

ROADWAY
LIGHTING

Location: Lake Underhill Facility, Florida

Client: Lockheed Martin

Lighting Agent: SESCO Lighting

Products Used: 35 Carmanah EverGEN™ 1520 solar LED street lights:

- Type II distribution – 5625 lumens
- Coverage area (per fixture): 125ft. stretch of roadway (26ft. wide)
- Mounting height: 24 ft.
- Minimum: 0.2 fc; Average: 1 fc
- Operating Profile: Split Night, 5hr, 25%, 2hr; on at dusk at full intensity for five hours; dims to 25% full intensity; returns to full intensity two hours before dawn

Overview: Headquartered in Bethesda, MD, Lockheed Martin is a global security company that employs about 146,000 people worldwide, and is engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products, and services.

When the security company performed an assessment of their Orlando, Florida facility, the results revealed that their existing 25-year-old streetlights needed replacement—including the underground wiring that powered them.

In partnership with Florida-based Carmanah distributor SESCO and HD Supply, Lockheed specified the ideal solution to be an easy-to-install, electricity-independent, field-proven lighting system that could seamlessly transition the facility's lighting requirements. With that, SESCO, HD Supply and Lockheed outlined an ideal application for solar-powered lighting.





Requirements: The decision to investigate the feasibility of a solar-powered street light option was one already in line with the company's movement towards sustainable business practices. Lockheed had already committed itself to find ways to reduce energy usage across their facilities worldwide, and had already benefited from the successful installation of energy-efficient lighting at other facilities. Lockheed was looking to build similar momentum in Orlando.

But environmental responsibility aside, Lockheed had another "green" consideration to contend with: cost. In the past, solar-powered outdoor lighting was a costly alternative for outdoor illumination.

But SESCO disagreed. Following a comparison between solar and AC-powered fixtures, representatives from both sides affirmed that the Carmanah solar LED street lights would save significant cost. At \$342,000 (including purchase price and maintenance) over a 20-year period, the EverGEN lights far outweighed conventional AC-powered streetlights with a cost of \$563,000 (including new wiring and electricity costs) over 20 years.

Our Solution: As Robert Carey, Chief Facilities Engineer at Lockheed, commented, the decision to go solar was an easy one. In searching for the best solar-powered light for the job, SESCO and HD Supply chose the Carmanah EverGEN™ 1520.

Featuring bright, dark-sky friendly BetaLED™ LEDway™ fixtures, a cost-effective installation, and an energy management system that provides enhanced autonomy and ensures reliable, all-night operation, the Carmanah EverGEN 1520 systems had virtually specified themselves.

Representing the state's largest installation of solar outdoor lighting, the EverGEN solar LED lights offered the most practical and economical alternative to conventional hard-wire systems. At the same time, the installation helped to achieve Lockheed's larger commitment to sustainable business practices through energy-efficient and environmentally-friendly technologies.