

## Micro Louvred Metal Inserts

**LIGHTING SOLUTIONS  
ANTI-GLARE, DIFFUSION & DIRECTION**



**MicroLouvre**  
Light Control Fabric

# LIGHTING APPLICATIONS

|                      |      |
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## ATTRIBUTES

Stops Glare  
Sustainable.  
Stops Night Sky Pollution.  
Health & Safety Visual Comfort.  
Ultra-thin.  
Easy to Integrate or Retro-fit.  
Durable & Fire Safe.



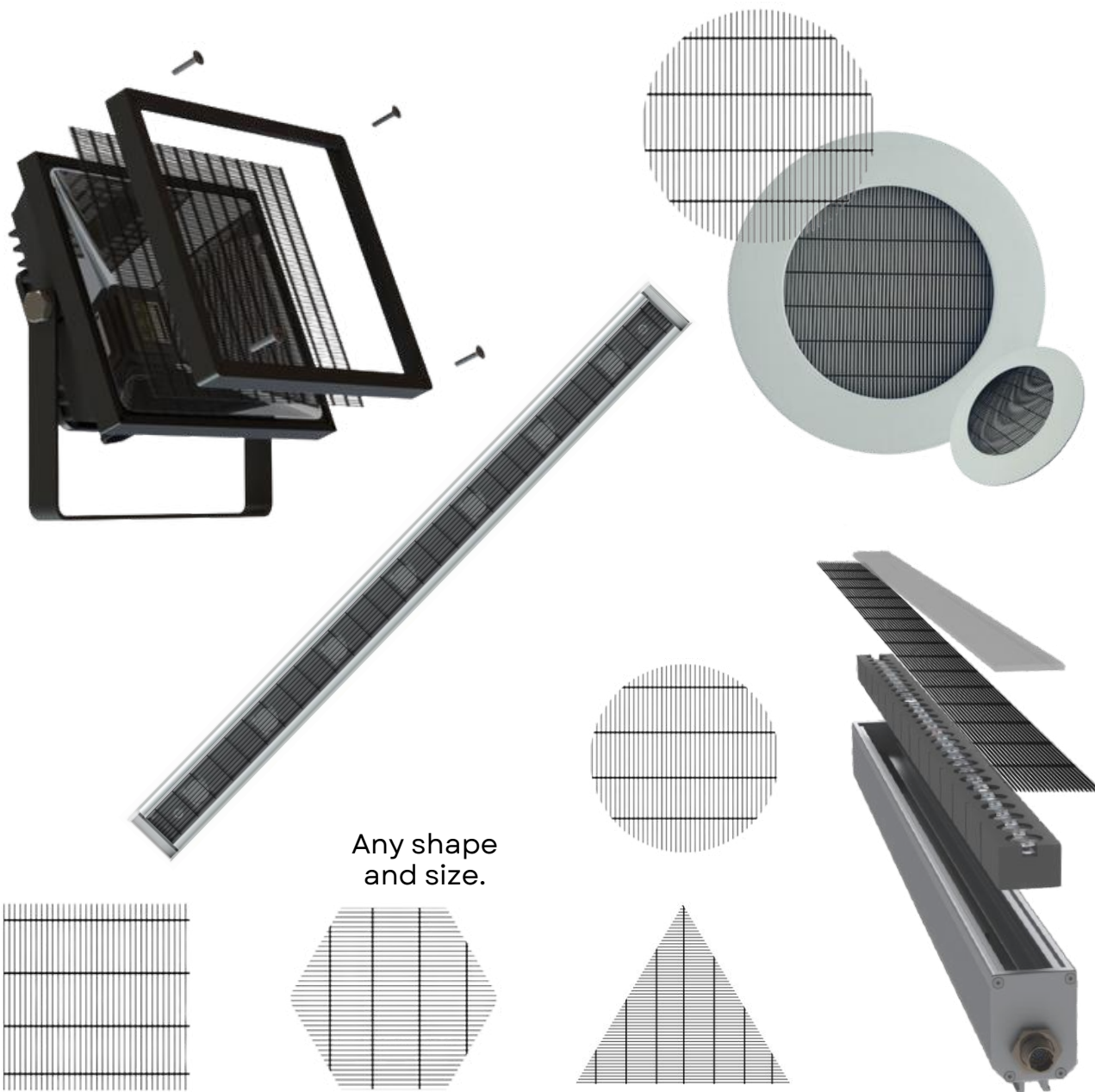


> GLARE CONTROL

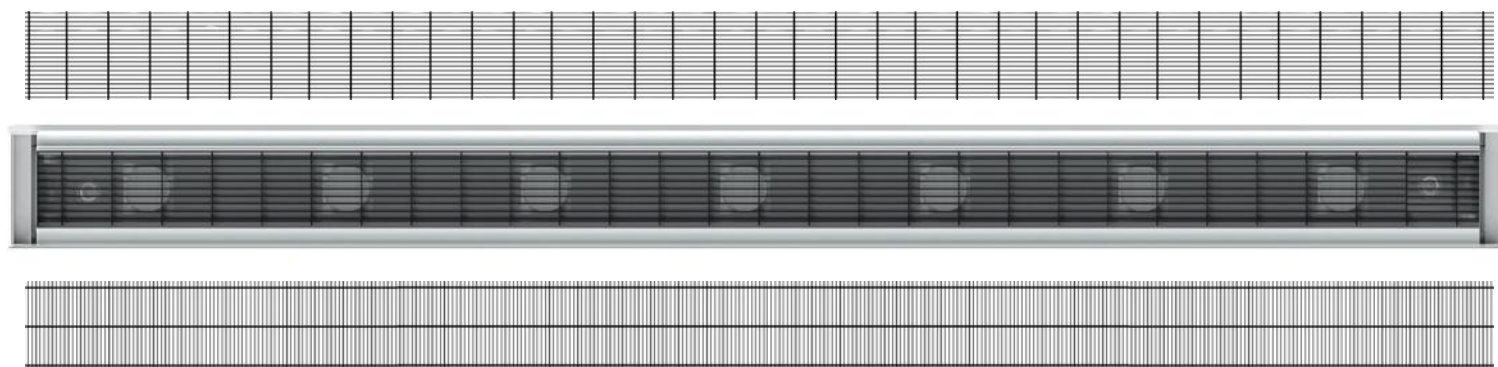
> LIGHT CONCEALMENT

> STOPS LIGHT POLLUTION

The micro-fine (1.25 x 0.3 mm) louvres of our fabric mean it's the perfect addition to new, or retro-fitted to existing, lighting units.



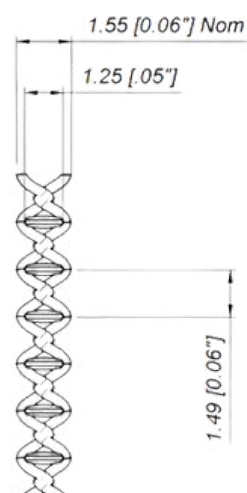
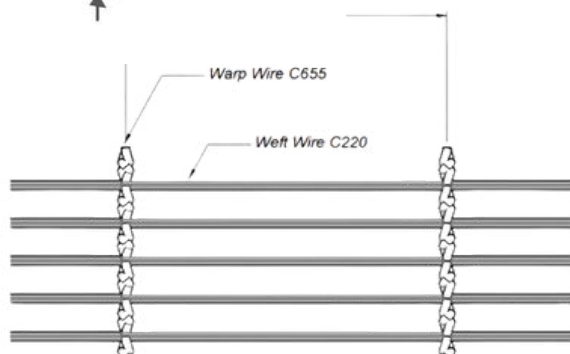
Any shape  
and size.





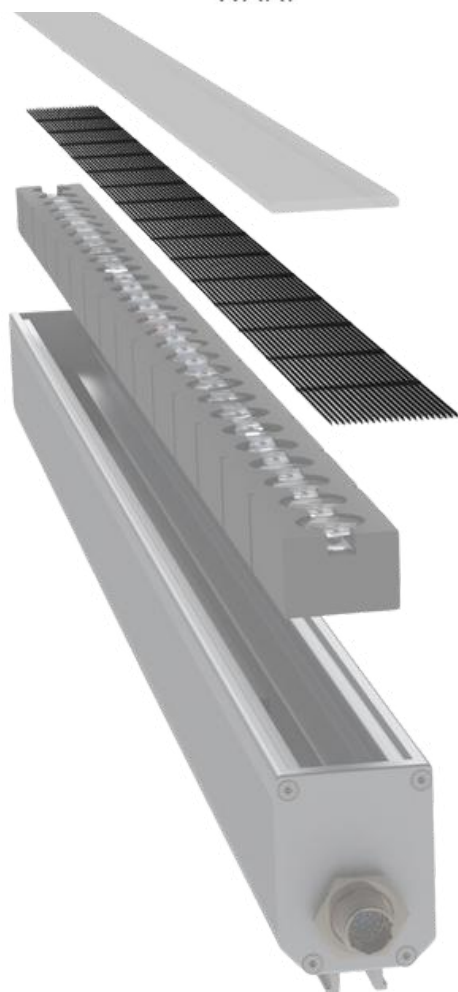
## K700-0

Only 1.5 mm thick overall, the micro-fine (1.25 x 0.3 mm) louvres are angled to suit any number of applications, whether to ensure optimum light in or redirect light, whilst blocking heat and glare, or to allow ventilation and filtration of air.

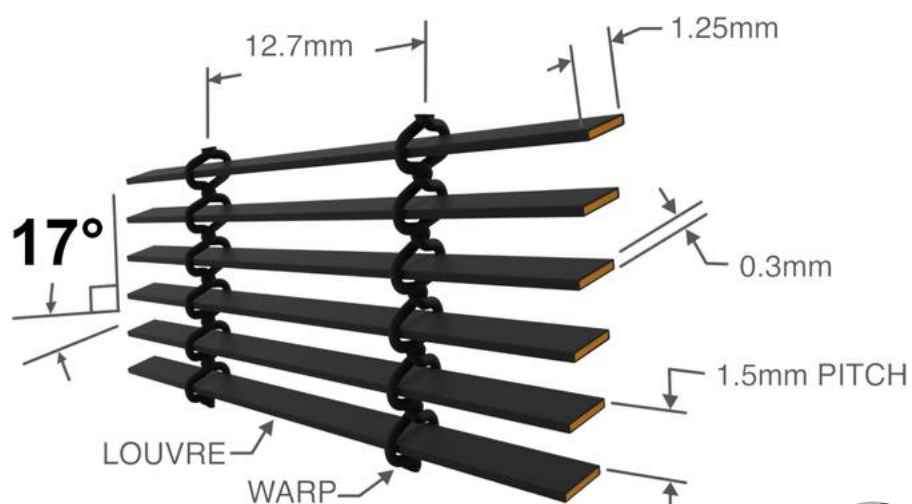


The result of decades of extensive international research and development, MicroLouvre® is a high-performance, woven metal fabric.

It can be used in its fabric form in small lighting units or tensioned in any frame for larger signage and displays, for controlling and diffusing sun, light and air.



## K700-17



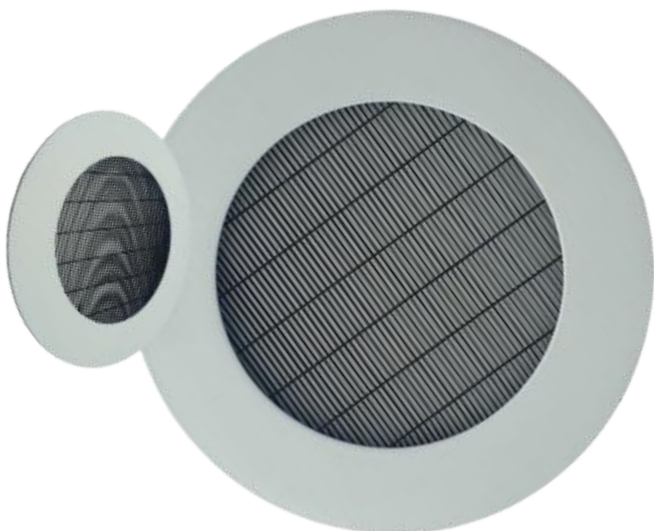






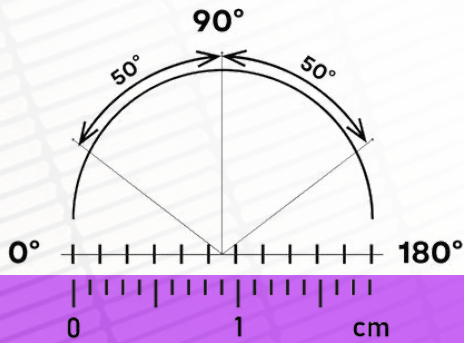
**THE DIFFERENCE IS CLEAR**

- Anti Glare.
- Diffusion.
- Light direction.

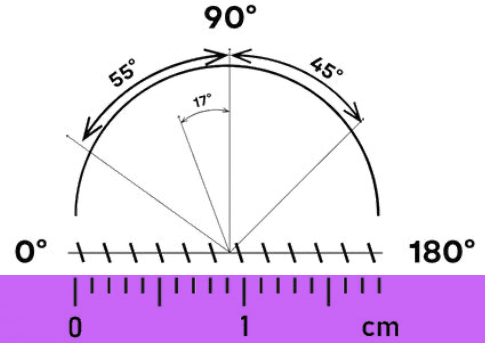


# MicroLouvre® Metal fabric Inserts

## Louvre Angle / Light & Vision Occlusion



FABRIC: K700-0



FABRIC: K700-17



## ATTRIBUTES

- Anti Glare.
- Diffusion.
- Light direction.
- Stops Night Sky Pollution.
- Health & Safety Visual Comfort.
- Ultra-thin. Easy to Integrate or Retro-fit.
- Sustainable.
- Durable & Fire Safe.



# Two louvre angle fabric options are available. K700-0 & K700-17 (both polyester powder coated)

**Application:** Lighting, signage, displays and more.

## Performance & Physical Characteristics

### Performance

Open Area - 80%

Colour Rendering Index (CRI) - 100%

Eclipse Angle - 0° to 45° & 135° to 180° from horizontal (**K700-17** = 0° to 35° & 135° to 180°)

Louvre Angle - 90° from horizontal when horizontally mounted (**K700-17** = 73° / 107°)

Visual Block - 100% @ 0° to 50° & 130° to 180° from horizontal (**K700-17** = 100% @ 0° to 35° & 135° to 180°)

Lumen Output Differential - Black Finish 25% nom. White Finish 35% nom.

Resistance to Wind - Hurricane Proof: 100 mph (160kph) (BRE) (K700/17 tested as maximum)

Wind Load: <14.65 kgs/sq mtr (<3lb per sq ft) (ASHRAE) (K700/17 tested as maximum)

Insect penetration - Exclusion of any body > 1.17 mm

Bug and Pest exclusion

Fully A1/A2 -s1,d0 to EN 13501 compliant

Lifetime 40+ years

### Physical Characteristics

Coated Fabric (MN204E - PPC)

### Weft - (Louvre)

Width - 1.30mm +0.0/-0.1mm (0.054 +0.0"/ -0.004")

Thickness - 0.35mm +0.025/-0.0mm (0.014" +0.001"/-0.0")

Louvre spacing - 1.41mm - 1.49mm (0.056" - 0.059")

Louvre count - 17min - 18max per 25.4mm (1")

Louvre angle - 0° (degrees) from normal plane when vertical

### Warp - (Wire)

Diameter - 0.310mm (0.0122") max

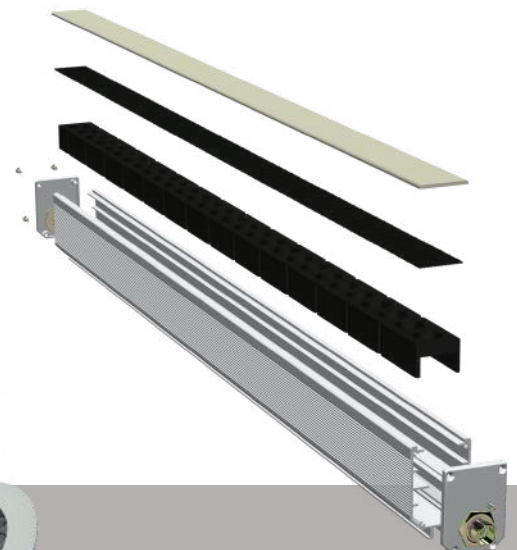
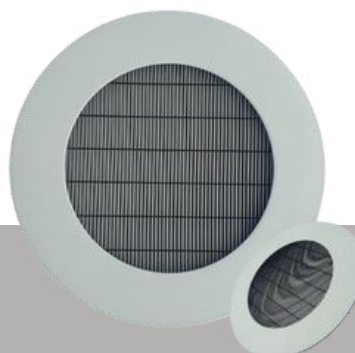
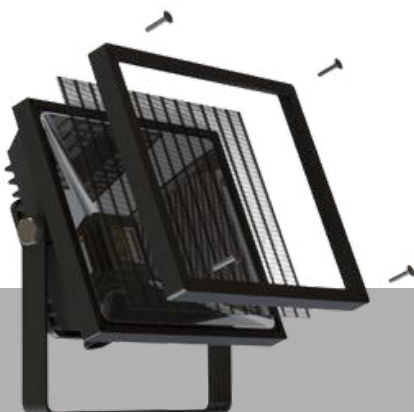
Spacing (nominal) - 12.7mm (0.5")

Fabric thickness O/A - 1.55mm ±0.1mm (0.061" ±0.004")

### Weight (nominal)

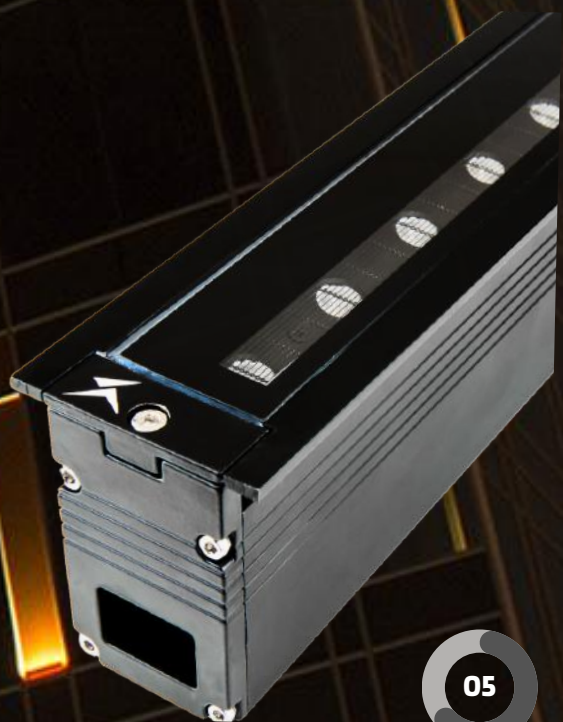
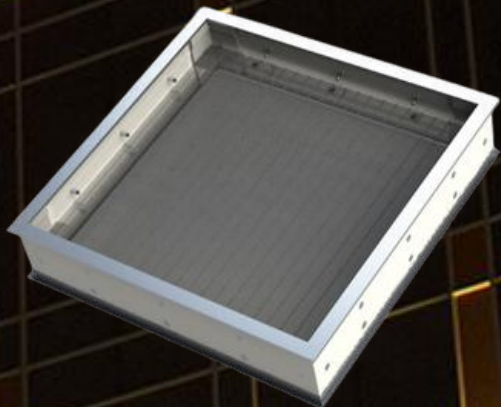
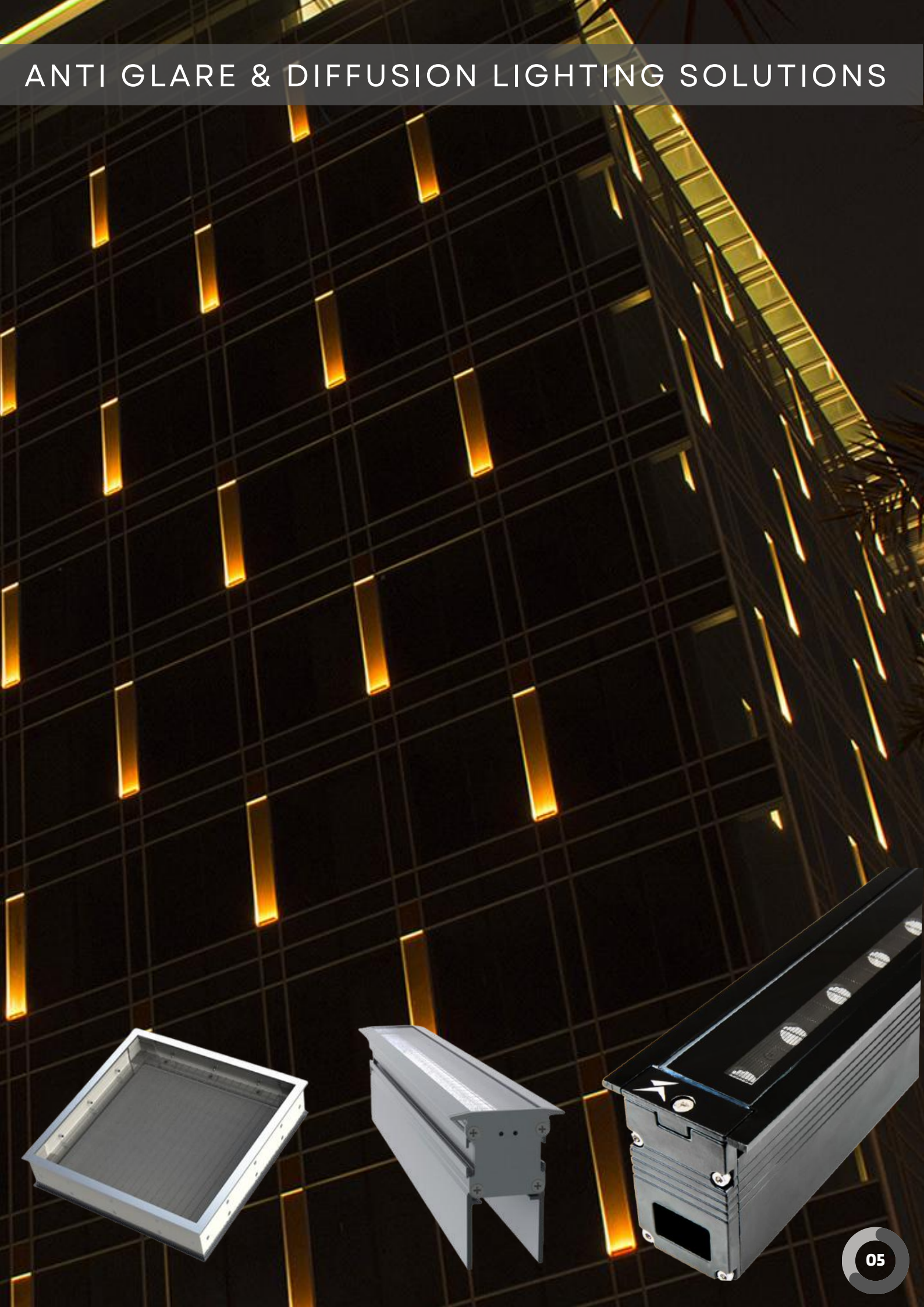
per Square Metre - 1.1 kg (2.43 lb)

per Square Foot - 0.102 kg (0.23 lb)

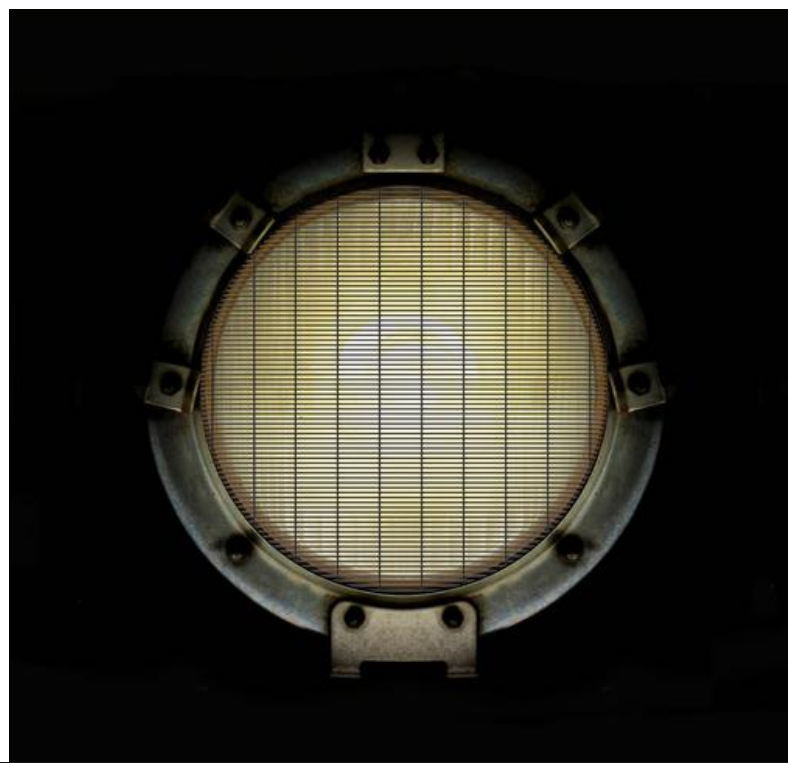
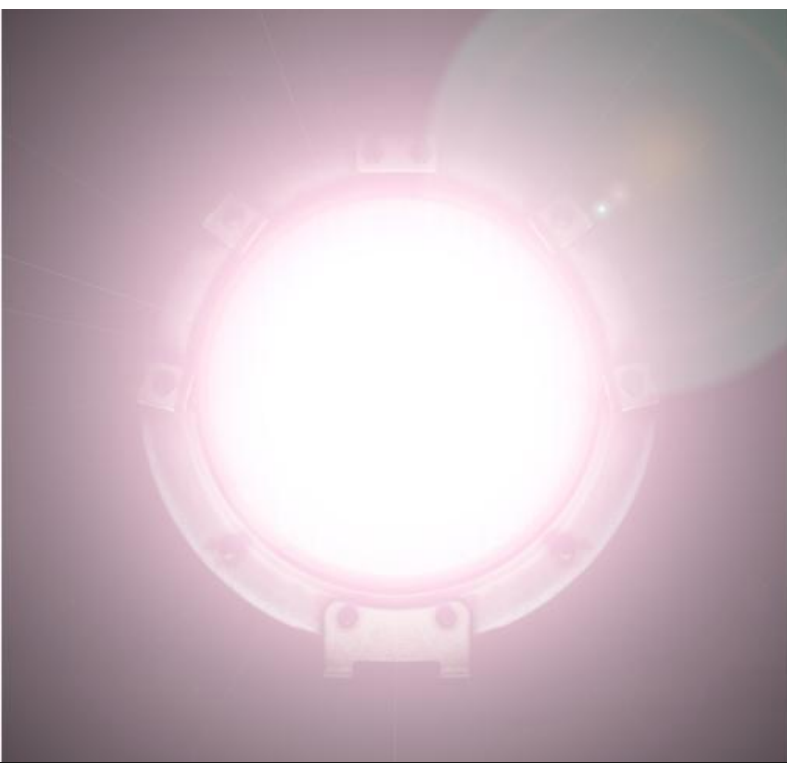
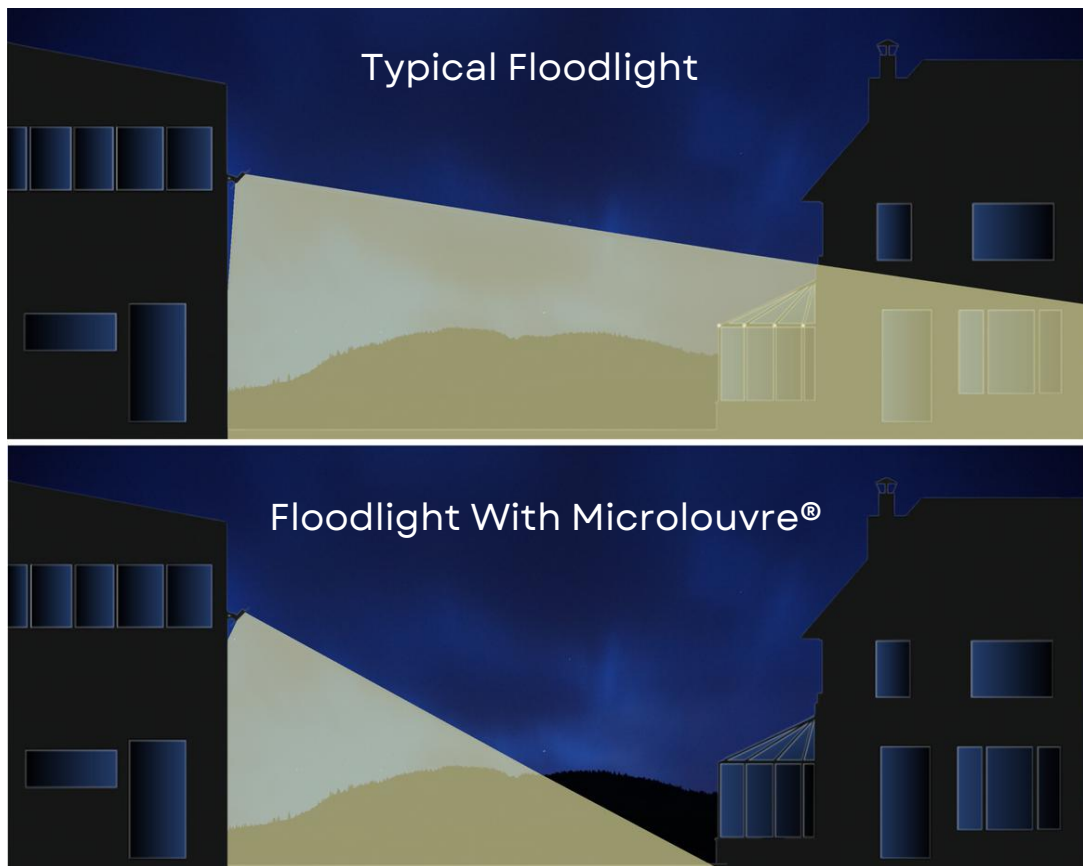




# ANTI GLARE & DIFFUSION LIGHTING SOLUTIONS



# Microlouvre® solves the problem of light trespass



**and reduces light spill**



# MICROLOUVRE®



The same light wash can be delivered without the outward glare. MicroLouvre® directs the beam to the intended area only.

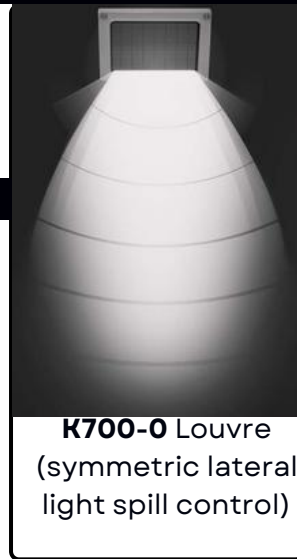
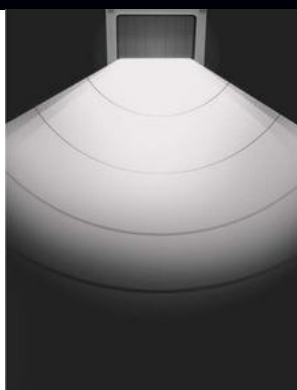


MicroLouvre® provides essential glare control by creating directional light diffusion, source concealment and glare control.

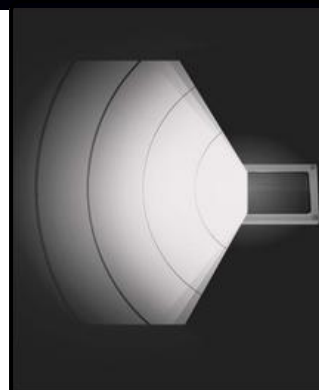
It is a highly effective light diffusion material for a wide range of applications.



**K700-17** Louvre  
Horizontal  
(forward light spill control)



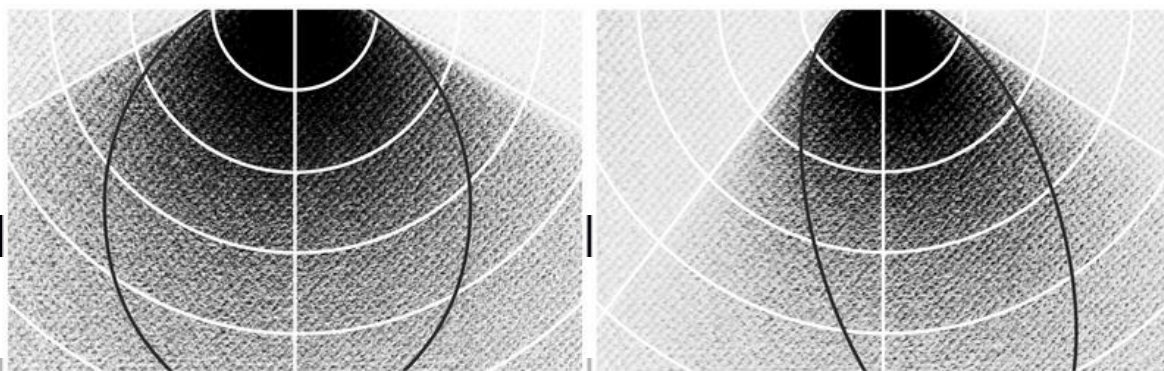
**K700-17** Louvre  
(asymmetric right/left kick spill control)



MicroLouvre® directs light onto objects or buildings and concentrate the light source IN the intended direction, solving the problem of unwanted light trespass and reducing light spill, glare and dangerous dazzle.

With its 80% open area, MicroLouvre® permits optimum light transfer, ensuring high energy efficiency, which is key to many lighting strategies.

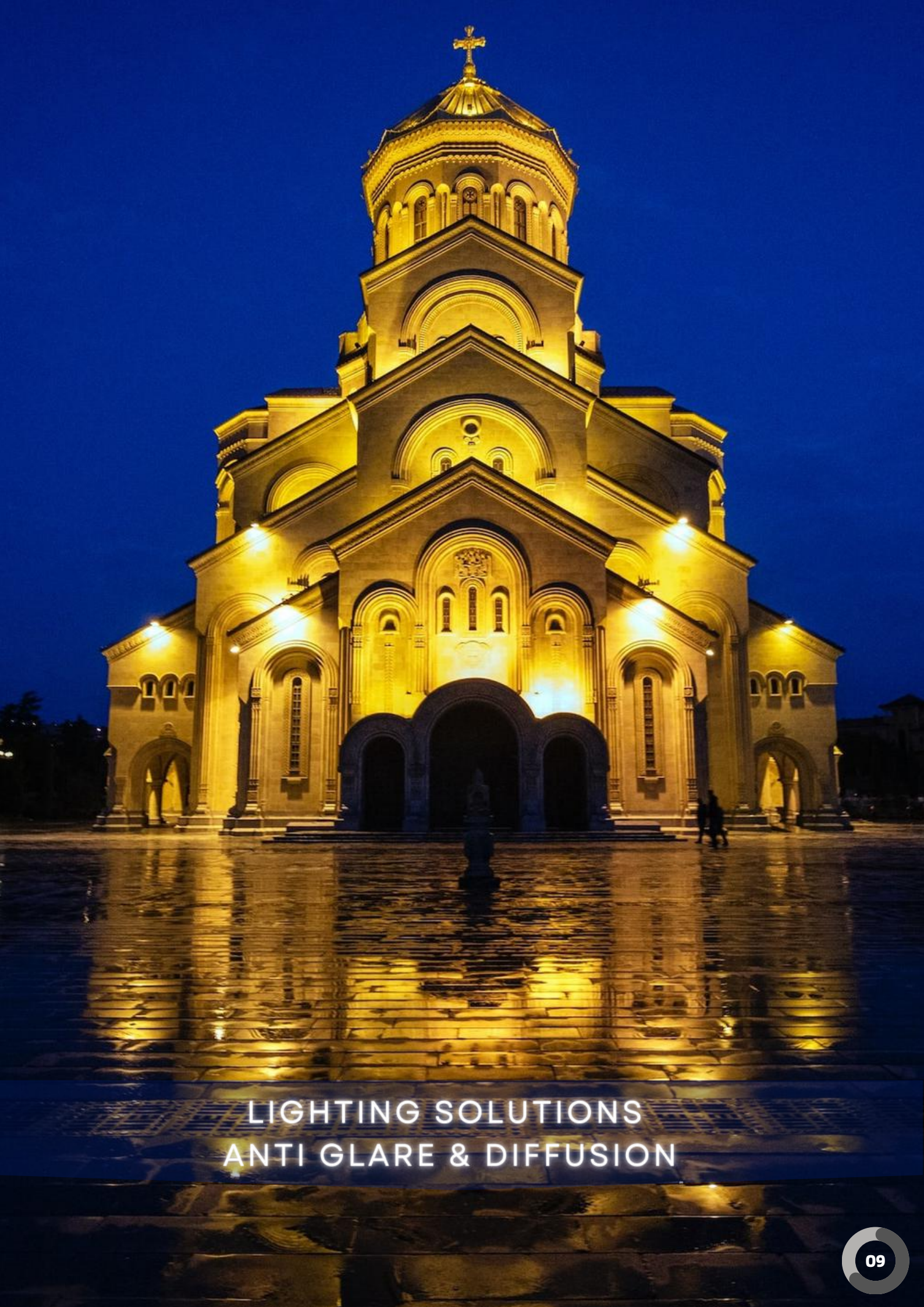
MicroLouvre® can provide either a symmetrical or asymmetrical light 'kick'.



MicroLouvre® metal fabric is directional for various lighting purposes, including: trading floors, museum or exhibition displays, shading traffic lights, and buildings and bridges around the globe. In addition, it is corrosive-resistant so suitable for indoor or outdoor use.

MicroLouvre® is so thin and easy to manipulate, it can easily be integrated or retro-fitted into any lighting unit.





LIGHTING SOLUTIONS  
ANTI GLARE & DIFFUSION





Adding MicroLouvre® to uplighting enables a more gentle wall grazing and stops discomfort from high glare.





## CONCEALING LIGHT SOURCES

# LIGHT CONTROL



A beautifully lit room can be a joy to experience, controlling that light can take it to another level of sophistication.

Non-diffused, bright internal lighting creates glare and uneven levels of brightness in the visual field leading to visual discomfort for occupants.



MicroLouvre's light diffusion and glare control, together with its lightweight, fire and heat resistance, and versatility in shape and size, make it ideal for use in:

- Luminaires and spotlights
- Wall washing and wall grazing units
- Stopping night sky pollution
- Display and exhibition lighting
- Film and photographic units
- Traffic lights, signage and street lighting





LIGHTING SOLUTIONS  
ANTI GLARE & DIFFUSION

# LIGHT CONTROL

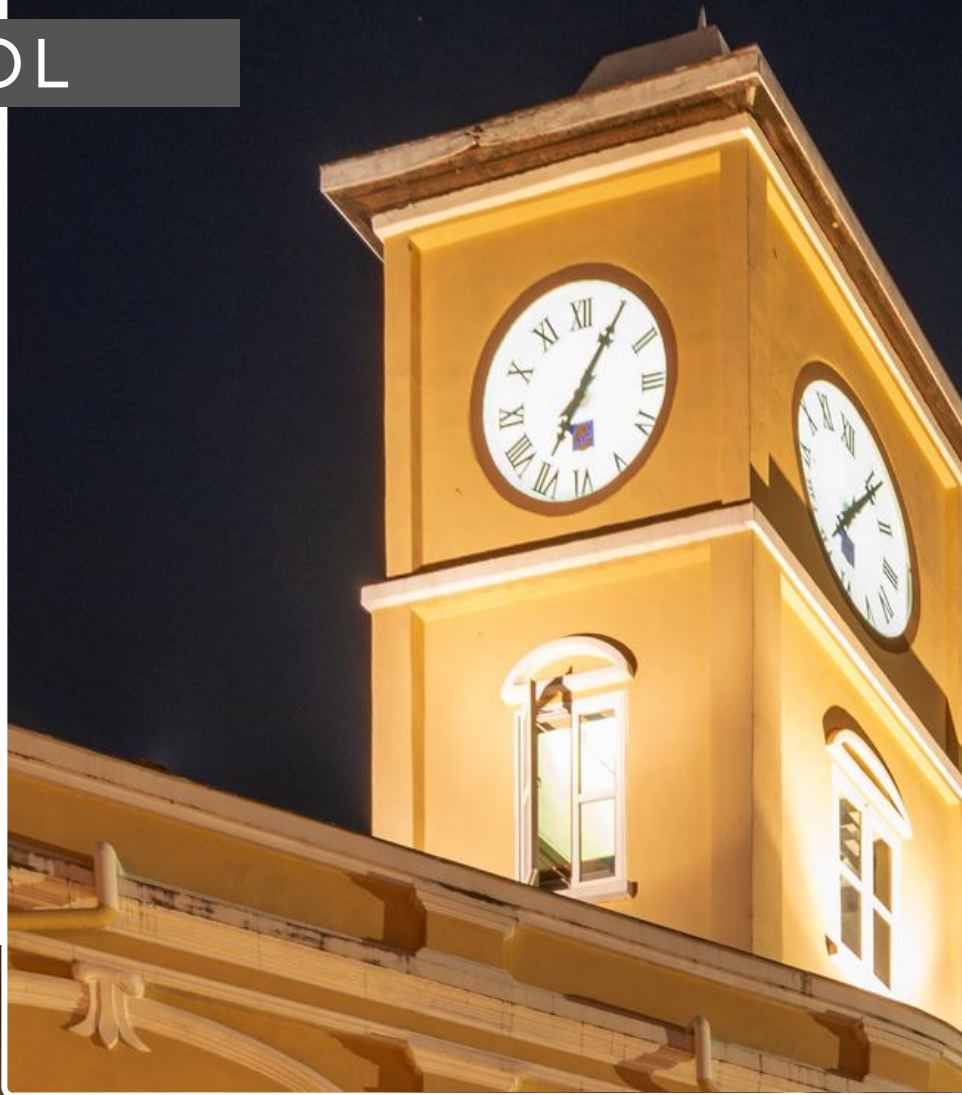
MicroLouvre® redirects light onto objects or buildings and **concentrates the light source** to the intended direction and avoids night sky pollution.

MicroLouvre® can provide either a **symmetrical** or **asymmetrical** light 'kick'.

K700-0°



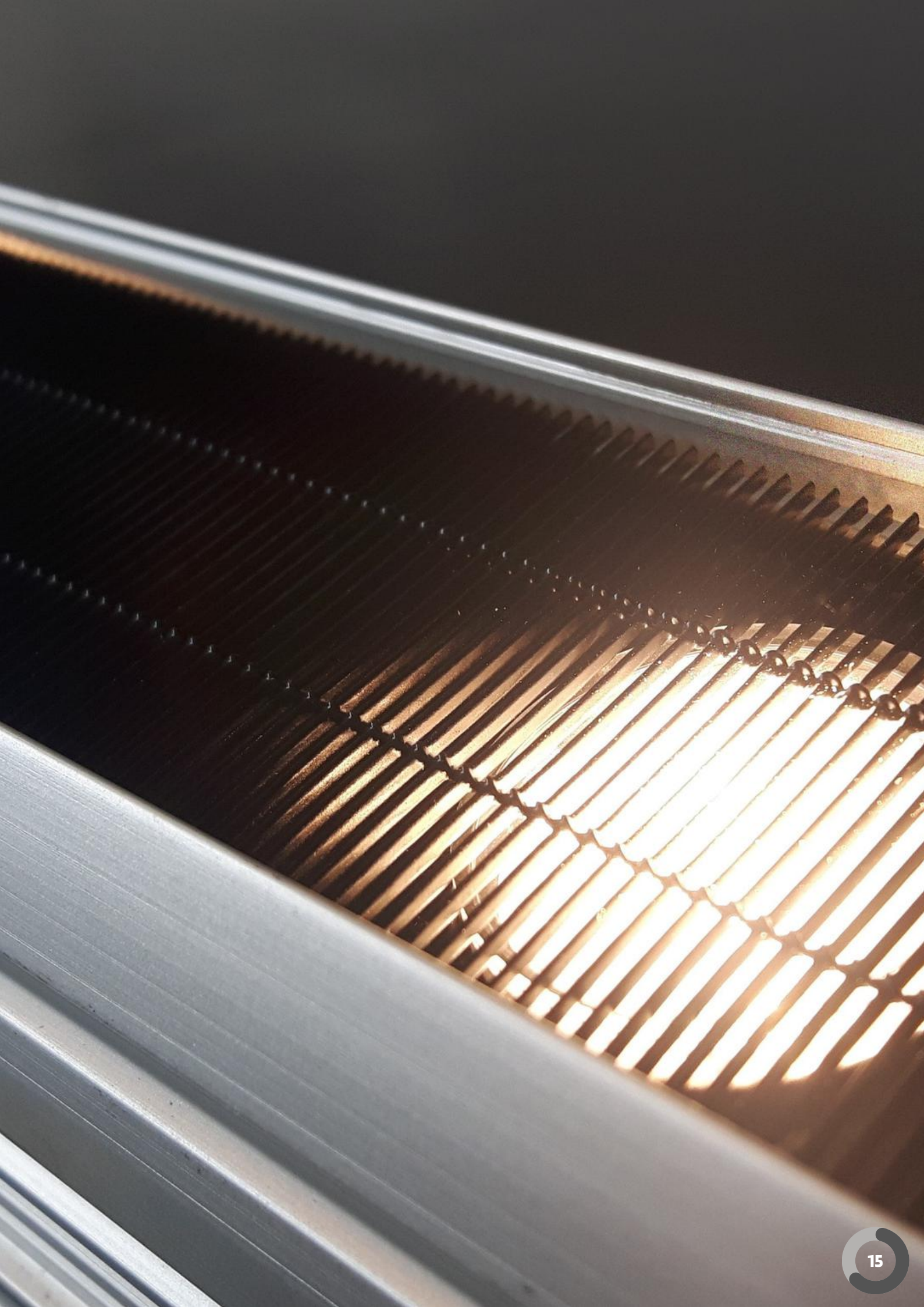
K700-17°



MicroLouvre® metal Fabric is so thin and light, it can be easily retro-fitted or installed as part of the original equipment, allowing lighting to be controlled to suit the desired environment and giving optimum uniformity and glare control.

Being bronze, MicroLouvre® is inherently fire and heat resistant, and importantly, non-combustible. Offices, hospital wards, schools and public buildings widely use traditional overhead recessed surface and suspended luminaires which are increasingly LED.





# LIGHT CONTROL

A compact, in-ground, mains on-board dimmable DMX driven, linear LED wallwash luminaire, providing even wash of light up to 5m. Delivering 1350lm per metre - by **ACDC**









# GLARE CONTROL

ACDC incorporated the MicroLouvre® into the Iglu linear product as it provided us (ACDC) with the unique opportunity of providing a premium ground recessed luminaire that when on, the façade being lit is still consistent with minimum glare, it works with the qualities of the luminaire.

The low depth of the MicroLouvre® also ensures that whilst it is a key product attribute it is not detrimental to the depth of the product.







MicroLouvre's ability to hide the light source whilst maintaining an integrated balance of glare control and high lumen transmission makes it the ideal solution for any high powered light. It is also essential to protect passers-by from unwanted glare from outdoor lighting units.



# GLARE CONTROL

**MicroLouvre® creates directional light diffusion, source concealment and glare control.**

**It is the world's thinnest and lightest metal louvre fabric. There are up to 700 paper-thin miniature bronze louvres woven into every metre of fabric.**

The tiny louvres are usually given a standard protective black polyester coating for a durable finish, absorbing and eliminating re-reflected heat, light and glare.

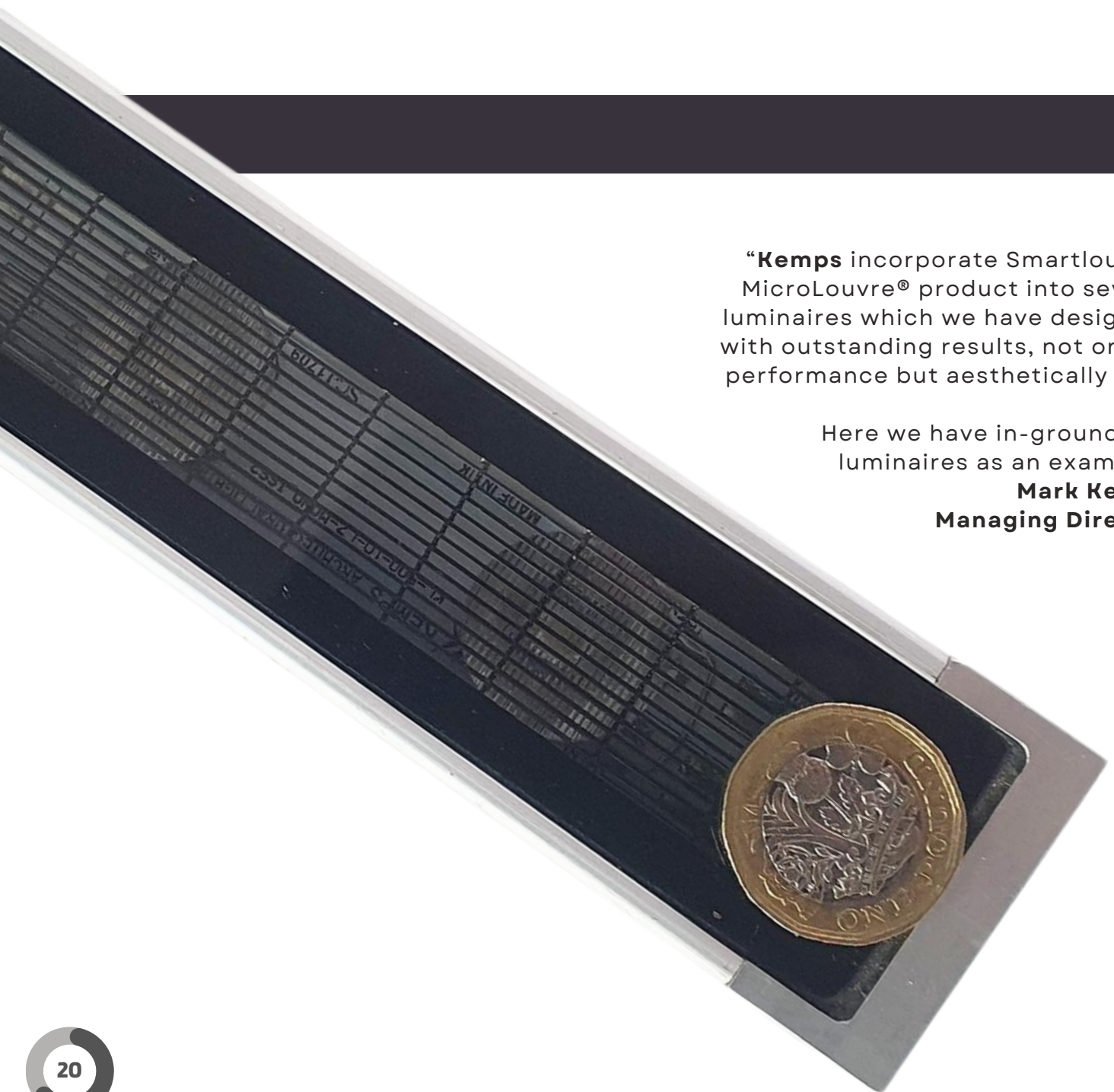
They can be any colour, as well as having a matt or highly reflective finish to suit.

The standard louvre angles are 17° and 0°. Angles between 17° and 0° can be produced on application.

**“Kemps** incorporate Smartlouvres MicroLouvre® product into several luminaires which we have designed, with outstanding results, not only in performance but aesthetically also.

Here we have in-ground LED luminaires as an example.”

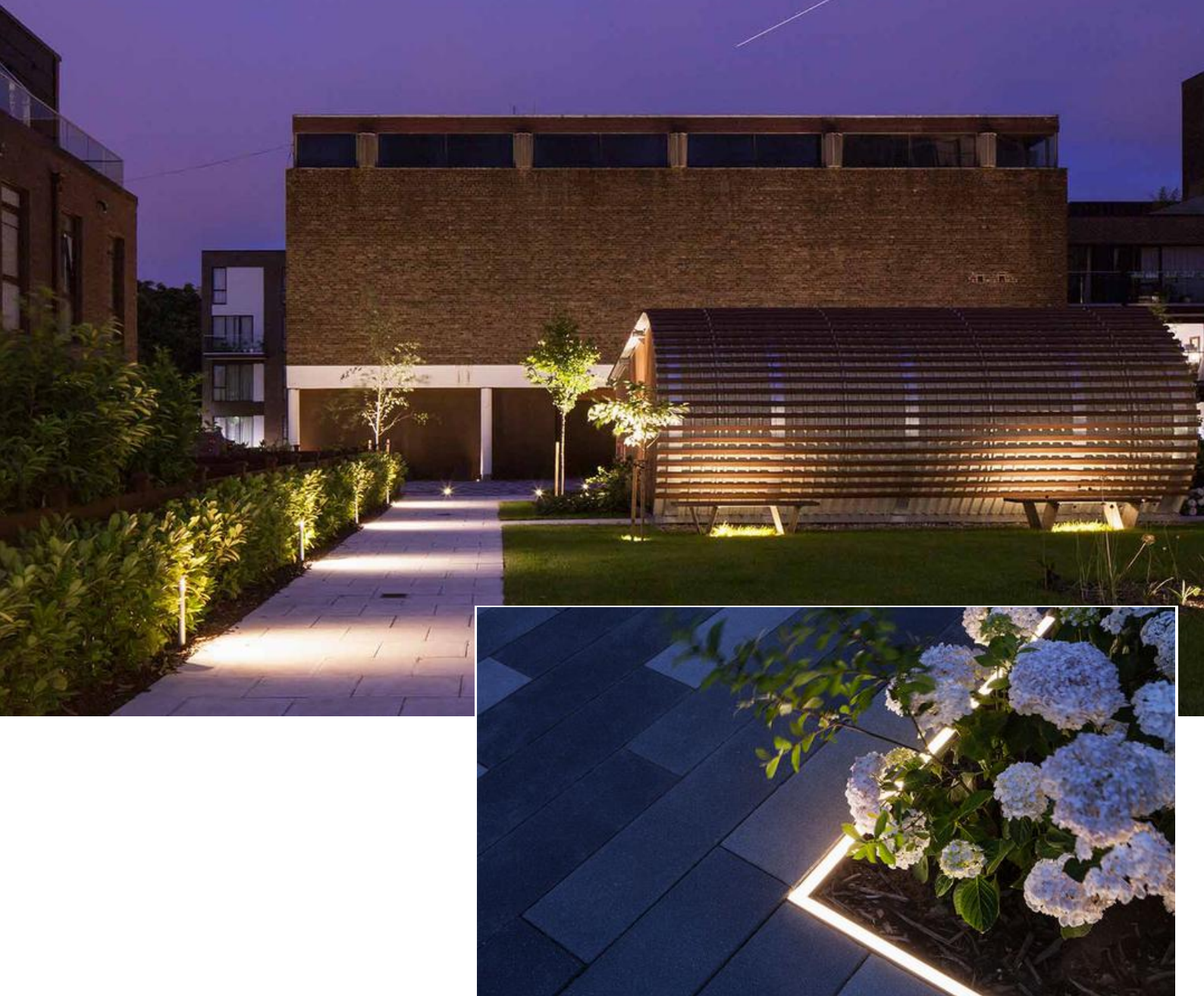
**Mark Kemp,**  
**Managing Director**







# PROJECT EXAMPLES



## LILIAN BAYLIS

The former Lilian Baylis Secondary School building, a prominent example of 'Brutalist' architecture has been renovated and refurbished to become an award winning residential complex.

As an essential part of this transformation, an aesthetic exterior lighting scheme to create a serene and welcoming ambiance for the building.





## JOHN CULLEN

The use of MicroLouvre® K700/0° fabric integrated into the luminaires effectively neutralises all sideways glare, without disturbing the light projected forward onto the illuminated surface.

Combined with screen-printed glass to protect the viewer from bounce-back glare, Contour Edge is one of the most visually comfortable, in-ground recessed luminaires on the market, without compromising output or quality.





Victory Park. An awe-inspiring war memorial, underwent a recent restoration where a sympathetic change in the lighting theme was vital.

# VICTORY BOULEVARD



# OSIJEK BRIDGE

Osijek pedestrian bridge spans the Drava River and is one of the city's most iconic landmarks, which originally opened in 1981.

In 2017 the bridge underwent a spectacular full colour transformation, funded by a Coca-Cola marketing campaign, which required citizens to collect more than 100,000 bottle caps.



Coca-Cola launched the campaign to mark 50 years of production in Croatia and to share its success as an active member of the local community by supporting projects that enhance the lives of citizens.



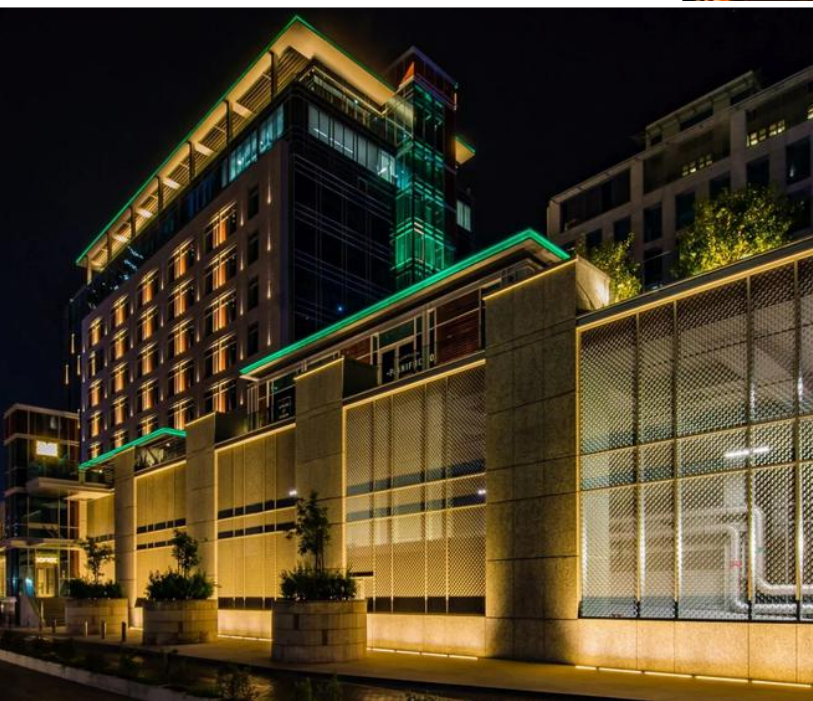


Built to provide services to Dubai's bustling financial hub, The Exchange is designed to create a relaxed, stress free and intimate oasis in the luxurious city.

A correct lighting design was needed to retain the atmosphere into and through the night, avoiding night sky pollution.

Along with the numerous banks, financial institutions and offices, it was created to be a 'hub of ideas'.

It has also become a culturally vibrant and active community, thanks to the presence of art galleries, excellent restaurants, and high calibre commercial establishments.



# THE EXCHANGE



# FUERTE DE VICTORIA GRANDE

The Fuerte De Victoria Grande fortress was on the verge of being abandoned but this historical architecture was rediscovered and totally restored as a public space for visitors.

Linea Light were the obvious choice with their well proven ability to embrace the unique character of this unique construction, illuminating and creating a perfect harmony between architecture, engineering and lighting design.





Stadkamer is a City Hall office building which has been transformed into a contemporary hub.

Providing information and education, art and culture in the heart of Zwolle, Stadkamer is home to performances, good food, and community spirit.

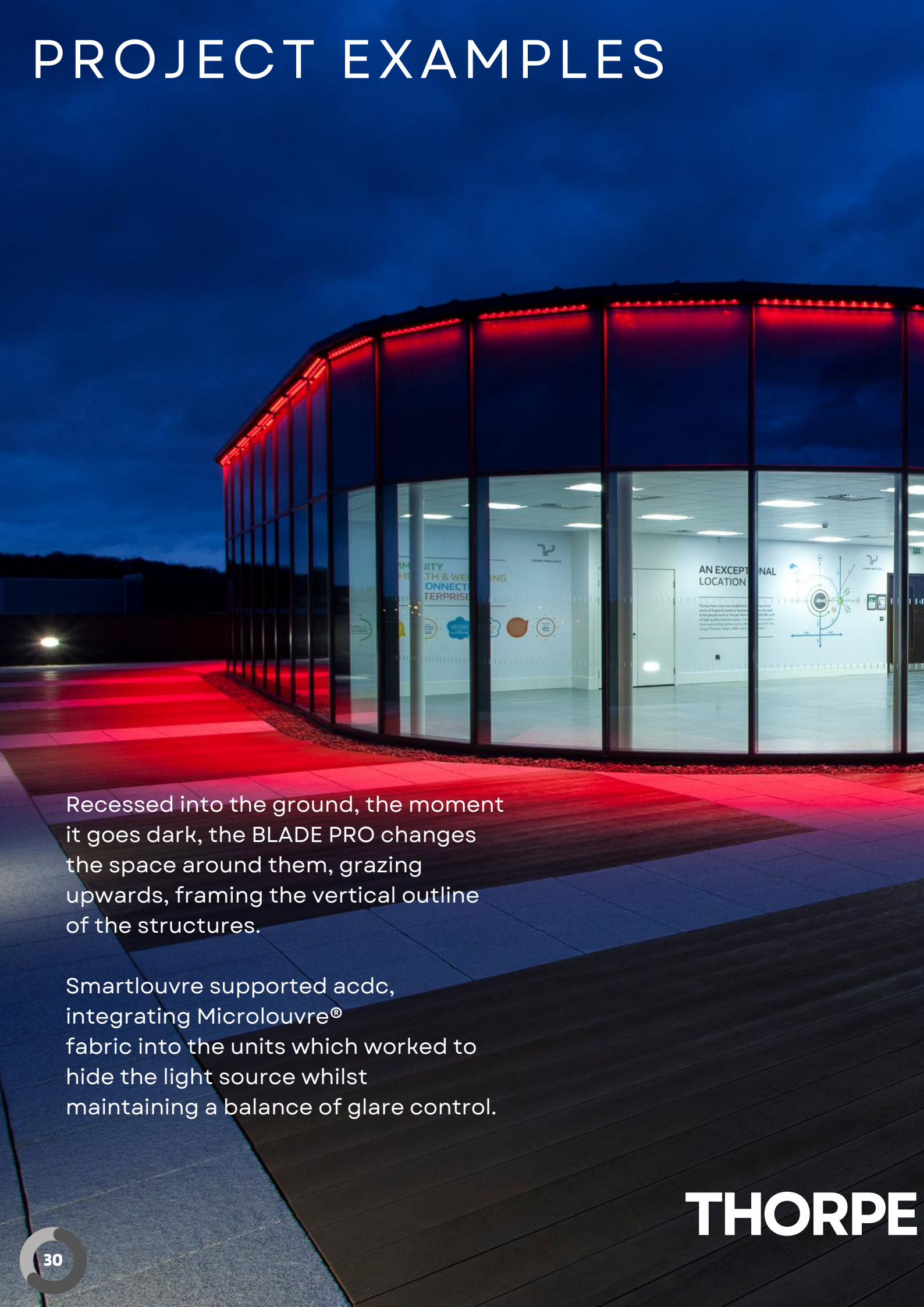
# STADKAMER CITY HALL

A sociable space made for studying and working, socializing and relaxing.





# PROJECT EXAMPLES

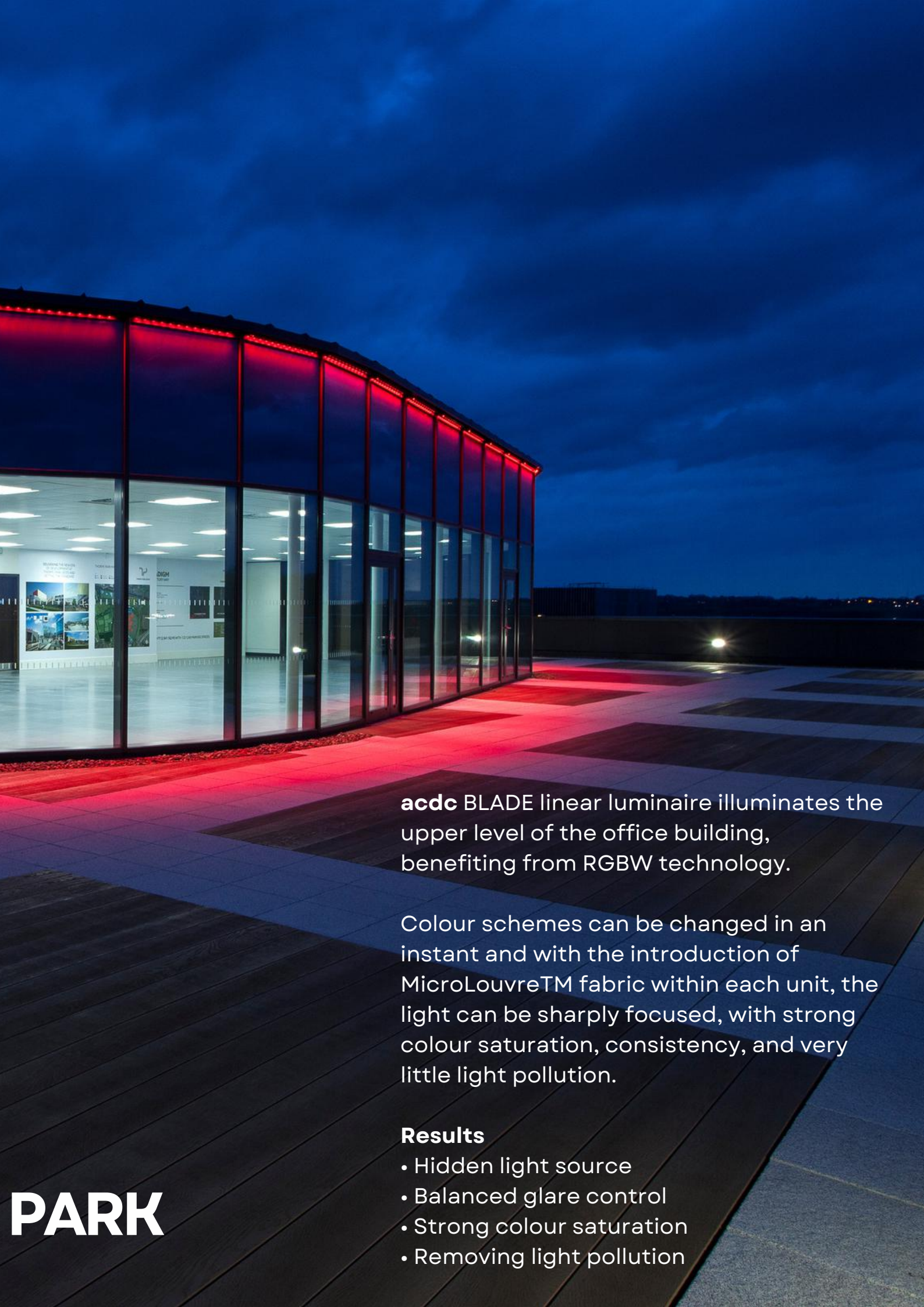


Recessed into the ground, the moment it goes dark, the BLADE PRO changes the space around them, grazing upwards, framing the vertical outline of the structures.

Smartlouvre supported acdc, integrating Microlouvre® fabric into the units which worked to hide the light source whilst maintaining a balance of glare control.

**THORPE**





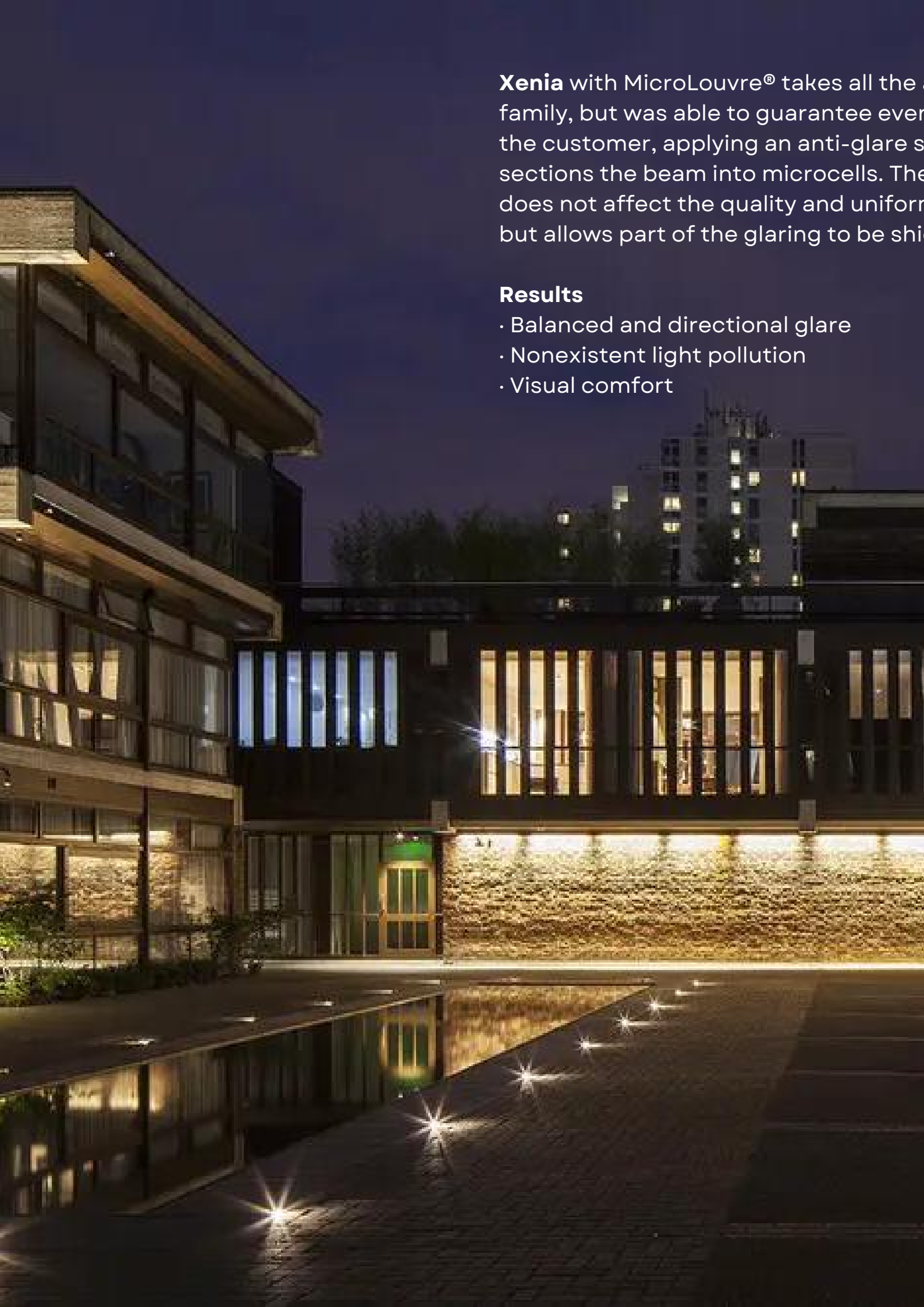
**acdc** BLADE linear luminaire illuminates the upper level of the office building, benefiting from RGBW technology.

Colour schemes can be changed in an instant and with the introduction of MicroLouvre™ fabric within each unit, the light can be sharply focused, with strong colour saturation, consistency, and very little light pollution.

### **Results**

- Hidden light source
- Balanced glare control
- Strong colour saturation
- Removing light pollution

# **PARK**



**Xenia** with MicroLouvre® takes all the family, but was able to guarantee even the customer, applying an anti-glare sections the beam into microcells. This does not affect the quality and uniformity but allows part of the glaring to be shielded.

### Results

- Balanced and directional glare
- Nonexistent light pollution
- Visual comfort



advantages of the Xenia  
n more visual comfort for  
screen to the product that  
e screen, extremely thin,  
mity of the light emitted,  
elded.



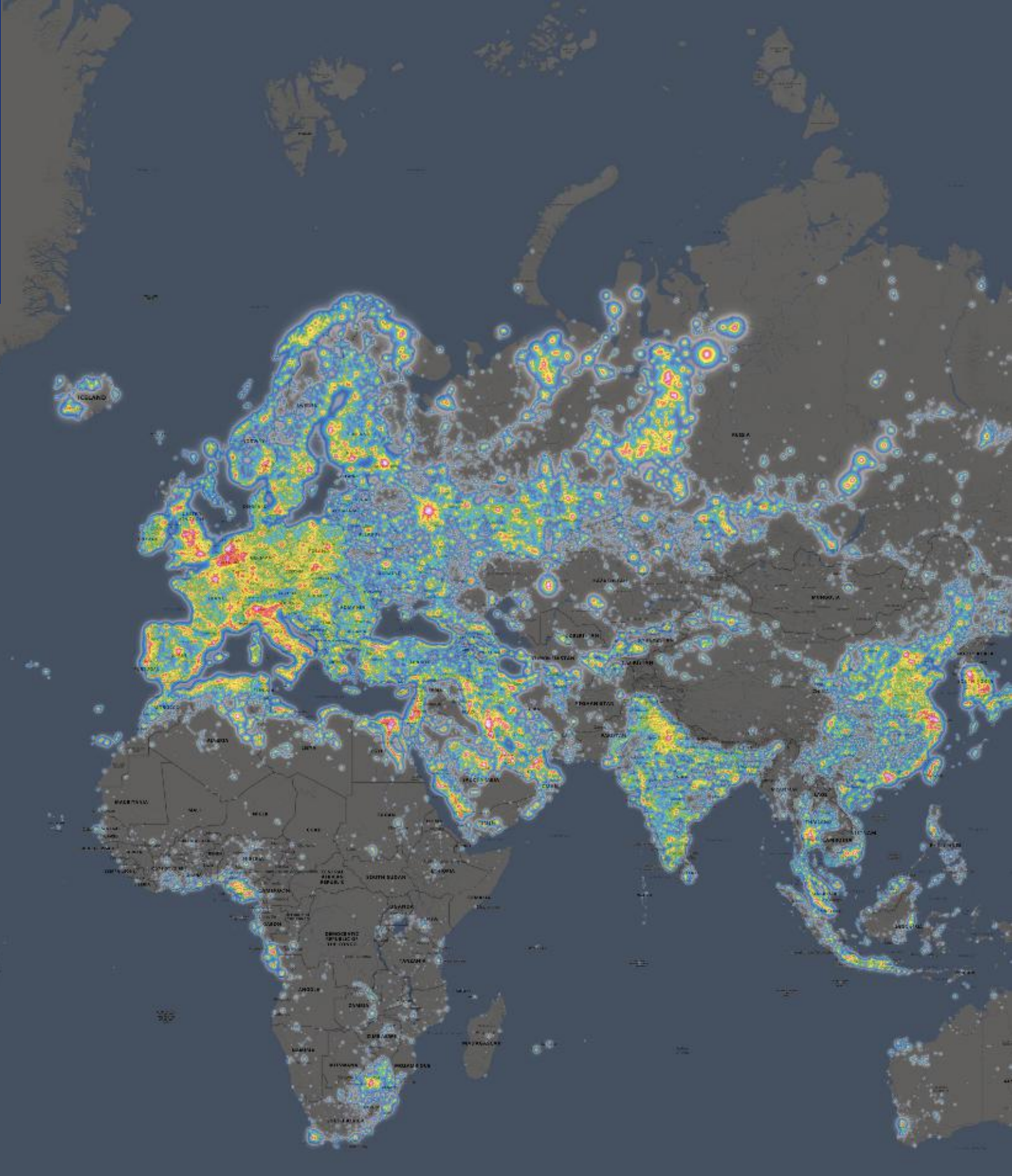
Lilian Baylis Secondary School

**Night sky pollution, also known as light pollution, is the presence of artificial light in the night sky that interferes with our ability to observe the stars and other celestial objects. Here are some of the problems associated with night sky pollution:**

1. **Disrupting ecosystems:** Artificial light at night can disrupt ecosystems by altering the behavior of animals, such as migratory birds and sea turtles, that use the stars to navigate. It can also interfere with the mating patterns of some species.
2. **Health problems:** Light pollution can disrupt the circadian rhythms of humans, which can lead to health problems such as insomnia, depression, and increased risk of cancer.
3. **Affecting our cultural heritage:** The loss of the night sky, which has been a source of inspiration and wonder for humans for millennia, has a profound impact on our cultural heritage.
4. **Affecting astronomical research:** The presence of artificial light makes it difficult for astronomers to study the night sky, and it reduces the sensitivity of telescopes.
5. **Wasting energy:** The excess lighting in cities and towns results in a waste of energy, which contributes to greenhouse gas emissions and global warming.

**MICROL**  
helps remove light pollution with





**OUVRE®**  
it's ability to hide the light source

**Overall, night sky pollution is a growing problem that has significant negative effects on the environment, human health, energy consumption, and our cultural heritage.**





Manufacturer of  
**MicroLouvre® fabric**



## Contact us

**SLTechnology Ltd. Global Manufacturers of MicroLouvre Fabric**  
18 The Tanneries, Brockhampton Lane, Havant, Hampshire, PO9 1JB, United Kingdom



[info@smartlouvre.com](mailto:info@smartlouvre.com)



[smartlouvre.com](http://smartlouvre.com)



+44 (0) 239 245 6333