LISA3-WWW-PIN

~60° wide beam with location pin installation



SPECIFICATION:

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

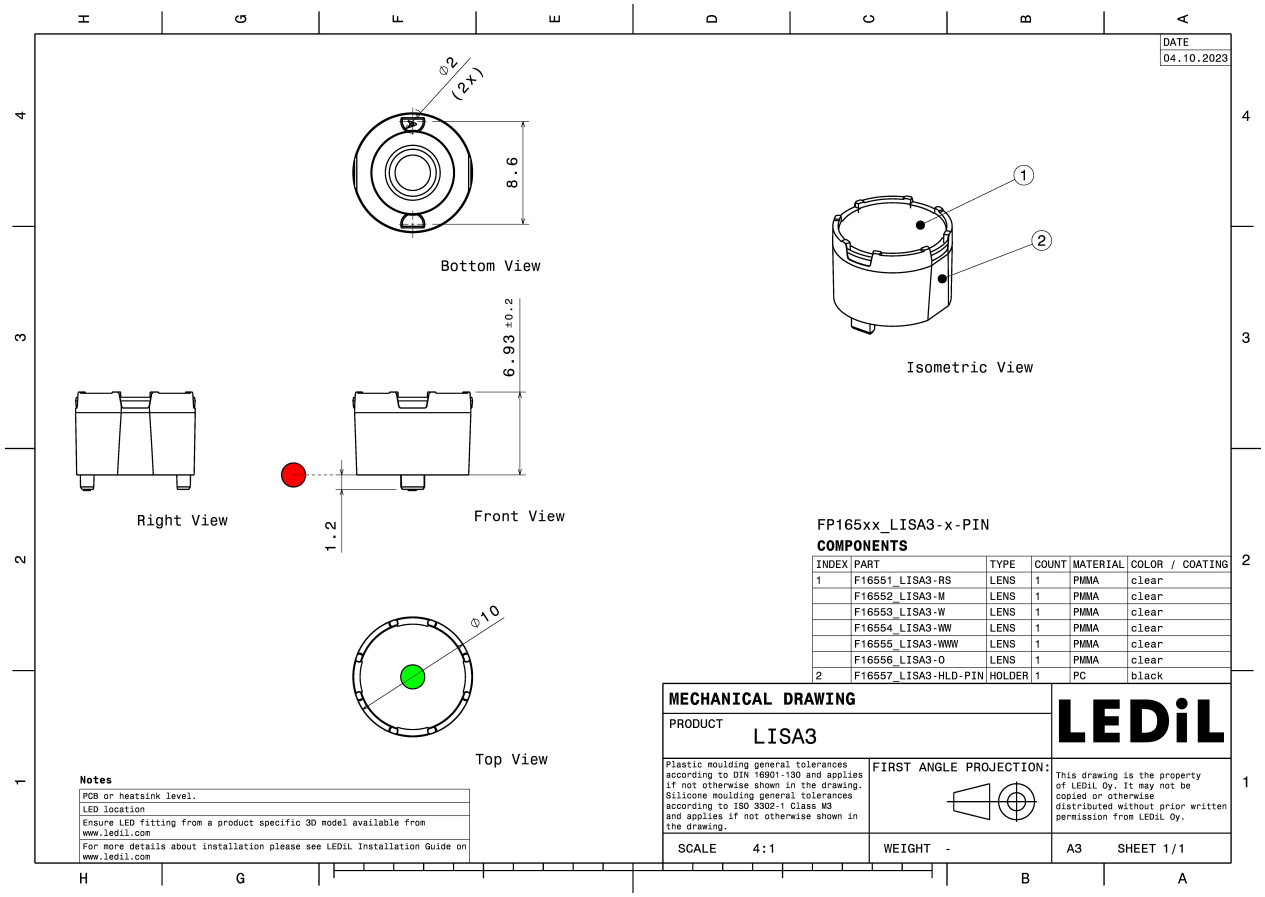
MATERIALS:

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

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
FP16562_LISA3-WWW-PIN » Box size: 310 x 230 x 60 mm	Single lens	2000	300	100	1.4

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FP165xx_LISA3-x-PIN

COMPONENTS

INDEX	PART	TYPE	COUNT	MATERIAL	COLOR / COATING
1	F16551_LISA3-RS	LENS	1	PMMA	clear
	F16552_LISA3-M	LENS	1	PMMA	clear
	F16553_LISA3-W	LENS	1	PMMA	clear
	F16554_LISA3-WW	LENS	1	PMMA	clear
	F16555_LISA3-WWW	LENS	1	PMMA	clear
	F16556_LISA3-O	LENS	1	PMMA	clear
2	F16557_LISA3-HLD-PIN	HOLDER	1	PC	black

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

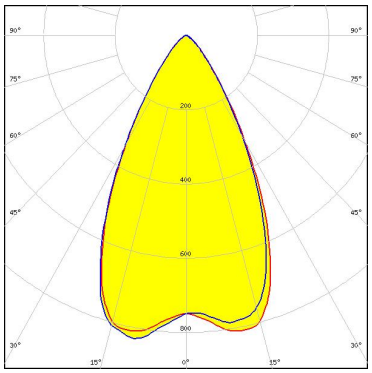
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OPTICAL RESULTS (MEASURED):

CREE LEDs

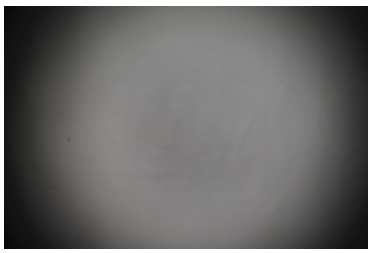
LED	XD16
FWHM / FWTM	55.0° / 85.0°
Efficiency	74 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

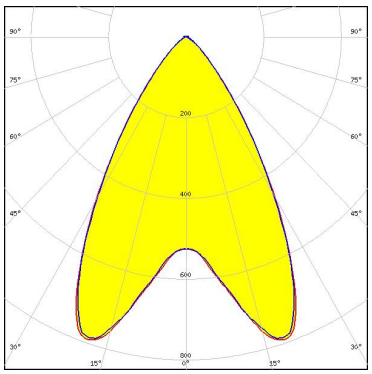




CREE LEDs

LED	XP-E2
FWHM / FWTM	63.0° / 91.0°
Efficiency	85 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

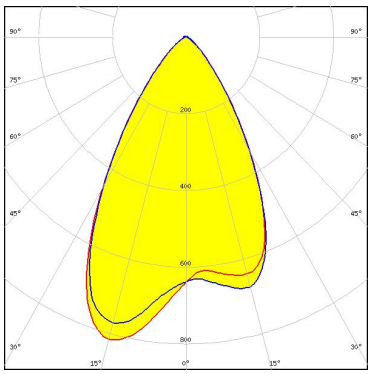




CREE LEDs

LED	XP-G3
FWHM / FWTM	60.0° / 92.0°
Efficiency	80 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

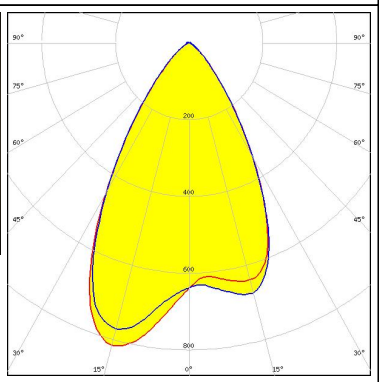




CREE LEDs

LED	XP-G3
FWHM / FWTM	61.0° / 95.0°
Efficiency	80 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	





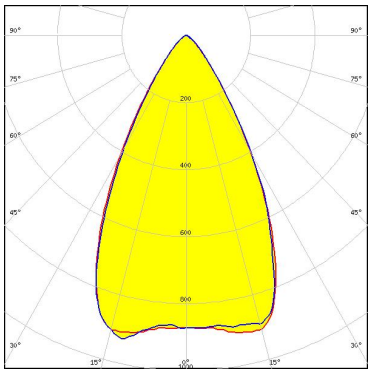
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OPTICAL RESULTS (MEASURED):

LUMILEDS

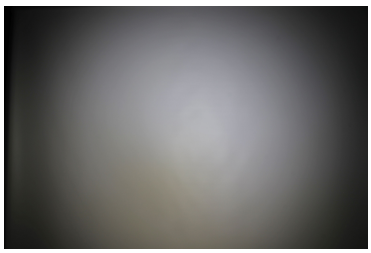
LED	LUXEON CZ
FWHM / FWTM	57.0° / 85.0°
Efficiency	85 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

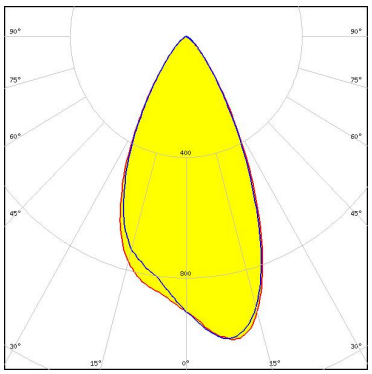




NICHIA

LED	NF2x757G
FWHM / FWTM	50.0° / 82.0°
Efficiency	76 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

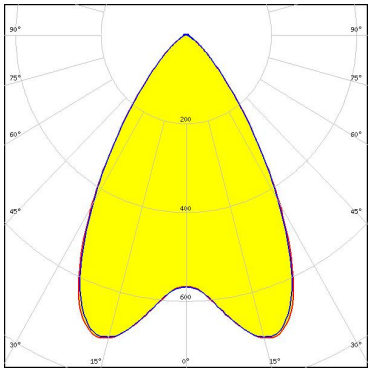




NICHIA

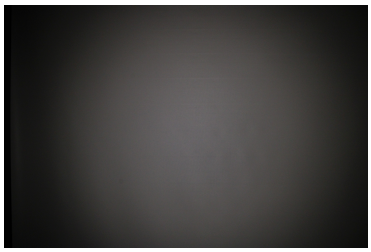
LED	NVSW219F
FWHM / FWTM	64.0° / 96.0°
Efficiency	84 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

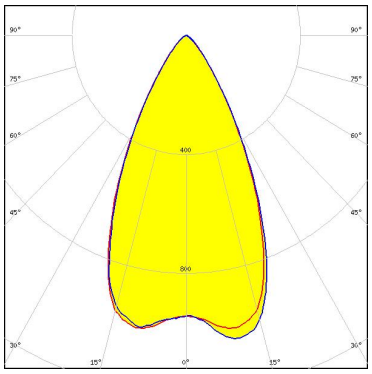




OSRAM
Opto Semiconductors

LED	OSCONIQ C 2424
FWHM / FWTM	53.0° / 81.0°
Efficiency	84 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	





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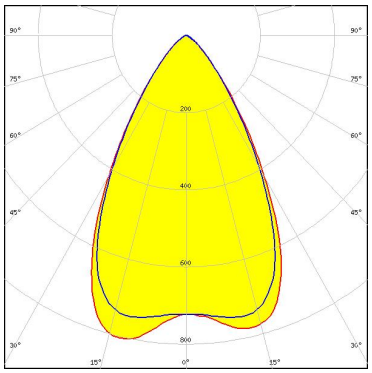
OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	60.0° / 93.0°
Efficiency	83 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:

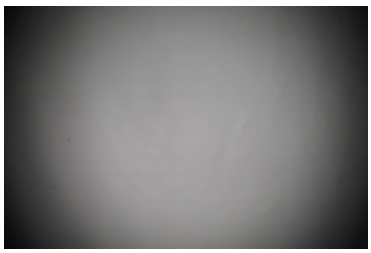


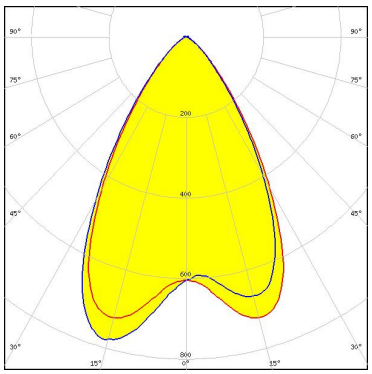


SAMSUNG

LED	LH351C
FWHM / FWTM	64.0° / 96.0°
Efficiency	84 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:



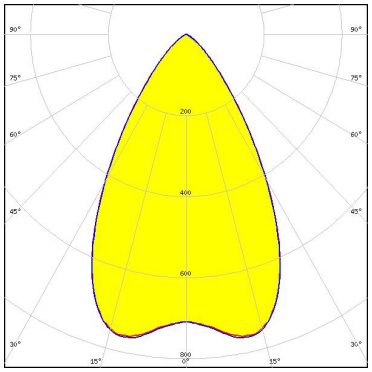


SEOUL SEMICONDUCTOR

LED	Z5M4
FWHM / FWTM	62.0° / 95.0°
Efficiency	84 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White

Required components:



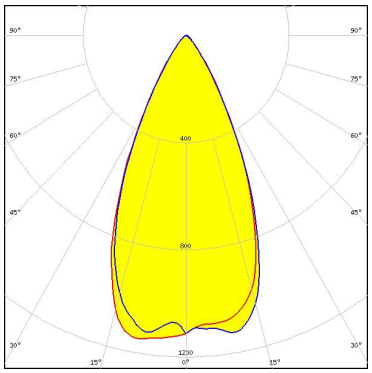


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OPTICAL RESULTS (SIMULATED):

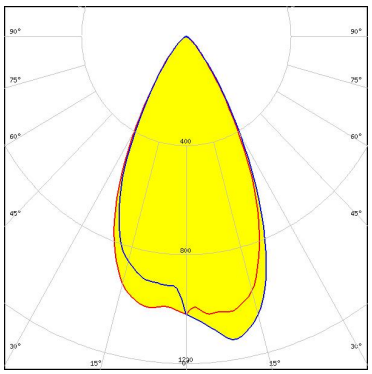
bridgelux

LED	CSP 2323 (BXCP)
FWHM / FWTM	50.0° / 74.0°
Efficiency	80 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



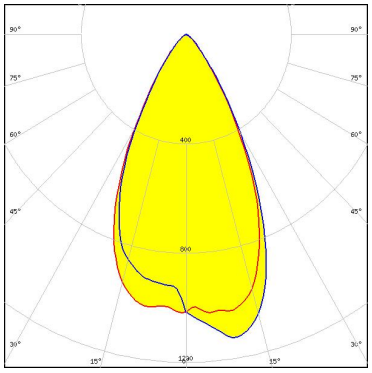
CREE LEDs

LED	J Series 2835
FWHM / FWTM	53.0° / 82.0°
Efficiency	87 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



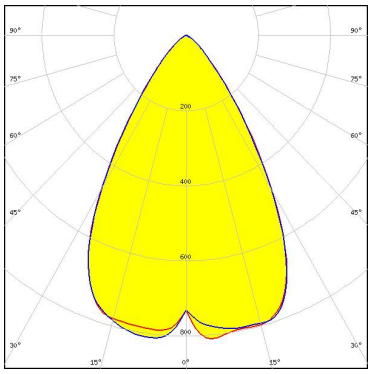
CREE LEDs

LED	J Series 2835
FWHM / FWTM	53.0° / 82.0°
Efficiency	87 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



CREE LEDs

LED	XP-E
FWHM / FWTM	64.0° / 93.0°
Efficiency	89 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

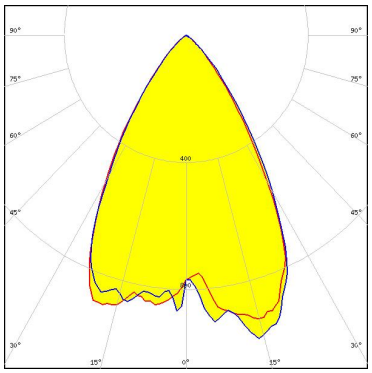


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OPTICAL RESULTS (SIMULATED):

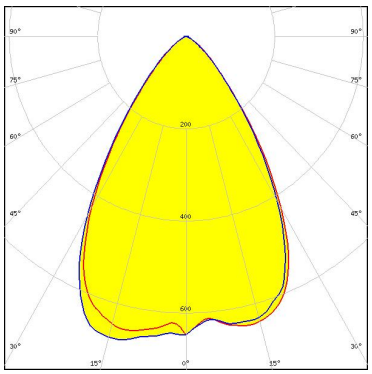
CREE LEDs

LED	XP-G2
FWHM / FWTM	66.0° / 93.0°
Efficiency	87 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



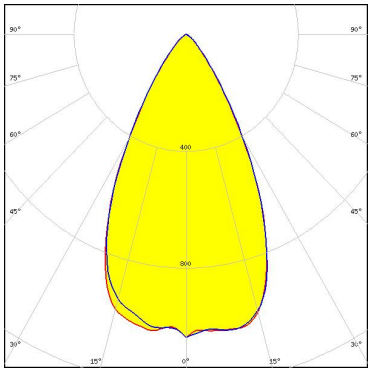
CREE LEDs

LED	XP-G2 HE
FWHM / FWTM	68.0° / 100.0°
Efficiency	82 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



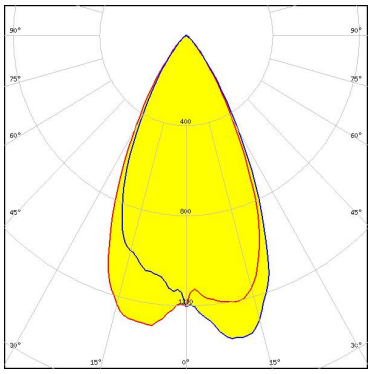
LUMILEDS

LED	LUXEON 2835 Line
FWHM / FWTM	54.0° / 82.0°
Efficiency	88 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



LUMILEDS

LED	LUXEON 3030 2D (Round LES)
FWHM / FWTM	54.0° / 79.0°
Efficiency	85 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

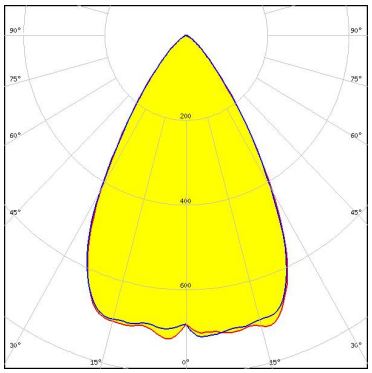


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OPTICAL RESULTS (SIMULATED):

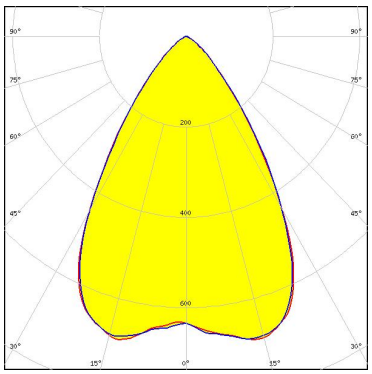
LUMILEDS

LED	LUXEON C
FWHM / FWTM	64.0° / 92.0°
Efficiency	79 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



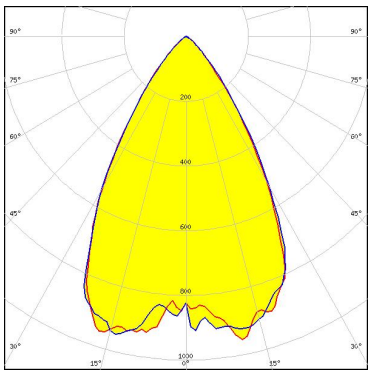
LUMILEDS

LED	LUXEON HL2X
FWHM / FWTM	66.0° / 98.0°
Efficiency	85 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



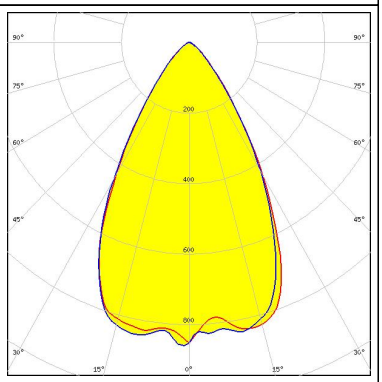
LUMILEDS

LED	LUXEON TX
FWHM / FWTM	62.0° / 87.0°
Efficiency	85 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



LUMILEDS

LED	LUXEON V2
FWHM / FWTM	60.0° / 92.0°
Efficiency	88 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

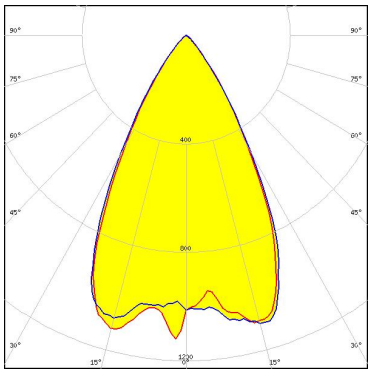


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OPTICAL RESULTS (SIMULATED):

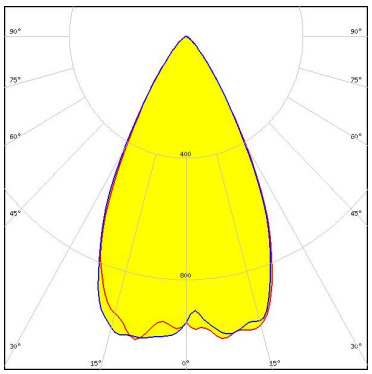
LUMILEDS

LED	LUXEON Z
FWHM / FWTM	58.0° / 80.0°
Efficiency	88 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



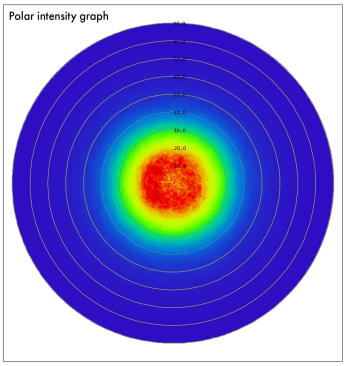
LUMILEDS

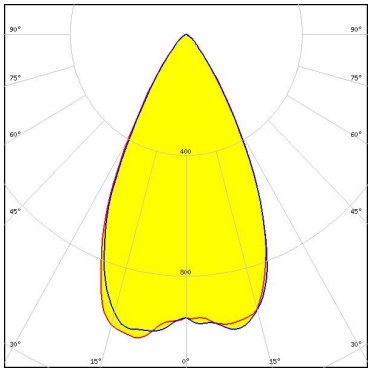
LED	LUXEON Z ES
FWHM / FWTM	56.0° / 82.0°
Efficiency	88 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



LUMINUS

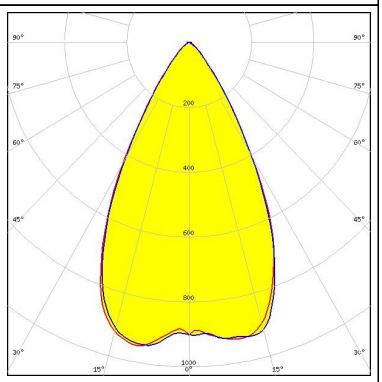
LED	SST-10-IR-B90
FWHM / FWTM	54.0° / 80.0°
Efficiency	86 %
LEDs/each optic	1
Light colour	IR
Required components:	





LUMINUS

LED	SST-20
FWHM / FWTM	56.0° / 84.0°
Efficiency	86 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

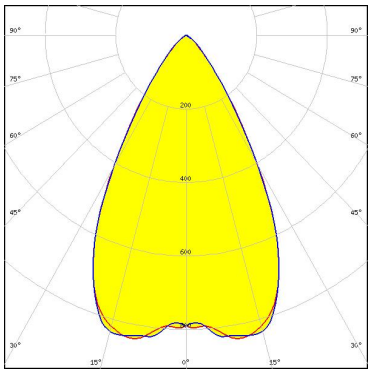


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OPTICAL RESULTS (SIMULATED):

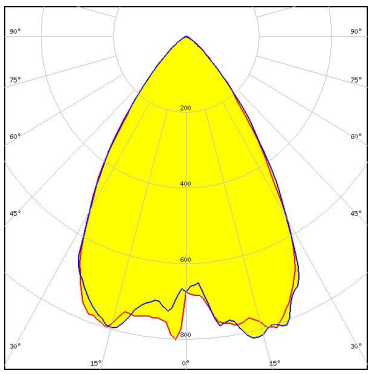
NICHIA

LED	NCSxx19B
FWHM / FWTM	60.0° / 88.0°
Efficiency	82 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



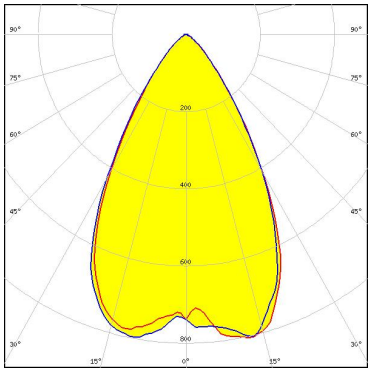
NICHIA

LED	NVSW219D
FWHM / FWTM	67.0° / 88.0°
Efficiency	84 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



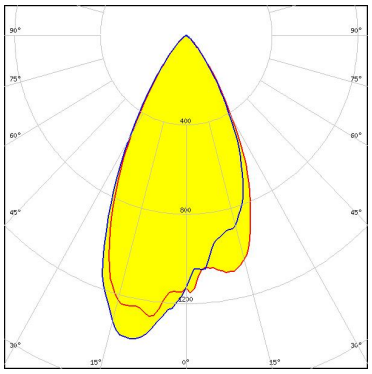
NICHIA

LED	NVSxx19B/NVSxx19C
FWHM / FWTM	61.0° / 92.0°
Efficiency	83 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OSRAM
Opto Semiconductors

LED	Duris S5 (2 chip)
FWHM / FWTM	49.0° / 77.0°
Efficiency	87 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

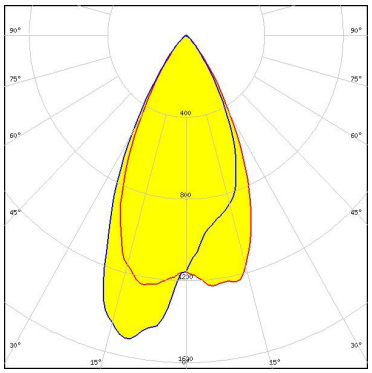


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OPTICAL RESULTS (SIMULATED):

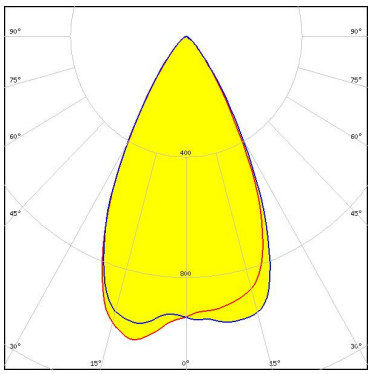
OSRAM Opto Semiconductors

LED	Duris S5 (Single chip)
FWHM / FWTM	48.0° / 76.0°
Efficiency	86 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



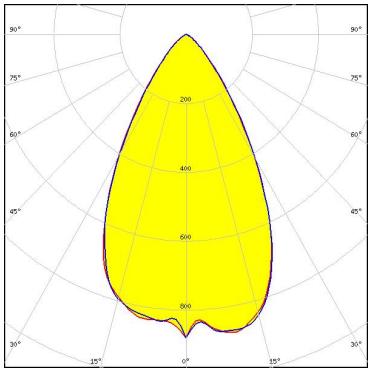
OSRAM Opto Semiconductors

LED	OSCONIQ P 3030
FWHM / FWTM	56.0° / 82.0°
Efficiency	85 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



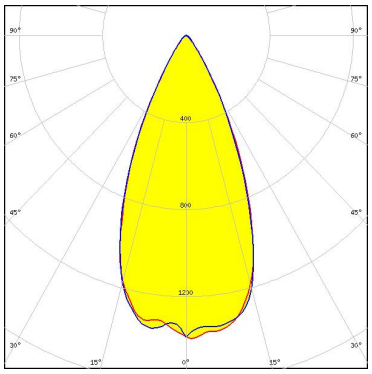
OSRAM Opto Semiconductors

LED	OSCONIQ P 3737 (3W version)
FWHM / FWTM	58.0° / 90.0°
Efficiency	86 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OSRAM Opto Semiconductors

LED	OSLON Black
FWHM / FWTM	46.0° / 71.0°
Efficiency	88 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

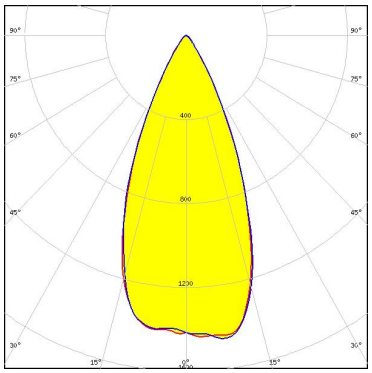


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OPTICAL RESULTS (SIMULATED):

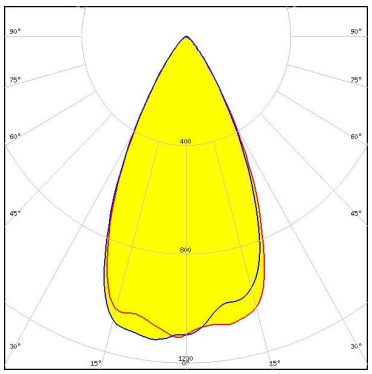
OSRAM Opto Semiconductors

LED	OSLON Black
FWHM / FWTM	45.0° / 69.0°
Efficiency	86 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



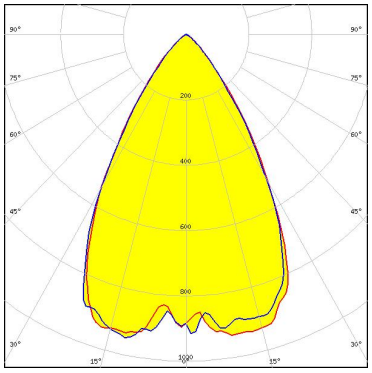
OSRAM Opto Semiconductors

LED	OSLON Black Flat (LUW HWQP)
FWHM / FWTM	54.0° / 80.0°
Efficiency	88 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	



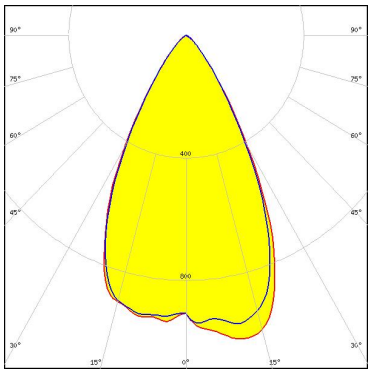
OSRAM Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	61.0° / 86.0°
Efficiency	86 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OSRAM Opto Semiconductors

LED	OSLON Square Flat
FWHM / FWTM	56.0° / 84.0°
Efficiency	87 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

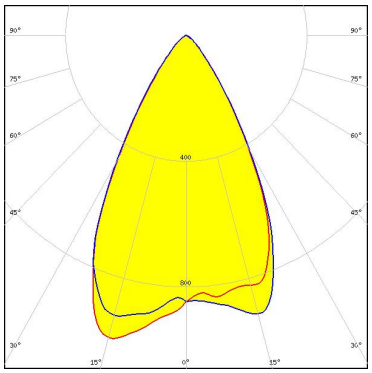


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OPTICAL RESULTS (SIMULATED):

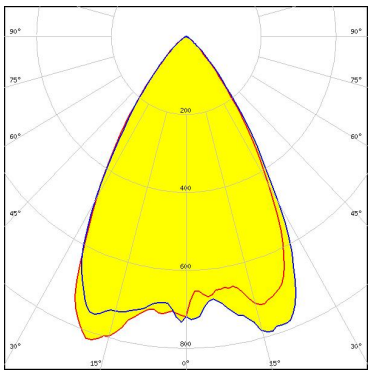
OSRAM
Opto Semiconductors

LED	OSLON SSL 120
FWHM / FWTM	58.0° / 85.0°
Efficiency	89 %
Peak intensity	1 cd/lm
LEDs/each optic	1
Light colour	Amber
Required components:	



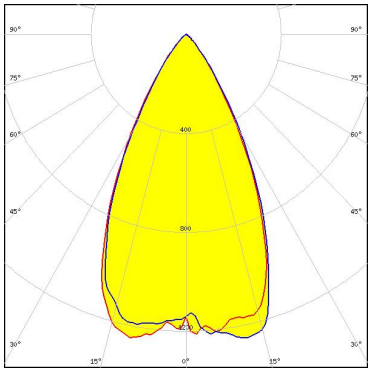
OSRAM
Opto Semiconductors

LED	OSLON SSL 150
FWHM / FWTM	63.0° / 84.0°
Efficiency	87 %
Peak intensity	0.9 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



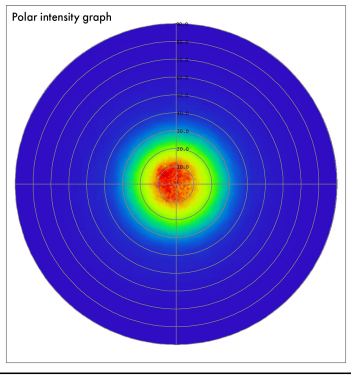
OSRAM
Opto Semiconductors

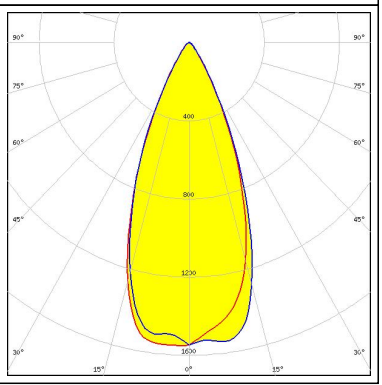
LED	OSLON SSL 80
FWHM / FWTM	53.0° / 79.0°
Efficiency	87 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



OSRAM
Opto Semiconductors

LED	SFH 4715AS
FWHM / FWTM	42.0° / 67.0°
Efficiency	87 %
Peak intensity	
LEDs/each optic	1
Light colour	IR
Required components:	



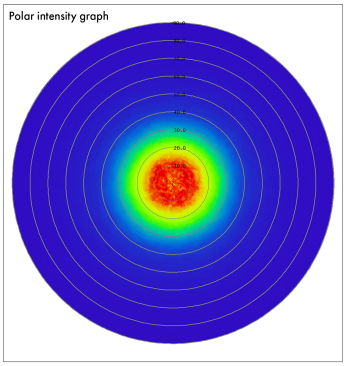


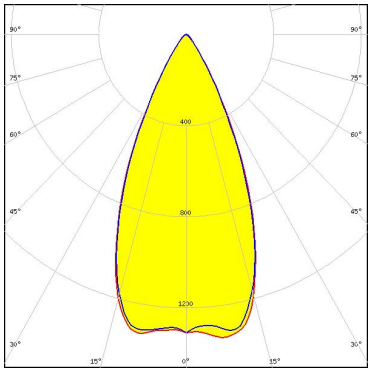
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OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

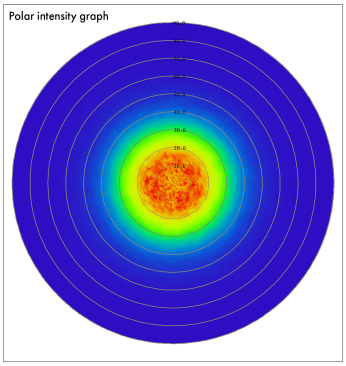
LED	SFH 4715S
FWHM / FWTM	47.0° / 70.0°
Efficiency	88 %
LEDs/each optic	1
Light colour	IR
Required components:	

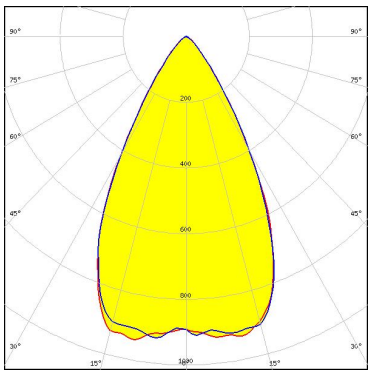




OSRAM
Opto Semiconductors

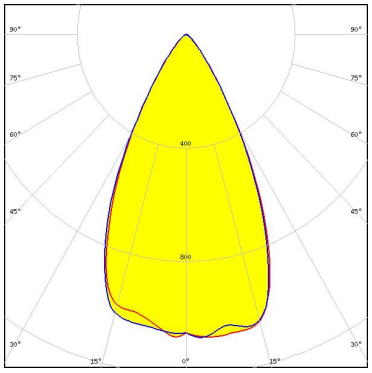
LED	SFH 4716S
FWHM / FWTM	57.0° / 83.0°
Efficiency	85 %
LEDs/each optic	1
Light colour	IR
Required components:	





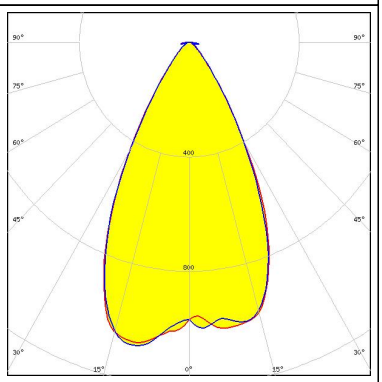
OSRAM
Opto Semiconductors

LED	Synios P2720 1 mm
FWHM / FWTM	54.0° / 80.0°
Efficiency	88 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	Red
Required components:	



OSRAM
Opto Semiconductors

LED	SYNIOS S2222
FWHM / FWTM	55.0° / 82.0°
Efficiency	96 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

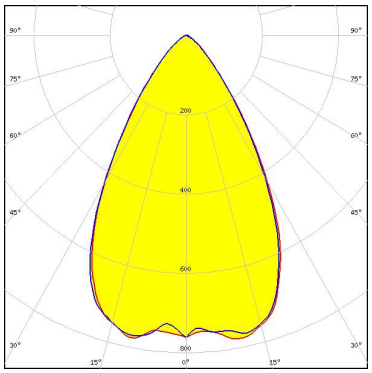


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OPTICAL RESULTS (SIMULATED):

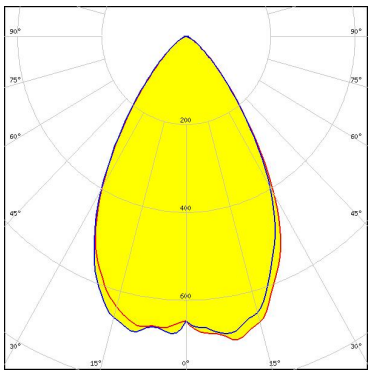
SAMSUNG

LED	LH351B
FWHM / FWTM	62.0° / 95.0°
Efficiency	85 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



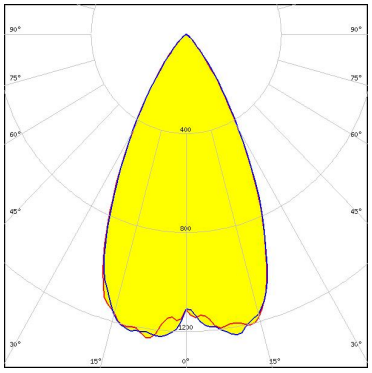
SAMSUNG

LED	LH351D
FWHM / FWTM	65.0° / 100.0°
Efficiency	81 %
Peak intensity	0.7 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



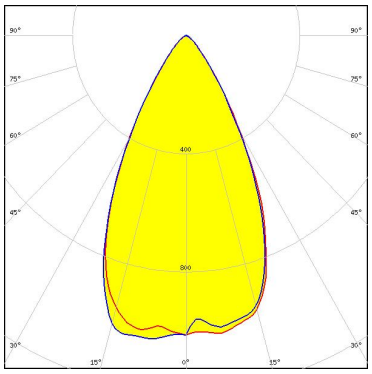
SAMSUNG

LED	LM301A
FWHM / FWTM	53.0° / 75.0°
Efficiency	87 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	



SAMSUNG

LED	LM301B
FWHM / FWTM	55.0° / 82.0°
Efficiency	87 %
Peak intensity	1.1 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

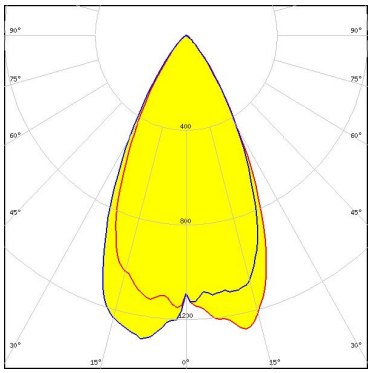


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OPTICAL RESULTS (SIMULATED):

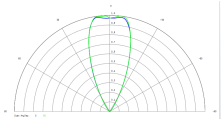
SAMSUNG

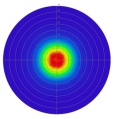
LED	LM302A
FWHM / FWTM	53.0° / 80.0°
Efficiency	87 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	White
Required components:	

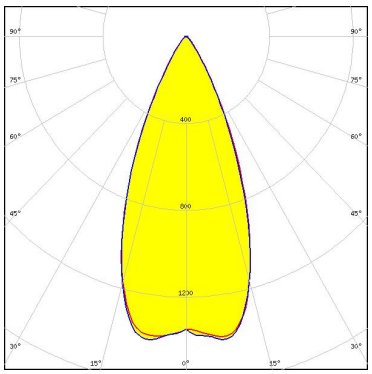


STANLEY

LED	FWR1107MS
FWHM / FWTM	44.0° / 68.0°
Efficiency	85 %
LEDs/each optic	1
Light colour	IR
Required components:	

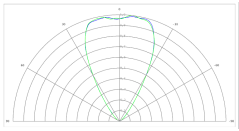


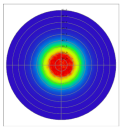


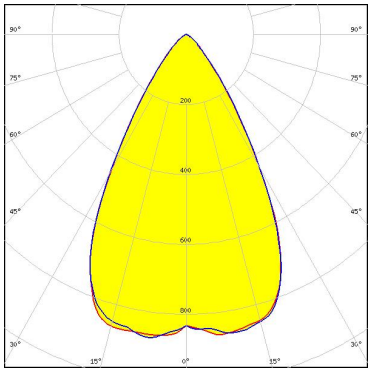


STANLEY

LED	FWR1108MS
FWHM / FWTM	60.0° / 87.0°
Efficiency	88 %
LEDs/each optic	1
Light colour	IR
Required components:	

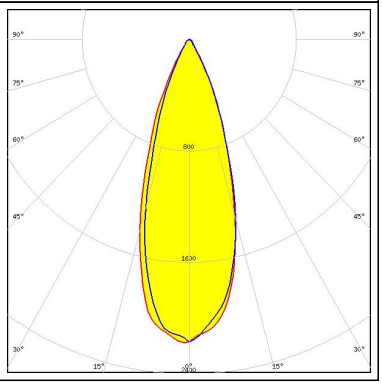






STANLEY

LED	MFN1107MS
FWHM / FWTM	35.0° / 60.0°
Efficiency	91 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	

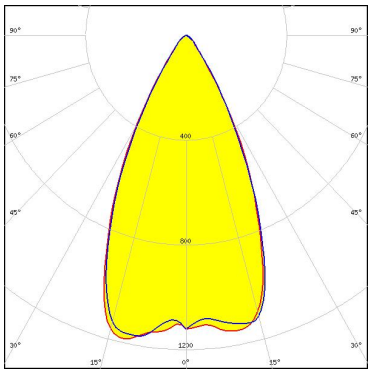


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OPTICAL RESULTS (SIMULATED):

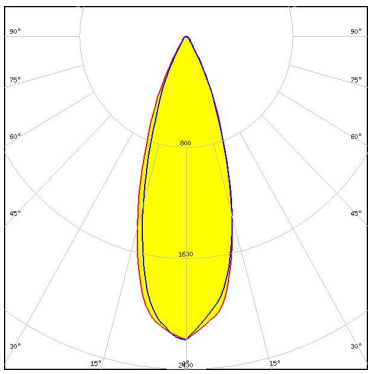
STANLEY

LED	MFN1108MS
FWHM / FWTM	52.0° / 76.0°
Efficiency	90 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	



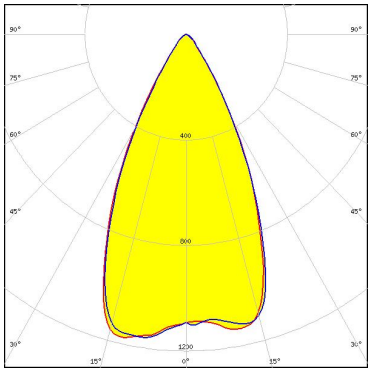
STANLEY

LED	MGN1107MS
FWHM / FWTM	35.0° / 60.0°
Efficiency	91 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	



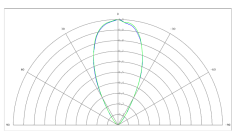
STANLEY

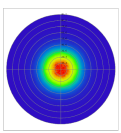
LED	MGN1108MS
FWHM / FWTM	52.0° / 76.0°
Efficiency	90 %
Peak intensity	1.2 cd/lm
LEDs/each optic	1
Light colour	IR
Required components:	

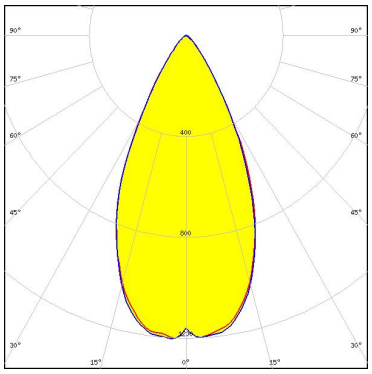


STANLEY

LED	MJN1107MS
FWHM / FWTM	50.0° / 77.0°
Efficiency	89 %
LEDs/each optic	1
Light colour	IR
Required components:	



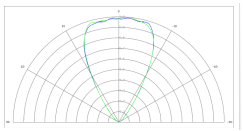


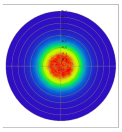


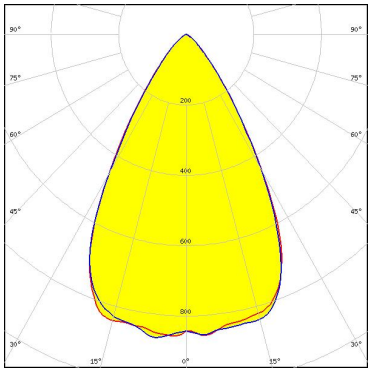
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OPTICAL RESULTS (SIMULATED):

LED	MJN1108MS
FWHM / FWTM	61.0° / 88.0°
Efficiency	88 %
LEDs/each optic	1
Light colour	IR
Required components:	







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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.

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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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