



Featuring Silescent's
Canopy LED Lighting Fixture
8 inch, 15 watts

Silescent Canopy LED Lighting Case Study II

Miami Country Day School

Lower School Outdoor Canopy Fixture Replacements

Miami, Florida



Before Retrofit



After Retrofit

Project Objectives...

Replace existing 70 watt HID fixtures with the specific goals of:

- Reducing energy consumption;
- Improve lighting quality and distribution - overall;
- Provide Instant ON/OFF eliminating warm-up cycles;
- Reduce maintenance costs of ongoing re-lamping, cleaning and fixture replacements.

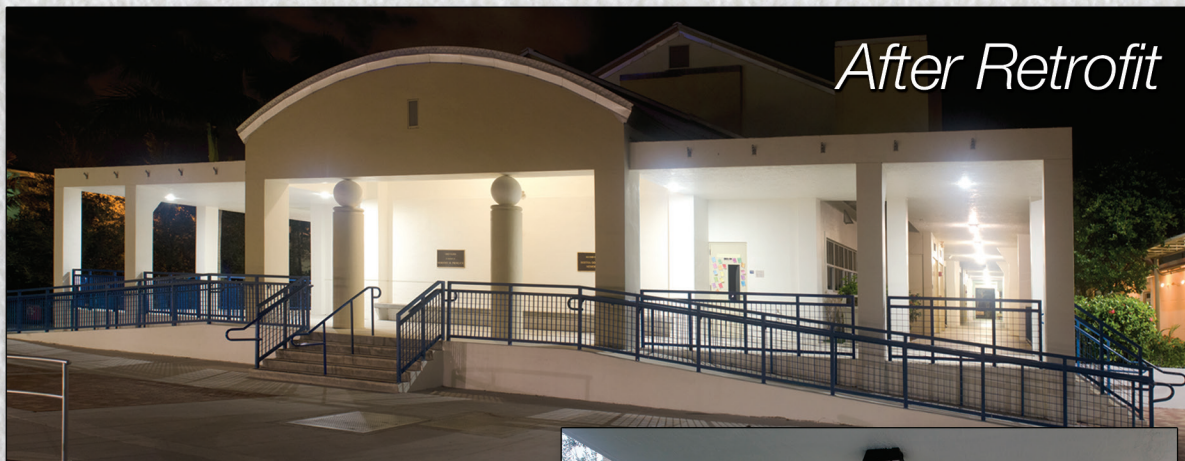
Silescent® combines LED technology with patent protected thermal management, electromechanical assembly and the industry's most advanced drive circuitry.

Project Performance...

Total Savings achieved \$15,111/year
(\$139/fixture/year)

(Detailed analysis on reverse side)

SILESCENT®
Lighting
SUPER EFFICIENT, LED LIGHTING PRODUCTS



After Retrofit

Project Scope...

EXISTING HID Fixtures

Fixtures: HID Fixture
HID Lamp: 70 watts/fixture
Number of Fixtures..... 109
Ballast (Factor)..... 10% (7.0 watts/fixture)
Total Existing Wattage: 8,393 watts

REPLACEMENT Silescent Fixtures

Replacement Fixture: Silescent 15 watt Canopy LED Fixture
Wattage: 15 watts/fixture
Number of Fixtures: 109
Total Wattage, 109 fixtures: 1,635 watts



Before
Retrofit

Summary of Savings...

Energy Savings: Considering equal usage (13hrs/day x 365 days/year)

Energy: (77w - 15w) x 109 x 13 hrs/day x 365 days/yr x \$.15/1,000watts = **\$4,810/year**

Maintenance Savings*: Bulb/Ballast/Lens part replacements + Labor to replace these items

- Two Bulb Replacements/year/fixture: \$35/bulb = \$70/fixture x 109 = \$7,630/yr.
- Labor 15 minutes/bulb at \$30/hr (est.) x 109 x 2 fixtures = \$1,635/yr.
- Using 10%/yr Ballast failure rate x 109 fixtures x \$80/Ballast = \$872/yr.
- Ballast replacement Labor: 30 min./ballast at \$30/hr (est.) x 109x10% fixtures/yr = ... \$164/yr.

**All replacement parts and labor costs provided by Miami Country Day School, Facilities Manager*

TOTAL SAVINGS: \$4,810 (energy) + \$8,502 (parts) + \$1,799 (labor) ≈ \$15,111/year (\$139.00/fixture/yr)

Additional Benefits...

- Full spectrum array based LED – improves visual acuity;
- Wide dispersion beam spread – provides even illumination with no dark shadows;
- Sanitary Design allowing it to be easily cleaned;
- Extra-long 100,000 life rating – maintenance free operation.



Silescent® Lighting Corporation 954.766.8448
1417 SW 1st Avenue 877.766.8448
Fort Lauderdale, FL 33315 Fax: 954.206.0071
www.silescent.com