

SPEC BOOK

Bartett Arboretum

UKLED LIGHTING DESIGN

FITTINGS BOOK

DWG REF	QUANTITY	LEAD TIME	PRODUCT CODE	CONTROLS
EM01	1	5-7 working days	MAN/M3/ST/WH	Switched
EM02	1	5-7 working days	Q-SPOT-3W/3H/L	Switched
EX10	4	5-7 working days	LIX-S60-T3M-2700	Switched
EX12	10	2-3 working days	MF20-A2X-00GH-3	Switched
EX3	1	5-7 working days	GAZ-L40-36-D-2700	Switched
EX4	1	2-3 working days	FLS3-8G1S31	Switched
EX5	4	2-3 working days	ASS-S10-TP25-D-2700	Switched
EX6	3	2-3 working days	ASS-M23-TP25-D-2700	Switched
L04	10m	2-3 working days	FLSCB1-5G1CB12	Switched
EM03	1	5-7 working days	AV/HO/NM3/LI	Switched

Manta

The **Manta** exit sign range has been developed to provide a robust but attractive solution for exterior applications requiring effective safety signage.

Manta signs offer an excellent viewing distance of 30 metres via easy to change legends, a robust polycarbonate housing with ratings of IP65/IK08.

NB: Every sign is provided with a retro fittable second legend plate for ceiling or 'flagpost' wall mounted double sided installation.

The **Manta** Exit Sign features a robust polycarbonate enclosure and is supplied with 'clip-in' safety sign legend screens behind a clear cover. It also benefits from being supplied with a mounting bracket allowing ceiling or 'flagpost' wall installation options to the standard wall mount (single sided only).

The integral rechargeable batteries and charger/driver PCB are mounted in the central housing and the advanced wide angle white LEDs provide even and effective illuminance across the legend. Cable entries are provided into the back (single sided), top, and one side.

OPERATION

The **Manta** range is supplied as permanently Maintained operation as standard providing 3 hour duration. Clip-in pictogram legend panels complying with the EC Safety Signs Regulations and latest ISO sign requirements are supplied as a kit with each luminaire.

The bright and even luminance across the legend panel ensures maximum visibility in the event of an emergency.

Manta luminaires use the latest high efficiency, white LEDs, a 'smart' energy efficient battery charger/driver circuit and long-life Lithium Iron Phosphate batteries (LiFePO4).

NOTE: **Manta** luminaires can be equipped with **SurePath BLE** Bluetooth addressable Gateway modules. [See Data Sheet.](#)

The luminaires are designed to fully comply with the relevant parts of EN60598.2.22

DALI-2/Self-Test Options:

The **Manta** LED luminaires are supplied with integral Self-Test gear complying with BSEN62034. There is also a fully interoperable DALI-2 version available. Please note the Self-Test only luminaire only operates in maintained mode and does not have the facility to be used as a non-maintained luminaire. For this extra function please revert to the DALI-2 version which has Self-Test capability and allows non-maintained operation

NB: The addition of DALI-2 gear can create a slight shadow on one edge of the legend plate.

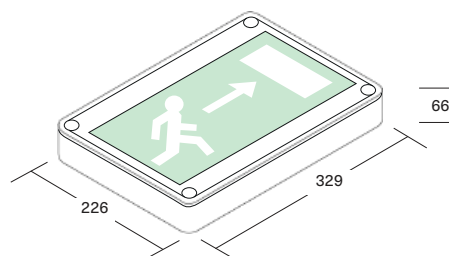


MAN/M3/ST/WH



GENERAL DETAILS

Product	LED Exit Sign
Light source	15 x white LEDs
Luminaire Lumens	N/A
Construction	Polycarbonate housing and double diffuser plus internal 'clip-in' safety legend screen
Geartray	Integral to base
Dimensions	329mm (L) x 226mm (W) x 66mm (H)
Cable entry	20mm knock-outs top, back and one end
Mounting	Wall mount (single sided only); Ceiling mount bracket; 'Flagpost' wall mount bracket — (bracket supplied)



Emergency Lighting Products Limited
Parbrook House, Gillmans Industrial Estate,
Natts Lane Billingshurst, West Sussex RH14 9EZ

Telephone: +44 (0) 1403 786601
Fax: +44 (0) 1403 786602
e-mail: sales@elp.uk.com

Safe in the knowledge
elp.uk.com

IP65 rated, single or double sided Exit Sign

Manta

SPECIFICATION

	/ST Maintained	/D2 Maintained
Light source	15 x wide angle white LEDs	
Colour temperature	4500K	
IP and IK rating	IP65 IK08	
Ambient temperature (Ta)	0°C to 25°C	
Insulation class	Class II	
Supply voltage	230V ~ 50Hz	
Supply power	3.5W	4.0W
Charge power (typical)	0.9W	1.1W
Battery	3.2V 1.5Ah LiFePO ₄	3.2V 3.2Ah LiFePO ₄
Weight	2.0kg	2.1kg



Every **Manta** sign is provided with a retro fittable second legend plate for ceiling or 'flagpost' wall mounted double sided installation.

ORDER CODES

Description

MAN/M3/ST/WH	Maintained self-test emergency LED exit sign luminaire
MAN/M3/D2/WH	Maintained DALI-2 emergency LED exit sign luminaire
MAN/230/WH	Mains only LED exit sign luminaire
MAN/230D/WH	DALI version of mains only LED exit sign luminaire
OPTIONS:	
/MT	Manual-test with DALI function disabled
/BLE	Wireless DALI emergency
LEGENDS:	NB: all versions are supplied
/ECAR	EC Format — Arrow Right
/ECAL	EC Format — Arrow Left
/ECAD	EC Format — Arrow Down
/ISOAR	ISO Format — Arrow Right
/ISOAL	ISO Format — Arrow Left
/ISOAU	ISO Format — Arrow Up
/ISOAD	ISO Format — Arrow Down

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Emergency



3 Hour Emergency

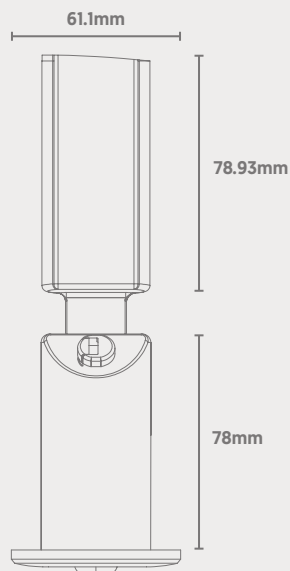


Discharge Protection

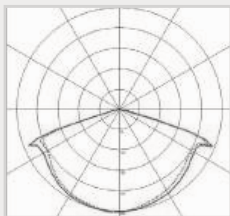


Lithium Iron Phosphate Battery

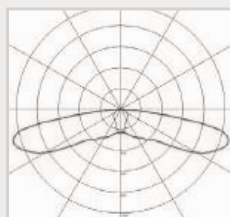
Dimensions



Photometric Data



Open Lens



Corridor Lens

QSpot Recessed

High-Output Recessed Downlight

CODE: Q-SPOT-3W/3H/L

QVIS[®]

LIGHTING & SECURITY



Power	Output	Lens Type	Testing	Duration
3W	250Lm	Open Lens	Push-Test (Manual)	3 Hours
	185Lm	Corridor Lens		

Technical

Input Voltage	AC 220-240V
Emergency Type	Non-Maintained
IP Rating	IP20
IK Rating	IK04
Operating Temp.	0 to +40°C
Mains Current	32mA
Mains Voltage Changeover Threshold	According to EN60598-2-22
Protection	Discharge
Colour Temperature	6000K
Battery Type	3.2V LiFePO ₄ ; 1500mAh
Charge Time	24 Hours
Cut Out	46mm
Dimensions	175mm x 61.1mm
Weight	0.156kg
MacAdam Step	<3
CE Standards	EN60598-1, EN 60598 2-22, EN62493, EN55015, EN61547, EN61000-3-2, EN61000-3-3, EN62722-1, EN62722-2-1 and EN50581
CE Directives	LVD, EMC, ERP & RoHS



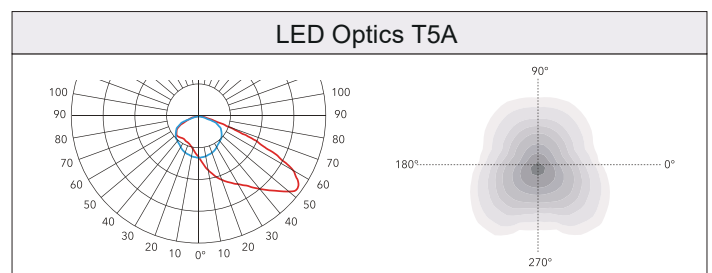
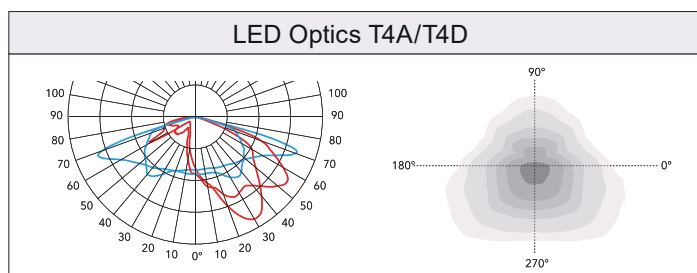
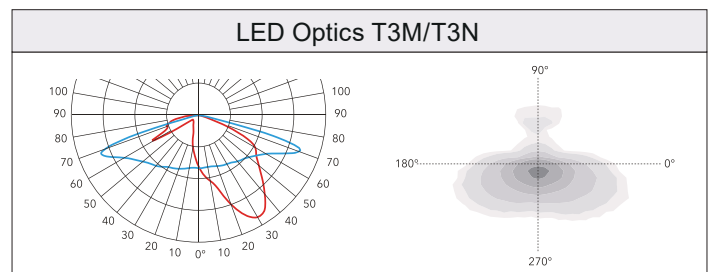
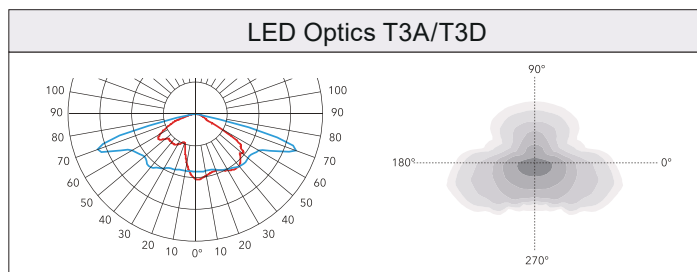
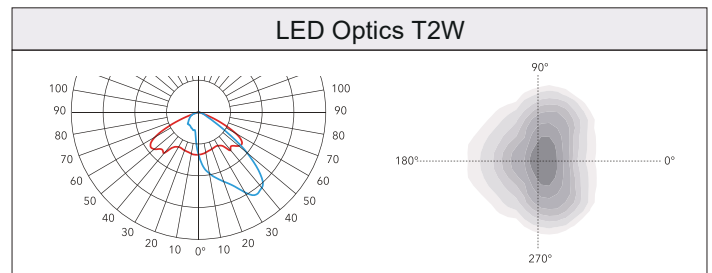
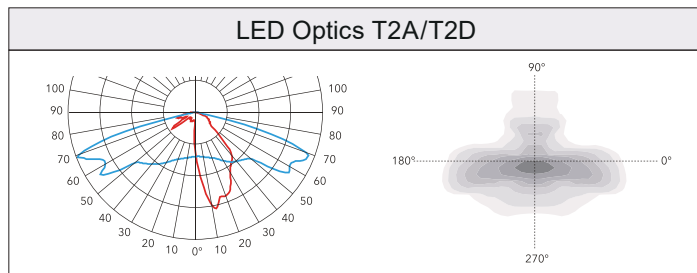
This high performance luminaire is available in two sizes with a power range of 40W to 150W. A modern and minimalist design ideal for urban and amenity applications.

- Die-cast aluminium housing available in two sizes, with super white tempered glass.
- Optical lenses with multiple distribution options, offering visual comfort and uniform light distribution.
- High quality LED chips and DALI driver as standard, with in-built surge protection up to 20KV.
- Tool-free, easy open housing for fast installation and maintenance. Power automatically disconnects when housing is opened for additional safety.
- Adjustable mounting bracket allows both horizontal and vertical pole mounting. Bracket suitable for Ø60mm pole diameter, bracket accessories available for other pole sizes.
- UV protected pure polyester powder coated housing offering high corrosion resistance.
- Suitable for use with a range of controls and remote management systems.
- All external screws are 304 stainless steel as standard.
- RAL9007, other RAL colours available on request.



Optics

EX10





The Mayfair 20W is the perfect combination of aesthetic appeal and optimum illumination performance with an IP65 - IK08 rating.

Manufactured in the UK with the latest Osram LEDs and a choice of 4 optics to create the perfect lighting design.

Options available are Colour Temperature, Beam Angle, DALI, Mini Photocell, 3hr Emergency, AstroDIM, Spill Shield, and any painted RAL colour finish.

Mayfair 20W LED Wall Light



LED Wall Mounted Lighting



Features

- LED rating (Source lumens) 3,019Lm (4000K / 6000K), 2,611Lm (3000K) and 2,528Lm(2700K).
- Luminaire flux (delivered lumens) 2,717Lm (4000K / 6000K), 2,350Lm (3000K) and 2,276Lm(2700K).
- Total system watts 20cW.
- Luminaire efficacy up to 160Lm/cW.
- -20 to +40°C operating temperature (Emergency 0 to +40°C).
- Colour temperature options available are 2700K, 3000K, 4000K, 6000K.
- Control options available are DALI, Mini-Photocell, AstroDIM, and 3hr Emergency.
- Emergency Mode BLF 50%.
- Optional column clamp bracket, flush wall bracket, or 300mm outreach arm bracket available separately.
- 5 Year Manufacturer's Warranty.

Benefits

- IP65 / IK08 rated for robust durability in tough environments.
- LED Lifespan >100,000hrs L90B10.
- Osram LEDs and Osram Driver for trusted quality and reliability.
- Easy access to LED and Driver via a removable base plate for simple maintenance.
- Luminaire body made of die-cast aluminium for robust durability.
- Choice of 4 optics for the perfect lighting design.
- Optional Spill Shield (FIX-0488) for controlled light distribution.
- Any painted RAL colour finish to match project aesthetics.
- Recessed light source for less than 0.5% upward light ratio.
- Compliant with Dark Skies recommendations^{#1}.
- Bat & Insect friendly^{#2}.

Painted Options



Kelvin Options



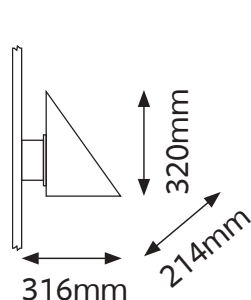
^{#1} 3000K + DALI control / dimmable option.

^{#2} 2700K + DALI control / dimmable option.

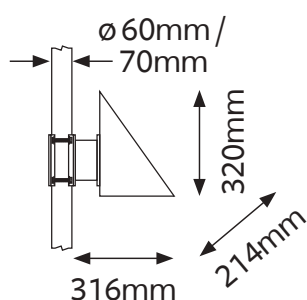
* 5 Year Manufacturer's Warranty.

Technical Details

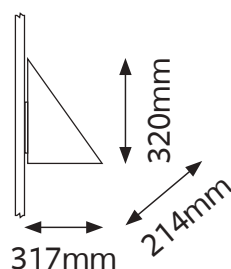
Dimensions



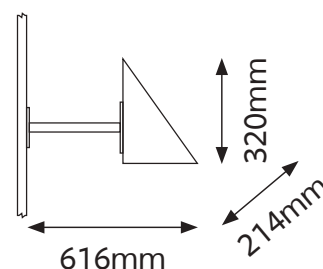
Stand-off Bracket (supplied).



Column Clamp Bracket. To be ordered separately, Code: FIX-0440.

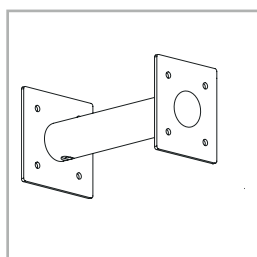


Flush Bracket. To be ordered separately, Code: FIX-0485.

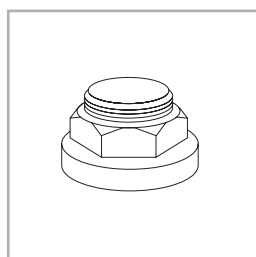


300mm Outreach Arm. To be ordered separately, Code: FIX-0476.

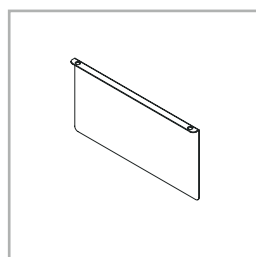
Add-Ons



Bracket Mounts available, contact sales for information.



Integral Mini-Photocell option change code from '00' to '04'.



Spill Shields available, contact sales for information.

Applications



Pathways



Office Buildings



Perimeter Lighting



Walkways

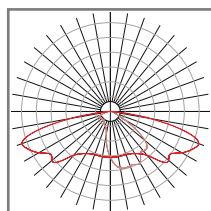


Security

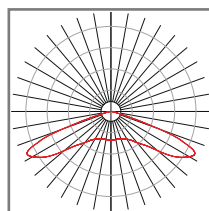
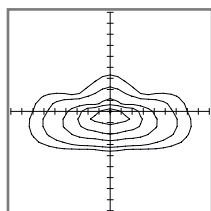


Amenity Areas

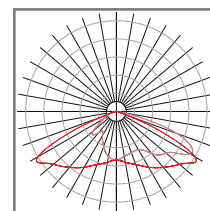
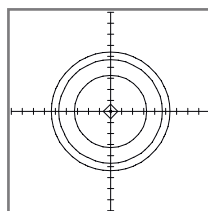
Photometric Data



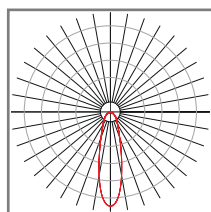
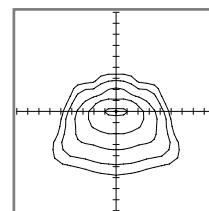
Optic 1 - Type II/III (long) beam for very wide pole to pole distances. Ideal for pedestrian paths & residential roads.



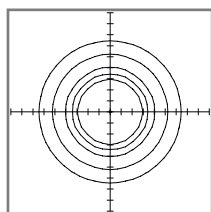
Optic 2 - IESNA Type V (circular 360°) beam for wide area lighting such as car parks.



Optic 3 - Wide IESNA Type IV forward-throw beam for wide area lighting like car parks, play areas, yards & bays.



Optic 4 - 30° spot beam for architectural effect.



NB: photometric images are indicative.

Need a Lighting Design?

We offer a free of charge design service, contact our team today: studio@gemmalighting.com.



High quality wall light with both down only and up and down lighting options for versatility, and available in three sizes to cover a variety of applications.

- Die-cast aluminium base with extruded aluminium body.
- Super white tempered glass lens offering high visual comfort.
- UV protected pure polyester powder coated housing offering high corrosion resistance.
- High quality LED chips and driver.
- Up and down and down only lighting options.
- RAL9005, other RAL colours available on request.



Product Specification

CODE	OPTIC	LED Qty	CCT	LUMENS	CRI	POWER	IP	IK	WEIGHT
GAZ-L40-D	36°	1	4000	4000	>70	40W	IP65	IK08	5.4
GAZ-L80-UD	36°	2	4000	8400	>70	80W	IP65	IK08	5.7

General Specification

Input voltage	100-240V
Input frequency	50/60Hz
Surge protection	0.5KV
LED Chips	Cree COB
Lifetime	L70 >127,000hours L80 86,000 hours L90 37,000 hours
SDCM	SDCM<6
Class	Class I
Ambient temperature	-20°C to +50°C
Material	High pressure die-cast aluminium housing with tempered glass
Finish	Polyester powder coat cured under heat
RAL colour	RAL9005

Driver Details

Product	GAZ-L40-D	GAZ-L80-UD
Driver	Yiguang	
Dimming control	/	
Driver current	930mA	930mA
Inrush current	<35A	<35A
Power factor	0.95	0.95

Single Colour - 10W Per Metre
FLS3 - XXXXX



ECO



IP65

IP20

DC 24V

LM 80

Single Binning

CRI 92+

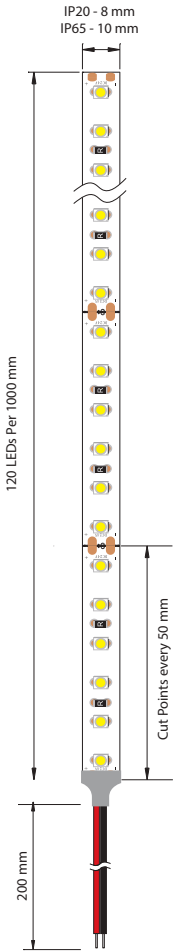
Dimmable

3 Step Macdams

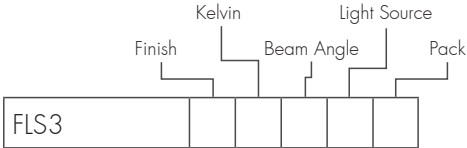
5 Year

Our ECO SERIES 10W per metre LED Strip features branded high efficiency 2835 SMD LEDs on a 2oz PCB board for a durable finish.

Easy mounting thanks to added strength (3M 300LSE) self adhesive and backed up by a 3 year standard and 5 year Extended Manufacturer's Warranty.



Product Reference:



FLS3	Finish	Kelvin	Beam Angle	Light Source - Per Metre	Pack
	0 IP20	G 2700K	1 120°	S3 780 - 900 lm/10w Blue 165lm / MCD Conversion	1 5 metre Reel
	5 IP65	C 3000K			2 10 metre Reel
	8 IP68	N 4000K			
		D 6500K			
		B Blue			

Client

Date

Project Ref

Product Ref

Quantity



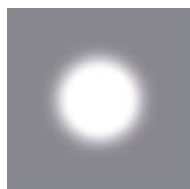
High quality square wall light with both down only and up and down lighting options for versatility, and available in two sizes to cover a variety of applications.

- Die-cast aluminium base with extruded aluminium body.
- Super white tempered frosted glass lens offering high visual comfort.
- UV protected pure polyester powder coated housing offering high corrosion resistance.
- High quality LED chips and driver.
- Up and down and down only lighting options.
- RAL9005, other RAL colours available on request.



Optics

TP25



α 25°

Product Specification

CODE	OPTIC	LED Qty	CCT	LUMENS	CRI	POWER	IP	IK	WEIGHT
ASS-S10	TP25	4	3000	990	>70	10W	IP65	IK08	1.5
ASS-S20	TP25	8	3000	2300	>70	20W	IP65	IK08	1.7
ASS-M23	TP25	9	3000	2350	>70	23W	IP65	IK08	2.7
ASS-M36	TP25	18	3000	4100	>70	36W	IP65	IK08	3.3

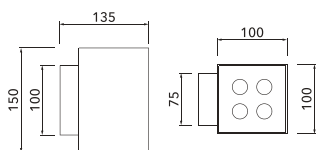
General Specification

Input voltage	100-240V
Input frequency	50/60Hz
Surge protection	0.5KV
LED Chips	CREE XTE
Lifetime	L70 >65,000hours L80 >65,000 hours L90 >65,000 hours
SDCM	SDCM<6
Class	Class I
Ambient temperature	-20°C to +50°C
Material	High pressure die-cast aluminium housing with tempered glass
Finish	Polyester powder coat cured under heat
RAL colour	RAL9005

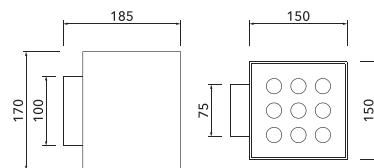
Driver Details

Product	ASS-S10	ASS-S20	ASS-M23	ASS-M36
Driver	Ealgerise			
Dimming control	Non Dimmable			
Driver current	700mA	700mA	700mA	600mA
Inrush current	30A MAX	20A MAX	20A MAX	20A MAX
Power factor	>0.9	>0.9	>0.9	>0.9

Dimensions



ASS-S



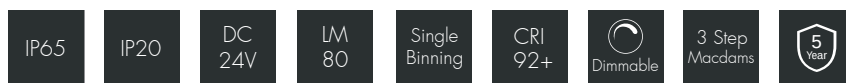
ASS-M

Single Colour COB LINEAR - 5W Per Metre

FLSCB1 - XXXXX

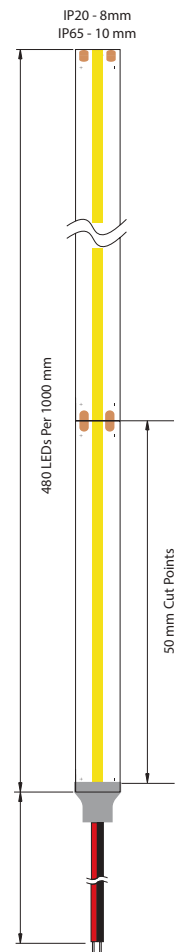


LINEAR

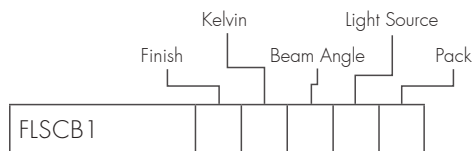


Our COB Series Strips are designed to offer a dotless Linear finish in a all applications, this 5W per metre model features 480 SMD LEDs on a 2oz PCB board for a durable finish.

Easy mounting thanks to added strength (3M 300LSE) self adhesive and backed up by a 3 year standard and 5 year Extended Manufacturer's Warranty.



Product Reference:



FLSCB1	Finish	Kelvin	Beam Angle	Light Source - Per Metre	Pack
	0 IP20	G 2700K	1 120°	CB1 490 - 545 lm/5w	1 5 metre Reel
	5 IP65	C 3000K			2 10 metre Reel
	8 IP68	N 4000K			

Client _____

Date _____

Project Ref _____

Product Ref _____

Quantity _____

Aviator-HO

Supplied with an IP65 rated polycarbonate base and attractive polycarbonate fresnel lens, Aviator-HO luminaires provide 1040 lumen output as standard, with the fresnel lens creating cost effective opportunities to minimise the number of luminaires required within an installation.

Aviator-HO luminaires can be surface mounted or semi-recessed and are ideal for exterior and industrial applications where higher illuminance levels are required.

OPERATION

The Aviator-HO luminaires are available with mains only or Non-Maintained emergency operation. All emergency versions provide 3 hour duration from integral high temperature Lithium Iron Phosphate batteries. The luminaires fully comply to the requirements of EN60598.2.22

DALI/Self-Test Options:

The Aviator-HO luminaires can be specified with integral DALI-2/Self-Test gear providing automatic Self-Test in accordance with BSEN62034 or fully interoperable DALI-2 operation when connected to a DALI control system.

NOTE: Aviator-HO luminaires can be equipped with SurePath BLE Bluetooth addressable Gateway modules.
[See Data Sheet.](#)



GENERAL DETAILS

Product	IP65 rated Bulkhead
Light source	2 x LED strip PCBs
Luminaire Lumens	1040lm (emergency)
Construction	Polycarbonate base and clear fresnel lens
Geartray	Hinged white painted steel
Dimensions	350mm (L) x 120mm (W) x 90mm (H)
Cable entry	20mm entries in back and ends



AV/HO/NM3/LI



AV/HO/230

Emergency Lighting Products Limited
Parbrook House, Gillmans Industrial Estate,
Natts Lane Billingshurst, West Sussex RH14 9EZ

Telephone: +44 (0) 1403 786601
Fax: +44 (0) 1403 786602
e-mail: sales@elp.uk.com

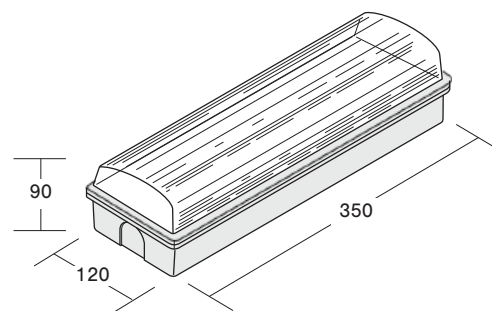
Safe in the knowledge
elp.uk.com

IP65 High Light Output Luminaire

Aviator-HO

SPECIFICATION

	Non-Maintained	Mains only
Light source	2 x LED strip PCBs	
Colour temperature	4500K	
Luminaire lumens (mains)	—	1040lm
Luminaire lumens (emergency)	1040lm	—
IP rating	IP65	
Ambient temperature (Ta)	0°C to 25°C	
Insulation class	Class II	
Supply voltage	230V +/- 10% ~ 50Hz	
Supply current	25mA	40mA
Supply power (mains)	5W	8W
Charge power (typical)	4W	—
Battery	9.6V 3.4Ah LiFePO ₄	—
Weight	1.4kg	1.0kg



AVIATOR-HO — Emergency Lighting Spacings

Mounting height Hm (m)	Trans. to wall	Trans. to trans.	Axial to trans.	Axial to axial	Axial to wall	
2.5	5.0	11.4	10.1	9.5	4.1	0.5 Lux min. (open)
4.0	7.9	16.6	14.9	15.1	5.9	
8.0	10.6	20.1	18.6	19.9	8.8	
10.0	8.8	19.5	18.1	18.4	6.6	
12.0	7.3	15.8	14.6	14.7	5.4	
2.5	4.9	11.0	12.7	14.7	4.7	1 Lux min. at centre
4.0	6.4	15.3	16.9	18.5	7.3	
8.0	9.1	19.9	21.1	23.1	8.1	
10.0	6.3	23.5	22.0	23.3	5.7	
12.0	6.2	22.0	21.4	21.4	5.5	

ORDER CODES

Description

AV/HO/NM3/LI	Non-Maintained 3-hour emergency bulkhead luminaire	
AV/HO/NM3/DALI/LI	Non-Maintained 3-hour DALI-2 emergency bulkhead luminaire	
AV/HO/230	Mains only bulkhead luminaire	
AV/HO/230D	DALI version of mains only bulkhead luminaire	
OPTIONS:	/BLE	Wireless DALI emergency
	AV/RB/KIT	Semi-Recessing Bezel

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THANK YOU

Please don't hesitate to contact your appointed project
manager with any questions.

UKLED LIGHTING DESIGN