

Welcome to Holophane

Over 125 years of innovation and technical excellence

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We are Holophane

The name Holophane is a combination of the Greek words 'Holos & Phanein' meaning to appear 'wholly or completely luminous.'

Established in 1896, we are one of Europe's leading lighting solutions manufacturer for the built environment.

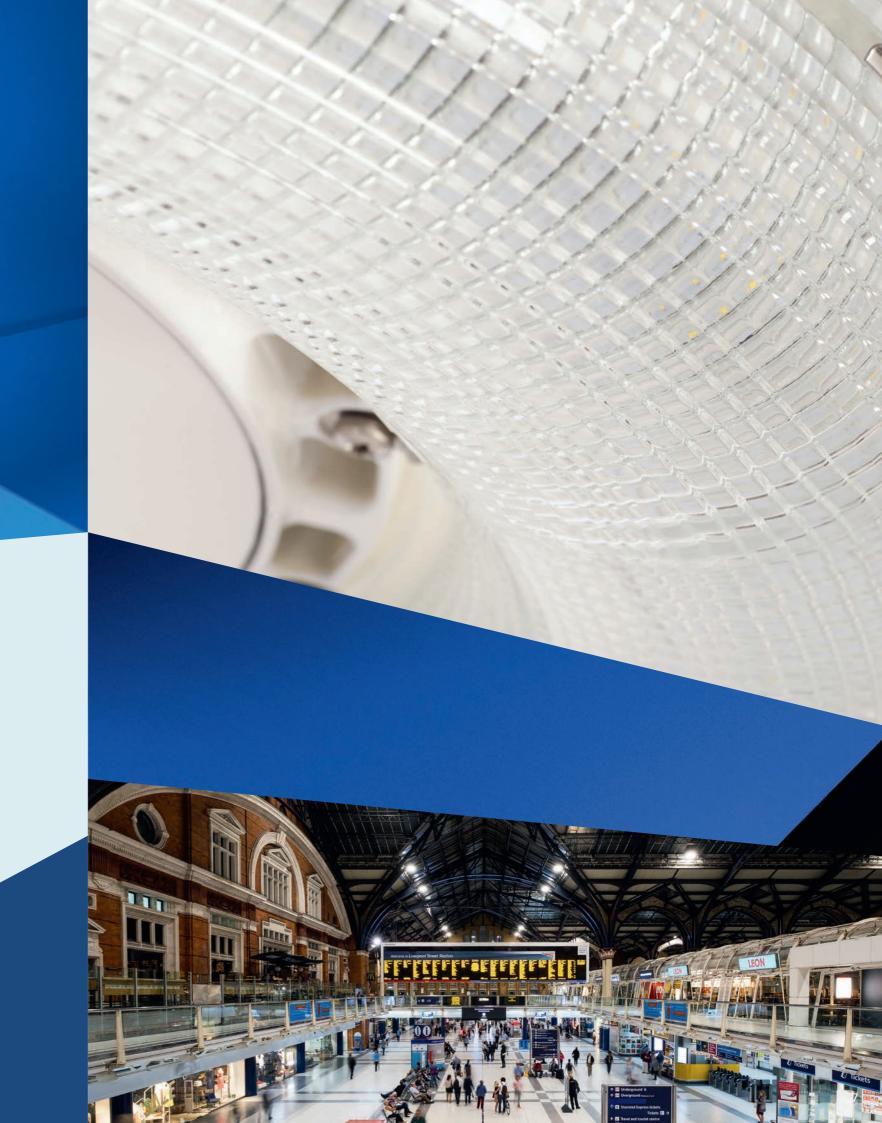
Recognised and trusted

With over 125 years of technical excellence and innovation, the name Holophane has enjoyed an enviable reputation throughout the world for its expertise, quality, and developing new ideas in lighting.

Our aim is to build and maintain strong relationships with our customers. We do this by offering sustainable products that provide the lowest total cost of ownership, high-quality solutions, with superior customer service.

David Barnwell

Managing Director, Holophane Europe Ltd.





We have been at the forefront of lighting since 1896. Lighting Designers, M&E Consultants, Specifiers and Distributors all look to us for support, advice, and delivery of high performing lighting solutions

From the earliest days when the company pioneered its famous glass reflector, the Holophane name has been an ever-present leader and innovator in the field of luminaire and lighting design.

Today we carry on this legacy, where in today's environment, landscape lighting, modern architecture and public space projects predominate, we remain synonymous with quality design, high performance, energy efficient and sustainable lighting.

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Part of the Acuity Brands Group

Acuity Brands, Inc. (NYSE: AYI) is a market-leading industrial technology company. We use technology to solve problems in spaces and light. Through our two business segments, Acuity Brands Lighting and Lighting Controls ("ABL") and the Intelligent Spaces Group ("ISG"), we design, manufacture, and bring to market products and services that make a valuable difference in people's lives.

We achieve growth through the development of innovative new products and services, including lighting, lighting controls, building

AcuityBrands.

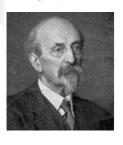
management systems, and location-aware applications. Acuity Brands, Inc. achieves customer-focused efficiencies that allow the Company to increase market share and deliver superior returns. The Company looks to aggressively deploy capital to grow the business and to enter attractive new verticals.

Acuity Brands, Inc. is based in Atlanta, Georgia, with operations across North America, Europe, and Asia. The Company is powered by more than 12,000 dedicated and talented associates.



The Holophane timeline

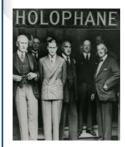
O In 1893 Otis Mygatt forms Holophane in France followed by the establishment of Holophane UK in 1896, headed by Pelham Trotter. Holophane was born and sold its first patented globe in 'white' or 'rose crystal for 2 shillings (10p).



O Holophane begun to advertise in more than 60 newspapers, such as The Times and the Daily Telegraph. In those first months prospects were good. Orders for 100,000 globes were received and the offices were soon transferred to larger premises.



O Holophane were expanding into International markets due to this the company moved to new premises in Carteret Street, Westminster where Holophane continued to develop and enlarge its Laboratories. King George V as Prince of Wales visits Holophane.



Otis Mygatt opens Holophane US in New Jersey.



Holophane Company Limited was formed and acquired all the rights, patents and manufacturing process of Holophane New Jersey. The company embarked on a new programme of prismatic glassware for commercial use. A core company, Davidsons, produced this glass.



Streetlighting became a strong speciality for Holophane. Sealed units had prisms moulded internally so that the outside surface was smooth for cleaning. The Duo Dome was particularly popular being supplied to Whitehall and other parts of London. Holophane US buy back the business from Holophane Limited in the UK for \$1,000,000



O Holophane began to establish a strong reputation. This was around the time that the famous Holophane lumeter was developed and for many years the only portable photometer available. Rapid development of the business necessitated

another move to Elverton Street

Westminster



 Holophane was commissioned to design and install the lighting of the enormous Battersea Power Station - not only the gigantic turbine hall, but other areas such as the coal-conveyor systems and the floodlighting of the tall chimneys



O Great Britain declares War on Germany. Holophane produces a range of ARP Air Raid Precaution Units designed to conform with war time lighting regulations. The company was also tasked to design fluorescent wall fittings for the illumination of wall maps in anti air raid operations rooms.





In 1923 Holophane was entrusted with the lighting of St Paul's Cathedral. Holophane developed its lamp technology to modify greater glare and brightness. Part of this was the Holophane Refractor / Reflector Unit.



Holophane was tasked with lighting Westminster Abbey.

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During the war Elverton Street was damaged by bombs on multiple occasions but work continued. The immediate post-war years were very busy for Holophane which was restricted by labour and materials shortages.



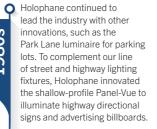
The Holophane timeline

When Queen Elizabeth was crowned, Holophane were given the full responsibility for the lighting of the Abbey. This was the first Coronation to be televised and filmed in colour. There had to be enough light vet not so much that it caused discomfort to the participants. Holophane used gold colour prismatic reflectors fitted into candelabras and chandeliers, with overhead projectors.



O In 1967 the company moved to a new and purpose built factory in Milton Keynes. This is still the present European HQ of Holophane. The laboratories developed an 8 metre swing goniophotometer and an integrating sphere.







O Holophane begins selling its first LED product - LED Series.



O Holophane's best selling products to date, the award rinning V-MAX and Haloprism luminaire, is released. The products have been sold in 11 different countries worldwide. Both products have gone on to win numerous global awards. HEA-HEMSA Award – Product of the Year and the Light Middle East Award – Outdoor Product of the Year.



O Holophane Europe Ltd is awarded one of the UK's most prestigious business awards; the Queen's Award for Enterprise: Innovation 2017 in recognition of Holophane's highly innovative lighting product development.



New professional grade LED Horticulture lighting solutions launched and next Launch of sustainability generation of industrial LED initiative, EarthLIGHT high bay lighting "Holobay"



One of the Post War developments was the Shell Tower built in 1958 and the Shell Office Block. Some 22,000 glass conical prism lenses were used. Other contracts of this time included the National Gallery, the Tate Gallery, the Mansion House and Buckingham Palace.



Holophane was expanding into international markets, first being Sweden followed by the Netherlands and Germany, and having great success internationally. In recognition of this Holophane was renamed Holophane Europe Ltd.



Holophane celebrates its 100th year anniversary. A 100 Years of a Lighting Legend brochure was printed in celebration.



trading for Holophane. This celebration was also accompanied with being awarded Manufacturer of the Year at Lux Live 2016. The judges said Holophane 'consistently delivers' and they are developing a suite of 'great' LED products and are 'embracing the digitisation of lighting' with 'confidence

2016 marked 120 years of



Introduces SmartID, our innovative maintenance solution.

Earth / LIGHT



VMXII first luminaire to be interdependently tested and verified through the LIA





Sales & distributors Europe

Headquarters United Kingdom - Milton Keynes

▲ Manufacturing United Kingdom - Milton Keynes

▲ Direct Sales Teams United Kingdom Germany

Belgium and Netherlands

▲ Distributors

Northern Ireland

Eire

Norway

Sweden

Finland

Netherlands

Belgium

Denmark

France

Spain

Poland

Israel

New Zealand

Australia





Our glass optics

Acuity Brands and Holophane manufacture our glass to remain as vertically integrated as possible, we control our own quality, costs and most importantly we remain experts on the technology.

We press the borosilicate glass, which isn't a process but an art, with quality control from start to finish.

- Does not haze or yellow
- Thermal and chemical resistant
- · Eco-friendly and recyclable
- · Repels dust and dirt
- · Beauty by day and visual comfort by night

PrismaLED optic technology

- Reduces discomfort glare and LED failure
- Consistent colour consistency
- Uniformed distribution



Thermal management

The thermal management of luminaires and the design around this is critical to ensure heat is dissipated away from sensitive electronic components.

By doing so means that we can create a luminaire with market leading light output whilst achieving maximum product life. Complete 'through ventilation' of driver electronics chamber ensures minimal dust build up to also aid in the longevity of luminaires

This is why Holophane strives to design luminaires with best-in-class thermal management and we achieve this by utilising three heat transfer principles: Conduction, Convection and Radiation.



Conduction

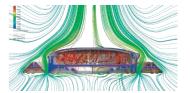
From the LEDs and driver onto the LED module and gear housing respectively.





Convection

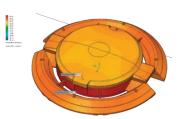
The air channel between the LED module and gear housing.





Radiation

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



Why glass refractors?

With all of the materials available today (plastics, acrylics, polycarbonate), Holophane has chosen to focus its intellectual energy on glass for one simple reason... the benefit to you, the customer. Glass is actually a very difficult material to work with in manufacturing, but we have chosen to invest heavily in this technology because it has great economic advantages in application. Here are just a few of these advantages...



Thermal shock

Glass shows very low thermal expansion or contraction



UV imperviou

Sunlight and lamp energy don't affect it. No change with prolonged exposure to sunlight or lamp.



Longevity

Doesn't degrade over time!



Temperature resistance

Typical fixture temperatures are comfortably within the melting point of glass.



Chemical resistance

Remember the test tubes in chemistry class? Making glass ideal for industrial environments and aggressive atmospheres.



Low dirt accumulation

Glass does not build an electrostatic charge unlike metals and plastics.



Recyclable

Made from recyclable glass.

Holophane lighting controls

From simple to cloud based

A solution that works for you

The Holophane controls solution is tiered to offer you a solution to cater for every type of project. Ranging from basic on/off PIRs through to cloud-based controls, Holophane can offer a competitive controls solution to work around your needs.



Benefits

A fully controllable cloud-based system than can easily be adapted in real-time. Maximum energy and efficiency savings.

Connected

Wireless grouping of luminaires enabling installations to have groups of luminaires activated. Perfect for aisles, racking or specific areas.

Intelligent

Added dynamic functionality enables areas to adapt to ambient light levels. Ideal for busy areas.

Simple

Immediate energy savings, through on/ off switching using motion sensing.

Interior lighting controls



solution HOLOSAir. Holophane's cloud-base system with added digital functionality and enhanced control

multiple luminaires Davliaht sensina and analytics

On/off & dynamic dimmin Wireless grouping of Web based cloud contro Emergency reporting Failure reporting

Holophane Up to 16m* service only Note: Requires a for full functionality

Yes - scalable. upgradeable



All the same features as the intelligent PIR but with added luminaire arouping functionality

On/off & dynamic dimmir Wireless arouping of Daylight sensing

Yes. Via the Holophane service only.

Yes - only the connected senso can be upgraded to the cloud tier



On/off & dynamic dimmina

via remote IR programme or via the Holophane

Yes service

No



· On/off control

Up to 16m*

Up to 16m*

Up to 16m*

via remote R programme or via the Holophane service

Exterior lighting controls





We call this control solution Controlux Air. Holophane's cloud-base system with added digital functionality and enhanced control

On/off & dynamic dimmin Wireless grouping of multiple luminaires

Daylight sensing Web based cloud control and analytics Failure reporting

Yes. Via the Up to 12m*

Holophane Yes – scalable service only Note: Requires o

ntrolux Air gatew

Yes via remote

or via the Holophane





All the same features as the intelligent PIR but with added luminaire grouping functionality

On/off & dynamic dimm Wireless grouping of

Yes via remote R programme Up to 12m* Holophane

Up to 12m*

Up to 12m*

No service







Intelligent



A simple on/off PIR

· On/off control

· On/off & dynamic dimming

Yes via remote IR programm or via the Holophane service



Our key vertical markets

We remain as vertically integrated as possible to deliver smart, simple, and sustainable lighting & control solutions that offer high quality and value for our customers.

Warehouse & Logistics

Enhance visibility, productivity, and safety with our LED lighting solutions. Our sustainable and cost-effective options are ideal for warehouses looking to improve their operations.



Industrial

Enhance workplace safety and productivity while lowering operating costs with our high-performing, low-maintenance, energy-efficient LED lighting solutions.



Rail

Scalable and low-maintenance LED lighting solutions for energy-efficient train station platforms and overground public spaces.



Road & Highways

Enhance the safety and visibility of roadways and highways with our sustainable, cost-effective, and scalable controlled LED lighting solutions.



Horticulture

Reliable and efficient LED lighting designed for commercial indoor and greenhouse horticulture.



Amenities

Enhance safety for drivers, riders, and pedestrians while improving the security of urban areas with our costeffective, sustainable LED lighting solutions.



Sports & Arena

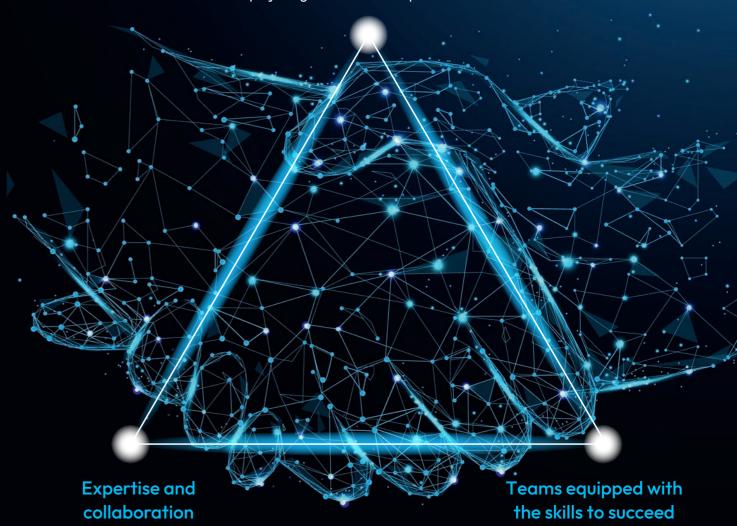
Efficient, low-maintenance, and scalable LED lighting solutions for energy-efficient indoor sports facilities and arenas.



Our partnership approach

Lighting excellence from the very start

Early-stage engagement ensures all projects get off to the best possible start



throughout the project
Strong partnerships and
innovation at every stage

Meeting your needs with a clear focus on supporting you



Environmental responsibility is no longer a nice-to-have, it's a necessity

We will not stop until we are 100% carbon neutral.

Holophane is committed to optimising every corner of our supply chain for sustainable and circular solutions, while challenging our suppliers to do the same.

This includes the eradication of plastic and introduction of 100% recyclable packaging solutions.

Environmental initiatives extend into the running of the entire organisation and our culture.

How are we doing it?

Photovoltaic solar panels: Our solar PV installation provides us with up to 85% of our renewable energy consumption, with the remaining 15% procured from Carbon Trust accredited renewable energy sources.

Product waste reduction: To meet our WEEE obligations, we are a member of Recolight to ensure the avoidance of end-of-life luminaires reaching landfill.

Flora: To help combat climate change, we have planted 42 mature trees and various shrubs around the perimeter of our head office. Also, to enhance biodiversity, we have sent to textile banks for recycling. recently planted a wild flower seed bed.

Cycle to work scheme: This reduces parking, congestion, and pollution problems, and helps contribute to a healthier and happier workforce.

Onsite electrical vehicle chargers and EV salary sacrifice scheme:

This promotes greener, zero emission producing vehicle usage.

Recycled staff uniforms: Our corporate work wear is made from both sustainable and recycled materials, with all unwanted or damaged items

Operational initiatives

We are breeding a company culture on sustainable behaviours.

A few conversations with our suppliers and we were able to shine a microscope on our supply chain, implementing circular operations wherever we can, educating and challenging our suppliers to do the same.

Each time a package is sent to us, we doubled down on what could be done to optimise the process. The same applies to our product manufacturing. It's these small incremental actions that all add up to make big change!

The reduction of our own manufacturing waste material has and always will be a high priority as we move towards completely circular operations of 100% recyclable packaging solutions.



Zero Iandfill

Since 2020 our waste streams have meant that no generated waste has been sent to landfill!



Here are a few examples on where we are making an impact:

Reduction in plastic packaging usage

Between 2016 and 2023 we have our purchased plastic usage from 7,000kg to 1,159kg through the following initiatives:

Replacing our plastic void fill machines: using a second generation, enhanced efficiency, recycled paper void fill machines.

Recycled packaging: our suppliers provide also biodegradable and recyclable. us with 100% "already recycled" cardboard which is then recycled at end-of-use.

New pallet wrapping machine: reduced our plastic wrapping consumption by 40%.

Paper tape and document windows: made from renewable sources, but are also biodegradable and recyclable.

Reusable package usage

As part of the sustainable supply chain, we repurpose the following packaging through the following initiatives:

Return of packing plastic trays: allowing our LED board supplier to reuse in repeat deliveries.

Return of pallet boxes and crates: transportation of goods inbound and outbound to be reused.

Reusable package usage

In 2023, we baled all packaging around the components we procure and sent it for recycling:





Wood 1,490kg



Our 4 pillars of eco-design constantly push us to create the most sustainable products









Circular economy **TM66**

Holophane's ambitious sustainable efforts have set us on a path to obtaining several accreditations with the Lighting Industry **Association and Chartered Institute** of Building Services Engineers' TM66 which allow us to rate our products and follow a method to design out waste.

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

Following the TM66 CEAM assessment a score between 0.0 and 4.0 is generated for each luminaire. Our goal is to ensure all our luminaires achieve excellent circularity (2.5 to 4.0).

To ensure the credibility, objectivity and consistency of our own ratings, our products are independently tested and verified through the Lighting Industry Association (LIA) Assured Scheme.





Chartered Institute of Building Services Engineers (CIBSE) 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.



TM66 Score

- TM66 Provisional Score
- ∞ TM66 Assured Score



CityMax (SCL) 2.7 TM66 • Assured Score oo



CityMax Large (BCL) 2.7 TM66 • Assured Score oo



Denver Elite Bollard Denver Elite Wall (DEB) (DEW) 2.2 TM66 2.3 TM66 Provisional Score o Provisional Score o



Hi-Beam (HIB) 2.3 TM66 Provisional Score o



HMAO IV (HMAO) 2.3 TM66 Provisional Score o



Metrolux (MTX) 2.5 TM66 • Provisional Score o



Parkpack (PPK) 2.6 TM66 • Provisional Score o



Wallpack Wallpackette (WPT) 2.4 TM66 2.1 TM66 Provisional Score o Provisional Score o



Denver iD Bollard (DBD) 2.4 TM66 • Provisional Score o



Denver iD Pole (DBL) 2.6 TM66 • Assured Score oo



D-Series Family 2.6 TM66 • Assured Score oo



Prismashield Elite 2.4 TM66 • Provisional Score o



(WAP)

Prismaspace (PRS) 2.0 TM66 • Provisional Score o



Prismpack (PPS & PPH) 2.7 TM66 • Assured Score oo



R-Line (RLI) 2.6 TM66 • Assured Score oo



D-Series Parking Garage (DPG) 2.2 TM66 • Provisional Score o



Denver iD Wall (DWL) 2.6 TM66 • Provisional Score o



Factor Small (FTS) (HAL) 2.3 TM66 • Provisional Score o



Haloprism 2.3 TM66 • Provisional Score o



Signature (SIG) 2.2 TM66 Provisional Score o



Signature Bollard (SGB) 2.2 TM66 Provisional Score o



S-Line (SLI) 2.6 TM66 • Assured Score oo



V-MAX (VMX) 2.8 TM66 • Assured Score oo

Our world renowned patented products

With a century of experience, our Holophane experts are dedicated to innovation and knowledge. We aim to create unique lighting and control solutions that improve quality, performance, and sustainability. Our products are safeguarded by patents, ensuring that you'll discover exclusive offerings only at Holophane.





$\mathbf{Prismaspace}^{\mathsf{m}}$

Light fixture with adjustment arm. Louver for LED Light Engine

CityMax®

Adjustable luminaire formed by LEDs of multiple configurations and powers

Denver[™] Elite Bollard

Management of light fixture surface temperature



LED luminaire with multiple vents for promoting vertical ventilation

V-Max™

Luminaire with LED cartridges



Metrolux™

Source assemblies incorporating LEDs as light sources for use in various lighting applications



Prismpack™

LED Module containing multiple individual reflectors housed behind a clear or prismatic glass.



Denver[™] iD Pole

Luminaire with transition zone for glare control

Valued customers









































SIEMENS



Sif

TUNGSTEN













TATA







Travelodge

Professional affiliations























Accreditations

The Holophane name is synonymous with quality, high performance luminaires.

This reputation has been established over 125 years of commitment to the manufacture and supply of luminaires of outstanding performance and design.









Testing and lab services

Tests of photometric, thermal and electrical performance together with electromagnetic compatibility, is tested in our approved laboratories and every luminaire manufactured is tested for function and safety before being dispatched from our factory.

Holophane boasts one of the worlds largest and impressive sets of photometric equipment. This includes a 12-metre arc length multicell Gonio-Photometer and a 4m diameter integrating sphere utilising a state-of-the-art spectrometer.

For all other testing, we partner with our parent company, Acuity Brands, in the USA, as well as with the LIA and other accredited laboratories across Europe.

To maintain transparency, credibility, and trust with our customers, we are happy to announce that we have received our ISO 14001 recertification.

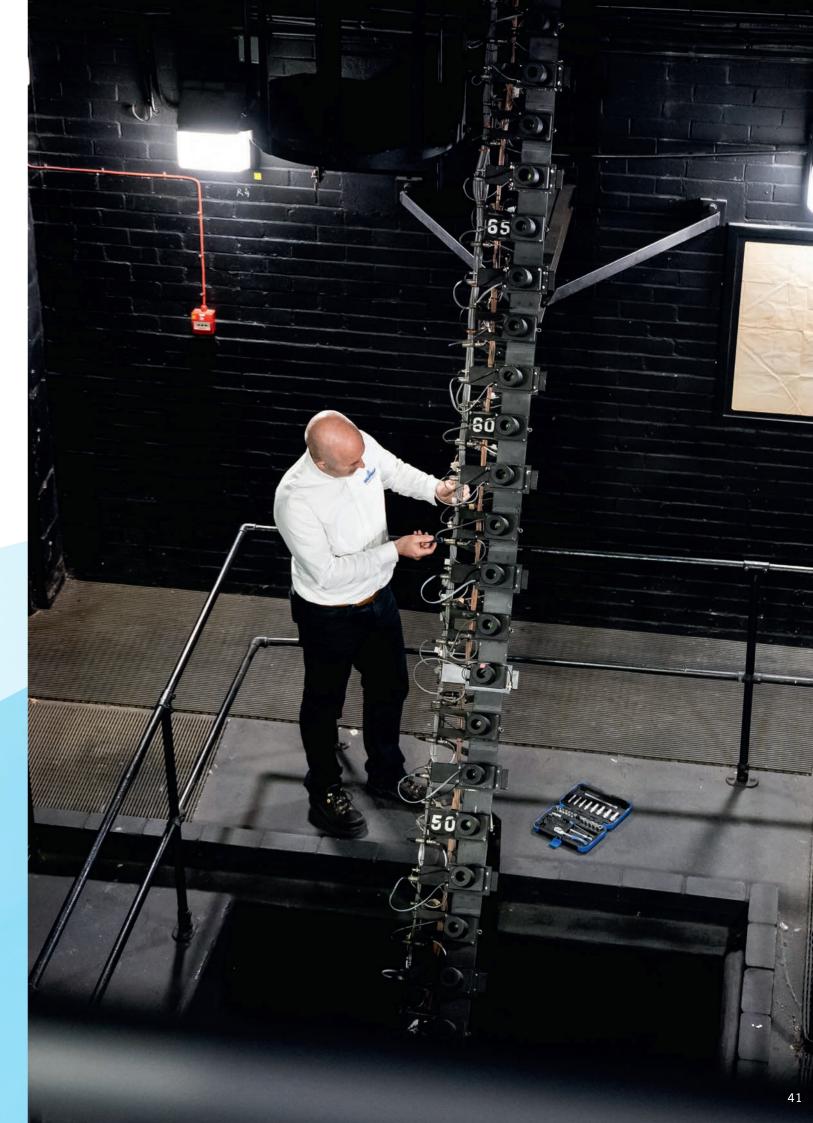
Being ISO certified enables us to evolve and showcase our efficiencies while consistently meeting or exceeding our customers' expectations.

Benefits include:

- Reduced cost of waste management
- Savings in consumption of energy and materials
- Lower distribution costs
- Improved corporate image among regulators, customers and the public









Made in Britain

For over 125 year Holophane has designed, developed and manufactured lighting solutions from our facilities in the UK. With our continual investment in our business we look to sustain local employment, ensure British economic investment and contribute to the British manufacturing output.

As part of this investment, our business philosophy is that our products are:

Researched in Britain

Liaison with customers ensuring products we produce meet their requirements.

Designed in Britain

By our in-house design team who understand British and European markets.

Tooled in Britain

Using local and national suppliers thus supporting the British economy.

Tested in Britain

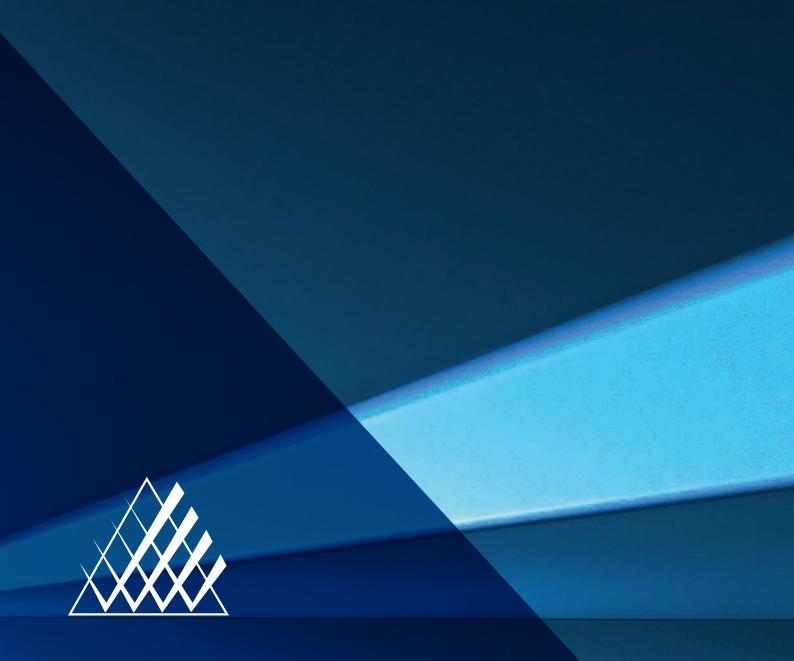
By our in-house laboratory and photometric teams ensuring compliance with British and European standards.

Manufactured in Britain

By our 105 strong factory workforce in Milton Keynes delivering the best quality expediently to our customers.

Supported in Britain

By our in-house project office ensuring we provide the best service to our customers.



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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