

SSL Postings

U.S. DEPARTMENT OF ENERGY

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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 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, these Postings will focus on SSL companies manufacturing here in the U.S., a series we call "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 [DOE white paper "Keeping Manufacturing in the United States,"](#) which grew out of DOE's 2010 SSL Manufacturing R&D Workshop.

Spotlight on Eye Lighting

A subsidiary of the Japanese company Iwasaki Electric, which has been around for more than 70 years, Eye Lighting is based in Mentor, OH, about 25 miles northeast of Cleveland on Lake Erie, and has been manufacturing high-intensity-discharge (HID) lamps there for about 23 years. In 2011, Eye Lighting introduced its first LED product, a luminaire for street, municipality, and area lighting called the kiaroLED, which is now also available in a post-top version. According to president and COO Tom Salpietra, the kiaroLED is assembled entirely in the U.S., and nearly all of the components are U.S.-made as well.

In October 2012, Eye Lighting acquired Aphos Lighting, which manufactured LED parking garage luminaires, canopy lights, streetlights, outdoor wall-mounted luminaires, and indoor high-bay luminaires. The manufacturing of those products has been moved to Eye Lighting's Ohio facility – except for the drivers, which are made overseas. According to Tom, the assembly is done at the Ohio facility, and the boards, the extrusions, and all the components are outsourced to U.S. companies.

The company has also come out with a higher-wattage LED retrofit kit intended for cities that have historical exterior fixtures (e.g., post-top or pendant-mount) they want to preserve. That product – which comes with an option to control backlight – is currently being assembled both domestically (25 percent) and overseas (75

percent) but, according to Tom, should be entirely assembled in the U.S. before the end of the year. He says Eye Lighting is now producing the LED equivalent of between 100W-150W high-pressure sodium lamps and expects to have a 250W equivalent by the end of the year.

The company has about 170 employees, roughly four dozen of whom – engineers, technicians, laboratory folks, and assembly personnel – work solely with SSL. In addition, two-thirds of Eye Lighting's sales team is focused on SSL, and the marketing department is split evenly between HID and SSL. Tom says Eye Lighting is moving heavily toward LEDs, in recognition of the fact that lighting in general is moving in that direction.

In addition to being able to promote its products as being made in America, a major reason Eye Lighting manufactures in the U.S., says Tom, is to have a supply chain that's close to home, which minimizes lead time. He notes that the company's engineering and R&D departments are right down the hall from one another as well as from the factory floor, which makes it possible to meet changing customer demand very quickly – sometimes several months faster than if the operations were carried out overseas. Tom says many customers are no longer willing to wait for four months to receive an order, and he points to faster lead time as one reason behind the recent industrial trend of "on-shoring," in which manufacturing is being brought back to North America.

Another reason for manufacturing domestically, he says, is that overseas wage rates have increased with inflation to the point where they're no longer that much lower than domestic rates. In addition, it's easier to keep track of product quality when the manufacturing is done here. Tom says Eye Lighting considered manufacturing in Asia, but when all was said and done the company opted to do it here in the U.S. He says Iwasaki Electric was very supportive of this.

Eye 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.