TMF LENSE





✓ NEW GENERATION OPTICS ► TRATO MICROSTRUCTURED FREEFORM

✓ TRATO MICROSTRUCTURED FREEFORM OPTICS

Precision for performance

At TRATO, we know that the synergy between quality optics and a high-performance LED module is the key to optimum luminous efficency. That's why we've developed a new generation of optic solutions combined with innovative linear LED modules, designed to meet the highest requirements on the market.

A breakthrough technology: the freeform microstructure

Our **TMF (TRATO Microstructured Freeform)** lenses use **advanced optical technology** based on geometric microstructuring, able to direct light with an **exceptional precision**.

Result:

- An increased energy efficiency,
- A perfect chromatic homogeneity,
- A significant reduction of glare,
- And a **superior visual comfort**, whatever of the observer's position.

Technical performance:

- Distributions available : Symmetrical, Asymmetrical, Double Asymmetrical
- Color Over Angle (COA) correction for homogeneous colour reproduction
- Freeform technology: targeted and controlled light distribution
- Optimised flows and better thermal management

CUSTOM GEN4 LINEAR MODULES

Versatility, robustness and lighting excellence

Gen4 linear LED modules have been designed to adapt to a wide variety of projects, from the most economical to the most technical, while guaranteeing **exceptional durability**.

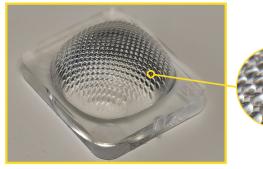
Two available versions:

- Middle Flux Affordable & Efficient
 Ideal for installations with restrictives budget without or
 - Ideal for installations with restrictives budget without compromising performance. Versatile use.
- High Flux Premium & Superior Chromatic Rendering Designed for applications requiring a high colour rendering index (R9), such as textiles and decoration. Suitable for the retail sector.

Key benefits:

- ENEC Certification
- 5 years guarantee
- High luminous flux retention over time
- Conforms to the most strict performance and safety standards

Geometric microstructuring of the lens





OPTIMUM SYNERGY: MODULE + OPTICS

Combining **TMF lenses** with **Gen4 LED modules** creates a **complete and intelligent** lighting solution. This complementarity allows to :

- Maximise optical efficiency,
- Guarantee controlled light diffusion,
- And ensure chromatic consistency across the entire beam.





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