

TINA2-RS

~14° spot beam. Assembly with holder, installation tape and location pins.

SPECIFICATION:

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

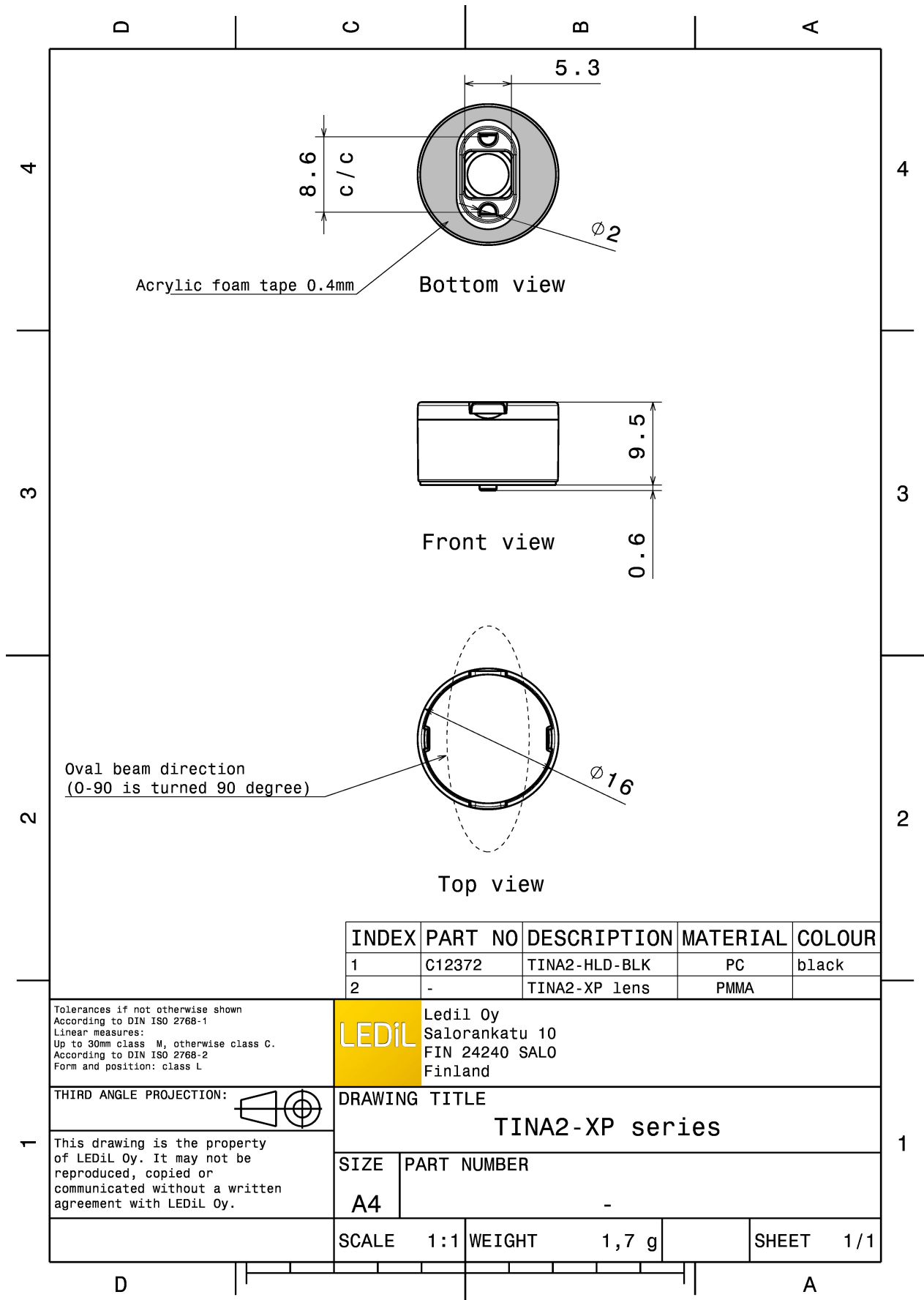


MATERIALS:

Component	Type	Material	Colour	Finish
TINA2-RS	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)
CA12374_TINA2-RS	Single lens	4140	230	230	8.3
» Box size: 451 x 241 x 298 mm					



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	-

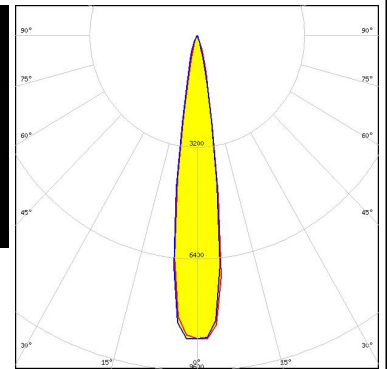
SCALE	1:1	WEIGHT	1,7 g	SHEET	1/1
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See also our general installation guide: www.ledil.com/installation_guide

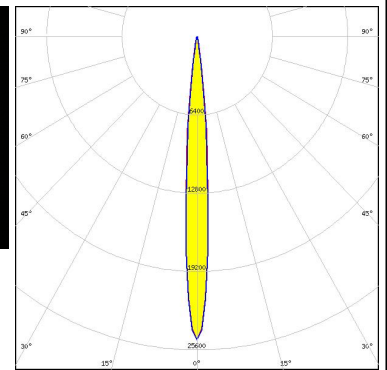
OPTICAL RESULTS (MEASURED):



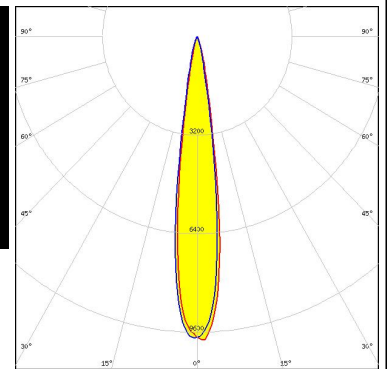
LED XB-H
 FWHM / FWTM 17.0° / 30.0°
 Efficiency 86 %
 Peak intensity 8.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



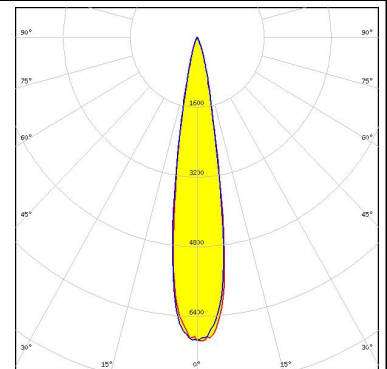
LED XQ-E HI
 FWHM / FWTM 9.0° / 19.0°
 Efficiency 81 %
 Peak intensity 25 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:




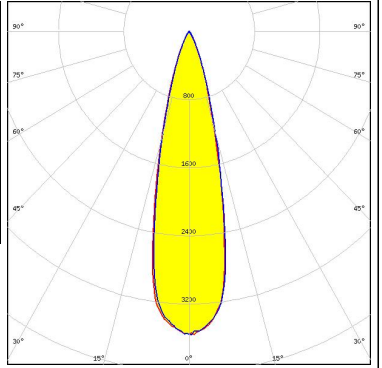
LED LUXEON TX
 FWHM / FWTM 15.0° / 27.0°
 Efficiency 89 %
 Peak intensity 9.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED NVSxx19B/NVSxx19C
 FWHM / FWTM 18.0° / 32.0°
 Efficiency 88 %
 Peak intensity 7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NWSx229A FWHM / FWTM 25.0° / 47.0° Efficiency 86 % Peak intensity 3.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLOM Square EC FWHM / FWTM 13.0° / 26.0° Efficiency 88 % Peak intensity 9.3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLOM Square PC FWHM / FWTM 12.0° / 25.0° Efficiency 88 % Peak intensity 9.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLOM SSL 80 FWHM / FWTM 10.0° / 24.0° Efficiency 88 % Peak intensity 16 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

OPTICAL RESULTS (MEASURED):

OSRAM Opto Semiconductors

LED SFH 4180S
FWHM / FWTM 6.0° / 16.0°
Efficiency %
LEDs/each optic 1
Light colour IR
Required components:

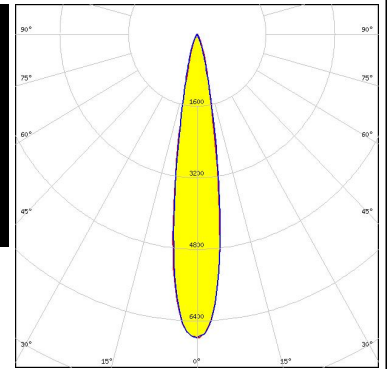
OSRAM Opto Semiconductors

LED SFH 4716S
FWHM / FWTM 11.0° / 22.0°
Efficiency %
LEDs/each optic 1
Light colour White
Required components:



SEOUL SEMICONDUCTOR

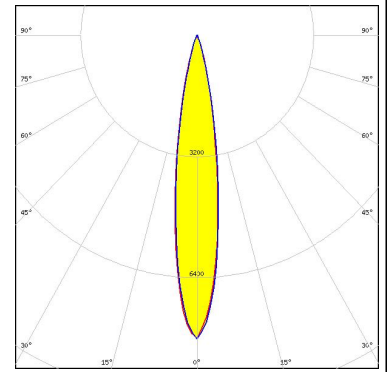
LED Z5M3
FWHM / FWTM 17.0° / 34.0°
Efficiency 87 %
Peak intensity 6.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



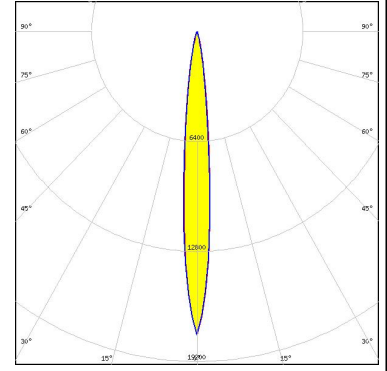
OPTICAL RESULTS (SIMULATED):



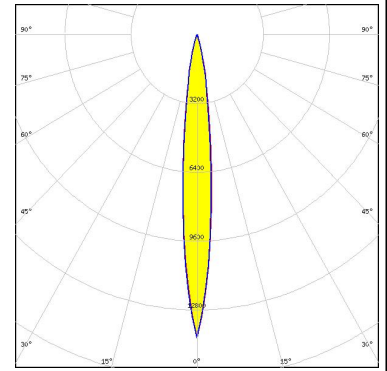
LED XB-D
 FWHM / FWTM 17.0° / 33.0°
 Efficiency 88 %
 Peak intensity 8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



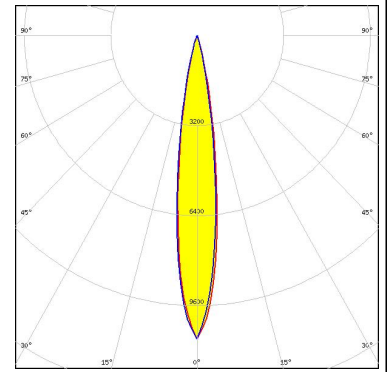
LED XE-G
 FWHM / FWTM 10.0° / 23.0°
 Efficiency 91 %
 Peak intensity 17.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



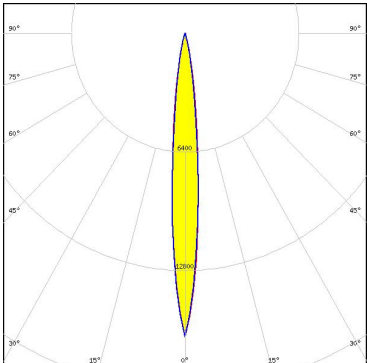
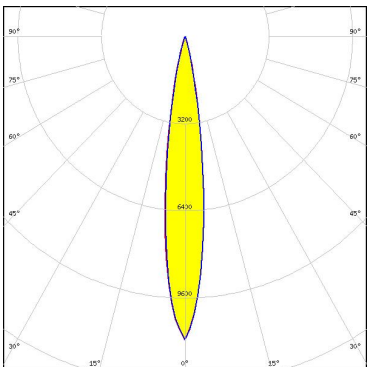
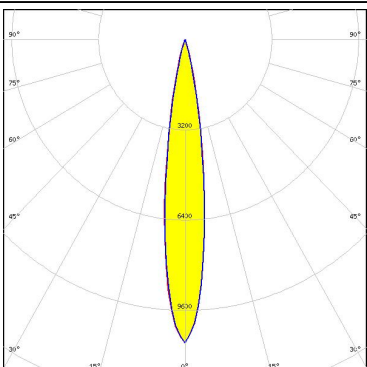
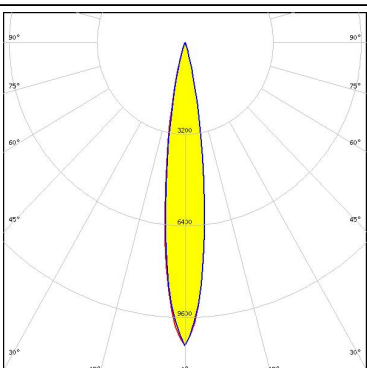
LED LUXEON C
 FWHM / FWTM 11.0° / 26.0°
 Efficiency 92 %
 Peak intensity 14 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



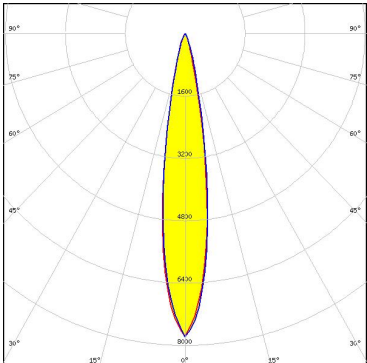
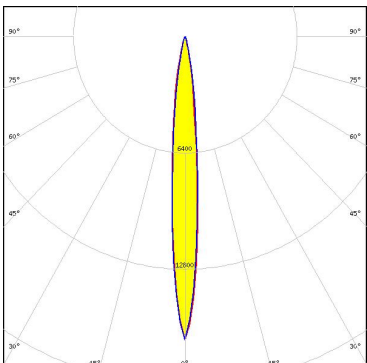
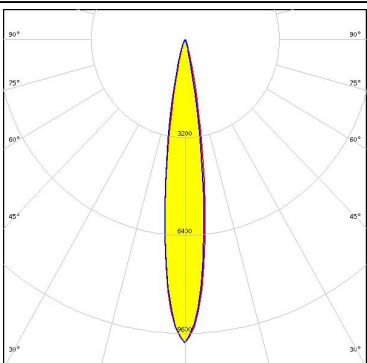
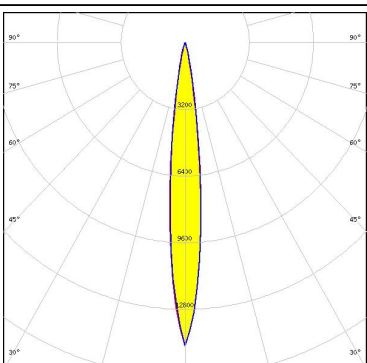
LED LUXEON CZ
 FWHM / FWTM 15.0° / 29.0°
 Efficiency 92 %
 Peak intensity 10.8 cd/lm
 LEDs/each optic 1
 Light colour Red
 Required components:



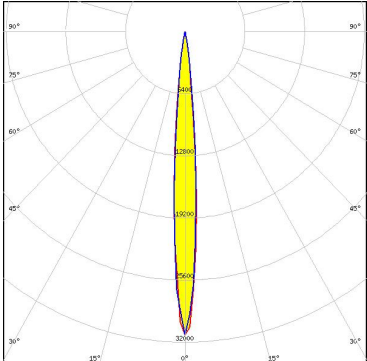
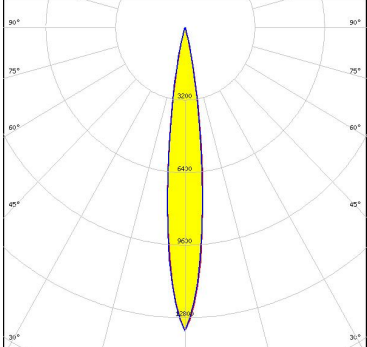
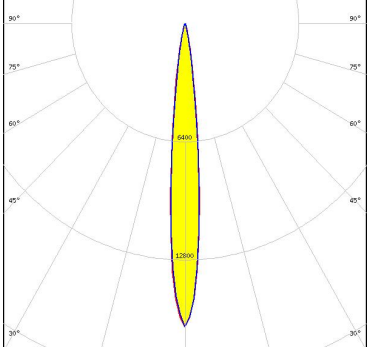

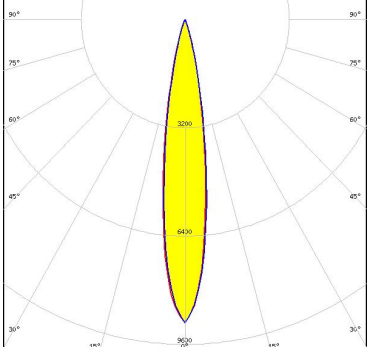
OPTICAL RESULTS (SIMULATED):

<p>LUMILEDS</p> <p>LED: LUXEON IR Compact FWHM / FWTM: 10.0° / 22.0° Efficiency: 87 % LEDs/each optic: 1 Light colour: IR Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON Rubix FWHM / FWTM: 15.0° / 29.0° Efficiency: 92 % Peak intensity: 11.1 cd/lm LEDs/each optic: 1 Light colour: Red Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON Rubix FWHM / FWTM: 16.0° / 29.0° Efficiency: 92 % Peak intensity: 10.8 cd/lm LEDs/each optic: 1 Light colour: Blue Required components:</p>	
<p>LUMILEDS</p> <p>LED: LUXEON Rubix FWHM / FWTM: 16.0° / 30.0° Efficiency: 92 % Peak intensity: 10.6 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED NF2W757H FWHM / FWTM 18.0° / 32.0° Efficiency 92 % Peak intensity 7.8 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>NICHIA</p> <p>LED NFSx757G FWHM / FWTM 10.0° / 24.0° Efficiency 93 % Peak intensity 16.7 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED Duris S5 (2 chip) FWHM / FWTM 15.0° / 29.0° Efficiency 92 % Peak intensity 9.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSCONIQ P 3030 FWHM / FWTM 12.0° / 24.0° Efficiency 91 % Peak intensity 16 cd/lm LEDs/each optic 1 Light colour Blue Required components:</p>	

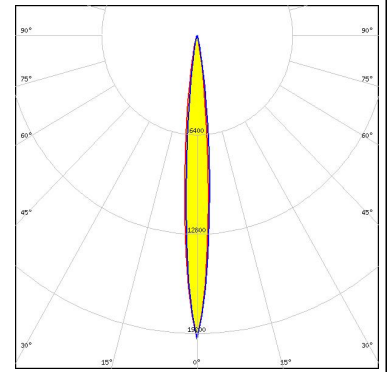
OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Black Flat (LUW HWQP)</p> <p>FWHM / FWTM 8.6° / 17.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 32.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Black Flat (LUW HWQP)</p> <p>FWHM / FWTM 14.0° / 26.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 13.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square Flat</p> <p>FWHM / FWTM 11.0° / 23.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 16.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	 
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON SSL 150</p> <p>FWHM / FWTM 17.0° / 32.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

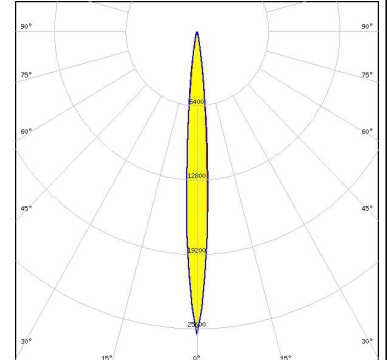
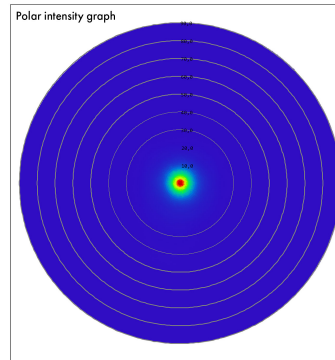
OSRAM
Opto Semiconductors

LED SFH 4170S
FWHM / FWTM 10.0° / 21.0°
Efficiency 81 %
LEDs/each optic 1
Light colour IR
Required components:



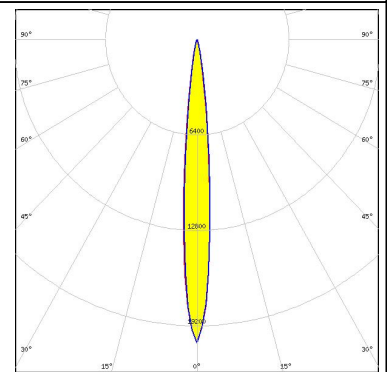
OSRAM
Opto Semiconductors

LED SFH 4770S
FWHM / FWTM 9.0° / 19.0°
Efficiency 83 %
LEDs/each optic 1
Light colour IR
Required components:



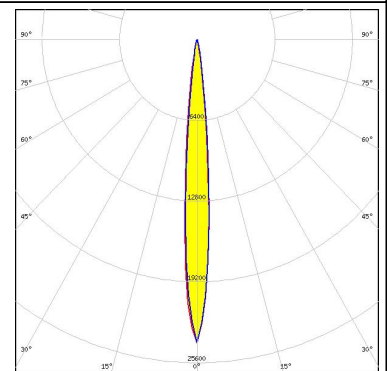
OSRAM
Opto Semiconductors

LED Synios P2720 1 mm
FWHM / FWTM 10.0° / 20.0°
Efficiency 92 %
Peak intensity 20.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM
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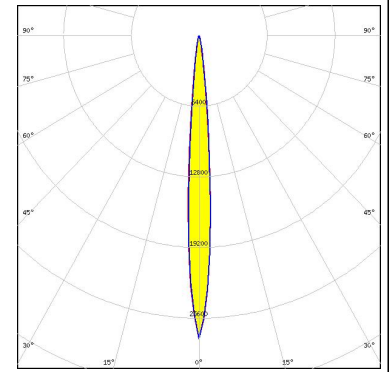
LED Synios P2720 1/2 mm
FWHM / FWTM 9.0° / 18.0°
Efficiency 92 %
Peak intensity 24 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED	Synios P2720 1/4 mm
FWHM / FWTM	8.0° / 17.0°
Efficiency	92 %
Peak intensity	27.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



GENERAL INFORMATION:

NOTE: The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value.

MATERIALS:

As part of our continuous research and improvement processes, and to ensure the best possible quality and availability of our products, LEDiL reserves the right to change material grades without notice.

PRODUCT DATA USER AGREEMENT AND DISCLAIMER:

The measured data in the provided downloadable LEDiL Product Datasheets and Mechanical 2D-Drawings is rounded and provided as reference for planning. LEDiL Oy's optical specifications have been verified by conducting performance testing of the products in accordance with the company's quality system. The reported data are averaged results of multiple measurements with typical variation. LEDiL Oy reserves the right to without prior notification make changes and improvements to its products.

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