

HB-IP-2X6-O

~30° + 115° oval beam

SPECIFICATION:

Dimensions	173.0 x 71.4
Height	13.1 mm
Fastening	screw
Ingress protection classes	IP67
ROHS compliant	yes ⓘ

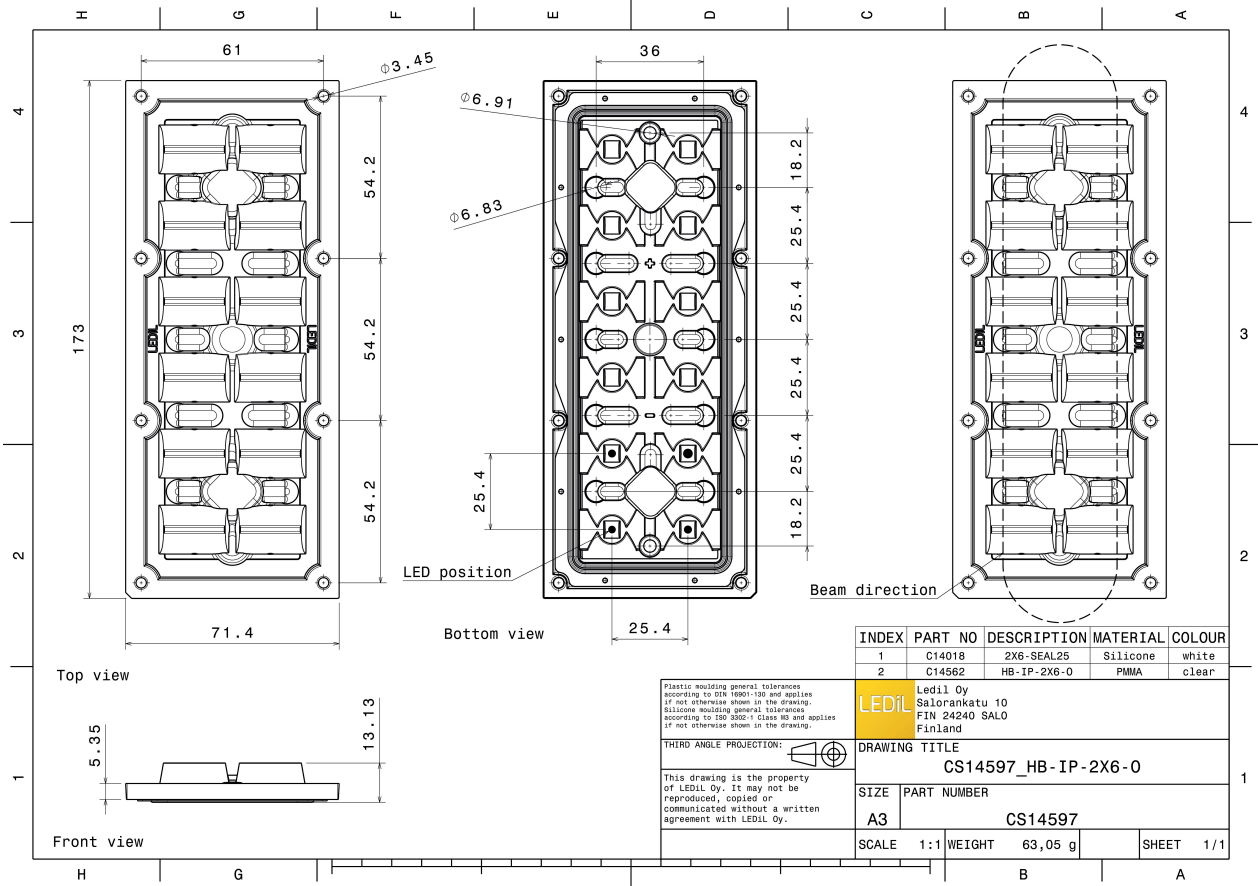
MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-IP-2X6-O	Multi-lens	PMMA	clear		
2X6-SEAL25	Seal	Silicone	white		



ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CS14597_HB-IP-2X6-O	Multi-lens	108	36	36	8.0
» Box size: 476 x 273 x 247 mm					


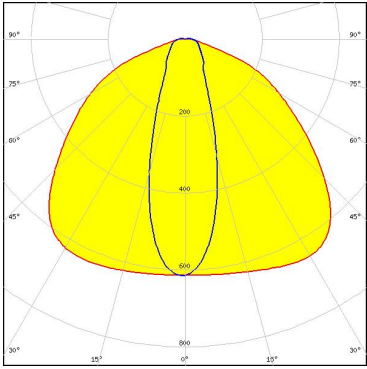


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

COMET ELECTRONICS

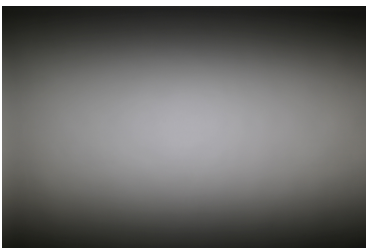
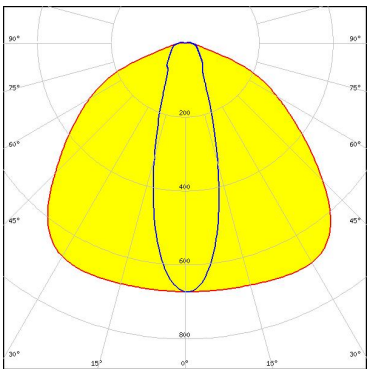
LED	QUICK FLUX 2x6 LED XG xxx G7+
FWHM / FWTM	116.0 + 32.0° / 149.0 + 92.0°
Efficiency	91 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

COMET ELECTRONICS

LED	QUICK FLUX 2x6 LED XT xxx G5
FWHM / FWTM	113.0 + 30.0° / 148.0 + 87.0°
Efficiency	90 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

CREE LEDs

LED	XM-L
FWHM / FWTM	36.0 + 110.0° / 96.0 + 147.0°
Efficiency	91 %
Peak intensity	0.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

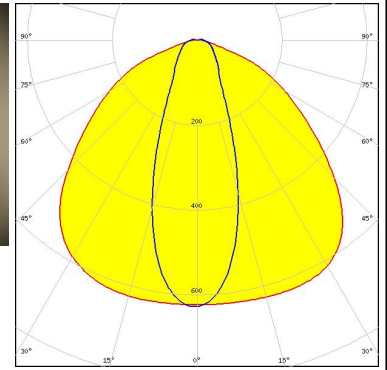



Light distribution files

OPTICAL RESULTS (MEASURED):



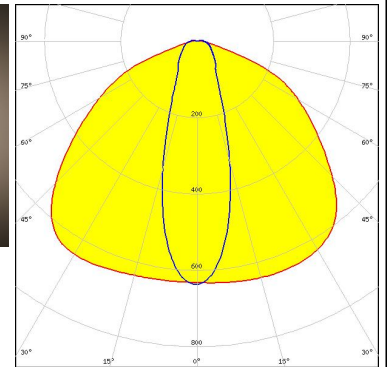
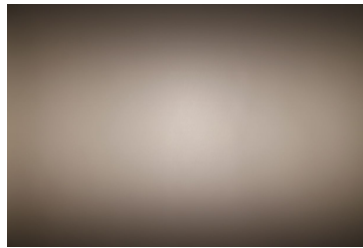
LED XM-L2
FWHM / FWTM 36.0 + 108.0° / 92.0 + 147.0°
Efficiency 91 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



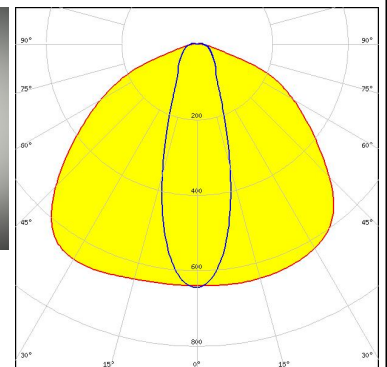
LED XP-G
FWHM / FWTM 31.0 + 117.0° / 91.0 + 149.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XP-G2
FWHM / FWTM 32.0 + 116.0° / 91.0 + 149.0°
Efficiency 92 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

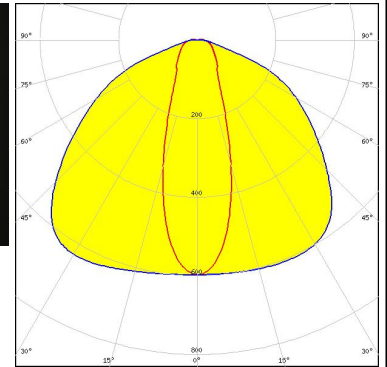
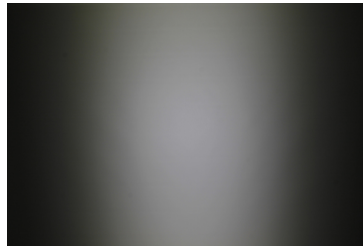


Light distribution files

OPTICAL RESULTS (MEASURED):



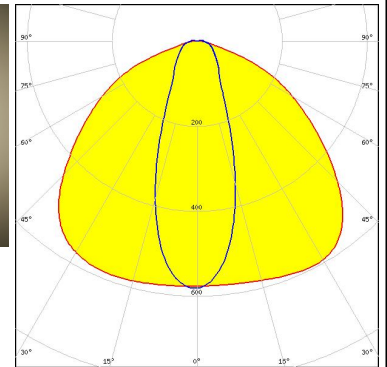
LED XP-G3
 FWHM / FWTM 33.0 + 119.0° / 100.0 + 150.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



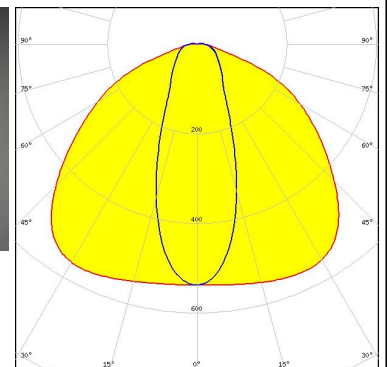
LED XP-L HD
 FWHM / FWTM 36.0 + 115.0° / 100.0 + 149.0°
 Efficiency 91 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-L2
 FWHM / FWTM 118.0 + 38.0° / 151.0 + 114.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

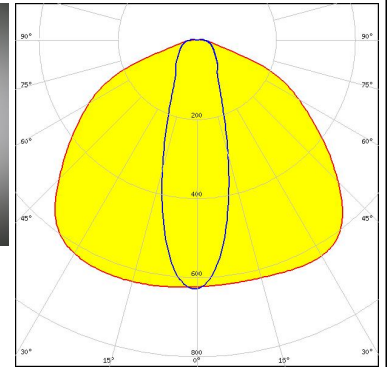
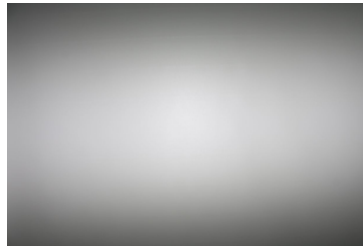


Light distribution files

OPTICAL RESULTS (MEASURED):



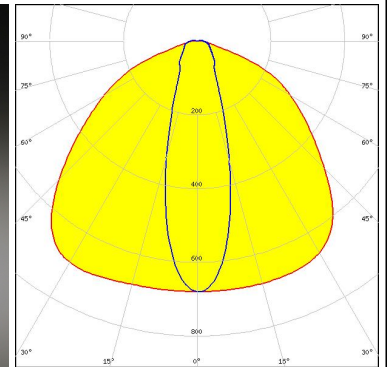
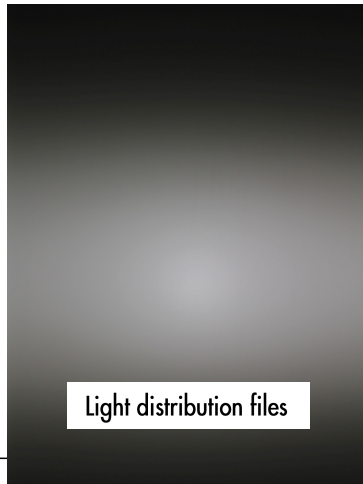
LED XT-E
FWHM / FWTM 31.0 + 119.0° / 99.0 + 151.0°
Efficiency 92 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



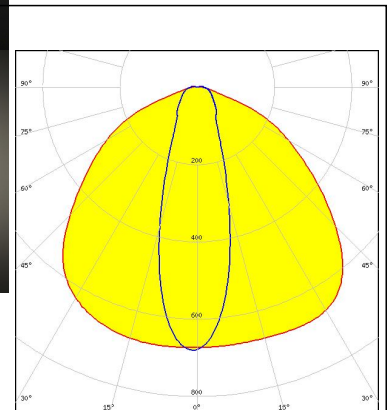
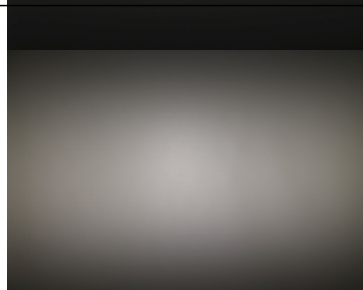
LED XT-E HE
FWHM / FWTM 112.0 + 29.0° / 147.0 + 85.0°
Efficiency 90 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON R
FWHM / FWTM 30.0 + 109.0° / 89.0 + 147.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

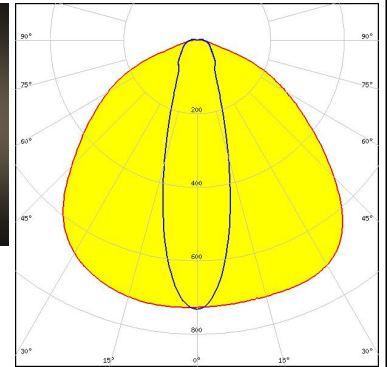
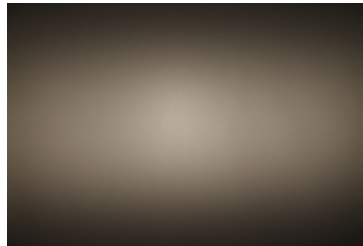


Light distribution files

OPTICAL RESULTS (MEASURED):



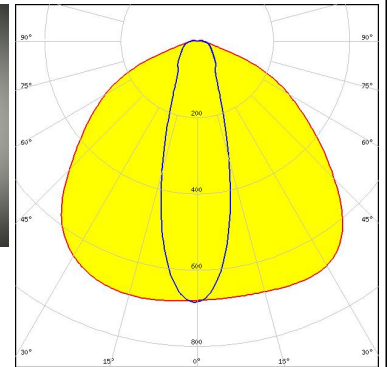
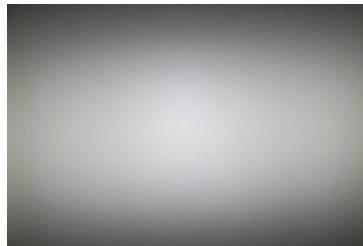
LED LUXEON Rebel
 FWHM / FWTM 28.0 + 107.0° / 84.0 + 145.0°
 Efficiency 91 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



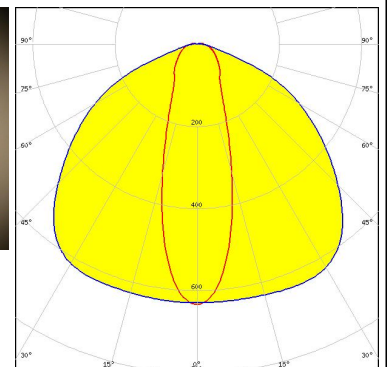
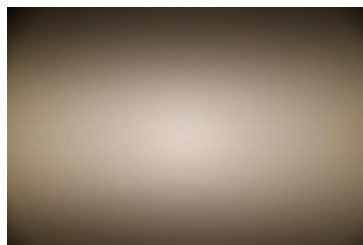
LED LUXEON Rebel ES
 FWHM / FWTM 30.0 + 110.0° / 88.0 + 146.0°
 Efficiency 91 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED LUXEON T
 FWHM / FWTM 32.0 + 115.0° / 103.0 + 148.0°
 Efficiency 91 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

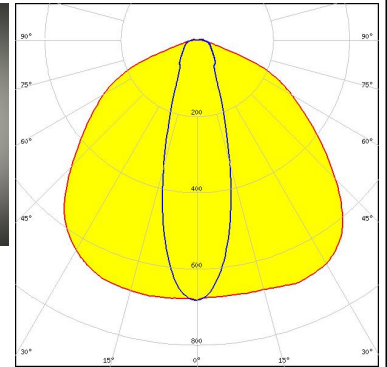


Light distribution files

OPTICAL RESULTS (MEASURED):



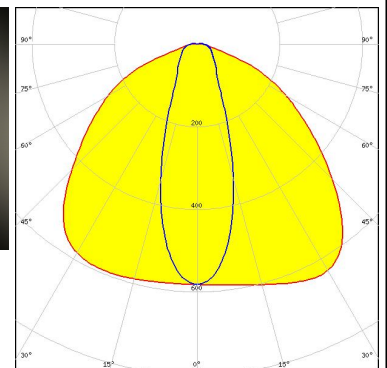
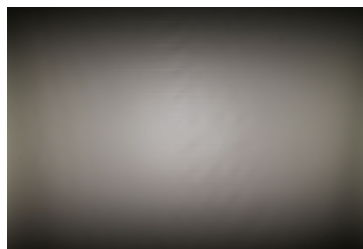
LED LUXEON TX
 FWHM / FWTM 30.0 + 111.0° / 84.0 + 147.0°
 Efficiency 90 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



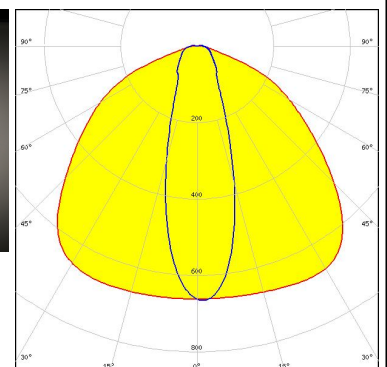
LED LUXEON V
 FWHM / FWTM 112.0 + 34.0° / 147.0 + 92.0°
 Efficiency 87 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED LUXEON V2
 FWHM / FWTM 113.0 + 31.0° / 147.0 + 91.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

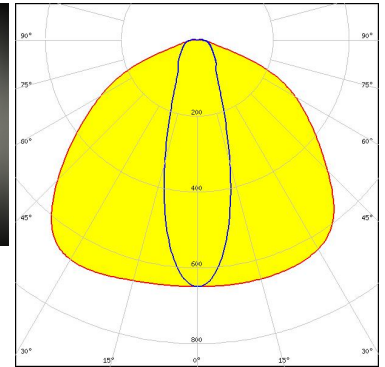
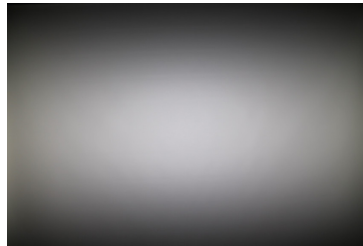


Light distribution files

OPTICAL RESULTS (MEASURED):



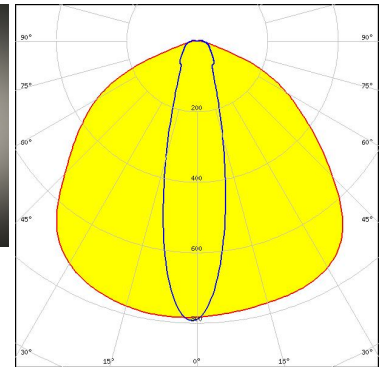
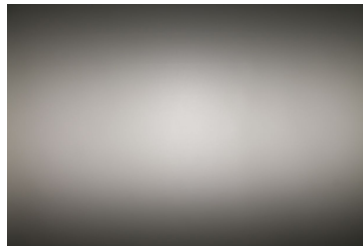
LED LUXEON XR-TX (L2T0-xxxx012M0000)
 FWHM / FWTM 30.0 + 115.0° / 92.0 + 148.0°
 Efficiency 91 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



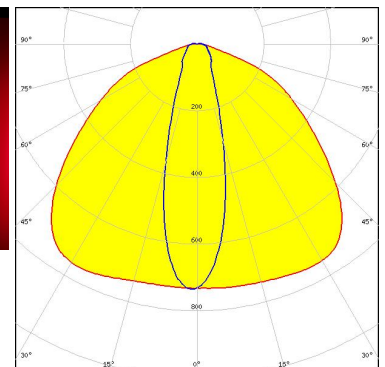
LED LUXEON Z ES
 FWHM / FWTM 25.0 + 108.0° / 73.0 + 145.0°
 Efficiency 90 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED SST-10-B130
 FWHM / FWTM 114.0 + 28.0° / 147.0 + 70.0°
 Efficiency 93 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type Deep Red
 Required components:

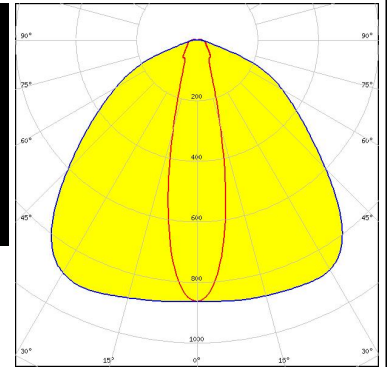
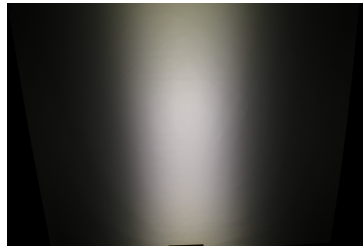


Light distribution files

OPTICAL RESULTS (MEASURED):



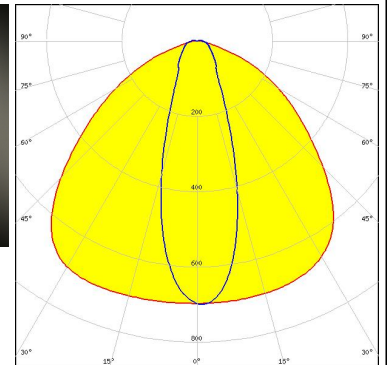
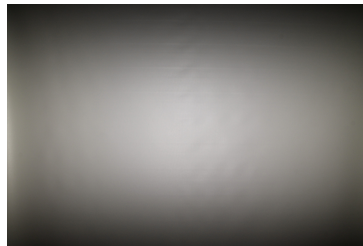
LED RecLED 146x45mm 2900lm 730 2x6 IP G1
 FWHM / FWTM 24.0 + 103.5° / 56.5 + 143.5°
 Efficiency 94 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



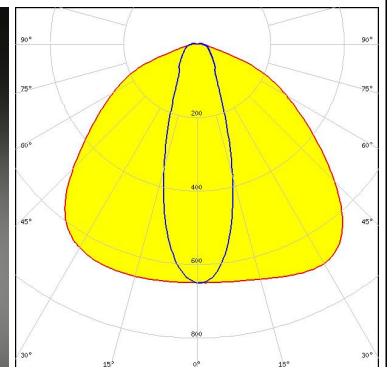
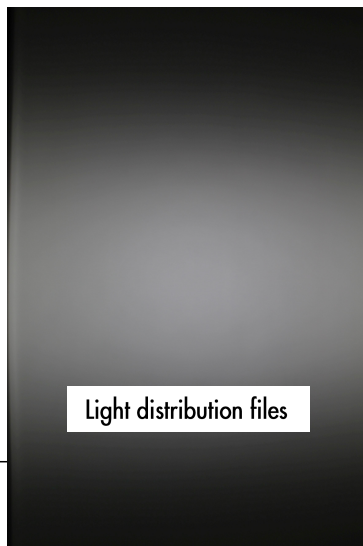
LED NVSW219D
 FWHM / FWTM 106.0 + 32.0° / 145.0 + 85.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED NVSW219F
 FWHM / FWTM 112.0 + 32.0° / 147.0 + 88.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

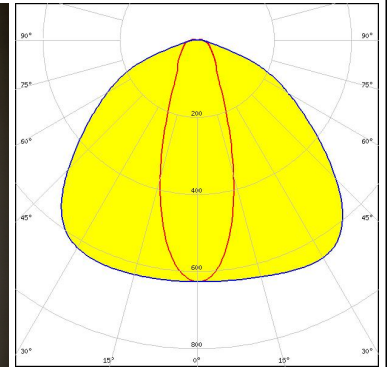
OPTICAL RESULTS (MEASURED):



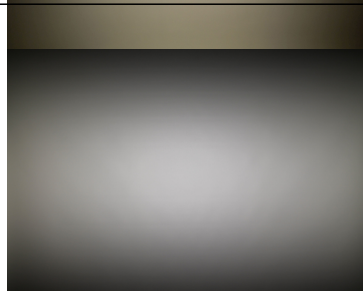
LED NVSW319B
 FWHM / FWTM 34.0 + 113.0° / 91.0 + 148.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



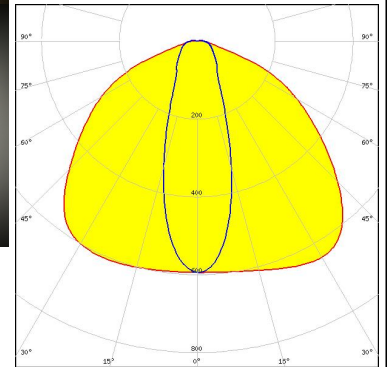
Light distribution files



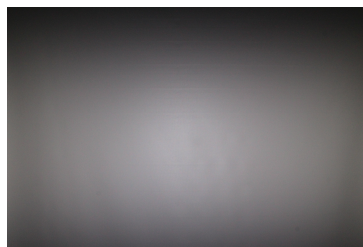
LED NVSW3x9A
 FWHM / FWTM 119.0 + 33.0° / 149.0 + 100.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



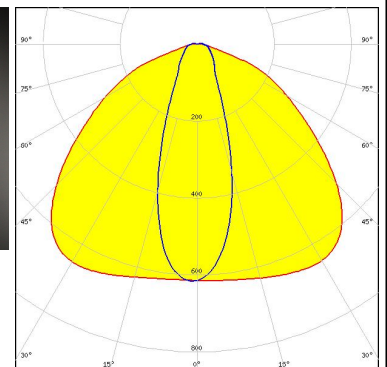
Light distribution files



LED NVSW519A
 FWHM / FWTM 113.0 + 35.0° / 147.0 + 90.0°
 Efficiency 94 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



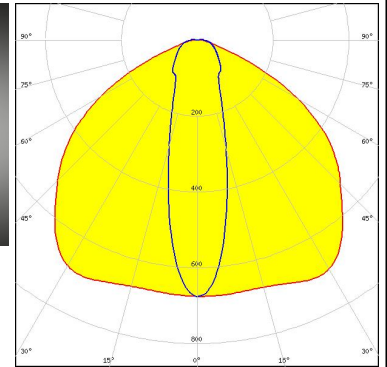
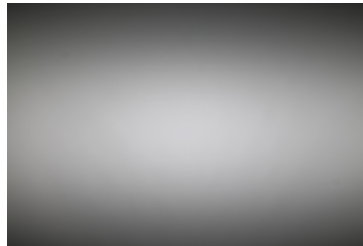
Light distribution files



OPTICAL RESULTS (MEASURED):



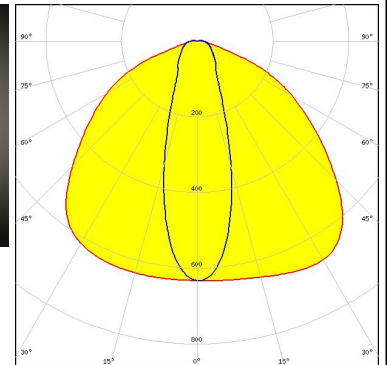
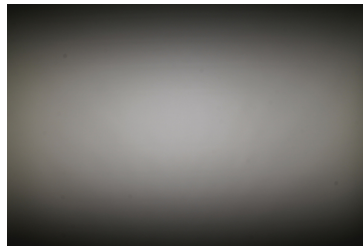
LED NVSxE21A
FWHM / FWTM 26.0 + 116.0° / 107.0 + 145.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



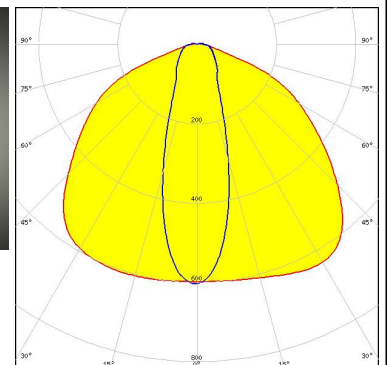
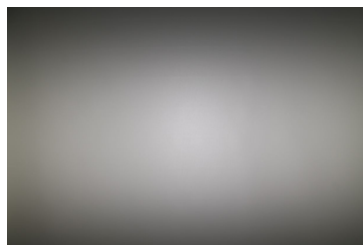
LED NVSxx19B/NVSxx19C
FWHM / FWTM 114.0 + 32.0° / 148.0 + 93.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NVSxx19B/NVSxx19C
FWHM / FWTM 31.0 + 116.0° / 100.0 + 149.0°
Efficiency 90 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

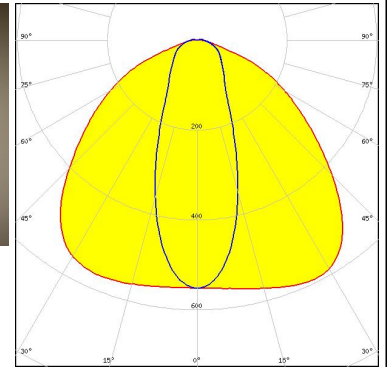


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

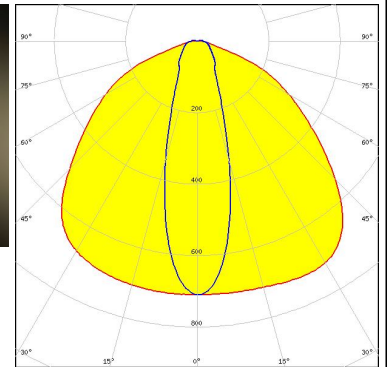
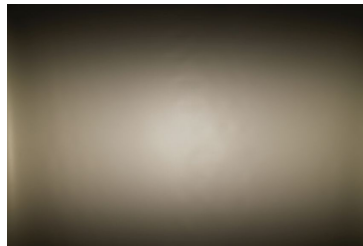
LED Duris S8
 FWHM / FWTM 111.0 + 38.0° / 148.0 + 121.0°
 Efficiency 92 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

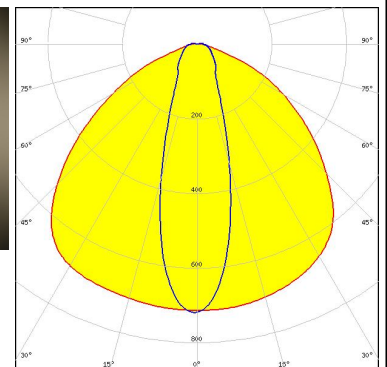
LED OSLOM Square CSSRM2/CSSRM3
 FWHM / FWTM 110.0 + 29.0° / 146.0 + 86.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLOM Square EC
 FWHM / FWTM 30.0 + 108.0° / 87.0 + 145.0°
 Efficiency 91 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

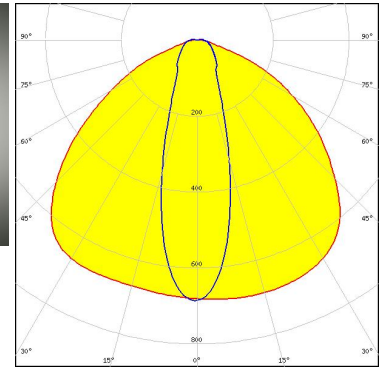
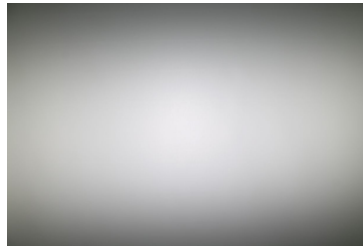


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

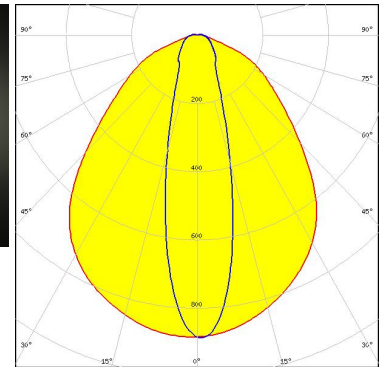
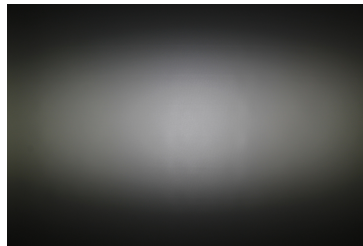
LED OSLON Square PC
 FWHM / FWTM 30.0 + 111.0° / 91.0 + 146.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

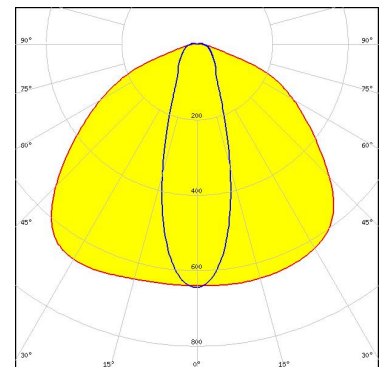
LED OSLON SSL 80
 FWHM / FWTM 26.0 + 92.0° / 81.0 + 143.0°
 Efficiency 93 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

PHILIPS

LED Fortimo FastFlex LED 2x6 DP G4
 FWHM / FWTM 32.0 + 116.0° / 91.0 + 149.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

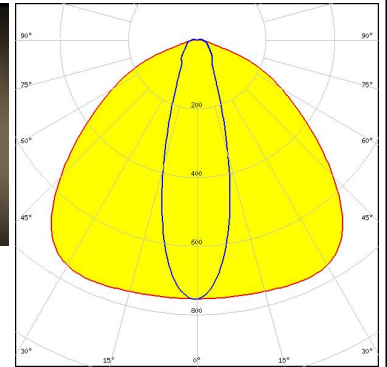


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

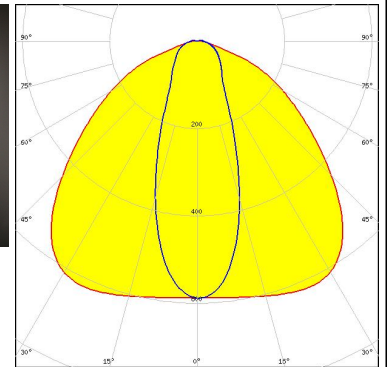
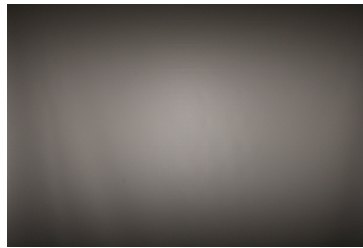
LED Fortimo FastFlex LED 2x6 DP G5
 FWHM / FWTM 108.0 + 29.0° / 145.0 + 72.0°
 Efficiency 94 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

PHILIPS

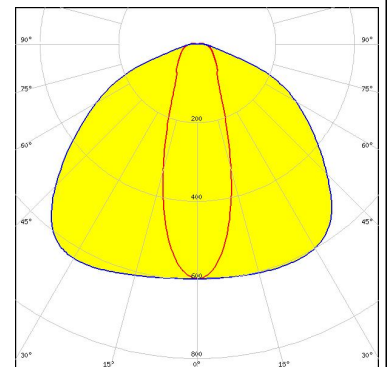
LED Fortimo FastFlex LED 2x6 DP HE
 FWHM / FWTM 106.0 + 37.0° / 146.0 + 110.0°
 Efficiency 94 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

PHILIPS

LED Fortimo FastFlex LED 2x6 DPX G4
 FWHM / FWTM 33.0 + 119.0° / 100.0 + 150.0°
 Efficiency 92 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

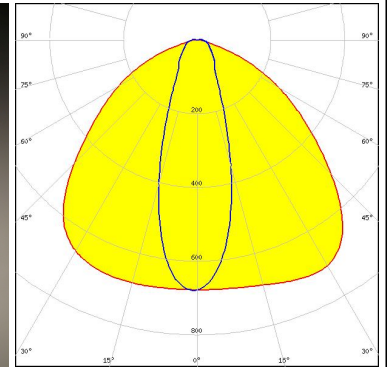
OPTICAL RESULTS (MEASURED):

SAMSUNG

LED HiLOM RH12 (LH351C)
 FWHM / FWTM 107.0 + 32.0° / 145.0 + 85.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

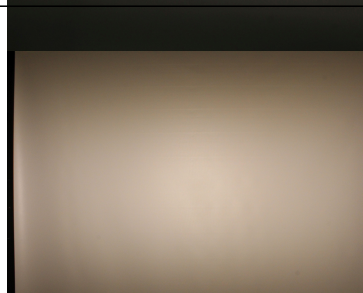


Light distribution files

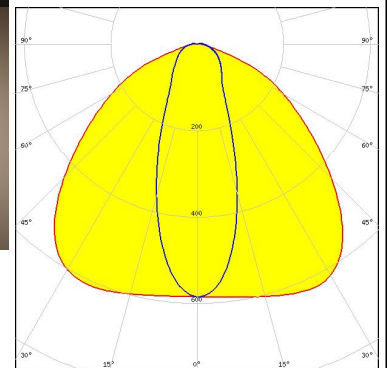


SAMSUNG

LED HiLOM RM12 ZP (LH502C)
 FWHM / FWTM 107.0 + 37.0° / 146.0 + 111.0°
 Efficiency 93 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

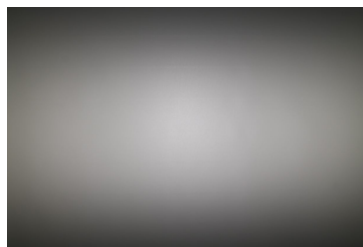


Light distribution files

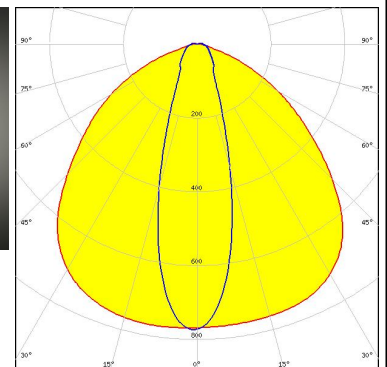


SAMSUNG

LED LH351Z
 FWHM / FWTM 29.0 + 104.0° / 70.0 + 144.0°
 Efficiency 91 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



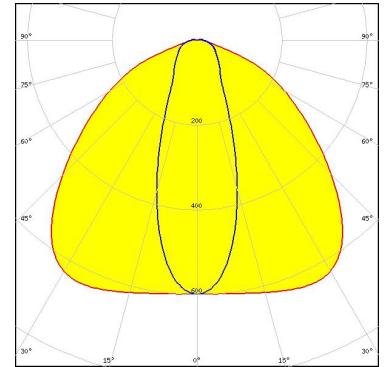
Light distribution files



OPTICAL RESULTS (MEASURED):



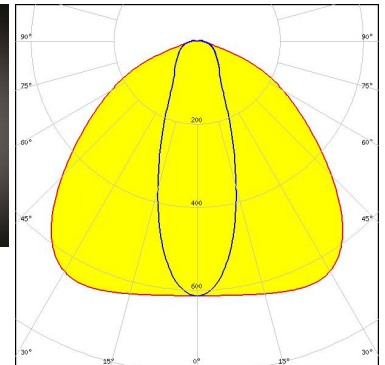
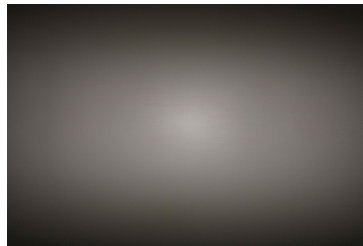
LED BALAM-VP-5250-750-36
FWHM / FWTM Asymmetric
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



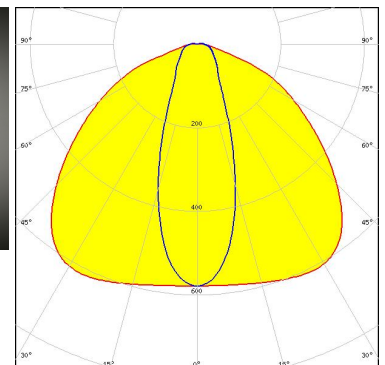
LED BALAMEC-VE-5700-740-36
FWHM / FWTM 107.0 + 35.0° / 145.0 + 100.0°
Efficiency 93 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED ROY-S26XPL2 (XP-L2)
FWHM / FWTM 116.0 + 36.0° / 150.0 + 98.0°
Efficiency 93 %
Peak intensity 0.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

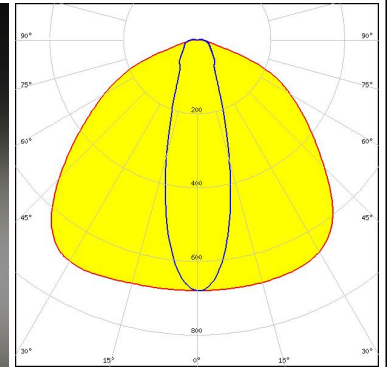


Light distribution files

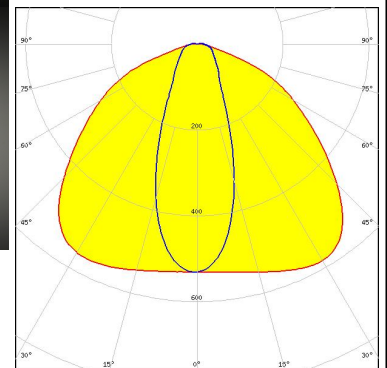
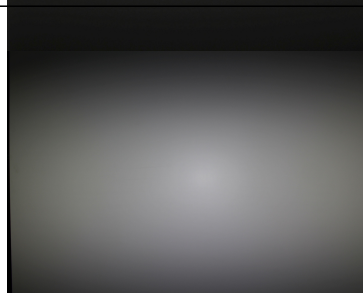
OPTICAL RESULTS (MEASURED):



LED XLE-S22C4XTEHE (XT-E HE)
 FWHM / FWTM 112.0 + 29.0° / 147.0 + 85.0°
 Efficiency 90 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



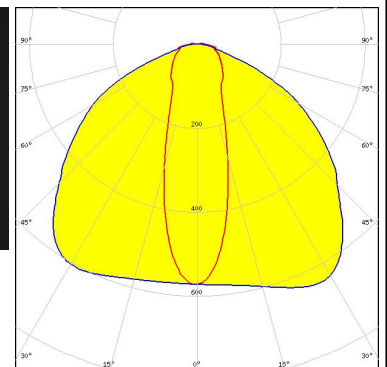
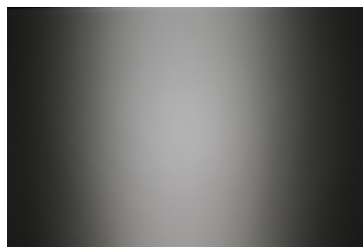
LED XLE-S26XHP35 (XHP35 HD)
 FWHM / FWTM 118.0 + 38.0° / 151.0 + 103.0°
 Efficiency 91 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

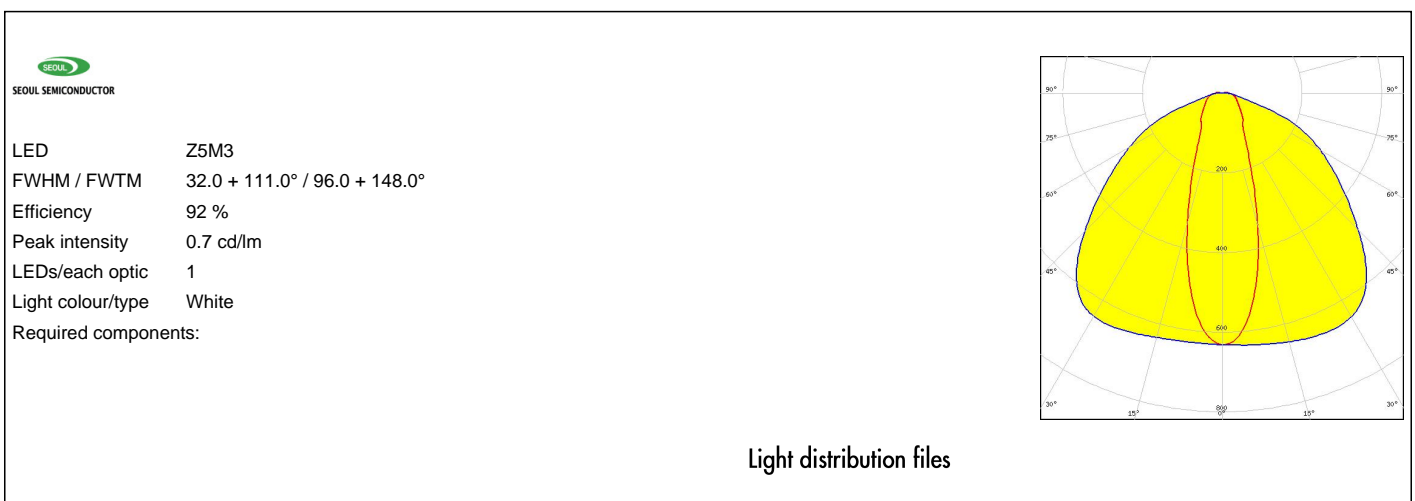
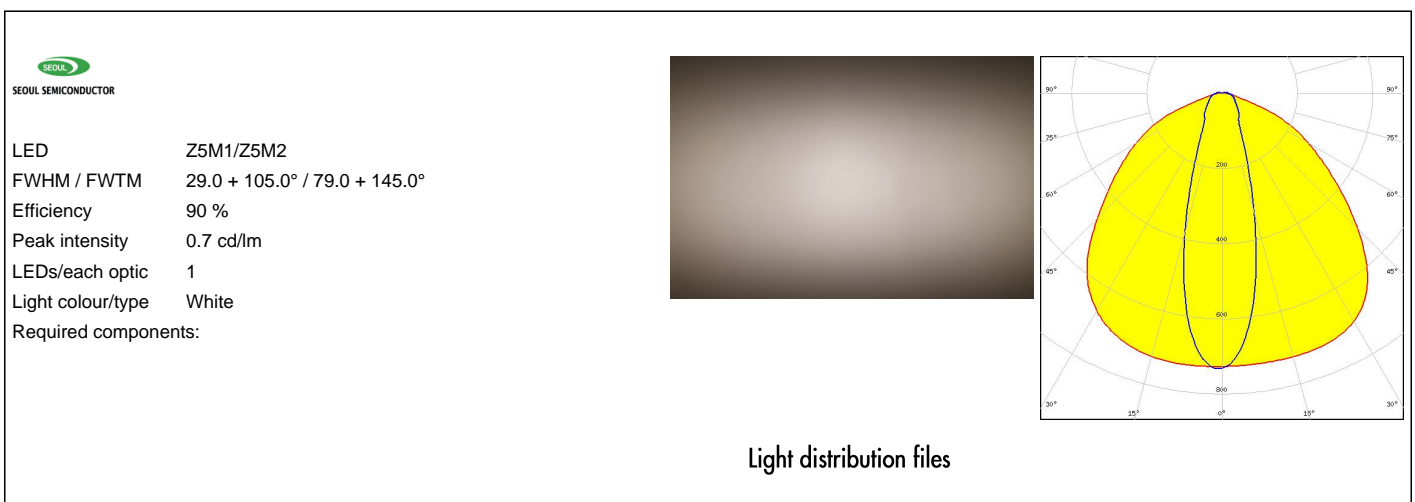
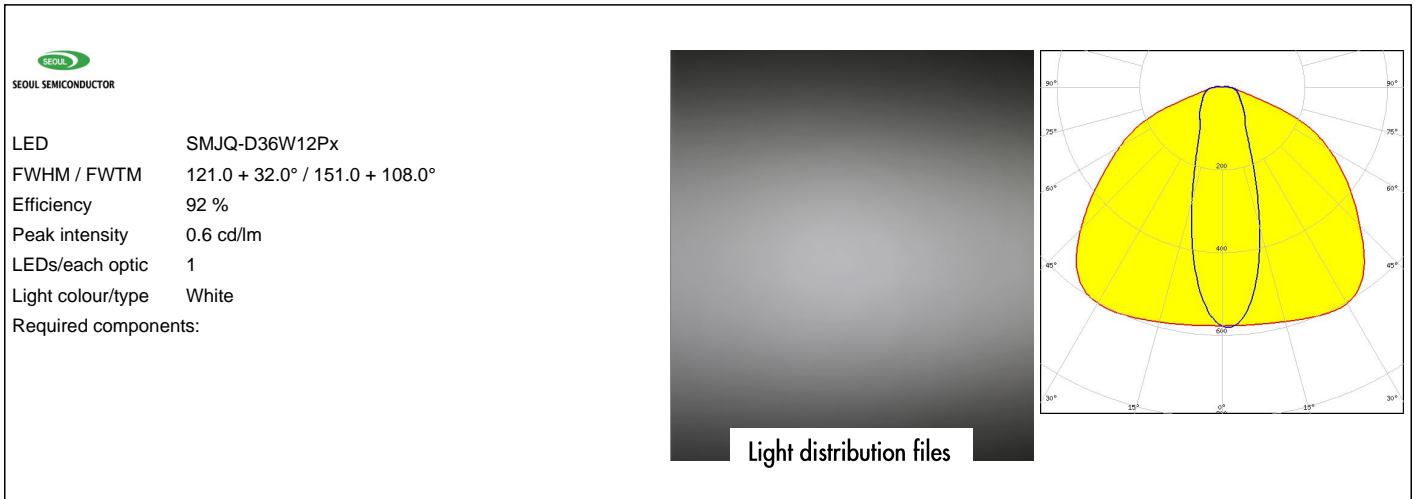


LED SMJQ-D36W12Mx
 FWHM / FWTM 30.0 + 119.0° / 128.0 + 149.0°
 Efficiency 91 %
 Peak intensity 0.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

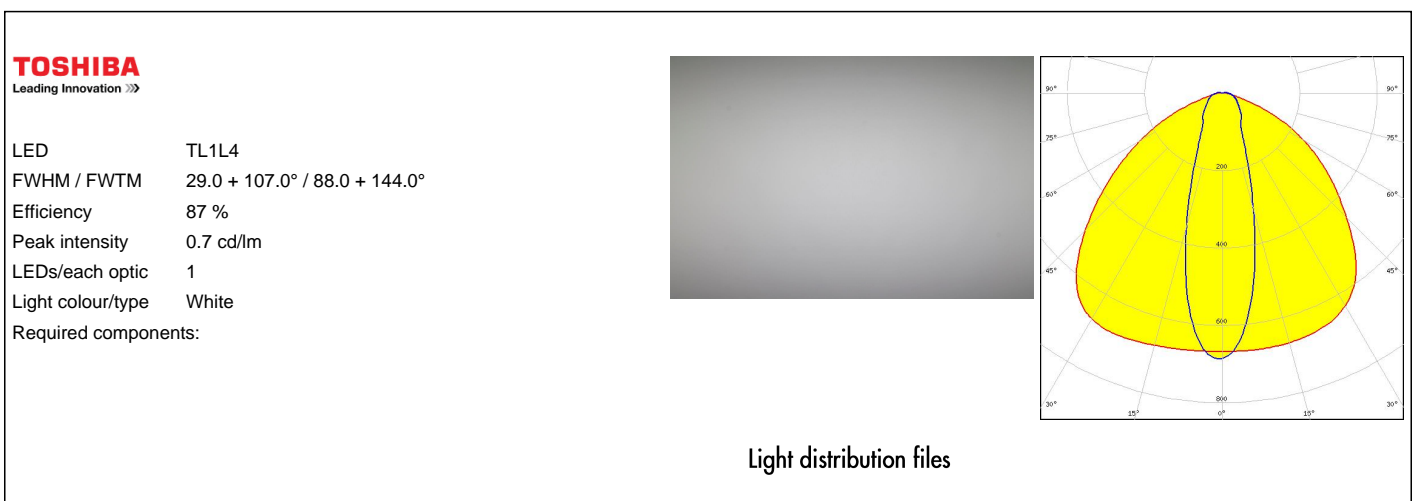
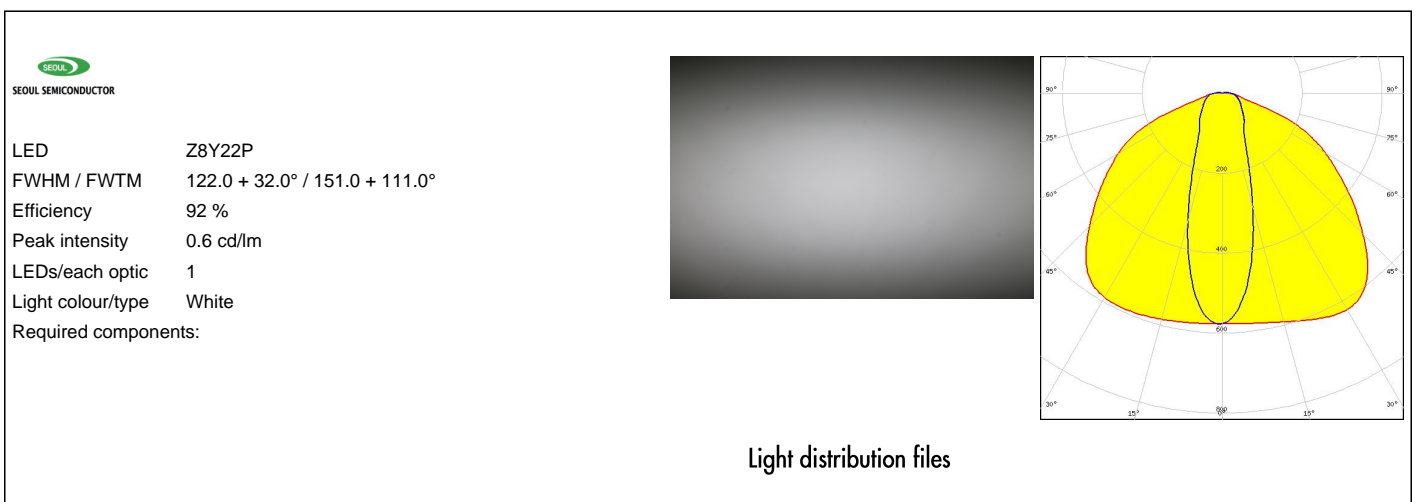
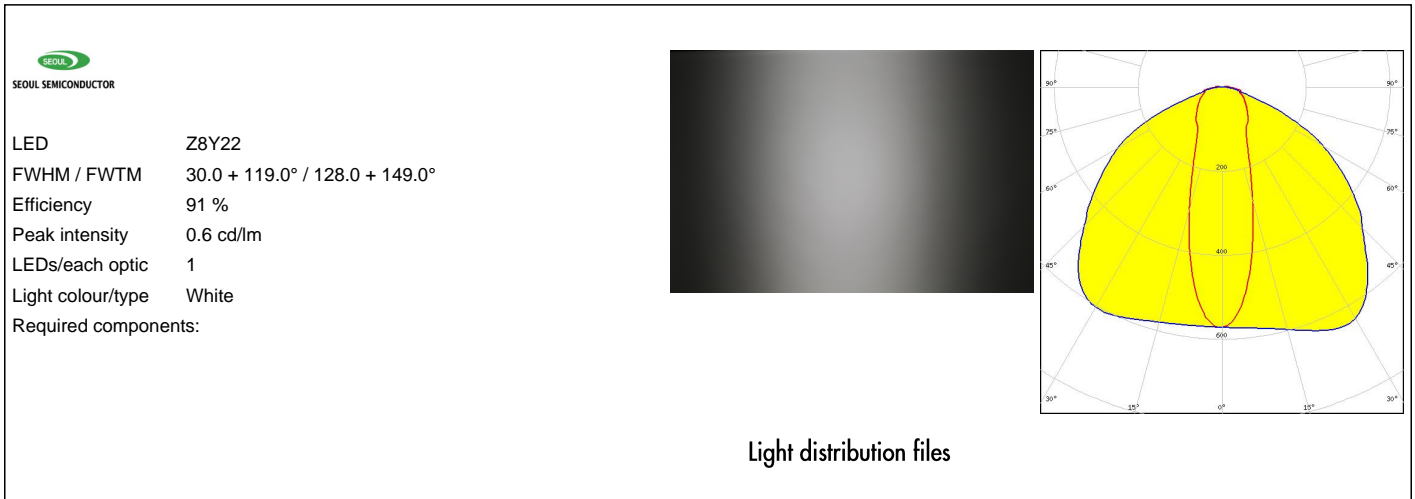


Light distribution files

OPTICAL RESULTS (MEASURED):



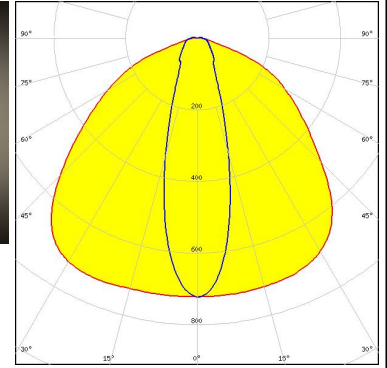
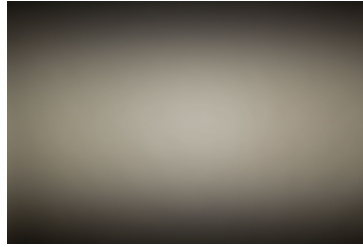
OPTICAL RESULTS (MEASURED):



OPTICAL RESULTS (MEASURED):

TRIDONIC

LED RLE 2x6 3000lm HP EXC2 OTD
FWHM / FWTM 108.0 + 29.0° / 146.0 + 82.0°
Efficiency 92 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

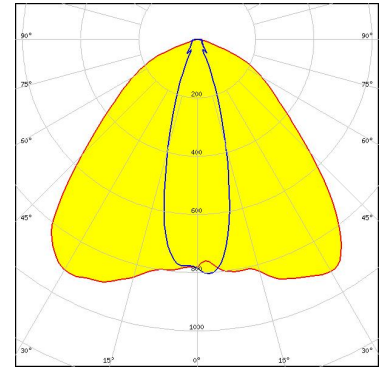


Light distribution files

OPTICAL RESULTS (SIMULATED):



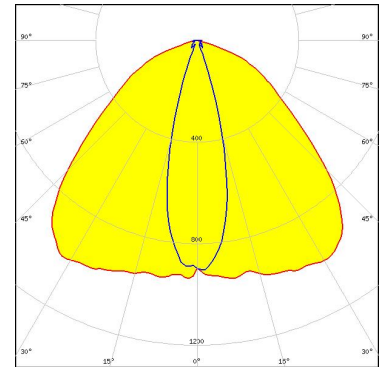
LED J Series 5050 Round LES
 FWHM / FWTM 29.0 + 96.0° / 50.0 + 141.0°
 Efficiency 94 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



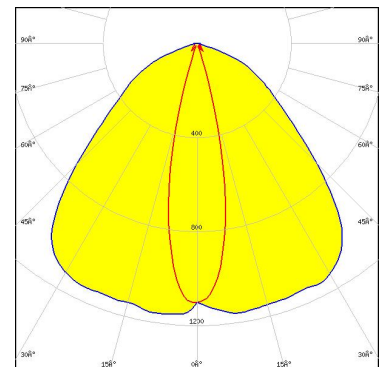
LED XP-G2 HE
 FWHM / FWTM 103.0 + 28.0° / 144.0 + 42.0°
 Efficiency 94 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED PrevaLED Brick HP IP 2x6
 FWHM / FWTM 24.0 + 97.0° / 36.0 + 141.0°
 Efficiency 95 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

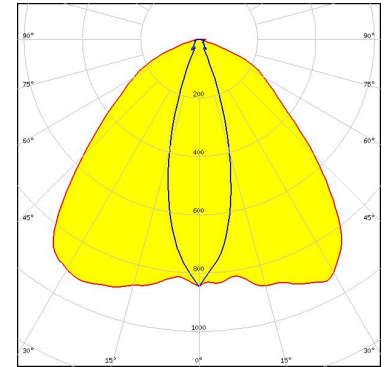


Light distribution files

OPTICAL RESULTS (SIMULATED):



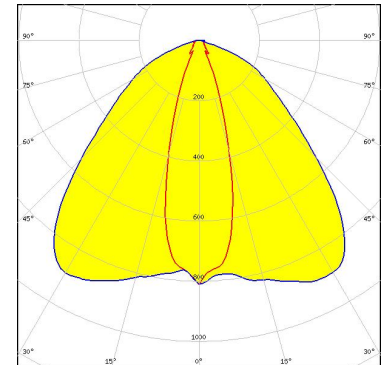
LED LUXEON 5050 Round LES
 FWHM / FWTM 34.0 + 96.0° / 61.0 + 141.0°
 Efficiency 93 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



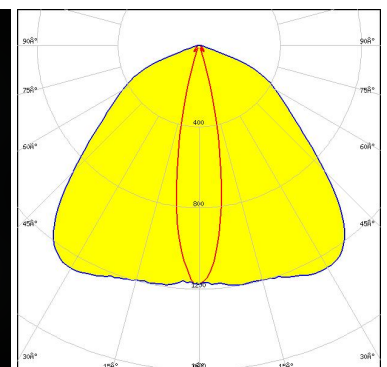
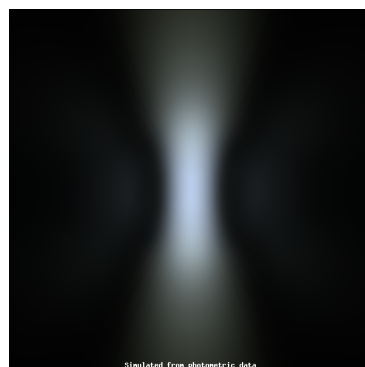
LED LUXEON 5050 Square LES
 FWHM / FWTM 30.0 + 98.0° / 52.0 + 141.0°
 Efficiency 95 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

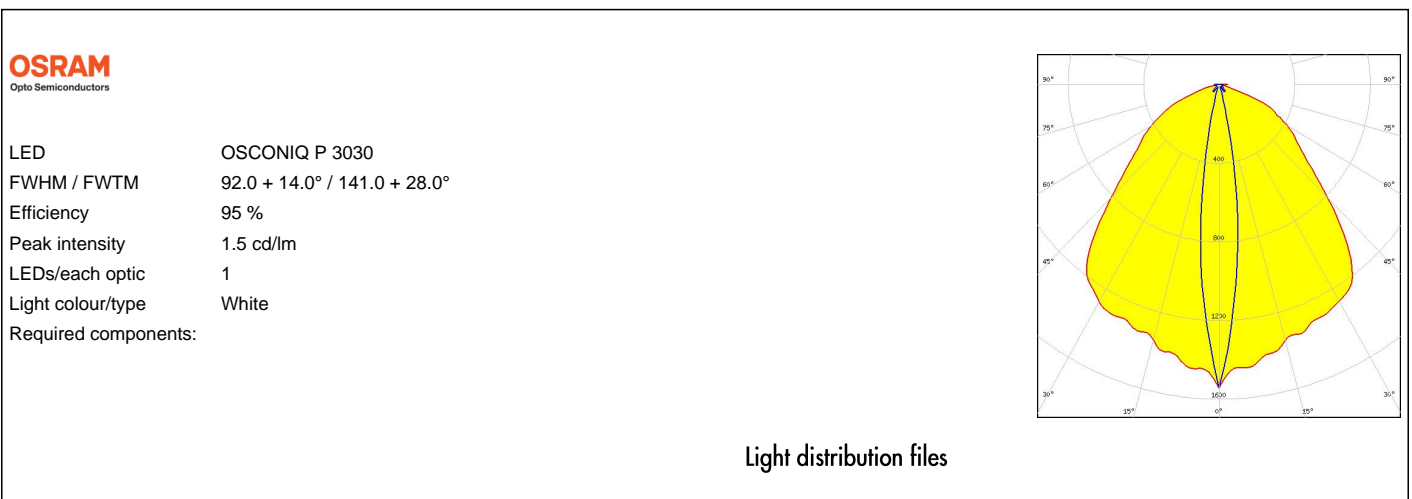
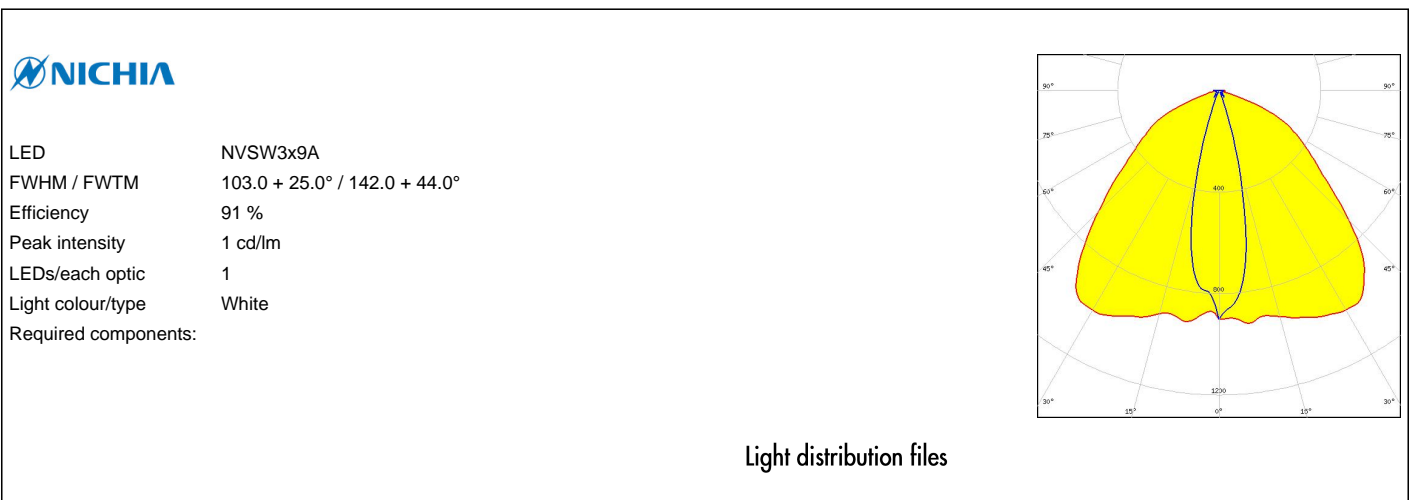
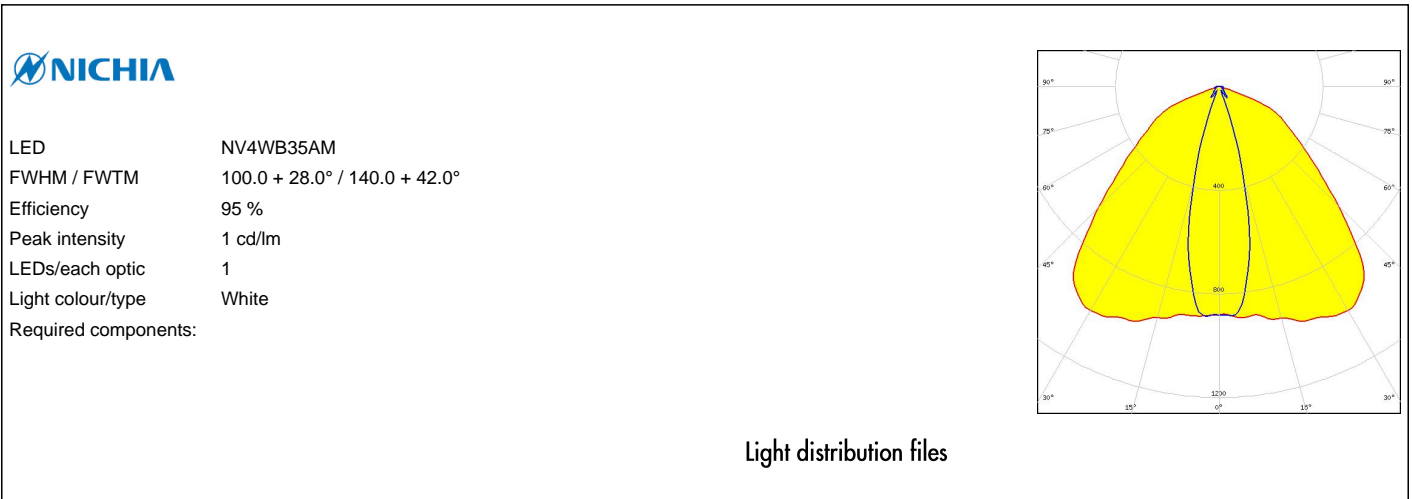


LED SST-20 Gen2
 FWHM / FWTM 20.0 + 102.0° / 34.0 + 142.0°
 Efficiency 96 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

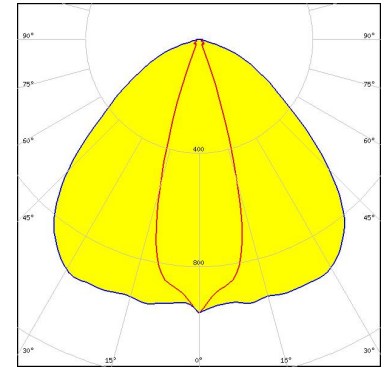
OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

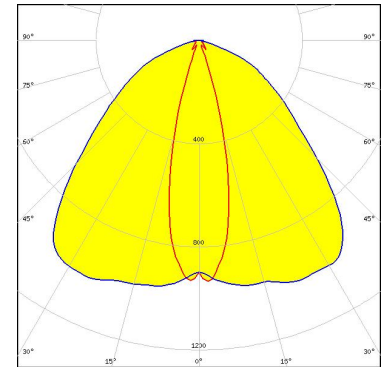
LED OSCONIQ P 3737 (2W version)
FWHM / FWTM 32.0 + 100.0° / 44.0 + 142.0°
Efficiency 95 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

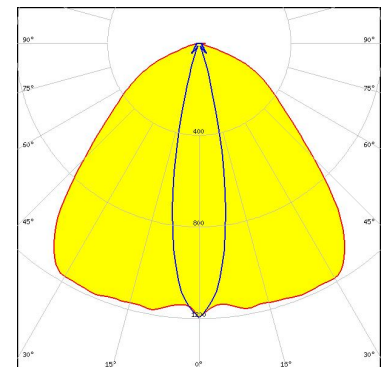
LED OSCONIQ P 3737 (3W version)
FWHM / FWTM 27.0 + 100.0° / 44.0 + 143.0°
Efficiency 94 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSCONIQ P 3737 Flat
FWHM / FWTM 96.0 + 22.0° / 140.0 + 36.0°
Efficiency 96 %
Peak intensity 1.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

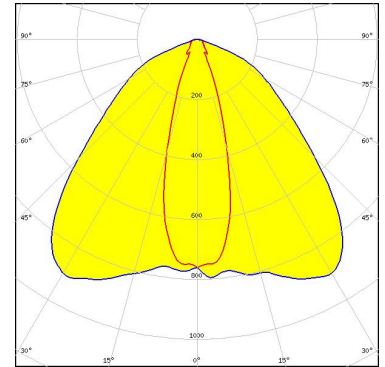


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

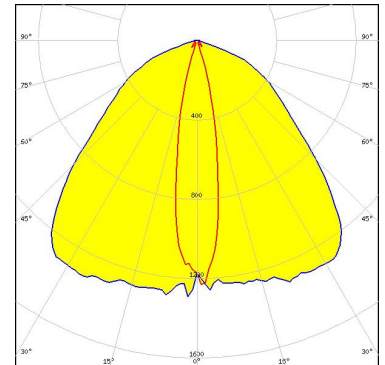
LED LH502D
FWHM / FWTM 30.0 + 98.0° / 52.0 + 140.0°
Efficiency 96 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



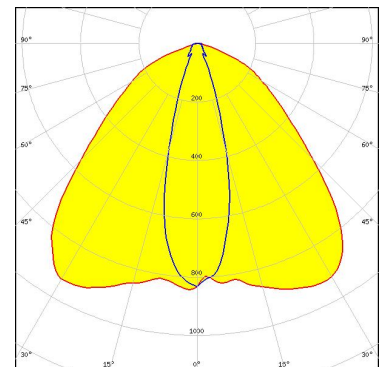
LED SEOUL DC 3528
FWHM / FWTM 20.0 + 99.0° / 36.0 + 142.0°
Efficiency 94 %
Peak intensity 1.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

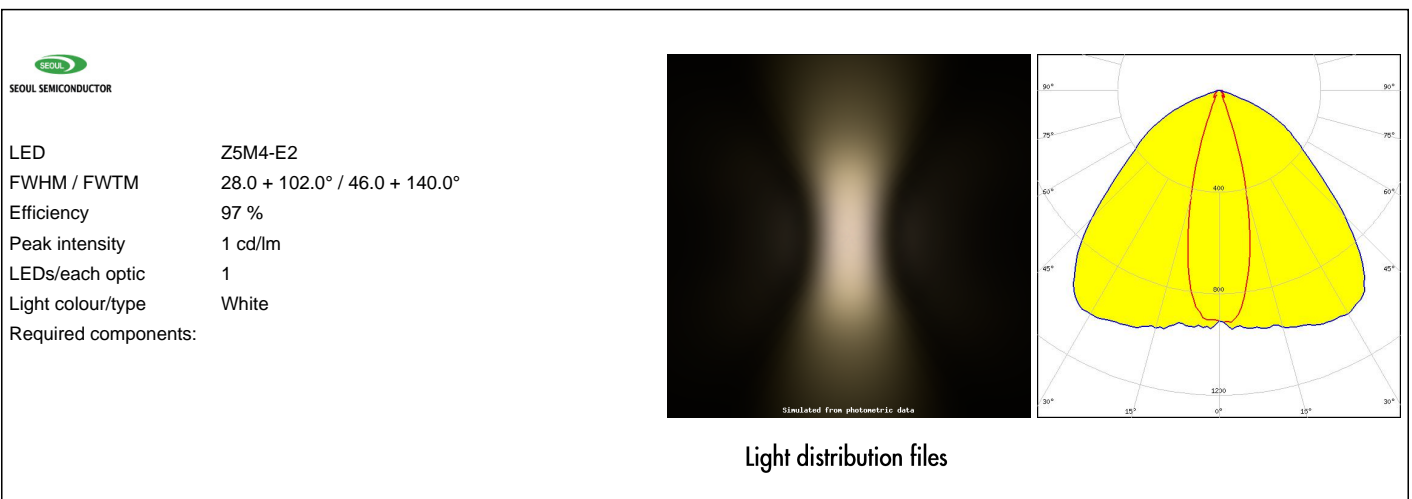
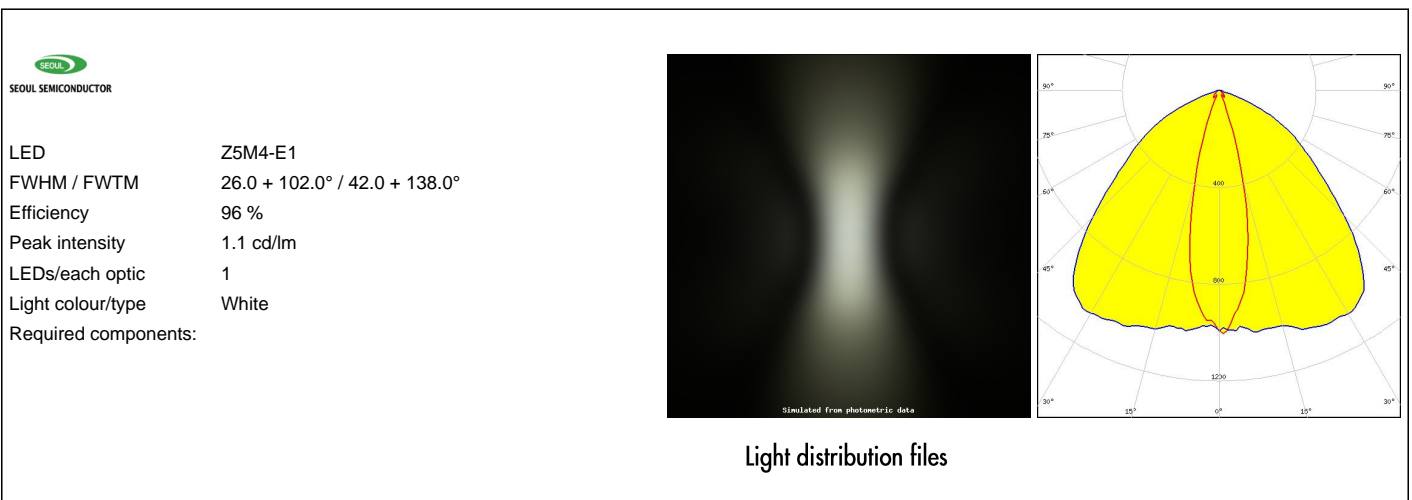
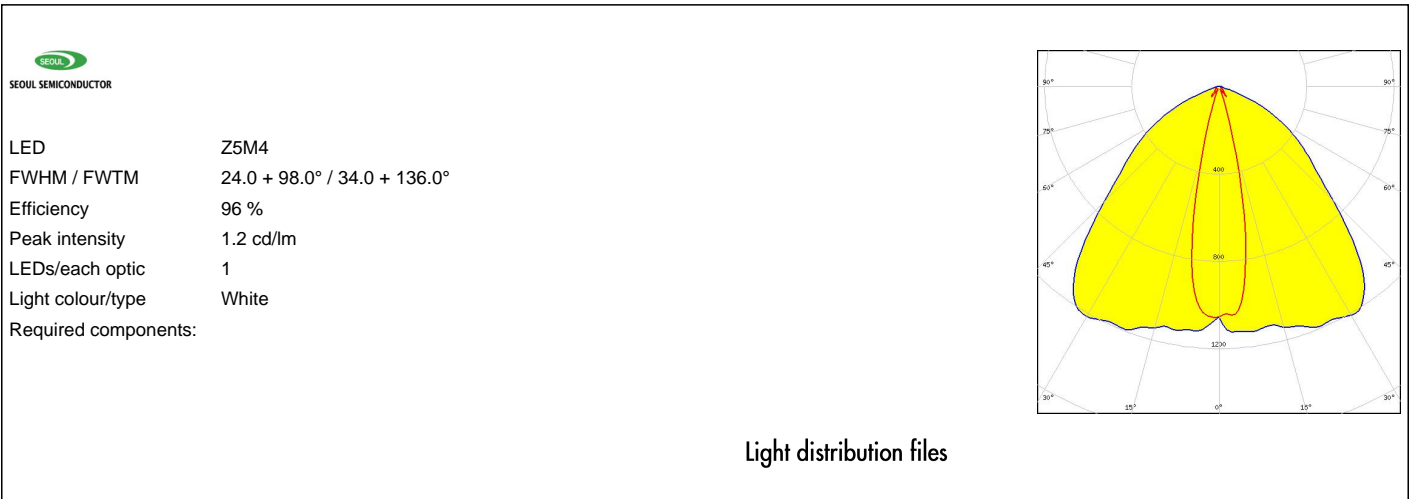


LED SEOUL DC 5050 6V
FWHM / FWTM 97.0 + 29.0° / 142.0 + 49.0°
Efficiency 94 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:




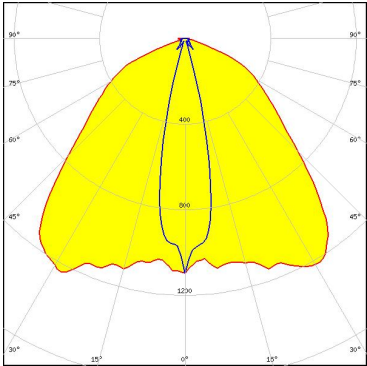
Light distribution files

OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):

 SEUL SEMICONDUCTOR	
LED	Z8Y22T
FWHM / FWTM	97.0 + 21.0° / 141.0 + 32.0°
Efficiency	94 %
Peak intensity	1.2 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.

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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

Joensuunkatu 7
FI-24100 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

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