

Case Study: Sustainability at Gardner-White

LED Lighting Solutions and a Unique Financing Model Helped Gardner-White Lower Overhead and Improve Customer Experience



The Philips 19W PAR 38 Single Optic AirFlux LED lamp.

PHOTO COURTESY PHILLIPS LIGHTING



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Photographs by Douglas Elbinger

Founded in 1912, Gardner-White is a family-run furniture store, managed by a father-daughter team, Steve and Rachel Tronstein. They operate 10 showrooms and one warehouse in Southeastern Michigan. To remain competitive in the furniture business is no easy task. Gardner-White focuses on its customer experience, offering impeccable service, inviting ambience and high-quality products... while always looking for new ways to operate more efficiently.

One challenge for the company, though, was to continue meeting its high standards amid rising energy costs. Imagine this: Gardner-White used nearly 2,000 75-watt halogen lamps at each of its eight stand-alone stores to light the showroom and spotlight its furniture for 12 hours per day, seven days a week. Not only did this result in excessive energy consumption, it also put an enormous strain on Gardner-White's operating budget. In addition, the steady burning of thousands of halogen lamps created sweltering heat in the stores. If you ever tried to change one before they cooled down then you remember how hot they are. To compensate for the heat generated by thousands 75W halogen lamps and maintain a temperate climate, Gardner-White was forced to operate air conditioning systems for six months a year, further stretching its resources and impact on the environment. Aside from the environmental and financial effects, the halogen bulbs burned out frequently and Gardner-White required a steady stream of in-store labor to replace the lamps and maintain consistent lighting in the stores.

For Steve and Rachel, the prospect of entering another spring and summer with more outrageous electricity bills and lamp replacements prompted them to seek an alternative lighting solution for its stores. They compared several LED products and selected light-emitting diode (LED) technology from Philips Lighting. The Philips 19-watt Single Optic AirFlux LEDs offered the best quality of light, maximum performance, and superior visual comfort. With its smooth white design, the Philips LEDs deliver increased candle power that allows Gardner-White to



Rachel and her father, Steve Tronstein, are always looking for ways to operate their 10 Michigan furniture showrooms more efficiently.

showcase its furniture without emitting heat. Rachel Tronstein, president of Gardner-White, emphasized that after extensive testing they decided to deviate from the industry standard color temperature of 27000 Kelvin to a slightly cooler 30000 Kelvin.

To make the lighting transition easier, Gardner-White used Philips Lighting Capital to help finance the project. Through a unique comprehensive financing program, Philips helped Gardner-White calculate anticipated monthly energy savings and structure a payment program that allows the company to break even or generate positive cash flow.

"When we saw the Philips LED lamps, we knew they were the right choice for us. Plus, no other vendor offered a financing component that helped support the sale of the lamps. With Philips Lighting Capital option, we were even more thrilled about our decision because we could make this change immediately, with no up-front costs," said Rachel.

Over a one-month period, Gardner-White replaced all 8,700 lamps in its ten stand-alone showrooms. The lamps blend seamlessly into the existing fixtures and allow Gardner-White to keep

the spotlight on its furniture. From day one, employees noticed how the LEDs showed the true fabric colors and highlighted the rich patinas of the wood finishes. Employees and customers alike can now make furniture and color selections with greater confidence by seeing the real colors and textures of each piece.

In addition, the employees noticed a significant difference

in showroom temperatures and have an easier time conversing with customers without air conditioners churning in the background.

Gardner-White has reaped

significant benefits on its operating budget, as well. With the pure reduction from 75 to 19 watts across 8,700 lamps, the company expects substantial reductions in energy costs in the six digits. In addition, Gardner-White utilized a local utility rebate for an additional \$92,000 in savings. Finally, by not having to offset the halogen heat with excessive air conditioning, the company expects additional tangible energy savings. As a result, Gardner-White expects a return on investment for the lamp replacements within just one year.

In addition, by reducing energy consumption, the switch to LEDs is estimated to eliminate over 3.2 million pounds annually in CO2 emissions, equivalent to taking 1,700 cars off the road each year (based on a reduction of wattage from 75 to 19, resulting in a savings of 11.6 million KWH per year,



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"When the size of your warehouse is measured in acres, having automatic motion sensors that turn off the lights in aisles when they are not in use is a huge energy saving measure."

Rachel Tronstein, president Garnder-White

according to U.S. EPA calculator).

"With the switch to LEDs, we are seeing a noticeable improvement in the store, from how the furniture looks, to how comfortable our customers and staff are while shopping, to our operating budget," said Steve. "We are amazed that such a simple switch can have such a powerful and lasting impact on our business and the environment."

Project Summary:

- Project Scope Replaced 8,700 75W PAR 38 halogen lamps with 8,700 Philips 19W PAR 38 Single Optic AirFlux LED lamps
- Project Timetable Project initiated in March 2014, with installation completed by the end of April 2014
- Primary Benefit significant cost savings (six figures) from reduced energy consumption
- \$92,000 utility rebate

Other Benefits include immediate transition to LED at break-even costs, without up-front expenses, using the Philips Capital financing option. High-quality light without generating heat, allowing Gardner-White to reduce air conditioning load. Improved furniture displays with true color presentation and wood highlights.

Many retail stores that have changed to LED also report higher sales that they attribute to better quality lighting. According the Department of energy, while LED installations increased in all applications between 2012 and 2014, more than quadrupling to 215 million units overall. Market penetration in the commercial sector remains modest, climbing to 3 percent overall in 2015, versus less than 1 percent in 2012.

As you see, there is still plenty of opportunity. Southeastern Michigan is a hot-bed of lighting innovation... so choose your lighting partners carefully. ♡

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