HOLOPHANE®

CityMax® Large

Innovation and efficiency

MADE IN BRITAIN®

CityMAX® LARGE

EFFICIENT AMENITY LUMINAIRE

CityMax Large combines a sleek contemporary design with exceptional technical performance. The CityMax Large luminaire has been engineered as a retrofit solution for existing 250W, 400W & 600W SON & metal halide installations typically seen in retail parks, amenity areas, town squares and car parks. With the latest in high efficiency LED technology and glass optics we have created a highly efficient LED light engine system that delivers energy savings, low glare appearance and exceptional visual acuity.

The specially engineered optical modules come with a full range of distribution options to meet the highest performance standards and deliver outstanding visibility and uniformity. 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. CityMax Large is a continuation of this proud tradition.

applications

> Car parks
> Retail parks
> Amenity areas
> Town squares

optics / light source

> Available with 6 optical distributions
> Lumen packages ranging from 20,000 to 40,000 lumens
> Colour temperature of 3000K or 4000K
> Smart City ready

TM66 CEAM-Make rating

TM66 CIRCULARITY 2.7 012-0091 LIA CIBSE

approvals

Complies with EN60598

IP65 IK07

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

MADE IN BRITAIN

Typical Luminaire Performance

Configuration	Delivered Lumens	Power Consumption	Driver Current	Projected Life of LED Module (L70B50 @Tq 25˚C)*
BCL.1.LC20X	c.20,000	122W	570mA	100,000 hrs
BCL.1.LC25X	c.25,000	155W	735mA	100,000 hrs
BCL.1.LC30X	c.30,000	196W	915mA	100,000 hrs
BCL.1.LC35X	c.35,000	235W	810mA	100,000 hrs
BCL.1.LC40X	c.40,000	264W	735mA	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.

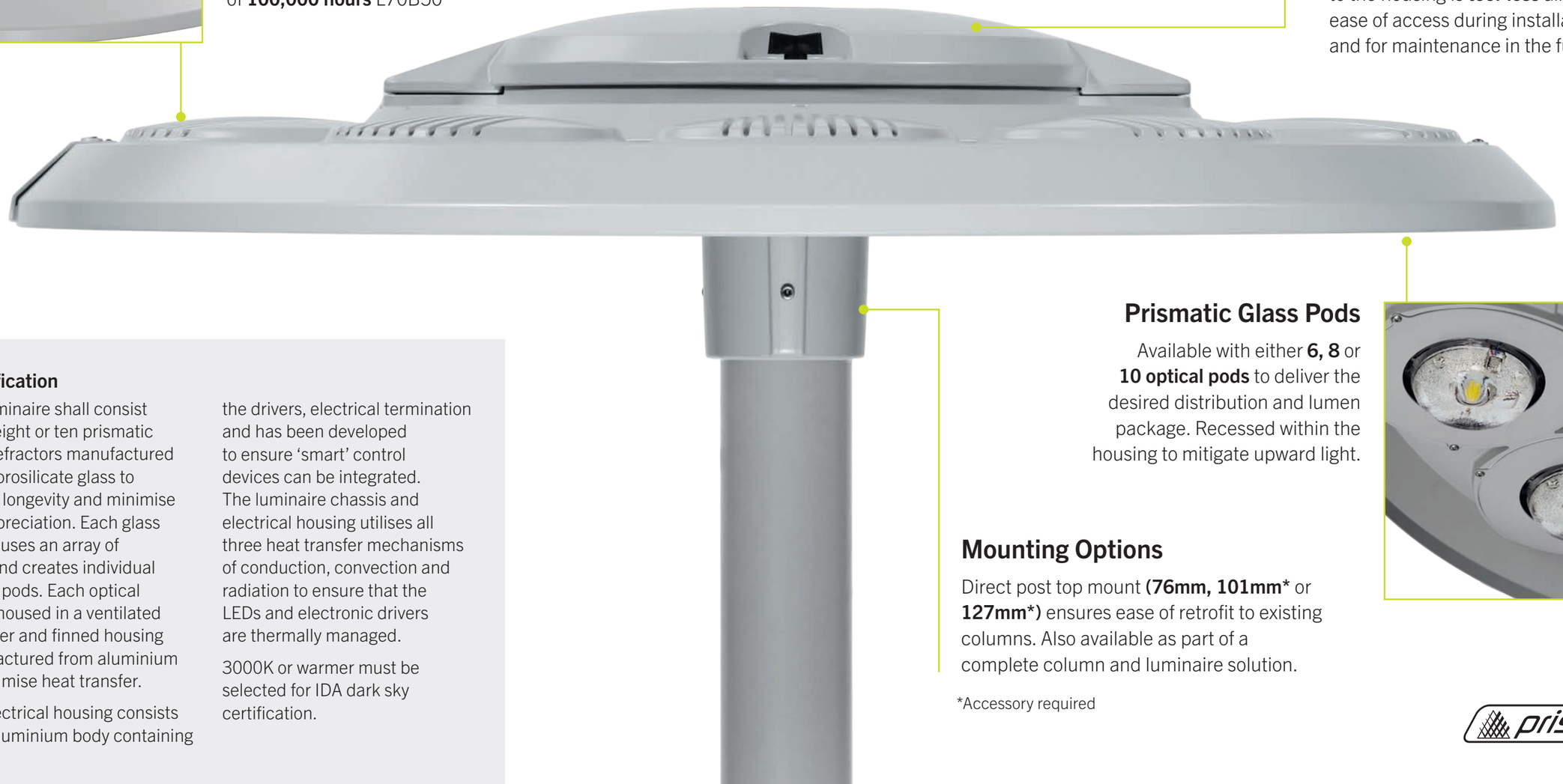
Technical Specifications

Thermal Management

Engineered to deliver exceptional thermal management via **conduction** and **convection** which ensures heat is taken away from the light engine to deliver a system life of **100,000 hours** L70B50

Control

The inner housing contains the **electronic drivers** and **'smart' control nodes** that deliver the complete controllable lighting solution. Access to the housing is **tool-less** allowing ease of access during installation and for maintenance in the future.



Specification

The luminaire shall consist of six, eight or ten prismatic glass refractors manufactured from borosilicate glass to ensure longevity and minimise dirt depreciation. Each glass lens houses an array of LEDs and creates individual optical pods. Each optical pod is housed in a ventilated chamber and finned housing manufactured from aluminium to maximise heat transfer.

The electrical housing consists of an aluminium body containing the drivers, electrical termination and has been developed to ensure 'smart' control devices can be integrated. The luminaire chassis and electrical housing utilises all three heat transfer mechanisms of conduction, convection and radiation to ensure that the LEDs and electronic drivers are thermally managed.

3000K or warmer must be selected for IDA dark sky certification.

Prismatic Glass Pods

Available with either **6, 8** or **10 optical pods** to deliver the desired distribution and lumen package. Recessed within the housing to mitigate upward light.

Mounting Options

Direct post top mount **(76mm, 101mm*** or **127mm*)** ensures ease of retrofit to existing columns. Also available as part of a complete column and luminaire solution.

*Accessory required

prismaled™

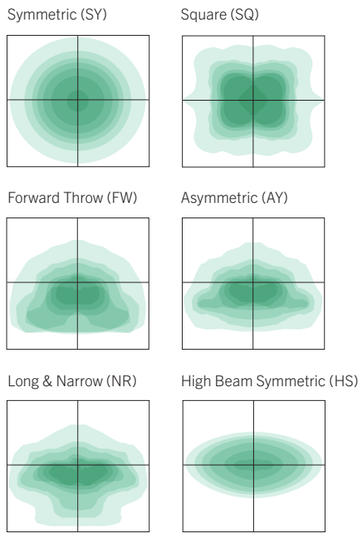
Holophane's Optical Story

In this very competitive environment, it is becoming increasingly important to reduce operating costs and improve efficiency. Holophane is your expert when it comes to delivering the most efficient lighting solutions to help you achieve that goal. Taking advantage of the most advanced technologies available.

Advanced Optical Control

By combining the latest in LED technology with our advanced glass refractor optic we are able to break up the image of the LEDs with a PrismGlow effect. This reduces the glare normally associated with individual LEDs and eliminates hot spots on the working environment thus creating a more uniform vertical and horizontal lighting solution.

Light Distribution



Thermal Management

Excellent heat dissipation, longer complete life

The LED module system covers a large contact surface that conducts heat away from the critical electronic components which is then dissipated throughout the housing. The channel between the modules and the gear compartment generates a constant flow of air that passes through the luminaire. This process of convection ensures the luminaire is running as cool as possible resulting in a long system life.

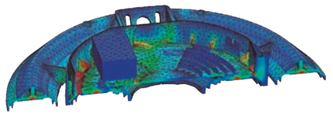
Thermal management

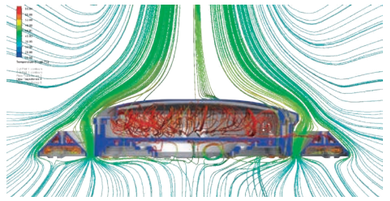
CityMax Large utilises all three heat transfer principles of conduction, convection and radiation.

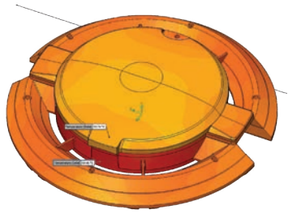
Conduction
From the LEDS and driver onto the LED module and gear housing respectively.

Convection
The air channel between the LED module and gear housing.

Radiation
Heat energy from the driver and LED is emitted from the casting in all directions.

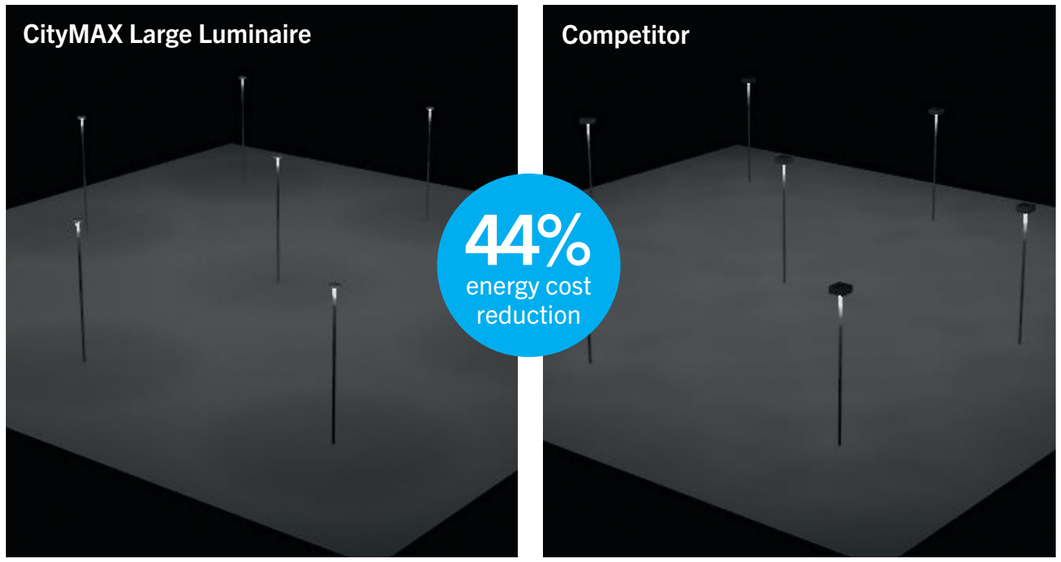






prismaled™

Performance



Design Parameters

> Designed to EN 12464-2:2014

> Target of 20 lux, 0.25% Uniformity

> 8m mounting height

> Maintenance factor of 0.88

> Total area of 34,047m²

> 40m spacing between mounting points.

Product Used

26 CityMax Large

> Luminous flux: c30,000

> Luminous efficiency: 148 lp/W

> £0.17 energy cost per m²

26 400W SON Luminaire

> Luminous flux: c32,000

> Luminous efficiency: 71 lp/W

> £0.30 energy cost per m²

Benefits

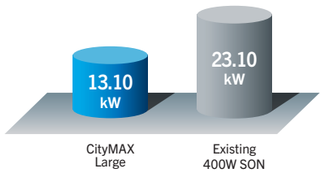
> 43% year 1 energy savings

> Improved light control

> Lower ongoing maintenance costs.

2 Year

energy consumption



CityMAX Large		400W SON
26	No of Luminaires	26
18	Eav (lux)	18
0.28	Uniformity	0.28
6.55	Total Power Load kW	11.55
£5,739	2 Year Energy	£10,121

* Additional saving can be achieved with CityMax Large and Controlux Air

Controls compatible with Controlux Air

Controlux Air helps users transform their existing infrastructure into a wireless platform. With Controlux Air, you have full remote configuration or your site with an intuitive user interface which is map based and delivers accurate/update reporting.

Wireless Controller

Wireless communication, lighting control and external sensor interface.

External antenna allowing communication with 'Motion Sensor' and 'Wireless Gateway'.

Creates a wireless mesh type network when used with the 'Wireless Gateway'.

Available with option code .T1Z4. Node be to be ordered as separate item (IOT.TZ4.TSK).

Motion Sensor

Motion sensor and wireless communication triggering 1 to 10 luminaires (with Integral Wireless Controller) upon detection (user configurable).

Wireless communication with 'Gateway'.

Detects pedestrians, cyclists and cars range (range: 2.5 -75 mph)

Range: up to 15m on each side, 9m front and 3m behind at a mounting height of 5m (max).

Gateway

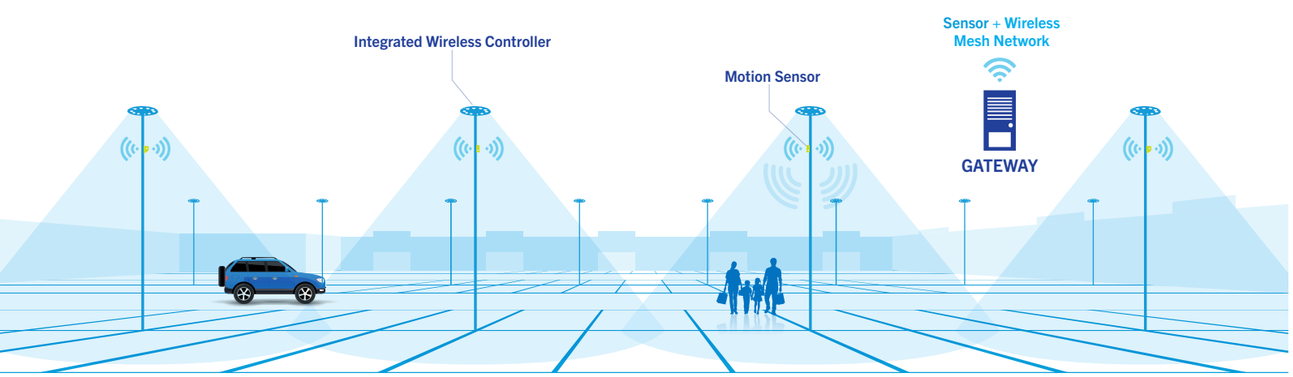
Wireless network and server communication (via SIM Card).

Suitable for pole, wall or inside cabinet mounting.

One Gateway required for up to 200 devices (Motion Sensors or Integrated Light Controllers)

with a range of up to 1km open field range.

Links all devices to web-based Customer Interface for remote management of luminaires and devices.



Intuitive user interface

Gain in-depth insights into every single aspect of your lighting system. Smart analytics and simple charts will help you make the right decision about your lighting infrastructure.

Automatic failure reports

Lighting-related system faults are identified, and automatic failure reports are sent in real-time. This results in optimized maintenance, better planning, reduced costs and extended luminaire life.

Power metering

Dedicated hardware provides precise energy metering, which is converted into detailed energy usage and savings reports.

Accurate real-time data

Generation of analytics per an individual light point or their groups. Available data includes: notifications about lighting-related faults, number of triggers per light point, generated energy savings, heatmaps, and more.

Map-based visualizations

Outdoor lighting points are represented in a graphic interface on Google Maps, coordinated with GPS technology, which enables you to locate, monitor and control individual light points with ease.

Continuous support

CityManager receives periodic security and feature upgrades. We do this to ensure optimum functionality and system performance.

Financial Benefits

By installing Controlux Air controls systems, you benefit financially, thanks to energy savings and reduced energy costs.

Energy savings of up to 80%

40% - 80%

- By using dynamic lighting, it is possible to generate energy savings of 40-80%, depending on the usage environment
- In dense urban environments, the Controlux Air solution has the potential to generate energy savings of 40-50% (in this case, actual savings depend on the traffic intensity)

Maintenance costs savings up to 50%

20% - 50%

- Automatic failure reporting
- No need for expensive visual inspections
- Extended luminaire lifetime
- Excellent preventive maintenance

For more information about ControluxAir scan the QR code or visit **www.holophane.co.uk/controlux-air**

Dimensional Data

Weight
(with control gear)

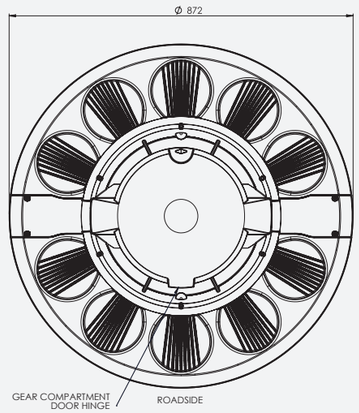
CityMax Large (BCL)	18 kg - 23 kg

Windage
(effective projected area)

CityMax Large 0.178m^2

Ta

-20°C to 50°C



CityMax Large with accessory HEL.101.CP

CityMax Large with accessory HEL.127.CP

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.

Ordering Details

Code	**Luminaire** (required)
BCL	CityMax Large
Code	**Lamp Type** (required)
.LC204	LED light engine producing c20,000lm with a nominal 4000K colour temperature, 70CRI
.LC254	LED light engine producing c25,000lm with a nominal 4000K colour temperature, 70CRI
.LC304	LED light engine producing c30,000lm with a nominal 4000K colour temperature, 70CRI
.LC354	LED light engine producing c35,000lm with a nominal 4000K colour temperature, 70CRI
.LC404	LED light engine producing c40,000lm with a nominal 4000K colour temperature, 70CRI
.LC203	LED light engine producing c20,000lm with a nominal 3000K colour temperature, 70CRI
.LC253	LED light engine producing c25,000lm with a nominal 3000K colour temperature, 70CRI
.LC303	LED light engine producing c30,000lm with a nominal 3000K colour temperature, 70CRI
.LC353	LED light engine producing c35,000lm with a nominal 3000K colour temperature, 70CRI
.LC403	LED light engine producing c40,000lm with a nominal 3000K colour temperature, 70CRI
Code	**Light Distribution** (required)
.SY	Symmetric distribution
.FW	Forward Throw
.AY	Asymmetric distribution
.NR	Long & narrow
.SQ	Square light distribution
.HS	High beam symmetric distribution
Code	**Fixing Method** (required)
.CP1	76mm central post top mounting
Code	**Colour** (required)
.C1	White (RAL9016)
.C4	Graphite
.C6	Grey
.C7	Black
.C9	Silver
.RAL****	RAL Colour (Customer choice)
Code	**Paint Finish** (option)
.C	Enhanced Paint Finish
Code	**Auxiliary Circuits** (option)
.CII	Class II
Code	**Photocell** (option)
.T1	Complete with NEMA socket. (To accept standard NEMA Photocell, available from Holophane)
.T7	Complete with 7-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) without locking top.
.T7T	Complete with 7-pin dimming NEMA ANSI C136.41 socket (photocell/node supplied by others) with weather proof locking top
.TSZA	Complete with miniature 55 lux factory fitted photocell. (Zodion Zhaga 4-pin)
.TZ01	Complete with 4-Pin Zhaga Socket - Top (suitable photocell/node supplied by others) with weather proof locking top*
.TZ02	Complete with 4-Pin Zhaga Socket – Bottom (suitable node/presence detector supplied by others) with weather proof locking top*
Code	**Dimming Outputs** (option)
.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
.CI9	Programmed to deliver 90% of the initial lumens over the life of the luminaire
.CL****	Customer specified programming
Code	**Control Gear** (option)
.LRD	DALI electronic gear
.LRT56	Pre-set to dim to 50% between 12am to 6am
.LRT66	Pre-set to dim to 60% between 12am to 6am
.LRT76	Pre-set to dim to 70% between 12am to 6am
Code	**Auxiliary Circuits** (option)
.C-PROTEC	10kv surge protection

Example										
BCL	.LA204	.SY	.CP1	.C1	.C	.CII	.T5	.CL7	.LRT56	.C-PROTEC

Note: Product is suitable for 76mm central post top mounting. For additional post top mounting option please see accessories available. * Not available with .LRD
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%.
For columns and brackets please visit http://www.holophane.co.uk/products/columns-and-brackets/

accessories

Code	
HEL.101.CP	101mm to 76mm adapter
HEL.127.CP	127mm to 76mm adapter

SUSTAINABILITY
ENVIRONMENTAL

EarthLIGHT

AN ECO DESIGN THAT IS SUSTAINABLE WITHIN.

Our products are just one part of our sustainability efforts, with the 4 pillars of our eco-design which constantly push us to create the most sustainable products that reduce our own environmental impact.

Pillar One
Sustainable
we make more with less

How are we doing it?

- To make use of recycled materials where we can
- Reducing unnecessary materials, weight and component count
- Only using components that can be used in other luminaries
- Reduce labour time and energy usage during the manufacturing process

Pillar Two
Scalable
we tailor the product for application

We offer:

- Products that are scalable to accommodate new features
- Form-factor sizing for each application to help reduce material waste
- Flexible mounting options

For information on our EarthLIGHT initiative please scan the QR code

Pillar Three
Serviceable
we ensure product longevity

All of our products are:

- Upgradable
- Simple in design
- Ensure easy access to internal components
- Spares are easily available to enable customer servicing and repair

Pillar Four
Separable
we are committed to global sustainability

Our products are:

- Environmentally friendly
- Recyclable
- Easy to disassemble, making materials used easy to separate

CIRCULAR ECONOMY TM66

Holophane's ambitious sustainability efforts have set us on the path to obtaining several accreditations with the LIA and CIBSE's TM66 which allows us to rate our products and follow a method that designs out waste.

The traditional resource sonsumption model is linear, where raw material is collected to make products, then often thrown away once they have served their purpose.

CIBSE's TM66 allows us to rate our products and follow a method to design out waste, maximise value and improve maintenance so that our luminaires can be repaired, recycled and re-used.

CIBSE

TM66 CIRCULARITY 2.7
012-0091 LIA CIBSE

2.5 to 4.0	Excellent circularity
1.5 to 2.5	Definite/substantial progress to circularity
0.5 to 1.5	Some circular economy functionality
0 to 0.5	Very poor circular economy performance


COSTA
currys
PC World

CityMax® Large

Speak to the Holophane experts today

Get in touch to discover how, together, we can ensure your lighting space works for you and the planet.

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