



# Emergency Lighting Design Handbook revision 4

# Eaton and Cooper united. Energizing a world that demands more. We deliver: • Electrical solutions that use less energy, improve power reliability and make the places we live and work safer and more comfortable Hydraulic and electrical solutions that enable machines to deliver more productivity without wasting power Aerospace solutions that make aircraft lighter, safer and less costly to operate, and help airports operate more efficiently Vehicle drivetrain and powertrain solutions that deliver more power to cars, trucks and buses, while reducing fuel consumption and emissions Discover today's Eaton.

#### Powering business worldwide

As a global power management company, we help customers worldwide manage the power needed for buildings, aircraft, trucks, cars, machinery and businesses.

Eaton's innovative technologies help customers manage electrical, hydraulic and mechanical power more reliably, efficiently, safely and sustainably.

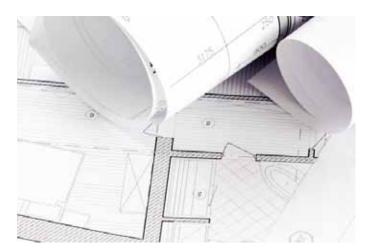
We provide integrated solutions that help make energy, in all its forms, more practical and accessible.

With 2013 sales of \$22 billion, Eaton has approximately 100,000 employees around the world and sells products in more than 175 countries.

Eaton.com

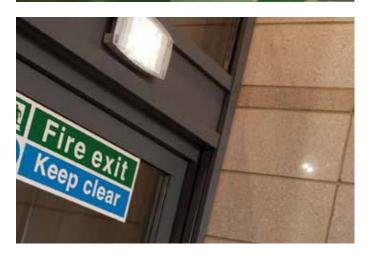


# Emergency Lighting Design Handbook revision 4











# Indoor emergency lighting



1.0	Overview	7
l.1	GuideLED	8
1.2	NexiTech LED	10
1.3	Planete 400 Disc	12
1.4	Micropoint 2 Surface	13
1.5	Micropoint 2	14
1.6	Halo-pack 2	16
1.7	Ledus	17
1.8	Sirios LED	18
1.9	Sirios	19
1.10	Star22	22
1.11	Cronus8W	24
1.12	Cronus6W	25

Indoor emergency lighting

Indoor	Recessed	Outdoor	Ni-Cd	Ni-Mh	Li-lon	Maintained	Non-Maintained	Autotest	Hospitals	Hotels	Cinemas/Theate	Schools	Offices	Industrial	Warehouse
							eq				iters				

	Indoor	Recessed	Outdoor	Ni-Cd	Ni-Mh	Li-lon	Maintained	Non-Maintair	Autotest	Hospitals	Hotels	Cinemas/The	Schools	Offices	Industrial	Warehouse
	Ins	tallati	on	E	Batter	У	0	oerati	on			Appl	licatio	ns		
GuideLED	•	•				•	•	•	•	•	•	•	•	•		
NexiTech LED	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•
Planete 400 Disc	•	•			•		•		•		•	•		•		
Micropoint 2 Surface	•	•			•		•	•	•	•	•	•		•		
Micropoint 2	•	•			•		•	•	•	•	•	•		•		
Halo-pack 2	•	•		•				•		•	•	•		•		
Ledus	•	•		•			•	•		•	•	•	•	•		
Sirios LED	•	•		•	•		•	•		•	•	•	•	•	•	•
Sirios	•	•	•	•			•	•	•	•	•	•	•	•	•	•
Star22	•	•		•			•	•	•	•	•	•	•	•	•	•
Cronus8W	•	•		•			•	•	•	•	•	•	•	•	•	•
Cronus6W	•	•		•				•			•		•	•		



- Innovative emergency lighting with the use of LED technology
- Conforms with regulation EN60598-2-22
- · Lithium Ion batteries
- Selectable autonomy of 1h, 3h and 8h
- Available for ceiling mounting and recessed applications

High power LEDs 2x1,6 Watt with a life expectancy of 50.000 hours

#### Construction:

White polycarbonate Aluminium reflector (heat sink) Module housing with steel sheet

#### Operation:

Maintained & Non-Maintained Selectable emergency duration of 1h, 3h, 8h

#### Installation options:

Flush mounting in false ceiling

Model 138x1 composed by an optical part and by a separate container for batteries and electronics

Wall ceiling model 138x2

#### Versions:

Autotest and CBS models available

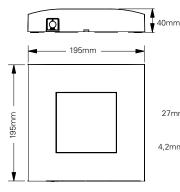
With test button for manual testing

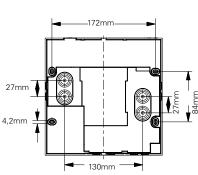
#### **Applications:**

Hotels, offices, cinemas, theaters, museums

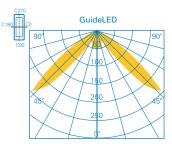
GuideLED self-contained lighting fixtures have a unique and innovative design using LED technology. Available for wall or ceiling installation with a flush mount option, these LED emergency lights have a 50.000 hour lifetime and the internal circuit technology diagnostics performs a self-test and checks the operating emergency autonomy.

Together with long life Lithium batteries, the sophisticated electronics allow a considerable energy saving and autonomy in emergency for up to 8 hours. The self-contained series are available with optical GuideLED symmetric uniform illumination for open anti-panic spaces, and asymmetric lighting for escape routes.



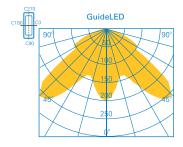


Light distribution for escape root illumination



Model	Height (m)		Distance for 1 Lux					
13821	03,00	04,50	09,40	03,40	09,40			
13822	04,00	03,50	11,00	03,40	11,00			
Symmetric	05,00	01,40	12,20	01,40	12,20			

#### Light distribution for open area illumination



Model	Height (m)	Height (m) Distance for 1			Lux		
13811	03,00		06,60		15,00		
13812	04,00		08,10		18,00		
Asymmetric	05,00		09,40		20,90		

#### Lithium ion battery technology

Lithium ion batteries require much less space than NiCid or NiMh cells of equal capacity, allowing more space in a compact design for cable routing. The Lithium ion batteries also don't suffer from the so-called memory effect associated with NiCid and NiMh cells.

#### Permanent safety

Capacity losses from ageing have been considered by corresponding dimensioning of the cells.

A multiple protective circuit, intergrated in the batteries ensures safe operation and high reliability. NiCd and NiMh batteries have a significantly higher self-discharge and are therefore permanently charged. This is no longer necessary with the new GuideLED luminaries, saving additional energy costs.

#### **Powered by Lilon**

- Low spacial requirement
- No memory effect
- Environmentally friendly

#### Equipped for all situations

With all GuideLED luminaries, selection can be made between Maintained and Non-Maintained mode of operation as well as 1h, 3h and 8h emergency light duration as standard. As such, all accommodation establishments and homes can be equipped with self contained luminairies.

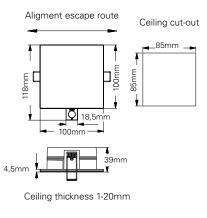
If the the escape sign luminairies are operated in surroundings with low background brightness, these can be adapted to such conditions by dimming to 30% or 10% brightness via the testing button.

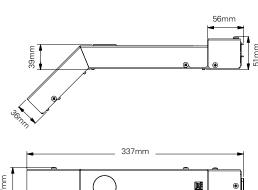
# Rated duration of emergency operation and its application

- **1h** e.g. escape routes in places of work
- 3h e.g. escape of assembly,
- **8h** sales areas, restaurants, schools, exhibition halls

#### GuideLED recessed







Required height in cavity ceiling for recessing through ceiling cut-out: 150 mm

Order code	Description	8	*	<b>(</b> 2)	<del>[+ -</del> ]	200 Exists
40071353093	GuideLED SL 13811, recessed asymmetric	LED 2x1,6W	210 Lm	1h, 3h, 8h	Lilon 3.7V 4Ah	Maintained / Non-Maintained
40071353092	GuideLED SL 13821, recessed symmetric	LED 2x1,6W	204 Lm	1h, 3h, 8h	Lilon 3.7V 4Ah	Maintained / Non-Maintained
40071353091	GuideLED SL 13812, wall mount asymmetric	LED 2x1,6W	210 Lm	1h, 3h, 8h	Lilon 3.7V 4Ah	Maintained / Non-Maintained
40071353090	GuideLED SL 13822, wall mount asymmetric	LED 2x1,6W	204 Lm	1h, 3h, 8h	Lilon 3.7V 4Ah	Maintained / Non-Maintained



- Emergency lighting luminaire
- Conform to EN60598-2-22
- ENEC Certification
- Autotest and Mains 230V version
- From 100 to 500lm output flux
- Comparable to 8, 11 and 24W fluorescent lamp
- Ni-Cd HT high quality batteries

High efficiency LEDS up to 50.000h life cycle

16, 29 and 48 LEDs depending on model

#### Construction:

Base and reflector white polycarbonate

Diffuser clear polycarbonate

Protection degree IP40 and IP65 with the accessory kit

#### Operation:

Maintained and Non-Maintained mode on all version

Fixed 60lm output in Maintained mode for all variants for high energy saving

1h, 1,5h and 3h duration

Rest Mode and Tests via remote command

12h recharge period (24h for 3h versions)

#### Installation options:

Wall and ceiling mounting

Surface or recessed installation in false ceiling and bricks wall

Single side glue-less ISO7010 pictograms with

20m viewing distance

Double side ISO7010 panels with 30m of viewing distance

#### Versions:

AT Autotest, according to EN50171 and EN62034, slave and CBS models available

#### Applications:

Schools, universities, commercial malls, stores, offices, public administration and all indoor generic environments

Safety antipanic lighting and escape route lighting

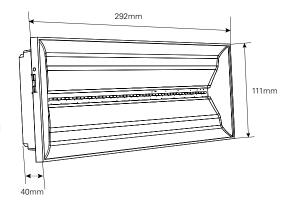
Exit sign with single and double side signalization

Hi-bay environments

Reliability and continuity of service was the main consideration in the development of the new NexiTech LED Emergency lighting range.

The modern style, the simplicity of the shapes and the high quality surfaces make NexiTech LED ideal for any architectural context, while the precision of the mechanics and the sophisticated electronics guarantee a full unmatched reliability.

The latest generation of LED light source and the careful study of the refractive parts allow a uniform light distribution without light waste.



#### Autotest is now for all

The reliability and the guarantee of operation are now within everyone's reach. We chose to design NexiTech LED starting directly from models with built-in diagnostic functions, all the self-contained versions (with battery on board) are equipped with a self-test system that performs automatic tests in accordance with standard EN62034 and EN50172.

#### Top level signalization

The pictograms, optional and available upon request, conform to the international standard ISO7010, have no glue and can be repositioned at will and with ease, without a complex installation. They are placed between the diffuser and reflector creating a translucency which finds its maximum aesthetic applications when recessed into the wall.



NexiTech LED with IP65 protection kit

The IP65 kit is compatible with all the variants.

Only surface mounting. Dimension 308x125x53 mm



NexiTech LED in the combined version "Door" allows for 2 functions in one device: safety light, with distance view of 20m and emergency lighting with 5lx on the floor.

## NexiTech LED



With double-side pictograms



Viewing distance: 30m

With single-side pictograms



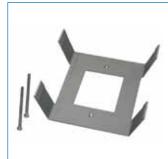
Viewing distance: 20m

Recessed base for bricks wall



Order code: NEXI-RB Cut-out: 277x100 mm

False ceiling adapter



Order code: NEXI-FC Cut-out: 272x95 mm

Order code	Description			<b>(</b> 2)	<del>[+ -]</del>	2 0 2:05 0 2:05
Autotest versions						
NEXI100-AT	NexiTech LED 8W 1,5h AT	12 LED	100 Lm	90'	3,6V - 0,8Ah NiCd	Non-Maintained
NEXI150-AT	NexiTech LED 11W 1h AT	16 LED	150 Lm	60′	3,6V - 0,8Ah NiCd	Maintained / Non-Maintained
NEXI250-AT	NexiTech LED 24W 1,5h AT	48 LED	250 Lm	90′	7,2V - 1,7Ah NiCd	Maintained / Non-Maintained
NEXI400-AT	NexiTech LED 24W Ultra 1,5h AT	48 LED	400 Lm	90′	7,2V - 1,7Ah NiCd	Maintained / Non-Maintained
NEXI100-3H-AT	NexiTech LED 8W 3h AT	12 LED	100 Lm	180′	3,6V - 2,0Ah NiCd	Non-Maintained
NEXI150-3H-AT	NexiTech LED 11W 3h AT	16 LED	150 Lm	180′	3,6V - 2,0Ah NiCd	Maintained / Non-Maintained
NEXI250-3H-AT	NexiTech LED 24W 3h AT	48 LED	250 Lm	180′	7,2V - 1,7Ah NiCd	Maintained / Non-Maintained
NEXI-D-AT	NexiTech LED Door 1,5h AT	48+2 LED	250 Lm	90′	7,2V - 1,7Ah NiCd	Maintained / Non-Maintained
NEXI250-230	NexiTech LED 250lm Mains	48 LED	250 Lm			Mains
NEXI500-230	NexiTech LED 500lm Mains	48 LED	500 Lm			Mains
NEXI-D-230	NEXI-D-230 Red	29+2	250+30 Lm			Mains

#### Accessories

NEXI-PICTO-U

Accessories	
NEXI-IP	IP65 protection kit
NEXI-RB	Bricks wall recessed base (cut-out 277x100mm)
NEXI-FC	False ceiling adapter (cut-out 272x95mm)
LUM10312	Rest-Mode and Test telecommand
Single-side glue-le	ess pictograms
NEXI-PICTO-D	Pictogram Down ISO7010 single-side 20m
NEXI-PICTO-L	Pictogram Left ISO7010 single-side 20m
NEXI-PICTO-R	Pictogram Right ISO7010 single-side 20m

Pictogram Up ISO7010 single-side 20m

#### Double-side panels

NEXI-PLEX-LR

NEXI-PLEX-DB

#### Lite version - standard uniformity

NEXI-PLEXL-DD Lite Double side panel Down/Down ISO7010 30m								
NEXI-PLEXL-LR Lite Double side panel Left/Right ISO7010 30m								
NEXI-PLEXL-DB Lite Double side panel Down/Blind ISO7010 30m								
Ultra version - high uniformity								
NEXI-PLEX-DD	Double side panel Down/Down ISO7010 30m							

Double side panel Left/Right ISO7010 30m

Double side panel Down/Blind ISO7010 30m



- Seamlessly integrates with the pure architectural lines of the building.
- Fits into the all-round light-theme concept.
- Shares the same standard diameter as most popular downlights.
- The standby-mode LED lighting (when mains-connected) is soft with a minimal glare.
- Recessed-mounting integration (close-fit mounting < 2mm thick - colors on request).

100 white LED of 1.5W

#### Materials:

High-performance microlens light diffuser

#### Installation:

Screwless terminal strips: automatic connectors.

Built-in housing for quick and easy mounting of the safety baffle hanger (metal cable thread)

Recessed-mounting trim options for structural or dropped ceilings:

- diameter 200 mm down light hole saw
- Shallow 65 mm recess

#### Operation:

Maintained operation with 360 lumen output in emergency operation

Disk delivers uniform down lighting: Homogeneous illumination for optimal visual comfort (Lmax/Lmin <1,5)

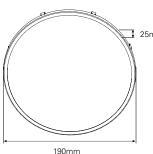
#### Applications:

Recessed applications on offices, hotels

Planete 400 Disc for all projects with 360 lumens in a disc of diameter 190 and slim 25mm. Discrete, it respects the original design of the architecture of the building and fits perfectly into the overall lighting concept.

Its diameter is equal to that of the most common down lights normal lighting. The illumination LEDs in standby (in the presence sector) is discrete and non-aggressive.

The optional mounting frame allows a perfect integration ceiling.



LUM10541

Recessed-mounting



trim in black

Recessed-mounting

trim in red

Planete 400 Disc

Model	Height (m)	Esc	ape route c 2m wid	eiling mo le, 1 Lux	unting	Op	Open area ceiling mounting 2m wide, 1 Lux				
LUM17044		$\Box$		<b> </b>				-			
	02,50	04,40	10,80	04,40	10,80	03,50	08,30	03,50	08,30		
	02,80	04,60	11,30	04,60	11,30	03,60	08,80	03,60	08,80		
	03,00	04,70	11,60	04,70	11,60	03,70	09,00	03,70	09,00		
	03,50	04,90	12,40	04,90	12,40	03,80	09,70	03,80	09,70		
	04,00	05,00	13,00	05,00	13,00	03,90	10,10	03,90	10,10		
	05,00	04,60	12,40	04,60	12,40	04,10	11,00	04,10	11,00		
	06,00	04,60	12,90	04,60	12,90	04,10	11,70	04,10	11,70		
	07,00	04,30	13,10	04,30	13,10	04,00	12,10	04,00	12,10		

Order code	Description	8	**	<b>(2)</b>	<del>[+ -]</del>	20 Em
LUM17044	Planete 400 Disc	100 LED 1,5W	360 Lm	60′	10 x 1,2 V / 0,6 Ah	Maintained
LUM22133	Planete 400 Disc mains	100 LED 1,5W	360 Lm			Mains
Accessories						
LUM10541	Recessed-mounting trim					
LUM10541COL	Recessed-mounting trim in colour					



- · Versatile multi functional use (escape and open area anti-panic)
- IP44 ingress protection suitable for bathrooms and wet environment
- First fix base for ease of installation

Indoor emergency lighting

- 60,000 hour life LED for reduced maintenance
- Environmentally friendly NiMh battery

#### **Light Source:**

1 x High power 1W white LED Consumption (Maintained) 6.9VA/5W

Consumption (Non-Maintained) 3.6VA/2.5W

#### Materials:

Luminaire Enclosure Polycarbonate

Battery NiMh (selfcontained version)

#### Installation:

Flush & Surface mount 20mm Conduit entry on all four sides

BESA box entry on base

#### Operation:

Self-contained Maintained luminaire can be operated in Non-Maintained mode

Can be used as security light with 4 pre-set light levels

Self contained, slave and CBS models available

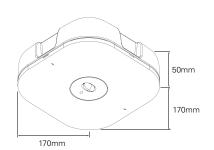
#### Applications:

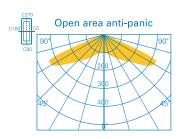
Hotels, offices, cinemas, theaters, museums and hospitals

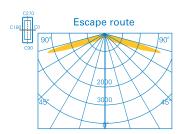
Micropoint 2 is a high specification competitively priced surface mounted emergency LED luminaire utilising the latest LED and optic technology to provide an unobtrusive, high quality, high performance luminaire for indoor use where aesthetics are prime importance.

The Micropoint 2 has been designed for ease of installation, reduced power consumption, minimal maintenance, reducing the TCO (total cost of ownership) without compromising aesthetics. The innovative optic design used in the Micropoint 2 utilises light efficiently from the LED to provide a uniform distribution in either an escape route or open area anti-panic emergency lighting, improving the performance and reducing the electrical power consumption.

Micropoint 2 utilises a touch sensitive keypad to improve ingress protection against water and dust.







#### Open area (Symmetric)

Mode	Mount height (m)	Lux level directly under		Open aı	rea 1 Lux	min
Self contained	d		-			
	02,50	01,70	04,30	09,40	09,40	04,30
	02,80	01,40	03,30	09,30	09,30	03,30
	03,00	01,20	03,20	09,20	09,20	03,20

#### Escape optic (Asymmetric)

Mode	Mount height (m)	Lux level directly unde		ape route 2	2m wide,	1 Lux min
Self contained	d					
	02,50	02,70	-	-	16,60	07,50
	02,80	02,20	-	-	18,10	08,10
	03,00	01,90	-	-	19,10	08,30

Order code	Description	8	*	<b>(</b> 2)	+-	2 0 E
MP2SO3H	Micropoint2 Surface Open Area	1 x 1W	30 Lm	180′	4,8V - 2Ah NiCd	Maintained
MP2SE3H	Micropoint2 Surface Escape Route	1 x 1W	30 Lm	180′	4,8V - 2Ah NiCd	Maintained
MP2SOS230	Micropoint2 Surface Mains Open Area	1 x 1W	30 Lm			Mains



- Versatile multi functional use (escape and open area anti-panic)
- Low power consumption reducing cost of ownership
- Excellent spacing reducing the quantity of fittings required
- 60.000 hour life LED for reduced maintenance
- Self-contained
- Environmentally friendly NiMh Battery

1 x High power 1W white LED Consumption (Maintained) 6.9VA/5W

Consumption (Non-Maintained) 3.6VA/2.5W

#### Materials:

Luminaire body: Aluminium, luminaire Head: Polycarbonate, remote gear pod: flame retardant ABS Battery, NiMh (selfcontained version)

#### Installation:

Flush mounting

Spring retaining clips for surface installation (install from below ceiling)

Plug and play socket for mains supply

No disassembly required during installation

#### Operation:

Maintained luminaire can be operated in Non-Maintained mode

Can be used as security light with 3 preset light levels

Self contained, slave and CBS models available

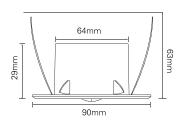
#### Applications:

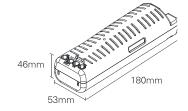
All recessed indoor applications

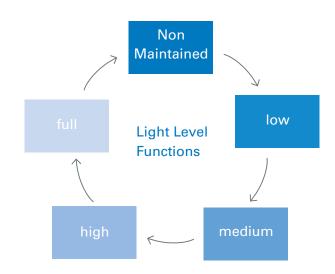
Micropoint 2 is a high specification competitively priced emergency LED luminaire. Micropoint 2 utilises the latest LED and optic technology to provide an unobtrusive, high quality, high performance luminaire for indoor use where aesthetics are of prime importance.

The Micropoint 2 has been designed for ease of installation, reduced power consumption, minimal maintenance, reducing the TCO (total cost of ownership) without compromising on aesthetics. The innovative optic design used in the Micropoint 2, developed and produced by Eaton's Safety business utilises light efficiently from the LED to provide a uniform distribution in either an escape route or open area anti-panic emergency lighting, improving the performance and reducing the electrical power consumption.









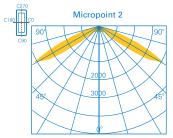


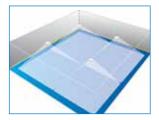




Preset light levels can be adjusted in Maintained mode to operate as security light, adjustable using touch sensitive button on luminaire fascia.

The high power, high efficiency LED light source provides uniform illumination with asymmetric and symmetric light patterns for escape or open area use.

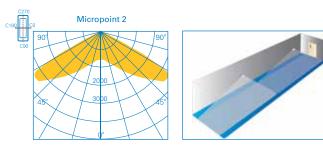




Open Area (Symmetric 0.5 Lux)

Model	Height (m)		Distance	for 1 Lux	
MP2O3H (Open Area	Anti-Panic)				
	02,50	04,30	09,40	01,70	09,40
	02,80	03,30	09,30	01,40	09,30
	03,00	03,20	09,20	01,20	09,20

#### Micropoint 2 advanced optics with rectangular distribution Luminaire with 'no' optics require overlap to eliminate dark spots



Escape Route (Asymmetric 1 Lux)

Height (m)	(e		stance for 1 Lux be route 2m wide)			
)						
02,50	-	-	07,80	17,10		
02,80	-	-	08,40	18,60		
03,00	-	-	08,60	19,60		
	02,50	02,50 - 02,80 -	(escape round) (escape round) (02,50 02,80	Height (m)   (escape route 2m wide		



Order code	Description		**		<del>[+ -</del> ]	2 0 2 0 2 0 2 0 2 0 0 2 0 0 0 0 0 0 0 0
MP2O3H	Micropoint2 Open Area	1 x 1W	30 Lm	180′	4,8V - 2Ah NiCd	Maintained / Non-Maintained
MP2E3H	Micropoint2 Escape Route	1 x 1W	30 Lm	180′	4,8V - 2Ah NiCd	Maintained / Non-Maintained
MP2ES230	Micropoint2 Mains Escape Route	1 x 1W	30 Lm			Mains
MP2OS230	Micropoint2 Mains Open Area	1 x 1W	30 Lm			Mains



- Suitable for both solid and exposed grid ceilings as the gear pod fits through the head unit installation aperture
- Adapter plate for retrofit and shallow ceiling applications
- 3 year warranty for peace of mind
- Up to 50.000 hour life LED for reduced maintenance
- Low power consumption reducing cost of ownership
- Environmentally friendly NiMH battery

1 x high power 3W white LED

#### Materials:

Luminaire head, remote gear and adaptor plate polycarbonate and ABS blend

Battery - NiMH

#### Installation:

Flush mounting

Spring retaining clips for surface installation (install from below ceiling)

Plug and play socket for mains supply

No disassembly required during installation

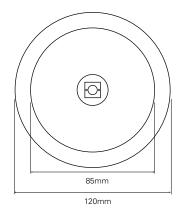
#### Operation:

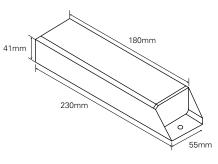
Non-Maintained operation

#### Applications:

All recessed indoor applications

Halo-Pack 2 combines the latest in LED technology with an ultra-low profile, providing emergency lighting where aesthetics and reliability are of prime importance. Installation into an existing ceiling is fast and simple to complete.









For retrofit and/or shallow ceiling applications an optional adapter plate is provided as standard

Model	Height (m)	directly under		2m wide	e route , 1 Lux mi	in		Open (anti 0,5 L	-panic) a ux min	rea
HPLED3	ЗН									
	02,50	05,32	03,20	08,70	03,20	08,70	03,60	09,70	03,60	09,70
	02,80	05,00	03,30	09,00	03,30	09,00	03,70	10,00	03,70	10,00
	03,00	04,36	03,30	09,10	03,30	09,10	03,80	10,20	03,80	10,20
	04,00	02,40	03,10	09,30	03,10	09,30	03,90	11,30	03,90	11,30
	05,00	01,08	01,09	08,50	01,00	08,50	03,60	12,50	03,60	12,50

Order code	Description	$\Diamond$	*	$\bigcirc$	<del>[+ -</del> ]	30 6 500 5 0 600 500 500 500 500 500 500 500 500 50
HPLED3H	Halo Pack 2	1 x 3W LED	30 Lm	180′	4,8V - 2Ah NiCd	Non-Maintained



- Easy to install
- IP rating IP42
- High temperature batteries Ni-Cd
- Opal diffuser version
- Low power consumption

16 LEDs of 2 Watt total consumption (Ledus16)

8 LEDs of 1 Watt total consumption (Ledus8)

#### Construction:

Base, mounting plate and cover, fire retardant

ABS, lens optical grade acrylic

#### Operation:

Maintained & Non-Maintained (selectable operation)
2 hours emergency duration
Night light mode operation

#### Applications:

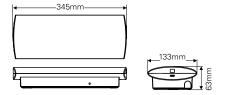
Residential applications, offices, hotels, restaurants, schools

Ledus family is a compact low profile range of luminairies with a stylish design which offers an attractive emergency lighting solution for a wide variety of areas.

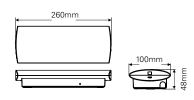
Two variants of LED strips of 16 and 8 LED of 2W & 1W relevant consumption are available along with 2 different housings per occasion. Suitable for small discrete applications up to normal antipanic emergency light installations.

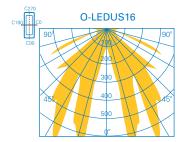
A full range of accessories, including a recessed base for wall or flush mounting and a plexiglass sign for installing the luminaire as an exit sign are available, as well as the opal diffuser version.

#### Ledus16



#### Ledus8





Model	Height (m)		Distance	for 1 Lux	
O-LEDUS16		<b> </b>			
	02,60	02,79	05,78	01,30	04,36
	02,80	02,90	06,22	01,13	04,38
	03,00	02,90	06,66	00,94	04,36
	03,20	02,78	07,01	00,66	04,22
	03,50	00,00	07,51	00,00	03,88
	04,00	00,00	08,28	00,00	03,12

Order code	Description		**	<b>(4)</b>	<del>[+ -]</del>	200 Z
O-LEDUS16	Ledus16	16 LED 2W	95 Lm	120′	3,6V - 1,7Ah NiCd	Maintained / Non-Maintained
O-LEDUS8	Ledus8	8 LED 1W	55 Lm	120′	2,4V - 1,7Ah NiCd	Maintained / Non-Maintained
O-LEDUS8-3H	Ledus8	8 LED 1W	55 Lm	180′	3,6V - 1,7Ah NiCd	Maintained / Non-Maintained
O-LEDUS8-ES	Ledus8 with Opal diffuser	8 LED 1W	-	120′	2,4V - 1,7Ah NiCd	Maintained / Non-Maintained
Accessories						
O-EL6PSLR	Double side exit sign (Left/Right)					
O-EL6PSD	Double side exit sign (Down)					
O-EL6RB	Recessed base (both for wall or flush mounting	ng)				
O-EL8PSLR	Double side exit sign (Left/Right)					
O-EL8PSD	Double side exit sign (Down)					
O-EL8RB	Recessed base (both for wall or flush mounting	ng)				



- · Anti-panic and exit sign in one
- Easy mounting
- Complete range of accessories
- · Certified family of emergency lights in accordance to EN 60 598-2-22
- ENEC certificate
- IP rating IP42 with the ability to upgrade it to IP65

24 white LED 1.5W

#### Materials:

White polycarbonate base and reflector

Clear polycarbonate diffuser

#### Operation:

Maintained & Non-Maintained (user selectable)

Autonomy from 1h up to 3h Functional test integrated into the diffuser

Inhibition and Rest Mode

Autotest & slave models available

#### Installation:

Wall and Ceiling Installation kit for recessed wall and ceiling

Base for quick mounting (accessory)

Protection Kit IP65 for outdoor use

#### Applications:

Schools, universities, public administration, commercial environments



Sirios LED is a low profile range of emergency lights, designed and equipped with technical solutions and accessories for a wide range of applications such as offices, restaurants, hotels, hospitals and general commercial applications.

The range of accessories includes a recessed base for installation to walls and false ceilings, a weatherproof kit an exit sign label as well as a variety of light distribution options.

Distance for 1 Lux

02.88

02.90

02.90

02.83

02 80

02.90

08.66

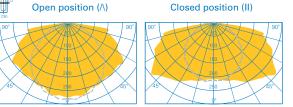
09.32

09.24

09.64

09.54

09.32



Height (m)

02.50

02.80

03.00

03.50

04.00

04.50

03.44

03.46

03.33

03.26

03.01

02.70

open

#### Summary

Application			
Led position	Exit Sign	Antipanic	Escape Route
Open ( \( \)	Best*	Best**	Good
Closed (  )	Good	Good	Best***

\* Better uniformity on sign

04.83

05.16

05.12

05.32

05.27

05.16

- \*\* Bigger covering area
- \*\*\* Longer distance in smaller heights, lower diversity (min to max illuminance ratio) along the route path.

Distance for 0,5 Lux

11 24

12.00

11.78

12.62

12.80

13.34

04.07

04.22

04.34

04.53

04.50

04.55

08.66

09.32

09.60

10.00

10.62

11.12

10	V	100	n (/	THE REAL PROPERTY.	
S	7		1		
	ï		1	П	7
		Ы	ı	п	

N	Tr.	4
	16	
	ы	
111		

h	d	ì	m
	b	И	N
O-SLE	D		

closed position (II)

#### closed



	02.50	03.44	09.04	02.50	06.40	05.02	11.76	03.70	08.20
_	02.80	03.58	09.32	02.44	06.68	05.16	12.00	03.84	08.64
	03.00	03.57	09.24	02.43	06.68	05.12	12.40	03.84	08.80
	03.50	03.38	09.64	02.27	07.00	05.32	12.60	04.00	08.96
	04.00	02.90	09.88	02.04	06.96	05.44	13.30	03.98	09.20
	04.50	02.39	10.00	01.55	06.78	05.50	13.34	03.89	09.64
-	03.50 04.00	03.38	09.64	02.27	07.00 06.96	05.32 05.44	12.60 13.30	04.00	08.96 09.20

07.14

07.44

07.68

08.06

08.00

08.10

In Sirios LED, both led positions are suitable to use for exit sign according to EN1838.

Order code	Description		*	$\mathcal{A}$	<del>[+ -]</del>	200 800 500 500 500 500 500 500 500 500 5
O-SLED	Emerg. Light Sirios 24LEDs M 2H	24 LED 1.5W	120 Lm	120′	NiCd 1,7Ah / 4,8V	Maintained / Non-Maintained
O-SLED-3H	Emerg. Light Sirios 24LEDs M 3H	24 LED 1.5W	120 Lm	180′	NiCd 1,7Ah / 4,8V	Maintained / Non-Maintained
O-SLED-AT	Emerg. Light Sirios AT 24LEDs M 1H	24 LED 1.5W	120 Lm	60′	NiMH 1,2Ah / 4,8V	Maintained / Non-Maintained
O-SLED-AT-3H	Emerg. Light Sirios AT 24LEDs M 3H	24 LED 1.5W	120 Lm	180′	NiMH 2,2Ah / 4,8V	Maintained / Non-Maintained
O-SLED-MAINS	Emerg. Light Sirios 24LEDs MAINS	24 LED 1.5W	120 Lm			Mains
Accessory						
O-SLED-STRIPE	LED stripe accessory for Sirios LED (service LED for replacement)					



- · Easy mounting
- Complete range of accessories
- · Certified family of emergency lights in accordance to EN 60 598-2-22
- ENEC certificate
- IP rating IP42 with the ability to upgrade it to IP65

Lamp. 8W fluorescent G5, 2G7 11W, 18W and 24W/2G11

#### Materials:

Base and reflector unit in white ABS

Clear polycarbonate diffuser

#### Operation:

Maintained, Non-Maintained and Sustain versions

Autonomy from 1h up to 3h

Functional test integrated into the diffuser

Inhibition and Rest Mode

Autotest, slave and CBS models available

Ultra Models with lumens flow up to 350lm

Low consumption in Maintained operation, with a power save of 33% of the nominal output of the lamp

#### Installation:

Wall and Ceiling Installation kit for recessed wall and ceiling

Base for quick mounting (accessory)

Panel, double-sided printed for reporting security (optional)

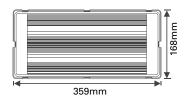
Distance view of 30 meters provides the ability to use fewer products and less power consumption per coverage area of an application

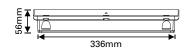
Protection Kit IP65 for outdoor use

#### Applications:

Schools, universities, public administration, commercial environments Sirios range of emergency lights are low profile, designed and equipped with technical solutions and accessories for a wide range of applications such as offices, restaurants, hotels, hospitals and general commercial applications.

The range of accessories includes a recessed base for installation to walls and false ceilings, an IP65 weatherproof kit an exit sign label as well as a variety of lamp options (8, 2x8, 11, 18, 24W).







#### Test Point



Just by pressing the plastic diffuser on all Sirios models you can test the lamp operation, the battery and electronic circuit switching

#### **Recessed Base**



Recessed base for false ceiling and wall recessed applications

IP65 kit



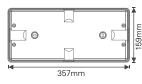
Retrofit IP65 weather proof kit provides an upgrade from IP42 to IP65 installations

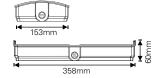
Sirios Exit sign plexiglass



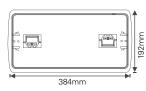
30m viewing distance reduces the quantity of fittings required and in turn reduces power consumption

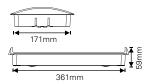
#### Weatherproof base





#### Recessed base





#### Range: Multi

Order code	Description		**	$\bigcirc$	<del>[+ -]</del>	**************************************
O-S8	Sirios Non-Maintained 8W 1h30	FL8WG5	85 Lm	90′	2,4V-1,7Ah NiCd	Non-Maintained
O-S8-3H	Sirios Non-Maintained 8W 3h	FL8WG5	85 Lm	180′	2,4V-1,7Ah NiCd	Non-Maintained
O-S11	Sirios Non-Maintained 11W 1h30	FL11W2G7	180 Lm	90′	4,8V-1,7Ah NiCd	Non-Maintained
O-S11-3H	Sirios Non-Maintained 11W 3h	FL11W2G7	180 Lm	180′	3,6V-4Ah NiCd	Non-Maintained
O-S18	Sirios Non-Maintained 18W 1h30	FL18W2G11	268 Lm	90′	6V-1,7Ah NiCd	Non-Maintained
O-S18-3H	Sirios Non-Maintained 18W 3h	FL18W2G11	268 Lm	180′	4,8V-4Ah NiCd	Non-Maintained
O-S24	Sirios Non-Maintained 24W 1h30	FL24W2G11	330 Lm	90′	4,8V-2,2Ah NiCd	Non-Maintained
O-S24-3H	Sirios Non-Maintained 24W 3h	FL24W2G11	330 Lm	180′	6V-4Ah NiCd	Non-Maintained
O-S8M	Sirios Maintained 8W 1h30	FL8WG5	85 Lm	90′	2,4V-1,7Ah NiCd	Maintained
O-S8M-3H	Sirios Maintained 8W 3h	FL8WG5	85 Lm	180′	2,4V-4Ah NiCd	Maintained
O-S11M	Sirios Maintained 11W 1h30	FL11W2G7	180 Lm	90′	4,8V-1,7Ah NiCd	Maintained
O-S11M-3H	Sirios Maintained 11W 3h	FL11W2G7	180 Lm	180′	3,6V-4Ah NiCd	Maintained
O-S18M	Sirios Maintained 18W 1h30	FL18W2G11	268 Lm	90′	6V-1,7Ah NiCd	Maintained
O-S18M-3H	Sirios Maintained 18W 3h	FL18W2G11	268 Lm	180′	4,8V-4Ah NiCd	Maintained
O-S24M	Sirios Maintained 24W 1h30	FL24W2G11	330 Lm	90′	4,8V-2,2Ah NiCd	Maintained
O-S24M-3H	Sirios Maintained 24W 3h	FL24W2G11	330 Lm	180′	6V-4Ah NiCd	Maintained
O-S8S	Sirios Sustain 8W 1h30	2 x FL8WG5	85 Lm	90′	2,4V-1,7Ah NiCd	Sustain
O-S8S-3H	Sirios Sustain 8W 3h	2 x FL8WG5	85 Lm	180′	6V-1,7Ah NiCd	Sustain
O-S8MAINS	Sirios Mains 8W	FL8WG5				Mains
O-S11MAINS	Sirios Mains 11W	FL11W2G7				Mains
O-S18MAINS	Sirios Mains 18W	FL18W2G11				Mains
O-S24MAINS	Sirios Mains 24W	FL24W2G11				Mains

#### Range: Ultra

Order code	Description		**		<del>[+ -]</del>	20 C C C C C C C C C C C C C C C C C C C
O-S8U	Sirios Non-Maintained 8W 1h	FL8WG5	230 Lm	60′	6V-1,7Ah NiCd	Non-Maintained
O-S8U-PLUS	Sirios Non-Maintained 8W 1h	FL8WG5	320 Lm	60′	3,6V-4Ah NiCd	Non-Maintained
O-S8U-3H	Sirios Non-Maintained 8W 3h	FL8WG5	210 Lm	180′	6V-4Ah NiCd	Non-Maintained
O-S11U	Sirios Non-Maintained 11W 1h	FL11W2G7	350 Lm	60′	3,6V-4Ah NiCd	Non-Maintained
O-S8MU	Sirios Maintained 8W 1h	FL8WG5	230 Lm	60′	6V-1,7Ah NiCd	Maintained
O-S8MU-PLUS	Sirios Maintained 8W 1h	FL8WG5	320 Lm	60′	6V-1,7Ah NiCd	Maintained
O-S8MU-3H	Sirios Maintained 8W 3h	FL8WG5	210 Lm	180′	3,6V-4Ah NiCd	Maintained
O-S11MU	Sirios Maintained 11W 1h	FL11W2G7	350 Lm	60′	6V-4Ah NiCd	Maintained

#### Range: Autotest

Order code	Description		*	<b>(2)</b>	+-	20 0 C C C C C C C C C C C C C C C C C C
O-S8-AT	Non-Maintained Sirios 8W Autotest 1h	FL8WG5	200 Lm	60′	6V-1,7Ah NiCd	Non-Maintained
O-S8-AT-3H	Non-Maintained Sirios 8W Autotest 3h	FL8WG5	100 Lm	180′	3,6V-4Ah NiCd	Non-Maintained
O-S11-AT	Non-Maintained Sirios 11W Autotest 1h	FL11W2G7	220 Lm	60′	6V-1,7Ah NiCd	Non-Maintained
O-S11AT-3H	Non-Maintained Sirios 11W Autotest 3h	FL11W2G7	110 Lm	180′	3,6V-4Ah NiCd	Non-Maintained
O-S18-AT	Non-Maintained Sirios 18W Autotest 1h	FL18W2G11	230 Lm	60′	6V-1,7Ah NiCd	Non-Maintained
O-S18-AT-3H	Non-Maintained Sirios 18W Autotest 3h	FL18W2G11	120 Lm	180′	3,6V-4Ah NiCd	Non-Maintained
O-S24-AT	Non-Maintained Sirios 24W Autotest 1h	FL24W2G11	330 Lm	60′	6V-1,7Ah NiCd	Non-Maintained
O-S24-AT-3H	Non-Maintained Sirios 24W Autotest 3h	FL24W2G11	330 Lm	180′	6V-4Ah NiCd	Non-Maintained
O-S8M-AT	Maintained Sirios 8W Autotest 1h	FL8WG5	200 Lm	60′	6V-1,7Ah NiCd	Maintained
O-S8M-AT-3H	Maintained Sirios 8W Autotest 3h	FL8WG5	100 Lm	180′	3,6V-4Ah NiCd	Maintained
O-S11M-AT	Maintained Sirios 11W Autotest 1h	FL11W2G7	220 Lm	60′	6V-1,7Ah NiCd	Maintained
O-S11M-AT-3H	Maintained Sirios 11W Autotest 3h	FL11W2G7	110 Lm	180′	3,6V-4Ah NiCd	Maintained
O-S18M-AT	Maintained Sirios 18W Autotest 1h	FL18W2G11	230 Lm	60′	6V-1,7Ah NiCd	Maintained
O-S18M-AT-3H	Maintained Sirios 18W Autotest 3h	FL18W2G11	120 Lm	180′	3,6V-4Ah NiCd	Maintained
O-S24M-AT	Maintained Sirios 24W Autotest 1h	FL24W2G11	330 Lm	60′	6V-1,7Ah NiCd	Maintained
O-S24M-AT-3H	Maintained Sirios 24W Autotest 3h	FL24W2G11	330 Lm	180′	6V-4Ah NiCd	Maintained

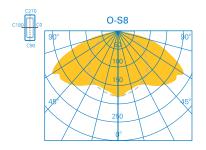
#### Accessories

Order code	Description
O-S-WB	Wall mounting base
O-S-RB	Recessed base
O-S-IP	Weatherproof base
171-000-032	Vertical metal base (O-MP41)
171-000-035	Horizontal metal base (O-PU41)
O-S-LGD100	Exit sign Left ISO format
O-S-LGD200	Exit sign Right ISO format
O-S-LGD300	Exit sign Down ISO format
O-S-LGD500	Sirios Pictogram Hydrant Red
O-S-PS	Sirios acrylic legend (no print)
O-S-PSD	Sirios acrylic legend (down)
O-S-PSDP	Sirios single side plexiglass (down)
O-S-PSLR	Sirios acrylic legend (left / right)

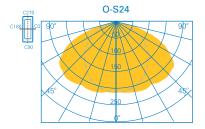
#### Sirios wall mount base for fast installation



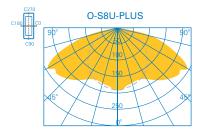
O-S-WB



Model	Height (m)	Distance for 1 Lux				[	Distance for 0,5 Lux				
O-S8						<b> </b>					
	02,60	03,02	08,86	02,21	06,20	04,93	11,15	03,60	07,71		
	02,80	02,94	08,76	02,19	06,26	04,88	11,48	03,63	08,00		
	03,00	02,83	08,67	02,13	06,34	04,83	11,78	03,67	08,26		
	03,20	02,67	08,68	02,06	06,40	04,84	12,04	03,70	08,43		
	03,50	02,33	08,68	01,92	06,32	04,84	12,37	03,66	08,64		
	04,00	01,49	08,26	01,50	06,16	04,63	12,23	03,58	08,88		



Model	Height (m)	Distance for 1 Lux				Distance for 0,5 Lux			
O-S24									
	02,60	04,65	11,68	03,59	08,83	06,34	13,41	04,91	10,66
	02,80	04,77	11,90	03,72	09,14	06,45	13,86	05,07	10,99
	03,00	04,88	12,25	03,80	09,42	06,62	14,49	05,21	11,28
	03,20	04,97	12,56	03,85	09,67	06,78	15,08	05,33	11,64
	03,50	05,09	12,89	03,94	10,00	06,95	15,72	05,50	12,12
	04,00	05,23	13,53	04,01	10,58	07,26	16,85	05,79	12,90



Model	Height (m)		Distance	e for 1 Lu	x	Distance for 0,5 Lux			
O-S8U-PLUS									
	02,60	05,58	13,55	03,91	09,46	07,27	15,82	05,23	11,31
	02,80	05,74	13,86	04,00	09,82	07,43	16,26	05,41	11,79
	03,00	05,89	14,49	04,13	10,15	07,74	16,94	05,57	12,30
	03,20	06,04	15,00	04,25	10,44	08,00	17,58	05,72	12,56
	03,50	06,26	15,50	04,32	10,78	08,25	18,33	05,89	13,17
	04,00	06,30	16,40	04,49	11,43	08,70	19,80	06,21	13,86





- · Low profile
- Unique elegant design
- Easy to install
- Certificated by ENEC Kema Keur
- IP rating IP42
- High temperature batteries Ni-Cd
- Autotest version
- Wide range of different models

Lamp. 8W fluorescent G5, 2G7 11W and 2G11 18W

#### Materials:

Base and reflector unit in white ABS

#### Operation:

Maintained, Non-Maintained and Sustained versions

Autonomy from 1h up to 3h

Self contained, Autotest, Inhibition and Rest Mode slave and CBS models available

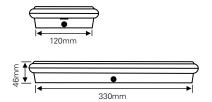
#### Installation:

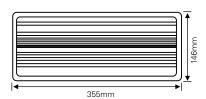
Wall, ceiling and recessed installations

#### Applications:

Schools, offices, hotels, restaurants, warehouses Star22 family of emergency luminaries has been developed to include a wide range of versions depending on the emergency duration, the functionalism and the type of lamps. This impressive variety, offers useful flexibility to the installer, offering several different choices that fulfil any requirements for effective emergency lighting, from a range of simple residential applications to specific industrial ones.

A full range of accessories are available. These include a recessed base for wall or flush mounting, and a plexiglass sign for deploying the luminaire as an exit sign.





#### O-EL20PSD



Slim plexi glass diffuser for exit signs

#### O-DS20

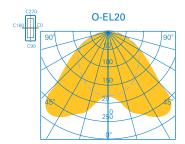


Plastic cone diffuser for exit signs

#### O-EL20RB



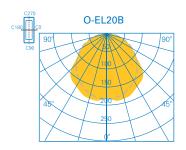
Recessed bases for ceiling and wall mount applications



Model	Height (m)		Distance for 1 Lux			Distance for 0,5 Lux			x
O-EL20									
	02,60	02,69	06,68	02,05	05,98	03,84	08,45	03,49	07,92
	02,80	02,80	06,92	02,00	06,01	03,96	08,66	03,50	08,09
	03,00	02,90	07,05	01,95	06,00	04,02	08,90	03,50	08,26
	03,20	02,98	07,13	01,85	05,97	04,07	09,14	03,48	08,34
	03,50	03,04	07,51	01,69	05,87	04,25	09,29	03,44	08,43
	04,00	02,95	08,00	01,24	05,60	04,50	09,81	03,30	08,55

# O-FL20A 0-FL20A 0-FL20A 0-FL20A

Model	Height (m)	Distance for 1 Lux				Distance for 0,5 Lux			
O-EL20A		<b> </b>							
	02,60	03,29	08,29	02,96	07,71	04,69	10,38	04,35	09,54
	02,80	03,34	08,62	03,00	07,82	04,81	10,71	04,41	09,82
	03,00	03,40	08,83	03,02	07,96	04,91	11,05	04,48	10,11
	03,20	03,44	08,97	03,07	08,16	04,99	11,31	04,58	10,32
	03,50	03,50	09,19	03,05	08,28	05,09	11,65	04,64	10,74
	04,00	03,76	09,50	03,03	08,55	05,25	11,32	04,77	11,09



Model	Height (m)	Distance for 1 Lux				Distance for 0,5 Lux				
O-EL20B						-				
	02,60	03,75	09,42	03,73	09,30	05,21	11,68	05,15	11,15	
	02,80	03,85	09,70	03,85	09,62	05,35	12,01	05,31	11,48	
	03,00	03,92	09,99	03,94	09,87	05,49	12,30	05,43	11,93	
	03,20	03,97	10,24	03,98	10,12	05,62	12,62	05,56	12,40	
	03,50	04,04	10,46	04,05	10,38	05,73	13,17	05,69	12,79	
	04,00	04,24	10,93	04,14	10,93	05,97	13,86	05,97	13,58	

		A	*	$\bigcirc$	+-	A O CANA
O-EL20	Star22 8W NM 90min	FL8WG5	70 Lm	90′	2,4V-1,5Ah NiCd	Non-Maintained
O-EL20-3H	Star22 8W NM 180min	FL8WG5	100 Lm	180′	6V-1,5Ah NiCd	Non-Maintained
O-EL20A	Star22 11W NM 90min	PL11W2G7	130 Lm	90′	3,6V-1,5Ah NiCd	Non-Maintained
O-EL20A-3H	Star22 11W NM 180min	PL11W2G7	100 Lm	180′	6V-1,5Ah NiCd	Non-Maintained
O-EL20B	Star22 18W NM 90min	PL18W2G11	210 Lm	90′	6V-1,5Ah NiCd	Non-Maintained
O-EL20C	Star22 18W NM 180min	FL 2X8WG5	240 Lm	90′	6V-1,5Ah NiCd	Non-Maintained
O-EL20M	Star22 8W M 90min	FL8WG5	70 Lm	90′	2,4V-1,5Ah NiCd	Maintained
O-EL20M-3H	Star22 8W M 180min	FL8WG5	100 Lm	180′	6V-1,5Ah NiCd	Maintained
O-EL20AM	Star22 11W M 90min	PL11W2G7	130 Lm	60′	3,6V-1,5Ah NiCd	Maintained
O-EL20AM-3H	Star22 11W M 180min	PL11W2G7	100 Lm	180′	6V-1,5Ah NiCd	Maintained
O-EL20BM	Star22 18W M 90min	PL18W2G11	210 Lm	90′	6V-1,5Ah NiCd	Maintained
O-EL20SU	Star22 8W S 90min	PL11W2G7	75 Lm	90'	2,4V-1,5Ah NiCd	Sustained
O-EL20SU-3H	Star22 8W S 180min	PL18W2G11	75 Lm	180′	6V-1,5Ah NiCd	Sustained
O-EL28-AUT	Star22 8W NM Autotest 60min	FL8WG5	230 Lm	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL28A-AUT	Star22 11W NM Autotest 60min	PL11W2G7	230 Lm	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL28B-AUT	Star22 18W NM Autotest 60min	PL18W2G11	230 Lm	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL28M-AUT	Star22 8W M Autotest 60min	FL8WG5	230 Lm	60′	6V-1,5Ah NiCd	Maintained
O-EL20 MAINS	Star22 8W Mains	FL8W G5				Mains
O-EL20A MAINS	Star22 11W Mains	PL11W 2G7				Mains
O-EL20B MAINS	Star22 18W Mains	PL18W 2G11				Mains
Accessories						
O-EL20RW	Wall mounting base					
O-EL20RB	Flush mounting base					
O-DS20	Double side diffuser					
O-EL20PS	Diffuser & legend (blank)					
O-EL20PSD	Diffuser & legend (down)					
O-EL20PSLR	Diffuser & legend (left/right)					



- Compliant to EN 60 598-2-22
- Certificated by ENEC Kema Keur
- IP rating IP40
- High temperature batteries Ni-Cd
- Autotest & models

8W FL8W G5

#### Construction:

Base, mounting plate and cover, fire retardant ABS, lens optical grade acrylic

#### Operation:

Maintained, Non-Maintained, Autotest, slave and CBS models available

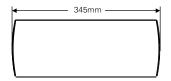
#### Applications:

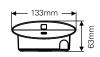
Residential applications, offices, hotels, restaurants and schools

Cronus 8W is a modern stylish emergency luminaire that utilises an 8 watt fluorescence lamp, able to provide suitable luminosity to several types of installations.

A discreet test button is built in to the luminaire giving the opportunity for a quick and easy functional test to be undertaken by anyone that needs to check the luminair's status.

A full range of accessories are available. These include a recessed base for wall or flush mounting and a plexiglass sign for installing the luminaire as an exit sign.





Button for manual test







O-EL8PSLR



C180 C270	O-EL8
C90	90°
	100
	45° 250 45°
	2300

Model	Height (m)		Distance	for 1 Lux		Distance for 0,5 Lux				
O-EL8										
	02,60	03,33	07,98	02,42	06,33	04,49	09,01	03,67	07,86	
	02,80	03,34	08,30	02,43	06,44	04,65	09,54	03,72	08,03	
	03,00	03,34	08,57	02,43	06,64	04,78	09,99	03,82	08,26	
	03,20	03,37	08,81	02,41	06,70	04,90	10,24	03,85	08,49	
	03,50	03,29	09,29	02,36	06,81	05,14	10,78	03,90	08,77	
	04,00	03,04	09,43	02,13	06,95	05,22	11,82	03,98	09,20	

Order code	Description	$\bigcirc$		(3)	+-	A Control of
O-EL8	Cronus 8W NM 90min	FL8WG5	100 Lm	90′	2,4V-1,5Ah NiCd	Non-Maintained
O-EL8-3H	Cronus 8W NM 180min	FL8WG5	115 Lm	180′	6V-1,5Ah NiCd	Non-Maintained
O-EL8C	Cronus 2x8W NM 90min	FL2x8WG5	250 Lm	90′	6V-1,5Ah NiCd	Non-Maintained
O-EL8M	Cronus 8W M 90min	FL8WG5	100 Lm	90′	2,4V-1,5Ah NiCd	Maintained
O-EL8M-3H	Cronus 8W M 180min	FL8WG5	115 Lm	180′	6V-1,5Ah NiCd	Maintained
O-EL8SU	Cronus 8W S 90min	FL8WG5	85 Lm	90′	2,4V-1,5Ah NiCd	Sustained
O-EL8SU-3H	Cronus 8W S 180min	FL8WG5	100 Lm	180′	6V-1,5Ah NiCd	Sustained
O-EL8-AUT	Cronus 8W NM Autotest 60min	FL8WG5	240 Lm	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL8M-AUT	Cronus 8W M Autotest 60min	FL8WG5	240 Lm	60′	6V-1,5Ah NiCd	Maintained
O-EL8MAINS	Cronus 8W Mains	FL8W G5				Mains
Accessories						
O-EL8PSLR	Double side exit sign (Left/Right)					
O-EL8PSD	Double side exit sign (Down)					
O-EL8RB	Recessed base (both for wall or flush mounting	g)				

# Cronus6W



- Low profile 4.8cm height
- Unique elegant design
- Easy to install
- Compliant to EN 60 598-2-22
- Certificated by ENEC Kema Keur
- IP rating IP42
- High temperature batteries Ni-Cd
- Opal diffuser version (EL5)
- Autotest version

#### **Light Source:**

6W FL6W T5

#### Construction:

Base, mounting plate and cover, fire retardant ABS, lens optical grade acrylic

#### Operation:

Maintained and Non-Maintained

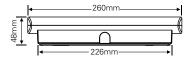
#### Applications:

Residential applications, offices, hotels, restaurants, schools

Cronus 6W is a compact low profile luminaire with a stylish design which offers an attractive emergency lighting solution for a wide variety of areas.

An additional small incandescence lamp is embodied in Cronus 6W indicating the normal charging mode while providing a smart night light solution.

A full range of accessories are available. These include a recessed base for wall or flush mounting, a plexiglass sign for installing the luminaire as an exit sign, as well as the opal diffuser version.









O-EL6RB



C180 C270	O-EL6
C90	900
	45° 250 45°

Model	Height (m)	Distance for 1 Lux				Distance for 0,5 Lux				
O-EL6										
	02,60	02,32	06,95	01,96	05,58	03,98	08,32	03,29	07,16	
	02,80	02,22	07,17	01,92	05,62	04,08	08,62	03,31	07,35	
	03,00	02,03	07,25	01,85	05,65	04,13	08,90	03,33	07,46	
	03,20	01,89	06,98	01,75	05,68	03,99	09,24	03,34	07,63	
	03,50	01,56	06,62	01,56	05,65	03,81	09,63	03,32	07,77	
	04,00	00,89	06,18	00,92	05,40	03,59	10,20	03,20	08,00	

Order code	Description	8	**	(2)	<del>[+ -</del> ]	\$ 0 \$
O-EL5	Cronus 6W NM 90min with Opal diffuser	FL6W T5		90′	2,4V-1,5Ah NiCd	Non-Maintained
O-EL6	Cronus 6W NM 90min	FL6W T5	60 Lm	90′	2,4V-1,5Ah NiCd	Non-Maintained
O-EL6-3H	Cronus 6W NM 180min	FL6W T5	70 Lm	180′	6V-1,5Ah NiCd	Non-Maintained
Accessories						
O-EL6PSLR	Double side exit sign (Left/Right)					
O-EL6PSD	Double side exit sign (Down)					
O-EL6RB	Recessed base (both for wall or flush mounti	ng)				



# Emergency lighting exit signs



2.0	Overview	29
2.1	GuideLED	30
2.2	Velos	34
2.3	Euro X LED	38
2.4	Planete 60D	39
2.5	UltraLED 45	40
2.6	Britesign 2	41
2.7	EvoLED	42
2.8	Via	43

Emergency lighting exit signs

		Indoor	Recessed	Suspended	Ni-Cd	Ni-Mh	Li-lon	Self contained Maintained	Autotest	Viewing Distance in meters	Hospitals	Hotels	Cinemas/Theaters	Schools	Offices	Industrial	Warehouse
		Ins	tallati	on		Batter	У	Opera	ation				App	olicati	ons		
GuideLED	<b>₹</b>	•	•	•			•	•	•	20/30	•	•	•	•	•		
Velos	← 🔀	•	•	•	•	•		•	•	30/40	•	•	•	•	•	•	•
Euro X LED	4 2	•					•	•	•	20	•	•	•	•	•	•	•
Planete 60D	1+7	•			•			•	•	21	•	•	•	•	•		
UltraLED 45	S V	•	•		•			•	•	21	•	•	•	•	•		
Britesign 2	₹↓	•			•			•	•	33	•	•	•		•	•	•
EvoLED		•						•	•	28	•	•	•	•	•		

Via



- Unit with innovative LED technology
- Complies with EN60598-2-22 and EN1838
- Lithium Batteries
- Range selectable 1h, 3h and 8h
- Push button for test operation
- Wall, ceiling, suspension
- Version 20m and 30m visibility
- Selectable autonomy of 1h, 3h and 8h
- Available for ceiling mounting and recessed applications

LED Strip with 3-chip technology with a lifetime of 50.000 hours

Consumption of 4.1W for models from 20m and 4.7W for models from 30m

#### Construction:

Housing unit in light grey polycarbonate

Panel polymethylmethacrylate **PMMA** 

Brackets for steel suspension

#### Operation:

Maintained (M) and Non-Maintained (NM) and CBS models available

Adjustable brightmess function, standing at 100%, 30% and 10%

Range selectable 1h, 3h and 8h Installation options: Wall, ceilings and recessed

Ceiling, recessed, stiff suspension and cable versions

External push button for manual execution of test

#### Applications:

Hotels, restaurants, meeting rooms, offices, shops, cinemas, theaters, museums

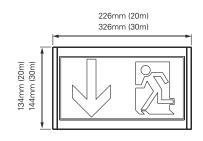
Particularly suitable for local public performance by adjusting the brightness

GuideLED, demonstrates that compliance with regulations, and multiple mounting options does not exclude an exemplary design. It has been developed in accordance with the provisions of ISO 3864-1, including the requirement of 500cd/m<sup>2</sup> within the white surface, ensuring optimal recognition and a high level of safety.

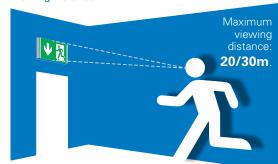
The highly developed Lightguide technology transforms the high point-sourced luminance of an LED into an illuminated surface with absolute uniform brightness. The 3-chip LEDs used in this process ensure a high level of operational safety and with a service life of 50.000 hours, significantly reduce maintenance efforts.

Its minimised power consumption of up to 60% below a comparable luminaire with fluorescent lamp also ensures a distinct reduction in operating cost.

The wide variety of versions available make the GuideLED escape sign luminaire a versatile solution. Featuring viewing distances of 20m or 30m, single-sided or double-sided options and multiple mounting types, they are ideal for a variety of room sizes and applications. Concealed connections and a slim-line construction also offer users an innovative solution and design.



#### Viewing distance



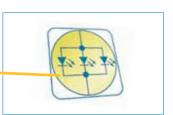
#### 3-Chip LEDs for increased safety

Longevity, instant start up, high efficiency and compact size are the features that make LEDs especially suitable for emergency and safety lighting. Precise matching along with low temperatures and low operating current guarantees high luminous efficiency with maximum service life.

Up to 48 LEDs optimally illuminate the GuideLED pictogram. Three LEDs are enapsulated in a common housing to form each light point. If one of the three LEDs fails, the intact LEDs illuminate more brightly. This ensures excellent illumination on a permanent level.







#### 1 LED Lightguide technology

- Perfect, standard compliant illumination
- Low energy requirements
- 3-Chip LEDs for increased safety with 50.000 hours service life

#### CGLine LED electronics

- Can be used for Maintained mode and Non-Maintained mode
- Fully automatic function test (weekly) or duration test (every 6 months)
- 1 minute switch-back delay to normal operation after mains return
- Blocking function prevents unitentional discharge during idle operating times (via CG controller CGLine 400 or CGLine WEB interface)
- Convenient and concise central monitoring in combination with CG Controller, CG Web interface or CG Vision visualisation Software



- Spacious insertion areas
- Equipped for through-wiring of mains cable and CGLine bus live double terminals and 4 cable terminals

#### 4 Display and test unit

- Testing button for manual triggering of function test and duration test
- Simple fault analysis with bicolor LED (light source charging or battery fault) and status display (operation, function test, duration test)
- Setting of dimming level in mains operation (100%, 30%, 10%)



#### 5 Innovative Lilon technology

- Large capacity with compact design
- 1 version for 1h, 3h and 8h emergency lighting operation
- No memory effect
- Environmental friendly: no heavy metals and energy-optimized charging process due to low self-discharge
- Simple replacement via polarity reversal protected plug-in contacts and snap mounting

#### Lightiguide technology for optimal illumination

The highly developed Lightguide technology converts the high point-sourced luminance of the LED into an illuminated surface with absolute uniform brightness, with luminance of over 50 cd/m² on white surface. Therefore the escape sign always remains easily recognisable even with poor visibility conditions or in bright surroundings.

Despite the very good photometric values, the new Lightguide technology with particularly efficient LEDs requires up to 60% less energy compared to previous escape sign luminaires with fluorescent lamps.

Photometric requirements for escape sign DIN 4844-1 (2005-05) and ISO 3864-1 (2002):

 $L_{\rm m} \ge 500$  cd/m² (white surface) For applications in bright ambient conditions (mains operation)

#### ISO 30061 (2007):

 $L_{\text{min}}=10\ \text{cd/m}^2$  (green surface) In smoky conditions. The luminaires should be suspended by at least 0.5m

#### EN 1838 (1999):

L<sub>min</sub> = 2 cd/m<sup>2</sup> (green surface) Emergency lighting operation



Badly illuminated escape sign



GuideLED ≥100 cd/m<sup>2</sup> ≥500 cd/m<sup>2</sup>

### Emergency lighting exit signs GuideLED

#### Wall Mount





GuideLED 10811 - 20m GuideLED 11811 - 30m

#### Wall Recessed



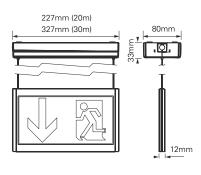
GuideLED 10812 - 20m GuideLED 11812 - 30m

Order code	Description	8	-2-	<del>[-</del> ]	200 Exions
40071353080	Wall mounting set for GuideLED, 20m and 30m		1h-3h-8h	Lilon 3,7 / 2Ah	
40071353070	Recessed mounting set for GuideLED, 20m and 30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353050	LED pictogram (left), 11x11/11x12, 20m	LED strip			
40071353051	LED pictogram (right), 11x11/11x12, 20m	LED strip			
40071353052	LED pictogram (down), 11x11/11x12, 20m	LED strip			
40071353150	LED pictogram (left), 11x11/11x12, 30m	LED strip			
40071353151	LED pictogram (right), 11x11/11x12, 30m	LED strip			
40071353152	LED pictogram (down), 11x11/11x12, 30m	LED strip			

#### Ceiling mounted Suspended

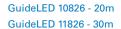


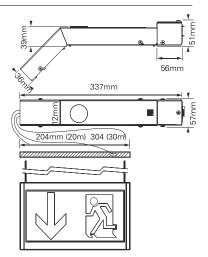
GuideLED 10825 - 20m GuideLED 11825 - 30m



Ceiling mounted Suspended by cable







Order code	Description		<b>(</b> 2)	<del>[+ -]</del>	200 Z
40071353065	Rope set 10825, intergated in canopy, 20m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353075	Rope set 11825, intergated in canopy, 30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353081	Rope set 10826/11826, with ceiling holders, 20/30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353450	LED pictogram (left/right), 10x25/10x26 (rope), 20m	LED strip			
40071353550	LED pictogram (left/right), 11x25/11x26 (rope), 30m	LED strip			
40071353451	LED pictogram (down/down), 10x25/10x26 (rope), 20m	LED strip			
40071353452	LED pictogram (left/blank), 10x25/10x26 (rope), 20m	LED strip			
40071353453	LED pictogram (right/blank), 10x25/10x26 (rope), 20m	LED strip			
40071353454	LED pictogram (down/blank), 10x25/10x26 (rope), 20m	LED strip			
40071353551	LED pictogram (down/down), 11x25/11x26 (rope), 30m	LED strip			
40071353552	LED pictogram (left/blank), 11x25/11x26 (rope), 30m	LED strip			
40071353553	LED pictogram (right/blank), 11x25/11x26 (rope), 30m	LED strip			
40071353554	LED pictogram (down/blank), 11x25/11x26 (rope), 30m	LED strip			
-					



Rope installation with ceiling rope holders, LED supply for mounting in cavity ceiling

#### **Celling Mount**



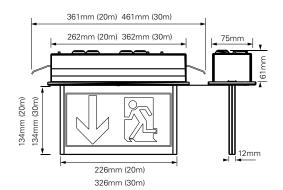
GuideLED 10821 - 20m GuideLED 11821 - 30m

## 227mm (20m) 327mm (30m) 80mm (80g) 80mm 12mm

#### Ceiling Recessed



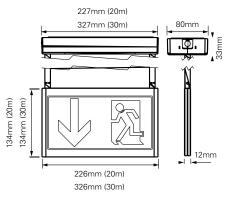
GuideLED 10824 - 20m GuideLED 11824 - 30m



#### Ceilling Suspended



GuideLED 10822 - 20m - bracket 0,5m GuideLED 11822 - 30m - bracket 0,5m GuideLED 10823 - 20m - bracket 1,5m GuideLED 11822 - 30m - bracket 1,5m





Order code	Description	8	$\odot$	+-	50 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
40071353061	Ceiling mounting set 10821, with canopy 20m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353062	Ceiling mounting set 10822, with canopy and 0,5m bracket, 20m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353063	Ceiling mounting set 10823, with canopy and 1,5m bracket, 20m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353064	Ceiling mounting set 10824, ceiling recessed housing, 20m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353071	Ceiling mounting set 11821, with canopy 30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353072	Ceiling mounting set 11822, with canopy and 0,5m bracket, 30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353073	Ceiling mounting set 11823, with canopy and 1,5m bracket, 30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353074	Ceiling mounting set 11824, ceiling recessed housing, 30m		1h-3h-8h	Lilon 3,7 / 2Ah	Maintained / Non-Maintained
40071353250	LED pictogram (left/right), 10x21/10x22, 10x23, 10x24 20m	LED strip			
40071353251	LED pictogram (down/down), 10x21/10x22, 10x23, 10x24 20m	LED strip			
40071353252	LED pictogram (left/blank), 10x21/10x22, 10x23, 10x24 20m	LED strip			
40071353253	LED pictogram (right/blank), 10x21/10x22, 10x23, 10x24 20m	LED strip			
40071353254	LED pictogram (down/blank), 10x21/10x22, 10x23,10x24 20m	LED strip			
40071353255	LED pictogram (left/right), 10x21/10x22,10x23,10x24 20m vertical	LED strip			
40071353256	LED pictogram (left/right), 10x21/10x22, 10x23, 10x24, 20m vertical	LED strip			
40071353 350	LED pictogram (left/right), 11x21/11x22,11x23, 11x24 30m	LED strip			
40071353 351	LED pictogram (down/down), 11x21/11x22,11x23, 11x24 30m	LED strip			
40071353 352	LED pictogram (left/blank), 11x21/11x22,11x23, 11x24 30m	LED strip			
40071353 353	LED pictogram (right/blank), 11x21/11x22,11x23, 11x24 30m	LED strip			
40071353 354	LED pictogram (down/blank), 11x21/11x22,11x23, 11x24 30m	LED strip			
40071353 355	LED pictogram (left/right), 11x21/11x22,11x23, 11x24 30m vertical	LED strip			
40071353 356	LED pictogram (left/right), 11x21/11x22,11x23, 11x24 30m vertical	LED strip			



- Unit with innovative LED technology Certified family of emergency exit signs in accordance to EN 60598-2-22
- 3rd party certification
- Nickel Metal Hydride Batteries
- Push button for test operation
- Ceiling, wall, suspension, recessed and lateral installation
- Models of 30m and 40m visibility
- Test functions
- Complete range of accessories

LED Strip with a lifetime of more than 60.000 hours 24 LEDs producing 140 lumens

#### Materials:

Base and reflector unit in white Polycarbonate

#### Operation:

Maintained, slave and CBS models available

Autonomy from 1h up to 3h

Adjustable brightness function to 50% in mains operation

Functional test button

Telecommand, Inhibition operation

Autotest and Slave models available

#### Installation:

Ceiling, wall, recessed, suspended through rope or metal pipe and lateral installation

No special tools required

#### Applications:

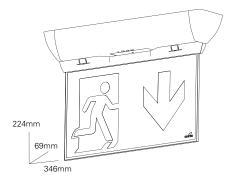
Schools, universities, public administration, commercial environments

Hotels, restaurants, meeting rooms, offices, shops, cinemas, theaters, museums

Areas with large heights and long distance view requirements

The new Velos family of emergency lighting is designed and equipped with technical solutions that make it suitable for a wide range of applications. A complete range of accessories such as the recessed base for false ceiling installations, lateral and back base as well as suspension options allow for a variety of mounting positions.

Together with the choice of ISO and EURO exit sign labels, the Velos LED range is appropriate for emergency lighting requirements in multiple of places such as offices, restaurants, hotels, hospitals and general commercial applications.



#### Viewing distance



Distance view of 30 / 40 meters provides the ability to use fewer products and less power consumption per coverage area of an application.



#### **Power Supply Unit**

- Easy to install with no use of special tools required.
  - Environmentally friendly: no heavy metals and energyoptimized charging process due to low self-discharge.
- Easy to connect power cables via screwless connectors for up to 2.5mm² cables.
- Multiple entrance points for power cables through base and main body of the power supply unit.
  - Construction Material: Polycarbonate.
  - Large capacity NiMH batteries with small construction size for compact luminaire design.

#### 4 Velos electronics

- Fully automatic function test (weekly) or duration test (every 10 weeks).
- Testing button for manual triggering of function test.
- Autotest models available with simple fault analysis with two LED indication of battery / LED test and status display (operation, function test, duration test, failure).
- Easily set the level in mains operation to 50% or 100%.
- Increased product reliability with LED matrix orientation. By groups of 3, if one of the 24 LEDs fails, the intact LEDs will illuminate more brightly.

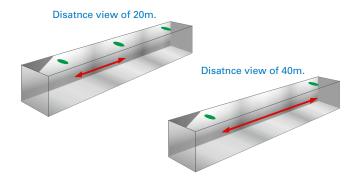


#### 5 Velos Exit Sign

- Design life time: exceeding 60.000 hours lifetime expectancy using an EN1838 standard plate of 4mm thickness with 24 LED producing 140lm with minimum 240 cd/m² on white surface.
- Simple parts clicking with each other ensuring fast installation.

#### Velos distance view

- Velos provides a solution regarding distance view and emergency exit signs
- Distance view from 30 up to 40 meters, minimizing the number of lights into an installation, reducing the energy consumption of the emergency lighting in a building and installation and maintenance cost.
- Various accessories for ease of installation aiming to accommodate all possible applications and areas, with recessed base, wall mounting accessories, lateral direction base, suspended from ceiling either with rope or metal pipes.



#### Velos optimal illumination

New exit sign plate used in Velos converts the high luminance of the LED into an illuminated surface with homogeneous brightness, with luminance of over 38 cd/m² on the white surface. As such the escape sign always remains easily recognisable even with poor visibility conditions or in bright surroundings.

Velos LEDs illuminate with a high efficiency of more than 112lm/W.

# Uniformity of the illumination >0.1 Contrast between white and coloured areas >5:1 but <15:1 ≥ 240 cd/m² ≥ 38 cd/m²

#### Photometric requirements for escape sign

EN 1838 (1999), Emergency lighting operation:

Lmin = 2 cd/m² (green surface) Lgreen ≥ 2 cd/m²

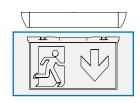
 $Lwhite \geq 10 \ cd/m^2$ 

5 ≤ Lwhite / Lgreen ≤15

ISO 30061 (2007), When smoke is prime consideration:

Lgreen  $\geq$  10 cd/m<sup>2</sup> Lwhite  $\geq$  50 cd/m<sup>2</sup>

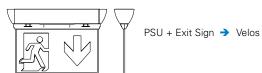
#### PSU unit of Velos (order separately)



#### Exit sign of Velos (order separately)

Order code			<del>[-</del> ]
O-ESC	Velos PSU 1,5h NiCd	1,5h	4VTCs NiCd 1600mA
O-ESC-3H	Velos PSU 3h NiCd	1,5h	4VTCs NiCd 1600mA
O-ESMAINS	Velos PSU Mains		
Order code	5 <sup>M</sup> 6 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0	$\odot$	<del>[+ -</del> ]
O-ESM-AT	Velos PSU 1h NiMH Autotest	1h	4AA NiMH 1100mA
O-ESM-AT-3H	Velos PSU 3h NiMH Autotest	3h	4VTCs NiMH 2000mA

#### Ceiling mount

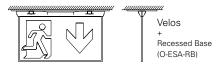


#### Wall mount

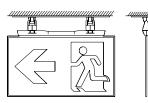




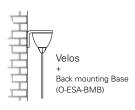
#### Recessed (30m)



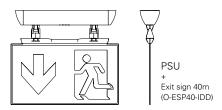
#### Recessed (40m)



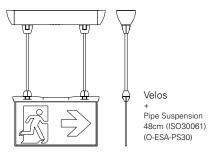




#### Ceiling mount (40m)



#### Suspended with metal pipes



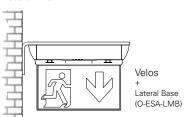
Velos

Recessed Base (O-ESA-RB)

Exit sign 40m

+ PSU

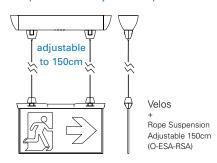
#### Lateral mount



#### Accessories

Order code	Description
O-ESA-RB	Velos Recessed base
O-ESA-FLEX	Velos Wall FLEXI Joint
O-ESA-RSA	Velos Rope Suspension adjustable 150cm
O-ESA-PS30	Velos Pipe Suspension 48cm (ISO30061)
O-ESA-LMB	Velos Lateral Mounting Base
O-ESA-BMB	Velos Back Mounting Base

#### Suspended with adjustable rope



# Emergency lighting exit signs Velos

15		
os	<b>∠</b> .	_

Order code	Description		Dimensions	
O-ESP-ELR	Velos pictogram EURO LEFT/RIGHT 30m	24 LEDs	288x165	<b>₹→</b> ■ ■← <b>汽</b>
O-ESP-ED	Velos pictogram EURO DOWN/BLANK 30m	24 LEDs	288x165	<b>₹↓</b>
O-ESP-EDD	Velos pictogram EURO DOWN/DOWN 30m	24 LEDs	288x165	<b>⋞</b> ↓▮ ▮↓≽
O-ESP-EU	Velos pictogram EURO UP/BLANK 30m	24 LEDs	288x165	<b>4</b> ↑■
O-ESP-EUU	Velos pictogram EURO UP/UP 30m	24 LEDs	288x165	<b>⋞</b> ↑▮∥↑⋡
O-ESP-E2R	Velos pictogram EURO Lateral to Room	24 LEDs	288x165	<b>→</b>
O-ESP-E2W	Velos pictogram EURO Lateral to Wall	24 LEDs	288x165	<b>□ □ □ □</b>
O-ESP-ILR	Velos pictogram ISO LEFT/RIGHT 30m	24 LEDs	288x165	
O-ESP-ID	Velos pictogram ISO DOWN/BLANK 30m	24 LEDs	288x165	<b>5</b> •
O-ESP-IDD	Velos pictogram ISO DOWN/DOWN 30m	24 LEDs	288x165	以する
O-ESP-IU	Velos pictogram ISO UP/BLANK 30m	24 LEDs	288x165	<b>公</b>
O-ESP-IUU	Velos pictogram ISO UP/UP 30m	24 LEDs	288x165	公 个 亿
O-ESP-I2R	Velos pictogram ISO Lateral to Room	24 LEDs	288×165	<b>₹</b>
O-ESP-I2W	Velos pictogram ISO Lateral to Wall	24 LEDs	288x165	<b>☆ ☆ →</b>
O-ESP-RUS	Velos pictogram Russian Exit 30m	24 LEDs	288x165	выход
O-ESP40-ILR	Velos pictogram ISO LEFT/RIGHT 40m	24 LEDs	370x220	\$ → ← \$2
O-ESP40-IDD	Velos pictogram ISO DOWN/DOWN 40m	24 LEDs	370x220	日本 マート 日本
O-ESP-H	Velos Hydrant pictogram 30m	24 LEDs	288x165	H H
O-ESP-FHD	Velos Fire hose down 30m	24 LEDs	288x165	
O-ESP-FH-EXT	Velos Fire hose & extinguisher 30m	24 LEDs	288x165	
O-ESP-WIRL	Velos pictogram Wheel ISO LEFT/RIGHT 30m	24 LEDs	288x165	& → ← ð
O-ESP-WIDD	Velos pictogram Wheel ISO DOWN/DOWN 30m	24 LEDs	288x165	& <b>↓</b> ↓ ₺
O-ESP40-WILR	Velos pictogram Wheel ISO LEFT/RIGHT 40m	24 LEDs	370x220	& → ← 성
O-ESP40-WIDD	Velos pictogram Wheel ISO DOWN/DOWN 40m	24 LEDs	370x220	<b>&amp; ♥ ♥</b> &





- For wall and ceiling mounting
- Protection class IP54
- Including pictogram set
- Low operating costs via low connected load
- Environmentally-friendly lithium ion battery
- Automatic test functions
- LEDs with high service life

5 LED of 4,5W

Low operating costs via low connected load (3.2 W)

Minimum maintenance effort and increased safety via use of LEDs with high service life (50,000 hours)

#### Materials:

Polycarbonate body and diffuser

#### Installation:

Wall mounting, ceiling mounting

Universal use: The luminaire is universally suitable for wall and ceiling mounting and has IP54 protection rating, including pictogram set (arrow right, left and down) acc. to ISO 7010

3h emergency light duration with an environmentallyfriendly lithium ion battery

#### Operation:

Maintained and Non-Maintained operation selectable via a sliding switch

LED self-contained luminaire with automatic test functions: Battery operation is tested once weekly and battery capacity twice yearly.

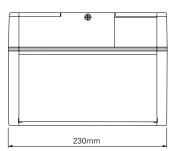
Test results are displayed via a dual colour LED.

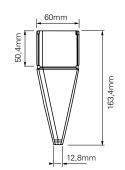
#### Applications:

Hotels, restaurants, offices, shops, cinemas, theaters, museums

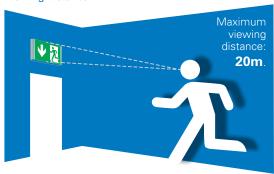
Euro X LED exit sign has been developed to meet a wide spectrum of requirements, with no compromises to quality or functionality despite the diversity of product features.

The self-contained luminaire features universal mounting, lithium ion technology and a high IP54 protection rating making it a flexible low maintenance solution with a long service life.



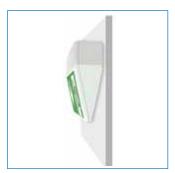


#### Viewing distance









Wall mounting

Order code	Description	$\Diamond$	<b>(</b> 2)	+-	300 CC (5)
40071354900	Euro X LED, 3h Autotest	5LED 3.2W	180′	3.7 V / 2.000 mAh	Maintained / Non-Maintained

# Planete 60D

- Unique elegant design
- Wall or ceiling
- Autotest
- Low energy consumption



#### **Light Source:**

2 white LED

No relamping: 100%-LED unit

#### Materials:

Interchangeable battery pack

#### Operation:

Maintained

Autotest in standard version

Automatic execution of all regulatory tests

#### Installation:

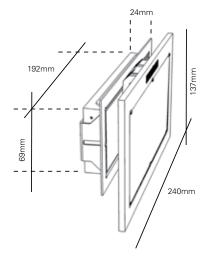
Wall and ceiling installations

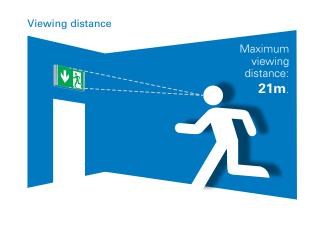
#### **Applications:**

Schools, offices, hotels, restaurants, warehouses Planete 60 combines the long life and low maintenance benefits of LED technology along with a light design making the product applicable to almost all stylish applications where emergency light is used.

Energy efficient and autotest reliable operation assures the long life of the LED light source, which is monitored by an integral self test system.

Planete 60 can be mounted in wall and ceiling installations.







Planete60, ceiling application



Planete60, wall application



Planete60, LED light distribution technology

Order code	Description		<b>(</b> 2)	<del>[+ -]</del>	40 62 20 0 2
LUM17002	Planete 60	2 white LED	60′	4x1,2V - 0,8Ah	Maintained
Accessories					
LUM10514	Recessed Base				
LUM10518	Legend Down				
LUM10517	Legend Left / Right				



- Unique elegant design
- Wall or ceiling
- Autotest
- Low energy consumption
- Weatherproof model available

2 x 1,6W Power LED

Reduced consumption (< 1.6W)

No relamping: 100%-LED unit

#### Materials:

Compact casing

Translucent honeycombshaped bracket for fast, universal fixing

Non-polarised remote control entries

Interchangeable battery pack

Connection to screwless terminals

Colour: white RAL 9010

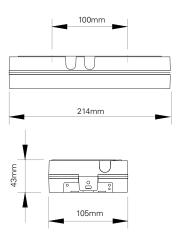
#### Installation:

Wall and ceiling mounting

#### Applications:

Domestic applications, houses, flats, offices

UltraLED 45 is an exit sign which can be altered according to the user and application requirements. With the smart change of the exit sing pictograms, it can be used in horizontal or vertical orientation. It has a long life duration as well as low maintenance with its autotest reliable operation. UltraLED 45 can be mounted in wall installations.













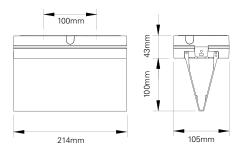
Easy installation and cabling



LUM16005



Recessed installation and diffuser accessory



Exit sign orientation and easy mounting of the unit

Order code	Description	$\Diamond$	(2)	<del>[+ -</del> ]	20 C C C C C C C C C C C C C C C C C C C
LUM16025	UltraLED 45	2 x 1,6W LED	60′	4X1,2V - 0,8Ah	Maintained
LUM16005	UltraLED 45 IP66	2 x 1,6W LED	60′	4X1,2V - 0,8Ah	Maintained
Accessories					
LUM10534	Recessed Base				
LUM10533	Double side diffuser				



- Ultra low profile design
- 50.000 hour LED source for minimum maintenance
- EN1838 compliant legend panel
- Bezel colour options on request
- Autotest models available

High intensity 3W white LED strip

#### Materials:

Housing steel, powder coated in RAL9016 finish

Bezel die cast Aluminum, satin anodised or powder coated in RAL9016 finish

Legend panel clear acrylic with screen print legend

#### Installation:

Suitable for wall mounting

First fix body with rear BESA entry and 20mm conduit entry on top face

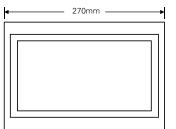
Direct fix via keyhole slots

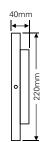
Bezel assembly screwed securely to base

#### Applications:

Hotels, restaurants, cinemas, theaters, schools and hospitals Using the latest in LED technology Britesign 2 has been remodeled to suit most prestigious installations and commercial interiors. It has an ultra low profile of 40mm and the stepped bezel creates an even slimmer appearance which makes this LED exit sign blend unobtrusively into almost any environment.

The picture frame style die cast aluminum bezel is available in satin anodised finish as well as the ever popular white and houses a 33m viewing distance legend panel. The 50.000 hour long life LED source provides outstanding savings in lamp replacement and maintenance costs when compared to a traditional 8W lamp.





#### Viewing distance





40mm slim profile of Britesign 2 minimised further using stepped frame design

Order code	Description	8	<b>(</b> 2)	<del>[+ -</del> ]	And Control
BS2M	Britesign 2, Maintained	3W LED strip	180′	4,8V - 1,6Ah	Maintained
BS2MIS	Britesign 2, Maintained, Autotest	3W LED strip	180′	4,8V - 1,6Ah	Maintained
BS2MA	Britesign 2, Maintained, Aluminum finish	3W LED strip	180′	4,8V - 1,6Ah	Maintained
BS2MAIS	Britesign 2, Maintained, Autotest, Aluminum	3W LED strip	180′	4,8V - 1,6Ah	Maintained
BS2S230	Britesign 2, Mains	3W LED strip			Mains
BSAD	Legend Down				
BSAL	Legend Left				
BSAR	Legend Right				



- Sleek modern looks blends into most environments
- 50.000 hour LED source for minimum maintenance
- Self-test as standard
- EN1838 compliant legend for uniformity of appearance
- · White or silver finish

1W high output high efficiency side emitting white LED

#### Materials:

Body and housing polycarbonate

Legend panel clear acrylic with pre-applied screen printed legend

Batteries NiMH

#### Operation:

Maintained 1 or 3 hour duration Choice of colour finishes

#### Installation:

Suitable for ceiling and wall mounting

Screwless snap together assembly

Legend panel has a self locking mechanism to prevent malicious removal

Push in connectors for mains supply cables

#### Applications:

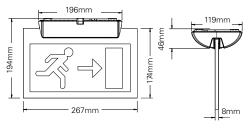
Hotels, cinemas, theaters, schools and hospitals

EvoLED combines the long life and low maintenance benefits of LED technology with energy efficient operation and prestigious styling to produce an exit sign suitable for almost any application.

Available in a choice of either white or silver color finishes, EvoLED is quick and simple to assemble with a snap together design incorporating a self locking clip in legend panel.

Reliable operation is assured by the long life LED light source, which is monitored by an integral self test system.

Thanks to the patented lighting technology EvoLED signage luminaires comply with only an LED light source all the required standards. EvoLED is available standard in white and aluminum.

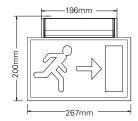


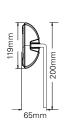
#### Viewing distance



#### Wall mount plexiglass







Order code	Description		<b>(</b> 2)	<del>[+ -</del> ]	800 82.0.5
100-001-105	EvoLED white, 1h, Autotest	1W LED	60′	4,8V - 1,25Ah	Maintained
100-001-115	EvoLED silver, 1h, Autotest	1W LED	60′	4,8V - 1,25Ah	Maintained
100-601-105	EvoLED white, 3h, Autotest	1W LED	180′	4,8V - 1,25Ah	Maintained
100-601-115	EvoLED silver, 3h, Autotest	1W LED	180′	4,8V - 1,25Ah	Maintained
175-000-050	Legend Right/Left				
175-000-062	Legend Down				
176-000-051	Legend Wall plex Right				
176-000-052	Legend Wall plex Left				

# Emergency lighting exit signs

- Modern contemporary styling
- 50.000 hour LED source for minimum maintenance
- Easy to install
- Luminaire and legend supplied as one unit
- Adjustable height (up to 7cm)



#### **Light Source:**

8 x 1W white LED strip

#### Materials:

Body and housing ABS white finish

Legend clear acrylic with pre applied legend

Batteries sealed nickel cadmium NiCd

#### Installation:

Suitable for ceiling mounting

Screwless snap together assembly

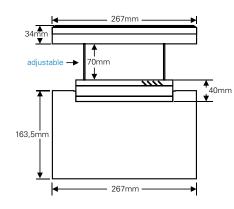
Legend panel has self locking mechanism to prevent malicious removal

Luminaire and legend supplied together

#### Applications:

Commercial malls, cinemas and theaters, hotels, restaurants, conference areas, hospitals Contemporary styling and high quality materials blend together perfectly to produce the attractive Via range of pendant exit signs.

Injection moulded parts help reduce weight and provide a distinctive sculptured appearance suitable for a wide variety of interiors and applications. Via also benefits from a frameless modern design of legend panel that offers a maximum viewing distance of 30m. The long life LED strip provides an excellent uniform illumination of the legend comfortably meeting the requirements of EN1838. Via has an LED source with a rated life of 50.000 hours ensuring reliable operation and minimising onsite maintenance costs





Order code	Description	8	<b>(</b> 2)	<del>[+ -]</del>	20 Com	
O-VIA8-PSD	VIA8, 2h, legend Down	8 x 1W LED strip	120′	2,4V - 1,5Ah	Maintained	<b>X</b> + <b>I X</b> + <b>I</b>
O-VIA8-PSLR	VIA8, 2h, legend Left / Right	8 x 1W LED strip	120′	2,4V - 1,5Ah	Maintained	<b>₹→</b> ■ <b>-</b> *
O-VIA8-EXT	VIA8 LED 2h Exit	8 x 1W LED strip	120′	2,4V - 1,5Ah	Maintained	EXIT
O-VIA8-STD	VIA8 LED 2h Stairs Down	8 x 1W LED strip	120′	2,4V - 1,5Ah	Maintained	<b>₹₹</b> ■ <b>*</b>
O-VIA8-STU	VIA8 LED 2h Stairs Up	8 x 1W LED strip	120′	2,4V - 1,5Ah	Maintained	<b>47</b>



## Outdoor emergency lighting



3.0	Overview	47
3.1	Atlantic LED	48
3.2	Outdoor wall	49
3.3	i-P65	50
3.4	Alfalux Highbay LED	52
3.5	Atlantic Plus LED	53
3.6	StarIP65	54
3.7	Zetalite 3	56
3.8	New Safe 8	57

Outdoor emergency lighting

	Indoor	Recessed	Outdoor	Ni-Cd	Ni-Mh	Li-lon	Maintained	Non-Maintai	Autotest	Hospitals	Hotels	Cinemas/The	Schools	Offices	Industrial	Warehouse
	Ins	tallati	ion		Batter	У	Op	oerati	on			App	licatio	ns		
Atlantic LED			•		•		•	•	•				•		•	•
Outdoor wall			•		•			•	•				•		•	•
i-P65			•		•		•	•	•	•	•	•	•		•	•
Alfalux Highbay LED																
1 : 1																
Atlantic Plus LED																
StarlP65		•	•	•			•	•	•	•	•	•	•	•	•	•
Zetalite 3			•	•			•	•					•		•	•
New Safe 8			•	•			•	•		•	•	•	•	•	•	•

The information given in this brochure is accurate at the time of compilation (errors and omissions excepted), however due to Eaton philosophy of constant product development we reserve the right to change specifications without prior notice.



- Innovative LED technology
- Complies with EN60598-2-22
- Rugged cast aluminum IK10
- Ni-Mh HT
- Suitable for industrial environments

Two high-brightness LEDs of 1.6W with loop life of 50.000 hours

#### Materials:

Cast aluminum housing unit in grey

White polycarbonate reflector Clear polycarbonate diffuser

#### Operation:

Maintained and Non-Maintained versions and CBS models available

Autonomy 1h

Manual test with magnet

#### Installation:

Wall and ceiling installations

#### Applications:

Factories, warehouses, underground car parks, workshops, tunnel

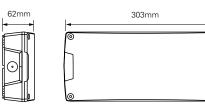
Escape routes, corridors

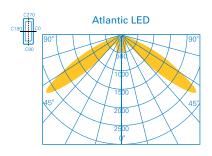
AtlanticLED is a device for lighting and signaling safety. The durable cast aluminum body along with the high IP65 protection rating, makes this unit particularly suited to industrial areas, underground

The electronic circuit performs self-diagnosis functions and independent tests for functionality and autonomy duration.

AtlanticLED has internal jumpers that allows to switch between 200 lux or 75 lux light output. The optical asymmetric lens are optimally designed to spread light in corridors and escape routes.

136mm







Atlantic LED can be used as exit sign

Atlantic LED  03,00 03,00 03,00 07,90 07,50 16,70 15,00 03,50 02,30 08,02 08,30 18,60 16,60	route)	د (escape	e for 0,5 Lux	Distance	n area)	Lux (ope	tance for 1	Dis	Height (m)	Model
03,50 02,30 08,02 08,30 18,60 16,60										Atlantic LED
1471 1471 1471 1471 1471 1471	06,60		15,00		16,70	07,50	07,90	03,00	03,00	
04.00 04.00 09.40 00.10 20.40 19.00	07,40		16,60		18,60	08,30	08,02	02,30	03,50	
04,00 04,00 08,40 09,10 20,40 18,00	08,10		18,00		20,40	09,10	08,40	04,00	04,00	

Order code	Description		**	<b>(</b> 2)	+-	50 C C C C C C C C C C C C C C C C C C C
100-052-023	ATLANTIC LED R-AD, (open area)	2 x 1 6W LED	200Lm	60′	4,8V-2,2Ah	Maintained / Non-Maintained
100-052-022	ATLANTIC LED R-AD, (escape route, double side)	2 x 1 6W LED	200Lm	60′	4,8V-2,2Ah	Maintained / Non-Maintained
100-052-021	ATLANTIC LED R-AD, (escape route, single side)	2 x 1 6W LED	200Lm	60′	4,8V-2,2Ah	Maintained / Non-Maintained
Accessories						
155-000-001	Single side pictogram (right)					
155-000-002	Single side pictogram (left)					
155-000-003	Single side pictogram (down)					
155-000-201	Double side pictogram (right)					
155-000-202	Double side pictogram (left)					
155-000-203	Double side pictogram (down)					



- Innovative LED technology
- Complies with EN60598-2-22
- Rugged cast aluminum IK10
- Ni-Mh HT
- Suitable for emergency exits

Two high-brightness LEDs of 1.6W with loop life of 50.000 hours

#### Materials:

Cast aluminum housing unit in grey

White polycarbonate reflector Clear polycarbonate diffuser

#### Operation:

Maintained and Non-Maintained versions and CBS models available

Autonomy 1h

Manual test with magnet

#### Installation:

Wall mounting over exits and escape routes versions

#### **Applications:**

Factories, warehouses, underground car parks, workshops, tunnel

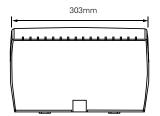
Escape routes, corridors

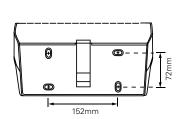
Installation on emergency exits inside and outside buildings

The durable cast aluminum along with the high degree of protection (IP65) makes this outdoor wall unit particularly suitable for industrial areas, underground car parks and tunnels.

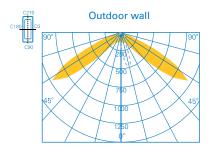
Outdoor Wall has been developed to be mounted on the wall above the safety exits of a building both inside and outside, thanks to the special design which allows 90° installation and ensures the uniform illumination level required by law.

Outdoor Wall has an internal jumpers that allows to switch between 200 lux or 75 lux light output. The optical asymmetric lens are optimally designed to spread light in corridors and escape routes.

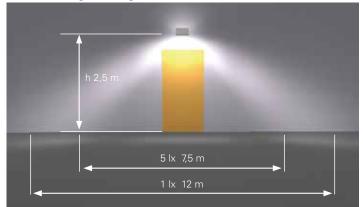








#### Outdoor LED light coverage



Order code	Description	8	**	<b>(</b> )	+-	50 50 50 50 50 50 50 50 50 50 50 50 50 5
100-052-521	OUTDOOR WALL AD	2 x 1 6W LED	2001 m	60′	4 8\/-2 2∆h	Maintained / Non-Maintained

i-P65



- Versatile multi functional use (escape, open area and exit sign use)
- Low power consumption reducing cost of ownership
- Ease of installation, reducing installation time and cost
- 60.000 hour life LED for reduced maintenance
- Autotest emergency versions available, reducing maintenance costs and offering ease of compliance with testing requirements
- Environmentally friendly NiMh battery

#### **Light Source:**

2 x high power 1W white LED

#### Materials:

Luminaire Body: Polycarbonate Gear Tray: Polycarbonate Battery: NiMh 4 cell

#### Operation:

Maintained luminaire can be operated in Non-Maintained model

Slave and CBS models available

Optional ISO7010 or Euro pictogram exit legends

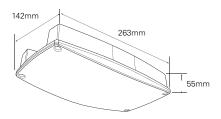
Temperature controlled battery heater kit for optimised performance in low ambient temperatures

#### Applications:

Hotels, cinemas, theaters, schools and hospitals

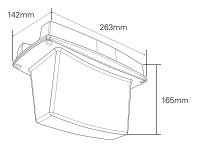
i-P65 is a high specification competitively priced emergency LED bulkhead utilising the latest LED and optic technology to provide an attractive, good quality, functional luminaire for indoor and outdoor use. Boasting numerous features and benefits, the i-P65 can be used to provide escape route lighting, single sided exit sign or optional double sided exit sign with a common look and feel where aesthetics are a primary concern.

The i-P65 has been designed for ease of installation, reduced power consumption, minimal maintenance, reducing the TCO (total cost of ownership) with a compact attractive appearance. The innovative optic design used in the i-P65 utilises light from the LED source to provide uniform lighting distribution. For both escape route and open area antipanic emergency lighting applications, performance is improved and electrical power consumption is reduced.



#### IP65LEDEX3H



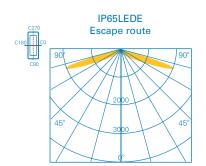


#### IP65LEDO3H

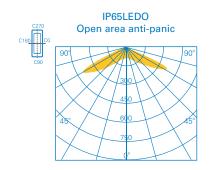








Model	Height (m)	Distan	ce for 1 L	ux
				<b>-</b>
Escape	02,50		07,80	17,10
optic	02,80		08,40	18,60
•	03.00		08 60	19.60



Model	Height (m)		Distanc	ce for 1 L	ux
Open area	02,50	05,30	10,50	05,30	10,50
optic	02,80	05,70	11,50	05,70	11,50
	03,00	05,90	12,20	05,90	12,20
	04,00	04,90	12,60	04,90	12,60

Order code	Description	8	<b>(</b> 2)	<del>[+ -</del> ]	500 E C. C.
IP65LEDO3H	i-P65, 3h, open area	2x1W LED	180′	4,8V-2Ah NiMh	Maintained / Non-Maintained
IP65LEDE3H	i-P65, 3h, escape route	2x1W LED	180′	4,8V-2Ah NiMh	Maintained / Non-Maintained
IP65LEDO3HIS	i-P65, 3h, open area Autotest	2×1W LED	180′	4,8V-2Ah NiMh	Maintained / Non-Maintained
IP65LEDE3HIS	i-P65, 3h, escape area Autotest	2×1W LED	180′	4,8V-2Ah NiMh	Maintained / Non-Maintained
IP65LEDEX3H	i-P65, double side exit sign, 3h	2×1W LED	180′	4,8V-2Ah NiMh	Maintained / Non-Maintained
IP65LEDEX3HIS	i-P65, double side exit sign, 3h, Autotest	2x1W LED	180′	4,8V-2Ah NiMh	Maintained / Non-Maintained
Accessories					
IP65LEG	Single side legend kit, European format				
IP65LEG7010	ISO7010 single side legend kit				
IP65DBLLEG7010	Double side legend panel kit, ISO7010				
IP65DBLLEG	European format double side legend kit				
IP65CONDHEAT	Low temperature battery heater				



- 60,000 hour LED options
- Mid bay and high bay options for optimum luminaire efficiency reducing the number of fittings required
- Weatherproof IP65 ingress protection suitable outdoor and wet environment
- Vandal resistant die-cast housing with polycarbonate lens
- Hinged gear tray for ease of installation
- Self-contained, slave, self-test and addressable testing options

13W high power white LED

#### Materials:

Base - die-cast aluminium, finished in white powder coated paint

Diffuser - Clear polycarbonate

Battery - NiCd

#### Operation:

Suitable for ceiling mounting

Designed for mounting heights of 6 - 25m

Twin BESA entry drillouts on rear

20mm conduit entry on each end, with blanking plugs for ease of installation

Direct screw fix option, with fixing holes outside IP65 area for improved ingress protection

Geartray hinged, retained in closed position by single thumb screw

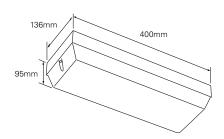
Terminal block, accommodating push-in wiring (solid or stranded cables)

Diffuser retained by allen key security screws

#### Applications:

Factories, warehouses, schools and hospitals

Designing emergency lighting for areas with high ceilings poses problems. Conventional bulkheads lack sufficient light output and often have inappropriate photometric distribution. Twin spot projectors are equally unlikely to provide the 0.5 lux minimum coverage over the entire core area for open areas as required for compliance with standards. Alfalux high bay provides a compact, simple to install solution suitable for mounting heights up to 25m. The Alfalux LED range is split into two variants with a mid-bay solution for low to medium height mounting and a hi bay solution up to 25m.



Model	Height (m)	Dis	tance for 1	Lux (ope	n area)	Distance	e for 0,5 Lu	x (escape	route)
Mtd/NMtd High Bay									
	06,00	03,50	08,20	05,80	12,20	03,70	07,30	06,10	11,60
	08,00	03,90	09,40	07,00	15,70	04,50	09,50	07,10	14,50
	10,00	04,10	10,50	07,50	18,30	05,00	11,00	07,90	17,30
	15,00	01,60	10,60	06,80	21,20	05,80	14,10	10,00	30,00
	20,00					03,20	14,60	10,00	30,00
Mtd/NMtd Mid Bay									
	02,50	04,30	09,40	01,70	09,40	05,30	10,50	01,70	10,50
	02,80	03,30	09,30	01,40	09,30	05,70	11,50	01,40	11,50
	03,00	03,20	03,20	01,20	09,20	05,90	12,20	01,20	12,20
	04,00					04,90	12,50	00,67	12,50

Order code	Description		2	<del>[+ -</del> ]	200 200 5 200 45 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
HLLEDH3H	Alfalux HighBay LED 3H Hi	1 LED 13W	180′	2,1V 4Ah NiCd	Maintained / Non-Maintained
HLLEDH3HIS	Alfalux HighBay LED 3H Autotest Hi	1 LED 13W	180′	2,1V 4Ah NiCd	Maintained / Non-Maintained
HLLEDL3H	Alfalux HighBay LED 3H Low	1 LED 13W	180′	2,1V 4Ah NiCd	Maintained / Non-Maintained
HLLEDL3HIS	Alfalux HighBay LED 3H Autotest Low	1 LED 13W	180′	2,1V 4Ah NiCd	Maintained / Non-Maintained
HLLEDH230	Alfalux HighBay LED Mains Hi	1 LED 13W			Mains
HLLEDL230	Alfalux HighBay LED Mains Low	1 LED 13W			Mains



- Verified light performance
- Weatherproof IP65 and vandal resistant

Outdoor emergency lighting

- High performance, wide spacing distribution
- Choice of standard or high light output circuits
- · Time saving first fix base and plug-in gear tray
- Optional large format legend kit

#### Light Source:

High intensity 3W white LED strip

#### Materials:

Base gear tray and lens - polycarbonate

Batteries (self-contained versions) - NiCd

Installation Notes

Suitable for ceiling or wall mounting

First fix base with heavy duty connector

#### Operation:

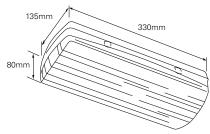
Maintained and Non-Maintained operation, 3 hour duration

Atlantic Plus has an additional battery cell for enhanced light output

Self-test, Autotest and Mains models available

#### **Applications:**

Schools, offices, hotels, restaurants, warehouses Weatherproof, stylish and robust, the Atlantic family is suitable for practically any application and location. The full range has excellent, high performance spacing characteristics, with a choice in self-contained for high output 3 cell Atlantic Plus, to maximize spacing and reduce the quantity of units required to achieve the latest European illumination requirements. All share the convenience of a first fix base, plug in gear tray and self-locking snap on vandal resistant lens which greatly speeds installation, saving time and cost. The robust, fully polycarbonate construction and IP65 rating provides enhanced protection for even the most vulnerable locations.





Self-adhesive legend ISO7010 format and European format available

Model	Height (m)	Lux level directly under		Distance for 1 Lux (escape route 2m wide)			Distance for 0,5 Lux (open anti-panic)			
Atlantic LED	plus									
	02,50	04,70	01,30	06,20	01,80	04,80	02,10	07,50	02,30	04,80
	02,80	03,70	01,40	06,40	01,90	04,80	02,20	07,70	02,40	04,90
	03,00	03,20	01,40	06,40	01,90	04,90	02,20	08,00	02,50	05,00
	03,50	02,40	01,00	03,70	02,00	04,90	02,30	04,80	02,60	04,00

Order code	Description		<b>(4)</b>	<del>[+ -</del> ]	200 200 200 200 200 200 200 200 200 200
ATLM	Atlantic Plus LED	LED strip 3w	180′	4,8V-1,6Ah NiCd	Maintained / Non-Maintained
ATLMIS	Atlantic Plus LED Autotest	LED strip 3w	180′	4,8V-1,6Ah NiCd	Maintained / Non-Maintained
ATLS230	Atlantic Plus LED Mains	LED strip 3w			Mains
Accessories					
LEXSABL	European Format self-adhesive legend kit				
LEXSABL-ISO	ISO7010 Format self-adhesive legend kit				



- Low profile
- Unique elegant design
- · Easy to install
- Certificated by ENEC Kema Keur
- High temperature batteries Ni-Cd
- LED and Autotest models available

Lamp. 8W fluorescent G5, 2G7 11W, 2G11 18W and 16 2W LED

#### Materials:

Base and reflector unit in white ABS

#### Operation:

Maintained, Sustain and Non-Maintained versions

Autonomy from 1h up to 3h

Autotest, Inhibition, Rest Mode, Slave and CBS models available

#### Installation:

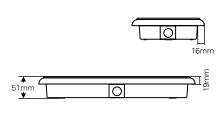
Wall and ceiling installations Panel, double-sided printed

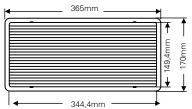
#### Applications:

Schools, offices, hotels, restaurants, warehouses The StarlP65 family of emergency luminaries has been developed to provide a reliable solution to those installations that are exposed to humidity and weather conditions.

A wide range of products depending on the emergency duration, the functionalism and the type of lamp offers a useful flexibility to the installer, who now has several different choices that fulfil any requirements for effective emergency lighting, from simple residential applications to specific industrial ones.

A full range of accessories are available. These include several legend stickers, a recessed base for wall or flush mounting, and plexiglass signs for deploying the luminaire as an exit sign.





#### O-EL65-LED



StarlP65 is available in LED

#### **O-DS65**



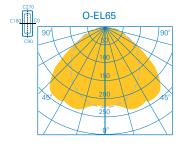
Plastic cone diffuser for using StarlP65 as exit sign

#### O-EL65RB

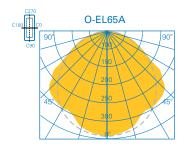


Recessed base for ceiling and wall applications

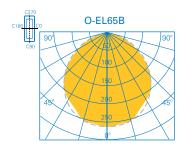
# Outdoor emergency lighting StarlP65



Model	Height (m)		Distance	e for 1 Lu	x		Distanc	Lux	
O-EL65									
	02,60	02,89	07,05	02,34	06,38	04,03	08,32	03,69	08,01
	02,80	02,91	07,32	02,35	06,44	04,16	08,62	03,72	08,24
	03,00	02,97	07,60	02,32	06,57	04,30	08,90	03,79	08,38
	03,20	02,98	07,85	02,27	06,63	04,42	09,14	03,81	08,59
	03,50	02,93	08,05	02,19	06,67	04,53	09,63	03,83	08,86
	04,00	02,68	08,28	01,95	06,59	04,64	10,35	03,80	09.20



Model	Height (m)		Distance	e for 1 Lu		Distance for 0,5 Lux			
O-EL65A									
	02,60	03,39	08,13	03,10	07,74	04,57	09,90	04,37	09,42
	02,80	03,46	08,37	03,21	08,00	04,68	10,23	04,50	09,70
	03,00	03,50	08,57	03,24	08,26	04,78	10,56	04,63	10,07
	03,20	03,55	08,91	03,31	08,46	04,95	10,87	04,73	10,36
	03,50	03,62	09.29	03,33	08,64	05,14	11,20	04,82	10,78
	04,00	03,56	09,84	03,34	09,04	05,42	11,86	05,02	11,43



Model	Height (m)		Distance for 1 Lux Distance for 0,5						Lux
O-EL65B					<b>□</b> □				
	02,60	03,77	09,23	03,81	09,38	05,11	11,15	05,19	11,31
	02,80	03,93	09,51	03,88	09,70	05,25	11,53	05,35	11,74
	03,00	04,04	09,79	03,98	09,99	05,40	11,93	05,49	12,19
	03,20	04,13	10,05	04,10	10,24	05,52	12,29	05,62	12,56
	03,50	04,22	10,38	04,17	10,54	05,59	12,73	05,77	13,05
	04,00	04,29	11,09	04,30	11,01	06,05	13,47	06,01	13,86

Order code	Description		፨	<b>(</b> 2)	<del>[-</del> -	**************************************
O-EL65-LED	StarIP65 LED 60min	16 2W LED	90Lum	60′	3,6V-1,7Ah NiCd	Maintained / Non-Maintained
O-EL65-LED-3H	StarlP65 LED 180min	16 2W LED	90Lum	180′	4,8V-2,2Ah NiCd	Maintained / Non-Maintained
O-EL65	StarIP65 8W NM 90min	FL8W G5	80Lum	90′	2,4V-1,5Ah NiCd	Non-Maintained
O-EL65-3H	StarlP65 8W NM 180min	FL8W G5	80Lum	180′	6V-1,5Ah NiCd	Non-Maintained
O-EL65A	StarlP65 11W NM 90min	PL 11W 2G7	130Lum	90′	3,6V-1,7Ah NiCd	Non-Maintained
O-EL65A-3H	StarIP65 11W NM 180min	PL 11W 2G7	200Lum	180′	6V-1,5Ah NiCd	Non-Maintained
O-EL65B	StarlP65 18W NM 90min	PL 18W 2G11	220Lum	90′	6V-1,5Ah NiCd	Non-Maintained
O-EL65M	StarIP65 8W M 90min	FL8W G5	80Lum	90'	2,4V-1,5Ah NiCd	Maintained
O-EL65M-3H	StarlP65 8W M 180min	FL8W G5	80Lum	180′	6V-1,5Ah NiCd	Maintained
O-EL65AM	StarlP65 11W M 90min	PL 11W 2G7	200Lum	90′	3,6V-1,7Ah NiCd	Maintained
O-EL65AM-3H	StarlP65 11W M 180min	PL 11W 2G7	200Lum	180′	6V-1,5Ah NiCd	Maintained
O-EL65BM	StarlP65 18W M 90min	PL 18W 2G11	200Lum	90′	6V-1,5Ah NiCd	Maintained
O-EL65-AT	StarlP65 8W NM Autotest 60min	FL8W G5	80Lum	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL65A-AT	StarlP65 11W NM Autotest 60min	PL 11W 2G7	130Lum	60′	3,6V-1,7Ah NiCd	Non-Maintained
O-EL65B-AT	StarlP65 18W NM Autotest 60min	PL 11W 2G7	200Lum	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL65M-AUT-IT	StarlP65 18W M Autotest 60min	PL 11W 2G7	200Lum	60′	6V-1,5Ah NiCd	Non-Maintained
O-EL65 MAINS	StarlP65 8W Mains	FL8W G5				Mains
O-EL65A MAINS	StarlP65 11W Mains	PL 11W 2G7				Mains
O-EL65B MAINS	StarlP65 18W Mains	PL 18W 2G11				Mains
Accessories						
O-DS65	Double side diffuser					
O-EL65RB	Flush mounting base					

Zetalite 3



- Versatile multi-functional use (escape, open area anti-panic and exit signage)
- Exit sign viewing distance of up to 20 meters
- IP65 ingress protection suitable for indoor and outdoor applications
- Low power consumption reducing cost of ownership
- Configurable as Maintained or Non-Maintained operation

#### **Light Source:**

12 x 0.25W white LED 50,000 hour life LED (L80) for reduced maintenance

#### Materials:

Luminaire Body - flame retardant ABS Luminaire Lens - clear

polycarbonate

NiCd battery

#### Operation:

Maintained mode 5VA/4W Non-Maintained mode 3.5VA/2.3W

#### Installation:

Luminaire can be operated in Maintained or Non-Maintained mode

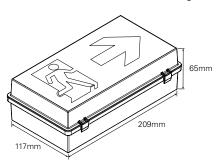
Use either as emergency luminaire or exit sign

#### Applications:

Industrial and all outdoor applications

Zetalite 3 is the first LED luminaire designed specifically for optimal performance from an LED light source. The result is exceptional performance, stunning uniformity and low energy usage at a traditional 8W bulkhead price point.

Zetalite 3 is suitable for use as an escape route, open area anti-panic emergency lighting and external over door lighting to provide safe way out of buildings. In addition to emergency lighting, Zetalite 3 is also suitable for use as an exit sign with the application of the optional stick on legend kit.





Self-adhesive legend ISO7010 format and European format available



Configurable as Maintained or Non-Maintained operation

Model	Height (m)	Lux level directly under		Distance for 1 Lux (escape route 2m wide)  Distance for 0,5 L (open anti-panio						
ZEL3ICE	L									
	02,50	04,50	02,90	07,50	02,80	07,10	03,40	08,10	02,80	07,90
	02,80	03,80	02,90	07,80	02,90	07,40	03,50	08,50	02,90	08,30
	03,00	03,40	03,10	08,00	03,00	07,60	03,50	08,70	03,00	08,60
	04,00	02,00	02,60	08,50	02,60	08,20	03,40	09,80	02,60	09,60
	05,00	01,30	02,00	08,10	02,00	08,00	03,40	10,50	02,00	10,40

Order code	Description	8	<b>(</b> 2)	<del>+ -</del>	300 E
ZEL3ICEL	Zeta III 3Hr	12 x 0,25W LED	180′	2,4V-4Ah NiCd	Maintained / Non-Maintained
Accessories					
ZELLEG	Euro Picto legend kit				
ZELLEG-ISO	ISO7010 Picto legend kit				

# New Safe 8



- Registered with verified light performance
- Easy to install, with snap-on lens
- Exit legend kit available

#### **Light Source:**

8WT5 fluorescent 3500°K G5 cap 3W LED strip

#### Materials:

Body and gear cover polycarbonate, white finish

Lens clear polycarbonate with linear prisms

#### Operation:

Maintained and Non-Maintained operation, 3 hour duration

Autotest models available

#### Installation:

Suitable for ceiling or wall mounting

BESA entry drilling template on rear

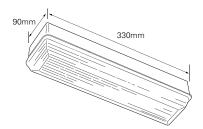
Cable entries rear and end Lens snap-fits into position

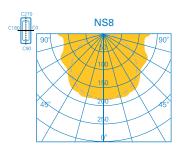
#### Applications:

Hotels, cinemas, theaters, schools and hospitals

Suitable for both exterior and interior applications, New Safe 8 represents excellent value for money. Full third party approvals, via the BSI Kitemark and ICEL registration schemes, provide complete peace of mind that quality has not been compromised.

The luminaire is easy to install and is available with the latest stand alone or central addressable self-testing functionality as an option. New Safe 8 has an attractive, unobtrusive and compact profile that is suitable for a wide variety of applications, from offices and hotels to factory units. A semirecessing bezel accessory is available to further enhance the appearance of this popular luminaire.





Model	Height (m)		Distance	Distance for 1 Lux Distance for 0,5 Lux					
NS8									
	02,60	02,42	07,16	02,28	06,26	04,08	09,78	03,63	08,07
	03,00	02,42	07,18	02,20	06,43	04,09	10,03	03,72	08,47
	04,00	01,85	06,88	01,62	06,36	03,94	10,20	03,68	09,01

Order code	Description	8	**	<b>(</b> 2)	= -	200 800 00 00 00 00 00 00 00 00 00 00 00
NS8	New Safe 8, Non-Maintained, 3h	FL8WG5	80Lm	180′	2,4V-4Ah NiCd	Non-Maintained
NS8M	New Safe 8, Maintained, 3h	FL8WG5	80Lm	180′	2,4V-4Ah NiCd	Maintained
Accessories						
LEXSAS	European format self adhesive legend kit					



## Beam lights & conversion kits



4.14.24.34.44.5

Overview	. 61
Planete 2000	. 62
Beamlite	. 63
Gemini Junior	. 64
EL40	. 65
Conversion Kit	. 66

Beam lights & conversion kits

	Indoor	Recessed	Ni-Cd Lead Acid	Ni-Mh	Maintained	Non-Maintained	Autotest	Hospitals	Hotels	Cinemas/Theaters	Schools	Offices	Industrial	Warehouse
	Ins	tallation	Battei	У	O	perati	on			Арр	licatio	ons		
Planete 2000	•	•		•		•	•	•	•	•	•		•	•
Beamlite	•	•	•			•		•	•	•	•		•	•
Gemini Junior	•	•	•			•		•	•	•	•		•	•
EL40	•	•	•			•		•	•	•	•		•	•
Conversion Kit	•		•					•	•	•	•	•	•	•



- Optical polycarbonate food industry use
- Minimal Environmental impact
- Low consumption
- Automatic tests
- Large LED: visibility / speed reading
- Multiple cable entries
- Easy installation

LED

Intergrated light diffuser
No relamping

Low consumption

#### Materials:

Optics from polycarbonate

5 cables entries (IP42 model) and 3 cable entries (IP65 model)

#### Applications:

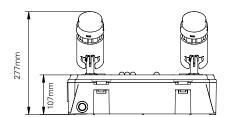
Cinemas, theatres, factories, warehouses, shopping malls, industrial units and stadiums Planete 2000 has been designed to provide the highest reliability for antipanic lighting. Equipped with 2 LED lamp heads, it can provide a light output of 2000 lumens, making Planete 2000 suitable for all applications of general emergency lighting.

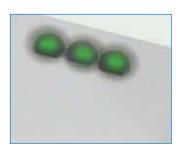
It is suitable for warehoused and industrial use and is ideal for areas that require anti-panic light where a large amount of people may be such as in cinemas, shopping malls, stadiums and airports.

The high intensity light source provides efficient illumination of long, narrow escape routes, but can also provide general coverage of a specific area when positioned at any degree specified to each other, in locations where higher illumination is required.

Planete 2000 is equipped with a sophisticated technology with auto test and self diagnostics for the lamps and battery, keeping the cost of the unit low.

It is available in IP65 certified casing for all outdoor applications.





Autotest diagnostics in all models



Weatherproof model available



LED technology of 2000 lumens light output

Order code	Description	8	**	$\bigcirc$	<del>[+ -]</del>	o com
LUM17010	PLANETE2000, IP42	LED	2.000 Lm	60′	32 x1,2V - 1,5Ah	Non-Maintained
LUM17011	PLANETE2000, IP65	LED	2.000 Lm	60′	32 x1,2V - 1,5Ah	Non-Maintained

**Beamlite** 



- High light output
- Robust construction with a long durable life
- Hinged front access door eases maintenance
- Multi-directional lamp heads for on site flexibility
- Weatherproof IP55 option
- Easy to install, with snap-on lens

#### Light Source:

12V, 21W tungsten BA15d

#### Materials:

Body IP20 sheet steel, powder coated in white/black finish

Body IP55 sheet steel, powder coated in grey finish

Lamp heads polycarbonate, finished black with clear front lens

#### Installation:

Suitable for wall mounting Cable entry on rear and top Direct screw fixed with keyhole slots

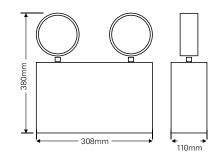
Weatherproof version drilled on site for fixing and entry holes

Lamp heads swivel and tilt, locked in position by screws

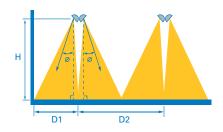
#### Applications:

Cinemas, theatres, factories, warehouses, shopping malls, industrial units and stadiums

Beamlite can be used for a wide variety of interior emergency lighting applications, particularly for warehouses and high ceiling commercial areas. The high intensity light source provides efficient illumination of long, narrow escape routes, but can also provide general coverage of a specific area when positioned at 90° to each other, in locations where higher illumination is required. Beamlite keyhole slot screw fixing holes and a hinged front access door providing ease of installation, whilst the standard twin LED's give separate early warning of failure of each lamp, in addition to mains and charging status.



#### BEN3



Model	Height (m)	Angle	D1(m)	D2(m)
BEN3 (2X21	W)			
	04,00	35°	04,30	09,30
	06,00	15°	03,10	08,00
	08,00	12°	03,40	07,30
	10,00	11°	03,70	08,10
	15,00	8°	03,50	08,90

- 1. Spacing achieves 1 lux min on centre line of escape route
- 2. Aiming angle at 4m height restricted by glare cut-off restriction

Order code	Description	8	**	(2)	<del>[+ -]</del>	20 0 000 000 000 000 000 000 000 000 00
BEN3	Beamlite, 2x21W, IP20	12V, 2×21W	250 Lm	180′	Lead 2x12V-7,2Ah	Non-Maintained
BEN3W	Beamlite, 2x21W, IP55	12V. 2×21W	250 Lm	180′	Lead 2x12V-7.2Ah	Non-Maintained

### Beam lights & conversion kits

Gemini Junior



- Competitive beam projector suits most budgets
- Easy to install keeps cost low
- Hinged front access door eases maintenance
- Top or side mounting of lamp heads
- Multi-directional lamp heads for on site flexibility
- Supplied with lamps

#### Light Source:

12V, 18W tungsten - wedge base

#### Materials:

Body - Sheet steel, powder coated in white finish

Lamp heads - Polycarbonate, finished white with clear front lens

Batteries - Recombination lead acid, maintenance free

#### Installation:

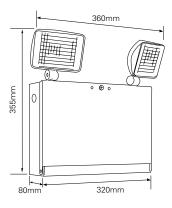
Suitable for wall mounting

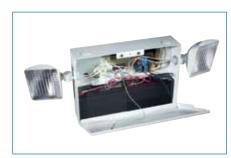
Cable entries on rear. Side and top cable entries, dependant on location of lamp heads

Direct screw fixed with keyhole slots

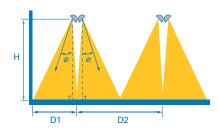
Lamp heads can be mounted on top or side of enclosure

Lamp heads swivel and tilt, locked in position by screws Combining flexibility and ease of installation, Gemini Junior represents exceptional value for money. This competitive beam projector is suitable for a wide variety of installations, with a choice of top or side mounting of the lamp heads, with multi-directional swivel and tilt facility ensuring that exactly the right positioning is achieved. Internal components are accessed via the hinged front cover, permitting easy installation and maintenance. Twin indicator LEDs provide peace of mind, covering individual lamp failure in addition to mains and charging status. When cost is paramount, Gemini Junior is an excellent choice for factory and high ceiling applications.





Side mounted lamp heads and hinged access door



Model	Height (m)	Angle	D1(m)	D2(m)
	04,00	40°	05,90	12,30
	06,00	18°	04,20	08,90
	08,00	13°	04,40	08,80
	10,00	09°	04,20	09,20

#### Notes:

- 1. Spacing achieves 1 lux min on centre line of escape route
- 2. Aiming angle at 4m height restricted by glare cut-off restriction
- 3. K factor of 0.55 and S factor of 0.8 have been applied

Order code Description		**	<b>(</b>	<del>[+ -]</del>	**************************************
GMRJ2183230240 Gemini Junior	2x18W	500 Lm	180′	Lead 2x12V - 7,2Ah	Non-Maintained



- Easy to install
- Portable
- Multi-directional lamp heads
- Lead battery
- Test button

12V, 18W

#### Materials:

Base and reflector unit in white ABS

Clear polycarbonate diffuser

#### Installation:

Suitable for wall mounting Cable entry on rear and top Direct screw fixed with keyhole slots

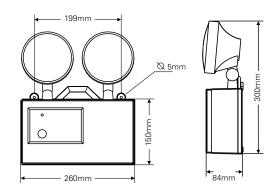
Lamp heads swivel and tilt, locked in position by screws

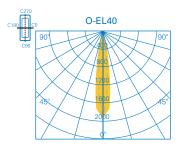
#### **Applications:**

Cinemas, theatres, warehouses and shopping malls

Smart design to provide a fully portable emergency beam light that suits a wide variety of applications. Using a pair of adjustable beam lights gives the ability to offer a high light output to even long narrow escape routes.

A built-in test button allows the user to directly check how the luminaire is functioning while at the same time offers the user the choice to disable one of the beams in order to double luminary's emergency duration.





Model	Height (m)	Distance for 1 Lux				Distance for 0,5 Lux			
O-EL40					<b>-</b>				<b>-</b>
	02,60	02,60	06,95	02,34	05,58	03,98	09,12	03,29	09,38
	02,80	02,61	06,92	02,43	05,60	03,96	09,36	03,30	09,36
	03,00	02,63	06,90	02,61	05,79	03,95	09,60	03,40	07,44
	03,20	02,69	06,91	02,69	06,14	03,96	09,63	03,57	07,36
	03,50	02,40	07,25	02,83	06,46	04,12	10,00	03,73	07,67
	04,00	02,40	07,46	01,54	06,95	04,23	09,77	03,98	08,00

Order code	Description		*	<b>(</b> 2)	<del>[+ -]</del>	500 \$
O-EL40	Beamlite, 2x18W	2x18W	236 Lm	90′	Lead 2x12V - 7,2Ah	Non-Maintained



- Easy to install
- Certificated by ENEC Kema Keur EN61347 and EN60925-2-4
- Compatible with T5 fluorescent lamps
- Suitable for electronic and electromagnetic ballasts
- LED indicator
- Charging time of 24 hours
- High temperature batteries Ni-Cd
- Fully compatible with high frequency circuits
- Extensive range, covering a diverse choice of fluorescent lamps
- Low profile design for easy integration

Series compatible with most flourescent lamps (linear and compact)

#### Materials:

Body white ABS

Comes with LED status to be fixed to the body appliance

Batteries sealed nickel cadmium

#### Operation:

Non-Maintained

Autonomy of 1h and 3h

#### Installation:

Suitable for fitting integral to host luminaire, where thermal and electro-magnetic test results permit

Remote mounting of complete kit, or of batteries only.

Supplied complete with low profile end caps for mounting batteries and LED with 1000mm lead

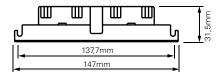
#### Applications:

Universities, supermarkets, warehouses, offices and where emergency lighting is required.

Lighting of escape routes and open areas.

This conversion kit is for the transformation of flourescent lamp mains lighting apparatus to perform as emergency lighting in an emergency situation. Solutions like these are ideal for large venues such as universities, supermarkets, warehouses, offices and open spaces which are integrated with the existing ordinary lighting. The latest version of conversion kits delivers optimum performance for a diverse choice of fluorescence lamp types and wattages. Low profile modules and unique chamfered battery end caps easing integration into swallow luminaries, are standard throughout the whole range of the conversion kits particularly useful in the newest ranges of T5 lamp.

#### Conversion kit body

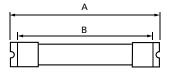




#### Technical specification

System Mode	Maintained or Non-Maintained
Normal light output (Maintained)	Full rated output of lamp
Recharge period	24 hours
Charging monitor	Green LED with cable 1m
Mains input voltage	230V ac / 50Hz
Power Consumption	Max 3VA@1H, 5VA@3H
Temperature ratings	Module 50oC - Battery 50oC
Dimensions L x W x H	148x39x31mm
Fixing centers of module	137-139mm
Certified to	EN 61347-2-7 & EN60925

#### Battery





Type of battery	А	В	С	D
3,6 1,5Ah	155	145	26	26
3,6 4,0Ah	210	200	35	35
4,8 1,5Ah	200	190	26	26
4,8 4,0Ah	280	270	35	35
6,0 1,5Ah	245	235	26	26
6,0 4,0Ah	340	330	35	35

Conversion Kit

	Battery	BK1	ВК3	max	( 36W	CK1	СКЗ	ma	x 58W	DK1	DK3	max	70W	TK1	max 8	:0W
Lamp		3,6V/1,7AI	n 3,6V/4Ah	ge	ency Lumen %	4,8V/1,7A	.h 4,8V/4Ah	ge	uncy Lumen %	6V/1,7Ah	6V/4Ah	ge . mA	Emergency Ballast Lumen Factor %	4,8V/4Ah	ge	Emergency Ballast Lumen Factor %
Watts	Diameter / Ho <b>l</b> der		imum ation	Discharge Current mA	Emergency Ballast Lumen Factor %	Minir Dura		Discharge Current mA	Emergency Ballast Lumen Factor %	Minir Dura		Discharge Current mA	Emerge Ballast Factor '	Minimum Duration	Discharge Current mA	Emerge   Ballast   Factor '
TLD 18W	T8-60cm	1h	3h	700	11	2h	3h	600	12	2h	3h	510	12	-	-	-
TLD 30W	T8-90cm	1h	3h	990	9	1,5h	3h	790	10	2h	3h	700	10	-	-	-
TLD 36W	T8-120cm	1h	3h	1010	8	1h	3h	810	9	1,5h	3h	760	13	-	-	-
TLD 58W	T8-150cm	-	-	-	-	1h	3h	990	7,5	1h	3h	810	9	-	-	-
TLD 70W	T8-180cm	-	-	=	-	-	=	-	-	1h	3h	1040	6	-	=	-
TL5 24W	T5-55cm	1h	3h	1000	7	1,5h	3h	750	7	2h	3h	600	7	2h	1200	22
TL5 39W	T5-85cm	-	2h	1350	7	=	2,5h	1050	7	1,5h	3h	820	7	1,5h	1720	18
TL5 54W	T5-115cm	-	-	-	-	-	2,5h	1150	5	1h	3h	950	6	1h	2050	16
TL5 80W	T5-145cm	-	-	-	-	-	-	=	-	=	=	-	-	1h	2400	12
PLS 11W	2G7	1,5h	3h	730	11	2h	3h	600	15	2,5h	3h	450	16	-	-	-
PLC 13W	G24q-1	1,5h	3h	780	15	2h	3h	624	19	2h	3h	500	20	-	-	-
PLC 18W	G24q <b>-</b> 2	1,5h	3h	870	12	1,5h	3h	725	16	2h	3h	580	18	-	-	-
PLC 26W	G24q-3	1h	3h	920	10	1,5h	3h	830	13	2h	3h	690	15	-	-	-
PLL 18W	2G11	2h	3h	670	12	2h	3h	540	14	2,5h	3h	430	15	-	-	-
PLL 24W	2G11	1h	3h	885	11	2h	3h	680	12	2h	3h	550	13	-	-	-
PLL 36W	2G11	-	2,5h	1021	9	1,5h	3h	820	10	2h	3h	690	11	-	-	
PLL 40W	2G11	-	-	-	-	1h	3h	950	7	1,5h	3h	760	8	-	-	-
PLL 55W	2G11	-	-	-	-	-	-	-	-	1h	3h	920	7			
2D 16W	GR10q	1,5h	3h	860	12	2h	3h	670	15	2h	3h	540	16	-	-	-
2D 28W	GR10q	1h	3h	950	9	1,5h	3h	730	11	2h	3h	680	13	-	-	-
2D 38W	GR10q	-	-	-	-	1,5h	3h	833	8	1,5h	3h	750	9	-	-	-

**Note:** Make sure that the terminals on the module cannot be touched when changing the lamp or starter by shrouding them with earthed metal or thermoplastic insulation kit

Order code	Description		$\odot$	+-
O-BK1	Conversion kit, BK1	up to 36W	60′	3,6V-1,5Ah
O-CK1	Conversion kit, CK1	up to 58W	60′	4,8V-1,5Ah
O-DK1	Conversion kit, DK1	up to 70W	60′	6,0V-1,5Ah
O-TK1	Conversion kit, TK1	up to 80W	60′	4,8V-1,5Ah
O-BK3	Conversion kit, BK3	up to 36W	180′	3,6V-1,5Ah
O-CK3	Conversion kit, CK3	up to 58W	180′	4,8V-1,5Ah
O-DK3	Conversion kit, DK3	up to 70W	180′	6,0V-1,5Ah

Anti-Panic (Open) - Area Lighting The part of emergency escape lighting provided to avoid panic and provide illumination allowing people to reach a place where an escape route can be identified.

Ballast - The component that controls the operation of a lamp from a specified low or high voltage AC or DC source (typically between 12 and 240 volts).

Ballast Lumen Factor - The ratio of the light output of the lamp in emergency operation compared with the light output of the same lamp operated by a reference ballast at its rated voltage and frequency.

Battery - Secondary cells providing the source of power during mains failure.

Battery Capacity - The discharge capability of a battery, being a product of average current and time, expressed as Ampere-hours (Ah) over a stated duration. Note: At fast rates of discharge the full ampere hour capacity of the battery is not available.

Candela (cd) - The unit of luminous intensity.

Central Battery System - A system in which the batteries for a number of emergency luminaires are housed in one location. Usually for all the emergency luminaires on one lighting sub-circuit, but sometimes for all emergency luminaires in a complete building.

Colour Temperature (°K) - All materials emit light when heated (e.g. metal glows red through to white as the temperature increase). The temperature to which a full radiator (or 'black body') would be heated to achieve the same chromaticity (colour quality) of the light source being considered, defines the correlated colour temperature of the lamp, quoted in degrees Kelvin.

Combined Emergency
Luminaire - A luminaire containing
two or more lamps, at least one of
which is energised from the
emergency supply and the
remainder from the normal supply
(If the emergency lamp is only
illuminated in a mains failure
condition this luminaire is regarded
for Fire Authority approval as
Non-Maintained).

Design Voltage - The voltage declared by the manufacturer to which all the ballast characteristics are related

Discomfort Glare - Glare which causes visual discomfort.

Emergency Lighting - The lighting provided for use when the supply to the normal mains lighting installation fails.

Escape Route Lighting - Lighting provided to ensure that the means of escape can be effectively identified and safely used when a location is occupied.

Emergency Exit - The way out of a building, which is intended to be used at any time whilst the premises are occupied.

'F' Mark - Mark indicating that a luminaire is suitable for mounting on to normally combustible surfaces.

Final Exit - The terminal point of an escape route, beyond which point persons are no longer in danger from fire or any other hazard requiring evacuation of the building.

Glare - The discomfort or disability that occurs when there is an excessive change of luminance in the field of vision.

High Risk Task Area - Lighting
Emergency lighting provided to
ensure the safety of people involved
in a potentially dangerous process
or situation and to enable proper
shut down procedures for the
safety of the operator and other
occupants of the premises.

Housing 850°C - Test Mandatory test for emergency luminaires used on escape routes, to establish that materials do not burn at a given temperature. Self- extinguishing grades of plastic must be used, or alternatively class and/or steel.

Illuminance (lux) - The luminous flux density at a surface, indicated in Im/m<sup>2</sup>.

Ingress Protection (IP) - Number classification of the degree of protection a luminaire provides against the entry of solid foreign bodies and moisture (See page 90 for classification).

Isolux Diagram - Diagram showing contours of equal illuminance

K Factor - The ratio of the light output from the lamp in its worst condition, normally at end of discharge and with any cable volt drop, to the output at nominal voltage.

Light Output Ratio (LOR) - The ratio of the total light output of a luminaire, compared with total lamp light output.

Lumen (Im) - The unit of luminous flux used to describe the quantity of light emitted by a source or received by a surface.

Luminaire - Apparatus which distribute the light given by a lamp or lamps, including all the items necessary for fixing and protecting the lamps and for connecting them to the electrical supply.

Luminance (cd/m2) - The perceived brightness of a surface, measured by the intensity of light emitted or reflected from a surface area in a given direction.

Luminous Efficacy (Im/W) - The ratio of light emitted, to the power consumed by a lamp.

Luminous Flux (Im) - The total light emitted by a lamp, measured in lumens.

Luminous Intensity (cd) - The power of a light source or illuminated surface to emit light in a given direction, measured in candela.

Lux - The unit if illuminance, equal to one lumen per square metre (lm/m²)

Maintained Emergency Luminaire - A luminaire containing one or more lamps, all of which operate from the normal supply or from the emergency supply at all material times.

Mounting Height - The vertical distance between the luminaire and the working plane. Note: For emergency lighting the floor is always taken to be the working plane.

Non-Maintained Emergency -Luminaire A luminaire containing one or more lamps, which operate from the emergency supply only upon failure of the normal mains supply. Rated Duration - The manufacturers declared duration for a battery operated emergency lighting unit, specifying the time for which it will operate after mains failure. This may be for any reasonable period, but is normally one or three hours (when fully charged).

Rated Load - The maximum load which may be connected to the system which will be supplied for the rated duration.

Re-charge Period - The time necessary for the batteries to regain sufficient capacity to achieve their rated duration.

Self Contained Emergency
Luminaire - A luminaire or sign
providing Maintained or NonMaintained emergency lighting, in
which all the elements such as
battery, the lamp and the control
unit are contained within the
housing or within 1 metre of the
housing.

Single Point Luminaire - See self-contained emergency luminaire.

Slave Luminaire - An emergency luminaire without its own batteries, which is designed to work in conjunction with a central battery system

Spacing to Height Ratio (SHR) - The ratio of the distance between luminaire centres in relation to their height above the working plane. Maximum spacing to height ratio (SHRmax) is the maximum spacing of an array of luminaires that will achieve a ratio of min/max direct illuminance of at least 0.7.

Standby Lighting - The part of emergency lighting which may be provided to enable normal activities to continue in the event of a mains supply failure.

Sustained Emergency Luminaire -See combined emergency luminaire.

Uniformity - The ratio between minimum illuminance (or luminance) to average illuminance (or luminance), usually measured at the working plane.

Notes


	• • • • • • • • • • • • •
	• • • • • • • • • • •
••••••••••••••••••••••••••••••••••	• • • • • • • • • • •
••••••••••••••••••••••••••••••••••••	• • • • • • • • • • • • •
	• • • • • • • • • • • • • • • • • • • •
	· · · · · · · · · · · · · · · ·
	• • • • • • • • • • •
	• • • • • • • • • • •
	• • • • • • • • • • •
	• • • • • • • • • • •
•••••••••••••••••••••••••••••••••••••••	
	· · · · · · · · · · · ·
	• • • • • • • • • • • •
	• • • • • • • • • • • •

At Eaton, we're energized by the challenge of powering a world that demands more. With over 100 years experience in electrical power management, we have the expertise to see beyond today. From groundbreaking products to turnkey design and engineering services, critical industries around the globe count on Eaton.

We power businesses with reliable, efficient and safe electrical power management solutions. Combined with our personal service, support and bold thinking, we are answering tomorrow's needs today. Follow the charge with Eaton. Visit eaton.com/electrical.

Eaton Industries Manufacturing GmbH Electrical Sector EMEA

Electrical Sector EMEA Route de la Longeraie 7 1110 Morges, Switzerland Eaton.eu Changes to the products, to the information contained in this document, and to prices are reserved; so are errors and omissions. Only order confirmations and technical documentation by Eaton is binding. Photos and pictures also do not warrant a specific layout or functionality. Their use in whatever form is subject to prior approval by Eaton. The same applies to Trademarks (especially Eaton, Moeller, Cutler-Hammer and CEAG). The Terms and Conditions of Eaton apply, as referenced on Eaton Internet pages and Eaton order confirmations.

© 2014 Eaton Corporation All Rights Reserved Printed in Greece Publication No. dh\_el\_rev.4\_eng – July 2014 Eaton is a registered trademark of Eaton Corporation.

All other trademarks are property of their respective owners.

