



# LIGHTING SOLUTIONS FOR DIGITAL INFRASTRUCTURE

LANTANA LED's high-performance, energy-efficient fixtures and accompanying Remote Driver Units offer distinct advantages for data center construction and operations. LANTANA LED fixtures dissipate heat without excessive temperature gains and are UL certified to withstand elevated ambient operating temperatures up to 70 °C

## DON'T WASTE YOUR ENERGY ON LIGHTING

Ultra-Efficient at up to 151.6 Lumens per Watt  
Recapture kW for Servers & Higher Revenue

## TURN UP THE HEAT, TURN DOWN THE COSTS

Engineered for Hot Aisle Applications  
Relocated Heat Source  
UL Certified for Elevated Operating Temps up to 70° C

## MITIGATE RISK AND BUILD FOR LESS

Up to 25% Uplight & 75% Downlight  
Centralized Normal & Emergency Power  
Substantial Material and Labor Savings  
**(\$2-\$5 Million per 1M Sq Ft Data Center)**

**77,000+ LED LIGHT  
FIXTURES**

**6500+ DC POWER  
SYSTEMS**

**ILLUMINATING MORE THAN 30 MILLION SQ FT OF DATA  
CENTERS NATIONWIDE**

**[WWW.LANTANALED.COM](http://WWW.LANTANALED.COM)**



# DATA CENTER CHALLENGES

## **RIISING CONSUMPTION & ENERGY COSTS**

Demand for capacity is multiplying at an unprecedented rate, and high-performance computing (HPC) is causing an increase in data rack density. Servers, storage racks, and networking devices require increasing amounts of energy as computing density increases. Server electricity is only a portion of the necessary consumption as energy costs escalate depending upon the type of cooling systems, including adiabatic, hot/cold aisle, free cooling, or liquid cooling.

## **IMPAIRED SAFETY, MAINTENANCE & OPERATIONS**

No windows and flat black equipment cabinets offer very little reflective light. Improper light placement can cast unnecessary shadows impairing visual perception and making servicing the equipment difficult, setting up potentially dangerous situations. Even something as simple as changing an LED driver could cause significant damage as maintenance crews navigate sensitive equipment to service the fixtures.

## **INSTALLATION COST ESCALATION**

As demand and backlog dramatically increase, construction of new data centers continues to experience delays and cost escalations of building materials because of supply chain disruptions and the increasing skilled labor shortage. The scarcity of materials continues to plague the industry causing higher prices and longer lead times. The average age of professional electricians is increasing as younger generations lack interest in pursuing careers in trades resulting in labor shortages and higher costs.

## **DIMINISHED RETURNS**

Light fixtures not designed to withstand hot aisle heat conditions or lack the quality for resiliency and longevity offer limited short-term savings. These savings are ultimately negated and result in long-term cost increases from downtime in electrical circuits, increased maintenance, and more frequent refreshes.

## **CONFIGURATION AND CONTROL**

Data center lighting solutions are often highly tailored to each application – the lighting requirements for a colocation vs. an enterprise hyperscale differ dramatically. Challenges for fixture configuration and controls arise unless flexibility is designed into the solution well in advance.

# THE LANTANA SOLUTION

## **LANTANA REMOTE LED LIGHT FIXTURES**

is designed and engineered for hot aisle applications with UL Certification for up to 70° C. Minimize the impact on energy costs and the use of space by removing heat from aisles and centralizing maintenance and operations from individual fixtures to the Remote Driver Unit. Engineered for longevity, LANTANA LED fixtures offer a life expectancy of more than 20 years, running continuously for 24 hours per day, seven days per week. The Architectural LED features a performance of 148.6 lumens per watt and evenly illuminates spaces with 75% direct and 25% indirect safe, clean, and bright light. The Edge LED performs at an extremely efficient 151.6 lumens per watt with 80% direct and 20% indirect light to safely illuminate cable trays for maintenance. The remote fixture can be installed by a low-voltage technician running a low-voltage cable.

## **LANTANA REMOTE DRIVER UNIT**

comes pre-wired and offers zones specific to each application. Simplify control and extend flexibility with integrated emergency controls. Move maintenance away from occupants and sensitive equipment with access that provides a safer work environment for maintenance workers, and plug-and-play installation allows rapid field deployment. Supply up to 20 LED fixtures supporting Class 2 drivers with a distributed low-voltage power system that centralizes AC to DC power conversion in an easy-to-access electrical panel.

## **LANTANA 6' POWER OVER ETHERNET LED FIXTURE**

with SmartEngine sensors\* offer the same efficiency and longevity as the LANTANA Remote LED fixtures while delivering power and data using standard Cat5e cables (not included). Reduce labor and material costs and the need for outlets and AC/DC power supplies. \*Control switch not included.