



Restaurant - New Construction

Burger King®/Group 2029 Inc.

Savoy, IL

By installing energy-efficient Cree® LED lighting, franchisee Maruti Seth met Burger King's challenge to take build an environmentally-friendly restaurant without compromising operational standards.

- Anticipated payback of two years
- Approximately 74 percent energy reduction over traditional metal halide system
- Estimated annual energy cost savings of \$3,500





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Maruti Seth, Owner,
Group 2029 Inc., Burger King® franchisee



SERVING UP SUSTAINABILITY

OPPORTUNITY

The average American stops at a quick-service restaurant 150 times a year. With this many impressions, fast-food restaurants have great opportunity to create positive environmental impacts as they enter the green-building arena.

Recent efforts in corporate strategies and enterprising franchisees are sprouting new models on how to serve up sustainability. As the number-two hamburger chain with over 12,000 restaurants around the world in 73 different countries, Burger King® is looking to lead the sustainable building charge among national and global fast food chains.

Burger King® is continually initiating environmentally positive changes without compromising operational standards. The company's employees and leadership are engaged and committed to developing ways to deliver consistent policies and practices across all of their operations globally.

Since 90 percent of Burger King's fast-food restaurants are owned by franchisees, new franchisees are challenged with implementing efforts towards a green vision by creating an exceptional and memorable dining environment that also incorporates a smaller carbon footprint, reduced utility costs and increased labor efficiencies.

As Burger King® franchisee Maruti Seth began making plans to open his ninth franchise, he wanted to find a way to reduce utility costs. So when Group 2029 Inc., the private company Seth founded in 2005, set out to construct the new restaurant in the central Illinois town of Savoy, it ordered energy-efficient Cree® LED lighting instead of traditional metal halide fixtures to illuminate the parking lot, drive-thru bay, walkways and more.

SOLUTION

The Cree exterior LEDway® luminaires with BetaLED® Technology that were chosen over the metal halide solution provide dramatically improved uniformity, eliminating dark spots between fixtures.

The LEDway® luminaires installed in the restaurant's parking lot feature patented NanoOptic® Technology that helps reduce light pollution by directing light into desired target areas without casting light onto neighboring properties or into the night sky.

The 304 Series™ luminaires mounted under the canopies of the windows, customer entrance and drive-thru bay of the restaurant also provide targeted light without spilling into adjacent areas.

And with a mind towards employee and patron safety, the Cree Edge™ security luminaires illuminate the employee and service entrance behind the building as well as the perimeter walkways.

In keeping with the corporate sustainability goals, the Cree LED fixtures offer superior lighting that meets the required uniformity and spill light requirements of the site, as well as the sustainable illumination performance requirements that were set.

BENEFITS

Seth and Group 2029 were willing to make the initial investment in Cree luminaires over a traditional lighting system because they anticipate recovering the additional cost of the LED system in approximately two years.

“It just didn't make sense to build a new restaurant with the latest technology and building materials but install outdated lighting fixtures,” said Seth. “The Cree luminaires provide very consistent and uniform illumination without having any light spilling to adjacent properties.”

And the restaurant will continue to rack up the savings. Energy use is expected to decrease an estimated 74 percent as a result of selecting Cree LED lights over metal halide fixtures, and the restaurant anticipates an annual energy savings of about \$3,500.

After opening in September 2011, the restaurant was exceeding expectations and receiving positive consumer feedback, particularly on the inviting exterior lighting.

The parking lot, restaurant perimeter and walkways are all brilliantly-illuminated, providing a welcoming and safe environment for patrons and employees.



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IN THIS CASE STUDY

LEDway® Series

AREA

- Minimum 70 CRI
- CCT: 4000K (+/-300K), 5700K (+/-500K)
- Utilizes BetaLED® Technology
- UL wet listed
- All aluminum housing



Cree Edge™ Series

SECURITY

- Minimum 70 CRI
- CCT: 4000K (+/-300K), 5700K (+/-500K)
- Utilizes BetaLED® Technology
- UL wet listed
- Multi-Level options
- Modular, low-profile design



304 Series™

CANOPY

- Minimum 70 CRI
- CCT: 4000K (+/-300K), 5700K (+/-500K)
- Utilizes BetaLED® Technology
- UL wet listed
- Multi-Level options
- Integrated occupancy sensor
- Low-profile design



Cree BetaLED® Technology uses a total systems approach combining the most advanced LED sources, driver technologies, optics and form into each product. The patented NanoOptic® technology, available in more than 20 distributions, provides a level of optical control and thermal management that traditional light source technology cannot provide. Combined with the DeltaGuard® Finish, the finest industrial-grade finish available, the result is outstanding target illumination, lasting performance and optimum energy efficiency.

PARTICIPANTS

End User: Burger King® Franchise,
Group 2029 Inc., Savoy, IL

Electrical Contractor: Aladdin
Electric, Urbana, IL



Cree IS LED Lighting

Learn more at: www.cree.com/lighting | info@cree.com | 800.236.6800

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