

HB-2X2-ON

~15° + 50° oval beam

SPECIFICATION:

Dimensions	50.0 x 50.0
Height	10 mm
Fastening	screw
ROHS compliant	yes ⓘ

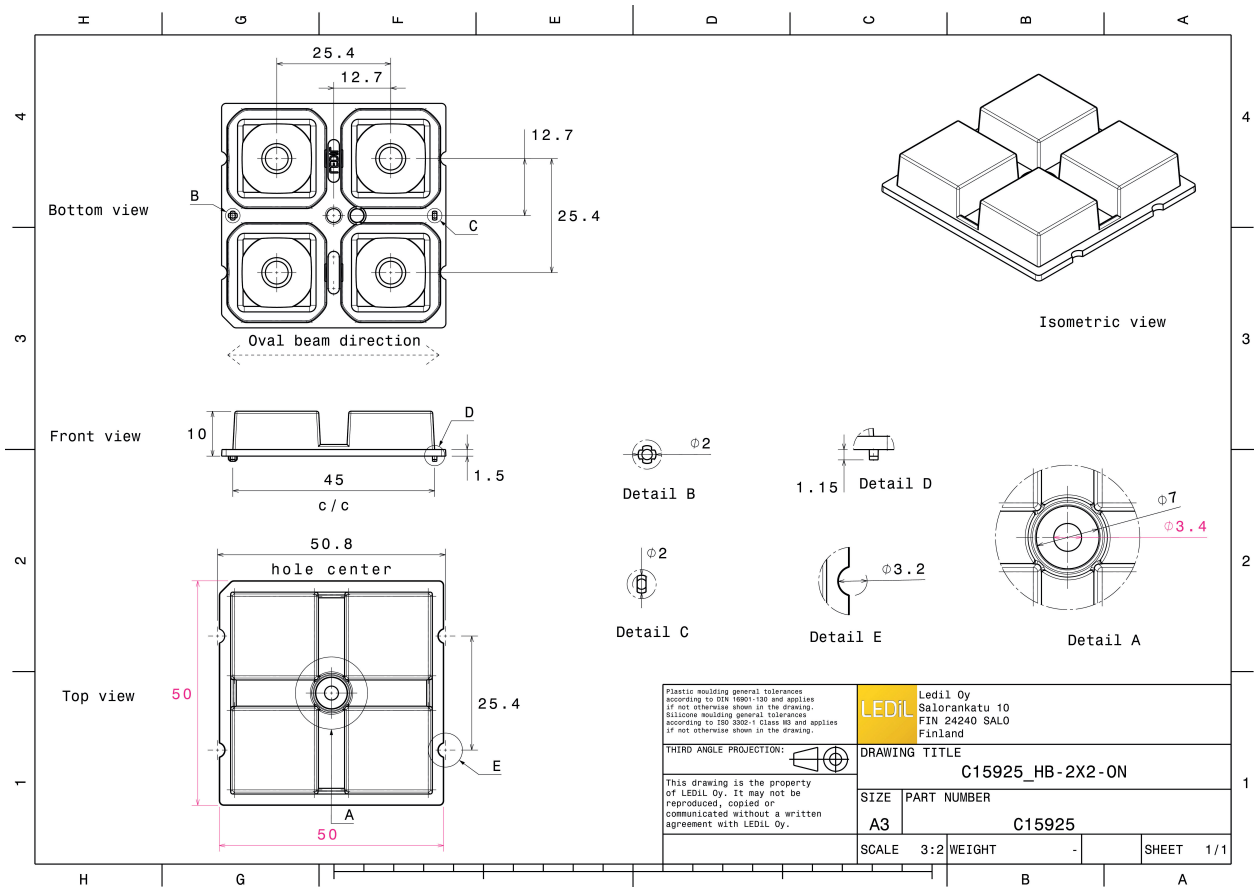
MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
HB-2X2-ON	Multi-lens	PMMA	clear		



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C15925_HB-2X2-ON » Box size: 480 x 280 x 300 mm	800	160	160	9.8



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

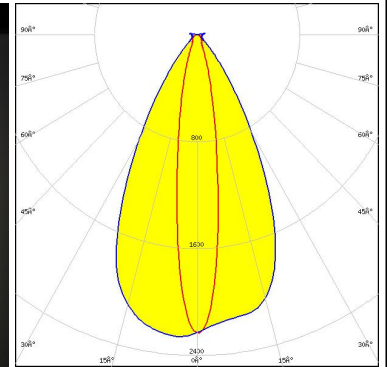
OPTICAL RESULTS (MEASURED):



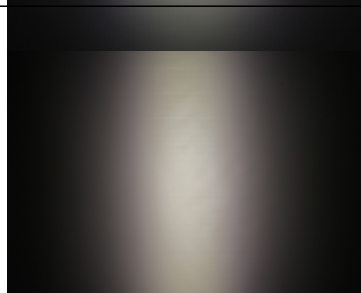
LED QUICK FLUX XTP 2x4 xxx LS G5
FWHM / FWTM 16.0 + 55.0° / 40.0 + 83.0°
Efficiency 93 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



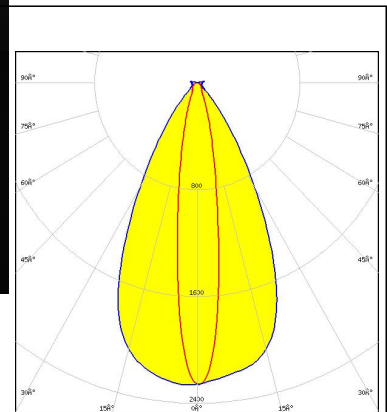
Light distribution files



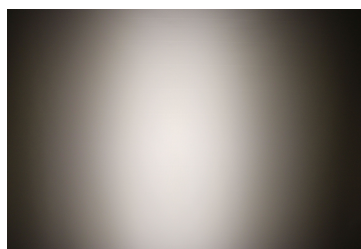
LED QUICK FLUX XTP 2x6 xxx LS G5
FWHM / FWTM 16.0 + 55.0° / 40.0 + 83.0°
Efficiency 93 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



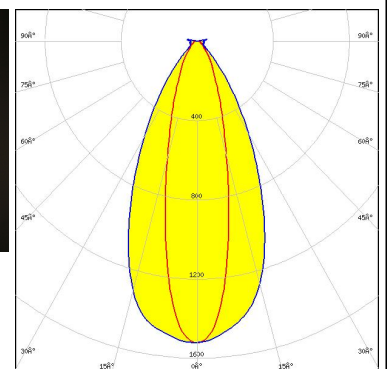
Light distribution files



LED J Series 5050C 6V E Class
FWHM / FWTM 25.0 + 51.0° / 64.0 + 87.0°
Efficiency 90 %
Peak intensity 1.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



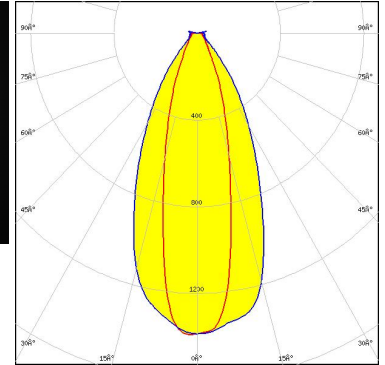
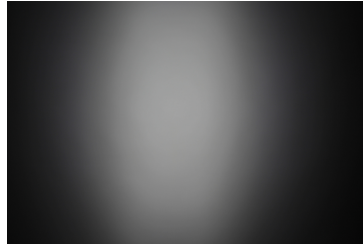
Light distribution files



OPTICAL RESULTS (MEASURED):



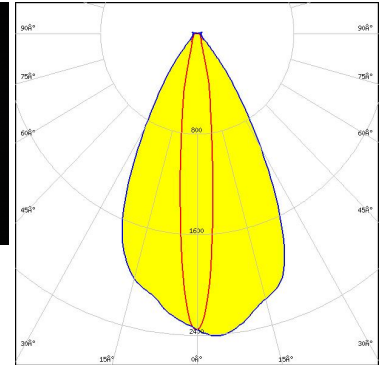
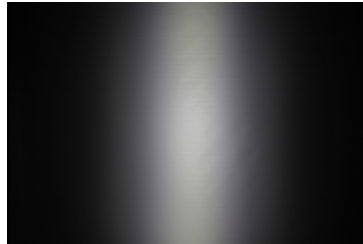
LED XD16
 FWHM / FWTM 27.0 + 49.0° / 62.0 + 89.0°
 Efficiency 90 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 4
 Light colour/type White
 Required components:



Light distribution files



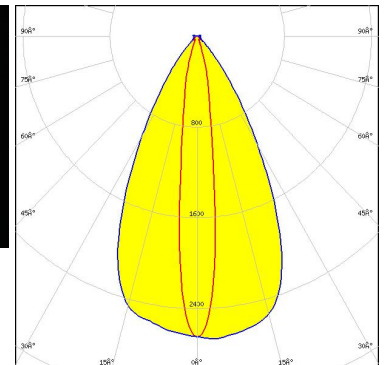
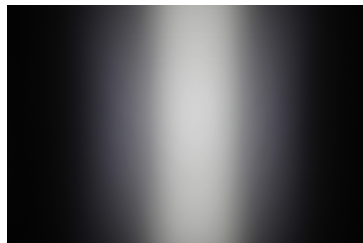
LED XD16
 FWHM / FWTM 13.0 + 55.0° / 34.0 + 82.0°
 Efficiency 89 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-G2
 FWHM / FWTM 14.0 + 55.0° / 34.0 + 82.0°
 Efficiency 89 %
 Peak intensity 2.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

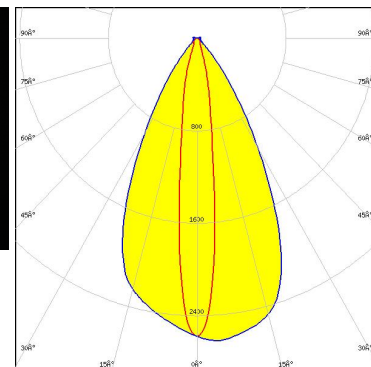
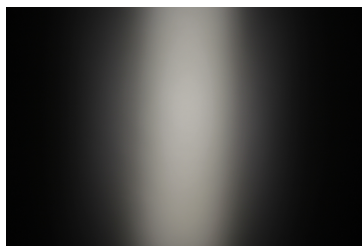


Light distribution files

OPTICAL RESULTS (MEASURED):



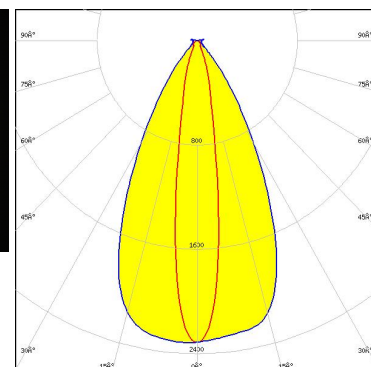
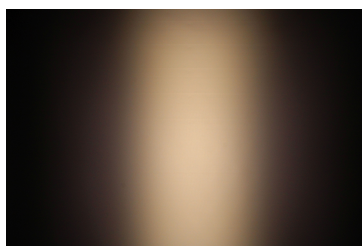
LED XP-L HI
 FWHM / FWTM 14.0 + 55.0° / 36.0 + 82.0°
 Efficiency 91 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



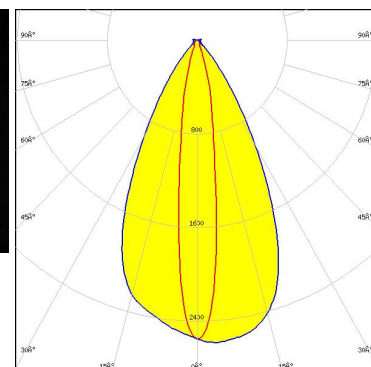
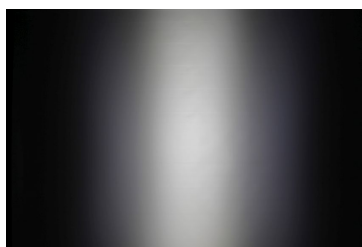
LED PL-BRICK HP 3800 2x8 SSG
 FWHM / FWTM 17.0 + 54.0° / 41.0 + 84.0°
 Efficiency 92 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED PrevaLED Brick HP 2x8
 FWHM / FWTM 15.0 + 54.0° / 36.0 + 82.0°
 Efficiency 91 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

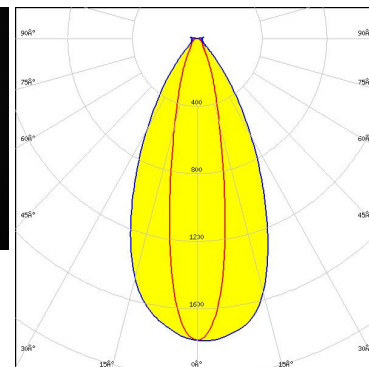
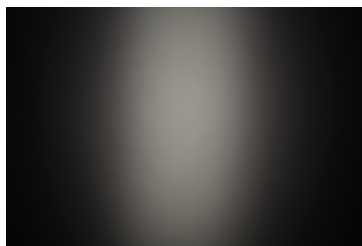


Light distribution files

OPTICAL RESULTS (MEASURED):



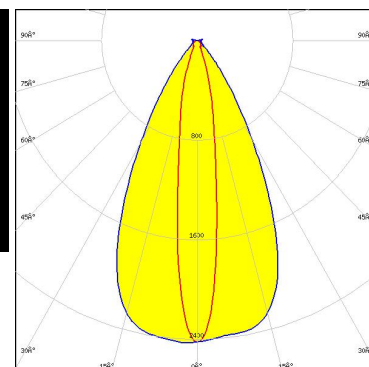
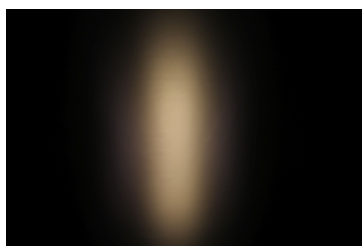
LED LUXEON V
FWHM / FWTM 22.0 + 51.0° / 52.0 + 86.0°
Efficiency 92 %
Peak intensity 1.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



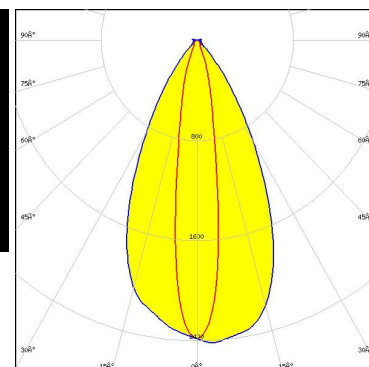
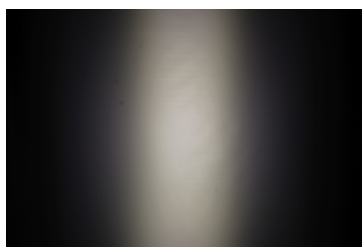
LED RecLED 122x50mm 1900lm 730 2x4 Opt G1
FWHM / FWTM 15.0 + 54.0° / 38.5 + 82.5°
Efficiency 94 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NVSW219F
FWHM / FWTM 17.0 + 53.0° / 40.0 + 83.0°
Efficiency 93 %
Peak intensity 2.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

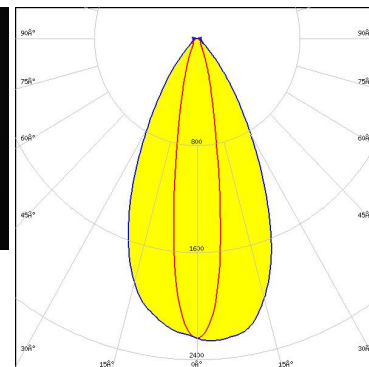
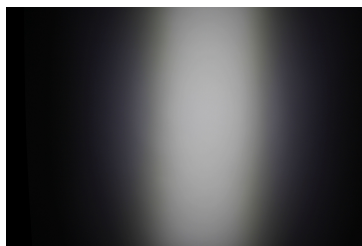


Light distribution files

OPTICAL RESULTS (MEASURED):



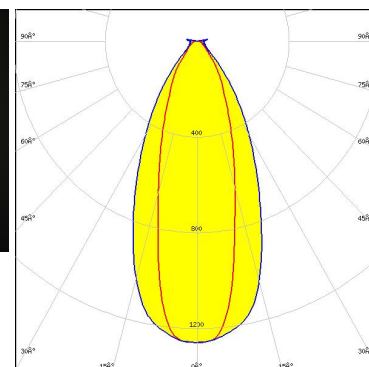
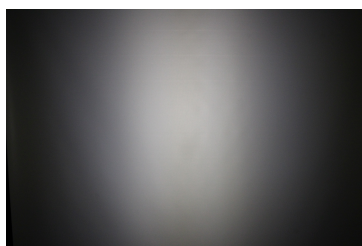
LED NVSW319B
 FWHM / FWTM 18.0 + 52.0° / 41.0 + 84.0°
 Efficiency 93 %
 Peak intensity 2.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



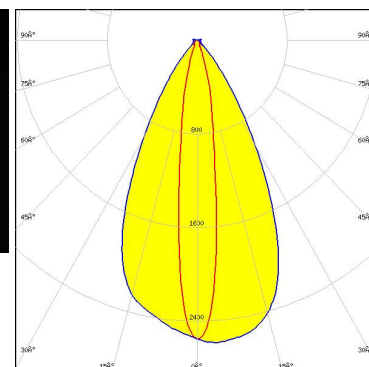
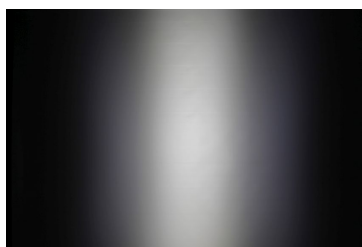
LED Duris S8
 FWHM / FWTM 31.0 + 49.0° / 78.0 + 91.0°
 Efficiency 92 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED OSLOM Square CSSRM2/CSSRM3
 FWHM / FWTM 15.0 + 54.0° / 36.0 + 82.0°
 Efficiency 91 %
 Peak intensity 2.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

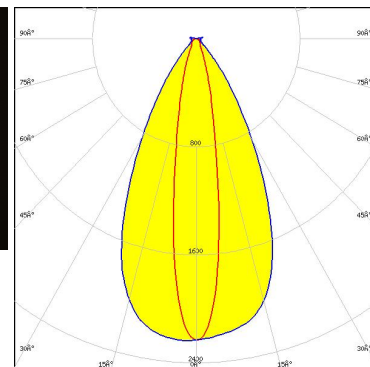
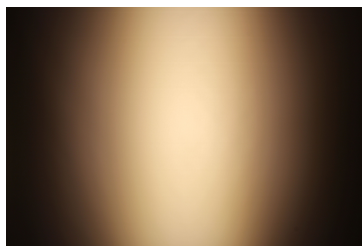


Light distribution files

OPTICAL RESULTS (MEASURED):

PHILIPS

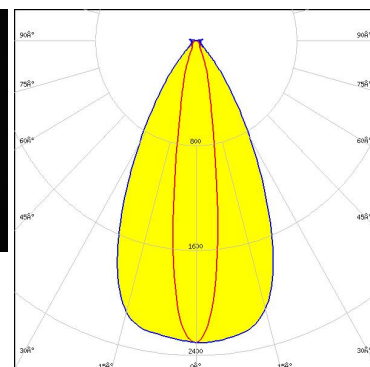
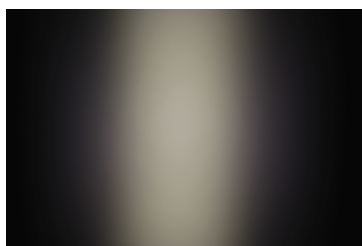
LED	Fortimo FastFlex LED 2x8 DA G4+
FWHM / FWTM	18.0 + 53.0° / 41.0 + 84.0°
Efficiency	94 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

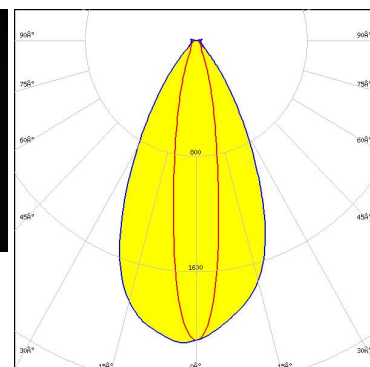
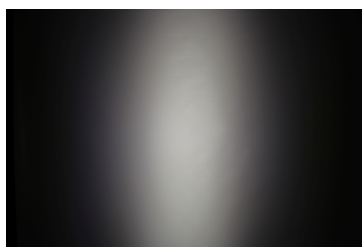
LED	HiLOM RH16 (LH351C)
FWHM / FWTM	17.0 + 54.0° / 42.0 + 84.0°
Efficiency	94 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



LED	Z5M3
FWHM / FWTM	18.0 + 53.0° / 44.0 + 84.0°
Efficiency	93 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

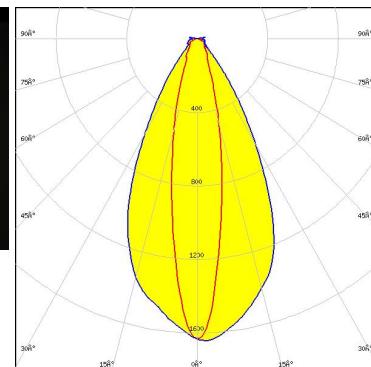


Light distribution files

OPTICAL RESULTS (MEASURED):



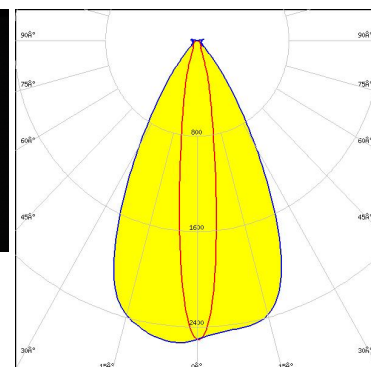
LED Z8Y22
 FWHM / FWTM 20.0 + 53.0° / 50.0 + 85.0°
 Efficiency 91 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

TRIDONIC

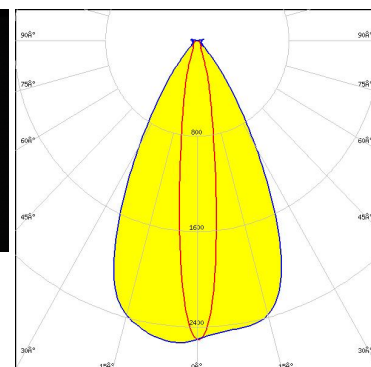
LED RLE 2x4 2000lm HP EXC2 OTD
 FWHM / FWTM 15.0 + 55.0° / 37.0 + 82.0°
 Efficiency 94 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

TRIDONIC

LED RLE 2x8 4000lm HP EXC2 OTD
 FWHM / FWTM 15.0 + 55.0° / 37.0 + 82.0°
 Efficiency 94 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

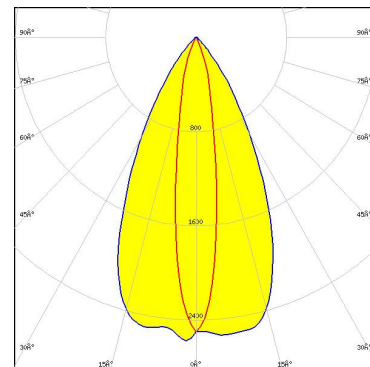


Light distribution files

OPTICAL RESULTS (SIMULATED):



LED XHP35 HI
FWHM / FWTM 16.0 + 50.0°
Efficiency 90 %
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

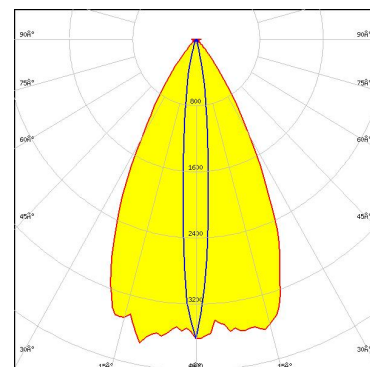


LED XP-E2
FWHM / FWTM 10.0 + 50.0°
Efficiency 90 %
LEDs/each optic 1
Light colour/type White
Required components:

Light distribution files



LED XP-E2
FWHM / FWTM 54.0 + 10.0° / 78.0 + 27.0°
Efficiency 93 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

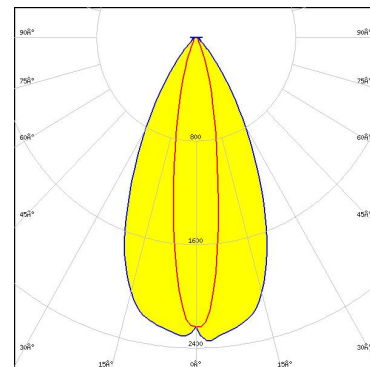


Light distribution files

OPTICAL RESULTS (SIMULATED):



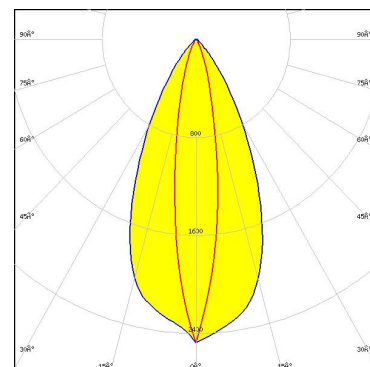
LED XP-G2 HE
 FWHM / FWTM 18.0 + 51.0° / 42.0 + 82.0°
 Efficiency 90 %
 Peak intensity 2.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



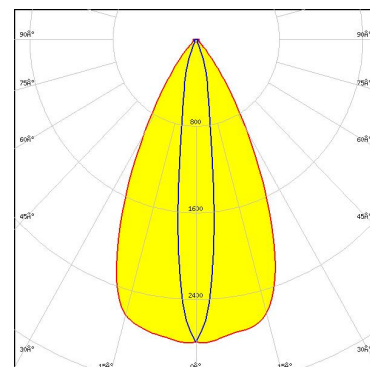
LED XP-G3
 FWHM / FWTM 17.0 + 48.0°
 Efficiency 89 %
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-G4
 FWHM / FWTM 14.0 + 54.0° / 36.0 + 80.0°
 Efficiency 91 %
 Peak intensity 2.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

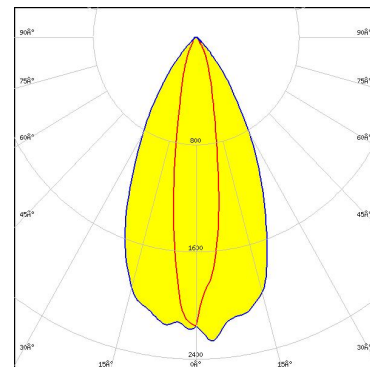


Light distribution files

OPTICAL RESULTS (SIMULATED):



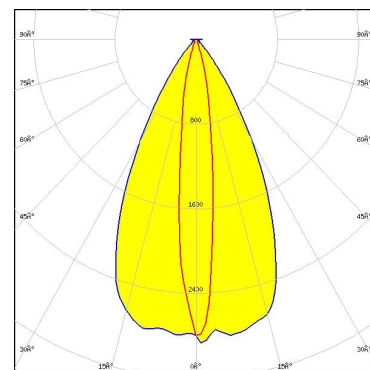
LED XP-L HD
FWHM / FWTM 18.0 + 50.0°
Efficiency 88 %
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



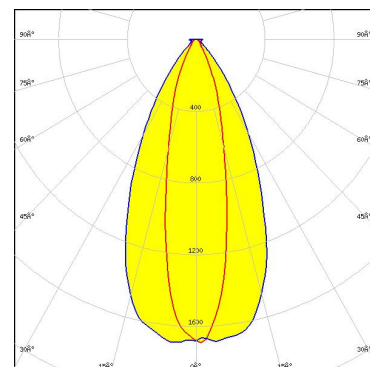
LED XT-E
FWHM / FWTM 14.0 + 55.0° / 34.0 + 80.0°
Efficiency 91 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON 5050 Round LES
FWHM / FWTM 23.0 + 51.0° / 56.0 + 86.0°
Efficiency 89 %
Peak intensity 1.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

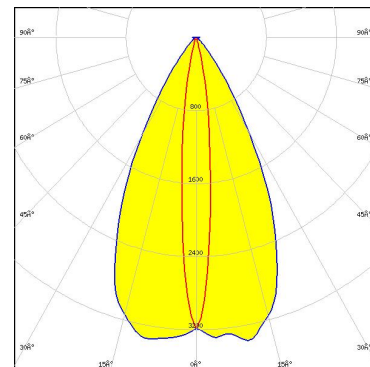


Light distribution files

OPTICAL RESULTS (SIMULATED):



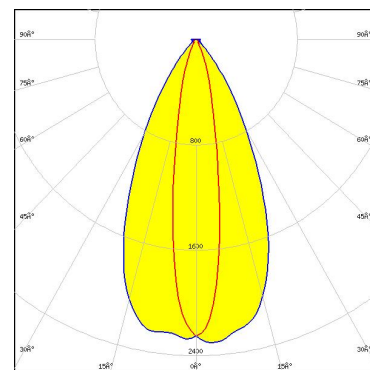
LED	LUXEON C
FWHM / FWTM	12.0 + 54.0° / 27.0 + 79.0°
Efficiency	91 %
Peak intensity	3.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



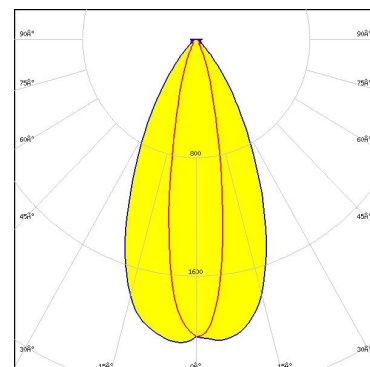
LED	LUXEON HL2X
FWHM / FWTM	18.0 + 52.0° / 42.0 + 82.0°
Efficiency	90 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



LED	LUXEON HL4X
FWHM / FWTM	20.0 + 50.0° / 46.0 + 84.0°
Efficiency	91 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

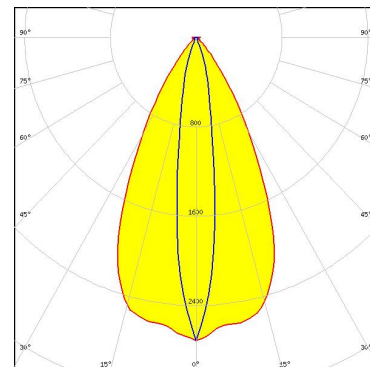


Light distribution files

OPTICAL RESULTS (SIMULATED):



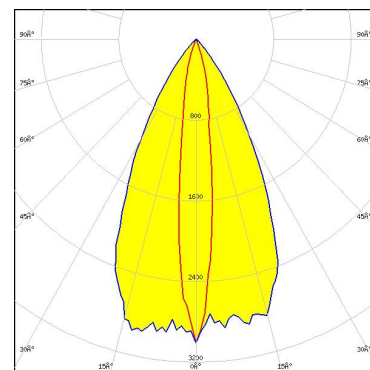
LED LUXEON HL4Z
FWHM / FWTM 54.0 + 14.0° / 80.0 + 36.0°
Efficiency 91 %
Peak intensity 2.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



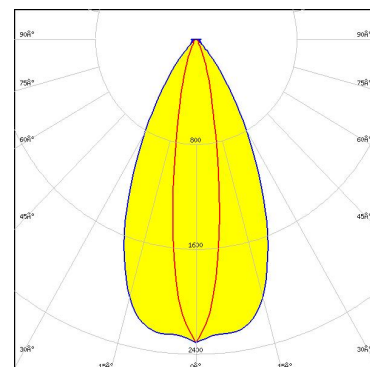
LED LUXEON TX
FWHM / FWTM 14.0 + 50.0°
Efficiency 90 %
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)
FWHM / FWTM 18.0 + 52.0° / 42.0 + 82.0°
Efficiency 91 %
Peak intensity 2.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

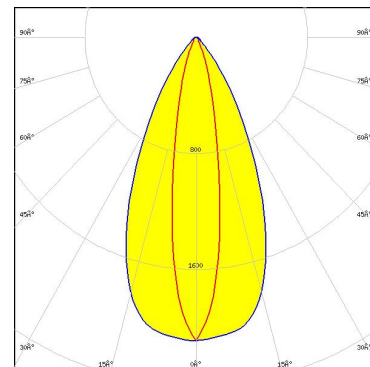
OPTICAL RESULTS (SIMULATED):



LED	LUXEON XR-HL2X (L2H2-xxxxxxxMLU010)
FWHM / FWTM	18.0 + 50.0° / 42.0 + 80.0°
Efficiency	82 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

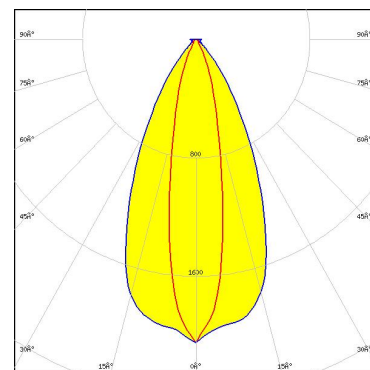
Protective plate, glass

Light distribution files



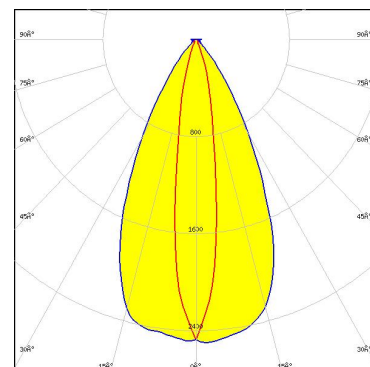
LED	NV4WB35AM
FWHM / FWTM	20.0 + 50.0° / 48.0 + 84.0°
Efficiency	90 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files



LED	NVSxx19B/NVSxx19C
FWHM / FWTM	16.0 + 53.0° / 38.0 + 81.0°
Efficiency	90 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

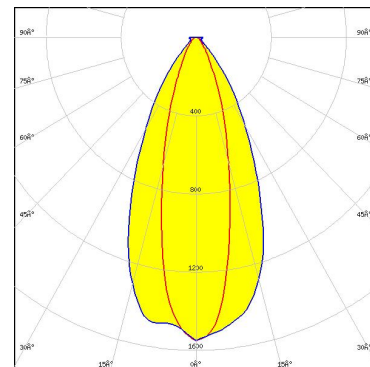
Light distribution files



OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

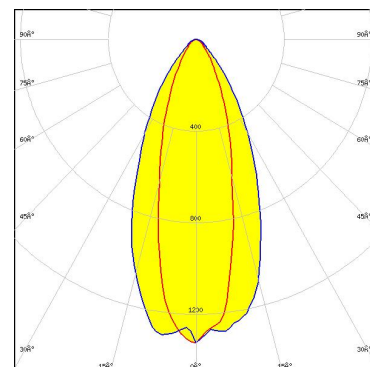
LED Duris S8
FWHM / FWTM 26.0 + 49.0° / 59.0 + 86.0°
Efficiency 88 %
Peak intensity 1.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED Duris S8
FWHM / FWTM 29.0 + 49.0° / 69.0 + 89.0°
Efficiency 84 %
Peak intensity 1.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

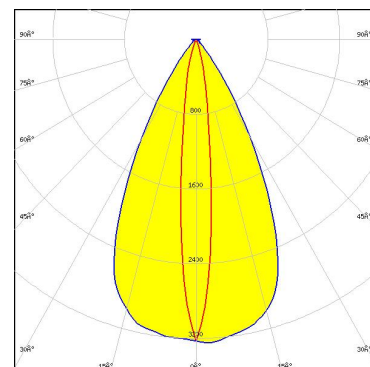


Light distribution files

Protective plate, glass

OSRAM
Opto Semiconductors

LED OSCONIQ C 2424 Gen1
FWHM / FWTM 12.0 + 54.0° / 30.0 + 78.0°
Efficiency 92 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

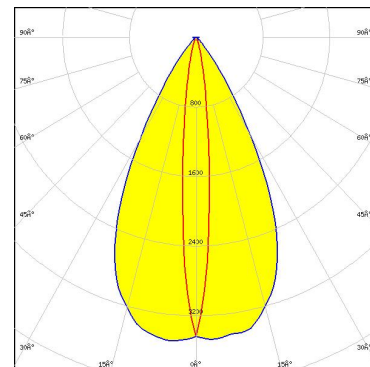


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

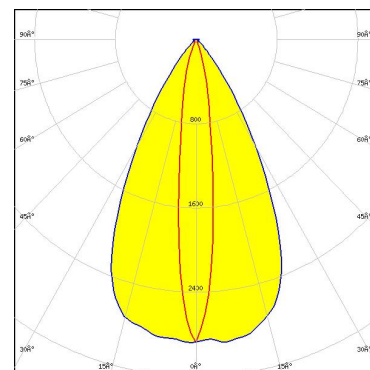
LED OSCONIQ P 3030
FWHM / FWTM 10.0 + 56.0° / 28.0 + 78.0°
Efficiency 94 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

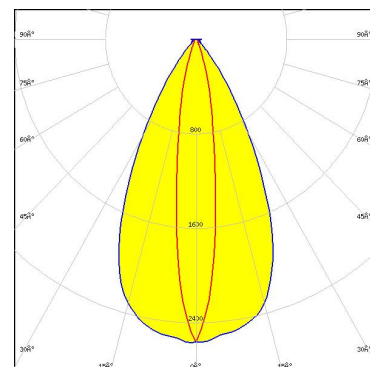
LED OSCONIQ P 3737 (2W version)
FWHM / FWTM 13.0 + 56.0° / 34.0 + 81.0°
Efficiency 93 %
Peak intensity 2.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSCONIQ P 3737 Flat
FWHM / FWTM 16.0 + 54.0° / 38.0 + 80.0°
Efficiency 92 %
Peak intensity 2.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

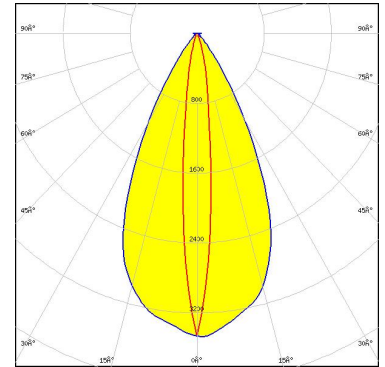


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

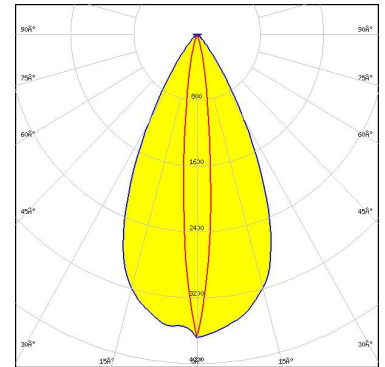
LED OSLON Square Flat
FWHM / FWTM 12.0 + 52.0° / 29.0 + 76.0°
Efficiency 93 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

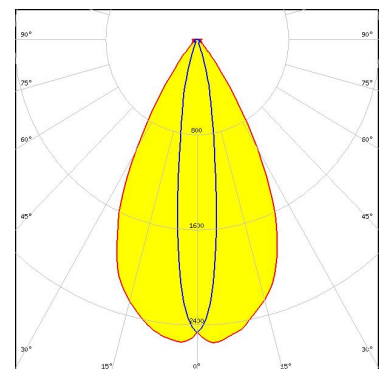
LED OSTAR Projection Compact (KW.CSLNM1.TG)
FWHM / FWTM 10.0 + 52.0° / 26.0 + 76.0°
Efficiency 93 %
Peak intensity 3.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED SFH 4715AS
FWHM / FWTM 56.0 + 14.0° / 78.0 + 31.0°
Efficiency 90 %
LEDs/each optic 1
Light colour/type IR
Required components:

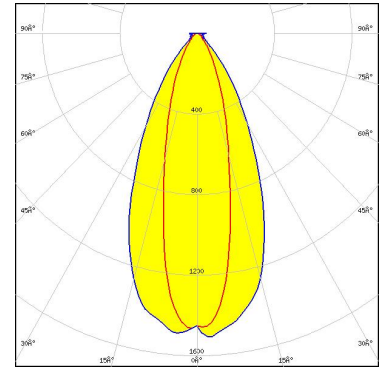


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

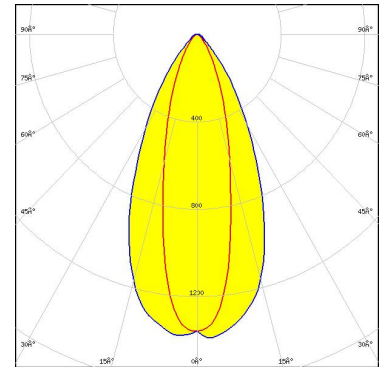
LED	LH502C
FWHM / FWTM	26.0 + 50.0° / 64.0 + 86.0°
Efficiency	87 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

LED	LH502C
FWHM / FWTM	28.0 + 50.0° / 64.0 + 86.0°
Efficiency	79 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

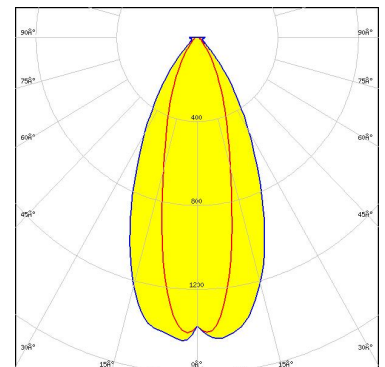


Light distribution files

Protective plate, glass



LED	MJT 5050
FWHM / FWTM	28.0 + 50.0° / 67.0 + 88.0°
Efficiency	87 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

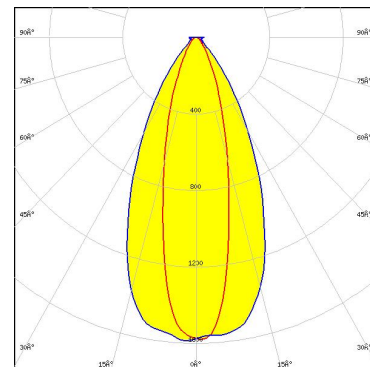


Light distribution files

OPTICAL RESULTS (SIMULATED):



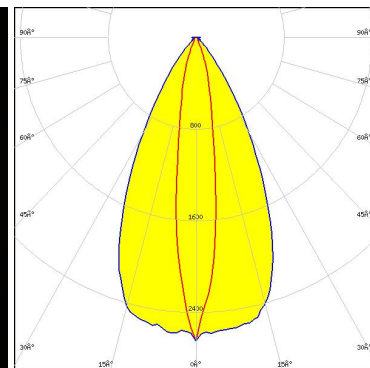
LED: SEOUL DC 5050 6V
 FWHM / FWTM: 26.0 + 50.0° / 60.0 + 86.0°
 Efficiency: 90 %
 Peak intensity: 1.6 cd/lm
 LEDs/each optic: 1
 Light colour/type: White
 Required components:



Light distribution files



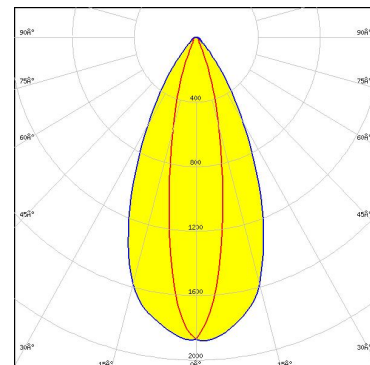
LED: Z5M3-E1
 FWHM / FWTM: 16.0 + 54.0° / 40.0 + 82.0°
 Efficiency: 92 %
 Peak intensity: 2.7 cd/lm
 LEDs/each optic: 1
 Light colour/type: White
 Required components:



Light distribution files



LED: Z5M5
 FWHM / FWTM: 22.0 + 50.0° / 46.0 + 82.0°
 Efficiency: 81 %
 Peak intensity: 1.9 cd/lm
 LEDs/each optic: 1
 Light colour/type: White
 Required components:



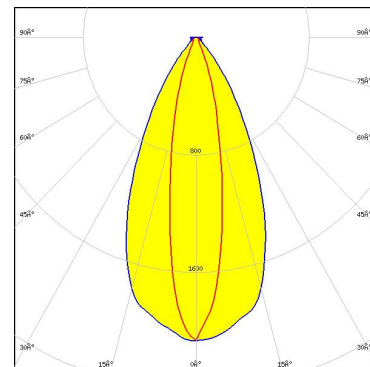
Protective plate, glass

Light distribution files

OPTICAL RESULTS (SIMULATED):



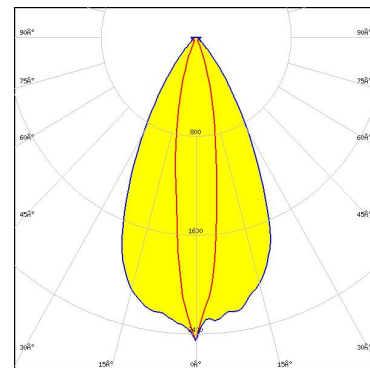
LED Z5M5
FWHM / FWTM 20.0 + 50.0° / 46.0 + 82.0°
Efficiency 90 %
Peak intensity 2.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED Z8Y22T
FWHM / FWTM 16.0 + 52.0° / 39.0 + 81.0°
Efficiency 90 %
Peak intensity 2.5 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:

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