

A detailed illustration of the Sagittarius constellation, showing a centaur archer riding a horse and holding a bow. The constellation is composed of numerous stars of varying brightness, connected by thin lines to form the figure. The background is a dark, starry sky.

SAGITTARIO

Challenges in Lighting

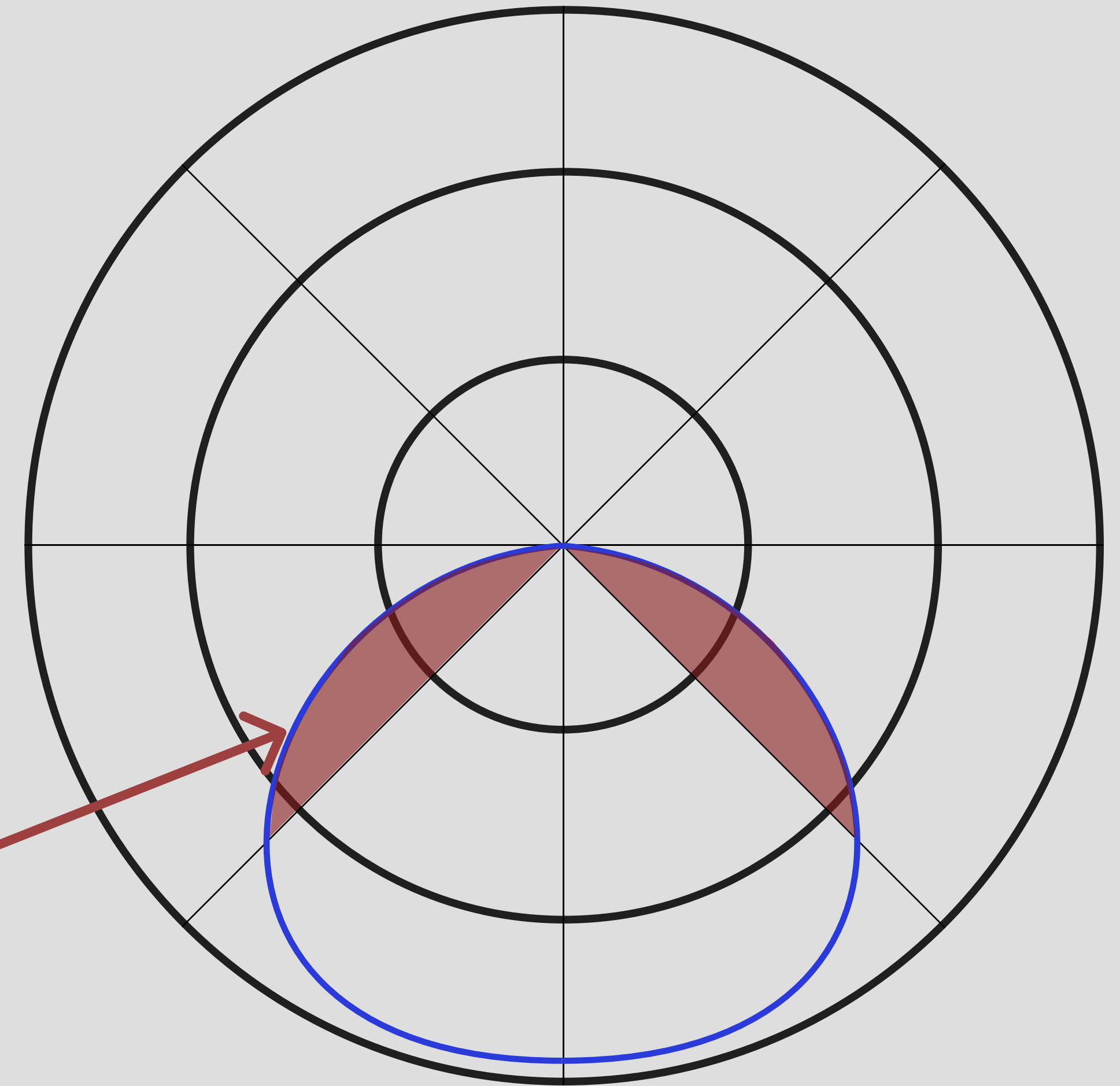
Lumen per Watt or Lux per Watt?

Optics direct light efficiently.

Energy-saving optics achieve required illumination levels with minimal power consumption.

Optical management is directly connected to the overall costs of maintaining light on.

*Is light in this direction needed?
Does it cause light spill and
energy waste?*



Challenges in Lighting

Big Spaces, big Optics.

Optics and LED modules work together in lighting.

Linear modules are preferred for large spaces, while flexible LED placement benefits from free-pitch or standardized optics.

Free-pitch optics are key for illuminating warehouses, supermarkets, and large buildings.



Technology Overview - How to make a Linear Optic



Injection Molding

- **High Efficiency**
- Freedom of Design
- Pitched Design
- Short lengths

Extrusion

- **Free-pitch**
- Optic working at a distance
- Radii on optical surfaces
- **Long Lengths**

Louvre Reflectors

- **Luminous Comfort**
- Efficiency dependant on material
- Complex Production
- Short lengths

OMP Technology

- **Free-pitch**
- **High Efficiency**
- **Luminous Comfort**
- **Long Lengths**

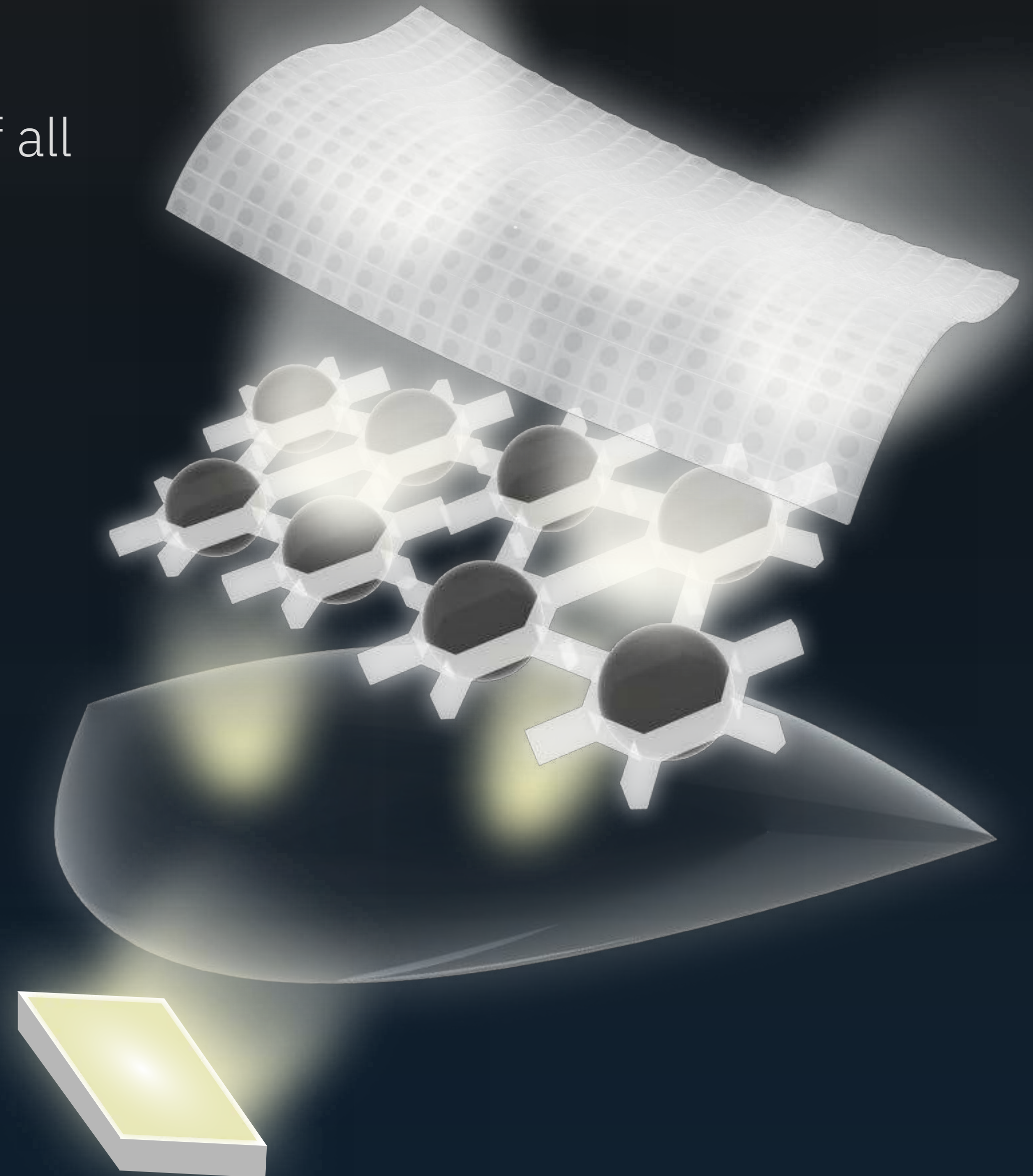
OMP is a new technology, that combines the benefits of all production technologies:

- Compact free-pitch Design
- Color-over-angle is avoided
- Efficiencies over 90%
- Full control of the beam angle
- Reliability over a long lifetime

Optics are composed of solid layers of PMMA, chemically bond together into one single piece.

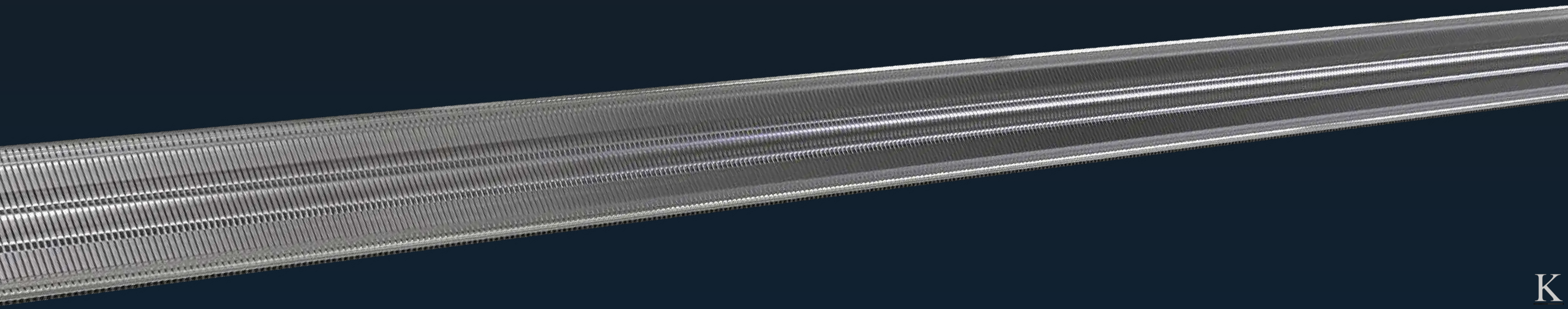
Nanomaterials are caring for managing color-over-angle.

Nanoprisms are controlling the light in transversal and longitudinal direction.



OMP Technology achieves the target of Energy Saving through Optical Management. It relies on a combination of layers and structures engineered, with optical features in mind.

Precise control of the LED is achieved, thanks to the narrowest manufacturing tolerances. Any length is possible, making it perfect to service large areas.

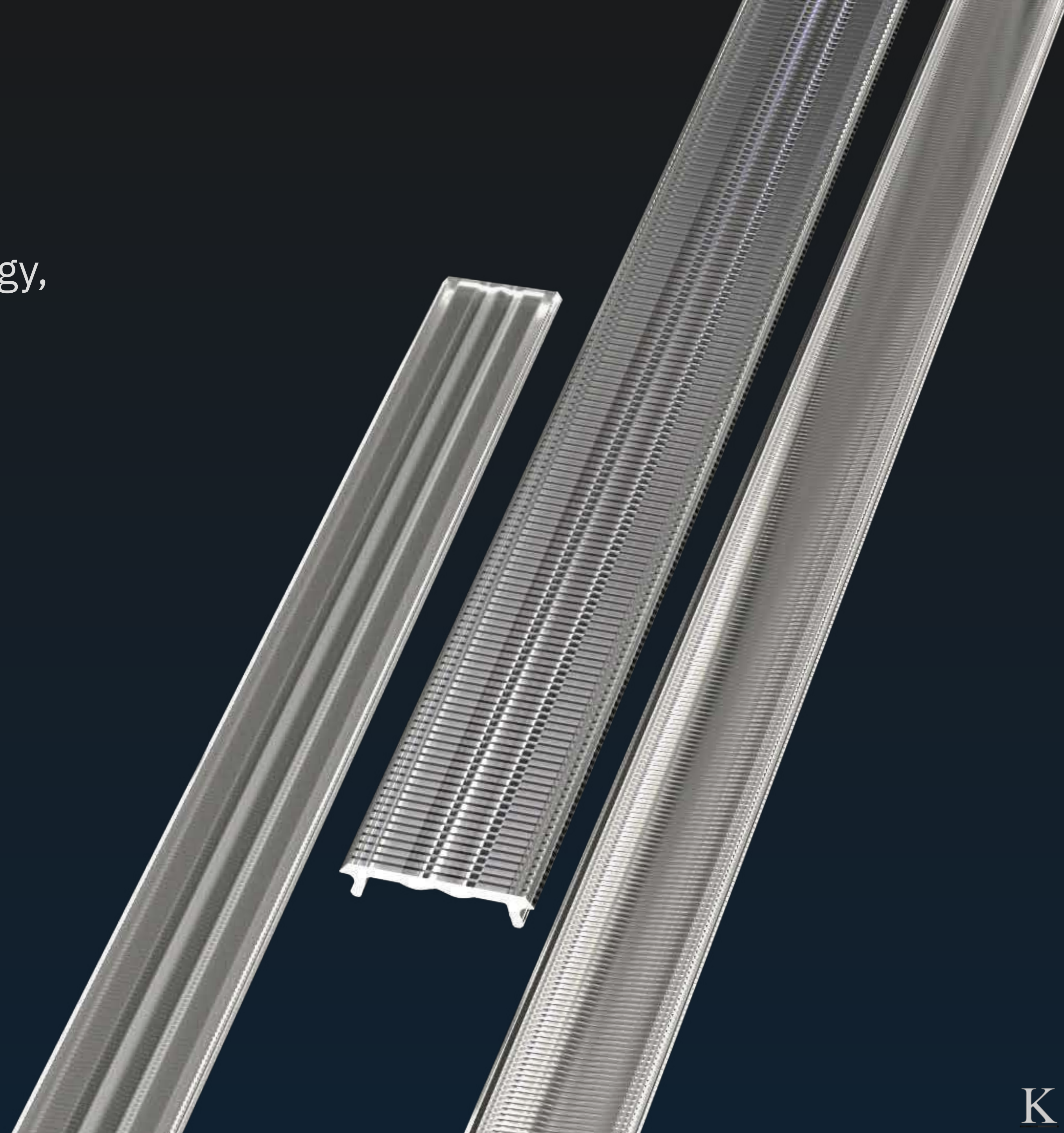


SAGITTARIO

The first product family basing on OMP Technology, specifically target to save energy in large areas:

- Supermarkets
- Warehouses
- Offices

Ideal for 2835 and 3030 midpower LEDs, arranged in 20 and 24 mm modules.



APPLICATIONS

powered by **OMP**[™] technology

A 3D architectural rendering of a supermarket aisle. The aisle is formed by two rows of blue shelving units. Each unit has a tall, solid blue back panel and several horizontal shelves. The shelves are empty. A long, thin, black light fixture is mounted on the ceiling, centered over the aisle. The floor is a light brown color. The walls are a neutral, light gray color.

Supermarket Aisle

Layout to maximize efficiency and minimize light spill.

Products in use:

- SAGITTARIO AX - Double Asymmetric Beam
- SAGITTARIO AS - single Asymmetric Beam

Application Example: **Supermarket Lighting**

Lighting on Shelves and Corridor - Asymmetric beams



Layout optimized for efficiency, reducing light spill.

SAGITTARIO AX - Double Asymmetric beam is placed in the middle of the aisle, distributing light on the shelves.

SAGITTARIO AS - Single Asymmetric beam is facing towards the shelf, illuminating products precisely.



SAGITTARIO AX	SAGITTARIO AS
+5% more light on shelves	+30% more uniformity
+11% more light on floor	>1.000 lx in display position
+5% more uniformity	1:2 contrast ratio

Compared to industry standard linear optics





Supermarket Aisle

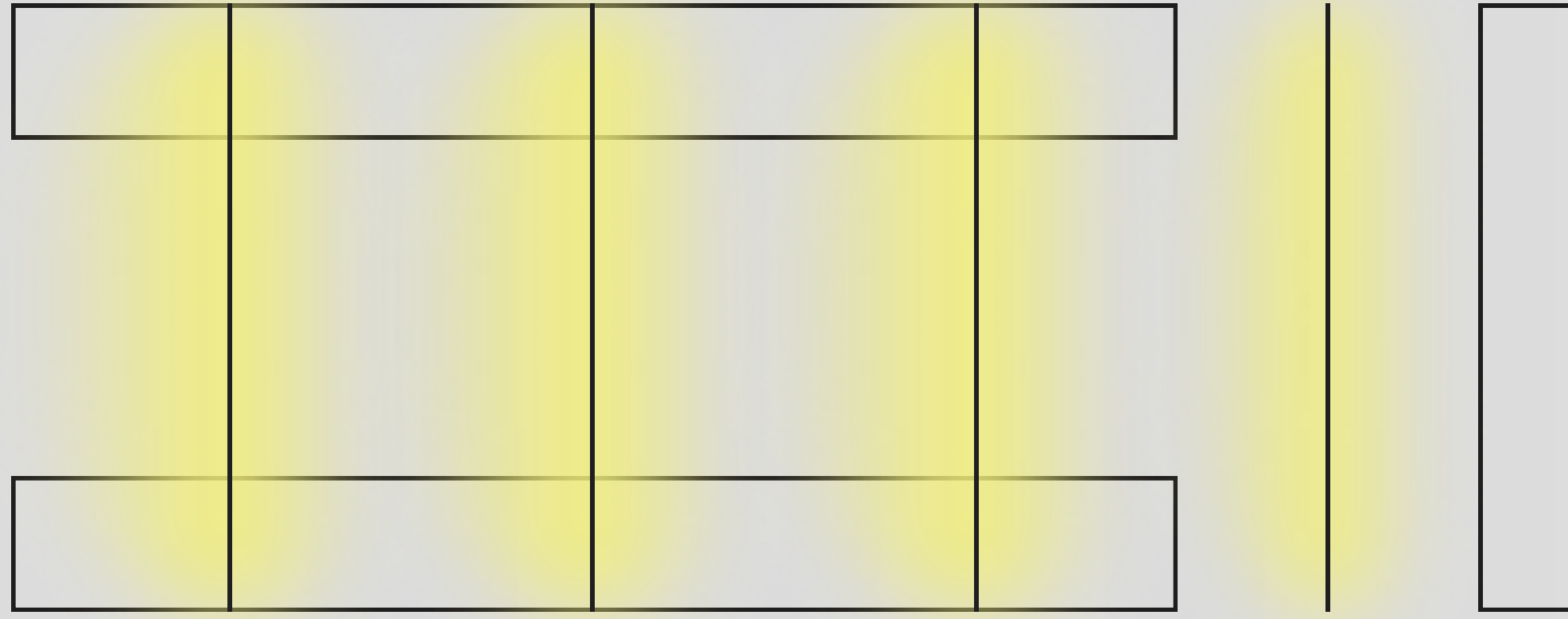
Layout to maximize uniformity as cross-sided to aisles.

Products in use:

- SAGITTARIO UW - FWHM 90°
- SAGITTARIO W7 - FWHM 70°

Application Example: **Supermarket Lighting**

Lighting on Shelves and Corridor - Asymmetric beams



Layout optimized for uniformity, cross-wise to aisle arrangement.

SAGITTARIO UW - FWHM 90° is placed in the cross-direction, achieving uniformity over the floor and on the products placed on top of the shelves.

SAGITTARIO W7 - FWHM 70° is placed in the mid of corridors, illuminating single-sided shelves.



SAGITTARIO UW	SAGITTARIO W7
>0.7 Uniformity	>0.7 Uniformity
+8% more light on floor	+7% Average illuminance
+15% more light on shelves	>1.000 lux in display position

Compared to industry standard linear optics





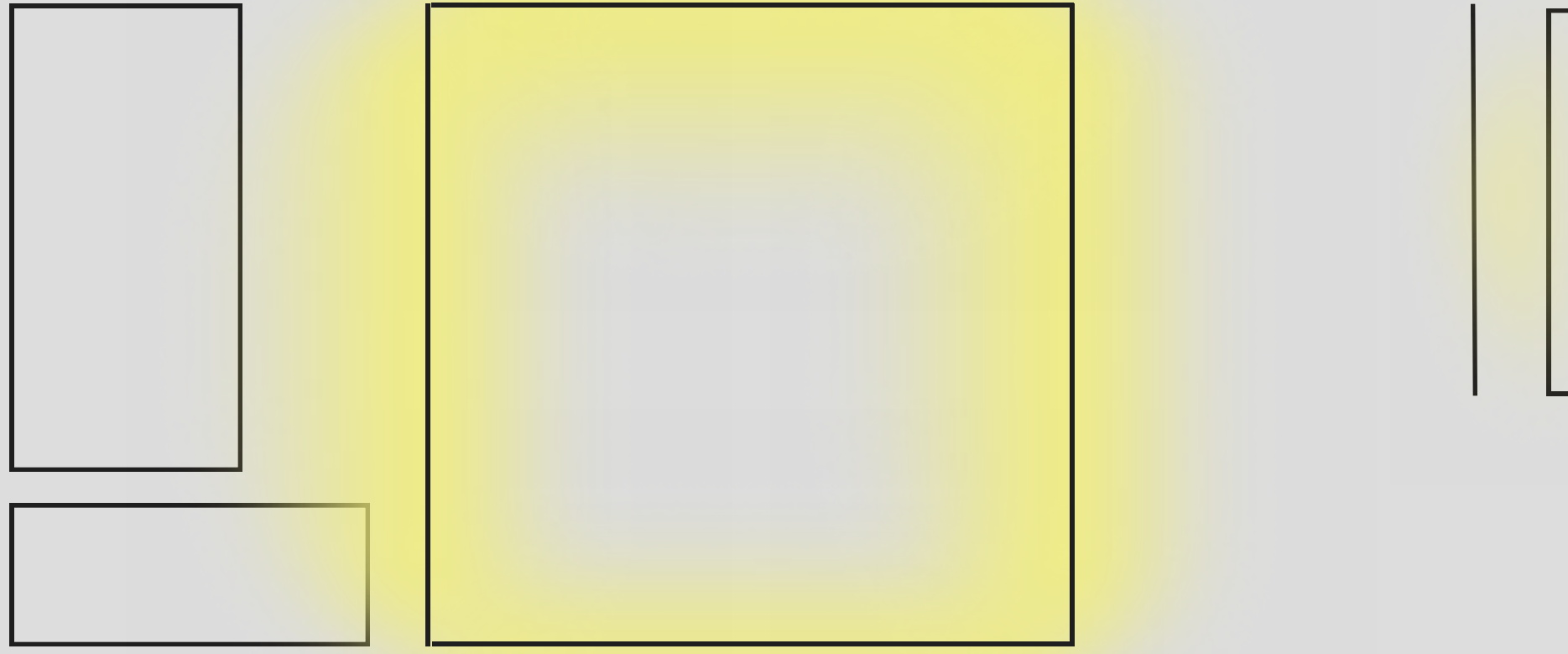
Interior Spaces

Diffusers, Uplights, Wallwashers for architectural lighting

- SAGITTARIO DIF - Compact Diffusor
- SAGITTARIO GW - Up-light
- SAGITTARIO AS - Wallwasher

Application Example: **Architectural Lighting**

Uniformity and Accent Lighting



Uniform and pleasant lighting, at efficacy up to 200 lm/W.

SAGITTARIO DIFF is lighting up the space uniformly

SAGITTARIO GW - Uplight lights up the ceiling, giving accents, or security light by night.

SAGITTARIO AS - Wallwasher gives accent lights and brightens up pictures, decorations and gives texture to surfaces.



FLOOR	WALL
Uniformity and comfort	High contrast on target
Tunable White possible	Uniform wallwashing effect
Compact design for track lighting	Compact design for track lighting

Compared to industry standard linear optics





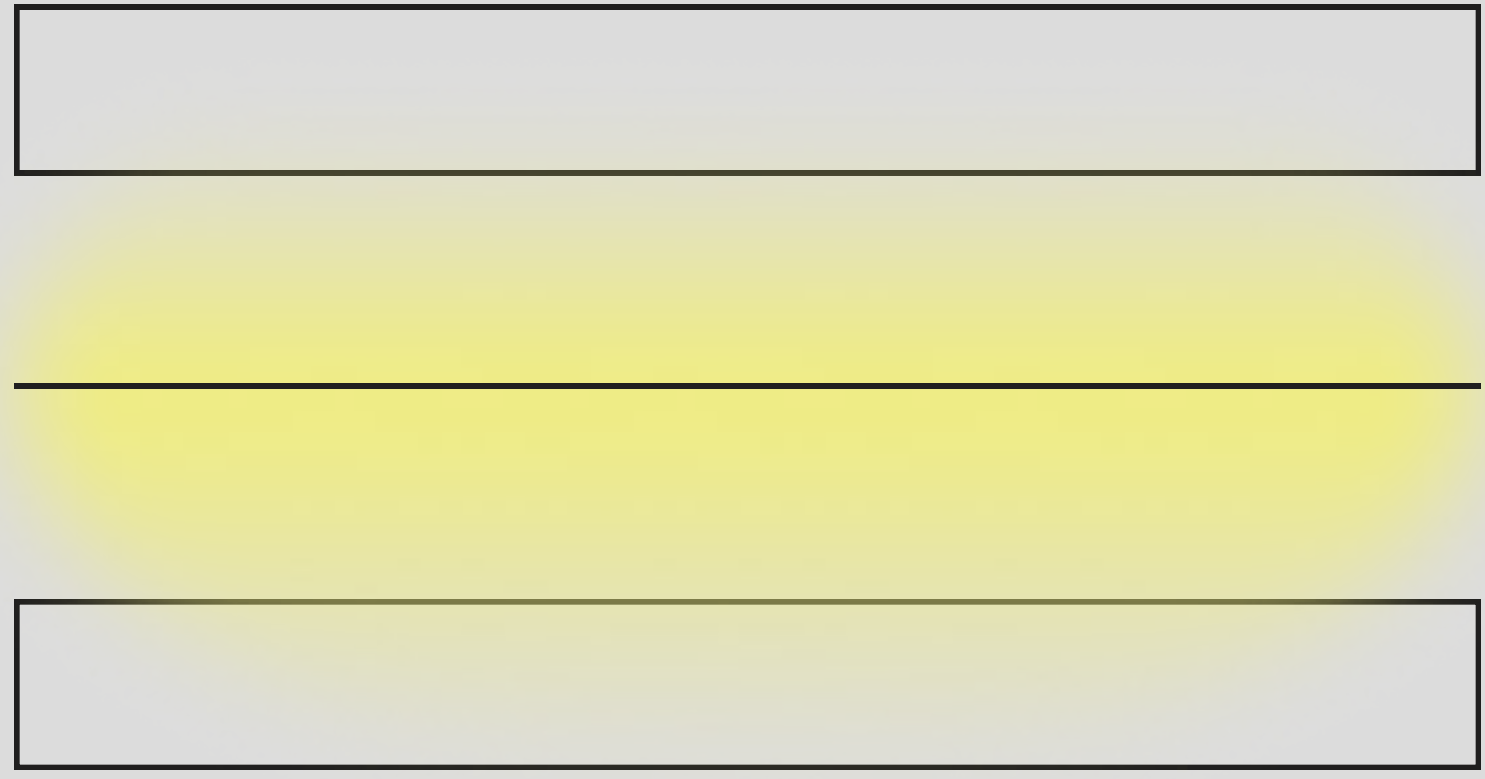
Low-Bay Lighting

Industrial lighting for warehouses up to 5 m mounting height.
Products in use:

- SAGITTARIO UW - FWHM 90°

Application Example: **Low-Bay Warehouse**

Lighting on Shelves and Corridor - FWHM 90°



Mounting height up to 5 m. High efficiency to save energy in warehouses.

SAGITTARIO UW - FWHM 90° lighting up the area on the shelves and on the floor.
In a single line, it achieves high uniformity both on the floor as on the shelves.



- SAGITTARIO UW

- +8% more light on shelves

- +6% more light on floor

- +5% more uniformity

Compared to industry standard linear optics





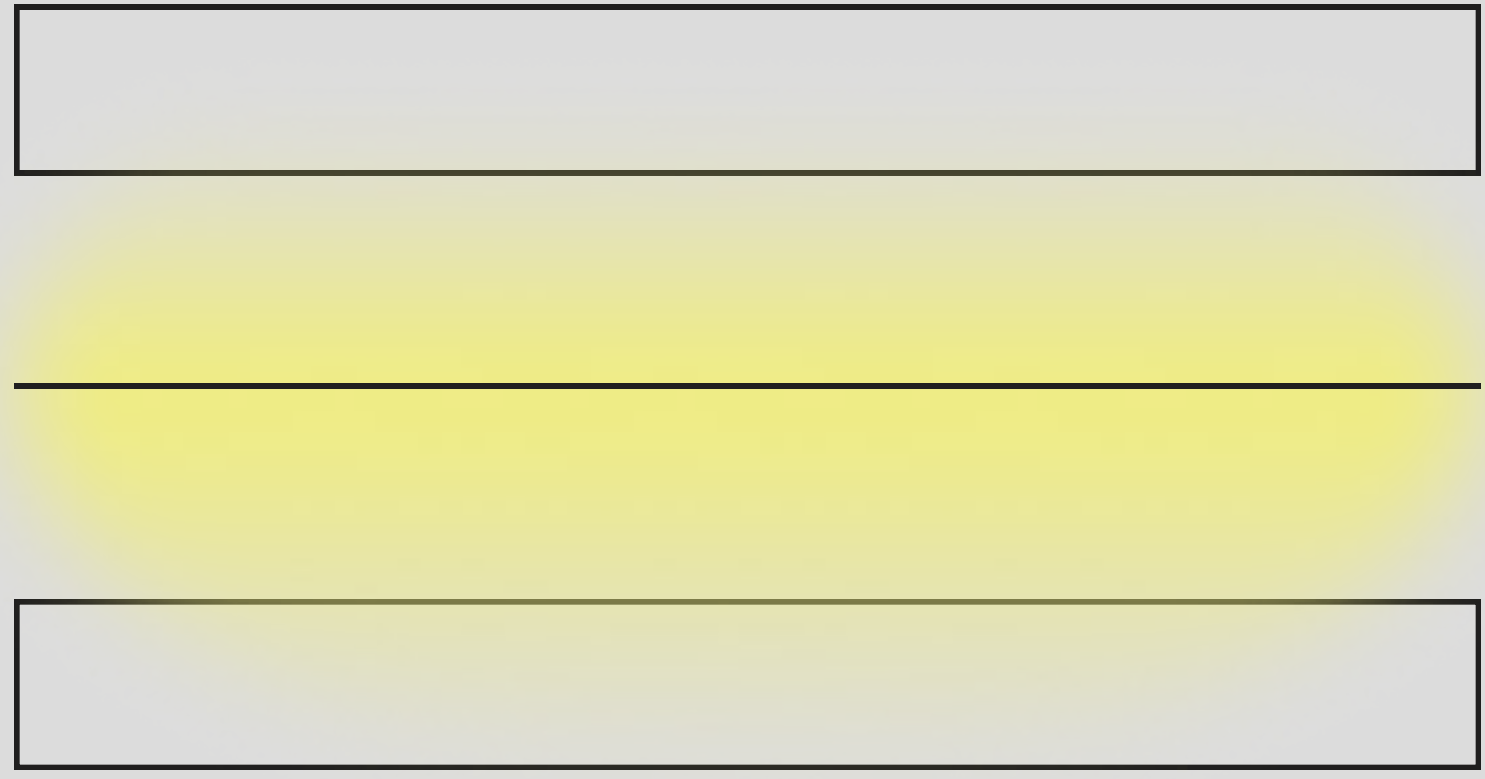
Mid-Bay Lighting

Industrial lighting for warehouses between 5 and 7 m mounting height.
Products in use:

- SAGITTARIO EW - FWHM 60°

Application Example: **Mid-Bay Warehouse**

Lighting on Shelves and Corridor - FWHM 60°



Mounting height up to 7 m. High efficiency to save energy in warehouses and industrial spaces.

SAGITTARIO EW - FWHM 60° highest efficacy to bring light to the ground. Single and double line possible, according to illumination targets in factories.



- SAGITTARIO EW

- +20% more light on shelves

- +10% more light on floor

- +5% more uniformity



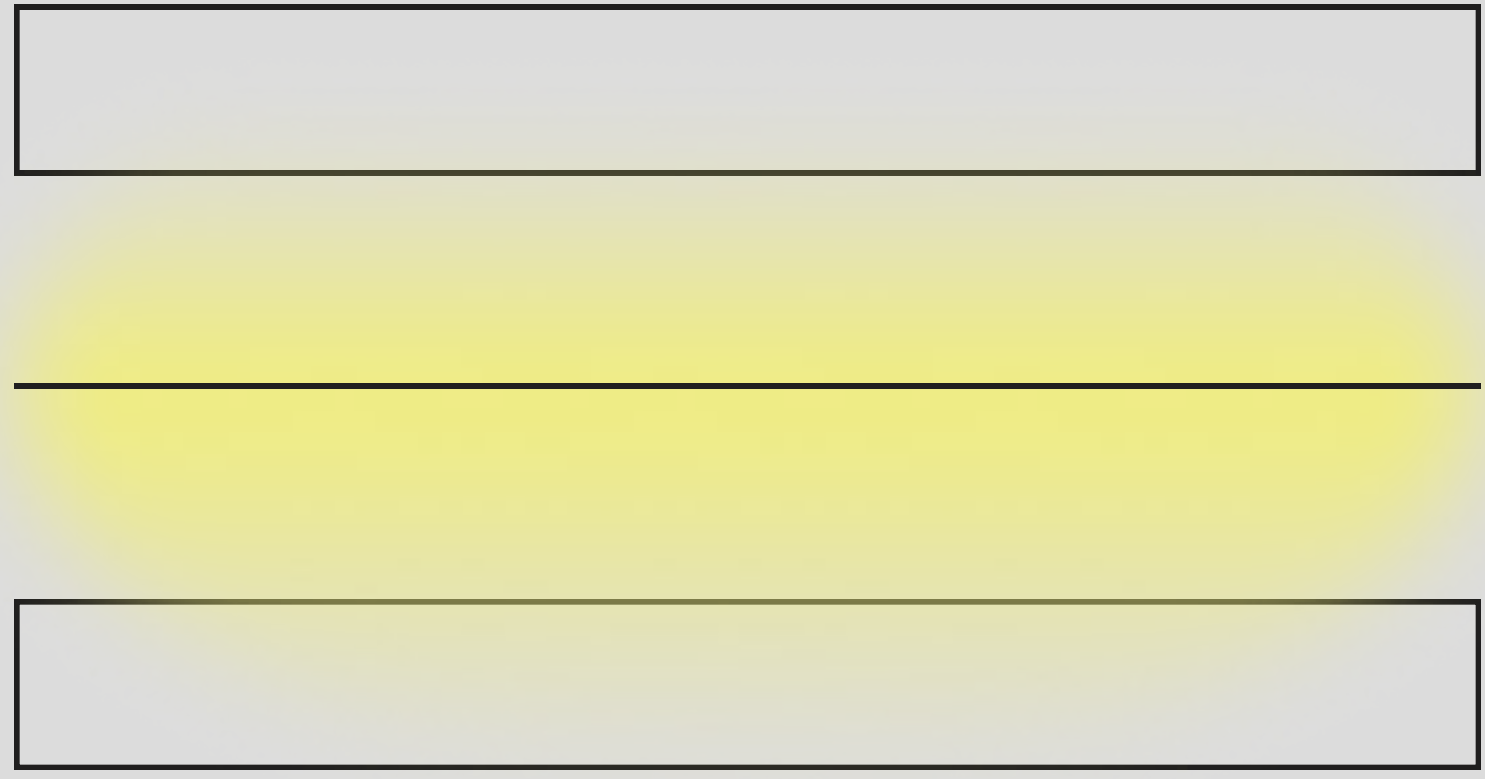
High-Bay Lighting

Industrial lighting for warehouses at mounting heights greater than 7 m.
Products in use:

- SAGITTARIO WI - FWHM 45° Elliptical Beam

Application Example: **High-Bay Warehouse**

Lighting on Shelves and Corridor - FWHM 45° Elliptical Beam



Mounting height more than 7 m. High efficiency to save energy in warehouses, factories and worksites.

SAGITTARIO WI - FWHM 45° Elliptical Beam highest efficacy to bring light to the ground. Collimated beam to reach the ground from high ceilings.



- SAGITTARIO WI

- +15% more light on shelves

- +10% more light on floor

- +10% more uniformity

Compared to industry standard linear optics

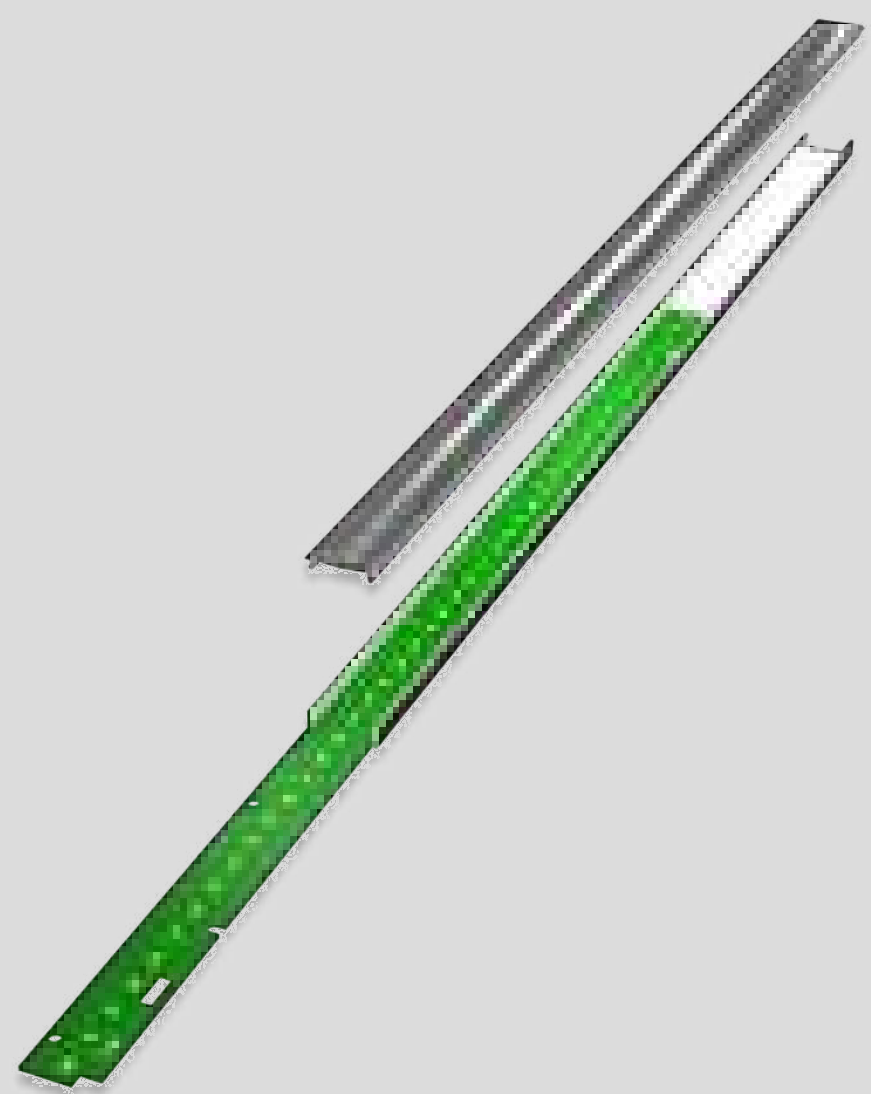


TECHNICAL INFORMATION

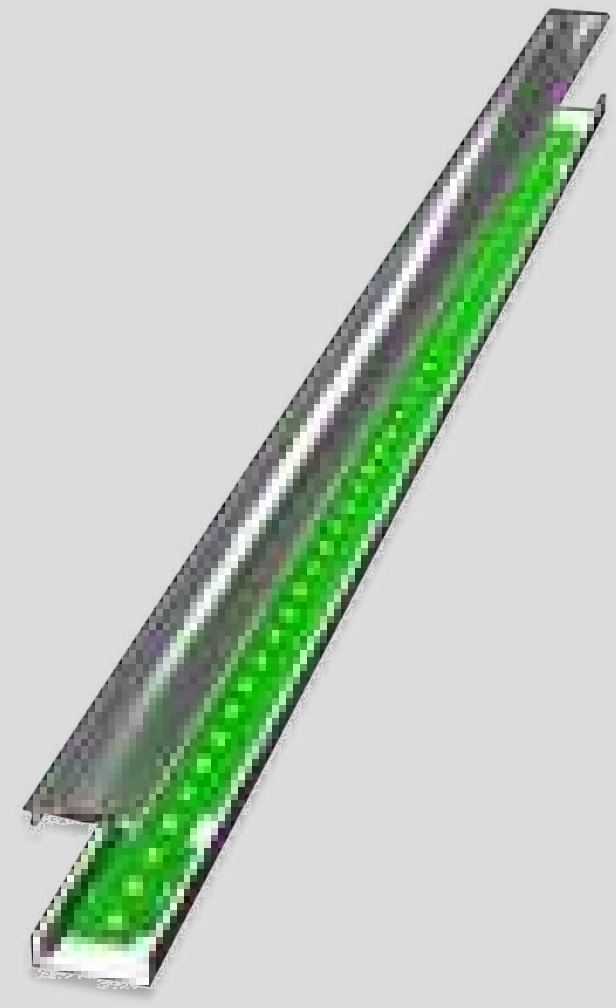
Mechanical Interface and PCB Layout

- Easy snap-in function
- One aluminum channel for all optics
- One PCB layout for all optics

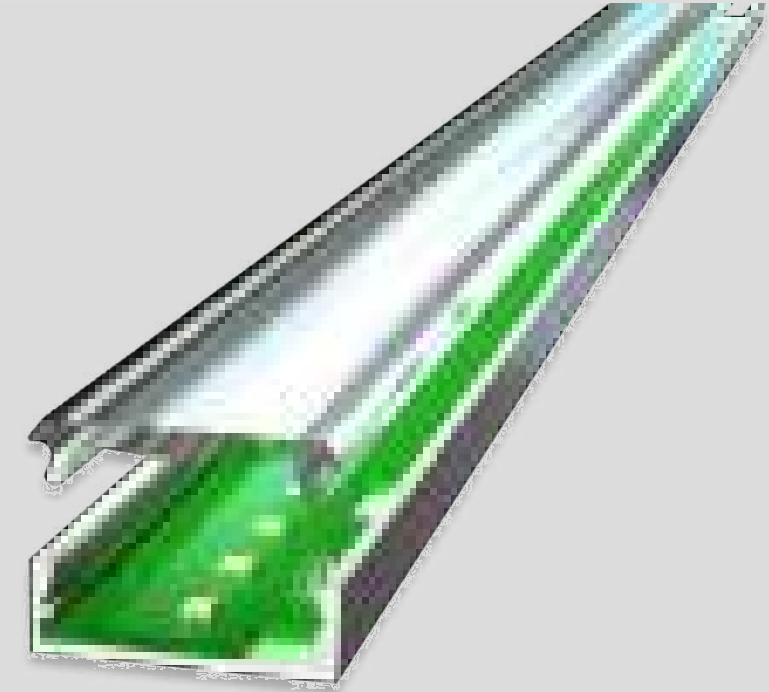
1. Slide in, or screw the PCB on aluminum channel



2. align the optic with the LEDs

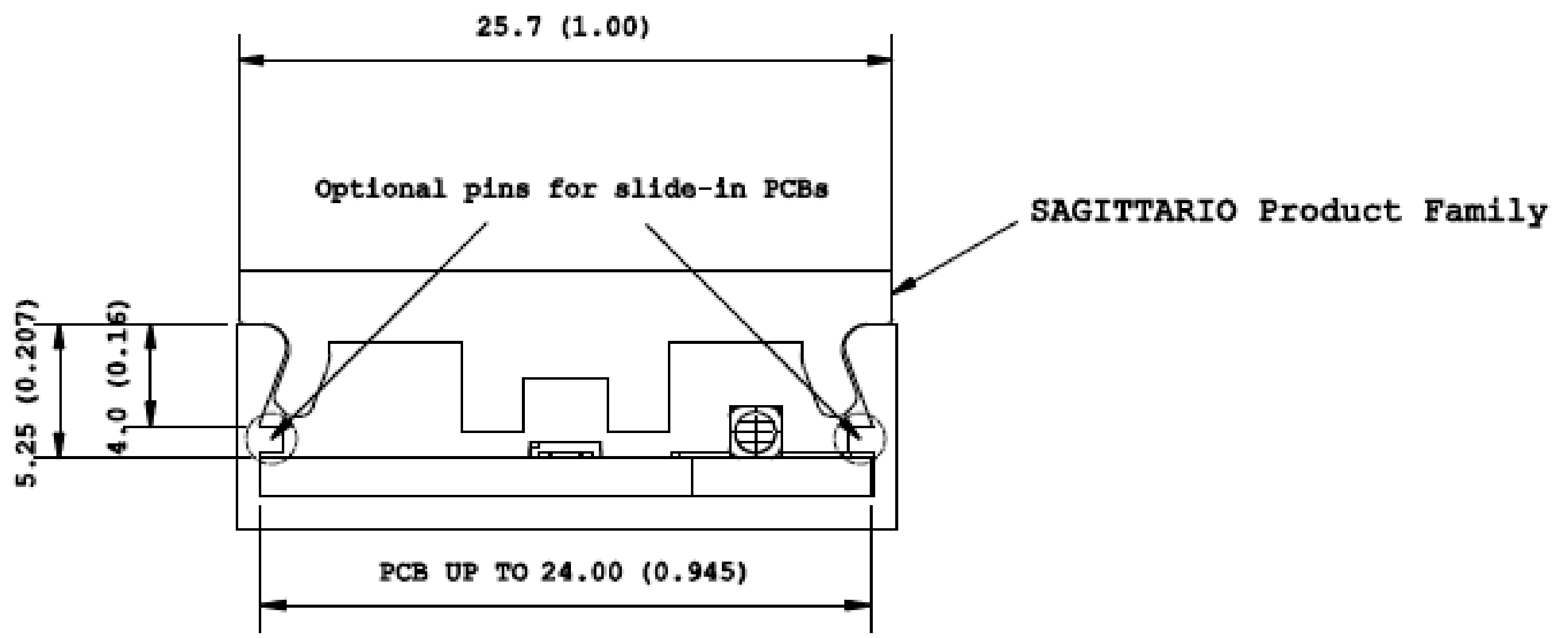
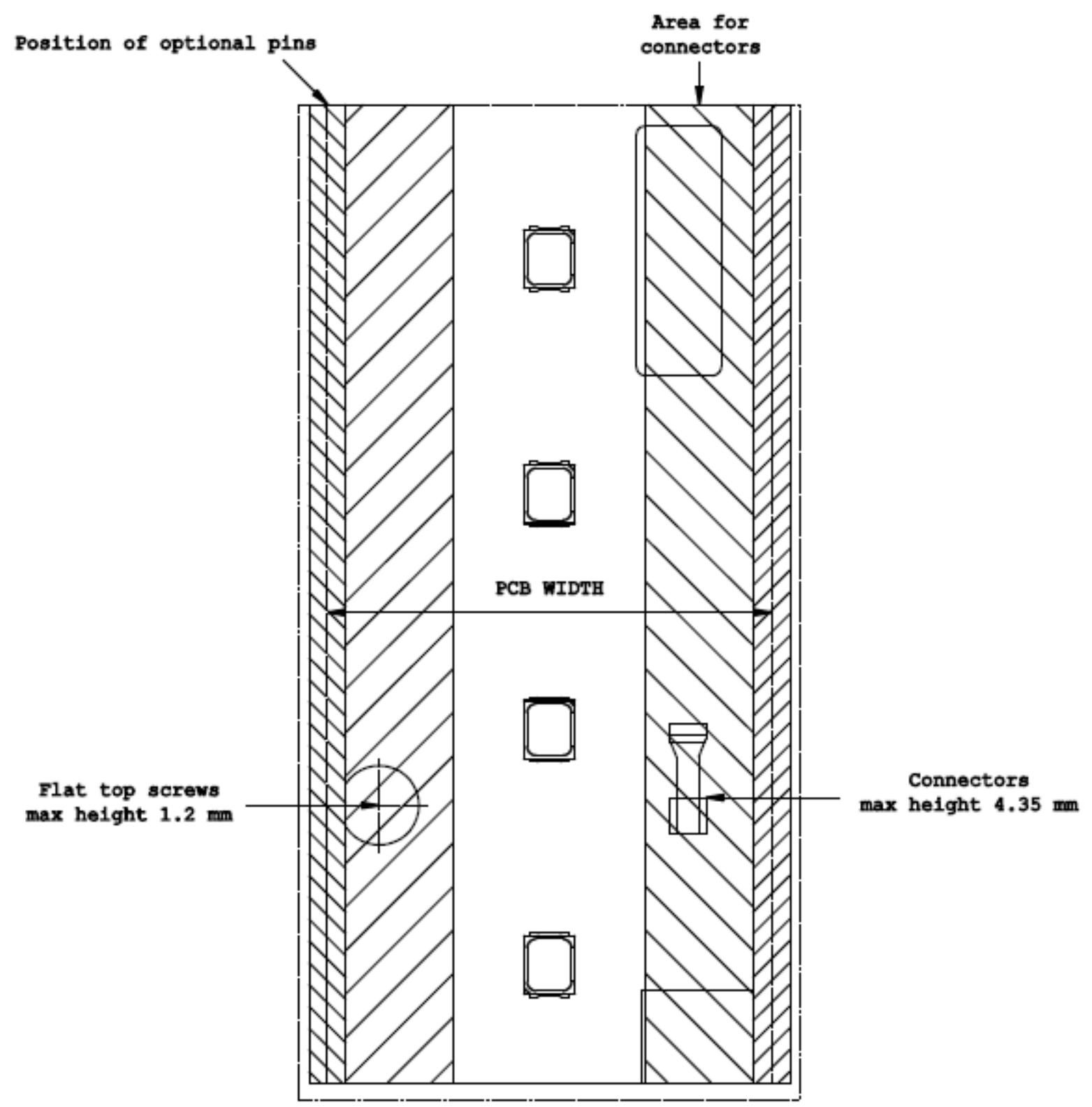


3. Snap in, by pushing the optic in hte channel



Mechanical Interface and PCB Layout

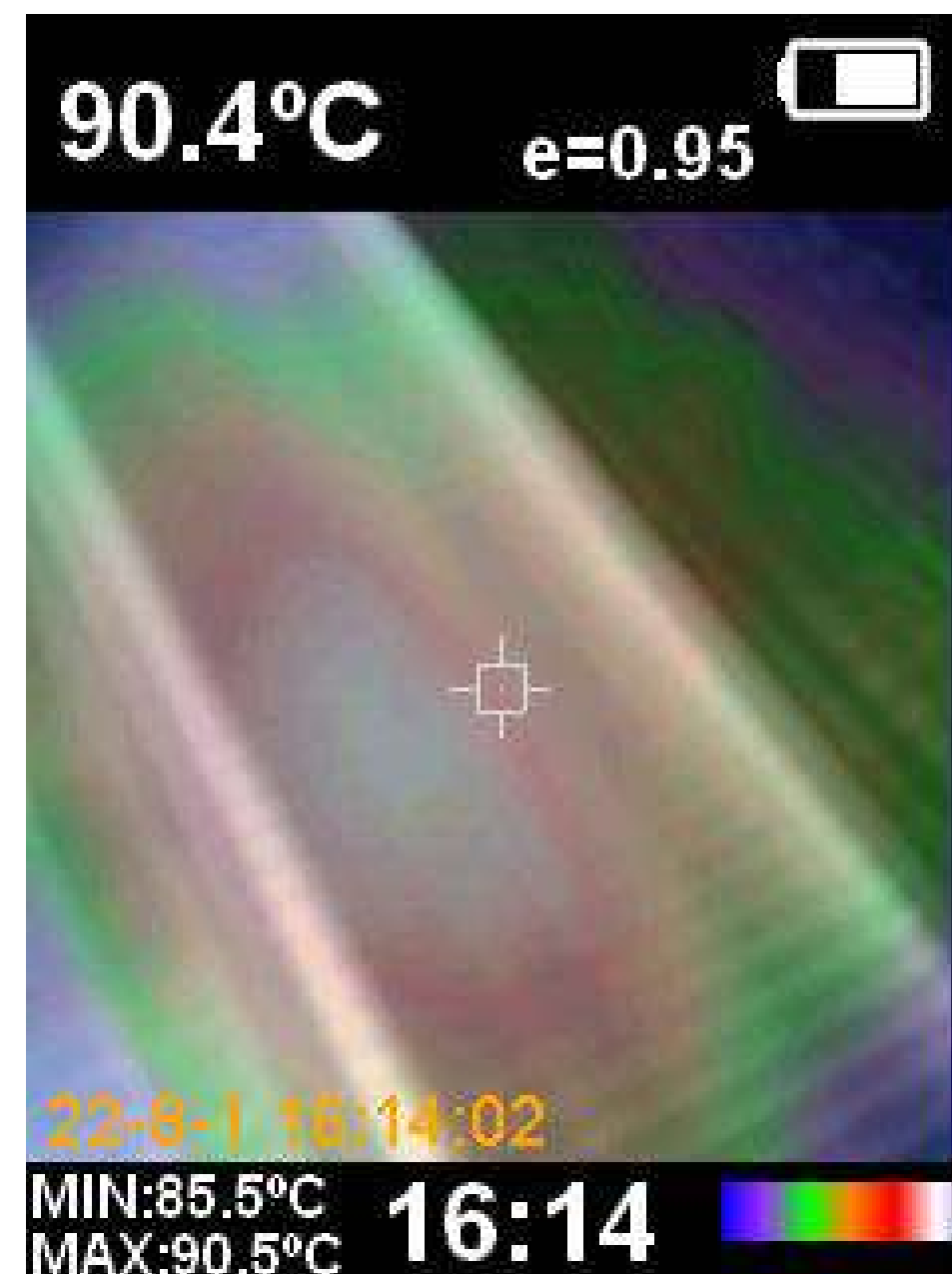
- PCB can be up to 24 mm in width
- Compatible with ZHAGA standard
- Connector max. height: 4.35 mm
- Ideal with flat top screw or pushfix
- One design matches all optics



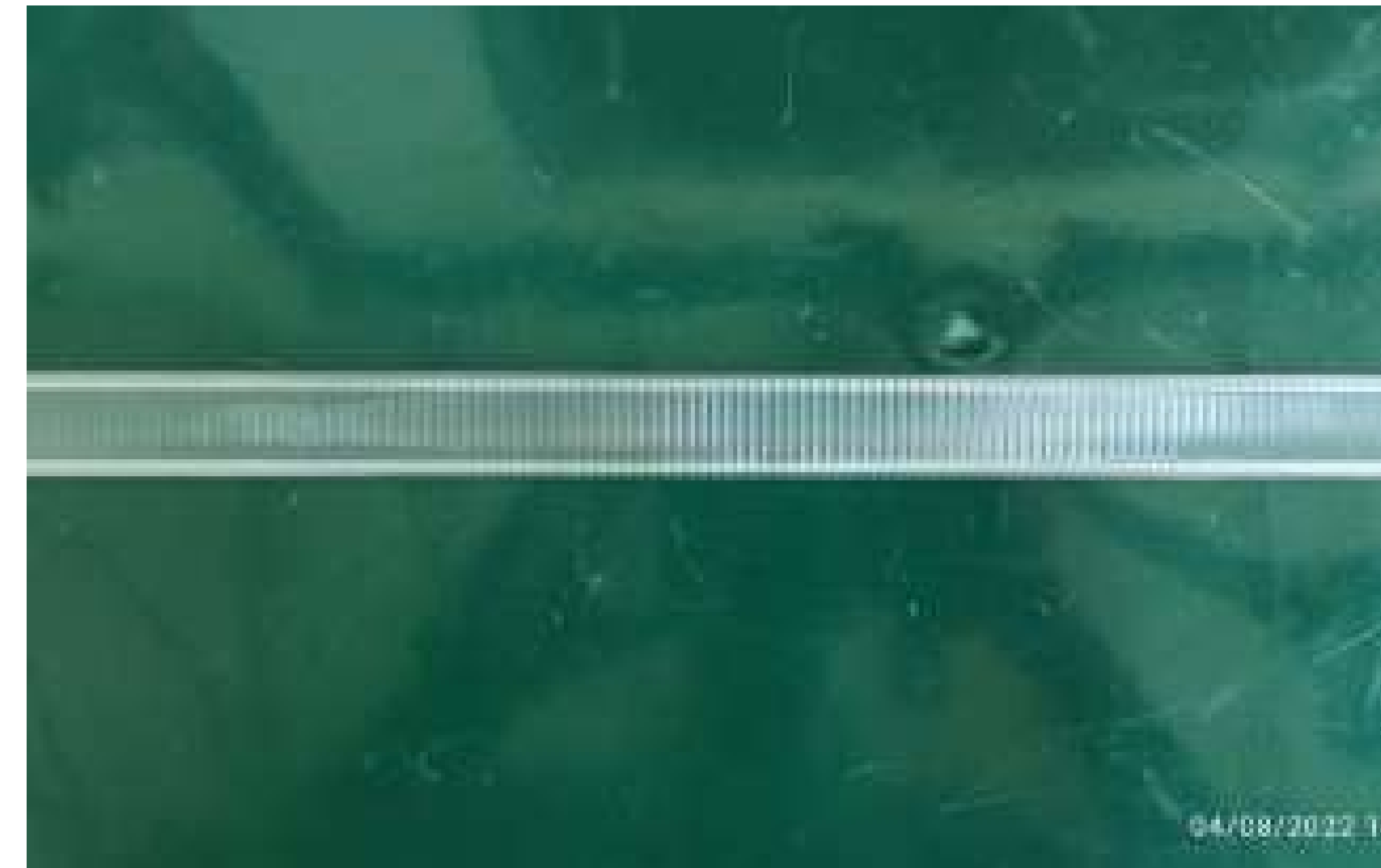
Operating temperatures and long term stability

- The optics can operate in a temperature range of -40 to +90° C
- When mounting the optic, allow space for thermal elongation on the ends: PMMA extends 1 mm, each meter, for every +10°C increase
- Long term stability is guaranteed by UV-transparent, non-yellowing material
- Impact resistance up to IK06

Thermal camera



After IK06 impact test: no visible signs of impact



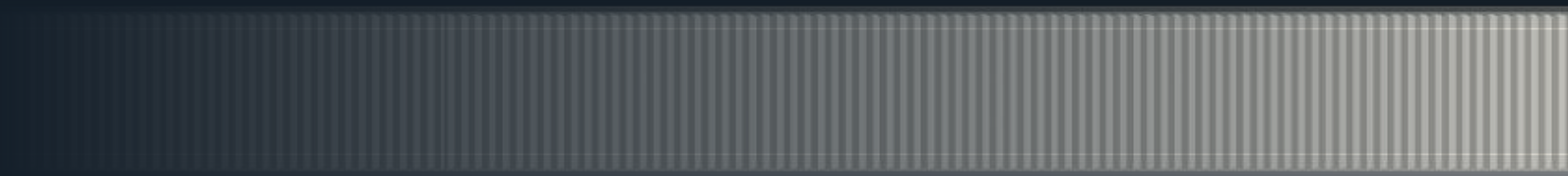
SAGITTARIO

Available standard lengths:

1.220 mm



1.550 mm



Custom Length possible

Available Beams:

- Single Asymmetric
- Double Asymmetric
- 140° FWHM
- 120° FWHM
- 110° FWHM
- 90° FWHM
- 60° FWHM
- 45° FWHM

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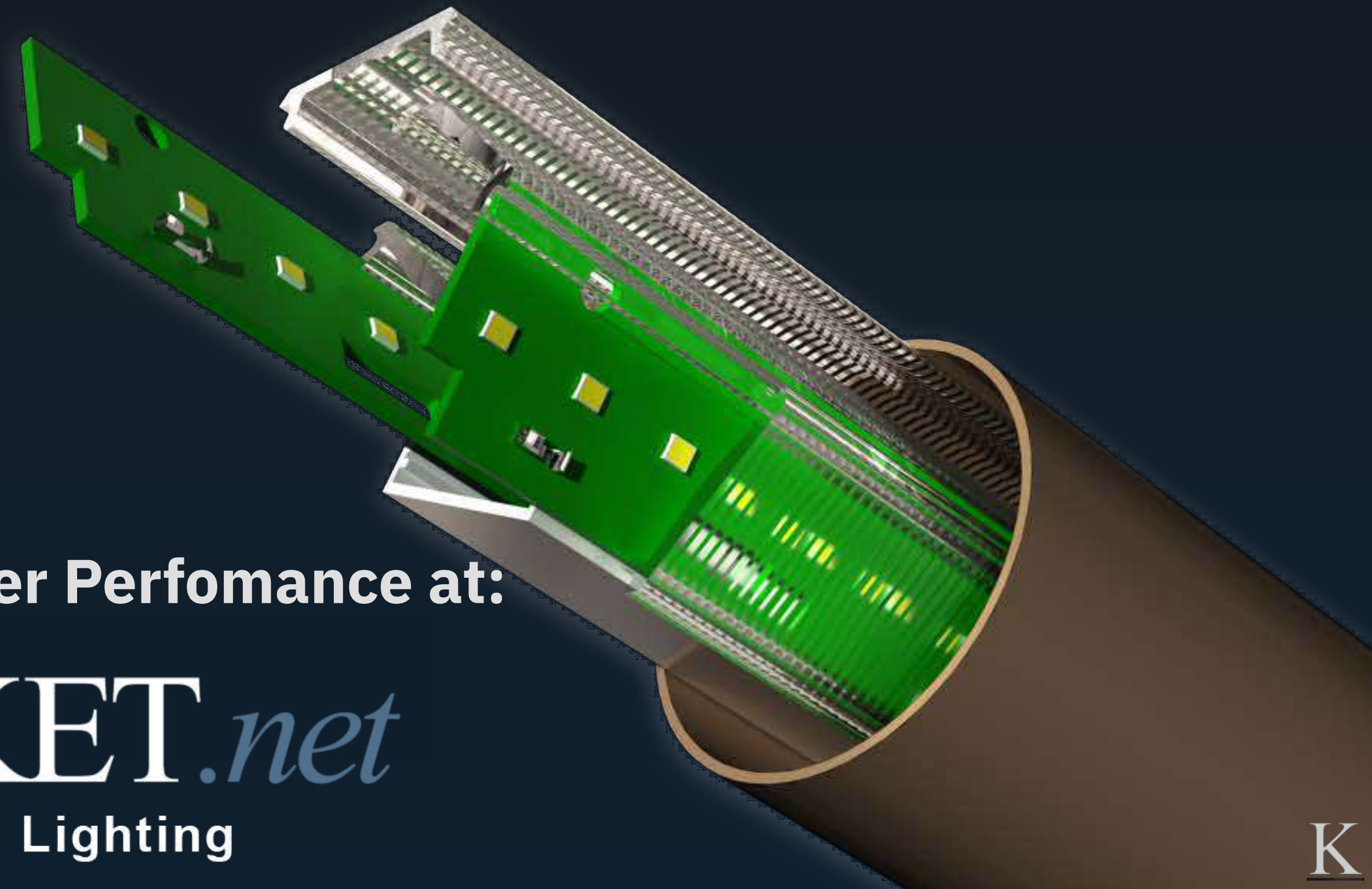
Sample Kits

FULL KIT

- 1 Module in 24 mm with LM301B
- 1 Module in 24 mm with LM281B+
- 1 Polycarbonate holder
- 1 piece of each optic

RETAIL KIT

- 1 Module in 24 mm with LM301B
- 1 Module in 24 mm with LM281B+
- 1 Polycarbonate holder
- 1 piece of each wide beam and asymmetric optic



Request and test the Optical Multilayer Performance at:

OPTOMARKET.net

Optical Solutions for LED Lighting

SAGITTARIO

powered by **OMP**™ technology

KHATOD

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