

PARKING LOT LIGHTING

BACKGROUND

Energy efficiency is especially a priority in parking lot lighting due to the long running operational hours and the high wattages of traditional outdoor light sources such as metal halide and high pressure sodium lamps. Lighting plays a leading role in the safety and security of a parking lot for both pedestrians and drivers.

CHALLENGE

The outdated lighting in a parking lot at a large residential eldercare facility was contributing to high energy and maintenance costs. The parking lot lighting fixtures were 175 watt metal halide canopy mount with failing transformers and lamps. The fixtures on poles were extremely challenging to maintain and, consequently, about half off the pole lamps were dark.

SOLUTION

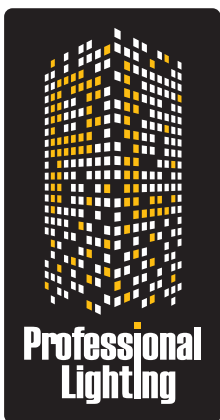
Professional Lighting installed a sample group of Light Emitting Diode (LED) fixtures for a trial demonstration with great results. The canopy fixtures were replaced with low profile 42 and 30 watt LED canopy fixtures with medium and wide distributions. Using switching for both 24/7 operation and dusk to dawn resulted in additional energy savings. The pole lights were retrofitted with 50 watt LED light plates for improved lighting at the top of the deck increasing safety and security.

The US Department of Energy estimates that using the LED site lighting specification will reduce parking lot energy use over 50% compared to other outdoor light sources. In addition to energy cost savings, LEDs' 100,000 hour expected life dramatically reduces maintenance costs.



BENEFIT SUMMARY

- Annual energy savings
Poles: \$735
Canopy 24/7: \$900
Canopy Dusk/Dawn: \$1000
- Annual maintenance savings
Poles: \$450
Canopy 24/7: \$250
Canopy Dusk/Dawn: \$320
- Total System Savings: \$3655



When It Comes to Lighting, We're Light Years Ahead!

412-B Gallimore Dairy Rd • Greensboro, NC 27409 • 336-605-5888 • 336-605-2888 fx
www.professionallighting.com