

LEDiL

Guide for street lighting optics

V1-0 / 2022



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.

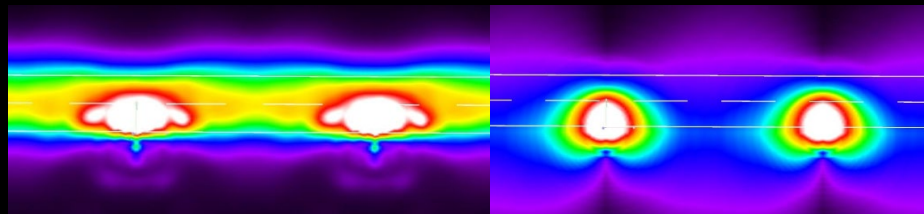
Make our optics the heart of your luminaire to **optimise cost, efficacy and light distribution with great results.**



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



LEDiL lens Average: 18 lx
Uniformity (uO): 0.58

Competitor lens Average: 10 lx
Uniformity (uO): 0.34

Freedom of design

Allows easy and flexible cost and efficacy optimization.

Typical usage

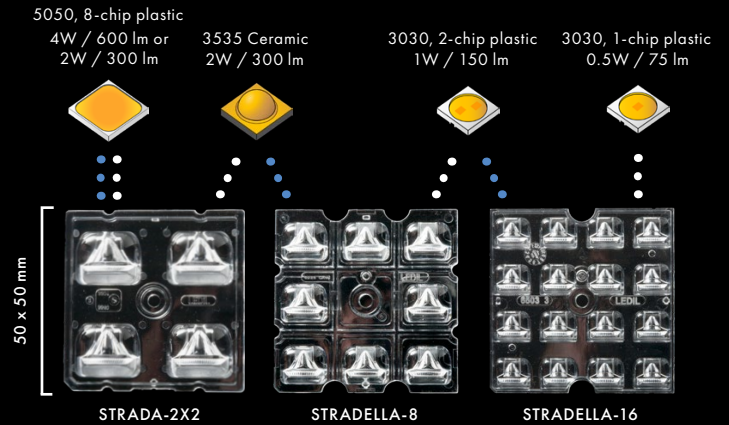
~1200 lm output @
8W / lens array

Needs typical thermal
design to remain
efficient

High density usage

~2400 lm output at
16W / lens array

Needs excellent
thermal design to
remain efficient



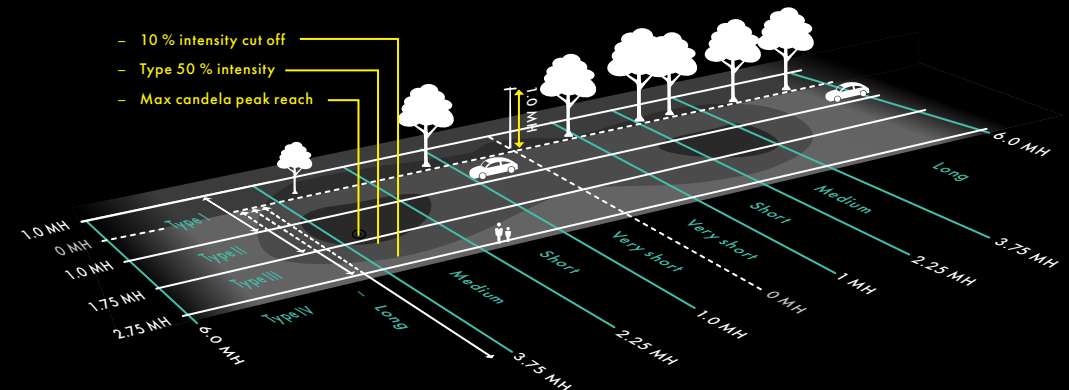
Ceramic package LED

Plastic package LED

● robustness / ● efficacy (lm/W)

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.





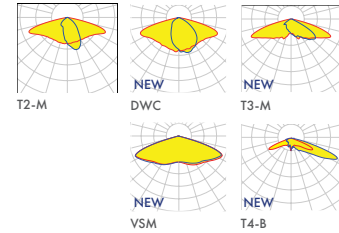
★ for luminance based road standards

STRADA-IP-24

PATENTED

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: Optimized for flat high power 5050 size LED packages such as:

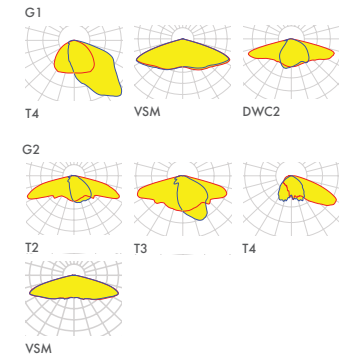
- CREE J/JR5050
- LUMILEDS LUXEON 5050 square
- NICHIA 48x series
- OSRAM DURIS S8
- OSRAM OSCONIQ S 5050
- SAMSUNG LH502C
- SEOUL DC 5050 6V

STELLA

Ø90 mm ingress protected silicone lenses.

Compatibility:

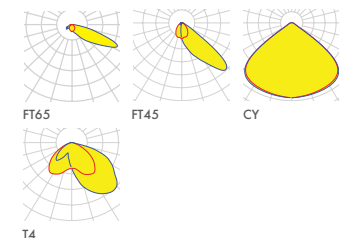
- G1:**
- T4 and DWC2, up to 23 mm LES size.
 - VSM up to 30 mm LES size.
- G2:**
- Optimized for 23 mm LES size.
 - Compatible with up to 30 mm LES size.
 - Same footprint as with original STELLA, but with more space inside for Zhaga compliant COB connectors.
 - 3rd party connectors available from: 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.



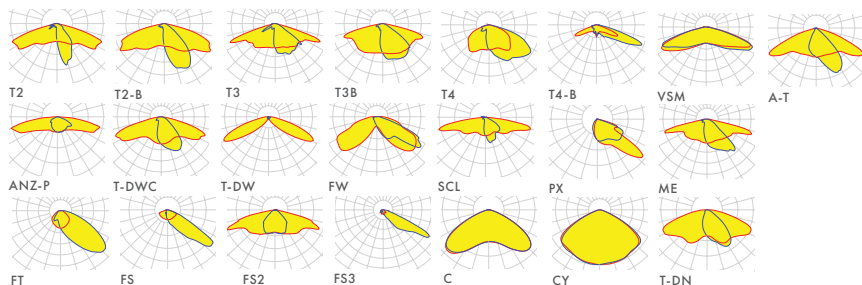
STRADA

The most versatile modular product family especially designed for street lighting.

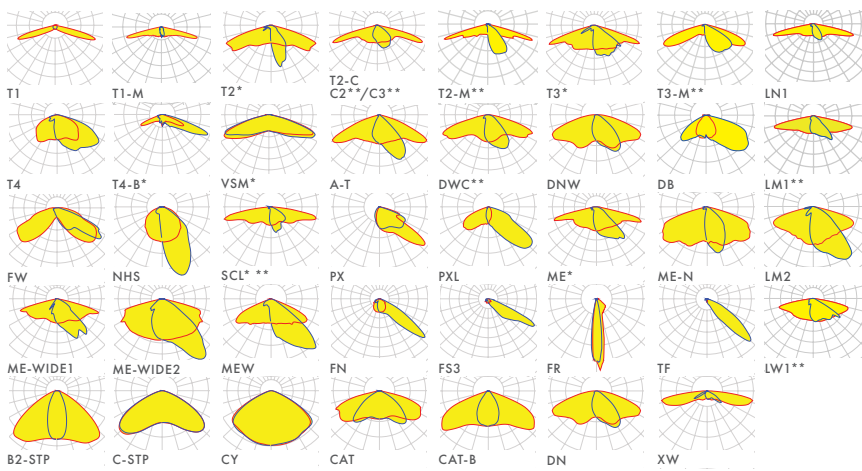
PATENTED



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



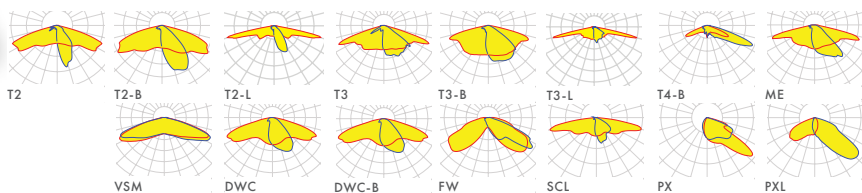
2X2
– 50 x 50 mm
Compatibility:
up to 5050 size
LED packages



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

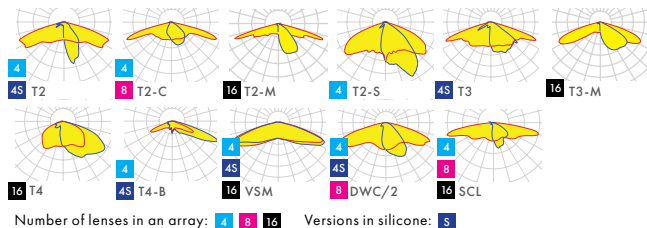


IP-2X6
– 173 x 71.4 mm
– ingress protected
Compatibility:
up to 5050 size LED packages



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: for flat 5050 size LED packages
– 16MX: for CSP LEDs



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

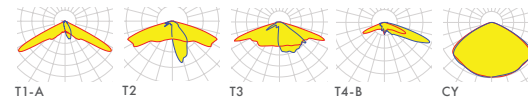
STRADELLA

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

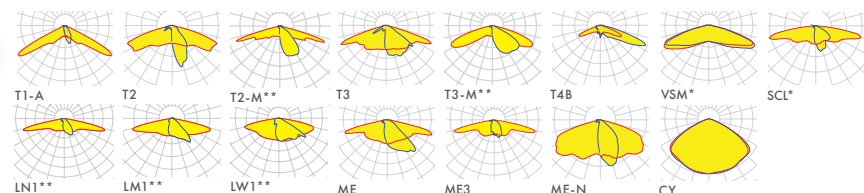
PATENTED



SINGLE
– 14 x 14 mm



8
– 50 x 50 mm



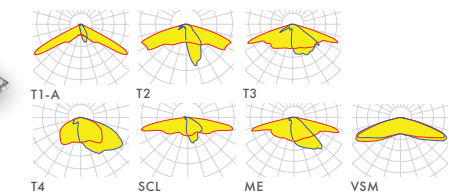
* plus variant for CSP LEDs ** variant only for CSP LEDs



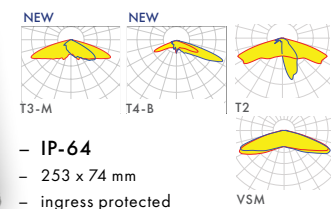
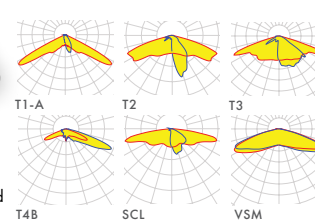
IP-16
– 100 x 60 mm
– ingress protected



16
– 50 x 50 mm



IP-28
– 100 x 100 mm
– ingress protected



NEW
– IP-64
– 253 x 74 mm
– ingress protected

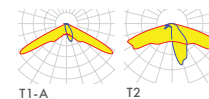
SITARA

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

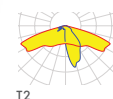
PATENTED



SINGLE
– 14 x 14 mm



2X2
– 50 x 50 mm
– ingress protected

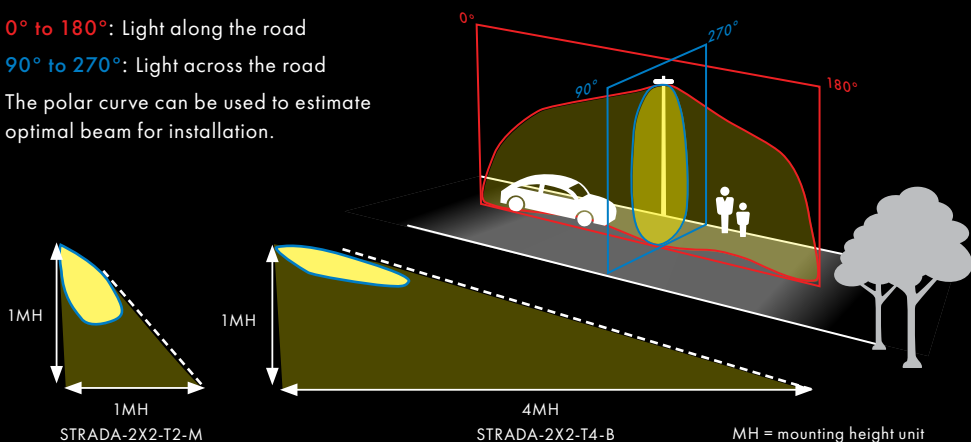


How to read polar curves

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

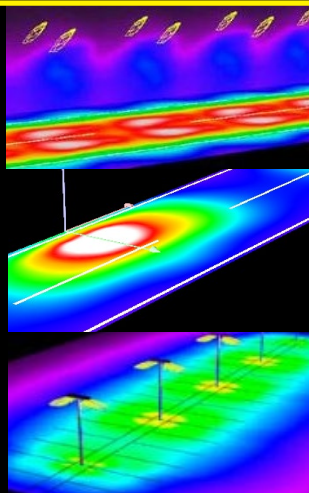
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