TINA-Y-RS

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



SPECIFICATION:

Dimensions	Ø 16.1
Height	10 mm
Fastening	tape, pin
ROHS compliant	yes

MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA-Y-RS	Single lens	PMMA	clear	gloss	
TINA-Y-HLD	Holder	PC	black	gloss	
TINA-Y-TAPE	Tape	Acryl tape			

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA18102_TINA-Y-RS » Box size: 476 x 273 x 197 mm	3900	300	300	5.6

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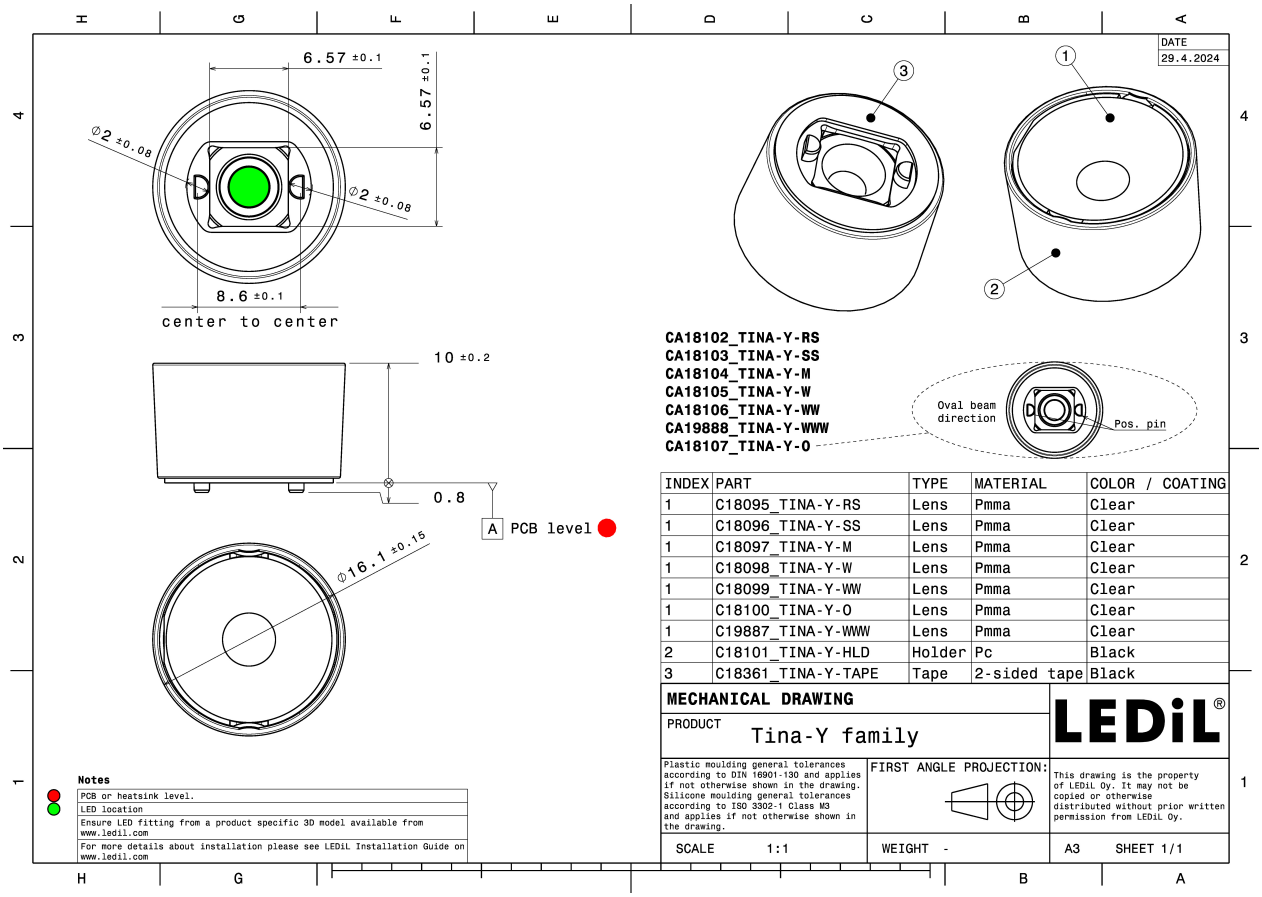

INDEX	PART	TYPE	MATERIAL	COLOR / COATING
1	C18095_TINA-Y-RS	Lens	Pmma	Clear
1	C18096_TINA-Y-SS	Lens	Pmma	Clear
1	C18097_TINA-Y-M	Lens	Pmma	Clear
1	C18098_TINA-Y-W	Lens	Pmma	Clear
1	C18099_TINA-Y-WW	Lens	Pmma	Clear
1	C18100_TINA-Y-O	Lens	Pmma	Clear
1	C19887_TINA-Y-WWW	Lens	Pmma	Clear
2	C18101_TINA-Y-HLD	Holder	Pc	Black
3	C18361_TINA-Y-TAPE	Tape	2-sided tape	Black

MECHANICAL DRAWING

PRODUCT Tina-Y family

Plastic moulding general tolerances according to DIN 16901-130 and applies if not otherwise shown in the drawing. Silicone moulding general tolerances according to ISO 3302-1 Class M3 and applies if not otherwise shown in the drawing.

FIRST ANGLE PROJECTION:

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SCALE 1:1 | WEIGHT - | A3 SHEET 1/1

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

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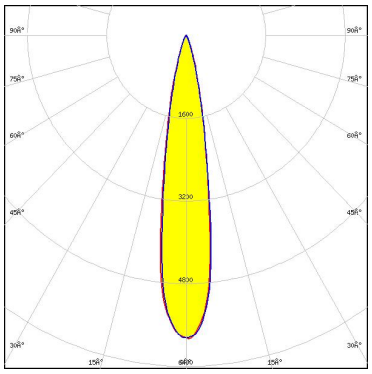
OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	XP-G3
FWHM / FWTM	18.0° / 35.0°
Efficiency	81 %
Peak intensity	5.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



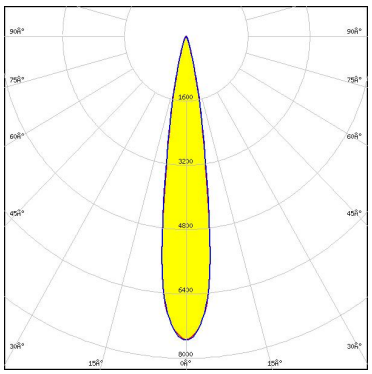


Light distribution files

CREE LEDs

LED	XP-G4
FWHM / FWTM	17.0° / 31.0°
Efficiency	87 %
Peak intensity	7.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



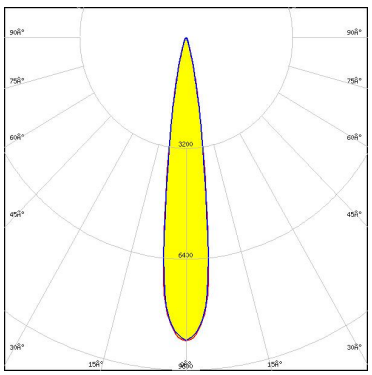


Light distribution files

NICHIA

LED	NVSW719AC
FWHM / FWTM	16.0° / 29.0°
Efficiency	88 %
Peak intensity	8.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

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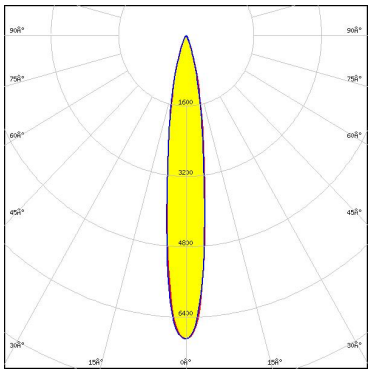
OPTICAL RESULTS (MEASURED):

OSRAM
Opto Semiconductors

LED	OSCONIQ C 3030
FWHM / FWTM	15.0° / 35.0°
Efficiency	83 %
Peak intensity	6.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

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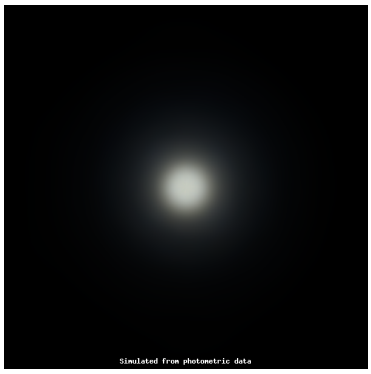
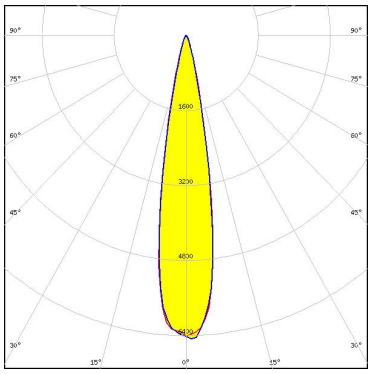
OPTICAL RESULTS (SIMULATED):

bridgelux

LED	Bridgelux SMD 3535 (3B1)
FWHM / FWTM	20.0° / 33.0°
Efficiency	88 %
Peak intensity	6.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

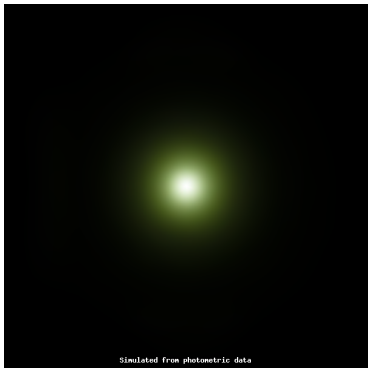


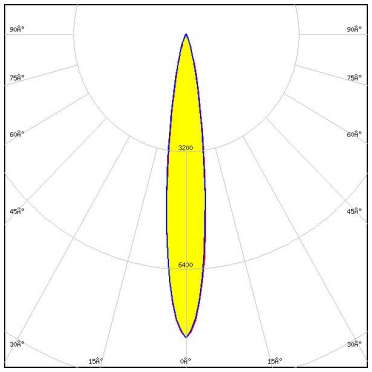


Light distribution files

CREE LEDs

LED	J Series 3030C
FWHM / FWTM	15.0° / 32.0°
Efficiency	87 %
Peak intensity	8.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

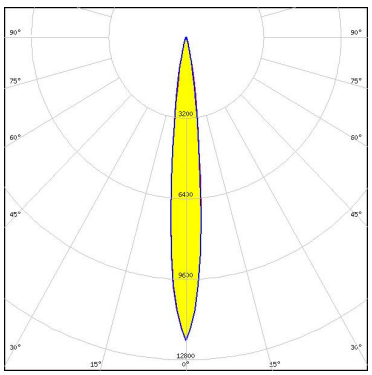




Light distribution files

CREE LEDs

LED	XD16
FWHM / FWTM	12.0° / 24.0°
Efficiency	80 %
Peak intensity	12 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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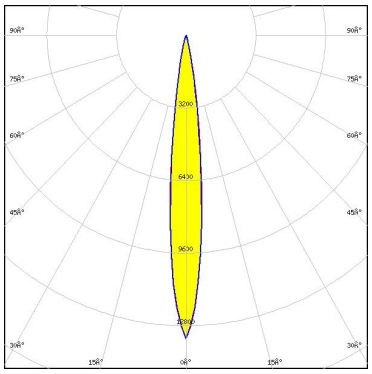
OPTICAL RESULTS (SIMULATED):

CREE LEDs

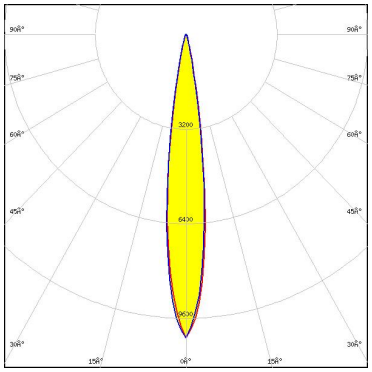
LED	XD16 Premium
FWHM / FWTM	12.0° / 24.0°
Efficiency	86 %
Peak intensity	13.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

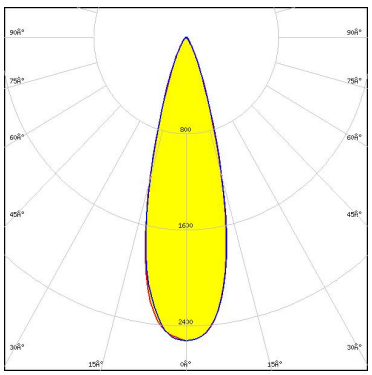
LED	XE-G
FWHM / FWTM	14.0° / 26.0°
Efficiency	87 %
Peak intensity	10.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XHP35.2 HD
FWHM / FWTM	30.0° / 52.0°
Efficiency	76 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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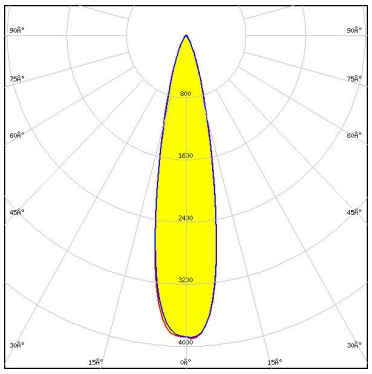
OPTICAL RESULTS (SIMULATED):

CREE LEDs

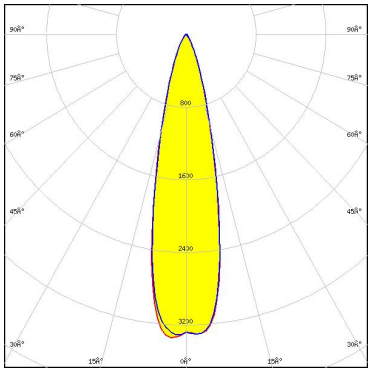
LED	XHP35.2 HI
FWHM / FWTM	22.0° / 44.0°
Efficiency	84 %
Peak intensity	3.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

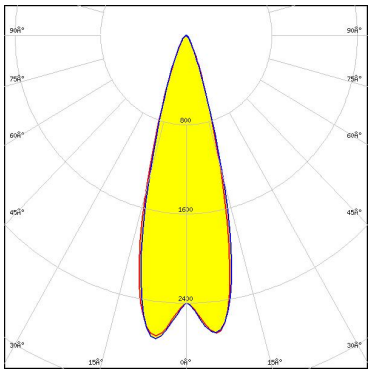
LED	XHP50.3 HI
FWHM / FWTM	24.0° / 48.0°
Efficiency	82 %
Peak intensity	3.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XM-L RGBW (XMLDCL HD)
FWHM / FWTM	30.0° / 49.0°
Efficiency	85 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	RGBW
Required components:	



Light distribution files

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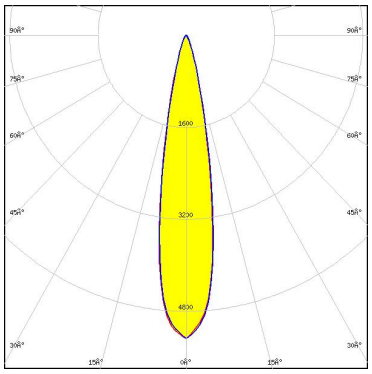
OPTICAL RESULTS (SIMULATED):

CREE LEDs

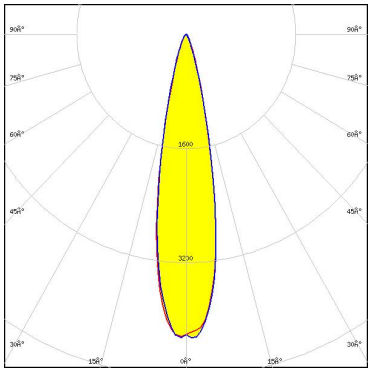
LED	XM-L RGBW (XMLDCL HI)
FWHM / FWTM	20.0° / 37.0°
Efficiency	85 %
Peak intensity	5.3 cd/lm
LEDs/each optic	1
Light colour/type	RGBW
Required components:	



Light distribution files

CREE LEDs

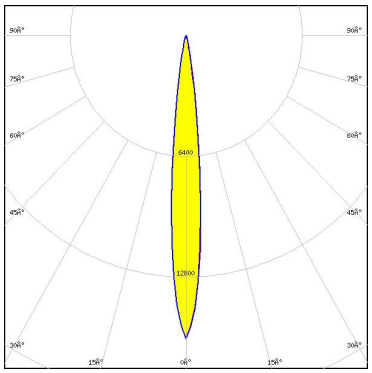
LED	XM-L3
FWHM / FWTM	21.0° / 40.0°
Efficiency	81 %
Peak intensity	4.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XP-E2
FWHM / FWTM	11.0° / 22.0°
Efficiency	88 %
Peak intensity	16 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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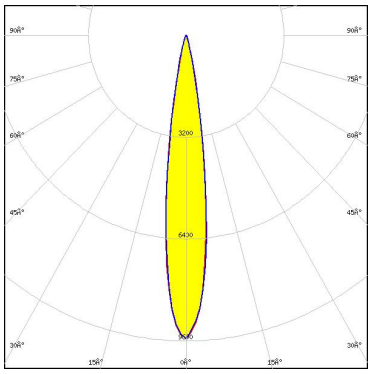
OPTICAL RESULTS (SIMULATED):

CREE LEDs

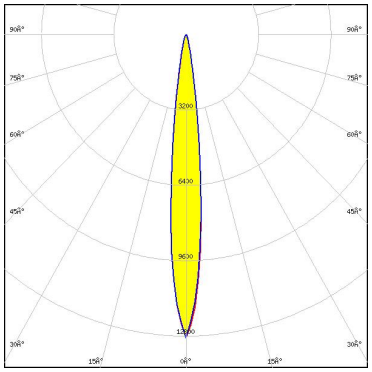
LED	XP-G2
FWHM / FWTM	15.0° / 28.0°
Efficiency	88 %
Peak intensity	9.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

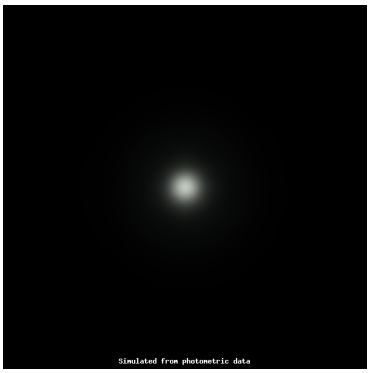
LED	XP-G4 HI
FWHM / FWTM	12.0° / 24.0°
Efficiency	86 %
Peak intensity	12.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

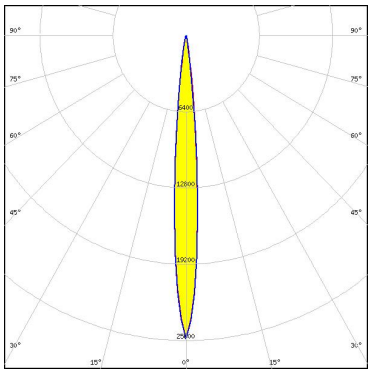


Light distribution files

CREE LEDs

LED	XP-GR
FWHM / FWTM	9.0 + 8.0° / 18.0°
Efficiency	90 %
Peak intensity	25.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

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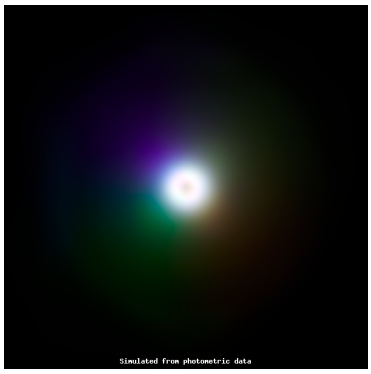
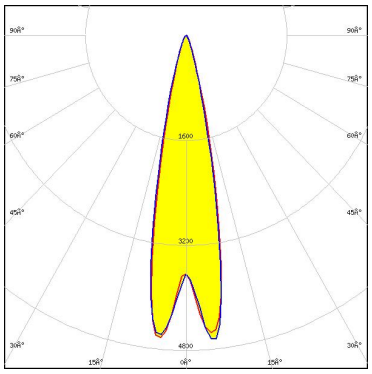
OPTICAL RESULTS (SIMULATED):

CREE LEDs

LED	XP-L RGBW HD
FWHM / FWTM	23.0 + 22.0° / 37.0°
Efficiency	88 %
Peak intensity	4.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

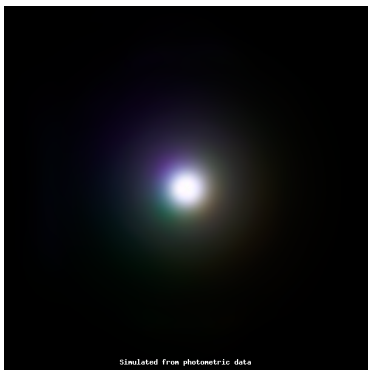


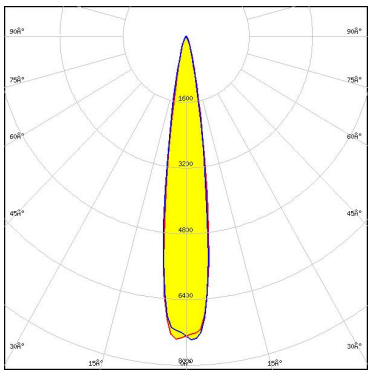


Light distribution files

CREE LEDs

LED	XP-L RGBW HI
FWHM / FWTM	16.0° / 31.0 + 30.0°
Efficiency	85 %
Peak intensity	7.5 cd/lm
LEDs/each optic	1
Light colour/type	RGBW
Required components:	

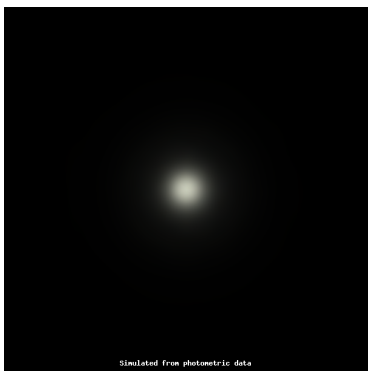


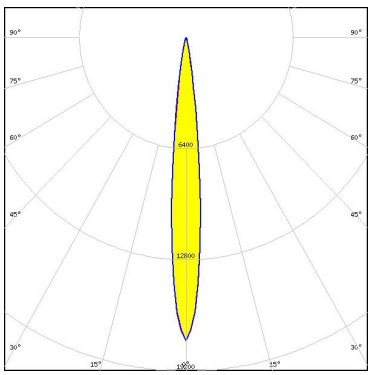


Light distribution files

CREE LEDs

LED	XP-LR
FWHM / FWTM	12.0 + 11.0° / 22.0 + 21.0°
Efficiency	90 %
Peak intensity	17.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

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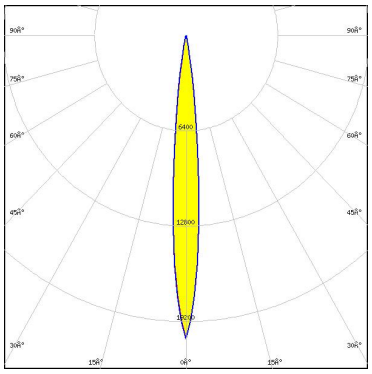
OPTICAL RESULTS (SIMULATED):

CREE LEDs

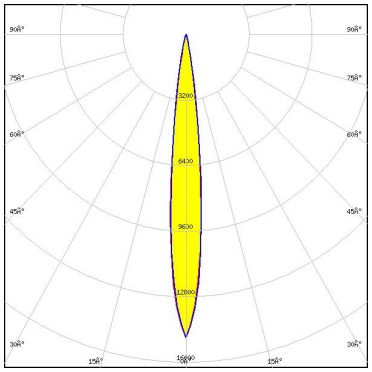
LED	XP-P
FWHM / FWTM	10.0° / 20.0°
Efficiency	89 %
Peak intensity	20.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

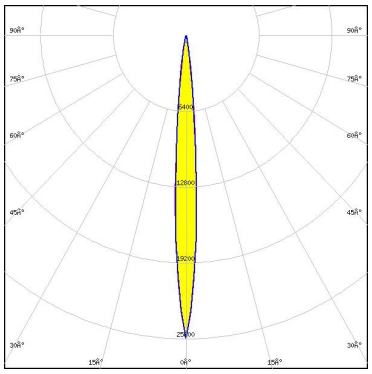
LED	XQ-E HD
FWHM / FWTM	12.0° / 22.0°
Efficiency	87 %
Peak intensity	14.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XQ-E HI
FWHM / FWTM	8.0° / 18.0°
Efficiency	87 %
Peak intensity	25.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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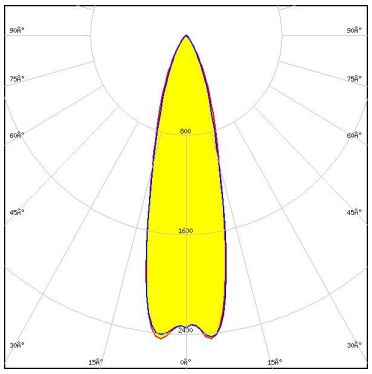
OPTICAL RESULTS (SIMULATED):

LUMILEDS

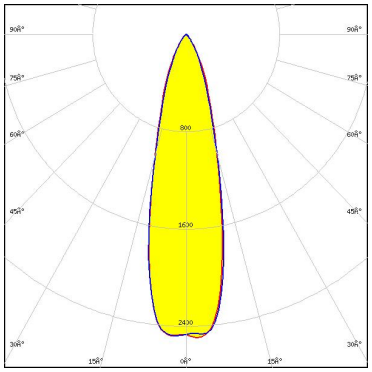
LED	LUXEON 5050 Round LES
FWHM / FWTM	28.0° / 56.0°
Efficiency	81 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

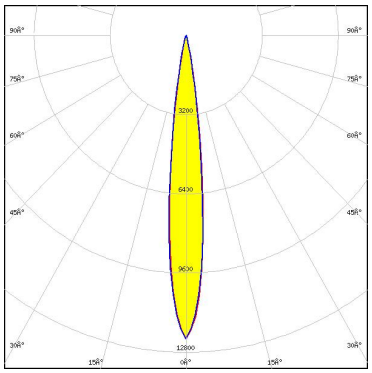
LED	LUXEON 5050 Square LES
FWHM / FWTM	26.0° / 56.0°
Efficiency	80 %
Peak intensity	2.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON C
FWHM / FWTM	12.0° / 24.0°
Efficiency	79 %
Peak intensity	12.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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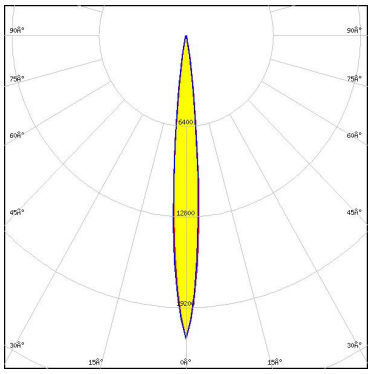
OPTICAL RESULTS (SIMULATED):

LUMILEDS

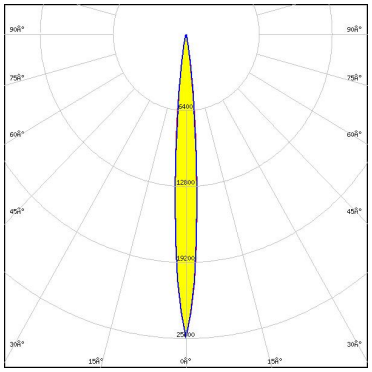
LED	LUXEON CZ
FWHM / FWTM	10.0° / 19.0°
Efficiency	88 %
Peak intensity	21.4 cd/lm
LEDs/each optic	1
Light colour/type	Red
Required components:	



Light distribution files

LUMILEDS

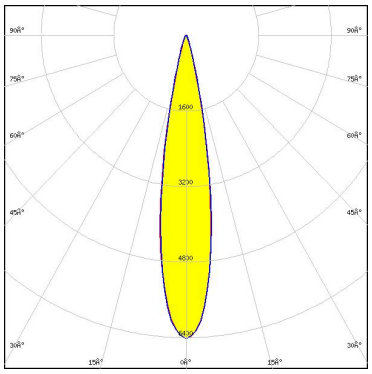
LED	LUXEON CZ
FWHM / FWTM	8.0° / 18.0°
Efficiency	88 %
Peak intensity	25.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON HL2X
FWHM / FWTM	20.0° / 32.0°
Efficiency	87 %
Peak intensity	6.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



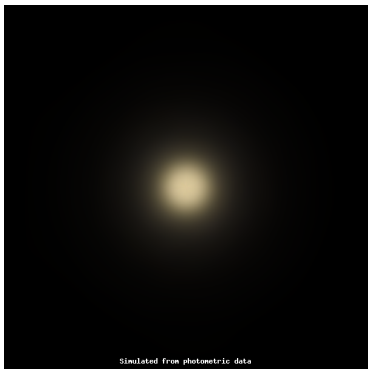
Light distribution files

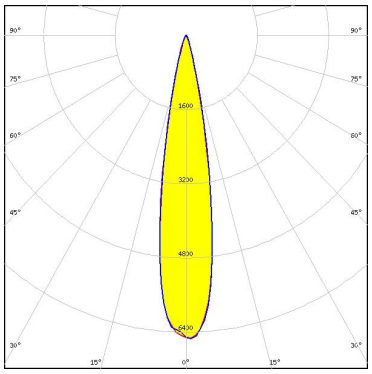
LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (SIMULATED):

LUMILEDS

LED	LUXEON HL2X-V
FWHM / FWTM	20.0 + 19.0° / 33.0°
Efficiency	89 %
Peak intensity	6.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

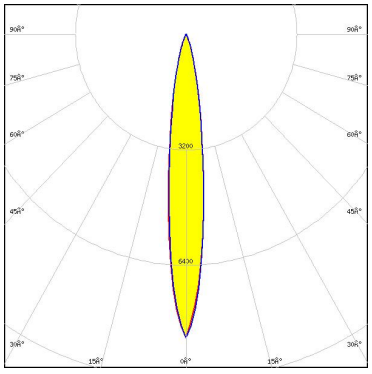




Light distribution files

LUMILEDS

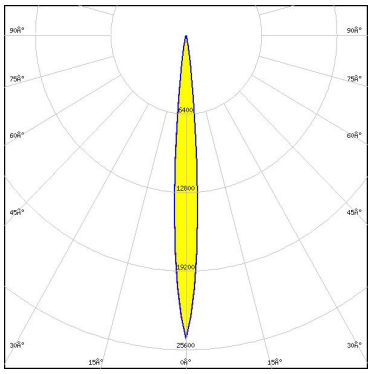
LED	LUXEON HL2Z
FWHM / FWTM	14.0° / 32.0°
Efficiency	83 %
Peak intensity	8.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON Rubix
FWHM / FWTM	8.0° / 18.0°
Efficiency	89 %
Peak intensity	24.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



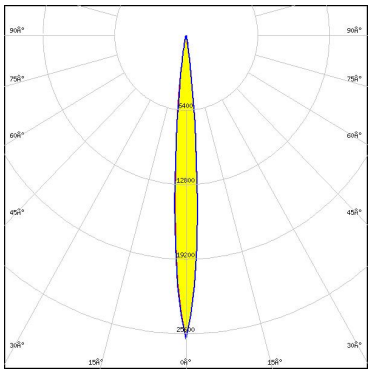
Light distribution files

LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (SIMULATED):

LUMILEDS

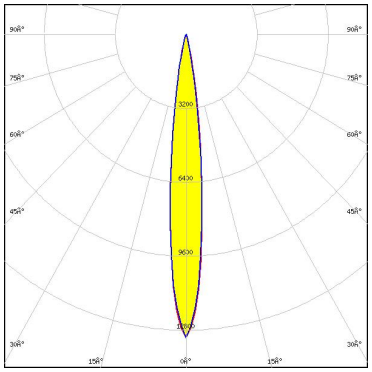
LED	LUXEON Rubix
FWHM / FWTM	8.0° / 18.0°
Efficiency	89 %
Peak intensity	26.1 cd/lm
LEDs/each optic	1
Light colour/type	Blue
Required components:	



Light distribution files

LUMILEDS

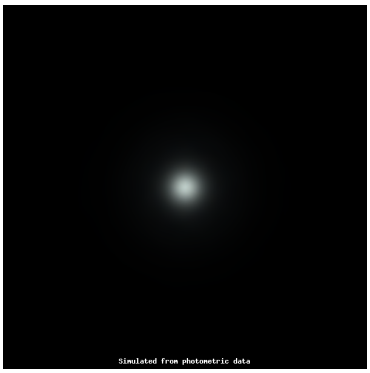
LED	LUXEON Z ES
FWHM / FWTM	12.0° / 24.0°
Efficiency	87 %
Peak intensity	13.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

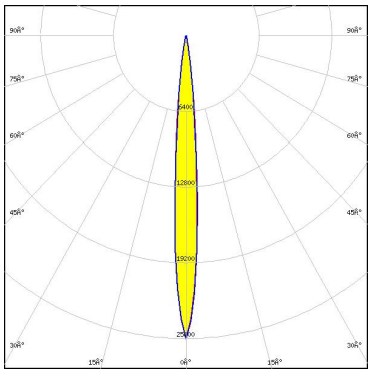


Light distribution files

LUMINUS

LED	SFT-12R-W-A
FWHM / FWTM	8.0° / 18.0°
Efficiency	89 %
Peak intensity	25.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





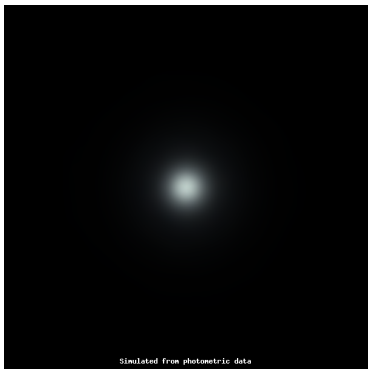
Light distribution files

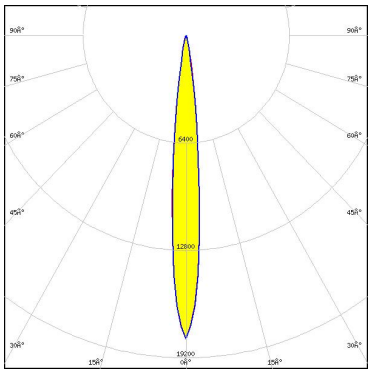
LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (SIMULATED):

LUMINUS

LED	SFT-25R-W-A
FWHM / FWTM	10.0° / 20.0°
Efficiency	89 %
Peak intensity	18.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

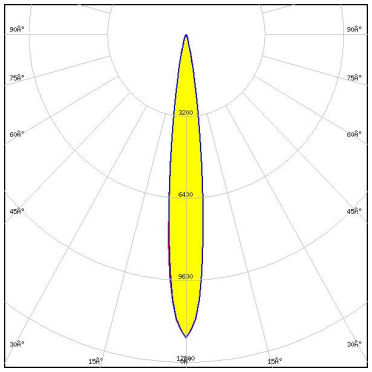




Light distribution files

LUMINUS

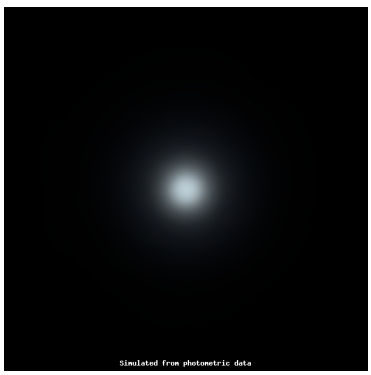
LED	SST-20 Gen1
FWHM / FWTM	12.0° / 26.0°
Efficiency	86 %
Peak intensity	11.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

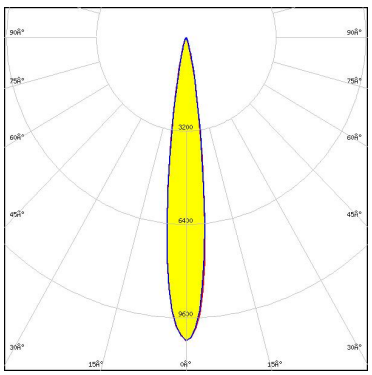


Light distribution files

LUMINUS

LED	SST-20 Gen2
FWHM / FWTM	14.0° / 26.0 + 27.0°
Efficiency	86 %
Peak intensity	10.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

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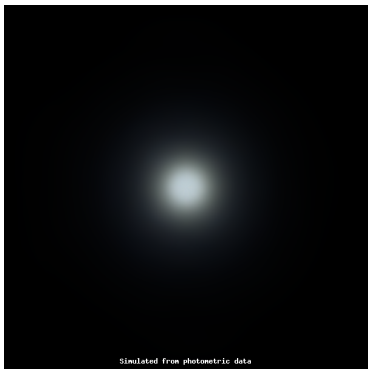
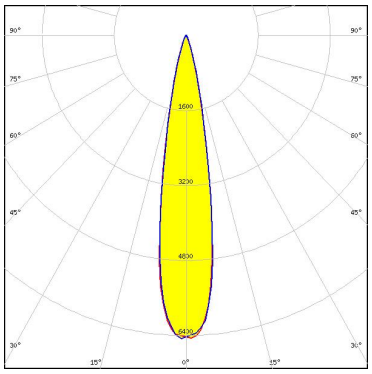
OPTICAL RESULTS (SIMULATED):

LUMINUS

LED	SST-20F-W
FWHM / FWTM	19.0 + 18.0° / 34.0°
Efficiency	90 %
Peak intensity	6.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

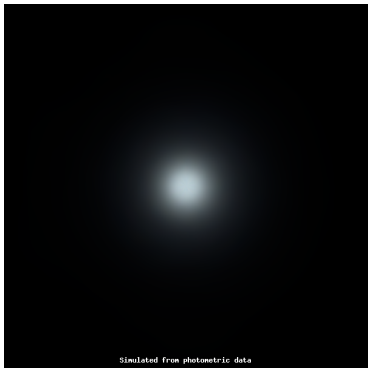


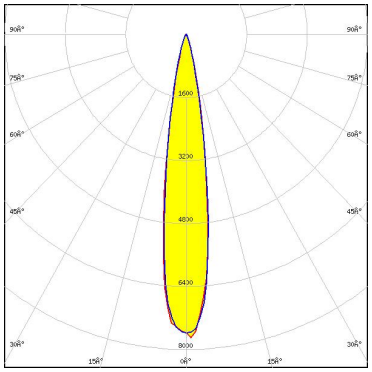


Light distribution files

LUMINUS

LED	SST-25-W
FWHM / FWTM	16.0° / 32.0°
Efficiency	87 %
Peak intensity	7.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

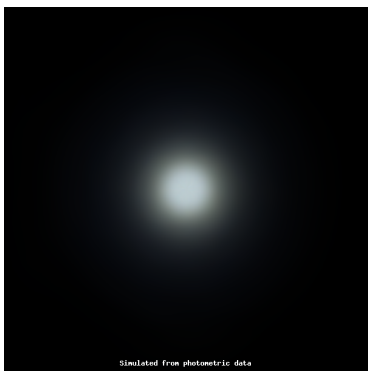


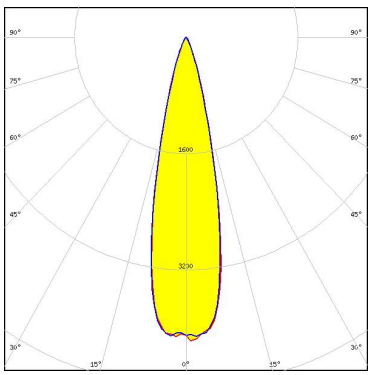


Light distribution files

LUMINUS

LED	SST-36F-W
FWHM / FWTM	24.0° / 42.0°
Efficiency	88 %
Peak intensity	4.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





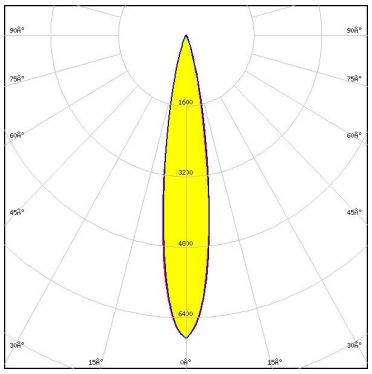
Light distribution files

LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (SIMULATED):

NICHIA

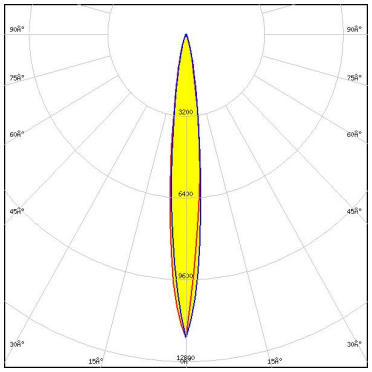
LED	NF2W757H
FWHM / FWTM	18.0° / 34.0°
Efficiency	89 %
Peak intensity	6.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NFSx757G
FWHM / FWTM	12.0° / 27.0°
Efficiency	88 %
Peak intensity	11.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NV4WB35AM
FWHM / FWTM	24.0° / 46.0°
Efficiency	86 %
Peak intensity	3.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

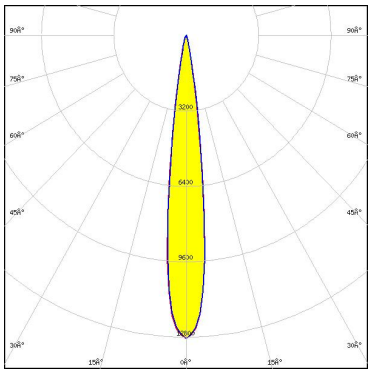
Light distribution files

LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (SIMULATED):

NICHIA

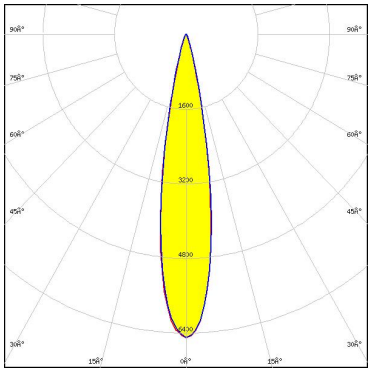
LED	NVSW219C-V2
FWHM / FWTM	14.0° / 24.0 + 23.0°
Efficiency	88 %
Peak intensity	12.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

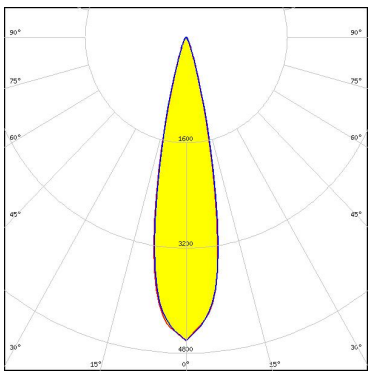
LED	NVSW219F
FWHM / FWTM	19.0° / 32.0°
Efficiency	87 %
Peak intensity	6.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

NICHIA

LED	NVSW519A
FWHM / FWTM	22.0° / 38.0°
Efficiency	83 %
Peak intensity	4.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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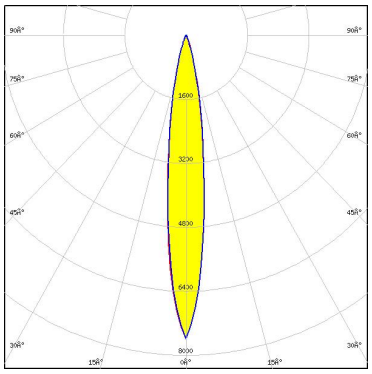
OPTICAL RESULTS (SIMULATED):

NICHIA

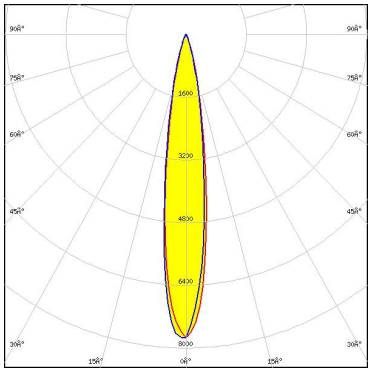
LED	NVSxE21A
FWHM / FWTM	14.0° / 32.0°
Efficiency	80 %
Peak intensity	7.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

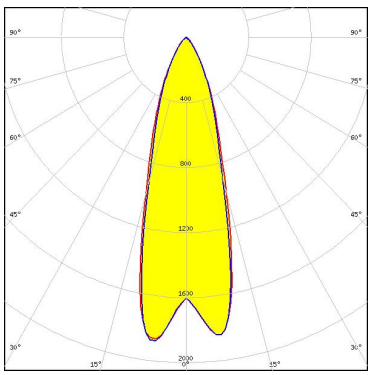
LED	DURIS S5 (2 chip)
FWHM / FWTM	15.0° / 33.0°
Efficiency	88 %
Peak intensity	7.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	Duris S8
FWHM / FWTM	31.0° / 63.0°
Efficiency	76 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

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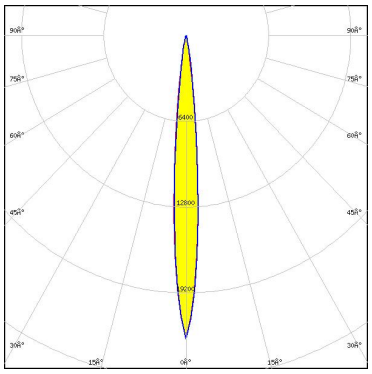
OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

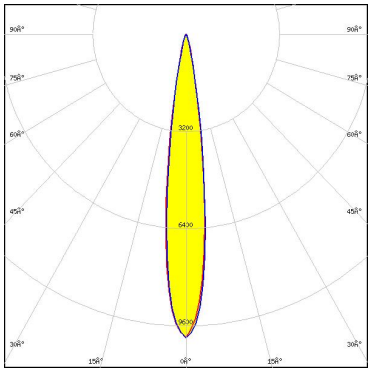
LED	OSLON Pure 1414
FWHM / FWTM	10.0° / 18.0°
Efficiency	89 %
Peak intensity	22.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

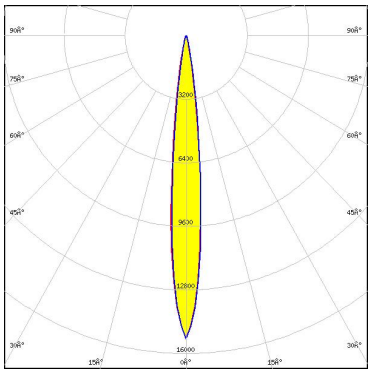
LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	15.0° / 27.0°
Efficiency	88 %
Peak intensity	10 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	12.0° / 23.0°
Efficiency	87 %
Peak intensity	15.3 cd/lm
LEDs/each optic	1
Light colour/type	Far Red
Required components:	



Light distribution files

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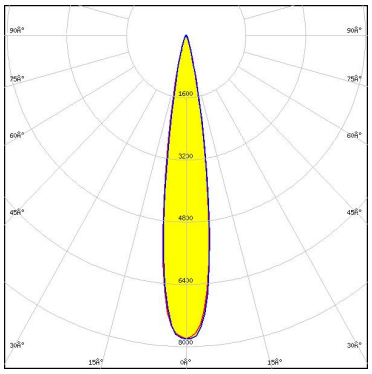
OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

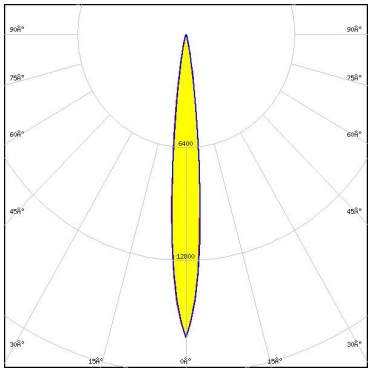
LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	17.0° / 30.0°
Efficiency	87 %
Peak intensity	7.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

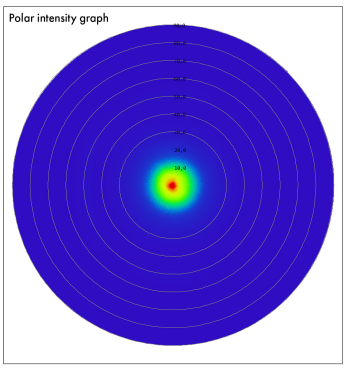
LED	OSLON SSL 150
FWHM / FWTM	11.0° / 22.0°
Efficiency	88 %
Peak intensity	17.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

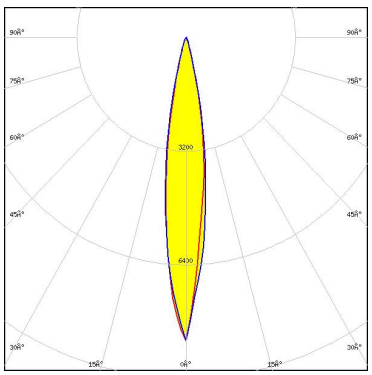


Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4715AS
FWHM / FWTM	16.0° / 30.0°
Efficiency	86 %
Peak intensity	8.5 cd/lm
LEDs/each optic	1
Light colour/type	IR
Required components:	





Light distribution files

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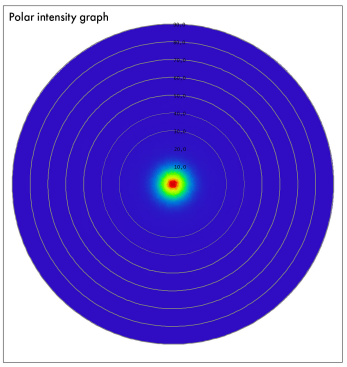
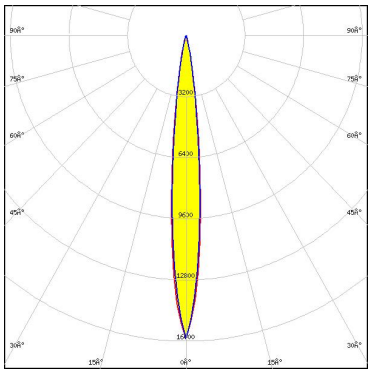
OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

LED	SFH 4716S
FWHM / FWTM	11.0° / 22.0°
Efficiency	86 %
LEDs/each optic	1
Light colour/type	IR
Required components:	

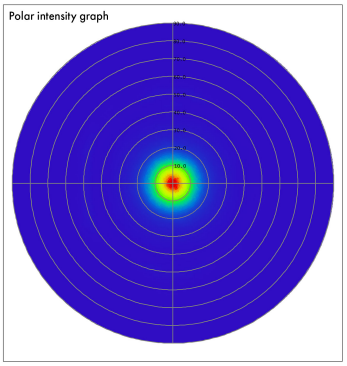


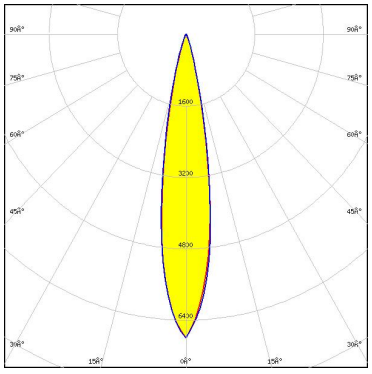


Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4725AS
FWHM / FWTM	18.0° / 32.0°
Efficiency	87 %
LEDs/each optic	1
Light colour/type	IR
Required components:	

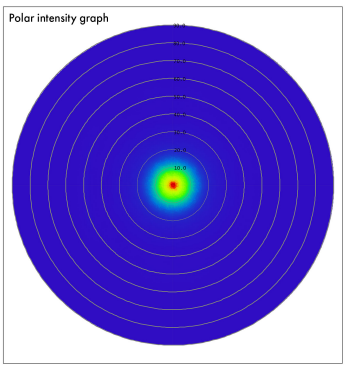


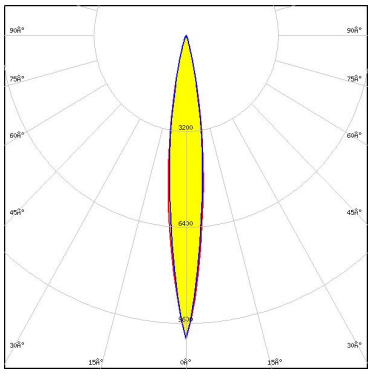


Light distribution files

OSRAM
Opto Semiconductors

LED	SFH 4725S
FWHM / FWTM	13.0° / 28.0°
Efficiency	87 %
LEDs/each optic	1
Light colour/type	IR
Required components:	





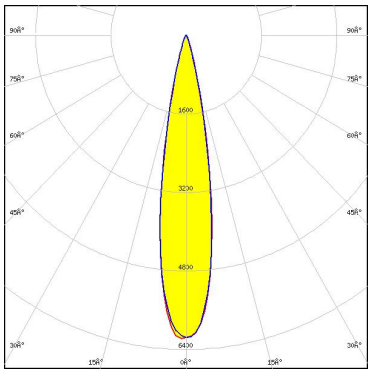
Light distribution files

LEDiL is a registered trademark of LEDiL Oy in the European Union, USA, and certain other countries.

OPTICAL RESULTS (SIMULATED):

SAMSUNG

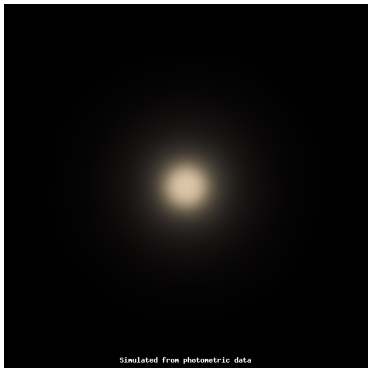
LED	LH351B
FWHM / FWTM	20.0° / 34.0°
Efficiency	86 %
Peak intensity	6.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

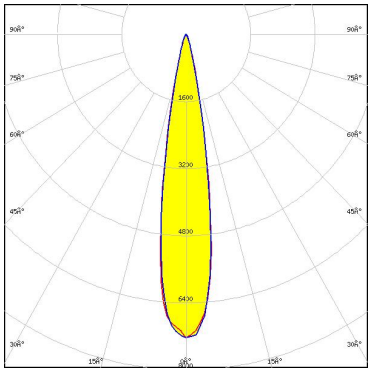


Light distribution files

SEOUL SEMICONDUCTOR

LED	Z5M3-E1
FWHM / FWTM	18.0° / 32.0°
Efficiency	90 %
Peak intensity	7.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

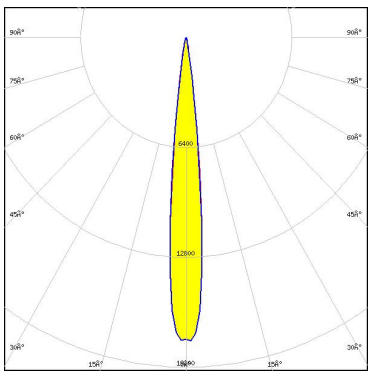




Light distribution files

STANLEY

LED	MGN1108MS
FWHM / FWTM	12.0° / 20.0°
Efficiency	88 %
LEDs/each optic	1
Light colour/type	IR
Required components:	



Light distribution files

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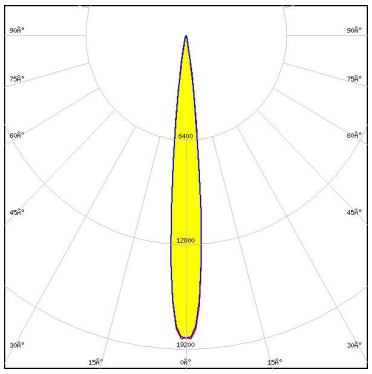
OPTICAL RESULTS (SIMULATED):

LED	MJN1108MS
FWHM / FWTM	12.0° / 20.0°
Efficiency	89 %
LEDs/each optic	1
Light colour/type	IR
Required components:	



Light distribution files

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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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