



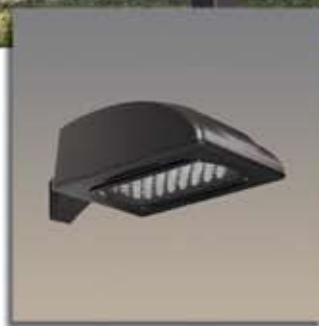
Parking Garage



Surface / Flood



Wall Sconce



Site & Area

# Architectural Site Lighting Package

*Featuring Philips LifeLED™ Technology*

**PHILIPS**

sense and simplicity

**Stonco®**

**ExcelLine®**

# Philips LifeLED™

## LED: THE NEXT GENERATION OF LIGHTING

Not since Thomas Edison and the invention of the incandescent bulb has one product stood ready to change the way we view illumination. LED technology has been advancing steadily over the last decade, but it's not until recently that it has reached the point where it may be used efficiently as a commercial outdoor light source. Luminaires with LED sources can cost more than fixtures with convention lamping, but they offer other benefits that far outweigh their initial price. These include total lamp replacement, electricity usage, and maintenance costs over the expected life of the LED product.







## PHILIPS LEADS THE WAY IN LIGHTING TECHNOLOGY

Philips cutting edge LED technology brings with it benefits far beyond that of more efficient lighting. It offers greater sustainability for us now as well as future generations. Lighting accounts for approximately 25% of the total electricity used today. A shift to LED luminaires with 50% greater efficiency will have major impact on power plant pollutants, building of new generation stations and management of fossil fuels.

LED's compact size and simple construction will reduce materials costs, manufacturing costs and transportation costs throughout the entire manufacturing chain. And longer life means less landfill and resultant pollutants throughout the life cycle of the product. Philips is leading the way in technological innovation and you can enjoy the benefits today!

# Philips LifeLED™

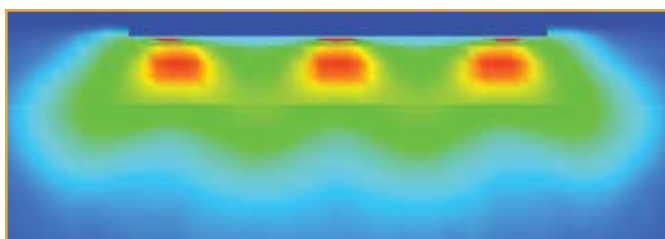
## HARNESSING THE POWER OF THE LED

Philips has developed an innovative LED light engine called LifeLED™. This is one of the most advanced LED light engine for outdoor luminaires on the market, and it brings many advantages previously unheard of in current luminaire designs.

LifeLED™ is not a single unit but rather an array of state-of-the-art LEDs exactly positioned for maximum light extraction, placement and heat removal. The individual LED is positioned in a computer-designed light-directing collimator that can be aimed to control how the light is distributed on the ground.



### Standard HID

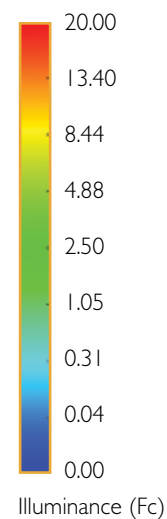


HID luminaires using a single source rely on a reflector system to distribute light. This results in non-uniform distribution of illumination and hot spots within the target area.

### LifeLED™



Luminaires using Philips LifeLED™ LED arrays utilize individual LED sources and optics to precisely aim the illumination for exact light placement. The result is greater uniformity and repeatability without annoying hot spots.



# A Revolution in Lighting

## LIFELED™ ARRAYS SURPASS TRADITIONAL SOURCES IN EVERY WAY

### Quality White Lighting

Philips is a leader in illumination-grade white LED light sources. Quality, when used to describe white light from LEDs, refers to the consistence of color in the beam of light and correlated color temperature (CCT).

### Greatly Extended Life

LifeLED™ LED engines are rated for approximately 60,000 hours over its operational lifespan. That is almost 16 years if operated 12 hours per day. LifeLED™ lasts anywhere between 3 and 7 times longer than conventional sources, greatly exceeding HPS (typical 24,000 hour lifespan) and MH's (10,000-16,000 hour lifespan). Luminaires powered by the LifeLED™ need to be replaced less often than HID luminaires, contributing to significantly reduced maintenance costs.

### Superior Photometric Performance

The optical system prisms direct light only where it is desired and at the levels desired, thereby reducing light pollution. With the LifeLED™, you'll also benefit from expanded fixture spacing as compared to other LED product currently available.

### Precise Thermal Management

As with all LED products, heat is a major issue when it comes to performance. Using a thermal heat sink for the LED chip, heat is pulled away from the chip and can be transferred to a thermal management system. The thermal management system includes a specialized circuit board that's bonded to an advanced aluminum heat sink to keep the thermal junction of each LED as cool as possible. This allows the LifeLED™ engine to function in environments with temperatures that range from -30°C/-22°F to +40°C/104°F.

### Rugged Performance

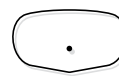
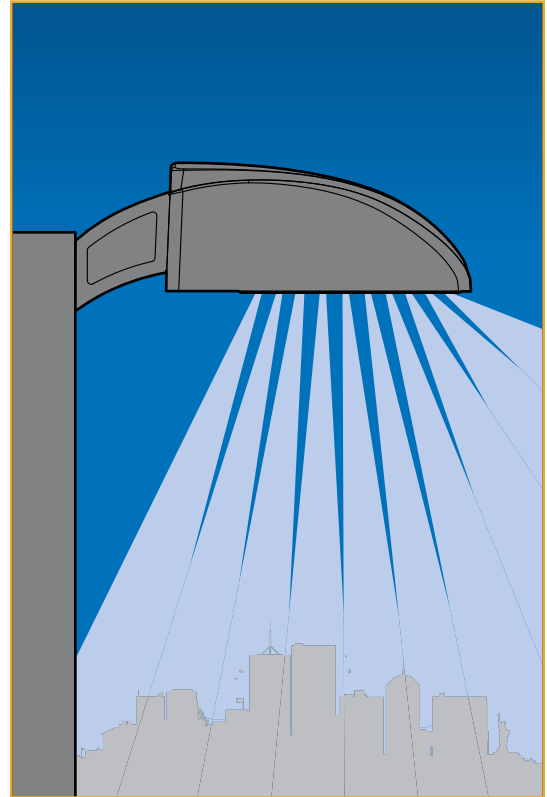
LED lights are more rugged and damage-resistant than compact fluorescent, HID and incandescent bulbs. They can withstand shock and vibration making them less susceptible to failure. However LEDs are very heat sensitive, and excessive exposure or inappropriate applications dramatically reduce both light output and unit lifetime.

### High CRI for Good Color Reproduction

The color rendering Index (CRI) is a measure of the ability of a light source to render colors compared to a reference source. LifeLED™ arrays produce a CRI rating of approximately 72, making objects appear more natural and vibrant.

### Excellent Lumen Maintenance

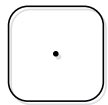
The steady decline of a light source over time is known as lumen maintenance. Incandescent lamps generally have catastrophic failures whereas HID lamps can rapidly reduce output in a short period of time. LED light output will slowly depreciate over its rated life of 60,000 hours but the change is difficult to detect. An LED is generally considered out of specification when it reaches 70% of its rated output.



II



III



V



# Philips LifeLED™



## MULTIPLYING THE POWER OF ONE

### LifeLED™ - The Next Generation of LED Engines are Here Today!

Philips and Philips companies worldwide have devoted thousands of hours in research developing the next generation of LED systems for outdoor lighting. This new technology, LifeLED™, solves the two main industry LED performance problems regarding uniformity and intensity while delivering energy savings of up to 50%.

### Photometric Efficiency with LifeLED™

When we speak of LED technology, we are not simply speaking of the light emitting diodes themselves but of all the other parts that make up the system. The LifeLED™ system is composed of five major components, all critical to the performance of the engine. The integrated components provide an efficient platform from which to produce light for outdoor applications.

LifeLED™ offers a longer operational life than conventional light sources with an average rated life of 60,000 hours. When compared to other LED optics, LifeLED™ offers exceptional photometric efficiency with greater fixture spacing and more lumens in targeted areas. And LifeLED™ is a sustainable design with up to 55% energy savings as well as other environmentally friendly features.



### Energy Savings

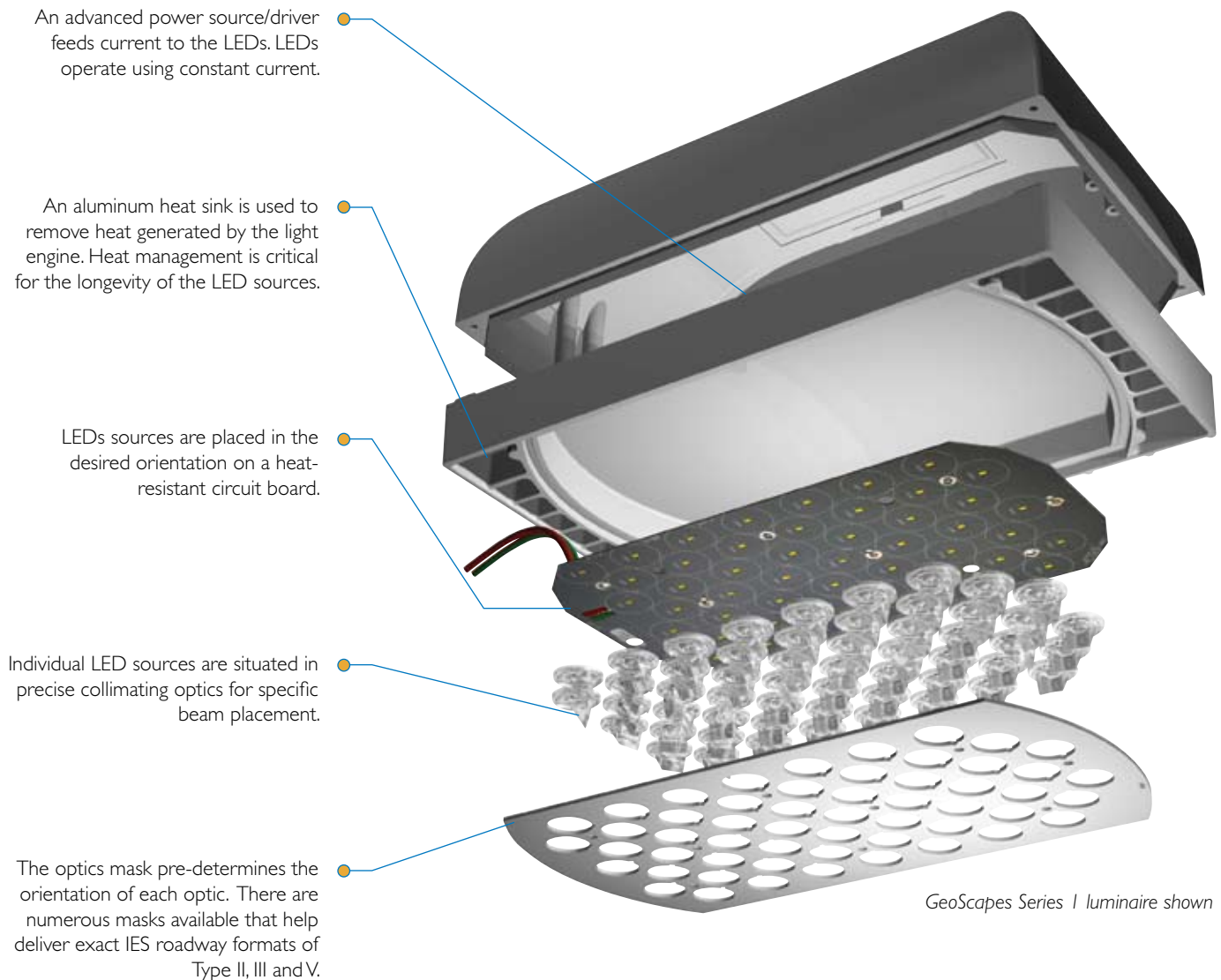
One of the major advantages of lighting with LEDs is the considerable reduction in energy usage. Depending on which type of lamp (HPS or MH) is replaced by the LifeLED™, the energy savings can range from 30% to 50%. It does this by providing greater optical control, higher lumen maintenance factor and a more efficient power supply.

Classification	LED	MH
	Full Cutoff	Full Cutoff
Average Footcandles	1.60	3.23
Minimum Footcandles	0.1	0.1
Avg/Min Footcandles	16.0	32.30
Lamp Wattage	82	175
Total Wattage	94.5	210

## ALL LifeLED™ COMPONENTS ARE DESIGNED FOR DURABILITY AND PERFORMANCE

LEDs are small in size and produce fewer lumens than HID sources. The challenge lies in how to effectively combine multiple LED sources for greater output and to direct the light to where it can be used more efficiently.

The technologically advanced elements of LifeLED™ work together to create a highly efficient light source. The LED array is mounted to a heat-resistant circuit board for efficient heat distribution. All components are mounted to a massive aluminum heat sink to transfer out heat to open air keeping the engine cool. The LEDs are powered by a state-of-the-art constant current driver for consistent lumen output. The design of the board also ensures that if an LED was to fail only that one would go out and not any of the adjacent ones.



# A Family of Luminaires

**Canopy Series**  
Parking Area and  
Canopy Lighting



There is a wide variety of LifeLED™ luminaires for practically any application for site continuity. From architectural floods to parking lot and area lighting, Stonco and ExceLine have the perfect luminaire for your next project.

**GeoScapes**  
Architectural Wallpacks



**FloodPak**  
Architectural Sconces







**Silhouette Series**  
Architectural Site and  
Area Lighting



**Roadway Series**  
Site and Area Lighting

**General-Purpose  
Floodlights**



# Sustainability

Sustainability and protection of the environment are of prime concern to Stonco, ExceLine and all Philips companies. With the advent of LED based solutions, we are taking a major step forward in achieving both goals.

When considering the sustainability of LED powered luminaires, the first facet that generally comes to mind is low energy consumption. But there are other benefits that are just as critical, including waste reduction, recyclability, the use of materials & resources and the effect on building and design practices.

LED-equipped luminaires support sustainable design in many ways. It uses less energy than most other lamp sources, lasts longer (which means less frequent replacement and reduced waste), is mercury-free, and can be housed in special luminaires designed for easier disassembly and recycling.

## OTHER ENVIRONMENTALLY FRIENDLY CONSIDERATIONS

### - Uses Less Energy

LifeLED™ system uses only 94.5 watts as compared to a 175 watt metal halide using a 210 system watts. That's a power reduction of 55%, along with more lumens in the targeted zone. Lower energy requirements mean reduced greenhouse gasses and other pollutants.

### - Less Total Heat

Less wasted heat from the fixture means less heat generated within the building.

### - Longest Life

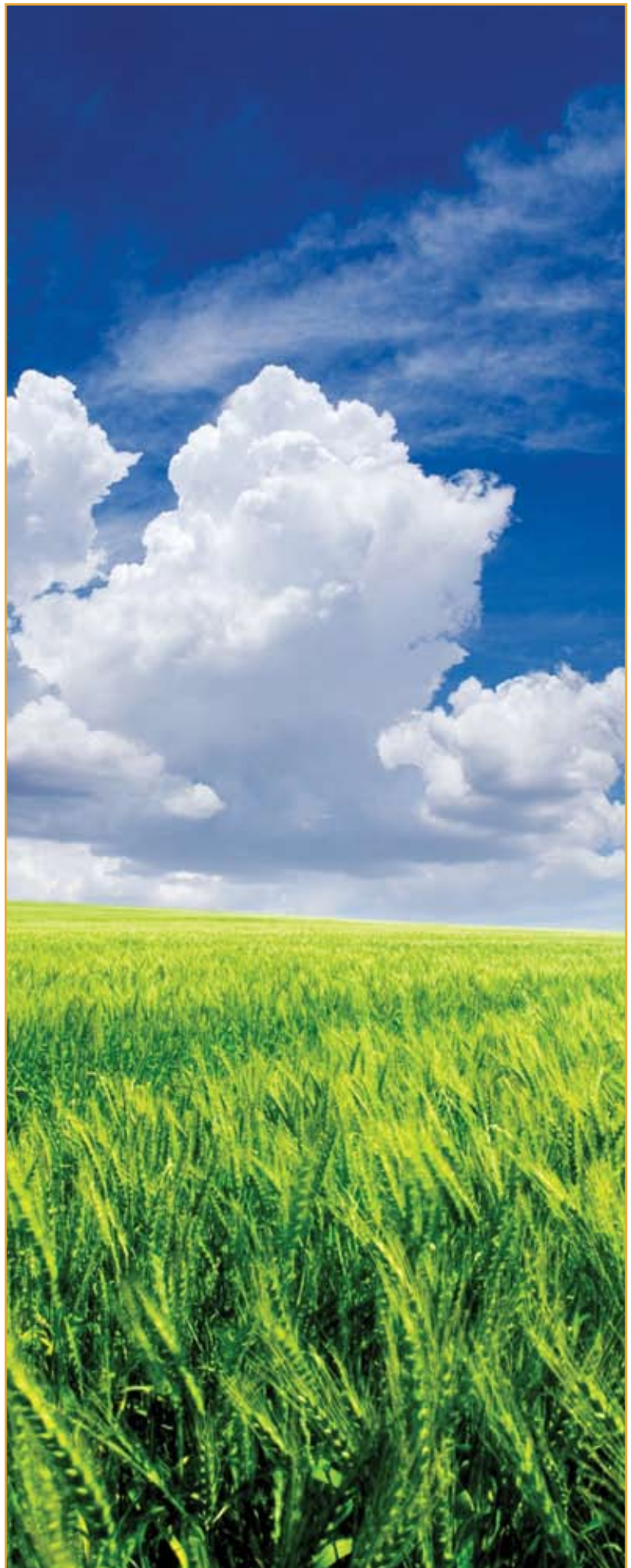
Longer life means fewer replacements are required resulting in less physical waste and smaller materials input.

### - Physically Durable

Small size and durable construction means fewer failures and less replacements required, reducing excess waste.

### - Fewer Pollutants

Unlike fluorescent and HID sources, there are no heavy metals like Mercury to pollute the landfills. There are also no Persistent Organic Pollutants (POP) or Volatile Organic Compounds (VOC) to cause injury.



## COMMITTED TO ENERGY CONSERVATION

Other Fine Crescent/Stonco and ExceLine  
Energy-Efficient Products



**LPQ Induction**



**Pulse Start**



**R5 Revolution LED**



**SmarT-Bay**



**HPT8 Systems**



# PHILIPS

sense **and** simplicity



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