

Hill Air Force Base

PROJECT OVERVIEW

- ▶ 50% energy reduction
- ▶ \$147K+ annual savings
- ▶ improved light levels

“We cut energy consumption in half by cutting lamp wattage in half. Not only did we cut the wattage in half, but we also increased the light level in formerly gloomy, under lit aisles.”

*John Adams
CES/Way
Ogden, Utah*

CARBON REDUCTION EQUIVALENTS



⇒ 2066



⇒ 138

Background

The challenges at Hill Air Force Base in northern Utah were to accomplish major energy savings goals and to improve lighting quality in three large base warehouses. Hill Air Force base is home to many operational and support missions including logistics management and depot maintenance of Air Force planes and helicopters. Stingray’s patented dual reflector technology was considered to improve energy efficiency and raise the light levels throughout the warehouses for safety.

Solution

After careful review, Hill Air Force Base decided to implement a one-for-one retrofit of its existing conventional 400-watt metal halide fixtures with Stingray’s 200-watt pulse start metal halide SPA highbays.

A total of 2,866 Stingray highbays were installed in the three warehouses. Stingray’s dual reflector system was particularly well suited to the warehouse environment as light could be better focused in the warehouse aisles and at the same time provide better illumination for the materials on the shelves (and in the open storage areas as well).

Results

A 50% reduction in energy use resulted in annual savings of over one million kilowatt-hours (kWh) of electricity and almost \$150,000 per year in utility charges. At a rate of \$0.25 per kWh the payback on the project was just over 4.5 years, which was 1/3 sooner than was the goal for the project.

Light levels improved so much that task lights mounted to the lift trucks were no longer needed to locate and handle stored items, thus eliminating a hazard when moving heavy containers in constricted spaces.

The warehouses are in use 24/7, but only a part of the warehouse may be used at any given time, so motion sensors were installed to further save energy and conserve lamp life.



The Stingray luminaires are helping the Air Force to meet its aggressive energy savings goals.

“Warehouse employees were so pleased with the increase in the amount of light and its quality,” noted John Adams, of CES/Way International, Inc., who specified and installed the Stingray system.

[‡]application specific maintained illuminance recommended by the Illumination Engineering Society of North America

*as judged by the facility’s staff and workers

