

Central City Parking Lot – Spokane, Washington Spokane Washington Showcases Green Technology



Carmanah EverGEN™ 1530 Solar LED Lighting Solutions

Project Summary

End User:

Spokane Public Facilities District (SPFD)

Lighting Agent:

Cascade Lighting

Lighting Engineering and Design:

MW Engineering (Lighting Engineers)
Escent Lighting (Lighting Design)

Project Scope:

Parking lot lighting systems for a major city parking lot located next to the INB Performing Arts Center, a brand new events centre in downtown Spokane.

Product:

Carmanah EverGEN™ 1530 solar LED parking lot lights

Other Benefits:

Significant showcase of city's continued commitment to green practices, portability that will allow the city to move the lights as site requirements change

Project Specification:

17 systems:

8 Type IV distribution – 4191 lumens

9 Type V distribution – 4398 lumens

Coverage area: 400ft x 300ft

Mounting height: 24 ft.

Minimum: 0.2 fc

Avg/min ratio: 2.4

Operating Profile:

Split Night, 5hr, 25%, 2hr: The light comes on at dusk at full intensity for five hours, then dims to 25% of full intensity, the light returns to full intensity two hours before dawn.

Central City Parking Lot – Spokane, Washington Continued...

When the Spokane Public Facilities District (SPFD) began to look for lighting alternatives for a new parking lot facility in the downtown core, solar LED lighting was top of mind. The central location of the parking lot in combination with its proximity to the INB Performing Arts Center, a major new facility in town, gave the SPFD the perfect opportunity to showcase its continued movement towards renewable energy alternatives.

The SPFD, which operates the Spokane Veterans Memorial Arena, Spokane Convention Center and INB Performing Arts Center, has adopted a Sustainability Policy for all of its venues. The policy mandates that all of the District's venues be operated in an environmentally friendly manner and that the facilities take every available opportunity to reduce waste by conserving essential resources, recycling and using recycled materials, and utilizing renewable energy sources whenever possible.

The District sought the help of lighting experts Escent Lighting and MW Consulting Engineers in finding a renewable energy alternative that would suit their needs and the lighting performance requirements of the site. With the help of authorized Carmanah lighting agent Cascade Lighting, the EverGEN™ solar LED light by Carmanah Technologies was proposed.

As the installation would represent the first LED site lighting in the city (not to mention the first solar site lighting installation), performance and reliability of the chosen solution was key. During the bid process the options for solar LED lighting solutions were evaluated carefully.

Light output that met IES standards along with proven reliability of the lighting systems were key considerations. Manufacturer experience and availability of support was also important. In addition, portability played a role as SPFD was seeking a viable long-term lighting

solution that could be moved and placed in a different location as the District grew and site requirements changed.

After extensive evaluation, the Carmanah EverGEN 1530 rose to the top as the solution of choice. With Carmanah's extensive experience in solar LED technology, customer confidence in the manufacturer's expertise and support allowed the EverGEN solution to shine. Additionally, the systems provided a robust and reliable lighting solution that met the high light output requirements of the site. Without the need for trenching or electrical grid connections, the Carmanah solar lights could also be picked up and moved to accommodate the SPFD's changing needs.

With dark-sky friendly BetaLED LEDway fixtures, the lights also provided a solution that will help the city reduce light pollution. With a lifespan of 100,000 hours, the LED fixtures will virtually eliminate bulb changes at the site. When combined with the solar-powered technology of the lights, the LED fixtures will also allow the city to significantly reduce maintenance costs for the lights and will eliminate electricity costs for illuminating the parking lot altogether.

Kevin Twohig, Executive Director of the Spokane Public Facilities District, couldn't be happier with the lighting selection. "As a district we have adopted practices and procedures that actualize our Sustainability Policy. We are constantly looking for ways to better improve our venues in environmentally friendly ways and selecting solar LED lighting for the new parking lot facility was both logical and environmental."

Jeremy van Lith of MW Consulting Engineers said of the project, "We at Escent Lighting and MW Consulting Engineers were thrilled to be an integral part in helping achieve the Spokane Public Facilities District's commitment to promote sustainability in our community via the South Convention Center Parking

Lot Solar Lighting Project. By applying our past experience and continuing education regarding new technologies like the EverGEN Series systems, we were able to successfully create a lighting design that not only met, but exceeded the Owner's expectations."

For more information on:
Carmanah Technologies, please visit:
www.carmanah.com
Spokane Public Facilities District,
please visit: www.spokanepfd.com
Cascade Lighting, please visit:
www.cascadelighting.com
MW Consulting Engineers, please visit:
www.mwengineers.com
Escent Lighting, please visit:
www.escent-ltg.com



Carmanah EverGEN solar LED lighting was chosen to illuminate a central city parking lot in Spokane, Washington.