



Petroleum



# PETROLEUM LIGHTING

## Application Guide

Better light makes us feel safer as we pull up to the pump, and more comfortable once we get there. Crisp, ultra-efficient lighting for convenience stores leads to an incredible shopping experience that's simply better.

**CREE**  <sup>TM</sup>





## Petroleum

# ALL PATHS LEAD TO YOUR STORE WITH CREE LED LIGHTING.

Potential customers have many choices when it comes to stopping for fuel and convenience. At Cree, we understand how quality lighting can help lead those potential customers to your store. Our fixtures create inviting light and excellent visibility to help attract more customers, all while lowering your energy and maintenance bills.

From a well-lit parking lot to appealing C-store product displays, we formulate every solution to meet your unique needs – whatever the application, whatever the budget.

### BETTER LIGHT FOR:

- Proven quality & performance
- Ultra-efficiency
- Lifetime energy savings
- Reduced maintenance costs
- Easy installation & upgrading
- Long-term financial benefits

Canopy





## STAND OUT IN THE CROWD.

Exterior lighting helps set your petroleum station apart from the pack. A well-lit canopy is critical in shaping the right first impression with your customers. By creating an inviting, safe and welcoming space under the canopy, your facility will not only stand out in the crowd, but you will also create an opportunity for greater success in your car wash and C-Store.

Easy-to-install canopy lighting from Cree requires no re-lamping for at least 10 years\* and virtually no maintenance to produce quality, even illumination under single- or double-skin canopies. The result is unbeatable value that contributes to a more profitable bottom line.

\*Lifetime is based on Cree® luminaires designed to last 50,000 hours.



### CPY Series Canopy

- Minimum 70 CRI
- Deliver up to 20,080 lumens
- Efficacy up to 151 lumens per watt
- IP66 rated
- Direct, pendant or Hook & Cord mounts available



### 304 Series™ Recessed Canopy

- NanoOptic® Technology
- Driver centrally located
- Convenient electrical inspection access
- Modular, low-profile design



### 228 Series™ Recessed Canopy

- UL wet listed
- Multi-level options
- Upgrade kit options
- Modular, low-profile design



## ILLUMINATE YOUR BRAND.

A customer's first impression of your brand is not made at the gas pump or in the C-Store. Your station's first impression is made from the road. That's why in addition to your canopy lighting, lights defining your perimeter, lighting your parking lot, walkways, and building entrances are so important. Put your brand on display and invite customers inside by creating a safe, comfortable, visually appealing environment from the road.

Cree's advanced NanoOptic® technology provides on-target illumination where you want it and full cutoff where you don't. Vividly light only the spaces that you want, while dramatically reducing energy costs and light pollution.



### OSQ Series Area

- Replace up to 1000W MH
- 70 CRI (4000K & 5700K; 3000K asymmetric optics); 80 CRI (3000K symmetric optics)
- Deliver up to 27,103 lumens
- Efficacy of 139 lumens per watt
- Versatile mounting options
- High Output version available replaces multiple 1000W fixtures (up to 68,691 lumens)



### LEDway Series High Output

- Replaces 70 to 400W HID
- Adjustable output for versatility
- Exclusive Colorfast DeltaGuard® Finish
- NanoOptic® Precision Delivery Grid™ Optic
- 10-year limited warranty



### XSP Series Wall Mount

- Replaces 70 to 175W HID
- Minimum 70 CRI
- Deliver up to 4,109 lumens
- Efficacy up to 101 lumens per watt
- IP66 rated
- NanoOptic® Precision Delivery Grid™ Optic
- Photocell, dimming and multi-level options available

# Car Wash





## MAXIMIZE THE BOTTOM LINE.

Car wash operators are constantly looking for ways to minimize operating costs and lower overhead while making environmentally-friendly decisions to attract customers. With LED lighting, this large task gets a little easier.

Cree LED lighting offers significant energy and maintenance savings over traditional lighting technologies by providing efficiency, performance and longevity. With our 10-year limited warranty, exclusive Colorfast DeltaGuard® Finish and no re-lamping for at least 10 years\*, you can feel confident that Cree® luminaires can withstand your car wash's harsh, corrosive environment.

\*Lifetime is based on Cree luminaires designed to last 50,000 hours.



### 304 Series™ Parking

- Direct, hook & cord or pendant mount
- Access from below the luminaire
- Exclusive Colorfast DeltaGuard® finish
- IP66 rated
- Suitable for wet locations



### CPY Series Canopy

- Minimum 70 CRI
- Deliver up to 20,080 lumens
- Efficacy up to 151 lumens per watt
- IP66 rated
- Direct, pendant or Hook & Cord mounts available



### Cree Edge™ Series Wall Mount

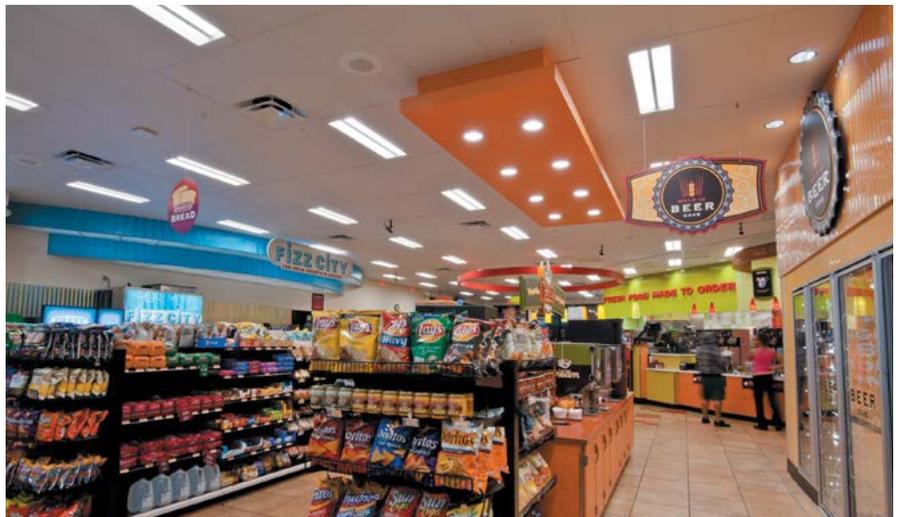
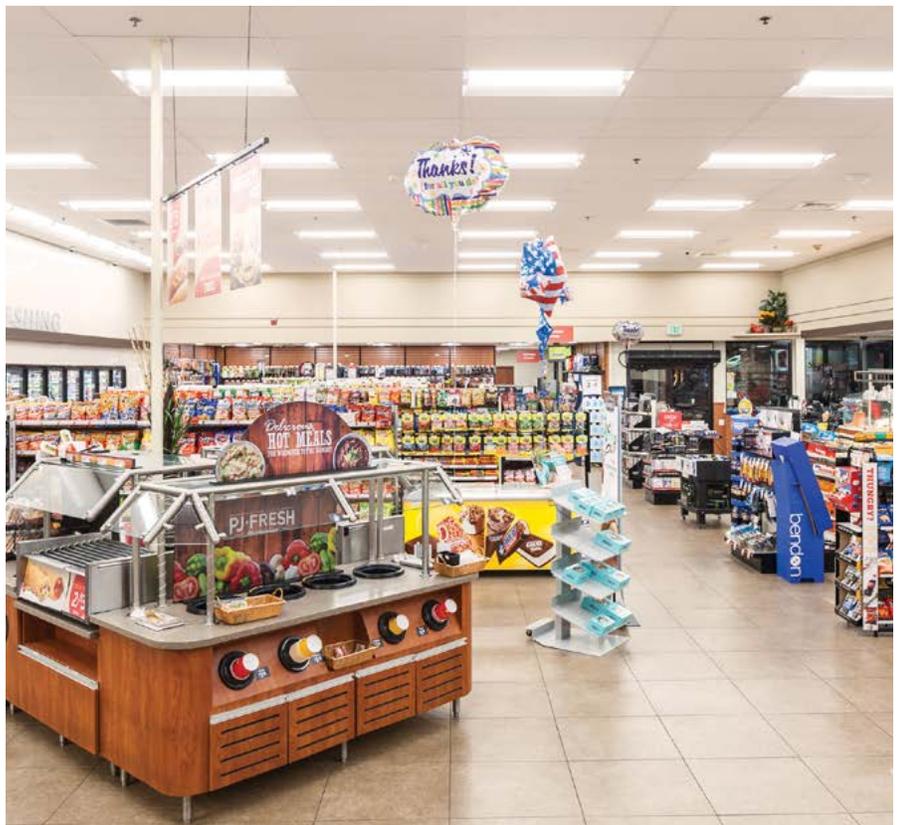
- Minimum 70 CRI at 4000K or 5700K
- Exclusive Colorfast DeltaGuard® Finish
- UL wet listed
- Multi-level options



## MAKE YOUR MERCHANDISE POP.

When customers walk into your C-Store, you want them to feel comfortable and at home. Interior lighting with Cree TrueWhite® Technology produces, inviting light that uses up to 85 percent less energy when compared to traditional lighting solutions.

Cree LED lighting solutions help to create an inviting atmosphere, providing your customers with a sense of comfort, safety and security that sets the tone for their experience from the canopy to the inside of the C-Store. Cree TrueWhite® Technology enables interior lights to achieve a 90+ CRI, so your refreshments look fresher, your appetizers more appetizing, and your C-Store cleaner and more professional.



### LR Series Downlights

- Cree TrueWhite® Technology
- Deliver up to 1,800 lumens
- Efficacy up to 100 lumens per watt
- Shallow and deep recess options
- Dimming: Continuous to 5%



### LS Series Surface Ambient

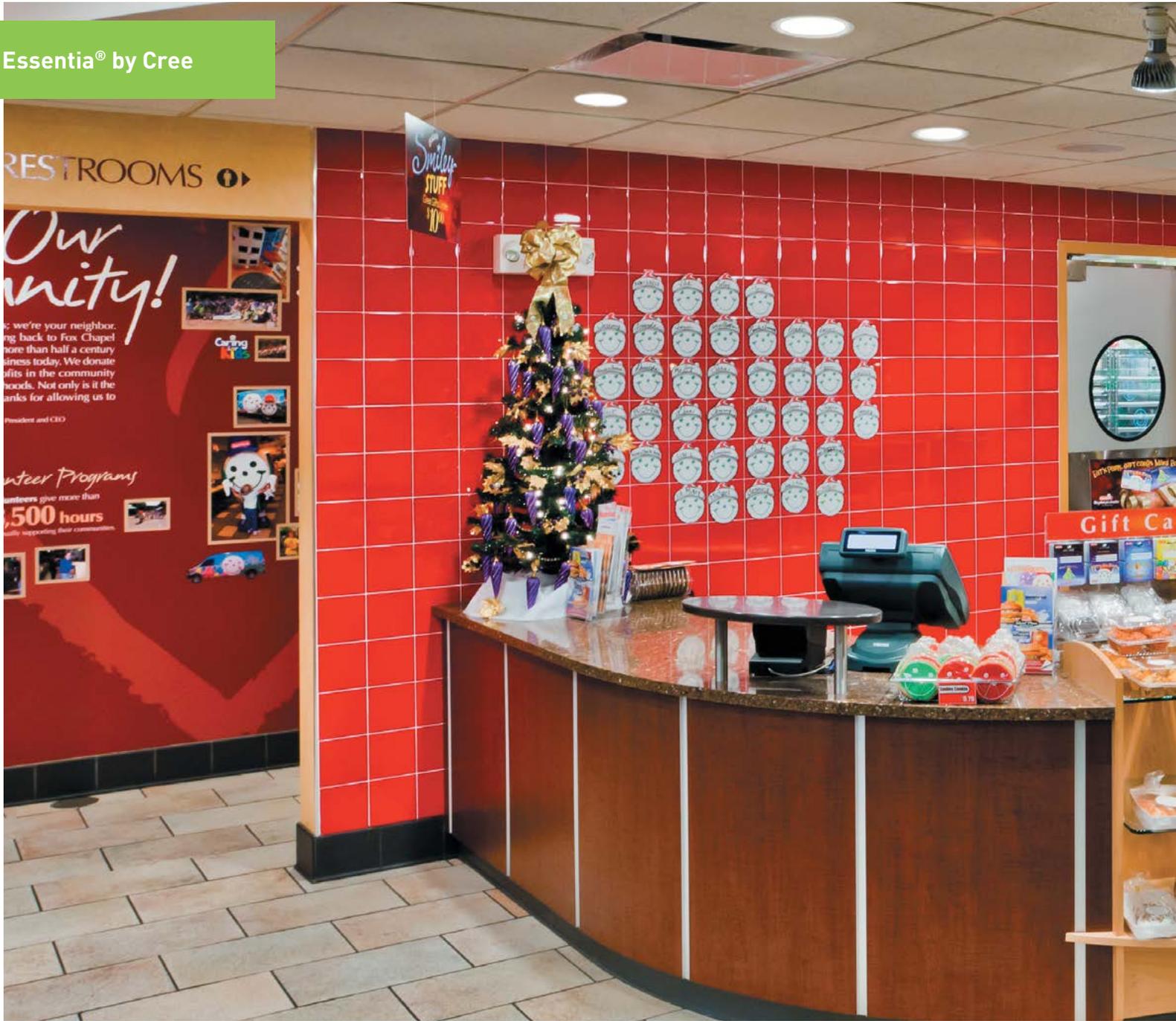
- 90 CRI or 80+ CRI
- Deliver up to 10,000 lumens
- Efficacy up to 130 lumens per watt
- Dimming: 0-10V to 5%
- Occupancy sensor and thru-wiring available



### ZR Series Troffers

- 90 CRI or 80+ CRI
- Deliver up to 5,000 lumens
- Efficacy up to 130 lumens per watt
- Matte finish for reduced glare
- Dimming: 0-10V to 5%
- Retrofit Kit option available

Essentia® by Cree



## RAISE YOUR EXPECTATIONS OF INDUSTRY STANDARD LED LIGHTING OPTIONS.

Essentia® by Cree expands your choices for that essential mix of performance and cost savings — giving you more power to choose wisely and a greater ability to customize and control your ROI. Now every selection is a smart investment. Very smart because Essentia® by Cree gives you the assurance of a highly reliable “Just Right” choice backed by a leader you trust. Now you can choose with confidence.



**ESSENTIA**  
by CREE ⇄

### Essentia® by Cree Flat Panel

- 90 CRI
- Deliver up to 5000 lumens
- Efficacy of 100 LPW
- Efficacy up to 110 lumens per watt
- 0-10V dimming to 10%
- IP40 rated



**ESSENTIA**  
by CREE ⇄

### Essentia® by Cree Downlights

- 90 CRI
- Deliver up to 6,300 lumens
- Efficacy up to 83 lumens per watt
- Dimming: 0-10V to 1%; Triac to 10%
- Narrow, medium and wide beam angles
- 4", 6" and 8" round with wall wash and adjustable accent configurations



**ESSENTIA**  
by CREE ⇄

### Essentia® by Cree Track Lighting

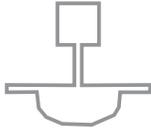
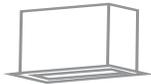
- Up to 2,500 lumens
- System available in either one- or two-circuit configurations for additional control flexibility
- Interchangeable reflectors for beam control
- Heads are compatible with prevalent one- and two-circuit track systems

# MAXIMIZE REUSE OF YOUR CURRENT INFRASTRUCTURE

## Upgrade Solutions for Canopies

Canopies don't have to be stuck in time with antiquated technology. Whether it is a 2x2 shoebox, a recessed rectangular box or just an obsolete metal halide solution, Cree's LED upgrade kits can transform these canopies to modern times without disturbing the existing aesthetics of the canopy. The easy-to-install upgrade kits can be installed in minutes while illuminating your brand and petroleum station in a whole new light — a seamless transition from yesterday to today. Further, with the Cree family of LED luminaires, you can drastically reduce the wattage required to illuminate your location by up to 70 percent with virtually no maintenance — all while creating an inviting and safe atmosphere for your customers. Installing Cree® LED luminaires would be the best investment decision you will ever make to maximize your bottom line.

For more information on upgrading petroleum canopy lighting, see the Cree LED Lighting Petroleum Upgrade Guide at [lighting.cree.com/petro](http://lighting.cree.com/petro).

<b>Canopy has a 2x2 Box</b>	
Upgrade Current Product in 2x2 Box with Cree	
Remove 2x2 Box and Upgrade with Cree	
<b>Canopy Does Not Have a 2x2 Box</b>	
Upgrade Existing HID Fixture with Cree	
<b>Canopy Does Not Have a 2x2 Box</b>	
Upgrade Recessed Rectangular with Cree	

## Cree Canopy LED Solutions



**CPY Series**  
Direct Mount Canopy



**228 Series™**  
Recessed Canopy



**304 Series™**  
Recessed Canopy

# COMPLETING YOUR INSTALLATION IS AS EASY AS 1...2...3

- 1** Choose the right outdoor luminaire for your application to significantly reduce energy and maintenance costs while improving your illumination performance.
- 2** Determine which mount your application requires and choose the appropriate tenon that works with the mount.
- 3** Contact your local Cree LED Lighting representative and start enjoying the many benefits of LED lighting.

## Available Mounts and Tenons for Cree Street and Area Luminaires



NOTE: Some product configurations are not available. Please consult spec sheet for specific availability and for further details.

# PROVEN INNOVATION AND SUPERIOR VALUE.

The innovative technologies that make up Cree® products have revolutionized the lighting industry by making high-quality, sustainable LED lighting affordable and available to all. With this advantage, we remain at the forefront today, dedicated to developing new LED lighting solutions that improve both our customers' spaces and their bottom lines, and all backed by an incredible warranty.



## Cree 10-year Limited Warranty\*

Light your Petroleum areas and facilities with confidence. Cree offers a 10-year limited warranty that covers the broadest product range in the industry. As a leading innovator of LED chips, components and lighting, Cree has more than 20 years of experience in commercial LED development, bringing an unprecedented level of expertise to all facets of the LED lighting design and development process. Cree's 10-year limited warranty covers the majority of globally-available, commercial-grade indoor and outdoor fixtures. To learn more, please visit [lighting.cree.com/warranty](http://lighting.cree.com/warranty).

## Cree TrueWhite® Technology

Cree TrueWhite® Technology delivers an exclusive combination of industry-leading efficacy (up to 150 lumens per watt) and 90+ CRI to lighting applications. Featuring high R9 values, spaces are brighter and colors are more vivid under beautiful white light—all while offering significant energy savings compared to traditional technologies.



## NanoOptic® Technology

With patented NanoOptic® Technology available in multiple distributions, Cree® outdoor LED fixtures provide precise optical control for exceptional application performance and energy savings. The NanoOptic® refractor system offers superior light control with more lumens delivered in the target area, improved uniformity ratios, and controlled high-angle brightness.

## DeltaGuard® Finish

Cree's exclusive Colorfast DeltaGuard® Finish protects our LED outdoor fixtures without compromise. Immersive conditioning across 18 stages delivers an e-coat epoxy primer with an ultra-durable powder topcoat, providing unmatched protection against corrosion, UV light, fading and weathering complete with a 10 year limited warranty.

\*Essentia® by Cree products are not included in the Cree 10-year limited warranty. Please visit [lighting.cree.com/warranty](http://lighting.cree.com/warranty) for more information.

## Benefits at Every Turn

Cree is the originator of today's LED lighting technology and is 100 percent committed to the continued advancement of solid state lighting. From growing our patented Silicon Carbide (SiC) materials, to developing the components, to manufacturing complete lighting systems, our entire portfolio benefits from Cree's unrelenting pursuit of developing the most advanced LED lighting products available.



### Proven Quality & Performance

A leading innovator of LED chips, components and lighting, Cree has more than a quarter century of experience in LED lighting development. As a leading vertically-integrated LED lighting company, Cree is revolutionizing the lighting industry with the development of sustainable lighting technology.



### Ultra-Efficient Lighting

Lighting accounts for approximately 20 percent of electricity use in commercial applications. Cree offers a complete line of indoor and outdoor LED lighting solutions that significantly reduce electricity consumption and operating costs for commercial applications.



### Lifetime Energy Savings

One of the main advantages of LED lighting is a substantial reduction of power consumption when compared to traditional sources. Significant energy savings begins on day one and continues throughout the application life of the product.



### Safe, Inviting Environment

Cree's advanced NanoOptic® technology provides targeted illumination for dramatically better visibility and reduced light pollution. Great lighting creates a safe, comfortable, visually appealing environment which attracts customers from the road.



### Reliable & Low Maintenance

Virtually maintenance-free, Cree® LED luminaires last 20x longer than traditional light sources — freeing you from fixture outages. That's why we offer a 10-year limited warranty along with our exclusive Colorfast DeltaGuard® finish.



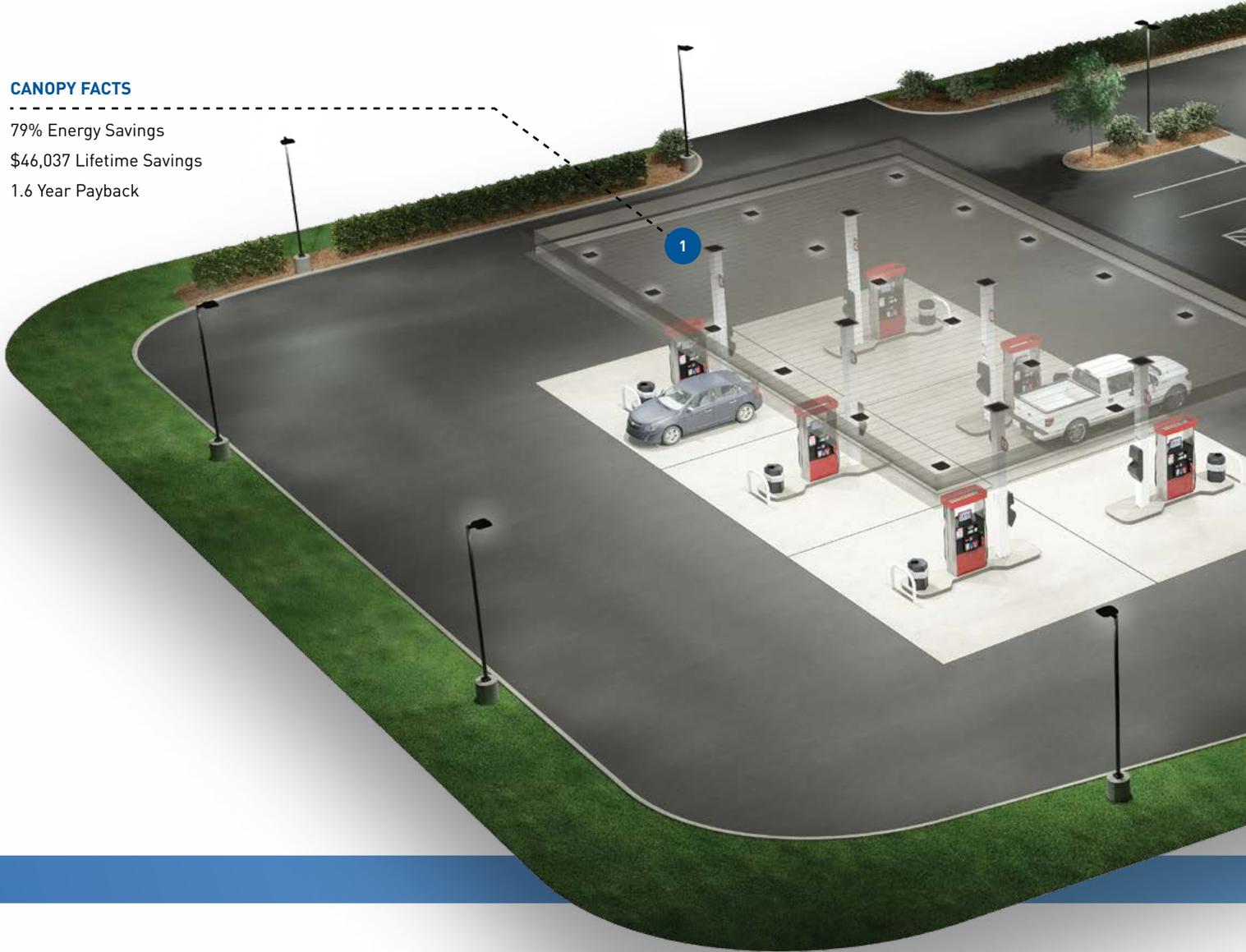
### Long-Term Financial Benefit

Cree offers some of the most energy efficient and long-lasting LED lighting in the industry. This translates to financial savings through reduced operational costs and less money spent on maintenance due to extended product life.

# CREE PETROLEUM LED LIGHTING SOLUTIONS

## CANOPY FACTS

- 79% Energy Savings
- \$46,037 Lifetime Savings
- 1.6 Year Payback



## Outdoor LED Lighting Products

1



CPY Series Canopy

2



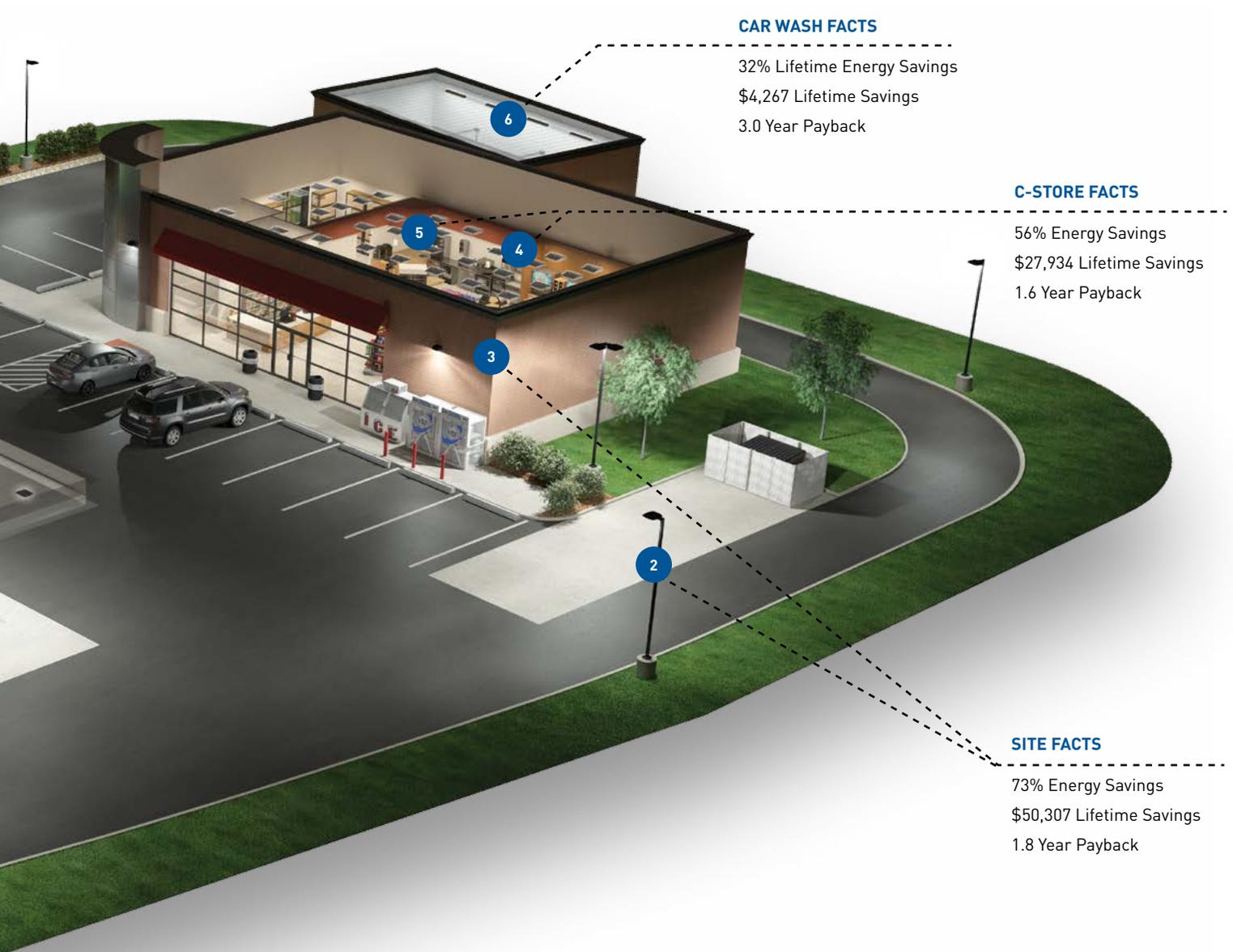
OSQ Series Area

3



XSP Series Wall Mount

\* Payback and energy savings are based on the national average electricity rate, recommended maintenance schedule, and typical maintenance costs over common assessment periods (application life).



**CAR WASH FACTS**

32% Lifetime Energy Savings  
\$4,267 Lifetime Savings  
3.0 Year Payback

**C-STORE FACTS**

56% Energy Savings  
\$27,934 Lifetime Savings  
1.6 Year Payback

**SITE FACTS**

73% Energy Savings  
\$50,307 Lifetime Savings  
1.8 Year Payback

**QUICK FACTS**

**70%**  
ENERGY SAVINGS

**\$128K**  
LIFETIME SAVINGS

**1.7 Yr.**  
PAYBACK

**Indoor LED Lighting Products**



ZR Series Troffer



LR Series Downlight



WS Series Surface Ambient

\* Payback and energy savings are based on the national average electricity rate, recommended maintenance schedule, and typical maintenance costs over common assessment periods (application life).



Petroleum



### FACILITIES FEATURED IN THIS BROCHURE INCLUDE:

- 7-ELEVEN® - Lakeland, FL
- Black Diamond Vista Chevron® - Concord, CA
- Circle K® Petroleum Station & Convenience Store - Columbus, IN
- 4Sons Tramonto - Phoenix, AZ
- 4Sons Tramonto - Cave Creek, AZ
- MAPCO® - Franklin, TN
- Pilot Flying J - Clear Brook, VA
- Raley's® - South Lake Tahoe, CA
- Rebel Oil - Las Vegas, NV
- Sheetz® - Cary, NC
- Shell® - Farmington, CA
- Tiger Mart - Little River, SC
- Woodridge Marathon® - Woodridge, IL

Learn more at: [lighting.cree.com/petro](http://lighting.cree.com/petro) | [info@cree.com](mailto:info@cree.com) | 800.236.6800

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