



Linear lenses

A safe choice for practical and commercial lighting of warehouses, offices, supermarkets and retail



FLORENCE-3R

3-row optics with 6 beams available

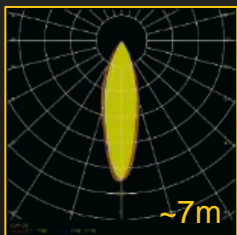
PATENT
PENDING

- LEDiL's patented optical design for uniform optics illuminance and smooth color mixing with RZ-surface
- Emphasis on glare reduction, with shade <19UGR
- Range of accessories available (shades & press fit)

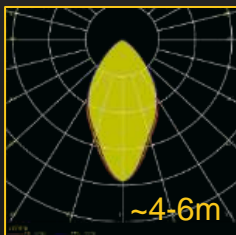


- Warehouse lighting
- Retail lighting
- Office lighting
- Low bay
- High bay

FLORENCE-Z30



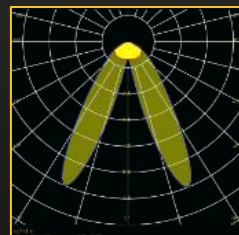
FLORENCE-Z60



FLORENCE-Z90



FLORENCE-ZT25



FLORENCE-ZT25-S



FLORENCE-O



FLORENCE-3R-IP-Z90



COMPATIBILITY

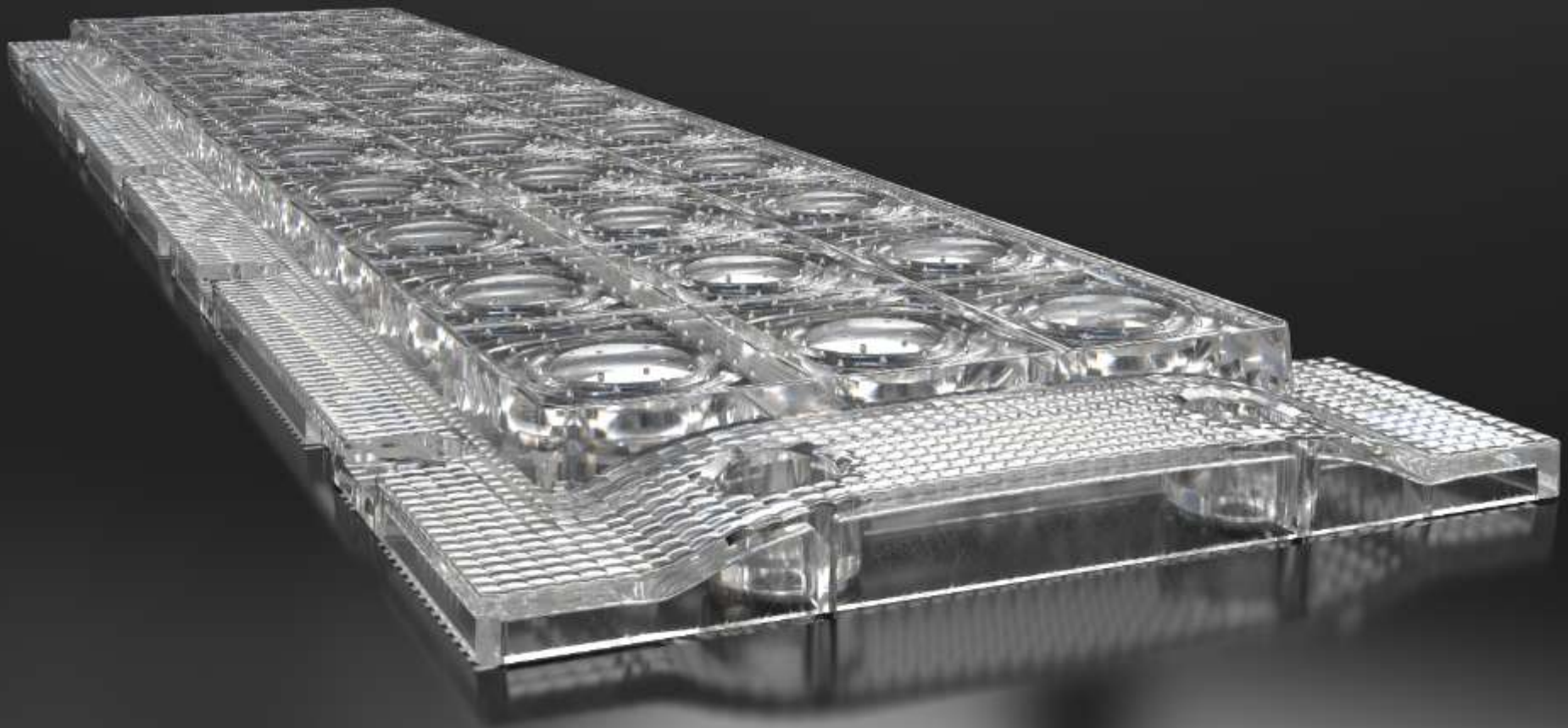
- Range of 3x11 mid-power LED modules
- Zhaga book 7 compliant modular solution



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New FLORENCE-IP family

With a seal



NEW!

Coming in Q117

FLORENCE-3R-IP



PC lens optimized for moist environments

- 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 IP65 rating
- 90deg version will be followed by 60 and oval

COMPATIBILITY

- Range of 3x11 mid-power LED modules

TYPICAL APPLICATIONS

- Industrial lighting
- Indoor lighting
- Low bay applications
- Halls



LEDiL

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FS15626_FLORENCE-3R-IP-Z90

FLORENCE-1R

Linear optics for all your lighting needs

- Single row FLORENCE that can be easily snapped into three smaller 95mm long pieces
- Easily customizable retaining clips connecting lenses into a continuous row
- Linear design works with any LED pitch; 24 LEDs on 1 ft

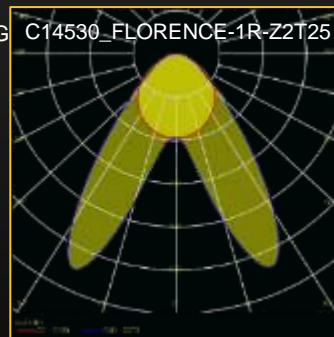
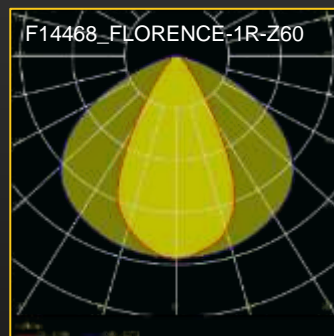
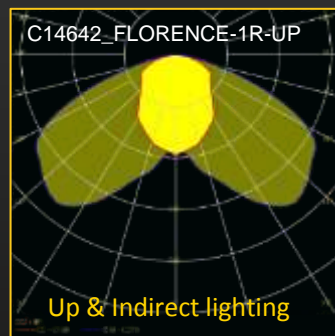


COMPATIBILITY

- Linear optics works with any distance between the LED's (except GC that is compatible with a range of mid-power LEDs up to 5630 package size)

TYPICAL APPLICATIONS

- Office lighting
- Retail lighting
- Low Bay
- Wall washing
- Interior architectural lighting
- Supermarket aisle lighting
- Industrial and warehouse corridor lighting



NEW!

Coming in Q117

FLORENCE-1R-GC-family



With minimized longitudinal glare meeting office lighting requirements

- Minimized longitudinal glare for better UGR values
- Optimal LED count to achieve good light distribution/UGR ratio to the desired area
- Special optical solutions to remove unwanted color-over-angle artefacts

FEATURES

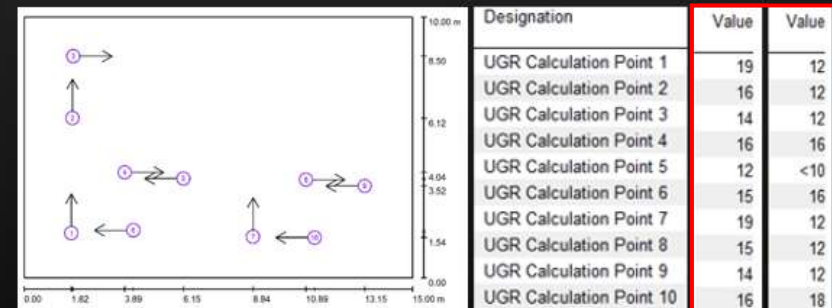
- Individual TIR lenses (instead of linear) used due to fixed LED positions
- Optional clips available for easier installation and continuous rows
- Z60 and ZT25 variants to follow Z90 variant
- Typical efficiency: 92%

COMPATIBILITY

- Linear optics that work with any distance between the LED's

TYPICAL APPLICATIONS

- Office lighting
- Retail lighting
- Low bay
- Interior architectural lighting
- Super market aisle lighting
- Industrial and warehouse corridor lighting



1R-GC-90 has clearly lower UGR values than 1R in 90x20 luminaire set up



LINNEA - a new 40mm wide linear lens family for mid power PCBs

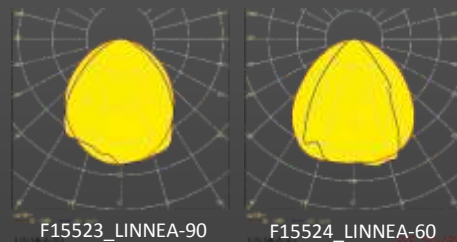
LEDiL

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NEW!

Coming in Q416

LINNEA



A new 40mm wide linear lens family for mid power PCBs

- Improved glare control and more uniform luminance due to micro structure
- 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 diffused surface and thin & low profile (=low cost)
- Lens clips to 1-1.2mm metal sheet or extrusion profile holding the PCB in place
- Easy wiring or board-to-board connection
- Range of symmetrical and asymmetrical beams with 60 and 90 beams coming first

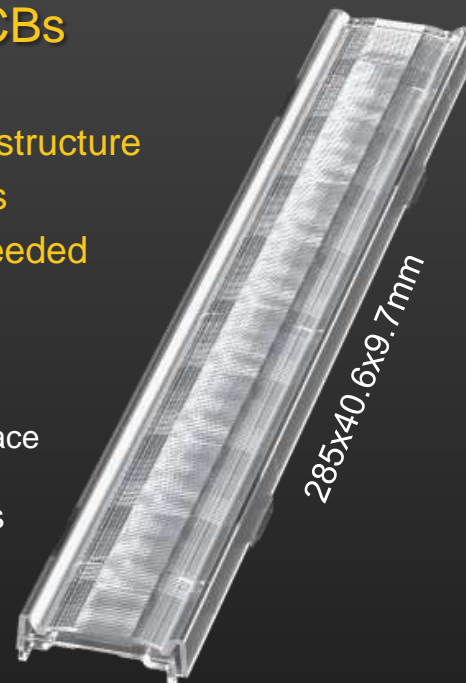
COMPATIBILITY

- Optimized for the most common Zhaga mid-power max.24mm wide PCBs
- Works for 1ft and 2ft boards, Any LED pitch can be used

TYPICAL APPLICATIONS

- Fluorescent lamp replacements
- Industrial lighting
- Office lighting
- Retail
- Garages and Canopies
- Pendant luminaires

COMPATIBLE PCBs:
Osram prevaled slim PL
PrevaLEDLinearSlim2-650lm, -2000lm
Samsung 2-2-3-1, 2-2-3-2, 2-2-3-4
Samsung M-series 10_4, 10_5, 10_6
Tridonic LLE G3
Tridonic TALEXXmodule LLE G1



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LEDiL Dark Light Concept

Zero-Glare designs



- Glare below Sollner dark limit
- No visible light sources, only effect of light itself
- Based on black reflectors



FLORENTINA-family

Anti-glare Optics (<19 UGR)

- Hybrid design - Black reflector with lenses
- Higher intensity and less spill light compared to metallized reflectors
- Various mounting options and beam angles available

FEATURES

- Single lens, 4x1, 2x2 and 12x1 configurations available
- Standard black and white faceplates or make your own
- Versions available with +/-30 degrees adjustable rotation mechanism
- Beams available from 10° to 60°, and also asymmetric and double asymmetric

TYPICAL APPLICATIONS

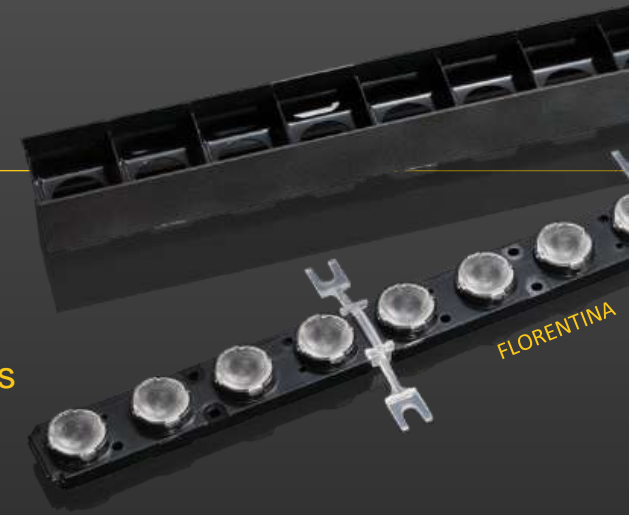
- Office lighting
- Retail lighting
- Downlight applications
- Track lighting
- Indoor architectural lighting

MOUNTING OPTIONS

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

COMPATIBILITY

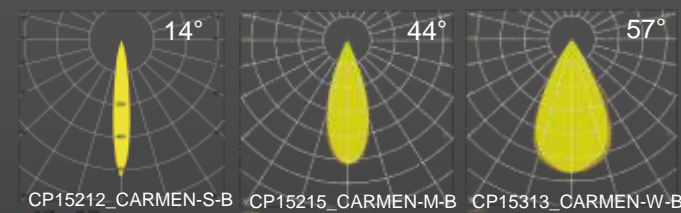
- LEDiL standard ROSE and LAURA (up to 5050) lenses available for FLORENTINA 4x1 and 2x2 versions
- LEDiL standard TINA/TINA2 (up to 3535) lenses available for FLORENTINA 12x1



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CARMEN

Your choice for pleasant retail lighting



- Aesthetic and convenient hybrid design protects the COB from dust and touches
- Redefined reflector performance with smooth cutoff and low glare
- Perfect selection of beams for general and accent lighting

FEATURES

- No halos or light spilling, low glare and complete control of light
- Comes with black reflector, especially optimized for low UGR applications
- Standard retail and track lighting beams available
- Various beam angles available including ultra narrow beam (~10°)

COMPATIBILITY

- LES sizes up to 10 mm
- LEDiL recommends spot version to be used with 6mm LES (=18000cd)
- Holder options for LEDiL, Stucchi, BJB etc. solderless connectors

TYPICAL APPLICATIONS

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

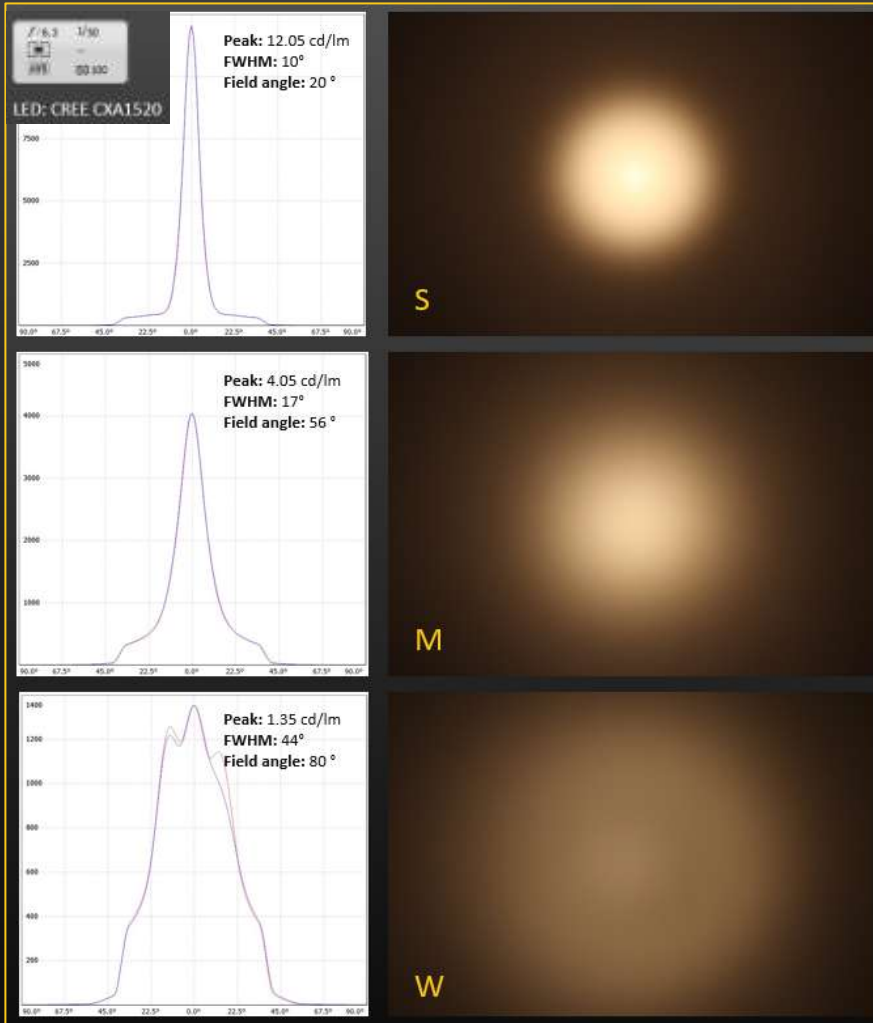


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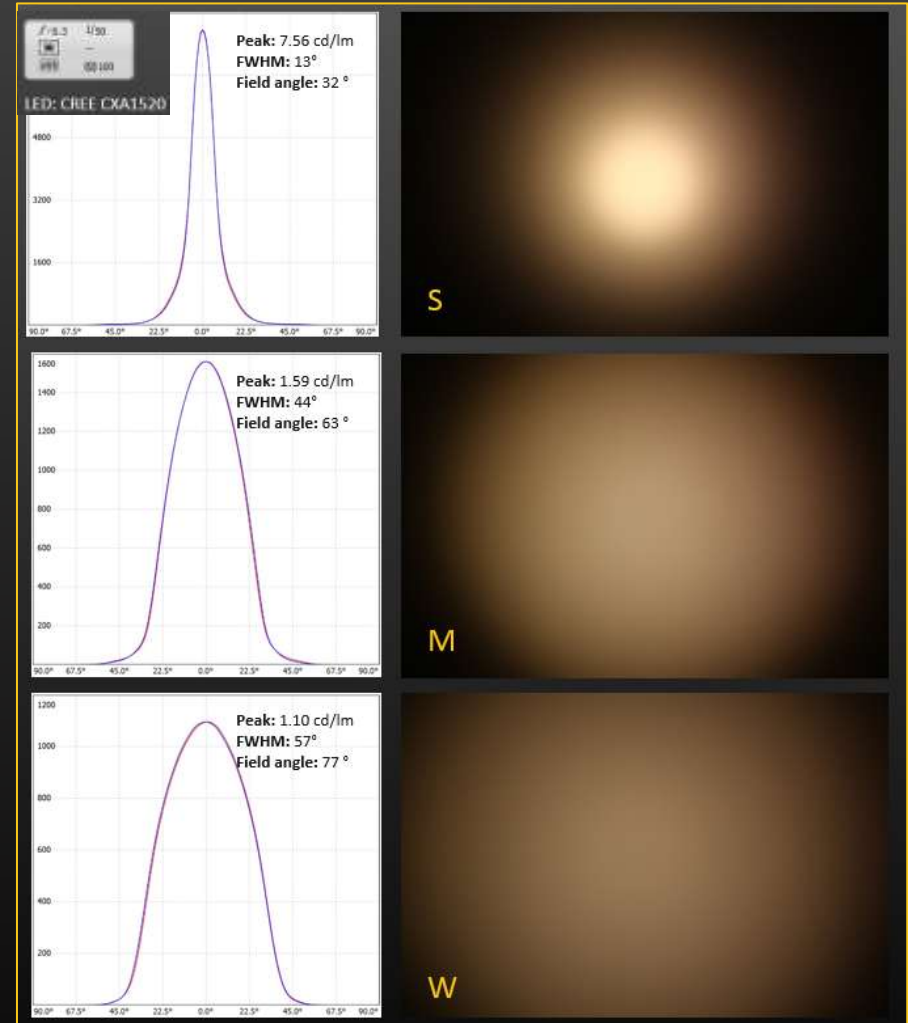
LENINA VS CARMEN

More uniform&smooth beams in CARMEN vs higher cd/lm peaks in LENINA

LENINA

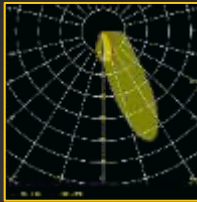


CARMEN



RONDA

- Asymmetric and double asymmetric wall washing beams meeting even strictest vertical illuminance requirements
- Uniform lighting up to the ceiling level without tilting of the fixture



RONDA-WAS
Asymm.



RONDA-ZT45
Double asymm.

■ FEATURES & BENEFITS

- Visually pleasing light distribution with smooth cut-off
- Wide customization possibilities (front panel, assembly depth, light pattern)
- Typical installation ratio 1:3 with asymmetric beams
- ZT45-version for corridors, aisles and vertical surface illumination

■ TYPICAL APPLICATIONS

- Office lighting, Architectural lighting, Downlights, Museums, Shops, Hotels



RONDA-WWW
Typ. FWHM.

Typ. Eff.: 85%



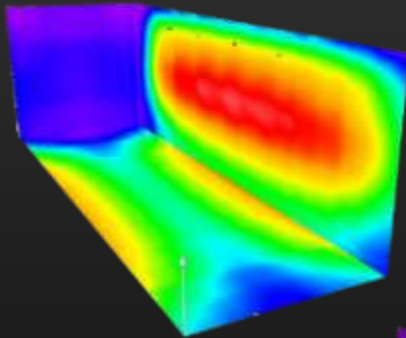
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RONDA-ZT45 and RONDA-WAS

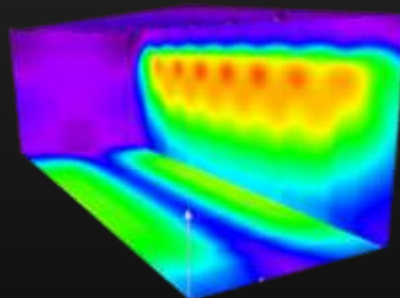
RONDA-ZT45 comparison to tilted track reflector

- Good uniformity and smooth blending beam
- Designed for 1:2 assembly ratio
 - Wall / shelf height = aisle width
- Recommended distance along the aisle 1m ... 1.5 m

FCN15357_RONDA-ZT45



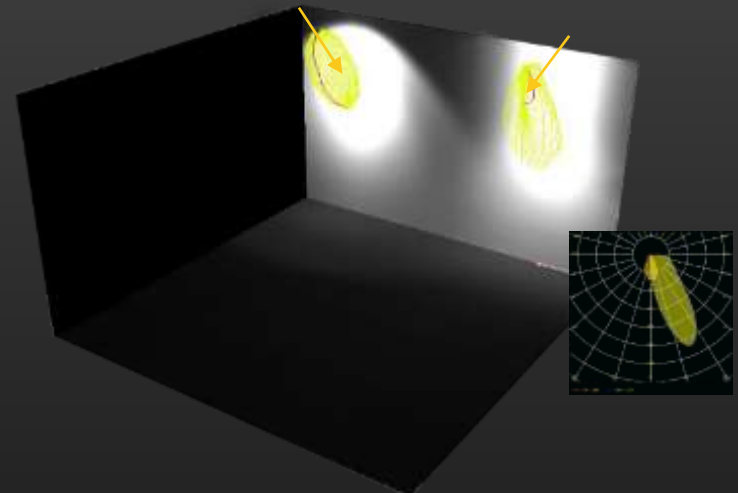
Tilted track reflector row



RONDA-WAS comparison to tilted track reflector

Tilted standard track-reflector

FCN15209_RONDA-WAS



- Designed for 1:3 assembly ratio
- Smooth cutoff
- High peak intensity for long reach and controlled lighting



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ZORYA

~340° silicone optic for retrofits

A highly efficient silicone molded LED optic that mimics a traditional light bulb beam pattern

ZORYA

~340° silicone optic for retrofits

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

FEATURES

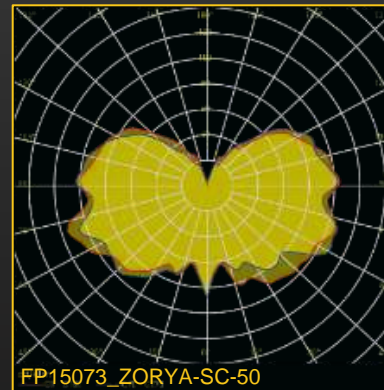
- Flexible design - lens can be scaled and holder modified
- High efficiency (95%) with excellent UV, heat, and impact resistance
- Can be used as it is, or with external protective cover
- RGB and tunable white support
- 2 different dimensions (50mm silicone, 22mm PC optic)

COMPATIBILITY

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

TYPICAL APPLICATIONS

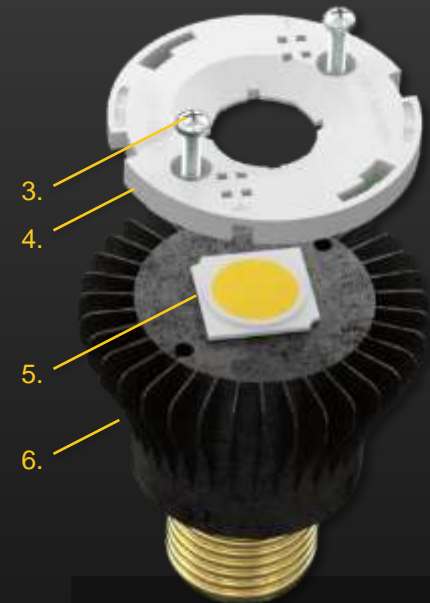
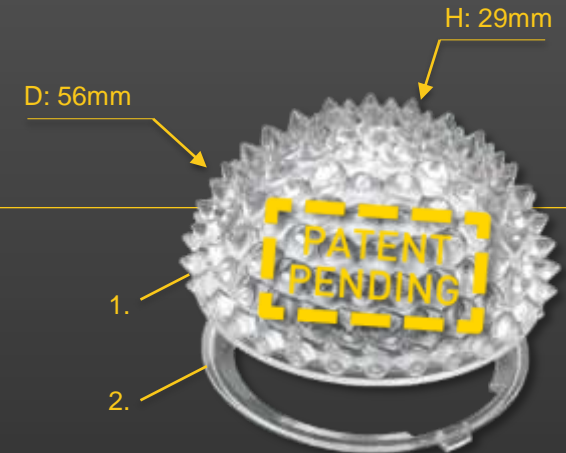
- Retrofit
- Walkway lighting
- Industrial lighting
- Garden lights



With ZORYA Without optic



LED used: CXA2590



- 1 F15074 ZORYA-SC
- 2 F15076 ZORYA-SC-ADAPTER-50
- 3 M3 screw DIN912
- 4 Connector BJB
- 5 COB LED LES 6-24 mm
- 6 Heatsink Ø50mm

STELLA-family

Easy ingress protected solution

Also in white



- Highly performing silicone lenses with 7 beam angles available and no house-side peaks
- Self-sealing up to IP67 rated products with excellent thermal, UV and impact resistance
- Up to 23mm LES sizes; 90mm diameter (* Up to 32mm LES sizes, min 13mm)



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STELLA-VSM

Wide area lighting with TYPEV light distribution

- Large silicone lens for wide outdoor areas with TYPEV light distribution
- Self-sealing silicone design for up to IP67 ingress protection against dirt, dust and moisture
- Compatible with up to 32mm LES-size COBs for ultimate illuminance output

FEATURES

- TYPEV symmetrical square-shaped light distribution
- More space for connectors reserved at the bottom (like in other new STELLA-optics)
- Maximum connector size: diameter 52mm, height 3,7mm

TYPICAL APPLICATIONS

- Wide area lighting

COMPATIBILITY

- Compatible from 13mm to 32mm LES-size COBs like Bridgelux VERO29 and Citizen CLU056
- The best performance can be achieved with 18mm LES size (depending on the application/setup)



STELLA-HB-WWW

"Cost optimized" solution for high bay applications

- Cost optimized high bay solution from silicone
- Approx. 90deg beam for very wide high bay lighting applications
- Self-sealing silicone design for up to IP67 ingress protection against dirt, dust and moisture

FEATURES

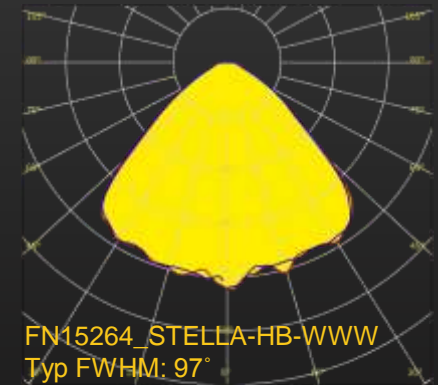
- Low profile, but yet enough space reserved for 52mm in diameter and max 6mm high connectors

TYPICAL APPLICATIONS

- High bay
- Industrial
- Warehouses

COMPATIBILITY

- Compatible from 13mm to 32mm LES-size COBs like Bridgelux VERO29 and Citizen CLU056
- The best performance can be achieved with 18mm LES size (depending on the application/setup)



FN15264_STELLA-HB-WWW
Typ FWHM: 97°
Typ. Eff. 88%

STELLA-HB-WWW

PRELIMINARY

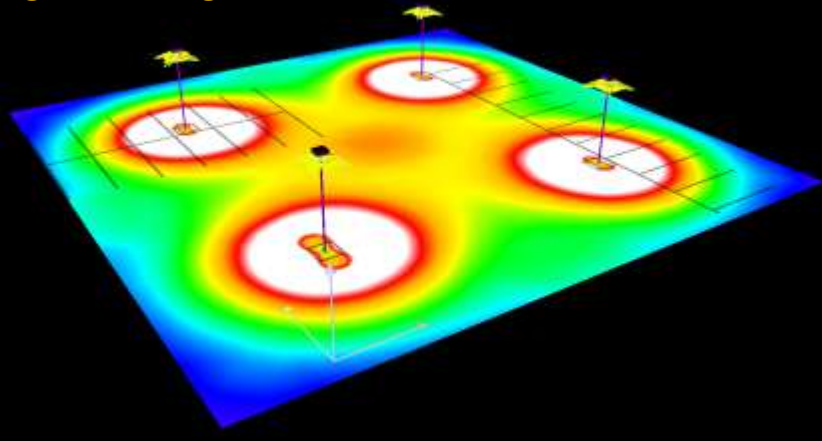


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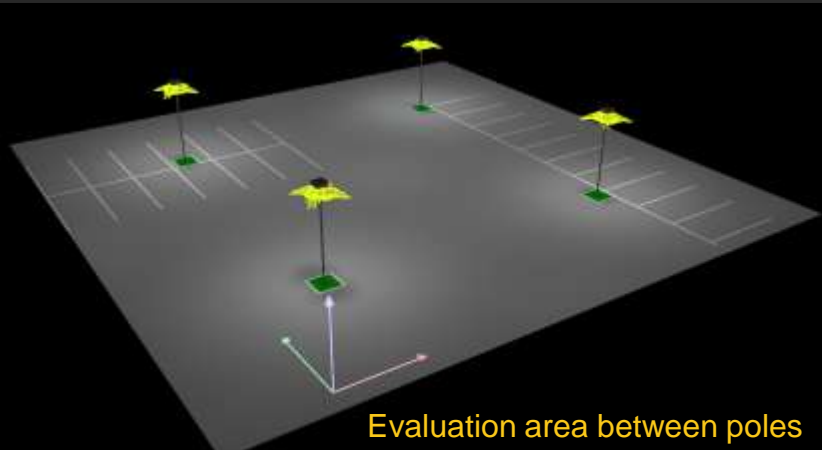
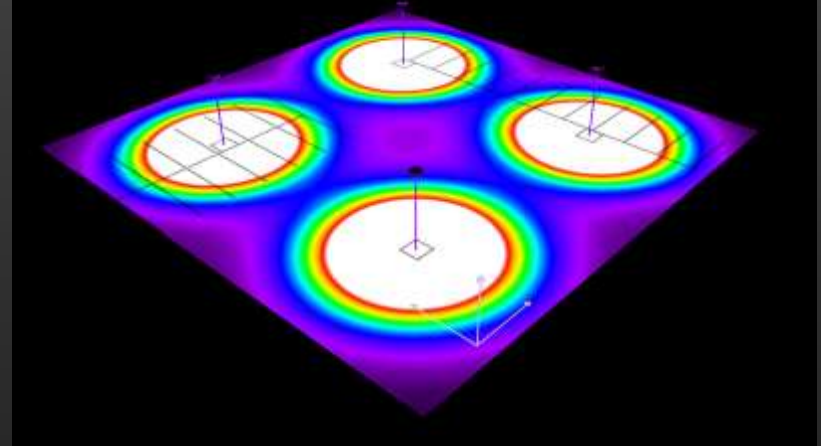
Parking lot simulation

STELLA-VSM vs STELLA-HB-WWW

STELLA-VSM



STELLA-HB-WWW



Evaluation area between poles

Height: 5m
Pole distance: 17.5m

STELLA-VSM
LED: VERO18
Luminous flux (Luminaire): 4217 lm
Luminaire Wattage: 28.8 W

STELLA-HB-WWW
LED: VERO29
Luminous flux (Luminaire): 4217 lm
Luminaire Wattage: 25.8 W

E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	$u0$
21	16	38	0.756



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