

TINA2-D

~16° diffused spot beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

Dimensions	Ø 16.0
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

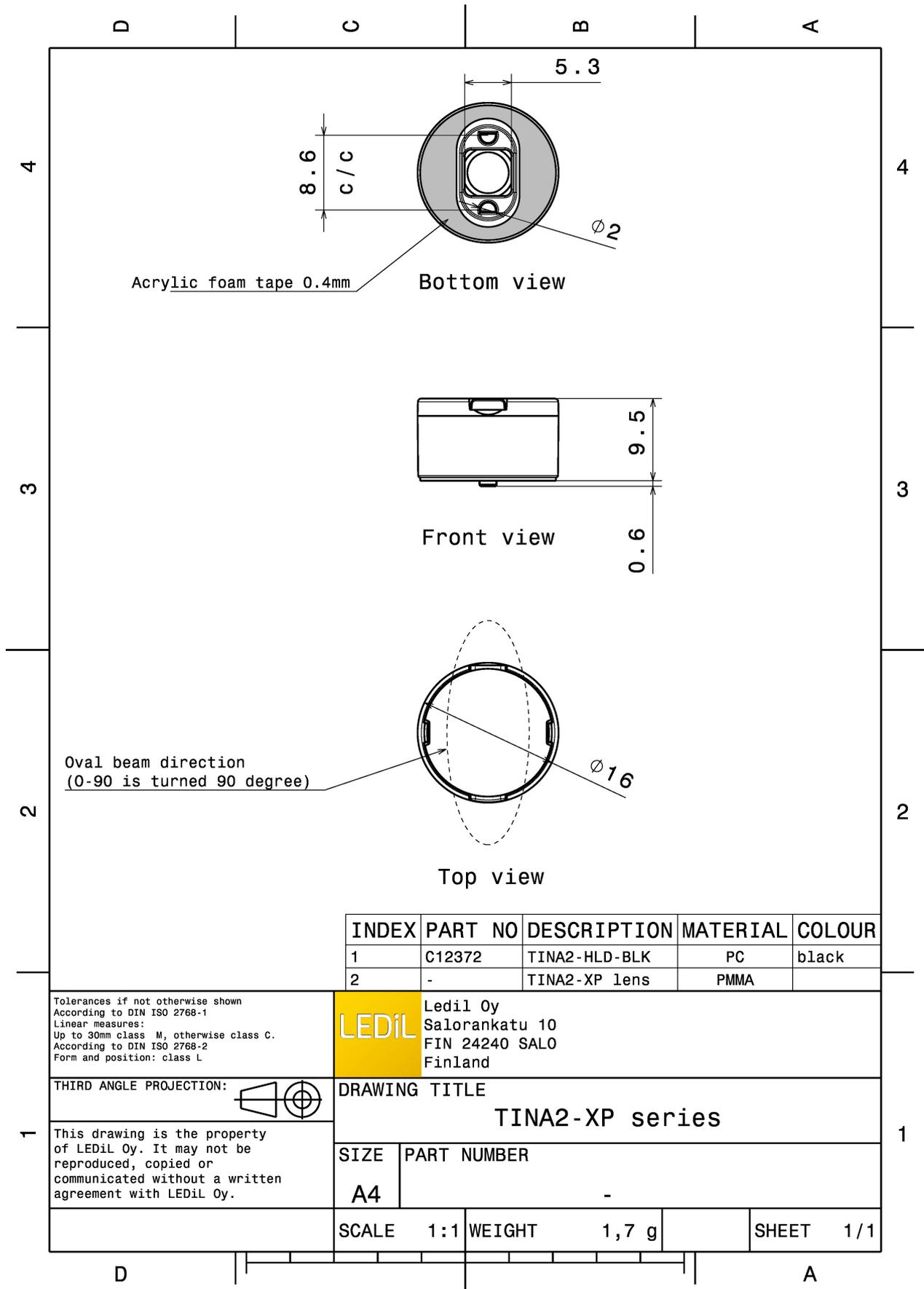


MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA2-XP-D	Single lens	PMMA	clear		
TINA2-HLD-BLK	Holder	PC	black		
TINA-TAPE3	Tape	Acrylic foam	black		

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA12375_TINA2-D » Box size: 451 x 241 x 298 mm	4140	230	230	8.1



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C12372	TINA2-HLD-BLK	PC	black
2	-	TINA2-XP lens	PMMA	

Tolerances if not otherwise shown
According to DIN ISO 2768-1
Linear measures:
Up to 30mm class M, otherwise class C.
According to DIN ISO 2768-2
Form and position: class L

LEDiL Ledil Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
TINA2-XP series

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SIZE	PART NUMBER
A4	-

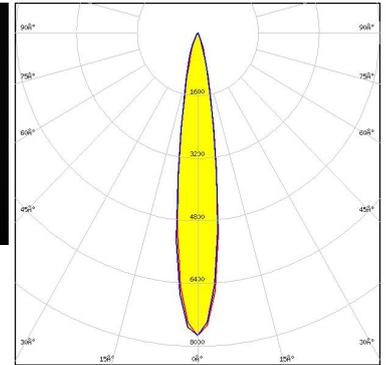
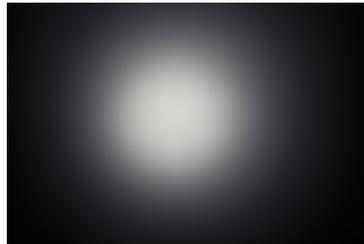
SCALE	1:1	WEIGHT	1,7 g	SHEET	1/1
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See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):



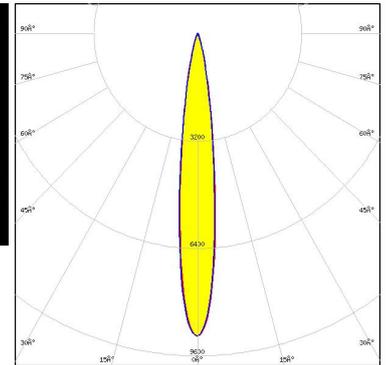
LED XB-H
FWHM / FWTM 16.0° / 34.0°
Efficiency 86 %
Peak intensity 7.7 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED XD16
FWHM / FWTM 14.0° / 29.0°
Efficiency 82 %
Peak intensity 9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON Z ES
FWHM / FWTM 12.0° / 27.0°
Efficiency %
LEDs/each optic 1
Light colour/type White
Required components:

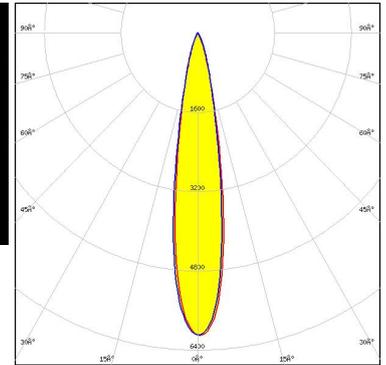


Light distribution files

OPTICAL RESULTS (MEASURED):



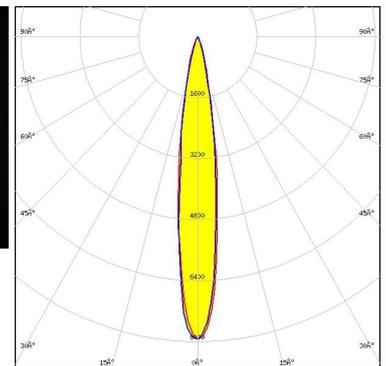
LED NVSxx19B/NVSxx19C
 FWHM / FWTM 18.0° / 36.0°
 Efficiency 87 %
 Peak intensity 6.1 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED OSLOM Square EC
 FWHM / FWTM 16.0° / 33.0°
 Efficiency 82 %
 Peak intensity 7.9 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED OSLOM Square EC
 FWHM / FWTM 16.0° / 34.0°
 Efficiency 87 %
 Peak intensity 6.2 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

Light distribution files

OPTICAL RESULTS (MEASURED):

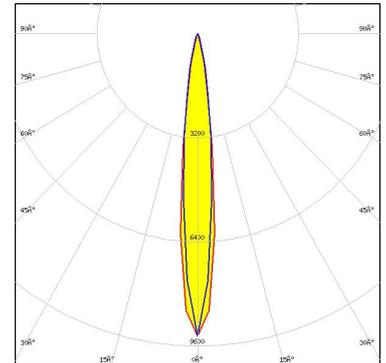
OSRAM
Opto Semiconductors

LED OSLON Square PC
FWHM / FWTM 13.0° / 32.0°
Efficiency 87 %
Peak intensity 6.3 cd/m
LEDs/each optic 1
Light colour/type White
Required components:

Light distribution files

OSRAM
Opto Semiconductors

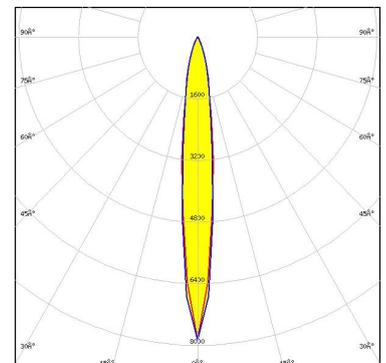
LED OSLON SSL 150
FWHM / FWTM 14.0° / 28.0°
Efficiency 89 %
Peak intensity 9.3 cd/m
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON SSL 80
FWHM / FWTM 12.0° / 35.0°
Efficiency 87 %
Peak intensity 7.9 cd/m
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED SFH 4170S
FWHM / FWTM 8.0° / 20.0°
Efficiency %
LEDs/each optic 1
Light colour/type IR
Required components:

Light distribution files

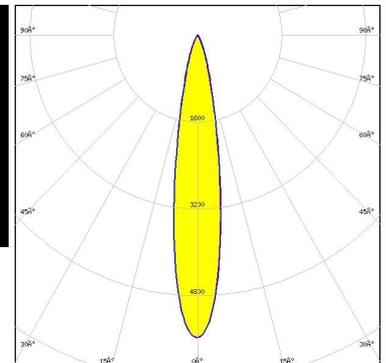
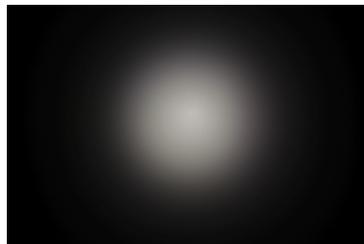
OSRAM
Opto Semiconductors

LED SFH 4180S
FWHM / FWTM 8.0° / 20.0°
Efficiency %
LEDs/each optic 1
Light colour/type IR
Required components:

Light distribution files

SEOL
SEOUL SEMICONDUCTOR

LED Z5M3
FWHM / FWTM 18.0° / 38.0°
Efficiency 86 %
Peak intensity 5.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

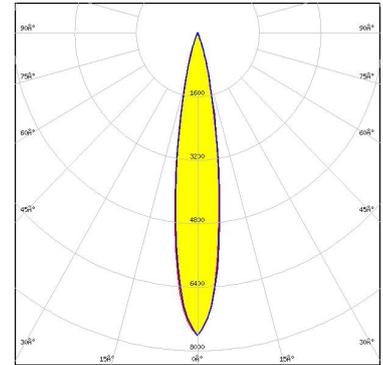


Light distribution files

OPTICAL RESULTS (SIMULATED):



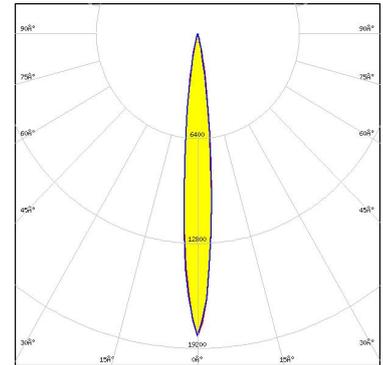
LED XB-D
FWHM / FWTM 18.0° / 34.0°
Efficiency 88 %
Peak intensity 7.6 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



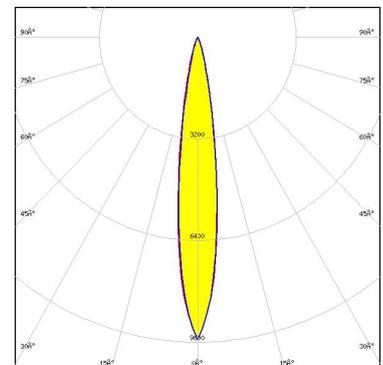
LED XQ-E HI
FWHM / FWTM 11.0° / 23.0°
Efficiency 91 %
Peak intensity 18.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files



LED LUXEON 2835 Line
FWHM / FWTM 15.0° / 31.0°
Efficiency 96 %
Peak intensity 9.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

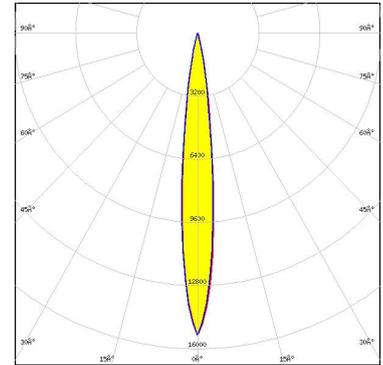


Light distribution files

OPTICAL RESULTS (SIMULATED):



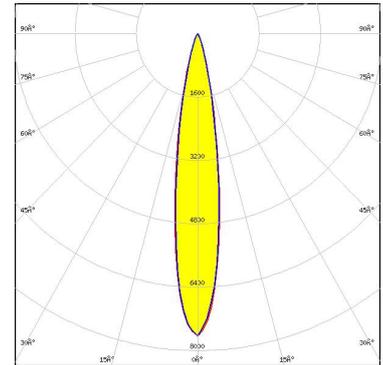
LED LUXEON Z ES
 FWHM / FWTM 12.0° / 24.0°
 Efficiency 92 %
 Peak intensity 15.3 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



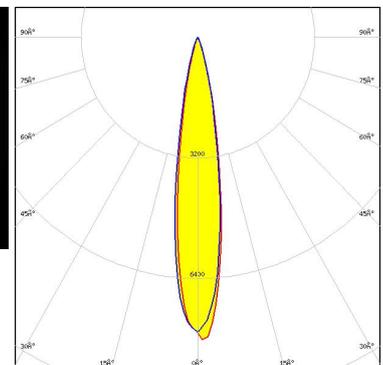
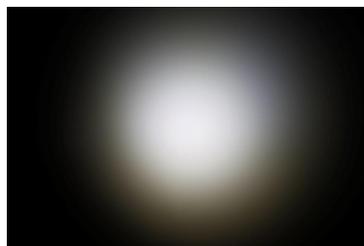
LED Duris E 2835
 FWHM / FWTM 17.0° / 34.0°
 Efficiency 92 %
 Peak intensity 7.6 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:



Light distribution files



LED Duris S5 (2 chip)
 FWHM / FWTM 17.0° / 33.0°
 Efficiency 92 %
 Peak intensity 8 cd/lm
 LEDs/each optic 1
 Light colour/type White
 Required components:

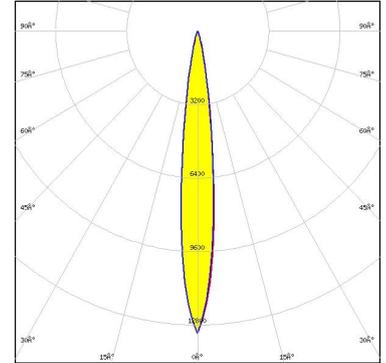


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

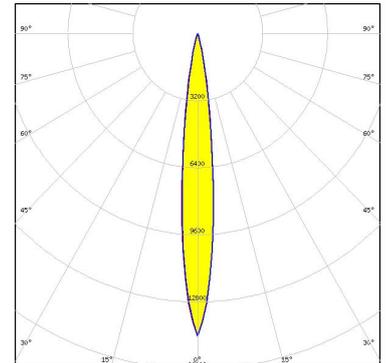
LED OSCONIQ P 3030
FWHM / FWTM 12.0° / 26.0°
Efficiency 91 %
Peak intensity 13.2 cd/lm
LEDs/each optic 1
Light colour/type Blue
Required components:



Light distribution files

OSRAM
Opto Semiconductors

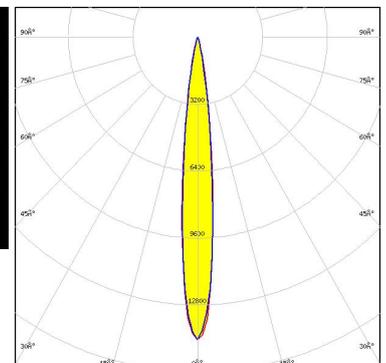
LED OSLON Signal
FWHM / FWTM 12.0° / 26.0°
Efficiency 92 %
Peak intensity 14.4 cd/lm
LEDs/each optic 1
Light colour/type Blue
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSLON Square Flat
FWHM / FWTM 12.0° / 24.0°
Efficiency 91 %
Peak intensity 14.5 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

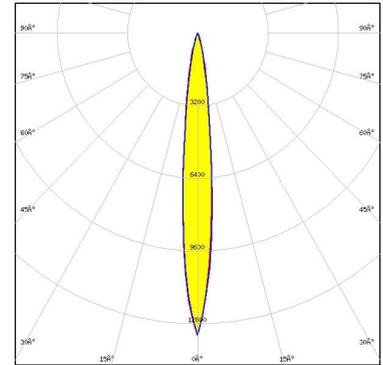


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

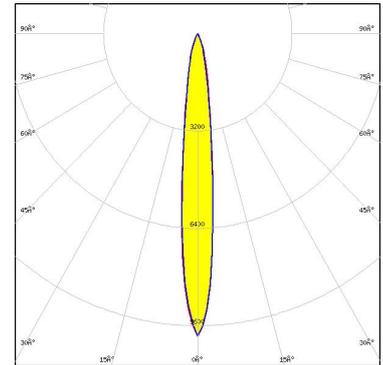
LED OSLON SSL 80
FWHM / FWTM 12.0° / 26.0°
Efficiency 91 %
Peak intensity 13.3 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

OSRAM
Opto Semiconductors

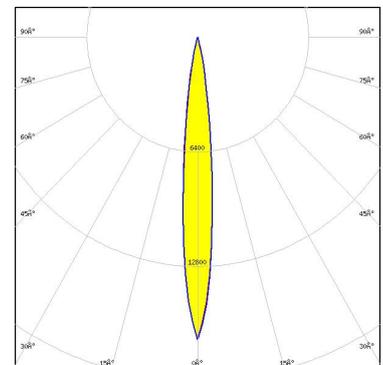
LED OSLON SSL 80
FWHM / FWTM 12.0° / 31.0°
Efficiency 90 %
Peak intensity 9.9 cd/lm
LEDs/each optic 1
Light colour/type Far Red
Required components:



Light distribution files

OSRAM
Opto Semiconductors

LED OSTAR Projection Compact (KW.CSLNM1.TG)
FWHM / FWTM 12.0° / 24.0°
Efficiency 92 %
Peak intensity 16.9 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:

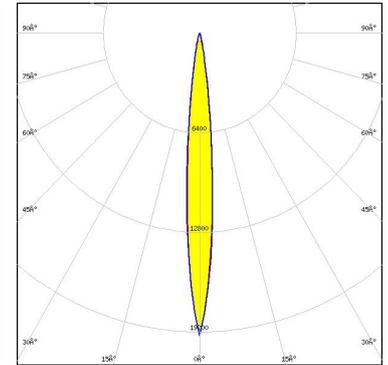
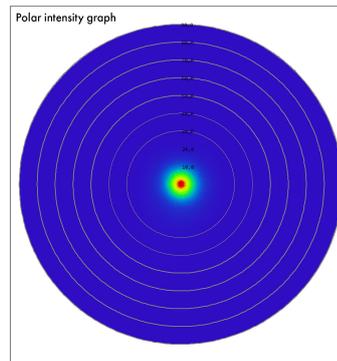


Light distribution files

OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

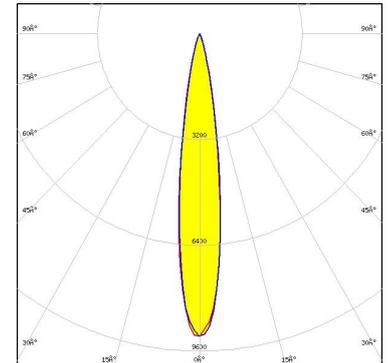
LED SFH 4770S
FWHM / FWTM 10.0° / 22.0°
Efficiency 91 %
LEDs/each optic 1
Light colour/type IR
Required components:



Light distribution files

SAMSUNG

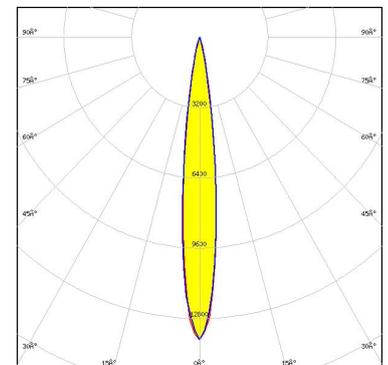
LED LH181B
FWHM / FWTM 16.0° / 30.5°
Efficiency 92 %
Peak intensity 9.2 cd/lm
LEDs/each optic 1
Light colour/type White
Required components:



Light distribution files

SEUL
SEOUL SEMICONDUCTOR

LED Z8Y15
FWHM / FWTM 13.0° / 25.0°
Efficiency 90 %
Peak intensity 13.8 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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