



UNIVERSITY/SCHOOLS



C-Flex®

CONTROLLABLE RETROFIT KITS

MORAVIAN UNIVERSITY BETHLEHEM, PENNSYLVANIA

PRODUCT USED

RP-T5HO-4FT-2L-E5-M-G2

RP-T5HO-4FT-3L-E5-M-G2

EXISTING FIXTURE / CONTROLS

4 FT HIGH BAY FIXTURES

4 FT PENDANT FIXTURES

LUTRON QUANTUM W/
ECOSYSTEM

BACKGROUND

Athletic facilities are a heartbeat of campus life — in 2012, Moravian University gave theirs a major upgrade. Swapping out 1000W metal halide lights for energy-efficient 360W fluorescent fixtures, they paired the change with a Lutron digital control system for flexible programming and centralized access. By 2020, Moravian was ready to enhance performance even further with new LED upgrades without replacing the existing fixtures.

SITUATION

Partnering with C-Flex, the team retrofitted the original Lutron fixtures with LED drivers and Type C LED lamps—boosting performance without replacing the entire system. The existing Lutron Quantum digital controls remained fully intact, continuing to deliver seamless scene selection and energy savings.

SOLUTION

The lighting upgrade at Moravian University covered 130 fixtures across both the main competition and auxiliary gyms, preserving the durable Lutron housings built for high-performance athletics. During the retrofit, the team took advantage of the opportunity to clean lenses and fixtures, boosting light quality even further. By replacing (6) 54W fluorescent lamps in each fixture with (6) 25W C-Flex Type C LED Lamps, and swapping out three ballasts for just two LED drivers, they reduced energy use, heat output and installation time.



UNIVERSITY/SCHOOLS



DISTRIBUTOR

COLONIAL ELECTRIC
ALLENTOWN, PA

MFG. REPRESENTATIVE

SYNERGY ELECTRICAL SALES
FAIRLESS HILLS, PA

INSTALLER

DIEFENDERFER ELECTRIC
ALLENTOWN, PA

RESULTS

Moravian University's gym lighting retrofit exceeded expectations—delivering 55% energy savings and brighter, more even illumination with zero dark spots. Light output jumped 13% in the auxiliary gym and 24% in the competition gym, thanks to 320° LED distribution and instant-on performance. By reusing 130 existing fixtures, the team avoided landfill waste and cut costs, all while supporting campus sustainability goals. The upgrade took just 20 minutes per fixture and preserved full control functionality, making it a smart, scalable solution for future campus renovations. The result is a cooler, brighter gym with longer-lasting components, full UL certification, and a renewed five-year warranty. Go Greyhounds!

MORAVIAN COLLEGE NEEDED

- Energy savings
- Improved light output
- Personalization & scene control
- Event hosting
- Maintain existing fixtures / durability w/ limited project waste
- Extend fixture warranty
- Main 'look & feel' of spaces
- Low labor cost
- Heat reduction & UV protection
- Reduced ballast maintenance

LED + LUTRON DELIVERED

- 55% wattage reduction
- 22% average foot candle increase
- Full utilization of Lutron Quantum w/ EcoSystem
- Specific lighting scenes were created for a variety of events
- Fixture housing remained 'as is' w/ limited disruption and no messy fixture waste
- 5 year warranty
- Easy Retrofit - 20 min per fixture
- Fixture lens will not yellow - LEDs run very cool
- Replaced ballast w/ LED drivers