# LEDIL

**GUIDE FOR STREET LIGHTING OPTICS** 





**AROUND** 50 **BEAMS FOR STREETS** 

**EXTENSIVE CUSTOMER** SUPPORT

HIGH | **QUALIT** 

ATENTED INNOVATION LOBAL MODULARITY SOLUTIONS

### FREEDOM OF DESIGN

~1200 lm output @ 8W / lens array Needs typical thermal design to remain efficient

4W / 600 lm or 2W / 300 lm

~2400 lm output at 16W / lens array

50 x 50 mm







Ceramic package LED Greater robustness

System cost PEfficacy (Im/W)

ALLOWS EASY AND FLEXIBLE COST AND EFFICACY OPTIMIZATION

#### 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.

#### IVIAKE our optics the heart of LIGHT

your luminaire to optimize cost, THAT IS efficacy and light distribution with great results!

**RIGHT** 

LEDiL

# FREEDOM OF DESIGN STREET LIGHTING WITH LEDIC

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

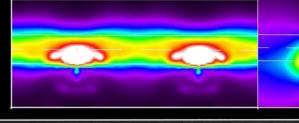
Average: 18 lx

Uniformity (uO): 0.58

Competitor lens

Average: 10 lx

Uniformity (uO): 0.34





## BEAMS FOR STREET LIGHTING



T1-A T2
IESNA Type I (short) IESNA Type II



IESNA Type II, minimized house side house side backlight



IESNA Type II, added IESNA Type II (short)



T1 IESNA Type I

(medium)

IESNA Type III IESNA Type III (medium) (medium), minimized



IESNA Type IV

IESNA Type IV, for-





IESNA Type V (square) Short IESNA Type II



ANZ-P

ANZ-V

Vehicular road lighting

in Australia & New

T4

DWC / T-DWC

Universal road lighting

(Typ. IESNA Type III

DWC2

Universal road lighting

(Typ. IESNA Type III

Medium)



Soft wide beam with

good illuminance



DW / T-DW Soft wide beam with good illuminance



Wide light distribu-

staggered pole setup

Pedestrian lighting

in Australia & New

Zealand

tion, residential streets, house side light

NHS narrow beam, minimal



PX Type II/III (long), ideal Double asymm., for pedestrian paths



DNW







uniformity





pedestrian crossings, and residential roads right side traffic







ME-N











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



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

Forward throw beam opti-

extremely efficient lighting

with counter-beam method





Forward throw beam for



Forward throw beam for

requirements



For symmetrical tunnel

carages, ideal for catenary

lighting and parking







Asymmetric spot light beam mized for European tunnels, for floodlighting railway tracks according to Russian



Narrow forward throw beam



FS

For area lighting and applications demanding a



FS2

For area and street lighting For canopy lighting with such as parks and pedestrian batwing light distribution, tunnel lighting



Catenary street light beam optimized for EN13201



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



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







**STRADA** 

up to

7070 size LED packets

up to

5050

size LED

LEDs

2X2 MX/S

90 x 90

X2MXS - silicone versions

The most versatile modular product family especially designed for street lighting

> MX: up to 7070 size LED packets MXS: also for up to

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

STRADELLA



THE WORLD'S NO.1 STREET LIGHTING OPTICS PROVIDER



#### HOW TO READ POLAR CURVES 0° to 180° (red): 270° Light along the road 90° to 270°(blue): Light across the road The polar curve can used to estimate optimal beam for installation STRADA-2X2-T2-M STRADA-2X2-T4-B 1MH Viounting height unit TECHNICAL SUPPORT **LEDil**<sup>®</sup> Simulations to show optic performance in real applications Ledil Oy Joensuunkatu 13 24100 SALO Guides and tips for installations **FINLAND** Ledil, Inc. 228 West Page Street Suite D Thermal analysis for luminaire designs Sycamore IL 60178 USA Free for all our customers www.ledil.com The information contained herein is the property of LEDiL Oy, Joensuunkatu 13, FI-24100 SALO, tech.support@ledil.com (GLOBAL) Finland, and is subject to change tech.support.us@ledil.com (NORTH AMERICA) withoutprior notice. Please visit www.ledil.com for additional tech.support.rus@ledil.com (RUSSIA) information, such as the latest photometric files, 3D mechanical models, and application notes relating to handling, gluing and taping. All LEDiL products are IPR protected