

LISA3-WW-PIN

~45° wide beam with location pin installation

SPECIFICATION:

Dimensions	Ø 9.9 mm
Height	7 mm
Fastening	pin
ROHS compliant	yes ⓘ

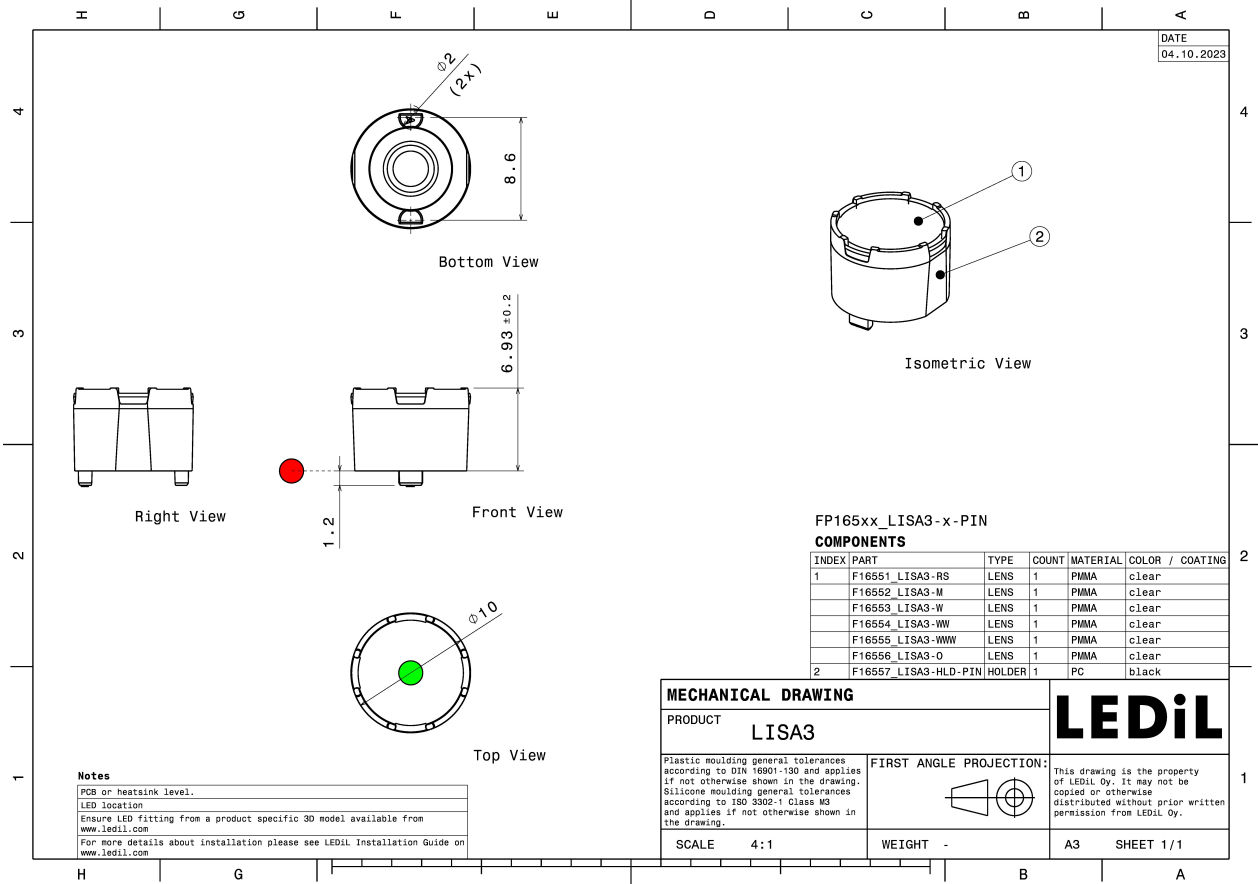
MATERIALS:

Component	Type	Material	Colour	Finish
LISA3-WW	Single lens	PMMA	clear	
LISA3-HLD-PIN	Holder	PC	black	

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP16561_LISA3-WW-PIN	Single lens	2000	300	100	1.4
» Box size: 310 x 230 x 60 mm					



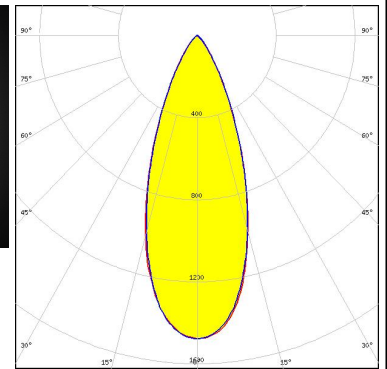
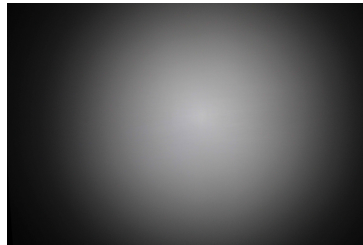


See also our general installation guide: www.ledil.com/installation_guide

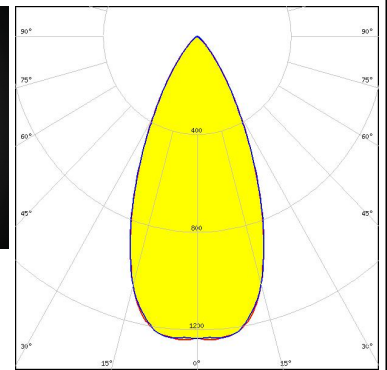
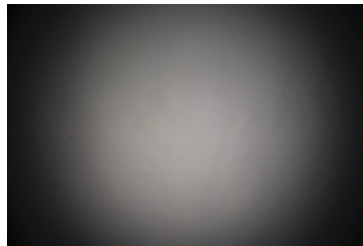
OPTICAL RESULTS (MEASURED):



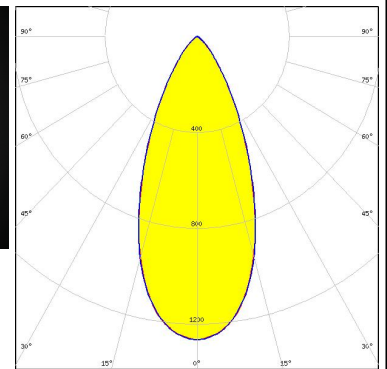
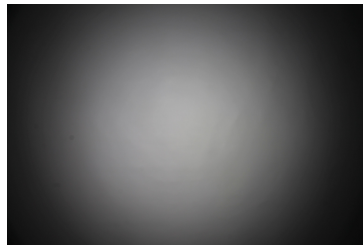
LED XD16
 FWHM / FWTM 39.0° / 69.0°
 Efficiency 75 %
 Peak intensity 1.5 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



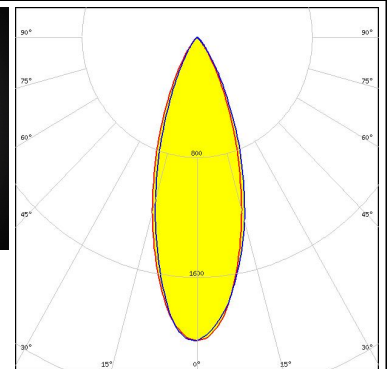
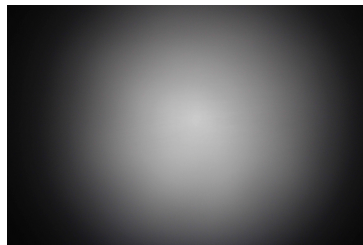
LED XP-E2
 FWHM / FWTM 46.0° / 79.0°
 Efficiency 88 %
 Peak intensity 1.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:




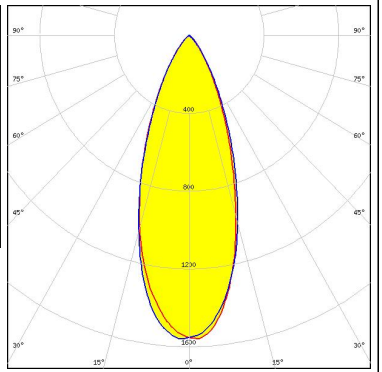

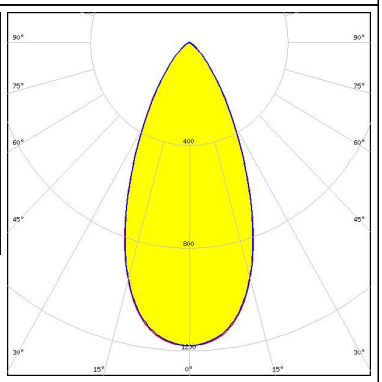

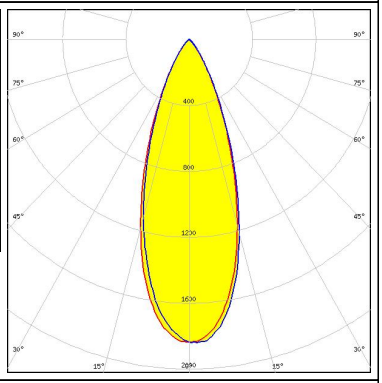

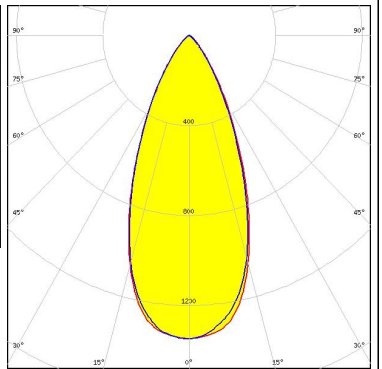
LED XP-G3
 FWHM / FWTM 44.0° / 79.0°
 Efficiency 83 %
 Peak intensity 1.3 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON CZ
 FWHM / FWTM 35.0° / 65.0°
 Efficiency 88 %
 Peak intensity 2 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



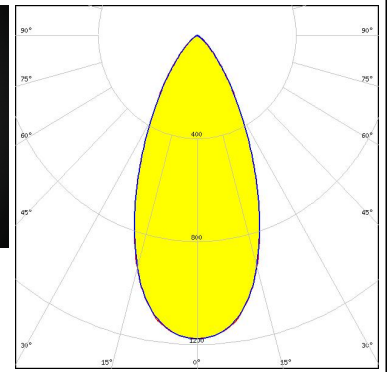
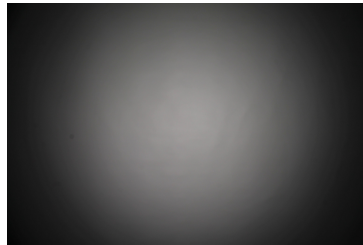
OPTICAL RESULTS (MEASURED):

<p>NICHIA</p> <p>LED NF2x757G FWHM / FWTM 38.0° / 71.0° Efficiency 79 % Peak intensity 1.6 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSW219F FWHM / FWTM 48.0° / 84.0° Efficiency 87 % Peak intensity 1.2 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSCONIQ C 2424 FWHM / FWTM 37.0° / 67.0° Efficiency 86 % Peak intensity 1.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM <small>Opto Semiconductors</small></p> <p>LED OSLON Square CSSRM2/CSSRM3 FWHM / FWTM 45.0° / 77.0° Efficiency 87 % Peak intensity 1.4 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

OPTICAL RESULTS (MEASURED):

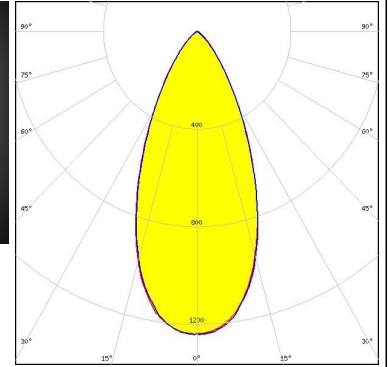
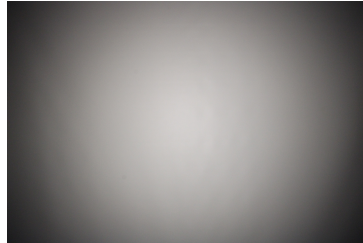
SAMSUNG

LED LH351C
 FWHM / FWTM 47.0° / 83.0°
 Efficiency 87 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:


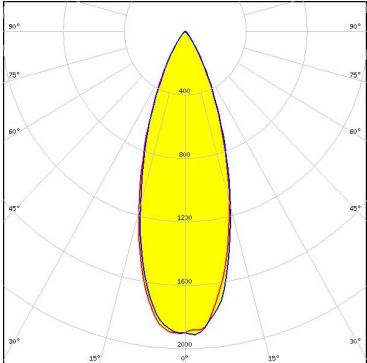

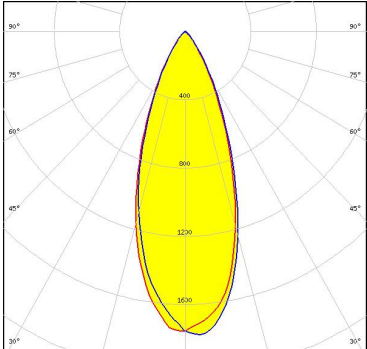

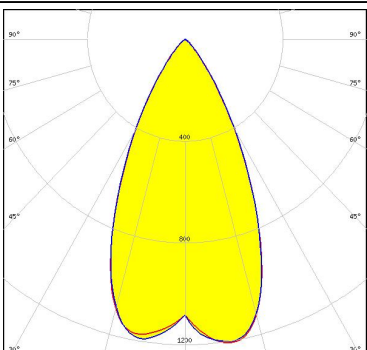

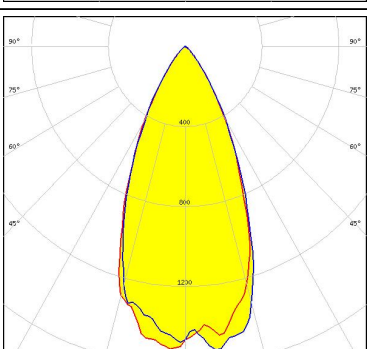


SEOUL SEMICONDUCTOR

LED Z5M4
 FWHM / FWTM 46.0° / 81.0°
 Efficiency 86 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



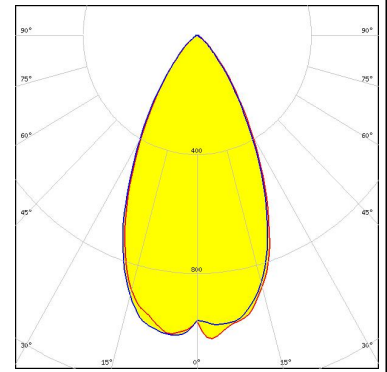
OPTICAL RESULTS (SIMULATED):

<p> LED CSP 2323 (BXCP)</p> <p>FWHM / FWTM 35.0° / 64.0°</p> <p>Efficiency 81 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p> LED J Series 2835</p> <p>FWHM / FWTM 38.0° / 69.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p> LED XP-E</p> <p>FWHM / FWTM 51.0° / 79.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 1.2 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	
<p> LED XP-G2</p> <p>FWHM / FWTM 49.0° / 78.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.9 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

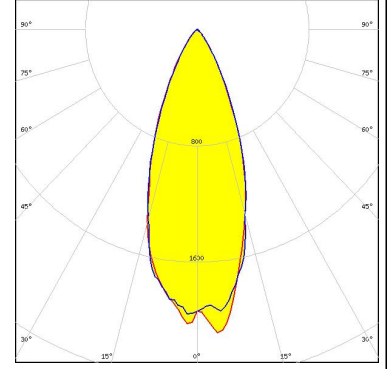
OPTICAL RESULTS (SIMULATED):



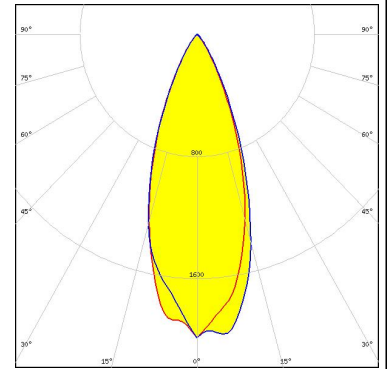
LED XP-G2 HE
 FWHM / FWTM 53.0° / 87.0°
 Efficiency 86 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



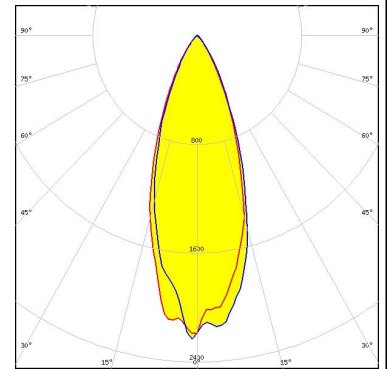
LED XT-E
 FWHM / FWTM 44.0° / 73.0°
 Efficiency 87 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON 3014
 FWHM / FWTM 38.0° / 65.0°
 Efficiency 90 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



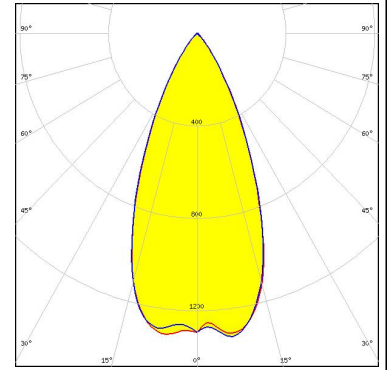
LED LUXEON 3030 2D (Round LES)
 FWHM / FWTM 37.0° / 65.0°
 Efficiency 86 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

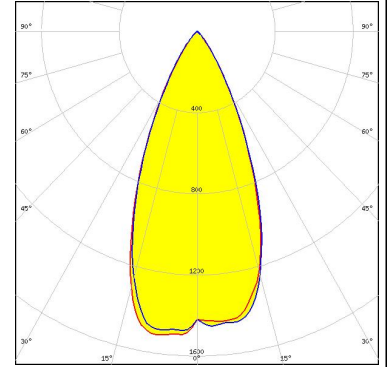
LUMILEDS

LED LUXEON C
 FWHM / FWTM 46.0° / 73.0°
 Efficiency 83 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



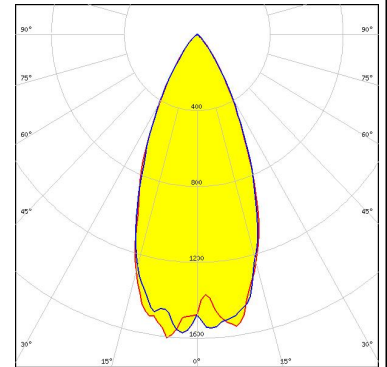
LUMILEDS

LED LUXEON Rubix
 FWHM / FWTM 46.0° / 72.0°
 Efficiency 91 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



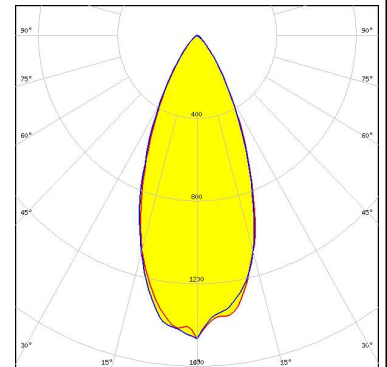
LUMILEDS

LED LUXEON TX
 FWHM / FWTM 45.0° / 74.0°
 Efficiency 87 %
 Peak intensity 1.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LUMILEDS

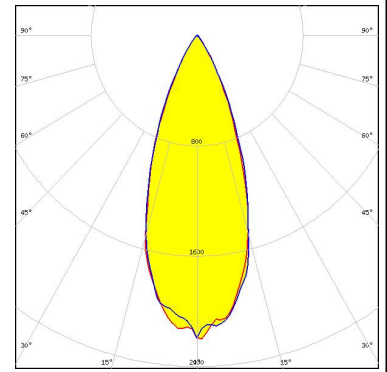
LED LUXEON V2
 FWHM / FWTM 44.0° / 76.0°
 Efficiency 89 %
 Peak intensity 1.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

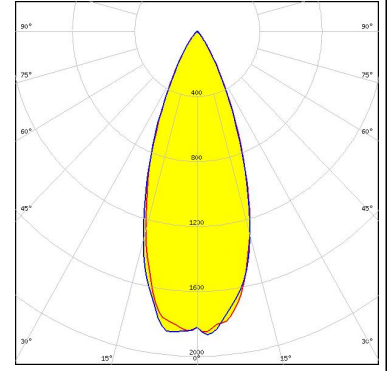
LUMILEDS

LED LUXEON Z
 FWHM / FWTM 38.5° / 63.0°
 Efficiency 89 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



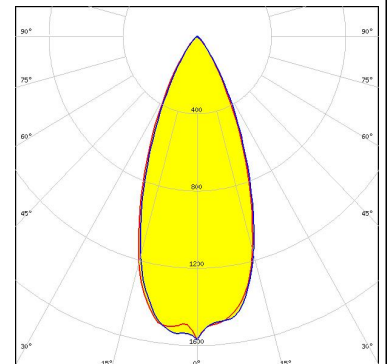
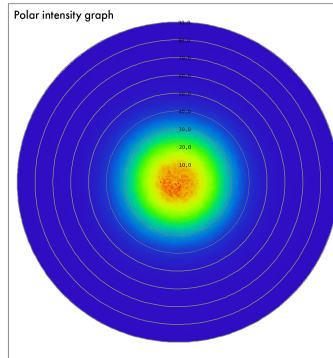
LUMILEDS

LED LUXEON Z ES
 FWHM / FWTM 40.0° / 66.0°
 Efficiency 90 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



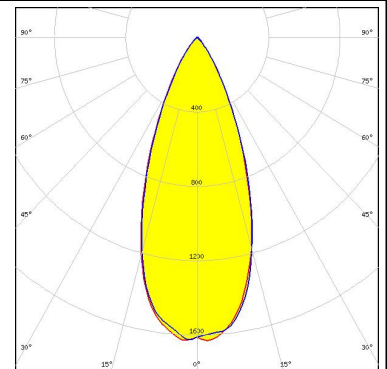
LUMINUS

LED SST-10-B130
 FWHM / FWTM 42.0° / 70.0°
 Efficiency 88 %
 LEDs/each optic 1
 Light colour White
 Required components:

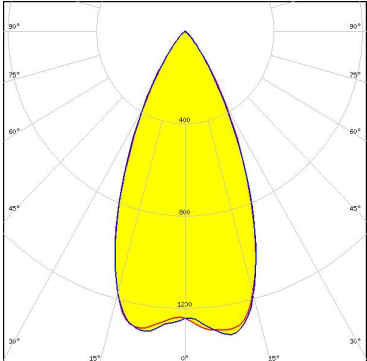
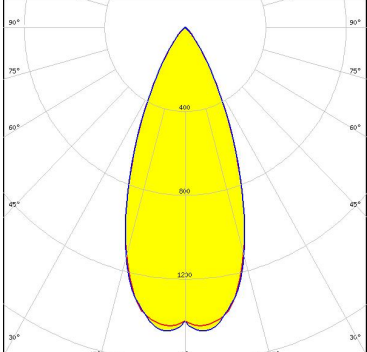
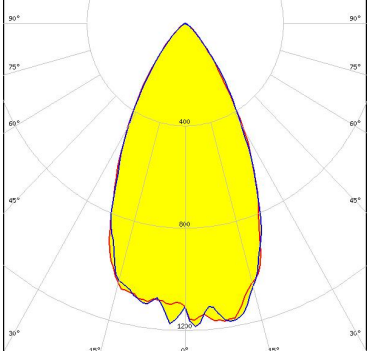
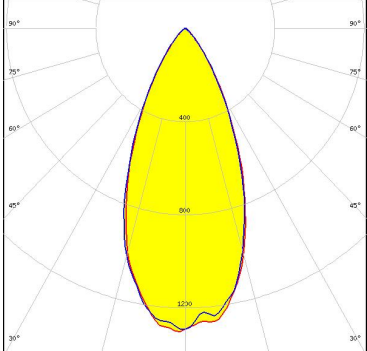


LUMINUS

LED SST-20
 FWHM / FWTM 41.0° / 70.0°
 Efficiency 88 %
 Peak intensity 1.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

<p>NICHIA</p> <p>LED: NCSU276C FWHM / FWTM: 49.0° / 77.0° Efficiency: 91 % LEDs/each optic: 1 Light colour: UV-A Required components:</p>	
<p>NICHIA</p> <p>LED: NCSxx19B FWHM / FWTM: 44.0° / 72.0° Efficiency: 84 % Peak intensity: 1.5 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NVSW219D FWHM / FWTM: 50.0° / 80.0° Efficiency: 86 % Peak intensity: 1.1 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	
<p>NICHIA</p> <p>LED: NVSxx19B/NVSxx19C FWHM / FWTM: 45.0° / 78.0° Efficiency: 85 % Peak intensity: 1.3 cd/lm LEDs/each optic: 1 Light colour: White Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED Duris S5 (2 chip)</p> <p>FWHM / FWTM 36.0° / 66.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.9 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 Duris S5 (Single chip)</p> <p>FWHM / FWTM 37.0° / 64.0°</p> <p>Efficiency 86 %</p> <p>Peak intensity 1.9 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 OSCONIQ P 3030</p> <p>FWHM / FWTM 38.0° / 66.0°</p> <p>Efficiency 87 %</p> <p>Peak intensity 1.9 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 OSLO Black</p> <p>FWHM / FWTM 33.0° / 60.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Black Flat (LUW HWQP)</p> <p>FWHM / FWTM 36.0° / 64.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 2.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour Red</p> <p>Required components:</p>	
<p>OSRAM Opto Semiconductors</p> <p>LED OSLON Square EC</p> <p>FWHM / FWTM 44.0° / 75.0°</p> <p>Efficiency 88 %</p> <p>Peak intensity 1.4 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 39.0° / 67.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 1.8 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 45.0° / 73.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1.4 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>	

OPTICAL RESULTS (SIMULATED):

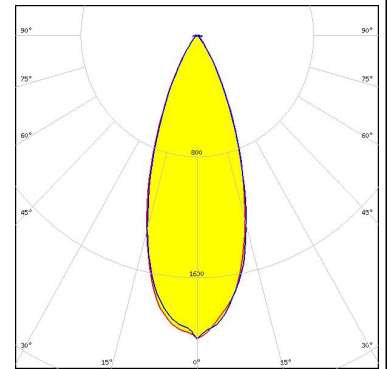
OSRAM <small>Opto Semiconductors</small>	LED SFH 4715AS FWHM / FWTM 30.0° / 57.0° Efficiency 89 % LEDs/each optic 1 Light colour IR Required components:		
OSRAM <small>Opto Semiconductors</small>	LED SFH 4715S FWHM / FWTM 31.0° / 58.0° Efficiency 89 % LEDs/each optic 1 Light colour IR Required components:	Polar intensity graph 	
OSRAM <small>Opto Semiconductors</small>	LED SFH 4716S FWHM / FWTM 38.0° / 65.0° Efficiency 87 % LEDs/each optic 1 Light colour IR Required components:	Polar intensity graph 	
OSRAM <small>Opto Semiconductors</small>	LED Synios P2720 1 mm FWHM / FWTM 37.0° / 64.0° Efficiency 90 % Peak intensity 2 cd/lm LEDs/each optic 1 Light colour Red Required components:		

OPTICAL RESULTS (SIMULATED):

OSRAM

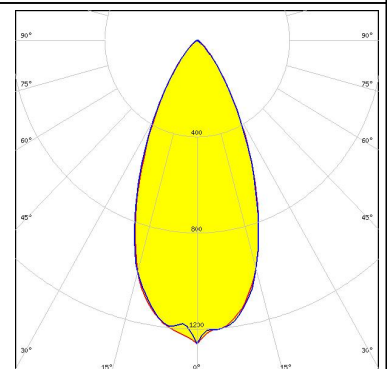
Opto Semiconductors

LED SYNIOS S2222
 FWHM / FWTM 37.0° + 38.0° / 66.0°
 Efficiency 97 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



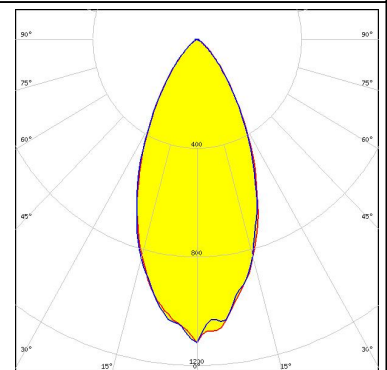
SAMSUNG

LED LH351B
 FWHM / FWTM 47.0° / 80.0°
 Efficiency 88 %
 Peak intensity 1.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



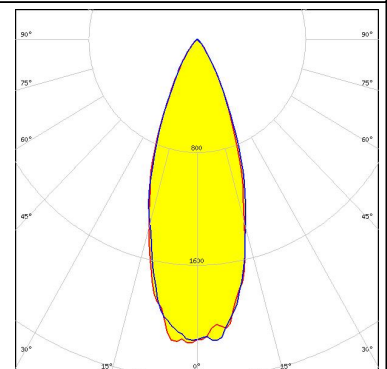
SAMSUNG

LED LH351D
 FWHM / FWTM 47.0° / 86.0°
 Efficiency 84 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

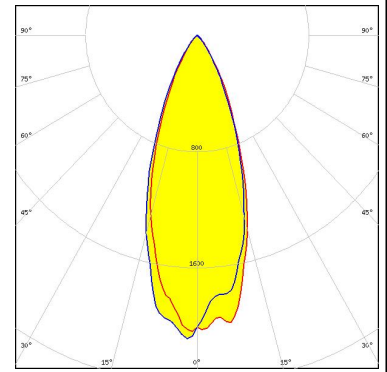
LED LM301A
 FWHM / FWTM 36.0° / 76.0°
 Efficiency 88 %
 Peak intensity 2 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

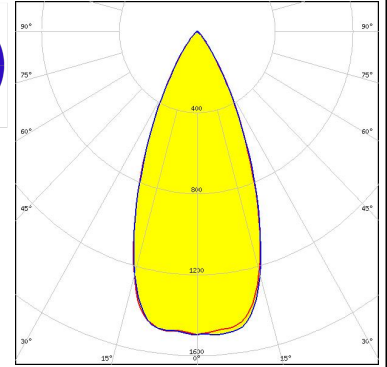
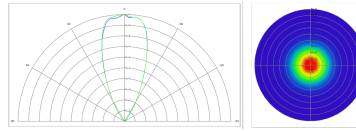
SAMSUNG

LED LM302A
 FWHM / FWTM 38.0° / 68.0°
 Efficiency 88 %
 Peak intensity 1.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



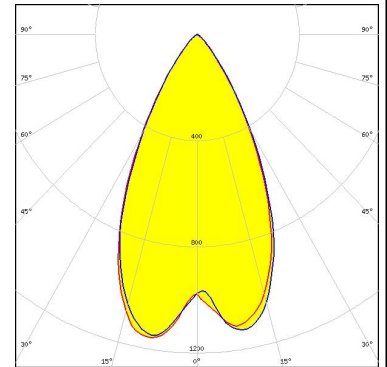
STANLEY

LED FWR1108MS
 FWHM / FWTM 44.0° / 71.0°
 Efficiency 90 %
 LEDs/each optic 1
 Light colour IR
 Required components:



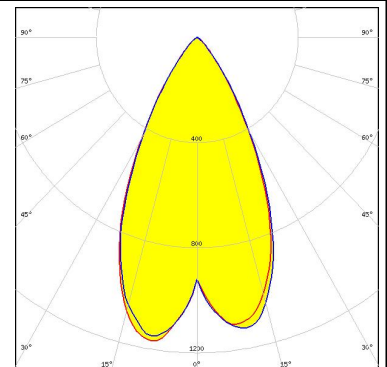
STANLEY

LED MFN1108MS
 FWHM / FWTM 54.0° / 82.0°
 Efficiency 92 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour IR
 Required components:

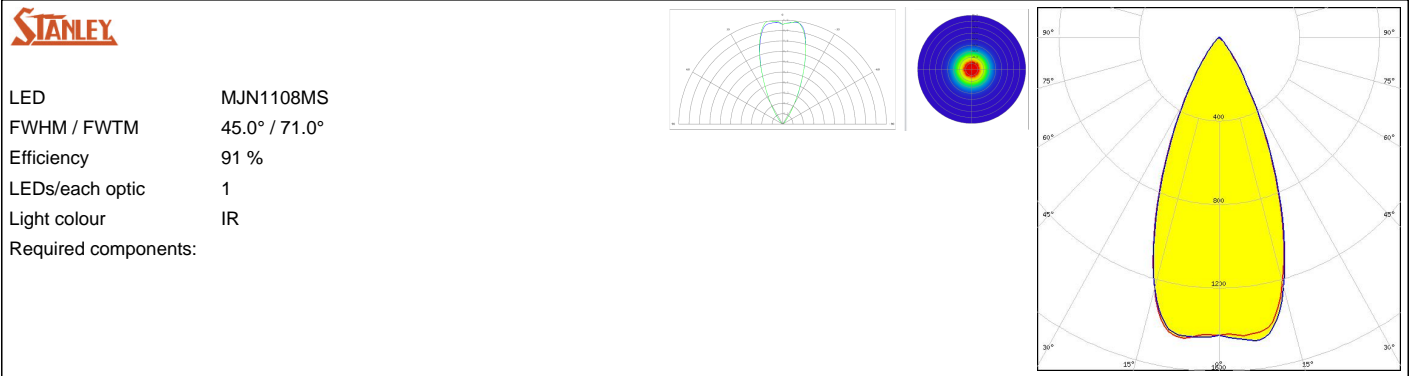


STANLEY

LED MGN1108MS
 FWHM / FWTM 54.0° / 82.0°
 Efficiency 92 %
 Peak intensity 1.2 cd/lm
 LEDs/each optic 1
 Light colour IR
 Required components:



OPTICAL RESULTS (SIMULATED):



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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