Solais LEDs Help Boston Design Center Achieve Radiant New Heights



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The Boston Design Center, an architectural landmark located on the renowned South Boston waterfront, has served as a bustling base of operations for the city's active interior design trade for over 25 years. Constructed as an army base in 1917 and remodeled into its current state as a wholesale design building in 1985, the elegant eight-story, 550,000 square-foot building currently houses 80 tenants whose showrooms display everything from furniture, fabric, lighting, rugs, tiles, and flooring to paint, bathroom fixtures, and kitchens – a one-stop shopping destination for the design industry. And thanks to a recent lighting upgrade involving Solais LEDs, the building now also boasts one of the highest-quality and energy-efficient lighting systems available.

"Though we'd proactively upgraded the building's cooling, lighting, and other electrical systems in the past, we still felt that our overall electricity expenses were too high and wanted to further reduce them," explained Steve Iacovino, Facilities Director of the Boston Design Center. "While the space in the BDC is largely tenant-owned and controlled, we determined that a great way to start addressing our building's energy consumption would be by upgrading the lighting in our common areas with more efficient LED technology."

According to lacovino, the building's common areas – which included all elevator lobbies and elevators as well as a 4,100 square-foot seminar room on the building's 5th floor -- contained outdated 50-90 Watt halogen floodlights which were neither efficient nor optimal for a trade whose livelihood relies on visual appeal. "We were always experiencing lamp outages, the lighting

wasn't crisp, and the color quality was inconsistent," he said. "In addition, because the lighting in the common areas operates 24-7, its high wattage was definitely creating excessive cost."



Following an in-depth investigation of their product options with local utility NSTAR over a 2-3 year period, lacovino ultimately upgraded 96 fixtures in elevator lobby areas, 16 fixtures within elevators, and 160 fixtures in the building's seminar room with 14 Watt, 40-degree PAR30 LEDs from Stamford, CT-based Solais Lighting in November 2011. Ideal for any application that requires high light output, great color rendering, and well-aimed directional light, "the LR30 is an outstanding and highlyefficient alternative to halogen sources and was an ideal choice for the lofty ceilings, high-end merchandise displays, and discerning clientele associated with the Boston Design Center," said Solais Lighting President James Leahy. In addition to the lamps' outstanding lumen output, high color rendering index, strong center beam candlepower, and long rated average life of 25,000-50,000 hours, Solais' LR30 LEDs are fully dimmable and free of hazardous substances such as lead and mercury. The lamps also feature Solais' exclusive and actively-cooled Luxiance® thermal management technology, which enables a lightweight, highperformance LED product ideal for track and recessed applications within retail, commercial, hospitality, and gallery settings.

"We loved the high lumen output and crisp, white light that these LED lamps delivered," lacovino noted, adding that, following the upgrade, "designers

and tenants in our building immediately told us that they could see things better, that things looked fresher, and that their merchandise showed so much more beautifully under these lights. And," he said, "based on the significant energy we saved by going from 50, 75, and 90 Watt halogen lamps down to just 14 Watt LEDs, combined with





the generous utility rebates these lamps qualified for, project payback will occur within just 3-4 months, making the decision to upgrade an absolute no-brainer for us."

"Before," lacovino continued, "the lighting in our common areas was spotty and the lobbies were not functional spaces that our tenants and their clients could use. Now, the lighting is much warmer and more inviting and truly highlights the marble and vintage elements of the building. The proof in the pudding is that our designers are now choosing to sit and show their clients products under the lights in the common areas for the first time," he said. And from a building envelope perspective, the LED upgrade drove another important and positive outcome by reducing strain on the facility's HVAC system. "By eliminating the higherwattage halogen and MR-16 lamps in our building and upgrading to lower-wattage and cooler-running LEDs, we'll eliminate at least 300 tons of load on our HVAC system, which means that our systems won't be as taxed as before. In the future, we might be able to downsize the chillers to the lower-cooling loads, too," he said.

"We're very happy with our Solais LEDs and the effect they've had on our building," lacovino concluded.

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Steve Iacovino, Boston Design Center

"The beauty of an upgrade to LEDs is that it's as easy as changing a light bulb and the cheapest way to have an immediate impact on a facility's ambiance and operating costs."

In fact, he added, and in perhaps the biggest tribute to the Solais LEDs, the new lights have been so well-received that the building's tenants themselves are now looking into LED upgrades within their own showrooms. "Based on the enhanced level of quality, performance, and reliability resident in today's LEDs, along with the increased availability of incentives on them, tenants of ours who had been hesitant to switch over to LEDs in the past are now upgrading," he said. "This technology will definitely deliver high quality lighting while helping to reduce operating expenses," lacovino concluded. "We're excited to share this opportunity with our tenants."

Project Summary | Solais.com

End User

The Boston Design Center, located on the South Boston waterfront

Project Description

The project involved the upgrade of 272 50, 75, and 90 Watt halogen floodlights to 14 Watt PAR30 LEDs from Solais Lighting

Project Timetable

Project completed in November 2011

Utility Partner:

NSTAR, which provides electricity to 1.1 million customers throughout eastern, central, and southeastern Massachusetts

Energy Savings

Following the upgrade to LEDs, the Boston Design Center experienced an up to 80% reduction in lighting system energy consumption and costs relative to their original 50-90 Watt halogen flood technology, which, combined with utility rebates, resulted in a simple project payback period of 3-4 months

Other Benefits Experienced

- With a rated average life of 25,000-50,000 hours, Solais LED lamps will offer years of maintenance-free operation
- Direct one-for-one screw-in capability ensures ease of installation
- Outstanding lumen output, high color rendering index, and strong center beam candlepower ensures high performance ideal for retail applications
- Solais LED lamps are fully dimmable and free of hazardous materials such as lead and mercury





Solais Lighting is a market-driven manufacturing company, passionate about improving environments through innovative LED lighting solutions. As an industry leader in LED lamp technology, Solais uses its innovation capability to continually develop products to meet market demands.

Solais has a highly regarded and dedicated executive team, consisting of leading professionals from all facets of the lighting industry, including: solid-state lighting research, product development, manufacturing, distribution and procurement. With an industry-leading, global manufacturing partner, we have the technological know-how, resources and capacity to successfully meet growing demands, yet maintain the responsiveness of a focused, innovative company.