

Reliable Lighting for Rural Residents



Project Statistics:

End User: Electric companies, municipalities and utility districts in rural areas

Application: Outdoor, retrofit luminaire fixtures

Products: Evluma's 50 Watt Clearlight Beacon, 40 Watt Clearlight EcoSpot and 40 Watt Clearlight Narrow

Partner: Evluma



Situation:

Seattle-based LED lighting manufacturer, Evluma, is devoted to the development of environmentally low impact solid-state lighting products. The company's flagship product, the Clearlight, is an LED replacement lamp designed to fit into existing outdoor fixtures.

Over the years, Evluma's Clearlight has become a key lighting solution for electric companies, municipalities and utility districts in rural areas. Evluma's LED bulbs are brighter, more energy efficient and, most importantly, more reliable than the sodium vapor and mercury vapor bulbs typically used in dawn-to-dusk fixtures. Reliability is a critical characteristic in rural areas where repair trucks are not readily available and often have to drive long distances to switch out broken and burned-out bulbs.

An LED bulb's reliability is directly tied to the bulb's thermal management solution. Heat is a great enemy to LEDs. The more effectively the bulb's heat is dissipated, the brighter, longer and truer to color the LED will burn.

In order to guarantee the Clearlight's reliability, brightness and efficiency, and make it a viable solution for electric companies and municipalities, Evluma selected the Nuventix SynJet as its LED thermal management solution.

“The key to long-lasting, bright LEDs is keeping the temperature constant and cool. SynJet helps us do this – and helps us do this without having to deal with moving parts. Fans wear out. With the SynJet, we don’t have this concern.” – Cathleen Shattuck, creative director, Evluma

For more information about Nuventix and SynJet® Technology visit www.nuventix.com

Solution:

The SynJet is an oscillating diaphragm that quickly pushes jets of air over the source of the heat, cooling it more effectively all while using less energy. Whether the dog days of summer or the bitterness of winter, the SynJet keeps the LED temperature constant, ensuring a long life for the bulb and a bright light for community members.

Further lending to the SynJet’s reliability is its fanless design. With no ball bearings or joints to wear out the SynJet is guaranteed to outlast other cooling solutions and even the LED bulb itself.

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When coupled with the SynJet, Evluma’s Clearlight LED bulbs last three to four times longer than the mercury vapor and sodium vapor lights they replace. This means three to four fewer trips down rural roads for repairmen and three to four fewer bulbs to purchase to keep the roads lit. The end result: maintenance savings of more than \$1,900 over the life of the bulb for electric companies and municipalities that use Evluma’s Clearlight with the SynJet.

For rural areas, LEDs cooled by the SynJet are the most cost effective, reliable lighting solution available. The more than 200 electric companies and municipalities Evluma works with have realized this, and have bright, long-lasting lights at lower cost to show for it.

