



## Driverless G90 design improves overall light levels at 75% less wattage than existing fluorescent tubes

**Natick, Massachusetts- 29th September, 2016-** A total of 8,875 ThinkLite LED retrofit tubes were recently installed in Boston's Prudential Center Garage, the largest parking garage in New England. This immediately reduced energy consumption for lighting by a dramatic 73% from the existing 32W Fluorescent tubes, down to a ThinkLite 8W LED Retrofit Tube kit. This revolutionary reduction is a message to the world of ThinkLite's ability to produce the highest level of energy efficiency in the LED market of today. The norm in the fluorescent-to-LED conversion industry is usually a 50% drop in wattage at the best. In a massive parking garage with over 3600 spaces and round the clock operation, savings like that are huge.

Ben Myers, Sustainability Manager for Prudential Center owner, Boston Properties applauded ThinkLite's ability to achieve the building's high standard of light level and photometric disturbing, together with such significant energy reduction at the same time. "At Boston Properties, we are always looking to share best practices throughout our properties and I'm very excited to share the results of this project."

Al Carlson of Needham Electric, Boston Properties' electrical supplier, said this project was a year in the making. "We first looked at LED replacement fixtures for this project. But it was a very costly proposition with a long, projected ROI. Then, we looked at retrofit tubes, but most technology available contained bulky drivers that generated significant heat and negatively impacted light output.

Most retrofit tube technologies on the market today have still not addressed the issue of fluorescent snap back in an easy and elegant manner. ThinkLite has addressed all of the inherent drawbacks with its driverless technology and G90 design of the retrofit. These tubes operate cooler and produce great light levels. The projected payback for the ThinkLite solution is just over one year."

"The ThinkLite solution is one of a kind: First we bypass the ballast and the tubes retrofit directly into existing fixtures, eliminating the need to replace fixtures. But what really makes the ThinkLite technology unique is the driverless design, coupled with a unique G90 safety socket." Dinesh Wadhvani, ThinkLite founder and CEO explained. "We have taken the entire functionality of an LED driver and placed it on a small microchip with four tiny components. This, plus our unique heat sink design, allows us to drive the LEDs to an industry leading 131, and most recently, now 180 lumens per watt. Only ThinkLite produces light levels on par with fluorescent tubes at a fraction of the wattage.

Joe Bertoni, Chief Engineer of Boston Properties was impressed with the technology behind ThinkLite. "We went from 32 watt fluorescent to 8 watt ThinkLite LED with no sacrifice of light quality. That's quite an accomplishment." Myers added, "For every watt we decrease, we save approximately \$11,000 in monthly lighting cost. So, to go from 32 to 8 watts is a huge financial win for us and brought our project ROI to approximately one year. For projects of this size and scope, that kind of payback is largely unheard of."

The benefits of the ThinkLite solution go beyond light quality. Both lamp and ballast maintenance is eliminated for up to 65,000 hours. "We were replacing tubes every day and frequently replacing ballasts. In a garage, that means closing off rows from time to time and impacting overall space availability," said Bertoni.

Boston Properties conducted a demand study comparing January to February 2015 before the ThinkLite installation to the same time period in 2016 after the installation. The results were impressive with an overall 43% reduction in electricity demand year over year. Myers commented, "This is an excellent result and give us great confidence that this was an excellent decision from both a sustainability and a financial perspective."



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William MacInnes of Able Engineering oversaw the entire retrofit project and marveled at the simplicity of the ThinkLite retrofit. “These products are very well engineered making the retrofit process easy. For each fixture, we simply bypassed the ballast (required by ThinkLite for maximum safety and performance) and popped in the new tubes.” ThinkLite has also engineered specific LED sockets that prevent the possibility of installing a fluorescent into the fixture at a later date. The initiative to replace 8,875 tubes at once is by nature a very time consuming process; however, the ThinkLite method made it very manageable, especially when compared to the prospect of replacing fixtures.

Bertoni of Boston Properties summed up the Prudential Center Garage project. “In our opinion, the project was a complete success and we will be looking for other areas throughout our portfolio to perform similar LED retrofit Projects with ThinkLite.”

### **About ThinkLite**

ThinkLite is a global lighting efficiency company that custom designs, manufactures, distributes, and installs energy efficient retrofit solutions to commercial customers and governments. The Company’s efficient lighting products leverages proprietary LED and Induction technologies that specifically adapt to existing infrastructures. The Company is headquartered in Natick, Massachusetts with operations in 14 countries.