

CASE STUDY

SEESMART[®] MEETS MINNESOTA ELEMENTARY SCHOOL

BUSINESS TYPE

Elementary School

BUSINESS LOCATION

Bloomington, Minn.

INSTALLATION AREAS

- Gymnasium

SEESMART PRODUCTS USED

- 120001

CASE SUMMARY



Before



After



This lighting layout shows the location of high bay fixtures in the gym and footcandle readings from before and after the Seesmart[®] LED retrofit.

RED- FOOTCANDLES BEFORE			GREEN- FOOTCANDLES AFTER		
12.6	○	○	25.5	○	13.0
41.1	○	○	41.2	○	41.0
○	○	○	○	○	○
16.3	○	○	17.1	○	12.1
37.2	○	○	42.0	○	41.1
○	○	○	○	○	○
11.4	○	○	9.8	○	19.4
41.6	○	○	41.0	○	42.1

CASE STUDY

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ANNUAL ENERGY SAVINGS

\$8,954.18

CARBON FOOTPRINT REDUCTION

35,392.90 lbs/yr

ANTICIPATED ROI

36 months

RETROFIT PERKS

- Reduced maintenance
- Reduced energy usage
- Cleaner, brighter appearance
- Dramatically increased light levels



CASE SUMMARY



Before



After



After



SEESMART[®] **MEETS MINNESOTA** **ELEMENTARY SCHOOL**

Elementary School

In 2009, an elementary school in Minnesota was growing increasingly dissatisfied with the lighting quality in the school's gymnasium. The 48 high-pressure sodium (HPS) high bays hanging there cast a dim, eerie glow. Each HPS fixture consumed 400 watts of electricity and took minutes to warm up. School officials knew it was time to replace their dingy, inefficient high bays and began looking for a better solution. After reviewing numerous products, they selected the Seesmart[®] 100-watt high bay in day white.

The school's LED retrofit proved to be a simple and rewarding process. Each HPS high bay and ballast was replaced by a Seesmart LED high bay. The Seesmart high bays vastly improved the gym's lighting quality. Under the old HPS high bays, footcandle readings in the 24-foot-high gym ranged from 9.8 to 25.5. Under the new LED high bays, the gym achieves between 37.2 and 42.1 footcandles. The Seesmart fixtures also power on and off instantly, and the day white color of the LED light gives the gym a bright, clean glow instead of a greenish gloom.

The Seesmart high bays have also improved the school's maintenance and energy costs. The Seesmart fixtures operate without a ballast and are covered by a 5-year warranty. They have reduced the power consumption of the gym's lighting by 75%. And by installing the Seesmart LED fixtures, the school has reduced its carbon footprint by over 35,000 pounds a year, the equivalent of planting seven acres of trees.

To further conserve energy, the school also installed a new lighting control system featuring 6 infrared and ultrasonic occupancy sensors. The control system has reduced the operating hours of the high bays from 12 to seven hours a day, five days a week. This conserves another 120 kWh of electricity a week.

School officials were delighted with the results of their lighting retrofit. Under Seesmart's high bays, the gym looks great, requires less maintenance, and uses far less energy than HPS fixtures. The school district and city are now considering retrofitting dozens of other gyms in the region.

To explore Seesmart's product line and discover how our LED products can transform your facility, call or email Seesmart today.