



CASE STUDY: THE CITY OF GEORGETOWN, HISTORIC DISTRICT

Georgetown, SC

CITY OF GEORGETOWN CASE STUDY

OVERVIEW

The City of Georgetown, South Carolina, is situated on the coast in Winyah Bay, between Myrtle Beach and Charleston. As the third oldest city in South Carolina, the City of Georgetown boasts a rich history. The Georgetown Historic District encapsulates this rich history lined with 18th and 19th century architecture and historical sites.

The streets of the Historic District are illuminated with antique-style street lights that complement the surrounding architecture. These fixtures, 600 in total, used 150 Watt High Pressure Sodium lamps. Because of the sheer amount of street lights used throughout the historic district, lamp and ballast replacements presented a costly problem for the City.

A longer life solution was desired to offset regular fixture maintenance. LED lighting technology, with a rated life of 3 to 5 times that of HPS lamps, provided an opportunity to reduce labor, replacement, and energy costs. However, because of the unique aesthetics of the current street light fixture, finding a replacement fixture that captured the same feel created a unique challenge.

SOLUTION

To solve the unique challenges presented to the historic district, the City of Georgetown turned to HyLite LED Lighting's retrofit Omni-Cob lamps. After trials and testing, the City of Georgetown selected the 36W Omni-Cob lamp to replace their existing 150W HPS lamps. This retrofit solution allowed for the city to upgrade their HPS lamps by simply bypassing the ballasts and screwing in the LED lamp. Furthermore, this solution allowed the existing fixtures to be utilized maintaining the current aesthetics of the historical district.

BENEFITS

With a rated life of 60,000 hours, the HyLite LED Omni-Cob Lamp was able to eliminate the need for regular maintenance. With a free surge protection device provided for each lamp, the city was also able to protect their lighting investment from damage from power surges and transients.

As an added benefit, the City of Georgetown cut their energy consumption and the environmental footprint of their city's street lighting. The HyLite LED 36W Omni-Cob saved over 80% in energy compared to the 150W HPS system.

	Before	After
Lamp	150W HPS	36W Omni-Cob
Actual Watts	188W	36W
Fixtures	600	600
Annual Estimated kWh Consumption	452,892 kWh	86,724 kWh
Rated Life	20,000 hours	60,000 hours
Annual kWh Savings	366,168	
Pounds of CO ₂ Offset	446,725	
Trees Planted Equivalent	1,117	
Auto-Miles Driven Equivalent	491,397	















- Lumen Efficacy: 140 lpw
- CRI >80
- Universal Voltage: 100-277V, AC 50/60 Hz.
- Ambient Working Temperature: -22° to 140°
- IP65
- 98% Recyclable





Surge Protection Device

- Resistant to Peaks and Surges of up to 20kA
- Class III Protection
- Maximum Surge Current = 20,000 Amps using industry standard 8/20 µSec wave
- Fully Sealed: Dustproof & waterproof with IP Protection Grade 67
- High Temperature Enclosure: Up to 158 °F (70 °C) max
- For use with Universal Voltage: 100-277V Power Supply



ABOUT HYLITE LED LIGHTING

HyLite LED Lighting, a division of ARVA, LLC, prides itself on designing innovative and cost-effective lighting products for commercial and industrial applications. HyLite is dedicated to the preservation of our planet by offering eco-friendly, energy-saving LED lamps, retrofits, and fixtures.



An Eco-Friendly Company

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