

Performance

With nine proprietary optics distributions designed specially for the Luxeon LED there's a distribution that's right for your site.

Endurance

The Luxeon Series incorporates the industry's best thermal design with the highest quality LED and power supply componentry available

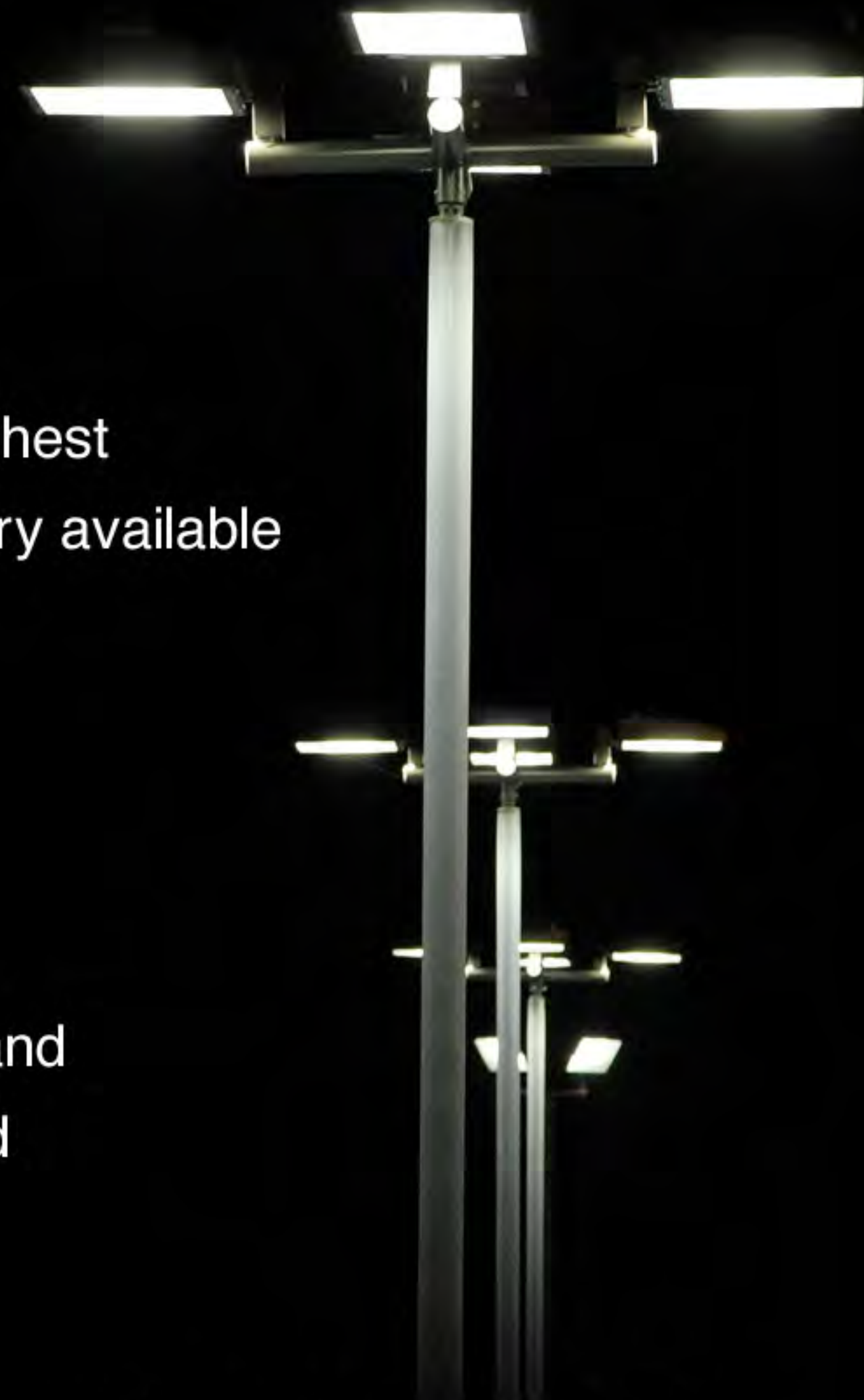
Style

Form follows function beautifully in the Luxeon Integral louvers provide bird protection and ventilation while chromed and polycarbonate optics bring good looks and uniform light quality.

From injection molding to metal fabrication, extrusion to board population and beyond, 100% of our proprietary componentry is domestically sourced and all assembly is performed in our US manufacturing facility. We're dedicated to robust design with uncompromising quality in a single technology. Our sole purpose is to deliver the best of the best in commercial solid state lighting and to delight our customers with unmatched service.



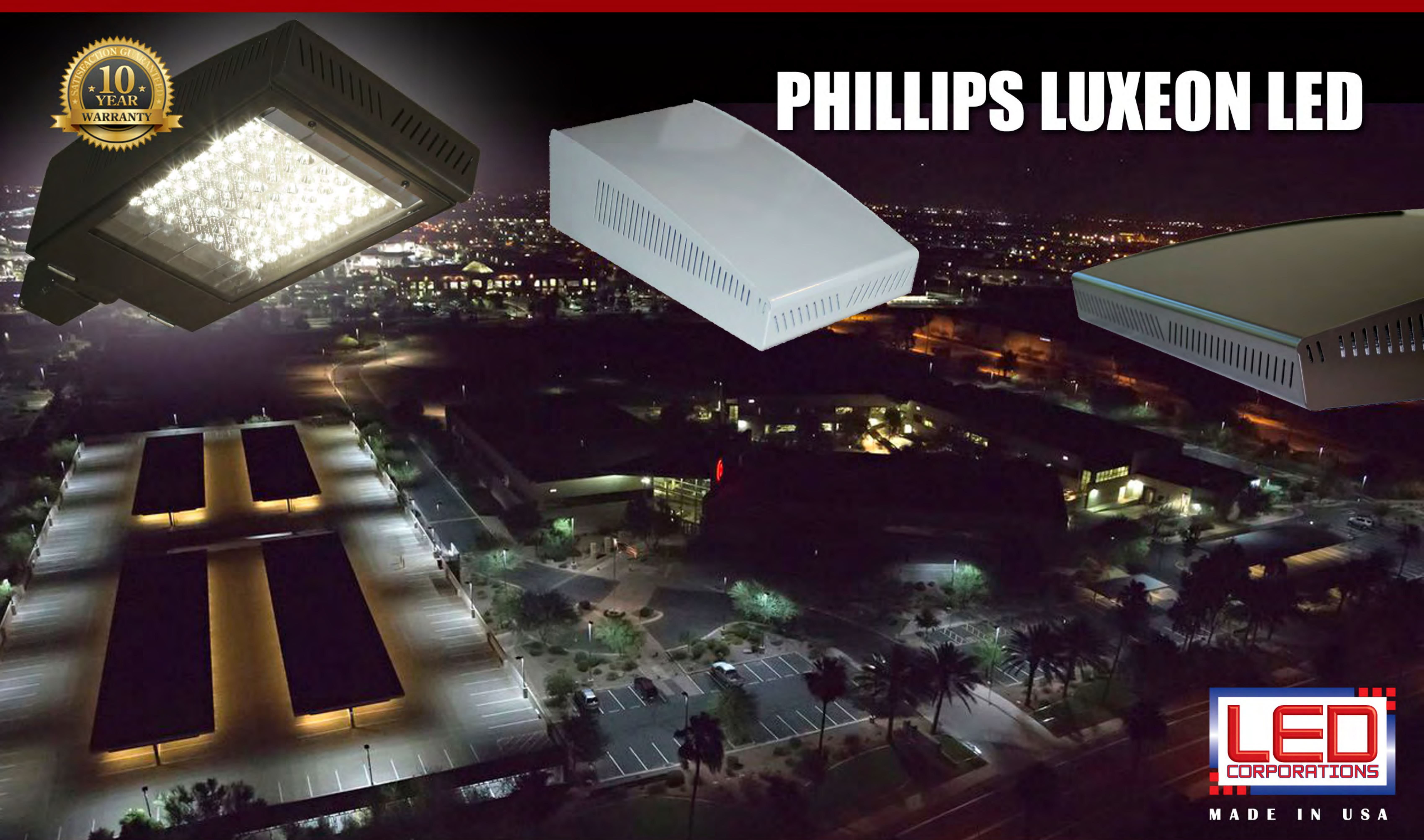
MADE IN USA



PHILLIPS LUXEON LED LIGHTS SERIES



PHILLIPS LUXEON LED

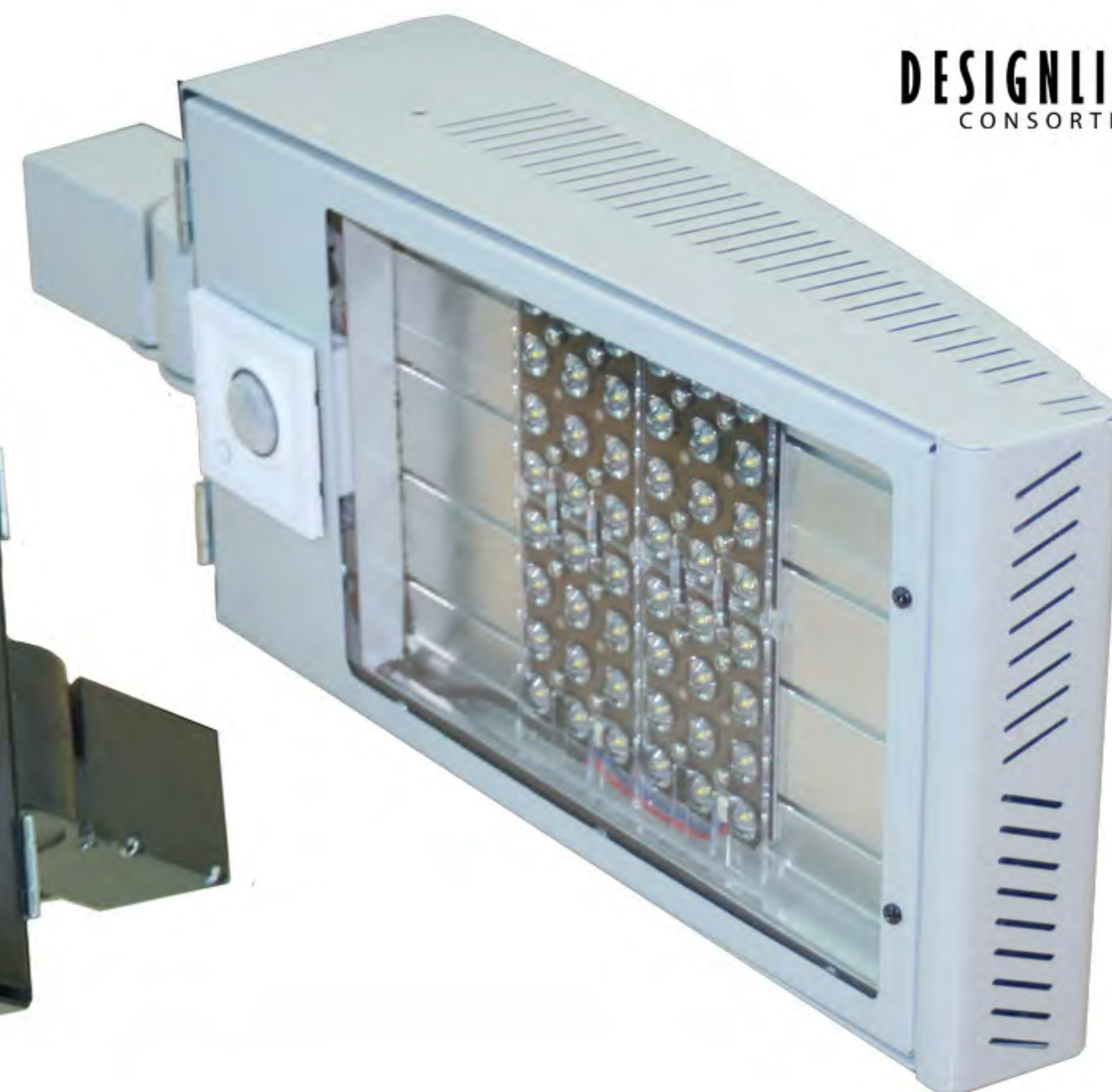


MADE IN USA



FUNCTION AND FORM

The ports, radial cover and rails, and the angled shape of the Luxeon body were inspired by modern automotive design while serving solid state performance. The ports, top and rails were designed to accommodate the physics of air and water movement. Optics designs minimize glare by obscuring the LEDs with texturing, blocking the peripheral line of sight, utilizing the largest in-class LED spacing, and maintaining a consistent spacing over all LEDs in the array.

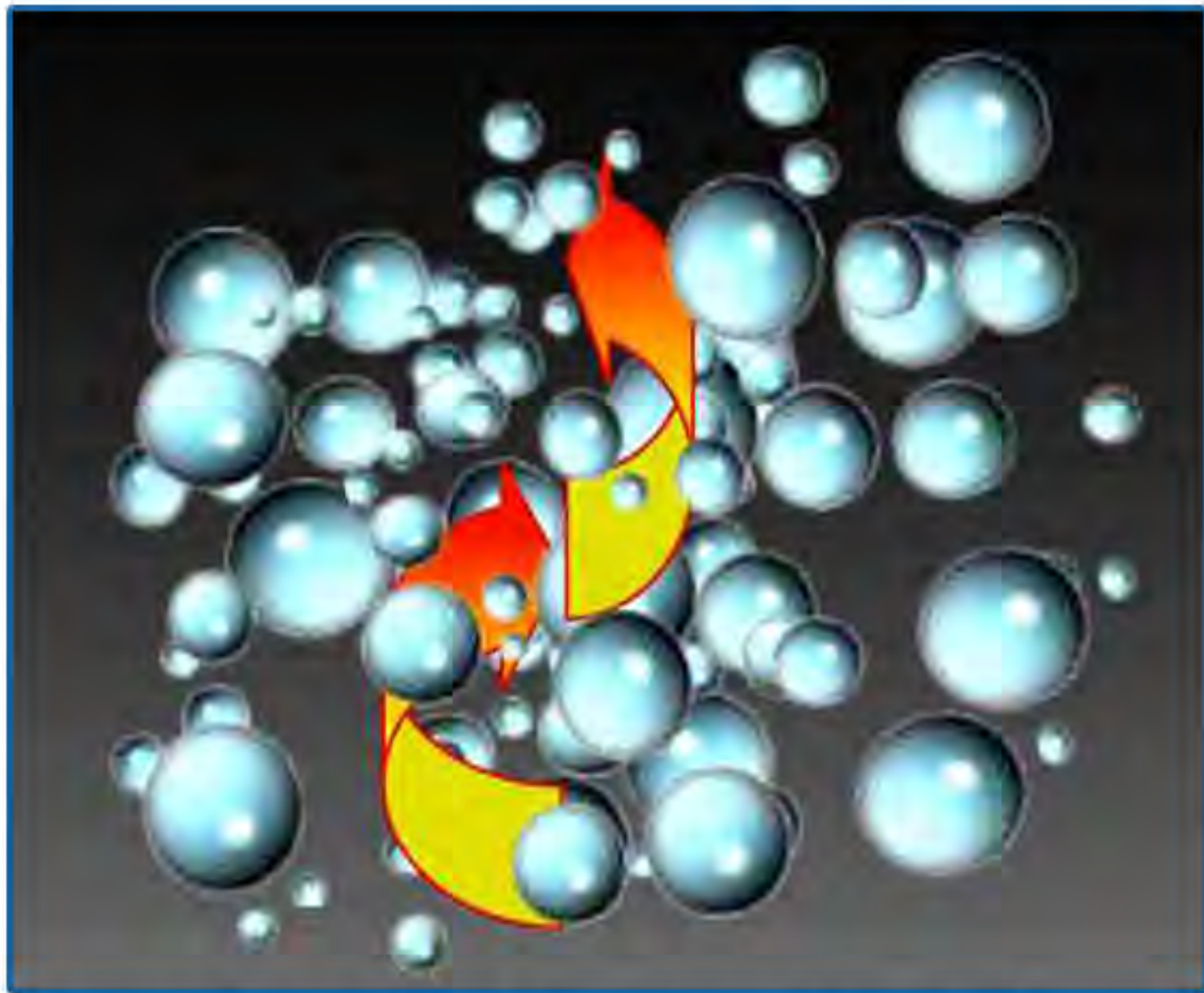


DESIGNLIGHTS
CONSORTIUM

RoHS
Compliant

cULus





Gasses trapped in die castings impede thermal conductivity

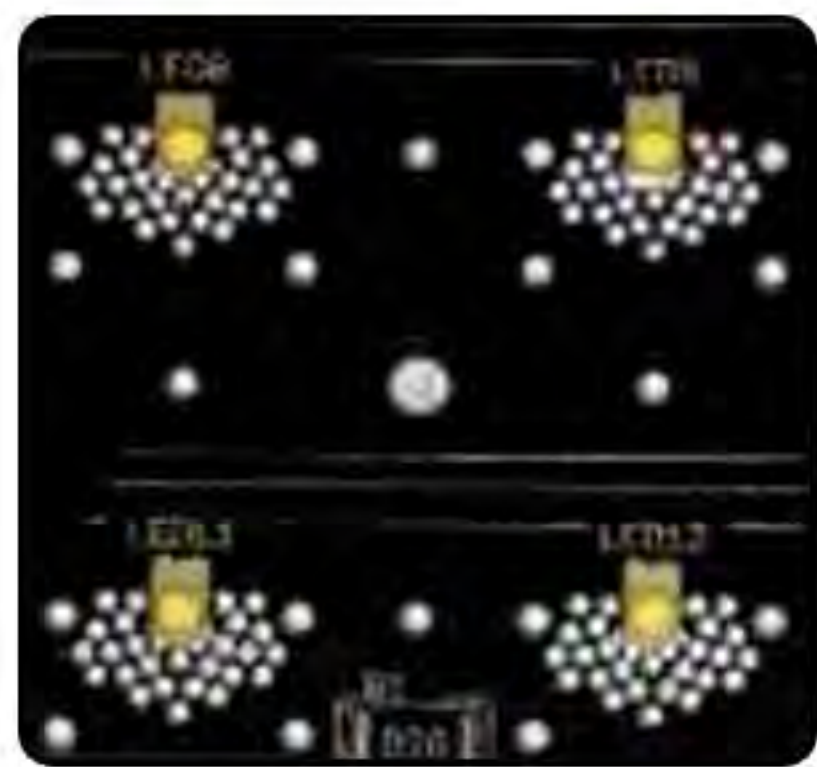
In die casting, heat-energy must navigate its way around trapped gasses that function as thermal insulators rather than thermal conductors. Heat-energy must complete for the limited thermal pathways

As thermal load exceeds thermal capacity, the saturation creates a thermal logjam that bucks up to the LED. The extrusion technology renders greater density. While it does create a heavier part (assuming the same geometry), Less trapped air results in increased thermal conductivity that's 20-30% greater than a die casting. Higher thermal conductivity means greater thermal capacity, and that simply higher output is maintained over a longer life. Gasses trapped in die castings impede thermal conductivity



At one square inch per LED, the industry's largest spacing. More real estate per LED means less competition for the thermal pathway

At one square inch per LED, the industry's largest spacing More real estate per LED means less competition for the thermal pathway "Chip-on-board" is gaining popularity as it renders a cheaper product and is useful when output must be contained in a small space. However, for high-powered lighting, concentration of thermal load in a small space goes against robust thermal management.



RELATIVE SIZE COMPARISON



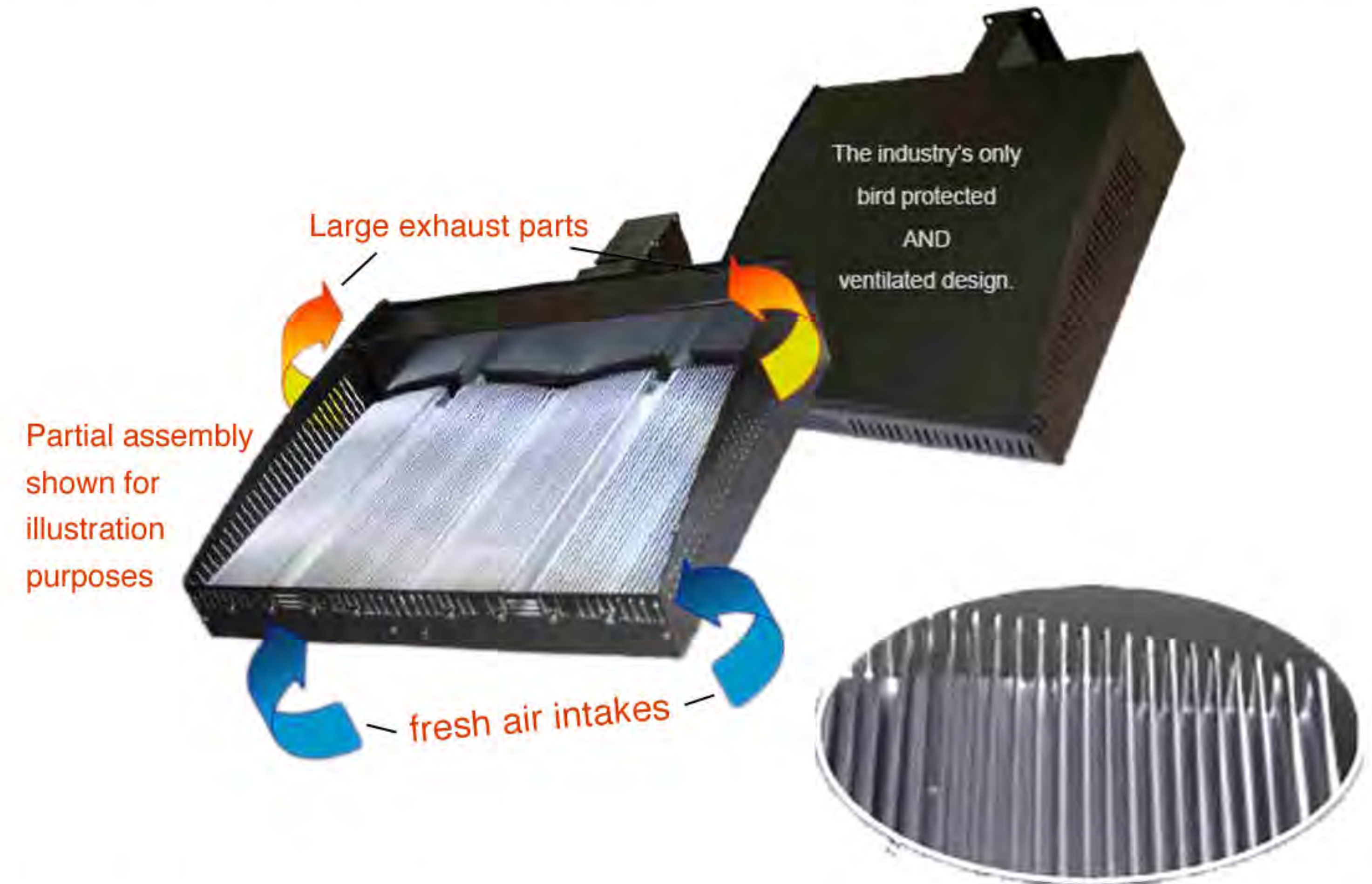
(wide discrete footprint vs. chip-on-board)

Each LED has a generous, highly conductive and direct thermal path to the convection surface.

THERMAL CONVECTION

Ventilated & Bird Protected Design

Getting the heat energy to the surface is only half the task. Once at the surface, the heat energy must exchange with the ambient air and doing so is a function of surface area and plenum (airflow) design. LED Corporations heat sink design is like none other. More than a year in development, the unique geometry was achieved through repeated product and process design improvements to render the largest surface area in the industry. More than four times the closest competitor. Internet heat sink protection eliminates the effects of bird droppings that inhibit convection in unprotected designs. The flow-through design encourages the heated air to escape at the highest and largest ports. Fresh air is drawn in through the intakes providing a continuous thermal exchange with the ambient air.



FLOW-THROUGH PLENUM DESIGN

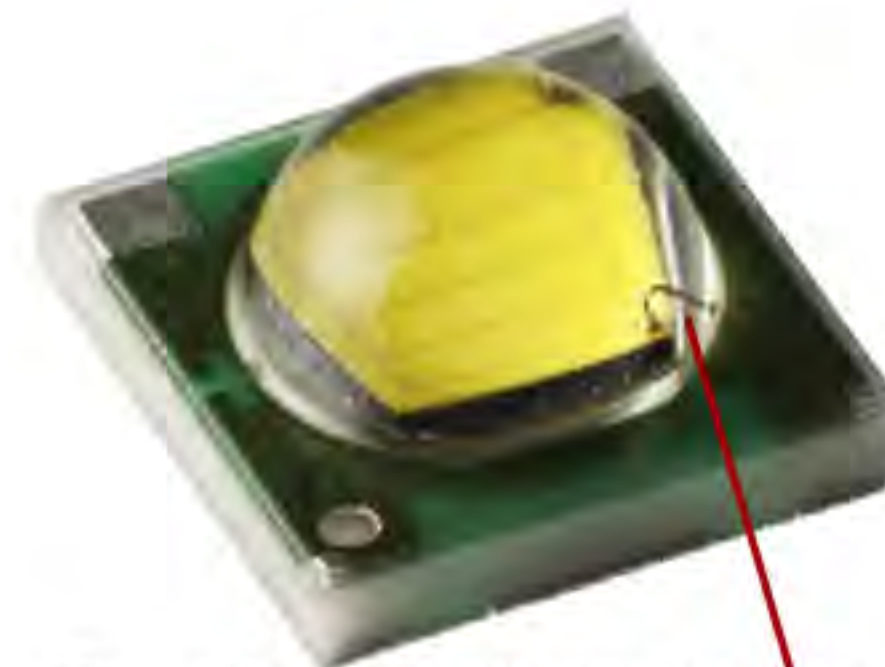
Deep and frequent fin geometry provides the largest in-class surface area per LED compare to any other manufacturer.

DELIVERED UNIFORMITY

Rather than off-the-shelf solutions, the LED Corporations lineup offers nine proprietary optics matched to the specific output signature of the Philips Luxeon LEDs. Whether low mounting or high mast, large or small spacing, incremental optics distributions deliver light that's right for your site. With an optics team called upon for defense and satellite imagery design, decades of experience comes together in the best optics designs in class. In lenses, our free forms deliver up to 64x the energy to the perimeters than they do straight down. In reflectors, unique multi-arrayed shapes work in synergy. All provide overlapping soft edges and insure that every ray is delivered proportionally to distance. The end result is amazing uniformity. Whether thermal management, optics, or component quality, LED Corporations is committed to providing the highest quality solid state lighting in the industry. In componentry, we're not tied to a single manufacturer and are routinely evaluating and bringing the industry's best to our customers. As of the date of this publishing, Philips has achieved less than 3ppm rating for LEDs supplied to LED Corporations. In each individual case, the LED circuit remained closed and did not affect any other LED in the array.



Proprietary Type V freeform optic



The Philips Luxeon® utilizes a proprietary patented wafer bonding process that significantly increases the surface area of connection to the anode and cathode. The result is a more reliable luminaire.

The other manufacturers use wire bonds, the weak link in component reliability. The typical failure mode of a wire-bonded LED is "open", meaning a failure takes all of the LEDs in the string down with it.

Philips Advance brings more than 50 years of engineering expertise to the high performance high reliability Xitanium line. Low voltage dimming, standard on all LED Corporations products, transitions smoothly with flicker-free delivery at all levels. IP66 rated, built-in surge protection, and thermal overload protection that powers down if normal operating temperature is exceeded provide reliability in even the most extreme conditions. Ultra quiet Class A sound rating makes traditional ballast hum a thing of the past.



PHILIPS
ADVANCE

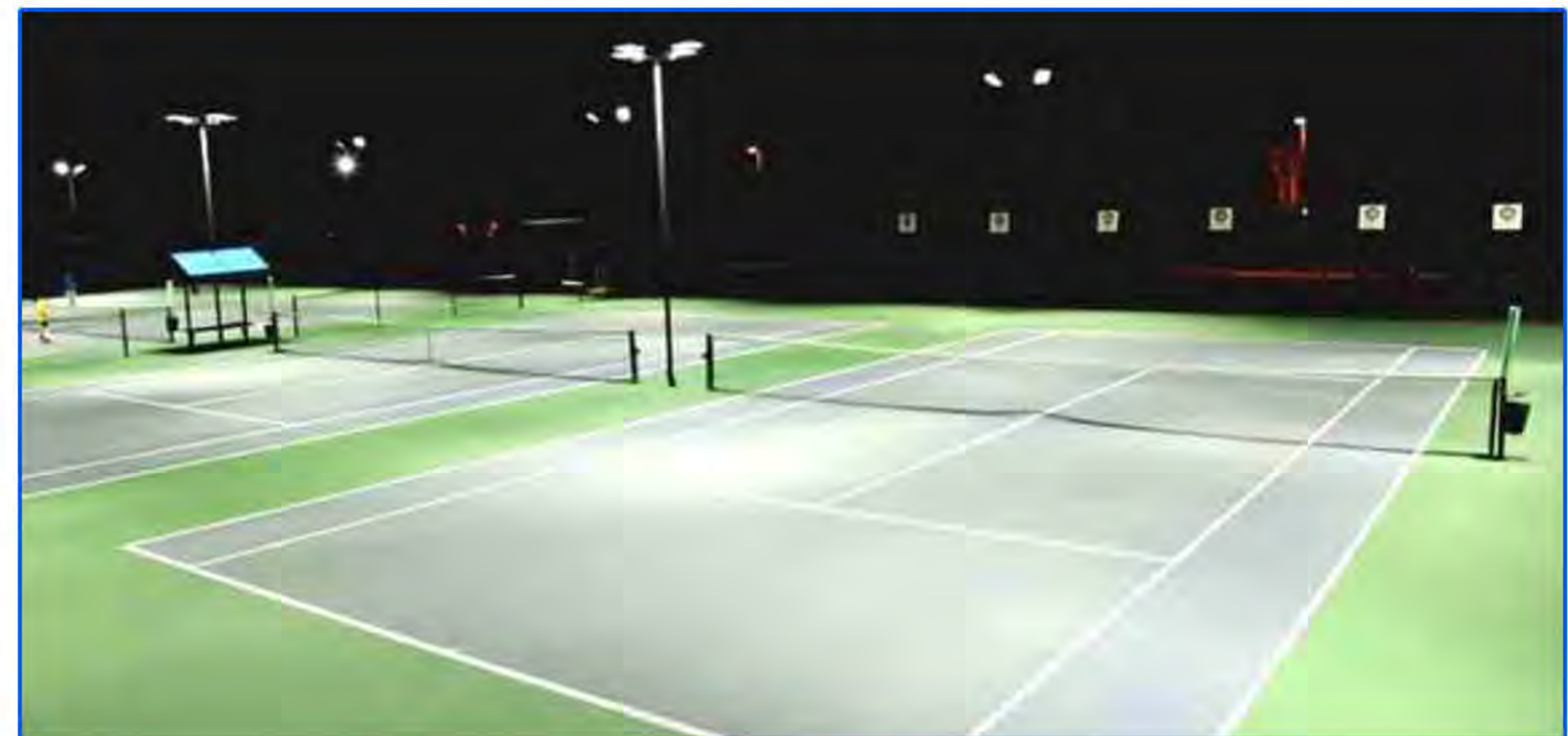
REDUCED OPERATING EXPENSES

Cut utility costs to 1/4 of HID.

Zero maintenance. No more bucket trucks to change a light bulb. Utility company rebates available in most locations. Paid-From-Savings Leasing can be structured with zero out-of-pocket cost. When the lease expires, the significant savings continue for years to come.



Integral or External Daylight, Occupancy, or Hybrid Sensors dim the lighting to your desired level, ramp up when presence is detected, and ramp down when the space is unoccupied. Dim levels and ramp times can be factory set to your desire and field-changed at any time.



VERSATILITY

With such a wide range of power and mounting options suited to poles, walls, buildings and more, there's Luxeon for every site.

- AUTO DEALERSHIP
- BIKE PATH
- HIGH MAST
- SHOPPING MALL
- PARKING DECKS
- CORPORATE CENTER
- APARTMENT & RESTAURANT COMPLEX
- SPORTING COMPLEX & FIELD
- EDUCATIONAL FACILITIES
- STREET & ROADWAY
- PARKS & RECREATION
- MUNICIPAL LOTS



- 26W
- 40W
- 53W
- 80W
- 106W
- 119W
- 159W
- 212W
- 318W