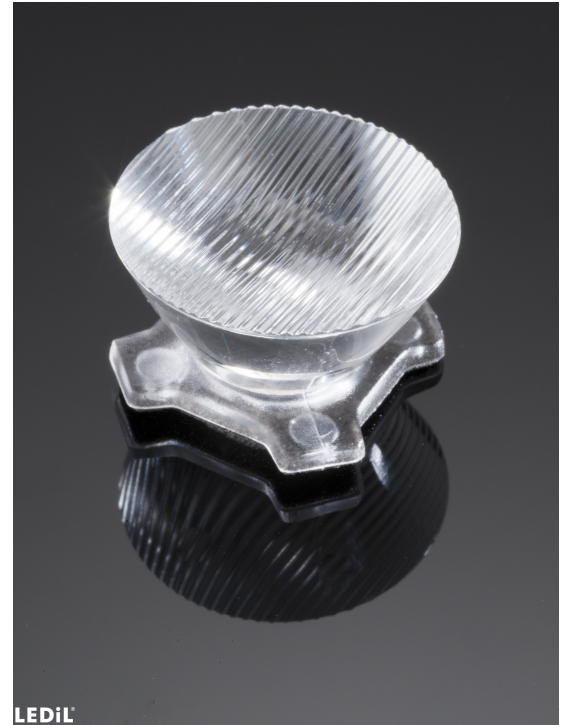


HEIDI-O-90

~13° x 45° oval beam optimized for Cree XP-G and XP-E. Variant with beam direction rotated 90°.

SPECIFICATION:

Dimensions	Ø 21.6
Height	12.1 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ



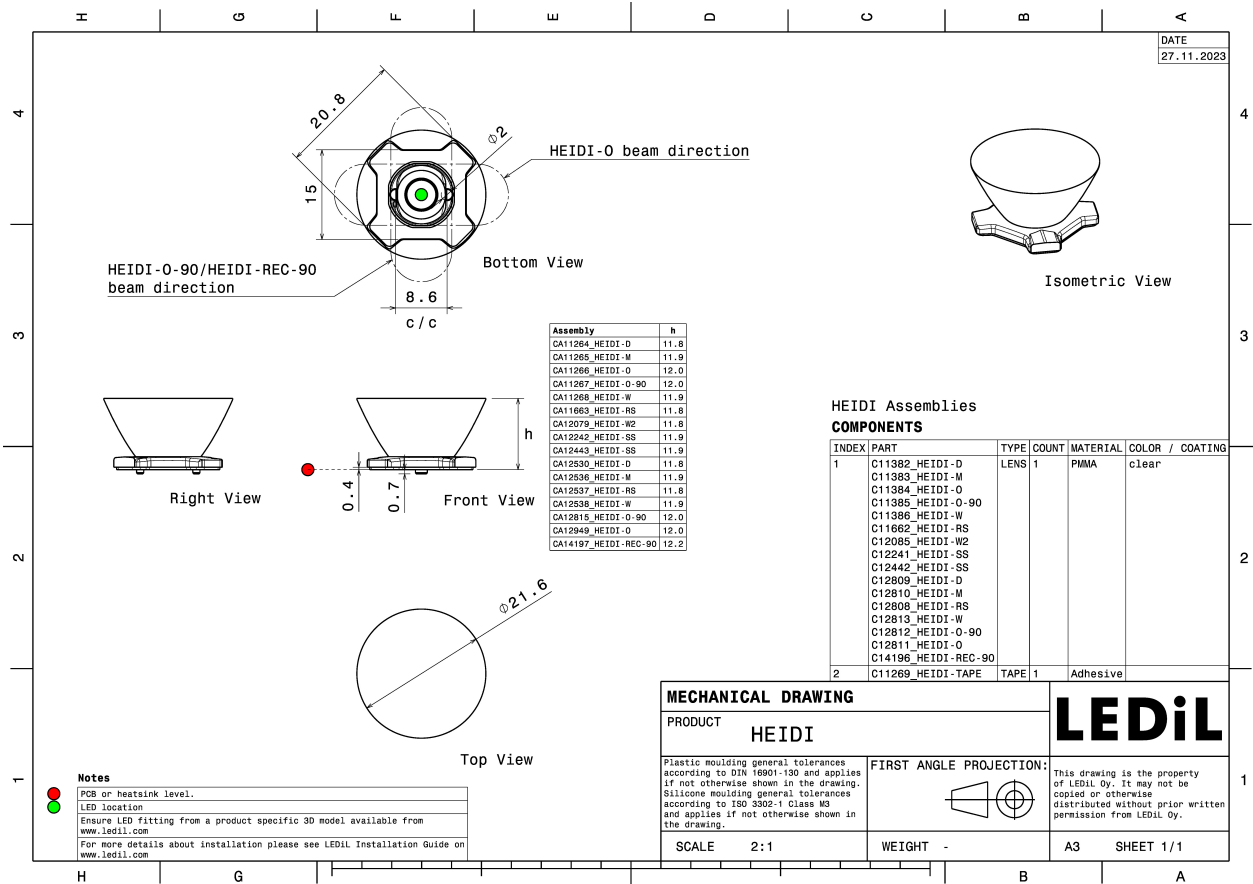
LEDiL

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HEIDI-O-90	Single lens	PMMA	clear		
HEIDI-TAPE	Tape	Acrylic foam	black		

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA11267_HEIDI-O-90	Single lens	3264	204	204	10.4
» Box size: 480 x 280 x 300 mm					

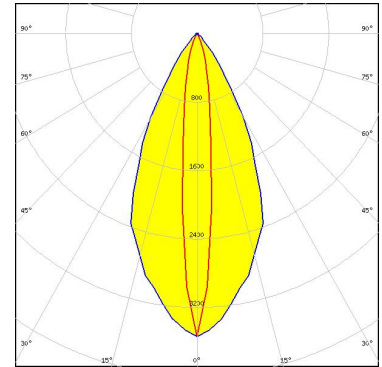


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



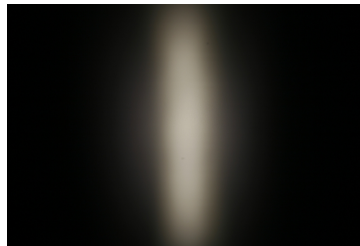
LED XB-D
FWHM / FWTM 12.0 + 49.0° / 34.0 + 78.0°
Efficiency 87 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



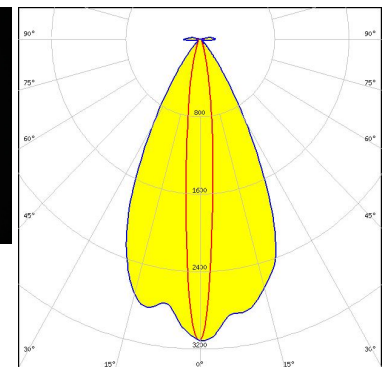
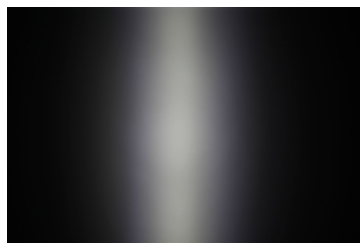
LED XB-H
FWHM / FWTM 11.0 + 52.0° / 34.0 + 80.0°
Efficiency 80 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XD16
FWHM / FWTM 11.0 + 52.0° / 30.0 + 76.0°
Efficiency 88 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

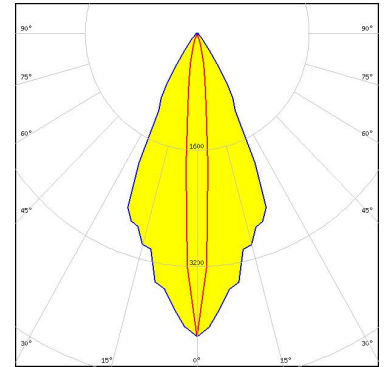


Light distribution files

OPTICAL RESULTS (MEASURED):



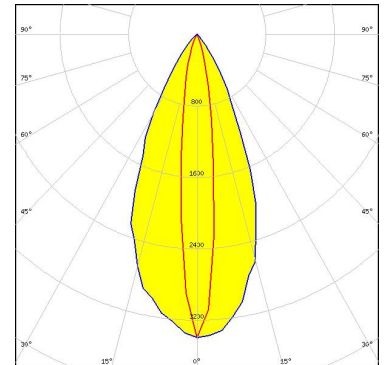
LED XP-E
 FWHM / FWTM 9.0 + 50.0° / 25.0 + 72.0°
 Efficiency 87 %
 Peak intensity 4.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



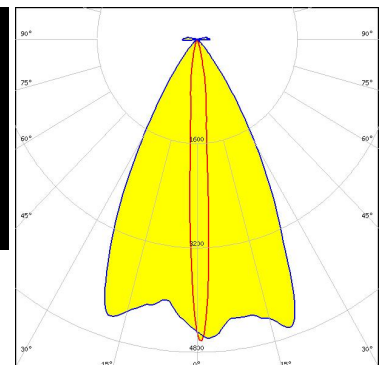
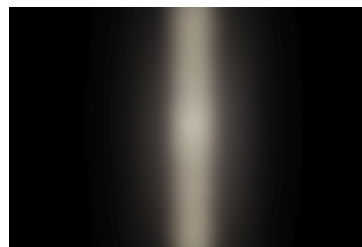
LED XP-G
 FWHM / FWTM 14.0 + 44.0° / 32.0 + 70.0°
 Efficiency 87 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XQ-E HD
 FWHM / FWTM 7.0 + 56.0° / 23.0 + 77.0°
 Efficiency 94 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

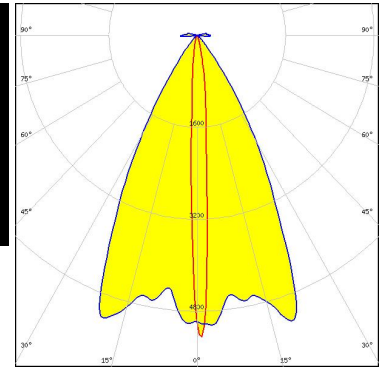
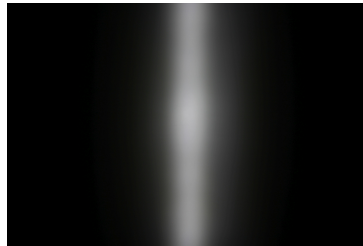


Light distribution files

OPTICAL RESULTS (MEASURED):



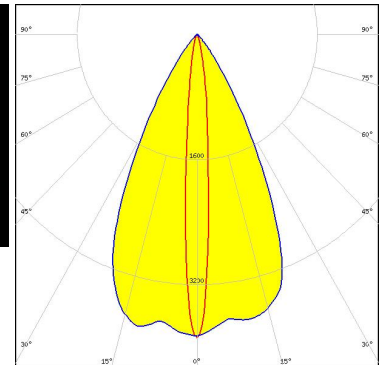
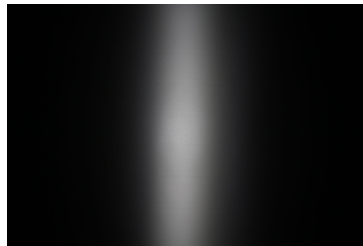
LED XQ-E HI
FWHM / FWTM 6.0 + 57.0° / 20.0 + 76.0°
Efficiency 94 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



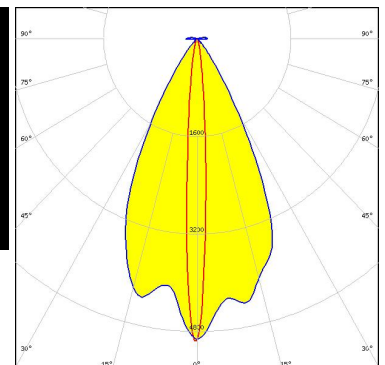
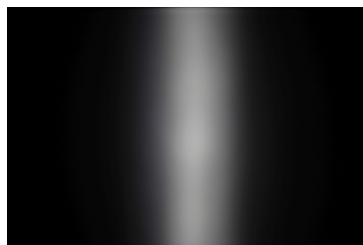
LED LUXEON C
FWHM / FWTM 9.0 + 54.0° / 23.0 + 76.0°
Efficiency 79 %
Peak intensity 3.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON CZ
FWHM / FWTM 8.0 + 52.0° / 19.0 + 73.0°
Efficiency 92 %
Peak intensity 5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

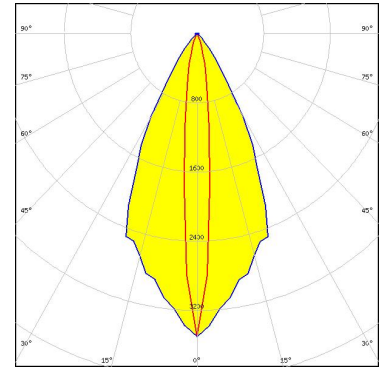


Light distribution files

OPTICAL RESULTS (MEASURED):



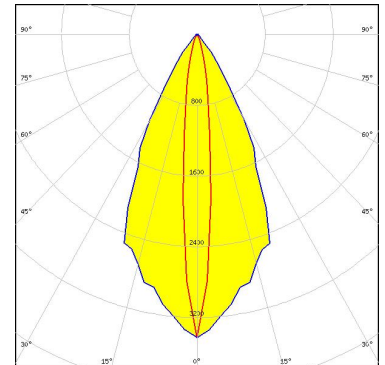
LED NCSxx19A
FWHM / FWTM 10.0 + 50.0° / 30.0 + 75.0°
Efficiency 82 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



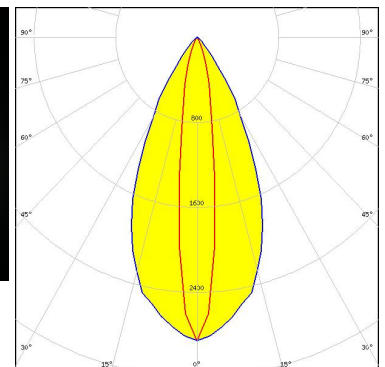
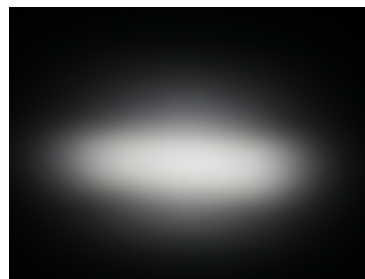
LED NVSxx19A
FWHM / FWTM 10.0 + 49.0° / 31.0 + 76.0°
Efficiency 82 %
Peak intensity 3.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NVSxx19B/NVSxx19C
FWHM / FWTM 14.0 + 48.0° / 38.0 + 78.0°
Efficiency 85 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

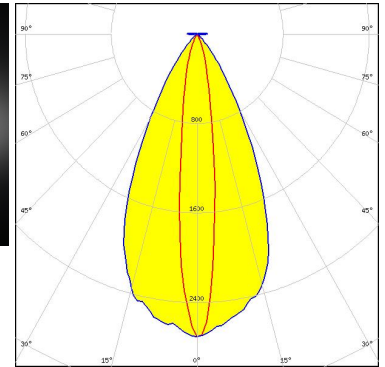
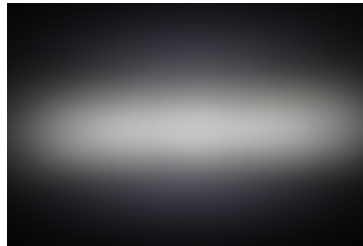


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

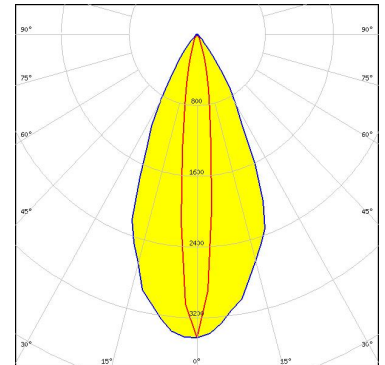
LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM 15.0 + 51.0° / 35.0 + 78.0°
 Efficiency 78 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

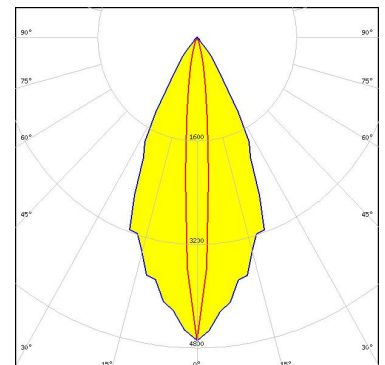
LED OSLON Square EC
 FWHM / FWTM 12.0 + 48.0° / 34.0 + 74.0°
 Efficiency 86 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON SSL 150
 FWHM / FWTM 9.0 + 48.0° / 25.0 + 72.0°
 Efficiency 86 %
 Peak intensity 4.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

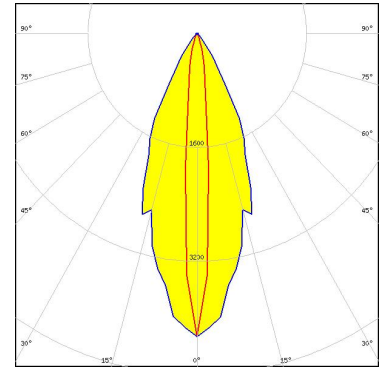


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

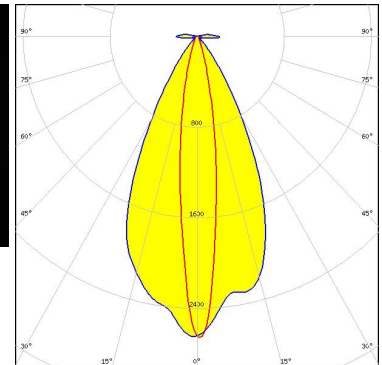
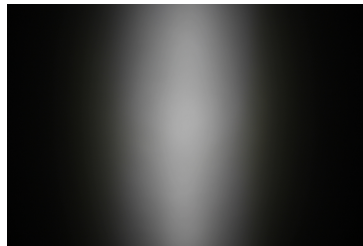
LED OSLON SSL 80
 FWHM / FWTM 9.0 + 42.0° / 27.0 + 70.0°
 Efficiency 83 %
 Peak intensity 4.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

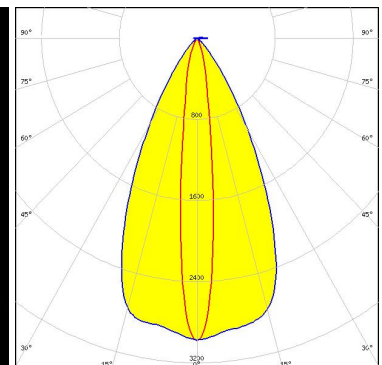
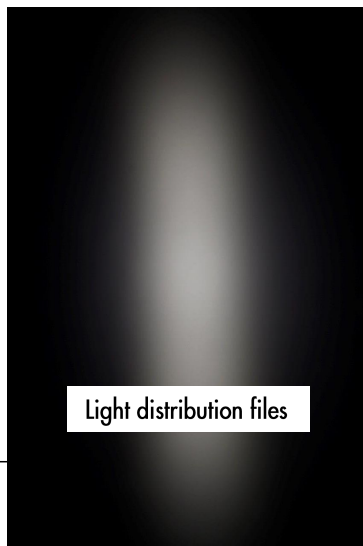
LED LH181B
 FWHM / FWTM 14.0 + 51.0° / 35.0 + 77.0°
 Efficiency 89 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

SAMSUNG

LED LH351B
 FWHM / FWTM 13.0 + 52.0° / 34.0 + 78.0°
 Efficiency 83 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

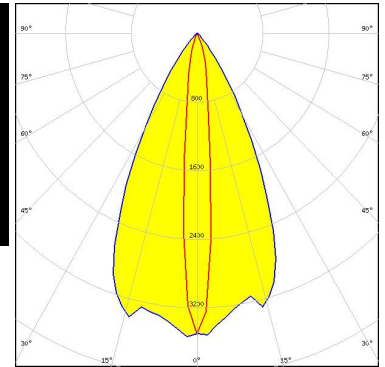
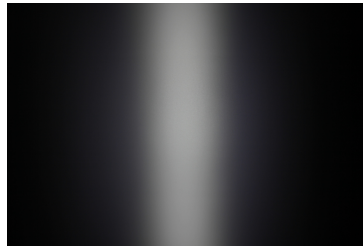


Light distribution files

OPTICAL RESULTS (MEASURED):

SAMSUNG

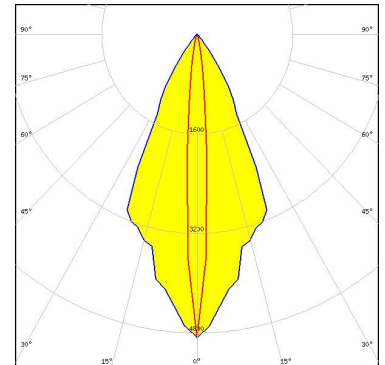
LED LH351Z
 FWHM / FWTM 11.0 + 54.0° / 31.0 + 78.0°
 Efficiency 82 %
 Peak intensity 3.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



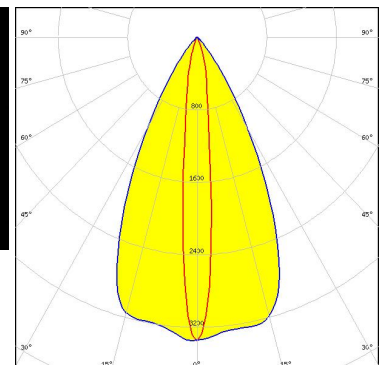
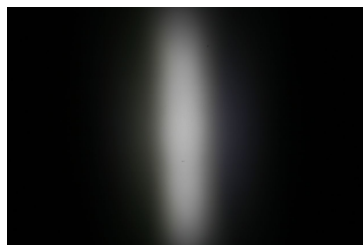
LED Z5
 FWHM / FWTM 8.0 + 50.0° / 21.0 + 72.0°
 Efficiency 86 %
 Peak intensity 4.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Z5M1/Z5M2
 FWHM / FWTM 11.0 + 53.0° / 31.0 + 77.0°
 Efficiency 84 %
 Peak intensity 3.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

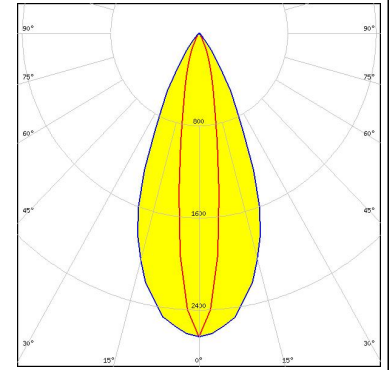


Light distribution files

OPTICAL RESULTS (MEASURED):

SHARP

LED	Double Dome (GM2BB)
FWHM / FWTM	16.0 + 44.0° / 40.0 + 70.0°
Efficiency	82 %
Peak intensity	2.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

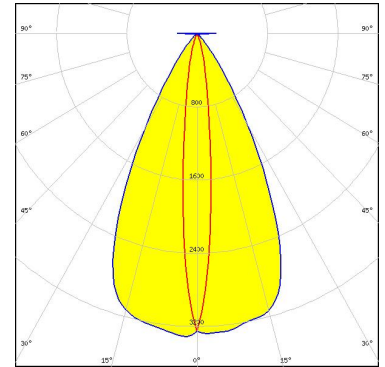


Light distribution files

OPTICAL RESULTS (SIMULATED):



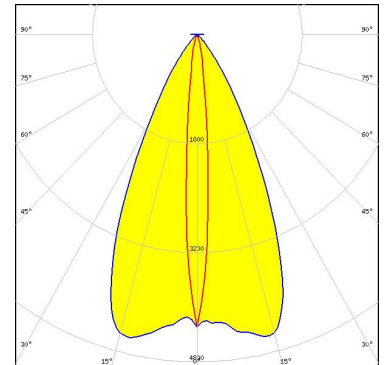
LED LUXEON HL2Z
FWHM / FWTM 12.0 + 54.0° / 28.0 + 76.0°
Efficiency 88 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



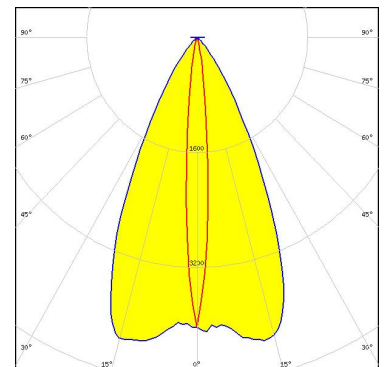
LED LUXEON SunPlus 20 Line (120 deg)
FWHM / FWTM 9.0 + 52.0° / 22.0 + 76.0°
Efficiency 91 %
Peak intensity 4.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON SunPlus 20 Line (150 deg)
FWHM / FWTM 9.0 + 52.0° / 20.0 + 76.0°
Efficiency 87 %
Peak intensity 4.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

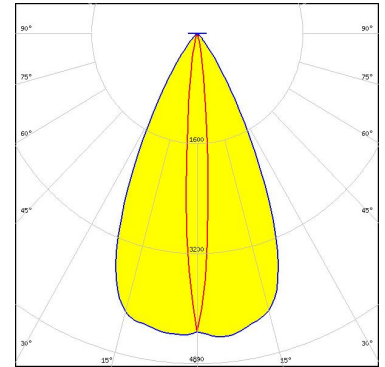


Light distribution files

OPTICAL RESULTS (SIMULATED):



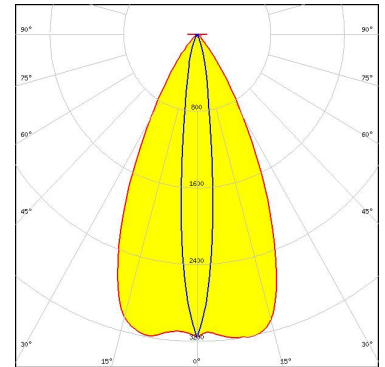
LED LUXEON Z ES
FWHM / FWTM 8.7 + 52.0° / 21.0 + 74.0°
Efficiency 92 %
Peak intensity 4.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



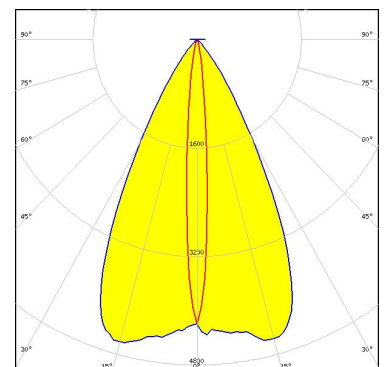
LED NVSxx19B/NVSxx19C
FWHM / FWTM 12.0 + 52.0° / 32.0 + 76.0°
Efficiency 90 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED OSCONIQ P 3030
FWHM / FWTM 7.9 + 55.0° / 20.0 + 77.0°
Efficiency 93 %
Peak intensity 4.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

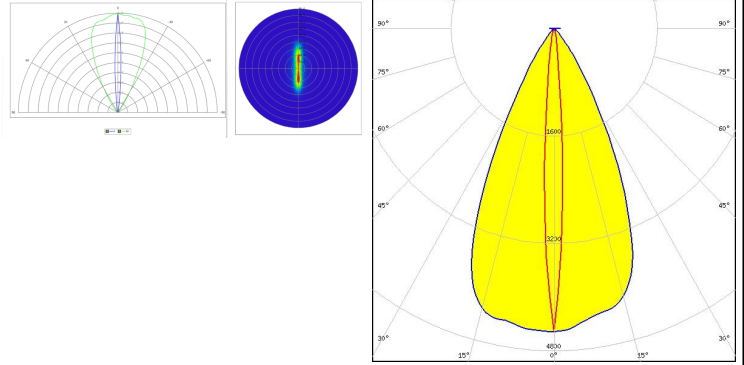


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED SFH 4170S
FWHM / FWTM 7.0 + 51.0° / 17.0 + 70.0°
Efficiency 83 %
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.

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P.R.CHINA

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