





Brighter by Design.



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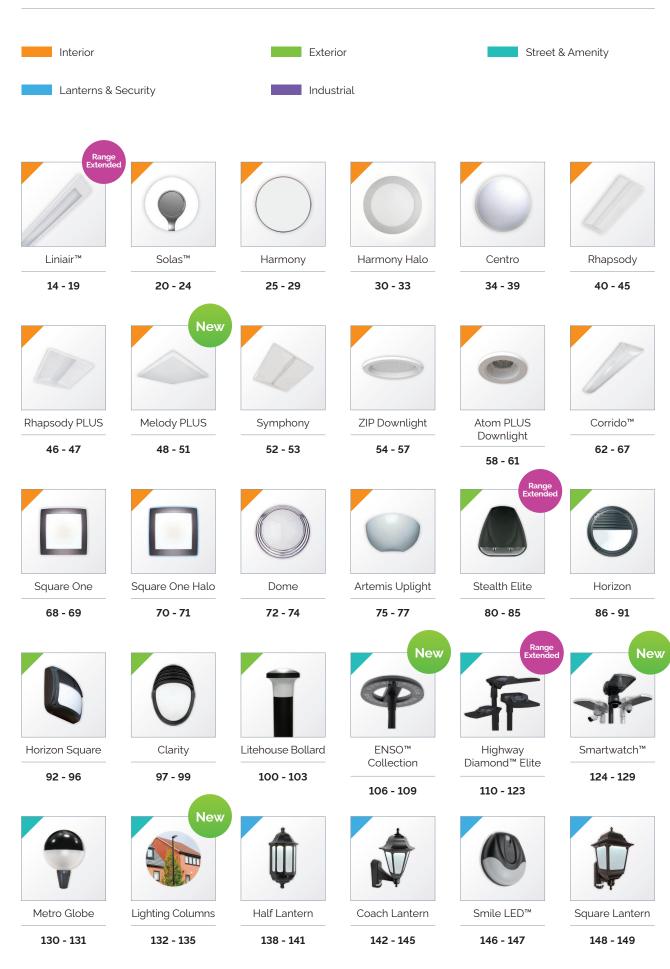
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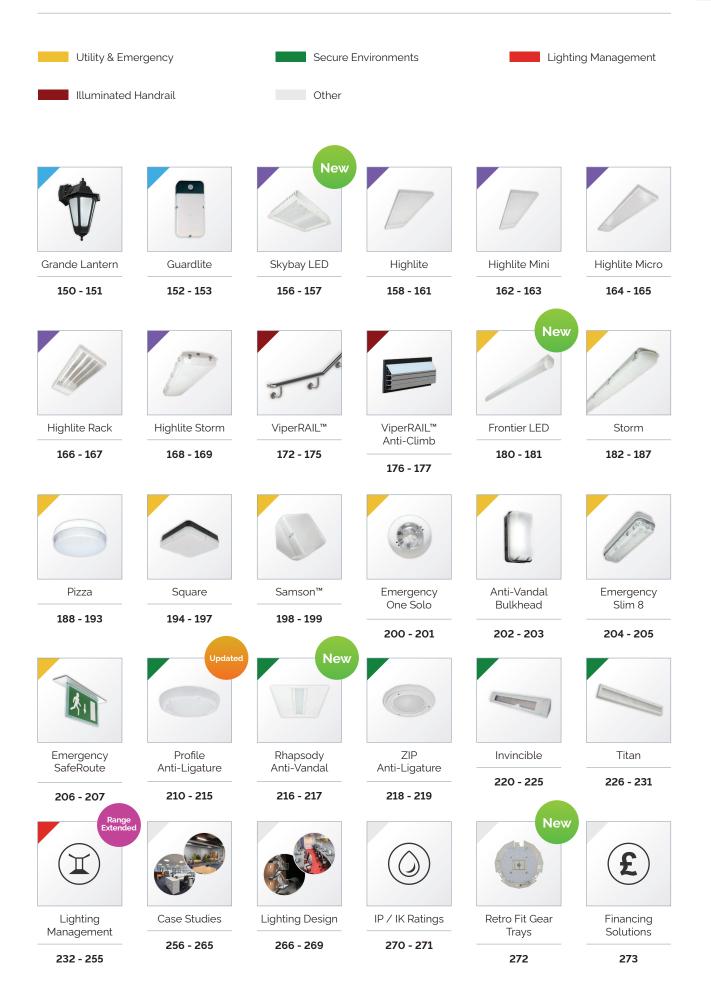






## Contents





## **Latest News**

We are delighted to announce that we have achieved a number of accolades at the HEA (Highway Electrical Association) 2018 Annual AGM and Awards Event.

#### Who are the HEA?

The HEA is uniquely placed to represent all those involved in the highway electrical sectors covering areas such as street lighting, traffic signals, cameras, communications, traffic signs, variable message signs and environmental monitoring equipment. The HEA has in excess of 110 organisational members covering contracting organisations, manufacturers and distributors as well as a number of consultant/overseeing and client organisations. Accredited to ISO9001, the HEA is one of the largest and most influential bodies in the highways/lighting/electrical sectors.

#### HEA-HEMSA — Luminaire Manufacturer of the Year 2018 | Winner! — ASD Lighting PLC

ASD Lighting are truly delighted to announce that we have been voted the luminaire manufacturer of the year 2018! All manufacturers that are part of the HEA are added to a voting list, which is then voted for by all contractors that work in the street lighting industry. They score our performance across a wide range of criteria (service, deliveries, and product quality to name a few) over the course of the past year.

To win this award is a huge honour and an excellent endorsement of our products and customer service level from our customer base.

We would like to attribute this award to everyone at ASD Lighting, in all departments, that works so hard to satisfy and continually grow our street lighting customer base.

We would like to sincerely thank all our customers for their votes and continued support as we go in to 2019 striving to enhance our reputation and market position even further. **Thank you!** 





## **Latest News**

#### HEA-HEMSA — Product of the Year | Commendation — Highway Diamond™ Elite Range

Our Highway Diamond<sup>™</sup> Elite Range was highly commended by the judging panel, a reflection of our commitment to high quality luminaire design + manufacture and genuine market leading delivery times.

#### HEA-HEMSA — Employee of the Year | Runner Up — Brian Holmes

Having put forward the nomination for Brian Holmes for the effect he has had on gaining our customer base in street lighting, we are delighted to inform all that he received a special recognition in the category of Employee of the Year due to his years of hard work, product knowledge and commercial awareness contributing hugely to the overall success of the ASD Lighting Street Lighting Division.







# Latest News

# RELUX®

ASD Lighting PLC are excited to announce that our entire catalogue of luminaires has been completely updated and is now available to use through the Relux Calculation Software Online Database.

The Relux lighting design software has almost 200,000 users in Europe alone and is available for download worldwide free of charge.

Thanks to this our customers can now use ASD Lighting's product data within their lighting design projects, and even download full descriptive datasheets to complete their project submissions.







ASD Lighting presents a comprehensive range of commercial, domestic, industrial, street and security lighting which has been designed, developed and manufactured to the highest standards with design flair and creativity.

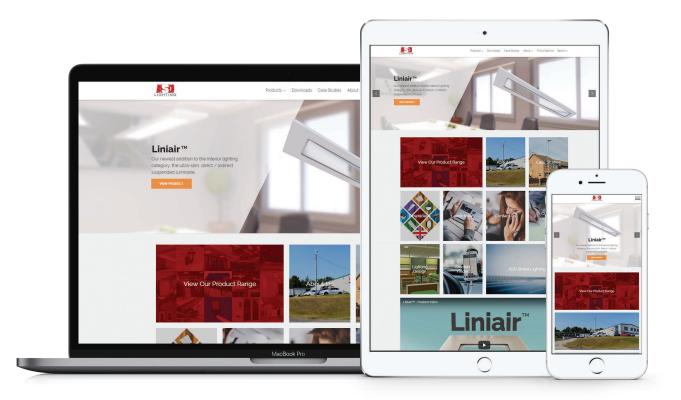
Offering a multitude of LED, lamp and operating options, our range provides practical solutions to an array of interior and exterior lighting applications.

At ASD we have combined our skill and expertise in the design and manufacture of lighting to provide a unique portfolio of products which are not only attractive and hard wearing, but include practical and time saving installation features.

Our unique approach to lighting design has led us to develop products to provide practical solutions to a wide variety of internal and external applications, both commercial and domestic.

ASD has developed a service to ensure that we work in partnership with our customers, to build a relationship that can be trusted and relied upon. We offer a unique product range with innovative features, with the best quality at the right price to ensure customer satisfaction, providing products Brighter by Design.

# asdlighting.com





ASD Lighting is unique amongst British Companies, a true manufacturer of lighting with a reputation for innovation and quality.

We have combined our skills and expertise in design and manufacture of lighting to provide a unique portfolio of products which are not only attractive and hard wearing, but include practical and time saving installation features.

# 1

ASD Lighting, formed in 1983, have been manufacturing in the UK from our 200,000-sq ft. factory in Rotherham for over 35 years.

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- Employs 200+ people.
- Broad product range.
- Manufacturing facilities in Yorkshire.
- Global marketing and distribution.
- Full UK manufacturing, injection moulding & aluminium spinning facilities.
- 200,000 square feet factory.
- UK design.
- UK manufacturing provides:
  - Excellent delivery.
  - High product quality.
- ISO 9001, 14001 & OHSAS 18001.

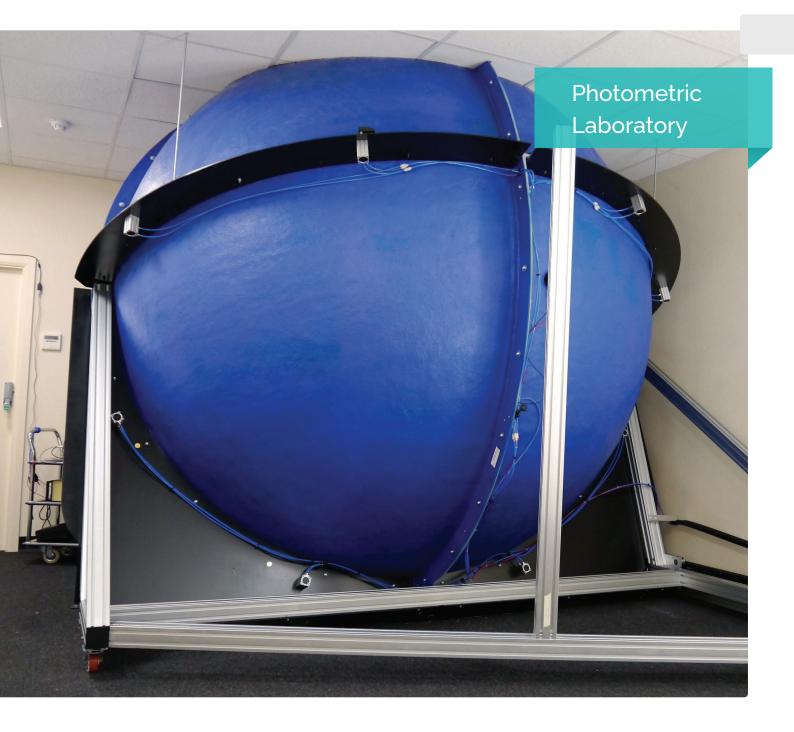
# Production Line

#### Design - With future in mind.

**Street Lighting** 

Our in-house Product Design Team create lighting solutions to ensure that we meet the ever changing demands of customers, turning thoughts and aspirations for products into reality, with both style and sophistication.

In the last year, two truly innovative LED products have been successfully launched based upon specific requirements of the lighting market; the ViperRail<sup>™</sup> and Highway Diamond<sup>™</sup> Elite. **Develop** - To make the future brighter. The drive to reduce both energy and CO2 has led to a shift in the requirements of many stakeholders within the lighting sector. The growing pace of technological innovation along with the investment in both people and new facilities at ASD Lighting, have enabled the business to evolve, embrace and meet new and growing challenges, which many of our customers now face.



Once a product is delivered, the process is not over. The ASD Lighting Product Design Team regularly meet with customers and liaise with other internal departments to ensure that products evolve, and where possible, improvements are made to areas such as ease of installation, quicker maintenance and improvements in photometry or efficacy. **WK Manufacture** - To deliver quality, on time. Fast and efficient delivery allows us to meet the demands of today's robust business requirements. 15 state of the art injection moulding machines with in-house spinning and die casting allow us to meet these demands.

Our fast and efficient manufacturing processes, in-house specialists and state of the art technology allows us to meet the ever changing requirements of our customers, whilst offering industry leading services and delivery times.

# Interior Lighting Solutions

ASD is pleased to present a comprehensive range of decorative commercial lighting which has been designed, developed and manufactured to the highest standards with design flair and creativity. Offering a multitude of lamp and LED operating options, the range provides practical solutions to an array of interior lighting applications.



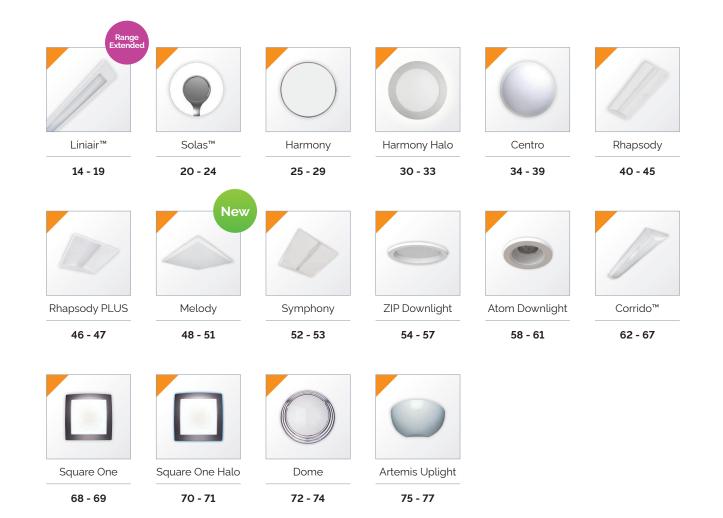












Don't forget to visit the ASD Lighting website for more information on any of the luminaires in this catalogue. asdlighting.com •

Liniair

# Liniair

1/

XI

Ultra-slim, direct / indirect suspended luminaire.



This slimline LED direct / indirect suspended luminaire is the ideal lighting solution for modern offices, meeting rooms and classrooms.

#### **Specification**

- Ceiling mounted (2m suspension kit as standard) & wall mounted.
- White & black colour options.
- Diffuser premium polycarbonate clear or microprism.
- Body mild steel.
- 60,000 hours to L70 B50.
- IP20.
- 60% Direct / 40% indirect light.
- 2m power cable as standard.
- 5 Year LED guarantee.

#### **Options**

- Ultra-thin integral emergency. .
- Continuous version available, enquire for more • details.

NEW

Wall Mounted **Option Available** 

- DSI / DALI Dimmable available. .
- PIR available.

#### **Suitable Applications**





Education





Commercial

Retail



# Liniair™

Designed, Developed & Manufactured in the UK





Colour Finish White LA14/W

> Black LA14/**B**

#### LED Types

- LED 2500, 4000, 5500.
- 4000 K as standard.
- 3000 K on request.

#### Materials

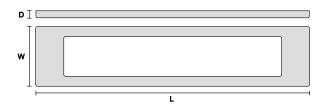
- Body: mild steel in white textured (RAL9016) or black (RAL9005) textured finish.
- End caps: premium polycarbonate.
- Diffuser: clear or microprism.

#### Installation

 The Liniair<sup>™</sup> comes as standard with a 2m suspension kit, (2m power cable as standard).

#### Standards

- IP20. • 'F' Mark.
- CE.
- BS EN 60598.
- Class 1.



Size	
Length	1380mm
Width	250mm
Depth	26mm



#### LA14/WK4LED2500



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
LA14/WM4LED2500	White	Microprism	4000 K	22 W	2590 lm	119 lm/W
LA14/WM4LED4000	White	Microprism	4000 K	33 W	3872 lm	119 lm/W
LA14/WM4LED5500	White	Microprism	4000 K	45 W	5356 lm	118 lm/W
LA14/WK4LED2500	White	Clear	4000 K	22 W	2500 lm	115 lm/W
LA14/WK4LED3500	White	Clear	4000 K	33 W	3735 lm	115 lm/W
LA14/WK4LED5000	White	Clear	4000 K	45 W	5169 lm	114 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (217 lm)

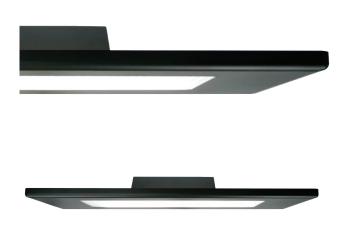






# Liniair<sup>™</sup> Wall Mounted

Designed, Developed & Manufactured in the UK



Colour Finish White LA8/W





LED Types

• LED 2500, 4000, 5500.

- 4000 K as standard.
- 3000 K on request.

#### Materials

- Body / wall mount: mild steel in white textured (RAL9016) or black (RAL9005) textured finish.
- End caps: premium polycarbonate.
- Diffuser: clear or microprism.

#### Installation

• Wall Mounted.

#### Standards

- IP20. • 'F' Mark.
- CE.
- BS EN 60598.
- Class 1.

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Size	
Length	800mm
Width	250mm
Depth	26mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
LA8W/WM4LED3000	White	Microprism	4000 K	44 W	3178 lm	72 lm/W
LA8W/WM4LED3500	White	Microprism	4000 K	56.5 W	3599 lm	63.7 lm/W
LA8W/WM4LED4500	White	Microprism	4000 K	70 W	4306 lm	61.4 lm/W



DALI / DSI Dim -DDD



Switch Dim -DD

# Solas<sup>™</sup> Range





A range of decorative commercial / domestic lighting, ideal for a range of internal environments due to its eye-catching and innovative design.

#### **Specification**

- Ceiling (surface / suspended) & wall mounted.
- White, satin aluminium & titanium colour options (Solas™ Eclipse & Orbit only).
- Premium opal polycarbonate body / diffuser.
- 60,000 hours to L70.
- IP20.
- Twist on diffuser is perfect for fast installation.
- Bespoke LED board designed to give a perfect homogeneous glow throughout the diffuser.
- 5 Year LED guarantee.

#### Options

- Emergency option available.
- DSI / DALI Dimmable available.
- Analogue Dimmable available.
- Daylight monitoring available (Solas<sup>™</sup> Eclipse & Orbit only).
- Microwave on / off available.
- e-Motion™ Corridor available.

#### **Suitable Applications**













Hotel





Education

Commercial

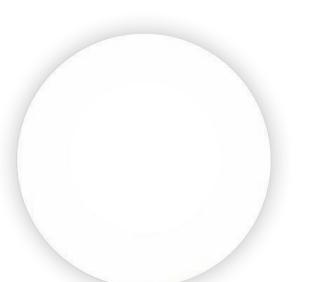
Healthcare

Residential

Corridor



## Solas™ Luna





#### LED Types

- LED 2500, 3000.
- 4000 K as standard.
- 3000 K on request.

#### Materials

- Body: Premium opal polycarbonate.
- Trim: Polycarbonate.

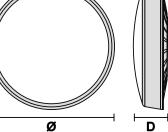
#### Installation

- Wall or ceiling mount.
- BESA fixing in centre of rear housing.

#### Standards

- IP20.
- 'F' Mark · CE.
- BS EN 60598.
- Class 1.

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Size	
Diameter	444mm
Depth	123mm



#### SSL/WL4LED3000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SSL/WL4LED2500	White	Premium Opal	4000 K	26.4 W	2499 lm	94.7 lm/W
SSL/WL4LED3000	White	Premium Opal	4000 K	34.2 W	3030 lm	88.6 lm/W

#### Code options (add suffix to code)



# Solas<sup>™</sup> Eclipse

XX Designed, Developed & Manufactured in the UK

Body: Premium opal polycarbonate.

BESA fixing in centre of rear housing.

LED Types • LED 2500, 3000. • 4000 K as standard. • 3000 K on request.

Materials

Installation • Wall or ceiling mount.

Standards • IP20. • 'F' Mark. · CE. • BS EN 60598.

• Class 1.

• Trim: Polycarbonate.



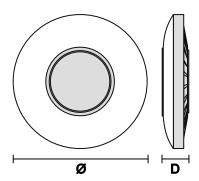




SSE/F



SSE/X



Size	
Diameter	444mm
Depth	88mm

# SSE/WL4LED2500





SSE/WL4LED3000

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SSE/WL4LED2500	White	Premium Opal	4000 K	28 W	2529 lm	90.3 lm/W
SSE/WL4LED3000	White	Premium Opal	4000 K	36.3 W	3043 lm	83.8 lm/W

Code options (add suffix to code)



# Solas<sup>™</sup> Orbit







#### Colour Finish

White SSO/W

Satin Aluminium SSO/F

Titanium

SSO/X



- LED 2500, 3000.
- 4000 K as standard. • 3000 K on request.

#### Materials

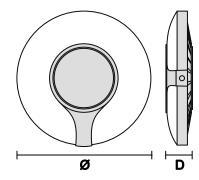
- Body: Premium opal polycarbonate.
- Trim: Polycarbonate.

#### Installation

- Wall or ceiling mount.
- BESA fixing in centre of rear housing.

#### Standards

- IP20.
- 'F' Mark.
- · CE. • BS EN 60598.
- Class 1.



Size	
Diameter	444mm
Depth	88mm



#### SSO/WL4LED3000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SSO/WL4LED2500	White	Premium Opal	4000 K	28.1 W	2430 lm	86.5 lm/W
SSO/WL4LED3000	White	Premium Opal	4000 K	36.4 W	2914 lm	80.1 lm/W

#### Code options (add suffix to code)



24 asdlighting.com

# Harmony Range





A range of decorative commercial or domestic lighting in variety of colour and size options to provide lighting - brighter by design.

#### **Specification**

- Ceiling & wall mounted.
- White, satin aluminium, chrome & brass colour options.
- Base constructed from spun aluminium with tough UV stabilised polycarbonate diffuser in premium opal or prismatic.
- IP20, IP44 available.
- 5 Year LED guarantee.

#### Options

- Emergency option available.
- IP44 versions available.
- Recessing kit available.
- DSI / DALI Dimmable available.
- Switch Dimmable available.
- Microwave on / off available.
- e-Motion™ Corridor available.
- Night Light option.
- 1-10V Analogue dimmable.
- Fluorescent options available.

Recessing Kit (IP20 Only) A simple kit allows the standard Harmony decor range to be recessed into any commercial installation.

CSS/RK1LED (LED Recessing Kit).

IP44 versions

IP44 versions are available across the range. These units cannot be semi-recessed.

#### Drop Wire Pendant Available in 400mm /

600mm lengths. Other lengths available on request.















Hotel



Office

Education

Commercial

Healthcare

Residential

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# Harmony 355mm

Designed, Developed & Manufactured in the UK

Body: Spun aluminium in white / chrome /

 Diffuser: Vandal resistant polycarbonate in premium opal, with self-extinguishing fire

 BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for

Semi recessing kit available as an accessory -

brass / satin aluminium.

• Wall or ceiling mount.

emergency versions.

Code: CSS/RK1LED.

• IP44 option available. • 'F' Mark. · CE. • BS EN 60598. • Class 1.

Standards

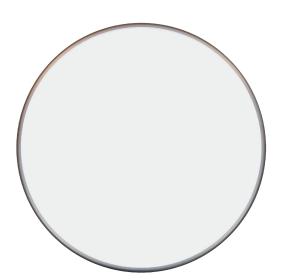
• IP20.

· LED 1800.

• LED 3000. Materials

properties. Installation









# -H D Ø

Size	
Diameter	355mm
Depth	105mm

Recess Hole Dimension 296mm

# H3/WL4LED1800

H3/WL4LED3000

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
H3/WL4LED1800	White	Premium Opal	4000 K	17 W	1625 lm	95.5 lm/W
H3/WL4LED3000	White	Premium Opal	4000 K	24 W	2789 lm	116 lm/W

#### Code options (add suffix to code)



3 Hour Maintained Emergency M (110 - 170 lm)



Microwave On/Off -9



e-Motion™ Microwave Slave Dim -CFS

e-Motion™ Microwave Master Dim

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-CFP



-DD

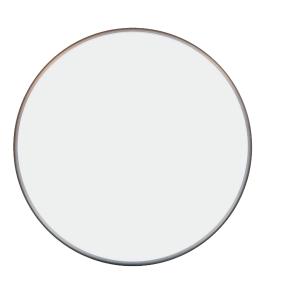
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Switch Dim



# Harmony 432mm







### · LED 1800.

- LED 3000. • LED 4000.

#### Materials

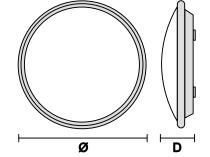
- Body: Spun aluminium in white / chrome / brass / satin aluminium.
- Diffuser: Vandal resistant polycarbonate in premium opal, with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.
- Semi recessing kit available as an accessory -Code: CSS/RK1LED.

#### Standards

- IP20.
- IP44 option available. • 'F' Mark.
- CE.
- BS EN 60598.
- Class 1.



Size	
Diameter	432mn
Depth	108mn

Recess Hole Dimension 412mm









H4/WL4LED3000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
H4/WL4LED1800	White	Premium Opal	4000 K	16.8 W	1670 lm	99.4 lm/W
H4/WL4LED3000	White	Premium Opal	4000 K	21.7 W	2367 lm	109 lm/W
H4/WL4LED4000	White	Premium Opal	4000 K	32.7 W	3409 lm	104 lm/W

Code options (add suffix to code)

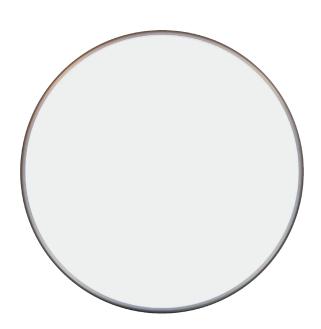


# Harmony 532mm

Designed, Developed & Manufactured in the UK



Interior Lighting Solutions







• LED 4000.

#### Materials

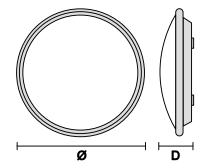
- $\cdot$  Body: Spun aluminium in white / chrome / brass / satin aluminium.
- Diffuser: Vandal resistant polycarbonate in premium opal, with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.
- Semi recessing kit available as an accessory -Code: CSS/RK1LED.

#### Standards

- IP20.
  - IP44 option available
- 'F' Mark.
- CE. • BS EN 60598.
- Class 1.



Size	
Diameter	532mm
Depth	108mm
Recess Hole 512mm	Dimension







Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
H5/WL4LED3000	White	Premium Opal	4000 K	21.6 W	2334 lm	108 lm/W
H5/WL4LED4000	White	Premium Opal	4000 K	32.6 W	3388 lm	104 lm/W

#### Code options (add suffix to code)





Microwave On/Off -9



e-Motion™ Microwave Slave Dim -CFS

e-Motion™ Microwave Master Dim

£

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-CFP



-DD

30

Switch Dim









A circular decorative luminaire with a halo backlight & a range of output / dimming options.

#### **Specification**

- Ceiling (surface / suspended) & wall mounted.
- White colour finish as standard, satin aluminium, chrome & brass colour options available.
- Spun aluminium body & vandal resistant premium opal polycarbonate diffuser.
- 450mm and 564mm base sizes available.
- A combination of direct lighting & back lighting.
- Halo effect with white or coloured back light.
- IP20.
- 5 Year LED guarantee.

#### Options

- Emergency option available.
- DSI / DALI Dimmable available.
- Microwave on / off available.
- e-Motion™ Corridor available.
- Night Light option available.
- Drop pendant kit available.
- Fluorescent options available.
- Digital Dimmable available.

#### **Suitable Applications**















Office

Education

Commercial Healthcare

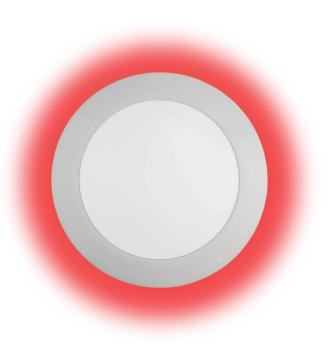
Residential

Hotel

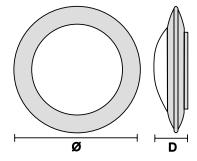
Corridor



# Harmony Halo 450mm



Size Diameter 450mm Depth 123mm





**Colour Finish** 

HA4/Z

HA4/WL4LED1800



HA4/WL4LED3000



brass / satin aluminium. • Diffuser: Vandal resistant

LED Types
• LED 1800.
• LED 3000.
Materials

Diffuser: Vandal resistant polycarbonate in premium opal, with self-extinguishing fire properties.

Body: Spun aluminium in white / chrome /

• Back light: Vandal resistant polycarbonate in opal with self-extinguishing fire properties. Coloured options available.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.
- Drop Wire Pendant available in various lengths.

#### Standards

- IP20.
- 'F' Mark.
- CE.
- BS EN 60598. • Class 1.



Drop Pendant Kit option	Code
400mm	HA4/_4PK
600mm	HA4/_6PK
900mm	HA4 /_9PK

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HA4/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1674 lm	100 lm/W
HA4/WL4LED3000	White	Premium Opal	4000 K	24.4 W	2711 lm	111 lm/W

#### Code options (add suffix to code)



# Harmony Halo 564mm

Designed, Developed & Manufactured in the UK

 $\cdot$  Body: Spun aluminium in white / chrome /

 Diffuser: Vandal resistant polycarbonate in premium opal, with self-extinguishing fire

 BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for

Semi recessing kit available as an accessory -

brass / satin aluminium.

• Wall or ceiling mount.

emergency versions.

Code: CSS/RK1LED.

 IP44 option available. • 'F' Mark. • CE. • BS EN 60598.

Standards

• IP20.

• Class 1.

LED Types • LED 1800. • LED 3000. Materials

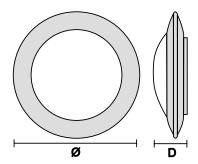
properties. Installation



Interior Lighting Solutions



Size Diameter 564mm Depth 130mm





**Colour Finish** 

Brass HA5/**Z** 

HA5/WL4LED1800



HA5/WL4LED3000





Drop Pendant Kit option	Code
400mm	HA5/_4PK
600mm	HA5/_6PK
900mm	HA5/_9PK

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HA5/WL4LED1800	White	Premium Opal	4000 K	16.6 W	1731 lm	104 lm/W
HA5/WL4LED3000	White	Premium Opal	4000 K	34.4 W	3579 lm	104 lm/W

Code options (add suffix to code)



Halo Options Red Halo HA5/\_\_R Blue Halo **HA5/\_\_U** 



# **Centro Range**





A range of decorative commercial & domestic luminaires with a range of fascia option.

#### **Specification**

- Ceiling & wall mounted.
- White colour finish as standard, satin aluminium, chrome & brass colour options available.
- Vandal resistant polycarbonate body with a premium opal diffuser.
- Easy to install.
- Halo back light version in a choice of colours.
- Fast fit Twist-Lock diffuser assembly.
- Unique first fit polycarbonate base with fast fit connector block & snap fit gear tray (Maxi Circo only - CE4).
- IP54.
- 5 Year LED guarantee.

#### Options

- Emergency option available.
- DSI / DALI Dimmable available.
- e-Motion™ microwave available (internal use only).
- e-Motion™ Corridor available.
- Fluorescent options available.

#### **Suitable Applications**













Hotel



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Education Co

Commercial Healthcare

Residential

Corridor



# **Centro Circo**



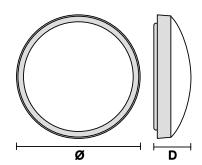




**Colour Finish** 



Brass CE(3 or 4)/**Z** 



Size	CE3	CE4
Diameter	330mm	450mm
Depth	108mm	128mm

#### LED Types

- · LED 1800.
- LED 3000. • LED 4000.

#### Materials

- Fascia: Vandal resistant polycarbonate in white / satin aluminium / Chrome / brass finish. Other colours available on request. Metallic finishes indoor use only.
- Diffuser: Vandal resistant polycarbonate in premium opal with self-extinguishing fire properties.
- Body: Vandal resistant polycarbonate.
- Back light: Clear vandal resistant polycarbonate with self-extinguishing fire properties. Coloured options available.

#### Installation

- Wall or Ceiling Mount.
- $\cdot$  Unique first fit polycarbonate base with snap fit gear tray.
- $\boldsymbol{\cdot}$  BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.
- Quick fit clip on diffuser.
- Fast fit Twist-Lock fascia (with single retaining screw).

#### Standards

- IP54.
- 'F' Mark • CE.
- BS EN 60598.
- Class 1.

CE4/WL4LED3000



Code		Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
CE3/WL4LED1800	330mm	White	Premium Opal	4000 K	16.7 W	1635 lm	98 lm/W
CE4/WL4LED3000	450mm	White	Premium Opal	4000 K	21.6 W	2335 lm	108 lm/W
CE4/WL4LED4000	450mm	White	Premium Opal	4000 K	32.7 W	3390 lm	103 lm/W

Code options (add suffix to code)





DALI / DSI Dim -DDD



•**E** 

카

-CFP

e-Motion™ Microwave Master Dim



S)

Night Light

CLED

Halo Options Ο

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White Halo CH(3 or 4)/\_\_K Red Halo CH(3 or 4)/\_\_R Blue Halo CH(3 or 4)/\_\_U



6

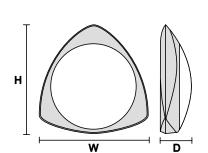
# **Centro Trio**







TR3/Z



8mm
7mm
8mm

# 4

finishes indoor use only. • Diffuser: Vandal resistant polycarbonate in

LED Types • LED 1800. Materials

premium opal with self-extinguishing fire properties. • Body: Vandal resistant polycarbonate. • Back light: Clear vandal resistant polycarbonate

• Fascia: Vandal resistant polycarbonate in white / satin aluminium / Chrome / brass finish.

Other colours available on request. Metallic

 Back light: Clear vandal resistant polycarbonate with self-extinguishing fire properties. Coloured options available.

## Installation

- Wall or Ceiling Mount.
- Unique first fit polycarbonate base with snap fit gear tray.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for
- emergency versions. • Quick fit clip on diffuser.
- Fast fit Twist-Lock fascia (with single retaining screw).

## Standards

- IP54.
- 'F' Mark.
  CE.
- BS EN 60598.
- Class 1.

## TR3/WL4LED1800



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
TR3/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1635 lm	97.9 lm/W

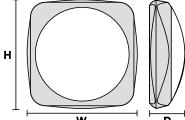
Code options (add suffix to code)



# **Centro Quadro**







Size	
Width	325mm
Height	325mm
Depth	108mm

#### LED Types LED 1800.

## Materials

- Fascia: Vandal resistant polycarbonate in white / satin aluminium / Chrome / brass finish. Other colours available on request. Metallic finishes indoor use only.
- Diffuser: Vandal resistant polycarbonate in premium opal with self-extinguishing fire properties.
- ${\boldsymbol{\cdot}}$  Body: Vandal resistant polycarbonate in finish to match fascia.
- Back light: Clear vandal resistant polycarbonate with self-extinguishing fire properties. Coloured options available.

## Installation

- Wall or Ceiling Mount.
- Unique first fit polycarbonate base with snap fit gear tray.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.
- Quick fit clip on diffuser.
- Fast fit Twist-Lock fascia (with single retaining screw).

## Standards

- IP54.
- 'F' Mark · CE.
- BS EN 60598.
- Class 1.

## QU3/WL4LED1800



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
QU3/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1635 lm	97.9 lm/W
Code options (add suffix to co	ide)					

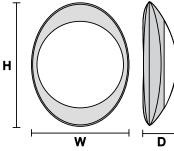
Halo Options 3 Hour Maintained Emergency Night Light e-Motion™ Microwave Master Dim White Halo **QH(3 or 4)/\_\_K** Red Halo **QH(3 or 4)/\_\_R** Blue Halo **QH(3 or 4)/\_\_U** Ŕ (8) •**E** С **M** (105 lm) -CFP CLED light Light Unavailable Microwave On/Off e-Motion™ Microwave Slave Dim Switch Dim Daylight Monitoring ବ 0 5 3--9 -CFS -DD -CFDP DALI / DSI Dim 6 -DDD

# **Centro Ovo**

Designed, Developed & Manufactured in the UK







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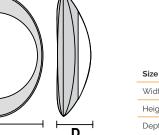
## **Colour Finish** White 0V3/**W**



Satin Aluminium 0V3/**F** 







ze	
idth	325mm
eight	410mm
epth	108mm

e-Motion™ Microwave Slave Dim

**}**-

-CFS

## LED Types

· LED 1800.

## Materials

- Fascia: Vandal resistant polycarbonate in white / satin aluminium / Chrome / brass finish. Other colours available on request. Metallic finishes indoor use only.
- Diffuser: Vandal resistant polycarbonate in premium opal with self-extinguishing fire properties.
- $\boldsymbol{\cdot}$  Body: Vandal resistant polycarbonate in finish to match fascia.
- Back light: Clear vandal resistant polycarbonate with self-extinguishing fire properties. Coloured options available.

## Installation

- Wall or Ceiling Mount.
- Unique first fit polycarbonate base with snap fit gear tray.
- ${\boldsymbol{\cdot}}$  BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.
- Quick fit clip on diffuser.
- Fast fit Twist-Lock fascia (with single retaining screw).

## Standards

- IP54.
- 'F' Mark • CE.
- BS EN 60598.
- Class 1.

## OV3/WL4LED1800



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
OV3/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1635 lm	97.9 lm/W
Code options (add suffix to co	ode)					
3 Hour Maintained E M (105 lm)	mergency	e-Motion™ Microw -CFP	ave Master Dim	Night Light CLED Emergency Night Light Unavailable	$\bigcirc$	Halo Options White Halo <b>0V3/K</b> Red Halo <b>0V3/R</b> Blue Halo <b>0V3/U</b>

Switch Dim

-DD

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-9

DALI / DSI Dim -DDD

Microwave On/Off

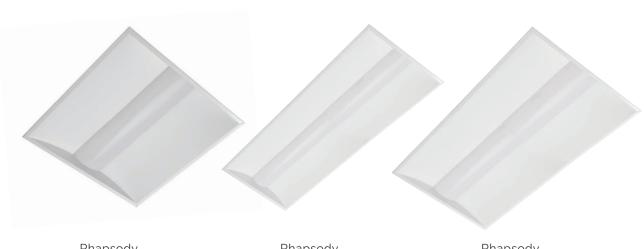
Daylight Monitoring

-CFDP

0

# **Rhapsody LED Range**





Rhapsody 500 x 500 Rhapsody 1200 x 300 Rhapsody 1200 x 600

A range of internal luminaires ideal for office lighting.

## **Specification**

- Recessed ceiling mounted.
- White colour finish.
- Constructed from steel, finished in white (RAL9016) with a premium polycarbonate opal refractor.
- 60,000 hours to L70.
- Supplied with 4000 K LED with a CRI of >80.
- Designed for office lighting and is suitable for areas with display screen equipment (DSE) workstations.
- Standalone proximity sensor.
- Suitable for areas where infection control is required. Hospital Technical Memorandum: "Lighting should be planned so lamps can be easily cleaned with no ledges or ridges where dust can gather".
- IP20.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- Available in 1-10V and DSI / DALI Dimmable.
- 3% to 100% pre-programmed e-Motion™ Corridor dimming.
- DSI / DALI Dim / Analogue options available.
- 3000 K available on request.
- Plug & Play options available.
- Air Handling option.
- Anti-vandal version available.





Office







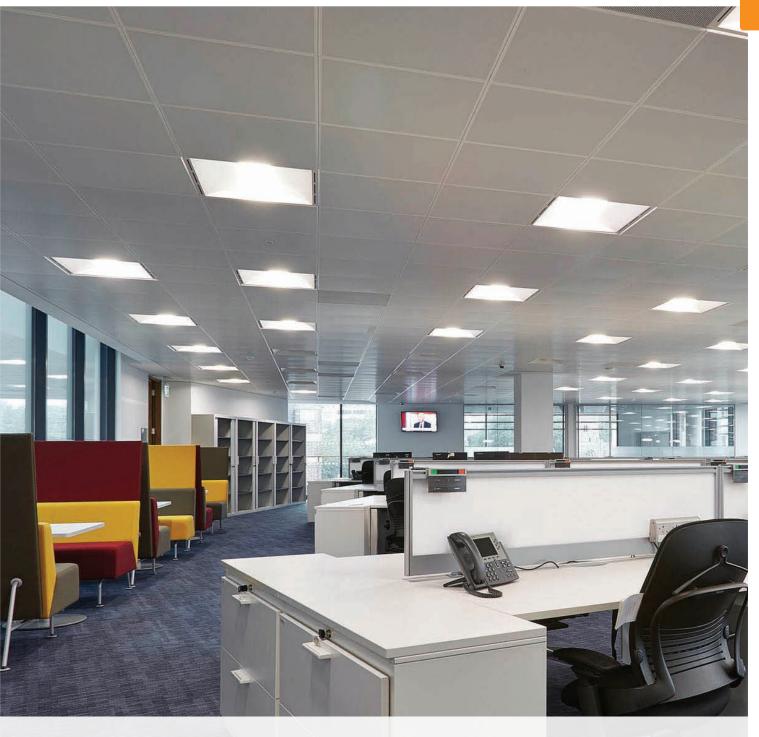


Education

Commercial

Healthcare

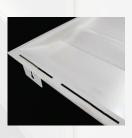
Retail





## Diffuser

Polycarbonate high output premium opal diffuser with excellent transmission. This unique material provides excellent luminance with a high degree of visual comfort.



**Air Handling Option** 

Available in 25 litre per second or 40 litres per second. Aids both ventilation and air circulation in the building.



Installation Options

Suitable for draw up and lay-in applications making it versatile for a number of ceiling systems including:
Exposed 'T'.
Concealed fix.
Some metal pan ceilings.

# Rhapsody LED 500 x 500





## Colour Finish

White

R5/**W** 

• LED **Types** 

## Materials

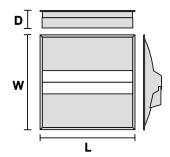
- Body: Steel in white RAL9016.
- Diffuser: Premium opal polycarbonate.

## Installation

- Suitable for draw up and lay-in applications making it versatile for a
- number of ceiling systems including: - Exposed 'T'.
- Concealed fix.
- Some metal pan ceilings.
- Plug & Play options.

## Standards

- IP20.
- 'F' Mark. • CE.
- BS EN 60598.
- Class I.
- TPA Rated.



Size	
Length	497mm
Width	497mm
Depth	110mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
R5/WL4LED3000	White	Premium Opal	4000 K	29.6 W	2407 lm	81 lm/W
R5/WL4LED4500	White	Premium Opal	4000 K	34 W	2980 lm	88 lm/W

#### Code options (add suffix to code)

3 Hour Maintained Emergency M (270 lm)





e-Motion™ Microwave Slave Dim -CF



Analogue Dim **-DA** 





# Rhapsody LED 1200 x 300





**Colour Finish** White R12X3/W

## • LED 3000.

- LED 6000.
- LED 9000.

## Materials

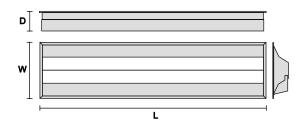
- Body: Steel in white RAL9016.
- Diffuser: Premium opal polycarbonate.

## Installation

- Suitable for draw up and lay-in applications making it versatile for a
- number of ceiling systems including:
- Exposed 'T'. - Concealed fix.
- Some metal pan ceilings.
- Plug & Play options.

## Standards

- IP20.
- 'F' Mark. · CE.
- BS EN 60598.
- Class I.
- TPA Rated.



Size	
Length	1197mm
Width	297mm
Depth	110mm



#### R12X3/WL4LED6000

XHIX
XXIIXX
XXXHAXXX
HHUXXAIXXZHHU
- XXX++XX/Y

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
R12X3/WL4LED3000	White	Premium Opal	4000 K	29 W	3034 lm	104 lm/W
R12X3/WL4LED6000	White	Premium Opal	4000 K	55 W	5549 lm	100 lm/W
R12X3/WL4LED9000	White	Premium Opal	4000 K	105 W	10440 lm	99 lm/W

Code options (add suffix to code)





6



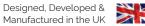
e-Motion™ Microwave Slave Dim



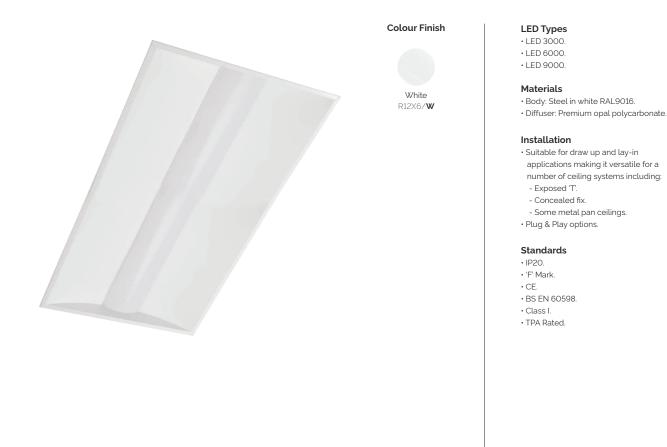
Analogue Dim -DA

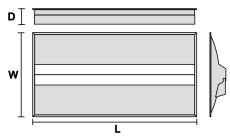
Self-Test Emergency Prefix **R12X3ST/** Suffix **M** 

# Rhapsody LED 1200 x 600









Size	
Length	1197mm
Width	597mm
Depth	110mm



R12X6/WL4LED6000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
R12X6/WL4LED3000	White	Premium Opal	4000 K	28.7 W	3150 lm	110 lm/W
R12X6/WL4LED6000	White	Premium Opal	4000 K	54 W	6055 lm	112 lm/W
R12X6/WL4LED9000	White	Premium Opal	4000 K	105 W	10440 lm	99 lm/W

Code options (add suffix to code)

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 $\Box$ 

3 Hour Maintained Emergency **M** (265 - 290 lm)

Self-Test Emergency Prefix **R12X6ST/** Suffix **M** 





e-Motion™ Microwave Slave Dim



# Rhapsody PLUS





An internal 600 x 600 luminaire ideal for office lighting.

## **Specification**

- Recessed ceiling mounted.
- White colour finish.
- 100% moulded polycarbonate Seamless edges.
- Single shot injection moulding.
- No paint to scratch.
- Fixed metal gear tray with wiring hatch.
- 25% lighter than steel version.
- Building Regulations Compliant Part B.
- Suitable for lay in application within a 15mm and 24mm Tee bar grid system.
- Designed for office lighting and is suitable for areas with display screen equipment (DSE) workstations.
- Lightweight design (3kg).
- IP20.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- DSI / DALI Dim / Analogue options available.
- 3000 K available on request.
- Plug & Play options available.
- Tuneable white option available.
- e-Motion™ Microwave Dimming options.





Office









Education

Commercial

Healthcare

Retail

# **Rhapsody PLUS**

Designed, Developed & Manufactured in the UK





White R6M/W

**Colour Finish** 

## LED Types

• LED 3000.

• LED 4500.

• LED 6000.

## Materials

- Body: 100% moulded polycarbonate in RAL 9016. - Seamless edges.
- Perfect corners.
- Gear tray: Steel.
- Diffuser: Premium opal diffuser for visual comfort. - Building Reg Compliant Part B.

## Installation

- Suitable for lay-in applications making it versatile for a number of ceiling systems including T 15 / 24.
- Prepared aperture cut to size.
- Plug & Play options.

## Standards

- IP20. • 'F' Mark
- CE.
- BS EN 60598.
- Class I.

D W

L

Size	
Length	595mn
Width	595mn
Depth	118mm

# R6M/WL4LED3000







R6M/WL4LED3000 White 4000 K 28.5 W 2772 lm 97 lm/W Premium Opal R6M/WL4LED4500 White 4000 K 41 W 3984 lm 97 lm/W Premium Opal R6M/WL4LED6000 White 4000 K 50 W 5354 lm 107 lm/W Premium Opal

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (265 - 310 lm)



Self-Test Emergency Prefix **R6MST/** Suffix **M** 



C

Microwave On/Off

DALI / DSI Dim

-DDD



-CFP

-E

e-Motion™ Microwave Slave Dim



e-Motion™ Microwave Master Dim



# **Melody PLUS Range**



Ultra-thin, low glare premium range of luminaires ideal for office lighting.

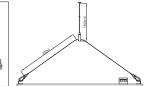
## Specification

- Mounting recessed, surface or suspended.
- White colour finish.
- 50,000 hours (L70/B50).
- 600 x 600 & 1200 x 300 sizes available.
- High efficiency of up to 126.7 lm/W.
- · Flat design for easy installation in low false ceiling.
- Ultra-low flicker for maximum visual comfort.
- 100% instant light.
- Degree of protection: IP40 front face, IP20 Casing.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- DALI Dim options available.
- 3000 K available on request.
- Surface Box (Code M6M/SBOX, M12X3M/SBOX).
- Suspension Kit (Code M6M/SK).





The vertical cables are 1500mm +/-10mm The cables that attach to the panel itself are 600mm +/-10mm

Suitable Applications



Office









Education

Commercial

Healthcare

Retail



# Melody PLUS 600 x 600



**Colour Finish** 

White M6M/**W** 

## · LED 2500.

- LED 3000.
- LED 4000.

## Materials

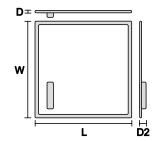
 Surface mounting frame: Material: Aluminium Colour: white (RAL 9003) Magnetic catch.

## Installation

Mounting - recessed, surface or suspended.

## Standards

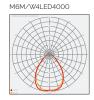
- IP40 front face, IP20 Casing.
- 'F' Mark.
- CE.
- BS EN 60598.
- Class I.



Size	
Length	595mm
Width	595mm
Depth	12mm
Depth 2 (Inc. Driver)	42mm







Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
M6M/W4LED2500	White	Microprism	4000 K	20.5 W	2475 lm	120.6 lm/W
M6M/W4LED3000	White	Microprism	4000 K	27.3 W	3240 lm	118.6 lm/W
M6M/W4LED4000	White	Microprism	4000 K	33 W	4056 lm	123 lm/W

## **Option Codes**









# Melody PLUS 1200 x 300



**Colour Finish** 

W/hite

M12X3M/W

## · LED 2500.

• LED 3000. • LED 4000.

## Materials

 Surface mounting frame: Material: Aluminium Colour: white (RAL 9003) Magnetic catch.

## Installation

Mounting - recessed, surface or suspended.

## Standards

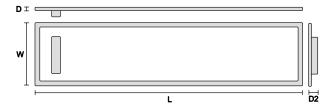
IP40 front face, IP20 Casing.

• 'F' Mark.

- CE.
- BS EN 60598.

• Class I.

Size	
Length	1195mm
Width	295mm
Depth	12mm
Depth 2 (Inc. Driver)	42mm





M12X3M/W4LED2500







M12X3M/W4LED2500 White 4000 K 2678 lm 126.7 lm/W Microprism 20.3 W M12X3M/W4LED3000 White 27.1 W 3390 lm 124.7 lm/W Microprism 4000 K 4244 lm M12X3M/W4LED4000 White 35 W 121.5 lm/W Microprism 4000 K

## Option Codes





Suspension Kit M6M/SK

# Symphony LED





Ultra slim LED 600 x 600 luminaire ideal for office lighting.

## Specification

- Recessed ceiling mounted.
- Constructed from steel, finished in white (RAL9016).
- Ultra slim depth for narrow ceiling voids (47mm).
- 60,000 hours to L70.
- Simple installation.
- 4000 K LED with a CRI of >80.
- Designed to be dirt / dust resistant.
- Suitable for office environments and for areas with display screen equipment (DSE) workstations.
- IP20.
- 5 Year LED guarantee.

## Options

- DSI / DALI Dim / Analogue options available.
- 3000 K available on request.
- Plug & Play available.





Office







Healthcare



Education

Commercial

Retail

# Symphony LED

Designed, Developed & Manufactured in the UK





## Colour Finish

White S6/**W** 

Installation
• Suitable for lay-in applications on

• Body: Steel in white RAL9016.

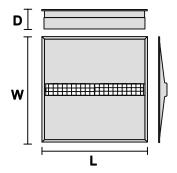
- 15mm & 24mm grids. Other ceiling types available on request.
- Plug & Play options.

## Standards

· LED 2000.

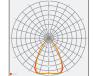
• LED 3000. Materials

- IP20.
- 'F' Mark
  CE.
- CE. • BS EN 60598.
- Class I.



Size	
Length	595mm
Width	595mm
Depth	65mm

## S6/W4LED2000-Y0





Code	Colour	Colour Temp.	System Power	Delivered Lumens	Efficacy
S6/W4LED2000-Y0	White	4000 K	22.2 W	2427 lm	109 lm/W
S6/W4LED3000-Y0	White	4000 K	29.9 W	3413 lm	115 lm/W

#### Code options (add suffix to code)











# **ZIP LED Downlight**





A compact & efficient, polycarbonate LED downlight.

## **Specification**

- The first commercial LED downlight that is first and second fix compatible.
- Recessed mounted down light, with ZIP adjustable fixing clip suitable for ceiling systems.
- Fast Fit Push & Twist.
- White colour finish.
- Drop Ring available.
- Wide angle distribution. .
- 3 output variants.
- 50,000 hours life.
- IP44.
- 5 Year LED guarantee.

## **Suitable Applications**















Office

Education

Healthcare Commercial

Retail

Corridor

Residential

# Interior Lighting Solutions

## 54 asdlighting.com

## Options

- Emergency option available. ٠
- DSI / DALI Dim options available. •
- 3000 K available on request. •
- e-Motion™ Microwave Dimming options.



# **ZIP LED Downlight**





**Colour Finish** 

White ZIPM/**W** 

## LED Types • LED 1000.

• LED 2000. • LED 3000.

## Materials

Housing material - polycarbonate.

## Installation

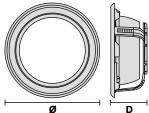
- Recessed mounted down light, with ZIP
- adjustable fixing clip suitable for ceiling systems.
- Fast Fit Push & Twist.

## Standards

- IP44. • 'F' Mark.
- · CE.
- BS EN 60598.
- Class I.







## Size Diameter Depth

Ø210mm cut out

236mm

91mm

## ZIPM/WL4LED1000





ZIPM/\W/I 4I ED2000





Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
ZIPM/WL4LED1000	White	Premium Opal	4000 K	16.2 W	1389 lm	85.7 lm/W
ZIPM/WL4LED2000	White	Premium Opal	4000 K	21.3 W	1886 lm	88.5 lm/W
ZIPM/WL4LED3000	White	Premium Opal	4000 K	28.7 W	2495 lm	86.9 lm/W

## Code options (add suffix to code)









-CFP

-6

e-Motion™ Microwave Slave Dim

e-Motion™ Microwave Master Dim

Subject to compatible ceiling type.





Self-Test Emergency Prefix **ZIPMST/** Suffix **M** 

# **ZIP LED Downlight Drop Ring**

Designed, Developed & Manufactured in the UK





Colour Finish White ZIPM/**W** 

LED Types • LED 1000. • LED 2000.

• LED 3000.

## Materials

Housing material - polycarbonate.

## Installation

- Recessed mounted down light, with ZIP adjustable
- fixing clip suitable for ceiling systems.
- Fast Fit Push & Twist.

#### Standards

- IP44.
- 'F' Mark.
- CF.
- BS EN 60598. • Class I.
- ZIPM/WLD4LED1000 7IPM / WI D4I ED2000



ø D

Size	
Diameter	239mm
Depth	109mm

Ø210mm cut out





ZIPM/WLD4LED1000 White Premium Opal / Drop Ring 4000 K 1348 lm 82.6 lm/W 16.3 W ZIPM/WLD4LED2000 White Premium Opal / Drop Ring 4000 K 19.8 W 1746 lm 88.1 lm/W 85.2 lm/W ZIPM/WLD4LED3000 White Premium Opal / Drop Ring 4000 K 28.1 W 2396 lm

Code options (add suffix to code)

£

3 Hour Maintained Emergency **M** (235 lm)



Switch Dim -DD



•€

-CFP

-CFS

e-Motion™ Microwave Slave Dim

e-Motion™ Microwave Master Dim

Subject to compatible ceiling type.





# **Atom PLUS Downlight**







## A compact & efficient range of LED luminaires.

## **Specification**

- Mounting suitable for mounting on normally flammable material 'F' mark.
- Fixing method sprung steel push fit wings suitable for ceilings between 5-20mm.
- White, satin aluminium & chrome colour options.
- BS EN 60598.
- 50,000 hours life.
- IP20.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- DSI / DALI Dim options available.
- 3000 K available on request.
- Adaptor plates available for retro fitting into larger apertures.
- Twist lock attachments:
  - Plain Bezel.
  - IP65 Kit.
  - Drop Attachment.
  - Ceiling Adaptor.

## **Suitable Applications**











Retail





Office

Education

Commercial Healthcare

re

Corridor

Residential



# **Atom PLUS Downlight**







Chrome AT1/H

## LED Types

· LED 8W. • LED 16W.

## Materials

Housing material - polycarbonate.

## Installation

- Mounting suitable for mounting on normally flammable material 'F' mark.
- Fixing method sprung steel push fit wings suitable for ceilings between 5-20mm. • Pre-wired 1m.

### Standards

- CE mark conformance to low voltage & EMC directives.
- BS EN 60598.
- IP20.
- IP65 Kit available.

IP65 Kit	Code
Seal & Cover Clear	AT1/W6
Seal & Cover Opal	AT1/WL6

Drop Attachments	Code
White Polycarbonate	AT1/WD
Chrome Polycarbonate	AT1/HD
Satin Polycarbonate	AT1/FD
Brass Polycarbonate	AT1/ZD

Bezel Attachments	Code
Polycarbonate Chrome Bezel	AT1/HBEZ
Polycarbonate Satin Bezel	AT1/FBEZ
Polycarbonate Brass Bezel	AT1/ZBEZ

Ø	D

Size	
Diameter	146mm
Depth	72mm
Ø127mm ci	ut out

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
AT1/W4LED7	White	Open Bezel	4000 K	8 W	687.8 lm	86 lm/W
AT1/W4LED14	White	Open Bezel	4000 K	16 W	1180 lm	73.7 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (207 lm) 16 W version only





Self-Test Emergency Prefix AT1ST/ Suffix M 16 W ver



Analogue Dim -DA 8 W version only.







## A high performance, shallow profile LED luminaire.

## Specification

- Ceiling, suspension or BESA mounting.
- White colour finish (satin aluminium available on request).
- Steel body, powder coated in RAL9016 with a polycarbonate diffuser and vandal resistant endcaps.
- Available in 3 body sizes.
- Simple installation and maintenance.
- Suitable for areas where infection control is required. Hospital Technical Memorandum: "Lighting should be planned so lamps can be easily cleaned with no ledges or ridges where dust can gather".
- 50,000 hours to L70.
- IP20.
- 5 Year LED guarantee.

## **Suitable Applications**



Corridor



Office



Education







Hotels



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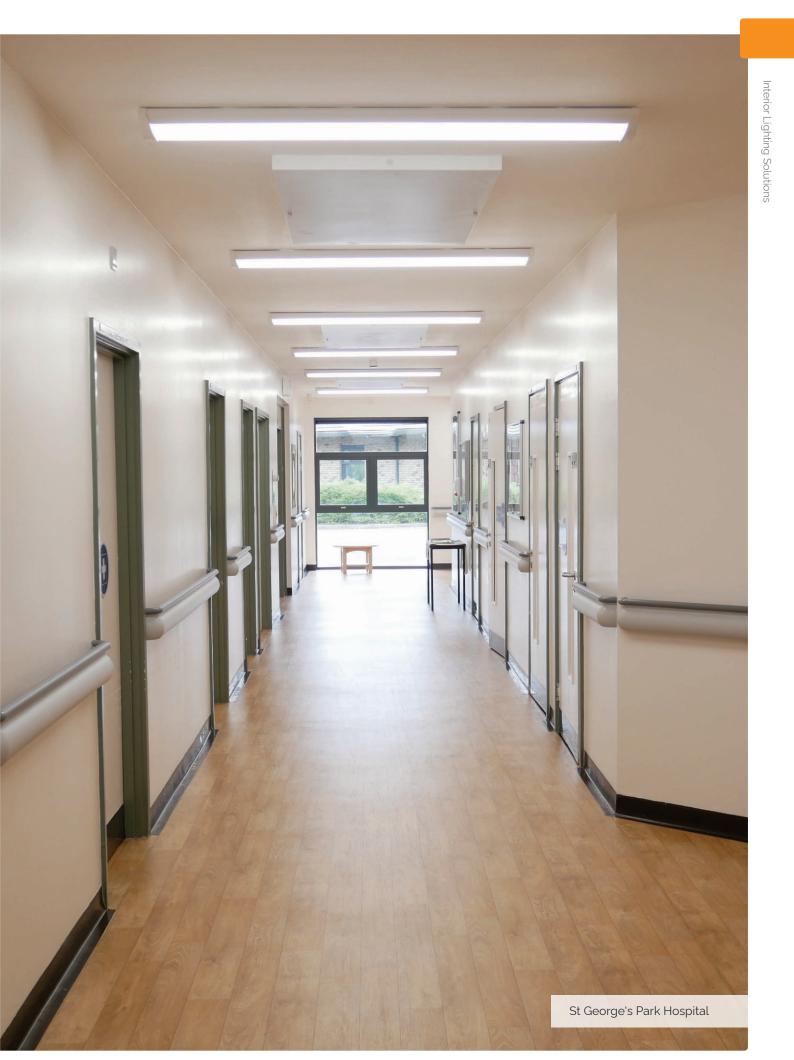
## Options

- Emergency option available.
- DSI / DALI Dim options available.
- 3000 K available on request.
- Microwave On/Off available.
- e-Motion<sup>™</sup> Microwave master & slave dimmable available.

Commercial

care

Airport









CD7/F

\*Minimum order quantity applies.

LED Types • LED 3000.

## Materials

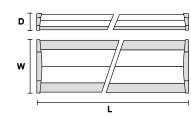
- Body: steel fabrication powder coated white RAL9016.
- Diffusing panels: flame retardant opal polycarbonate – UV stabilised.
- End cap & body colour: standard white RAL9016, available in brushed satin aluminium.

## Installation

 BESA fixing (with additional mounting bracket, please enquire) and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.

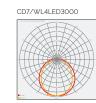
## Standards

- IP20.
- 'F' Mark.
- CE.
- BS EN 60598. • Class I.



Size	
Length	758mm
Width	227.5mi

m Depth 76.4mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
CD7/WL4LED3000	White	Premium Opal	4000 K	19.2 W	1991 lm	103 lm/W

## Code options (add suffix to code)







 $\sim$ 

Self-Test Emergency Prefix CD7ST/ Suffix M



e-Motion™ Microwave Slave Dim 3--CFS

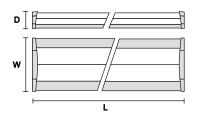


Analogue Dim -DA

Designed, Developed & Manufactured in the UK







Size	
Length	1258mm
Width	227.5mm
Depth	76.4mm

## **Colour Finish**



CD12/W

Satin Aluminium\* CD12/F\*Minimum order quantity applies.

## LED Types

#### • LED 3000. • LED 6000.

• LED 9000.

## Materials

- Body: steel fabrication powder coated white RAL9016.
- Diffusing panels: flame retardant opal polycarbonate – UV stabilised.
- End cap & body colour: standard white RAL9016, available in brushed satin aluminium.

## Installation

 BESA fixing (with additional mounting bracket, please enquire) and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.

## Standards

- IP20.
- 'F' Mark. • CE.
- BS EN 60598.
- Class I.

CD12/WL4LED3000

## CD12/WL4LED6000





## CD12/WL4LED9000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
CD12/WL4LED3000	White	Premium Opal	4000 K	28.7 W	2970 lm	103 lm/W
CD12/WL4LED6000	White	Premium Opal	4000 K	51.5 W	5341 lm	103 lm/W
CD12/WL4LED9000	White	Premium Opal	4000 K	100.6 W	9964 lm	99 lm/W

## Code options (add suffix to code)



3 Hour Maintained Emergency **M** (300 lm) Excludes - CD12/WL4LED9000



Switch Dim

-DD

•**E** 

**;**]-

-CFP

e-Motion™ Microwave Slave Dim -CFS

e-Motion™ Microwave Master Dim





Self-Test Emergency Prefix **CD12ST/** Suffix **M** Ļ



Colour Finish White CD15/W Satin Aluminium\* CD15/F

um order quantity applies.

\*Minim

## LED Types

- LED 3000.LED 4500.
- LED 4500
- LED 6000.
  LED 7500.

#### Materials

- Body: steel fabrication powder coated white RAL9016.
- Diffusing panels: flame retardant opal polycarbonate UV stabilised.
- End cap & body colour: standard white RAL9016, available in brushed satin aluminium.

#### Installation

 BESA fixing (with additional mounting bracket, please enquire) and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.

#### Standards

- IP20.
- 'F' Mark.
  CE.
- CE.
- BS EN 60598. • Class I.

CD15/WL4LED3000 CD15/W













D	
w	
	H

Size	
Length	1558mm
Width	227.5mm
Depth	76.4mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
CD15/WL4LED3000	White	Premium Opal	4000 K	25.2 W	2870 lm	113 lm/W
CD15/WL4LED4500	White	Premium Opal	4000 K	34.3 W	4199 lm	122 lm/W
CD15/WL4LED6000	White	Premium Opal	4000 K	44.6 W	5133.8 lm	115 lm/W
CD15/WL4LED7500	White	Premium Opal	4000 K	63 W	6739 lm	106 lm/W

Code options (add suffix to code)

3 Hour Maintained Emergency M (315 lm)

(315 lm)





£

-CFP

e-Motion™ Microwave Slave Dim -CFS

e-Motion™ Microwave Master Dim



-DA

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Analogue Dim



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## **Square One**







A square internal decorative luminaire.

## **Specification**

- Wall or ceiling mounted as a square or diamond. ٠
- White, satin aluminium, chrome & brass colour options.
- Wire drop down pendant. .
- Tough polycarbonate body and diffuser.
- IP20 (IP44 available). .
- 5 Year LED guarantee.

## Options

- Emergency option available. •
- DSI / DALI Dim / Analogue options available. •
- 3000 K available on request. •
- Self-Test emergency option. .
- e-Motion™ corridor available. .
- Fluorescent options available. .







Education







Office

Commercial

Hotel

Corridor

# **Square One**







Chrome SQ4/**H** 

## LED Types • LED 1800.

• LED 3000.

## Materials

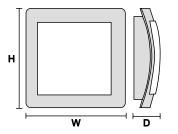
- Fascia: Vandal resistant polycarbonate in white / chrome / brass / satin aluminium finish.
- Other colours available on request. Diffuser: Vandal resistant polycarbonate in
- opal, with self-extinguishing fire properties. Body: Vandal resistant polycarbonate in
- white, other colours available on request. Base: Powder coated aluminium finished in RAL 9016.

## Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.

## Standards

- IP20 (IP44 available as an option, add
- to code: B1).
- 'F' Mark · CE.
- BS EN 60598.
- Class I.



Size	
Width	410mm
Height	410mm
Depth	120mm



## SQ4/WL4LED3000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SQ4/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1621 lm	97 lm/W
SQ4/WL4LED3000	White	Premium Opal	4000 K	21.7 W	2182 lm	100 lm/W

Code options (add suffix to code)



# Square One Halo





A square internal decorative luminaire with a halo backlight.

## Specification

- Wall or ceiling mounted as a square or diamond.
- White, satin aluminium, chrome & brass colour options.
- Halo effect backlight in a range of colours.
- Wire drop down pendant.
- Tough polycarbonate body and diffuser.
- IP20 (IP44 available).
- 5 Year LED guarantee.

## Options

- Emergency option available.
- DSI / DALI Dim / Analogue options available.
- 3000 K available on request.
- Self-Test emergency option.
- e-Motion™ Corridor available.
- Fluorescent options available.





Office









Education Commercial

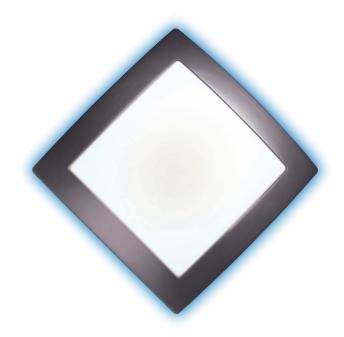
l Hotel

Corridor

# Square One Halo

Designed, Developed & Manufactured in the UK







Chrome SH4/**H** 

## • LED 1800.

LED 1800.
 LED 2000.

## Materials

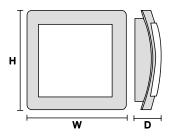
- Fascia: Vandal resistant polycarbonate in white / chrome / brass / satin aluminium finish.
- Other colours available on request. • Diffuser: Vandal resistant polycarbonate in
- opal, with self-extinguishing fire properties. • Body: Vandal resistant polycarbonate in
- white, other colours available on request. • Base: Powder coated aluminium finished in RAL 9016.

## Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions.

## Standards

- IP20 (IP44 available as an option, add
- to code: B1).
- 'F' Mark.
  CE.
- BS EN 60598.
- Class I.



Size	
Width	410mm
Height	410mm
Depth	120mm



## SH4/WL4LED3000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SH4/WL4LED1800	White	Premium Opal	4000 K	16.5 W	1728 lm	104 lm/W
SH4/WL4LED3000	White	Premium Opal	4000 K	21.8 W	2182 lm	100 lm/W

Code options (add suffix to code)



# Dome & Mini Dome





Mini Dome Chrome

## A circular decorative luminaire.

## **Specification**

- Ceiling mounted. .
- White, chrome & brass colour options.
- IP20.
- IP44 bathroom versions available.
- 5 Year LED guarantee.

## Options

- Emergency option available. •
- DSI / DALI Dim / Analogue options available. •
- 3000 K available on request. •
- e-Motion™ Corridor available. .
- Microwave on / off available. .
- Switch Dimmable available.
- Fluorescent options available. •

## **Suitable Applications**



Education



Commercial







Hotel

Corridor

Residential

## **Mini Dome**







## • LED 1000.

#### Materials

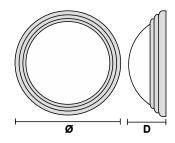
- Body: vandal resistant polycarbonate self-extinguishing fire properties in white  $\checkmark$ brass / chrome.
- Diffuser: snap fit vandal resistant polycarbonate with self-extinguishing fire , properties.

### Installation

- Ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way block for emergency version.
- Quick fit clip on diffuser.

#### Standards

- IP20 (IP44 available as an option, add
- to code: B1). • 'F' Mark.
- CE.
- BS EN 60598.
- Class I.



Diameter 314mm Depth 100mm

### MD/WL4LED1000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
MD/WL4LED1000	White	Premium Opal	4000 K	11.8 W	1263 lm	107 lm/W











#### LED Types • LED 1800.

### Materials

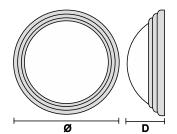
- Body: vandal resistant polycarbonate self-extinguishing fire properties in white  $\boldsymbol{\prime}$ brass / chrome.
- Diffuser: snap fit vandal resistant polycarbonate with self-extinguishing fire properties.

### Installation

- Ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way block for emergency version. Quick fit clip on diffuser.

## Standards

- IP20 (IP44 available as an option, add to code: B1).
- 'F' Mark.
- CE.
- BS EN 60598.
- Class I.



Size	
Diameter	38

388mm Depth 120mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
AD/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1749 lm	104 lm/W

### Code options (add suffix to code)



**₽** 



DALI / DSI Dim -DDD

Switch Dim 5,00 -DD







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## **Artemis Uplight**





A stylish, versatile and distinctive internal luminaire that provides indirect lighting.

## **Specification**

- Wall mounted.
- Spun aluminium body, colour finished in white.
- Indirect lighting range.
- Quick Fix mounting arrangement.
- IP20.
- Two size variants: 307mm (mini) and 408mm.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- Switch Dimmable available.
- 7W downlight option.
- Fluorescent options available.

Suitab	le A	ppli	ications	









Hotel

Education Commercial

Office

## **Mini Artemis Uplight**





## LED Types LED 600.

#### Materials

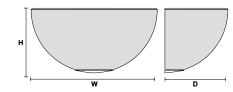
- Body: spun aluminium.
- Gear tray: mild steel.

#### Installation

- Unique first fit mild steel gear tray, slide attached quarter sphere fronts.
- 3 ways mains terminal block.
- Rear cable entry.

#### Standards

- IP20.
- 'F' Mark
  CE.
- BS EN 60598.



Size	
Width	307mm
Height	140mm
Depth	154mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
UM3/W4LED600	White	Premium Opal	4000 K	7.13 W	441 lm	61.9 lm/W

## **Artemis Uplight**







UM4/W

· LED 10.

### Materials

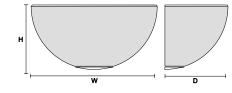
- Body: spun aluminium.
- Gear tray: mild steel.
- Downlight: opal polycarbonate with colour choice available.

### Installation

- Unique first fit mild steel gear tray, slide attached quarter sphere fronts.
- 3 ways mains terminal block.
- Rear cable entry.

### Standards

- IP20.
- 'F' Mark.
- CE.
- BS EN 60598.



Size	
Width	408mm
Height	185mm
Depth	204mm

Code	Colour
UM4/WLED10	White

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (91 lm)



Artemis Uplight + 7W Downlight UM4/W7LED10

+44 (0) 1709 374898 77

## Exterior Lighting Solutions

Increasingly, the adequate provision of external lighting is seen as essential in providing a safe environment, whilst curbing light pollution by reducing upward glare.

Designed for use where the aesthetics of the lighting scheme are of paramount consideration our systems have constantly been re-evaluated to provide units that deliver these requirements and help combat the increasing threat of vandalism or theft from property.















## **Stealth Elite**





A robust high performance exterior luminaire.

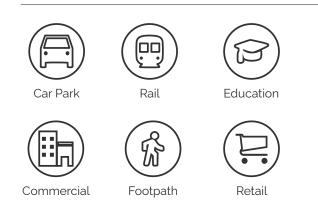
## **Specification**

- Wall mount.
- Black and titanium colour finishes available.
- Flood, wide and T beam angle distribution available.
- Die cast aluminium (powder coated).
- Clear / opal diffuser options.
- DALI Driver as standard (requires different wiring than standard product in order to use DALI).
- 10KV Surge Protection.
- Integrated Over Voltage Protection.
- Standby Power less than 0.5W.
- High operation temperature version available.
- ULOR as low as 0.6%.
- Standard specification paint finish passes 1000 hours Salt Spray Test in accordance with BS EN ISO 9227:2006.
- > 100k hrs L90-B10.
- Latest generation of LED chips.
- IP65 / IK10.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- PIR / Photocell options available.
- 3000 K available on request.
- Step Dim (Additional PIR required).
- Astro Dim (Additional Photocell required).
- Presence Detection (Additional PIR required).
- CLO.

## **Suitable Applications**



Exterior Lighting Solutions



Lamp	Circuit Watts	ASD Stealth Elite	Circuit Watts	Lumens	Energy Saving	Part No.
32W CFL	38W	Stealth Elite 4 LED 350mA Flood	19W	1915	50%	SEL-B4LED435-FL1
50W MH	63W	Stealth Elite 8 LED 300mA Flood	31.5W	3353	50%	SEL-B4LED830-FL1
70W SON	86W	Stealth Elite 8 LED 350mA Flood	35.8W	3717	59%	SEL-B4LED835-FL1
70W MH	86W	Stealth Elite 8 LED 500mA Flood	49.9W	5022	42%	SEL-B4LED850-FL1

## Stealth Elite Flood Beam Angle







Designed, Developed & Manufactured in the UK



LED Types

LED 4 (350, 500mA).
LED 8 (350, 500mA).

### Materials

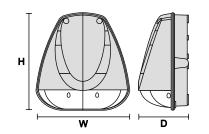
Body: Die cast aluminium (powder coated).Diffuser: Vandal resistant polycarbonate.

#### Installation

Wall mount.
BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for photocell versions.

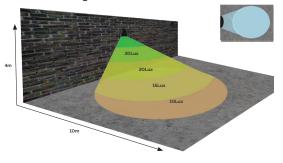
#### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
  'F' Mark.
- F M
- BS EN 60598.
- Class I.



Size	
Width	330mm
Height	343mm
Depth	176mm

#### Flood Beam Angle



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SEL/B4LED435-FL1	Black	Clear	4000 K	19 W	1915.5 lm	100.7 lm/W
SEL/B4LED450-FL1	Black	Clear	4000 K	26.4 W	2611.5 lm	98.5 lm/W
SEL/B4LED835-FL1	Black	Clear	4000 K	35.8 W	3717.8 lm	103.8 lm/W
SEL/B4LED850-FL1	Black	Clear	4000 K	49.9 W	5022 lm	100.6 lm/W

Code options (add suffix to code)









## Stealth Elite Wide Beam Angle

Designed, Developed & Manufactured in the UK



Colour Finish

Black





LED Types

LED 4 (350, 500mA).
LED 8 (350, 500mA).

### Materials

Body: Die cast aluminium (powder coated).Diffuser: Vandal resistant polycarbonate.

### Installation

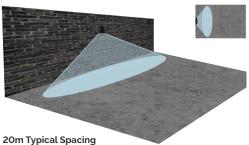
Wall mount.
BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for photocell versions.

#### Standards

- IP65.20 Joules of impact resistance (IK10).
- 'F' Mark.
- CE.
- BS EN 60598.
- Class I.

Size	
Width	330mm
Height	343mm
Depth	176mm

### Wide Beam Angle



Based on a 5m mounting height.

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SEL/B4LED435-W	Black	Clear	4000 K	19.4 W	1476 lm	76.1 lm/W
SEL/B4LED450-W	Black	Clear	4000 K	26.5 W	2006 lm	76.5 lm/W
SEL/B4LED835-W	Black	Clear	4000 K	35.6 W	3192 lm	89.5 lm/W
SEL/B4LED850-W	Black	Clear	4000 K	50 W	4325 lm	86.5 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (256 lm)







Self-Test Emergency Prefix **SELST/** Suffix **M** 

## Stealth Elite T-Beam Angle



XX

Exterior Lighting Solutions

Ideal for doorways





### LED Types

LED 4 (350, 500mA).
LED 8 (350, 500mA).

### Materials

Body: Die cast aluminium (powder coated).Diffuser: Vandal resistant polycarbonate.

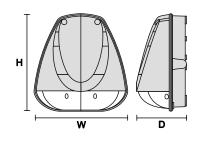
### Installation

Wall mount.
BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for photocell versions.

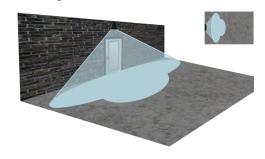
#### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
  CE.
- CE. • BS EN 60598.
- Class I.

T-Beam Angle



Size	
Width	330mm
Height	343mm
Depth	176mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SEL/B4LED435-T	Black	Clear	4000 K	19.4 W	1877 lm	96.8 lm/W
SEL/B4LED450-T	Black	Clear	4000 K	26.6 W	2555.7 lm	96.2 lm/W
SEL/B4LED835-T	Black	Clear	4000 K	35.9 W	3524.4 lm	98.1 lm/W
SEL/B4LED850-T	Black	Clear	4000 K	50 W	4752 lm	94.8 lm/W

#### Code options (add suffix to code)

3 Hour Maintained Emergency M (256 lm)







## Stealth Elite Opal Diffuser







**Colour Finish** 





LED Types

• LED 2000.

• LED 3000. • LED 4000.

### Materials

- Body: Die cast aluminium (powder coated).
- Diffuser: Vandal resistant polycarbonate.

### Installation

- Wall mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for photocell versions.

#### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- · CE.
- BS EN 60598. • Class I.
- 60,000 Hours LED.

н D w

Size	
Width	330mm
Height	343mm
Depth	176mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
SEL/BL4LED2000	Black	Premium Opal	4000 K	21 W	1805 lm	86 lm/W
SEL/BL4LED3000	Black	Premium Opal	4000 K	29.3 W	2495 lm	85 lm/W
SEL/BL4LED4000	Black	Premium Opal	4000 K	41.2 W	3384 lm	82 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (275 lm)







Self-Test Emergency Prefix **SELST/** Suffix **M** 

## **Horizon Range**



A comprehensive range of attractive, vandal resistant luminaires suitable for internal and external use.

## **Specification**

- Wall mount.
- Black, white, titanium and satin aluminium colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- 283mm and 353mm base sizes available.
- Louvre, eyelid or cage fascia to reduce upward glare (Cage fascia 353mm only).
- Screw down cover.
- Simple installation.
- 353mm metal based version features multiple side entries.
- IP65 / IK10.
- 5 Year LED guarantee.

## Options

- Emergency option available (353mm only).
- PIR / Photocell options available.
- 3000 K available on request (353mm only).
- HI-LO PIR (luminaire at 10% during periods of inactivity, 100% light output when HI-LO PIR detects movement).
- Anti-tamper screws available.
- Fluorescent options available.

## **Suitable Applications**











Footpath



Residential

Commercial E

Education

Healthcare

Hotel





## **Horizon Plain**

Body: 283mm/353mm vandal resistant

 Diffuser/Fascia Ring: Vandal resistant polycarbonate in opal with self-extinguishing

polycarbonate with self-extinguishing fire

• Diffuser 2: (353mm circular) Vandal resistant polycarbonate clear lens with self-extinguish-

• Die cast aluminium option available (HR3 only).

BESA fixing and rear cable entry. 3 way mains

terminal block. 4 way terminal block for

emergency versions & photocell.

 Photocell version - external use only. • HI-LO PIR - 100% light output, dims to 10%

• 20 Joules of impact resistance (IK10).

• 2 x Conduit entry points (mini version only).

during periods of inactivity.

LED Types • LED 600 (HR2 only). • LED 1800 (HR3 only).

Materials

properties.

fire properties.

fire properties.

Installation Wall or ceiling mount.

• Screw down lid.

Standards • IP65.

• 'F' Mark. · CE. • BS EN 60598. • Class I.

ing

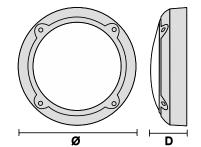


Exterior Lighting Solutions









Size	HR2	HR3
Diameter	283mm	353mm
Depth	103mm	110mm













Code	Size	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HR2/BLP4LED600	283mm	Black	Premium Opal	4000 K	8.2 W	483 lm	59 lm/W
HR3/BLP4LED1800	353mm	Black	Premium Opal	4000 K	16.7 W	1341.5 lm	80.3 lm/W

#### Code options (add suffix to code)



Excludes - HR2/BLP4LED600



Metal Base Option HR3**M**/

с

( 🖓

Photocell





## **Horizon Louvre**

Designed, Developed & Manufactured in the UK

• Body: 283mm/353mm vandal resistant

 Diffuser/Fascia Ring: Vandal resistant polycarbonate in opal with self-extinguishing

polycarbonate with self-extinguishing fire

 Diffuser 2: (353mm circular) Vandal resistant polycarbonate clear lens with self-extinguish-

• Die cast aluminium option available (HR3 only).

BESA fixing and rear cable entry. 3 way mains

terminal block. 4 way terminal block for

emergency versions & photocell.

 Photocell version - external use only. • HI-LO PIR - 100% light output, dims to 10%

• 20 Joules of impact resistance (IK10).

• 2 x Conduit entry points (mini version only).

during periods of inactivity.

LED Types • LED 600 (HR2 only). • LED 1800 (HR3 only).

Materials

properties.

fire properties.

fire properties.

Installation Wall or ceiling mount.

Screw down lid.

Standards • IP65.

• 'F' Mark. • CE. • BS EN 60598. • Class I.

ing







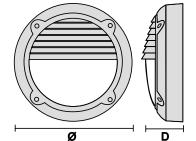




 $\text{HR}_{\text{-}}/\textbf{X}$ 



 $\text{HR}\_/\text{F}$ 



Size	HR2	HR3
Diameter	283mm	353mm
Depth	113mm	122mm



HR3/BLL4LED1800





Code		Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HR2/BLL4LED600	283mm	Black	Premium Opal	4000 K	8.2 W	281.8 lm	34 lm/W
HR3/BLL4LED1800	353mm	Black	Premium Opal	4000 K	17.8 W	762 lm	42.8 lm/W

#### Code options (add suffix to code)



Anti-Tamper Screws



Metal Base Option



PIR

Р



## Horizon Eyelid









 $\text{HR}\_/\text{F}$ 

H

Size	HR2	HR3
Diameter	283mm	353mm
Depth	107mm	112mm

- LED Types • LED 600 (HR2 only).
  - LED 1800 (HR3 only).

#### Materials

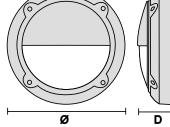
- Body: 283mm/353mm vandal resistant polycarbonate with self-extinguishing fire
- properties. Diffuser/Fascia Ring: Vandal resistant polycarbonate in opal with self-extinguishing fire properties.
- Diffuser 2: (353mm circular) Vandal resistant polycarbonate clear lens with
- self-extinguishing fire properties.
- Die cast aluminium option available (HR3 only).

### Installation

- Wall or ceiling mount.
- ${\boldsymbol{\cdot}}$  BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for
- emergency versions & photocell. Screw down lid.
- Photocell version external use only.
- $\cdot$  HI-LO PIR 100% light output, dims to 10% during periods of inactivity.
- 2 x Conduit entry points (mini version only).

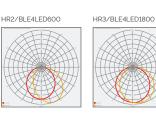
### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- CE. • BS EN 60598.
- Class I.



-		
	Size	HR2
	Diameter	283m
	Depth	107m

ize	HR2	HR3
iameter	283mm	353mm
epth	107mm	112mm







Code	Size	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HR2/BLE4LED600	283mm	Black	Premium Opal	4000 K	8.2 W	281.8 lm	34 lm/W
HR3/BLE4LED1800	353mm	Black	Premium Opal	4000 K	17.8 W	664 lm	37.3 lm/W

#### Code options (add suffix to code)







PIR

Р



Anti-Tamper Screws Þ

Metal Base Option HR3**M**/

## **Horizon Cage**

Designed, Developed & Manufactured in the UK

 Body: 353mm vandal resistant polycarbonate with self-extinguishing fire properties.

polycarbonate in opal with self-extinguishing

• Diffuser 2: (353mm circular) Vandal resistant polycarbonate clear lens with self-extinguishing fire properties. Die cast aluminium option available (HR3 only).

• BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions & photocell.

Photocell version - external use only.

• 20 Joules of impact resistance (IK10).

during periods of inactivity.

• HI-LO PIR - 100% light output, dims to 10%

Diffuser/Fascia Ring: Vandal resistant

LED Types • LED 1800. Materials

fire properties.

Installation • Wall or ceiling mount.

• Screw down lid.

Standards • IP65.

• 'F' Mark.

• CE. • BS EN 60598. • Class I.









HR3/**B** 

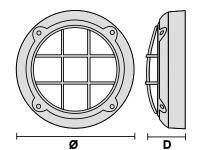




HR3/**X** 



HR3/F



Size	
Diameter	353mm
Depth	116mm



Code		Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HR3/BLC4LED1800	353mm	Black	Premium Opal	4000 K	17.9 W	1035.6 lm	57.8 lm/W
Code options (add suffi	x to code)						
3 Hour Maintain	ed Emergency		Photocell		R		IR
UU M			c (	( ) p		HILO	
Anti-Tamper Sci T	rews		etal Base Option 3 <b>M</b> /				

## Horizon Square Range





A comprehensive range of attractive, vandal resistant luminaires suitable for internal and external use.

## Specification

- Wall mount.
- Black, white and titanium colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- 330mm base size.
- Louvre, eyelid or cage fascia to reduce upward glare.
- Screw down cover.
- Simple installation.
- IP65 / IK10.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- Photocell version available (external use only).
- 3000 K available on request.
- Anti-tamper screws available.
- Fluorescent options available.

## **Suitable Applications**













Residential

Commercial

Education

Healthcare

Footpath

Hotel

## **Horizon Square Plain**

Designed, Developed & Manufactured in the UK





**Colour Finish** 



White

HS3/W



HS3/X



• LED 1800.

### Materials

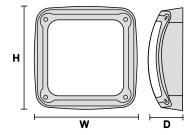
- Body: 330mm vandal resistant polycarbonate self-extinguishing fire properties in black / white / titanium.
- Diffuser: Vandal resistant polycarbonate in opal with self-extinguishing fire properties.

### Installation

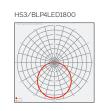
- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions & photocell.
- Screw down lid.
- Photocell external use only.

## Standards

- IP65.
- 20 Joules of impact resistance (IK10). • 'F' Mark.
- · CE.
- BS EN 60598.
- Class I.



Size	
Width	330mm
Height	330mm
Depth	111mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HS3/BLP4LED1800	Black	Premium Opal	4000 K	16.6 W	1473 lm	88.7 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (77 lm)



à Anti-Tamper Screws т

## Horizon Square Louvre









HS3/W



## LED Types

• LED 1800.

## Materials

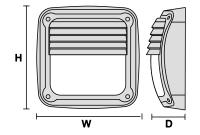
- Body: 330mm vandal resistant polycarbonate self-extinguishing fire properties in black / white / titanium.
- Diffuser: Vandal resistant polycarbonate in opal with self-extinguishing fire properties.

### Installation

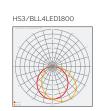
- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions & photocell.
- Screw down lid.
- Photocell external use only.

## Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark. · CE.
- BS EN 60598.
- Class I.



Size	
Width	330mm
Height	330mm
Depth	122mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HS3/BLL4LED1800	Black	Premium Opal	4000 K	16.6 W	860 lm	51.8 lm/W

Code options (add suffix to code)







Anti-Tamper Screws

## Horizon Square Eyelid

Designed, Developed & Manufactured in the UK









White HS3/**W** 



## LED Types

· LED 1800.

## Materials

- Body: 330mm vandal resistant polycarbonate self-extinguishing fire properties in black / white / titanium.
- Diffuser: Vandal resistant polycarbonate in opal with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions & photocell.
- Screw down lid.
- Photocell external use only.

### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- CE. • BS EN 60598.
- Class I.

Size	
Width	330mm
Height	330mm
Depth	114mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HS3/BLE4LED1800	Black	Premium Opal	4000 K	16.6 W	718 lm	43.2 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency



Anti-Tamper Screws

## Horizon Square Cage







HS3/B



White HS3/**W** 



## LED Types

• LED 1800.

### Materials

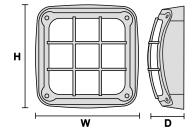
- Body: 330mm vandal resistant polycarbonate self-extinguishing fire properties in black / white / titanium.
- Diffuser: Vandal resistant polycarbonate in opal with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for emergency versions & photocell.
- Screw down lid.
- Photocell external use only.

### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- CE. • BS EN 60598.
- Class I.



Size	
Width	330mm
Height	330mm
Depth	117mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HS3/BLC4LED1800	Black	Premium Opal	4000 K	16.5 W	1358 lm	82.3 lm/W

Code options (add suffix to code)







## **Clarity Range**





A robust high performance exterior luminaire.

## **Specification**

- Ceiling & wall mounted portrait or landscape.
- Black, white, titanium and satin aluminium colour . finishes available.
- Vandal resistant polycarbonate body and diffuser. •
- Louvre, Eyelid, Cage or Plain Ring trims. •
- Simple installation. .
- Fast fit base and gear tray.
- Single screw fixing front trims. .
- Interchangeable trims. •
- IP65. •
- 5 Year LED guarantee. .

## Options

- PIR / Photocell options available.
- HI-LO PIR (luminaire at 10% during periods of ٠ inactivity, 100% light output when HI-LO PIR detects movement).
- Fluorescent options available.

## **Suitable Applications**













Residential

Commercial

Education

Healthcare

Footpath

Hotel

## **Clarity Landscape**











Satin Aluminium C2L/**F** 

## LED Types

• LED 600.

### Materials

- Body: Landscape/portrait orientation in vandal resistant polycarbonate self-extinguishing fire properties in black / white / titanium.
- Fascia Ring: Vandal resistant polycarbonate with self-extinguishing fire properties.
- Diffuser: Vandal resistant polycarbonate opal with self-extinguishing fire properties.

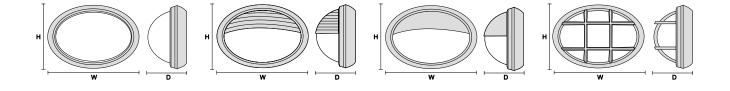
### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for high frequency photocell version.
  Auto level Feature.
- Hinged front fascia retained by single screw.
  Screw down diffuser.
- Photocell version external use only.
- HI-LO PIR 100% light output, dims to
- 10% during periods of inactivity.
- 2 x Conduit entry points.

### Standards

- IP65.
- 'F' Mark.
- CE.
- BS EN 60598.
- Class I.

Size	
Width	276mm
Height	190mm
Depth	125mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
C2L/BLP4LED600	Black	Premium Opal	4000 K	7 W	460 lm	65.7 lm/W
Code options (add suffix	to code)					
Photocell c		PIR P		HI-LO PIR <b>HILO</b>	Eyelid	Options - C2L/E
						∋ - C2L/L · C2L/C

## **Clarity Portrait**

Designed, Developed & Manufactured in the UK





# **Colour Finish**









Satin Aluminium C2P/**F** 

## LED Types

• LED 600.

## Materials

- Body: Landscape/portrait orientation in vandal resistant polycarbonate self-extinguishing fire properties in black  $\it /$  white  $\it /$  titanium.
- Fascia Ring: Vandal resistant polycarbonate with self-extinguishing fire properties.
- Diffuser: Vandal resistant polycarbonate opal with self-extinguishing fire properties.

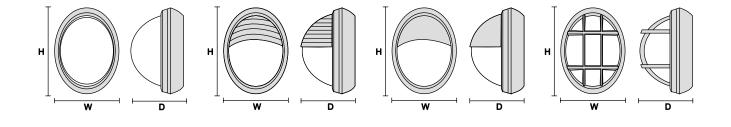
### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for high frequency photocell version. • Auto level Feature.
- Hinged front fascia retained by single screw.
- Screw down diffuser. Photocell version - external use only.
- HI-LO PIR 100% light output, dims to
- 10% during periods of inactivity.
- 2 x Conduit entry points.

### Standards

- IP65.
- 'F' Mark.
- CE.
- BS EN 60598. • Class I.

Size	
Width	190mm
Height	276mm
Depth	125mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
C2P/BLP4LED600	Black	Premium Opal	4000 K	7.8 W	517 lm	66.3 lm/W

Code options (add suffix to code)







Fascia Options Eyelid - C2P/\_\_E Louvre - C2P/\_\_L Cage - C2P/\_\_C

## Litehouse Bollard





The ASD LiteHouse bollard provides a stylish, robust and efficient unit for illuminating pedestrian areas, pathways & carparks and defining routes and edges within designated areas.

## **Specification**

Exterior Lighting Solutions

- Root mount & surface mount versions.
- Black and titanium colour finishes available.
- Bollard column available in high impact PVC or powder coated aluminium.
- Maximises downward light & minimises upward light.
- Diffuser available in opal and Fresnel prismatic.
- Adjustable ground trim / kick plate (optional).
- Root mount first fit kit.
- PVC shaft option simplifies earthing requirements + removes touch potential.
- 60,000 hours to L70.
- IP65 / IK10.
- 5 Year LED guarantee.

## Options

- Emergency option available.
- Photocell option available.
- 3000 K available on request. •
- Access door option available in galvanized steel version only.
- Fluorescent options available. .

## **Suitable Applications**













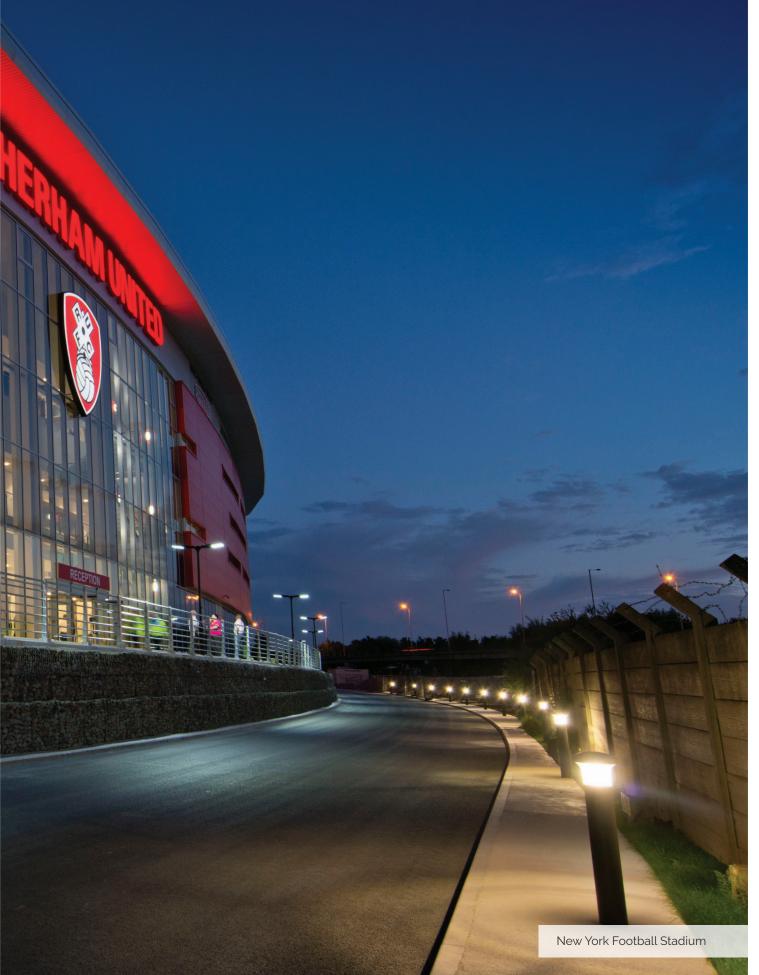
Commercial

Education

Retail

Footpath

Rail



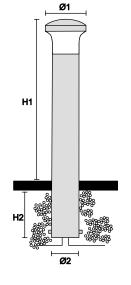
## Litehouse Bollard Root Mounted





Premium Opal





Size	
Height 1	1015mm
Height 2	400mm
Diameter 1	260mm
Diameter 2	153mm



(Aluminium / Steel bodies only) LED Types

Standard / High LED outputs available

Materials

- Head: Vandal resistant UV stabilised
- polycarbonate.
- Diffuser 1: Vandal resistant UV stabilised
   polycarbonate Fresnel lens + Optical Louvre
   with
- top reflector.
- Diffuser 2: Vandal resistant UV stabilised opal polycarbonate.
- Body 1: Extruded aluminium column finished with a UV stabilised polyester powder coated in black.
- Body 2: High impact PVC column in black.
- Ground Trim / Kick Plate: Extruded aluminium (optional extra).
- Body 3: Galvanized steel (Access Door available).

### Installation

- Root mounted.
- No visible fixings.
- 3 way mains terminal block. 4 way terminal block for photocell versions.

### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
  'F' Mark.
- F Mai
- BS EN 60598.
- Class I.



Access Door (Galvanized steel version only) LHR/\_G

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
LHR/B1PLLED35	Black	Premium Opal	4000 K	14.1 W	953 lm	67.5 lm/W
LHR/B1PLLED50	Black	Premium Opal	4000 K	19.5 W	1258 lm	64.5 lm/W
LHR/B1PFLED35	Black	Louvre	4000 K	14 W	986 lm	70 lm/W
LHR/B1PFLED50	Black	Louvre	4000 K	20.1 W	1340 lm	66.6 lm/W

Code options (add suffix to code)



Fresnel Diffuser Option



Black Foot Trim **LHT/B**  Root First Fit Kit LHF/KIT1

Aluminium Body Option

## **Litehouse Bollard Surface Mounted**

Standard / High LED outputs available.

• Head: Vandal resistant UV stabilised

Diffuser 1: Vandal resistant UV stabilised

polycarbonate Fresnel lens + Optical Louvre

Diffuser 2: Vandal resistant UV stabilised opal

Body 1: Extruded aluminium column finished

• Body 2: High impact PVC column in black.

with a UV stabilised polyester powder coated

Ground Trim / Kick Plate: Extruded aluminium



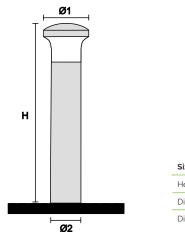
Exterior Lighting Solutions





Premium Opal

l ouvre



Size	
Height	1015mm
Diameter 1	260mm
Diameter 2	153mm

## **Colour Finish**

Black LHS/B



LHS/X (Aluminium / Steel bodies only)

(optional extra). Body 3: Galvanized steel (Access Door available).

#### Installation

LED Types

Materials

with top reflector.

polycarbonate.

polycarbonate.

in black.

- Surface mounted
- No visible fixings.
- 3 way mains terminal block. 4 way terminal block for photocell versions.

#### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- · CE.
- BS EN 60598. • Class I
- 0

Access Door (Galvanized steel version only) LHS/\_G

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
LHS/B1PLLED35	Black	Premium Opal	4000 K	14.1 W	953 lm	67.5 lm/W
LHS/B1PLLED50	Black	Premium Opal	4000 K	19.5 W	1258 lm	64.5 lm/W
LHS/B1PFLED35	Black	Louvre	4000 K	14 W	986 lm	70 lm/W
LHS/B1PFLED50	Black	Louvre	4000 K	20.1 W	1340 lm	66.6 lm/W

Code options (add suffix to code)





Aluminium Body Option LHS/\_\_A

Fresnel Diffuser Option LHS/\_\_\_F

## Street & Amenity Lighting Solutions

The rapid pace of advancement in technology and the benefits that they bring can be integrated into a whole range of lighting products, coupled with ASD Lighting's reputation for cutting edge innovative luminaire design creates simply stunning aesthetics. Within this section we have products with optical performance suitable for residential roads, traffic routes, public amenity areas, pedestrian crossings, parks, footpaths, cycle ways, rail platforms and many other exterior applications.















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106 - 109
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110 - 123

124 - 129

130 - 131

132 - 135

# **O**|**ENSŌ** COLLECTION







A New Modular, Architectural Street Lighting Collection Available First Quarter 2019.

## Specification

- UK designed, developed and manufactured.
- 100,000 hours (L90, F10).
- Tool free maintenance.
- IP66 / IK10.

## Options

- 60 76mm Post top mounting.
- Offset post top mounting and suspension options.
- Customisable quadrant blanking available.
- Clear and opal diffusers available.
- Mini Cell option available.
- NEMA Socket option available.
- PIR option available.

## Suitable Applications



Footpath







Car Parks





Rail & Infrastructure

Parks and Amenity Areas



City Centres

Traffic Routes

Pedestrian Crossing & Infr



# **O**|**ENSŌ** COLLECTION





Industrial high bay option.

# OILECTION





The ENSO<sup>™</sup> Collection will be available in the first quarter of 2019. Please get in touch with sales for further information and specifications.

# Highway Diamond™ Elite Range

## Designed, Developed & Manufactured in the UK





The Highway Diamond<sup>™</sup> Elite offers a complete family of luminaires with an unsurpassed flexibility of lumen outputs, optical distributions and specification features.

## Specification

Street & Amenity Lighting Solutions

- UK designed, developed and manufactured.
- Colour finished in black (RAL 9005) or light grey (RAL 9006).
- 10 Day delivery lead time.
- Four body sizes.
- Tool free maintenance (excluding Micro Highway Diamond<sup>™</sup> Elite).
- 3000 K, 4000 K & 5700 K available on request.
- 100,000 hours (L90, F10).
- CE certification / ENEC mark.
- IP66 / IK10.
- 5 Year LED guarantee, (extended warranties available).

## Options

- Emergency option available.
- Mini Cell option available.
- NEMA Socket option available.
- PIR option available.
- Wall bracket option available.
- Corner wall bracket option available.
- Front, side & rear light shield options available.
- Other RAL colours available on request.

## **Suitable Applications**





# Highway Diamond™ Elite Range





Technical Data	Standard Features	Additional Detail
LED	$\checkmark$	Designed solely for an LED light source
Driver	$\checkmark$	DALI Programmable, CMS Compatible
Driver Current	Various	200 - 700 mA
Dimming	$\checkmark$	Multiple Step / Part Night
Constant Light Output	$\checkmark$	
Photometric Lens Options	✓ (Multiple)	Inc. Narrow / Medium / Wide / Extra Wide / Pedestrian Crossing
Luminaire Materials	Die-Cast Aluminium	Housing / Spigot / Fixing Clip
RAL Colours	Black / Light Grey	9005 / 9006
Correlated Colour Temperature	Various	Warm White / Neutral White / Cool White
Colour Rendering	> 80 > 72	Warm White Neutral White / Cool White
Ingress Protection Rating	IP66	Gear & LED Compartments
Impact Protection Rating	IK10	Optical Cover
Optical Cover	✓ Flat Cover	UV Stable Polycarbonate
Entry to Gear Compartment	Tool Free	Simple fixing clip
Driver Gear Tray Replacement	Tool Free (Excluding Micro Highway Diamond™)	Completely replaceable without tools required
Inbuilt Anti-Tamper Facility	$\checkmark$	Instructions provided in the luminaire
Protection Class	Class 1	
Warranty Period	Standard 5 Years	Extended Warranties Available
Specification	√(Various)	Inc. CE Certification / ENEC Mark
Design Life	100,000 hr	(L90, F10)
Mains Voltage	220-240 V / 50-60 Hz	
Operating Temperature Range	-40 to +55°c	Based on ambient external temperature
Surge Protection	Inbuilt Driver	10 kV (1 pulse) / 8 kV
Vibration Tested	$\checkmark$	Certificates - EN 60068-2-6 & EN 60068-2-64 (Micro Highway Diamond™ documentation submitted)
Manufacturing Location	UK	

# Micro Highway Diamond™ Elite

Designed, Developed & Manufactured in the UK





Colour Finish Black HWD2/B



available on request

Light Grey

HWD2/J

LED Types

· LED 4, 8, 12, 16.

#### Materials

Body: Die cast aluminium (powder coated).

Diffuser: Vandal resistant clear polycarbonate.

#### Installation

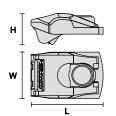
- Post top / side Entry Ø 60 mm Ø 76 mm (HWD2). • Post top tilt 0° / 5° / 10° / 15° / 20°.
- Side entry tilt -10° / -5° / 0° / 5° / 10° / 15°.
- Side Entry Ø 28 mm Ø 42 mm (HWD2S). Inbuilt anti-tamper facility to secure gear
- compartment.

## Installation

Tool less entry to gear compartment.

#### Standards

- IP66.
- 20 Joules of impact resistance (IK10).
- CF.
- · ENEC. • BS EN 60598.
- Class I.



Size	
Length	255mm
Width	165mm
Height	111mm

Code	Colour	LED	Driver Current	Colour Temp.	System Power	Delivered Lumens	Efficacy
HWD2/B4LED435-S1	Black	LED 4	350mA	4000 K	6 W	567 lm	94.5 lm/W
HWD2/B4LED450-S1	Black	LED 4	500mA	4000 K	9 W	783 lm	87 lm/W
HWD2/B4LED835-S1	Black	LED 8	350mA	4000 K	11 W	1129 lm	102 lm/W
HWD2/B4LED850-S1	Black	LED 8	500mA	4000 K	15 W	1552 lm	103 lm/W
HWD2/B4LED1235-S1	Black	LED 12	350mA	4000 K	15 W	1699 lm	113 lm/W
HWD2/B4LED1250-S1	Black	LED 12	500mA	4000 K	21 W	2329 lm	111 lm/W
HWD2/B4LED1635-S1	Black	LED 16	350mA	4000 K	19 W	2213 lm	116 lm/W
HWD2/B4LED1650-S1	Black	LED 16	500mA	4000 K	26 W	2987 lm	115 lm/W

For information on the full range, please contact our street lighting specialists - info@asdstreetlighting.com

Code options (add suffix to code before -S1 Optic)





# Highway Diamond™ Elite

· LED 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44.

• Body: Die cast aluminium (powder coated). • Diffuser: Vandal resistant clear polycarbonate.

• Post top tilt 0° / 5° / 10° / 15° / 20°. • Side entry tilt -10° / -5° / 0° / 5° / 10° / 15°. • Side Entry Ø 28 mm - Ø 42 mm (HWDS). Inbuilt anti-tamper facility to secure gear

• Tool less entry to gear compartment. Tool free driver gear tray replacement.

• 20 Joules of impact resistance (IK10).

• Post top / Side Entry Ø 60 mm - Ø 76 mm (HWD).

LED Types

Materials

Installation

compartment.

Installation

Standards • IP66.

· CE. · ENEC. • BS EN 60598. • Class I. Class II on request.

 Tool free maintenance. Auto disconnect (optional extra).

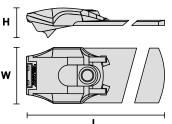








Other RAL Colours available on request



Size	
Length	476mm
Width	233mm
Height	116mm

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Code	Colour	LED	Driver Current	Colour Temp.	System Power	Delivered Lumens	Efficacy
HWD/B4LED1235-S1	Black	LED 12	350mA	4000 K	17 W	1699 lm	113 lm/W
HWD/B4LED1250-S1	Black	LED 12	500mA	4000 K	21 W	2329 lm	111 lm/W
HWD/B4LED2035-S1	Black	LED 20	350mA	4000 K	23 W	2781 lm	121 lm/W
HWD/B4LED2050-S1	Black	LED 20	500mA	4000 K	33 W	3823 lm	116 lm/W
HWD/B4LED2835-S1	Black	LED 28	350mA	4000 K	32 W	3899 lm	122 lm/W
HWD/B4LED2850-S1	Black	LED 28	500mA	4000 K	44 W	5345 lm	112 lm/W
HWD/B4LED3635-S1	Black	LED 36	350mA	4000 K	39 W	4955 lm	127 lm/W
HWD/B4LED3650-S1	Black	LED 36	500mA	4000 K	55 W	6796 lm	124 lm/W
HWD/B4LED4435-S1	Black	LED 44	350mA	4000 K	48 W	5966 lm	124 lm/W
HWD/B4LED4450-S1	Black	LED 44	500mA	4000 K	67 W	8241 lm	123 lm/W

For information on the full range, please contact our street lighting specialists - info@asdstreetlighting.com

Code options (add suffix to code before -S1 Optic)



3 Hour Maintained Emergency (Variants on request)









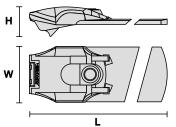
# Midi Highway Diamond™ Elite











Size	
Length	672mm
Width	329mm
Height	173mm

Other RAL Colours available on request

#### LED Types

· LED 52, 60, 68, 76, 84, 92, 100.

#### Materials

• Body: Die cast aluminium (powder coated). Diffuser: Vandal resistant clear polycarbonate.

#### Installation

- Post top Ø 60 mm Ø 76 mm.
- Post top tilt -5° / 0° / 5° / 10° / 15°.
- Side entry Ø 60 mm Ø 76 mm.
- Side entry tilt -10° / -5° / 0° / 5° / 10° / 15°.
- Insert reducers available for smaller diameters.
- $\boldsymbol{\cdot}$  Inbuilt anti-tamper facility to secure gear compartment.

#### Installation

- Tool less entry to gear compartment.
- Tool free driver gear tray replacement.
- Tool free maintenance.
- Auto disconnect.

#### Standards

- IP66.
- 20 Joules of impact resistance (IK10).
- CE.
- · ENEC. • BS EN 60598.
- Class I.

Code	Colour	LED	Driver Current	Colour Temp.	System Power	Delivered Lumens	Efficacy
HWD6/B4K5250-S1	Black	LED 52	500mA	4000 K	80 W	9415 lm	118 lm/W
HWD6/B4K5270-S1	Black	LED 52	700mA	4000 K	112 W	12701 lm	113 lm/W
HWD6/B4K6850-S1	Black	LED 68	500mA	4000 K	103 W	12655 lm	123 lm/W
HWD6/B4K6870-S1	Black	LED 68	700mA	4000 K	145 W	16546 lm	114 lm/W
HWD6/B4K8450-S1	Black	LED 84	500mA	4000 K	126 W	15457 lm	123 lm/W
HWD6/B4K8470-S1	Black	LED 84	700mA	4000 K	179 W	19963 lm	112 lm/W
HWD6/B4K10050-S1	Black	LED 100	500mA	4000 K	150 W	18213 lm	121 lm/W
HWD6/B4K10070-S1	Black	LED 100	700mA	4000 K	211 W	24341 lm	115 lm/W

For information on the full range, please contact our street lighting specialists - info@asdstreetlighting.com

Code options (add suffix to code before -S1 Optic)



3 Hour Maintained Emergency (Variants on request)







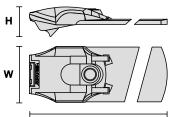


# Maxi Highway Diamond™ Elite









Siz	е		
Ler	ngth	858mm	
Wi	dth	329mm	
He	ight	173mm	

#### LED Types

· LED 100, 112, 124, 136, 148, 160

#### Materials

• Body: Die cast aluminium (powder coated). • Diffuser: Vandal resistant clear polycarbonate.

Designed, Developed &

Manufactured in the UK

#### Installation

- Post top Ø 60 mm Ø 76 mm.
- Post top tilt -5° / 0° / 5° / 10° / 15°.
- Side entry Ø 60 mm Ø 76 mm.
- Side entry tilt -10° / -5° / 0° / 5° / 10° / 15°.
- Insert reducers available for smaller diameters.
- $\boldsymbol{\cdot}$  Inbuilt anti-tamper facility to secure gear compartment.

#### Installation

- Tool less entry to gear compartment.
- Tool free driver gear tray replacement.
- Tool free maintenance.
- Auto disconnect.

#### Standards

- IP66.
- 20 Joules of impact resistance (IK10).
- CE.
- · ENEC.
- BS EN 60598. Class I.

L

Size	
Length	858mm
Width	329mm
Hoight	172mm

Code	Colour	LED	Driver Current	Colour Temp.	System Power	Delivered Lumens	Efficacy
HWD8/B4K11250-S1	Black	LED 112	500mA	4000 K	171 W	20874 lm	122 lm/W
HWD8/B4K11270-S1	Black	LED 112	700mA	4000 K	241 W	27832 lm	116 lm/W
HWD8/B4K13650-S1	Black	LED 136	500mA	4000 K	206 W	25347 lm	122 lm/W
HWD8/B4K13670-S1	Black	LED 136	700mA	4000 K	288 W	33795 lm	116 lm/W
HWD8/B4K16050-S1	Black	LED 160	500mA	4000 K	240 W	29820 lm	122 lm/W
HWD8/B4K16070-S1	Black	LED 160	700mA	4000 K	388 W	39759 lm	116 lm/W

For information on the full range, please contact our street lighting specialists - info@asdstreetlighting.com

Code options (add suffix to code before -S1 Optic)

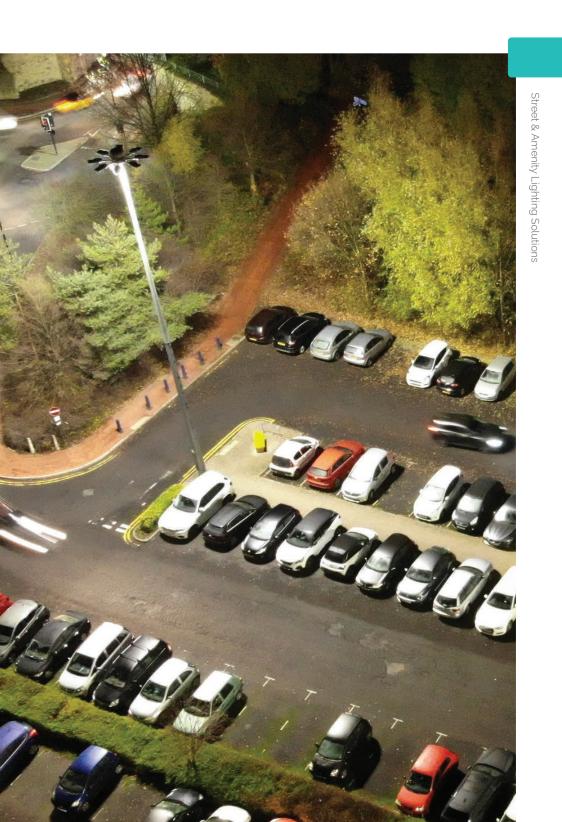


3 Hour Maintained Emergency (Variants on request) м









Meadowhall Interchange

# Highway Diamond™ Elite Flood

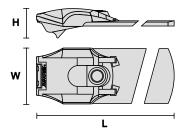
Designed, Developed & Manufactured in the UK











Size	
Length	476mm
Width	233mm
Height	116mm

#### LED Types

• LED 4, 6, 8, 12

#### Materials

- Body: Die cast aluminium (powder coated).
- Diffuser: Vandal resistant clear polycarbonate.

#### Installation

- Post top / side entry Ø 60 mm Ø 76 mm (HWD).
- Post top tilt 0° / 5° / 10° / 15° / 20°.
- Side entry tilt -5° / 0° / 5° / 10° / 15°.
- Side entry Ø 28 mm Ø 42 mm (HWDS).
  Inbuilt anti-tamper facility to secure gear compartment.

#### Installation

- Tool less entry to gear compartment.
- Tool free driver gear tray replacement.
- Tool free maintenance.
- Auto disconnect (optional extra).

#### Standards

- IP66.
- 20 Joules of impact resistance (IK10).
- CE.
- ENEC.
- BS EN 60598.
- Class I.

Code	Colour	LED	Driver Current	Colour Temp.	System Power	Delivered Lumens	Efficacy
HWD/B4LED4M70-FL1	Black	LED 4	700mA	4000 K	37.1 W	3555 lm	95.7 lm/W
HWD/B4LED6M70-FL1	Black	LED 6	700mA	4000 K	54.3 W	5253 lm	96.8 lm/W
HWD/B4LED8M70-FL1	Black	LED 8	700mA	4000 K	70.8 W	6864.6 lm	96.9 lm/W
HWD/B4LED12M70-FL1	Black	LED 12	700mA	4000 K	105 W	10215.4 lm	97.3 lm/W

For information on the full range, please contact our street lighting specialists - info@asdstreetlighting.com

Code options (add suffix to code before -FL1 Optic)



3 Hour Maintained Emergency (Variants on request)









# Highway Diamond™ Elite Attachments



Wall Bracket 4x8mm Fixing Holes. Ø76mm Mounting Spigot

HWD/B90



2 Way Horizontal Mount Bracket 100 HWL/B2B



Ø42mm Fixing Spigot. Ø42mm Outreach Arm. HWL/J1B500

Single arm Outreach 500

2 Way Mount Bracket 500 500mm Outreach Per Arm. Ø76mm Mounting Spigot. HWL/B2B



4 Way Mount Bracket 500mm 500mm Outreach Per Arm. Ø76mm Mounting Spigot. HWL/B4XB

HWDS





HWL/CB

Corner Bracket

Bird Scarer & Bird Spike Please contact sales for this attachment.



Bird Scarer & Bird Spike Please contact sales for this attachment.





Side Light Shield HWD/BLS100S

**Rear Light Shield** HWD/BLS100R





Side Entry Spigot Ø28mm - Ø42mm

# Highway Diamond™ Elite Quick Spec Comparison Guide

HID	Total Circuit Watts	Number of LED's	LED Circuit Watts	Lumens	Code (Street Optic)	Code (Flood Optic)
70W	90W	20	39W	4100	HWD/B4LED2050-S1	HWD/B4LED2050-S0
100W	115W	28	52W	6600	HWD/B4LED2850-S1	HWD/B4LED2850-S0
150W	180W	44	80W	9500	HWD/B4LED4450-S1	HWD/B4LED4450-S0
250W	300W	60	110W	12800	HWD6/B4K6050-S1	HWD6/B4K6050-S0
400W		160	160W	35000	HWD8/B4KLED16050-S1	HWD8/B4KLED16050-S0

The above comparison guide highlights the typical values between HID luminaires to the ASD LED Equivalent. A full lighting design scheme may be required, please contact us for details.





Premium street & amenity lighting now available with integrated security & surveillance cameras.

Following on from the great success of the Highway Diamond<sup>™</sup> luminaire, ASD Lighting partnered with Axis communications to integrate their surveillance cameras into the Highway Diamond<sup>™</sup> Elite Midi range (44 - 84 LED's) of premium exterior luminaires.



## **Suitable Applications**

















Car Parks

ks

Rail

Cycle Routes

Education

Healthcare





# Smartwatch™ Overt Bullet Camera



Designed to be clearly visible to act as a deterrent, the bullet camera provides excellent image quality in HDTV 1080p resolution, even in complex light conditions.

The camera features Corridor Format, pixel counter, remote focus and zoom, as well as P-Iris control – ensuring optimal depth of field, resolution, image contrast and clarity.

The I/O port can be used for notification to an alarm panel or control of a relay. Axis Zipstream technology significantly reduces bandwidth and storage requirements. The outdoor-ready camera comes with an adjustable weather shield.

- Lightfinder and WDR Forensic Capture.
- Axis Zipstream technology.
- HDTV 1080p at up to 60 fps.
- Built-in IR LEDs with OptimizedIR, 20 meters (66 feet).
- I/O support and Edge Storage.
- Up to 22,000 lumen output.

Bullet Camera Specification	
Lens	"Varifocal Remote focus"
Resolution	1080p
Horizontal Field of view (in 1080p)	96°-33°
Vertical Field of view (in 1080p)	50°-18°
Dust Resistant	√ (IP66)
Moisture Resistant	√ (IP66)
Frame Rate	50/60 fps (50/60Hz)
Operating Temperature Range	-30°C to +50°C
Warranty	3 years
Wide Dynamic Range Enabled	Forensic Capture
Quad View	×
Zipstream	✓
Two Way Audio Enabled	×
Alarm in-/outputs enabled	✓
Pan / Tilt / Zoom	Digital
Lightfinder	✓
Speed Dry (rain removal)	×
Auto Image Stabilisation	×
Auto-Tracking	×





# Smartwatch™ Overt Dome Camera



Designed to be clearly visible to act as a deterrent, the ASD Dome Camera is a fixed dome network camera that offers superb video performance in HDTV 1080p/5 MP resolution.

It complies with the SMPTE 274M standard and can cover a large area with exceptional detail and light sensitivity. Wide dynamic range and day/night functionality provides high image quality even in low-light conditions. With multi-view streaming, the full view and up to 8 individually cropped out view areas can be streamed simultaneously.

The Dome Camera has support for digital pan/tilt/ zoom, two-way audio, audio detection and input/output ports for external devices. With its weather-proof and vandal-resistant casing, it is perfectly adapted for harsh environments.

- HDTV 1080p/5 MP.
- P-Iris control.
- Remote zoom and focus.
- I/O ports and two-way audio.
- Outdoor-ready and IK10 vandal-resistance.
- Up to 22,000 lumen output.

Dome Camera Specification	
Lens	Adjustable
Resolution	1080p
Horizontal Field of view (in 1080p)	84°-30°
Vertical Field of view (in 1080p)	63°-22°
Dust Resistant	√ (IP66)
Moisture Resistant	√ (IP66)
Frame Rate	"2MP - 30fps 3MP - 20fps 5MP - 12fps"
Operating Temperature Range	-40°C to +55°C
Warranty	3 years
Wide Dynamic Range Enabled	✓
Quad View	×
Zipstream	$\checkmark$
Two Way Audio Enabled	✓
Alarm in-/outputs enabled	✓
Pan / Tilt / Zoom	Digital
Lightfinder	x
Speed Dry (rain removal)	x
Auto Image Stabilisation	x
Auto-Tracking	✓







# Smartwatch™ Overt PTZ Camera





Designed to be clearly visible to act as a deterrent, the compact, outdoor-ready PTZ Camera delivers smooth HDTV 72Op video at 50/60 fps, with 30x optical zoom and autofocus. Axis Sharpdome technology provides full scene fidelity and sharp images in all directions–above as well as below the horizon. Quick and precise pan performance of over 700°/s makes it easy to change viewing position and follow fast moving objects.

The PTZ Camera supports Axis Lightfinder technology, making it extremely sensitive to low light, and Wide Dynamic Range – Dynamic Capture for challenging lighting conditions. Axis Speed Dry function easily removes water drips from the dome glass, providing sharp images in rainy weather.

PTZ Camera Specification	
Lens	Adjustable
Resolution	720p
Horizontal Field of view (in 1080p)	58.3°-2.1°
Vertical Field of view (in 1080p)	34.9°-1.3°
Dust Resistant	√ (IP66)
Moisture Resistant	√ (IP66)
Frame Rate	up to 25/30fps or 50/60 fps (50/60Hz)
Operating Temperature Range	-40°C to +70°C
Warranty	3 years
Wide Dynamic Range Enabled	Dynamic Capture
Quad View	×
Zipstream	✓
Two Way Audio Enabled	×
Alarm in-/outputs enabled	×
Pan / Tilt / Zoom	"Pan 360° endless, 0.05°-700°/s Tilt *20 to -90°, 0.05°-500°/s Zoom 30 x optical, 12 x digital = total 360 x zoom"
Lightfinder	$\checkmark$
Speed Dry (rain removal)	√
Auto Image Stabilisation	✓
Auto-Tracking	~

- Sharpdome technology.
- Speed Dry function.
- Lightfinder technology.
- Axis Zipstream technology.
- Pan performance 700° per second.
- Up to 22,000 lumen output.









# Metro Globe





A robust globe exterior luminaire with a clean & simple aesthetic.

## **Specification**

- Utilising a solid polycarbonate piece with a coated top.
- 76mm spigot.
- Manufactured in the UK.
- IP65.
- 5 Year LED guarantee,

## Options

• Mini Cell option available.

## **Suitable Applications**







Rail







(	ഹീ	

Footpath

Car Park

Cycle Routes

Pedestrian Education

Healthcare

# **Metro Globe**

Designed, Developed & Manufactured in the UK







MGP/**B** 

LED Types • LED (4700 K).

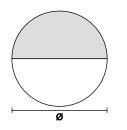
Materials Vandal resistant polycarbonate.

#### Installation

Simple installation.

#### Standards

- IP65. • 'F' Mark.
- CE.
- BS EN 60598.
- Class I.





Code	Colour	IP Rating	Colour Temp.
MGP/BK47LED1650	Black	IP65	4000 K

## **Types of Column**

## **Stepped Tubular Steel**

Now the most frequently used column for conventional street lighting because of the lower price, consisting of a constant diameter column shaft with a larger diameter base compartment. The change in diameter is achieved by means of a short taper, frequently known as the shoulder. The angle of taper varies for different manufacturers and processes. The majority of columns have a single reduction although there are examples of two or more.



#### **Conical or Octagonal**

A constant taper circular section or a folded sheet polygonal section, which can be a regular or irregular polygon, generally with eight sides are quite common and can perform better in high wind exposure areas. A circular section with a constant diameter base compartment and a variable diameter shaft is also available.

Max Windage		Max Hea	dload
4 m	0.79	4 m	50kg
5 m	0.45	5 m	50kg
6 m	0.27	6 m	30kg
8 m	0.23	8 m	30kg

## **Colour options**



Silver (galvanized steel)

Black (9005)

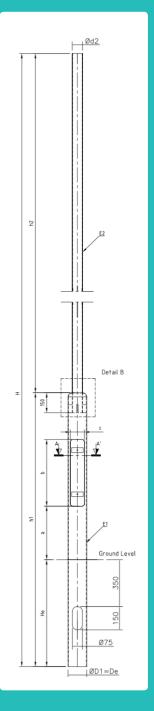


Mid-hinged column available on request.



Street & Amenity Lighting Solutions

Dimensions				
Height	4m	5m	6m	8m
H (m)	4800	5800	7000	9200
H1 (mm)	2050	2050	2250	2450
ØD1 (mm)	139.7	139.7	139.7	168.3
E1 (mm)	4	4	4	3
H2 (mm)	2750	3750	4750	6750
ØD2 (mm)	76.1	76.1	76.1	101.3
E2 (mm)	2.9	2.9	2.9	3



## **Types of Protection**

## Hot Dip Galvanizing

for steel lighting columns due to its sacrificial properties and a column. Galvanizing is carried out to BS EN ISO 1461. In coating has doubled due to the reduction of airborne pollutants and the halving of the rate of loss of thickness.

#### Painting

There is a very large range of different painting systems that galvanised surfaces. In coastal areas such painting can also further protect the galvanising from the continuous sea salt

#### **Root Protection**

We recommend bitumen root protection or glass flake root applied to that part embedded in the ground and for 250mm above ground. This prevents corrosion, resist mechanical abrasion but also attack from electrolytes in the ground water that can cause the material of the root to be conducted onto surrounding objects by electrolytic action.

## **Order Codes** HWL/JPOST4M HWL/JPOST5M

HWL/JPOST6M

HWL/JPOST8M

HWL/BPOST4M

4m mounting height, Galvanized steel colour finish 5m mounting height, Galvanized steel colour finish 6m mounting height, Galvanized steel colour finish 8m mounting height, Galvanized steel colour finish 4m mounting height, Black (RAL 9005) colour finish HWL/BPOST5M 5m mounting height, Black (RAL 9005) colour finish HWL/BPOST6M 6m mounting height, Black (RAL 9005) colour finish HWL/BPOST8M 8m mounting height, Black (RAL 9005) colour finish HWL/FUSECUTOUT **Fuse Cut-out** 

Price on application for nationwide delivery.

### **Types of Protection**

## Hot Dip Galvanizing

Now the most frequently used corrosion protection system for steel lighting columns due to its sacrificial properties and its equal protection to the internal and external surfaces of a column. Galvanizing is carried out to BS EN ISO 1461. In the last ten years it is claimed that the life of the galvanized coating has doubled due to the reduction of airborne pollutants and the halving of the rate of loss of thickness.

#### Painting

There is a very large range of different painting systems that can be applied to bare steel, aluminium sprayed surfaces or galvanised surfaces. In coastal areas such painting can also further protect the galvanising from the continuous sea salt spray.

#### **Root Protection**

We recommend bitumen root protection or glass flake root applied to that part embedded in the ground and for 250mm above ground. This prevents corrosion, resist mechanical abrasion but also attack from electrolytes in the ground water that can cause the material of the root to be conducted onto surrounding objects by electrolytic action. For particular soil types and for local authorities.

#### **Lighting Column**

Height	4 m 5 m 6 m 8 m
	(7 & 9 m available on request)
Ingress protection rating	IP66
Impact protection rating	IK10+
Body material	Galvanized steel
CE mark	Yes
Manufacturing location	Europe
Structural Warranty	20 Years (Depends on environment & conditions above ground)
Expected Lifespan	20 - 40 Years



#### Definitions

### **Nominal Height**

This is the height of the column and bracket combination from ground level to the axis at the point of entry into the luminaire at the luminaire fixing.

## **Bracket Projection**

This is the horizontal distance from the vertical axis of the column to the point of entry into the luminaire at the luminaire fixing, frequently incorrectly called "outreach" which is the horizontal distance from the vertical column axis to the centre of the light source (used for lighting design). It is important to state if single arm, double arm or multiple arm brackets are required.

#### **Flange Plates**

The structural plate at right angles to the column axis at, or near, ground level to secure the column to a foundation or structure by means of foundation bolts, frequently incorrectly called "base plate" (see below).

#### **Planting Depth**

The length of column shaft below the intended ground level, known as the root, for embedment in the backfilled soil to provide stability to the column shaft.

## **Base Plates**

An anti-sink plate at the bottom of the root of a column which may either be fixed to the column or supplied separately.

#### Base Compartment(s)

The area at the base of a column shaft to house electrical equipment. While a single compartment is usually required, double door columns are also available for double arm brackets or to house additional equipment. It should be noted that the sizes of the door openings have been standardised in the UK to 600mm by 115mm or 500mm by 100 mm.

#### Luminaire Weight & Windage

The effective weight and projected area of the luminaire in the vertical plane, used for column design or selection for appropriate wind resistance.

## **Luminaire Fixing**

The extension of the bracket or column shaft onto which the luminaire is fixed, usually known as the "spigot" although this term is not used by EN 40.

#### Post Top Columns

Where there is no projecting bracket, although a vertical extension may be used, and the luminaire is fixed on its axis directly above the column shaft.

#### Post Top Mount Columns

Where the spigot is similar to that for post top columns, with or without an extension, and the luminaire is fixed onto this spigot but projects sideways.

# Lantern & Security Lighting Solutions

At ASD we are aware of the ever increasing demand made on external lighting, both courtesy and security.

Our systems have constantly been re-evaluated to provide units to help combat the increasing threat of theft or vandalism to property. Combining the skills and expertise from over 30 years' experience in the lighting industry, we have designed a range of lighting suitable for all outdoor applications. Using the latest manufacturing techniques we have a range that meets the demands of domestic and commercial installations with robust casing and extremely effective and reliable PIR and photocell options.











138 - 141





142 - 145



Smile LED™

146 - 147



148 - 149





150 - 151



Guardlite

152 - 153

# Half Lantern





A traditional wall mounted half lantern ideal for doorways to optimise illumination for entrance areas.

## **Specification**

- Wall mount.
- Black, white and titanium colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- Simple installation.
- Shatter-proof polycarbonate detector.
- PIR range of 6 metres.
- 110° angle of detection.
- Photocell: dusk to dawn sensor.
- Designed to BS EN 60598.
- IP44 / IK10.
- 5 Year LED guarantee.

## Options

- PIR / Photocell options available.
- HI-LO PIR (luminaire at 10% during periods of inactivity, 100% light output when HI-LO PIR detects movement).
- Fluorescent options available.

## Suitable Applications







Footpath

Hotel



# Half Lantern





# Colour Finish



HL/W

Titanium HL/**X** 

## LED Types

• LED 600.

#### Materials

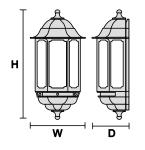
- Body: Vandal resistant polycarbonate
   self-extinguishing fire properties in black /
- white / titanium / other colours on request. • Windows: Vandal resistant polycarbonate in premium opal.

#### Installation

- Simple installation.
- Photocell option external use only.
- HI-LO PIR 100% light output, dims to 10% during periods of inactivity.

#### Standards

- IP44. • 'F' Mark.
- CE.
- BS EN 60598.
- Class I.



Size	
Width	182mm
Height	394mm
Depth	118mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HL/BK4LED600	Black	Premium Opal	4000 K	7.4 W	283.3 lm	38 lm/W

#### Code options (add suffix to code)

Photocell c





HI-LO PIR **HILO** 



# **Coach Lantern**







A traditional and elegant lantern design.

## Specification

- Wall mount.
- Black, white and titanium colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- Simple installation.
- Shatter-proof polycarbonate detector.
- PIR range of 6 metres.
- 110° angle of detection.
- Photocell: dusk to dawn sensor.
- IP44.
- 5 Year LED guarantee.

## Options

- PIR / Photocell options available.
- HI-LO PIR (luminaire at 10% during periods of inactivity, 100% light output when HI-LO PIR detects movement).
- Optional corner bracket.
- Fluorescent options available.



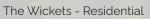






Footpath

Hotel



# **Coach Lantern**

Body: Vandal resistant polycarbonate self-extinguishing fire properties.
Diffuser: Vandal resistant polycarbonate.

• HI-LO PIR - 100% light output, dims to 10%

during periods of inactivity.

LED Types • LED 600. Materials

Installation

• Quick Fit connection.

• Optional Corner Bracket.

• Photocell outdoor use only.

Standards • IP44. • 'F' Mark. • CE. • BS EN 60598. • Class 2.



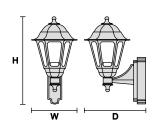








Titanium CL/**X** On Request



Size	
Width	170mm
Height	417mm
Depth	273mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
CL/BK4LED600	Black	Premium Opal	4000 K	7.4 W	380 lm	51 lm/W

#### Code options (add suffix to code)

Photocell c





### Patio & Mini Column **Coach Lantern**





Code	Туре	Colour	Diffuser	Colour Temp.
CP/BK4LED600	Patio	Black	Premium Opal	4000 K
MC/BK4LED600	Mini Column	Black	Premium Opal	4000 K

### Smile LED™





A modern & robust, polycarbonate LED luminaire.

### Specification

- Wall mount.
- Black, white, titanium and satin aluminium colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- Simple installation.
- IP65.
- 5 Year LED guarantee.

### Options

- PIR / Photocell options available.
- HI-LO PIR (luminaire at 10% during periods of inactivity, 100% light output when HI-LO PIR detects movement).

### Suitable Applications







Footpath

Hotel

### Smile LED™

Designed, Developed & Manufactured in the UK





**Colour Finish** 









SML/F

н ŀ W D

Size	
Width	180mm
Height	208mm
Depth	68mm

SML/BL4LED600 Black Premium Opal 4000 K 7.4 W 280 lm

#### Code options (add suffix to code)







LED Types

• LED 600.

#### Materials

- Body: Vandal resistant polycarbonate self-extinguishing fire properties in
- black, white and titanium. Diffuser: Vandal resistant polycarbonate.

#### Installation

• Wall mount.

#### Standards

• IP65.

- CE.
- BS EN 60598-2-1. • Class I.

38 lm/W

### **Square Lantern**





### A traditional square lantern.

### Specification

- Wall mount.
- Black and white colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- Simple installation.
- PIR: Day time walk test.
- Shatter-proof polycarbonate detector.
- PIR range of 6 Metres.
- 110° Angle of detection.
- Photocell: Dusk to dawn sensor.
- IP44.
- 5 Year LED guarantee.

### Options

- PIR / Photocell options available.
- HI-LO PIR (luminaire at 10% during periods of inactivity, 100% light output when HI-LO PIR detects movement).
- Optional corner bracket.
- Fluorescent options available.

### **Suitable Applications**







Footpath

Hotel

### **Square Lantern**

Designed, Developed & Manufactured in the UK





### **Colour Finish**





#### LED Types

• LED 600.

#### Materials

- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black / white.
- Diffuser: Vandal resistant polycarbonate.

#### Installation

- Quick Fit connection.
- Optional Corner Bracket.
- Photocell outdoor use only.

#### Standards

- IP44.
- 'F' Mark.
- CE.
- BS EN 60598. • Class I.

Н W D

Size	
Width	185mm
Height	438mm
Depth	267mm

Code	Colour	Diffuser	Colour Temp.
CL4/BK4LED600	Black	Premium Opal	4000 K
Code options (add suffix to code)			
		_	
Photocell c	PIR P	HI-LO PIR HILO	

### **Grande Lantern**





A grande domestic lantern.

### Specification

- Wall mount.
- Black and white colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- The UV stable "colour fast" polycarbonate won't suffer from chipping or paint peel.
- Simple installation.
- IP44.
- 5 Year LED guarantee.

### Options

- Photocell option available.
- Fluorescent options available.









Footpath

Hotel

### **Grande Lantern**

Designed, Developed & Manufactured in the UK





**Colour Finish** 



White GCD/**W** 

### LED Types

• LED 600.

#### Materials

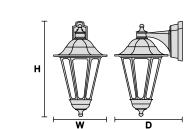
- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black / white.
- Windows: Vandal resistant polycarbonate.

#### Installation

- Simple installation.
- Photocell option.

#### Standards

- IP44.
- 'F' Mark. · CE.
- BS EN 60598.
- Class I.



Size	
Width	170mm
Height	437mm

W FORCH	1, 0,,,,,,
Height	437mm
Depth	325mm

Code	Colour	Diffuser	Colour Temp.
GCD/BK4LED600	Black	Premium Opal	4000 K



### Guardlite





This slim-line Guardlite bulkhead is constructed from vandal resistant Polycarbonate and is available with 110 degree PIR and photocell.

### **Specification**

- Wall mount.
- Black and white colour finishes available.
- Vandal resistant polycarbonate body and diffuser.
- Simple installation.
- Designed to BS EN 60598.
- IP65.
- 5 Year LED guarantee.

### Options

- Photocell option available.
- 110° PIR option; Range of 12 Metres.
- Fluorescent options available.









Footpath

Hotel

### Guardlite

Designed, Developed & Manufactured in the UK





### **Colour Finish**





### LED Types

• LED 600.

#### Materials

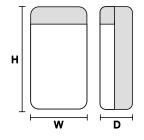
- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black / white.
- Diffuser: Prismatic or Opal vandal resistant polycarbonate.

#### Installation

Simple installation.

#### Standards

- IP65.
- 'F' Mark.
- · CE.
- BS EN 60598.
- Class I.

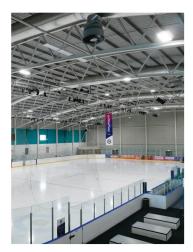


Size	
Width	135mm
Height	260mm
Depth	84mm

Code	Colour	Diffuse		Colour Temp.	
GU/BL4LED600	Black	Premiur	n Opal	4000 K	
Code options (add suffix to code)		Photocell c			

### Industrial Lighting Solutions

Where other areas within lighting provision have evolved in terms of style and efficiency, industrial lighting has remained at a relative standstill. At ASD Lighting we constantly strive for design and technological innovation within all areas and as a result are able to present a versatile range of luminaires for industrial and warehousing environments.









### Skybay LED







An all new High efficiency LED HighBay with a range of output and optic options to provide energy saving benefits.

### **Specification**

- Suitable for area / rack applications, (choice of optics).
- Surface & suspended mounting options available.
- White colour finish.
- Temperature controlled by mild steel body.
- For schemes requiring a greater lumen output, a higher lumen output version is available on request.
- Up to 60,000 hour life to L70.
- IP20.
- 5 Year LED guarantee.

### Options

- DALI dimmable option.
- PIR occupancy detection option.





Industrial



Retail



Sports Venue

# Skybay LED

Designed, Developed & Manufactured in the UK





**Colour Finish** 

White SB/W LED Types • LED (4000 K).

#### Materials

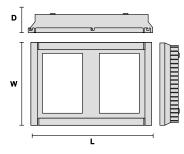
• Body – Steel fabrication powder coated white RAL9016.

#### Installation

Surface or suspended.

### Standards

- IP20. • 'F' Mark.
- · CE.
- BS EN 60598.
- Class 1.



Size	
Length	561mm
Width	387mm
Depth	90mm

Code	Colour	Optic	Colour Temp.	System Power	Delivered Lumens	Efficacy
SB/W4LED11000-A1	White	Area Optic	4000 K	68.5 W	11058 lm	161.4 lm/W
SB/W4LED15000-A1	White	Area Optic	4000 K	99.5 W	15316 lm	153.9 lm/W
SB/W4LED22000-A1	White	Area Optic	4000 K	153.5 W	21804 lm	142 lm/W
SB/W4LED11000-R1	White	Rack Optic	4000 K	ТВА	ТВА	ТВА
SB/W4LED15000-R1	White	Rack Optic	4000 K	ТВА	ТВА	ТВА
SB/W4LED22000-R1	White	Rack Optic	4000 K	ТВА	ТВА	ТВА





# **Highlite LED**

Industrial Lighting Solutions





### High efficiency LED HighBay.

### **Specification**

- BESA Surface mounted.
- Suspended option available.
- White colour finish.
- Eligible for the governments Enhanced Capital
- Allowance scheme.
- Temperature controlled by mild steel body.
- A DEER (Design Energy Efficiency Rating) Rating of A, Exemplary.
- For schemes requiring a greater lumen output, a 32000 version is available which utilises the Highlite Rack body (shell only).
- Up to 60,000 hour life to L70.
- IP2O.
- 5 Year LED guarantee.

### Options

- Emergency option available.
- 3000 K available on request.
- DALI dimmable option.
- Daylight / Non occupancy dimming.
- Wire guard option.
- PIR occupancy detection option.





Industrial





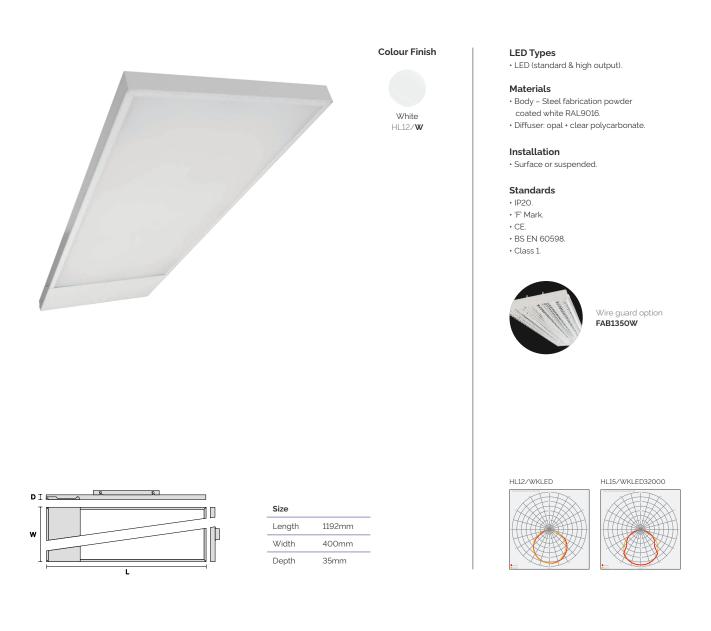
Sports Venue

Retail



# **Highlite LED**





Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HL12/WKLED	White	Clear	4000 K	190.9 W	22056.8 lm	115.5 lm/W
HL15/WKLED32000	White	Clear	4000 K	232.3 W	29696.9 lm	127.8 lm/W

Highlite LED 32000 utilises the Highlite Rack body (shell only). See Highlite Rack page for dimensions.

•**-**6

#### Code options (add suffix to code)



e-Motion™ PIR Master Dim -CFP







Premium Opal Diffuser HL12/W**L** 



# **Highlite Mini LED**





### High efficiency LED LowBay.

### **Specification**

- Suitable for lower mounting heights when compared to the Highlite LED.
- BESA Surface mounted.
- Suspended option available.
- White colour finish.
- Temperature controlled by mild steel body.
- Up to 60,000 hour life to L70.
- IP20.
- 5 Year LED guarantee.

### Options

- Emergency option available.
- 3000 K available on request.
- DALI dimmable option.
- Daylight / Non occupancy dimming.
- Wire guard option (sports hall).
- PIR occupancy detection option.

### **Suitable Applications**





Retail



Sports Venue

# **Highlite Mini LED**

Designed, Developed & Manufactured in the UK





Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HL12S/WKLED	White	Clear	4000 K	115.9 W	13670 lm	117.9 lm/W

Code options (add suffix to code)



3 Hour Maintained Emergency **M** (255 - 355 lm)



•**-**6

**}** 



DALI / DSI Dim

Premium Opal Diffuser HL12S/W**L** 



# **Highlite Micro LED**





### High efficiency LED LowBay.

### **Specification**

- An ideal replacement for traditional 150 W low bay installations.
- Suitable for lower mounting heights when compared to the Highlite and Mini Highlite LED.
- BESA Surface mounted.
- Suspended option available.
- White colour finish.
- A DEER (Design Energy Efficiency Rating) Rating of A, Exemplary.
- Temperature controlled by mild steel body.
- Up to 60,000 hour life to L70.
- IP20.
- 5 Year LED guarantee.

**Suitable Applications** 

### Options

- Emergency option available.
- 3000 K available on request.
- DALI dimmable option.
- Daylight / Non occupancy dimming.
- PIR occupancy detection option.



Industrial



Retail



Sports Venue

# **Highlite Micro LED**

Designed, Developed & Manufactured in the UK





Colour Finish

White HL12N/**W**  • LED (4000 K).

#### Materials

- Body Steel fabrication powder coated white RAL9016.
- Diffuser: opal + clear polycarbonate.

#### Installation

Surface or suspended.

#### Standards

- IP20.
- 'F' Mark.
- CE. • BS EN 60598.
- Class 1.

w
L

Size	
Length	1192mm
Width	200mm
Depth	35mm

\_



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HL12N/WKLED	White	Clear	4000 K	71.3 W	7417 lm	104 lm/W

#### Code options (add suffix to code)



3 Hour Maintained Emergency **M** (250 - 300 lm)





DSI Dim

Premium Opal Diffuser HL12N/W**L** 



•**-**6

## **Highlite Rack LED**







### High efficiency LED HighBay.

### Specification

- A unique bespoke design to suit the complex requirements of high ceiling racking installations.
- Precisely controlled by the highly reflective aluminium louvers giving market leading superior performance.
- Suspended mounting. •
- White colour finish. .
- Up to 60,000 hour life to L70.
- IP2O. .
- 5 Year LED guarantee.

### Options

- Emergency option available.
- 3000 K available on request.
- DALI dimmable option. .
- Daylight / Non occupancy dimming.
- PIR occupancy detection option.

#### **Suitable Applications**







# **Highlite Rack LED**

Designed, Developed & Manufactured in the UK







HLR/W

**LED Types** • LED (4000 K).

Materials

Highly specular reflectors.

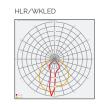
#### Installation

• Suspended.

#### Standards

- IP20.
- 'F' Mark.
- CE.
- BS EN 60598. • Class 1.

Size	
Length	1530mm
Width	430mm
Depth	70mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HLR/WKLED	White	Highly specular reflectors	4000 K	193 W	19496 lm	101 lm/W

#### Code options (add suffix to code)



3 Hour Maintained Emergency **M** (260 - 300 lm)

ency (•C)





e-Motion™ PIR Slave Dim -CFS DALI / DSI Dim



### **Highlite Storm LED**







A high performance, IP67 rated LED Highbay. Superb performance where a high degree of ingress protection is required.

### Specification

- Suitable for: Refrigerated storage, parking areas, food production, manufacturing facilities.
- Surface or suspended mounted options.
- White colour finish.
- Fiberglass housing.
- Steel clips.
- GRP base.
- Up to 60,000 hour life to L70.
- IP67.
- 5 Year LED guarantee.

### Options

- Emergency option available.
- 3000 K available on request.
- DALI dimmable option.
- PIR occupancy detection option.





Industrial

Retail

### **Highlite Storm LED**





White HLS/**W** 

**Colour Finish** 

LED Types • LED (4000 K).

#### Materials

Body: fiberglass body.Diffuser: polycarbonate diffuser.

#### Installation

Surface or suspended.

#### Standards

- IP67.
- 'F' Mark. • CE.
- BS EN 60598.
- Class 1.

HLS/WKLED

i

Size	
Length	1319mm
Width	371mm
Depth	151mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HLS/WKLED	White	Clear	4000 K	151.4 W	18726.3 lm	123.6 lm/W

#### Code options (add suffix to code)

Premium Opal Diffuser



3 Hour Maintained Emergency M (247 - 265 lm)





e-Motion™ Microwave Slave Dim

DALI / DSI Dim -DDD

# Illuminated Handrail Lighting Solutions

The ViperRAIL<sup>™</sup> LED is an innovative solution to stairway, access ramp and bridge deck lighting.

The solution is totally bespoke and tailored around each individual project to ensure maximum efficiency.











172 - 175

ViperRAIL Anti-Climb

176 - 177

### ViperRAIL<sup>™</sup> LED Illuminated Handrail System

### Designed, Developed & Nanufactured in the UK





### Specification

This luminaire is a high performance bespoke engineered handrail with integral IP65 LED lighting units for the illumination of stairs, walkways & bridges.

The ViperRAIL<sup>™</sup> LED system is the ideal solution where stairs and walkways need to be illuminated in a discreet and uniform method.

Available with either brushed stainless, powder coated or warm-touch finishes. This handrail is suitable for both internal and external use.

The striking design features and the use of LED light, allows it to architecturally enhance the environment where it is installed. At the same time the ViperRAIL<sup>™</sup> LED provides the essential safety requirements for pedestrians.

### A stylish yet functional LED handrail.

- Project specific LED handrail system.
- Handrail manufactured from 316 stainless steel.
- Super tough IK10 polycarbonate luminaire optics and anodised aluminium heat sink.
- Symmetrical / asymmetric distributions available.
- 48mm diameter handrail.
- In excess of 100,000 hours to L85 B10.
- Class III luminaire SELV compliant.
- Warm to touch coating available if required.
- 4000 K CRI 75 light source as standard other colours available.
- Full range of rail end terminations and supports available.
- Dimming available as an option.
- Can be connected to static inverter / ups to offer emergency operation.
- LED module lengths available: 300, 600, 900 and 1200mm.
- Can be used for compliance with building regulations Part K, BS5395, DDA.
- Single and twin circuit wiring available.
- Available in any paint colour.



Rail

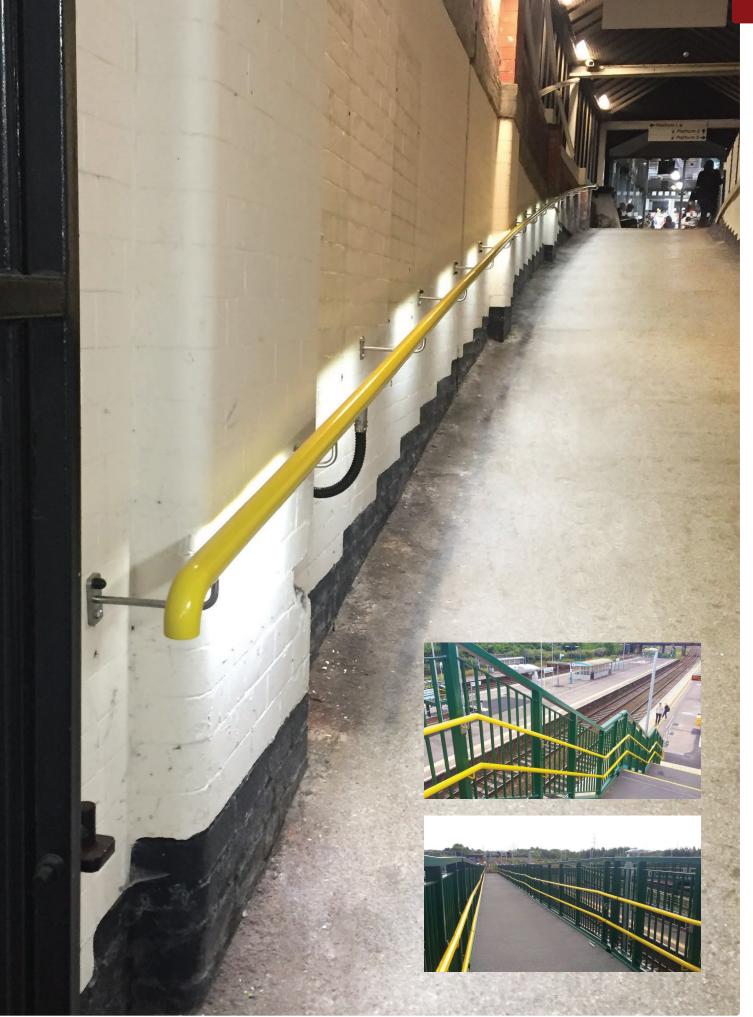




Footpath

172 asdlighting.com

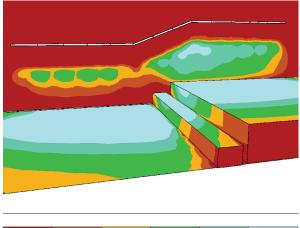
**Suitable Applications** 





# ViperRAIL<sup>™</sup> LED Illuminated Handrail System

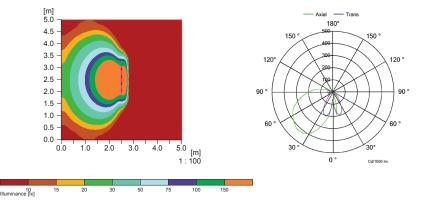




50 75 100 150 200 Illuminance [k]

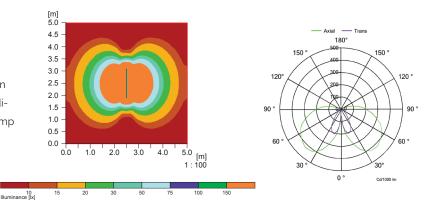
### Asymmetric

Asymmetric provides illumination to walkways or gives an ambient glow to walls, highlighting the route of travel without the need for lamp posts.



### Bi-Asymmetric

Bi-Asymmetric provides even illumination from the rail to either side of it, ideal for divider rails and a modern alternative to lamp posts.



For more information, a tailored design and pricing, please contact our

# ViperRAIL<sup>™</sup> LED Illuminated Handrail System



### Lighting Module Lengths

1	
ļ	600mm
ł	900mm
	1200mm

### Colour options

Brushed stainless finish.
Powder coated.
Warm to touch plastic coating in a full range of colours.

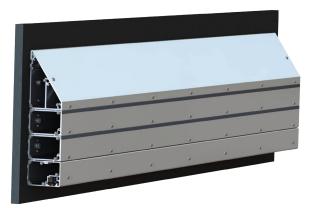
Commercial Department on T: 01709 843354 or E: rail@asdlighting.com



Designed, Developed & Manufactured in the UK

# ViperRAIL<sup>™</sup> Modular Anti-Climb System





The ViperRAIL Modular Anti-Climb system is the ideal solution for installations where an illuminated handrail would be unsuitable.

This is a high performance, vandal resistant, bespoke engineered modular lighting, containment & anti-climb system.

The design creates a structure to discourage climbing for open bridge decks over roads & railways.

This slip fronted trunking system comes with its own containment compartment for through–wiring.

Unlimited additional containment compartments can be added for additional services + through wiring.

Our ViperRAIL Modular Anti-Climb system is available as individual luminaires or a continuous run.





For more information, a tailored design and pricing, please contact our

### ViperRAIL<sup>™</sup> Modular Anti-Climb System

# Anti-Climb Module Coptianiment Module Luminaire Module

- Project specific LED slip fronted trunking system.
- Manufactured from extruded aluminium.
- Super tough IK10 polycarbonate luminaire optics and anodised aluminium heat sink.
- Asymmetric distribution.
- In excess of 100,000 hours to L85 B10.
- Class III luminaire SELV compliant.
- 4000 K CRI 75 light source as standard other colours available.

- Dimming available as an option.
- Can be connected to static inverter / ups to offer emergency operation.

Designed, Developed &

Manufactured in the UK

Key

- 1000 and 2000 lumens per linear meter.
- Single and twin circuit wiring available.
- Inbuilt containment compartment.
- Available in any paint colour.

### Commercial Department on T: 01709 843354 or E: rail@asdlighting.com

# Utility & Emergency Lighting Solutions

ASD's range of high quality, hard wearing and practical Utility & Emergency luminaires are designed and manufactured to meet the exacting demands of specifiers, contractors and end users.

Government tariffs on energy now require genuine savings to be made. The ASD's utility and emergency fittings offer a comprehensive range of energy saving lamp options to meet L1 building regulation requirements. All fittings are produced to the highest quality, to meet the demands of BS EN 60598.











Frontier LED

180 - 181

Anti-Vandal Bulkhead

202 - 203



Emergency Slim 8

204 - 205

188 - 193

Pizza



194 - 197



Samson™

198 - 199



Emergency One Solo

200 - 201

Emergency SafeRoute

206 - 207

### **Frontier LED**





A versatile LED linear luminaire suitable for a wide range of applications.

### Specification

- Ceiling mount.
- Premium Polycarbonate opal diffuser for visual comfort.
- 1200mm & 1500mm body sizes available.
- White colour finish.
- Designed to BS EN 60598.
- IP20.
- 5 Year LED guarantee.

### Options

- Emergency option available.
- 3000 K available on request.
- Suspension hook available.
- e-Motion™ Corridor available.
- Dimming options available.

### **Suitable Applications**











Commercial

Education

Healthcare

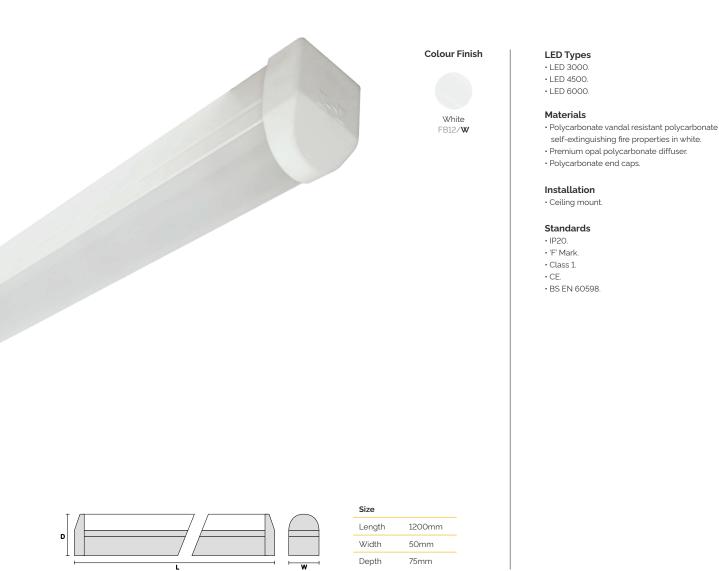
Rail

Retail

# **Frontier LED**

Designed, Developed & Manufactured in the UK





Code	Colour					Efficacy
FB12/WL4LED3000	White	Premium Opal	4000 K	29 W	3344 lm	115.7 lm/W
FB12/WL4LED4500	White	Premium Opal	4000 K	42.6 W	4361 lm	102.4 lm/W
FB12/WL4LED6000	White	Premium Opal	4000 K	50 W	6260 lm	124.2 lm/W

1500mm body size available, please contact us for details.

Code options (add suffix to code)



ſ -CFP



DALI / DSI Dim 67 -DDD





Microwave On/Off



e-Motion™ Microwave Slave Dim



Self-Test Emergency Prefix **FB12ST/** Suffix **M** 

# Storm<sup>™</sup> LED

Utility & Emergency Lighting Solutions



A robust weatherproof linear luminaire offering high protection from dust, corrosion and acts of vandalism.

# **Specification**

- Ceiling mount.
- Premium injection moulded opal diffuser for visual comfort.
- Stainless steel toggle clips as standard.
- Ideally suited to multi-storey car parks, changing areas, factories, plant rooms, loading bays and construction sites.
- Grey colour finish.
- Designed to BS EN 60598.
- IP65 / 20 Joules of impact resistance (IK10).
- 5 Year LED guarantee.

# Options

- Emergency option available.
- 3000 K available on request.
- Suspension hook available.
- e-Motion™ Corridor available.
- Dimming options available.

# **Suitable Applications**





Education





Rail





Commercial

Healthcare

e

Sports Venue



# Storm<sup>™</sup> 1200



Grey WP12/W

**Colour Finish** 



LED 3000.
LED 4500.

#### Materials

- Body: Vandal resistant polycarbonate
   self-extinguishing fire properties in Grey.
- Diffuser: Vandal resistant polycarbonate
   in opal, with self-extinguishing fire properties.

#### Installation

- Ceiling mount.
- Multiple knockouts.
- Stainless steel toggle clips as standard.

#### Standards

• BS EN 60598. • Class I.

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
  CE.

Length	1215mm
Width	116mm
Depth	74mm
Clips	8





#### WP12/WL4LED4500

Ĥ	
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Code			Colour Temp.			Efficacy
WP12/WL4LED3000	Grey	Premium Opal	4000 K	29 W	3029 lm	104 lm/W
WP12/WL4LED4500	Grey	Premium Opal	4000 K	39.5 W	4415 lm	111 lm/W

Code options (add suffix to code)









-CFP

-6

e-Motion™ Microwave Master Dim



6



-DDD

DALI / DSI Dim

Analogue Dim

Self-Test Emergency Prefix **WP12ST/** Suffix **M** 



# Storm<sup>™</sup> 1500





Code options (add suffix to code)







DALI / DSI Dim -DDD

0 -DA

Analogue Dim



Microwave On/Off

e-Motion™ Microwave Slave Dim 2 -CFS

£



6

Self-Test Emergency Prefix **WP15ST/** Suffix **M** 

# Storm<sup>™</sup> 1800





Colour Finish

Grey WP18/**W**  · LED 9000.

#### Materials

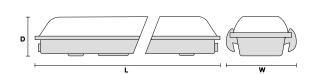
- Body: Vandal resistant polycarbonate self-extinguishing fire properties in Grey.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

#### Installation

- Ceiling mount.
- Multiple knockouts.
- Stainless steel toggle clips as standard.

#### Standards

- IP65.
- 20 Joules of impact resistance (IK10). • 'F' Mark.
- F M
- BS EN 60598.
- Class I.



Size
------

Length	1815mm
Width	116mm
Depth	74mm
Clips	8

#### WP18/WL4LED9000



Code			Colour Temp.			
WP18/WL4LED9000	Grey	Premium Opal	4000 K	85 W	8670 lm	102 lm/W
Code options (add suffix	to code)					
3 Hour Maintainee M (329 lm)	d Emergency	e-Motion™ Micr -CFP	rowave Master Dim	DALI / DS -DDD	il Dim	Analogue Dim <b>-DA</b>



e-Motion™ Microwave Slave Dim -CFS 

-DA

Self-Test Emergency Prefix **WP18ST/** Suffix **M** 



# Pizza LED Range





# A robust utility luminaire.

### **Specification**

- Wall or ceiling mount.
- Shatterproof, weather resistant and UV stabilised polycarbonate body & diffuser.
- Metal base version available.
- White, black & titanium colour options.
- Suitable for internal or external use.
- Rated for continuous use.
- Conduit entry capability.
- IP65.
- 5 Year LED guarantee.

# Options

- Emergency option available.
- 3000 K available on request.
- Photocell options (external use only).
- Anti-tamper screws available on request.
- Fused connector block available on request.
- Self-Test emergency version available.
- Integral microwave sensor option (internal use only).
- e-Motion™ Corridor dimming versions available.
- Fluorescent options available.

# **Suitable Applications**













Commercial

Education

Healthcare

Rail

Sports Venue



# Mini Pizza LED









# LED Types

• LED 600.

#### Materials

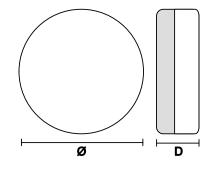
- Body: Vandal resistant polycarbonate
   self-extinguishing fire properties in black /
   white / Titanium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

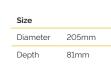
#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry.
- 3 way mains terminal block.
- Screw down diffuser (with anti tamper screws on request).
- Photocell version external use only.

### Standards

- IP65. • 'F' Mark.
- CE.
- BS EN 60598.
- Class I.





Code	Colour	Diffuser	Colour Temp.
AM/WL4LED600	White	Premium Opal	4000 K

#### Code options (add suffix to code)



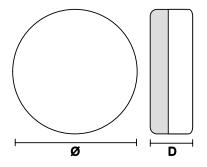
# Midi Pizza LED

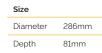
Designed, Developed & Manufactured in the UK



Utility & Emergency Lighting Solutions







#### **Colour Finish**





AP/W



LED Types

### • LED 1800 250mA.

• LED 1800.

• LED 3000.

#### Material 1 (Polycarbonate)

- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black  $\scriptstyle /$ white / Titanium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

#### Material 2 (Die Cast Aluminium)

- Body: Die cast aluminium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

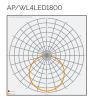
#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry.
- 3 way mains terminal block. 4 way terminal block for emergency & photocell versions.
- Screw down diffuser (with anti tamper screws on request).
- Photocell version external use only.
- Microwave sensor option (internal use only). • e-Motion™ Master (internal only) and Slave options available.

#### Standards

- IP65.
- 'F' Mark
- · CE.
- BS EN 60598.
- Class I.

#### AP/WL4LED3000



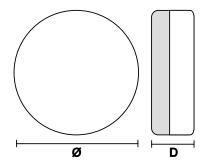
Code						
AP/WL4LED1800-250	White	Premium Opal	4000 K	10.9 W	862.7 lm	79 lm/W
AP/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1617 lm	97 lm/W
AP/WL4LED3000	White	Premium Opal	4000 K	17.1 W	1846 lm	107 lm/W

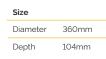


# Maxi Pizza LED









#### LED Types

**Colour Finish** 

Black

MP/B

White

MP/W

Titanium

MP/X

· LED 1800. • LED 3000.

### Material 1 (Polycarbonate)

- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black  $\scriptstyle /$ white / Titanium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

### Material 2 (Die Cast Aluminium)

- Body: Die cast aluminium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry.
- 3 way mains terminal block. 4 way terminal
- block for emergency & photocell versions. Screw down diffuser (with anti tamper screws on request).
- Photocell version external use only.
- Microwave sensor option (internal use only).
- e-Motion™ Master (internal only) and Slave options available.

#### Standards

- IP65.
- 'F' Mark.
- CE.
- BS EN 60598.
- Class I.

# MP/BL4LED1800 MP/BL4LED3000

Code			Colour Temp.			Efficacy
MP/BL4LED1800	White	Premium Opal	4000 K	16.5 W	1550 lm	94 lm/W
MP/BL4LED3000	White	Premium Opal	4000 K	25.4 W	2507 lm	98 lm/W

Code options (add suffix to code)



Self-Test Emergency

Prefix MPST/ Suffix M



DALI / DSI Dim



с

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Photocell





т

Anti-Tamper Screws







MP**M**/\_\_

\* MP/BL4LED3000 Emergency option available at a reduced output.



# come to Cleethorpes

Town Centre 🛱 Taxis 🔿 Buses -> Sea front 230 **Cleethorpes Train Station** 

TRANSPENNINE

# **Square IP65 Range**







# A robust square utility luminaire.

### **Specification**

- Wall or ceiling mount.
- Shatterproof, weather resistant and UV stabilised polycarbonate body & diffuser.
- Metal base version available. ٠
- White, black & titanium colour options.
- Suitable for internal or external use.
- Rated for continuous use.
- Hinged gear tray.
- Screw down cover.
- Conduit entry capability.
- IP65.
- 5 Year LED guarantee.

### Options

- Emergency option available.
- 3000 K available on request.
- Photocell options (external use only). .
- Anti-tamper screws available on request. •
- Fused connector block available on request. •
- Self-Test emergency version available. •
- Integral microwave sensor option (internal use . only).
- e-Motion™ Corridor dimming versions available.
- Fluorescent options available.

### **Suitable Applications**





Education









Commercial

Healthcare

Rail

Sports Venue

# Mini Square IP65

Designed, Developed & Manufactured in the UK





Colour Finish

White AMS/**W** 

Titanium AMS/X

#### LED Types • LED 600.

Materials (Polycarbonate)

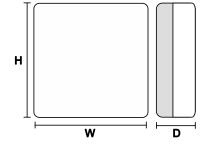
- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black / white / Titanium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.BESA fixing and rear cable entry.
- 3 way mains terminal block.
- Screw down diffuser (with anti tamper screws on request).
- Photocell version external use only.

#### Standards

- IP65.
- 100 Joules of impact resistance (IK14).
  'F' Mark.
- F M
- CE. • BS EN 60598.
- Class I.



Size	
Width	190mm
Height	190mm
Depth	90mm

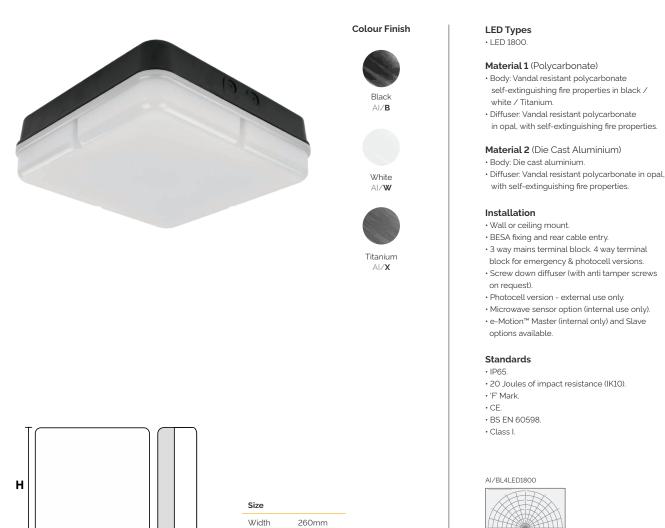
Code	Colour		Colour Temp.
AMS/BL4LED600	White	Premium Opal	4000 K





# Midi Square IP65





Code			Colour Temp.			
AI/BL4LED1800	Black	Premium Opal	4000 K	16.7 W	1646 lm	98 lm/W

Code options (add suffix to code)

W







Switch Dim 5.0 -DD

-DDD

DALI / DSI Dim

Height

Depth

D

260mm

90mm



с

F





Metal Base Option  $\mathsf{A}|\mathbf{M}/_{--}$ 

# Maxi Square IP65















Titanium MS/**X** 



• LED 3000.

### Materials

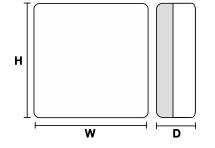
- Body: Vandal resistant polycarbonate
   self-extinguishing fire properties in black /
   white / Titanium.
- Diffuser: Vandal resistant polycarbonate in opal, with self-extinguishing fire properties.

#### Installation

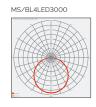
- Wall or ceiling mount.
- BESA fixing and rear cable entry.
- 3 way mains terminal block. 4 way terminal block for emergency & photocell versions.
- Screw down diffuser (with anti tamper screws on request).
- Photocell version external use only.
- Microwave sensor option (internal use only).
- e-Motion<sup>™</sup> Master (internal only) and Slave options available.

#### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- CE.
- BS EN 60598. • Class I.

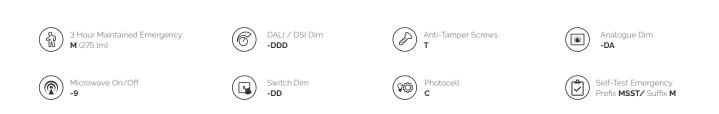


Size	
Width	340mm
Height	340mm
Depth	104mm



Code	Colour		Colour Temp.			
MS/BL4LED3000	White	Premium Opal	4000 K	25.7 W	2513 lm	98 lm/W

Code options (add suffix to code)



\* MS/BL4LED3000 Emergency option available at a reduced output.

# Samson<sup>™</sup> LED





An anti-vandal cornice luminaire.

### **Specification**

Utility & Emergency Lighting Solutions

- Cornice mount (45 degree).
- Shatterproof, weather resistant and UV stabilised polycarbonate diffuser & metal base.
- White & black colour finish options.
- Suitable for internal or external use.
- Rated for continuous use.
- Screw down cover.
- Conduit entry capability.
- IP65.
- 5 Year LED guarantee.

# Options

- Emergency option available.
- 3000 K available on request.
- Photocell options (external use only).
- Anti-tamper screws available on request.
- Self-Test emergency version available.

### **Suitable Applications**





Education









Commercial

He

Healthcare

Rail

Sports Venue

# Samson<sup>™</sup> LED

Designed, Developed & Manufactured in the UK







SM/B

• LED Types

# Materials

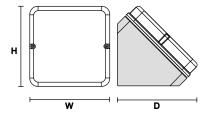
- Body: Die cast aluminium + fabricated steel
   in black or white.
- Diffuser: Vandal resistant polycarbonate in opal with self-extinguishing fire properties.

#### Installation

- Cornice mount.
- BESA fixing and rear cable entry.
- 3 way mains terminal block. 4 way terminal block for Emergency & photocell versions.
  Screw down lid.
- Screw down lid.
  Photocell version external use only.

### Standards

- IP65.
- 20 Joules of impact resistance (IK10).
- 'F' Mark.
- CE.
- BS EN 60598.
- Class I.



Size	
Width	260mm
Height	260mm
Depth	212mm



Code						Efficacy
SM/WL4LED1800	White	Premium Opal	4000 K	16.7 W	1646 lm	98 lm/W



# **Emergency One Solo LED**



# A self-contained emergency LED.

# **Specification**

- 6500 K.
- LED emergency module suitable for direct installation in ceilings.
- · Complete set with integrated electronics, LED module, heat sink, optics and battery.
- Includes click-in multi-lens option for anti-panic, escape route and spot illumination.
- Emergency lighting function for manual testing.
- Small size ceiling hole, 40 43 mm diameter, 80 mm height.
- 5 year driver warranty.
- 3 year battery warranty.
- Plug in lithium iron phosphate battery with strain relief.

### **Suitable Applications**















Commercial

Education

Healthcare

Hotel

Corridor

Office

# **Emergency One Solo LED**





### ish

LED Types • LED.

Materials

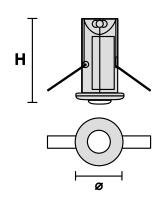
Housing material - polycarbonate.

Installation
• ceiling mount.

### Standards

IP20.
 CE.

Class 2.



Size	
Diameter	51mm
Height	80mm
Cut Out	40 - 43mm

Code	Emergency	Colour	System Power	IP Rating
EMOD/W2NM	Non Maintained	White	2 W	IP20
EMOD/W2M	Maintained	White	2 W	IP20

# Anti-Vandal Bulkhead





# A tough and robust bulkhead luminaire.

# **Specification**

- Wall or ceiling mount.
- Shatterproof, weather resistant and UV stabilised polycarbonate body & prismatic diffuser.
- Black & white colour finish options.
- Suitable for internal or external use.
- Screw down cover.
- Multi 20mm knockouts.
- IP65.
- 5 Year LED guarantee.

### Options

- Photocell options (external use only).
- PIR versions available.
- Anti-tamper screws available on request.
- Opal & red diffusers available.
- Fluorescent options available.





Commercial



Residential



# **Anti-Vandal Bulkhead**

Designed, Developed & Manufactured in the UK







**Colour Finish** 



White AB/W

# LED Types

• LED 600.

### Materials (Polycarbonate)

- Body: Vandal resistant polycarbonate self-extinguishing fire properties in black  $\scriptstyle \not$ white.
- Diffuser: Vandal resistant polycarbonate in prismatic, with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- BESA fixing and rear cable entry. 3 way mains terminal block. 4 way terminal block for photocell versions.
- Screw down lid.
  - Photocell version external use only.

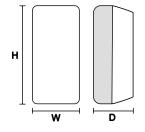
#### Standards

- IP65. • 'F' Mark.
- CE.
- BS EN 60598.
- Class I.

PIR



Red Diffuser



Size	
Width	126mm
Height	247mm
Depth	107mm

Code	Colour		Colour Temp.			
AB/BP4LED600	Black	Prismatic	4000 K	8 W	595 lm	77 lm/W

#### Code options (add suffix to code)







Red Diffuser AB/BR\_\_

Opal Diffuser AB/BL\_\_

# **Emergency Slim 8 LED**





A tough and robust emergency luminaire.

# **Specification**

Utility & Emergency Lighting Solutions

- Wall or ceiling mount.
- Vandal resistant polycarbonate body and prismatic diffuser.
- White colour finish.
- Non-maintained & Maintained options.
- Screw down diffuser.
- Hinged gear tray.
- 6 x Running Man Exit Legend: LBLB086.
- 20mm knock outs for additional functions.
- IP55.
- 5 Year LED guarantee.

# Options

- Emergency maintained or non-maintained operations.
- Photocell options (external use only).

### **Suitable Applications**





Education





Hotel





Commercial

Healthcare

care

Sports Venue

Retail

# **Emergency Slim 8 LED**

Designed, Developed & Manufactured in the UK





**Colour Finish** 

W/hite

SL/W

# LED Types

• 12 x LED - Standard Output 1W strip.

#### Materials

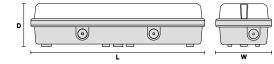
- Body: Vandal resistant polycarbonate self-extinguishing fire properties in white.
- Diffuser: Vandal resistant polycarbonate in prismatic, with self-extinguishing fire properties.

#### Installation

- Wall or ceiling mount.
- Multi 20mm knockouts.
- Screw down lid.
- Photocell options (external use only). Select by switch for Maintained or
- Non-Maintained operation.

#### Standards

- IP55.
- 'F' Mark
- CE. • BS EN 60598.
- Class I.



Size
Length
\\/idth

0	
Width	118mm
Depth	89mm

368mm

Code	LED	Colour		
SL/WPLED12M	Standard Output + 3 Hour Maintained	White	Prismatic	IP55
SL/WPLED6M	High Output + 3 Hour Maintained	White	Prismatic	IP55
LBLB086	Running Man Exit Legend			IP55

Select by switch for Maintained or Non-Maintained operation.

Code options (add suffix to code)



3 Hour Maintained Emergency



3 Hour Non Maintained Emergency



# **Emergency SafeRoute™**





# LED emergency exit sign.

### **Specification**

- Surface, wall or recessed mount.
- Mild steel body in white. Acrylic legend clear • panel with screen print legend detail.
- Low power consumption reduces running costs.
- Easy to install.
- Available with up, down, left and right legend. .
- 12 LED strip 1W.
- Can be affixed into solid or suspended ceilings.
- Product life16.5yrs @ 3000hrs per year.
- IP20.
- 5 Year LED guarantee.

# Options

- Available in Emergency, Self-Test and DALI.
- 3 hour maintained and non-maintained versions.

# **Suitable Applications**





Education









Commercial

Healthcare

Hotel

Sports Venue

# **Emergency SafeRoute™**

Designed, Developed & Manufactured in the UK





Size	Surface Mount	Recessed Mount	Wall Mount
Width	295mm	295mm	295mm
Height	201mm	207mm	209mm
Depth	54mm	50mm	56mm

#### Colour Finish

White

SR /W

LED Types • 12 LED strip 1W.

#### Materials

- Body: Mild steel in white RAL9016. Acrylic legend – clear panel with screen print legend detail.
- Battery: Sealed nickel cadmium type.

#### Installation

- Surface, wall or recessed mount.
- Rear cable entry.
  4 way terminal block.
- 220-240v 50/60Hz.
- Mains power consumption maintained mode 4W 30mA.
- Batteries 3 cell Ni-Mh 2.0Ah.
- Recharge period 12 hours.
- Main body retained into ceiling by two suspension springs which allow a rigid fix without need for additional tools.
- Whole unit installed into ceiling as one piece - no need for separate trims etc.
- Surface (ceiling) or wall mount.
- Recess ceilings between 5 25mm.

#### Standards

- IP20.
- 'F' Mark.
- CE.
- BS EN 60598
- Class 1.

Code	Mounting	Colour	Diffuser	IP Rating
SRS/WLED12DM	Surface Mount Down	White	Clear	IP20
SRS/WLED12LRM	Surface Mount Left / Right	White	Clear	IP20
SRS/WLED12UPM	Surface Mount Up	White	Clear	IP20
SRR/WLED12DM	Recessed Mount Down	White	Clear	IP20
SRR/WLED12LRM	Recessed Mount Left / Right	White	Clear	IP20
SRR/WLED12UPM	Recessed Mount Up	White	Clear	IP20
SRW/WLED12DM	Wall Mount Down	White	Clear	IP20
SRW/WLED12LRM	Wall Mount Left / Right	White	Clear	IP20
SRW/WLED12UPM	Wall Mount Up	White	Clear	IP20

Code options (add suffix to code)









Self-Test Emergency Prefix **SR\_ST/** Suffix **M** 

# Secure Environments Lighting Solutions

Secure environments require special consideration and expert knowledge when it comes to lighting. Working closely with our clients in this sector has enabled ASD to offer luminaires with some unique design features to allow ease of installation, ease of maintenance, high efficiency and most of all a comfortable and safe environment for patients and staff.











# **Profile Anti-Ligature**





An anti-ligature luminaire ideally suited to environments where consideration of the actions of individuals need priority such as hospitals, prisons, secure and care units.

# Specification

- · Ceiling & wall mounted.
- White colour finish as standard, satin aluminium option available.
- Steel body & vandal resistant premium opal polycarbonate diffuser.
- Vandal resistant / anti-ligature (where riot conditions do not exist).
- Tamper proof fixings.
- 434mm, 524mm and 590mm sizes available.
- IP20 (IP44 available as an option).
- 5 Year LED guarantee.

### Options

- Emergency option available.
- Night light option available.
- DSI / DALI Dimmable available.
- Microwave on / off available.
- e-Motion™ Corridor available.
- Fluorescent options available.

### **Suitable Applications**

Secure Environments



Healthcare



# Profile Anti-Ligature 434mm

Designed, Developed & Manufactured in the UK

Body: Steel in white / satin aluminium.
Diffuser: Vandal resistant polycarbonate in opal

IP20 (IP44 available as an option).
150 Joules of impact resistance (IK16).

or prismatic, with self-extinguishing fire

LED Types • LED 1800. Materials

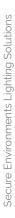
properties.Tamper proof fixings.

Installation
• Wall or ceiling mount.
• For use with anti-pick mastic.

Standards

'F' Mark.
CE.
BS EN 60598.
Class I.

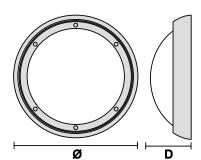








Satin Aluminium HP4AL/**F** 



Size	
Diameter	434mm

Depth 106mm



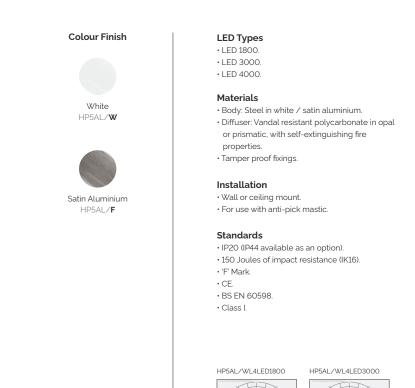
Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HP4AL/WL4LED1800	White	Premium Opal	4000 K	16.6 W	1670 lm	100 lm/W
HP4AL/WL4LED3000	White	Premium Opal	4000 K	22.2 W	2683 lm	120 lm/W

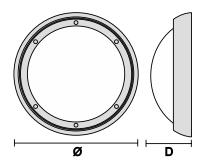


# Profile Anti-Ligature 524mm









Size	
Diameter	524mm
Depth	112mm





HP5AL/WL4LED4000



			> > < /
С			



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HP5AL/WL4LED1800	White	Premium Opal	4000 K	16.8 W	1696 lm	101 lm/W
HP5AL/WL4LED3000	White	Premium Opal	4000 K	21.6 W	2351 lm	109 lm/W
HP5AL/WL4LED4000	White	Premium Opal	4000 K	32.7 W	3395 lm	104 lm/W



# Profile Anti-Ligature 590mm

Designed, Developed & Manufactured in the UK

• Body: Steel in white / satin aluminium.

• IP20 (IP44 available as an option). • 150 Joules of impact resistance (IK16).

or prismatic, with self-extinguishing fire

Diffuser: Vandal resistant polycarbonate in opal

LED Types • LED 3000. • LED 4000. Materials

properties. Tamper proof fixings.

Installation • Wall or ceiling mount. For use with anti-pick mastic.

Standards

• 'F' Mark. · CE. • BS EN 60598. • Class I.



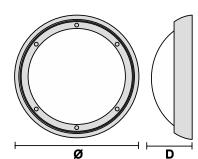
Secure Environments Lighting Solutions



**Colour Finish** White HP6AL/W



HP6AL/F



Size	
Diameter	590mm
Depth	112mm





HP6AL/WL4LED4000

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
HP6AL/WL4LED3000	White	Premium Opal	4000 K	21.6 W	2351 lm	109 lm/W
HP6AL/WL4LED4000	White	Premium Opal	4000 K	32.7 W	3395 lm	104 lm/W





# **Rhapsody Anti-Vandal**





A 600 x 600 range of anti-vandal luminaires ideal for secure environments.

### Specification

- Recessed ceiling mounted.
- White colour finish.
- Constructed from steel, finished in white (RAL9016) with a premium polycarbonate opal refractor.
- 60,000 hours to L70.
- Supplied with 4000 K LED with a CRI of >80.
- IP20 (IP65 available on requested).
- IK10.
- 5 Year LED guarantee.

### Options

- Emergency option available.
- Available in 1-10V and DSI / DALI Dimmable.
- 3% to 100% pre-programmed e-Motion™ Corridor dimming.
- 3000 K available on request.
- Plug & Play options available.

### **Suitable Applications**



Secure Environments



Healthcare

# **Rhapsody Anti-Vandal**







Colour Finish

White R6V/**W** 

#### LED Types

• LED 3000. • LED 4500.

#### Materials

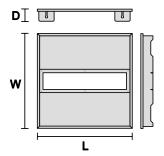
- Body: Steel in white RAL9016.
- Diffuser: Premium opal polycarbonate.

#### Installation

- Suitable for draw up and lay-in applications making it versatile for a
- number of ceiling systems including: - Exposed 'T'.
- Concealed fix.
- Some metal pan ceilings. • Plug & Play options.

#### Standards

- IP20 (IP65 available on requested).
- IK10.
- 'F' Mark. · CE.
- BS EN 60598.
- Class I.
- TPA Rated.



### Size

597mm Length Width 597mm Depth 117mm

### R6V/WI 4I FD3000



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
R6V/WL4LED3000	White	Premium Opal	4000 K	28.5 W	2406 lm	84.3 lm/W
R6V/WL4LED4500	White	Premium Opal	4000 K	41.5 W	3372 lm	81.3 lm/W

Code options (add suffix to code)

R

 $(\Box)$ 

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3 Hour Maintained Emergency

Self-Test Emergency Prefix **R6VST/** Suffix **M** 





e-Motion™ Microwave Slave Dim

Analogue Dim ( 💽 -DA

# ZIP Anti-Ligature



Ideal for mental health & secure unit Installations, enhanced with the 'quick click' paddle connector; the push in connector eases wiring and reduces installation time.

### Specification

- Recessed mounted down light, with ZIP adjustable fixing clip suitable for ceiling systems.
- White colour finish.
- The pre-attached adjustable ratcheted fixing enables the fitting to be installed easily; with just a few clicks the luminaire is held in position.
- Engineered for simple installation & low maintenance.
- IP65 rated.
- 20 Joules of impact resistance (IK10).
- 5 Year LED guarantee.

### Options

- TPA rated version available on request.
- Emergency option available.
- DSI / DALI Dimmable available.
- e-Motion™ Corridor available.

#### Suitable Applications



Secure Environments



Healthcare

# **ZIP Anti-Ligature**

Designed, Developed & Manufactured in the UK



Secure Environments Lighting Solutions



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
ZIPMAL/WL4LED1000	White	Premium Opal	4000 K	16.3 W	1363 lm	83.6 lm/W
ZIPMAL/WL4LED2000	White	Premium Opal	4000 K	21.3 W	1812 lm	85 lm/W
ZIPMAL/WL4LED3000	White	Premium Opal	4000 K	28.7 W	2489 lm	86.7 lm/W

Code options (add suffix to code)

3 Hour Maintained Emergency Ŷ **M** (240lm)

ZIPMAL/WLTPA4LED\_\_

TPA Rated



£

**}**-

-CFP

e-Motion™ Microwave Slave Dim -CFS

e-Motion™ Microwave Master Dim



3,0

Switch Dim

-DD

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Self-Test Emergency Prefix **ZIPALST/** Suffix **M** ~

-DA

Analogue Dim





High efficiency cornice luminaire providing a robust vandal resistant and energy efficient option for high dependency and security applications.

### **Specification**

- Cornice mount.
- White colour finish.
- Steel body & vandal resistant 4mm thick prismatic GE lexan polycarbonate diffuser.
- 600mm, 1200mm & 1500mm lengths available.
- IP20 + IP66.
- 5 Year LED guarantee.

#### Options

- Emergency option available.
- Night light option available. .
- DSI / DALI Dimmable available. •
- Microwave on / off available. •
- e-Motion™ Corridor available. •
- Fluorescent options available.

### **Suitable Applications**

Secure Environments



Healthcare





## Invincible LED 600





Colour Finish

White IV6/**W** 

#### Installation • Cornice mount.

• LED 3000.

Materials

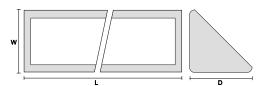
Body: Steel.
Diffuser: Polycarbonate.

- Microwave sensor option.
- e-Motion<sup>™</sup> Corridor option.

#### Standards

- IP20 + IP66.
- 150 Joules of impact resistance (IK16).
- 'F' Mark.
- CE. • BS EN 60598.





Size	
Length	673mm
Width	158mm
Depth	158mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
IV6/WK4LED3000	White	Prismatic	4000 K	30.8 W	2396 lm	78 lm/W
Code options (add suffix	to code)					
3 Hour Maintaine	ed Emergency	e-Motion™ M -CFP	icrowave Master Dim	DALIZI -DDD	DSI Dim	Analogue Dim -DA
Microwave On/0	Off	e-Motion™ M -CFS	icrowave Slave Dim	Switch [ -DD	Dim	Self-Test Emergency Prefix <b>IV6ST/</b> Suffix <b>M</b>
		_				

IP66 IV6S/\_\_

9)

Night Light -CLED3

## Invincible LED 1200





White

IV12/**W** 

Colour Finish

### LED 6000.LED 7500.

#### Materials

· LED 3000.

Body: Steel.Diffuser: Polycarbonate.

#### Installation

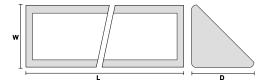
#### Cornice mount.

- Microwave sensor option.
- e-Motion™ Corridor option.

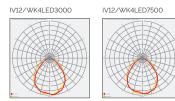
#### Standards

- IP20 + IP66.
- 150 Joules of impact resistance (IK16). • 'F' Mark.
- F M
- BS EN 60598.





Size	
Length	1273mm
Width	158mm
Depth	158mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
IV12/WK4LED3000	White	Prismatic	4000 K	33.7 W	2876 lm	85 lm/W
IV12/WK4LED6000	White	Prismatic	4000 K	57.6 W	5689 lm	98 lm/W
IV12/WK4LED7500	White	Prismatic	4000 K	74.2 W	6942 lm	93 lm/W



## Invincible LED 1500







### · LED 3000.

- LED 6000.
- LED 7500.

#### Materials

• Body: Steel. Diffuser: Polycarbonate.

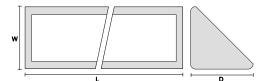
### Installation

- Cornice mount.
- Microwave sensor option.
- e-Motion™ Corridor option.

#### Standards

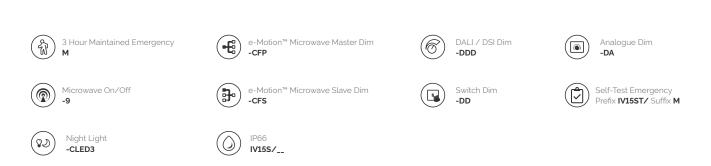
- IP20 + IP66.
- 150 Joules of impact resistance (IK16).
- 'F' Mark. • CE.
- BS EN 60598.





Size	
Length	1573mm
Width	158mm
Depth	158mm

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
IV15/WK4LED3000	White	Prismatic	4000 K	ТВА	ТВА	ТВА
IV15/WK4LED6000	White	Prismatic	4000 K	ТВА	ТВА	TBA
IV15/WK4LED7500	White	Prismatic	4000 K	ТВА	ТВА	ТВА









High efficiency anti-vandal luminaire, suitable for healthcare, secure units, external tunnels and public walkways.

### **Specification**

- Surface mounted.
- White colour finish.
- 1.2mm mild steel body & vandal resistant 4mm thick prismatic GE lexan polycarbonate diffuser.
- 600mm, 1200mm & 1500mm lengths available.
- 60,000 hours to L70/B50 (5 x the life of fluorescent lighting).
- IP20 + IP66.
- 5 Year LED guarantee.

### Options

- Emergency option available. .
- Night light option available. •
- DSI / DALI Dimmable available. •
- Microwave on / off available. •
- e-Motion™ Corridor available. •
- Fluorescent options available. •

### **Suitable Applications**

Secure Environments

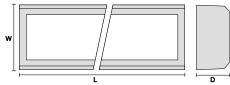


Healthcare









Size	
Length	673mm
Width	254mm
Depth	92mm

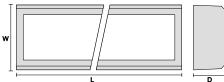
Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
TT6/WK4LED3000	White	Prismatic	4000 K	ТВА	ТВА	TBA



Designed, Developed & Manufactured in the UK







Size	
Length	1273mm
Width	254mm
Depth	92mm



Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy
TT12/WK4LED3000	White	Prismatic	4000 K	33.7 W	2876 lm	85 lm/W
TT12/WK4LED6000	White	Prismatic	4000 K	57.6 W	5689 lm	98 lm/W
TT12/WK4LED7500	White	Prismatic	4000 K	74.2 W	6942 lm	93 lm/W



XX





- LED 6000. • LED 7500.
- Materials
- Body: Steel.
- Diffuser: Polycarbonate.

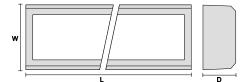
#### Installation

- Wall or ceiling mount.
- Microwave sensor option.
- e-Motion™ Corridor option.

#### Standards

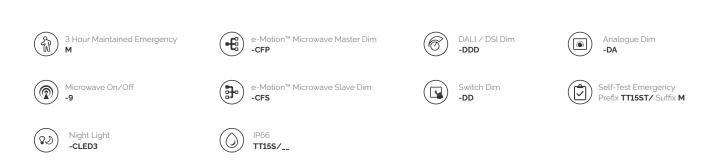
- IP20 + IP66.
- 150 Joules of impact resistance (IK16).
- 'F' Mark. • CE.
- BS EN 60598.





Size	Size				
Length	1573mm				
Width	254mm				
Depth	92mm				

Code	Colour	Diffuser	Colour Temp.	System Power	Delivered Lumens	Efficacy	
TT15/WK4LED3000	White	Prismatic	4000 K	ТВА	ТВА	ТВА	
TT15/WK4LED6000	White	Prismatic	4000 K	ТВА	ТВА	TBA	
TT15/WK4LED7500	White	Prismatic	4000 K	ТВА	ТВА	ТВА	





# Lighting Management & Modular Wiring

Lighting Management is a way of controlling the light we use on a daily basis in everyday situations. ASD Lighting takes pride in offering this range of highly efficient state of the art lighting controls. We offer a variety of systems from integral occupancy sensors to sophisticated dimming systems, for applications such as offices & classrooms, based on amounts of natural daylight & occupancy. This unique range is adaptable to its surrounding environment & highly energy efficient.









Microwave Single Point

234



Basic Dim

240



Intelligent Photocell Single Point





Comfort DIM

241



e-Motion™ Corridor (Down to 10%) Single Point

236



DALI Basic

242



e-Motion™ Corridor (On/Off) – CFDP Single Point

237



Master / Slave control

238

DALI Pro

244



LUXeye

239



ENCELIUM

245

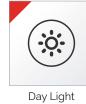


Wireless Lighting Controls

246 - 247



248



249









251

Scene

252



Emergency

253



Modular Wiring

254



255



One Touch

250

ConnecDim

243









## **Microwave Single Point**



#### Technical data

- Operating voltage
- Switched power
- Standby power
- Warm time
- Detection area
- Hold time
- Daylight threshold
- Sensor principle
- Microwave frequency
- Microwave power
- Detection range
- Detection angle
- Mounting height
- Operating temperature
- IP rating
- Certificate

- 220-240VAC
- Max. 400W (capacitive) Max. 800W (resistive)
- 0.5W
- 20s
  - 10 / 30 / 50 / 75 / 100%, can be customized
  - 5s / 30s / 180s / 300s / 15min / 25min, can be customized
  - 2Lux / 5Lux / 20Lux / 30Lux / Disable
  - Microwave motion detector
  - 5.8GHz+/-75MHz
- <0.2mW
  - Max. (Ø x H): 8m x 5m
  - 30° 150°
  - Max. 5m
  - -35°C +70°C
    - IP20 (IP65 Mounting in Hytronik special box) Semko, EMC, CE, R&TTE, SAA

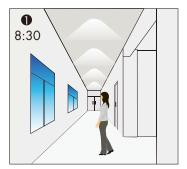
Simple on off function Adjustable sensitivity, lux and time Internal daylight threshold (if enough ambient light sensor will not trigger). **Usage suitability – Corridors / washrooms / lobbies etc.** User commissioning

# **Intelligent Photocell Single Point**

### Photocell Advance Version with Remote Control

Thanks to the Photocell Advance function, these daylight sensors can built inside the fixture completely. The fixture is effectively controlled by the daylight sensor, automatic on/ off operation based upon daylight.

• Works from behind the fixture cover / diffuser.



With insufficient natural light, the light switches on at 100%.



The light turns off completely whenever natural light reaches above pre-set daylight threshold.





The light automatically turns on at 100% when natural light lux level drops below pre-set daylight threshold.



The light turns on at full or dims to maintain the lux level. The light output regulates according to the level of natural light available.



The light dims to minimum level then switches off when natural light is sufficient.



The light automatically switches on when natural light is insufficient.

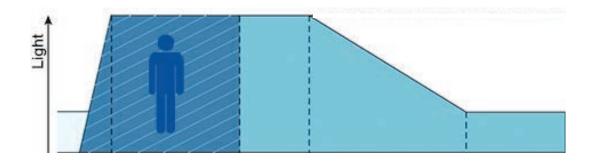
Commissioning via HRC-11 remote Built into the fitting and can be used internally DS06 photocell As above but with daylight harvest functionality Needs to be used in conjunction with a 1-10v driver Can be used in a master slave configuration (wired) **Usage suitability - corridors / washrooms / lobbies etc. Where ambient light is available during daylight hours.** User commissioning

# e-Motion™ Corridor (Down to 10%) Single Point

The e-Motion™ Corridor enables the illuminance to be linked to the presence or absence of people.

A conventional relay motion sensor is connected. The luminous intensity is increased when a person enters the room. When the person leaves the room the motion sensor switches off after a certain delay and the luminous intensity is automatically reduced.

The e-Motion<sup>™</sup> Corridor is particularly beneficial in applications in which light is needed round the clock for safety reasons, for example in public buildings, large apartment complexes, car parks, pedestrian underpasses and underground railway stations. Since the luminous intensity only has to be increased when there is a demand for light the e-Motion<sup>™</sup> Corridor offers effective lighting management and helps save energy and costs. Another benefit of the e-Motion<sup>™</sup> Corridor is the enhanced convenience of automatic lighting controls.



Basic e-Motion<sup>™</sup> Corridor dimming to 10% Fitting will stay on at 10% day or night Internal photocell disabled ON time set on microwave Sensitivity set on microwave **Usage suitability – Corridors / washrooms / lobbies etc.** User commissioning

# e-Motion™ Corridor (On/Off) – CFDP Single Point

### Features

- 24 hour daylight monitoring dawn/dusk sensor
- 😭 Special photocell to measure and differentiate natural light from LED light from behind the fixture cover
- One-touch daylight learning via remote control
- 🖳 Tri-level dimming control based upon occupancy (also known as corridor function)
- Easy-on-the-eye operation which makes the light turning on/off less uncomfortable
- DIP switch offers multiple current selections for different luminaire requirements
- 🕗 5 Year, 50,000hr Warranty



### 2 24h Daylight Monitoring Function

#### Now with Photocell Advance technology, natural daylight will override the occupancy sensor.

Automatic on/off, based upon natural daylight conditions, our innovative and patented software enables our antenna with built-in daylight sensor to provide a "smart photocell" or dawn/dusk function from behing the luminaire cover, preventing the need to drill for an external photocell. This function is activated when the stand-by period is set to "+ $\infty$ ".

21:40

level at night.



The light switches on at 100% when there is movement detected.





The light dims to stand-by level after the hold-time.



The light turns off completely when natural light reaches above daylight threshold.

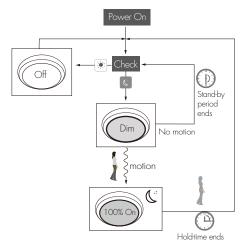


6

The light remains in dimming

The light automatically turns on at 10% when natural light is insufficient (no motion).

Settings on this demonstration: Hold-time: 10min Daylight threshold: 50lux Stand-by dimming level: 10% Stand-by period: +∞



Commissioning via HRC-11 remote or dip switches on the driver. Detection range, hold time, daylight threshold standby time and standby dimming level can all be pre-set. Fitting will turn OFF when the ambient light threshold is met. **Usage suitability - Corridors / Washrooms / Lobbies etc. Where ambient light is available during daylight hours.** User commissioning

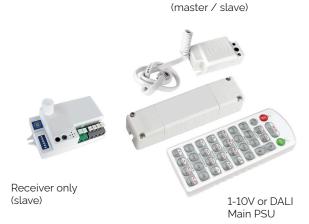
### Master / Slave control



All features: 868MHz FSK transmission mode (other Frequencies available)

Supports e-Motion™ Corridor or organic style of response, dependent on occupancy Rotary switch allows easy commissioning of small installations (15 groups)

Remote control "teach n learn) allows unlimited groups.



Antenna choice

There are two types available with group settings either via rotary switch grouping or remote control selection. Perfect solution for retrofitting where rewiring is not possible. Transmitter range 30m indoor, 100m in open space. Daylight threshold selectable. Mounting height max 6m. RF Frequency 915MHz (FSK mode). Detection range max (DxH) 12m x 6m. User commissioning

# LUXeye

### Wired DALI broadcast but controlled via Bluetooth (phone, tablet etc.)

If you want total control over your lighting, including an option to regulate it from your smartphone, but have concerns that the equipment involved will be complicated and difficult to use - worry no more! The Luxeye Sense DALI BT is a lighting control unit with an integrated light and presence sensor, and a DALI broadcast output channel, that works out of the box and is easily operated using a pushbutton. Now you can ensure that the use of light in areas like offices, conference rooms, training rooms and corridors is cost-effective and well managed. The Luxeye Sense DALI BT regulates light and light intensity according to the presence, or otherwise, of people and of ambient light. And if the pre-settings are not suitable for your needs, no problem - you can change them quickly and easily at the unit, using a screwdriver. You can even control the light and settings from a smartphone, using a free app that you download from the Apple or Google app store. With the Luxeye Sense DALI BT as part of your total lighting system, you can be sure that money is not being wasted on light that is not needed, while providing reliable, high quality light exactly when and where appropriate; all in a simple, straightforward and reliable way.



#### **Product benefits**

- Automatic start of light regulation after power-on (out of the box function)
- Basic functionality without configuration
   thanks to applied pre-settings
- Easy and fast customization of important parameter via screwdriver
- $V(\overline{D})$  corrected light sensor element
- Predefined and customizable
   configurations for all applications
- Password protection for user and configuration APP access
- Easy report generation of all commissioned sensors
- Easy report sharing via email
- DEMO Mode usable without device

#### **Product** features

- One DALI broadcast output channel
- Daylight-dependent regulation and presence-dependent control of light
- Operation via standard pushbutton
- Outputs with electronical reversible short-circuit and overload protection
- Change of delay time with screwdriver direct at the sensor
- Change of lighting intensity with screwdriver direct at the sensor
- Halogen free polycarbonate plastic housing
  - Controller with integrated light and presence sensor, DALI output channel
- Presence detection via passive IR element
- Light control with app connection via Bluetooth
- Light control via smart phone
- Adjustment of all settings via smartphone
- Individual activation and deactivation of light and presence sensor
- Function indicator with three color LED
- Various shutters included for different detection areas

Hard wired system Suitable for up to 20 drivers Controlled by iOS 8.4 and Android 4.x app (free download) Password protection for user and configuration APP access Daylight dependant regulation and presence dependant control of light Can be used with an external momentary switch Detection range typically 7.0m diameter with a mounting height of 3.0m **Usage suitability – corridors, small offices, classrooms, conference rooms** User / Professional commissioning\*

# **Basic Dim**

The three most important criteria that modern lighting management systems have to meet are visual comfort, suitability to the tasks being performed and energy efficiency – compactDIM supports all these. With just a small addition you can turn your luminaire into an intelligent system. Compact and with low standby losses, it will then save you energy.

#### DALI TOUCHPANEL BASIC Touchpanel

DALI TOUCHPANEL BASIC performs a variety of lighting tasks in small and medium-sized rooms such as

offices, hotel rooms, classrooms and meeting rooms and is very easy to use. Luminaires can be switched

on and off, dimmed and grouped via the control panel with six individually assignable keys. DALI TOUCHPANEL BASIC is available in the four layouts COMBINATION, GROUP, SCENE and TUNABLE WHITE.

Another advantage is the ease of commissioning by means of a DALI connection. What's more, lighting

scenes can be saved and colour temperatures can be set. Using simple rotary switches, up to 15 lighting

scenes and 14 groups can be defined. Another benefit is simple commissioning thanks to DALI connection

and four preprogrammed types. .

#### basicDIM wireless – introduction to intuitive light control

Integrated in the luminaire, the basicDIM wireless module allows anyone to have convenient, wireless interaction with luminaires, including configuration, commissioning and lighting control by the user. Simple control using Bluetooth smart can already be observed from the compact user interface. Its eight buttons enable switching on and off, dimming, scene selection and the setting of the colour temperature and light proportion. The lighting control can also be operated using an app.

> BasicDIM wireless module Wireless controllable with Android/iOS smart device Forms a wireless communication network with up to 127 nodes Commissioning via mobile phone / tablet device Individual / group control via app BasicDIM wireless user interface Battery powered wireless wall switch 4 scenes Dim up / down **Usage suitability – Corridors, small offices, classrooms etc** User / Professional commissioning\*







<sup>\*</sup> Professional commissioning at daily rates.

## **Comfort DIM**

#### Properties

- Colour touch screen (7")
- Background lighting with RGB LEDs
- User-friendly application software
- With DALI system functions of addressing and grouping
- USB and ethernet interface
- Can be remote-controlled via standard internet browser or em-LINK software (available at www.tridonic.com)
- Up-/downloading of the emergency lighting test report and firmware via USB or Ethernet
- 5-year guarantee

#### Lighting management

- Lighting management system with up to 128 DALI devices
- Start-up, control and operating unit
- Manual dimming and switching
- Manual scene recall or timed scene recall with a maximum of 99 sequences
- Tunable White (colour converter) control (colour temperature along the Planckian Locus)
- Weekday-controlled sequence programming (schedule)
- User-defined labelling of scenes, groups, sequences and schedules
- Optimised mode for RGB coloured light management

#### **Emergency lighting management**

- For small and medium emergency lighting systems with up to 120 DALI emergency lighting units (60 for each DALI line) per DALI x/etouchPANEL 02
- 2 addresses for external status controls
- Function and endurance tests can be conducted in accordance with local regulations
- Supports patented addressing function ("EZ easy addressing")
- Individual labelling of groups and devices
- Calendar-controlled function and duration test
- Interconnection of up to 25 panels for bigger installations possible



DALI x/e-touchPanel O2 Lighting and emergency lighting xcontrol system



DALI touchPanel O2 Operating and control unit

Hard wired system DALI control system with 2 mode options Lighting management in mains mode Emergency lighting mode Needs an external DALI power supply Commissioned via on screen prompts and addressing tool (article number 89899836) **Usage suitability – Medium / small offices, classrooms, lecture theatres, residential homes** User / Professional commissioning<sup>\*</sup> Lighting Management & Modular Wiring

# **DALI** Basic

The DALI RC BASIC SO is a DALI control unit for use with your LMS. With a maximum power input of 9 W, it is suitable for up to 64 DALI electronic control gears and can be expanded using DALI repeaters. It allows you to control up to 4 lighting scenes (one under daylight-dependent control) and 4 freely-assignable lighting scenes (3 under daylight-dependent control), has 3 inputs for up to 6 light or presence sensors and 5 inputs for startup/operation. It also gives you presence detection with user-definable delay (1...30 min) and has an integrated floating fault contact for lamp fault reporting. Great for conference rooms and office lighting, DALI RC BASIC SO lets you dim or switch all the luminaires in the system, and is set up without software.

#### Product features

- DALI control unit
- Presence detection with user-definable delay (1...30 min)
- Integrated floating fault contact for lamp fault reporting
- Control of up to 4 lighting scenes (one of which under daylight-dependent control)
- Control of up to 4 freely assignable lighting scenes (3 under daylightdependent control)
- 3 inputs for up to 6 light or presence sensors
- 5 inputs with make contacts for startup/operation
- Maximum power input: 9 W

#### Product benefits

- All the luminaires in the system can be dimmed or switched
- Setup without software

éééé		Resat	
Construction of the second sec	Room Controller Typ: DALL RC BASIC SO	4 J <sup>4</sup> 1- ● -32 Min Baoteb ● Sanden ● Fabler ● C €	

The versatile DALI LS/PD BASIC is a light and presence sensor, suitable for luminaire installation and ceiling mounting. It can be used purely as a light sensor or purely as a presence sensor. Ideal for use within light fittings, in offices and conference rooms, DALI LS/PD BASIC can also be separately mounted, and is set up without software, making it a simple but helpful addition to your light management system (LMS).

#### Product features

- Light and presence sensor for luminaire installation and ceiling mounting
- Can also be used purely as a light sensor or purely as a presence sensor



Hard wired system Din rail mounted Can be used in conjunction with sensors to detect presence and ambient light regulation Can be used with DALI repeaters to extend the system **Usage suitability – Medium / small offices, conference rooms, classrooms, lecture theatres, residential homes** User / Professional commissioning\*

## ConnecDim

Tridonic unveils connecDIM, an easy-to-integrate light management system solution for industry and commerce. The system, comprising connecDIM Gateway and connecDIM Cloud, combines cost efficiency and user-friendly design with decentralised light monitoring and control options from anywhere in the world.

#### **Product features**

- Independent lighting control for up to 256 DALI gears on 4
   DALI lines
- Can be expanded by connecting multiple gateways on the same network
- Cloud based web interface for configuration and monitoring
- Simple setup via mobile App or Cloud service
- Status LED for indicating the operating status
- Connects to Tridonic DALI Interface RS232 PS/S
- Works with Tridonic DALI comfortDIM portfolio
- Cross DALI line control with DALI XC, DALI touchPANEL and DALI MSensor
- Freely programmable daily scheduling with calendar function
- DALI emergency lighting unit test scheduling and monitoring via the connecDIM Cloud
- Cloud based maintenance, e-mail alerts, predictive warnings and visual monitoring
- Open JSON-RPC TCP control protocol for linking to building automation systems
- 5-year guarantee

#### Step No. 1

Step No. 2



Set up your DALI network with sensors, pushbuttons, touchpanels and DALI devices all connected to a DALI line.



Install connecDIM gateway

interoperation between all DALI standard devices. Enables wireless control through a standard

wifi-router with a iOS or Android

device. Once connected to the internet, it uploads all lighting data to the connecDIM Cloud.

inks the DALL lines and



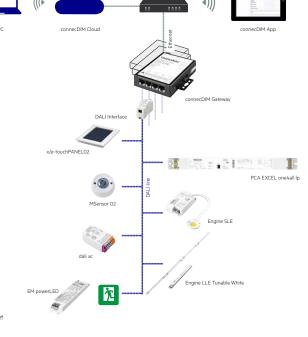
Step No. 3

Download your matching App for tablet or smartphone connecDIM Lite: App made for users to control their individual lights within the wifi-network. connecDIM Architect: App made for commissioning used by electrician/ integrators and for maintenance. Step No. 4

#### Log-in to connecDIM Cloud (optiona) Online 24/7 worldwide available service through an internet browser on Windows or Mac. Monitoring site remotely. Schedule superbranisation

Monitoring site remotely, Schedule synchronisation, Maintenance, Emergency lighting tests, Energy Monitoring, Offsite Backup, Global Management & Reporting





Hard wired system Cloud based for global monitoring of multiple sites Emergency lighting monitoring and test reporting Energy monitoring down to single light points Initial cloud system costs and yearly gateway costs Usage suitability – Large offices, schools, manufacturing plants, warehousing, healthcare, supermarkets, sports halls, public buildings Professional commissioning\*

# **DALI Pro**

Enjoy pinpoint control of your lighting system straight out of the box with this comprehensive control unit for light management systems. The DALI PRO CONT-4 arrives preconfigured, so there is no start-up procedure, but when you do want to change the settings, the process is straightforward. The unit acts as controller for four DALI lines, and up to 50 pushbutton/sensor couplers can be integrated. Its many useful features include an integrated clock for event control, a weekly scheduler and a e-Motion™ Corridor with preprogrammed settings. You can quickly and easily create lighting scenes and sequences, which the unit can store and recall. The DALI PRO CONT-4 is highly reliable, with a mains interruption buffer battery, and if you need to control large luminaire groups, this unit can be particularly good, since it can switch and dim up to 256 DALI ECGs and control up to 4 x 16 groups. You may find it useful in many areas, including offices, conference rooms, production and assembly facilities, classrooms and sports halls, and of course it integrates with other elements of OSRAM's DALI professional lighting systems, to let you create the light management system (LMS) that best meets your needs.

#### **Product features**

- Interconnection of up to 4 DALI Professional control units
- Configuration via LAN/WLAN/USB
- RGB color sequences
- · Time-of-day-dependent color temperature adjustment (human centric lighting)
- Controller for 4 DALI lines
- Up to 50 pushbutton/sensor couplers can be integrated
- Integrated DALI supply
- 4 freely programmable switchover relays; load contact: 4x 5 A
- Daylight-dependent and/or presence-dependent or manual control
- Up to 4 x 16 groups can be controlled
- Integrated clock for event control
- Weekly scheduler
- Connection via push-in terminals
- Control of lighting scenes and sequences (recall/store)
- Housing for series installation
- Length of the DALI control cable: up to 300 m

#### Product benefits

- Easy and intuitive control via App
- Control up to 1024 DALI ECGs via LAN interconnectivity
- Plug and Play preconfigured for instant use without any startup procedure
- Mains voltage interruption buffer battery
- All the luminaires in the system can be dimmed or switched
- Simple creation of scenes and sequences
- Switching and dimming of up to 256 DALI ECGs per DALI Professional control unit
- A setpoint for daylight-dependent control can be stored by double clicking
- Sensor integration in DALI
- Remote access/remote maintenance





Hard wired system Din rail mounted Can be used in conjunction with sensors to detect presence and ambient light regulation Interconnection of up to 4 DALI professional control units Up to 50 push-buttons / sensors Easy control via App iOS and Android Graphic configuration with windows user interface Usage suitability – Large offices, schools, manufacturing plants, warehousing, healthcare, supermarkets, sports halls, public buildings Professional commissioning\*

## **ENCELIUM**

An advanced, intelligent light management solution for commercial spaces seeking to optimize energy savings, streamline operations, improve occupant experiences and participate in the Internet of Things (IoT).

The Award-Winning ENCELIUM® EXTEND Networked Light Management System is a flexible and powerful way to monitor, analyze and manage interior and exterior commercial lighting spaces. It is the only lighting control system that can gather data from a range of lighting devices to adjust lighting usage with changing building and occupancy needs and requirements making any building fit for the future.

#### Features & Benefits

- 360 degree, 3D graphical control and reporting
- Control one fixture or an entire campus
- Scales from a single control server
- Utilizes wireless and wired devices on the same system
- Can integrate into other BMS systems via a BACnet® interface
- Supplier agnostic control is compatible with 3rd party components
- Simple installation and design
- A handful of components do all the work
- Easily meet 90.1.T-24, IECC, LEED, Green Buildings



The ENCELIUM EXTEND Networked Light Management System and Polaris 3D Software makes it possible to monitor, control and adjust your entire lighting network indoors and outdoors all from a single software platform.

This premier networked light management system enables building owners and facility managers to eliminate duplicate lighting control systems thus saving time and money to maintain and train staff on two different systems.



The Polaris 3D® software (displayed on the screen) enables end users to quickly identify, analyze and adjust their lighting network needs all from a centralized location.

The ENCELIUM® EXTEND Networked Light Management System (LMS) is designed for commercial spaces that seek advanced features and functionality including:

- Web-accessible system control
- Advanced energy reporting features and other data analytics
- Building automation system
  integration

Hybrid wired / wireless system
EM monitoring wired
Web access and possibility of remote maintenance
Real-time light control, analysis of energy consumption
Emergency lighting monitoring and test reporting
Energy monitoring down to single light points
Initial setup cost, no on-going costs.
Usage suitability – large offices, schools, manufacturing plants, warehousing, healthcare, supermarkets, sports halls, public buildings
Professional commissioning\*

# **e-Motion™ Cloud** Wireless Lighting Controls

Wireless Lighting Control offers end-to-end Wireless lighting control solutions Our system is installed in over 1,500 sites across the UK and Northern Europe

Our system is installed in over 1,500 sites across the OK and Northern Europe Regional shopping centres, europe's largest automotive parts distribution centre, the largest multi-story car park in the uk, tech companies' offices (4,000+ luminaires per site), a chain of 400+ pet stores, police stations, the national bank, the largest global online retailer's distribution centres (5000+ luminaires per site), global tv headquarters, offices of the most prestigious car manufacturer, government offices, universities, private and public schools, multistory car parks of two global car-park operators, port authorities, a global chain of coffee shops, London head office of top 5 chartered accountants (6,000+ luminaires), UK's largest airport, front and back of house lighting at several regional shopping centres, etc.

#### Why Wireless Lighting Control?

- Wireless Lighting Control which leads to reduction in cost, power consumption and carbon footprint.
- All products confirm compliance with Radio Equipment Directive, RED 2014/86/EU and The Luminaire Standard (BS 60598).
- After years of successful installations including blue chip clients with over >5000 devices per installation.
- Emergency lighting tests are run automatically and reports generated avoiding the need for manual recording of results.
- Each Wireless lumianaire is programmed to operate using drag and drop menus.
- No complicated electrical installation.
- · Change individual luminaire operation to improve light usage without the need to alter any wiring.
- No limit to the number of luminaires that can be controlled.

#### OFFICES

The requirement for Lighting Controls in the office comes from many sources, building controls regulations, environmental standards, the desire to save energy and sometimes the desire to be seen to be saving energy. Modern controls with tuneable white light can enhance rather than detract from the office environment and have become an essential part of the wellbeing environment

#### WAREHOUSES & INDUSTRIAL

Industrial premises offer the shortest investment payback times from lighting controls. The luminaires are more powerful and so the savings per luminaire are greater while the on-cost of controls per luminaire is the same.

#### RETAIL

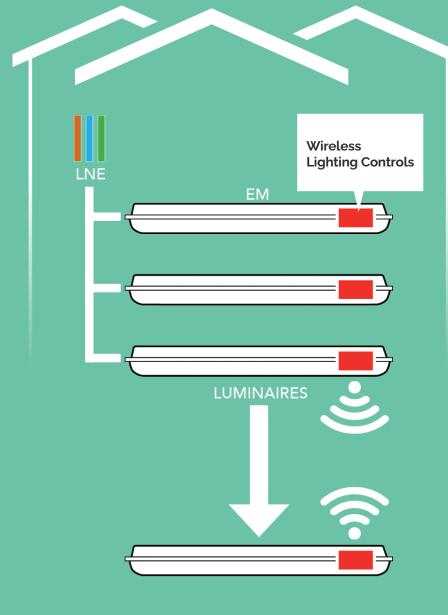
Control systems for retail chains are all about offsite management and control. The lighting controls requirement behind the scenes is like other commercial premises but the front-of-house requirement is very different. The visible lights should never switch off during trading hours, else the store looks closed.

#### CAR PARKS

Lighting Controls in car parks pose a set of challenges which arguable can only be solved with wireless controls. An optimum solution needs almost as many overlapping groups as the number of luminaires. Previous attempts to solve this with DALI have been complicated and, even where they appear to work at the outset, fall into disuse after the first attempt at any modifications or maintenance.



# **e-Motion™ Cloud** Wireless Lighting Controls



### **Core System**

- Every luminaire will have a wireless controller and a presence sensor.
- The only connections to the luminaires are Live, Neutral and Earth.
- This includes the emergency luminaires which no longer need a separate switched live.
- One Luminaires per zone might have a daylight sensor.
   Wireless scene-plates might be added for scene-setting.
- That's it! There are no remote sensors, Lighting Controls Modules, network controllers or head-end PC onsite.

### Optional Cloud Monitoring

- Internet connectivity is not required nor used for lighting controls.
- The system can be linked to the internet by adding a Collator.
- The online portal can now be used to monitor and control emergency lighting, energy usage, occupancy heatmapping and e-mail alerts for maintenance



#### Commisioning

- Import, sketch or photograph each zone. Wirelessly identify fittings and drag onto the drawing.
- Assign and edit profiles.
- Link fittings into unlimited overlapping groups for occupancy daylight and scene controls



## e-Motion<sup>™</sup> Corridor





ASD has a wide range of dimmable luminaires that are suitable for use with ASDs' e-MOTION systems.

This system can control a range of lamp types including 2D, compact fluorescent and T5 circular and now LED, a system unique in the LED marketplace to ASD lighting.

Ideal for stairwells and corridors where lighting is required to be turned on 24/7 but may only be actively used for a small proportion of that time. For example, hotels etc. On emergency or secondary stairwells or healthcare corridors where luminaires are required to be turned on but in reality these areas are rarely used.

### e-MOTION Corridor – What is it?

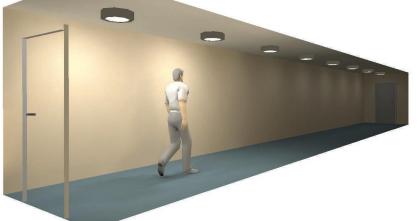
The 'e-MOTION Corridor' system is a simple lighting control system that can perform in small or large premises and has the benefit of complex functionality if required, whilst remaining very simple to install and maintain.

The 'e-MOTION Corridor' system is energy efficient and economical and can give savings of up to 70% energy use in 24 hour applications.

The system works by using specialist DALI control gear which can be programmed to meet the customers specific requirements.

The ASD Lighting 'e-MOTION Corridor' system uses integral Microwave sensors which detect movement. These are fully concealed so that unlike much of the competition, the fittings look completely normal on the outside and do not have any protruding sensors.

The system is modern, highly effective technological approach to conserving energy for situations where the area is used as a thoroughfare and in all reality the lighting is only required for a small proportion of time.



Corridor starts at its pre-set dimming % (eg 10%). Once the sensor picks up movement the fittings instantly come up to full brightness.

As you move along the corridor and the activation time elapses on the first fittings they dim back down to their pre-set dimming % (eg 10%).

## e-Motion<sup>™</sup> Day Light



Lighting control systems and lighting management systems have established themselves as permanent features of modern lighting solutions and provide the basis for daylight-dependent lighting.

Most commonly used to dim the row of luminaires closest to the windows in open spaces to create a defined constant light value along the window row, or possibly further into an open space if daylight penetration comes from skylights / roof windows.

The system uses digital DSI Ballasts and a light sensor. If the available daylight level falls, the luminaires are automatically turned on at a pre-set value.

- Intelligent system with some programmability which remains simple to install.
- Savings of up to 30% can be made in energy use.
- Presence / absence detectors can be incorporated into the system to take full advantage of any further energy savings to be made.

Tried and trusted DSI technology (Digital Serial Interface) and the DALI interface protocol (Digital Addressable Lighting Interface), offer application-specific flexibility for both small and extensive lighting systems. The modular DIM system is designed primarily for controlling groups of luminaires in large enclosed spaces.

e-motion DAYLIGHT provides an easy-to-use cost-effective constant lighting system. The sensors detect the available ambient light and use this as the basis for controlling the lighting system to achieve a defined constant light value. This set-point (fade value) can be temporarily adjusted and the system switched on or off via DSI signals.

DSI is the traditional digital control. The intelligent functions of DSI lighting management include programmability, the option of common routing of the control line and mains power supply, and interference free communication.



The basic components needed are a DSI room sensor and dimmable control gear for the various light sources. With such an array of products any lighting task can be covered.

Tailored to individual requirements, the intelligent lighting control systems and lighting management systems from ASD are based on the versatility of the digital interface and the self-detection capacity of the control signal.



## e-Motion<sup>™</sup> One Touch





A simple to install and cost effective system for switching and dimming of up to 25 ballasts (Digital H.F regulating). A system normally associated with single rooms. By the use of a push to make switch, a single press will turn the luminaires on or off. Pressing and holding the switch will dim or brighten the lamps.

The e-motion ONE-TOUCH provides a simple but ingenious way of switching and dimming fluorescent fittings from ASD, all with a simple conventional mains voltage switch. In a direct comparison with other cost-effective control methods, it not only has a distinct cost advantage (a switch is cheaper for example than a 1...10 V potentiometer) it also offers numerous intelligent functions:

- Silent operation.
- A wide range of ASD luminaires are suitable for this system.
- Simple, cost-effective and extremely user-friendly.
- Powerless switching via the control interface.
- Two way or multi-position switching is possible.



#### Multi-functional switch

Different functions are performed depending on the current operating status and how long the switch is pressed. A short press on the switch switches the connected ballasts on or off depending on their current status. Holding down the switch will fade the connected ballasts up or down, with the direction of fade changing each time the switch is pressed.

The system can be synchronised after setup by holding down the switch for more than 10 seconds. Synchronisation causes the lighting level to jump to 50%.

#### Simplicity itself

As in the case of changing from DSI to DALI control, there is no need to rewire the luminaire when changing to e-motion ONE-TOUCH control. All you have to do is integrate a bridge on the luminaire terminal from the neutral conductor to an interface input (D1/D2) and connect the phase to the other interface input.

#### Technical Specification:

- Any number of conventional switches.
- The control signal corresponds to the mains voltage.
- Fade rate 2.55 sec. (1 % to 100 %)
- Unlimited length of the control line
- Control of a theoretically unlimited number of ballasts (recommended: 25 ballasts per system).
- Dimming possible via a second phase.

## e-Motion<sup>™</sup> Microwave



The interior range from ASD now offers the option of including the latest state-of-the-art sensor technology. High-frequency sensors can be invisibly concealed inside a number of our attractive luminaires. The sensor instantly responds to the tiniest movement, regardless of temperature and will automatically switch "ON" the light.

#### Integral HF "Microwave" Sensor

The system uses remote or integral microwave detectors which upon sensing movement switches all luminaires on the system up to full output.

When no movement is detected, after a preset time the system turns off after activation time elapses.

- Fully adjustable settings to suit any installation.
- Takes full advantage of energy savings. Can be up to 70% on a 24 hour application.
- A wide range of ASD luminaires are suitable for use with e-motion **MICROWAVE** sensor.

ASD HF Microwave sensors are designed specifically for indoor spaces, such as stairwells, corridors or bathrooms. The innovative lights can be either wall or ceiling mounted. HF Sensor Lights ensure efficient, money-saving light management as well as added convenience and safety in the home, commercial premises, administration centres and other buildings.

The intelligent fitting is just as easy and quick to install as conventional luminiares - and there's no need for separate switches or motion detectors.

#### Benefits at a glance:

- Safety, convenience and energy saving because light comes "ON" automatically.
- Extremely rapid response time.
- Reliable, all-round detection regardless of ambient temperature and direction of movement.
- Reach, light threshold and "ON" time adjustable to suit needs.
- Rapid installation: Sensor and light = 1 connection.











1mW

Response threshold can be set from 2 to 2000 lux to suit individual needs



wall mounting

Detection zones for

ceiling mounting.



stay "ON" for any time between 5 sec. and 15 min.

	Voltage	230 – 240V 50 Hz
HF System		5.8 GHz (responds to the tiniest movement regardless of temperature)
	Angle of coverage	$360^{\circ}$ with $160^{\circ}$ angle of aperture
	Transmitter power	Approx 1mW
	Reach	1 – 8m infinitely variable
	Max. area covered	Approximately 50 m2
	Time setting	5 sec - 15 min
	Twilight setting	2 – 2000 Lux
	Permanent light	-
	Brightness control	-
	Special features	Other loads can be connected (100 VA max, e.g. bathroom / WC extractor fan or additional light)

## e-Motion<sup>™</sup> Scene





Infra-red scene setting system provides 3 program scenes suitable for a variety of applications such as conference rooms, meeting rooms, lecture theatres, or any space where a selection of lighting scenes may be required.

Requires the use of dimmable ballasts, an infra-red receiver and a hand held controller to create three separate lighting scenes, with an over ride facility.

The control module is connected using a two wire bus system taken to each luminaire. The infra-red receiver is then connected to the control module.

Using the hand held programmer, all the required lighting scenes can be set up simply and quickly.

Hard wired switches can be incorporated into the system at any position.

The result is a professional solution that is easy to handle, simple to install and extremely cost-effective.

A wide range of ASD luminaires are suitable for use with e-motion SCENE.



### e-Motion<sup>™</sup> Emergency



The intelligence of individually addressable EmPRO emergency lighting unit is now available for small emergency lighting systems. This is thanks to the new e-PANNEL, which has been developed with userfriendliness as an absolute priority.

Systems are available to connect up to 60 or 120 emergency lighting units. Three addresses are reserved for relay modules so that different operating conditions can be indicated by signal lamps.

The e-PANNEL is synonymous with simple configuration, with high-quality monitoring and automatic triggering of all the emergency lighting tests prescribed in the relevant standards. These include the check on the operability of modules, batteries and lamps, the annual service life test and the commissioning check after installation in accordance with the self-test standard as per IEC 62034.

An algorithm automatically assigns all the addresses to six test groups so that the prescribed tests on the emergency lighting units start at staggered times. This ensures that there are always enough luminaires operational at any one time should there be a mains failure. A perfect example of intelligent functionality.

Fault messages are shown on the e-PANNEL display, stored in memory and maintained as a log book. The data can be read out via an infra-red link and further processed (archived for example), burnt onto CD or printed out.

#### e-PANNEL





PANNEL EM PRO / PC PRO EM PRO EM PRO

PC CFL COMBO-CONECT



#### **Snap in Connectors & Modular Wiring System**

Fast, reliable and already tried and tested millions of times, the future of electrical connection clearly belongs to the snap-in connector. Modular wiring systems have the right solution to satisfy any practical requirement in contemporary building applications.

> In the modern age where time is money, modular wiring systems are becoming more and more essential to keep installation costs down, this allows all parties to maximise their efficiency.

From Warehouses to Office Blocks, Football Grounds to Schools, modular wiring systems are being used more and more often and with more innovative fittings utilising inbuilt connectors it has never been easier to use.

ASD Lighting works very closely with all major suppliers of modular wiring and connectors meaning we can supply and specify any make and model as per the clients requirements, these include;

> Wieland Metway

Wago



Below is a brief description of the components available;

#### Male and female connectors

In 2, 3, 4, and 5 pole with 2 conductor entries per pole and time and cost saving Cage Clamp S connection which allows looping through of wiring. The connectors have unique coding and colours and are premarked.

#### Snap in connectors

Snap in connectors (2, 3, 4, and 5 pole) with integrated locking device make feedthrough connection easy. Direct earth connection to a metal enclosure is available as an option. More lighting manufacturers are fitting these as standard.

#### T-pieces

In 2, 3, 4, and 5 pole, these make the connection of lighting fixtures easy, without using a junction box. The through wiring is simply plugged in each side.

#### Distribution connector

This can act as a star distribution point, in a ceiling installation for example, with leads connecting each side. Mounting options are available.

#### Distribution connector with phase selector

The extra feature allows equalisation of phase loading in a lighting circuit for example. Simple movement of the white lever selects the chosen phase.

#### Six pole strain relief

This allows simultaneous use of two 3 pole connectors to make a 6 pole connector, essential in lighting control applications.

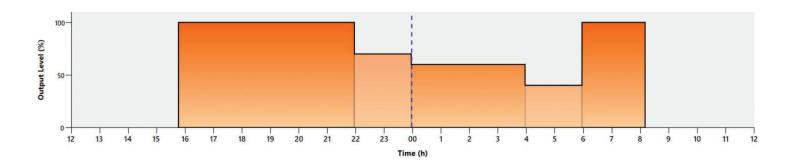
#### Clean earth

For use in clean earth and high integrity earth applications only, their different coding and colour ensure mismating is not possible. Available in 4 and 5 pole, with either 2 or 3 earth connections and with 2 current carrying poles.

For more information or a Modular wiring design using ASD Lighting products please contact the lighting specification team. specifications@asdlighting.com

### **Step Dimming**

Reference Sc	hedule						
Step	1	2	3	4	5	6	
Output Level	100	70	60	40	100	0	%
Time	ON	22:00	00:00	04:00	06:00	OFF	hh:mm







ASD Lighting provided a modern refresh on this general district hospital based in Dewsbury, providing energy savings inside and out.

Luminaires used:

- Highway Diamond™ Elite
- Horizon LED
- Corrido LED
- Melody LED

- Artemis Uplight
- Rhapsody PLUS LED
- Storm LED













ASD Lighting Illuminates Raynesway Junction utilising the Highway Diamond<sup>™</sup> Elite<sup>™</sup> range.

- 56 x Midi Highway Diamond<sup>™</sup> Elite lanterns replaced 56 x 250W SON lanterns.
- 4 x Highway Diamond<sup>™</sup> Elite lanterns replaced 4 x 60W Cosmo lamps.





All of this is making an energy saving of 38,500kW converting to LED, with a whopping cost saving of £4150.00 per annum. That's 61% Energy savings made.

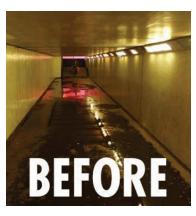












We are delighted to have participated in transforming the bleak Marylebone Road Subway in to a Wonderpass. Gone are the wet puddles and bleak lighting. Say hello to the light, and colourful Wonderpass. Thanks to our Invincible fitting, you need never worry about the dark again.

The Invincible was the best choice for this project, not only does it earn its name by being tough and vandal resistant, but it also gives out just the right amount of light and is economical to run.

The Wonderpass was commissioned by Local business improvement district the Baker Street Quarter Partnership and funded by Transport for London and Westminster City Council.

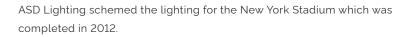
Penny Alexander, chief executive of the Baker Street Quarter Partnership, said "The Wonderpass provides the magnificent fanfare welcome this area deserves celebrating its fascinating past and showcasing our great attractions."





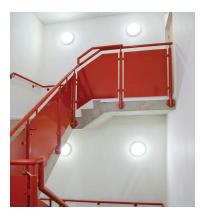






The environments that were schemed -

- Surrounding car park / footpath & external wall Highway LED / Horizon / Litehouse.
- RUFC shop Skybay LED / Safe Route / Pizza.
- Hall ways / Reception Atom LED / ZIP / Harmony Halo.
- Internal rooms and viewing boxes Atom LED / ZIP / Storm / Liteglide 7.
- Pitch surround (Not flood lights) Harmony / Harmony Halo / Stealth.







A Bristol branch of a popular banking company tasked ASD Lighting with bringing light to their office space. Realising their vision for an ideal office lighting solution we used our Rhapsody LED fitting.

Creating a comfortable environment with the minimal amount of glare on computer screens was key, which the Rhapsody LED's soft lighting achieves easily. Lessening the glare reduces eye strain for employees and other side effects such as headaches or migraines.

ASD Lighting and the bank are both happy with the final result.







ASD Lighting provided the lighting solution for the Auchterarder Community School in Scotland as one of our latest projects.

For this we decided our versatile Solas Eclipse would be perfect.

Location: Auchterarder, Perth and Kinross, Scotland.









ASD Lighting designed and supplied the street lighting for Coppice Gardens.

Customer: Rotherham Council.

Location: Greasbrough, Rotherham, South Yorkshire.

Fittings Used: Highway Diamond™.









Kyle Academy, a school in Ayr, Scotland specified ASD Lighting as their lighting suppliers for a recent project. We fitted out their Design Technology, Metalwork and Woodwork rooms with our luminaires.

For the Design Technology room we used our Rhapsody Plus, which is ideal for office lighting and areas with display screen equipment.

For the Metalwork and Woodwork rooms we used our Highlite Micro luminaires. These were better suited to the lower mounting height of the warehouse-style ceiling than our Highlite.







Busy Interchange next to popular shopping centre Meadowhall based in Sheffield, South Yorkshire, receives full lighting upgrade with energy saving lighting controls.

- 20m High mast fitted with Midi Highway Diamond<sup>™</sup> Elite 76 LED 700mA F0 Optic to achieve an average of 20 lux.
- All platforms fitted with Highway Diamond<sup>™</sup> Elite with PIR non-occupancy dimming.
- Designed to 20 lux min at platform edge in line with DOO Requirements.
- Stealth Elite wall pack mounted on building perimeter.
- Secondary Station entrance/exit now used substantially more by the public due to the enhanced lighting provided by the Highway Diamond<sup>™</sup> Elite Range.
- Waiting area is lit up with the ZIP LED Downlight and Midi Pizza using e-Motion
  Non-occupancy Dimming.
- Melody LED e-Motion™ Non-occupancy 10% Dimming in ticket office.





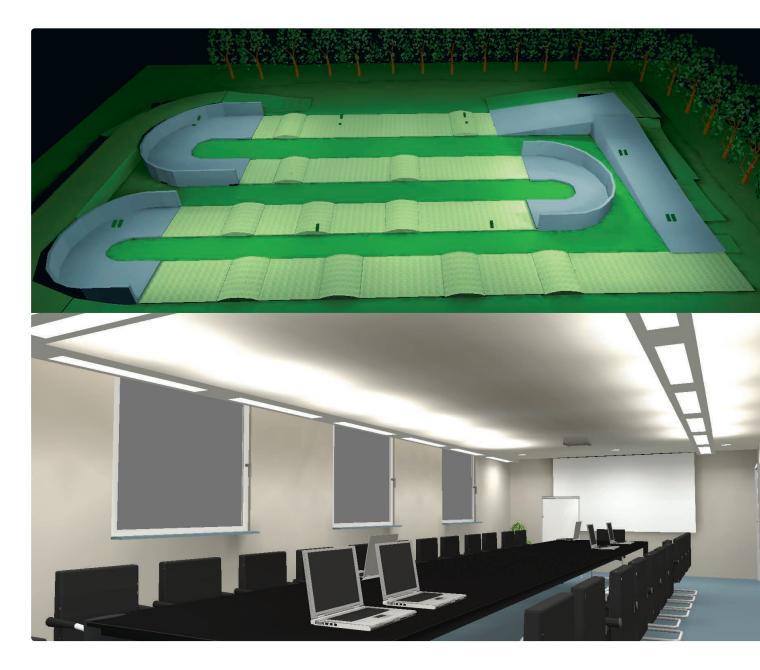




Grimsby train station received a full lighting upgrade, improving safety and reducing energy costs.

Luminaires used: Stealth. Highway Diamond™ Elite.





### Professional lighting design service.

Lighting or the design of lighting has been widely described as a mixture of both art and science. If upon entering a space the lighting looks and feels 'right' to the observer, the chances are that it has been correctly designed, as complaints are normally only raised if the installed lighting system is seen as too bright, too dim or causes glare issues for occupiers of the space. There are a large number of British/European standards; Codes of practice; professional lighting guides and industry specific documents that apply or give guidance for the lighting of any Internal, External, Emergency or Roadway lighting system. These documents are organic and are constantly updated to reflect new ideas or technological advancement.



Competent Lighting Designers are aware of the various current lighting publications and can advise clients on a wide range of lighting design considerations as required, as well as having an element of design flair to help provide a pleasing lit environment.

ASD Lighting are proud to have a team of fully trained and competent lighting designers that can deliver an excellent service to clients such as architects, consultants, specifiers, installers and end users.

For further details please contact the Lighting Design department on:

### T: +44 (0) 1709 374898 E: spec@asdlighting.com

Relevant groups bodies and organisations involved in lighting

Including but not limited to:

#### Society of Light and Lighting Institute of Lighting Professionals

Leaders in the field of professional Lighting. Both organisations have a wide portfolio of lighting design guidance available for almost any internal or external space, or emergency lighting. Members are Professionals who are involved in the lighting of a wide range of projects.

**C.I.E. (International Commission on Illumination).** Perform fundamental research into lighting metrics and measurement.

L.I.A. (Lighting Industry Association). Provide data to their manufacturing members.

B.S.I. (British Standards Institution) / Lighting Liaison Group – Develop product performance specification for products and the spaces they will be installed.
A wide range of British Standards are available for the lighting of most interior or exterior spaces. Linked with the I.E.C. (International electro-technical commission) for International co-operation.

**H.E.A. (Highways Electrical Association)**. Supports organisations involved in the technical delivery of streetlighting.

**U.K. roads liaison group / U.K. lighting board**. Provide the U.K. Government with strategy and policy advice on street lighting.

A.D.E.P.T. Have a lighting group for local authority based input into lighting issues.

There are design guidance or British standard publications for almost every space you can think of, including workplaces of all kinds; Industrial spaces; Offices; Sports facilities; Residential developments; Places of Worship; Museums and Art Galleries; Education premises; Outdoor spaces and Emergency Lighting for all scenarios.

As well as the documents mentioned above, there are specific design guides that are used within organisations such as Defence projects, Hospital buildings and Railway sites amongst others which are specific to their particular needs. Local Authorities may have particular local requirements for lighting within their authority.

### **IP** Ratings

The IP (Ingress Protection) rating given to an enclosure states the degree protection it offers by means of two digits. A summary of these is shown below; for a more detailed definition see IEC 529:1989, BS EN 65029: 1992.

#### First Digit

The first digit covers protection against entrance of solid objects, which includes hands and tools such as screwdrivers. At the lowest of seven levels 0, no protection is offered, either of the equipment itself from damage by intrusion or of a person contacting live or moving parts. At the highest, 6 there shall be no entry of dust.

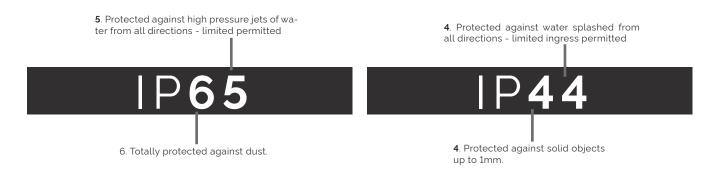
- **O** Zero protection
- **1** Protection against solid objects e.g. accidental touch by hands.
- 2 Protected against solid objects up to 12mm e.g. Fingers.
- **3** Protected against solid objects up to 2.5mm e.g. Tools and Wire.
- **4** Protected against solid objects up to 1mm e.g. tools, wires and small wires.
- 5 Protected against dust limited ingress no harmful deposits.
- 6 Totally protected against dust.

#### Second Digit

The second digit cover the degree of protection against the entry of water, on a progressive scale. For example, number 1 indicates that dripping water shall have no harmful effect, and number 6, that water projected in powerful jets against the enclosure from any direction shall have no harmful effects.

O Zero protection.

- **1** Protected against vertical falling drops of water e.g. condensation.
- **2** Protected against direct spray of water up to 15° from vertical.
- **3** Protected against direct sprays of water up to 60° from vertical.
- **4** Protected against water splashed from all directions limited ingress permitted.
- **5** Protected against low pressure jets of water from all directions limited ingress permitted.
- 6 Protected against strong jets of water from all directions.
- **7** Protected against the effect of immersion between 15cm and 1m.
- 8 Protected against long periods of immersion under pressure.



Example ASD fittings: Pizza, Mini Pizza, Mini Square, IP65 Square Example ASD fittings:

Circular Bulkhead, Lantern Range, Selected Harmony Lines

N.B. The letter X can be used instead of the first or second digit to indicate that tests have either not been made or are not applicable.

## **IK Ratings**

The IK (Impact Protection) rating given provides us with the level of protection the luminaire offers. As defined in the international standard IEC 62262 and IEC 60068-2-75, it classifies the degree of protection provided by enclosures for electrical equipment against external mechanical impacts.

IK Code	Test and Level of Protection Achieved
ΙΚΟΟ	Not protected
IK01	Protected against 0.14 joules impact. Equivalent to impact of 0.25Kg Mass dropped from 56mm above impacted surface.
IK02	Protected against 0.2 joules impact. Equivalent to impact of 0.25Kg Mass dropped from 80mm above impacted surface.
ІКОЗ	Protected against 0.35 joules impact. Equivalent to impact of 0.25Kg Mass dropped from 140mm above impacted surface.
IKO4	Protected against 0.5 joules impact. Equivalent to impact of 0.25Kg Mass dropped from 200mm above impacted surface.
IK05	Protected against 0.7 joules impact. Equivalent to impact of 0.25Kg Mass dropped from 280mm above impacted surface.
IK06	Protected against 1 joules impact. Equivalent to impact of 0.25Kg Mass dropped from 400mm above impacted surface.
IK07	Protected against 2 joules impact. Equivalent to impact of 0.5Kg Mass dropped from 400mm above impacted surface.
IK08	Protected against 5 joules impact. Equivalent to impact of 1.7Kg Mass dropped from 300mm above impacted surface.
IKO9	Protected against 10 joules impact. Equivalent to impact of 5Kg Mass dropped from 200mm above impacted surface.
IK10	Protected against 20 joules impact. Equivalent to impact of 5Kg Mass dropped from 400mm above impacted surface.

There are some circumstances where the luminaire requires even greater protection such as those used in custodial or public spaces. EN60068-2 does not allocate codes above IK10, the following have been extrapolated and designed in accordance with this testing.

IK11	Protected against 35 joules impact.
	Equivalent to impact of 10Kg Mass dropped from 350mm above impacted surface.
IK12	Protected against 15 joules impact.
	Equivalent to impact of 10Kg Mass dropped from 500mm above impacted surface.
IK13	Protected against 75 joules impact.
	Equivalent to impact of 10Kg Mass dropped from 750mm above impacted surface.
IK14	Protected against 100 joules impact.
	Equivalent to impact of 10Kg Mass dropped from 1000mm above impacted surface.
IK15	Protected against 125 joules impact.
	Equivalent to impact of 10Kg Mass dropped from 1250mm above impacted surface.
IK16	Protected against 150 joules impact.
	Equivalent to impact of 10Kg Mass dropped from 1550mm above impacted surface.

### **Retro Fit Gear Trays**

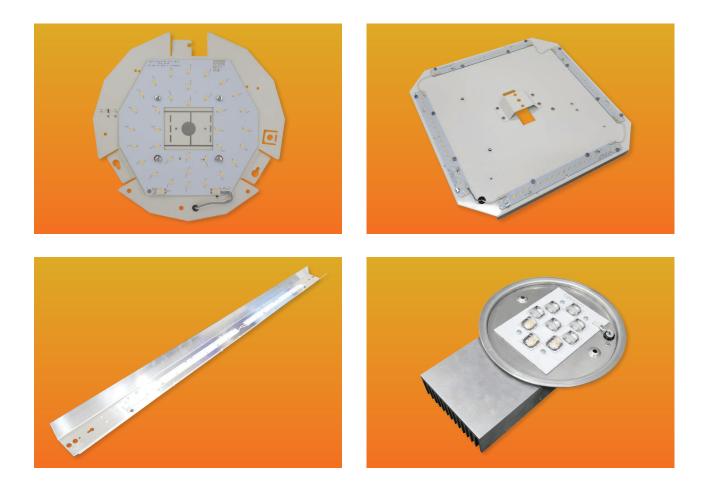
# We offer replacement gear trays for existing luminaires.

Please ask for more details.

If a light fitting is in good condition, then why replace it?

ASD Lighting provides a service to retrofit gear trays, they are fully customizable to fit any particular fitting.

Upgrade your lights to LED and save on energy while improving the output.



## Is your customer needing help funding their project?

### ASD could help with access to Grants, Financing solutions, and Tax relief initiatives.

Please ask for more details.

Some projects are eligible for help with financing from various government and private organisations aimed at reducing the country's electricity consumption and subsequent CO2 emissions including 'The Energy Saving Trust, 'Green Deal', 'Salix' and the 'Enhanced Capital Allowances' scheme.

This could be the extra incentive your customer needs to proceed with the project, whilst also putting you in a favourable position when tendering against other companies. ASD has a specially trained department that are able to offer help and support in applying for and acquiring funding or in some cases are able to apply on behalf of the customer.

To find out if your client is eligible for one of these schemes / grants and/or more information on energy and CO2 savings please feel free to contact our commercial projects department on

spec@asdlighting.com



SOLVING ENERGY EFFICIENCY FINANCE IN THE PUBLIC SECTOR









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