HOLOPHANE®

AcuityBrands.
Expanding the boundaries of lighting™

THE QUEEN'S AWARDS
FOR ENTERPRISE:
INNOVATION
2017

PRISMASPACE™

OPTIMAL EFFICIENCY

LED

PATENTED DESIGN
REGISTERED EUROPEAN DESIGN

PRISMASPACE

FLEXIBILITY
EFFICIENCY
ADAPTABILITY

PATENTED DESIGN
REGISTERED EUROPEAN DESIGN

Prismaspace™ takes commercial interior lighting to new levels of flexibility with superior light control. The solution fuses the latest in highly efficient mid-power LEDs with the distinguished dynamics of Holophane's durable prismatic optics. Combined to deliver unparalleled uniformity and the best in class Adaptable Lighting Solution.

For over 120 years, Holophane has enjoyed an enviable reputation throughout the world for expertise, quality and innovation in lighting. From the earliest days, when the company pioneered its famous glass refractor, the Holophane name has been ever present as a leader in the field of luminaire and lighting design. Prismaspace is a continuation of this proud tradition.

optics / light source

- Available with 3 light distributions; Narrow, Medium and Open
- Option of 70CRI and 80CRI
- 4000°K & 5700°K colour temperature
- Lumen packages ranging from 3,000 to 40,000 lumens
- Available with efficacies of up to 179 lm/W

TM66 CEAM-Make rating

Preliminary Rating: 2.0 (Definite/ substantial progress to circularity)

approvals

CE

Complies with EN60598

IP40 with IP65 option

Ta -20˚C to +45˚C*

* Ta of +25˚C for Emergency versions

For further information please visit the Holophane website www.holophane.co.uk

LUX Awards 2016 COMMENDED

MADE IN BRITAIN

LED energyefficient

prismaled™

Typical Luminaire Performance

Configuration	Delivered Lumens	Power Consumption	Driver Current	Projects Life of LED Module (L70B50 @ Tq 25ºC)*
PRS.S.L0348.HE	c.3,000	23W	150mA	100,000+ hrs
PRS.S.L0548.HE	c.5,000	34W	240mA	100,000+ hrs
PRS.S.L0748.HE	c.7,000	42W	340mA	100,000+ hrs
PRS.S.L0948.HE	c.9,000	54W	440mA	100,000+ hrs
PRS.S.L1248.HE	c.12,000	70W	600mA	100,000+ hrs
PRS.S.L1548.HE**	c.15,000	87W	740mA	100,000+ hrs
PRS.S.L1848.HE**	c.18,000	107W	900mA	100,000+ hrs
PRS.S.L2048.HE**	c.21,000	127W	1050mA	100,000+ hrs
PRS.D.L2248.HE	c.23,000	133W	550mA	100,000+ hrs
PRS.D.L2548.HE	c.26,000	150W	625mA	100,000+ hrs
PRS.D.L3048.HE	c.31,000	183W	755mA	100,000+ hrs
PRS.D.L3548.HE	c.36,000	222W	900mA	100,000+ hrs
PRS.D.L4048.HE	c.42,000	260W	1050mA	100,000+ hrs

Note: Data is correct at time of print.
* For other life metric data in line with IEC PAS62722-2-1 and 62717 contact your Holophane Representative for details.
** IP65 version.
† Based on the average of all the optical distribution options.

PRISMASPACE™

DOUBLE MODULE

> Trunking and suspension mount.

> Lumen range of 9,000 to 40,000 lumens.

> 4000K or 5700K options.

> Efficacy of up to 177 lpw.

> Sealed to IP40. IP65 version available.

> Rotatable optics available with IP65 version.

PRISMASPACE™

SINGLE MODULE

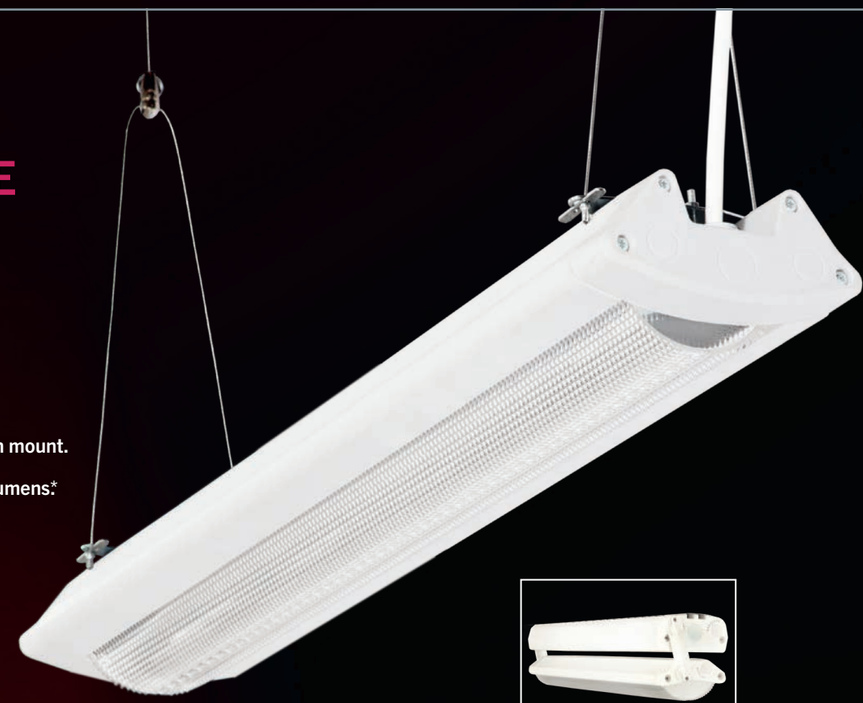
> Universal Trunking and suspension mount.

> Lumen range of 3,000 to 20,000 lumens.*

> 4000K or 5700K options.

> Efficacy of up to 179 lpw.

> Sealed to IP40.



IP65 version

specification

The luminaire shall consist of an extruded aluminium (6063 T6) body with two bespoke moulded plastic (Glass filled PA6-6) end caps ensuring a rigid linear design. The optical arrangement consists of mid power LEDs mounted to the aluminium backed PCB which are then directly attached to the extruded aluminium optical assembly to aid heat dissipation by way of conduction. The LED array is arranged behind an acrylic (PMMA) prismatic lens. The optical arrangement will consist of either a single or double optic that can be rotated up to 180 degrees via the adjustable arm assembly - only available with IP65 version.

* 12000 to 20000 lumen only available with IP65 version.

features and benefits

Versatile Lighting System

> Available as a single or double optical modules with a range of outputs that can be suspended or mounted directly to trunking.

> Emergency, sensors and controls integrated into the luminaire or available as standalone items that can be installed in a variety of methods.

High Efficient LED Technology

> Unique design of the LED module that utilises the latest mid-power LEDs to deliver efficacy of up to 170lpw (when option HE is selected) resulting in reduced installation, power consumption and payback time.

Exceptional Optical Performance

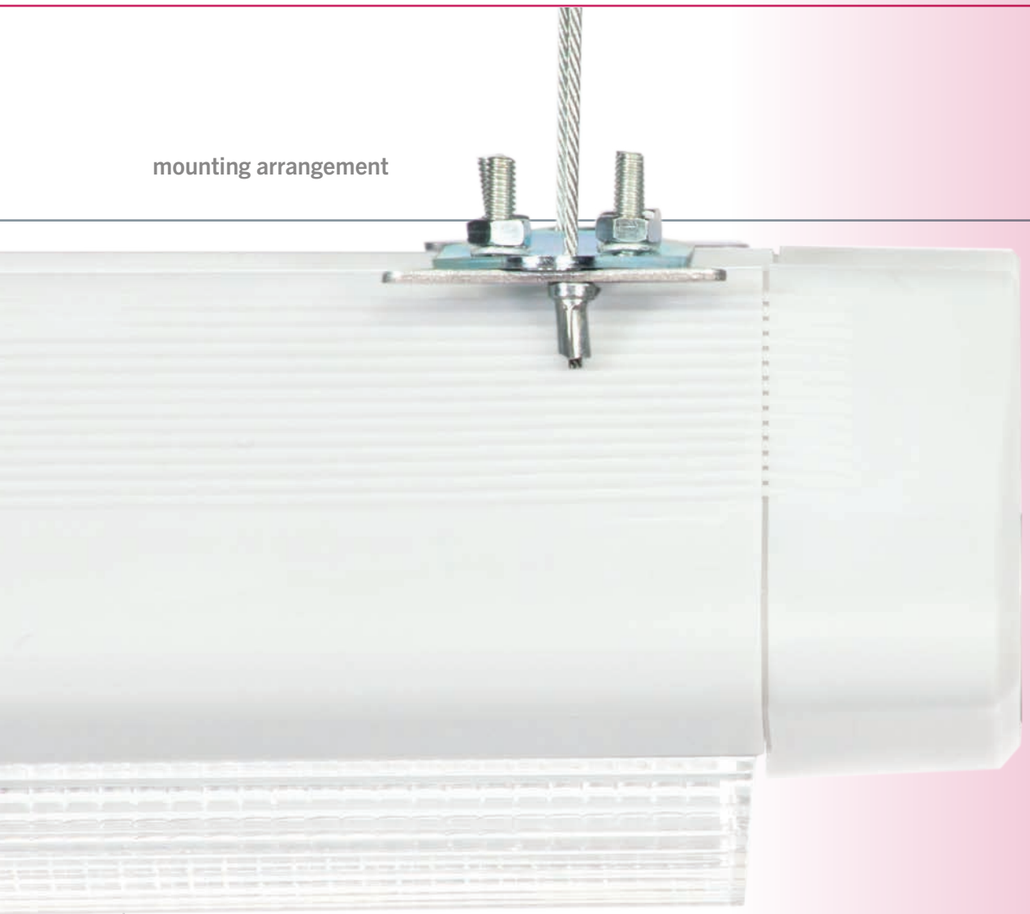
> Incorporates PrismaLED technology which delivers a wholly luminous effect that accurately controls the output of the LEDs and reduces glare with ‘PrismGlow’.

> Refractor technology with rounded ‘light blending’ prisms on the inner surface and sharper ‘light controlling’ prisms on the outer surface help to ‘blend and shape’ the light output. Combined this delivers a uniformed vertical and horizontal lighting solution.

> Unique rotational system enabling optics to be angled by up to 180º allowing the user to ‘customise’ the distribution to focus on specific working areas if required (available with IP65 versions only).

PRISMASPACE

mounting arrangement



Single
module

Actual
size
73mm

SLIM PROFILE

ease of installation

> Lightweight luminaire with tool-less mechanical and electrical installation onto trunking or via suspension for safe, fast installation by a single person.

Double
module

Actual
size
90mm

optical performance

It is critical that customers of warehousing or logistics applications find ways to reduce the amount of energy required to light their facilities. Prismaspace is an LED luminaire system that can enable significant energy savings whilst also providing instant light and the possibility to dim the light level instantly. Prismaspace is DALI-dimmable so even more energy can be saved.

UP TO 25% ENERGY SAVINGS

20% less luminaires vs equivalent LED system

25% energy saving vs equivalent LED system

PRISMASPACE™

Design Parameters:

Mounting height = 15m, aisle width 3.2m, Reflectances 50/30/20

Product Used:

16 Prismaspace (single optic) per aisle

- Luminous Flux: .c9000 lm, achieving 3.8m spacing
- Luminous efficiency : 135lpw
- Average hor uniformity : 0.93
- Average ver uniformity : 0.68
- Total Power/aisle : 1088W

20 Equivalent linear LED luminaire per aisle

- Luminous Flux: .c8000lm, achieving 3m spacing
- Luminous efficiency: 109lpw
- Average hor uniformity: 0.97
- Average ver uniformity: 0.46
- Total Power/aisle: 1460W

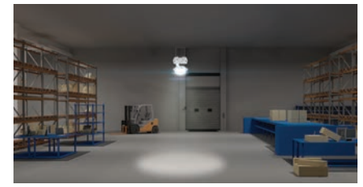
Benefits:

- **25% energy saving per aisle**
- **20% less luminaires reducing installation costs**
- **Low glare via PrismaLED**
- **Improved vertical illumination**

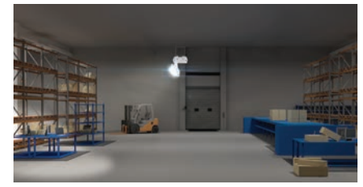
prismaled™

rotatable optics

With the unique rotating optical module (IP65 versions only) available with Prismaspace any restrictions on site relating to mounting of the luminaire are alleviated as the module can be adjusted on site, to focus on the working plane - be that horizontal or vertical.

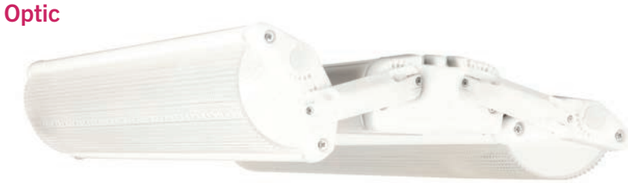


0° rotation



60° rotation

Twin Optic



Optical Modules rotatable from 0° to 45° in 15° increments

Single Optic

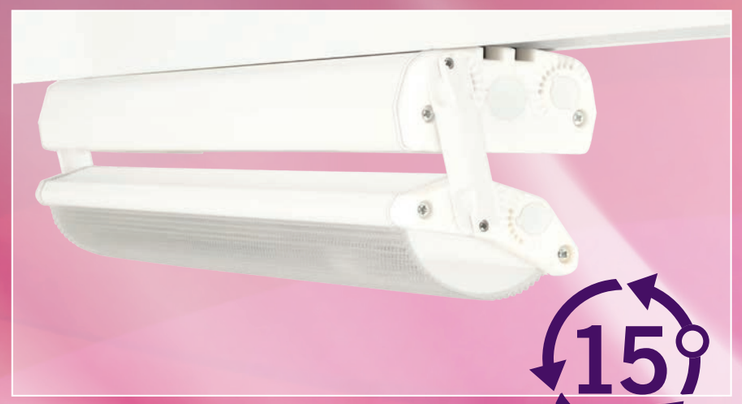
Optical Module rotatable from 0° to 180° in 15° increments

*As standard all Prismaspace optics are factory set to 0° but can be adjusted in situ.

Patent Pending

PRISMASPACE

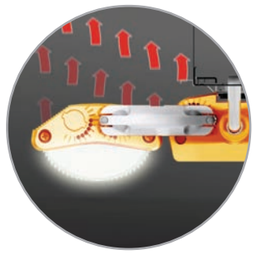
MAXIMUM VERSATILITY



Patent Pending

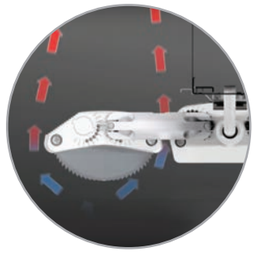
The reliability and performance of an LED luminaire is dependent on a combination of factors; keeping the Tc point of the electrical components (control gear, LEDs etc.) as low as possible is critical to maintaining the luminaires efficiency. The selection of quality materials used in components such as the housings is equally as critical in ensuring that the heat generated by the electrical components is thermally managed.

Prismaspace™ utilises all three heat transfer principles of conduction, convection and radiation to ensure that the LEDs mounted to the aluminium backed PCB and electronic drivers are thermally managed well within their limit to maximise system life. The drivers are mounted within their own housing away from the LEDs to ensure that heat generated by each individual electronic component does not adversely affect the other.



Conduction

Taking heat away from electronic components.



Convection

The air pocket between the Driver and LED modules allows ambient air to flow freely.

Radiation

Surface finish and form designed to maximise heat radiation.

THERMAL EXCELLENCE

PRISMASPACE

fully controllable

When equipped with optional embedded controls devices, the Prismaspace luminaire can provide additional energy savings. These fully programmable sensors dim the luminaire to pre-set illumination levels when motion is no longer detected and will return the luminaire to full illumination, without distracting flash, within three seconds of sensing movement. Each sensor also detects ambient light, so perimeter fixtures can be dimmed to minimum when sufficient daylight enters the structure.

The factory fitted addition of a wireless node introduces the latest “mesh” wireless technology and replaces wired communication signals between luminaires with trouble free wireless system that reduces the requirement for controls cables to each luminaire.

DALI control (1 x DALI addresses**)

Integrated PIRA option
(up to 20m mounting height).
- > Daylight Sensor & Presence
- > Default settings :
  Daylight= 500 lux at sensor level
  PIR = Dims to off no
  occupancy after 20 minutes

Standalone Presence and Daylight sensor available for trunking mount
- > Controls up to 20 drivers
- > Mounted directly to trunking.

Integrated HOLOS Wireless node option.

Prismaspace is fully compatible with HOLOS Wired and HOLOS Air control systems.

HOLOSWired
HOLOSAir

emergency operation

Integrated one hour (EM1) or three hours (EM3) maintained emergency option available*.

Delivers 500 lumens (luminaire level).

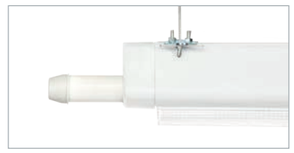
Achieves 5 lux average, 4 lux min in emergency+.

Standalone, self-contained, 1 or 3 hour emergency accessory available for installation onto trunking or via suspension. HEL.EM1 and HEL. EM3 delivers 350 lumens.

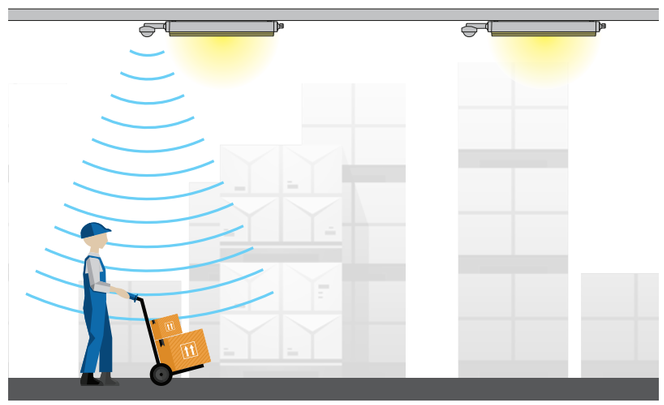
+ Parameters: Mounting Height = 15m, Aisle Width = 3.20m. Aisle Length = 60m, Reflectances = 50/30/20

Trunking mount accessory sensor (HEL.PIRA)

Standalone emergency unit (HEL.EM1 or HEL.EM3)



Integrated wireless node (.WI) that can be used in conjunction with Holos Wireless. Luminaire with this option is ‘Sensor Ready’.



* Integrated emergency not available with single module IP40 and limited to up to 25,000 lumens on all double module versions.
**Lumen options L30XX, L35XX and L40XX have 2 x DALI addresses.

‘Volumetric illumination’ delivers an optimal mix of light to walls, partitions, vertical and horizontal work surfaces. Results in reduced shadow and increased perceived volume of space.

Studies have indicated that increased lighting levels in horizontal and vertical illuminance increase the productivity up to 5.7 %.

Luminaire assembly (Finland) 4.6%

Luminaire assembly (Germany) 5.7%

Electronic assembly (The Netherlands) 3%

Machine repair (The Netherlands) 3%

Luminaire assembly (The Netherlands) 5.5

Volumetric lighting in car manufacturing industry significantly reduces “write-ups” (deficiencies)*.

prismaled™

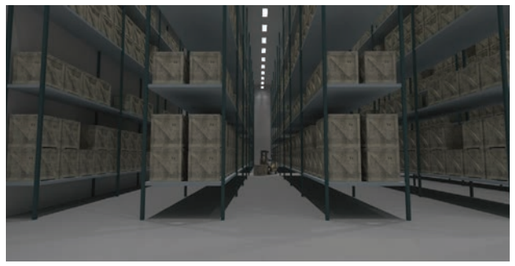
Open area

Representation of a sample industrial building with objects, using direct light high bay luminaires.

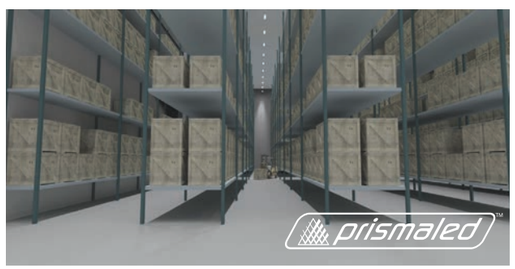
Representation of the same scene, using Haloprism/Vantage/ Prismaspace luminaires.

Aisle area

Representation of a sample warehouse building with racking, using direct light high bay luminaires.

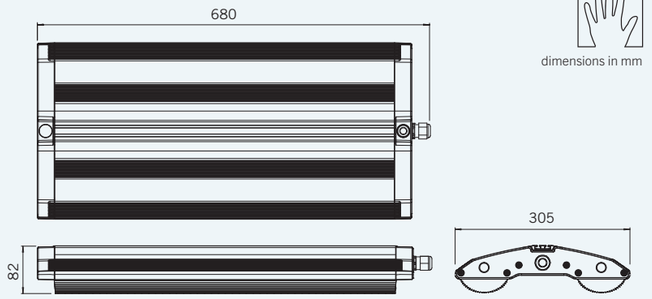


Representation of the same scene, using Haloprism/Vantage/ Prismaspace luminaires.



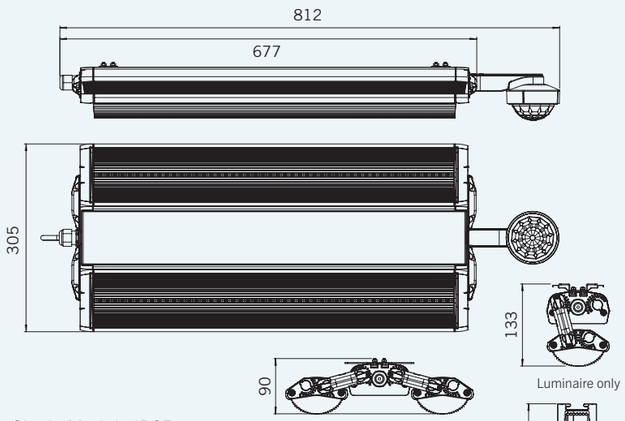
*Source: Mack trucks, Pa. USA, EC&M

Double Module IP40

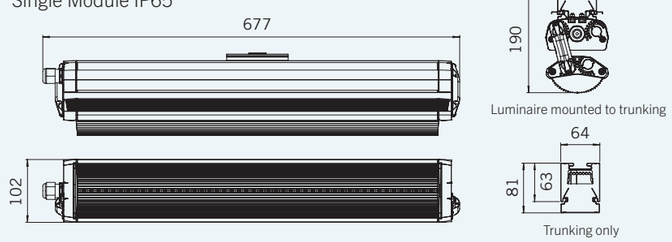


Single Module IP40

Double Module IP65



Single Module IP65



applications

Logistic Centres
Distribution Centres
Retail Stores
Warehousing
Assembly Areas
Industrial Areas

weight (with control gear)

Single optic - IP65	4kg
Double optic - IP65	4.6kg
Single optic - IP40	3.2kg
Double optic - IP40	4.6kg

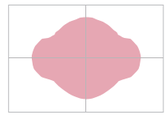
TA

-20ºC to +45˚C*

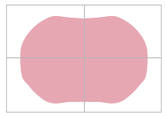
* Ta of +25˚C for Emergency versions

light distribution

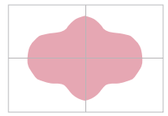
Open



Wide



Narrow



PrismaLED optics

prismaled™

Note: The specifications of the Holophane luminaire represents typical values. All descriptions, illustrations, drawings and specifications in the Holophane catalogue and website represent only general particulars of the goods to which they apply and shall not form part of any contract. The company reserves the right to change specifications at its discretion without prior notification or public announcement.

Code	**Luminaire** (required)
PRS	Prismaspace Luminaire

Code	**Enclosure** (required)
S	Single module
D	Double module

Code	**Lamp Type** (required)
.L0348	LED light engine producing c3000lm with a nominal 4000K colour temperature, 80CRI*
.L0548	LED light engine producing c5000lm with a nominal 4000K colour temperature, 80CRI*
.L0748	LED light engine producing c7000lm with a nominal 4000K colour temperature, 80CRI*
.L0948	LED light engine producing c9000lm with a nominal 4000K colour temperature, 80CRI*
.L1248	LED light engine producing c12000lm with a nominal 4000K colour temperature, 80CRI**
.L1548	LED light engine producing c15000lm with a nominal 4000K colour temperature, 80CRI***
.L1848	LED light engine producing c18000lm with a nominal 4000K colour temperature, 80CRI***
.L2048	LED light engine producing c20000lm with a nominal 4000K colour temperature, 80CRI***
.L2248	LED light engine producing c22000lm with a nominal 4000K colour temperature, 80CRI+
.L2548	LED light engine producing c25000lm with a nominal 4000K colour temperature, 80CRI+
.L3048	LED light engine producing c30000lm with a nominal 4000K colour temperature, 80CRI+
.L3548	LED light engine producing c35000lm with a nominal 4000K colour temperature, 80CRI+
.L4048	LED light engine producing c40000lm with a nominal 4000K colour temperature, 80CRI+

Code	**Version** (option)
.HE	High efficacy

Code	**Distribution** (required)
.ND	Narrow distribution
.MD	Medium distribution
.OD	Open distribution

Code	**IP Rating** (option)
.IP65	Sealed to IP65

Code	**Lens** (option)
.HI	High angle shield (low UGR version, max 22)[1]

Code	**Fixing method** (required)
.SUS	Suspension (suspension kit not supplied, to be ordered separately)
.TK1	Fully adjustable for trunking sizes 50x50mm up to 85x100mm. Only one nut & bolt to fasten horizontally in each side
.TK2	M20 conduit & universal mount to OEM trunking brackets or hangers via Ø60mm hole

Code	**Photocell** (option)
.PH0	Integrated PIR, suitable up to 15m. Switches off after 10 minutes of inactivity - switching-only functionality. Remotely re-programmable with accessory HEL.PRG (purchased separately).
.PH1	Integrated PIR, suitable up to 15m. Dims to 30% after 10 minutes of inactivity - switches off after further 10 minutes. Remotely re-programmable with accessory HEL.PRG (purchased separately).
.WIH	Integrated wireless node, supports grouping, suitable up to 15m - includes PIR & photocell (Requires SER.COM.DAY or SER.COM.NIGHT commissioning)
.PLO	Integrated PIR, suitable up to 9m. Switches off after 10 minutes of inactivity. Remotely re-programmed with accessory “HEL.PRG” (purchased separately)
.PL1	Integrated PIR, suitable up to 9m. Dims to 30% after 10 minutes of inactivity - switches off after further 10 minutes. Remotely re-programmed with accessory “HEL.PRG” (purchased separately)
.WIL	Integrated wireless node, supports grouping, suitable up to 6m - includes PIR (Requires SER.COM.DAY or SER.COM.NIGHT commissioning)

Code	**Colour** (required)
.C1	White (RAL9016)

Code	**Control Gear** (option)
.LRD	DALI HF electronic control gear
.CL7	Programmed to deliver 70% of the initial lumens over the life of the luminaire
.CL8	Programmed to deliver 80% of the initial lumens over the life of the luminaire
.CL9	Programmed to deliver 90% of the initial lumens over the life of the luminaire

Code	**Emergency** (option)
.EM1	Self contained 1hr maintained emergency battery and invertor (delivering c500 lumens)[2]
.EM3	Self contained 3hr maintained emergency battery and invertor (delivering c500 lumens)[2]
.VDC	Luminaire supplied with internal DC fuse to accept 176 275VDC. Luminaire will dim to 15% when powered by DC

Code	**Auxiliary Circuits** (option)
.FC1	Electrical connection to existing trunking loom via KLIK 4 plug
.FC2	Electrical connection to existing trunking loom via WAGO 5 POLE plug
.FC3	Electrical connection to existing trunking loom via GST18/6 BLACK/BLUE plug
.FC4	Electrical connection to existing trunking loom via GST18/5 plug
.FC5	Electrical connection to existing trunking loom via ENSTO 6 D2 plug

Example											
PRS	S	.L0348	.HE	.ND	.IP65	.HI	.SUS	.PIRA	.C1	.LRD	

*Single module only ** Single module with .HE. ***Single module with .HE & IP65. +Double module only
[1] Cannot be used with option .HE [2] Cannot be used with single IP40 version or lumen versions .L30XX, L35XX or L40XX.

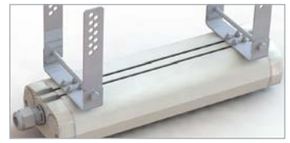
Lumen data is considered to be representative of the configuration shown, and may vary, with a tolerance on flux of +/- 7% (typical of LED manufacturers data) and luminaire power of +/- 5%.

ordering details - accessories and trunking

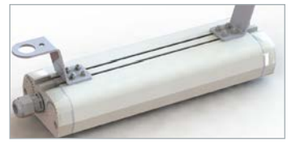
Code	**Accessories**
HEL.EM1.TK1	Self contained 1 hour emergency (delivering c350 lumens) supplied with universal trunking mount adaptors
HEL.EM3.TK1	Self contained 3 hour emergency (delivering c350 lumens) supplied with universal trunking mount adaptors
HEL.EM1.TK2	Self contained 1 hour emergency (delivering c350 lumens) supplied with universal plate with provisions for M20 conduit & 6mm hole for hanger brackets
HEL.EM3.TK2	Self contained 3 hour emergency (delivering c350 lumens) supplied with universal plate with provisions for M20 conduit & 6mm hole for hanger brackets
HEL.EM1.SUS	Self contained 1 hour emergency (delivering c350 lumens), suitable for suspension (suspension kit not supplied, to be ordered separately)
HEL.EM3.SUS	Self contained 3 hour emergency (delivering c350 lumens), suitable for suspension (suspension kit not supplied, to be ordered separately)
HEL.PIRA.TK1	PIR for 360º, aisle and end of aisle. Up to 20 metres mounting (IP65), ready to mount on Holophane trunking and suitable for up to 20 drivers. Universal surface mount / trunk clamp bracket (suitable for surface mounting on track dimensions up to width: 85mm x height:70mm)
HEL.PIRA.TK2	PIR for 360º, aisle and end of aisle. Up to 20 metres mounting (IP65), ready to mount on Holophane trunking and suitable for up to 20 drivers. Suitable for mounting on universal trunk adaptor mounting plate (suitable for M20 trunk adaptor)
HEL.PRO	Infrared programming handset up to 7m
HEL.PRO.25	Infrared programming handset up to 25m
HEL.SUS.PRS	Prismaspace suspension kit (1m to 6m) - includes 2 x suspension wire and fixing kit.
HEL.PRG	Remote programming device. Suitable for luminaires with options PH0/PL1/PH1 PIR devices. Programming range up to 20m.

PRISMASPACE™

Self Contained IP65 Emergency Option



HEL.EM1.TK1 / HEL.EM3.TK1

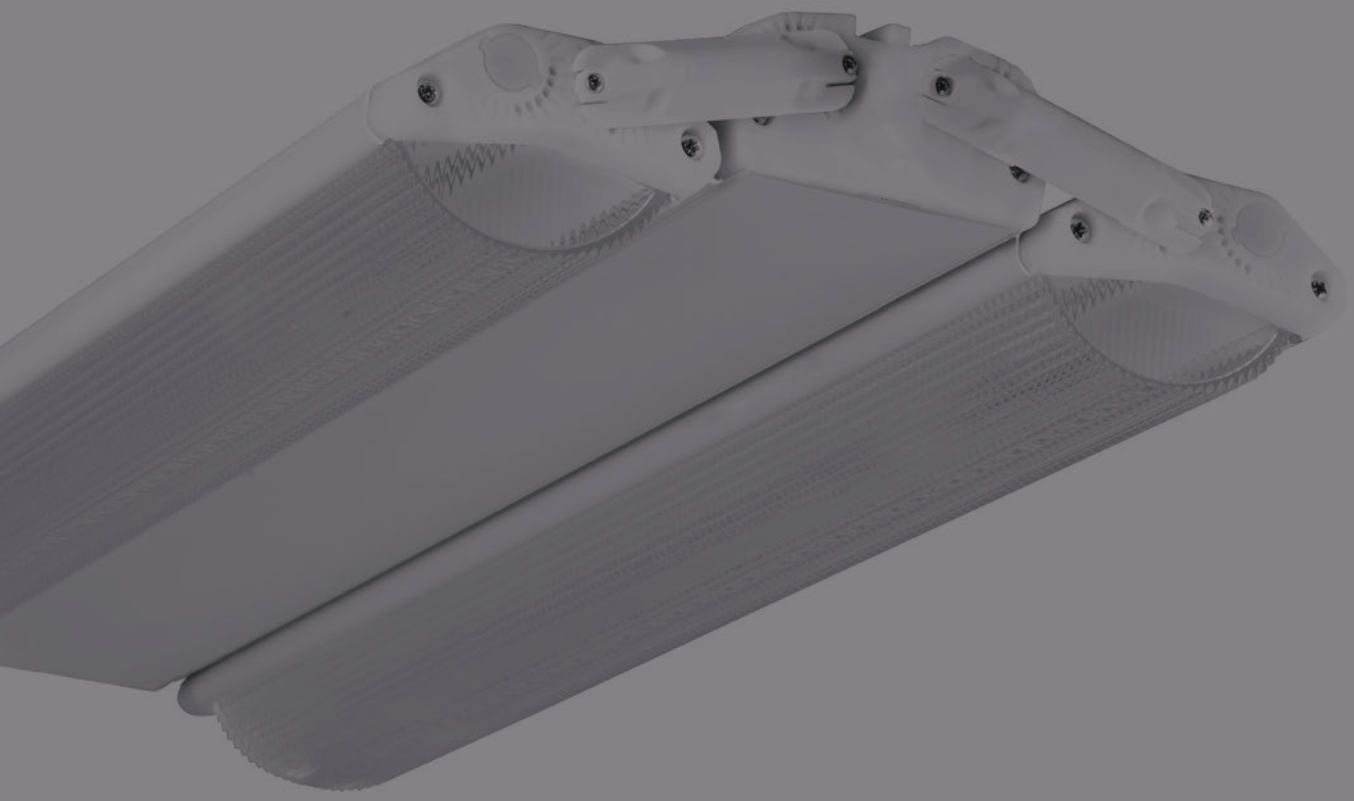


HEL.EM1.TK2 / HEL.EM3.TK2

HEL.EM1.SUS / HEL.EM3.SUS

HEL.PIR

PRISMASPACE™



LED

PRISMASPACE™

Holophane Europe Limited
Bond Avenue, Bletchley, Milton Keynes MK1 1JG United Kingdom
Telephone: +44 (0) 1908 649292 UK Fax: +44 (0) 1908 367618
International Fax: +44 (0) 1908 363789
E-mail: info@holophane.co.uk

www.holophane.co.uk

THE QUEEN'S AWARDS FOR ENTERPRISE: INNOVATION 2017

HOLOPHANE®

AcuityBrands.

HOL-BRO-PRS-UK-01/24