

LISA3-RS-PIN

~15° spot beam with location pin installation

SPECIFICATION:

Dimensions	Ø 10.0
Height	6.9 mm
Fastening	glue, pin
ROHS compliant	yes ⓘ

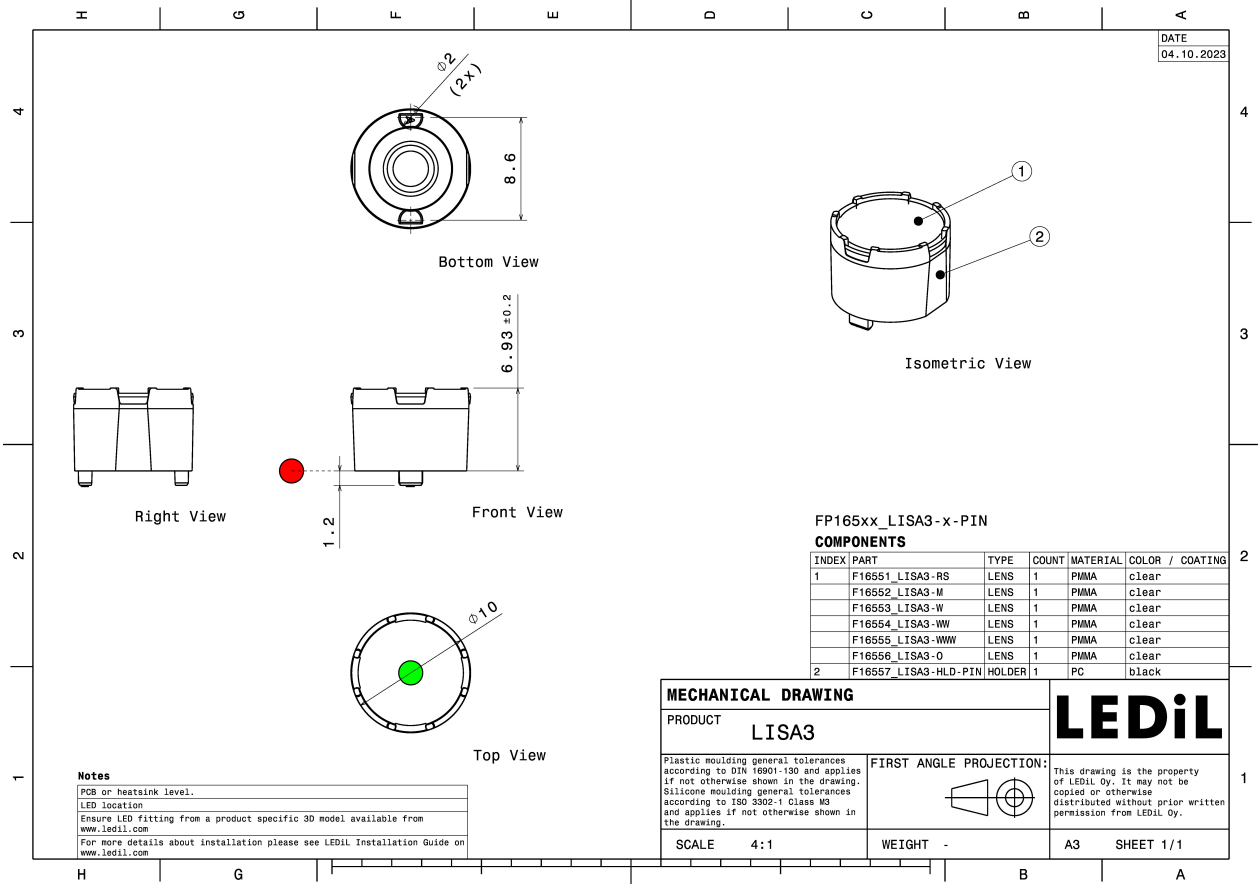


MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
LISA3-RS	Single lens	PMMA	clear		
LISA3-HLD-PIN	Holder	PC	black		

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
FP16558_LISA3-RS-PIN » Box size: 310 x 230 x 60 mm	2000	300	100	1.3

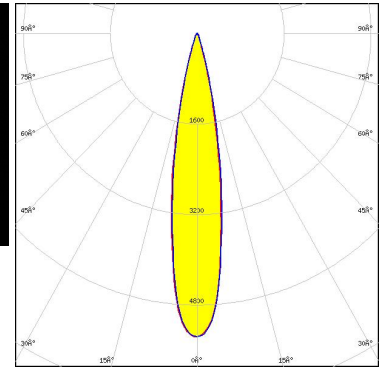
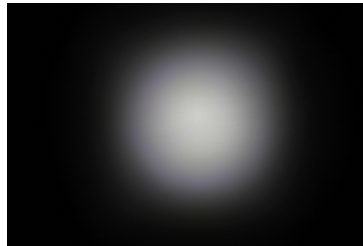


See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



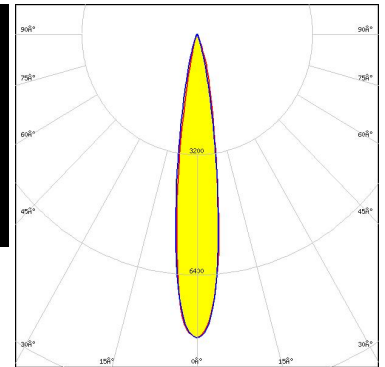
LED XD16
FWHM / FWTM 19.0° / 34.0°
Efficiency 78 %
Peak intensity 5.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



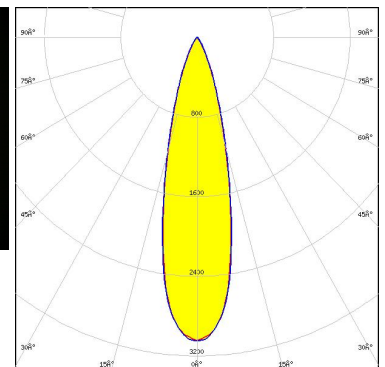
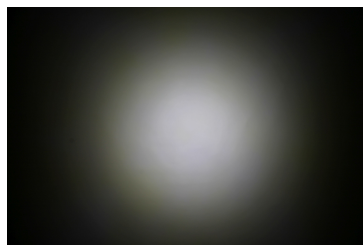
LED XP-E2
FWHM / FWTM 16.0° / 31.0°
Efficiency 90 %
Peak intensity 8.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XP-G3
FWHM / FWTM 26.0° / 51.0°
Efficiency 84 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

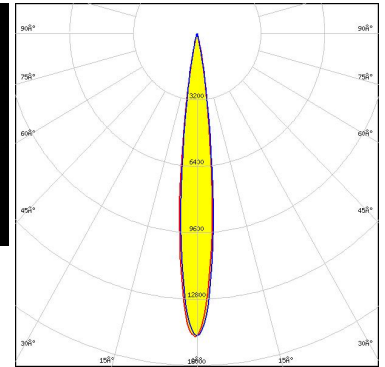
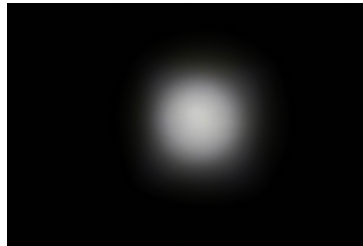


Light distribution files

OPTICAL RESULTS (MEASURED):



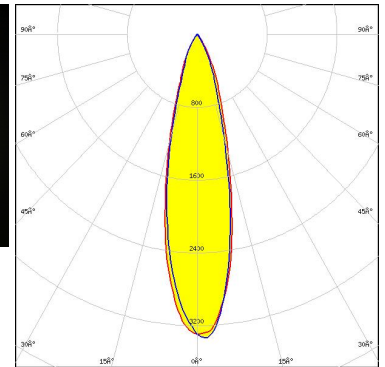
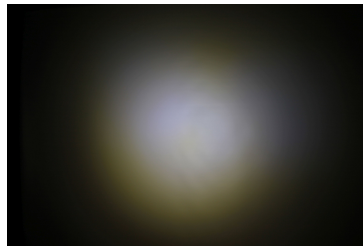
LED LUXEON CZ
FWHM / FWTM 12.0° / 23.0°
Efficiency 89 %
Peak intensity 14.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



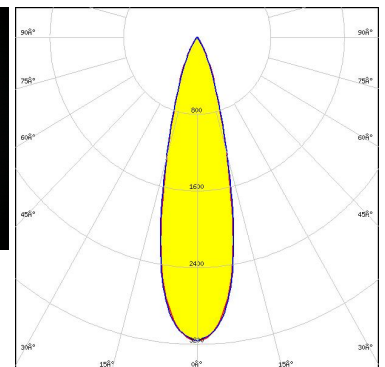
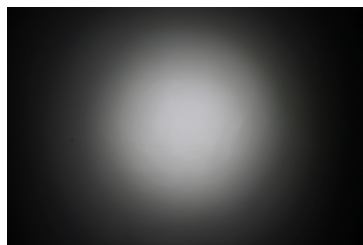
LED NF2x757G
FWHM / FWTM 25.0° / 52.0°
Efficiency 88 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED NVSW219F
FWHM / FWTM 26.0° / 52.0°
Efficiency 90 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

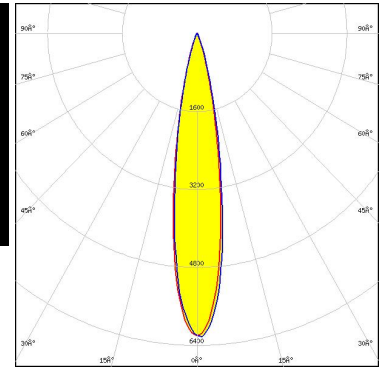


Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

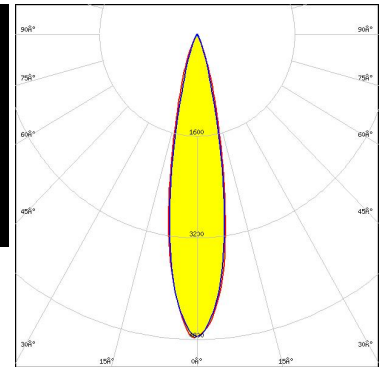
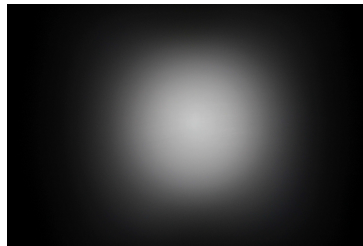
LED OSCONIQ C 2424
FWHM / FWTM 18.0° / 35.0°
Efficiency 88 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

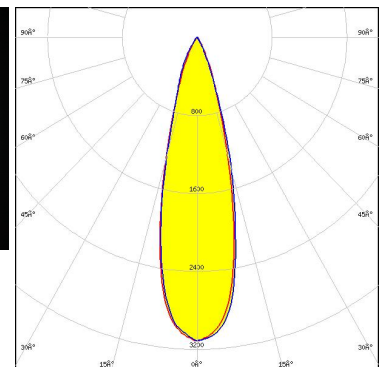
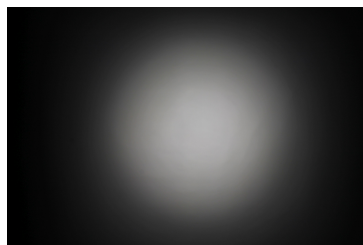
LED OSLOM Square CSSRM2/CSSRM3
FWHM / FWTM 21.0° / 40.0°
Efficiency 88 %
Peak intensity 4.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files


SAMSUNG

LED LH351C
FWHM / FWTM 28.0° / 51.0°
Efficiency 90 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OPTICAL RESULTS (MEASURED):

 SEOL SEMICONDUCTOR		
LED	Z5M4	
FWHM / FWTM	29.0° / 51.0°	
Efficiency	89 %	
Peak intensity	3.1 cd/lm	
LEDs/each optic	1	
Light colour/type	White	
Required components:		

Light distribution files

OPTICAL RESULTS (SIMULATED):

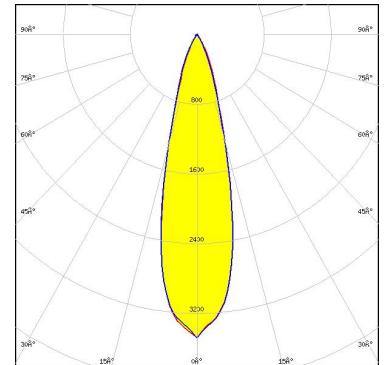


LED CSP 2323 (BXCP)
FWHM / FWTM 18.0° / 40.0°
Efficiency 81 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

Light distribution files



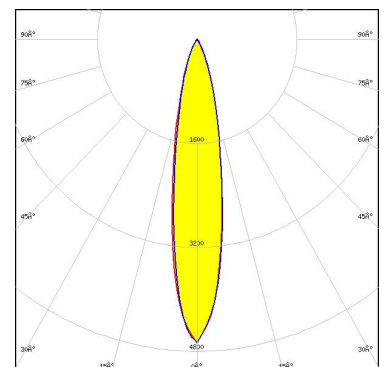
LED SMD 3535 BXEX
FWHM / FWTM 26.0° / 51.0°
Efficiency 90 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED J Series 2835
FWHM / FWTM 19.0° / 44.0°
Efficiency 88 %
Peak intensity 4.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

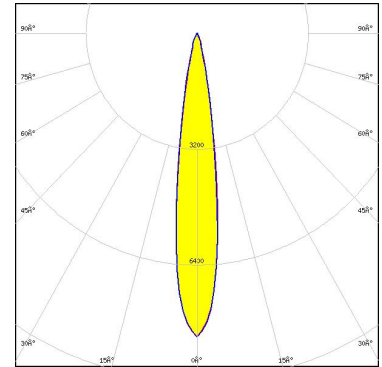


Light distribution files

OPTICAL RESULTS (SIMULATED):



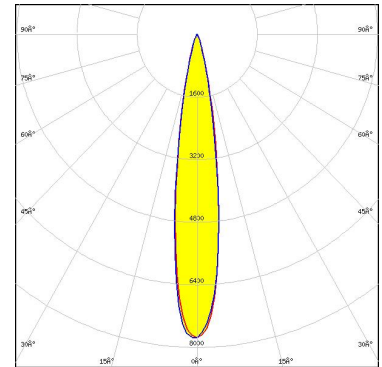
LED XE-G
 FWHM / FWTM 16.0° / 30.0°
 Efficiency 89 %
 Peak intensity 8.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



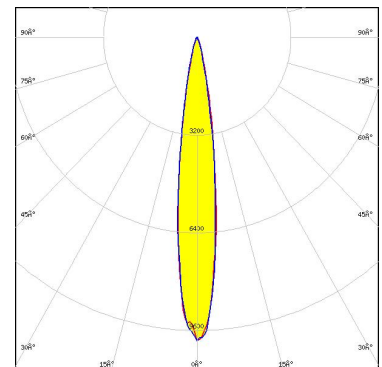
LED XP-E
 FWHM / FWTM 16.0° / 32.0°
 Efficiency 91 %
 Peak intensity 7.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XP-E2
 FWHM / FWTM 14.3° / 29.0°
 Efficiency 89 %
 Peak intensity 9.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

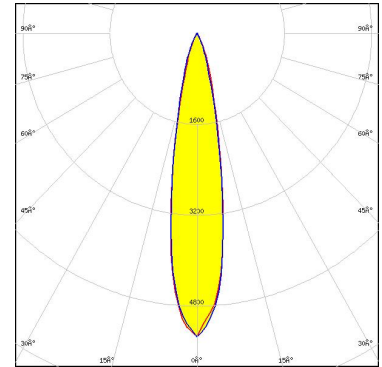


Light distribution files

OPTICAL RESULTS (SIMULATED):



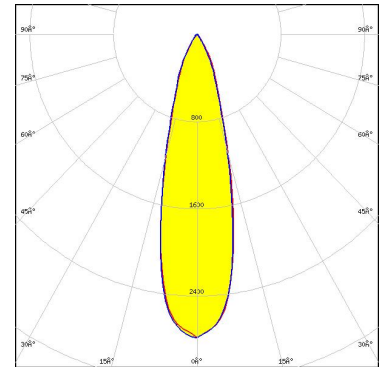
LED XP-G2
FWHM / FWTM 20.0° / 40.0°
Efficiency 89 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



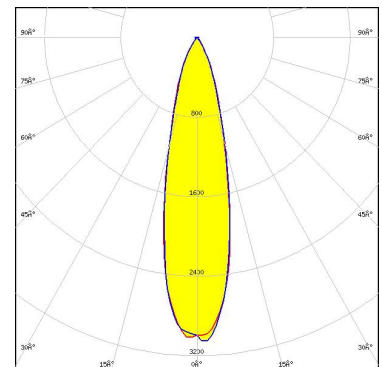
LED XP-G2 HE
FWHM / FWTM 27.0° / 57.0°
Efficiency 86 %
Peak intensity 2.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XP-G3
FWHM / FWTM 26.0° / 54.0°
Efficiency 86 %
Peak intensity 3.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

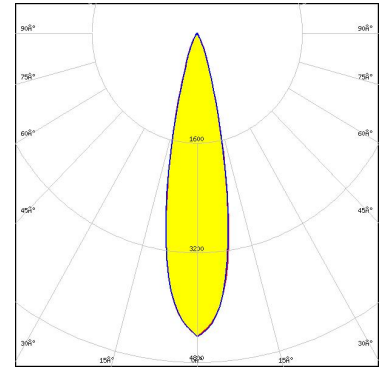


Light distribution files

OPTICAL RESULTS (SIMULATED):



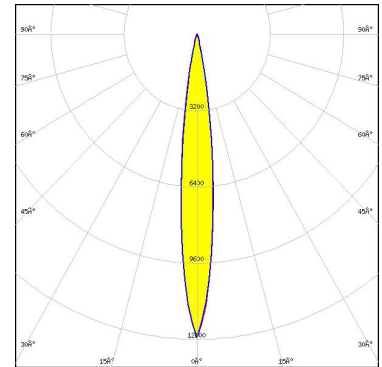
LED XP-G4
 FWHM / FWTM 24.0° / 42.0°
 Efficiency 90 %
 Peak intensity 4.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



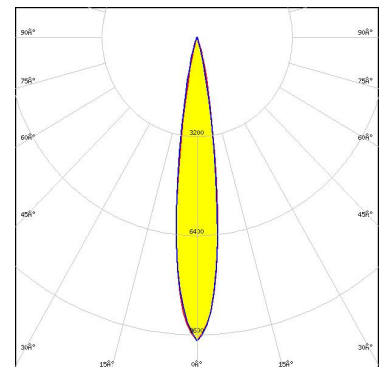
LED XP-P
 FWHM / FWTM 12.0° / 26.0°
 Efficiency 97 %
 Peak intensity 12.7 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED XQ-E HD
 FWHM / FWTM 16.0° / 29.0°
 Efficiency 89 %
 Peak intensity 9.8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

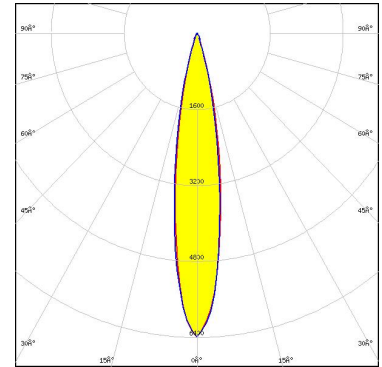


Light distribution files

OPTICAL RESULTS (SIMULATED):



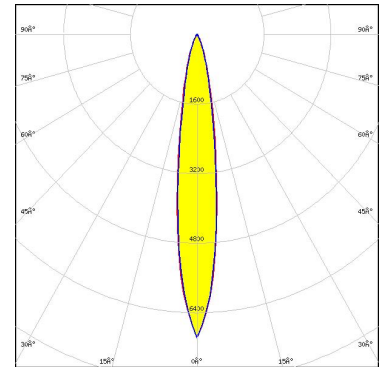
LED XQ-E HI
FWHM / FWTM 18.0° / 34.0°
Efficiency 82 %
Peak intensity 6.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



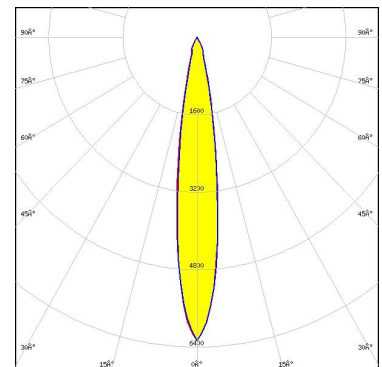
LED LUXEON 2835 Line
FWHM / FWTM 16.0° / 36.0°
Efficiency 89 %
Peak intensity 7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON C
FWHM / FWTM 16.0° / 32.0°
Efficiency 78 %
Peak intensity 6.3 cd/lm
LEDs/each optic 1
Light colour/type Red
Required components:

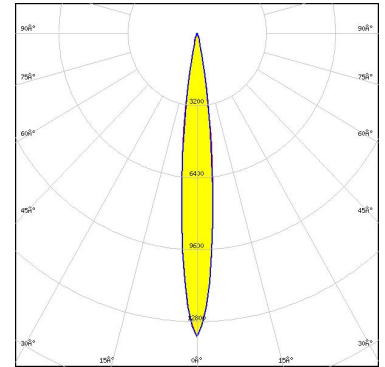


Light distribution files

OPTICAL RESULTS (SIMULATED):



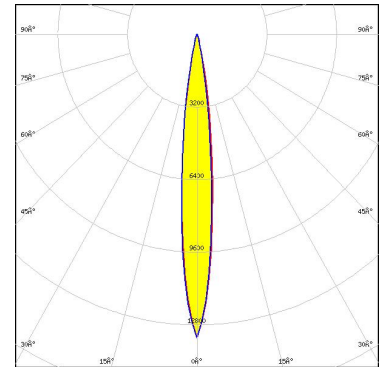
LED LUXEON CZ
FWHM / FWTM 12.0° / 24.0°
Efficiency 90 %
Peak intensity 13.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



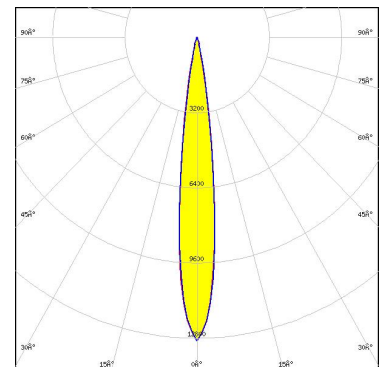
LED LUXEON CZ
FWHM / FWTM 12.0° / 25.0°
Efficiency 90 %
Peak intensity 13.4 cd/lm
LEDs/each optic 1
Light colour/type Red
Required components:



Light distribution files



LED LUXEON Rubix
FWHM / FWTM 14.0° / 24.0°
Efficiency 90 %
Peak intensity 12.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

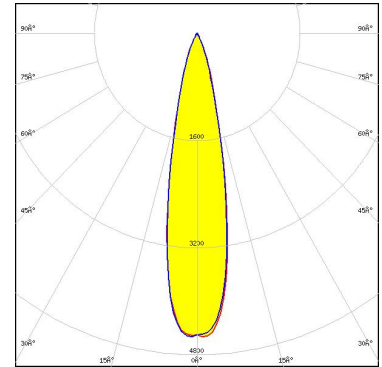


Light distribution files

OPTICAL RESULTS (SIMULATED):



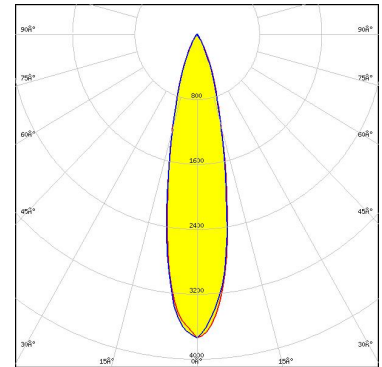
LED LUXEON TX
FWHM / FWTM 22.0° / 43.0°
Efficiency 88 %
Peak intensity 4.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



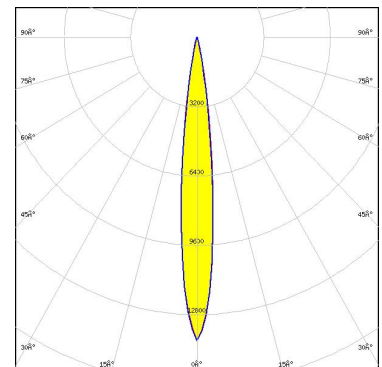
LED LUXEON V2
FWHM / FWTM 22.0° / 51.0°
Efficiency 90 %
Peak intensity 3.8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON Z
FWHM / FWTM 12.0° / 23.0°
Efficiency 87 %
Peak intensity 13.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OPTICAL RESULTS (SIMULATED):

LUMILEDS

LED	LUXEON Z ES
FWHM / FWTM	15.0° / 30.0°
Efficiency	88 %
Peak intensity	9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files

LUMINUS

LED	SST-10-B130
FWHM / FWTM	19.0° / 36.0°
Efficiency	89 %
Peak intensity	6 cd/lm
LEDs/each optic	1
Light colour/type	Deep Red
Required components:	

Light distribution files

LUMINUS

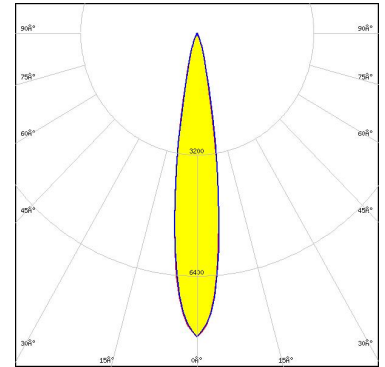
LED	SST-10-IR-B90
FWHM / FWTM	17.0° / 38.0°
Efficiency	87 %
LEDs/each optic	1
Light colour/type	IR
Required components:	

Light distribution files

OPTICAL RESULTS (SIMULATED):



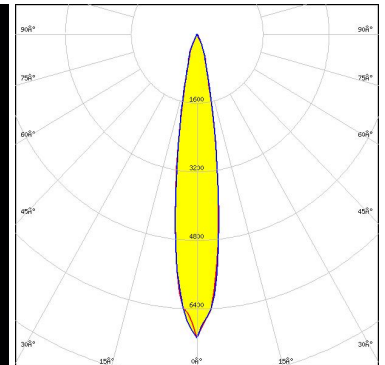
LED SST-12 Gen1
FWHM / FWTM 17.0° / 32.0°
Efficiency 89 %
Peak intensity 8 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



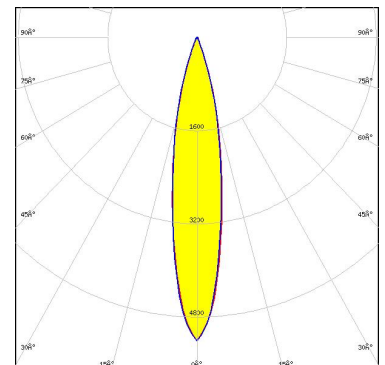
LED SST-12 Gen2
FWHM / FWTM 16.0° / 35.0 + 36.0°
Efficiency 89 %
Peak intensity 7.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

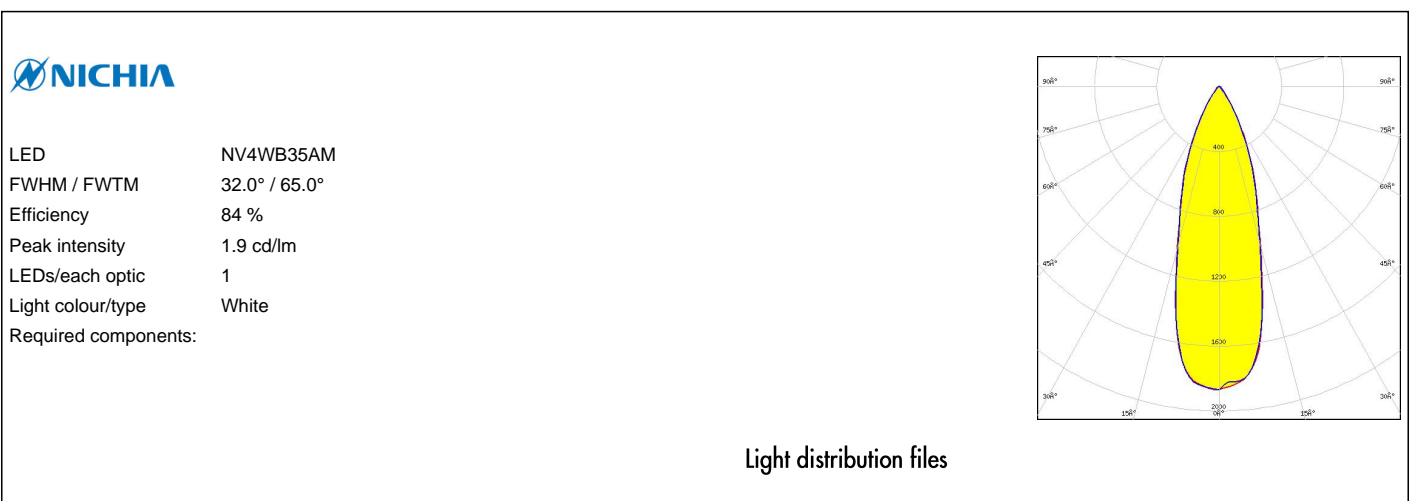
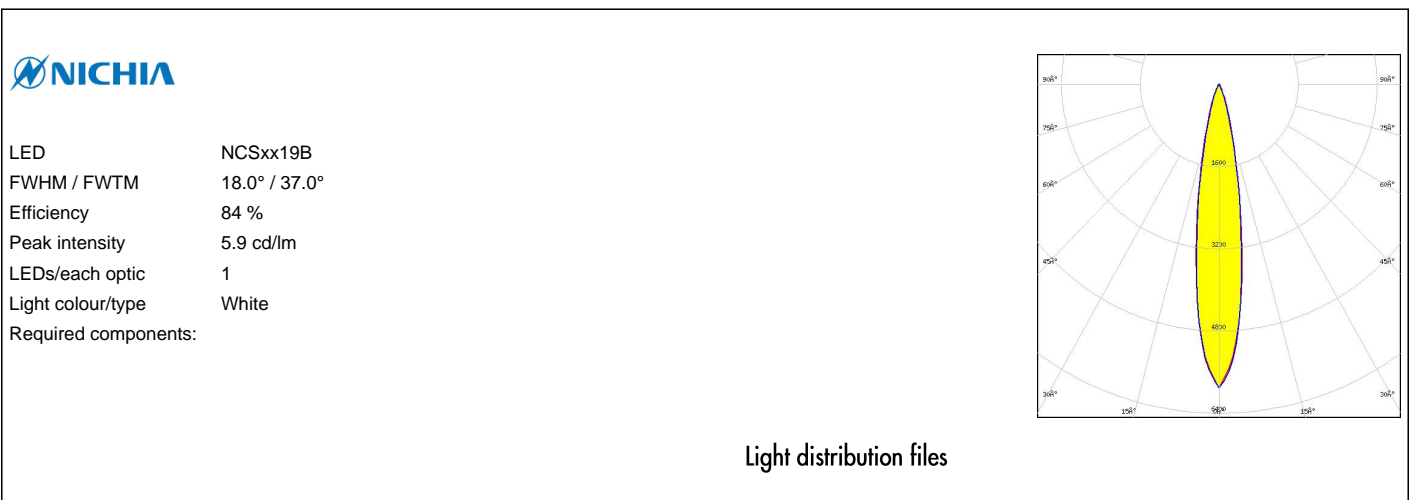
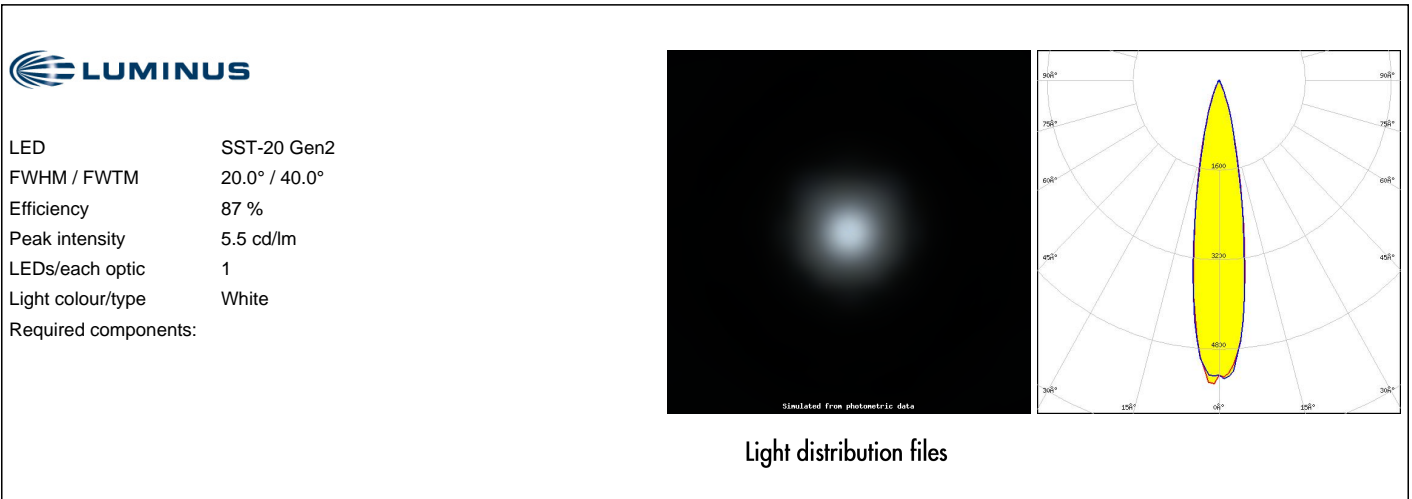


LED SST-20 Gen1
FWHM / FWTM 20.0° / 40.0°
Efficiency 86 %
Peak intensity 5.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

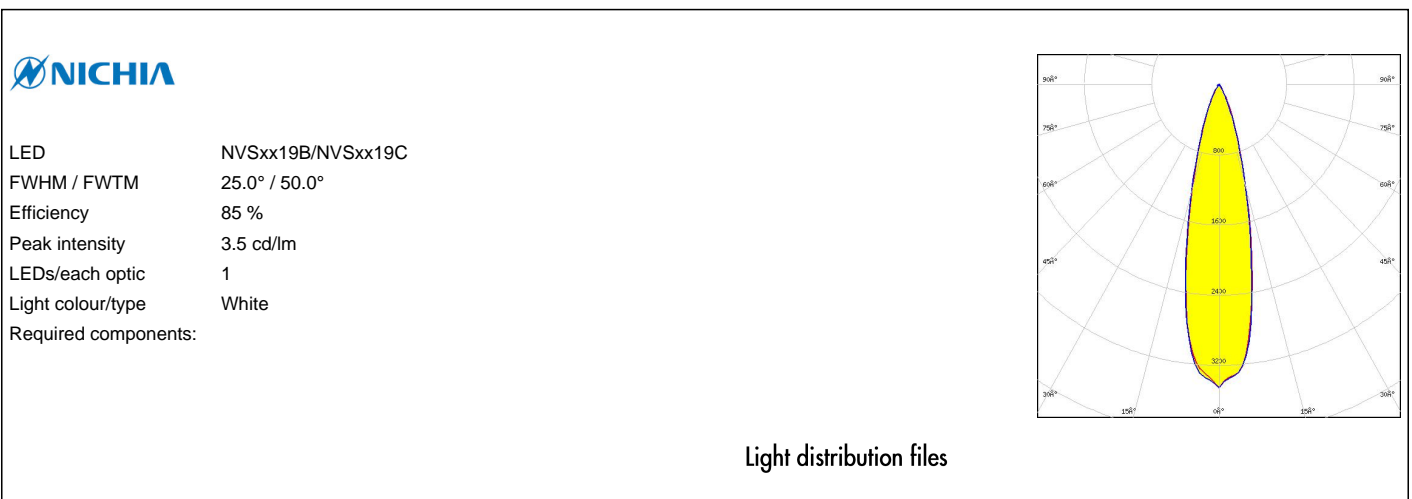
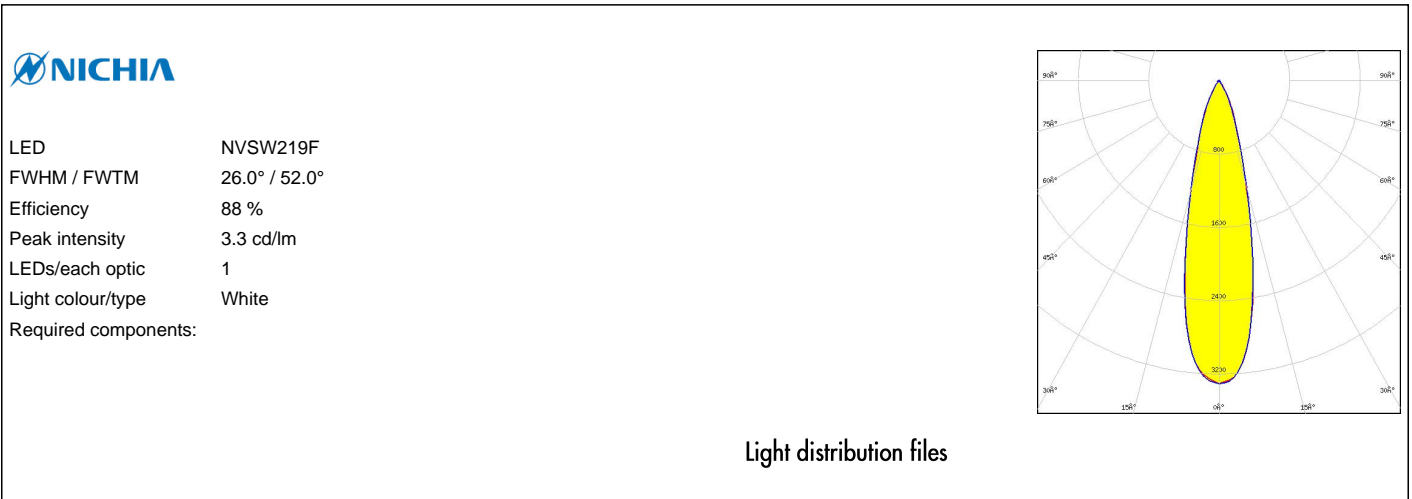


Light distribution files

OPTICAL RESULTS (SIMULATED):



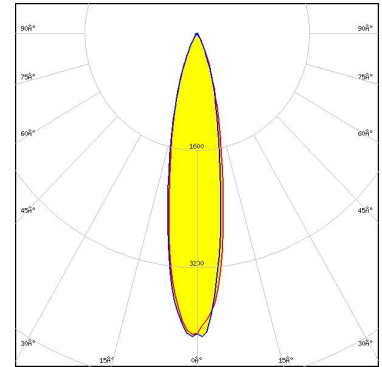
OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

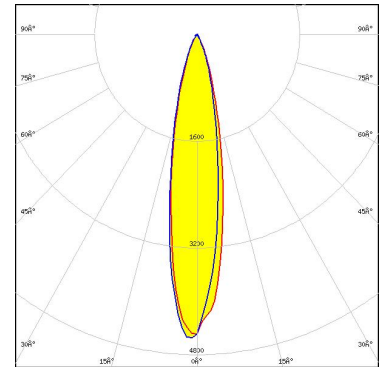
LED Duris S5 (2 chip)
 FWHM / FWTM 20.0° / 44.0°
 Efficiency 87 %
 Peak intensity 7.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

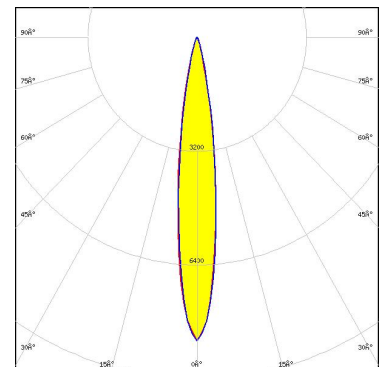
LED Duris S5 (Single chip)
 FWHM / FWTM 20.0° / 43.0°
 Efficiency 86 %
 Peak intensity 4.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSCONIQ P 3030
 FWHM / FWTM 14.0° / 30.0°
 Efficiency 86 %
 Peak intensity 8.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

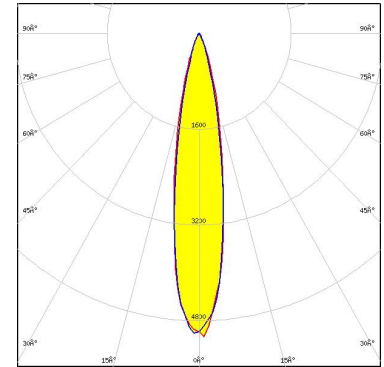


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

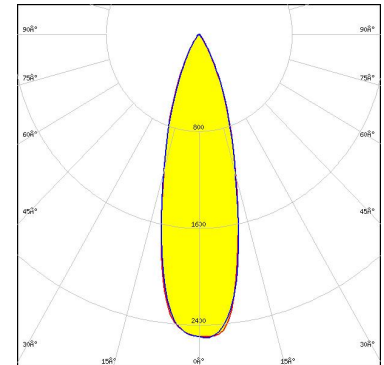
LED OSCONIQ P 3737 (2W version)
 FWHM / FWTM 20.0° / 40.0°
 Efficiency 88 %
 Peak intensity 5.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

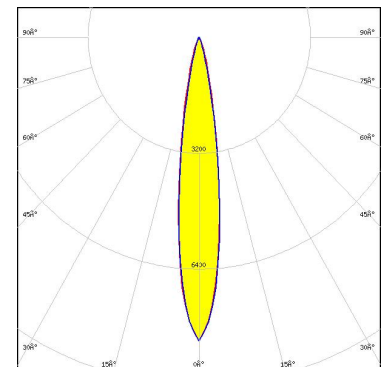
LED OSCONIQ P 3737 (3W version)
 FWHM / FWTM 29.0° / 58.0°
 Efficiency 88 %
 Peak intensity 2.5 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLO Boost HX (KW CULPM1.TG)
 FWHM / FWTM 16.0° / 32.0°
 Efficiency 90 %
 Peak intensity 8.4 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

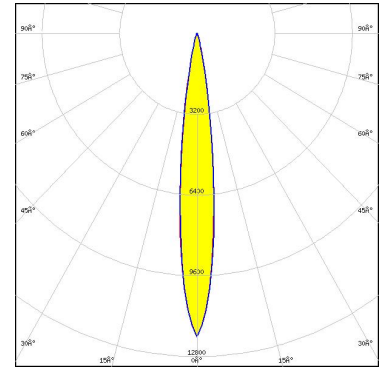


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

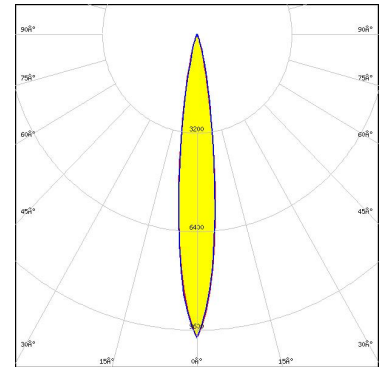
LED OSLON Pure 1414
FWHM / FWTM 14.0° / 26.0°
Efficiency 90 %
Peak intensity 12 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

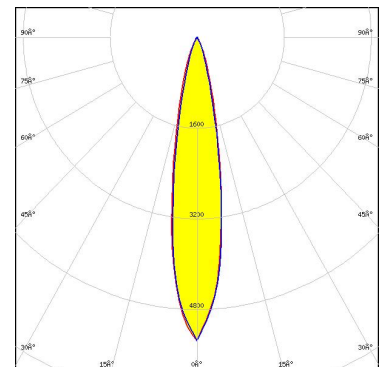
LED OSLON Signal
FWHM / FWTM 14.0° / 29.0°
Efficiency 88 %
Peak intensity 9.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 19.0° / 40.0°
Efficiency 88 %
Peak intensity 5.4 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

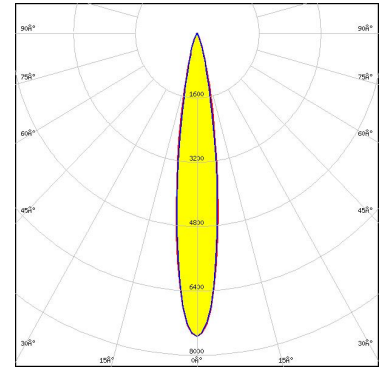


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

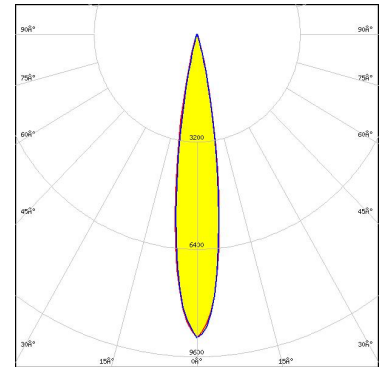
LED OSLON Square Flat
FWHM / FWTM 16.0° / 33.0°
Efficiency 89 %
Peak intensity 7.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

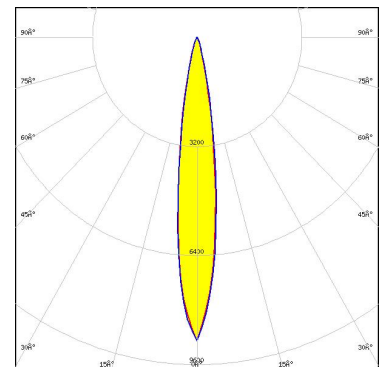
LED OSLON SSL 120
FWHM / FWTM 16.0° / 29.0°
Efficiency 90 %
Peak intensity 9 cd/lm
LEDs/each optic 1
Light colour/type Hyper Red
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON SSL 150
FWHM / FWTM 14.5° / 29.0°
Efficiency 88 %
Peak intensity 8.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

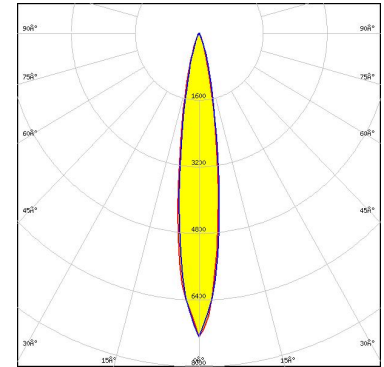


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

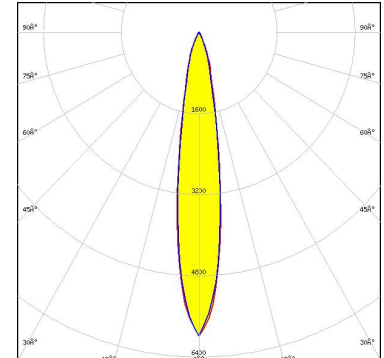
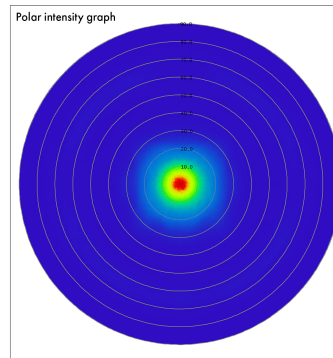
LED OSLON SSL 80
 FWHM / FWTM 15.0° / 31.0°
 Efficiency 87 %
 Peak intensity 7.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

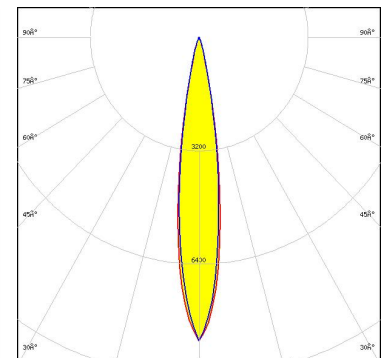
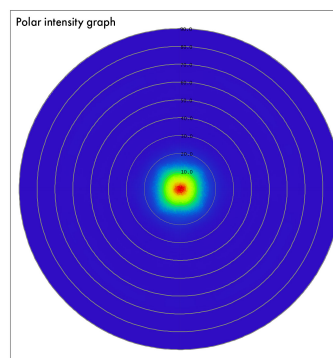
LED OSLON SSL 80
 FWHM / FWTM 17.0° / 40.0°
 Efficiency 87 %
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED SFH 4716S
 FWHM / FWTM 16.0° / 29.0°
 Efficiency 86 %
 LEDs/each optic 1
 Light colour/type IR
 Required components:

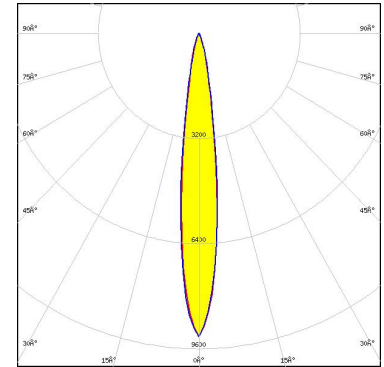
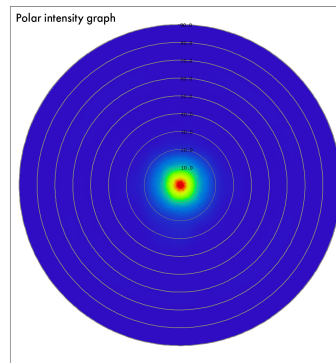


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

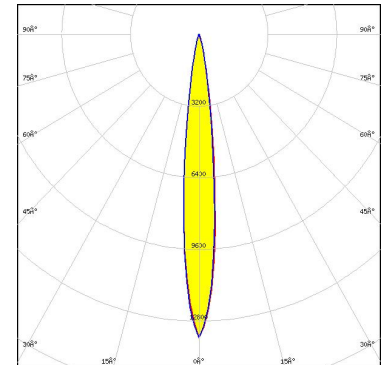
LED SFH 4770S
FWHM / FWTM 14.0° / 30.0°
Efficiency 87 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files

OSRAM
Opto Semiconductors

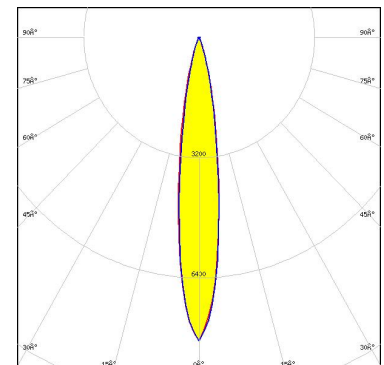
LED Synios P2720 1 mm
FWHM / FWTM 12.0° / 24.0°
Efficiency 88 %
Peak intensity 13.6 cd/lm
LEDs/each optic 1
Light colour/type Red
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED SYNIOS S2222
FWHM / FWTM 16.0° / 34.0 + 32.0°
Efficiency 97 %
Peak intensity 8.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

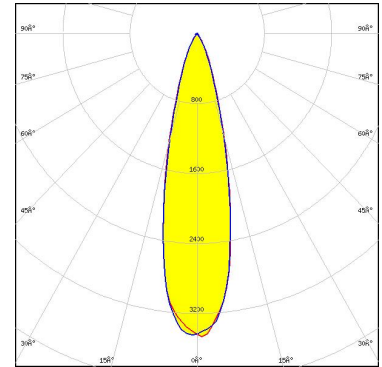


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

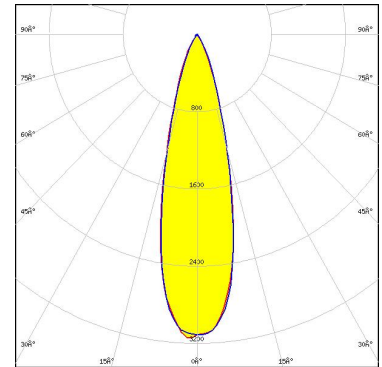
LED LH351B
FWHM / FWTM 26.0° / 49.0°
Efficiency 88 %
Peak intensity 3.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

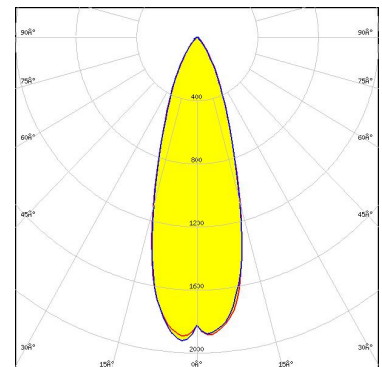
LED LH351C
FWHM / FWTM 26.0° / 51.0°
Efficiency 87 %
Peak intensity 3.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

LED LH351D
FWHM / FWTM 34.0° / 66.0°
Efficiency 85 %
Peak intensity 1.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

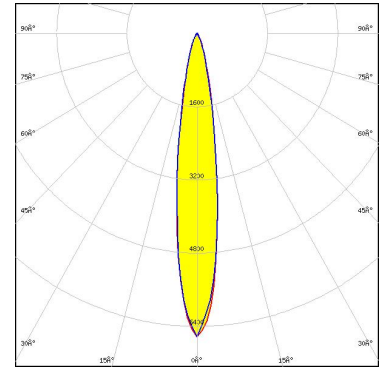


Light distribution files

OPTICAL RESULTS (SIMULATED):

SAMSUNG

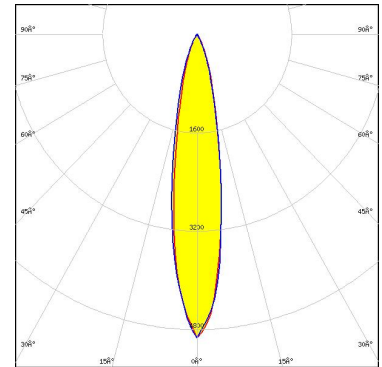
LED LM301A
FWHM / FWTM 14.5° / 33.0°
Efficiency 87 %
Peak intensity 7.1 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SAMSUNG

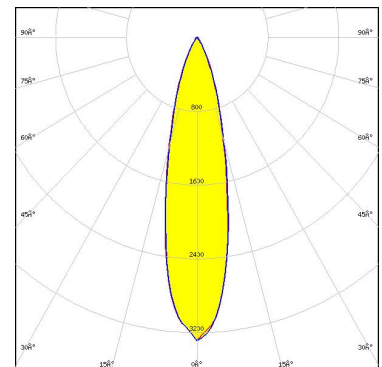
LED LM302A
FWHM / FWTM 16.0° / 40.0°
Efficiency 87 %
Peak intensity 5.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

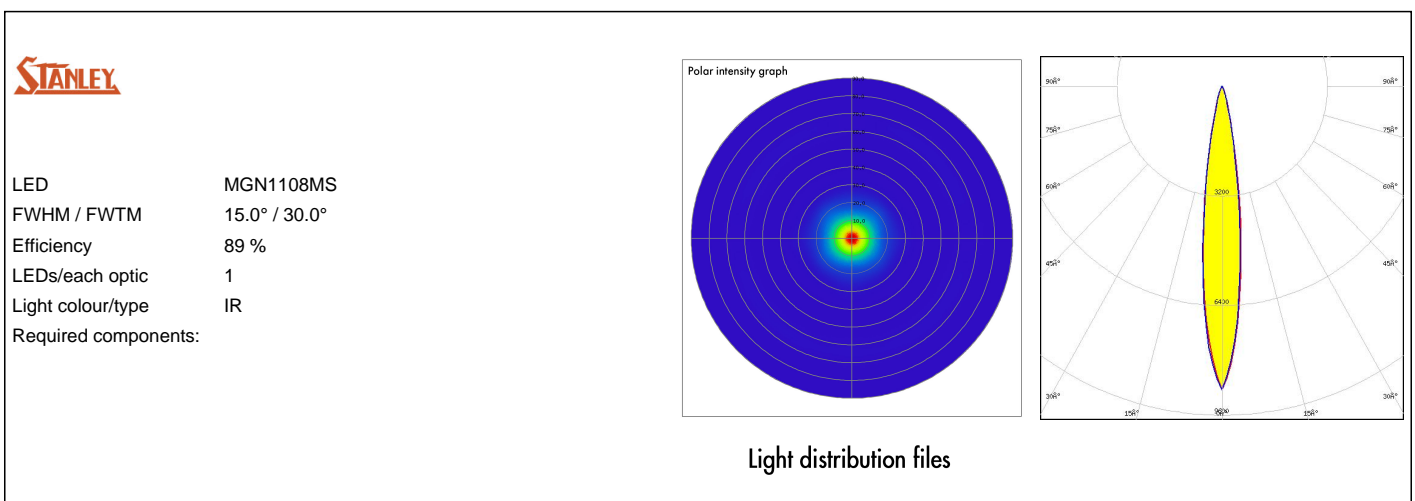
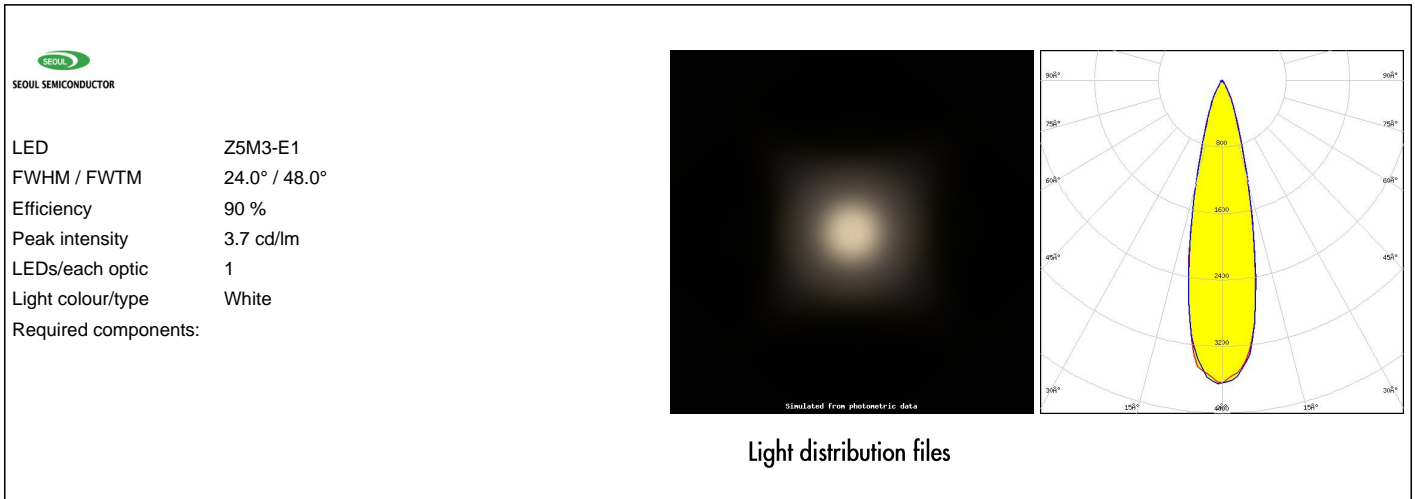


LED Z5M3
FWHM / FWTM 24.0° / 51.0°
Efficiency 86 %
Peak intensity 3.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

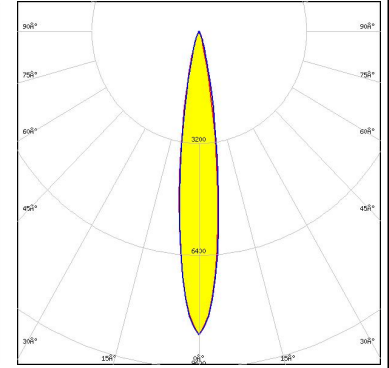
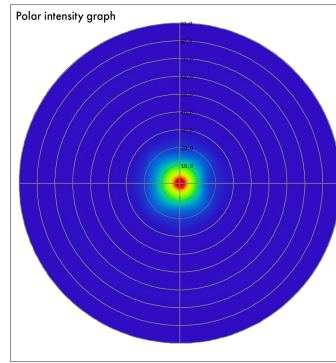
OPTICAL RESULTS (SIMULATED):



OPTICAL RESULTS (SIMULATED):



LED MJN1108MS
FWHM / FWTM 15.0° / 31.0°
Efficiency 90 %
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:

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