

TINA2-M

~30° medium beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

Dimensions	Ø 16.0
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

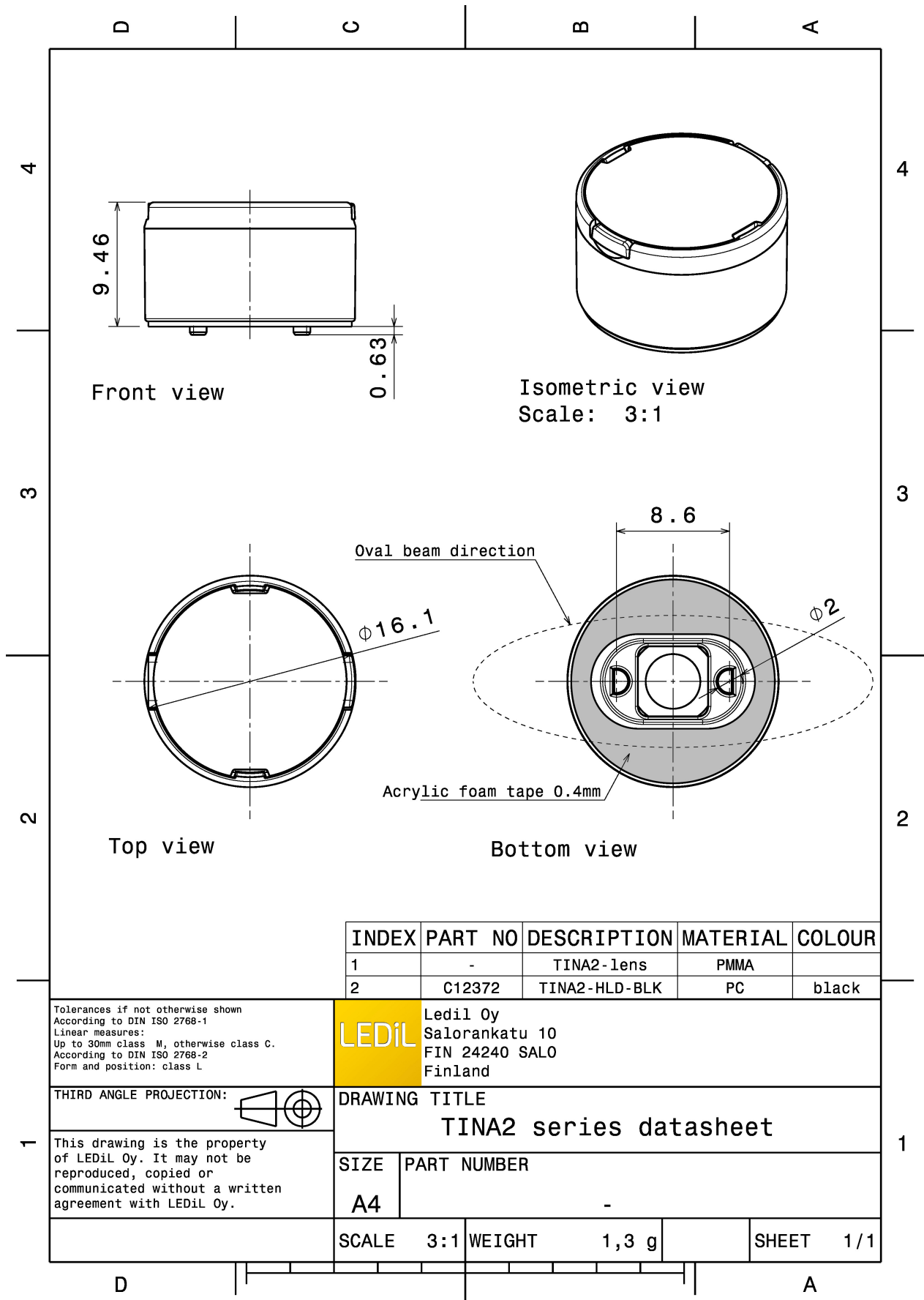


MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA2-XP-M	Single lens	PMMA	clear		
TINA2-HLD-BLK	Holder	PC	black		
TINA-TAPE3	Tape	Acrylic foam	black		

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA12377_TINA2-M » Box size: 451 x 241 x 298 mm	4140	230	230	8.3



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	-	TINA2-lens	PMMA	
2	C12372	TINA2-HLD-BLK	PC	black

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C.
According to DIN ISO 2768-2
Form and position: class L

LEDiL LediL Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
TINA2 series datasheet

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SIZE	PART NUMBER
A4	-

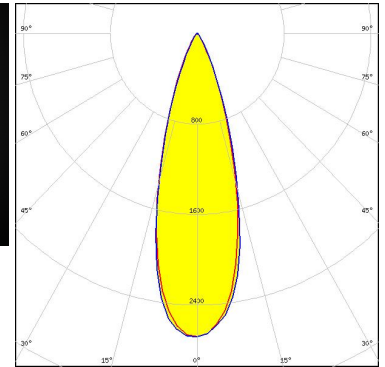
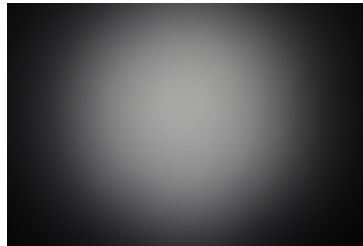
SCALE	3:1	WEIGHT	1,3 g	SHEET	1/1
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See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



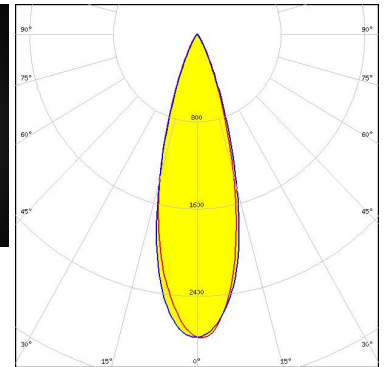
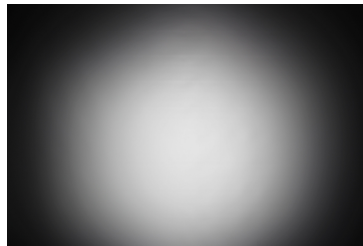
LED XB-H
FWHM / FWTM 31.0° / 54.0°
Efficiency 85 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



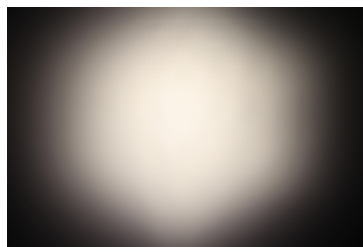
LED XD16
FWHM / FWTM 30.0° / 52.0°
Efficiency 83 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XQ-E HD
FWHM / FWTM 29.0° / 51.0°
Efficiency 84 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

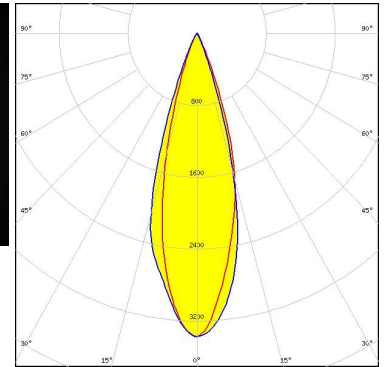
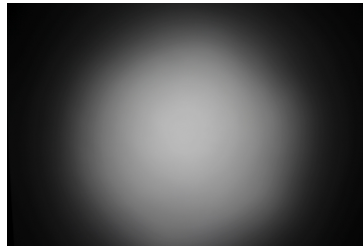


Light distribution files

OPTICAL RESULTS (MEASURED):



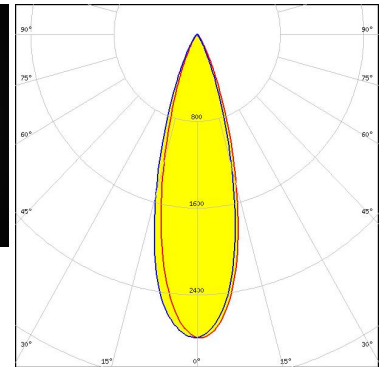
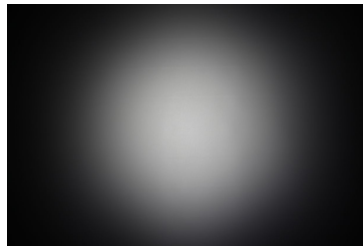
LED LUXEON CZ
 FWHM / FWTM 28.0° / 47.0°
 Efficiency 89 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



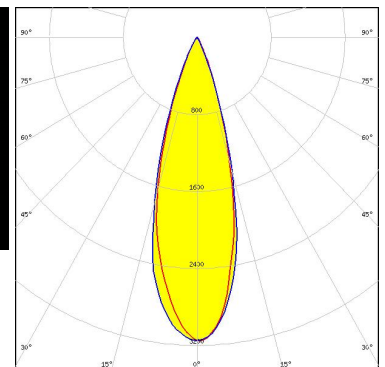
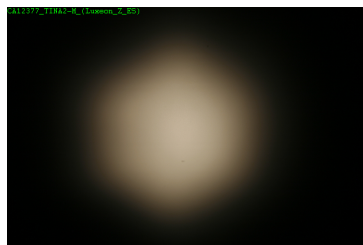
LED LUXEON TX
 FWHM / FWTM 30.0° / 53.0°
 Efficiency 86 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED LUXEON Z ES
 FWHM / FWTM 31.0° / 50.0°
 Efficiency 88 %
 Peak intensity 3.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

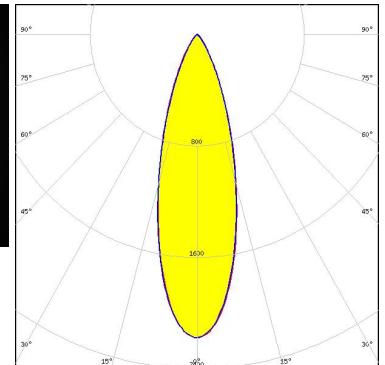
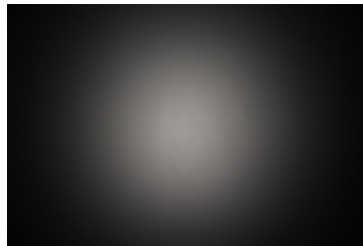
OPTICAL RESULTS (MEASURED):



LED NVSxx19B/NVSxx19C
FWHM / FWTM 29.0° / 55.0°
Efficiency 85 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



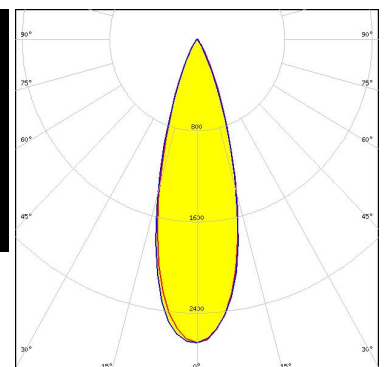
LED NWSx229A
FWHM / FWTM 26.0° / 52.0°
Efficiency 86 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED OSLOM Square EC
FWHM / FWTM 30.0° / 54.0°
Efficiency 85 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED OSLON Square PC
FWHM / FWTM 29.0° / 53.0°
Efficiency 86 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

[Light distribution files](#)

OSRAM
Opto Semiconductors

LED SFH 4170S
FWHM / FWTM 28.0° / 50.0°
Efficiency %
LEDs/each optic 1
Light colour/type IR
Required components:

[Light distribution files](#)

OSRAM
Opto Semiconductors

LED SFH 4180S
FWHM / FWTM 29.0° / 49.0°
Efficiency %
LEDs/each optic 1
Light colour/type IR
Required components:

[Light distribution files](#)

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED SFH 4715S
FWHM / FWTM 28.0° / 56.0°
Efficiency %
LEDs/each optic 1
Light colour/type IR
Required components:

Light distribution files

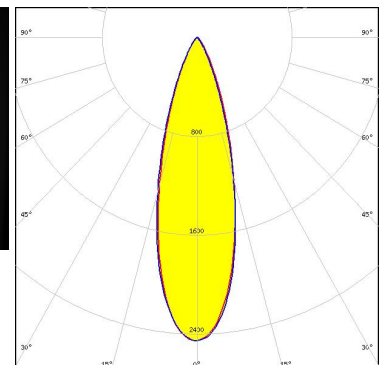
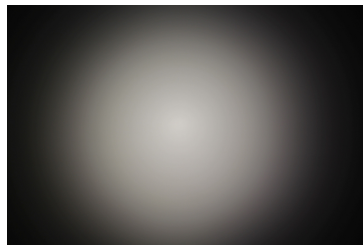
OSRAM
Opto Semiconductors

LED SFH 4725S
FWHM / FWTM 27.0° / 54.0°
Efficiency %
LEDs/each optic 1
Light colour/type IR
Required components:

Light distribution files

SEUL
SEOUL SEMICONDUCTOR

LED Z5M3
FWHM / FWTM 30.0° / 57.0°
Efficiency 83 %
Peak intensity 2.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

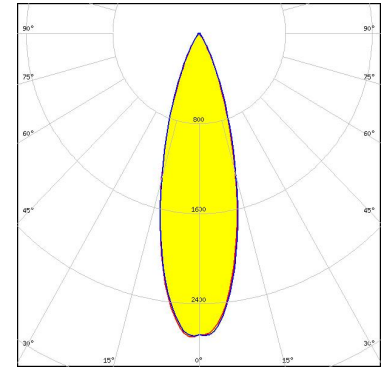


Light distribution files

OPTICAL RESULTS (SIMULATED):



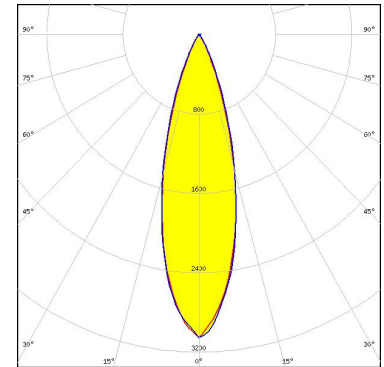
LED XB-D
FWHM / FWTM 30.0° / 55.0°
Efficiency 86 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



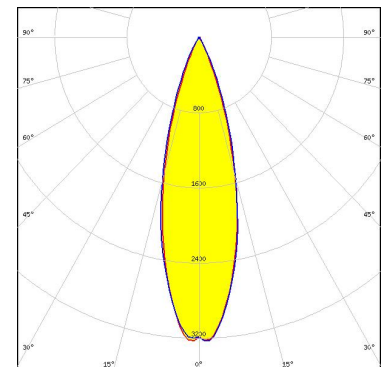
LED XE-G
FWHM / FWTM 29.0° / 53.0°
Efficiency 89 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XQ-E HI
FWHM / FWTM 29.0° / 51.0°
Efficiency 90 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

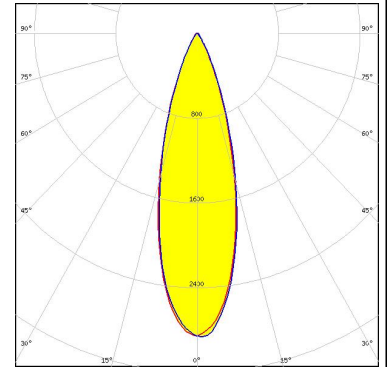


Light distribution files

OPTICAL RESULTS (SIMULATED):



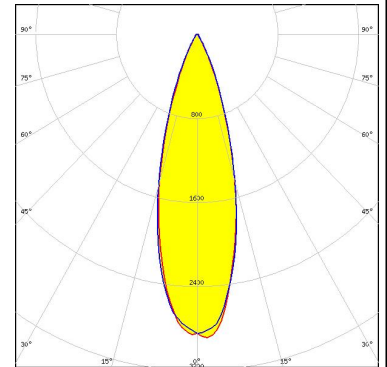
LED LUXEON 2835 Line
FWHM / FWTM 30.0° / 55.0°
Efficiency 96 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON C
FWHM / FWTM 30.0° / 52.0°
Efficiency 93 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



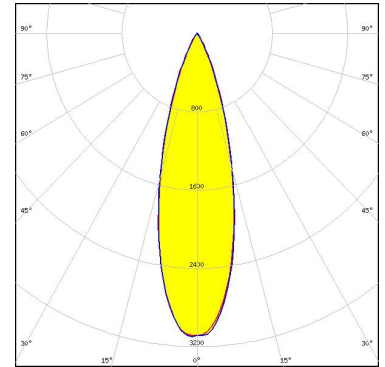
LED LUXEON IR Compact
FWHM / FWTM 29.0° / 51.0°
Efficiency 83 %
LEDs/each optic 1
Light colour/type IR
Required components:

Light distribution files

OPTICAL RESULTS (SIMULATED):



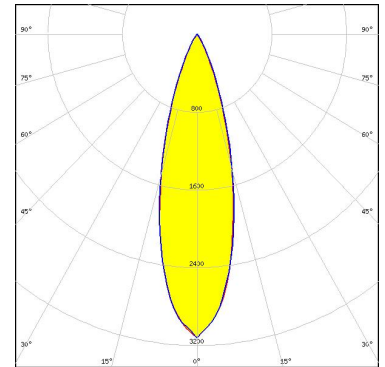
LED LUXEON Rubix
FWHM / FWTM 29.0° / 52.0°
Efficiency 91 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type Red
Required components:



Light distribution files



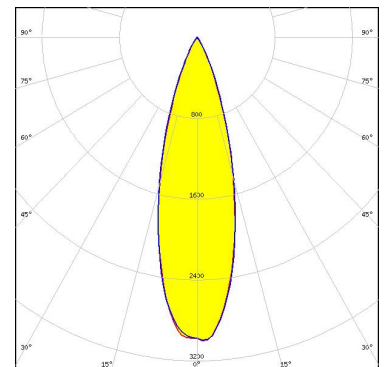
LED LUXEON Rubix
FWHM / FWTM 28.0° / 53.0°
Efficiency 91 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON Rubix
FWHM / FWTM 30.0° / 53.0°
Efficiency 91 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type Blue
Required components:

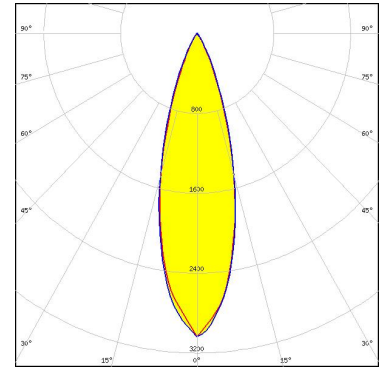


Light distribution files

OPTICAL RESULTS (SIMULATED):



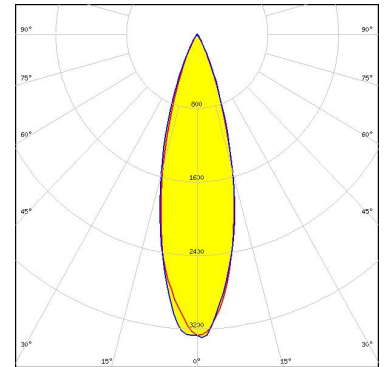
LED LUXEON SunPlus 20 Line (150 deg)
FWHM / FWTM 30.0° / 53.0°
Efficiency 89 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



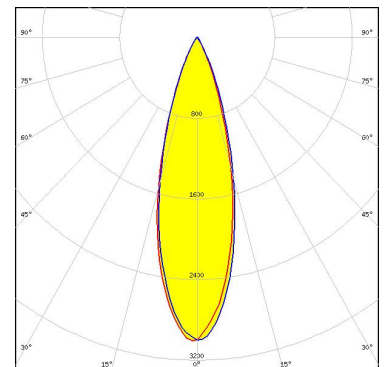
LED LUXEON Z ES
FWHM / FWTM 29.0° / 52.0°
Efficiency 91 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NFSx757G
FWHM / FWTM 29.0° / 53.0°
Efficiency 90 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

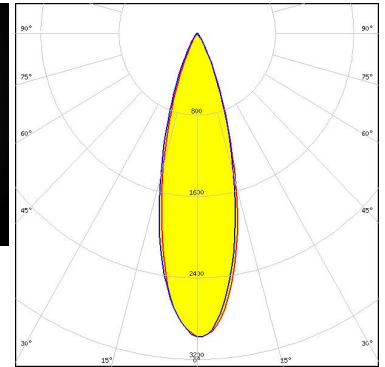
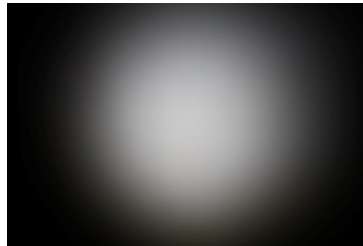


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

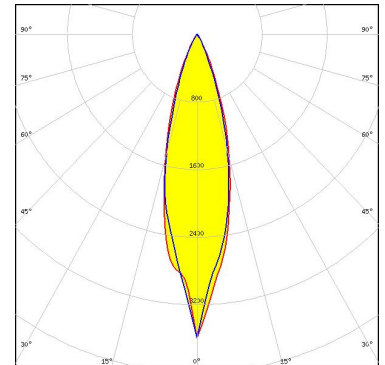
LED Duris S5 (2 chip)
FWHM / FWTM 29.0° / 54.0°
Efficiency 92 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

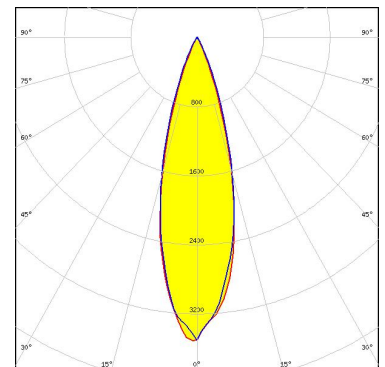
LED OSCONIQ P 3030
FWHM / FWTM 26.0° / 50.0 + 52.0°
Efficiency 90 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour/type Blue
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLOM Black Flat (LUW HWQP)
FWHM / FWTM 28.0° / 49.0°
Efficiency 91 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

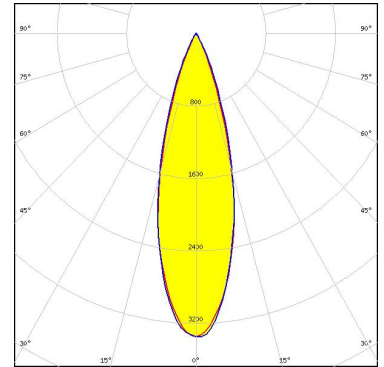


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

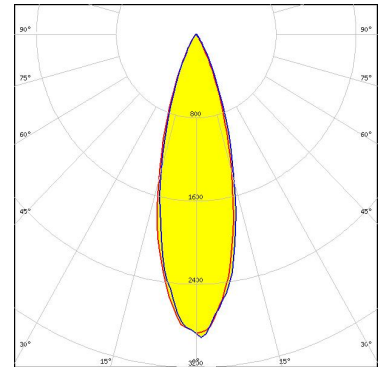
LED OSLON Pure 1414
FWHM / FWTM 29.0 + 30.0° / 48.0 + 52.0°
Efficiency 92 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

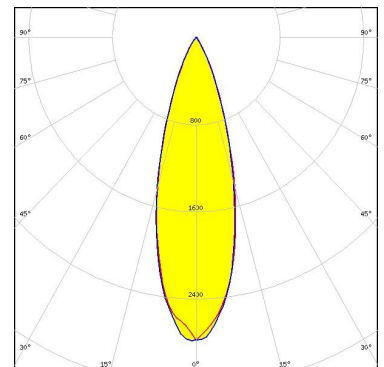
LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 29.0° / 54.0°
Efficiency 90 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 30.0° / 56.0°
Efficiency 90 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

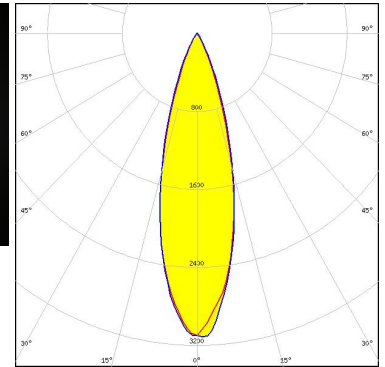
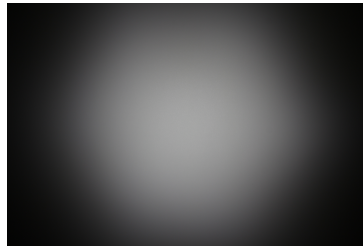


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

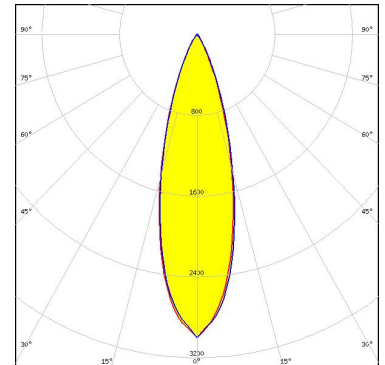
LED OSLON Square Flat
FWHM / FWTM 29.0° / 52.0°
Efficiency 89 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

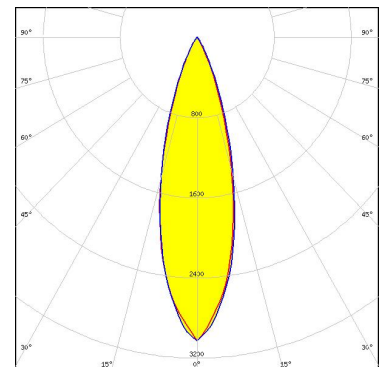
LED OSLON SSL 150
FWHM / FWTM 29.0° / 54.0°
Efficiency 90 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON SSL 80
FWHM / FWTM 29.0° / 53.0°
Efficiency 89 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

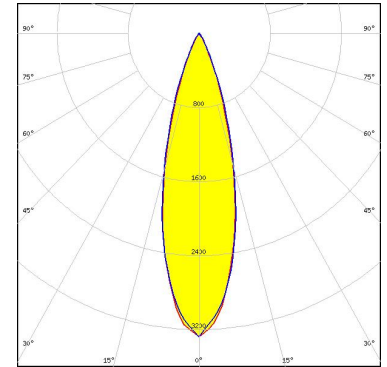


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED SFH 4715S
FWHM / FWTM 28.0° / 51.0°
Efficiency 90 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files

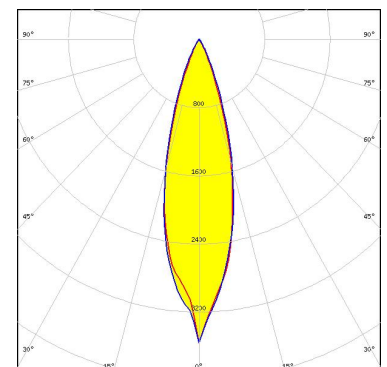
OSRAM
Opto Semiconductors

LED SFH 4770S
FWHM / FWTM 27.0° / 51.0°
Efficiency 85 %
LEDs/each optic 1
Light colour/type IR
Required components:

Light distribution files

OSRAM
Opto Semiconductors

LED Synios P2720 1 mm
FWHM / FWTM 27.0° / 50.0°
Efficiency 91 %
Peak intensity 3.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

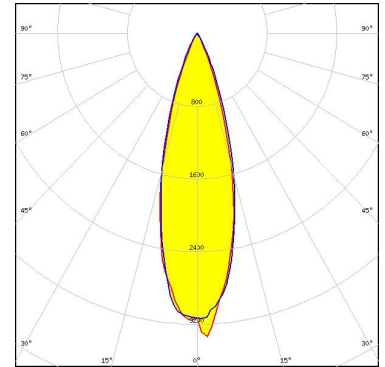


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

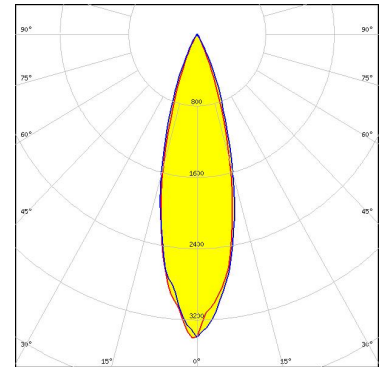
LED Synios P2720 1/2 mm
FWHM / FWTM 29.0° / 51.0°
Efficiency 93 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

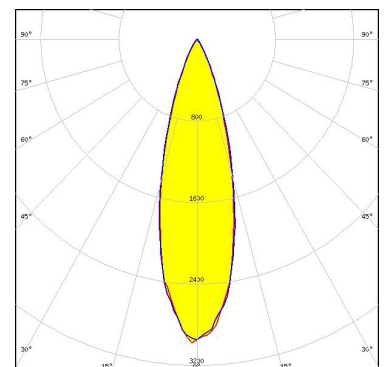
LED Synios P2720 1/4 mm
FWHM / FWTM 28.0° / 50.0°
Efficiency 91 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

LED LH181B
FWHM / FWTM 29.0° / 53.5°
Efficiency 90 %
Peak intensity 3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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LEDiL Oy

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Shenzhen 518057
P.R.CHINA

Local sales and technical support

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

Shipping locations

Poznan, Poland
Hong Kong, China

Distribution Partners

[www.ledil.com/
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