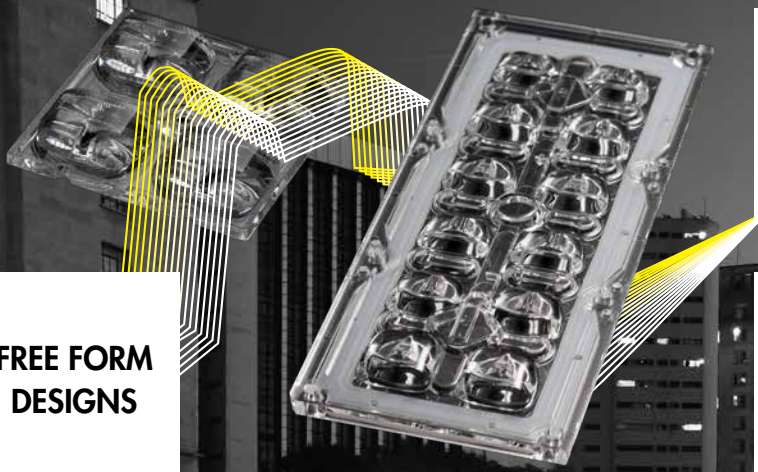
LEDiL®

GUIDE FOR STREET LIGHTING OPTICS



AROUND **50** BEAMS FOR STREETS

FREE FORM DESIGNS

EXTENSIVE CUSTOMER **SUPPORT**

HIGH QUALITY

PATENTED INNOVATIONS

GLOBAL SOLUTIONS

MODULARITY

FREEDOM OF DESIGN

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

5050, 8-chip plastic
4W / 600 lm or
2W / 300 lm

3535 Ceramic
2W / 300 lm

3030, 2-chip plastic
1W / 150 lm

3030, 1-chip plastic
0.5W / 75 lm

Ceramic package LED
Greater robustness

Plastic package LED
Lower robustness

ALLOWS EASY AND FLEXIBLE COST AND EFFICACY OPTIMIZATION

BEAMS FOR STREET LIGHTING

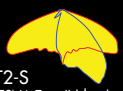
T1
IESNA Type I (medium)

T1-A
IESNA Type I (short)

T2
IESNA Type II (medium)

T2-B
IESNA Type II, minimized house side backlight

T2-C
IESNA Type II, added house side backlight



T2-S
IESNA Type II (short)

T3
IESNA Type III (medium)

T3B / T3-B
IESNA Type III (medium), minimized backlight

T4
IESNA Type IV

T4-B
IESNA Type IV, forward throw beam

VSM
IESNA Type V (square)

A-T
Short IESNA Type II

ANZ-P
Pedestrian lighting in Australia & New Zealand

ANZ-V
Vehicular road lighting in Australia & New Zealand

DWC / T-DWC
Universal road lighting (Typ. IESNA Type III Medium)

DWC2
Universal road lighting (Typ. IESNA Type III Medium)

DNW
Soft wide beam with good illuminance uniformity

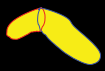
DW / T-DW
Soft wide beam with good illuminance uniformity

FW
Wide light distribution, residential streets, staggered pole setup

NHS
narrow beam, minimal house side light

SCL
Type II/III (long), ideal for pedestrian paths and residential roads

PX
Double asymm., pedestrian crossings, right side traffic



PXL
Double asymm., pedestrian crossings, left side traffic

ME
Excellent longitudinal luminance uniformity fulfilling EN13201 M-class requirements

ME-N
Designed for high poles, fulfilling EN13201 M-class requirements

ME-WIDE1
Fulfilling EN13201 M-class requirements, added house side backlight

ME-WIDE2
For staggered pole setups fulfilling EN13201 M-class requirements

MEW
Extremely low glare fulfilling EN13201 M-class requirements for wet road surfaces in North Europe

FN
Narrow forward throw beam for area lighting

FT
Forward throw beam for area lighting

FS
Forward throw beam for area lighting

FS2
For symmetrical tunnel lighting and parking carages, ideal for catenary street lighting

FS3
Forward throw beam optimized for European tunnels, extremely efficient lighting with counter-beam method

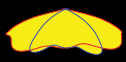
FR
Asymmetric spot light beam for floodlighting railway tracks according to Russian normative

TF
Narrow forward throw beam optimized for European tunnels

B2
For area lighting and applications demanding a wide oval beam pattern

C
For area and street lighting such as parks and pedestrian walkways

CY
For canopy lighting with batwing light distribution, suitable for symmetrical tunnel lighting



CAT
Catenary street light beam optimized for EN13201 M-classes

CAT-B
Narrow catenary street light beam optimized for EN13201 M-classes and tilted poles

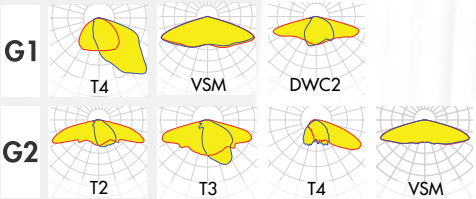
DN / T-DN
For area lighting with shorter illumination distances

XW
Wide beam

STELLA

Ø90 mm up to IP67 silicone lenses

STREET LIGHTING BEAMS AVAILABLE



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 Stucchi

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

JENNY

COMPATIBILITY

Up to 7070 size LED packages.

STREET LIGHTING BEAMS AVAILABLE

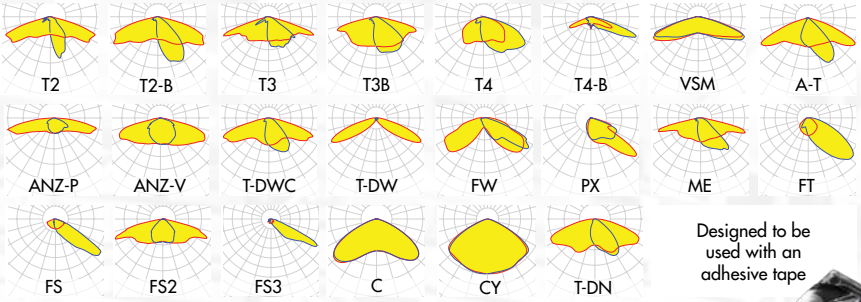
STRADA

The most versatile modular product family especially designed for street lighting

SQ

25 x 25 mm

up to 7070 size LED packets



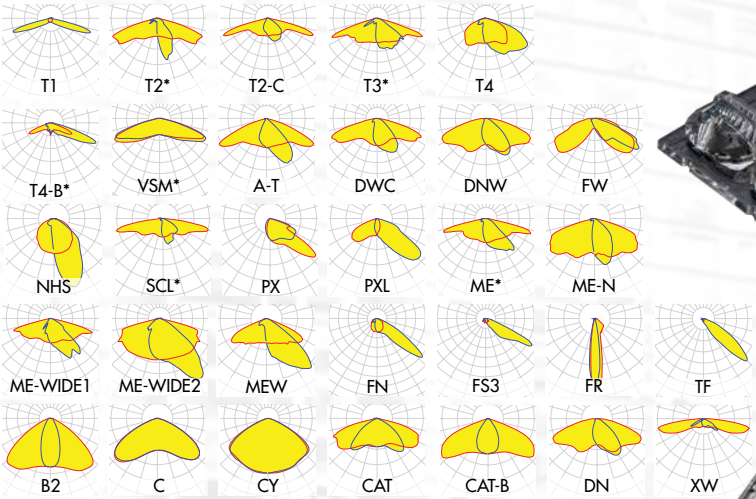
Designed to be used with an adhesive tape

2X2

50 x 50 mm

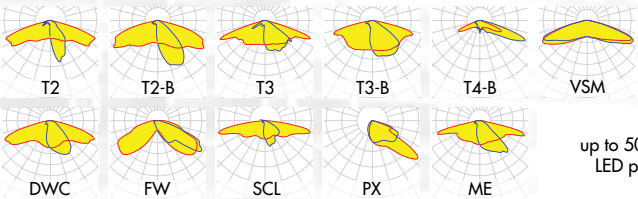
up to 5050 size LED packets

*variant available for CSP LEDs



IP-2X6

173 x 71.4 mm

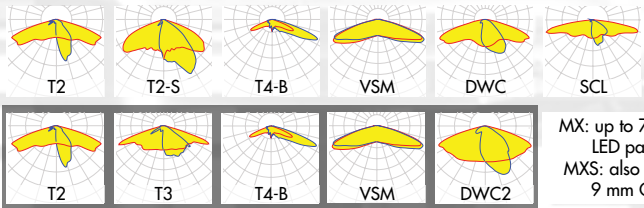


up to 5050 size LED packets

up to IP67

2X2 MX/S

90 x 90 mm



2X2MXS - silicone versions

up to IP67

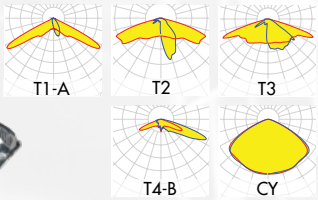
MX: up to 7070 size LED packets
MXS: also for up to 9 mm COBs

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

STRADELLA

COMPATIBILITY

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

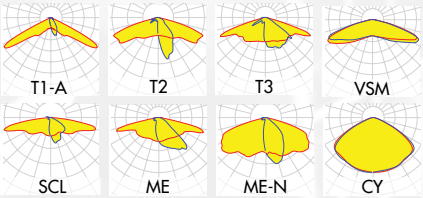


SINGLE

14 x 14 mm

STRADELLA-8-HV versions available with longer location pin distance (47.4 mm) allowing high voltage circuit designs.

Shorter location pin distance (45 mm) available from all STRADELLA-8 versions except ME-N and CY.



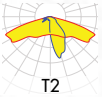
8

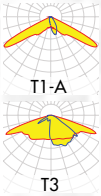
50 x 50 mm

IP-16

100 x 60 mm

up to IP67





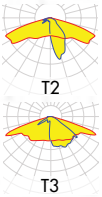
16

50 x 50 mm

IP-28

100 x 100 mm

up to IP67



THE WORLD'S NO.1 STREET LIGHTING OPTICS PROVIDER

LEDiL®

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 optimize cost, efficacy and light distribution with great results!

LIGHT THAT IS RIGHT

LEDiL®

STREET LIGHTING WITH LEDiL

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

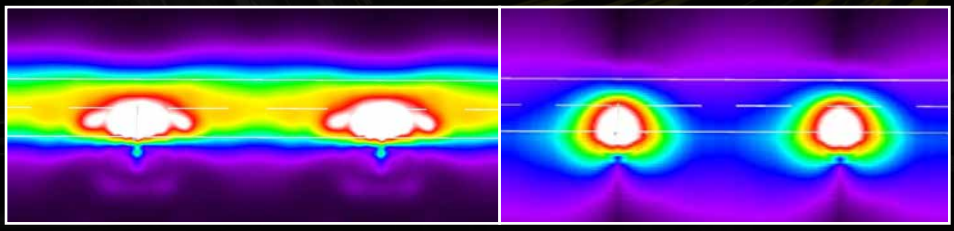
- Needs fewer LEDs, lenses and heat sinks
- Uses less energy for a faster return on investment

LEDiL lens

Average: 18 lx
Uniformity (uO): 0.58

Competitor lens

Average: 10 lx
Uniformity (uO): 0.34

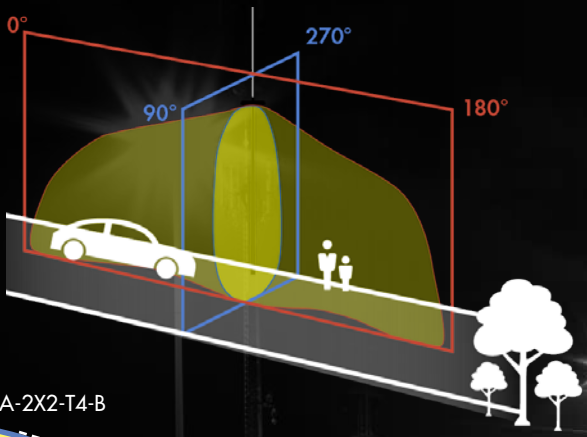


HOW TO READ POLAR CURVES

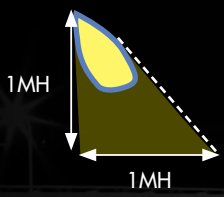
0° to 180° (red):
Light along the road

90° to 270°(blue):
Light across the road

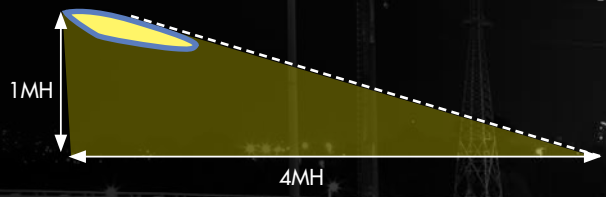
The polar curve can be used to estimate optimal beam for installation



STRADA-2X2-T2-M



STRADA-2X2-T4-B



MH = Mounting height unit

TECHNICAL SUPPORT

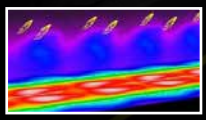
Simulations to show optic performance in real applications

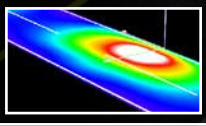
Guides and tips for installations

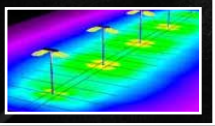
Thermal analysis for luminaire designs

Free for all our customers

tech.support@ledil.com (GLOBAL)
tech.support.us@ledil.com (NORTH AMERICA)
tech.support.rus@ledil.com (RUSSIA)







LEDiL®

Ledil Oy
Joensuunkatu 13
24100 SALO
FINLAND

Ledil, Inc.
228 West Page Street Suite D
Sycamore IL 60178
USA

www.ledil.com