

LEDiL

Guide for street lighting optics

V1-0 / 2025



Why LEDiL?

The world is full of different roads and strict street lighting requirements. Add to this different LED package preferences and mechanical size limitations and possible combinations multiply exponentially. That is why LEDiL offers so many specific light distributions for road lighting to help you meet these requirements.

Whether it is a tunnel in Europe or road in Brazil, we offer solutions for virtually any LED model and type; from tiny CSPs to large COBs, while keeping the optics as future proof and modular as we can, so you can keep it simple and flexible.

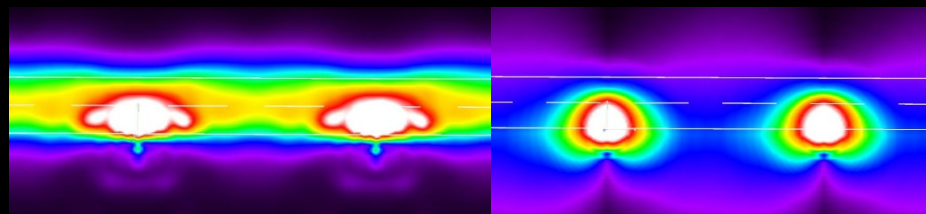
Make our optics the heart of your luminaire to **optimise cost, efficacy and light distribution with great results.**



Efficiency

With the same installation and light output LEDiL light distribution is 80 % more efficient than competitor equivalent!

- Needs fewer LEDs, lenses and heat sinks
- Uses less energy for a faster return on investment



Freedom of design

Allows easy and flexible cost and efficacy optimisation.

	5050 PLASTIC	3535 CERAMIC	3030 1W PLASTIC	3030 0.2W PLASTIC FC
50 x 50 mm				
STRADA-2X2	222 lm/W 5.4 W 205 lm/W 11.7 W	194 lm/W 6.2 W 160 lm/W 15.0 W		
STRADA-2X3	226 lm/W 5.3 W 218 lm/W 11.0 W	207 lm/W 5.8 W 182 lm/W 13.2 W		
STRADELLA-8		211 lm/W 5.7 W 194 lm/W 12.4 W	182 lm/W 6.6 W (max lumens ~1600)	
STRADELLA-16			203 lm/W 5.9 W 180 lm/W 13.3 W	228 lm/W 5.3 W (max lumens ~2200)

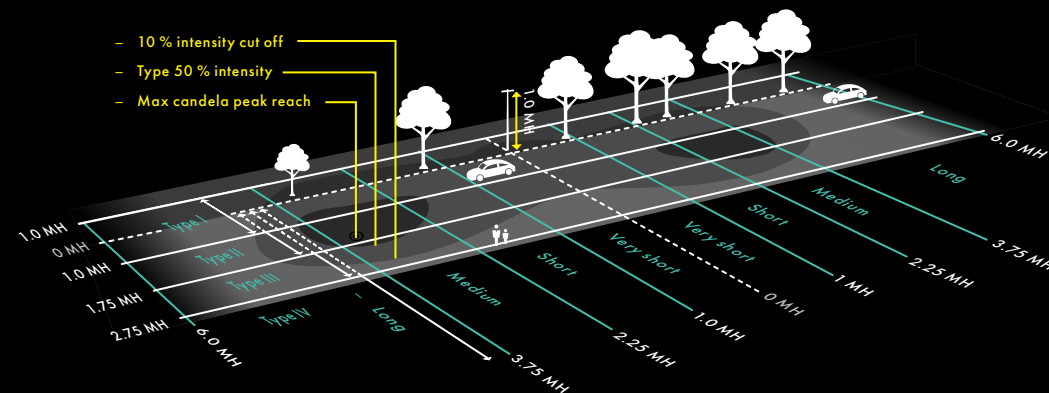
- Typical usage: ~1200 lm output
 - High density usage: ~2400 lm output
- Typical efficacy of 4000K CRI70 LED Tc 25° C, without optical or electrical losses.

Ceramic package LED
Plastic package LED



IESNA Type

IESNA Type is defined by position of highest candela intensity. IESNA Type classification is established by measuring where the bulk of the pattern falls on the grid.





PATENTED



STRADA/SPORT-IP-24

Ingress protected lens array for flat 5050 size LEDs to boost energy efficiency.

- **Industry standard redefined** – same dimensions and screw holes as the 2X6 lens family
- **High performing** – excellent beam quality built on the STRADA legacy
- **Versatile** – Extreme efficiency when under-driving or extreme output at max power

Compatibility: Flat 5050 size LED packages

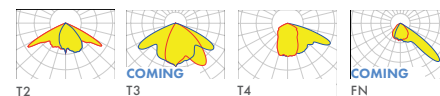
PATENT PENDING



STRADA-2X2R

Highly efficient and innovative low glare reflector design for outdoor lighting

Compatibility: Flat 5050 size LED packages



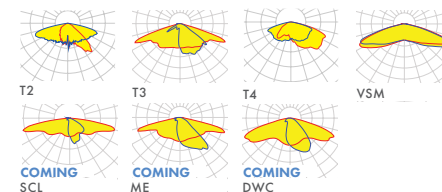
PATENTED



STRADA-2X3

50 x 50 mm lens family in 2X3 format for street and area lighting applications

Compatibility: Flat 5050 size LED packages

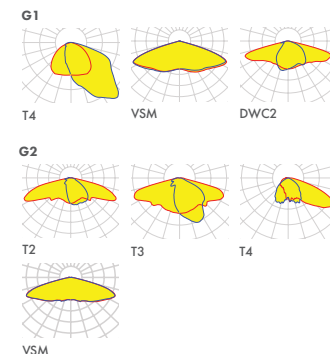


STELLA

Ø90 mm ingress protected silicone lenses.

Compatibility:

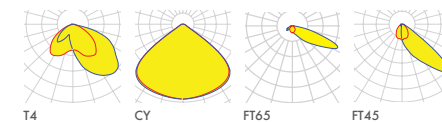
- G1: – T4 and DWC2, up to 23 mm LES size.
– VSM up to 30 mm LES size.
– Optimised for 23 mm LES size.
- G2: – Compatible with up to 30 mm LES size.
– Same footprint as with original STELLA, but with more space inside for Zhaga compliant COB connectors.
– 3rd party connectors available from B+W, BJB, TE and IDEAL.



JENNY

35 x 35 mm single lenses and 8X1 arrays made from silicone.

Compatibility: Up to 7070 size LED packages.



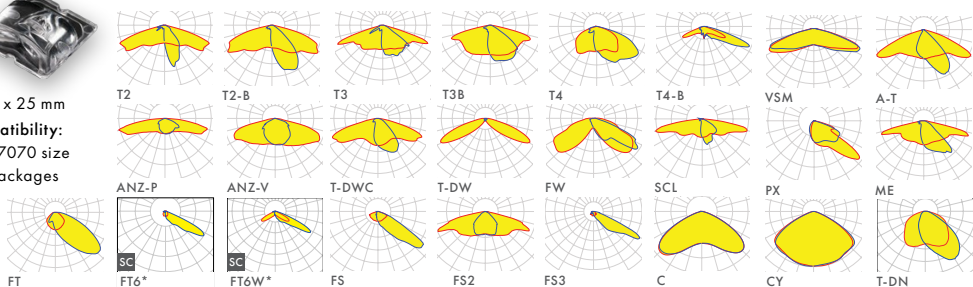
STRADA/SPORT

The most versatile modular product families especially designed for street and sports lighting.

PATENTED

SQ

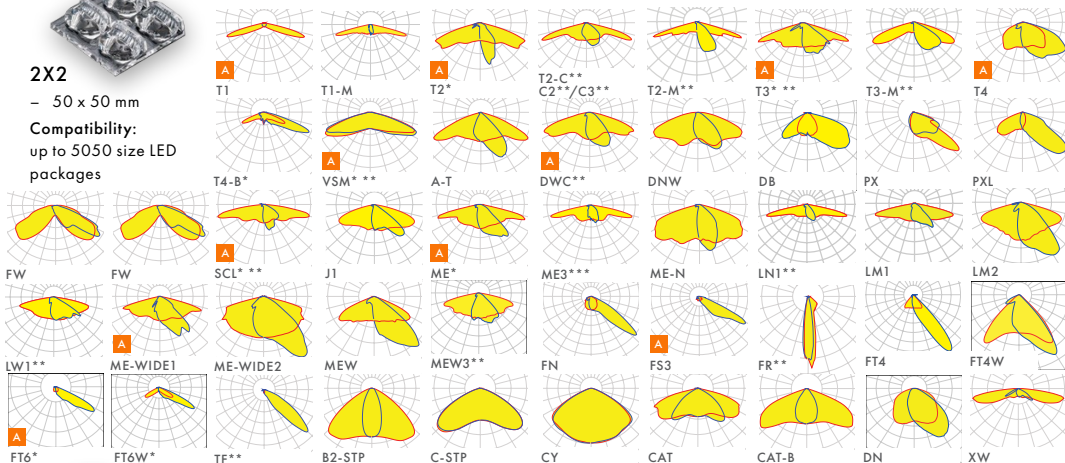
– 25 x 25 mm
Compatibility:
up to 7070 size
LED packages



*only for flat 7070 size LEDs, size: 30 x 30 mm

2X2

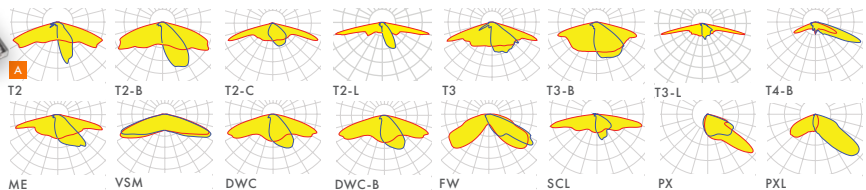
– 50 x 50 mm
Compatibility:
up to 5050 size LED
packages



* variant available for CSP LEDs ** variant available for flat 5050 size LED packages ***variant only for flat 5050 size LEDs

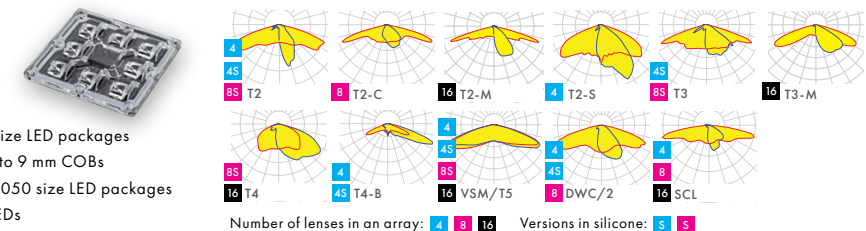
IP-2X6

– 173 x 71.4 mm
– ingress protected
Compatibility:
up to 5050 size LED packages



MX/S

– 90 x 90 mm
– ingress protected
Compatibility:
– MX: up to 7070 size LED packages
– MXS: also for up to 9 mm COBs
– 8MX/S: for flat 5050 size LED packages
– 16MX: for CSP LEDs



Number of lenses in an array: 4 8 16 Versions in silicone: S S

Compatible with SOLDER-CLIP-2 installation: SC Available in AMBER: A

STRADELLA

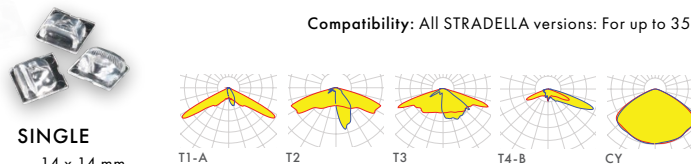
Cost-efficient product family of single lenses and dense lens arrays.

PATENTED

Compatibility: All STRADELLA versions: For up to 3535 size mid- and high-power LEDs.

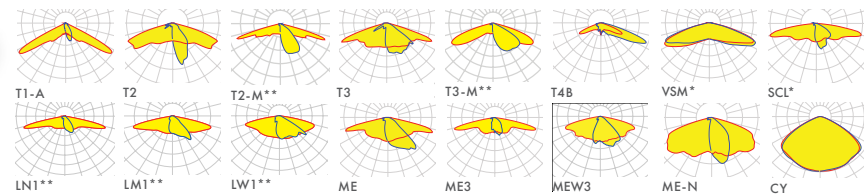
SINGLE

– 14 x 14 mm



8

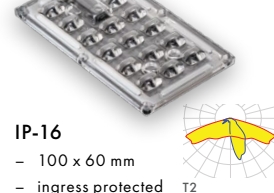
– 50 x 50 mm



* plus variant for CSP LEDs ** variant only for CSP LEDs

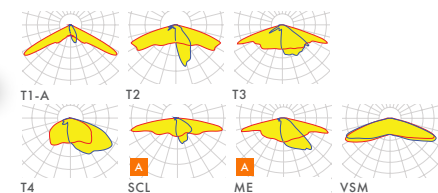
IP-16

– 100 x 60 mm
– ingress protected



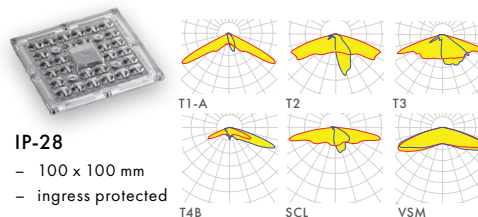
16

– 50 x 50 mm



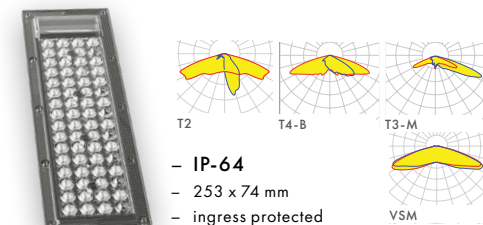
IP-28

– 100 x 100 mm
– ingress protected



IP-64

– 253 x 74 mm
– ingress protected



SITARA

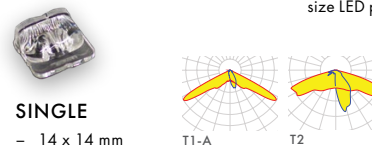
Cost-efficient product family of single lenses and 2X2 lens arrays with ingress protection.

PATENTED

Compatibility: Optimised for high-power 5050 size LED packages.

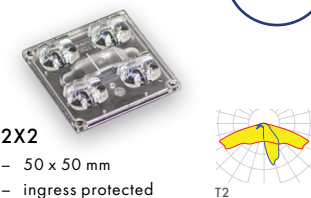
SINGLE

– 14 x 14 mm



2X2

– 50 x 50 mm
– ingress protected

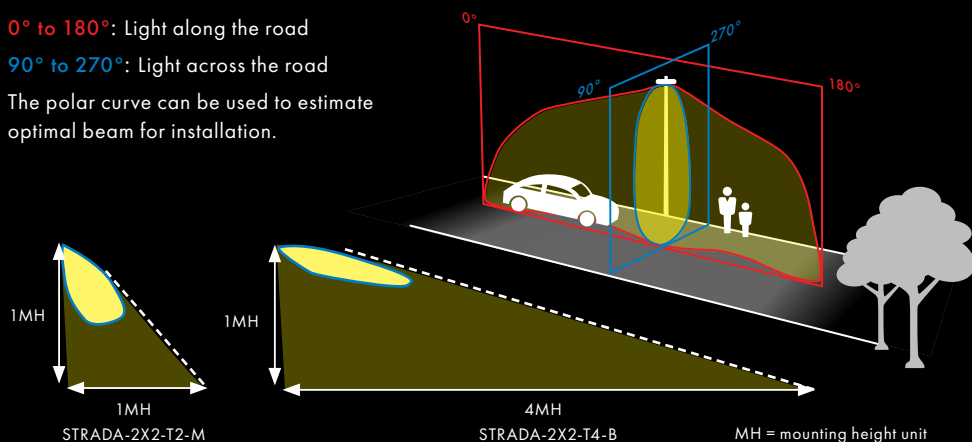


How to read polar curves

0° to 180°: Light along the road

90° to 270°: Light across the road

The polar curve can be used to estimate optimal beam for installation.



Technical support

- Simulations to show optic performance in real applications
- Guides and tips for installations
- Thermal analysis for luminaire designs

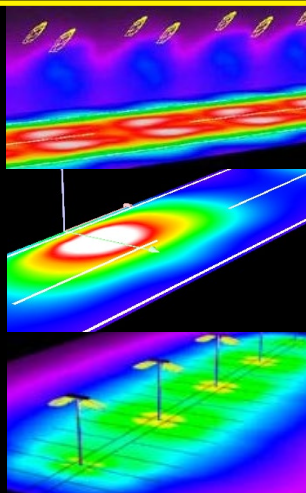
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