VERONICA-SQ-MINI-O

~15° + 50° oval beam



SPECIFICATION:

Dimensions	13.9 x 13.9 mm
Height	8.9 mm
Fastening	tape, pin
ROHS compliant	yes

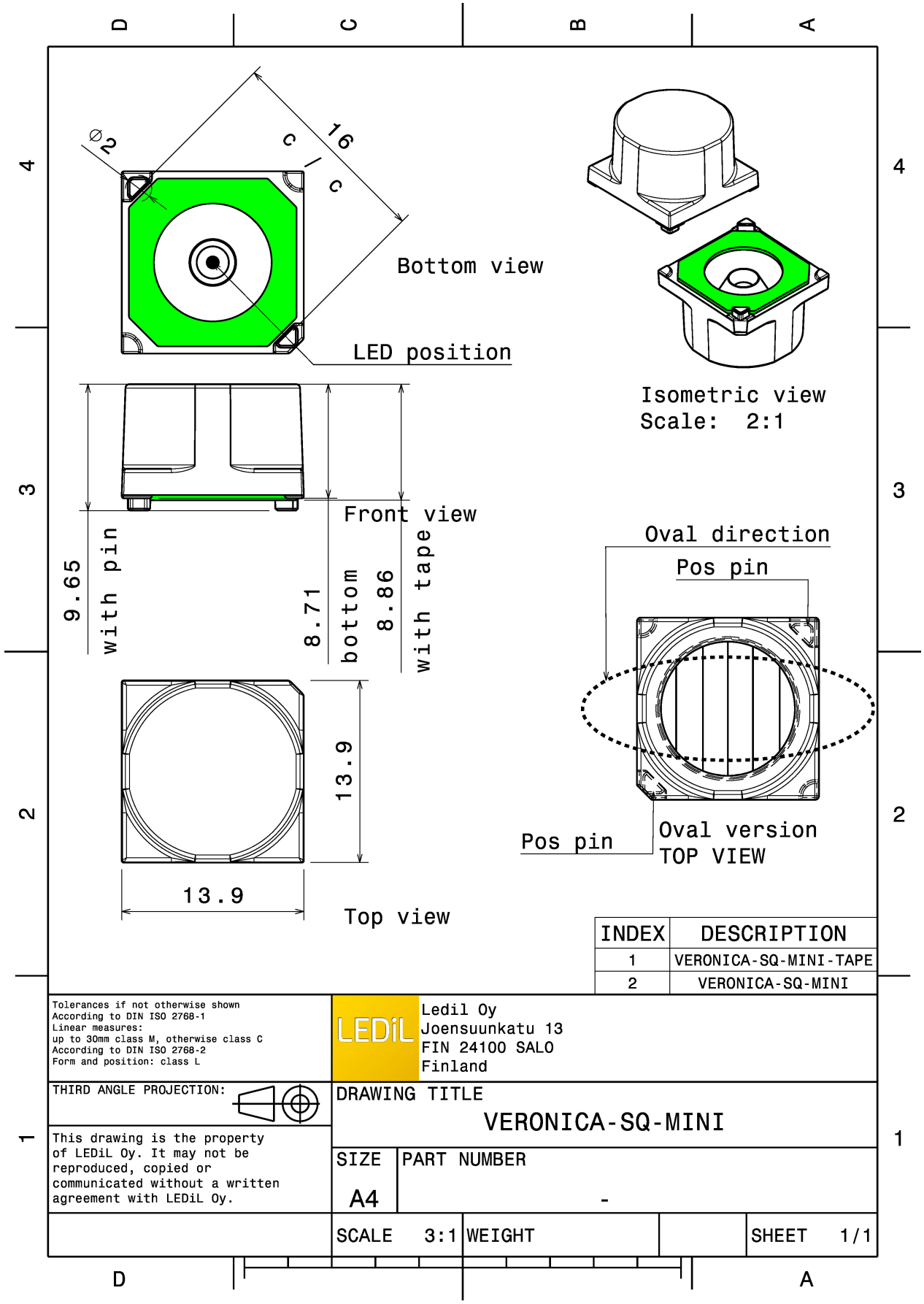
MATERIALS:

Component	Type	Material	Colour	Finish	Length
VERONICA-SQ-MINI-O	Single lens	PMMA	clear		13.9
VERONICA-SQ-MINI-TAPE	Tape	Acrylic foam	clear		13.0

ORDERING INFORMATION:

Component		Qty in box	MOQ	MPQ	Box weight (kg)
CA14602_VERONICA-SQ-MINI-O » Box size: 480 x 280 x 300 mm	Single lens	5544	252	252	7.8

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INDEX	DESCRIPTION
1	VERONICA-SQ-MINI-TAPE
2	VERONICA-SQ-MINI

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 Oy
Joensuunkatu 13
FIN 24100 SALO
Finland

THIRD ANGLE PROJECTION:

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DRAWING TITLE
VERONICA-SQ-MINI

SIZE	PART NUMBER
A4	-

SCALE	WEIGHT		SHEET
3:1			1/1

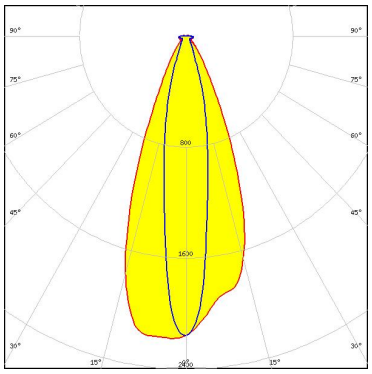
See also our general installation guide: www.ledil.com/installation_guide

OPTICAL RESULTS (MEASURED):

CREE LEDs

LED	XD16
FWHM / FWTM	41.0 + 18.0° / 68.0 + 43.0°
Efficiency	89 %
Peak intensity	2.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



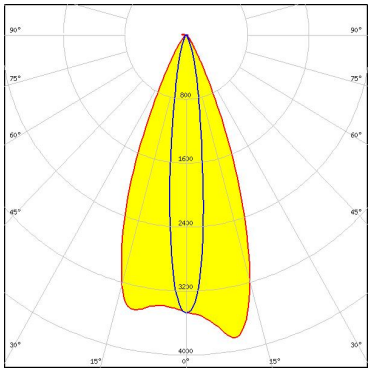


Light distribution files

CREE LEDs

LED	XP-E2
FWHM / FWTM	42.0 + 14.0° / 61.0 + 34.0°
Efficiency	92 %
Peak intensity	3.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



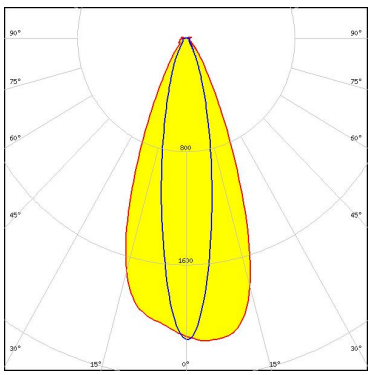


Light distribution files

LUMILEDS

LED	LUXEON Rebel
FWHM / FWTM	42.0 + 20.0° / 71.0 + 50.0°
Efficiency	90 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

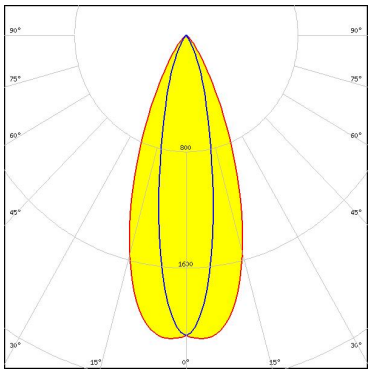
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OPTICAL RESULTS (MEASURED):

LUMILEDS

LED	LUXEON Rebel ES
FWHM / FWTM	50.0 + 23.0° / 71.0 + 51.0°
Efficiency	80 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



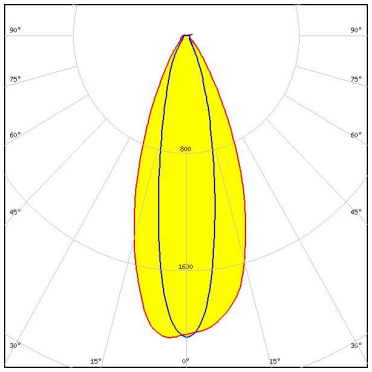


Light distribution files

LUMILEDS

LED	LUXEON TX
FWHM / FWTM	42.0 + 22.0° / 73.0 + 54.0°
Efficiency	90 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



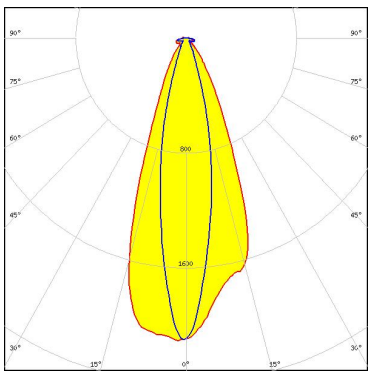


Light distribution files

NICHIA

LED	NCSxE17A
FWHM / FWTM	40.0 + 20.0° / 69.0 + 44.0°
Efficiency	89 %
Peak intensity	2.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





Light distribution files

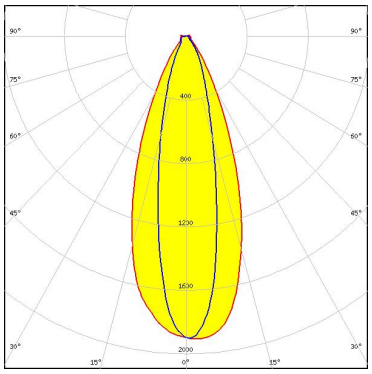
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OPTICAL RESULTS (MEASURED):

NICHIA

LED	NVSxx19B/NVSxx19C
FWHM / FWTM	41.0 + 23.0° / 74.0 + 56.0°
Efficiency	90 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



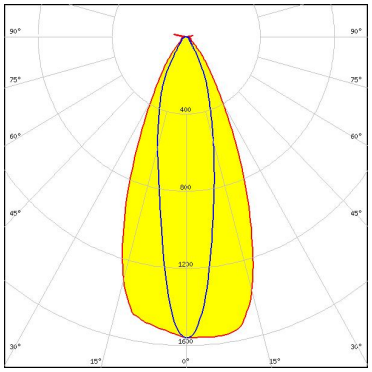


Light distribution files

OSRAM
Opto Semiconductors

LED	Duris S5 (2 chip)
FWHM / FWTM	76.0 + 22.0° / 79.0 + 61.0°
Efficiency	74 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



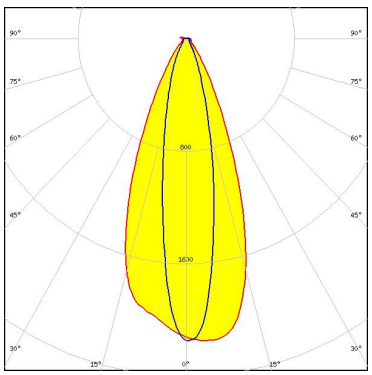


Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON Square EC
FWHM / FWTM	42.0 + 20.0° / 72.0 + 49.0°
Efficiency	89 %
Peak intensity	2.2 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	SFH 4170S
FWHM / FWTM	40.0 + 12.0° / 60.0 + 33.0°
Efficiency	%
LEDs/each optic	1
Light colour/type	IR
Required components:	

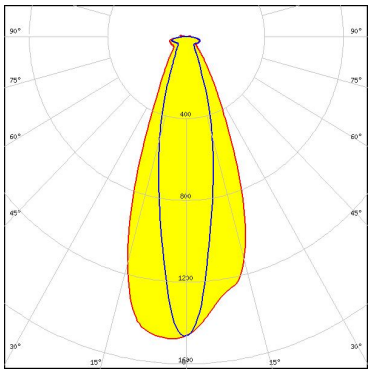
OSRAM
Opto Semiconductors

LED	SFH 4180S
FWHM / FWTM	38.0 + 11.0° / 58.0 + 31.0°
Efficiency	%
LEDs/each optic	1
Light colour/type	IR
Required components:	

SAMSUNG

LED	LH181A
FWHM / FWTM	42.0 + 22.0° / 77.0 + 54.0°
Efficiency	88 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

Light distribution files



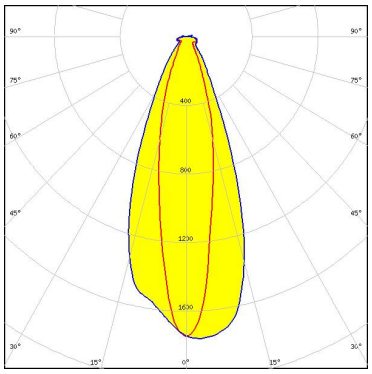
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OPTICAL RESULTS (MEASURED):

SAMSUNG

LED	LH181B
FWHM / FWTM	22.0 + 41.0° / 54.0 + 75.0°
Efficiency	91 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



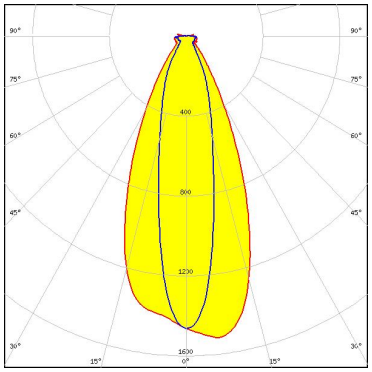


Light distribution files

SEOUL SEMICONDUCTOR

LED	Z8Y22P
FWHM / FWTM	46.0 + 23.0° / 80.0 + 62.0°
Efficiency	90 %
Peak intensity	1.5 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	





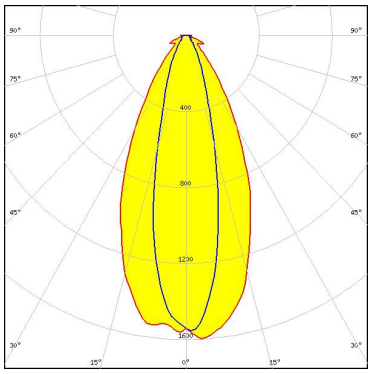
Light distribution files

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OPTICAL RESULTS (SIMULATED):

CREE LEDs

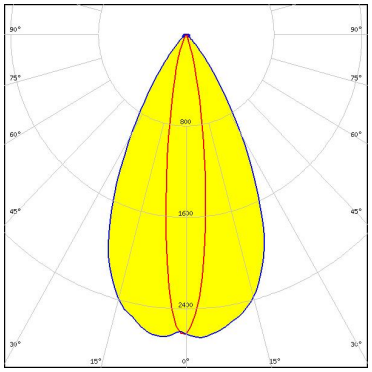
LED	XP-G2 HE
FWHM / FWTM	50.0 + 26.0° / 88.0 + 59.0°
Efficiency	90 %
Peak intensity	1.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

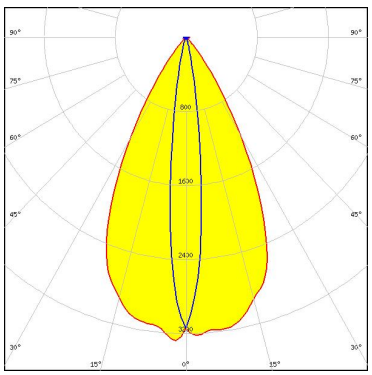
LED	XQ-E HD
FWHM / FWTM	54.0 + 16.0° / 80.0 + 34.0°
Efficiency	90 %
Peak intensity	2.7 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

CREE LEDs

LED	XQ-E HI
FWHM / FWTM	54.0 + 12.0° / 78.0 + 26.0°
Efficiency	89 %
Peak intensity	3.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



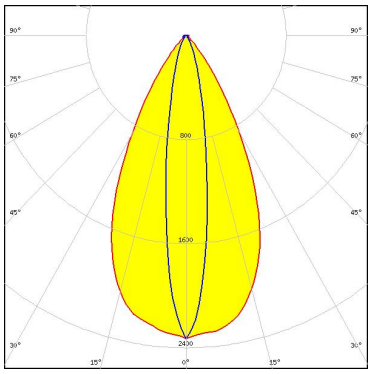
Light distribution files

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OPTICAL RESULTS (SIMULATED):

LUMILEDS

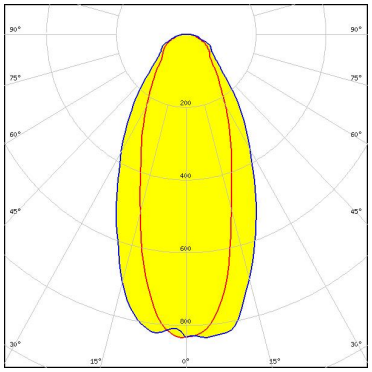
LED	LUXEON 2835 Line
FWHM / FWTM	54.0 + 16.0° / 80.0 + 41.0°
Efficiency	86 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	PC Amber
Required components:	



Light distribution files

LUMILEDS

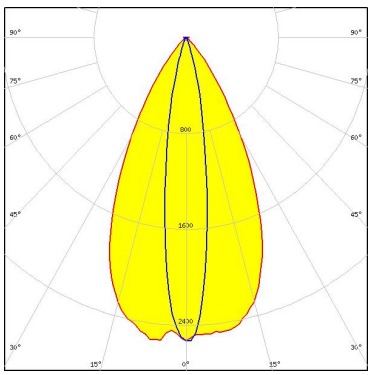
LED	LUXEON 5050 Round LES
FWHM / FWTM	54.0 + 36.0° / 118.0 + 106.0°
Efficiency	86 %
Peak intensity	0.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON C
FWHM / FWTM	53.0 + 17.0° / 81.0 + 34.0°
Efficiency	87 %
Peak intensity	2.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



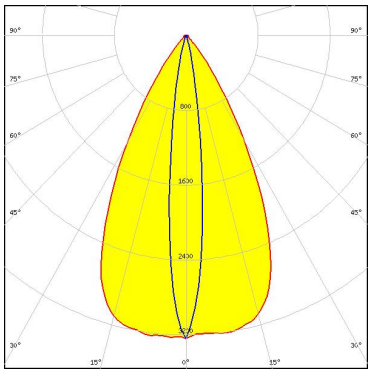
Light distribution files

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OPTICAL RESULTS (SIMULATED):

LUMILEDS

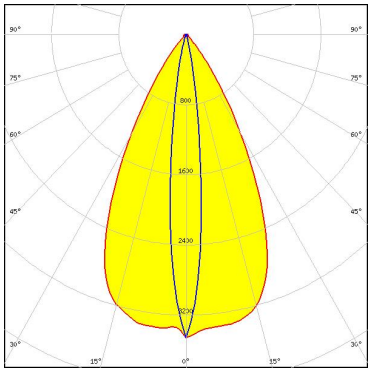
LED	LUXEON CZ
FWHM / FWTM	56.0 + 13.0° / 79.0 + 26.0°
Efficiency	91 %
Peak intensity	3.3 cd/lm
LEDs/each optic	1
Light colour/type	PC Amber
Required components:	



Light distribution files

LUMILEDS

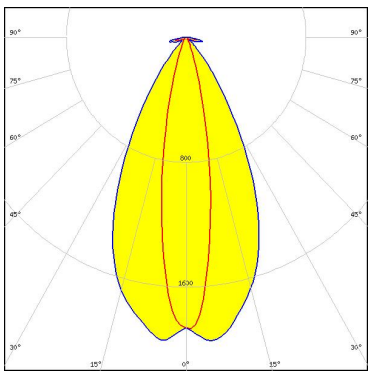
LED	LUXEON CZ
FWHM / FWTM	54.0 + 12.0° / 78.0 + 25.0°
Efficiency	91 %
Peak intensity	3.5 cd/lm
LEDs/each optic	1
Light colour/type	Red
Required components:	



Light distribution files

LUMILEDS

LED	LUXEON HL1Z
FWHM / FWTM	20.0 + 53.0° / 40.0 + 82.0°
Efficiency	90 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



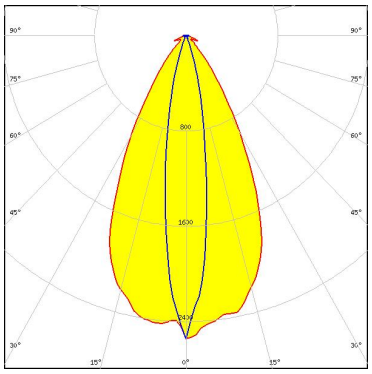
Light distribution files

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OPTICAL RESULTS (SIMULATED):

LUMILEDS

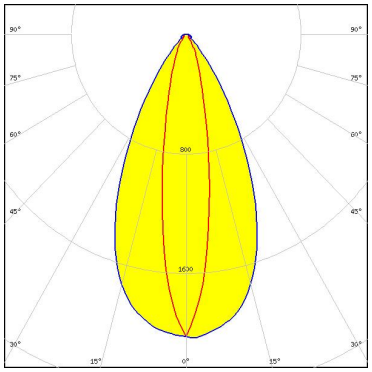
LED	LUXEON Z ES
FWHM / FWTM	53.0 + 16.0° / 82.0 + 35.0°
Efficiency	92 %
Peak intensity	2.6 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

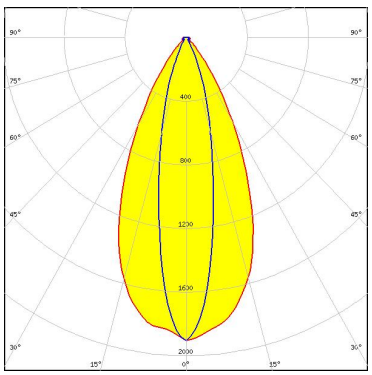
LED	Duris E 2835
FWHM / FWTM	18.0 + 52.0° / 48.0 + 82.0°
Efficiency	88 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSCONIQ P 3737 (2W version)
FWHM / FWTM	49.0 + 22.0° / 80.0 + 49.0°
Efficiency	83 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



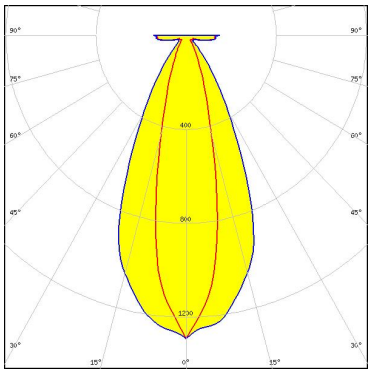
Light distribution files

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OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

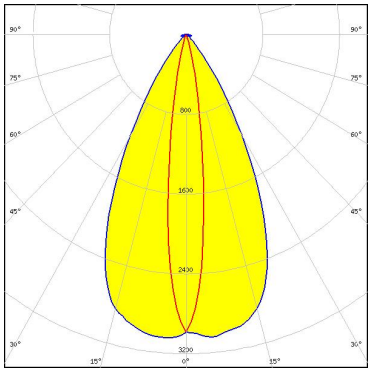
LED	OSCONIQ P 3737 (3W version)
FWHM / FWTM	24.0 + 48.0° / 48.0 + 80.0°
Efficiency	84 %
Peak intensity	1.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

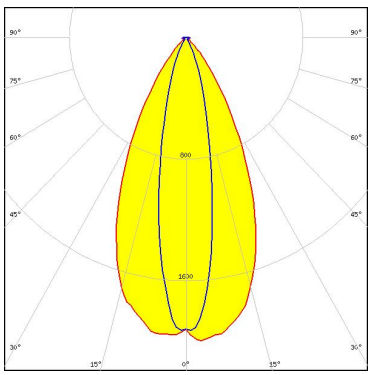
LED	OSLON Pure 1414
FWHM / FWTM	14.0 + 54.0° / 28.0 + 79.0°
Efficiency	93 %
Peak intensity	3.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON Square CSSRM2/CSSRM3
FWHM / FWTM	48.0 + 20.0° / 82.0 + 44.0°
Efficiency	81 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



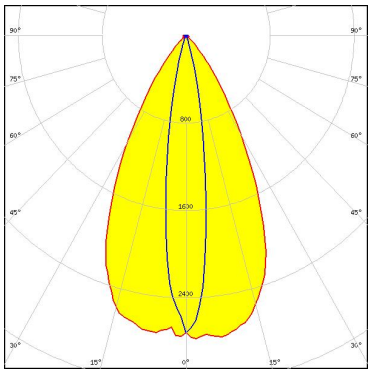
Light distribution files

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OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

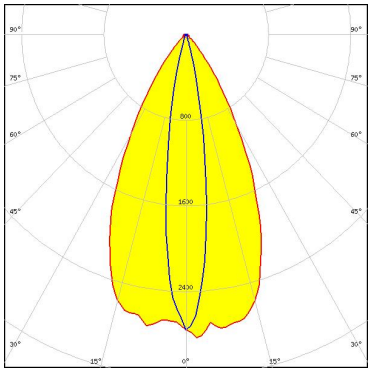
LED	OSLON SSL 150
FWHM / FWTM	54.0 + 15.0° / 80.0 + 30.0°
Efficiency	90 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	Green
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

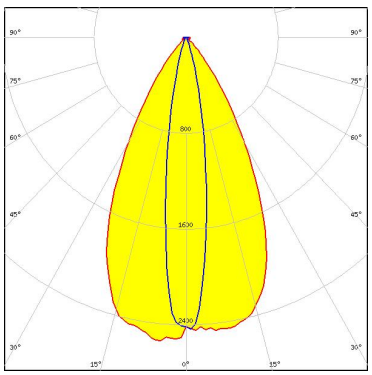
LED	OSLON SSL 150
FWHM / FWTM	53.0 + 16.0° / 80.0 + 30.0°
Efficiency	90 %
Peak intensity	2.8 cd/lm
LEDs/each optic	1
Light colour/type	Red
Required components:	



Light distribution files

OSRAM
Opto Semiconductors

LED	OSLON SSL 150
FWHM / FWTM	55.0 + 16.0° / 82.0 + 34.0°
Efficiency	89 %
Peak intensity	2.6 cd/lm
LEDs/each optic	1
Light colour/type	Blue
Required components:	



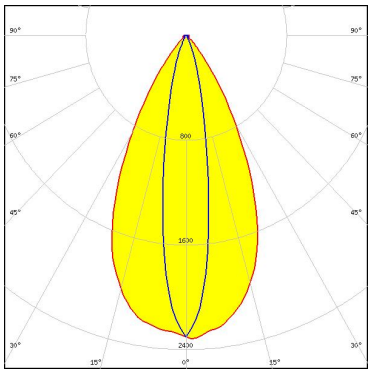
Light distribution files

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OPTICAL RESULTS (SIMULATED):

OSRAM
Opto Semiconductors

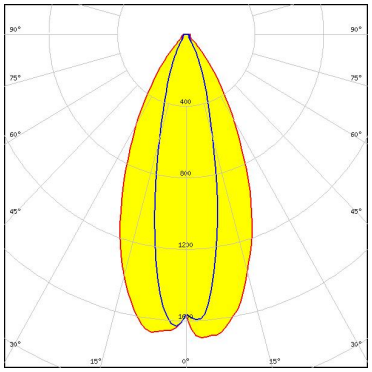
LED	OSLON SSL 80
FWHM / FWTM	53.0 + 18.0° / 80.0 + 40.0°
Efficiency	86 %
Peak intensity	2.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SAMSUNG

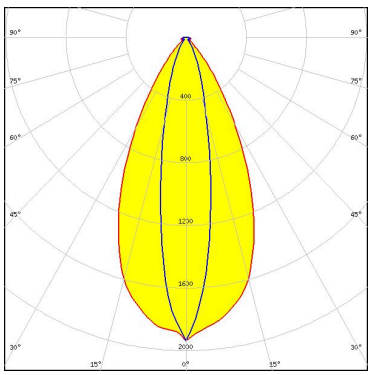
LED	LH351B
FWHM / FWTM	49.0 + 24.0° / 83.0 + 53.0°
Efficiency	84 %
Peak intensity	1.8 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	MJT 3030
FWHM / FWTM	50.0 + 20.0° / 82.0 + 48.0°
Efficiency	85 %
Peak intensity	1.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



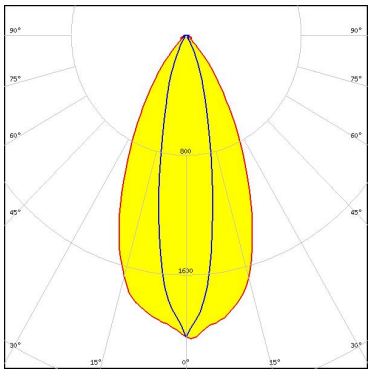
Light distribution files

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OPTICAL RESULTS (SIMULATED):

SEOUL SEMICONDUCTOR

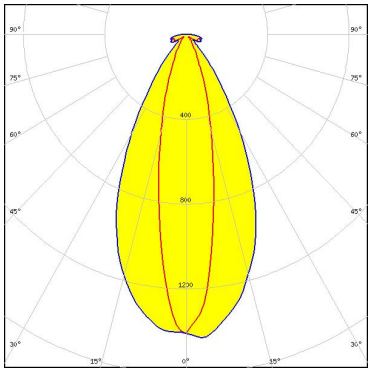
LED	Z5M1/Z5M2
FWHM / FWTM	50.0 + 22.0° / 82.0 + 48.0°
Efficiency	88 %
Peak intensity	2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



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SEOUL SEMICONDUCTOR

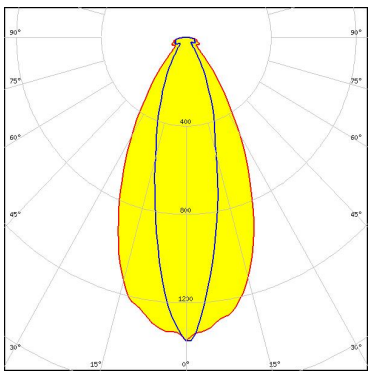
LED	Z8Y19
FWHM / FWTM	22.0 + 52.0° / 51.0 + 84.0°
Efficiency	87 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files

SEOUL SEMICONDUCTOR

LED	Z8Y22T
FWHM / FWTM	51.0 + 25.0° / 87.0 + 61.0°
Efficiency	87 %
Peak intensity	1.4 cd/lm
LEDs/each optic	1
Light colour/type	White
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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