



# Aerial LED

*The future of area lighting*

## Introducing Aerial LED, the future of area lighting.

The Aerial LED range is the universal solution for any large area lighting project. Whether in Industry, Warehousing, Sports or Retail, Aerial LED delivers low energy, high comfort lighting with minimal through life maintenance.

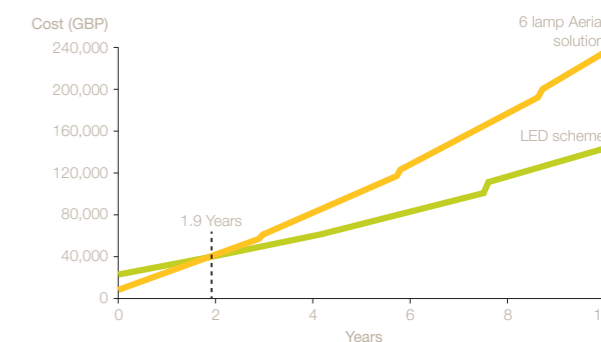


### Increasing Comfort

Aerial LED brings the latest diffuser technology usually seen only in high-end office solutions to area lighting. The unique hexaprism diffuser optic completely eliminates glare from every angle of view, adding a level of comfort and lighting quality never before seen in this type of application.

### Economising Maintenance

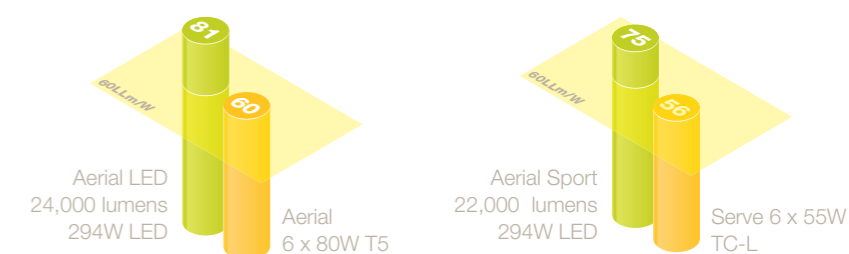
Aerial LED's light engines have a rated life of over 50,000 hours, resulting in far fewer maintenance cycles than traditional luminaires. This not only reduces cost, but also means significantly less disruption in environments that typically operate 24 hours per day. Aerial LED also employs industry-standard Zhaga connections to its LED light engines, allowing simple replacement at the end of their life.



### Reducing Energy

Aerial LED can bring cost and energy savings of over 60% compared to traditional HID or fluorescent lighting solutions. This is particularly beneficial when used in a 24/7 operating environment. To further increase energy savings, Aerial LED is available with an integrated COM7 detector for both daylight and presence detection, and can integrate into Whitecroft's Command Elite controls system.

#### LI/cw Comparison



## Body

### Extruded Aluminium Body

Aerial LED has an all aluminium body, ensuring both structural rigidity and low weight.

### Command 7 Detector



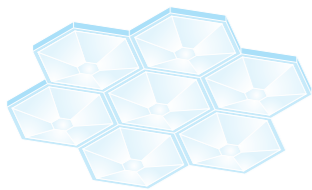
The optional Command 7 microwave detector is integrated into Aerial LED's centre optic, providing a wide range of lighting control options. Presence detection can be configured for either on/off or dim down to one of 4 pre-determined levels.\*

\*When used in conjunction with a DALI luminaire

## Optical Controllers

### Hexaprism Diffuser

At the heart of Aerial LED's advancement in technology is the unique PMMA Hexaprism diffuser. This complex geometric pattern ensures an extremely even and efficient light distribution whilst also controlling glare from every angle of view.



### Polycarbonate Diffuser for Sports Halls



Aerial Sport has a polycarbonate Hexaprism diffuser optic, which guarantees glare-free viewing from all angles. This is particularly important in sporting applications, where competitors may be viewing fast moving objects directly overhead. The polycarbonate material of the diffuser also offers complete impact protection.

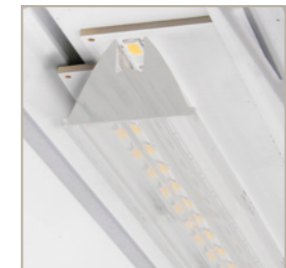
## LED Technology

### LED Light Engine

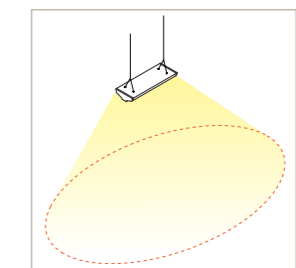
Aerial LED employs the latest high efficiency LED light engine, delivering over 80 Luminaire Lumens per Circuit Watt. With output options ranging from 8000 to 24,000 lumens, the cool white Ra80 4000K LEDs will bring efficiency and quality to any application. The LED light engines in Aerial LED use industry standard Zhaga connections, ensuring simple replacement at the end of their life.

### Narrow Beam Prism for Warehouses

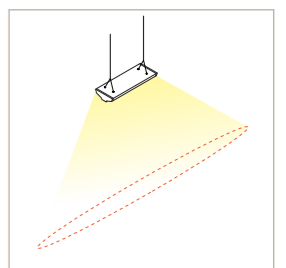
Aerial Logistic has a specially designed prism lens to focus light into a narrow 15° beam pattern for use in aisle applications such as warehouses. The prism lens ensures light is delivered exactly where it is needed, improving vertical illuminance.



15° beam prism lens



Aerial LED  
Area distribution



Aerial Logistic  
Aisle distribution

# Aerial in Action



## Aerial LED in Retail

With ever increasing pressure on retailers to reduce energy costs and lower CO<sub>2</sub> emissions, Aerial LED perfectly demonstrates a visual commitment to lowering the carbon footprint of any retail environment. The reduced maintenance demands will ensure that Aerial LED continues to deliver cost savings year on year. Increased comfort will also benefit shoppers and create a more conducive buying environment.



## Aerial Sport

For sports halls, a special variant of Aerial LED has been created which combines all of the energy benefits of the standard luminaire with features specially developed for sports applications. A bespoke polycarbonate Hexaprism diffuser is employed to eliminate glare, even when viewed from directly below the luminaire. This is particularly important when sports such as badminton are played. The LED light engines are also completely flicker-free, making it easier to see fast moving objects at any height. The minimal maintenance factor of Aerial LED is particularly beneficial in sports applications, where fewer luminaires are typically used.

# Aerial in Action



## Aerial Logistic for Warehouses

Narrow aisle warehousing requires a specialist approach. Aerial Logistic has a specialised prism lens designed to direct light downwards in a narrow 15° beam pattern, ensuring light is not wasted at the tops of racking. Improved vertical illuminance, results in better-lit environments, making for more efficient operations, as well as reduced energy and maintenance bills.



## Aerial LED in Industry

Factory lighting has long been neglected in the lighting industry, with the majority of applications still using poor quality, inefficient metal halide solutions. Aerial LED will not only have a massive impact on energy bills but will also increase comfort, creating an all round more efficient working environment. Aerial LED's low maintenance requirements will further increase productivity and reduce cost by eliminating downtime caused by re-lamping.

# aerial LED

## suspended LED high or low bay luminaire



Integral Command 8 detector

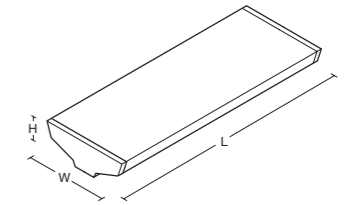
# aerial LED

### Order Codes

<b>Aerial LED</b> 36,603 lumen, 289W	DALI AELMY44K	
<b>Aerial Sport</b> 24,600 lumen, 220W	DALI AESLY14K	3 hr Emergency AESLY14KEM
<b>Accessories</b>		
Suspension kit		AERSK1
Alternative mounting kit		AERLTRU
COM8 programming handset*		COM8HP
<b>Options</b>		
EASYTEST**	Add suffix /ET	i.e. AESLY14K/ET
COMEPS**	Add suffix /EP	i.e. AESLY14K/EP
INTEGRAL DETECTOR***	Add Q8 before Y	i.e. AELMQ8Y44K

\* Programming handset must be used with integral detector product to enable commissioning  
 \*\* Not available on 36,000 lumen Aerial LED  
 \*\*\* When using COM8 with 36,000 lumen Aerial LED, maximum ambient temperature is 30°C

### Dimensions



Version	L	W	H	KG	KG/m²
Aerial LED	1418	354	113	14	-
Aerial Sport	1418	354	113	14	15

### Optics

- 4000K 'cool' white LEDs
- Ra80 colour rendering index

### Aerial LED

- DALI as standard
- Quadraprism diffuser for all round glare control, maximum diffusion and high efficiency
- Output:  
– 36,603 lumens (289W)
- Recommended for mounting heights between 10m and 20m

### Aerial Sport

- DALI as standard
- Polycarbonate hexaprism diffuser for IK10 impact resistance and optimum glare control
- Output:  
– 24,600 lumens (220W)
- Recommended for mounting heights between 4m and 12m

### Body

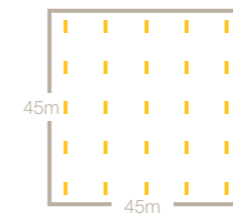
- Aluminium body finished white
- 4 suspension points for wire or chain suspension (supplied separately)
- Wire suspension kit with up to 6m drop
- On Aerial Sport, LED light engines are separately switched to vary lighting levels
- Choice of integral emergency options for Aerial Sport; standard 3 hr, Easytest or COMEPS\*\*
- Alternative mounting kit available for surface, trunking, chain or drop rod mounting (supplied separately)
- Optional integral Command 8 high sensitivity PIR programmable detector available mounted in a plate at the end of the centre optic\*
- Light chamber and front face IP40, gear chamber and rear face IP20
- Aerial LED ambient operating temperature range:  
– -20°C up to 40°C
- Aerial Sport ambient operating temperature range:  
– Standard: -20°C up to 35°C  
– Emergency: 0°C up to 35°C

\* Programming handset required (supplied separately)  
 \*\* Not available with Aerial LED

### Performance Guide

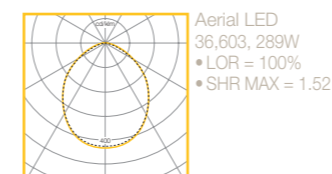
Aerial LED	Lamps	Illuminance	Spacing
	36,603 lumen	300 lux	9.0m x 9.0m

No. of luminaires: 25



Reflectance: 70/50/20	Maintenance: 0.8
Mounting Height: 15m	Spacing: 9.0m x 9.0m

### Photometric Performance



Utilisation Factors UF(F)		Room Reflectance	Room Index
C	W	F	
1.00	0.70	0.50	0.20
3.00	0.73	0.98	1.05
5.00			

### LED Performance

Version	Colour Temp	Ra (CRI)	Life Expectancy	Colour Consistency
Aerial Sport	4000K	≥ 80	L <sub>75</sub> (100,000hrs)	MacAdam 3 SDCM
Aerial LED	4000K	≥ 80	L <sub>70</sub> (100,000hrs)	MacAdam 3 SDCM

### To Specify

**Aerial LED**  
 Suspended LED high output luminaire with quadraprism optic. Suitable for low or high bay application. Four suspension points – as Whitecroft Lighting AERIAL LED.

**Aerial Sport**  
 Suspended LED sports hall high output high bay luminaire with impact resistant polycarbonate hexaprism optic. Operation in ambient temperatures up to 35°C. Four suspension points – as Whitecroft Lighting AERIAL SPORT.

*Lighting, design, controls:*  
Total Project Solutions

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