4 SONS FOOD STORES, INC.
Phoenix, AZ

Multiple Cree® LED lighting upgrades lead to significant energy savings and surprising benefits for this chain of petroleum stores.
Opportunity

4 Sons's tedious and costly maintenance plan made simple with Cree LED lighting solutions.

With twenty-one food and petroleum stores in the local Phoenix, Arizona area, Eric Seitz, Owner of 4 Sons Food Stores, Inc., was paying for a lot of lighting maintenance. “I was growing tired of the maintenance and expense involved with our lights and I wanted to lower the power bills at all of our locations,” said Seitz.

That’s when Seitz contacted Treve Gibson, Owner of DemandDrop about upgrading his existing lighting to a more efficient lighting solution that wouldn’t alter his current lighting plan. Enter Cree.

“We worked together to create a phenomenal cost-saving solution using Cree® LED lights,” said Gibson.

Solution

If you plan it, savings will come. Interior and exterior lighting upgrades completed over time

With multiple locations of various sizes and layouts to upgrade, Gibson developed a plan to upgrade two to three locations per month.

“Each location has strict lighting rules and the existing lighting plans were already compliant. The Cree® luminaires saved us time, because they worked great as one-to-one (or less) replacement solutions. So, we didn’t have to redesign the entire lighting plan,” said Gibson.

Throughout all of the stores, the canopy lighting was transitioned from 400W metal halide to the high-performing CPY Series which allowed Seitz to reduce the number of luminaires needed. Around the C-Store, 42W XSPW™ Wall Packs replaced 175W metal halide. For stores with car washes, the XSPW™ Wall Packs or CPY250™ Canopy/Soffit luminaires were used.

Inside the stores, 12W CR6™ Downlights were used to replace 32W CFL fixtures, and the ZR Series Troffers replaced 3-lamp fluorescent T8 fixtures. ZR24™ luminaires provide 90+CRI to make merchandise colors and brands pop at 4,000 Kelvin.

“I was skeptical about reducing the color temperature because I’ve always used 5,000 Kelvin at my stores, but it worked – the lighting is so much brighter and uses less energy,” said Seitz.

In some locations, 2-lamp fluorescent T8 bulbs were easily switched to LED with the UR Series Upgrade Kits — using the existing housing allowed for reduced fixture waste.

“Cree makes a great product and with a 10-year limited warranty backing it, it’s a great buy. It’s the best value in energy efficiency, longevity and reliability.”

Treve Gibson | Owner, DemandDrop

CREE® LED LIGHTING FUELS 4SONS’ COST SAVINGS GOALS
By upgrading their light fixtures to Cree LED luminaires, 4Sons Food Stores, Inc. was able to save $1,500 to $1,800 per month per location on energy costs – about one third of the energy bill. In addition, each location saves thousands of dollars annually on maintenance costs since Cree LED lights are virtually maintenance-free for 10 years. For example, the Cave Creek location is estimated to save $3,500 in annual maintenance costs. By upgrading, each location was able to secure between $8,000 to $16,000 in utility rebates. In Cave Creek’s situation, the payback was brought down to 1.7 years.

The cost savings doesn’t end with the lighting upgrade. “The money we have saved on energy and maintenance costs from the lights, allowed us to install programmable thermostats,” said Seitz. Since the Cree® LED lights generate less heat than traditional lights, we were able to adjust the set temperature allowing us to keep the c-store comfortable, while our HVAC system uses less energy,” said Seitz. “The temperature change really pays off since it can be 115° or higher in the summer.”

The benefits of Cree LED lighting doesn’t stop at cost savings – 4 Sons Food Stores, Inc. is also benefiting from the crisp white light creating excellent visibility and an inviting, safe atmosphere.

“Our stores are so bright now that they bring in customers from the highway,” said Seitz. “Neighboring stations end up getting lost in the dark and we stand out in the crowd.”

“The Cree® LED lighting helps customers feel safe and secure late at night,” said Gibson.

“The lighting is very comfortable,” said Gibson. “It’s bright, but not piercing to the eyes.” Plus, the interior LED lighting helps make the store merchandise and displays pop without being overbearing.

“We are very happy with our decision to upgrade the lighting in all of our locations to Cree® LED lighting. From the crisp white light to the energy and maintenance savings – it’s a win for us,” said Seitz.

**Benefits**

Switch to Cree® LED Lighting yields an impressive ROI that leads to significant energy savings and an overall pleasing outcome for 4Sons and their customers.

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**“We are very happy with our decision to upgrade the lighting in all of our stores to Cree® LED lighting. The lighting is fantastic and the return on investment is even better.”**

Eric Seitz | Owner, 4 Sons Food Stores, Inc.

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*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) for Cave Creek, AZ location. Payback calculation also includes a rebate received from Arizona Public Service Company.*
Cree® LED Lighting Used

• CPY Series Canopy and Soffit
• XSP Series Wall Pack
• UR Series Upgrade Solutions
• CR Series Downlights
• ZR Series Troffers
• XSP Series Area

Participants

End User: 4 Sons Food Stores, Inc.
Agent: Trengove Marketing & Sales
Distributor: DemandDrop

Visit www.cree.com/lighting or contact a Cree lighting representative to learn more.