

SSL Postings

U.S. DEPARTMENT OF ENERGY

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Although you do not often hear about growth in domestic manufacturing here in the United States, the solid-state lighting industry is steadily growing and establishing a manufacturing presence here at home. Solid-state lighting was not only born of U.S. ingenuity and R&D, but is also riding the crest of a worldwide trend toward greater energy efficiency. This offers a golden opportunity for U.S. manufacturing to take a significant role in SSL. From time to time, the Postings focus on SSL companies manufacturing here in the U.S., in a series called "SSL in America." This is not intended to endorse or promote any of the companies, but rather to describe advances in energy-efficient solid-state lighting. The activities you'll read about here are consistent with the U.S. Department of Energy (DOE) white paper ["Prospects for U.S.-Based Manufacturing in the SSL Industry."](#)

Spotlight on NuLEDs

NuLEDs is a manufacturer of Power over Ethernet (PoE) LED lighting solutions. Founded and run by the husband-and-wife team of Chris and Lisa Isaacson, the company got its start in 2011 making other LED and control technologies, but by the end of that year had switched its focus to PoE. In addition to making the devices that link LED lighting to a power source as well as to the Internet of Things (IoT), NuLEDs also makes controls, sensors, and lighting systems and develops the software that drives and unifies it all. The company partners with a wide range of luminaire manufacturers that cover most lighting applications.

According to Chris, all of the R&D and engineering is done at the company's headquarters, which is located in Carlsbad, CA – 30 miles from San Diego, three miles from the Pacific Ocean, and a mile from Legoland – and is home to seven fulltime employees. The hardware, he says, is made by California-based contract manufacturers. Most of the software is developed either at the Carlsbad headquarters or by California-based contractors, with the remainder developed overseas. The firmware is developed by NuLEDs employees, one of whom is based overseas rather than in Carlsbad.

Chris notes that the company tries to use local vendors whenever feasible – which is why the sheet-metal fabrication, anodizing of metal parts, cable assembly, and plastic molding are all done within driving distance of Carlsbad, and all of the electronics manufacturing is done in the U.S.

Chris explains that having nearly everything done in California provides NuLEDs with the flexibility to get things done much more quickly than would otherwise be possible. The close proximity of most everyone involved – from designers to production folks – gives them ready access to key equipment, improving responsiveness to last-minute changes, shrinking lead time, and facilitating quality control.

What's more, Chris adds, manufacturing domestically helps the company protect its intellectual property, which is central to the "disruptive" technology it sells. And then there's the satisfaction that comes from helping the local economy by spending locally. On the flip side, Chris says, are the higher labor rates here in the U.S., though these are offset to some degree by virtually eliminating the need to import.

NuLEDs is among a number of companies that are working to create and strengthen a solid-state lighting manufacturing base here in the U.S. This will not only help bring significant energy savings through more efficient lighting products, but will benefit our economy by adding jobs at multiple levels of the supply chain.

As always, if you have questions or comments, you can reach us at postings@akoyaonline.com.