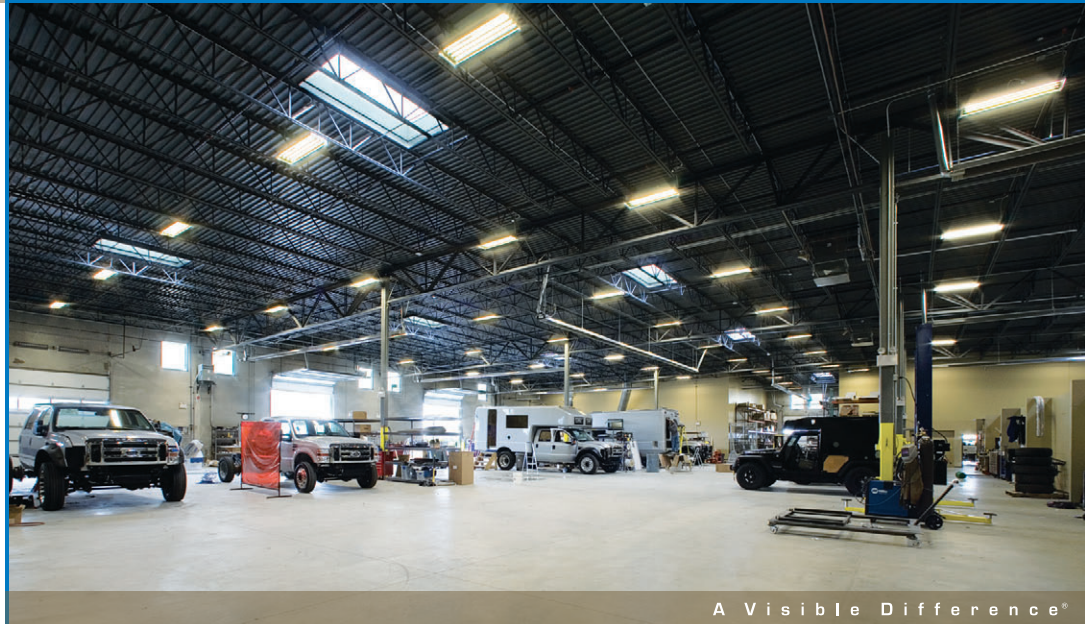


Case Study:

EarthRoamer – Lafayette, Colorado

Specialty Off-Road Vehicle Manufacturer Chooses Williams GL for Cleaner, More Efficient Lighting



Job Specific Information:

- 98 H.E. Williams GL 4-lamp 54-watt T5HO luminaires installed in the main production and maintenance area, and seven GL 4-lamp T8 32-watt luminaires installed in mezzanine spaces above the main floor.
- Mounting Height: 20' above the floor (main production area) and 12' above the floor (mezzanine)
- Spacing: 19' on center
- Footcandle Level: Average 60fc maintained in main production area
- Payback on investment: Estimated to be less than two years (based on energy savings over 400-watt metal halide fixtures)

As an entrepreneur with an engineering background, Bill Swails spent years carefully designing personal expedition vehicles that were efficient, durable and easy on the environment. So, when his business expanded enough to justify the construction of a new manufacturing facility near Denver, he took a close look at how that building could meet those same requirements.

"Our old facility was actually five leased spaces in two different buildings, and it had a lot of darker areas where it was hard to see," said Swails, EarthRoamer co-founder and COO. "So, I was looking for lighting that was bright and energy-efficient. That meant having cleaner, whiter light, using fixtures that would help us manage our overall energy costs."

Based on those parameters, metal halide and sodium-based lighting products were quickly eliminated from consideration, due to higher energy use or poor color clarity. Once the field had been narrowed to industrial fluorescent fixtures, project engineer Larry Smith said the Williams GL quickly rose to the top of the list.

"In meetings with Bill and (co-founder) Michele Connolly, they talked about what they wanted for light levels, energy efficiency and the ability to instantly switch lights on and off – things they weren't going to get with high-intensity discharge (HID) products," said Smith, principal of SRB Consulting Engineering in Loveland, CO. "That's when we knew the GL would be the right fixture for this application."

The largest space within the new 56,000 square-foot facility was the production and service area, where clear lighting was critical for quality manufacturing. Williams' GL fixtures, each with four 54-watt T5HO fluorescent lamps, maintained an average of 60 footcandles in the production area – far superior to the light levels in the leased facility. Meanwhile, Swails and Connolly approved the installation of other Williams luminaires – including linear suspended, indirect fluorescent and downlighting products – accounting for 80 percent of the building's overall lighting.

At a time when energy cost management is becoming more important than ever, Williams' GL products are helping EarthRoamer improve its bottom line. In addition to its superior paint and reflector technology, which delivers more light for less money, the GL luminaires in this project are switched to allow full, half or no lighting at any given time. That helps the company's production managers calibrate lighting needs with manufacturing and service activities.

"The key goal for this project was to get the light levels we wanted at the lowest possible energy use, and that's an area where Williams excels," said John Kampf, a principal with Ingwers Lighting Group in Denver. "Most of the building is lit using under one watt per square foot, which is very good."

