

Silescent Canopy LED Lighting  
**Case Study III**  
*Miami Country Day School*  
*High School Outdoor Canopy*  
*Fixture Replacements*  
*Miami, Florida*

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



*Before  
Retrofit*



### *Project Objectives...*

Replace existing 32 watt circular fluorescent lamp 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 \$8,111/year**  
(**\$63/fixture/year**)

*(Detailed analysis on reverse side)*

**SILESCENT®**  
*Lighting*  
SUPER EFFICIENT, LED LIGHTING PRODUCTS



After  
Retrofit

After Retrofit

## Project Scope...

### **EXISTING Circular Fluorescent Fixtures**

Fixtures: ..... Circular fluorescent lamp fixture  
Lamp: ..... 32 watts/fixture  
Number of Fixtures..... 129  
Ballast (Factor)..... 10% (3.2 watts/fixture)  
Total Existing Wattage ..... 4,540 watts

### **REPLACEMENT Silescent Fixtures**

Replacement Fixture: ..... Silescent 15 watt Canopy LED Fixture  
Wattage: ..... 15 watts/fixture  
Number of Fixtures: ..... 129  
Total Replaced Wattage ..... 1,935 watts

## Summary of Savings...

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

**Energy:**  $(35.2w - 15w) \times 129 \times 13 \text{ hrs/day} \times 365 \text{ days/yr} \times \$0.15/1,000\text{watts} = \text{\$1,855/yr.}$

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

- One Bulb replacement/year/fixture @ \$13.50/bulb = \$13.50/fixture x 129 = ..... **\$1,741/yr.**
- Bulb replacement Labor: 20 min./bulb at \$30/hr (estimated) x 129 fixtures = ..... **\$1,290/yr.**
- Each Ballast requires replacement every 3 years @ \$18/Ballast x 129 fixtures = ..... **\$774/yr.**
- Ballast replacement Labor: 15 minutes/ballast at \$30/hr (est) x 129/3 fixtures/yr = .. **\$322/yr.**
- Each Lens replaced on average every 2yrs @ \$18/Lens x 129/2 fixtures/yr = ..... **\$1,161/yr.**
- Lens replacement Labor: 30 min./Lens at \$30/hr (est.) x 129/2 fixtures/yr = ..... **\$968/yr.**

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

**TOTAL SAVINGS: \$1,855 (energy) + \$3,676 (parts) + \$2,580 (labor) ≈ \$8,111/year** (\$63.00/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 hour 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