

From Light to Lighting Upcoming products from LEDiL







### LEDiL's new solderless connectors

### VESUVIUS & HEKLA



### 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 maintaining constant pressure on COBs
- LEDiL "snap in" feature simplifies the installation and makes alignment of the LED easy
- Zhaga 35mm mounting holes and the same "twist and lock" feature as in other LEDiL holder systems
- 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 reflector families from LEDIL (ANGELETTE, ANGELA, ANGELINA)

### HEKLA (D=44mm)

- Innovative LEDiL Push-In connectors allows you to decide whether you want to solder the LEDs or not
- Compatible with smaller size lenses and reflectors like LEDIL's BROOKE-G2, BARBARA-G2, MIRELLA-G2, RONDA, CARMEN and ZORYA
- Minimalistic design with great flexibility





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

1] Compatible, but not possible to use solderless connectors 2] Socket only, no Push-In connectors needed

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



### A new 40mm wide linear lens family for mid power LEDs

### LINNEA

- Advanced optical control with less glare, great color uniformity and improved longitudinal illuminance
- Allows a solid linear construction without gaps between the lenses
- Extremely fast to assemble with integrated clips and no screws needed

#### **FEATURES**

- 40mm wide PC lens with a diffused surface and a low profile
- Lens clips to a metal sheet or profile while resting on top of the PCB - different lens versions for 1-1.2mm and 0.5mm profile thicknesses
- Enough space for board-to-board connections
- 90° beam will be followed by 60° and asymmetrical beams
- Solid construction protects the LEDs from external touches and excessive dust

#### COMPATIBILITY

 Optimized for the most common Zhaga mid-power 24mm wide PCBs

### TYPICAL APPLICATIONS

- Fluorecent lamp replacements
- Industrial lighting
- Office lighting
- Retail
- Garages and canopies
- Pendant luminaires

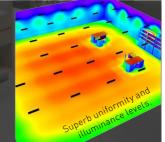
### F15524 LINNEA-60 F15523 LINNEA-90 Tvp.FWHM:60° Tvp.FWHM:90°

### Typ. efficiency of 88%

### APPLICATION EXAMPLE

Two mid-power modules are enough to replace a typical single fluorescent tube in this warehouse installation.

36 luminaires in total Luminous flux: 1 000lm (LEDs) Luminous flux: 885lm (Luminaire) Eav: 115lx (workplane) 105lx (floor) u0: 0.55 (workplane) 0.51 (floor) Maintenance factor: 0.8



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.



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

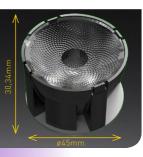


See full family listing and ordering codes at www.ledil.com/florencefamily



### RGB and tunable white 45mm mixer lens. **GABRIFLLA**

- 45mm color mixing lens with a very narrow beam
- Easy & reliable assembly with excellent positioning accuracy
- Medium and wide beam versions to follow



### **FEATURES**

- LEDiL's unique color mixing surface ensures uniform beam
- Holder design allows more space for components
- Can be fastened with screws or pre-installed tape

### COMPATIBILITY

- Optimized for 5050 sized and compatible with 7070 RGB LEDs
- 13.6mm pin distance

### TYPICAL APPLICATIONS

- Stage lighting
- Architectural lighting

## CN15529 GABRIELLA-45-S Typ.FWHM: 9° Typ. efficiency of 93%

### PC lens optimized for moist environments FLORENCE-3R-IP

- Up to IP67 rated PC lens for fluorescent light replacements
- Perfect for industrial halls affected by moisture and constant dust
- Compact and efficient design with high impact resistance

### **FEATURES**

- 14 screw holes outside the integrated silicone gasket to allow up to IP67 rating • Indoor lighting
- 90° beam will be followed by 60° and oval beam

### TYPICAL APPLICATIONS

- Industrial lighting
- Low bay applications
- Halls

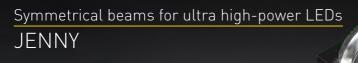
# FS15626 FLORENCE-3R-IP-Z90 Typ.FWHM: 86°

### COMPATIBILITY

• Range of 3x11 mid-power LED modules

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





- Silicone lenses made for extreme conditions Superior heat and UV-radiation resistance
- Ideal for sport field lighting with ultra high-power LEDs
- FIFA lighting requirements can be met



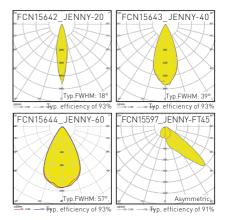
- Lens heights from only 13,4 to 15 mm
- Beam angles fulfilling NEMA requirements in typical installations
  - 20°=NEMA3
  - 40°=NFMA4
  - 60°=NEMA5
- JENNY-FT65 to follow

### COMPATIBILITY

- Ideal for 4-chip ultra high power LEDs
- Comptible with previously released C14436\_ JENNY-HLD-A-BLK

#### TYPICAL APPLICATIONS

- Sport field and stadium lighting
- · High mast applications







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



### 340° silicone optic for retrofits

### ZORYA

- Omnidirectional lens meeting Energy Star requirements
- High temperature resistance due to silicone technology
- Twist and lock holder system allows the lens to be used with solderless connectors



#### **FEATURES & BENEFITS**

- High efficiency (95%) with excellent UV, heat, and impact resistance
- Can be used as it is, or with external protective cover
- RGB and tunable white support

#### COMPATIBILITY

- · LES sizes from 6 mm to 24 mm
- LEDiL's HEKLA and 3rd party connectors
- LEDiL adapters allow easy fitting to various connectors and base parts

# FP15073\_Z0RYA-SC-50

### TYPICAL APPLICATIONS

- Retrofit
- Walkway lighting
- · Industrial lighting
- · Garden lights





Compatibility

CXA/B 13xx CXA/B 15xx CXA/B 1816 CXA/B 25xx CXA/B 30xx

XCoB 105/107/109 XCoB 1204/1205

Soleriq P6 Soleriq P9 Soleriq S13 Soleriq S13 Gen2

LC013B, LC019B ZC12/18, ZC25/40

Mega Zenigata Mini Zenigata

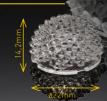
SLE G4 LES10 SLE G5 LES15 DMC 122, DMC 12





### ZORYA-MINI

- 22mm PC optic, perfect for light bulbs
- Close to 50/50 front and backlight ratio
- For high power LEDs up to 7070 size packages
- Simple attachment with adhesive tape



C15419 ZORYA-MINI

1 F15074 2 F15076 3 M3 screw 4 Connector

4 Connector BJB 5 COB LED LES 6-24 mm 6 Heatsink Ø50mm

DIN912

ZORYA-SC ZORYA-SC-ADAPTER-50

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

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



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



### 70mm COB optics with no spill light

### CARMEN

- Patent pending hybrid lens family with 10° ultra narrow beam
- Higher performance compared to similar size traditional reflector designs
- Hybrid design protects the COB from external touches and excesive dust



### **FEATURES & BENEFITS**

- No 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

### TYPICAL APPLICATIONS

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



### COMPATIBILITY

- LES sizes up to 10 mm
- LEDiL recommends spot version to be used with 6mm LES (=18000cd)
- LEDiL's HEKLA and 3<sup>rd</sup> party connectors









### Versatile low-profile system for indoor lighting RONDA • 70mm diameter and low profile design with easy integration in luminaires • Patent pending multi refraction FN15679 RONDA-S FN15622 RONDA-REC-60 optical technology allows excellent optical performance Various beam options makes RONDA an ideal and modern choice for wide range of downlight solutions Typ.FWHM: 27 Typ.FWHM: 58°+58° FN15380 RONDA-WAS FN15388 RONDA-ZT45 FN15552 RONDA-W EN15387 RONDA-WW EN15381 RONDA-WWW Typ.FWHM: 83° Typ.FWHM Asymmetric



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



### Dark Light Optics with no glare

### FLORENTINA family

- Hybrid design of a black reflector and lenses designed for high visual comfort applications
- Multiple different form factors including single and linear
- 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 7070) lenses available for FLORENTINA-1, 4x1 and 2x2 versions
- LEDiL standard TINA/TINA2 (up to 3535) lenses available for FLORENTINA 12x1

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



#### 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

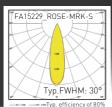
### ROSE-MRK - Quality lighting for bigger LEDs

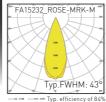
### COMPATIBILITY

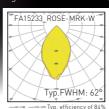
 Super high-power multi-crystal LEDs up to 7070 packages

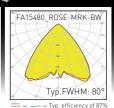
### TYPICAL APPLICATIONS

- Indoor lighting
- General lighting
- Spot lights
- · Up- and downlights









D: 21.6 mm

H: 11,8 mm

Compatibility

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

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



### FLORENTINA for ROSE-CMC and -MRK lenses



# FLORENTINA-1 FLORENTINA-1-HLD assembly including ROSE lens C15427\_FLORENTINA-1-SHD-60

### FLORENTINA-2X2

FLORENTINA-2X2-HLD assembly including 4x ROSE lens C14734\_FLORENTINA-2X2-SHD C14960\_FLORENTINA-2X2-SHD-WHT



### FLORENTINA-4X1

FLORENTINA-4X1-HLD assembly including 4x ROSE lens C15028\_FLORENTINA-4X1-SHD C15690\_FLORENTINA-4X1-SHD-WHT



### FLORENTINA-2X2-OPEN

FLORENTINA-2X2-HLD assembly including  $4\times$  ROSE lens C15196\_FLORENTINA-2X2-SHD-0PEN



#### FLORENTINA-4X1-OPEN

FLORENTINA-4X1-HLD assembly including 4 x ROSE lens C15198 FLORENTINA-4X1-SHD-OPEN



### FLORENTINA for TINA/TINA2 lenses

#### FI ORFNTINA 12x1



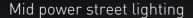
FLORENTINA-HLD assembly including 12 xTINA/TINA2 lens C16446\_FLORENTINA-SHD C15469 FLORENTINA-SHD-WHT C14353\_FLORENCE-1R-CLIP-A
C14409\_FLORENCE-1R-CLIP-B
C14751\_FLORENCE-1R-CLIP-C

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.



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





### STRADELLA family

STRADA's little sister – Compact STRADELLA lens doubles or even quadriples 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 and 16 lenses in one

• Standard street lighting and high bay beams available

Single lens available with the same beam angles

#### COMPATIBILITY

• Up to 3535 size LED packages

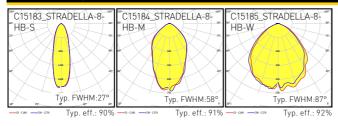
#### TYPICAL APPLICATIONS

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



For high-power LEDs

### STRADELLA High Bay beams



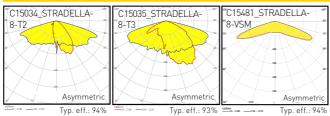
### Also available:

C15245\_STRADELLA-HB-S C15246\_STRADELLA-HB-M C15247\_STRADELLA-HB-W

#### STRADELLA 16-up:

C15430\_STRADELLA-16-HB-S C15431\_STRADELLA-16-HB-M C15432\_STRADELLA-16-HB-W

### STRADELLA Street and area lighting beams



### Also available:

#### Single lens C14502\_STRADELLA-T2

C14501\_STRADELLA-T3

MORE BEAMS COMING!

### And many more!

### Standard LEDiL range of optics expanded



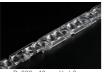
### FLORENCE-ZT25-S

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





D: 286 x 61mm H: 11.4m



FLORENCE-1R-GC-Z90

Minimum glare and optimized LED layout for high-end office lighting







STRADA-2X2-CAT-B

Symmetrical narrow elliptical beam, optimized for catenary lighting







### STRADA-2X2-T2-C

Optimized for street lighting poles with tilted and long armatures





D: 50mm H: 7,4mm



#### STELLA-VSM

STELLA silicone lens with Type V beam for area lighting







### 2X2MX family

Super high power standard lens module family with huge possibilities for technical and street lighting



BROOKF-G2

Brooke (D:45mm) reflector family for next generation COBs. HEKLA compatible



TO QUALITY

LIGHTING

### SAGA-S-WHT

Innovative hybrid spotlight with silicone lens and white frame for durable indoor lighting

### Where to buy

| Joni Mäki            | joni.maki@ledil.com            | +358 40 413 9990     | Global                                       |
|----------------------|--------------------------------|----------------------|--|
| Konstantinos Kyranas | konstantinos.kyranas@ledil.com | +49 17 1184 5154     | Europe                                       |
| Sampsa Nurmi         | sampsa.nurmi@ledil.com         | +358 41 503 5316     | USA  |
| Kevin Vaughn         | kevin.vaughn@ledil.com         | +1 (412) 721 4308    | North-East USA & East-Canada                 |
| Paul Munce           | paul.munce@ledil.com           | +1 678 372 6053      | South-East & South-Central USA               |
| Lauri Haarala        | lauri.haarala@ledil.com        | +1 331 330 3215      | Midwestern USA                               |
| North America        | us.sales@ledil.com             | +358 40 413 9990     | Sales and Technical Support                  |
| Bruno Musolino       | bruno.musolino@ledil.com       | +55 (11) 9 8264 6688 | Brazil                                       |
| Jen John Lee         | jen.lee@ledil.com              | +55 (11) 9 7378 8874 | Brazil                                       |
| Rodrigo Menabrito    | rodrigo.menabrito@ledil.com    | +52 (81) 1609 2329   | México                                       |
| Raúl Parra           | raul.parra@ledil.com           | +358 40 095 6839     | Central America, South-America               |
| Ville Saarinen       | ville.saarinen@ledil.com       | +358 40 732 8705     | Nordic, Baltic<br>Japan                      |
| Simon Aldred         | simon.aldred@ledil.com         | +44 7540 726 384     | UK, Ireland, Benelux                         |
| Glenn Bultinck       | glenn.bultinck@ledil.com       | +33 75 09 78 155     | France                                       |
| Dave Simpson         | dave.simpson@ledil.com         | +34 607 858 901      | Spain, Portugal                              |
| Oliver Klasen        | oliver.klasen@ledil.com        | +49 151 20 66 1985   | Germany, Austria Switzerland                 |
| Martin Lengwenus     | martin.lengwenus@ledil.com     | +49 1577 191 6641    | Germany, Austria, Switzerland - Inside sales |
| Markus Bausewein     | markus.bausewein@ledil.com     | +49 152 34 01 3357   | South of Germany, Austria, Switzerland       |
| Marcin Wiewiórka     | marcin.wiewiorka@ledil.com     | +48 501 765 576      | Poland, Czech Republic, Slovakia             |
| Diego Quadrio        | diego.quadrio@ledil.com        | +39 340 659 9236     | Italy  |
| Nonna Raita          | nonna.raita@ledil.com          | +358 40 833 2707     | Hungary, Croatia, Slovenia                   |
| Nico Lehtonen        | nico.lehtonen@ledil.com        | +358 44 525 9191     | Romania, Serbia, Bulgaria, Kosovo            |
| Saken Jusupov        | saken.jusupov@ledil.com        | +7 911 758 95 54     | Russia, Ukraine, Belarus, Kazakhstan         |
| Zekeriya Boz         | zekeriya.boz@ledil.com         | +90 546 291 2 444    | Turkey                                       |
| Bahador Mozaffari    | bahador.mozaffari@ledil.com    | +98 912 593 9355     | Iran   |
| Radhesyam Nandigam   | india@ledil.com                | +91 9676 333 162     | India  |
| Tang Yunfeng         | yunfeng.tang@ledil.com         | +86 139 1727 3224    | China, Hong Kong, Taiwan, Mongolia           |
| Howard Lee           | howard@coresemi.com            | +82 103 799 7351     | South-Korea                                  |
| Suppaluck Sae-Sean   | suppaluck.sae-sean@ledil.com   | +66 869 741 968      | Thailand, Malaysia                           |
| Pasi Kontto          | pasi.kontto@ledil.com          | +358 40 776 2149     | Australia, New Zealand                       |
|                      |                                |                      |  |

For detailed information visit www.ledil.com/where\_to\_buy







For technical support and simulations