

# COMMUNITY LED LIGHTING

REGENCY



*Conserve energy while adding lasting style.* 



## **PHILIPS**

is committed to producing high quality energy efficient luminaires and to continuous expansion of our LED product line.

Hanover Lantern

Hanover Lantern is a trademark of the Philips Group

## LED SOLUTIONS

Design for LED Luminaires is Critical

LED

luminaires are engineered with state-of-the-art software and technologies increasing longevity. Every product is designed and tested first with 3-dimensional software to ensure that the LED manufacturer's specifications are met prior to tooling up for production. Not only does this improve speed-to-market, but it also allows engineers to create optimal designs for thermal management which is vital to the life of LEDs.

Hanover Lantern

A simple retrofit "solution" can quickly become more of a problem than a solution unless it is designed properly. Validation of the entire luminaire system design is critical to ensure that the LED manufacturer's junction temperature limit is not exceeded.

Without proper thermal management, the promises of a long lifespan and delivered lumens from an LED luminaire cannot be achieved and pre-mature failure is eminent. Hanover Lantern LEDs address these issues with innovative heat sinking and thermal management. Designs have been thoroughly tested ensuring the most reliable LED luminaire systems available.

Regency 10802 series

Regency 10202 series



Regency 10502 series

#### Longevity

With approximately 70,000\* hours of operational lifespan (*16 years at 12 hours per night*), Philips' LifeLED<sup>™</sup> far surpasses HPS typical 24,000 hours lifespan and MH's 10,000 - 16,000 hour lifespan.



Since the life is between 3 to 7 times longer, luminaires powered by the Philips' LifeLED<sup>™</sup> need to be replaced less often than HID luminaires, significantly contributing to reduced maintenance costs.

\* calculated with an ambient temerature of 25 °C/77 °F.



#### Energy Savings

Saving energy is an important factor to many communities and decision-makers. LED lighting offers the highest energy savings of any lighting source on the market. As a comparison to high-intensity discharge (*HID*) lamps, a major metropolitan city with an installed base of 10,000 metal halide luminaires will save 18.5 million kWh of energy over the course of one year by switching to LED.

"According to the U.S. Dept of Energy, no other lighting technology offers the same potential as LEDs to save energy and enhance lighting quality and reliability."

(Architectural SSL; p.37; Nov. 2008)

#### Low Maintenance

A major factor in the total cost of ownership (*TCO*) of luminaires is the maintenance cost. LEDs can last for over 16 years (*at least 70,000 hours at an ambient temperature of 25°C/77°F*) compared to HID which has a significantly shorter lifespan, therefore a maintenance crew must be sent to re-lamp the HID luminaires as many as three times before a properly designed LED system needs to be replaced.

"With a 10- to 15-year lifetime that is at least triple that of current technologies, the maintenance advantages alone offer a street-smart argument for transitioning to LED-based systems."

(Philips; White Paper: Street Lighting)

#### Green Environment

What does Green really mean? Many think of it in terms of the degree to which we are preserving our planet. One way to accomplish this is to reduce our "carbon footprint". The carbon footprint is thought of as the amount of carbon dioxide (CO2) and greenhouse gasses released into the atmosphere by human activity or a product lifecycle. In the scenario above, the city with 10,000 installed LED luminaires reduces the amount of CO<sub>2</sub> emitted by 11,000 metric tons each year on energy consumption alone. In addition, since LEDs are mercury-free and contain no hazardous materials they are environmentally safe and recyclable.

### Save Our Skies and Earth

Do you remember walking outside as a child and marveling at the star filled night sky?

If you were to do the same now, you might think there are fewer stars. Rest assured, the stars are still there. They are just being obscured by light pollution from lighting fixtures that spread or reflect a portion of their illumination upward into the night sky.

If you have flown into an airport at night recently, you have seen it first hand – large pockets of the night sky filled with an orange glow – known as sky glow or light pollution. From the sky, lighting can be something to marvel at, but from the ground, uncontrolled light can block your view of the stars and has even been linked to the disruption of ecosystems.

In recent years there has been an effort to limit or eliminate much of this unwanted light pollution, most notably by the non-profit International Dark-Sky Association and the Illuminating Engineering Society of North America.

By following the guildlines established by these two organizations and by using Dark Sky friendly lighting fixtures, it is possible to achieve safe and effective illumination in your lighting project while helping to eradicate light pollution.

At Hanover Lantern we manufacture a variety of durable, high quality luminaires that are efficient as well as Dark Sky compliant. Our full cutoff and cutoff optics systems direct the light downward to the area that needs illumination – not upward into the night sky.

Our lighting specialists are ready to assist you in choosing a styled, cost effective solution that meets your lighting needs while helping to preserve our dark skies for generations to come.



## Specifications

#### Regency LED collection specifications.

- 175w MH or 150w HPS equivalent
- (54) 107 lumen-per-watt LED devices
- 6300 initial lumens, 5355\*
- Specialized aluminum core circuit board
- Cast aluminum heat sink
- Injection molded, clear acrylic optical prisms
- Approximately 70,000\*\* hours of operational life
- Type II, III, IV and V distribution patterns
- Operating temperature range -40°C to 50°C
- 95 watts energy use (<50% of comparable HID)</li>
- 72 color rendering index (CRI)
- 6000K color temperature (CCT)
- 120 to 277 VAC; input 50-60 Hz; auto-sensing electronic driver
- ETL listed. IP66 rated
- 5 year limited warranty.

\* measured luminous output of a new light source - the output at 50% of lamp life

\*\* calulated with an ambient temperature
of 25°c/77°F





### PHILIPS LifeLED<sup>™</sup> Photometric Efficiency

The Philips' LifeLED<sup>™</sup> optical system allows Hanover Lantern the ability to control the light from the LEDs to create superior photometric distribution.

The Philips' LifeLED<sup>™</sup> performance allows spacing up to eight times mounting height. This offers more savings by using less luminaires and the energy to operate those luminaires in the same space.

### **LED Full Cutoff Regency Series**





W: 22" dia.

E.P.A.: 1.2 sq. ft.

### Ordering Information

W: 22" dia.

E.P.A.: 1.0 sq. ft.

To ensure prompt and efficient processing of your order, please follow the sequence in the example shown below.

10502LED2	BLK	LM6300	CT6000	GF
model	finish	source/lumens	color temp	lens

#### Bracket Arms Designed for the Regency

W: 22" dia.

E.P.A.: 1.2 sq. ft.



E.P.A.: 1.8 sq. ft.

Hanover Lantern - Community LED Lighting

E.P.A.: 1.2 sq. ft.



### LED Photometrics



Flat Lens - Type IV LM6300, CT6000 (16' mounting height)





Flat Lens - Type V LM6300, CT6000 (16' mounting height)



#### COMMUNITY LED LIGHTING

Hanover quality that lasts

### FIVE YEAR LIMITED WARRANTY

Hanover Lantern warrants its products against defects in material and workmanship. Without charge, Hanover Lantern will either repair or replace (Hanover Lantern reserves the right to decide between repair or replacement) any properly installed Hanover Lantern product that fails under normal operating conditions within five years from the date of shipment, provided it is returned to the factory, transportation prepaid, and our inspection determines it to be defective under the terms of this warranty.

The warranty covers only equipment manufactured by Hanover Lantern and does not extend to transportation, installation or replacement charges; nor does it apply to any equipment of another manufacturer used in conjunction with Hanover Lantern equipment.

No other warranty, expressed or implied, exists beyond that included in this statement.



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