## SSL Postings

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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 i-Lighting**

I-Lighting is an LED lighting products manufacturer based in a small town called North East, in rural Cecil County, MD. The company's product line includes outdoor deck and stair lighting, fence and outdoor structure lighting, landscape and hardscape lighting, undercabinet lighting, cove lighting, indoor stair lighting, up-washing wall sconces for lobbies, a new line of poultry lighting for chicken farmers, and dimmers. All of i-Lighting's luminaires run on low-voltage direct current. The company was founded a decade ago by CEO Scott Holland, in the basement of his home. Back then, i-Lighting consisted of Scott, his wife, and another employee, but as it grew it moved into its present location, which is just a short drive away from where it began and, with Interstate 95 nearby, has ready access to the eastern seaboard.

The company is one of a number of manufacturers that have brought jobs back to the U.S., in a trend known as "reshoring" — such as GE Lighting, which last year dedicated part of its Hendersonville, NC, plant to the manufacturing of LED circuit boards that were previously outsourced to overseas vendors. Scott explains that like GE Lighting, i-Lighting initially had its printed circuit boards made overseas. But over time he discovered that the quality of those boards dropped as the failure rate and pricing rose, and the distance and language barrier made it hard to rectify things. So, with the help of a \$100,000 InvestMaryland grant from the state of

Maryland in 2013, the company purchased the equipment to populate its own printed circuit boards, which it purchases in volume in blank substrate form (i.e., with no installed parts) from an offshore source. This has lowered manufacturing costs, which has resulted in increased sales volume, which in turn has enabled the company to hire more people.

In addition, Scott notes, earlier this year i-Lighting invested half a million dollars in injection-molding equipment so that it could make its own plastic pieces, which the company had been getting from overseas. This has enabled i-Lighting to hire five more people. Today 14 people are employed at the company's North East facility, not counting a force of independent sales reps — as well as a considerable ripple effect from using U.S. vendors whenever possible. Most of i-Lighting's manufacturing — including its luminaires and controllers — is done at its North East headquarters. As a result of its recently added capabilities, Scott recounts, the company is getting requests from other U.S. manufacturers to do contract manufacturing.

He says one advantage of manufacturing domestically is that it gives the company control of its destiny and also of its product quality. Scott notes that when i-Lighting's products were made overseas, it could take as long as three months for them to arrive, which meant that quality issues took longer to detect, not to mention being more difficult to correct. He explains that the circuit boards are still etched overseas because U.S. regulations to control the highly toxic acids involved in that process would make it too costly to do it here.

Scott adds that Cecil County has provided some assistance to his company, including underwriting the extensive training of i-Lighting's staff in how to operate the equipment that populates the circuit boards, which he says is highly complex. I-Lighting has also gotten additional financial aid from the State of Maryland, and Scott notes that there's quite a bit of assistance available to businesses at the state and local levels, but they have to seek it out, and county economic development councils are a good place to start.

I-Lighting 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.