

# LEDiL<sup>®</sup>



## RANGE & PRECISION – LEDiL<sup>®</sup>'s standard LED optics offer both

LEDiL is a Finnish manufacturer and supplier of top quality LED secondary optics. We are driven by an innovative 'can do, will do' attitude and willing to run that 'extra mile' to bring to our customers the finest solutions that add real value to their end products. Whether they need reflectors or lenses, asymmetric or symmetric. Our standard product range brings over 2.500 cost-effective optical solutions to our customers' needs.

Application support

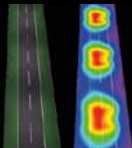
Custom solutions

Symmetric

Asymmetric

Reflectors

Arrays



[www.ledil.com](http://www.ledil.com)

Autumn 2014

LEDiL

## Global Supplier of LED Optics for Demanding Applications

Ledil, with design expertise in Finland and production facilities in Europe and China, is leading optics supplier to the world's premier lighting manufacturers. The innovative lenses and reflectors we produce provide optimal optic performance and durability. Relationships with top LED manufacturers allow Ledil to release products alongside newest LEDs; our customers enjoy rapid development and deployment of new fixtures with latest technology. We are THE optics partner to ensure that your LED lighting fixture is the most efficient and innovative on the market. Our engineers possess a "can do, will do" attitude based on quality, innovation and collaboration. Ledil has genuine desire to offer our clients competitive solutions and products and our staff consist of skillful and innovative experts that possess the latest knowledge of LED optics solutions.



**Ledil Oy**

Salorankatu 10, FI-24240 SALO, Finland  
[www.ledil.com](http://www.ledil.com)

**Local sales and technical support available in following countries**

USA, China, Germany, UK, Benelux, Italy, Spain, Portugal  
See [www.ledil.com](http://www.ledil.com)

**Shipping locations**

Salo, Finland  
Hong Kong, China

**Franchised Distribution Partners**

See [www.ledil.com](http://www.ledil.com)

## Dear Customer

Please note that you can find ordering codes for products together with the latest product information at our website:

[www.ledil.com](http://www.ledil.com)

FWHM, efficiency and other values in this catalogue are typical values and subject to chosen LED/optic - combination. Actual values can be found on our website.

We have included saved search paths for your convenience. URL to the saved search can be found under each product family name. This address will take you directly to the family listing.

Subscribe to our newsletter and get the latest product information at [www.ledil.com/subscribe](http://www.ledil.com/subscribe)

### LED compatibility:

#### Cree

[CXA1310](#)  
[CXA15](#)  
[CXA1520](#)  
[CXA1816](#)  
[CXA1830](#)  
[CXA2011](#)  
[CXA25](#)  
[CXA30](#)  
[CXA35](#)  
[MC-E](#)  
[MC-E RGB](#)  
[MK-R](#)  
[MK-R2](#)  
[ML-E](#)  
[MP-L](#)  
[MT-G](#)  
[MT-G2](#)  
[MX-3](#)  
[MX-6](#)  
[XB-D](#)  
[XB-H](#)  
[XB-B/G](#)  
[XM-L](#)  
[XM-L EZW](#)  
[XM-L HVW](#)  
[XM-L2](#)  
[XM-L RGB](#)  
[XP-E](#)  
[XP-E HEW](#)  
[XP-E2](#)  
[XP-G](#)  
[XP-G2](#)  
[XP-L](#)  
[XQ-D](#)  
[XQ-E](#)  
[XR-E](#)  
[XT-E](#)  
[XT-E HVW](#)

#### Optogan

[OLP-x5050F6L](#)  
[OLP-x5065F6L-06A](#)

#### Osrarn

[DDR](#)  
[Duris E5](#)  
[Duris P5](#)  
[Duris S5](#)  
[Duris S8](#)  
[GDr](#)  
[GDr+](#)  
[JR Dragon](#)  
[OsISq EC](#)  
[OsISq PC](#)  
[OsI SSL150](#)  
[OsI SSL80](#)  
[Ostar L](#)  
[Ostar L+](#)  
[Ostar-SMT RGB](#)  
[PDr](#)  
[PrL C AC \(LEP-2000\)](#)  
[PrL C AC \(LEP-800\)](#)  
[PrL C Z3 LES19](#)  
[PrL C Z3 LES23](#)  
[PrL C Z3 LES9](#)  
[PrL C Z4 LES19](#)  
[SFH-4751](#)  
[SFH 4715S \(IR\)](#)  
[Soleriq E30](#)  
[Soleriq P6](#)  
[Soleriq P9](#)  
[Soleriq S13](#)  
[Soleriq S19](#)

#### Tridonic

[S-SLE G2 LES19](#)  
[S-SLE G2 LES23](#)  
[S-SLE G2 LES26](#)  
[S-SLE G3 LES19](#)  
[S-SLE G3 LES23](#)  
[S-SLE-P G3 LES10](#)  
[S-SLE-P G3 LES17](#)

#### Stanley

[Stanley J](#)  
[Stanley G](#)

#### Nichia

[107](#)  
[COB204](#)  
[NC4U 133A](#)  
[NC4U 134A](#)  
[NCSU0033A](#)  
[NCSU0033B](#)  
[NCSU0034A](#)  
[NCSU0034B](#)  
[NCSxx19A](#)  
[NCSxx19B](#)  
[NF2x757A](#)  
[NF2x757D](#)  
[NJ5x036](#)  
[NS3x83](#)  
[NS6x83](#)  
[NS9x383](#)  
[NSBx1066A](#)  
[NSBx110](#)  
[NSBx121A](#)  
[NSCxJ216A](#)  
[NSCxJ36A](#)  
[NSMx286M](#)  
[NSW157T](#)  
[NV5xx19A](#)  
[NV5xx19B](#)

#### Samsung

[LC026B/LC040B](#)  
[LH351A\(3535\)](#)  
[LH351B](#)  
[LM231 A/B](#)  
[LM362A](#)  
[LM561B](#)  
[Sunnix5](#)

#### Vossloh-Schwabe

[WU-M-461](#)  
[WU-M-462](#)  
[WU-M-464](#)  
[WU-M-484](#)  
[WU-M-485](#)  
[WU-M-486](#)

#### LUXEON

[LX A](#)  
[LX CoB1203](#)  
[LX CoB1204/1205](#)  
[LX CoB1208](#)  
[LX H50-2](#)  
[LX K12](#)  
[LX K16](#)  
[LX K2](#)  
[LX K4](#)  
[LX K8](#)  
[LX M](#)  
[LX MZ](#)  
[LX PWT](#)  
[LX Q](#)  
[LX R](#)  
[LX Rebel](#)  
[LX Rebel ES](#)  
[LX Rebel+](#)  
[LX S](#)  
[LX S2000](#)  
[LX S3000](#)  
[LX S5000](#)  
[LX T](#)  
[LX TX](#)  
[LX Z](#)  
[LX Z ES](#)  
[LX Z RGB](#)  
[LZ4 RGB](#)

#### Sharp

[Double Dome](#)  
[Mega Zenigata](#)  
[Mini Zenigata](#)  
[Tiger Zenigata](#)

#### LedEngin

[LZ1 \(00U600\)](#)  
[LZ1 \(00UA00\)](#)  
[LZ1 \(00xW00\)](#)  
[LZ4 \(00xW00\)](#)

#### Bridgelux

[BXRA ES R](#)  
[BXRA ES S](#)  
[BXRA LS](#)  
[BXRA RS](#)  
[SM4](#)  
[Vero10](#)  
[Vero13](#)  
[Vero18](#)  
[Vero29](#)  
[V6](#)  
[V8](#)  
[V10](#)

#### Luminus

[CSM-360-W](#)  
[CXM-14](#)  
[CXM-18](#)  
[CXM-18](#)  
[CXM-6](#)  
[CXM-7](#)  
[CXM-9](#)  
[SSM-80](#)  
[SST-50](#)  
[SST 90](#)

#### Seoul

[MJT4040](#)  
[AX3221](#)  
[P4](#)  
[P5](#)  
[P7](#)  
[Z5](#)  
[Z5 M](#)  
[Z5 M1](#)  
[Z5 P](#)  
[ZC12/18](#)  
[ZC25/40](#)  
[ZC6](#)

#### Avago

[Jade](#)  
[5630](#)

#### Citizen

[CLL01x](#)  
[CLL02x](#)  
[CLL03x](#)  
[CLL04x](#)  
[CLL05x](#)  
[CL-L230](#)  
[CL-L233](#)  
[CL-L235](#)  
[CL-L330](#)  
[CL-L340](#)  
[CL-L400](#)

#### LG

[Cer 3535](#)  
[COB-4W](#)  
[COB-10W](#)  
[COB-13W](#)  
[COB-17W](#)  
[COB-24W](#)  
[H35B0](#)  
[H35C0](#)  
[H35C1](#)  
[LG 3030](#)  
[LG 5630](#)  
[LG 6030](#)

#### Lite-On

[LTP-L-M036](#)  
[LTP-L-M074](#)

DDR = Diamond Dragon  
 OsISq = Oston Square  
 Ostar L = Ostar Lighting  
 PrL C = PrevalLED Core  
 S-SLE = STARK SLE  
 S-SLE-P = STARK SLE PURE

## LARISA

[www.ledil.com/larisa](http://www.ledil.com/larisa)



**LARISA-O**  
PMMA / Black PC  
H: 7,5 mm  
D: 9,9 x 9,9 mm  
Beam type: Oval



**LARISA-W**  
PMMA / Black PC  
H: 7,5 mm  
D: 9,9 x 9,9 mm  
Beam type: Wide



**LARISA-M**  
PMMA / Black PC  
H: 7,5 mm  
D: 9,9 x 9,9 mm  
Beam type: Medium

Code	Typ. FWHM	Typ. Eff.	Typ. cd/lm
LARISA-M	32	86	2,2
LARISA-O	40 x 22	81	2,1
LARISA-RS	19	80	3,7
LARISA-W	48	85	1,2
LARISA-WW	57	84	0,9
LARISA-RZ	27	77	1,9



**LARISA-RZ**  
PMMA / Black PC  
H: 7.5 mm  
D: 9.9 x 9.9 mm

XP-E  
XP-G  
XB-D  
NCsxx19A  
NF2x757A  
NF2x757D  
NVsxx19A  
OsLSL150  
OsLSL80  
OsSg EC  
OsSg PC  
DurisPS  
LX A  
LX Rebel  
LX Rebel ES  
LX Z  
H35C0  
H35B0

## LISA

[www.ledil.com/lisa](http://www.ledil.com/lisa)



**LISA-SS**  
PMMA / White PC  
H: ≈7,3 mm  
D: 10,8 mm  
Beam type:  
Smooth spot



**LISA-RS**  
PMMA / White PC  
H: ≈7,3 mm  
D: 10,8 mm  
Beam type: Real spot

XP-E  
XP-G  
LX Rebel  
GDr  
PDr  
Z5

## LISA2

[www.ledil.com/lisa2](http://www.ledil.com/lisa2)



**LISA2-RS-PIN**  
PMMA / Black PC  
H: ≈6,6 mm  
D: 9,9 mm  
Beam type: Real spot

**LISA2-R-PIN**  
Hyper Reflective white PC  
H: ≈6,6 mm  
D: 9,9 mm  
Beam type: Extra² wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
LISA2-M	22	89	2,8
LISA2-O	45 x 21	82	2,2
LISA2-O-90	19 x 48	82	2,2
LISA2-O-90-PIN	48+18°	83	TBA
LISA2-RS	19	89	3,1
LISA2-W	34	88	1,8
LISA2-WW	46	89	1,1
LISA2-WWW	80	83	0,4



H35C1  
H35C0  
OsSg EC  
OsLSL150  
OsLSL80  
SFH 47155 (R)  
DurisPS  
LX A  
LX H50-2  
LX Q  
LX Rebel ES  
LX Rebel  
LX T  
LX Z  
LX Z ES  
Double Dome  
NCsxx19A  
NCsxx19B  
NVsxx19A  
XB-D  
XP-E  
XP-E2  
XP-G  
XP-G2  
XP-E  
XP-E  
Z5

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Single lenses

## TINA

[www.ledil.com/tina](http://www.ledil.com/tina)



**TINA-WW**  
PMMA / White PC  
H: ≈10 mm  
D: 16,1 mm  
Beam type:  
Extra wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
TINA-D	16	92	6,1
TINA-M	29	88	2,1
TINA-O	34 x 15	89	3,4
TINA-RS	13	93	10,9
TINA-W	48	91	1,3
TINA-WW	61	91	0,8

## TINA2

[www.ledil.com/tina2](http://www.ledil.com/tina2)



**TINA2-R-CLIP16**  
Hyper Reflective white PC  
H: 10,1 mm  
D: 16,1 mm  
Beam type: Wide



**TINA2-SS**  
PMMA / PC  
H: ≈10 mm  
D: 16,1 mm  
Beam type:  
Smooth spot



**TINA2-M**  
PMMA / PC  
H: ≈10 mm  
D: 16,1 mm  
Beam type: Medium

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
TINA2-D	16	89	6,9
TINA2-M	29	86	2,5
TINA2-O	35 x 16	87	3,5
TINA2-RS	14	91	10,4
TINA2-W	46	87	1,37
TINA2-WW	58	87	0,9
TINA2-R	TBA	TBA	TBA

## TINA3

[www.ledil.com/tina3](http://www.ledil.com/tina3)



**TINA3-S**  
PMMA / White PC  
H: 11,5 mm  
D: 16,1 mm  
Beam type: Spot



**TINA3-W**  
PMMA / White PC  
H: ≈7 mm  
D: 16,1 mm  
Beam type: Wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
TINA3-00	59 x 39	90	1,20
TINA3-S	13	77	8,40
TINA3-W	39	90	1,70
TINA3-WW	53	90	1,00
TINA3-WWW	71	88	0,60

## FLORENTINA

[www.ledil.com/products](http://www.ledil.com/products)

TINA2-L12 multiholder  
12-up with glare  
protection

**FLORENTINA-SHD**

PC  
H: 22,5 mm  
D: 286.8 x 27,5 mm



**FLORENTINA-HLD**

PC  
H: 10,2 mm  
D: 285,6 x 19,5 mm

LX-A | LX-T  
LX Rebel  
LX Rebel ES  
LX H50-2  
LX Z ES  
GDF+  
Od SSL150  
Od SSL80  
SFH 47155 (LR)  
MX-G | XP-E  
XP-G | XT-E  
XP-G2  
NCSxx19A  
NS5x83  
LHS31 (A0559)  
S3S3H  
Z5 | Z5M

MX-G | XB-D  
XDL | XW-L2  
XP-E | XP-E2  
XP-E HEW  
XP-G | XP-G2  
XP-E  
CL-L400  
OILPxx050FOL  
NCSxx19A  
NF2x757A  
NS3x83  
NS5x83  
NS9x153  
NVSxx19A  
NVSxx19B  
LX Z ES  
LX B | LX T  
LX Rebel  
LX Rebel ES (A)  
DurisS5  
GDF+  
OsSg EC  
OsSg PC  
Od SSL150  
Od SSL80  
SFH 47155 (LR)  
Z5

Z5  
Jlead  
H3S6  
H3S8Q  
H3SCL

### ROSE

[www.ledil.com/rose](http://www.ledil.com/rose)



#### ROSE Extra wide

Material: PC / PC  
H: 13,5 mm  
D: 21,6 x 21,6 mm



#### ROSE Medium

Material: PC / PC  
H: 15,6 mm  
D: 21,6 x 21,6 mm

Beam type code	Typ. FWHM	Typ. eff.	Typ. cd/lm
-D	16	85	7,1
-M	30	83	2,5
-MD	24	TBA	TBA
-O	43 x 15	81	3,1
-O-90	13 x 44	81	3,6
-RS	11	88	21,7
-SS	15	87	9,37
-W	51	81	1,1
-WW	59	TBA	0,78
-WWW	80	84	0,4

- MC-E
- MX-3
- MX-6
- XM-L
- XM-L EZW
- XM-L2
- XP-E
- XP-E HEW
- XP-G
- XP-E
- E2
- E3
- E6-F
- NS5x336
- NS5x83
- NS9x153
- NCSU033A
- NCSU033A
- LX K2
- LX Rebel
- LX Rebel ES
- LX Rebel ES+
- OL P-x050F6L
- Stanley 3J
- Stanley 6J
- H35CO

### ROSE-UV

[www.ledil.com/rose](http://www.ledil.com/rose)

LEDiL's next generation of UV optics for Nichia type packaged UV-LEDs offers substantially improved performance and durability over previous generation optics. With the introduction of new materials such as optical grade silicones LEDiL has been able to considerably increase optical efficiency and UV resistance of the optics.

- NCSU032A
- NCSU033B
- NCSU033A
- NCSU034A
- NCSU034B
- NCSU034A



**FCA14011\_G2-NIS033U-S**  
Silicone/PC  
H: 12,9 mm  
D: 21,6 x 21,6 mm  
Efficiency: 92%  
Beam type: Spot



**FCA14405\_G2-NIS033U-M**  
Silicone/PC  
H: 12,9 mm  
D: 21,6 x 21,6 mm  
Efficiency: 91%  
Beam type: Medium

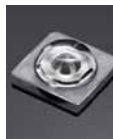


**FCA14464\_G2-NIS033U-W**  
Silicone/PC  
H: 12,9 mm  
D: 21,6 x 21,6 mm  
Beam type: Wide

### SIRI-A

[www.ledil.com/siri](http://www.ledil.com/siri)

SIRI family is a series of specialty optics for wide area lighting applications.



**SIRI-A**  
PMMA  
H: 13,9 mm  
D: 4,2 mm  
Beam type: Wide area lighting



**SIRI-DOME**  
PMMA  
H: 13,9 mm  
D: 4,9 mm  
LED cover with no effect on the light



**SIRI-DIFF**  
PMMA  
H: 13,9 mm  
D: 4,9 mm

- XP-E
- XB-D
- XM-L
- XM-L2
- XP-G
- XP-G2
- XT-E
- OsSqr EC
- OsSqr PC
- OsS150
- NS5x383
- NS5x19A
- NS5x19B
- LX-A
- LX-R
- LX Rebel ES

### TWIDDLE

[www.ledil.com/twiddle](http://www.ledil.com/twiddle)

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
TWIDDLE-D	20	81	TBA
TWIDDLE-M	32	72	TBA
TWIDDLE-RZ-D	TBA	TBA	TBA
TWIDDLE-RZ-M	TBA	TBA	TBA



#### TWIDDLE-D

PMMA  
H: 14,3 mm  
D: 21,6 mm  
Beam type: Diffused spot

- NS6x83
- MX-6
- XR-E
- XP-G
- XP-G2
- XT-E

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Single lenses

## LAURA GenII

[www.ledil.com/laura](http://www.ledil.com/laura)

LAURA GenII is the next generation of LEDiL's classic LAURA family. New LAURA GenII optics feature new thinner holder design. GenII optics are backwards compatible with previous generations and offer the same beam specifications and exceptional quality of light at even more affordable price.



### G2-LAURA-O-WAS

PMMA / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type:  
Wall washer

GenII LAURA ordering codes	Typ. FWHM	Typ. eff.	Typ. cd/lm
CA13629 G2-LAURA-D-P	13	93	9,3
CA13627 G2-LAURA-M-P	30	92	2,6
CA13631 G2-LAURA-O-P	40 x 13	91	4,8
CA13628 G2-LAURA-RS-P	8	93	33,2
CA13630 G2-LAURA-SS-P	11	93	16,5
CA13634 G2-LAURA-W-P	46	91	1,55
CA13633 G2-LAURA-WW-P	66	86	0,7
CA13636 G2-LAURA-R-XW-P	72	86	0,6
CA13632 G2-LAURA-R-W-P	70	81	0,8
CA13639 G2-LAURA-SS-WAS-P	Asymmetric	92	11,6
CA13638 G2-LAURA-O-WAS-P	Asymmetric	84	2,6
CA13637 G2-LAURA-O90-P	TBA	TBA	TBA



### G2-LAURA-WW

PMMA / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type:  
Extra wide



### G2-LAURA-M

PMMA / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type:  
Medium



### G2-LAURA-RS

PMMA / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type: Real spot

## LAURA

[www.ledil.com/laura](http://www.ledil.com/laura)



### LAURA-RS

PMMA / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type: Real spot



### LAURA-R-XW

Hyper Reflective  
PC / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type:  
Extra<sup>2</sup> wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
LAURA-D	15	88	6,2
LAURA-M	29	88	2,5
LAURA-O	40 x 12	88	4,3
LAURA-RS	8	93	30,5
LAURA-SS	11	91	14,5
LAURA-W	42	88	1,7
LAURA-WW	66	86	0,70
LAURA-XW	72	85	0,6
LAURA-R-W	70	77	0,52



### LAURA-SS-WM

PMMA / PC  
H: ≈13 mm  
D: 21,6 x 21,6 mm  
Beam type:  
Wall washer

Ostar L  
OslSq EC  
OslSq PC  
Osl SSL150  
Osl SSL80  
SFH 47155 (IR)  
XB-D  
XP-E2  
XP-E  
XP-E-HEW  
XP-G  
XP-G2  
XP-L  
XP-L  
XTE  
XTE3535  
H35C0  
H35C1  
Stanley3J  
Stanley6J  
107  
NC-sxx19A  
NC-sxx19B  
NF-z757A  
NS9x153  
NV-sxx19A  
LXA  
LX H50-2  
LX PWT  
LX Q  
LX R  
LX Rebel  
LX Rebel ES  
LX T  
LX Z ES  
Double Dome  
CL-1400  
Jade  
Z5

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- 107
- NC5xx19A
- NC5xx19B
- NF2x757A
- NS6x83
- NS9x383
- NV5xx19A
- NV5xx19B
- OD1
- OD1
- OS150 EC
- OS150 PC
- OS155L150
- OS155L80
- Ostar LH
- Duris55
- Ostar-SMT RGB
- MC-E
- XB-D
- XM-L
- XM-L2
- XP-E
- XP-E-NEW
- XP-E
- XP-E
- XP-E
- MX-6
- XB-H
- XP-E2
- XP-G2
- XP-L
- XO-E
- HB50
- HB80
- HB50
- CL1400
- LX-A
- LX150-Z
- LX-Q
- LX-R
- LX Rebel
- LX Rebel ES
- LXT
- LX Z ES
- Z5
- Z5 M1
- LH351A(3535)
- SummiS
- OLP505050FL
- LZ1(00U600)
- LZ1(00U400)
- LZ1(00xW00)

## LEILA GenII

[www.ledil.com/leila](http://www.ledil.com/leila)

New LEILA GenII is the next generation of LEDiL's classic LEILA family, featuring a new thinner holder design. GenII optics are backwards compatible with previous generations offering same beam specifications and exceptional quality of light at even more affordable price.



### LEILA-G2-O-90

PMMA / PC  
H: 14,7 mm  
D: 21,6 mm  
Beam type: Oval



### LEILA-G2 Real Spot

PMMA / PC  
D: 21,6 mm  
H: 14,7 mm



### LEILA-G2-D

PMMA / PC  
H: 14,77 mm  
D: 21,6 mm

GenII LEILA ordering codes	Typ. FWHM	Typ. eff.	Typ. cd/lm
CA14511_G2-LXP2-O-90-P	11 x 39	89	4,6
CA14512_G2-LXP2-O-90	11 x 39	89	4,6
CA14503_G2-LXP2-RS-P	9,6	94	23,1
CA14504_G2-LXP2-RS	9,6	94	23,1
CA14505_G2-LXP2-RS2-P	8,5	90	22,1
CA14506_G2-LXP2-RS2	8,5	90	22,1
CA14507_G2-LXP2-D-P	TBA	TBA	TBA
CA14508_G2-LXP2-D	TBA	TBA	TBA
CA14509_G2-LXP2-M-P	TBA	TBA	TBA
CA14510_G2-LXP2-M	TBA	TBA	TBA



## LEILA

[www.ledil.com/leila](http://www.ledil.com/leila)

### LEILA-R-CLIP16

Hyper reflective PC  
H: 13 mm  
D: 21,6 mm  
Typ. FWHM: 73°  
Typ. efficiency: 90%  
Beam type: Extra<sup>2</sup> Wide



### LEILA Real Spot

PMMA / PC  
D: 21,6 mm  
H: 13,3 mm



### LEILA-M

PMMA / PC  
H: ≈13 mm  
D: 21,6 mm  
Beam type: Medium

Beam type code	Typ. FWHM	Typ. eff.	Typ. cd/lm
-MD	24	90	TBA
-O	39 x 11	88	4,8
-O-90	11 x 39	89	4,6
-REC	37 x 26	84	2,4
-RS	9,6	94	23,1
-RS2	8,5	90	22,1
-SS	12	TBA	
-W	42	90	1,6
-WW	42	TBA	TBA
-WAS	Asymm.	TBA	TBA

## LEILA for UV lighting

Special products made of COP, an extremely UV-withstanding material suitable for various UV-lighting applications.



### FCN12592\_LE1-D-COP

LedEngin 5W UV (365nm)  
Material: COP / PC  
H: 15,1 mm  
D: 21,6 mm  
FWHM: 12°  
Beam type: Smooth spot  
Efficiency: 92%



### FCN12592\_LE1-D-COP

LedEngin 5W UV (400 nm)  
Material: COP / PC  
H: 15,1 mm  
D: 21,6 mm  
FWHM: 12°  
Beam type: Smooth spot  
Efficiency: 92%

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](http://www.ledil.com) for LED specific values and optical datasheets.



# Single lenses

SFH 4715S (IR)

## IRENE

[www.ledil.com/products](http://www.ledil.com/products)

LEDIL's IRENE is especially developed with square beam-pattern for IR-CCT camera chip compatibility.



**IRENE-IR-16**  
PMMA / PC  
H: 14,3 mm  
D: 21,6 mm  
FWHM: 20° + 19°  
[sim.]

Code	Typ. FWHM	Height	Diameter
IRENE-IR-4	67° + 67°	14,3	21,6
IRENE-IR-8	32° + 32°	14,3	21,6
IRENE-IR-12	25° + 25°	14,3	21,6
IRENE-IR-16	20° + 19° [sim.]	14,3	21,6
IRENE-IR-25	11° + 9° [sim.]	14,3	21,6

## IRINA

[www.ledil.com/irina](http://www.ledil.com/irina)

XP-E  
XP-G



**IRINA-RS**

PMMA / PC  
H: 11,7 mm  
D: 24,7 mm  
Beam type: Real spot

## TITANUM / SPUTNIK

[www.ledil.com/products](http://www.ledil.com/products)

TITANUM / SPUTNIK family of optics for Osram and Seoul LEDs. Versions that have ordering code ending with -C have metallized coating making them suitable for potting. Go to [www.ledil.com](http://www.ledil.com) for specific order codes and more information.

GD-L  
PDI  
LI Dragon  
P4  
P5

Code	Typ. FWHM	Typ. eff.
TITANUM/SPUTNIK-M	26	87
TITANUM/SPUTNIK-O	36 X 8	89
TITANUM/SPUTNIK-SS	9	84
TITANUM/SPUTNIK-W	66	71



**TITANUM/ SPUTNIK-90-C**

PMMA / PC  
H: 14,3 mm  
D: 21,6 mm  
Beam type: Oval

## EMILY

[www.ledil.com/emily](http://www.ledil.com/emily)



**EMILY-O-WAS**

PMMA,  
H: 14,8 mm,  
D: 26 mm  
Beam type: Tilted oval

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
EMILY-SS-WAS	8	90	12
EMILY-O-WAS	43 x 10	87	3,6
EMILY-D	11	91	14
EMILY-M	18	91	7,4
EMILY-M2	29	89,2	3,05
EMILY-O	44 x 10	89	4,5
EMILY-O-90	45 x 10	89	4,2
EMILY-SS	11	80	13,4
EMILY-W	39	86	1,5
EMILY-WWW	58	86	1
EMILY-RS	8	90	29,5



**EMILY-M**

PMMA  
H: 15,1 mm  
D: 26 mm  
Beam type: Medium



**EMILY-WWW**

PMMA  
H: 13,3 mm  
D: 26 mm  
Beam type: Extra wide



**EMILY-O**

PMMA  
H: 15,1 mm  
D: 26 mm  
Beam type: Oval

Double Dome  
LX-A  
LX H50-2  
LX Rebel  
LX Rebel +  
LX T  
LX Rebel ES  
OsEq EC  
Os SSL80  
Os SSL150  
NCsxx19A  
NCsxx19B  
NVsxx19A  
NVsxx19B  
NS97333  
XML-BWV  
XP-E  
XP-E2  
XP-G  
XP-G2  
XP-L  
XM-L  
XM-L2  
XT-E  
Z5  
Z5 M1

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### EVA

[www.ledil.com/eva](http://www.ledil.com/eva)



**EVA-S**  
PMMA  
H: 16,4 mm  
D: 35 mm  
Beam type: Spot



**EVA-M**  
PMMA/PC  
H: 16,4 mm  
D: 37,7 mm  
Beam type: Medium



**EVA-WW**  
PMMA/PC  
H: 16,4 mm  
D: 37,7 mm  
Beam type: Extra wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
EVA-D	16	80	4,92
EVA-M	24	89	3,2
EVA-O	38 x 17	85	3,06
EVA-S	13	93	TBA
EVA-W	38	83	1,4
EVA-WW	53	82	1,7
C10685 EVA-M	26	89	2,8



**EVA-O**  
PMMA  
H: 16,4 mm  
D: 35 mm  
Beam type: Oval

MC-E  
MK-R  
XM-L  
XM-L EZW  
XM-L HVW  
XM-L2  
XTE  
XP-G2  
NS9x383  
NSM286M  
LXM  
LXM2  
DurisS8

### MIRA

[www.ledil.com/mira](http://www.ledil.com/mira)



**MIRA-M**  
PC/PC  
H: ≈16 mm  
D: ≈35 mm  
Beam type: Medium



**MIRA-WW**  
PC/PC  
H: ≈16 mm  
D: ≈35 mm  
Beam type: Extra wide



**MIRA-W**  
PC  
H: 14,7 mm  
D: 32,4 mm  
Beam type: Wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
MIRA-M	28	83	2,1
MIRA-W	38	82	1,5
MIRA-WW	58	83	0,9

### KIKI

[www.ledil.com/products](http://www.ledil.com/products)

KIKI-A lens designed for backlighting applications. An optical design carefully optimised for maximally uniform light distribution even for wider distances between LED placements.



**KIKI-A**  
PMMA  
H: 5,9 mm  
D: 21,6 x 14 mm  
Beam type: Wide-Area Lighting

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
KIKI-A	163	92	0,28
KIKI-B	TBA	TBA	TBA

LXT  
XTE

### EYA

[www.ledil.com/eya](http://www.ledil.com/eya)



**EYA-O**  
PMMA/PC  
H: 29,1 mm  
D: 30,4 mm  
Beam type: Oval



**EYA-S**  
PMMA/PC  
H: 29,1 mm  
D: 30,4 mm  
Beam type: Spot

### JULIA-A

[www.ledil.com/julia](http://www.ledil.com/julia)



**JULIA-A**  
PMMA  
H: 4,8 mm  
D: 18,8 mm  
Beam type: Wide area lighting

Od SSL150  
Od SSL80  
IX Rebel  
IX Rebel ES  
XP-E  
XP-E2  
XP-G  
XP-G2  
XTE  
NC-Sxx19A  
NV-Sxx19A  
Z5

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Single lenses

## HEIDI

[www.ledil.com/heidi](http://www.ledil.com/heidi)



### HEIDI-WR

PMMA, H: 11,7 mm, D: 21,6 mm  
Beam type: Round



### HEIDI-W2

PMMA  
H: 11,7 mm  
D: 21,6 mm  
Beam type: Wide



### HEIDI-O

PMMA  
H: 11,7 mm  
D: 21,6 mm  
Beam type: Oval

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
HEIDI-D	10	90	14,8
HEIDI-M	26	89	3,8
HEIDI-O	49 x 11	87	4,5
HEIDI-O-90	13 x 44	87	4,7
HEIDI-RS	8	92	21,8
HEIDI-SS	15	90	6,8
HEIDI-W	32	87	2,6
HEIDI-W2	45	80	1,1
HEIDI-WR	31	TBA	TBA
HEIDI-REC	TBA	TBA	TBA
HEIDI-REC-90	TBA	TBA	TBA

OsSqa EC  
OsSqa PC  
OsS5L150  
OsS5L80  
ML-E XM-L  
XB-D XB-H  
XP-E XP-E2  
XT-E XP-L  
XP-G XP-G2  
Z5M1  
Z5P1 Z5  
Ccr3535  
H35CO  
107  
NC5xx19A  
NC5xx19B  
NV5xx19A  
NV5xx19B  
NF2x757A  
NSSW157T  
LX H50-2  
LX PWT  
LX Rebel  
LX Rebel LX-A  
LX Rebel ES  
Double Dome

## FLARE

[www.ledil.com/flarefamily](http://www.ledil.com/flarefamily)



### FLARE-MINI-A

PMMA  
H: 8,6 mm  
D: 16 mm  
Beam type: Oval



### FLARE-C

PMMA  
H: 14,6 mm  
D: 24,5 x 24,5 mm  
Beam type: Rectangular



### FLARE-MAXI-D

PMMA  
H: 16,7 mm  
D: 33,9 x 33,9 mm  
Beam type: Rectangular

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
FLARE-B	102 x 11	93	1,6
FLARE-C	87 x 8	93	3,2
FLARE-C-D	95 x 21	93	1
FLARE-MAXI	99 x 13	94	2,3
FLARE-MAXI-D	108 x 15	94	1,8
FLARE-MINI-A	106 x 20	94	1,1
FLARE-MINI-AD	98 x 19	94	1,1
FLARE-MINI-AD-PIN	98 x 19	94	1,1
FLARE-MINI-A-PIN	106 x 20	94	1
LEDIL-FLARE	138 x 20	92	1,3



### FLARE-MAXI

PMMA  
H: 16,7 mm  
D: 33,9 x 33,9 mm  
Beam type: Rectangular



### FLARE-MINI-AD

PMMA  
H: 8,6 mm  
D: 16 mm  
Beam type: Oval

LX A  
LX K2  
LX H50-2  
LX M  
LX MZ  
LX Rebel  
LX Rebel ES  
LXT  
Double Dome  
NC5xx19A  
NC5xx19B  
NS9xx3B3  
NV5xx19A  
NV5xx19B  
OsS5L100  
OsS5L150  
OsS5L80  
MK-R  
XB-D  
XM-L  
XM-L2  
XP-E  
XP-E2  
XP-G  
XP-G2  
XP-L  
XR-E  
XT-E  
H35CO  
H35CT  
Z5  
Z5M1

## IRIS

[www.ledil.com/iris](http://www.ledil.com/iris)



### IRIS-O

PMMA / PC  
H: ≈29 mm  
D: 38 mm  
Beam type: Oval



### IRIS

PMMA / PC  
H: ≈29 mm  
D: 38 mm  
Beam type: Spot



### IRIS-M

PMMA / PC  
H: ≈29 mm  
D: 38 mm  
Beam type: Medium

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
IRIS-M	26	86	2,7
IRIS-O	39 x 28	84	1,9
IRIS-RS	5	93	6,6
IRIS-RS2	9	91	19,2
IRIS-S	13	89	10,9

MC-E XP-L  
XM-L XM-L2  
XP-E XP-E2  
XP-G XP-G2  
OsS5L150  
OsS5L80  
Ostar L  
OsSqa EC  
SPT175118R  
LX H50-2  
LX M  
LX MZ  
LX Rebel  
LX Rebel ES  
LXT  
NC5xx19A  
NV5xx19A  
NS9xx3B3  
SST-50 SST-90  
Z5 Z5M1  
H35CT

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### BILLIE

[www.ledil.com/billie](http://www.ledil.com/billie)



#### BILLIE-A

PMMA / PC  
H: 16.1 mm  
D: 21.5 mm  
Beam type: Asymmetric



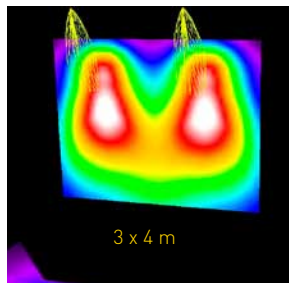
#### BILLIE-B

PMMA / PC  
H: 16.1 mm  
D: 21.5 mm  
Beam type: Asymmetric

BILLIE, a rectangular wall-washing optic with excellent beam uniformity; another unique innovation made possible by LEDiL. Especially designed for indoor and outdoor architectural and billboard lighting, BILLIE is the perfect solution for small concealed fixtures.

#### APPLICATION EXAMPLE OF ENERGY EFFICIENT BILLBOARD LIGHTING

- Beam is tilted 18° to achieve even illumination of the billboard face
- Beam can be adjusted sideways with optional sublens
- Luminous flux: 884 lm
- Emin 104 lx, Emax 218 lx
- Typical uniformity 1:2



- LX A
- LX R
- LX Rebel
- LX Rebel ES
- NCsxx19A
- NF2x757A
- NSSW157T
- NV5xx19A
- OsLSL80
- OsLSL150
- DurisS5
- XB-D
- XP-E
- XP-G
- XP-G2
- XT-E
- Z5

### SEANNA-A

[www.ledil.com/products](http://www.ledil.com/products)

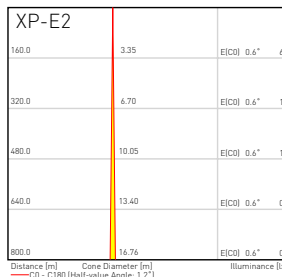
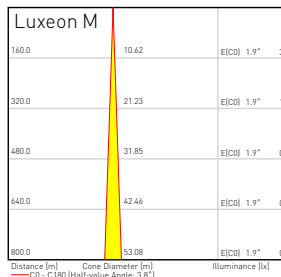


#### SEANNA-A

PMMA  
D: 152,6 mm  
H: 79 mm  
Beam type: Real Spot

SEANNA's patent pending design has two optical elements. A primary TIR lens ensuring that all light will hit the secondary Fresnel resulting in maximum performance and efficiency.

- Optimized for a variety of high power LED's
- Peak value at 25m up to 800 cd/lm and spot as narrow as 1-3° depending on LED
- Holder design allows both pole and integrated installation options



- LX M
- LX Rebel
- LX Rebel ES
- LX S
- MK-R
- XB-D
- XM-L
- XM-L2
- XP-E
- XP-E2
- XP-G
- XP-G2
- XT-E
- SSM-80

- LX M
- LX A
- LX Rebel
- LX Rebel ES
- LX M Z
- LX T
- Double Dome

### VERONICA

[www.ledil.com/veronica](http://www.ledil.com/veronica)



#### VERONICA-RS

PMMA  
H: 26 mm  
D: 12,2 mm  
Beam type: Real Spot

TIR lens for installations with potting resin.

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
VERONICA-O	54 + 11°	84	4,2
VERONICA-RS	12	90	18,4
VERONICA-SQ-O	56+12	82	3,2
VERONICA-SQ-M	TBA	TBA	TBA
VERONICA-SQ-WW	TBA	TBA	TBA

### AMELIA

[www.ledil.com/products](http://www.ledil.com/products)



#### AMELIA-S

PMMA  
H: 45 mm  
D: 27,1 mm  
Beam type: Spot

- LX S

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](http://www.ledil.com) for LED specific values and optical datasheets.

## BLONDIE

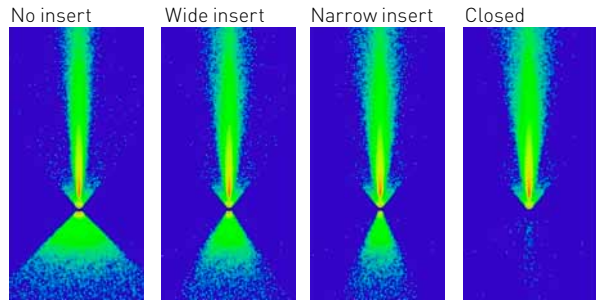
[www.ledil.com/blondie](http://www.ledil.com/blondie)



**BLONDIE-A**  
PC  
H: 45 mm  
D: 92 x 78.3 mm

Blade type wall grazing luminaires are good choices for emphasizing details and adding structure to buildings. LEDiL created the BLONDIE reflector which produces a very tight blade type wall washing beam with a single LED source using only a few watts of energy.

To shape the double-sided beam of BLONDIE further, it comes with three interchangeable inserts. With these additional reflector pieces, the backside light can easily be shaped into different angles.



LX A  
LX M  
LX MZ  
LX Rebel  
MK-R  
XM-L2  
XP-G  
XP-G2  
XP-E2  
NV5x19B  
OsIsc EC

## FRIDA-A

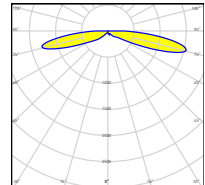
[www.ledil.com/products](http://www.ledil.com/products)



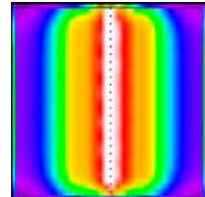
**FRIDA-A**  
PMMA  
H: 9,7 mm  
D: 12,2 + 7,9 mm  
Beam type:  
Wide area lighting

FRIDA-A FOR REFRIGERATOR LIGHTING

- Application area: 1,52 x 1,52 m
- Luminaire row installed along the centerline of the cabinet
- Emits light sideways giving optimal shelf illumination
- Eav: 795 lx
- Emin: 142 lx
- Emax: 2410 lx
- u0: 0,178



XP-G  
XB-D



## HELENA

[www.ledil.com/helena](http://www.ledil.com/helena)

Diamond turning is the method of choice when producing some of the very highest class optics in the world. We have used it to make HELENA, fresnel type lens having surface accuracy of a hundredth of a millimetre. This means better light control and efficiency – lighting the LEDiL way.

LX K8  
LX K12  
LX K16  
CXA15  
CXA25



**HELENA-A**  
PMMA  
H: 11 mm  
D: 72,8 mm  
Beam type: Medium



**HELENA-B**  
PMMA/PC  
H: 11 mm  
D: 72,8 mm  
Beam type: Medium

### RGB-MIXING

[www.ledil.com/rgb](http://www.ledil.com/rgb)

- LEDiL patented technology
- Proprietary and patented microstructured surfaces

Typical applications:

- RGBX for stage lighting and architectural applications
- Adaptive color temperature
- Perfect CRI



LZ4 RGB  
MC-E  
MC-E RGB  
XM-L RGB  
Ostar-SMT RGB  
PS



#### ANGELINA-RZ-S

PC / PC  
H: 31 mm  
D: 82 mm  
Beam type: Spot  
FWHM: 26°



#### ANGELA-RZ-W

PC / PC  
H: 74,5 mm  
D: 119,5 mm  
Beam type: Wide  
FWHM: 31°



#### GERI-RZ

PMMA/PC  
H: 32,8 mm  
D: 45 x 45 mm  
Beam type: Wide  
FWHM: 31°



#### RITA-A-RZ

Hyper Reflective PC  
H: ≈19 mm  
D: 35,1 x 28,9 mm  
Beam type: Asymm.



#### RITA-WAS-RZ

Hyper Reflective PC  
H: ≈17 mm  
D: 31,9 x 28,4 mm  
Beam type: Asymm.



#### REBECCA

PMMA / PC  
H: 29,9 mm  
D: 42 mm



#### MIRELLA-RZL

PC / PC  
D: 49,9 mm  
H: 25,8 mm  
Beam types: -S, -M, -W, -XW

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
RGBX-M	30	70	TBA
RGBX-0	48+25	70	TBA
RGBX-SS	20	85	3,8
RGBX-HLD	TBA	TBA	TBA
RGBX2-M	34	68	1,5
RGBX2-0	48+24	66	1,5
RGBX2-S	20	77	4,6
ANGELA-RZ-S	10	90	11,0
ANGELA-RZ-M	18	84	3,0
ANGELA-RZ-W	38	83	1,4
ANGELA-RZ-XW	72	89	0,6
ANGELINA-RZ-S	25	89	1,8
ANGELINA-RZ-M	37	89	1,3
ANGELINA-RZ-W	54	89	1,0
ANGELINA-RZ-XW	TBA	TBA	TBA
REBECCA-RZ-WW	TBA	TBA	TBA

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Specialty products

## SAGA

[www.ledil.com/saga](http://www.ledil.com/saga)

### SAGA-HB-IP-WHT

Silicone  
H: 12 mm  
D: 50 mm  
Beam type: HighBay  
Typical FWHM: 62°



CLL01x  
CLL02x  
CLL03x  
CXA1304  
CXA1816  
CXA15  
Vero10  
BXR A E5 S  
V10  
CXM-6  
CXM-7  
CXM-9  
Soleriq P6  
Soleriq P9  
Soleriq S13  
Mini Zenigata  
LTP-L-M036

- TIR lens in optical grade silicone
- Precision-molded frame in Hyper-Reflective White PC
- Zhaga compliant fastening with two M3 screws 35 mm apart
- Average optical efficiency of 92 %

## STELLA

[www.ledil.com/stella](http://www.ledil.com/stella)

### STELLA-A

Silicone  
H: 22 mm  
D: 90 mm  
Beam type:  
Asymmetric



CLL03x  
CLL04x  
CLL05x  
LX K12  
LX K16  
LX CoB1208  
CXA15  
CXA25  
CXA30  
CXA35  
CXA1816  
Vero13  
Vero18  
Vero29  
CXM-18  
Soleriq S19  
Soleriq S13  
Mega Zenigata  
LTP-L-M074

- Self-sealing design simplifies luminaire design
- Very good thermal and UV-resistance
- Average optical efficiency of 92%
- STELLA-A street lighting lens featuring Type II / Type III light distribution depending on LES size
- STELLA-HB for warehouse and outdoor applications, works with COB's up to LES size 50

### STELLA-HB

Silicone  
H: 19,5 mm, D: 90 mm  
Typical FWHM: 77°  
Beam type: High Bay



## JENNY

[www.ledil.com/products](http://www.ledil.com/products)

Cost effective silicone lens family designed for high power multi-crystal and COB LEDs. Can be installed with glue or optional holder.

### JENNY-8X1-CY

Silicone  
H: 11,5 mm  
D: 280 x 35 mm  
Typ. efficiency: 94%  
Beam type:  
Wide area lighting



### JENNY-HLD-A-BLK

PC  
H: 5 mm  
D: 34.8 x 50 mm



### JENNY-CY

Silicone  
H: 11,5 mm, D: 35 x 35 mm  
Typical efficiency: 94%  
Beam type:  
Wide area lighting



CLL01x  
CLL02x  
CXA1304  
CXA1310  
CXA15  
CXA1520  
MK-R  
MK-6  
XM-L-EZW  
LX M  
NSMx286M  
Mini Zenigata  
V6  
V8

### EMERALD

[www.ledil.com/emerald](http://www.ledil.com/emerald)

Cost effective and new one-LED, one-optic solution for exit route lighting. With EMERALD's extremely wide beam distribution it's possible to achieve EN 1838 compliant lighting for installation height to distance ratios up to and beyond 1:7. Extended illumination range and single LED design reduces costs of the fixture and installation significantly.

### EMERALD-A

PMMA  
H: 7,3 mm  
D: 21,6 mm  
Beam type: Rectangular  
Typical FWHM: 150° x 20°



H35C0  
H35B0  
XB-D X1-E  
XM-L XM-L2  
XP-E XP-E2  
XP-G XP-G2  
OsSa EC  
OsSa PC  
OsSSL150  
OsSSL80  
Z5  
LXA  
LXA M LX M Z  
LX Rebel  
LX Rebel ES  
LXT LX R  
NCsxx19A  
NVsxx19A  
NS9x383

### DOROTHY

[www.ledil.com/dorothy](http://www.ledil.com/dorothy)

DOROTHY is an array of 4 side-emitting optics. It is designed for wide area lighting applications, especially anti-panic area lights.

### DOROTHY-4-A

PMMA  
H: 4,5 mm  
D: 50,6 mm  
Beam type: Wide area



XP-E  
XP-E2  
XP-G  
XT-E  
XP-G2  
LXA  
LXR  
LX Rebel  
LX Rebel ES  
LXZ ES  
NCsxx19A  
NCsxx19B  
NVsxx19A  
NVsxx19B

Code	Beam Type	Typ. FWHM	Typ. eff.	Typ. cd/lm
DOROTHY-4-A	Wide area	152	94	0,3
DOROTHY-4-B	Side-Emitting	TBA	TBA	TBA

### LOTTA-A

[www.ledil.com/products](http://www.ledil.com/products)



### LOTTA-A

PMMA  
H: 3,6 mm  
D: 19,6 + 15,4 mm  
Beam type:  
Wide area lighting

LOTTA is designed especially for wide-area and backlighting applications. This lens shares the mechanical design of LEDiL's classic single STRADA family. LOTTA is design to provide good uniformity over wide areas optimized for Philips Lumileds' Luxeon LEDs.

### VENLA-IRIS

[www.ledil.com/venla](http://www.ledil.com/venla)

VENLA-S-IRIS complements LEDiL's VENLA optics family by featuring one of the tightest spot beams available for Philips Lumileds' Luxeon S.



### VENLA-S-IRIS

PMMA / PC  
H: 27,2 mm  
D: 45 mm  
Beam type: Spot

LX S  
LX M  
SSM-80  
XM-L  
XM-L2

### OONA-A

[www.ledil.com/products](http://www.ledil.com/products)

### OONA-A

PMMA  
H: 4,5 mm  
D: 9,9 x 9,9 mm  
Beam type: Oval



OsSa EC  
OsSa PC



# Specialty products / Reflectors

## SOPHIE

[www.ledil.com/products](http://www.ledil.com/products)

## SOPHIE

PMMA

H: 10,4 mm

D: 150 mm

Beam type: Asymmetric



XP-G  
XT-E  
XP-E  
XB-D  
OsIq PC  
OsISSL80  
OsISSL150  
DurisS5  
NF2x75/A  
NCSxx19A  
NVsxx19A  
NVsxx19B  
LX Rebel  
LX Rebel ES  
LXT  
LXR

SOPHIE linear optic is an excellent choice for backlighting and shelf lighting applications. It's asymmetric beam provides uniform illumination when installed inside the shelf - making your goods look great.

XB-D  
XP-E2  
XP-G  
XP-G2  
LXA  
LX Rebel  
OsIq TEC  
NCSxx19A  
HBS CO

## EMMA

[www.ledil.com/products](http://www.ledil.com/products)



### EMMA-A

PMMA

H: 5,7 mm

D: 9,9 x 9,9 mm

Beam type:  
Side emitter

## STRADA-S

[www.ledil.com/products](http://www.ledil.com/products)



### STRADA-S

PMMA

H: 6,9 mm

D: 19,6 x 15,5 mm

Beam type:  
Side emitter



### STRADA-S-14

PMMA

H: 6,5 mm

D: 19,6 x 13,8 mm

Beam type:  
Side emitter

LXA  
LX Rebel  
LX Rebel ES  
LXZ ES  
NCSxx19A  
NVsxx19A  
HBS CO  
OsIq TEC  
OsISSL150  
OsISSL80  
Double Dome  
XB-D  
XP-E  
XP-G  
ZS

## MINNIE

[www.ledil.com/minnie](http://www.ledil.com/minnie)

Available with or without holder. Diameter 35 mm (32,4 mm without holder), typical height ≈15 mm.



### MINNIE-LT-M

PC

H: 15,6 mm

D: 35 mm

Beam type:  
Medium



### MINNIE-LT-W

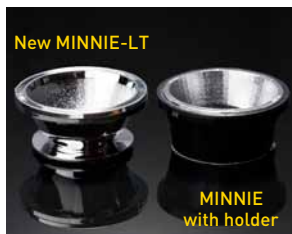
PC

H: 15,6 mm

D: 35 mm

Beam type:  
Wide

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
MINNIE-M	24	72	2,6
MINNIE-W	33	76	2
MINNIE-WWW	69	91	0,9
MINNIE-XW	90	92	0,5
MINNIE-LT-M	21	92	2
MINNIE-LT-W	29	92	2



New MINNIE-LT

MINNIE  
with holder

CXA15  
MG-E  
MG-G  
MG-G2  
MKR  
LXM  
LXTM Z  
NSIxx280M  
SSM-80

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

## BOOM

[www.ledil.com/boom](http://www.ledil.com/boom)



### BOOM-S

Metallized PC  
H: ≈14 mm  
D: 22,2 mm  
Beam type: Spot



### BOOM-M

Metallized PC  
H: ≈14 mm  
D: 22,2 mm  
Beam type: Medium

MC-E  
XRE  
LX-M  
LX-MZ  
AX321  
P7

Code	Typ. FWHM	Typ. cd/lm
BOOM-M	32	1,9
BOOM-S	18	3,6
BOOM-W	55	1,1
BOOM-XW	70	0,67



### BOOM-XW

Hyper Reflective PC  
H: ≈14 mm  
D: 22,2 mm  
Beam type: Extra<sup>2</sup> W

CXA15  
NSBxL110  
BXRA ES-3  
CL-L233  
CL-L02x  
CL-L251

## BRIDGET / LILY / CINDY

[www.ledil.com/products](http://www.ledil.com/products)

Mini Zenigata  
SST-50  
SST-90  
Soleriq P6  
Soleriq P9  
LTPL-M036



### -S

Metallized PC  
H: 12,8 mm  
D: 22,6 mm  
Beam type: Spot



### -M

Metallized PC  
H: 12,8 mm  
D: 22,6 mm  
Beam type: Medium

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
-M	41	87	1,5
-S	31	89	1,5
-W	57	88	1,1
BRIDGET-S-UNI	44	85	1,0
BRIDGET-M-UNI	52	84	1,1
BRIDGET-W-UNI	61	87	1,0

## BOOMERANG

[www.ledil.com/boomerang](http://www.ledil.com/boomerang)

Ostar  
LZ1100xW00  
LZ4100xW00



### BOOMERANG

Metallized PC  
H: ≈14 mm  
D: 22,2 mm  
Beam type: Spot

## TYRA / TYRA2 / TYRA3

[www.ledil.com/tyra](http://www.ledil.com/tyra)



### TYRA-S

Metallized PC  
H: 23,1 mm  
D: 40 mm  
Beam type: Spot

CL-L233  
MP-L  
NSBxL110

Code	Typ. FWHM	Typ. cd/lm
-M	32	90
-S	20	89
-W	47	91
-WW	64	90



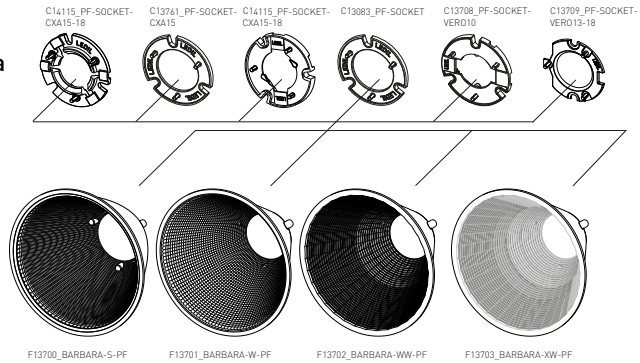
### TYRA3-WW

Metallized PC  
H: 22,5 mm  
D: 40 mm  
Beam type: Extra wide

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](http://www.ledil.com) for LED specific values and optical datasheets.

## BARBARA

[www.ledil.com/barbara](http://www.ledil.com/barbara)



BRXA ES R  
 Vero10  
 Vero13  
 Vero18  
 CXA1816  
 CXA2011  
 CXA15  
 COB-10W  
 COB-13W  
 COB-17W  
 COB-24W  
 CL-L330  
 CLL05x  
 NSBxL110  
 NSBxL066A  
 NSBxL121A  
 NSCxJ216A  
 S-SLE-P G3 LES17  
 Soloriq P6  
 Soloriq P9  
 LTPL-M036

Code	LED	Typ. FWHM	Typ. eff.
BARBARA-S		17	90
BARBARA-S-PF		TBA	TBA
BARBARA-S-PF	CXA15	21	86
BARBARA-S-PF	VERO10	21	88
BARBARA-S-PF	VERO13/18	22	91
BARBARA-W-PF		TBA	TBA
BARBARA-W-PF	CXA15	24	85
BARBARA-W-PF	VERO10	29	78
BARBARA-W-PF	VERO13/18	45	92
BARBARA-WW-PF		TBA	TBA
BARBARA-WW-PF	CXA15	64	84
BARBARA-WW-PF	VERO10	68	77
BARBARA-WW-PF	VERO13/18	58	91
BARBARA-XW		75	90
BARBARA-XW-PF		74	91
BARBARA-XW-PF	VERO13/18	72	93



### BARBARA-XW

Hyper Reflective PC  
 H: 44,7 mm  
 D: 70 mm  
 Beam type: Extra² W



### BARBARA-S

Metallized PC  
 H: 44,7 mm  
 D: 70 mm  
 Beam type: Spot

## RITA

[www.ledil.com/rita](http://www.ledil.com/rita)

The RITA family of wall-washing reflectors have gained a new colour mixing versions, RITA-WAS-RZ and RITA-A-RZ, compatible with a range of RGBW LEDs. Colour washing has never been easier.



Os35a EC  
 Os35sL150  
 Os35s180  
 Os35a-SMT RGB  
 LX M  
 LX H50-2  
 LX M  
 LX MZ  
 LX Rebel  
 LX Rebel ES  
 LX T  
 LX Z RGB  
 XM-B  
 XBP  
 XM-L  
 XM-L 2  
 XTE  
 XPE  
 XP-G  
 XP-G2  
 NS9x383  
 NCSxx19A  
 NVSxx19A  
 NVSxx19B  
 ZS

### BROOKE

[www.ledil.com/brooke](http://www.ledil.com/brooke)



#### BROOKE-S

Metallized PC  
H: 20,1 mm  
D: 45 mm  
Beam type: Spot



#### BROOKE-W

Metallized PC  
H: 21,1 mm  
D: 45 mm  
Beam type: Wide

#### BROOKE-SCR-M

Metallized PC

H: 20,2 mm

D: 45 mm

Beam type: Medium



BXRA ES R  
BXRA ES S  
Vero10  
CL103X  
CL1230  
CL1330  
CXA2011

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
BROOKE-S	24	94	
BROOKE-M	28	92	2,2
BROOKE-SCR-M	24	91	2,5
BROOKE-SCR-W	42	91	1,2
BROOKE-W	46	92	1,24
BROOKE-XW	TBA	TBA	TBA
BROOKE-SOCKET-VERO10	Socket to position and hold BRX Vero10		

### VENLA

[www.ledil.com/venla](http://www.ledil.com/venla)

#### VENLA-WW

Metallized PC

H: 25 mm, D: 45 mm

Beam type: Extra wide



LX M Z  
LX S  
SSM-80  
XM-L  
XM-L2

Code	Typ. FWHM	Typ. eff.
C11773 VENLA-S	13	TBA
C11775 VENLA-M	28	90
C11776 VENLA-W	45	TBA
C11777 VENLA-WW	56	87
CP12090 VENLA-S-IRIS	18	93

### BRITNEY

[www.ledil.com/britney](http://www.ledil.com/britney)

#### BRITNEY-XW

Hyper Reflective PC

H: 38,4 mm, D: 70 mm

Beam type: Extra<sup>2</sup> Wide

FWHM: 74°



BXRA RS



#### BRITNEY-M

Metallized PC  
H: 38,4 mm  
D: 70 mm  
Beam type: Medium  
FWHM: 28°



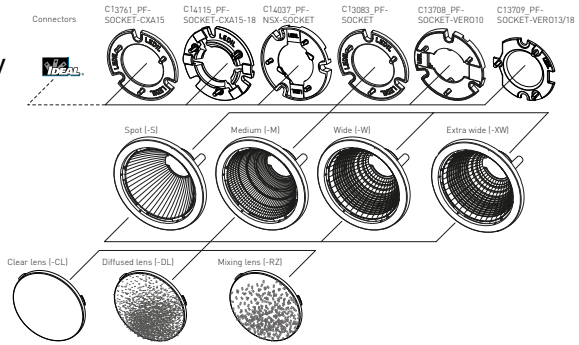
#### BRITNEY-W

Metallized PC  
H: 38,4 mm  
D: 70 mm  
Beam type: Wide  
FWHM: 48°

## MIRELLA

[www.ledil.com/mirellafamily](http://www.ledil.com/mirellafamily)

- Manufactured from impact-resistant, UL 94 V-2 rated, polycarbonate
- Available with an optional clear, diffusing or mixing lens, molded from PMMA
- Optimized for use with larger single-die lighting class LEDs and COB array LEDs



- COB-4W
- CXA1304
- CXA15
- CXA1816
- MKR
- MT-G
- MT-G2
- XML
- XML2
- XML RGB
- XP-G
- XP-G2
- XP-E
- XP-E-M036
- NSX3-066A
- NSX3-121A
- NSX2JC16A
- NSX1036A
- NSXs19A
- NS9x383
- Duris58
- Oslon EC
- Ostar L+
- Ostar-SMT RGB
- Soleriq P6
- Soleriq P9
- Soleriq S13
- BXRA ES S
- BXRA LS
- SM4
- Verio 10
- Verio 13
- Verio 18
- CL101X
- CL102X
- Mini Zenigata
- LX A
- LX M
- LX M2
- LX S
- LX CoB1203
- LX K4
- LX Z RGB
- S-SLE-P G3 LESTO
- CXM-6
- CXM-7
- CXM-9
- ZC6



### MIRELLA-50-S-PF

Metallized PC  
H: 24 mm  
D: 49,9 mm  
Beam type: Spot



### MIRELLA-50-M-PF

Metallized PC  
H: 24,8 mm  
D: 49,9 mm  
Beam type: Medium



### MIRELLA-50-W-DL-PF

Metallized PC / PC  
H: 25,5 mm  
D: 49,9 mm  
Beam type: Wide



### CN13905\_MIRELLA-50-S-PF-RZL

Metallized PC / PC  
H: 24,8 mm  
D: 49,9 mm  
Beam type: Spot

Code	Typ. FWHM	Typ. Eff.	Typ. cd/lm	Fastening
MIRELLA-50-M	27	90	2,8	glue
MIRELLA-50-M-CL				glue
MIRELLA-50-M-CL-PF	30	87	2,5	socket, screw
MIRELLA-50-M-DL	34	84	1,9	glue
MIRELLA-50-M-DL-PF	30	85	2,3	socket, screw
MIRELLA-50-M-PF	32	88	1,9	socket, screw
MIRELLA-50-M-PF-RZL	38	81	1,5	socket, screw
MIRELLA-50-M-PF-VERO10	28	85	2,2	socket, screw
MIRELLA-50-M-PF-VERO13/18	34	88	1,8	socket, screw
MIRELLA-50-M-PIN	23	86	3,2	pin
MIRELLA-50-M-PIN-CL	26	84	2,5	pin
MIRELLA-50-M-PIN-DL	34	80	1,6	pin
MIRELLA-50-M-PIN-RZL	34	83	1,6	pin
MIRELLA-50-M-RZL				glue
MIRELLA-50-S	15	92	8,5	glue
MIRELLA-50-S-CL-PF	16	84	6,0	socket, screw
MIRELLA-50-S-DL	20	85	4,9	glue
MIRELLA-50-S-DL-PF	17	84	4,3	socket, screw
MIRELLA-50-S-PF	17	88	5,4	socket, screw
MIRELLA-50-S-PF-RZL	22	82	3,1	socket, screw
MIRELLA-50-S-PF-VERO10	20	88		socket, screw
MIRELLA-50-S-PF-VERO13/18	25	89	2,5	socket, screw
MIRELLA-50-S-PIN	11	87	12,3	pin
MIRELLA-50-S-PIN-DL	15,3	82	5,5	pin
MIRELLA-50-S-PIN-RZL	18	83	3,4	pin
MIRELLA-50-S-RZL				glue
MIRELLA-50-W	41	90	1,6	glue
MIRELLA-50-W-CL	46	84	1,3	glue
MIRELLA-50-W-CL-PF	46	85	1,3	socket, screw
MIRELLA-50-W-DL	47	83	1,2	glue
MIRELLA-50-W-DL-PF	45	85	1,3	socket, screw
MIRELLA-50-W-PF	43	87	1,3	socket, screw
MIRELLA-50-W-PF-RZL	47	81	1,2	socket, screw
MIRELLA-50-W-PF-VERO10	41	85	1,5	socket, screw
MIRELLA-50-W-PF-VERO13/18				socket, screw
MIRELLA-50-W-PIN	33	86	1,6	pin
MIRELLA-50-W-PIN-CL	44	84	1,4	pin
MIRELLA-50-W-PIN-DL	47	81	1,2	pin
MIRELLA-50-W-PIN-RZL	48	81	1,1	pin
MIRELLA-50-W-RZL				glue
MIRELLA-50-XW	80	93	0,6	glue
MIRELLA-50-XW-PF	78	92	0,6	socket, screw
MIRELLA-50-XW-PF-VERO10	74	92	0,6	socket, screw

## ANGELA / ANGELINA

[www.ledil.com/products](http://www.ledil.com/products)

Code	Beam type	Diameter	Height	Typ. FWHM	Typ. Eff.	Typ. cd/lm
ANGELA-S	Spot	119,5	79,3	25	89	3,2
ANGELA-M	Medium	119,5	79,3	32	89	2,5
ANGELA-W	Wide	119,5	74,5	46	89	1,4
ANGELA-XW	Wide	119,5	74,5	TBA	TBA	TBA
ANGELA-XW-B	Wide	119,5	74,5	36	93	2,1

ANGELINA-S	Spot	82	31	39	90	1,2
ANGELINA-M	Medium	82	31	32	92	1,6
ANGELINA-W	Wide	82	31	47	92	1,1
ANGELINA-RZ-S	Spot	82	31	31	88	1,4
ANGELINA-RZ-M	Medium	82	31	TBA	TBA	TBA
ANGELINA-RZ-W	Wide	82	31	TBA	TBA	TBA
ANGELINA-XW	Wide	82	31	91	93	0,46
ANGELINA-XW-B	Wide	82	31	91	94	0,53
ANGELINA-M-B	Medium	82	31	39	91	1,3
ANGELINA-W-B	Wide	82	31	51	91	1,0

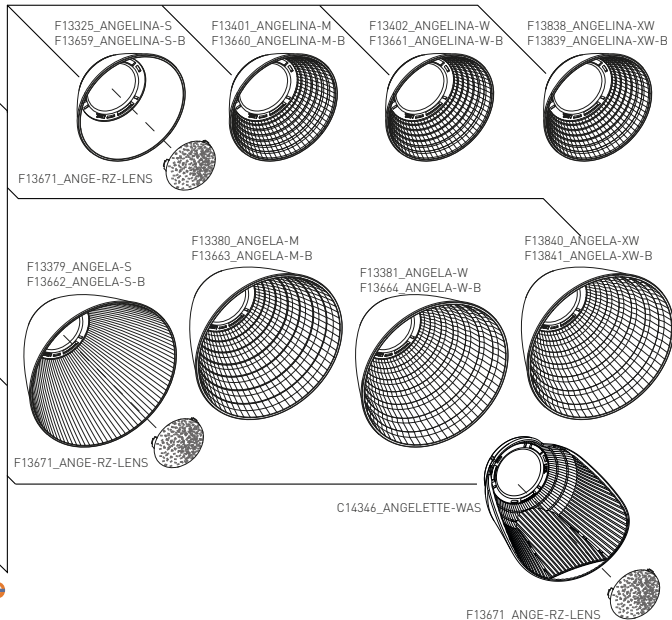
### SOLDERLESS CONNECTORS:



### LEDiL Clamps:



### ZHAGA Book3 SLM MODULES:



- COB-10W
- COB-13W
- COB-17W
- COB-24W
- BXRA ES R
- Vero13
- Vero18
- Vero29
- CXA15
- CXA1520
- CXA1816
- CXA25
- CXA30
- CXA35
- PRL C AC LEP2000
- PRL C AC LEP800
- PRL C Z3 LES19
- PRL C Z3 LES23
- PRL C Z3 LES9
- PRL C Z4 LES19
- Soleriq E30
- Soleriq S13
- Soleriq S19
- Mega Zenigata
- Tiger Zenigata
- CLL02x
- CLL03x
- CLL04x
- F-SLM 2000 G3
- F-SLM 3000 G3
- F-SLM 4500 G3
- LX CoB1208
- LX CoB1204/1205
- LX K12
- LX K16
- LX S2000
- LX S3000
- LX S5000
- NSB-L21A
- NSC-KJ216A
- LC026D/LC040B
- CXM-M14
- LPL-M074
- S-SLE G2 LES19
- S-SLE G2 LES23
- S-SLE G2 LES26
- S-SLE G3 LES19
- S-SLE G3 LES23
- WU-M-461
- WU-M-462
- WU-M-464
- WU-M-484
- WU-M-485
- WU-M-486
- ZC25/40

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](http://www.ledil.com) for LED specific values and optical datasheets.

## ANGELETTE-WAS

[www.ledil.com/products](http://www.ledil.com/products)

ANGELETTE-WAS a wall-washer that uniquely utilizes the efficiency of COB's in wall washing, providing a heretofore unseen uniformity and light pattern quality.

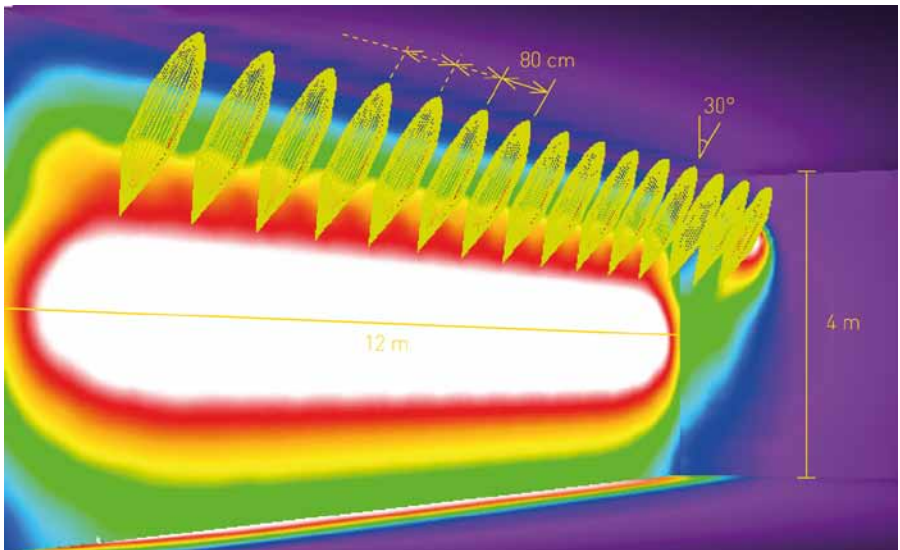
### ANGELETTE-WAS

H: 84 mm  
D: 97,2 x 83,4 mm  
Efficiency: 92%  
Beam type: Asymm.

NEW!



CXA1830  
CXA25  
LX S2000  
LX S3000  
LX S5000  
Vero13  
Vero18  
Vero29



### TYPICAL APPLICATION OF ANGELETTE-WAS

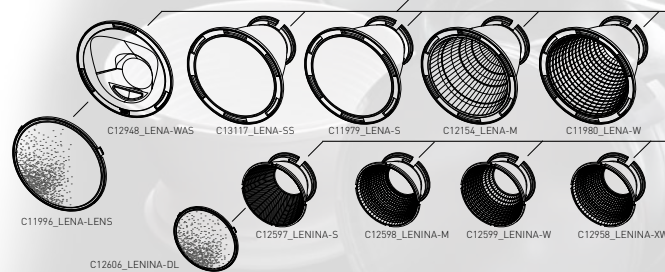
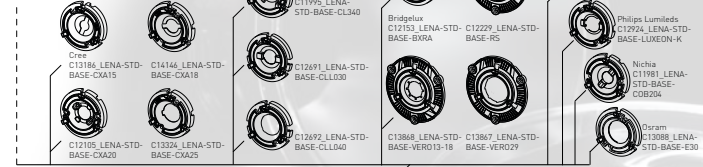
- Ceiling height 4 m, wall width 12m, 15 luminaires installed on a track suspended 20 cm lower
- Track installed 1.5 m distance from the wall
- Distance between luminaires 80 cm
- Luminaire flux with each luminaire 4000 lm  
Eav: 755 lx, Emax: 1340 lx, U0: 0.1614

One system,  
endless possibilities

SOLDERLESS CONNECTORS:

**Yipert**

LEDiL base parts:



- CXA15
- CXA1520
- CXA1816
- CXA2011
- CXA25
- NSCj216A
- NSBxL110
- NSBxL121A
- COB204
- SoLeriq E30
- BXRA ES R
- V10
- Vero13
- Vero18
- Vero29
- CL1340
- CLL03x
- CLL04x
- LX K12
- LX K16
- LX CoB 1204/1205
- LX CoB 1208
- Meqa Zenigata
- ZC1218
- ZC25/40
- LTP-LM036
- S-SLE-P G3 LES17

## LENA

[www.ledil.com/lenafamily](http://www.ledil.com/lenafamily)

Code	Beam type	Diameter	Height	Typ. FWHM	Typ. Eff.	Typ. cd/lm
LENA-M	M	111	86	22	83	2,5
LENA-M-DL	M	111	87	22	77	3,4
LENA-S	S	111	86	11	85	7,6
LENA-S-DL	S	111	87	14	80	5,6
LENA-SS	SS	111	86	18	82	5
LENA-SS-DL	SS	111	87	16	74	5
LENA-W	W	111	86	46	82	1,3
LENA-WAS	WAS	111	37	Asym	82	1,1
LENA-WAS-DL	WAS	111	41,2	Asym	76	0,86
LENA-W-DL	W	111	87	45	75	1,3
LENA-X-WAS	WAS	111	37	Asym	87	
LENA-X-WAS-DL	WAS	111	42	Asym	80	

## LENINA

[www.ledil.com/leninafamily](http://www.ledil.com/leninafamily)

Code	Beam type	Diameter	Height	Typ. FWHM	Typ. Eff.	Typ. cd/lm
LENINA-M	M	74	46	31	87	2,1
LENINA-M-DL	M	74	48	35	80	1,6
LENINA-S	S	74	46	19	88	4,5
LENINA-S-DL	S	74	48	23	81	3,1
LENINA-W	W	74	46	53	87	1,1
LENINA-W-DL	W	74	48	54	80	1
LENINA-XW	XW	74	46	73	89	0,6
LENINA-XW-DL	WWW	74	48	68	82	0,6

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](http://www.ledil.com) for LED specific values and optical datasheets.



# Multi-lens arrays

## SATU

[www.ledil.com/satu](http://www.ledil.com/satu)



### SATU-M

3 LEDs  
PMMA  
H: 8,9 mm  
D: 21,8 mm  
Beam type: Medium



### SATU-O

3 LEDs, PMMA  
H: 8,9 mm, D: 21,8 mm  
Beam type: Oval

H35C0  
H35B0  
XP-G XB-D  
XP-G2  
XT-E  
XP-E XP-E2  
OsLSL150  
OsLSL80  
OsSqr EC  
NCsxx19A  
NF2x757A  
NVsxx19A  
NVsxx19B  
LXA LXT  
LX Rebel  
LX Rebel ES  
LXHS0-2  
Double Dome  
Z5

Code	Typ. FWHM	Typ. eff.	Typ. cd/lm
SATU-M	27	91	2,9
SATU-O	42 x 22	86	2,5
SATU-S	19	90	4,9
SATU-W	33	86	1,9

## CUTE

[www.ledil.com/cute](http://www.ledil.com/cute)



MX-3 MX-G  
XM-L XM-L2  
XM-L HWV  
XP-E XT-E  
XR-E XP-L  
XP-G XP-G2  
XT-E HWV  
Z5 Z5-M1  
OsSqr EC Pbr  
OsLSL150  
OsLSL80  
NCsxx19A  
NCsxx19B  
NVsxx19A  
NS3x33 NS5x33  
Cer 3535 H35C1  
LXA LXT  
LX Rebel  
LX Rebel ES  
LXHS0-2  
Double Dome

Code	Beam type	LEDs	Diameter	Height	Typ. FWHM	Typ. eff.	Typ. cd/lm
CUTE-3-M	M	3	35	15	24	88	3,8
CUTE-3-S	S	3	35	15	11		
CUTE-3-SS	SS	3	35	15	12	90	11,3
CUTE-3-W	W	3	35	15	39	83	1,6
CUTE-3-WW	WW	3	35	15	TBA	TBA	TBA
CUTE-4-M	M	4	35	15	22	84	4,26
CUTE-4-SS	SS	4	35	15	11	88	13,2
CUTE-4-W	W	4	35	15	38		

## GT3

[www.ledil.com/gt3](http://www.ledil.com/gt3)



### GT3-M

3 LEDs  
PMMA  
H: 9 mm  
D: 35 mm  
Beam type: Medium



### GT3-WW

3 LEDs  
PMMA  
H: 9 mm  
D: 35 mm  
Beam type: Extra wide

LXA  
LX Rebel  
LX Rebel ES  
LXT  
OsSqr EC  
OsLSL150  
OsLSL80  
XP-E  
XB-D  
XP-G  
NCsxx19A  
NVsxx19A  
Double Dome  
Z5

Name	Beam type	Diameter	Height	Typ. FWHM	Typ. eff.	Typ. cd/lm
GT3-M	M	35	9	30	89	2,2
GT3-S	S	35	9	18	90	4,5
GT3-W	W	35	9	40	88	1,6
GT3-WW	WW	35	9	47	90	1,1

## GT4

[www.ledil.com/gt4](http://www.ledil.com/gt4)



LXA  
LX Rebel  
LX Rebel ES  
LXT  
OsLSL150  
OsLSL80  
XB-D  
XP-E  
XP-G  
NCsxx19A  
NVsxx19A  
Double Dome  
Z5

Name	Beam	Diameter	Height	Typ. FWHM	Typ. Eff	Typ. cd/lm
GT4-M	M	35	9	28	88	2,5
GT4-S	S	35	9	21	90	3,3
GT4-W	W	35	9	38	89	1,7
GT4-WW	WW	35	9	53	90	1,1

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

### ANNA

[www.ledil.com/anna](http://www.ledil.com/anna)

One of LEDiL's largest lens array family and most popular product families. ANNA family is versatile with optics in two diameters, wide selection of beam angles and sources.

ANNA-50-5-S



- Cer 3535
- H35CO
- OsSg EC
- OsSg PC
- Ostar L+L
- Ostar-SMT RGB
- SFH 4715S (IR)
- OsSSL150
- OsSSL80
- DuoS55
- MLE
- XB D
- XM-L
- XM-L2
- XP-E
- XP-E2
- XP-G
- XP-G2
- XT-E
- LX-A
- LX Rebel
- LX Rebel E5
- LX R
- LX T
- LX PWT
- Double Dome
- 107
- NCsxx19A
- NF2x757A
- NSW157T
- NS9x153
- NS9x383
- NVsx19A
- LH351A(3535)
- SM4
- Z5
- Z5 M

Name	Beam type	LED sources	D	H	Typ. FWHM	Typ. efficiency	Typ. cd/lm
ANNA-40-3-M	M	3	40	10,7	22	88	3,7
ANNA-40-4-M		4					
ANNA-40-5-M		5					
ANNA-40-6-M		6	50				
ANNA-40-7-M		7					
ANNA-50-3-M		3					
ANNA-50-4-M		4					
ANNA-50-5-M	5	40	10,7	15	91	8,5	
ANNA-50-6-M	6						
ANNA-50-7-M	7						
ANNA-40-7-M2	M						7
ANNA-40-3-S	S	3	40	10,7	15	91	8,5
ANNA-40-4-S		4					
ANNA-40-5-S		5					
ANNA-40-6-S		6	50				
ANNA-40-7-S		7					
ANNA-50-3-S		3					
ANNA-50-4-S		4					
ANNA-50-5-S	5	40	10,7	15	85	TBA	
ANNA-50-6-S	6						
ANNA-50-7-S	7						
ANNA-40-7-S-PC	S						7
ANNA-40-3-W	W	3	40	10,7	32	86	1,9
ANNA-40-4-W		4					
ANNA-40-5-W		5					
ANNA-40-6-W		6	50				
ANNA-40-7-W		7					
ANNA-50-3-W		3					
ANNA-50-4-W		4					
ANNA-50-5-W	5	40	12,5	64	90	0,9	
ANNA-50-6-W	6						
ANNA-50-7-W	7						
ANNA-40-7-WW	WW						6



**ANNA-50-3-S**

D: 50 mm  
3 LEDs  
PMMA  
Beam type: Spot



**ANNA-40-4-S**

D: 40 mm  
4 LEDs  
PMMA  
Beam type: Spot



**ANNA-40-3-M**

D: 40 mm  
3 LEDs  
PMMA  
Beam type: Medium

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Multi-lens arrays

## ANGIE

[www.ledil.com/angie](http://www.ledil.com/angie)

### ANGIE-S

D: 34 mm  
H: 10,7 mm  
4 LEDs  
PMMA  
Beam type: Spot



XP-E  
XP-G  
LX H50-2  
LX T  
LX Rebel  
LX Rebel E5  
Os1 SSL80  
Os1 SSL150  
Os1 Sg EC  
ZS

Name	Beam type	Typ. FWHM	Typ. eff.	Typ. cd/lm
ANGIE-S	S	12	93	11,8
ANGIE-M	M	19	89	6,2
ANGIE-M2	M2	26	88	3,3
ANGIE-W	W	29	84	2,4

## TAMPA

[www.ledil.com/tampa](http://www.ledil.com/tampa)

### NIS83-MX-7-M

D: 38 mm  
7 LEDs  
PMMA  
Beam type: Medium



MX-6  
LX A  
LX Rebel  
LX Rebel E5  
NIS3x83  
NIS6x83  
O1 P-x050F01

Name	Beam type	Height	Typ. FWHM	Typ. eff.
NIS83-MX-7-M	M	11,4	20	90
NIS83-MX-7-MD	MD	11,4	22	91
NIS83-MX-7-W	W	11,4	37	89
NIS83-MX-7-WW	WW	11,4	57	87
RER-7-MD	MD	10,6	33	85
RER-7-S	S	10,6	19	89
RER-7-W	W	10,6	41	82
RER-7-WW	WW	10,6	53	90

## PENTA

[www.ledil.com/penta](http://www.ledil.com/penta)



### PENTA-5-M

D: 35,5 mm  
5 LEDs  
PMMA  
Beam type: Medium



Double Dome  
GDr+  
LX Rebel  
MX-6  
XP-E  
XP-G  
NIS3x36  
NIS6x83  
ZS

Name	Beam type	LEDs	Height	FWHM
NIS83-MX-5-W	W	5	6,8	36
PENTA-5-M	M	5	7,2	30
RER-5-M	M	5	6,8	28

### NIS83-MX-5-W

D: 35,5 mm, 5 LEDs, PMMA  
Beam type: Wide

## QUAK

[www.ledil.com/quak](http://www.ledil.com/quak)

### NIS83-MX-4-M

D: 50 mm  
4 LEDs  
PMMA  
Beam type: Medium



MX-6  
NIS3x83  
NIS6x83

Name	Beam	FWHM
NIS83-MX-4-SS	SS	15
NIS83-MX-4-M	M	21
NIS83-MX-4-W	W	49

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### MELODY

[www.ledil.com/melody](http://www.ledil.com/melody)

#### MELODY-3-M

D: 50,6 mm

H: 11,9 mm

3 LEDs

PMMA

Beam type: Medium



XP-E | XP-E2  
XP-G | XP-G2  
XT-E | XB-D  
LX-A  
LX-R  
LX-H50-2  
LX-T  
LX-Rebel  
LX-Rebel ES  
LX-ZE5  
NCsxx19A  
NCsxx19B  
NVsxx19A  
NVsxx19B  
OsS5L180  
OsS5L150  
OsS5 EC  
Double Dome  
Z5 | Z5 M

Name	Beam type	LEDs	Typ. FWHM	Typ. eff.	Typ. cd/ lm
MELODY-4-M	M	4	29	89	2,8
MELODY-3-M	M	3	34	92	2,1
MELODY-4-S	S	4	12	89	14,8

### DOLLY

[www.ledil.com/dolly](http://www.ledil.com/dolly)



GDr+  
LX-K2  
P4

Name	Beam type	LEDs	D	H	FWHM
APOLLO-3-S	S	3	50	19,4	10
LAIKA-3-S	S	3	50	20,4	10
TITANUM-3-S	S	3	50	18,4	15
TITANUM-3-M	M	3	50	19,9	30
LAIKA-3-M	M	3	50	20,4	28

### TUIJA

[www.ledil.com/tuija](http://www.ledil.com/tuija)



XB-D  
XP-E  
XP-G  
LX-A  
LX-Rebel  
LX-Rebel ES  
OsS5L150  
OsS5L180  
NCsxx19A  
NVsxx19A  
Double Dome  
Z5

Name	Beam type	LEDs	D	H	Typ. FWHM	Typ. Efficiency	Typ. cd/lm
TUIJA-3-M	M	3	50	14,5	16	84	5,6
TUIJA-3-M2	M	3	50	14,5	35	87	2
TUIJA-3-SS	SS	3	50	14,5	12	90	12,9
TUIJA-3-W	W	3	50	14,5	53	86	0,9

### MARTHA

[www.ledil.com/martha](http://www.ledil.com/martha)

#### PLATINUMROCKET-3-SS

D: 50 mm

3 LEDs

PMMA

Beam type: Smooth spot



GDr+  
LX-K2  
MX-6  
XR-E  
NS5x83  
P4

Name	Beam type	LEDs	D	Typ. H	Typ. FWHM
APOLLO-LAIKA-3-W	W	3	50	17	49
NIS83-MX-3-W	W	3	50	15	48
PLATINUMROCKET-3-W	w	3	50	16	43
PLATINUMROCKET-3-SS	SS	3	50	16	14
PLATINUMROCKET-3-M	M	3	50	16	20
NIS83-MX-3-M	M	3	50	16	22

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Multi-lens arrays

## SANDRA

[www.ledil.com/sandra](http://www.ledil.com/sandra)



### SANDRA-M

D: 67 mm  
H: 11,1 mm  
12 LEDs  
PMMA  
Beam type: Medium



### SANDRA-S

D: 67 mm  
H: 11,1 mm  
12 LEDs  
PMMA  
Beam type: Spot

**NEW!**



### SANDRA-O

D: 67 mm  
H: 11,1 mm  
12 LEDs  
PMMA  
Beam type: Oval

Name	Beam type	Typ. FWHM	Typ. eff.	Typ. cd/lm
SANDRA-12-M	M	28	88	2,4
SANDRA-12-W	W	31	88	2,4
SANDRA-12-S	S	14	91	13,2
SANDRA-12-O	O	45+20	90	TBA

XP-E  
XP-E2  
XP-G  
XP-G2  
XT-E  
OsS1150  
OsS180  
OsScEC  
LX Rebel  
LX Rebel ES  
DuoTel Dome  
NVSxx19A  
NF2x757A  
NVSxx19A  
Z5

## VIRPI

[www.ledil.com/virpifamily](http://www.ledil.com/virpifamily)



### VIRPI-M

D: 74,9 x 74,9 mm  
H: 9,4 mm  
25 LEDs  
PMMA  
Beam type: Medium  
Typical FWHM: 29°  
Typical cd/lm: 2,7

## EMY

[www.ledil.com/emy](http://www.ledil.com/emy)

MX-G  
NVSxxB3  
NVSxx19A

### VIRPI-S

D: 74,9 x 74,9 mm  
H: 9,4 mm  
25 LEDs  
PMMA  
Beam type: Spot  
Typical FWHM: 15°  
Typical cd/lm: 7,5



### VIRPI-W

D: 74,9 x 74,9 mm  
H: 9,4 mm  
25 LEDs  
PMMA  
Beam type: Wide  
Typical FWHM: 42°  
Typical cd/lm: 1,6

### EMY-S

D: 50 mm  
H: 14,4 mm  
6 LEDs  
PMMA  
Beam type: Smooth spot



XB-D  
XP-G  
XT-E  
XP-E2  
XP-G2  
ML-E  
XH-B/G  
DurisPS  
DurisS5  
OsScEC  
LX Rebel ES  
NF2x757A  
NVSxx19A  
LG-3030  
LM231 A/B

## PETUNIA

[www.ledil.com/petuniafamily](http://www.ledil.com/petuniafamily)



### PETUNIA

D: 29,5 x 46,5 mm H: 7,4 mm  
12 LEDs PMMA  
Typ. FWHM: 29°, Typ. eff: 91%

### SOLUTION FOR PLANT LIGHTING

- A special lens for deep red, deep blue and white OSRAM OSLON LEDs
- Smooth mixing of colours at a short distance resulting in a uniform growing light for plants
- PCB available with the right spread of colours
- Control algorithm for switching on / off white and coloured LEDs



OsS1150  
XB-D  
XP-E  
XP-G  
XT-E  
NVSxx19A

# FLORENCE

[www.ledil.com/florence](http://www.ledil.com/florence)



## FLORENCE-Z60

D: 286 x 61 mm  
H: 8.5 mm  
33 LEDs  
PMMA

Name	Beam type	Typ. FWHM	Typ. eff.	Typ. cd/lm
FLORENCE-Z30	M	TBA	TBA	TBA
FLORENCE-Z60	W	58	88	0,8
FLORENCE-Z90	WWW	92	86	0,4
FLORENCE-ZT25	Asymmetric	TBA	94	0,6

## FLORENCE-ZT25

D: 286 x 61 mm  
H: 11 mm  
33 LEDs  
PMMA



XH-B/G  
XP-G  
Duris E5  
Duris P5  
Duris S5  
NF2x757D  
LG5630  
LG6030  
LM231 A/B  
LM362A  
LM561B  
5630  
LX3535

# FLORENCE-1R

[www.ledil.com/products](http://www.ledil.com/products)

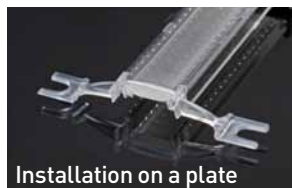


## FLORENCE-1R-ZT25

D: 19,5 x 286 mm  
H: 7,1 mm  
PMMA

## FLORENCE-1R-CLIP-A

D: 63,5 x 9 mm  
H: 8,4 mm  
PC



Installation on a plate

LG5630  
NCSxx19B  
NF2x757A  
XB-H  
XP-E  
XP-E2  
XP-G  
XO-E  
LX Rebel ES  
LXT



## FLORENCE-1R-Z90

D: 19,5 x 286 mm  
H: 7 mm  
PMMA

## FLORENCE-1R-CLIP-B

PC



Profile installation

Name	Beam type	Typ. FWHM	Typ. eff.	Typ. cd/lm
FLORENCE-1R-Z90	WWW	90 + 110	94	0,4
FLORENCE-1R-Z60	M	TBA	TBA	TBA
FLORENCE-1R-ZT25	Asymmetric	TBA	86	TBA
FLORENCE-1R-O	Oval	TBA	TBA	TBA
FLORENCE-1R-MAXI-WG	Asymmetric	TBA	90	TBA
FLORENCE-1R-CLIP-A	Clip for installation on a plate			
FLORENCE-1R-CLIP-B	Clip for installation on a profile			

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](http://www.ledil.com) for LED specific values and optical datasheets.

# Multi-lens arrays

## SHELLY

[www.ledil.com/shelly](http://www.ledil.com/shelly)



### SHELLY-T-6X1-WAS

D: 119,8 x 19,6 mm  
H: 7,6 mm  
6 LEDs  
PMMA

### SHELLY-T-6X1-N

D: 119,8 x 19,6 mm  
H: 7 mm  
6 LEDs  
PMMA



DurisS5  
LX Rebel  
LX Rebel ES  
LX T  
LX Z ES  
NC5xx19A  
NC5xx19B  
NF2x757A  
NF2x757D  
NV5xx19A  
NV5xx19B  
XB-D  
XC-D  
XC-E

Name	Beam type	Typ. eff.	Typ. cd/lm
SHELLY-N	Asymmetric	94	0,5
SHELLY-WAS	Asymmetric	94	1,0

## ZENIA

[www.ledil.com/products](http://www.ledil.com/products)

ZENIA optics are designed to illuminate the backdrop inside the shelves. Also suited for wall-washing and stair lighting applications. Linear optics that work with any distance between the mid-power LEDs. Modular breakable design at 15 mm intervals allows installation to any width. Designed to be installed as such or into an aluminium profile.

### ZENIA

D: 16,2 x 119,8 mm  
H: 5,97 mm  
PMMA



Duris E5

## VANESSA

[www.ledil.com/vanessafamily](http://www.ledil.com/vanessafamily)

Name	Beam type	Typ. FWHM	Typ. eff.
VANESSA-M	Medium	26	89
VANESSA-O	Oval	42+19°	82
VANESSA-S	Spot	17	90
VANESSA-B-O	Oval	45+21°	88
VANESSA-B-S	Spot	22	93
VANESSA-B-W	Wide	37	92



LG5630  
LX A  
LX Rebel ES  
XP-E  
XP-G  
XP-G2  
XT-E  
NF2x757A  
OsdSq EC

VANESSA-B-O

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

### ZOWIE

[www.ledil.com/zowie](http://www.ledil.com/zowie)

#### Spot or Wide – Take Both

Three revolutionary products featuring efficient zoom from spot to wide beams. Ideal choice for applications that benefit from adjustability and a compact optical system.



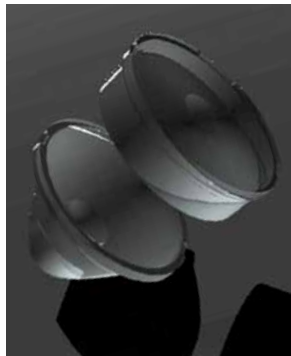
#### ZOWIE-MINI

D: 14,8 mm  
PMMA  
Beam type: Zoom  
Available with  
optional multi-holder

#### ZOWIE-MIDI-RZ

D: 35 mm  
PMMA  
Beam type: Zoom

Name	Diameter	Beam type	Typ. FWHM
ZOWIE-MAXI	65	Zoom	TBA
ZOWIE-MIDI-RZ	35	Zoom	TBA
ZOWIE-MINI	14,8	Zoom	24-60

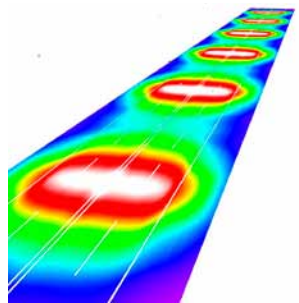


- LX A
- LX M
- LX Rebel ES
- LX S
- LX Z RGB
- MT-G2
- XB-D
- XM-L
- XP-E
- XP-G
- XP-G2
- XT-E
- O-Star EC
- O-Star-SMT RGB
- NVSxx19A
- NVSxx19E
- LZ4(00xW00)

### TATIANA

[www.ledil.com/tatiana](http://www.ledil.com/tatiana)

- Designed especially to meet Russian street lighting standards.
- Module can be snapped into four single lenses which enable upgrading old lighting fixtures and gives more freedom when designing the fixture.
- Designed for lighting fixtures with 15° mounting angle.
- Suitable also for wire-mounted catenary luminaires.



#### DESIGN EXAMPLE

Luminous flux (Luminaire): 9404 lm  
Luminous flux (Lamps): 9800 lm  
Luminaire Wattage: 90 W  
Arrangement: Double row, opposing  
Pole Distance: 40 m  
Mounting Height: 12 m  
Height: 12 m  
Overhang: 0.853 m  
Boom Length: 1.5 m

Maximum luminous intensities  
at 70°: 447 cd/klm  
at 80°: 36 cd/klm  
at 90°: 11 cd/klm



#### TATIANA-1X4-B

D: 102x25 mm  
H: 7,7 mm  
Typ. FWHM: °  
Typ. eff: 94%  
PMMA  
LEDs: 4

- NVSxx19A
- O-Star EC
- XM-L2
- XP-G2
- XT-E

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](http://www.ledil.com) for LED specific values and optical datasheets.



## High Bay

www.ledil.com/  
highbayfamily

MK-R  
XB-D  
XM-L  
XM-L2  
XP-E  
XP-E2  
XP-E-HEW  
XP-G2  
XP-G  
XP-L  
XP-E  
MX-C  
MX-CP  
XM-H2W  
XME  
O3-5m-EC  
O3-5m-PC  
O3-SS180  
O3-SS150  
LX-A  
LX-M  
LX-M2  
LX-Q  
LX-Rebel  
LX-Rebel ES  
LX-R  
LX-T  
LX-H50-2  
LX-Z ES  
NC5x19A  
NC5x19B  
NF2x757A  
NS6x33  
NS9x33S  
NS3x19A  
NS5x19B  
Double Dome  
HB35(A3535)  
O1-5-06516-06A  
MJT-0040  
Z5-M1  
Z5  
HB3C1

Name	LEDs	Diameter	Height	Typ. FWHM
STRADA-2X2-CY	4	50x50	7,8	127+127
HB-2X2-RS	4	50x50	10	10
HB-2X2-M	4	50x50	8,5	25
HB-2X2-O	4	50x50	10,6	TBA
HB-2X2-RW	4	50x50	8,5	51
HB-2X2-W	4	50x50	8,5	51
HB-2X2-WW	4	50x50	8,5	65
HB-5X1-FLAT-W	5	123 x 25	8,5	54
HB-5X1-W	5	123 x 25	9	56
HB-5X1-WW	5	123 x 25	9	TBA
HB-IP-2X6-W	12	173 x 71.4	11,4	58
HB-IP-2X6-WWW	12	173 x 71.4	11,4	98
HB-SQ-A	1	25 x 25	12,9	50



**STRADA-2X2-CY**  
D: 50x50 mm  
H: 7,8 mm  
PMMA  
Typ. eff: 94%



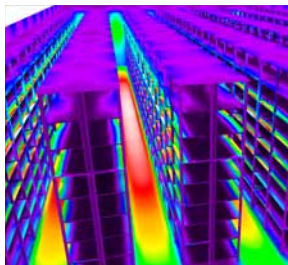
**HB-IP-2X6-W**  
D: 173 x 71,4 mm  
H: 11,4 mm  
Typ. FWHM: 58°  
Typ. eff: 94%  
PMMA  
LEDs: 12



**HB-2X2-O**  
D: 50 x 50 mm  
H: 10,6 mm  
PMMA  
Typ. eff: 94%  
LEDs: 4  
Oval beam type suitable for warehouse aisle lighting



**HB-5X1-FLAT-W**  
D: 123 x 25 mm  
H: 8,5 mm  
PMMA  
Typ. FWHM: 54°  
Typ. eff: 91%  
LEDs: 5



**HB-2X2-O DESIGN EXAMPLE**

- Luminaire installation height: 14 m
- Installed in the aisle centerline
- Fixture luminous flux 6200 lm
- LED luminous flux 7000 lm



**HB-2X2-RW**  
D: 50x50 mm  
H: 8,5 mm  
PMMA  
Typ. FWHM: 51°  
Typ. eff: 89%  
LEDs: 4



**HB-SQ-A**  
D: 25 x 25 mm  
H: 12,9 mm  
PMMA  
Typ. FWHM: 54°  
Typ. eff: 86%

### STRADA

[www.ledil.com/strada](http://www.ledil.com/strada)

STRADA lenses, originally designed for street lighting applications, are suitable for many other applications as well.

Like all LEDiL products STRADA lenses are optimized for specific LED types and have optimal light distribution and over 90% optical efficiency. Some STRADA lenses can also be used with other LED types with a small sacrifice in light distribution and optical efficiency. STRADA lenses designated for roadway lighting have batwing light distribution for better performance.

Symmetric STRADA lenses were the first lenses from LEDiL designed especially for street lighting applications. On street lighting setups, symmetrical light distribution requires a mounting boom and tilt in the lamp head. This makes symmetrical STRADA lenses ideal for traditional street light replacement.

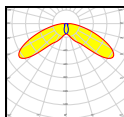


- StanleyJ3
- StanleyJ
- CL-L400
- LH35TA(3535)
- LH35IB
- NCSxx19A
- NCSxx19B
- NS5x83
- NS5x83
- NS9x83
- NV5xx19A
- NV5xx19B
- Double Dome
- LX A
- LX H50-2
- LX M
- LX MZ
- LX O
- LX R
- LX Rebel
- LX Rebel ES
- LX T
- LX TX
- LX T5
- OLP5050RDL
- OLP5050RDL-06A
- GDH
- OSL1EC
- OSL1PC
- OSL150
- OSL180
- Ostar-SMT RGB

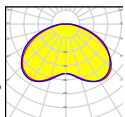
- MC-E
- MKR
- MKR2
- MT-G
- MX-3
- MX-6
- XB-D
- XB-H
- XM-F
- XM-F2
- XC-E
- XP-E
- XP-E2
- XP-E-HEW
- XP-G
- XP-G2
- XP-L
- XR-E
- XT-E
- XT-EHW
- MJT4040

- Z5M1
- Z5M2
- Z5
- Z5D
- H35C0
- H35B0
- H35C1

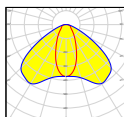
### Single optics



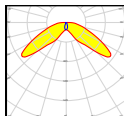
**STRADA-A**  
 D: 19,6 x 15,4 mm  
 H: 10,8 mm  
 PMMA  
 Typ. FWHM: 80° x 146°  
 Typ. eff: 92%



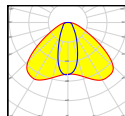
**STRADA-C2**  
 D: 19,6 x 15,6 mm  
 H: 6,4 mm  
 PMMA  
 Typ. FWHM: 120°  
 Typ. eff: 92%



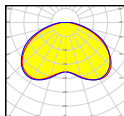
**STRADA-B**  
 D: 19,6 x 15,5 mm  
 H: 6 mm  
 PMMA  
 Typ. FWHM: 105° x 44°  
 Typ. eff: 93%



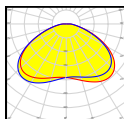
**STRADA-A2**  
 D: 19,6 x 15,4 mm  
 H: 10,6 mm  
 PMMA  
 Typ. FWHM: 72° x 141°  
 Typ. eff: 92%



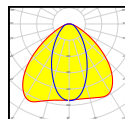
**STRADA-B2**  
 D: 19,6 x 15,5 mm  
 H: 5,3 mm  
 PMMA  
 Typ. FWHM: 111° x 47°  
 Typ. eff: 92%



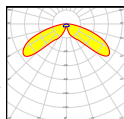
**STRADA-C**  
 D: 19,6 x 15,6 mm  
 H: 5,3 mm  
 PMMA  
 Typ. FWHM: 125°  
 Typ. eff: 92%



**STRADA-C2-CLIP**  
 D: 19,6 x 15,6 mm  
 H: 6,9 mm  
 PMMA  
 Typ. eff: 92%



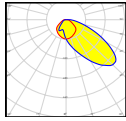
**STRADA-DN**  
 D: 19,6 x 15,7 mm  
 H: 5,9 mm  
 PMMA  
 Typ. FWHM: 107° x 58°  
 Typ. eff: 92%



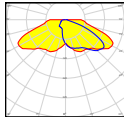
**STRADA-DW**  
 D: 19,6 x 15,7 mm  
 H: 9,6 mm  
 PMMA  
 Typ. FWHM: 89° x 142°  
 Typ. eff: 92%

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](http://www.ledil.com) for LED specific values and optical datasheets.

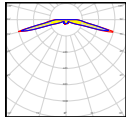
# Street lighting



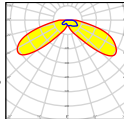
**STRADA-FT**  
D: 19,6 x 15,4 mm  
H: 8,3 mm  
PMMA  
Typ. eff: 91%



**STRADA-FW**  
D: 19,6 x 15,5 mm  
H: 10,9 mm  
PMMA  
Typ. eff: 92%



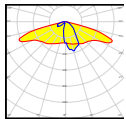
**STRADA-S**  
D: 19,6 x 15,5 mm  
H: 6,9 mm  
PMMA  
Typ. FWHM: 149° x 159°  
Typ. eff: 93%



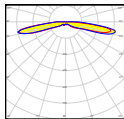
**STRADA-T-DW-EP**  
D: 19,8 x 15,5 mm  
H: 10,7 mm  
PMMA  
Typ. eff: 92%



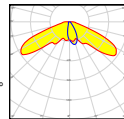
**STRADA-SQ-T-DW-90**  
D: 25 x 25 mm, H: 11,4 mm  
Typ. eff: 91%



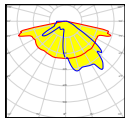
**STRADA-SQ-T2**  
D: 25 x 25 mm  
H: 8,5 mm  
PMMA  
Typ. eff: 90%



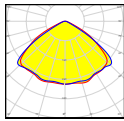
**STRADA-S-14**  
D: 19,6 x 15,5 mm  
H: 6,9 mm  
PMMA  
Typ. FWHM: 149° x 159°  
Typ. eff: 93%



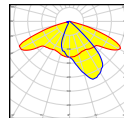
**STRADA-K**  
D: 19,6 x 15,5 mm  
H: 8,7 mm  
PMMA  
Typ. eff: 96%



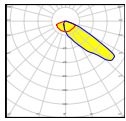
**STRADA-SQ-T3**  
D: 25 x 25 mm  
H: 8,5 mm  
PMMA  
Typ. eff: 90%



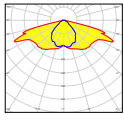
**STRADA-SQ-CY**  
D: 25x25 mm  
H: 10,1 mm  
PMMA  
Typ. eff: 94%



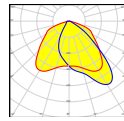
**STRADA-SQ-A-T**  
D: 25 x 25 mm  
H: 9,1 mm  
PMMA  
Typ. eff: 93%



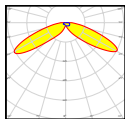
**STRADA-SQ-FS**  
D: 25 x 25 mm  
H: 12,3 mm  
PMMA  
Typ. eff: 93%



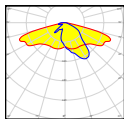
**STRADA-SQ-FS2**  
D: 25 x 25 mm  
H: 8,2 mm  
PMMA  
Typ. eff: 90%



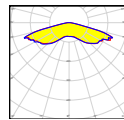
**STRADA-SQ-T-DN**  
D: 25 x 25 mm  
H: 8,5 mm  
PMMA  
Typ. eff: 90%



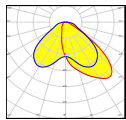
**STRADA-SQ-T-DW**  
D: 25 x 25 mm  
H: 11,4 mm  
PMMA  
Typ. eff: 91%



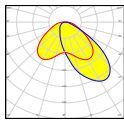
**STRADA-SQ-T-DWC**  
D: 25 x 25 mm  
H: 9,1 mm  
PMMA  
Typ. eff: 93%



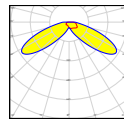
**STRADA-SQ-VSM**  
D: 25 x 25 mm  
H: 6,9 mm, PMMA  
Typ. FWHM: 152°  
Typ. eff: 93%



**STRADA-T-DN**  
D: 19,8 x 15,5 mm  
H: 8,9 mm  
PMMA  
Typ. eff: 92%



**STRADA-T-DN-EP**  
D: 19,8 x 15,5 mm  
H: 8,8 mm  
PMMA  
Typ. eff: 91%



**STRADA-T-DW**  
D: 19,8 x 15,5 mm  
H: 10,8 mm  
PMMA  
Typ. eff: 93%

Name	Diameter	Height	Typ. eff.	Typ. FWHM
STRADA-SQ-FS-NP	25x25	12,4	TBA	TBA
STRADA-SQ-ME	25x25	8,6	TBA	TBA
STRADA-SQ-FT	25x25	12,5	TBA	TBA
STRADA-SQ-ME-NP	25x25	8,6	TBA	TBA
STRADA-SQ-T4	25x25	9,4	TBA	TBA
STRADA-SQ-FW	25x25	15,3	TBA	TBA
STRADA-SQ-T4-NP	25x25	9,4	TBA	TBA
STRADA-C2-NP	19,6 x 15,5	6,9	92,0	111

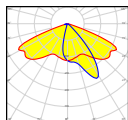
- Stanley3J
- Stanley6J
- CL-L400
- LH351A(B3535)
- LH351B
- NC5xx19A
- NC5xx19B
- NS3xx33
- NS6xx33
- NS9xx33B
- NSVxx19A
- NSVxx19B
- Double Dome
- LX A
- LX H50-2
- LX M
- LX MZ
- LX O
- LX R
- LX Rebel
- LX Rebel ES
- LX T
- LX TX
- LX Z ES
- OLP-3050RFL
- OLP-3050RFL-06A
- GFC
- OsSoc EC
- OsSoc PC
- Os SSL150
- Os SSL80
- Ostar-SMT RGB
- MC-E
- MK-R
- MK-R2
- MT-G
- MX-3
- MX-6
- XB-D
- XBH
- XBH
- XBH2
- XC-E
- XP-E
- XP-E2
- XP-E HEW
- XP-G
- XP-G2
- XP-L
- XR-E
- XR-E
- XRFE HW
- MJ14040
- Z5M1
- Z5M
- Z3
- Z5P
- H35C0
- H35B0
- H35C1

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](http://www.ledil.com) for additional information, such as the latest photometric files, 3D mechanical models, and application notes relating to handling, gluing and taping.

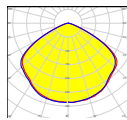
## 2x2 modules



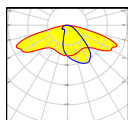
**STRADA-2X2-T2**  
D: 50 x 50 mm, H: 7,7 mm  
For IESNA Type 2 road lighting



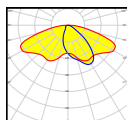
**STRADA-2X2-A-T**  
D: 50 x 50 mm  
H: 7,3 mm  
PMMA  
Typ. eff: 93%



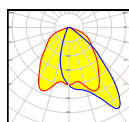
**STRADA-2X2-CY**  
D: 50x50 mm  
H: 7.8 mm  
PMMA  
Typ. eff: 94%



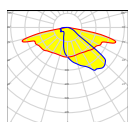
**STRADA-2X2-DWC**  
D: 50 x 50 mm  
H: 6 mm  
PMMA  
Typ. eff: 93%



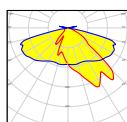
**STRADA-2X2-DNW**  
D: 50 x 50 mm  
H: 11 mm  
PMMA  
Typ. eff: 93%



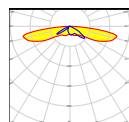
**STRADA-2X2-DN**  
D: 50 x 50 mm  
H: 8,05 mm  
PMMA



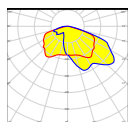
**STRADA-2X2-ME**  
D: 50 x 50 mm  
H: 8,2 mm  
PMMA



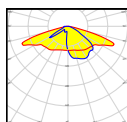
**STRADA-2X2-ME-WIDE1**  
D: 50 x 50 mm  
H: 8.3 mm  
PMMA



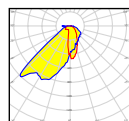
**STRADA-2X2-XW**  
D: 50 x 50 mm  
H: 7 mm  
PMMA  
Typ. eff: 94%



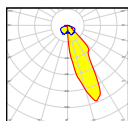
**STRADA-2X2-T4**  
D: 50 x 50 mm  
H: 7 mm  
PMMA



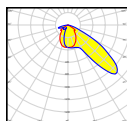
**STRADA-2X2-T3**  
D: 50 x 50 mm  
H: 7 mm  
PMMA



**STRADA-2X2-PX**  
D: 50 x 50 mm  
H: 8 mm  
PMMA



**STRADA-2X2-NHS**  
D: 50 x 50 mm  
H: 9,8 mm  
PMMA



**STRADA-2X2-FN**  
D: 50 x 50 mm  
H: 10 mm  
PMMA  
Typ. eff: 94%

## STRADA 6X1 modules

Precision-engineered lens array.

Emitted light has an asymmetric tilt in the wide beam to efficiently direct light to the roadway surface and to minimize stray light outside of target areas.



**STRADA-6X1-DNW**  
D: 119,8 x 25,2 mm  
H: 5,6 mm  
Typ. efficiency: 93%



**STRADA-6X1-DWC**  
D: 119,8 x 25,2 mm  
H: 5,5 mm  
Typ. efficiency: 94%



**STRADA-6X1-ME**  
D: 119,8 x 25,2 mm, H: 8,2 mm  
Typ. efficiency: 93%

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](http://www.ledil.com) for LED specific values and optical datasheets.

## STRADA-IP 2X6 modules



### **STRADA-IP-2X6-DWC**

D: 173 x 71,4 mm, H: 7,9 mm  
Typ. efficiency: 96%

### **STRADA-IP-2X6-T2**

D: 173 x 71,4 mm, H: 7,9 mm  
Typ. efficiency: 96%

### **STRADA-IP-2X6-T3**

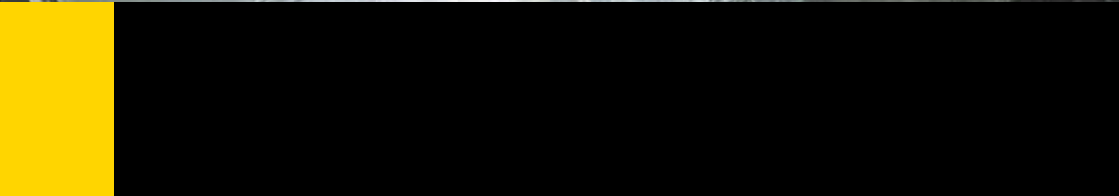
D: 173 x 71,4 mm, H: 7,9 mm  
Typ. efficiency: 96%

### **STRADA-IP-2X6-ME**

D: 173 x 71,4 mm, H: 7,9 mm  
Typ. efficiency: 96%

This street lighting optic is designed for peak optical performance, ease of installation and protection from dirt and water. STRADA-IP-2X6-DWC is a precision-engineered 12-position lens array with a tilted beam to direct light efficiently to the roadway surface.

The integral silicone gasket protects up to IP67. The wide, asymmetric beam allows for rapid development of luminaires classified as IESNA Type II and III and related European and Russian street lighting classes.



Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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