New Leaf Market
Tallahassee, FL

A commitment to sustainability in both its business and building practices led New Leaf Market to a Cree® LED lighting solution. The Cree system not only dramatically improves the quality and reach of the market’s lighting, it further advances a green initiative while adding some green to the bottom line.

- Total lifetime savings of $28,155
- More than 3,400 watts saved; 57% energy savings
- Annual operating savings of $2,798
OPPORTUNITY
New Leaf Market, a cooperatively owned grocery, was launched in 1974 in Tallahassee, Florida, for the purpose of providing its customer-owners — mostly college students and young families — the opportunity to buy healthy foods at an affordable price.

The subsequent years brought steady growth, and in 2008 New Leaf Market added 4,435 square feet, with wider aisles and expanded retail space offering a vast inventory of organic and local produce, natural groceries, organic wines, microbrews, supplements, natural vitamins and body-care products. The expanded New Leaf Market deli now offers breakfast, lunch and dinner selections, and a wide variety of beverages.

Since its inception, the market has emphasized socially and environmentally responsible practices and provided education and information about its products and the cooperative principles upon which it’s based. To build on its mission, New Leaf Market wanted to take its commitment to sustainability beyond the food stocked on its shelves and find ways to reduce its energy consumption.

When the time came to upgrade New Leaf’s lighting system, market management sought a solution that would be in keeping with its commitment to advancing green initiatives at every opportunity.

SOLUTION
To that end, the cooperative turned to Cree for a more energy-efficient lighting solution, switching from linear fluorescents to Cree CS18™ LED linear luminaires.

This improvement was immediately apparent to employees and customers alike. One of the market’s stockers joked that his workload had just been increased because since everything looked so much better, the merchandise was going to fly off the shelf.

The improved light quality was also immediately evident to Robby Gilliom, Service Manager at Weston-Trawick, who recommended Cree to New Leaf Market. Robby installed the Cree LED fixtures for half the store in one night, with the fluorescents remaining in place in the other half, affording a clear comparison between the lighting options. According to Gilliom, the vivid “before and after” contrast was striking, with the Cree LED fixtures providing even light distribution all the way down to the bottom shelves. Additionally, the color quality of the products on the LED-lit side of the store was dramatically enhanced since the CS18™ LED linear luminaires feature a color rendering index (CRI) of 90. Gilliom also appreciated the ease of installing the lightweight fixtures since each row requires only one connection.

BENEFITS
New Leaf Market wanted a lighting solution that would allow the store to save energy without compromising light quality. In selecting Cree CS18 LED linear luminaires, the grocery has realized 57 percent energy savings in its 13,700-square-foot store.

It’s estimated that over the lifetime of the fixtures, the cooperative will save $22,557 more with the Cree solution than it would have had it opted for a new fluorescent system. In addition, it takes only eight months to recoup the incremental upfront cost of using LED lighting through the improved energy and maintenance savings.

But the improvements didn’t stop with energy savings. The improved light quality with the new Cree LED lights was so dramatic, even the customers were talking about how good the store looked.

“Colors really pop now with our new LED fixtures. The apples really do shine brighter,” said New Leaf Market General Manager Larrane Hartridge. “And the amount of additional light has been impressive. Customers have commented on how much better things look, without even knowing why.”

Larrane Hartridge, General Manager, New Leaf Market

New Leaf strives to be a good neighbor. It is one of the National Cooperative Grocers Association’s 128 member and associate co-ops that in aggregate operate 165 stores, generate more than $1.4 billion in annual revenue and are owned by 1.3 million consumers.

Individually, co-ops serve the distinct needs of communities like Tallahassee. Together, they have the purchasing power to rival conventional grocery chains and the good business practices to truly make the world a better place.

This energy-efficient lighting solution from Cree helps further substantiate New Leaf Market’s commitment to being a conscientious member of the communities in which it operates.
Financial Analysis

Project Fixture Options
The options for New Leaf Market to replace their original lighting systems included upgrading to Cree LED lighting or a fluorescent system more efficient than the original lighting.

<table>
<thead>
<tr>
<th>Energy Comparison</th>
<th>Qty</th>
<th>Watts</th>
<th>Total Watts</th>
<th>Energy Savings</th>
</tr>
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<tbody>
<tr>
<td>Original Lighting</td>
<td></td>
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</tr>
<tr>
<td>6-Lamp T8 Linear Fluor. (Direct/Indirect)</td>
<td>34</td>
<td>180</td>
<td>6,120</td>
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<tr>
<td>Cree LED Lighting</td>
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<td>57%</td>
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<tr>
<td>CS18 LED Linear Luminaire</td>
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<td>70</td>
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<td>Fluorescent Lighting</td>
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<td>19%</td>
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<tr>
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<td>130</td>
<td>4,940</td>
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</tbody>
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Estimated Project Savings*
- $28,155 Total Lifetime Savings
- Up to 3,460 Total Watts Saved
- $2,798 Avg. Annual Operating Savings
- 73 hrs. Saved Relamping (Lifetime)

Payback in just over 8 MONTHS**

Estimated Total Lifetime Costs*
- No Upgrade: $64,787
- Fluor. Upgrade: $59,189
- Cree Upgrade: $36,632

*Savings and payback are representative of what consumers could expect operating in a typical grocery store environment using comparable products.

**Savings are incremental compared to fluorescent lighting option.

To see how these savings were achieved and to calculate your own, please visit: www.cree.com/payback.
IN THIS CASE STUDY

CS Series
LINEAR LUMINAIRE

- 1'x4' or 1'x8' dimension
- Up to 8000 lumens
- 100 - 115 LPW
- 90 CRI at 3500K or 4000K
- 120-277 VAC, 50/60 Hz
- Up to 75,000-hour lifetime
- 10-year limited warranty
- 0-10V dimming to 5%

Cree TrueWhite® Technology
begins with the highest performing commercially available LEDs. Cree TrueWhite® Technology mixes the light from red and unsaturated yellow LEDs to create beautiful, warm, white light. This patented approach enables color management to preserve high color consistency over the life of the product. Cree TrueWhite® Technology also enables a CRI of at least 90 while maintaining high luminous efficacy - a no compromise solution.

PARTICIPANTS
End User: New Leaf Market
Installer: Weston-Trawick
Cree Rep Agency: Craig Ripple & Associates

Join the LED Lighting Revolution.
Learn more at: www.cree.com/lighting | info@cree.com | 800.236.6800

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