

LISA3-WWW-PIN

~60° wide beam with location pin installation

SPECIFICATION:

Dimensions	Ø 9.9 mm
Height	7 mm
Fastening	pin
ROHS compliant	yes ⓘ

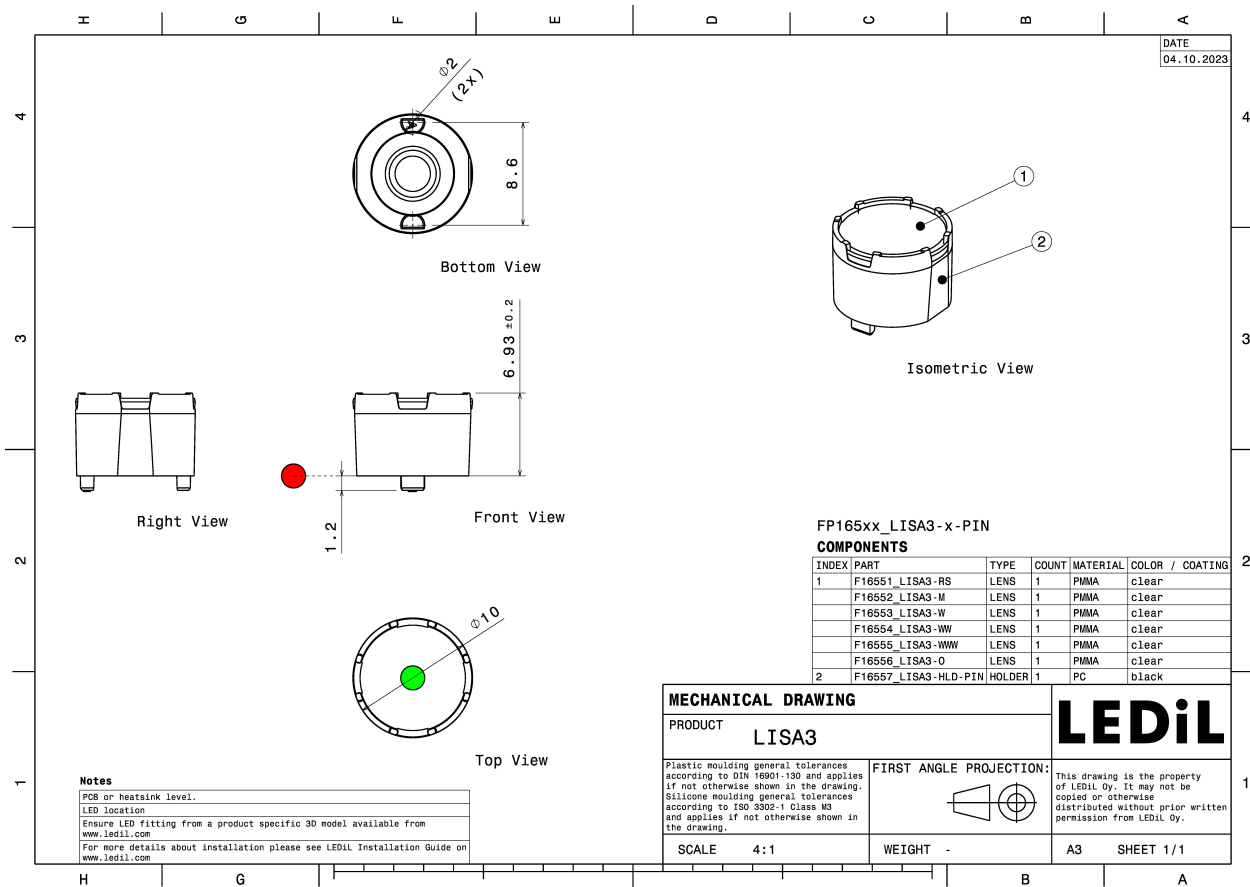
MATERIALS:

Component	Type	Material	Colour	Finish	Length
LISA3-WWW	Single lens	PMMA	clear		9.9
LISA3-HLD-PIN	Holder	PC	black		9.9

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
FP16562_LISA3-WWW-PIN » Box size: 310 x 230 x 60 mm	2000	300	100	1.4



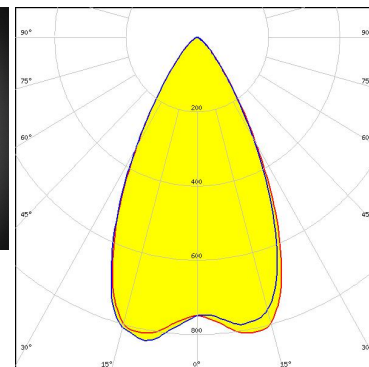
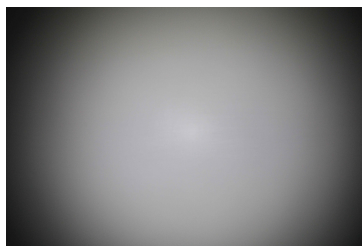


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



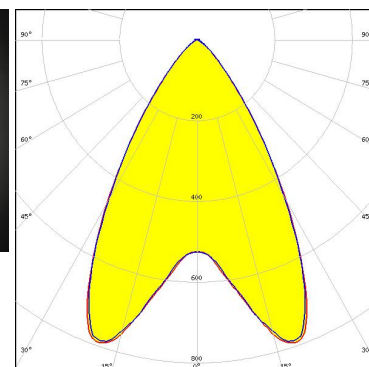
LED XD16
 FWHM / FWTM 55.0° / 85.0°
 Efficiency 74 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



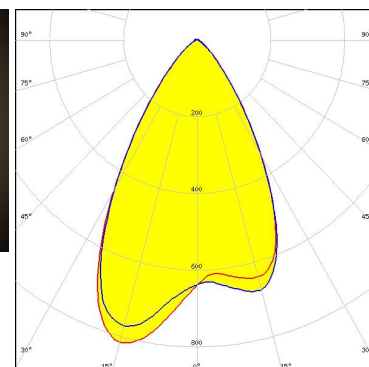
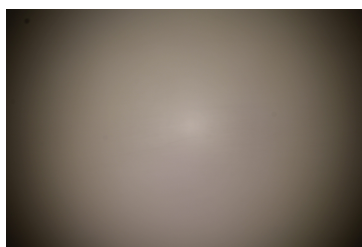
LED XP-E2
 FWHM / FWTM 63.0° / 91.0°
 Efficiency 85 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-G3
 FWHM / FWTM 61.0° / 95.0°
 Efficiency 80 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

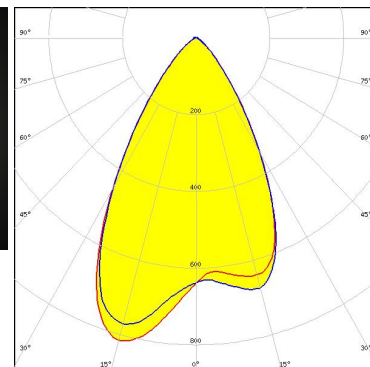
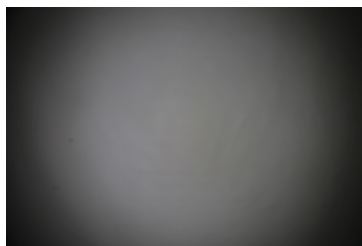


Light distribution files

OPTICAL RESULTS (MEASURED):



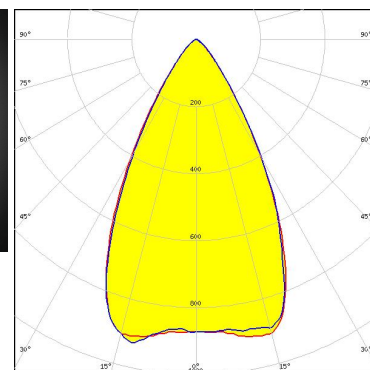
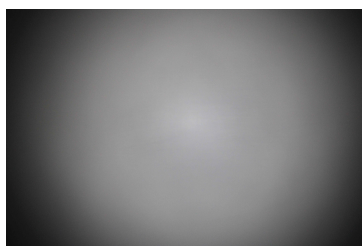
LED XP-G3
FWHM / FWTM 60.0° / 92.0°
Efficiency 80 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



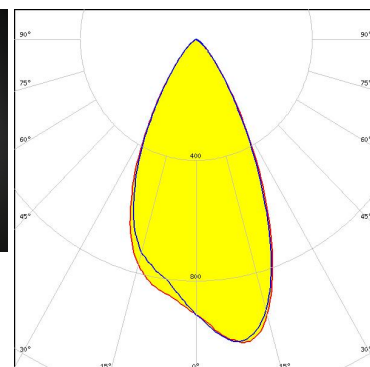
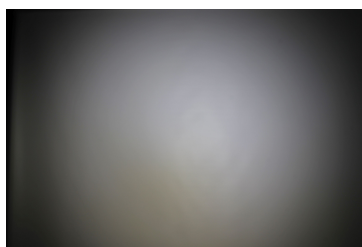
LED LUXEON CZ
FWHM / FWTM 57.0° / 85.0°
Efficiency 85 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NF2x757G
FWHM / FWTM 50.0° / 82.0°
Efficiency 76 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

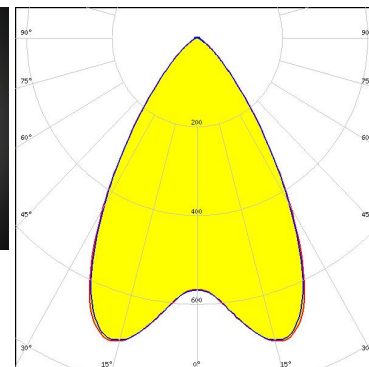
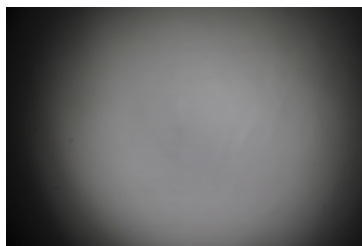


Light distribution files

OPTICAL RESULTS (MEASURED):



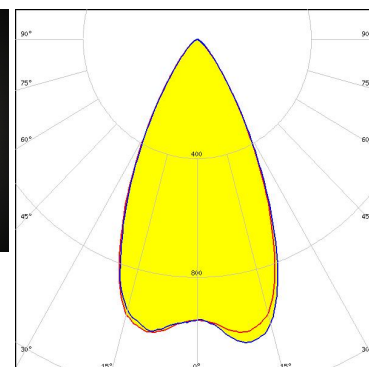
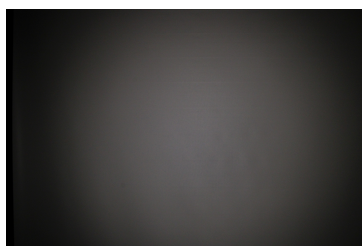
LED NVSW219F
 FWHM / FWTM 64.0° / 96.0°
 Efficiency 84 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



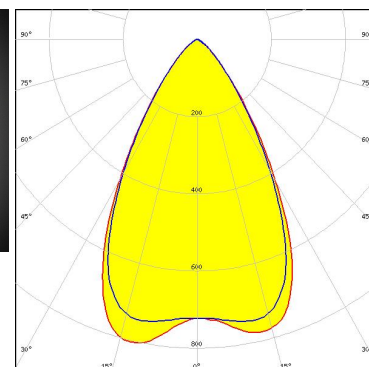
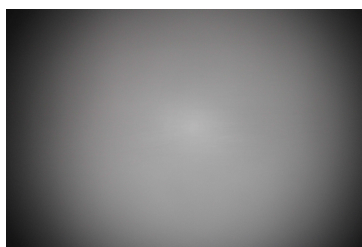
LED OSCONIQ C 2424
 FWHM / FWTM 53.0° / 81.0°
 Efficiency 84 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM 60.0° / 93.0°
 Efficiency 83 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

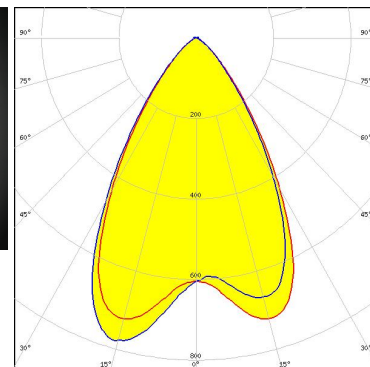
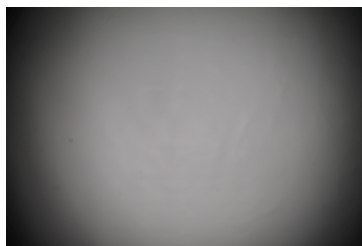


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

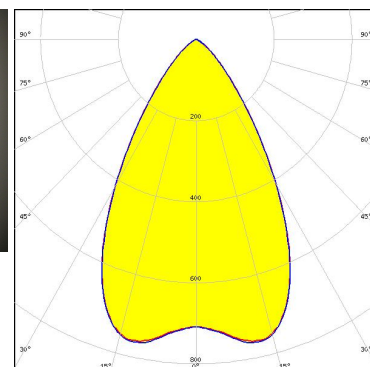
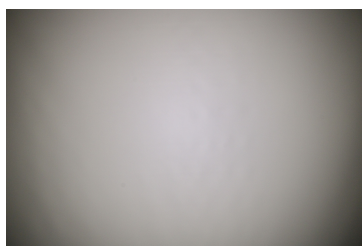
LED LH351C
FWHM / FWTM 64.0° / 96.0°
Efficiency 84 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED Z5M4
FWHM / FWTM 62.0° / 95.0°
Efficiency 84 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

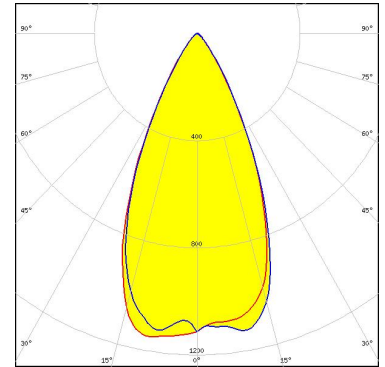


Light distribution files

OPTICAL RESULTS (SIMULATED):



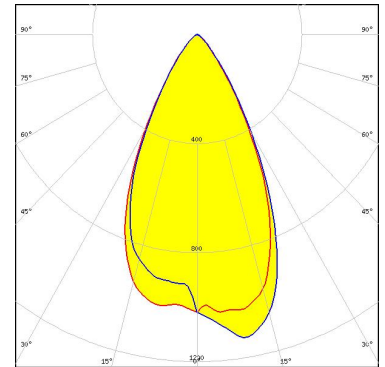
LED CSP 2323 (BXCP)
 FWHM / FWTM 50.0° / 74.0°
 Efficiency 80 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



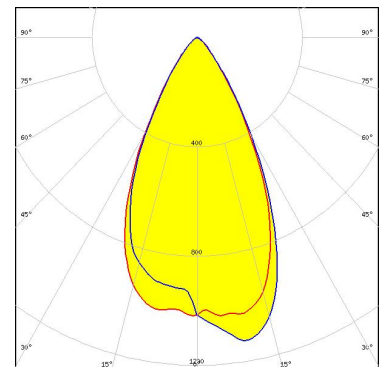
LED J Series 2835
 FWHM / FWTM 53.0° / 82.0°
 Efficiency 87 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED J Series 2835
 FWHM / FWTM 53.0° / 82.0°
 Efficiency 87 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

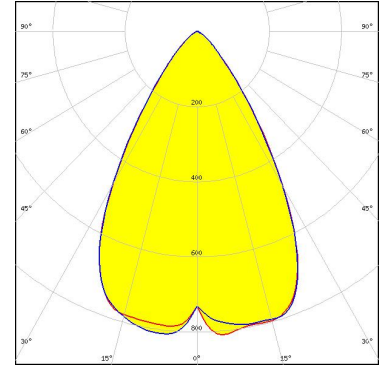


Light distribution files

OPTICAL RESULTS (SIMULATED):



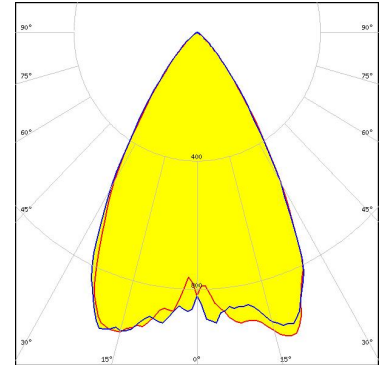
LED XP-E
 FWHM / FWTM 64.0° / 93.0°
 Efficiency 89 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



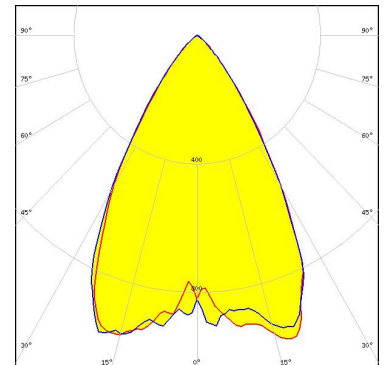
LED XP-E2
 FWHM / FWTM 62.0° / 88.0°
 Efficiency 89 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-E2
 FWHM / FWTM 64.0° / 90.0°
 Efficiency 89 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

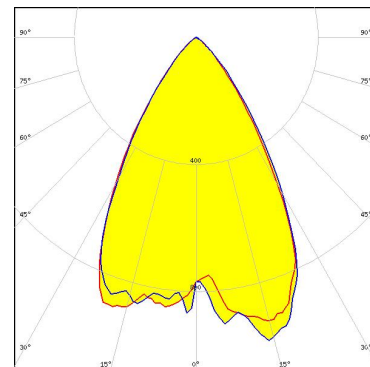


Light distribution files

OPTICAL RESULTS (SIMULATED):



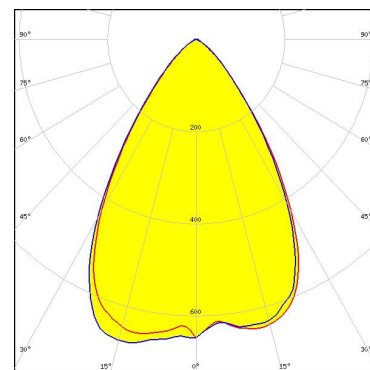
LED XP-G2
 FWHM / FWTM 66.0° / 93.0°
 Efficiency 87 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



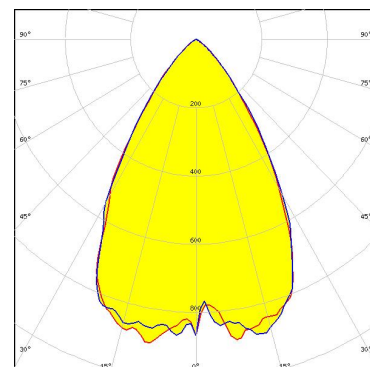
LED XP-G2 HE
 FWHM / FWTM 68.0° / 100.0°
 Efficiency 82 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-G3
 FWHM / FWTM 63.0° / 93.0°
 Efficiency 82 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

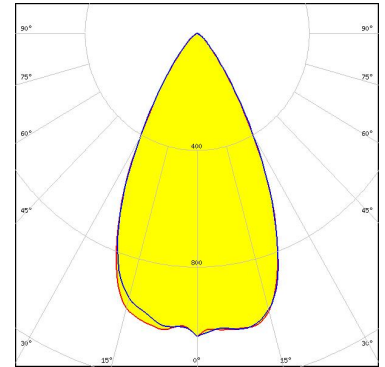


Light distribution files

OPTICAL RESULTS (SIMULATED):



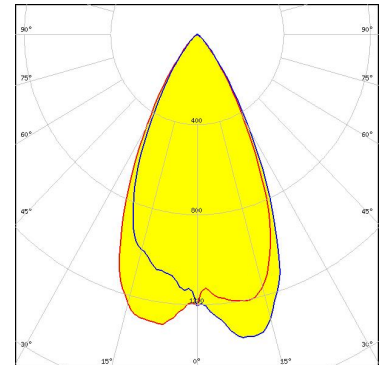
LED LUXEON 2835 Line
 FWHM / FWTM 54.0° / 82.0°
 Efficiency 88 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



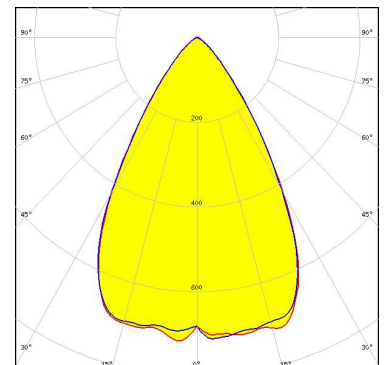
LED LUXEON 3030 2D (Round LES)
 FWHM / FWTM 54.0° / 79.0°
 Efficiency 85 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED LUXEON C
 FWHM / FWTM 64.0° / 92.0°
 Efficiency 79 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

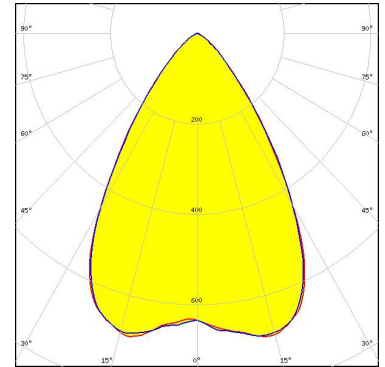


Light distribution files

OPTICAL RESULTS (SIMULATED):



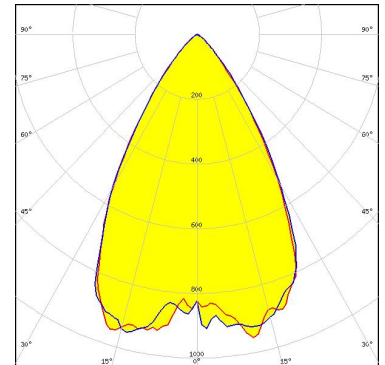
LED LUXEON HL2X
 FWHM / FWTM 66.0° / 98.0°
 Efficiency 85 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



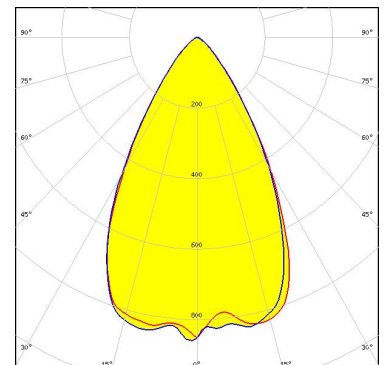
LED LUXEON TX
 FWHM / FWTM 62.0° / 87.0°
 Efficiency 85 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED LUXEON V2
 FWHM / FWTM 60.0° / 92.0°
 Efficiency 88 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

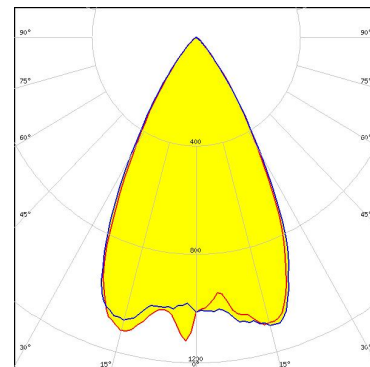


Light distribution files

OPTICAL RESULTS (SIMULATED):



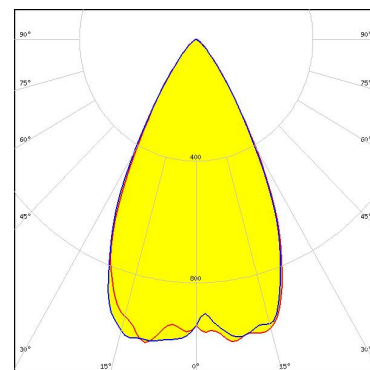
LED LUXEON Z
FWHM / FWTM 58.0° / 80.0°
Efficiency 88 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



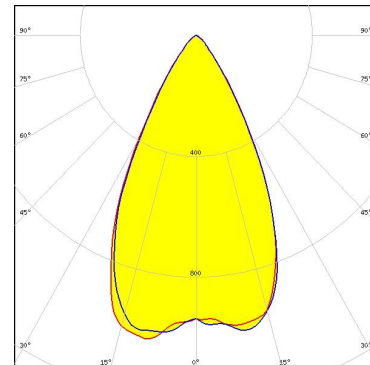
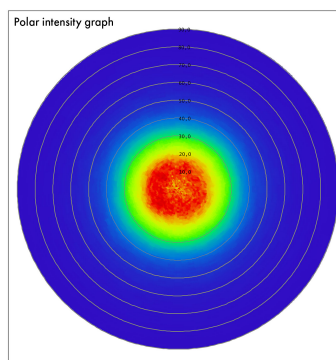
LED LUXEON Z ES
FWHM / FWTM 56.0° / 82.0°
Efficiency 88 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED SST-10-IR-B90
FWHM / FWTM 54.0° / 80.0°
Efficiency 86 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files

OPTICAL RESULTS (SIMULATED):

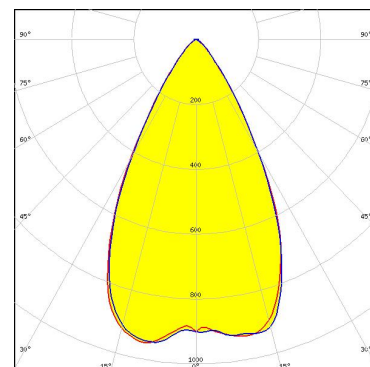


LED SST-12
FWHM / FWTM 60.0° / 88.0°
Efficiency 87 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Light distribution files



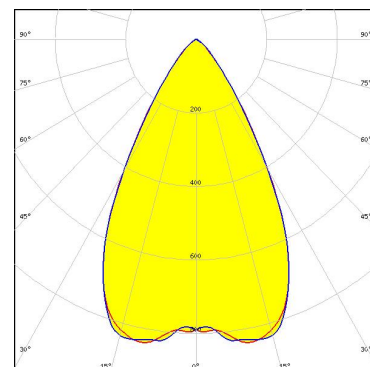
LED SST-20
FWHM / FWTM 56.0° / 84.0°
Efficiency 86 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NCSxx19B
FWHM / FWTM 60.0° / 88.0°
Efficiency 82 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

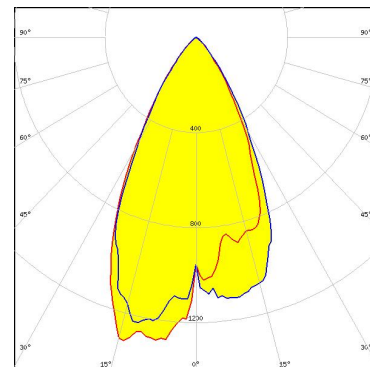


Light distribution files

OPTICAL RESULTS (SIMULATED):



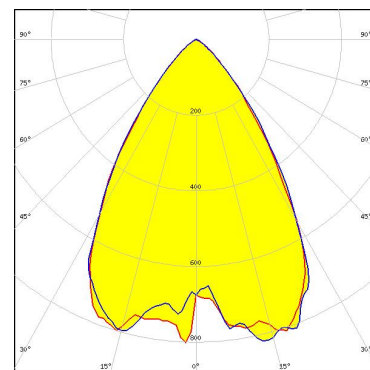
LED NF2x757G
 FWHM / FWTM 50.0° / 77.0°
 Efficiency 88 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



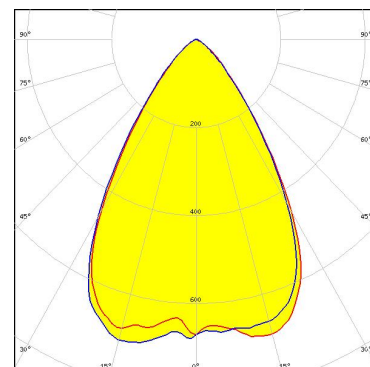
LED NVSW219D
 FWHM / FWTM 67.0° / 88.0°
 Efficiency 84 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED NVSW219F
 FWHM / FWTM 66.0° / 99.0°
 Efficiency 84 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

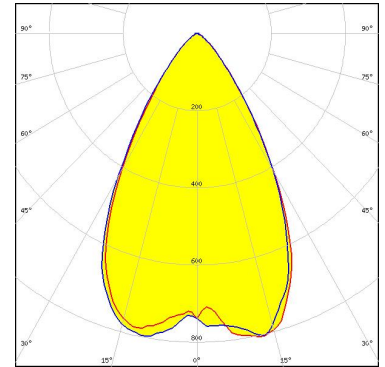


Light distribution files

OPTICAL RESULTS (SIMULATED):



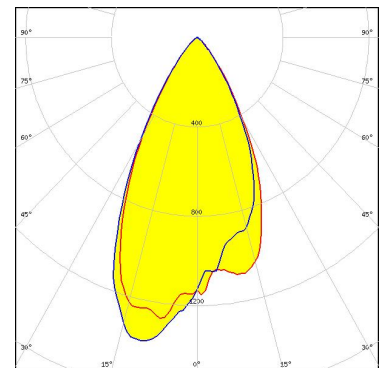
LED NVSxx19B/NVSxx19C
 FWHM / FWTM 61.0° / 92.0°
 Efficiency 83 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



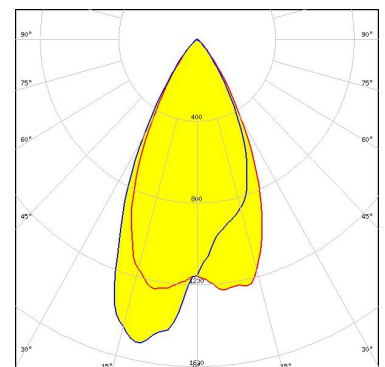
LED Duris S5 (2 chip)
 FWHM / FWTM 49.0° / 77.0°
 Efficiency 87 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Duris S5 (Single chip)
 FWHM / FWTM 48.0° / 76.0°
 Efficiency 86 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

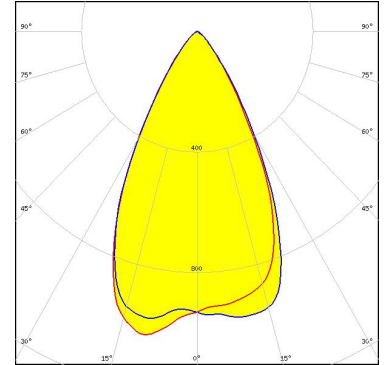


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

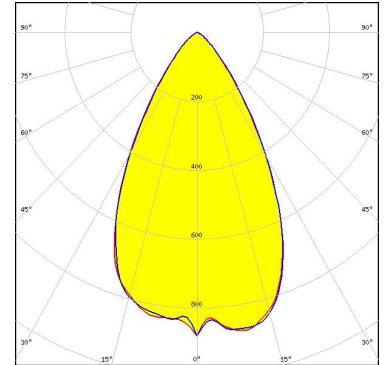
LED OSCONIQ P 3030
FWHM / FWTM 56.0° / 82.0°
Efficiency 85 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

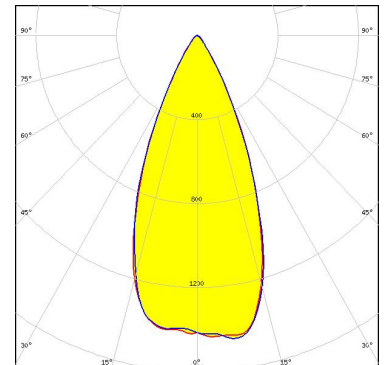
LED OSCONIQ P 3737 (3W version)
FWHM / FWTM 58.0° / 90.0°
Efficiency 86 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLOM Black
FWHM / FWTM 45.0° / 69.0°
Efficiency 86 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

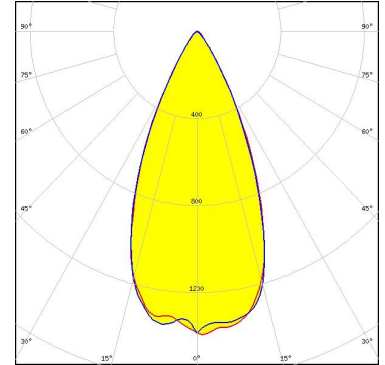


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

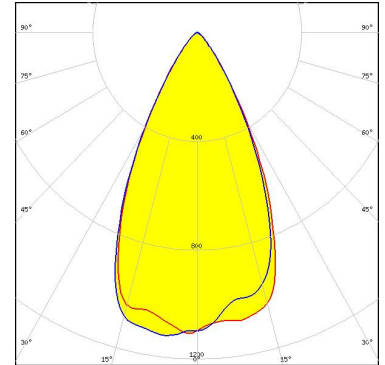
LED OSLON Black
FWHM / FWTM 46.0° / 71.0°
Efficiency 88 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

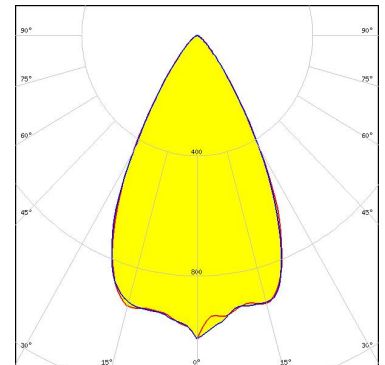
LED OSLON Black Flat (LUW HWQP)
FWHM / FWTM 54.0° / 80.0°
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type Red
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON Pure 1414
FWHM / FWTM 58.0 + 57.0° / 84.0 + 83.0°
Efficiency 89 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

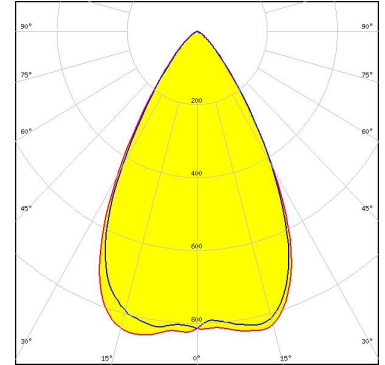


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

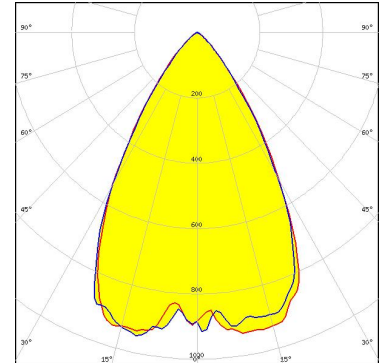
LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 61.0° / 90.0°
Efficiency 87 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

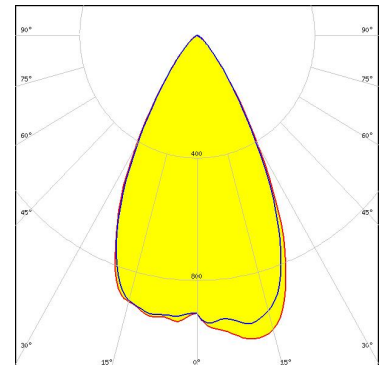
LED OSLON Square EC
FWHM / FWTM 61.0° / 86.0°
Efficiency 86 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON Square Flat
FWHM / FWTM 56.0° / 84.0°
Efficiency 87 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

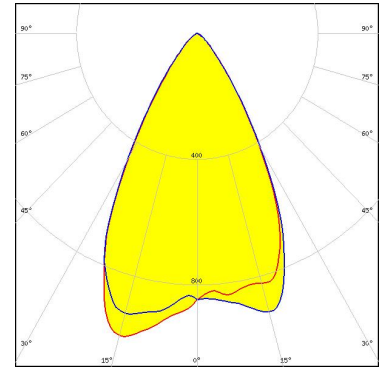


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

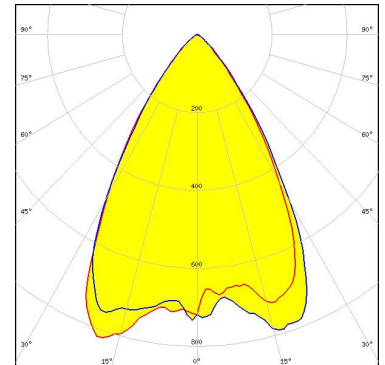
LED OSLON SSL 120
FWHM / FWTM 58.0° / 85.0°
Efficiency 89 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type Amber
Required components:



Light distribution files

OSRAM
Opto Semiconductors

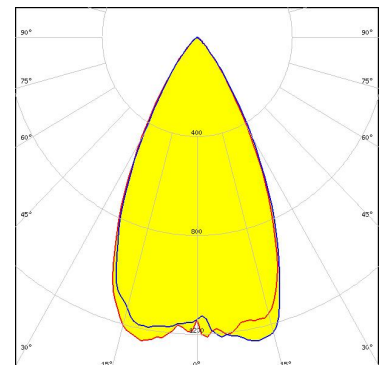
LED OSLON SSL 150
FWHM / FWTM 63.0° / 84.0°
Efficiency 87 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON SSL 80
FWHM / FWTM 53.0° / 79.0°
Efficiency 87 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

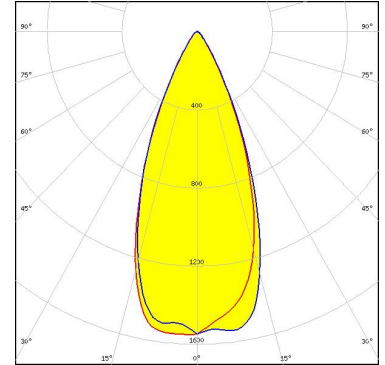
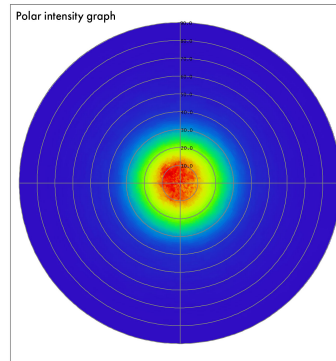


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

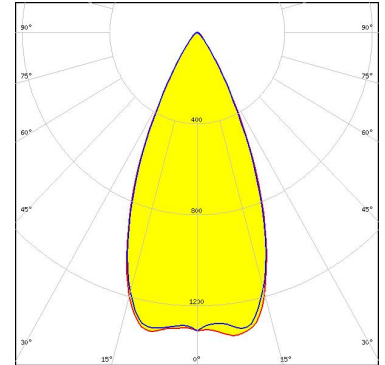
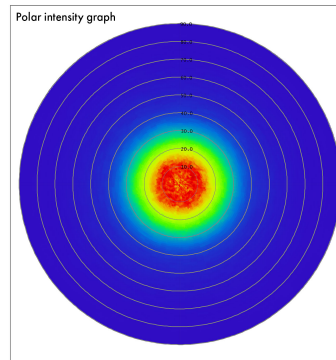
LED SFH 4715AS
FWHM / FWTM 42.0° / 67.0°
Efficiency 87 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files

OSRAM
Opto Semiconductors

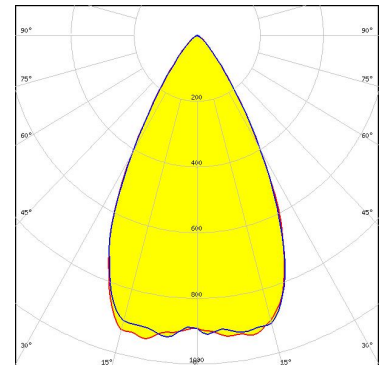
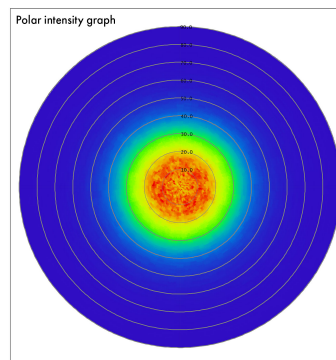
LED SFH 4715S
FWHM / FWTM 47.0° / 70.0°
Efficiency 88 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED SFH 4716S
FWHM / FWTM 57.0° / 83.0°
Efficiency 85 %
LEDs/each optic 1
Light colour/type IR
Required components:

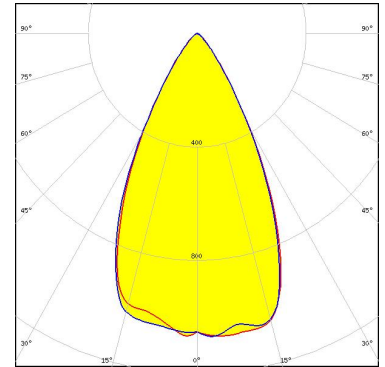


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

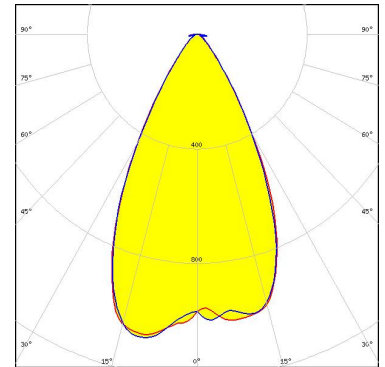
LED Synios P2720 1 mm
FWHM / FWTM 54.0° / 80.0°
Efficiency 88 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type Red
Required components:



Light distribution files

OSRAM
Opto Semiconductors

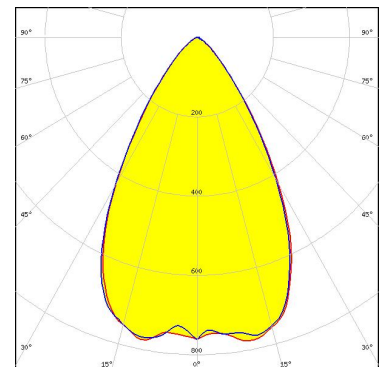
LED SYNIOS S2222
FWHM / FWTM 55.0° / 82.0°
Efficiency 96 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

LED LH351B
FWHM / FWTM 62.0° / 95.0°
Efficiency 85 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

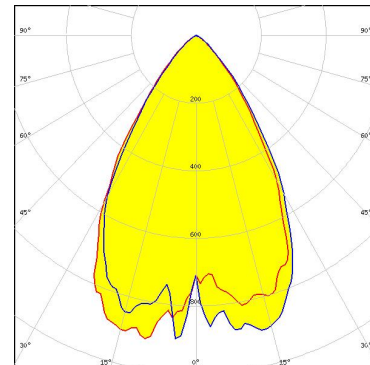


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

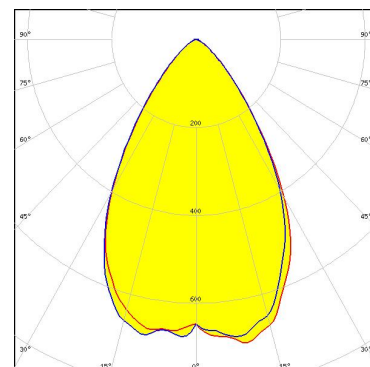
LED LH351C
FWHM / FWTM 62.0° / 88.0°
Efficiency 84 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

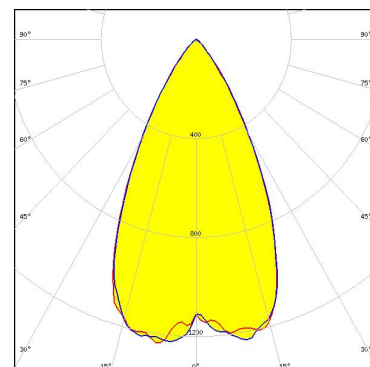
LED LH351D
FWHM / FWTM 65.0° / 100.0°
Efficiency 81 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

LED LM301A
FWHM / FWTM 53.0° / 75.0°
Efficiency 87 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

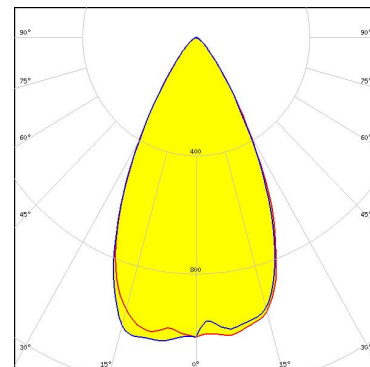


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

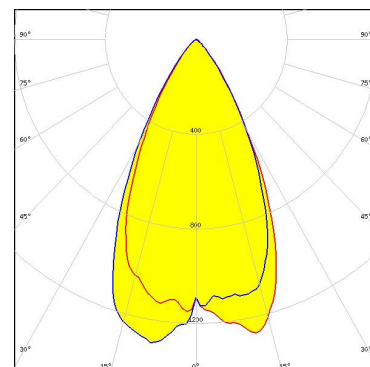
LED LM301B
 FWHM / FWTM 55.0° / 82.0°
 Efficiency 87 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

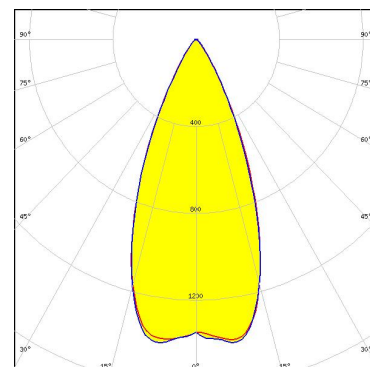
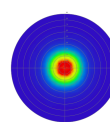
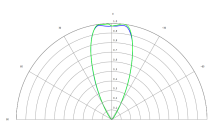
LED LM302A
 FWHM / FWTM 53.0° / 80.0°
 Efficiency 87 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

STANLEY

LED FWR1107MS
 FWHM / FWTM 44.0° / 68.0°
 Efficiency 85 %
 LEDs/each optic 1
 Light colour/type IR
 Required components:

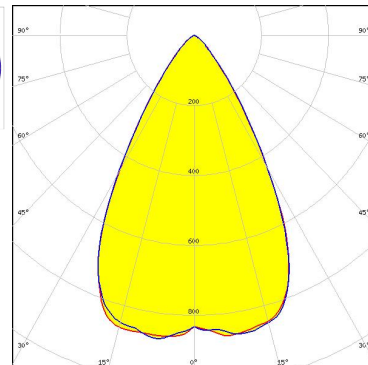
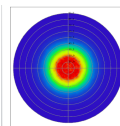
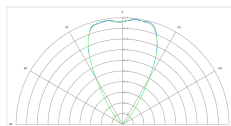


Light distribution files

OPTICAL RESULTS (SIMULATED):



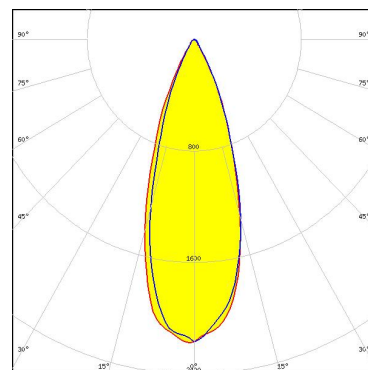
LED FWR1108MS
FWHM / FWTM 60.0° / 87.0°
Efficiency 88 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files



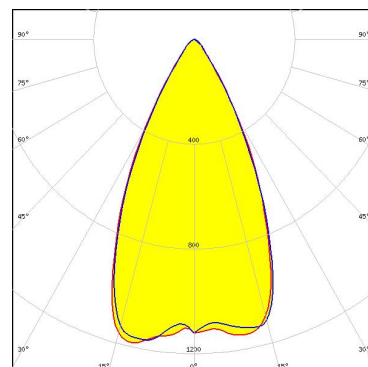
LED MFN1107MS
FWHM / FWTM 35.0° / 60.0°
Efficiency 91 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files



LED MFN1108MS
FWHM / FWTM 52.0° / 76.0°
Efficiency 90 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type IR
Required components:

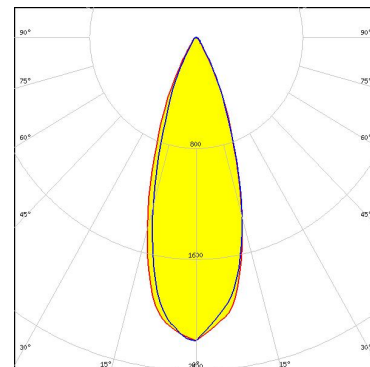


Light distribution files

OPTICAL RESULTS (SIMULATED):



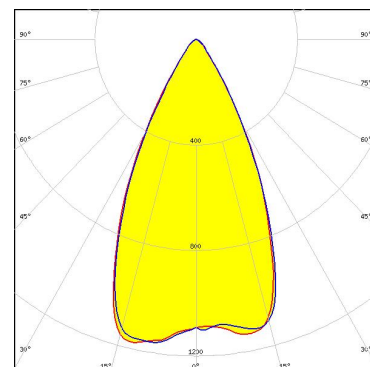
LED MGN1107MS
FWHM / FWTM 35.0° / 60.0°
Efficiency 91 %
Peak intensity 2.2 cd/lm
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files



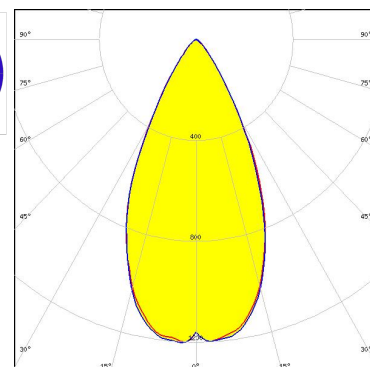
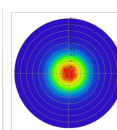
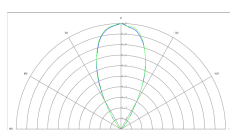
LED MGN1108MS
FWHM / FWTM 52.0° / 76.0°
Efficiency 90 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files



LED MJN1107MS
FWHM / FWTM 50.0° / 77.0°
Efficiency 89 %
LEDs/each optic 1
Light colour/type IR
Required components:

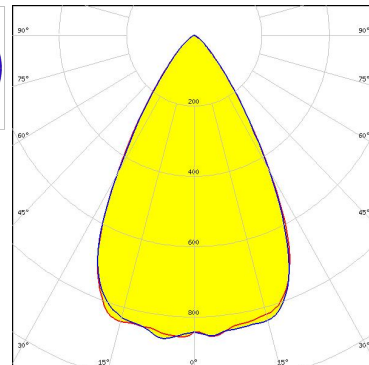
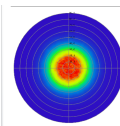
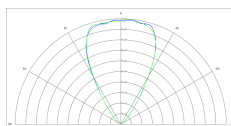


Light distribution files

OPTICAL RESULTS (SIMULATED):



LED MJN1108MS
FWHM / FWTM 61.0° / 88.0°
Efficiency 88 %
LEDs/each optic 1
Light colour/type IR
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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

LEDiL Oy

Joensuunkatu 13
FI-24240 SALO
Finland

LEDiL Inc.

228 West Page Street
Suite D
Sycamore IL 60178
USA

Ledil Optics Technology (Shenzhen) Co., Ltd.

405 , Block B
Casic Motor Building
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/
where_to_buy](http://www.ledil.com/where_to_buy)