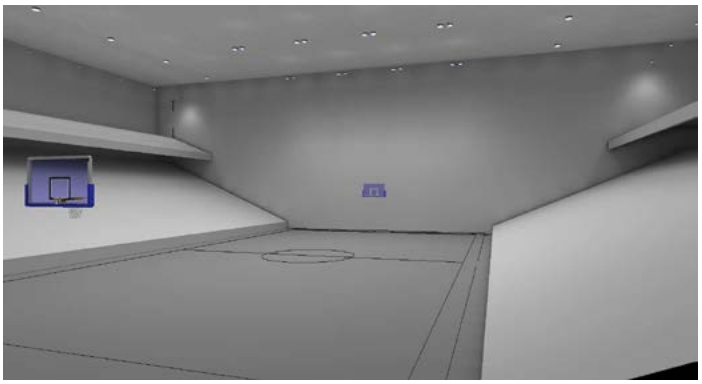
M10 to 3/4” pipe adapter enabled direct installation onto existing mounting pipes—no additional hardware or infrastructure overhaul required, saving significant time and cost.

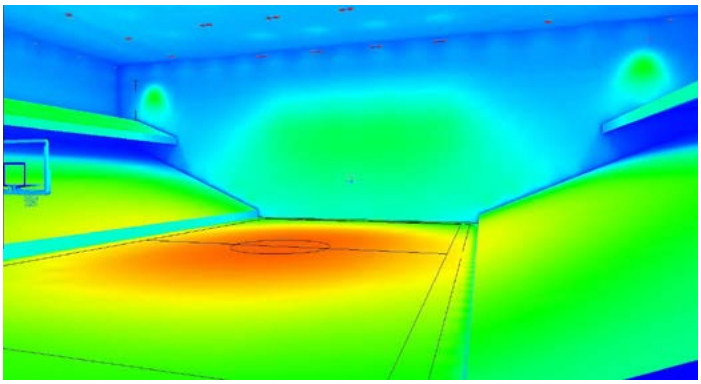
PERFORMANCE RESULTS:

Detailed Lighting Performance Analysis

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
BASKETBALL COURT	Illuminance	Fc	144.72	171	97	1.49	1.76
UPPER BLEACHERS	Illuminance	Fc	73.66	84	45	1.64	1.87







Basketball Court Performance:

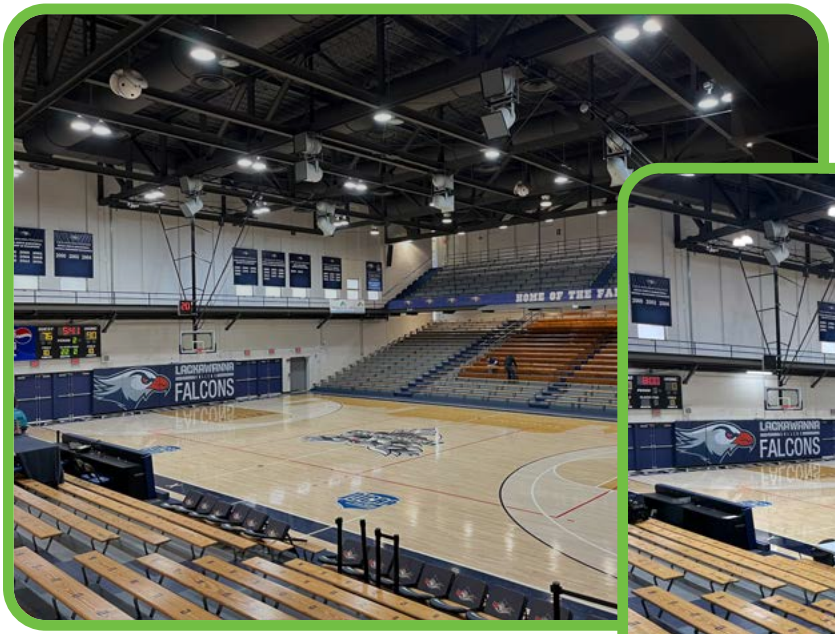
- **144.72 FC average illuminance exceeds broadcast standards (100+ FC required)**
- Exceptional uniformity ratios of 1.49 (avg/min) and 1.76 (max/min) - well below the 2.0 industry benchmark
- Professional broadcast quality with no dark spots or shadows affecting camera coverage

Upper Bleachers Performance:

- 73.66 FC average provides comfortable spectator viewing
- Outstanding uniformity with ratios of 1.64 and 1.87, ensuring even lighting distribution
- Professional broadcast quality with no dark spots or shadows affecting camera coverage

These uniformity ratios represent professional-grade lighting performance. Ratios closer to 1.0 indicate more even lighting distribution, and achieving results under 2.0 is considered excellent for athletic facilities. Most facilities struggle to achieve such exceptional uniformity.

BEFORE



AFTER

PROJECT PARTNERS:

This project involved successful collaboration across all stakeholders:

- Lackawanna's Erik Larson championed the project to support the college's NCAA transition goals & Facilities Director Rob Hyde ensured project leadership and facility requirements were met.
- Advanced Electrical & Communications (AEC)'s Adam Burleigh executed the installation expertly, utilizing existing infrastructure with the M10 pipe adapters.
- Schaedler Yesco's Mark Malvizzi facilitated seamless product delivery and project coordination.
- Locust Sales' Brian Cornia identified the opportunity and guided the lighting solution selection.
- EiKO's Ed Wynne provided technical expertise and fixture specifications to meet broadcast lighting standards.

In the photo from left to right:

Brian Cornia (Locust Electric Sales)

Adam Burleigh (Advanced Electrical & Communications)

Erik Larson (Director of Athletics – Lackawanna College)

Rob Hyde (Facilities Director – Lackawanna College)

From initial assessment through final installation, each partner contributed essential expertise that delivered television-ready lighting supporting Lackawanna's historic athletic transition.

Contractor Spotlight

Advanced Electrical & Communications (AEC) brings 13 years of specialized commercial and industrial electrical expertise to every project. As an upstanding member of both the National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers Local Union 163 & 81, AEC has built a solid reputation across three states for quality workmanship and efficiency. Their proven track record with large-scale lighting retrofits and new installations made them the ideal partner for this challenging project at Mohegan Pennsylvania.

Contractor Testimonial

"The installation was incredibly smooth thanks to the M10 to 3/4" pipe adapter. We utilized the existing mounting infrastructure completely, saving significant time and cost. The BAYE3 fixtures installed directly onto existing pipes without modifications."
— Adam Burleigh, Advanced Electrical & Communications LLC (AEC)

PROJECT IMPACT:

This lighting upgrade directly supports Lackawanna College's historic NCAA transition. With television-ready lighting, Falcons' home games can be broadcast, increasing visibility and providing enhanced exposure for student-athletes as they compete in the prestigious PSAC conference.

As Lackawanna College continues toward full NCAA Division II membership, this lighting upgrade ensures their facility meets modern athletic competition standards

GO FALCONS!