LEDiL

From Light to Lighting
Q2/2016 Innovations from LEDiL

www.ledil.com

LEDiL

® LEDiL

LEDiL's new solderless connectors

YES! Finally connectors and optics from the same manufacturer

KONNTAKT

What makes you want it?

- Compatibility NOW and in the future with most of our lenses and reflectors
- Multiple dimensions and Zhaga mounting holes
- At VERY attractive price

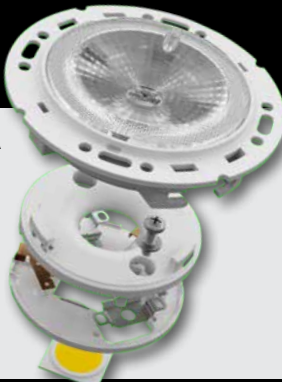Make your connections more versatile, robust and future proof

Technical details

- Robust design allows the product to be used in presence of vibrations and even in high temperature conditions
- LEDiL "snap in" feature simplifies the installation and makes alignment of the LED easy
- Zhaga 35mm and 45mm mounting holes available and the same "twist and lock" features as LEDiL other holder system
- Industrial standard integrated poke-in wire terminals and very low profile design

VESUVIUS (D=50mm)

- Metal holding clips that ensure excellent thermal control and pressure against bigger COBs
- Compatible with various lenses and reflectors from LEDiL (ANGELETTE, ANGELA, ANGELINA, RONDA)
- Two socket versions compatible with a range of LEDs from various manufacturers
- Shares the same mounting interface as Ideal, TYCO, Stucchi etc.

HEKLA (D=44mm)

- Innovative LEDiL Push-In accessories allows you to decide whether you want to solder the LEDs or not
- Push-In accessories are easily adaptable to most existing LEDIL holder systems
- Compatible with smaller size lenses and reflectors like LEDiL´s BROOKE- and WINNIE-families
- Minimalistic design with great flexibility

LED Compatibility

KA15411_VESUVIUS-A

CLU03x/CLU03x
ZC-12/18
SLE G5/LES J5
CXM-14 (AC00)

Version B

CXA18

And more is coming...

LED Compatibility

KN15490_KONNTAKT-HEKLA-A-V8
BXR V6/8

KN15503_KONNTAKT-HEKLA-A-V13
BXR V10/13

KN15502_KONNTAKT-HEKLA-A-CXA1520
CXA/B1520

KN15500_KONNTAKT-HEKLA-A-CXA1850
CXA/B1850

KN15501_KONNTAKT-HEKLA-A-CLL020

CLL02x/CLU02x/	LC003B/LC008B
CLU700	ZC-4/ZC-6
CXA/B1310	SLE-G5 LES6/SLE-G5
CXM-9 (AC00)	LES11
Soleriq S9	

And more is coming...

LEDiL recommends the use of M3 washers with all solderless connectors to improve reliability and LED lifetime.

Available in Q2

FWHM angles, efficiencies and cd/lm values contained herein are typical values. Actual measured values depend of the specific LED/optic combination. Go to www.ledil.com for LED specific values and optical datasheets.
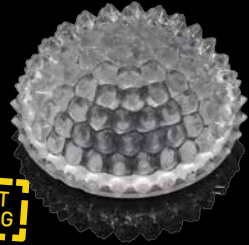
See full family listing
and ordering codes at
www.ledil.com/zorya

~360° silicone optic for retrofits
ZORYA

- Omnidirectional lens fulfilling Energy Star standards
- Easy ingress protection due to silicone technology
- Twist and lock holder system allows the lens
  to be used with solderless connectors
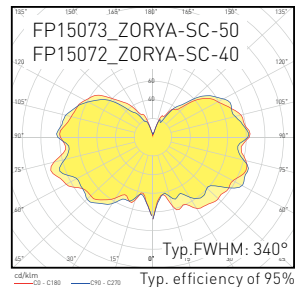
PATENT PENDING

FEATURES & BENEFITS
- High efficiency (95%) with excellent UV,
  heat, and impact resistance
- Flexible design with 2 dimensions available – 50 and 22mm
- Can be used as it is, or with external protective cover
- RGB and tunable white support
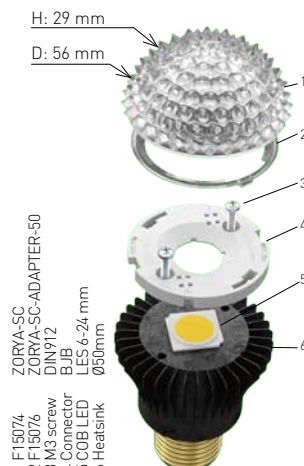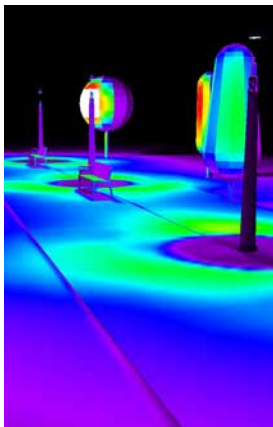- Flexible design – lens can be scaled and holder modified

COMPATIBILITY
- LES sizes from 6 mm to 24 mm
- Stucchi, BJB and Tyco solderless connectors
- 40 and 50 mm LEDiL adapters

TYPICAL APPLICATIONS
- Retrofit
- Walkway lighting
- Industrial lighting
- Garden lights

FP15073_ZORYA-SC-50
FP15072_ZORYA-SC-40

Typ. FWHM: 340°

cd/klm —— C0 - C180 ——C90 - C270   Typ. efficiency of 95%

Without optics

With ZORYA

H: 29 mm
D: 56 mm

1.
2.
3.
4.
5.
6.

ZORYA-SC
ZORYA-SC-ADAPTER-50
DIN912
BJB
LES 6-24 mm
Ø50mm

1 F15074
2 F15076
3 M3 screw
4 Connector
5 COB LED
6 Heatsink

LED Compatibility

LED Compatibility
BXRAES R, V10, V13
CLL02x CLL03x, CLL04x, CLU700, CLU710, CLU720, CLU730
CXA/B 13xx CXA/B 15xx CXA/B 1816 CXA/B 25xx CXA/B 30xx
LXCoB 105/107/109 LXCoB 1204/1205 LXCoB 1211
Soleriq P6 Soleriq P9 Soleriq S13 Soleriq S13 Gen2 Soleriq S19
LC013B, LC019B
ZC12/18, ZC25/40 ZC4/6
Mega Zenigata Mini Zenigata
SLE G4 LES10 SLE G5 LES15
DMC 122, DMC 125 DMC 128

Available in Q2

The information contained herein is the property of LEDiL Oy, Salorankatu 10, FI-24240 SALO, Finland, and is subject to change without prior notice. Please visit www.ledil.com for additional information, such as the latest photometric files, 3D mechanical models, and application notes relating to handling, gluing and taping.

LEDiL®

70mm COB optic with 10° beam and no halo

CARMEN

- Patent pending hybrid lens family with 10° ultra narrow beam
- Higher performance compared to similar metallized reflector designs in the market
- Dust- and TouchProof design
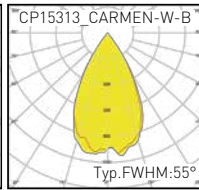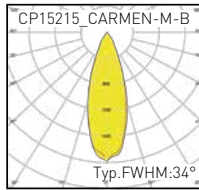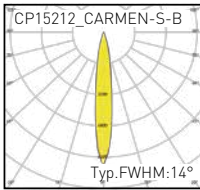
PATENT PENDING

FEATURES & BENEFITS

- No halos or light spilling resulting in a higher intensity and less glare
- Standard retail and track lighting beams available
- Comes with a black reflector, especially optimized for low UGR applications

COMPATIBILITY

- LES sizes up to 14 mm
- LEDiL recommends spot version to be used with 6mm LES (=18000cd)
- Holder options for BJB and Stucchi solderless connectors

TYPICAL APPLICATIONS

- Track lighting
- Retail and supermarkets
- Industrial lighting
- Outdoor architectural
- General indoor lighting

Assembly example

H: 36 mm

D: 70 mm

CP15212_CARMEN-S-B	CP15215_CARMEN-M-B	CP15313_CARMEN-W-B
Typ.FWHM:14°	Typ.FWHM:34°	Typ.FWHM:55°

LED Compatibility

V10, V13
CLL01x, CLL02x
CLL700
CXA/B 13xx
CXA/B 15xx
LXCoB 105/107/109
Mini Zenigata
SLE G4 LES10

DESIGN EXAMPLE

Ultra narrow beam available

Available in Q2

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See full family listing
and ordering codes at
www.ledil.com/ronda

70mm, recessed system for all architectural lighting needs

RONDA

- Asymmetric and double asymmetric wall washing beams meeting even strictest vertical illuminance requirements
- No shadows, uniform light up to the ceiling level without any tilting of the fixture needed
- Wide customization possibilities (front panel, assembly depth, light pattern)

PATENT PENDING

FEATURES & BENEFITS
- Various light distributions available with smooth cut-off
- Low profile design for shallow depth installations
- Typical installation ratio 1:3 with asymmetric beams
- Accessories available by request (black shade available for double asymmetric version)
- ZT45-version for corridors, aisles and vertical surface illumination

COMPATIBILITY
- LES sizes up to ~16 mm
- Two holder versions to support most common connectors
  Holder A: LEDiL, TE, BENDER+WIRTH and other twist and lock socket types
  Holder B: different connectors from BJB and Stucchi

TYPICAL APPLICATIONS
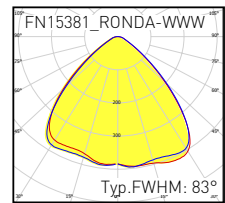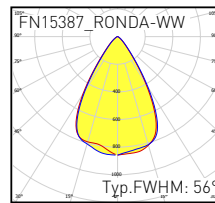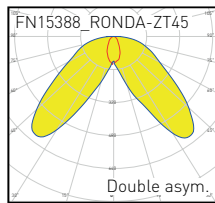- Office lighting
- Architectural lighting
- Downlights
- Museums
- Shops
- Hotels

MOUNTING OPTIONS
- Screws
- Glue

Faceplate examples

LED Compatibility
V10,VERO13
CLL02x
CLU700,CLU710
CXA/B 13xx
CXA/B 15xx
CXA/B 1816
CXA/B 1830
LX CoB 1202/1203
LX CoB 1202s
NSBxL066A/NFCxL036B
NSBxL110
NSCxL036A
Duris S10
Soleriq S13
Soleriq S9
Mini Zenigata

D: 70 mm

Design example

FN15380_RONDA-WAS	FN15388_RONDA-ZT45	FN15387_RONDA-WW	FN15381_RONDA-WWW
Asymmetric.	Double asym.	Typ.FWHM: 56°	Typ.FWHM: 83°
Typ. efficiency of 95%	Typ. efficiency of 85%	Typ.efficiency of 87%	Typ.efficiency of 85%

Available now

LEDiL®

Anti-glare Optics with <19 UGR

FLORENTINA family

- Hybrid design of a black reflector and lenses designed for high visual comfort applications
- Higher intensity and less spill light compared to metallized reflectors
- Various mounting options and beam angles available

FEATURES & BENEFITS
- Single lens, 4x1, 2x2 and 12x1 configurations available
- Beams available from 10° to 60°, also asymmetric and double asymmetric
- Standard LEDiL faceplates in black or white and possibility to make your own faceplate
- Versions available with +-30 degrees adjustable rotation mechanism
- Mounting with steel springs or screws to ceiling or to aluminum profile with LEDiL clips

COMPATIBILITY
- LEDiL standard ROSE (up to 5050) lenses available for FLORENTINA 4x1 and 2x2 versions
- LEDiL standard TINA/TINA2 (up to 3535) lenses available for FLORENTINA 12x1

TYPICAL APPLICATIONS
- Office lighting
- Retail lighting
- Downlight applications
- Track lighting
- Indoor architectural lighting

MOUNTING OPTIONS
- Can be installed into an aluminium profile
- Screws (M3,M4 and PT)
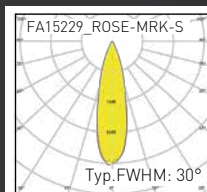- Press fit pins
- Springs
- Clips
- Glue

LED Compatibility FLORENTINA-12x1		
XHP35 HD, XM-L, XP-E2, XP-G, XP-G2, XP-L, XQ-E, XQ-E HI	LX MZ, LX Rebel ES, LX Rebel Plus, LX TX, LX Z ES	Duris S8, Oslon Square EC, Oslon SSL 80
LH351B	NCSxx19B, NVSxx19B/NVSxx19C	H35C1 (LEMWA33)
TL1L4		

LED Compatibility FLORENTINA-1, -2X2, -4X1		
XHP35 HD, XP-G2, XP-L	NVSxx19B/, NVSxx19C	Oslon Square EC, LX MZ, LXTX

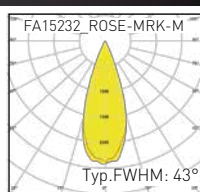## ROSE-MRK – Quality lighting for bigger LEDs

COMPATIBILITY
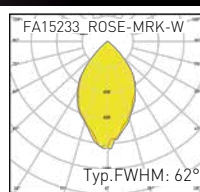- Super high-power multi-crystal LEDs up to 7070 packages

TYPICAL APPLICATIONS
- Indoor lighting
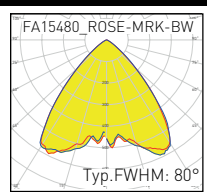- General lighting
- Spot lights
- Up- and downlights

D: 21,6 mm
H: 11,8 mm

LED Compatibility
MK-R
XHP50
LXM

| FA15229_ROSE-MRK-S	FA15232_ROSE-MRK-M	FA15233_ROSE-MRK-W	FA15480_ROSE-MRK-BW
Typ.FWHM: 30°	Typ.FWHM: 43°	Typ.FWHM: 62°	Typ.FWHM: 80°
Typ. efficiency of 80%	Typ. efficiency of 84%	Typ. efficiency of 84%	Typ. efficiency of 87%

Available now

FWHM angles, efficiencies and cd/lm values contained herein are typical values. Actual measured values depend of the specific LED/optic combination. Go to www.ledil.com for LED specific values and optical datasheets.

See full family listing
and ordering codes at
www.ledil.com/florentina-family

FLORENTINA for ROSE-CMC and -MRK lenses
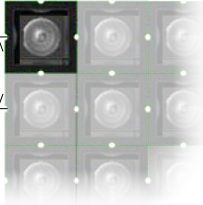
FLORENTINA-1
C15426_FLORENTINA-1-HLD
C15427_FLORENTINA-1-SHD-60
ROSE lens

40mm

MAKE
IT
YOURS

FLORENTINA-2X2
C14735_FLORENTINA-2X2-HLD
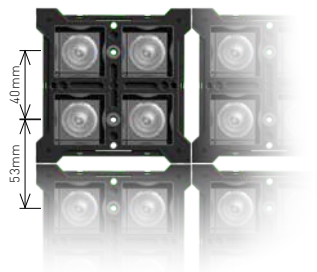C14734_FLORENTINA-2X2-SHD
C14960_FLORENTINA-2X2-SHD-WHT
4 x ROSE lens

FLORENTINA-2X2-UV
C14735_FLORENTINA-2X2-HLD
C15030_FLORENTINA-2X2-SHD-UV
4 x ROSE lens

FLORENTINA-2X2-OPEN
C14735_FLORENTINA-2X2-HLD
C15196_FLORENTINA-2X2-SHD-OPEN
4 x ROSE lens

40mm
53mm

FLORENTINA-4X1
C15029_FLORENTINA-4X1-HLD
C15028_FLORENTINA-4X1-SHD
4 x ROSE lens

FLORENTINA-4X1-UV
C15029_FLORENTINA-4X1-HLD
C15031_FLORENTINA-4X1-SHD-UV
4 x ROSE lens

FLORENTINA-4X1-OPEN
C15029_FLORENTINA-4X1-HLD
C15198_FLORENTINA-4X1-SHD-OPEN
4 x ROSE lens

53mm

FLORENTINA for TINA/TINA2 lenses

FLORENTINA 12x1

C14465_FLORENTINA-HLD
C16446_FLORENTINA-SHD
12 x TINA lens

C14353_FLORENCE-1R-CLIP-A

C14409_FLORENCE-1R-CLIP-B

C14751_FLORENCE-1R-CLIP-C

Available in Q2

See full family listing
and ordering codes at
www.ledil.com/lucia

See full family listing
and ordering codes at
www.ledil.com/stellafamily

10 degree beam with 5050 packages

LUCIA family (90x90mm)

- 4-up lens module with specially tilted lenses
- Precise "blade" type beam ideal for the illumination of large buildings, objects and pillars
- LUCIA can be also used in surgical- and sports lighting applications thanks to its very good cut off
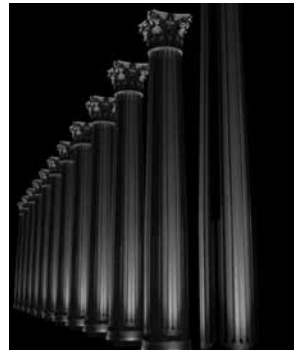
H: 34,7 mm

D: 89,8 mm
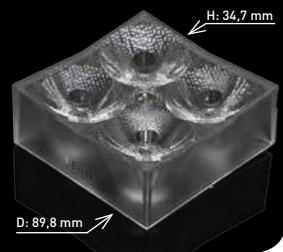
FEATURES & BENEFITS
- Glare-free and powerful light from very compact source
- Specifically optimised for visually demanding tasks
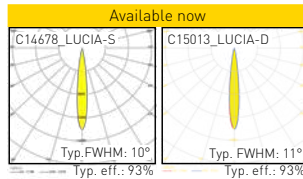- Easy mounting with 1 screw

COMPATIBILITY
- Up to 7070 size LED packages

TYPICAL APPLICATIONS
- Outdoor up-/downlighting
- Architectural lighting
- Surgery light
- Flood light
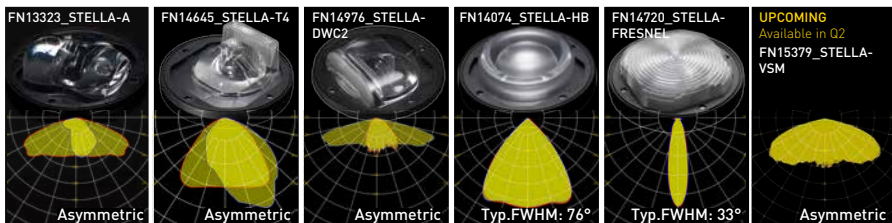- High-speed camera lighting

LED Compatibility		Duris P10
XHP35 HI, XHP50	XP-E2, XP-G2	LX M, LX MZ
XHP70, XM-L RGB	XP-L	LX Z RGB

Available now

C14678_LUCIA-S	C15013_LUCIA-D
Typ. FWHM: 10°	Typ. FWHM: 11°
Typ. eff.: 93%	Typ. eff.: 93%

COB street and high bay lighting

STELLA silicone lens family (D=90mm)

FN13323_STELLA-A	FN14645_STELLA-T4	FN14976_STELLA-DWC2	FN14074_STELLA-HB	FN14720_STELLA-FRESNEL	UPCOMING Available in Q2 FN15379_STELLA-VSM
Asymmetric	Asymmetric	Asymmetric	Typ.FWHM: 76°	Typ.FWHM: 33°	Asymmetric

FEATURES & BENEFITS
- Various beam angles available
- Self-sealing IP67 rated products with excellent thermal, UV, and impact resistance
- Highly performing silicone lenses with no house-side peaks

COMPATIBILITY
- Up to 23mm LES sizes

TYPICAL APPLICATIONS
- Street lighting (ME1 & Type III)
- High Bay (40, 60, 90, 140)
- Canopy and forward throw available

Available now   LED Compatibility: Check www.ledil.com/stellafamily

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See full family listing
and ordering codes at
www.ledil.com/2x2mx

See full family listing
and ordering codes at
www.ledil.com/2x2s

Silicone molded 2x2 lenses for high temperature applications

STRADA-2X2MXS (7070 packages)

2X2mx™

FEATURES & BENEFITS
- Part of LEDiL standard (90x90mm) 2X2MX platform now in silicone
- High UV, thermal and impact resistance
- Completely sealed structure with 8 screws for IP67

COMPATIBILITY
- Up to 7070 size LED packages
- A range of 2X2MX compliant heatsinks and PCBs available from selected ecosystem partners

TYPICAL APPLICATIONS
- Both indoor and outdoor applications
- Halls, arenas, roads, pathways etc.
- Applications with high lumen outputs

H: 14 mm

D: 90x90 mm

FN14825_STRADA-2X2MXS-DWC2

Asymmetric

cd/klm   Typ. efficiency of 92%
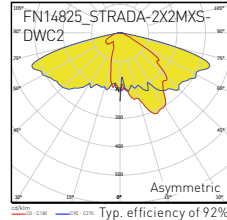
LED Compatibility XHP70 LXM

Available now

## STRADA-2X2S (5050 packages)

FEATURES & BENEFITS
- LEDiL standard (50x50mm) STRADA-2X2 footprint in silicone
- High UV, thermal and impact resistance
- Fastening with one M3 screw

COMPATIBILITY
- Optimized for a range of 3535 high power and compatible up to 5050 LED packages

TYPICAL APPLICATIONS
- Street lighting
- Outdoor area lighting
- Pathway lighting

H: 7,2 mm

D: 50x50 mm

FN15180_STRADA-2X2S-T3

Asymmetric

cd/klm   Typ. efficiency of 88%
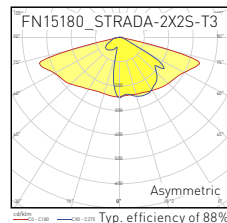
FN15180_STRADA-2X2S-T3
- Smooth uniform rectangular beam
- IESNA Type 3 light distribution and universal solution for general ME classes
- Installation up to 1:5 pole ratio

LED Compatibility		
XB-D, XHP35 HD	XP-L HI, XQ-E HI	NVSxx19B/NVSxx19C
XHP35 HI	XT-E, XT-E HVW	Duris S8
XP-G2, XP-L	LXMZ, LX TX	Oslon Square PC

Available in Q2

See full family listing
and ordering codes at
www.ledil.com/stradellafamily

LEDiL®

Mid power street lighting
STRADELLA-8UP

STRADA's little sister – Compact STRADELLA lens doubles the density of LEDs compared to standardized STRADA-2X2 lenses, making it a cost efficient and feasible solution for mid-power LEDs.
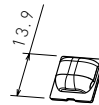
FEATURES & BENEFITS
- The same dimensions and mounting hole as STRADA-2X2 family, but with 8 lenses in one
- Standard street lighting and high bay beams available
- Single lens available with the same beam angles

COMPATIBILITY
- STRADELLA-8UP: 3030 & 3535 size packages

TYPICAL APPLICATIONS
- Street lighting (ME, T2 & T3)
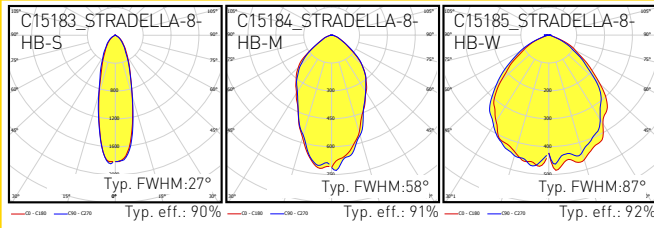- High bay lighting (30, 60, 90)
- Flood lighting

13,9

50

Single lens
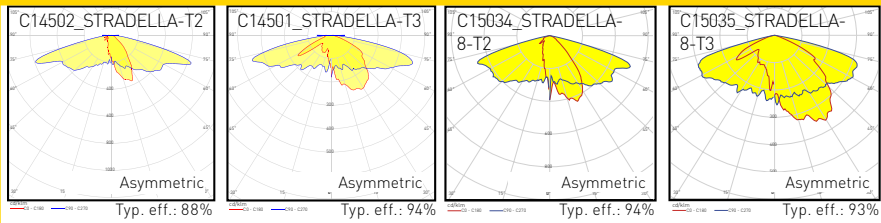For high-power LEDs
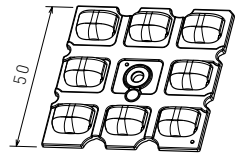
8-up module
For high-/mid-power LEDs

Available in Q2		
C15183_STRADELLA-8-HB-S	C15184_STRADELLA-8-HB-M	C15185_STRADELLA-8-HB-W
Typ. FWHM:27°	Typ. FWHM:58°	Typ. FWHM:87°
Typ. eff.: 90%	Typ. eff.: 91%	Typ. eff.: 92%

LED Compatibility

XP-G2
XT-E
LX 3030 2D
LX 3535 2D
LX FlipChip
LXFlipChip White 10
NF2x75/D
NVSxx19B/NVSxx19C
Dura S5 (2 chip)
Oslon Square EC
Oslon Square Gen3
Z8Y15, Z8Y19

Available now			
C14502_STRADELLA-T2	C14501_STRADELLA-T3	C15034_STRADELLA-8-T2	C15035_STRADELLA-8-T3
Asymmetric	Asymmetric	Asymmetric	Asymmetric
Typ. eff.: 88%	Typ. eff.: 94%	Typ. eff.: 94%	Typ. eff.: 93%

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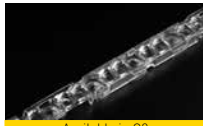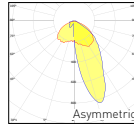
And many more!

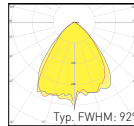# Standard LEDiL range of optics expanded

FLORENCE-ZT25-S
Asymmetric wall washing beam available for Florence-3R product family

Available in Q2
D: 286 x 61 mm H: 11,4 mm

Asymmetric

FLORENCE-1R–GC
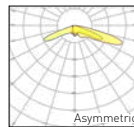Minimum glare and optimized LED layout for high-end office lighting

Available in Q2
D: 282 x 19 mm H: 6,9 mm

Typ. FWHM: 92°

FLORENCE-O
Elliptical beam now available for high racking applications and corridors

Available now
D: 286 x 61 mm H: 8,45 mm

Typ. FWHM: 90+37°

STRADA-2X2-T4-B
Widest IESNA Type IV forward throwing beam
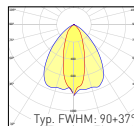
Available now
D: 50 mm H: 9,02 mm

Asymmetric

SAGA-S-WHT
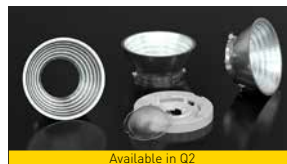Innovative hybrid spotlight with durable silicone lens and reflective white frame for indoor lighting

Available in Q2
D: 50 mm H: 13,7 mm

Typ. FWHM: 25°
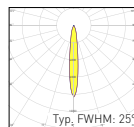
YOUR FASTLANE TO MARKET

D: 9,9 x 9,9 mm H: 7,5 mm

Available now

Available in Q2

Available now

ANGELETTE
Industry standard (D:110 mm) diameter reflectors with various accessories

BROOKE-G2
Finally Brooke (D:45mm) reflector family is available for next generation COBs

LARISA-PIN
New holder available for LARISA product family with LEDiL standard position pins