



	Fixture	Energy Savings
Previous System	1000W Metal Halide	33+%
Ephesus Solution	Arena Downlight 750	

VENUE

Nicholson Fieldhouse is the practice facility for University of Central Florida's Knights NCAA Division I football team, who were undefeated in their 2017 season. The fieldhouse was built in 2005 and was the first indoor practice facility at any of Florida's DI football programs.

CHALLENGE

The UCF Knights athletic department wanted to address several lighting challenges by switching to Ephesus LED technology: high energy consumption by the existing 1000W metal halide system needed to be lowered, continual maintenance of the metal halide system was costly and disrupted operations, light levels and uniformities were poor and becoming problematic - the majority of newer indoor practice facilities are illuminated to 75-100 footcandles while Nicholson Fieldhouse had around 40 FC, and the contractor-based control system provided on-off operation while the 20 minute warm-up/cool down cycles made it nearly impossible to turn off the system during operational hours.

SCOPE

The existing fixtures were replaced on a one-to-one basis in their current locations so as to save on installation costs. New wireless controls were installed to eliminate the need to re-wire the facility, and to provide the team with dimming and control capabilities. Light levels were expected to increase dramatically to improve playability for the team.

SOLUTION

77 Ephesus Arena Downlight 750 fixtures (operating at 680W each) were installed. The Ephesus solution included the AirMesh wireless control system to increase operational flexibility as well as to provide remote control and monitoring. Eaton's Ephesus Lighting was able to deliver the new lighting system quickly, with only a couple of weeks between order and delivery.

RESULTS

Players returned to an improved experience at the fieldhouse. Light levels more than doubled, from approximately 40 FCs to over 90 FCs, greatly improving visibility and player safety. Energy consumption was reduced by about a third, before considering the additional benefits provided by the controllability of the AirMesh system.