



ORION WILL CHANGE THE WAY YOU  
THINK ABOUT A LIGHTING COMPANY.

# CASE & STUDY

## RETAIL

Orion's line of LED lighting fixtures are designed to be durable and aesthetically pleasing, while providing a safe environment and saving operating/maintenance costs – perfect for all lighting area needs for distribution centers, warehouses and stores.

# WHY ORION



## LOWER COST INSTALL

- Modular, plug and play design
- Lower overall labor costs
- Install more fixtures in less time



## 2-3 WEEK SHIP

- Quick ship, 10 days
- Overnight shipment of additional materials



## CLEAN JOB-SITE MANAGEMENT

- Fixtures in trays
- Packaging doubles for recycling
- No need for a dumpster
- Debris-free install



## TRUSTED AMERICAN PARTNER

- Clear warranties with excellent coverage
- Quality manufacturing base with domestic and international partners
- 40 years retrofit experience

From the very first handshake to the final fixture installed, our energy is the difference we bring to every retrofit. Ingenuity guides us to new solutions. Dedication helps you at every step. And our products illuminate your world in ways you might not have imagined.

## VISION

Orion will change the way you think about a commercial and industrial lighting company. Full service offerings, friendly and competent staff, an unexpected customer experience, and the best performance around; giving you a solution that will make you a hero in your organization.

## MISSION

Lead the transformation of commercial and industrial facilities to solid state LED lighting technology and drive financial, environmental, and workspace benefits, while dominating the building retrofit market by providing more profit for the installer and more value for the end user.

## VALUE

### ALLY IN ACCOUNTABILITY

#### EXPERTISE

Our relationships go beyond shipping you the latest fixture. Your goals become our goals, which means we share responsibility to help you keep your promises and make your project successful.

### PRACTICAL INGENUITY

#### PRODUCT

When you've been on the job site or up on the lift, you build in-the-trenches know-how. That expertise inspires more creative products that maximize real-world performance for your lighting investment.

### UNCOMMON DEDICATION

#### SERVICE

Our customers tell us we have more capable teams that deliver results, not just on paper, but in the day-to-day work of the people we serve. Some say it's our Midwestern roots; we think it's our energy.

## Efficient Lighting for Effective Merchandising

### OVERVIEW

Your facility has very specific needs and your lighting system has to address the unique challenges. Your lights must present your merchandise in the best possible manner and that may require many different qualities and quantities of light within the same store. The lights must be visually appealing and consistent with the overall look and design of your store. Your storage and warehouse spaces require an entirely different set of lighting standards than the customer sections of the store. Orion can provide you with a suite of products that can meet your lighting needs from store to warehouse to distribution center.



### PROJECT BENEFITS

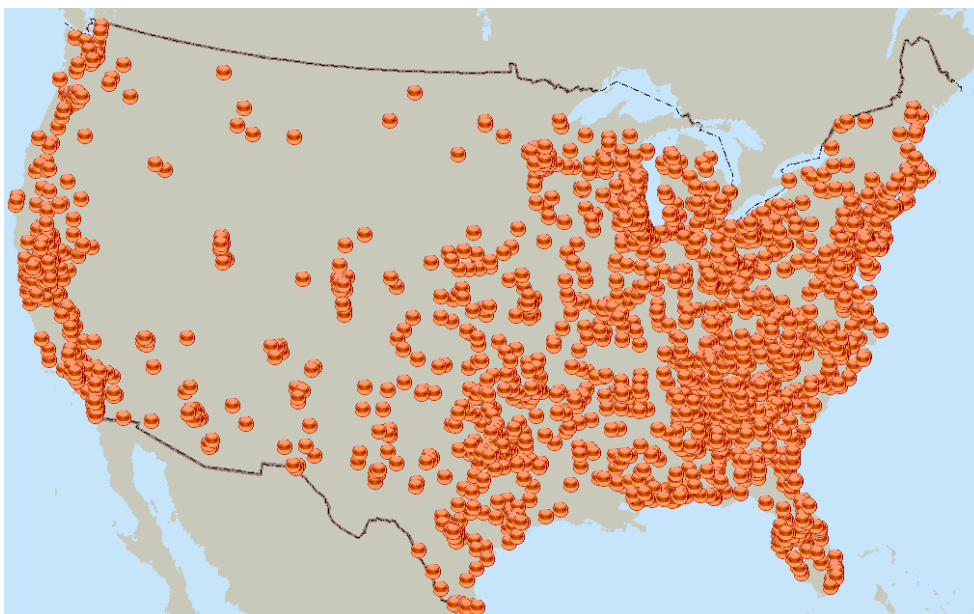
- Redeploy limited resources into other store improvements by reducing both operating and maintenance spending with some of the most-efficient, longest-lasting fixtures on the market.
- Reduce customer inconvenience and store disruptions by spending less time repairing fixtures and replacing burnt out lamps.
- Fixtures that are lightweight and easy to install, which allows you to easily adjust fixture placement in response to floor space changes and limit store disruptions during the install.
- Improve system performance by integrating your fixtures with most commercially available control technologies, which allow to deliver the right amount of light where and when it is needed.
- Durable fixtures designed to withstand the challenges of both your sales floor and storage environments.

Multiple color temperature options available to meet the specific merchandising needs of your facility.

- Fixtures designed to deliver optimal light levels to maximize facility performance and customer comfort.
- Reduce OSHA/waste concerns by eliminating need for fluorescent lamp disposal.
- Reduce your facility's environmental impact by reducing its energy consumption and usage.



As of March 31, 2016, Orion has completed over 2,300 projects with 468 customers in the Retail market. The following map shows displays projects in contiguous United States.





# Shining stars

BY KIM ANN ZIMMERMAN

**Striking the right balance between energy costs and merchandising effectiveness is crucial when implementing a lighting program.**

## **N BASEBALL, FANS IN THE STANDS ARE SOMETIMES REFERRED TO AS THE 10TH MAN ON THE FIELD**

as they can provide a boost to the team with their cheers. The lighting in supermarkets can play a similar supporting role. If a product or category needs a lift, additional lighting can draw the attention of shoppers to help coax the "player" out of a slump in sales. Superior lighting design is the sign of a winning franchise.

But just like the price of season tickets, the cost of energy continues to rise, forcing supermarkets to make some hard choices when it comes to lighting. Some are looking to save energy by retrofitting with more efficient fixtures, while others are trying to make the best of natural daylight with skylights.

Supermarkets continue to struggle to differentiate themselves, and lighting plays a big role in conveying the store's image," says David Rice, vice president for St. Louis-based Baero North America. "At the point it becomes a trade off. While reducing lighting certainly saves energy, you may suffer in presentation or customers may not be able to read product labels. It comes down to a difficult decision. The choice may mean that the color quality might not be optimized or the solution might not be very efficient."

he proper lighting can help supermarkets project a higher-end image out of a huge investment, experts note. "Supermarkets are all essentially selling the same product," says Michael Dwyer, vice president, national account sales for Juno Lighting, Des Plaines, Ill. "Supermarkets are going to make the décor look higher end, but maintain reasonable costs. Lighting is one of the best ways to achieve that goal."

Steve Barker, vice president of sales for Villa Lighting, says there are two trends driving the grocery industry—reducing energy consumption and extending the life of fixtures and lamps. [Addressing] these two issues



keeps stores looking good over a longer period of time," he says. The St. Louis-based firm carries lighting products from a number of manufacturers.

He says grocers are taking a longer view when making lighting choices. "We find that our grocery customers are looking at the cost of various lighting solutions over a five- to 10-year period, as opposed to strictly focusing on the initial cost of installation," he says. "This is having a positive impact."

Rice says some grocers are paying more attention to lowering the level of lighting at certain times of the day, such as when there are few customers in the store or at night when the shelves are being stocked. "We're seeing a more strategic use of switching when areas of the store aren't active," he says. He notes many stores are now employing a mix of overhead fluorescent lighting and accent lighting such as ceramic metal halide fixtures, which makes it easier to adjust the lighting levels as needed.

Michael Lehman, vice president marketing and product development for Con-Tech Lighting, Northbrook, Ill., says while grocers need to keep tabs on their energy costs, there are other considerations when it comes to lighting.

"Being energy efficient when it comes to lighting is a good thing, but it needs to be done carefully and intelligently," he says. "It is not just a matter of using

less power, so therefore I am doing my job. Supermarkets have to take into account color rendering of their lighting fixtures and the amount of heat coming from the light. There is a design aspect as well as a functional aspect to lighting."

## **LAYERS OF LIGHT**

One of the most important aspects of lighting a supermarket is to vary the levels of lighting so that the shopper's eye is drawn to the more profitable products. "Supermarkets really need to have a better understanding of how lighting can project an image of price and quality," says Daryl D. Sullivan,



resident and CEO of Las Vegas-based Celebrity Lighting. "A uniformly lit store projects an image of low price and low quality," he says.

For a product to stand out, the accent lighting needs to be three times the amount of the overall lighting in the store. "Naturally, retailers will be better served by highlighting the SKUs that are most profitable," he says. As more grocers make use of natural lighting, maintaining the proper ratio between the overall lighting and the merchandising lighting becomes more challenging, he notes.

Con-Tech Lehman says attention needs to be paid to the placement and direction of accent lighting to have a maximum impact on sales.

"The first thing I tell grocers is that the aiming angle and location of the fixture is key," he says. "If it is not done properly, the accent lighting can be blinding and distracting to the shopper, which is exactly the opposite effect of what you're trying to achieve. Also, you don't want to spew light everywhere. You want to look at produce, end caps and other key areas of profit such as seafood and floral and punch up those areas to make them stand out."

The quality of the light is also an important consideration, Lehman says.

You want to be sure that you're presenting the product in the right type of light. This is why metal halide has become so popular. You can make adjustments with lenses and reflectors." He notes that supermarkets have been gravitating toward using lighting to create a more home-like atmosphere for consumers who have been used to shopping in sterile warehouse

stores. "They are bringing things down to people-scale by bringing the fixtures down closer to the product," he says, and this is possible as fixtures become more advanced and emit less heat. "This really serves several purposes," he notes. "It provides a more welcoming and comfortable feel as opposed to large warehouse stores. They are also using wall sconces and other residential-type lighting to create a more comfortable atmosphere. Also, retailers can bring the fixtures down closer to the product so that they are not lighting up the whole ceiling. This works well in areas such as seafood, floral and bakery."

Many lighting manufacturers, including Osram Sylvania, are developing lighting systems that emit less heat. "Some of our fixtures capture the heat and send it back to the filament," says Bob Ponzini, a commercial engineer with the Danvers, Mass.-based lighting manufacturer.

The company is also introducing a line of ceramic arc tube metal halide lamps that he says provide greater color consistency. Ponzini says the lamps can be used in existing metal halide fixtures designed for metal halide lamps with similar wattages and configurations.

Sylvania recently partnered with Energy Solutions International, a fixture manufacturer in St. Paul, Minn., to upgrade the lighting systems at Quality Markets, a 51-store chain that operates in southwest New York and northwest Pennsylvania.

"We have found a great deal of interest in retrofit kits and fixtures that convert older systems to newer lighting technology," says George McIntyre, Energy Solutions' director of strategic alliances and marketing.

In terms of future lighting technology, LED has garnered a lot of interest due to the low maintenance and high efficiency; this lighting technology has been primarily used in refrigerated and freezer cases in supermarkets as well as some signage and outdoor lighting. The technology is especially attractive in refrigerated and cold cases, as the lights do not give off any heat, contributing to lower energy output to keep the cases cold.

Experts predict it will be at least several years until LED is a practical solution for general lighting. The lighting technology will be more widely adopted as standards emerge and the technology evolves to provide more accurate color rendering.



## SOAKING IN THE SUN

Orion Energy Systems, Manitowoc, Wis., has developed a solar light pipe that collects and focuses daylight with highly reflective geometrically arranged materials and consumes no electricity. The system has been used primarily in warehouses and distribution centers, but officials hope to deploy the system in stores as well.

When the Apollo Light Pipe is deployed in an integrated three-phase system, including Orion's high intensity fluorescent fixtures and control devices, it can replace electrical lighting in a facility during peak hours when electricity is most expensive, resulting in significantly lower energy bills for Orion's customers.

According to Orion officials, companies such as Kroger, Supervalu, Kraft and Coca-Cola have found Orion Energy Systems' energy management program can cut their lighting costs by 50%, dramatically reduce carbon emissions and allow them to significantly reduce their electrical consumption.

Orion has already successfully installed the Apollo Light Pipe as part of a three-phase energy management system in Coca-Cola Enterprises, Sysco Foods and Ralph Lauren Polo, removing particular lighting zones from the grid for up to ten hours a day. Orion's HIF lighting system reduces electricity costs by approximately 50% when replacing the industry standard HID fixtures and is engineered in a modular fashion allowing for easy integration of phase II and III of the energy management system.

"Rising energy prices and increasing awareness of environmental concerns are causing businesses to evaluate additional ways to become more energy efficient, including a wholesale changeover to energy efficient equipment," according to Neal Verfuert, president and CEO of Orion. "We are extremely pleased that our innovations have resulted in products which can help address these concerns. We were able to take light pipe technology—which has been around for years—and bring it to the next level, one that is in keeping with state-of-the-art industrial and commercial applications."

Another benefit, according to Verfuert, is that companies can sell back the excess energy, potentially generating a profit for retailers. "On a hot summer day, they can sell that capacity back to the grid," he says. Learn more at [www.oriones.com](http://www.oriones.com).

"Obviously, there is a potential for savings on maintenance and it is a good solution for some applications, but it is not yet a viable solution for general illumination," says Villa Lighting's Barber.

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## LED Door Retrofit Offered

January 13, 2014 By William Opalka



### Orion Energy Systems

says it is offering the industry's first complete suite of LED Door Retrofit (LDR) products. The LDR is completely assembled within the door frame.

The Orion LDR system reuses the original housing of the existing troffer and installs quickly. There are an estimated 964 million troffers currently in the US lighting market.

The Orion LDR product suite is designed to retrofit most existing 2-foot-by-2-foot and 2-foot-by-4-foot fluorescent troffers and is

available in a variety of lens styles, wattages and color temperatures.

The Orion LDR system offers the following:

- It can be retrofit into existing fluorescent troffers within minutes with no disruption to ceiling tiles and no need to remove existing fixtures.
- The LDR can reduce a company's energy consumption by up to 70 percent.
- The LDR system decreases costs associated with maintenance, freeing up maintenance teams to focus on tasks other than light bulb replacement.
- The LDR provides a volumetric, even-distribution of light with quality color rendering and is available in multiple color temperatures to accommodate end-user needs. Compared to fluorescent lighting, the LDR system generates less heat and, therefore, has a positive impact on HVAC requirements.

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### Videos

## Orion Energy Systems granted US patent for LED door retrofit assemblies

Published on: January 28, 2015



MANITOWOC, Wis. — Orion Energy Systems, Inc. (NYSE MKT: OESX), a leading designer and manufacturer of high-performance, energy-efficient lighting platforms, today announced that it was granted a new patent from the U.S. Patent and Trademark Office (Pat. No. 8888313) directed to design improvements and technical advancements for troffer door assemblies. This award brings the company's total portfolio of granted patents to 62, with 41 additional pending globally. The patent is a continuation of Orion's efforts to protect the proprietary innovations embodied in the LDR, which is now the company's best-selling LED product.

Orion LDR fixtures have been shipped to more than a thousand locations throughout North America since its January 2014 launch. Due to its easy installation, attractive design and reliable performance, the LDR continues to gain traction with leaders in multiple industries seeking to replace energy-consuming fluorescent troffer fixtures with high efficiency LED light sources.

Recent deployments of the Orion LDR include one of the leading big box retailers in the US and a large group of Veterans Affairs hospitals. These customers chose the LDR as a result of Orion's speed of delivery, fast installation and lower total cost of ownership through a number of unique design features. The fixture ships assembled which:

- Makes typical installers more efficient by reducing installation time to 1-2 minutes per fixture (compared to over 10 minutes for many competitive fixtures).
- Eliminates the risk of missing or damaged pieces and the need for tools other than a ladder.
- Reduces waste and mitigates environmental and health concerns by leveraging the existing housing, thereby avoiding the need to access the ceiling.

"While this latest patent further strengthens Orion's overall intellectual property portfolio, it also demonstrates how our technology is creating value in the market. We are known for thoughtful, integrated lighting solutions and we are winning business over many competitors because Orion offers a faster return on investment due to improved light delivery and more efficient installation. Protecting our intellectual property is paramount, since accelerating LED adoption through creative products and processes like the LED Door Retrofit fixture is key to both Orion and our customer's success," said John Scribante, Chief Executive Officer of Orion.

### About Orion Energy Systems

Orion is leading the transformation of commercial and industrial buildings with state-of-the-art energy efficient lighting systems. Orion manufactures and markets a cutting edge portfolio of products encompassing LED Solid-State Lighting and high intensity fluorescent lighting. Many of Orion's 100+ granted patents and pending patent applications relate to lighting systems that provide exceptional optical and thermal performance, which drive financial, environmental, and work-space benefits for a wide variety of customers in the retrofit markets.

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# Orion Awarded National Contract with One of the World's Largest Retailers



[www.businesswire.com/news/home/20151110005607/en/Orion-Awarded-National-Contract-World%E2%80%99s-Largest-Retailers](http://www.businesswire.com/news/home/20151110005607/en/Orion-Awarded-National-Contract-World%E2%80%99s-Largest-Retailers)

MANITOWOC, Wis.--([BUSINESS WIRE](#))--One of the premier supermarket chains and top ten global retailers has awarded its national LED lighting contract for distribution centers to **Orion Energy Systems, Inc. (NASDAQ: OESX)**, a leading designer and manufacturer of high-performance, energy-efficient retrofit lighting platforms.

The contract continues Orion's long history of successful partnerships with over fifty of the best-known cold storage, food distribution and warehousing facilities. In this market, Orion has completed nearly \$60 million in installations at over 650 sites.

Orion is now the specified supplier of all interior LED lighting for the company. The total value of upgrading 29 distribution and cold storage centers from fluorescent to LED technology is expected to be \$12-15 million over the next three years, with projects ranging from \$150,000 to over \$1 million depending on the size of the facility.

"Because we understand the unique requirements and incredible margin pressure these clients face, we've become the go to company in the cold storage and food distribution industry," said John Scribante, Chief Executive Officer of Orion Energy Systems. "Orion creates unique LED lighting retrofit products specifically designed to not only reduce their utility bill, but also install and ship faster, perform better, and provide long-lasting, no-maintenance and green solutions for their facilities and communities."

The global retailer had previously selected Orion for its initial lighting retrofit from metal halide to a combination of Orion Compact Modular High Bay four lamp T8 fluorescent fixtures and ENCF Freezer Enclosed fixtures with dual switch motion sensors. For this new contract, Orion beat out eight other companies, including all of the largest lighting manufacturers in the US. Orion stood out as the clear winner in the final competitive demonstration because it set a new standard for shipment and installation, and used fewer LED fixtures to deliver more light for less energy.

In the typical 12-fixture aisle, Orion was able to reduce the amount of fixtures by 50 percent while improving light levels due to superior LED optics. The fixtures with dimming smart motion controls were also delivered and installed within two weeks vs. a more than 12-week ship time for the runner-up.

Under the contract, Orion products will be installed for a variety of interior lighting applications, including the Orion ISON™ Open LED High Bay, Apollo® LED High Bay (ALHB), Apollo® LED Strip Retrofit (OLSR), Apollo® LED Troffer Retrofit (LDR) and Harris Exit Signs. For freezer applications, the newest generation of LED technology provides additional functionality and controls that were not available before with fluorescent fixtures, including the ability to completely power off the LED fixtures without affecting lifetime performance or output. Over the life of these new Orion LED fixtures, the retailer expects to save over \$94,000 for the average facility.

## About Orion Energy Systems

Orion is leading the transformation of commercial and industrial buildings with state-of-the-art energy efficient lighting systems and retrofit lighting solutions. Orion manufactures and markets a cutting edge portfolio of products encompassing LED Solid-State Lighting and high intensity fluorescent lighting. Many of Orion's 100+ granted patents and pending patent applications relate to lighting systems that provide exceptional optical and thermal performance, which drive financial, environmental, and work-space benefits for a wide variety of customers in the retrofit markets.



# Multi-Billion Dollar Global Retailer Selects Orion Lighting for Retrofit of Its Corporate Headquarters and over 575 Retail Stores



[www.businesswire.com/news/home/20151222005182/en/Multi-Billion-Dollar-Global-Retailer-Selects-Orion-Lighting](http://www.businesswire.com/news/home/20151222005182/en/Multi-Billion-Dollar-Global-Retailer-Selects-Orion-Lighting)

MANITOWOC, Wis.--(BUSINESS WIRE)--**Orion Energy Systems, Inc. (NASDAQ: OESX)**, a leading designer and manufacturer of high-performance, energy-efficient retrofit lighting platforms, today announced a multi-billion dollar global retailer with over 575 warehouse club operations has selected Orion LED retrofit lighting as the spec for its retail stores and corporate offices.

Over 33,125 Orion LED light fixtures have been installed in more than two hundred US stores and three corporate offices to date. The retailer plans for an additional 50 sites to be retrofitted each quarter, with each retail facility receiving on average 125 Orion light fixtures, including the 2x4 and 2X2 LDR in a variety of lens configurations and lumen packages. Orion originated this opportunity through its Enterprise Account division which gained the specification, and engaged its Pacific Northwest channel partner to manage the customer relationship, and provide the products and services for each site.

The national rollout was driven by the desire to reduce maintenance costs and increase energy savings, using energy-efficient lighting design to replace the existing inefficient fluorescent T8 and 2x4 troffer fixtures. Orion fixtures were selected over two other leading manufacturers due to the LDR's ease and speed of install, particularly since installation had to take place quickly over challenging areas in many stores, such as meat and produce sections.

Since its introduction in 2014, the Orion LDR suite has created a new standard not only for design, performance, and energy efficiency, but also a breakthrough in the ease of installation in troffer retrofit from fluorescent to LED, which reduces overall costs. The [industry's first patented LED Troffer Retrofit suite](#) reduces cost on the job site because it ships fully assembled, is adjustable to fit existing troffers, and typically installs in one to two minutes with no tools other than a ladder, compared to more than 10-minute installs for many competitive fixtures.

"This retailer is known for its commitment to bring merchandise to its customers at the lowest cost, and its focus to not only reduce expenses in their operations, but also be more carbon-efficient than other retailers," said John Scribante, Chief Executive Officer of Orion Energy Systems. "Orion is now a part of that story, providing patented, quick-install fixtures that reduce downtime, virtually eliminate maintenance, and reduce energy costs to yield more value for the retailer, their customers, and the environment."

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# Orion APOLLO Troffer Retrofit LDR Series Voted Product of the Year – Silver by Consulting-Specifying Engineer Readers

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[www.businesswire.com/news/home/20150922005838/en/Orion-APOLLO-Troffer-Retrofit-LDR-Series-Voted](http://www.businesswire.com/news/home/20150922005838/en/Orion-APOLLO-Troffer-Retrofit-LDR-Series-Voted)

MANITOWOC, Wis.--([BUSINESS WIRE](#))--**Orion Energy Systems, Inc. (Nasdaq: OESX)**, a leading designer and manufacturer of high-performance, energy-efficient retrofit lighting platforms, today announced the [APOLLO Troffer Retrofit LDR Series](#) was voted 2015 Product of the Year – Silver in the Lighting Fixtures and Luminaires Category by subscribers of *Consulting-Specifying Engineer* (CSE) magazine.

Since its introduction in 2014, the Orion LED Troffer Retrofit (LDR) suite created a new standard not only for design, performance and energy-efficiency, but also a breakthrough in the ease of installation in troffer retrofit from fluorescent to LED. The [patented suite](#) reduces cost on the job site because it ships fully assembled, is adjustable to fit existing troffers, and installs in less than two minutes with no tools other than a ladder, compared to more than 10-minute installs for many competitive fixtures. Orion continues to take a leadership position in this segment, with the recent product launch of the new [High Lumen LED APOLLO Troffer Retrofit](#), available 7000 and 9000 lumen packages for retail, manufacturing, and industrial applications.

“This award is a reflection of the strong culture of innovation of Orion, and the APOLLO Troffer Retrofit LDR Series is just one example of our commitment to merge attractive design with industry-leading installation times and energy-efficient performance,” said John Scribante, Chief Executive Officer of Orion Energy Systems. “It’s an honor to be recognized by *Consulting-Specifying Engineer* magazine, especially because this recognition comes from the vote of the readers and our customers, and we look forward to delivering more industry-leading products like this series in the days to come.”

CSE’s 11<sup>th</sup> Annual Product of the Year award showcases practical innovation, educating the industry about the top new products in the field designed to increase efficiency and improve system quality. Voters in this reader choice program include qualified engineering, facility management and building professionals who specify products and systems for nonresidential buildings.

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## Barney's Furniture

Springfield, IL

Replaced 8ft 60-watt T12 fluorescent lighting with Orion's 8ft 2-lamp T8 conversion kits with optically enhanced reflectors.

### Project Metrics

Annual Cost Savings	<b>\$7,349</b>
Annual Kilowatt Hour Reduction	<b>63,904</b>
Load Reduction	<b>21.6 kW</b>
Annual Carbon Dioxide Reduction	<b>39 Tons</b>

*"Our new lighting not only will save us on energy costs, but the furniture on our sales floor looks better than ever. In our warehouse, our employees are saying that it has never been easier to locate merchandise."*

– **Barry Seidman**  
Owner



Before- 38 Foot-candles



After-60 Foot-candles



**"We are pleased to report a measured increase of nearly 100% in light levels and we show a reduction in the electrical consumption for lighting. With the vertical light levels in our shipping aisles improving ... our shelves and their products displayed are more customer-friendly now."**

Jim Lampl – Director of Conservation  
Giant Eagle – Cleveland, OH

### Project Scope

Replace legacy lighting system consisting of High Intensity Discharge fixtures with Orion's T8 Fluorescent Compact Modular High Bay fixtures.

### Project Economics

Displaced Energy:	633,080 kWh
Displaced Capacity:	90.44 kW
Annual Cost Reduction:	\$37,984
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	409 tons/year
Acres of Trees Planted (Equivalency):	116 Acres



Before



After



## King Par Flushing, MI

### Project Scope

**Interior:** Replace legacy lighting system consisting of High Intensity Discharge, T12 HO, T12 Fluorescent and Incandescent fixtures with Orion's T8 Fluorescent Compact Modular High Bay, Conversion Kit, and Retrofit Kit and LED Task Lighting fixtures with standard motion control technologies.

**Exterior:** Replace legacy lighting system consisting of High Intensity Discharge fixtures with Orion's T5 Fluorescent Exterior fixtures.

### Project Economics

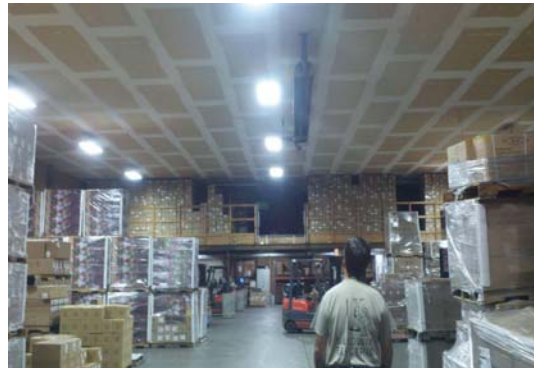
Displaced Energy:	243,118 kWh
Displaced Capacity:	63.76 kW
Annual Cost Reduction:	\$27,958
Light Level Improvement:	30.0% (36.7 to 47.7 avg. fc)

### Environmental Impact

Carbon Dioxide Emissions Displaced:	157 tons/year
Acres of Trees Planted (Equivalency):	45 Acres



Before



After



## Rural King Evansville, IN

### Project Scope

Replace legacy lighting system consisting of High Intensity Discharge fixtures with Orion's T8 Fluorescent Compact Modular High Bay fixtures.

### Project Economics

Displaced Energy:	262,094 kWh
Displaced Capacity:	N/A
Annual Cost Reduction:	\$25,213
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	169 tons/year
Acres of Trees Planted (Equivalency):	48 Acres



Before



After





## Cross Midwest Tire Kansas City, MO

### Project Scope

**Interior:** Replace legacy lighting system consisting of High Intensity Discharge, T12 HO Fluorescent and Incandescent fixtures with Orion's T8 Fluorescent Compact Modular Step-Dimming High Bay, Conversion Kit and Retrofit Kit fixtures with standard motion control technologies.

**Exterior:** Replace legacy lighting system consisting of High Intensity Discharge fixtures with Orion's T5 Exterior fixtures.

### Project Economics

Displaced Energy:	143,159 kWh
Displaced Capacity:	54.75 kW
Annual Cost Reduction:	\$14,042
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	93 tons/year
Acres of Trees Planted (Equivalency):	26 Acres



Before



After



**"The result of the change to our lighting has been well received from both our repeat customers and employees alike. Our employees have certainly noticed the difference in overall store temperature since installing the new lighting."**

Mike High – Owner

High Brothers Lumber and Home Center – Camdenton, MO

### Project Scope

Replace legacy lighting system consisting of High Intensity Discharge fixtures with Orion's T8 Fluorescent High Bay fixtures.

### Project Economics

Displaced Energy:	100,826 kWh
Displaced Capacity:	N/A
Annual Cost Reduction:	\$8,023
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	65 tons/year
Acres of Trees Planted (Equivalency):	19 Acres



Before



After



## Complete Auto Pros Sterling Heights, MI

### Project Scope

Replace legacy lighting system consisting of T12 and T12 HO fluorescent fixtures with Orion's T8 Fluorescent Conversion and Retrofit Kits.

### Project Economics

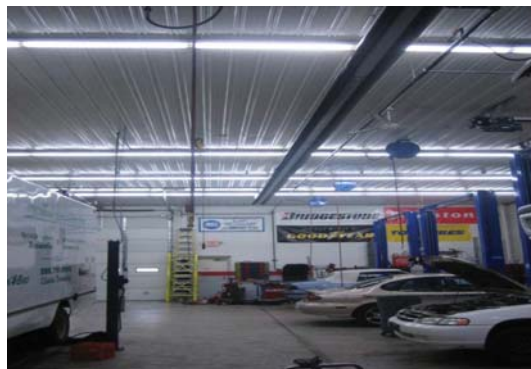
Displaced Energy:	12,056 kWh
Displaced Capacity:	4.64 kW
Annual Cost Reduction:	\$1,326.18
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	8 tons/year
Acres of Trees Planted (Equivalency):	2 Acres



Before



After



**"My shop is now bright white and super efficient. My energy bill reflects the bottom line, definitely well worth the investment."**

Mike Komasa – President

Rochester Hills Collision - Rochester Hills, MI

### Project Scope

Replace and redesign the legacy lighting system which consisted of T12 fluorescent strips fixtures with a reduced number of Orion's compact modular T8 fluorescent fixtures.

### Project Economics

Displaced Energy:	17,053 kWh
Displaced Capacity:	6.56 kW
Annual Cost Reduction:	\$1,944
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	11 tons/year
Acres of Trees Planted (Equivalency):	3 Acres



Before



After



## BARNES & NOBLE

**“This project was so big, saved so much, that they have already had the project paid back in energy savings in 5 months! They are very impressed with how fast the payback has been.”**

Garrett Henderson – Electrical Contractor  
Barnes and Noble – Monroe Township, NJ

### Project Scope

Replace legacy lighting system consisting of Metal Halide fixtures with Orion's T8 Fluorescent Compact Modular fixtures and standard motion controls.

### Project Economics

Displaced Energy:	928,542 kWh
Displaced Capacity:	105.0 kW
Annual Cost Reduction:	\$78,926
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	600 tons/year
Acres of Trees Planted (Equivalency):	170 Acres



Before



After



**“We tested six different fixtures and the Orion fixture gave the most bang for the buck, including a large positive environmental impact.”**

Jason Knapp – Catalog Fulfillment Manager  
Cabela's – Prairie du Chien, WI

### Project Scope

Replace legacy lighting system consisting of High Intensity Discharge fixtures with Orion's T8 Fluorescent Compact Modular High Bay fixtures.

### Project Economics

Displaced Energy:	4,050,763 kWh
Displaced Capacity:	554.9 kW
Annual Cost Reduction:	\$198,487
Light Level Improvement:	N/A

### Environmental Impact

Carbon Dioxide Emissions Displaced:	2,619 tons/year
Acres of Trees Planted (Equivalency):	743 Acres



Before



After

REGISCORPORATION

**Regis Corporation**

Chattanooga, TN

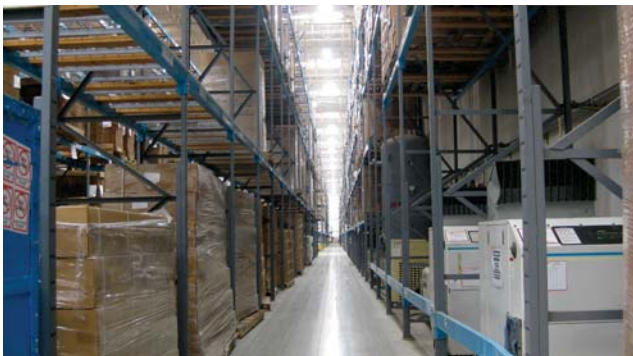
Replaced interior 400-watt metal halide fixtures with Orion's T8 fluorescent fixtures and task dimming controls.

**Project Metrics**

Annual Cost Savings	<b>\$90,592</b>
Annual Kilowatt Hour Reduction	<b>932,981</b>
Load Reduction	<b>158.8 kW</b>
Light Level Improvement	<b>124%</b>
Annual Carbon Dioxide Reduction	<b>567 Tons</b>



Before Foot-Candles 24.2-27.6



After Foot-Candles 30.5-33.9 (Lighting shown is at 60%)



**"This lighting project is the best improvement we have made in the 12 years we have been here. All associates are really impressed with the new lighting. In addition, the installers were professional, productive, efficient, and created minimal disruption. We are extremely happy with the results."**

John Schafer

Office Max – Maple Grove, MN

**Project Scope**

Replace legacy lighting system consisting of Metal Halide fixtures and T12 fluorescent fixtures with Orion T8 Fluorescent Compact Modular High Bay and T8 Fluorescent Conversion Kit fixtures with Intelite® energy management and standard motion control technologies.

**Project Economics**

Displaced Energy:	240,977 kWh
Displaced Capacity:	44.1 kW
Annual Cost Reduction:	\$24,338
Light Level Improvement:	N/A

**Environmental Impact**

Carbon Dioxide Emissions Displaced:	156 tons/year
Acres of Trees Planted (Equivalency):	44 Acres



Before



After



## orion | Case Studies – Retail



### Tractor Supply Company

Waco, TX

Replaced legacy lighting system consisting of 400W metal halide fixtures with Orion's T8 6 lamp fluorescent Compact Modular fixtures.

#### Project Metrics

Annual Cost Savings	<b>\$11,771</b>
Annual Kilowatt Hour Reduction	<b>178,336</b>
Load Reduction	<b>20 kW</b>
Annual Carbon Dioxide Reduction	<b>108 Tons</b>



Before



After



Before



After



### Big Lots Durant, OK

#### Project Scope

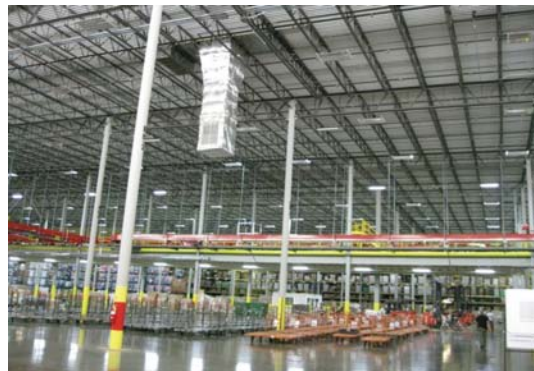
Replace legacy lighting system consisting of Metal Halide fixtures with Orion's T8 Fluorescent Compact Modular High Bay fixtures and standard motion sensors.

#### Project Economics

Displaced Energy:	4,114,229 kWh
Displaced Capacity:	974 kW
Annual Cost Reduction:	\$222,168
Light Level Improvement:	N/A

#### Environmental Impact

Carbon Dioxide Emissions Displaced:	2,660 tons/year
Acres of Trees Planted (Equivalency):	755 Acres



Post Installation – Ceiling View



Post Installation – Floor View

Customer	Quantity
7-Sigma Inc.	3
A&J Conversions	1
A.Lave & Sons Co.	1
A1 Body and Glass	1
AA Anderson, Inc	1
Aaron and Company	1
Abbott Machine Company	1
Abe's of Maine	1
Ace Hardware	4
ACO Hardware Inc.	2
Acoustech Supply, Inc.	1
Active Sports	1
Active Water Sports	1
Ada's Natural Foods Market, Inc	1
Adelta Corporation	1
Advance Auto Parts	14
Advance Electrical & Industrial Supply	1
Advance Holdings	1
Albertons	1
Allied Pools	1
Alro Steel	1
Alto Shaam	1
Amazon.com	3
Amelia's Grocery Outlet	1
Amelia's Grocery Outlet	1
Amerhart Limited	1
American Eagle Outfitters	1
American Furniture Warehouse	1
American Signature, Inc	6
American Tire and Wheel	1
AmeriMark Direct	1
Andrews Sports Club Inc	1
Antiques on 2nd	1
Apple Foods	1
Apple Market	1
Applebees	1
Aqua Export, Inc.	1
Artists Frame Service	1
Athleta, Inc.	1
Aurora Hardwoods	1
Automotive Technology	1
AutoZone	1
Avis / Budget / Payless	1
B&B Energy	1
B&T Quality Foods	1
Badger Corp	1
Barnes & Noble	1
Barney's Furniture	1
Barron's Lumber	1
Batteries Plus	10
Bearing Technologies	1
BedMart, Inc.	3
BeMart Materess Superstores	1
Ben Clymer's Body Shop	1
Bernard Building Center	2
Best Restaurant Equipment	1
Big 5 Sporting Goods	1

Customer	Quantity
Big Lots	5
Bilco Auto Body	1
Blackhawk Hardware	1
Bob Sumerel Tire Center	1
Bobby Denning, Inc	1
Brady Industries	1
Brookstone Company	1
Brown Lumber & Supply Co., In	1
Builders First Source	1
Building Products of Iowa	1
Burger King	1
Burgetts Inc.	1
Burlington Coat Factory	2
Cabela's Inc.	2
Calibre	1
Callahan's General Store	1
Callaway Truck Equipment	1
Cambria Company	1
Carroll Plaza Shopping Center	1
Cascio Interstate Music Co.	1
Central Steel & Wire Company	1
Centre at Hagerstown	1
Ceres Shopping Center	1
Chainworks, Inc	1
Champion Lumber	1
Chatham Plaza	1
Chelsea Lumber	1
Citi Trends	1
Citi Trends Inc.	1
City Furniture	1
Claire's Boutique	1
Clearview Nursery LTD	1
Clinton Home Center	1
Coburn's	2
Colfax Furniture	2
Color Crossing	1
Comfort Products	1
CompUSA	13
Construction Repair Services	1
Continental Diamond	1
Contract Furnishings Mart	1
Copps Corporation	1
Cost Less Food	1
Costco Wholesale	244
Country Mart	2
Craftsman Tool & Mold Co.	1
Crate & Barrel	4
Cross Midwest Tire Co.	3
Cudahy Lumber Company	1
CVS Pharmacy	1
D to Z Sports	2
Daedalus Books	1
Dave's Market	1
DCF Suncoast General Service	1
Dellwood Tire Co.	1
Dennis' 7 Dees Landscaping	1
Dennison International	1



Customer	Quantity
Direct Landscape Supply	1
Dittman	1
Do It All	1
Do It Best	2
Do It Best Corporation	1
Do	1
Dollar General	1182
Dollar Tree	6
Dominick's Finer Foods	1
Domino's Pizza	1
DSW Inc	1
Dunkin' Brands Group, Inc.	2
Eagle Claw Fishing and Tackle	1
Eagle Collision	1
Eagle Industrial Distribution	1
EFD Induction	1
ENCAP	1
Exeter Property Group	2
Facility Solutions Group, Inc.	1
Factory Card & Party Outlet	1
Factory Direct Furniture	1
Family Center Farm and Home	1
Family Dollar	24
Farm & Home Supply	1
Fellowes Manufacturing Co.	1
Ferguson Enterprises	3
Festival Foods	10
Fick & Sons Truck Stop	1
Ficosa North America	1
Fiesta Food Warehouse	1
Fife Lake Village Market	1
Figi's	2
Film Rroducts Corporation	1
Finish Line, Inc.	2
Finke & Company	1
Fischer Lumber	1
Fisher Auto Parts	1
Fleet Street, Ltd.	1
Food Express Truck Shop	1
Foodtown	4
Footwear Unlimited	1
Forrer Strategic Business Interiors	1
Forrest Products Supply	1
Fort Western	1
FOS Furniture Inc	1
Franklin County Shop	1
Fresco Community Markets	1
Fresh Encounter	2
Furniture Fair	1
G&S Furniture and Office Installation	1
Gaerte's Garage, Inc.	1
Gander Mountain	38
Gap, Inc.	5
Garvey Office Products	1
Gary's Tire Center	1
Gem City Tire	1
Gillies Lumber Inc.	1

Customer	Quantity
Global Equip. Co.	1
Global Recognition	1
Golden Rule BBQ	1
Golf Gifts & Gallery	1
Goodwill Industries	7
Grand Northern Products	1
Graybar Electric Company, Inc.	2
Great Lakes Carbide Tool Manufacturing	1
Great Lakes Marine Services	1
Great Plains Business Park	2
Greg's Auto and Truck Body Repairing	1
Groupe SEB	1
Grove Supply Corp	1
Halls Warehousing Corp.	1
Hap Partners	1
Harlem Furniture	1
Hartland America Inc.	1
Hayward Pool Products	1
Herbalife	1
Hercules Tire	2
Hi	1
Hopson Auto Repair Inc	1
HotSpring Spas of Orange County	1
Houston Carton Inc.	1
Howard Presicion Metals	1
Hubert Co.	1
HyPro Incorporated	1
Hyundai Motor America	1
HyVee Inc.	1
IDI	1
Illico Incorporated	1
Imperial Bag	1
Inland Power Group	1
Innovative Repairs	2
Insko Distributing, Inc	1
Insurance Collision Centers	1
Interceramic Inc	1
I	1
J&B Importers	1
J&J Furniture	1
JIM HAWK TRUCK TRAILER, INC.	1
Jim's Auto Body	1
John Holmlund Nursery	1
Johnson Brothers Wholesale Liqour	1
Jordan's Furniture	3
Kamco Supply Corp.	1
Kauffman Tire	1
KB Body Shop	1
Kele, Inc.	1
Keokuk Farm & Home Supply	1
King Kullen	5
King Par Golf	1
Klyonna Clothing Inc.	1
Kobos Coffee	1
Kohl's Department Stores	9
Krueger International	1
Kulkoni, Inc	1

Customer	Quantity
Kulmann's Automotive	1
Kurts Autobody Repair, Inc	1
Lakeland Sports Center	1
Lancaster Market Place LLC	1
Larmon Photographic	1
Lehenbauer Repair	1
Les Schwab Tire Center	9
LeTourneau Technologies	1
Lia Sophia	1
Liberty Place	1
Liebovich Brothers, Inc.	1
Limited Brands	1
Lippert Enterprises, Inc.	1
Liquidated Lumber	1
Long Gate Shopping Center c/o BoPat Electric	1
Lou Perrine's Gas & Grocery	1
Lowe's	4
LTD Commodities	1
Macy's	4
Mainland Skate and Surf	1
Mainline Furniture	1
Marissa Food Mart	1
Marketplace Foods	2
Marsh Electronics Inc	1
Marshall Auto Body	1
Marshall Towne Millwork	1
Martin Sprocket & Gear, Inc.	1
Martin Wheel	1
Max Tool	1
MC Dixon Lumber	1
McCoy's Building Supply	1
MCKay Nursery Company	1
MCLANE PACIFIC	1
McMahon & Co	1
McShan Lumber Company	2
Megagoods	1
Menards	3
MetroPCS, Inc.	1
Michael's Furniture Warehouse	1
Microfibres	1
Mid America Tile	1
Midland Paper Company	1
Midland Plastics	1
Midwest Flooring Outlet	1
Milaca Unclaimed Furniture	1
Miles Kimball	1
Millen Ace Hardware	1
Monentive Speciaty Chemicals	1
Mortimer Lumber	1
Mt. Moriah Auto Sales, Inc.	1
My Tires	1
Nancy's Notions	1
Napa The Ridge Company	1
NASCO	2
National Auto Spa	1
National Furniture	1
Neu's Building Center Inc	1

Customer	Quantity
New River Pottery	3
Newark Farmers Market	1
Newegg	1
Nino Salvaggio International Marketplace	1
Northern Lumber Co.	1
Northpier Restaurant	1
Oak Village Shopping Center	1
OfficeMax/Office Depot	23
Ohio Mulch	1
Orscheln Group	1
Orvis	1
Pacific Packaging Products Inc	1
Packing Incorporated	1
Pamida	1
Paradigm Gardens	1
Partylite	1
Payless Shoes	1
Perfection Plus Transmission Parts	1
Performance Inc.	1
Petflow	1
Pick N Save	2
Piggly Wiggly	2
Pilot/ Flying J	1
Pintsch's True Value	1
Playmobil	1
Plow and Hearth	2
Portfolio International LLC	1
Portland Packaging Company	1
Powell Electrical Systems, Inc	1
Prestige Auto Works	1
Pro Health	1
Pro	1
Produce Junction	5
Publix Supermarket	2
Puckett's Warehouse	1
Pulse Direct, Inc.	1
QESCO Farm and Home Supply	1
Qualheim True Value	1
Quality Car & Truck Repair	1
Quality Collision Center	1
Quality Dairy Company	2
Quality Growers Floral Co. Inc.	1
Quality Water Services	1
QVC Inc	1
Racetrack Supermarket	1
RCS Fabrication, Inc.	1
Real Deals on Rugs & Art	1
Recliner Land	1
Regis Distribution Center	1
Reliance Steel & Aluminum Co.	1
Reno	2
Restore a Muscle Car	1
Reyes Holdings	1
Rite Hite Corporation	1
River City Auto Body	1
River City Truck Repair	1
Roadrunner Sports	1



Customer	Quantity
Rockaway Bedding	1
Rona Home & Garden	43
Ron's Automotive & Collision Repair	1
Ron's Repair Shop	1
Rose Brothers Furniture, Inc.	1
Roundy's	6
Rural King Supply	20
S Abraham & Sons, Inc	1
S. I. Metals and Supply, Inc.	1
Saddle Up	1
Safeway, Inc.	5
Save	1
ScanSource, Inc.	1
Schwan Food Company	1
Scott's Comemercial Truck Services	1
Sears Holding Corporation	36
Sergeants Pet Care Products, Inc.	1
Service King Collision Center	2
Sheboygan Auto Glass Co.	1
Sheffield Antique Mall	1
Sherm's Piggly Wiggly	1
ShopRite	26
Sierra Trading Post	1
Sierra Vista Mall	1
Silver Lake Auto Center	1
Simmons Foods Ryder Dock	1
Simpson Strong Tie Co.	1
Sisken Steel	1
Sissy's Log Cabin 15	1
Skipperliner	1
Snider Tire, Inc. Building 5	1
Sorensen's True Value	1
Southern Indiana Tire	1
Southfield Dealers Body Shop	1
Southland Mall, LTD	1
SpartanNash	8
Spencer Gifts	1
SPI	1
SRC Electrical LLC	1
St. Andrews Products Nolan & Johnson Building	1
St. Vincent Depaul	2
Stage Stores	1
Standfast, Inc.	1
Staples Inc.	4
Star Western Wear	1
Stash and Store	1
Stauffers Of Kissel Hill	1
Stein Garden & Gifts	1
Stokes Electrical Supply Co.	1
Stop and Shop/Giant	1
Sugar River Machine Shop	1
Sugar Steel	1
Sunset Do It Best	1
Superior Tire Service	2
Sutherland Lumber Company	6
Swan Serv	1
Talaris, Ltd.	1

Customer	Quantity
Tci Tire Center	1
TCT Stainless Steel Inc	1
Tennies True Value	1
The Bedroom Store	1
The Douglas Stewart Company	1
The Forside Company	1
The Kroger Company	48
The Talbots, Inc.	1
Theising Veneer, Inc	1
Thirtyone Gifts	1
Thomson Marine	1
TIFCO Industries	1
Tiger Direct, Inc.	7
Tile Outlets of America	3
Tipton General Store	1
Tire Centers, LLC	13
Tire Dealers Warehouse	1
Tire Universe	1
TMR Furs LLC	1
Tony's Finer Foods	1
Tool Steel Service	1
Tower Tech Systems	1
Town & Country Supermarket	1
Town Fair Tire Center	1
Tractor Supply Co.	3
Trade Global	1
Transtar Industries, Inc.	1
Triangle Town Center & Commons	1
Trigs Ace Hardware	1
Tri	2
Trivett's Furniture	1
Trophy Depot	1
Truck King International	3
True Value Company	3
TSC	1
Tuffy Auto Service Center	1
Uchiyama America Inc	1
United Supply Corporation	1
US Tsubaki	1
Utica Part & Service	1
Valli Produce	1
Value World	1
Ventra Fowlerville	1
Veterans Medical Supply	1
Viking Village Foods	1
Vilter	1
Vince & Joe's Gourmet Market	1
Vitamin Shoppe	1
Wago Corporation	1
Wakefern Food Corp	5
Wal	2
Washington Food Center	1
West Michigan Bank & Trust	1
Weyco Group Inc.	1
WG & R	1
Whole Foods Market	2
Wilderness Crossing Travel Center	1

Customer	Quantity
WinCo Foods	3
Winter Woods Gifts	1
Wittcock Supply	1
Wonder Book	1

Customer	Quantity
Woodworkers Depot	1
WSI	1
Xtreme Auto Body	1
Z Gallerie	1
Zuern Building Products	3



## ISON™ LED HIGH BAY | HBIF2

- Industry leading efficiency with best in class performance
- Patent-pending unique modular design allows for ease of field maintenance and is upgradeable for performance enhancements
- Superior thermal management leads to longer life and enhanced performance
- Ideal for industrial, commercial and retail application
- Flexible platform to adjust to almost any application
- Durable, sleek, aluminum body with open area and aisle illumination options
- Various control options offered to gain additional energy savings
- Voltage: 120-277, 347, and 480v
- Rated Life: 150,000 hours



## ISON™ LED HIGH BAY HIGH LUMEN | HBIF2

- Best in class "Lumen per Watt Performance" - up to 177 lpw
- Designed to replace traditional fluorescent or HID of 400, 750 and/or 1000 watt in heights above 40'
- Groundbreaking thermal management design reduces fixture operating temperature to enhance performance
- Wireless networking and remote control sensors
- Voltage: 120-277v, 347v and 480v
- Rated Life: 150,000 hours



## APOLLO® LED HIGH BAY | HBAC2

- Future-proof, modular design allows for ease of field maintenance and is upgradeable for performance enhancements
- Feature rich, value oriented high performance high & low bay solution ideal for industrial, commercial, and retail applications
- Hundreds of options and accessories available, including emergency battery back up, integrated and wireless controls, aisle illumination package and more
- Easy-to-install, lightweight aluminum body design, reduces ceiling grid load, installs faster with minimal impact on operations
- Extensive list of features and fixture options
- Voltage: 120-277v, 347v, 480v
- Rated Life: 125,000 hours



## HARRIS LED HIGH BAY | HBHC1

- Modular power pack is field replaceable for ease of fixture maintenance
- Well suited to meet high and low bay illumination requirements for industrial, commercial, and retail applications
- Plug and play end mounted control options available
- Optional aisle illumination performance package
- Voltage: 120-277v, 347v, 480v
- Rated Life: 100,000 hours



#### ISON™ LED LDR® TROFFER RETROFIT MODULAR | LDRM1

- Industries first Patented LED LDR® Troffer Retrofit contained within the doorframe
- Patent pending, future-proof, interchangeable light engine design delivers the benefit of replaceable LED lamps or tubes without the performance or safety risks
- Designed to retrofit existing 2'x2' and 2'x4' T8/T12 fluorescent troffers in as little as two minutes
- Ships completely assembled, which minimizes labor install and interruption in the workplace
- Several control options to include third party control solutions
- Voltage: 127-277v
- Rated Life: 125,000 hours



#### APOLLO® LED LDR® TROFFER RETROFIT | LDR F-SERIES 1'x4', 2'x2', 2'x4'

- Industries first Patented LED LDR® Troffer Retrofit contained within the doorframe
- Designed to retrofit almost all existing T8/T12 troffer
- One-piece, powder-coated white, light-weight enclosed aluminum body
- Designed to retrofit existing 1'x4', 2'x2' and 2'x4' T8/T12 fluorescent troffers in as little as two minutes
- Matte finish contour or flat panel lens
- Full range dimming driver
- Voltage: 120-277
- Rated Life: 125,000 hours



#### HARRIS LED LDR® TROFFER RETROFIT EDGE | LDRE1

- Industries first Patented LED LDR® Troffer Retrofit contained within the doorframe
- Designed to retrofit existing 2'x2' and 2'x4' T8/T12 fluorescent troffers with either prismatic lens or parabolic louvers
- Installs in as little as two minutes, which minimize workplace disruption
- Ships completely assembled, which minimizes cleanup and labor install
- Several control options to include third party control solutions
- Voltage: 127-277v
- Rated Life: 100,000 hours



#### APOLLO® LED SUSPENDED SLIMLINE SERIES | SPTS1

- Versatile slim design lends itself to many low bay, interior lighting applications
- Internal and External Driver options
- Suspended and surface mounting options
- Opaque matte lens aids in distribution of light and reduction of glare
- Voltage: 120-277v
- Rate life: 100,000 hours



## APOLLO® LED VAPORTIGHT NARROW BODY SERIES | VTON1

- Ideal for commercial kitchens, breweries, under awnings, laundries, car washes, utility tunnels, and livestock containment buildings where the application requires a waterproof and/or dust proof fixture
- Bi-level, dual circuit option allows for high and low lumen light levels for safety
- UL Wet Location, IP66, IP67, High Pressure Washdown PSI1500, NEMA 4X Housing
- TVSS and Wet Location sensor options available
- Voltage: 120-277v
- Rated Life: 125,000 hours



## APOLLO® LED VAPORTIGHT WIDE BODY SERIES | VTOD1

- Ideal for commercial kitchens, breweries, under awnings, car washes, utility tunnels, and livestock containment buildings where the application requires a waterproof and/or dust proof fixture
- Bi-level, dual circuit option allows for high and low lumen light levels for safety
- UL Wet Location, IP66, IP67, High Pressure Washdown PSI1500, NEMA 4X Housing
- TVSS and Wet Location sensor options available
- Voltage: 120-277v
- Rated Life: 125,000 hours



## HARRIS LED VAPORTIGHT | xVT

- Industrial application, food service settings
- Outperforms in freezer and refrigerator settings
- Lightweight fiberglass body, Ribbed frosted acrylic lens
- Four and eight foot options
- Quick clean with high or low pressure wash
- Voltage: 120-277
- Rated Life: 50,000 hours
- IP65, IP67







ORION WILL CHANGE THE WAY YOU  
THINK ABOUT A LIGHTING COMPANY.

# WHY ORION

From the very first handshake to the final fixture installed, our energy is the difference we bring to every retrofit. Ingenuity guides us to new solutions. Dedication helps you at every step. And our products illuminate your world in ways you might not have imagined.

## ALLY IN ACCOUNTABILITY

Our relationships go beyond shipping you the latest fixture. Your goals become our goals, which means we share responsibility to help you keep your promises and make your project successful.

## PRACTICAL INGENUITY

When you've been on the job site or up on the lift, you build in-the-trenches know-how. That expertise inspires more creative products that maximize real-world performance for your lighting investment.

## UNCOMMON DEDICATION

Our customers tell us we have more capable teams that deliver results, not just on paper, but in the day-to-day work of the people we serve. Some say it's our Midwestern roots; we think it's our energy.

## LIGHT YEARS AHEAD®

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Manitowoc, WI 54220

800.660.9340 | 920.482.0520  
[orionlighting.com](http://orionlighting.com)

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