



D-Series

D-SERIES

The modern styling of the **D-Series** is striking yet unobtrusive - making a bold, progressive statement as it blends seamlessly with its environment. **D-Series** takes all the benefits of LED technology and moulds it into a high performance, high efficacy and long life area lighting luminaire.

With its exceptional 'finned' thermal management system, **D-Series** is capable of delivering over 100,000 hours LED module life. Offering a wide range of lumen packages and optical distributions, **D-Series** delivers optimised lighting application designs.

With the integrated ZD4i compatibility **D-Series** delivers a controllable luminaire that helps you realise energy consumption goals and demonstrate environmental responsibility. With its unique optics placed below each LED it ensures light is delivered where it needs to be, providing a uniform Nighttime Friendly environment with minimal light pollution.

Applications

- Amenity Areas
- Car Parks
- Retail Parks
- Truck Yards
- Warehousing
- Exterior Areas

Optics / Light Source

- Lumen packages ranging from 2,000 - 50,000 in 3 different luminaire variants
- Fully soak tested light engines ensuring LED reliability and eliminating early failures.
- 2700K/3000K/4000K colour temperature.
- RA 70.

TM66 CEAM-Make Rating

Rating: 2.6 Excellent Circularity.



Approvals

Complies with EN60598



IP IP65 luminaire and LED optic

Ta -40°C to +40°C

DSX1



AN ENVIABLE REPUTATION THROUGHOUT THE WORLD

125 years of 
Innovation & Excellence

When Holophane was founded in 1896 in London, headed by Pelham Trotter, it marked the start of an incredible history that has now seen Holophane become a global business revered throughout the world for its expertise, quality, innovation and excellence in lighting.

Holophane's first product was the famous patented globe in 'white' or 'rose crystal' that sold for around 2 shilling (10p). Today, Holophane continues this proud tradition with our values deeply rooted in the dedication to creating luminaires, with exceptional lighting performance, innovative patented technologies, and delivering added customer value beyond illumination.

What does it mean for our customers?

A Trusted & Reliable UK Manufacturer

From Royalty all the way to small residential projects, Holophane has been a trusted manufacturer over the decades for all manner of projects. You can be sure you are in good hands and can rely on the collective knowledge and expertise we have gathered since our inception in 1896.

Development of Innovative Products

As part of our design philosophy, Holophane are always trying to push boundaries in the development of unique product innovations. As such many of our luminaires hold UK and International design patents.



Products That Deliver Added Value

In today's world, sustainability and added value are becoming increasingly important. As such our products and solutions go further than just lighting. Many of our innovations include integrated smart connected solutions to help customers achieve further energy savings and can also enable remote monitoring.

Delivering excellent customer service

Over our 125-year history we have always been committed to delivering the best service to our customers and supporting in a myriad of ways to ensure the best possible outcomes. This goes as far as offering a free lighting design service to one-off products/solutions to meet customers unique needs.

THE D-SERIES RANGE 3 LUMINAIRES, ONE COMPLETE PROJECT SOLUTION

The **D-Series** range has been designed not only for super optical quality and performance but also to have a cohesive family aesthetic.

Available in 3 luminaire sizes, the D-Series range offers a full outdoor lighting solution for any environment.



DSX0

2,000 to 22,000 lumens
up to 6m mounting heights



DSX1

22,000 - 36,000 lumens
between 6m and 10m mounting heights



DSX2

30,000 - 50,000 lumens
8m mounting heights and above

PRODUCT FEATURES

Enhanced Performance

The **D-Series** range features the very latest LED technologies. In conjunction with silicone optics this delivers the best lighting performance coupled with low-energy consumption and high efficacy. This also means D-Series meets BREEAM compliance.

Class leading optics

The **D-Series** range has the flexibility of 4 optimised optical distributions. Through using individual bubble optics per LED D-Series controls the light exactly where it's needed. This results in a luminaire that provides best in class spacings and uniformity.

Easy maintenance

The **D-Series** range has an easily accessible gear compartment ensuring fast and simple component changes if required.

ZD4i
ready

**0%
ULOR**

D-SERIES



DSX1



DSX2

Connected

The **D-Series** range is ZD4i compatible when specified with the 4-pin Zhaga socket options (TZ01 or TZ02) enabling a future proof luminaire that can be used in conjunction with Controlux Air or a expanding ecosystem of third party devices and sensors.

Note: Post Top Bracket for The D-Series range is sold separately. Please enquire with your Holophane representative for the full range of mounting options.





DSX0

THERMAL MANAGEMENT

The reliability and performance of an LED luminaire is dependent on a combination of factors. Keeping the temperature of the drivers, LEDs and electronic components as low as possible is critical to maintaining the luminaire's efficiency.

One of Holophane's key luminaire design principles ensures that the **D-Series** family utilises all three heat transfer principles of conduction, convection and radiation.



Conduction

Taking heat away from electronic components, LEDs and drivers.

The **D-Series** range has drivers and LEDs that are mounted directly to thermally efficient, LM6 Aluminium to promote efficient transfer of heat from these critical components.



Convection

From luminaire heat sink chassis and LED module to ambient air.

The **D-Series** range is designed to have drivers and LEDs that are mounted separately to avoid compound heating of components. This ensures critical components are kept as cool as possible to ensure long system life.



Radiation

Surface finish and form designed to maximise heat radiation.

The **D-Series** range incorporates a large finned casting design which increases the total surface area of the luminaire and in turn helps to promote cooling through radiation.

THERMAL MANAGEMENT

DSX1

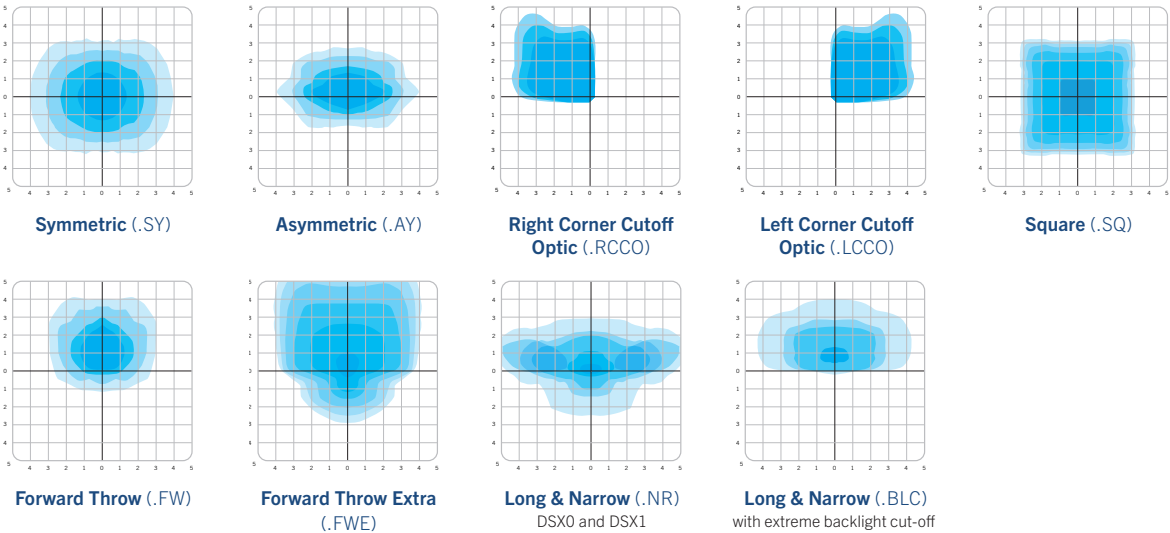


SPECIFICATION

Specification

Single-piece die-cast aluminium housing, that conforms to EN1706 AC-46500, with integral heat sink fins to optimise thermal management through conductive cooling. LED modules are IP65 with individual lenses, and high grade aluminium housing to transfer heat away from the LEDs and dissipate through the finned housing for cooling. The LED driver is mounted in direct contact with the finned housing for cooling to promote low operating temperature and long system life. Housing is completely sealed against moisture and environmental contaminants (IP65). Installation is via the integrated mounting block and integral arm that facilitate a quick and easy installation. 3000K or warmer must be selected for IDA dark sky certification.

Light Distributions



Features and benefits

System Longevity

- The D-Series's diecast aluminium housing acts as its primary heat sink. Its longitudinal fins employ conductive cooling techniques to dissipate heat away from the key LED components and driver that extends the life of the luminaire.
- Light engine(s) consist of either 20 or 30 high efficacy LEDs (subject to chosen configuration) mounted to a metal-core circuit board to maximize heat dissipation and promote long life.

Exceptional Performance

- Offering six lumen packages ranging from 2000 lm to 50,000 lm with efficiencies of up to 143 lpw (Lumens Per Watts).

- Four optimised distributions (Symmetric, asymmetric, forward throw and long and narrow) delivered by quality LEDs and bespoke UV stabilised optics.
- LED light engines with 0% ULOR ensuring night time friendly.

Complete Light Package

- Available with ZD4i compatibility for use with range of 3rd-party sensors and devices.
- Fully integrated into Holophane standard column range.

DIMENSIONS & PERFORMANCE

Typical luminaire performance

Configuration	Delivered Lumens	Circuit Power (W)	Driver output current (mA)	Luminaire total number of LEDs	Luminaire efficacy (lm/W)
DSX0.4.LA02X	2,000	14	203	20	143
DSX0.4.LA03X	3,000	20	309	20	150
DSX0.4.LA04X	4,000	27	419	20	148
DSX0.4.LA05X	5,000	34	534	20	147
DSX0.4.LA06X	6,000	40	653	20	150
DSX0.4.LA08X	8,000	56	906	20	143
DSX0.4.LA10X	10,000	68	1181**	20	147
DSX0.4.LA11X	11,000	75	609	40	147
DSX0.4.LA13X	13,000	90	733	40	144
DSX0.4.LA15X	15,000	106	864	40	142
DSX0.4.LA16X	16,000	114	932	40	140
DSX0.4.LA18X	18,000	130	1050	40	138
DSX0.4.LA22X	22,000	169	1385	40	130
DSX1.4.LA22X	22,000	145	799	60	152
DSX1.4.LA30X	30,000	213	1150	60	141
DSX1.4.LA36X	36,000	256	1400	60	128
DSX2.4.LA30X	30,000	202	838	80	149
DSX2.4.LA36X	36,000	239	781	100	151
DSX2.4.LA40X	40,000	268	883	100	149
DSX2.4.LA45X	45,000	310	1016	100	145
DSX2.4.LA50X	50,000	351	1157	100	142

Weight (with control gear)

DSX 0	8.0 kg
DSX 1	12.2 kg
DSX 2	15.0 kg

Windage (effective projected area)

DSX 0	0.09 m²
DSX 1	0.09 m²
DSX 2	0.10 m²

TA

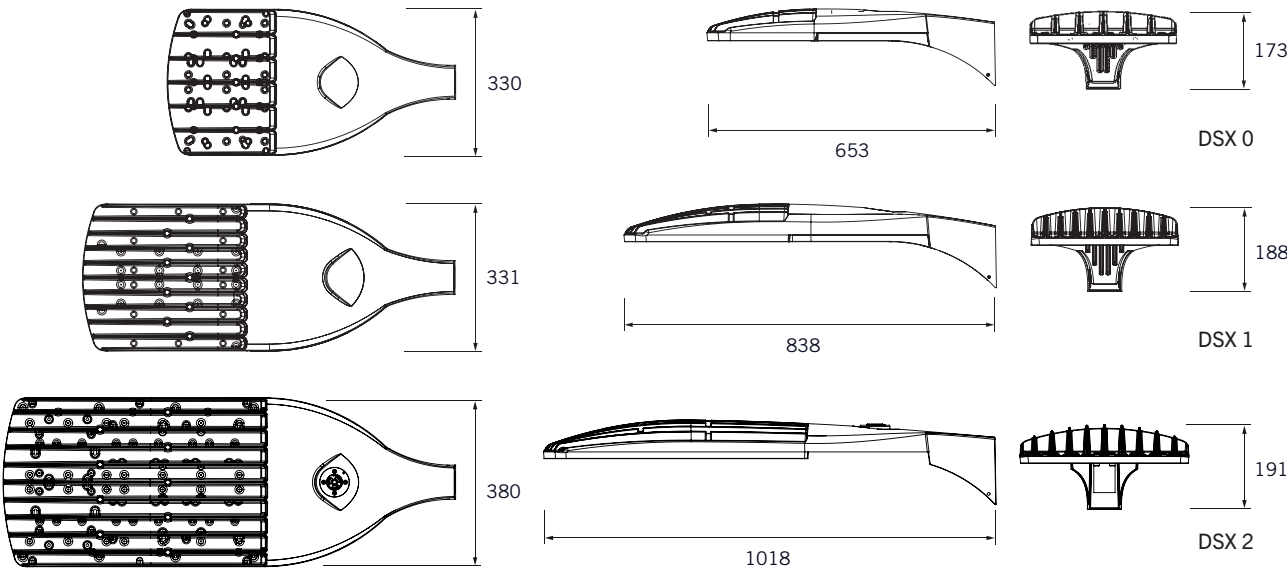
-40°C to 40°C

X - Denotes colour temperature (replace X with 2 for 2700K, 3 for 3000K and 4 for 4000K)

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.



dimensions in mm



SPECIFICATION

LIGHTING WHERE YOU NEED IT... NOT WHERE YOU DON'T

Addressing unwanted spill light along the perimeter of your outdoor lighting design is no easy task. Whether you are trying to limit the light trespass due to concern for neighbouring properties, or simply seeking to achieve the most optimised lighting design, you need the most stringent light control available.

The D-Series Extreme Cutoff Optics, with its industry-leading optics addresses light trespass using innovative backlight control, delivering outstanding performance, long life and energy efficiency. This is accomplished through the use of specialised point-source black light engines, integrated specular reflectors with optimised optics and dedicated light-absorbing backlight shields to provide maximum control for backlight while providing superior lighting levels and luminaire efficiency.

DSX0



DSX1



DSX2



INNOVATIVE OPTICS THAT SUPPORT YOUR DESIGN

Specialised, Black D-Series Light Engines

The stray-light absorbing light engines remove light scattered during refraction, ensuring light is directed exactly where it is needed - virtually eliminating spill light.



Integrated Shield

The integrated shield design virtually eliminates light trespass, reduces glare, and maximises forward-reflected light, while maintaining high luminaire efficiency.



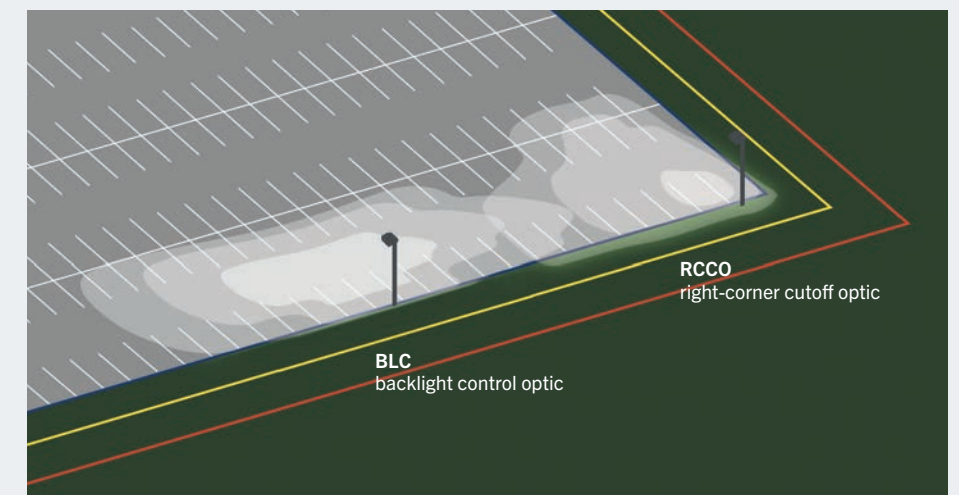
INNOVATION IN ACTION

Dedicated Backlight Control

The BLC optic enables significant backlight control, projecting light directly to the front and side of the task area while having as little as 0.5% of total backlight beyond the boundary line or column placement. This optic allows for optimal backlighting results when used on paths, curbs and parameter edging where backlight is not required. This is accomplished using a specialised

point-source black light engine with integral reflectors, optimised optics and light-absorbing backlight shields, providing superior lighting levels and luminaire efficiency. LEDs also can't be seen from the rear, which helps reduce glare when looking at the fitting from behind.

- **Curb Line**
- **Property Line**
Virtually all light is cutoff right at that property line.
- **Boundary Line**



Corner Cutoff Control

The RCCO (right-corner cutoff optic) and LCCO (left-corner cutoff optic) apply the same principles as the BLC optic. However, this optical distribution caters to aiding perimeter lighting control to the corners of parking lots and other outside areas. The image above illustrates this optic working in harmony with the BLC optic to provide unmatched perimeter lighting while

maintaining light levels that offer high visibility to the target area. The image further illustrates how sharp the cutoff is of the light. Allowing for projects to have a column mounted in the corner without any light spill going to one side. This helps support compliance with intrusive light requirements along the perimeter area while the target area remains illuminated.

DSX2





Note: The specifications of the Holophane luminaire, 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.

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%.

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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 luminaires
- Reduce labour time and energy usage during the manufacturing process

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 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



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 consumption 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.



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

D-Series



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