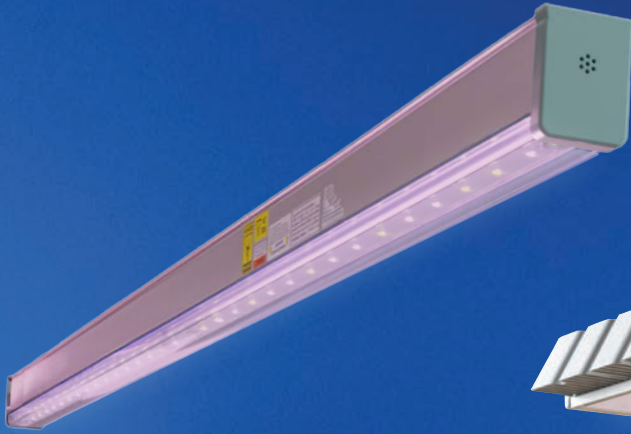


 verjure™

by



HOLOPHANE®



Horticultural Lighting Solutions

EarthLIGHT

| Lighting built on sustainability

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.



An enviable reputation throughout the world



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 horticulture projects predominate, we remain synonymous with quality design, high performance, energy efficient and sustainable lighting.

Holophane, part of the Acuity Brands group, provides a comprehensive range of professional lighting.

Part of the Acuity Group

Acuity Brands, Inc. (NYSE: AYI) is a marketleading 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 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.

In 1999 Holophane was purchased by what was to become Acuity, a market-leading industrial technology company that develops innovative new products and services, including lighting, lighting controls, building management systems, and location-aware applications.

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.



Glasshouse lighting

Glasshouse lighting, also known as greenhouse lighting, is essential for supplementing natural sunlight to optimise plant growth.

This type of lighting is used to:

Extend photoperiods:

Supplement natural daylight to ensure plants receive the required amount of light for photosynthesis and flowering.

Enhance growth:

Provide additional light during cloudy days or in regions with low sunlight, promoting better growth and yield.

Control light spectrum:

Tailor the light spectrum to meet the specific needs of different crops, enhancing specific growth stages such as germination, flowering, and **fruiting**.

Indoor farming

Indoor farming for crops involves creating an optimal indoor growing environment using artificial light. This approach is common in vertical farms and other indoor agriculture setups where sunlight is entirely replaced by artificial light.

Key features include:

Controlled environment:

Allows for precise control over temperature, humidity, and light, creating ideal growing conditions year-round.

Space efficiency:

Maximizes space by using vertical stacking systems, enabling high-density crop production.

Light spectrum customization:

Like glasshouse lighting, warehouse lighting can be customized to provide the ideal spectrum for each growth stage.

Arize™ Element L1000 & L2000

These products are designed specifically for glasshouse and warehouse applications, providing high-intensity, energy-efficient light that can be tailored to the specific needs of different crops, including vegetables, herbs, cannabis, and fruit.

The L1000 and L2000 models offer advanced spectral control, allowing growers to optimize light conditions for different growth stages, from germination to harvest.

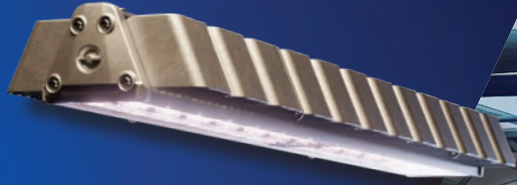
In summary, glasshouse and indoor farming play a critical role in modern agriculture, enabling growers to maximize productivity, improve crop quality, and maintain consistent yields regardless of external weather conditions.

With advancements in lighting technology, growers can now precisely control the growing environment, leading to more efficient and sustainable agricultural practices.



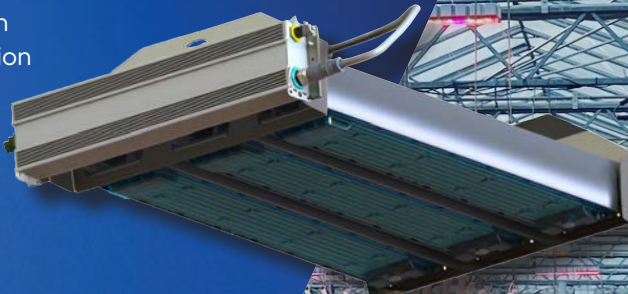
Arize™ Element L1000

The Arize™ Element L1000 is a versatile and powerful top lighting solution for greenhouse and indoor farm applications. Up to 2,250 $\mu\text{mol/s}$



Arize™ Element L2000

The Arize™ Element L2000 is an ultra-powerful top lighting solution for greenhouse and indoor farm applications, up to 3,300 $\mu\text{mol/s}$. Less fixtures, more light and uniformity!



What is vertical farming?

Vertical farming involves growing crops in vertically stacked layers within climate-controlled environments, optimizing the growth of plants, vegetables, and fruits. This innovative agricultural technique maximizes space efficiency and allows for precise control over growing conditions, ensuring consistent and high-quality yields.

Benifits of vertical farming:

Reduced water and space usage:

Vertical farming uses significantly less water and space compared to traditional farming methods. The efficient use of resources makes it a sustainable and cost-effective option.

Year-round production:

With controlled environments, crops can be grown and harvested all year round, irrespective of external weather conditions, ensuring a consistent supply of fresh produce.

Controlled environment:

Vertical farms maintain optimal conditions for plant growth, including temperature, humidity, and light. This minimizes the impact of external environmental factors such as pests, diseases, and extreme weather.

Enhanced food safety:

The controlled conditions in vertical farming reduce the risk of contamination and improve food safety. This ensures that the produce is clean and healthy for consumption.

Lower emissions:

By growing food locally and reducing the need for long-distance transportation, vertical farming helps to decrease the carbon footprint associated with food transport. This contributes to a more sustainable and environmentally friendly food production system.

Arize™ Life horticulture lights for vertical farming

Vertical farming involves growing crops in vertically stacked layers within climate-controlled environments, optimizing the growth of plants, vegetables, and fruits. This innovative agricultural technique maximizes space efficiency and allows for precise control over growing conditions, ensuring consistent and high-quality yields.



Arize™ Life 2.4m option



Arize™ Life 1.2m option



Arize™ Element L1000



Arize Element 1000 is a versatile and powerful top lighting solution for greenhouse and indoor farm applications. Up to 2,250 $\mu\text{mol/s}$

- Available in a wide range of power and spectral options
- Scalable solution for maximum productivity and efficiency across a wide range of horticultural applications
- Ultra-efficacious – up to 3.6 $\mu\text{mol/j}$

IP66, 1,750–2,200 $\mu\text{mol/s}$, CE, UKCA, DLC, cULus,
120 – 480V AC, 732w – 755w



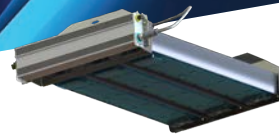
- Engineered optics for superior uniformity.
- Easy to install brackets
- 6kV surge protection option
- Square or unistrut mounting bracket options. Aircraft cable mounting option also supported.



Ideal for

Indoor non-stacked,
greenhouse, top
light or supplemental
lighting

Arize™ Element L2000



Arize Element 2000 is an powerful top lighting solution for greenhouse and indoor farm applications, up to 3,300 $\mu\text{mol/s}$. Less fixtures, more light and uniformity!

- Enabling efficient growth at an industrial scale
- Maximum PPF of 3400 $\mu\text{mol/s}$, an 83% increase compared to legacy 1000W HPS fixtures.
- Optical design that surpasses legacy HPS light distribution, cultivators can produce top quality harvests in all seasons using fewer fixtures

IP66 3,400 $\mu\text{mol/s}$ CE, UKCA, DLC, cULus
120 – 480V AC 732w, 755w & 1090w



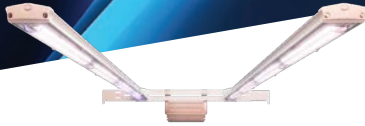
- 2 or 3 module options for added scale and scope for installations
- 6kV / 10kV surge protection options
- Unistrut mounting bracket option



Ideal for

Indoor non-stacked,
greenhouse, top
light or supplemental
lighting

Arize™ Factor® ML



Arize Factor includes engineered optics for maximum uniformity. Designed for high density indoor flower and cannabis production.

- Scalable, modular, and versatile, the Arize Factor is the ideal choice for multilayer, production-focused cultivation
- Configurable in 2, 4, 5, and 6-modules arrays, growers can add extra bars to easily boost intensity or increase coverage area

IP65 Up to 1,950 $\mu\text{mol/s}$ CE, UKCA, DLC, cULus
120 - 480V AC | 45 - 143V DC 408w - 639w



- Can power vigorous vegetative growth or drive generative production in dense, sea-of-green style indoor plantations
- 6kV / 10kV surge protection options
- Suspended or unistrut mounting bracket options



Ideal for

Indoor non-stacked/
stacked, intracanopy,
supplemental, top light
and greenhouse

Arize™ Life



Arize Life 2 is a low profile fixture, designed to be used in vertical and racking applications.

- Designed specifically to meet the needs of vertical and multi-tier indoor cultivators
- High-efficiency luminaire with a daisychain option to ensure that indoor cultivators can reach new heights of productivity
- Offers a sustainable, efficient and scalable horticultural lighting solution

IP66 70 - 206 $\mu\text{mol/s}$ CE, UKCA, IK10, DLC, cULus
120 - 277V AC 32w - 64w



- Available in 2.4m and 1.2m lengths
- Quick and easy installation with snap in mounting clips and click to fit wiring connections
- Snap to fit wire connectors ready to accommodate future luminaires



Ideal for

Indoor non-stacked/
stacked, top light and
sole source lighting



EarthLIGHT

Lighting built on sustainability

EarthLIGHT is a central tenet of Acuity brands' strategy and reflects our comprehensive approach around ESG topics.

Through EarthLIGHT, we improve our operations, social responsibility and products to aid customers in lessening their carbon emissions and create a more sustainable environment.



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 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 sent to textile banks for recycling.

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 landfill

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 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.

Recycled materials

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

 **Plastic**
4,050kg

 **Wood**
1,490kg

 **Cardboard / Paper**
14,090kg



We deliver smart, simple, and sustainable lighting & control solutions that offer high quality and value for our customers.

We achieve this through a culture of collaboration, empowering our people, and continuously improving our products, technology and services.

Our partnership approach



Lighting excellence from the very start

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



Expertise and collaboration throughout the project

Strong partnerships and innovation at every stage.



Teams equipped with the skills to succeed

Meeting your needs with a clear focus on supporting you.





Speak to a Holophane expert today

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



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by



HOLOPHANE®