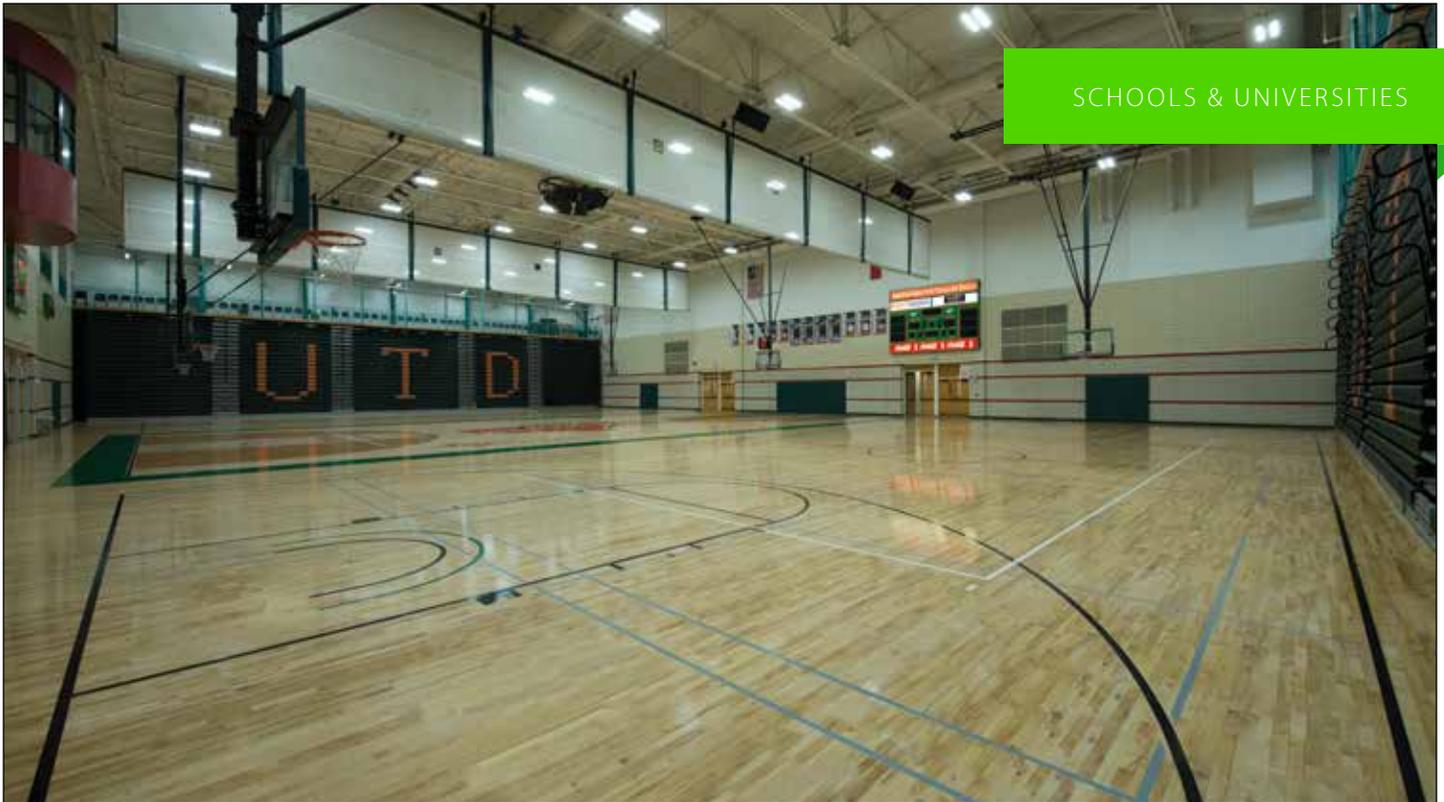


# Case Study



SCHOOLS & UNIVERSITIES

82%

ENERGY SAVINGS

\$286K

LIFETIME SAVINGS

DLC

LISTED

## University of Texas at Dallas

The University of Texas at Dallas is a public, doctoral research university with a Division III athletic program.

The university offers 138 academic programs, with eight schools and 50 research programs and institutes.

*“The ability to adjust each light individually has helped create specific lighting configurations for various events, such as graduations, career fairs, and athletic events.”*

— Tricia Losavio, Director of Recreational Sports





### The Problem

The multi-purpose gymnasium—used for DIII basketball games, morning yoga, graduations, career fairs, and just about anything else at the university requiring a large open space—was dimly lit by old metal halides. In addition to the poor light output from the metal halides, they were inefficient—using over 20,000 kWh per month.

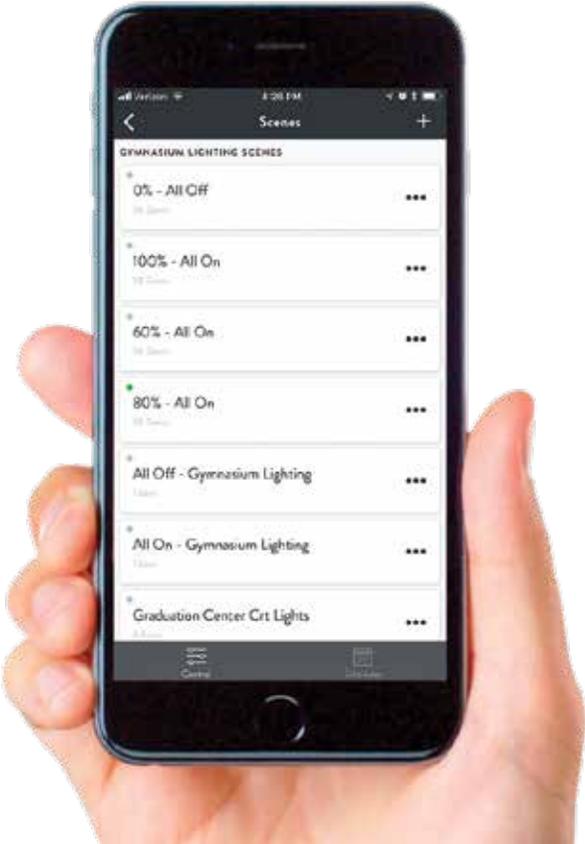
*“It kind of felt like you were in a dingy dungeon if you were on the side courts.”*

— UT Dallas’s Associate Director for Energy, Conservation, & Sustainability

There weren’t luminaire level controls, so to create scenes for events, the staff had to climb special lifts up to the ceiling and partially unscrew the bulbs. The same lifts were used to replace the bulbs every 20 months! With lift rentals as high as \$1500 and another \$500 in labor costs, replacing lights and settings “scenes” could easily escalate to over \$20,000 per year. In addition to wasting time and money, the lifts posed serious safety concerns replacing bulbs suspended over 30 feet off the ground.

### Concerns

The space didn’t follow the same schedule every day, so all the lights were just left on all day, wasting energy. The new system needed the ability to easily create and update robust scenes and schedules. As the needs and uses of the space changed, the new system needed to change with it.



## The Solution

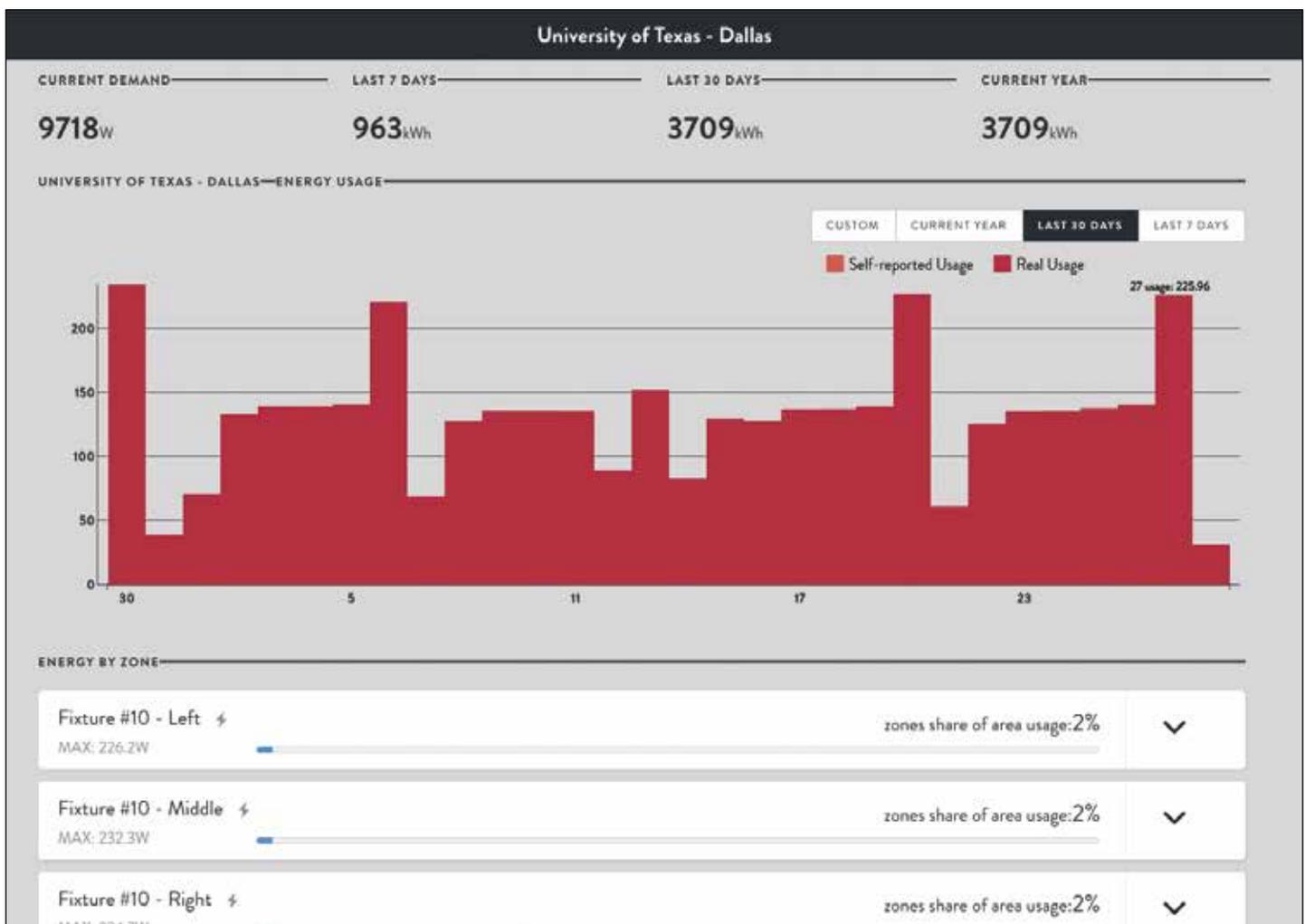
RAB's RAIL high bay fixtures were placed over the court, and SHARK washdown fixtures were placed in the mezzanine. The fixtures are rated for 27 years, so the ceiling lifts can be put away for quite a while. Lightcloud Controllers on each fixture allow for luminaire level control, so scenes were created for each use. For basketball games, the bleachers are dimmed, and the court is set to 100%. For graduation, there's a spotlight look for the stage. Lights can even be dimmed for 5AM yoga meditation. Scheduling and phone apps make it easy to create the perfect lighting environment while saving energy.

## Results

Not only are the lighting and controls better, the system is saving tons of energy, nearly 17,000 kWh per month! When the system was designed, RAB estimated energy savings of 70%. Despite careful efforts to be as accurate as possible, the actual savings weren't 70%—they were 82%! Over the life of the system, the university is going to save \$286,000\*!

These savings don't take into account lift rentals or utility rebates, which can be huge. RAB RAILS, SHARKs, and Lightcloud are all DLC listed for additional incentives and rebates.

*“Our in-game experience has improved. We are now able to dim the lights for introductions and the brightness is greater, making it better for video broadcasts and photography.” – Bill Petit, Director of Athletics*



\*Lifetime savings of the system is based on 6.5c/kWh

## Installed Lightcloud Devices



### Gateway

120-277 VAC, 50/60 HZ

The Gateway is the brain of a Lightcloud system. It communicates with RAB's servers via a private 3G cellular connection, so no internet access is required. Plus, it features an Uninterruptible Power Supply for added peace of mind.



### Controller

120-277 VAC, 50/60 HZ

The Controller is the basic building block of the Lightcloud system. Use it for switching and 0-10V dimming. Deploy it for power management. Or simply use it to extend the range of your Lightcloud mesh network.

## Installed Fixtures



High Bay

**RAIL225W/D10** —

Replaced 1000W and 400W Metal Halide  
Ultra-high efficacy  
100,000-hour lifespan, virtually maintenance-free operation  
0-10V driver for variable dimming down to 10%



Washdown

**SHARK4-50W/D10** —

Replaced 400W Metal Halide  
Impact resistant  
IP66 rating protects against dust & water ingress  
0-10V dimming  
100,000-hour lifespan

## Project Details

**Client:** The University of Texas at Dallas

**Distributor:** Sean Walters, Regency Lighting

**Manufacturer's Rep:** Tad Alison, Alison & Co.

*"The new lighting system has really updated the look and feel of our gym courts."*

*— Tricia Losavio, Director of Recreational Sports*



**RAB**® | Controls

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