



Sure Bet for Schools



Gymnasium Lighting Retrofit

Eagle Valley Middle School, Carson City School District

Project Description:

Carson City School District converted 30 - 400 Watt High Intensity Discharge light fixtures to 54 Watt T5 High Output fluorescent fixtures with electronic ballasts in the school gymnasium.

Contractor: Quality Control Systems

Results/Benefits:

This project involved converting 30 HID lamps to High-Output T-5 fixtures with 4 lamps and electronic ballasts. The T-5s with electronic ballasts provide a 48% demand savings over the HID lighting system. Furthermore, T-5 lamps immediately re-strike when turned on, providing the gymnasium brighter, better quality light without a "warm-up" period. Therefore, the T-5 lamps can easily be turned off during non-occupancy periods. The school benefits from significant energy cost savings and the lowered maintenance cost of T-5 fixtures, which have a longer life than HID fixtures, while the students get a more comfortable and user friendly gymnasium.

Project Details:

	Total
Peak Demand Savings	6.66kW
Annual Energy Savings	22,500 kWh
Total project cost	\$13,500
Annual energy cost savings*	\$2,029.50

* Assumes that the electricity rate is \$0.09/per kWh

Note: Savings are based on assumed annual usage of 3,390 hours, converting 30 HID fixtures to T-5 fixtures with 4 lamps and electronic ballasts