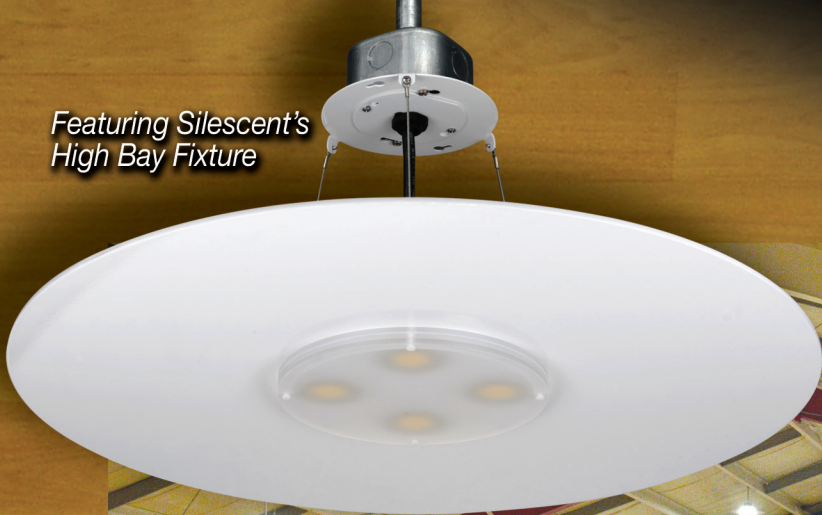


Featuring Silescent's
High Bay Fixture

Silescent High Bay LED Lighting Case Study I High School Gymnasium Miami, Florida



After Retrofit



Before Retrofit

Project Objectives...

Replace existing 400 watt Metal Halide fixtures with 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

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

Project Performance...

Total Savings achieved \$5,688.00/year
(\$237.00/year/fixture)
(Detailed analysis on reverse side)

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

Project Scope...

EXISTING MH Fixtures

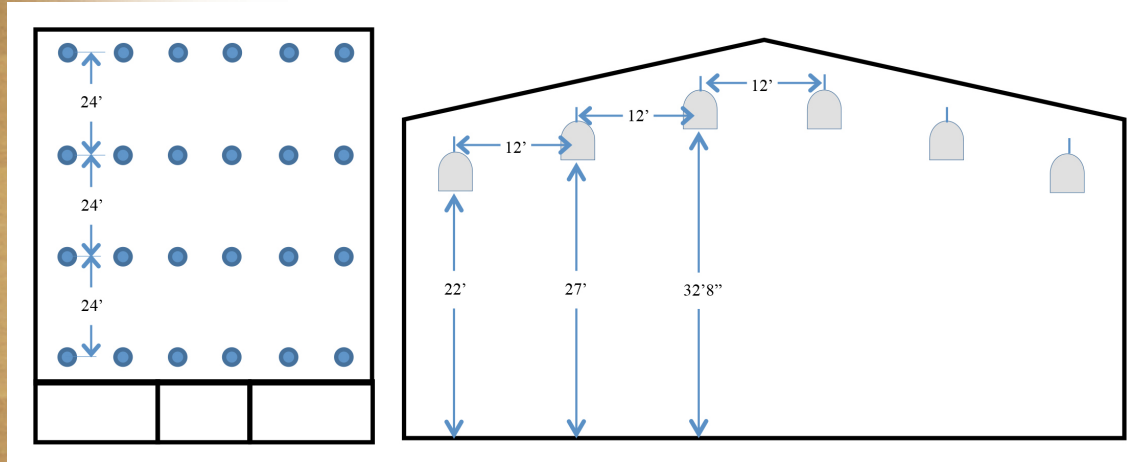
Fixtures: Cooper MHSS-W-400-277V
 Lamp: Sylvania 400watt (M59-S)
 Number of Fixtures..... 24
 Total Wattage: 9,600 watts
 On-Demand Use 13 hr/day x 300 days/yr (3,900 hrs/yr)

REPLACEMENT Silescent Fixtures

Replacement Fixture: .. Silescent 200w High Bay LED Fixture
 Wattage: 200 watts/fixture
 Number of Fixtures: Qty 24 pendant mount
 Total Wattage: 4,800 watts
 On-Demand Use* 8 hr/day x 300 days/yr (2,400 hrs/yr)

**reflects instant on/off capability of Silescent High Bay LED fixture*

Gymnasium Layout



Gymnasium Plan View

Gymnasium Building Section

Summary of Savings...

Energy Savings:

At Equal Usage:

Energy Savings: $(400w-200w) \times 24 \times 13 \text{ hrs/day} \times 300 \text{ days/yr} \times \$0.15/1,000\text{watts} = \dots\dots\dots \$2,808/\text{yr}$

Additional Savings for Instant ON/OFF use:

Energy Savings: $(400w-200w) \times 24 \times (13-8) \text{ hrs/day} \times 300 \text{ days/yr} \times \$0.15/1,000\text{watts} = \dots\dots\dots \$1,080/\text{yr}$

Additional Savings for HVAC Cost Reductions:

Energy Savings: 30% savings (est.) of energy used to be realized from A/C =\$600/yr

TOTAL Energy Savings: $\$2,808/\text{yr} + \$1,080/\text{yr} + \$600/\text{yr} = \dots\dots\dots \mathbf{\$4,488/\text{yr}}$

Maintenance Savings*: Annual re-lamping of 24 fixtures with scissor lift for access and two maintenance personnel.

Maintenance: $24 \text{ fixtures} \times \$15/\text{bulb} + \$350 \text{ lift rental} \times 8 \text{ hrs} \times 2 \text{ staff} \times \$30/\text{hr} = \dots\dots\dots \$1,200/\text{yr}$

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

TOTAL SAVINGS: \$4,488 (energy) + \$1,200 (maintenance) \approx \$5,688/year (\$237.00/year/fixture)

Additional Benefits...

- Instant on/off – events start on time, end on time;
- Full spectrum array based led – improves visual acuity for all events
- Wide dispersion beam spread – provides even illumination throughout facility, eliminates dark shadows;
- Extra-long 100,000 life rating – maintenance free operation;
- Leasing options available to qualified purchasers.



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