

Energy Savings LED High Mast Project

Case Study

Summary

In the fall of 2016, a Pennsylvania correctional institution upgraded their outdated high mast lighting from 1000 watt high pressure sodium (HPS) and metal halide (MH) fixtures with new LED HMAO LED II lighting technologies from Holophane, an Acuity Brands company.

Schaedler Yesco, supplyFORCE, Holophane, and PPL Electric Utilities teamed up to develop this energy savings project for the prison. The electrical supply procurement administrator, supplyFORCE, made it simple to procure the lighting material for this project as an authorized GSA schedule holder and fulfillment center.

Project Scope

- Retrofit lighting project with reduced quantities 1.2:1 new LED fixtures
- Eighty-one (81) 1000 watt high pressure sodium (HPS) fixtures replaced with sixty-seven (67) Holophane HMLED2
- Eighty-one (81) 1000 watt metal halides (MH) replaced with sixty-seven (67) Holophane HMLED2

Savings Highlights

- Rebate paid: \$22,764
- Annual kWh savings: 455,669 kWh per a year
- Annual electric savings: \$36,316
- Estimated annual total savings \$62,599
- Payback period without rebate: 5 years
- Payback period with rebate: 4 years

