

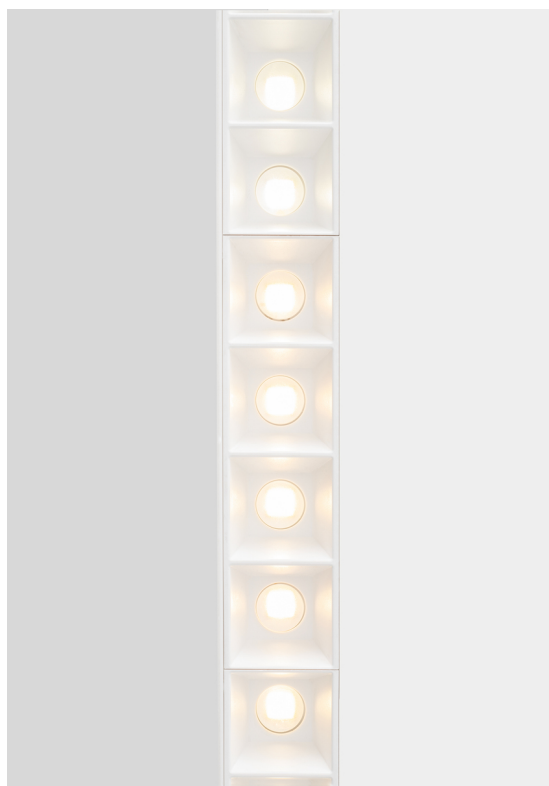


# Refractive Emission Technology

Refractive emission's patented optical technology was developed to achieve **maximum efficiency on a small scale**, in compliance with the regulation for the lighting of workspaces. The lens is especially designed to **intercept 100% of the flux emitted** by the LED and control it with minimum dispersion so as to ensure **more than 90% efficiency and an efficacy of up to 154 lm/W**.

The lens is the primary optical system that collects and redirects the flux without intercepting the geometry of the cell in which it is inserted, thus avoiding a deterioration in performance in terms of quantity and quality of light emission. The small cells, in which the LED and lens are inserted, act only as screens to avoid direct viewing of the source from certain angles but do not affect the flux emitted, leaving a clean, pure light, whose characteristics are defined solely by the primary optics.

The refractive technology therefore guarantees **perfect glare-free perception with UGR up to <16**, with a level of lighting that is compliant with the regulations for office spaces.



A.39 Sharp Refractive Emission - Carlotta de Bevilacqua

**REFRACTIVE TECHNOLOGY**  
High power & performance

**Extreme Efficiency**  
more than 90%

**High Efficacy**  
up to 154 lm/W

**Extreme glare control**  
up to UGR < 16

**CRI 90**

**Good Uniformity**

Ideal for double height spaces

A.39 Sharp refractive emission - black louvres  
1184 mm - direct only  
Installation h 3200 mm - Desk h 750 mm  
Isolines (lx) on a desk 1600x800 mm  
UGR < 16

A.39 Sharp refractive emission - white louvres  
1184 mm - direct only  
Installation h 3200 mm - Desk h 750 mm  
Isolines (lx) on a desk 1600x800 mm  
UGR < 16

# Microrefractive

A cell of Refractive houses four cells of Microrefractive. This reduction in scale has led to **an improvement in efficacy to 164 lm/W** and **an enhancement in uniformity by totally eliminating the multi-shadow effect.**



A.39 Sharp Microrefractive Emission - Carlotta de Bevilacqua

**MICROREFRACTIVE TECHNOLOGY**  
High performance

**Extreme Efficiency**  
more than 90%

**Extreme Efficacy**  
up to 168 lm/W

**High Glare Control**  
up to UGR < 16

**CRI 90**

**High uniformity**  
no multi-shadows

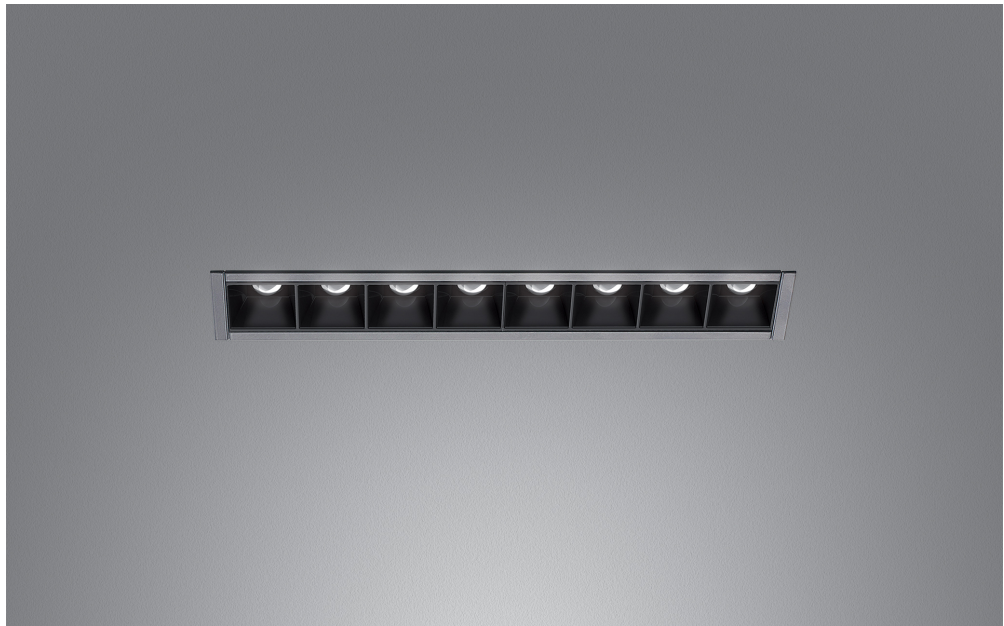
Ideal for light perception

**A.39 Sharp microrefractive emission - black louvres**  
1194 mm - direct only  
Installation h 2400 mm - Desk h 750 mm  
Isolines (lx) on a desk 1500x800 mm  
UGR < 16

**A.39 Sharp microrefractive emission - white louvres**  
1194 mm - direct only  
Installation h 2400 mm - Desk h 750 mm  
Isolines (lx) on a desk 1500x800 mm  
UGR < 16

Refractive technology is particularly suitable for environments where light perception is crucial and ideal for applications requiring a high level of visual accuracy and a high ability (CRI > 90) to correctly represent the colours of the objects it illuminates.

## Refractive Technology products



Sharp Refractive Emission - Carlotta de Bevilacqua