

## TINA-Y-SS

~16° smooth spot beam. Assembly with holder, installation tape and pins.

## SPECIFICATION:

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

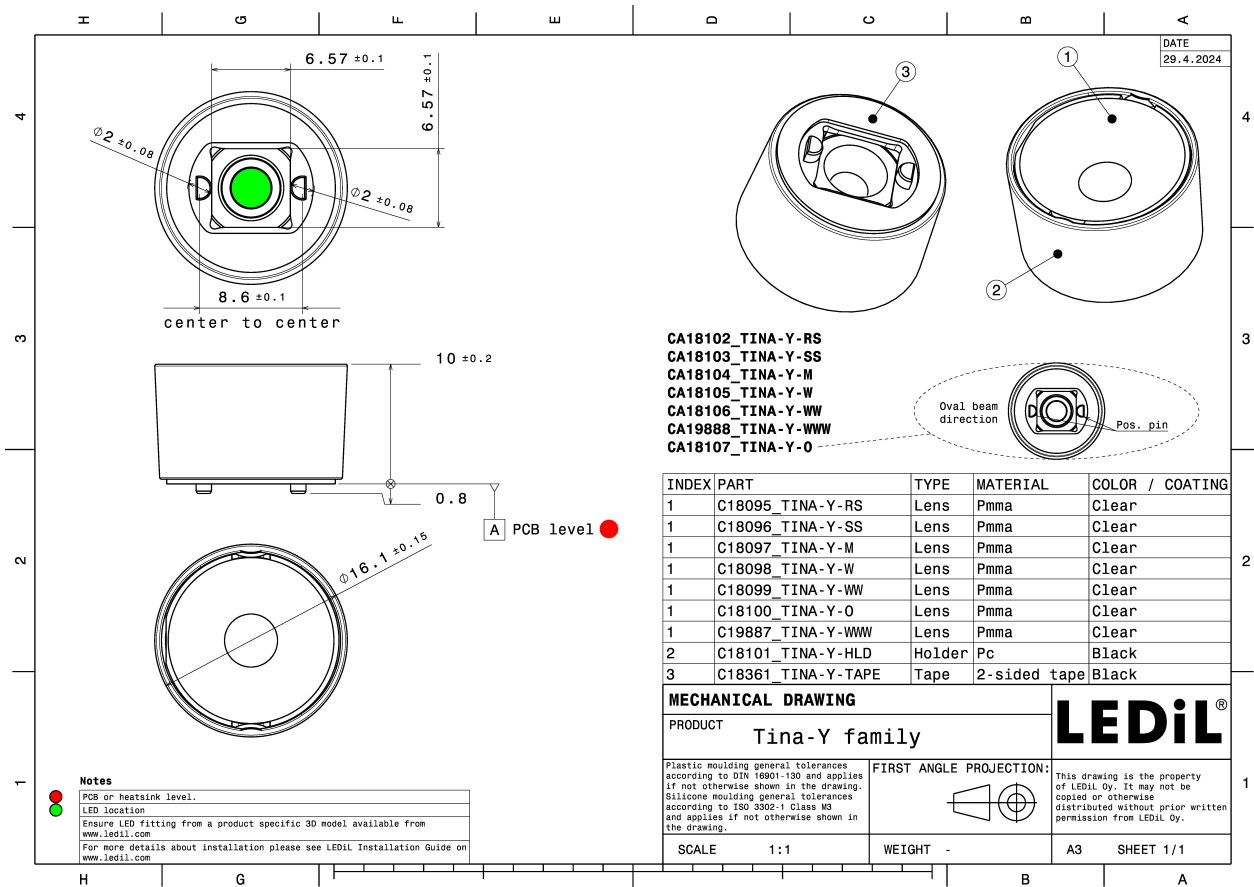


## MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA-Y-SS	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)
CA18103_TINA-Y-SS » Box size: 476 x 273 x 197 mm	3900	300	300	5.7

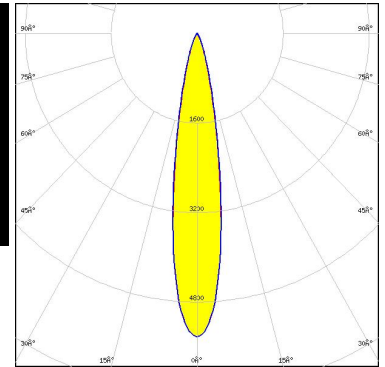


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



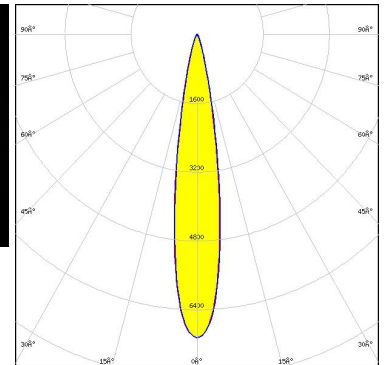
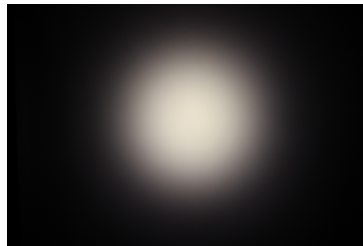
LED XP-G3  
 FWHM / FWTM 18.0° / 37.0°  
 Efficiency 81 %  
 Peak intensity 5.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



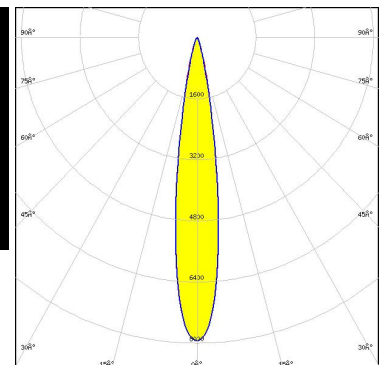
LED XP-G4  
 FWHM / FWTM 17.0° / 33.0°  
 Efficiency 87 %  
 Peak intensity 7.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NVSW719AC  
 FWHM / FWTM 17.0° / 31.0°  
 Efficiency 87 %  
 Peak intensity 7.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

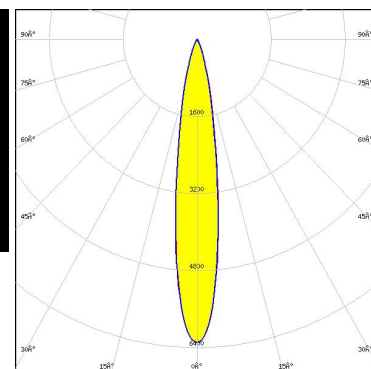
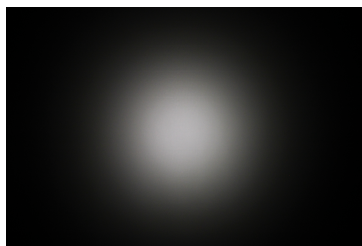


Light distribution files

### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

LED	OSCONIQ C 3030
FWHM / FWTM	16.0° / 36.0°
Efficiency	83 %
Peak intensity	6.3 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



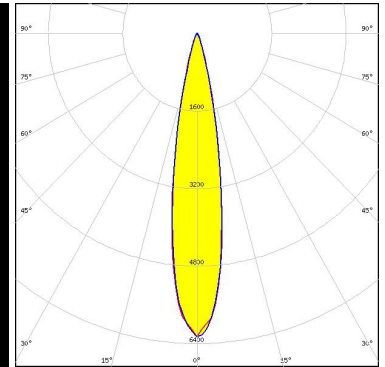
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



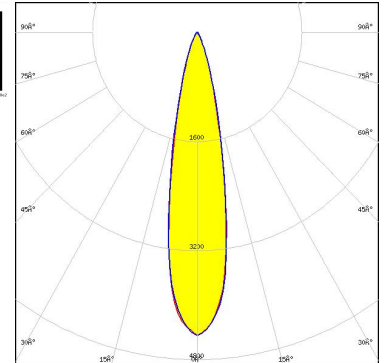
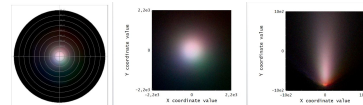
LED Bridgelux SMD 3535 (3B1)  
 FWHM / FWTM 18.0° / 35.0 + 34.0°  
 Efficiency 88 %  
 Peak intensity 6.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



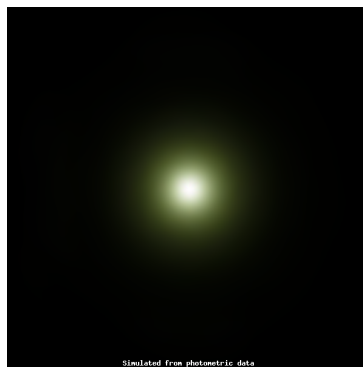
LED CLR6A-TKW  
 FWHM / FWTM 21.0° / 42.0°  
 Efficiency 86 %  
 Peak intensity 4.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



LED J Series 3030C  
 FWHM / FWTM 16.0° / 34.0°  
 Efficiency 87 %  
 Peak intensity 7.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

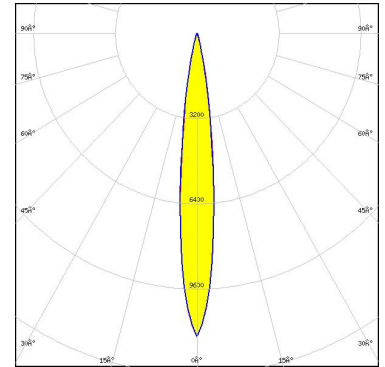


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



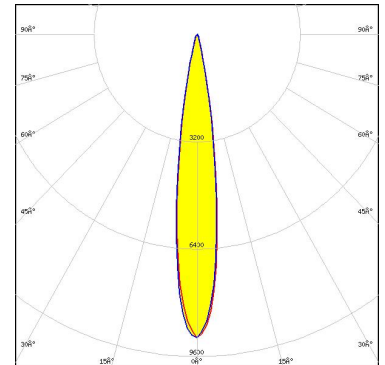
LED XD16 Premium  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 86 %  
 Peak intensity 11.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



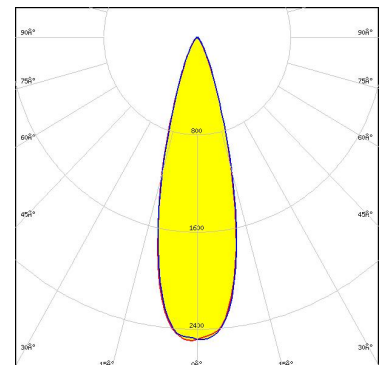
LED XE-G  
 FWHM / FWTM 16.0° / 28.0°  
 Efficiency 87 %  
 Peak intensity 9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XHP35.2 HD  
 FWHM / FWTM 28.0° / 52.0°  
 Efficiency 75 %  
 Peak intensity 2.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

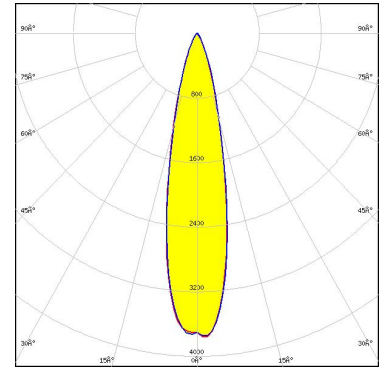


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



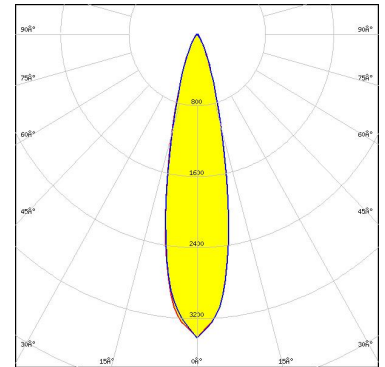
LED XHP35.2 HI  
FWHM / FWTM 22.0° / 46.0°  
Efficiency 83 %  
Peak intensity 3.8 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



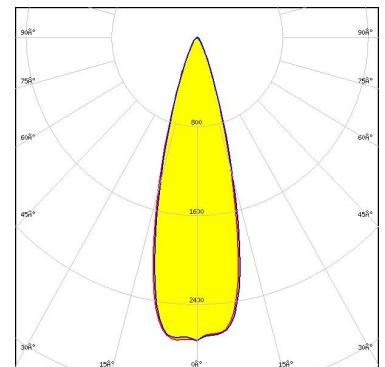
LED XHP50.3 HI  
FWHM / FWTM 24.0° / 48.0°  
Efficiency 82 %  
Peak intensity 3.4 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XM-L RGBW (XMLDCL HD)  
FWHM / FWTM 30.0° / 50.0°  
Efficiency 85 %  
Peak intensity 2.7 cd/Im  
LEDs/each optic 1  
Light colour/type RGBW  
Required components:

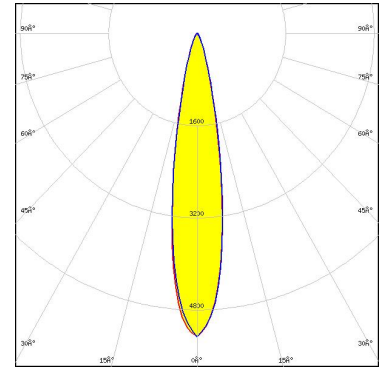


Light distribution files

### OPTICAL RESULTS (SIMULATED):



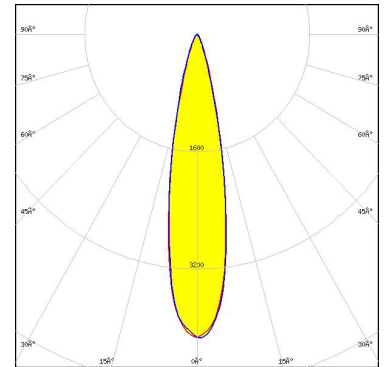
LED XM-L RGBW (XMLDCL HI)  
 FWHM / FWTM 20.0° / 38.0°  
 Efficiency 85 %  
 Peak intensity 5.3 cd/Im  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



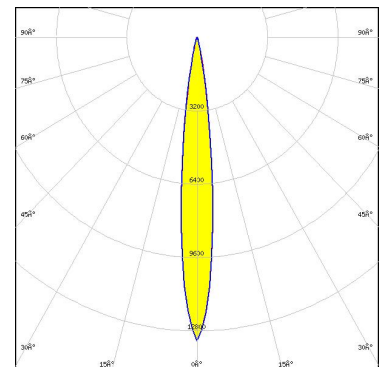
LED XM-L3  
 FWHM / FWTM 21.0° / 42.0°  
 Efficiency 80 %  
 Peak intensity 4 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-E2  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 88 %  
 Peak intensity 13 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

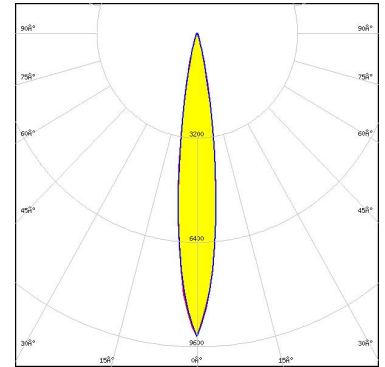


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



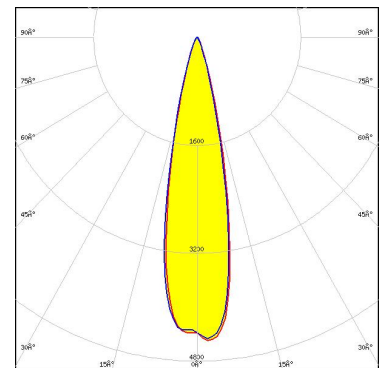
LED XP-G2  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 87 %  
 Peak intensity 9 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



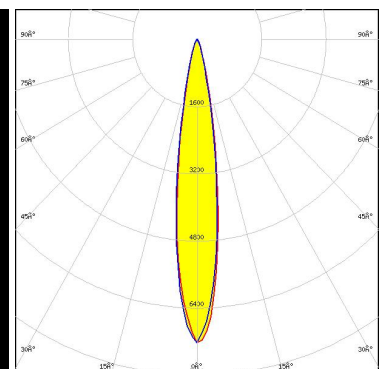
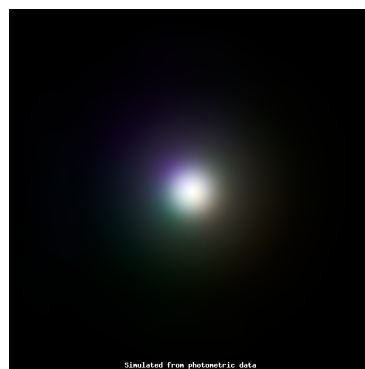
LED XP-L RGBW HD  
 FWHM / FWTM 23.0° / 39.0°  
 Efficiency 87 %  
 Peak intensity 4.6 cd/Im  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



LED XP-L RGBW HI  
 FWHM / FWTM 16.0° / 32.0°  
 Efficiency 84 %  
 Peak intensity 7.2 cd/Im  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:

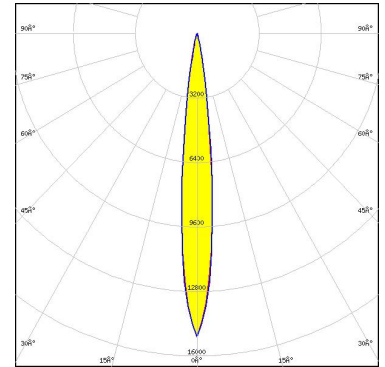


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



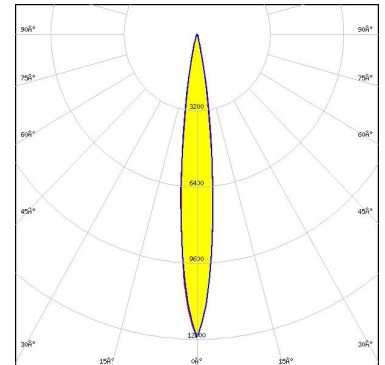
LED XP-P  
FWHM / FWTM 12.0° / 22.0°  
Efficiency 89 %  
Peak intensity 15.1 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



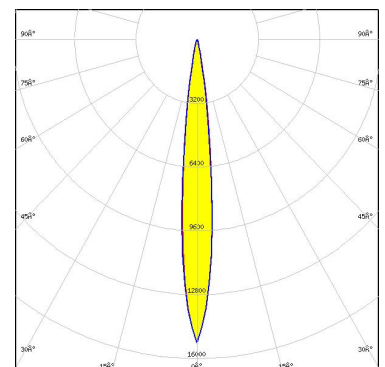
LED XQ-E HD  
FWHM / FWTM 12.0° / 24.0°  
Efficiency 87 %  
Peak intensity 12.7 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XQ-E HI  
FWHM / FWTM 12.0° / 22.0°  
Efficiency 87 %  
Peak intensity 15.2 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:

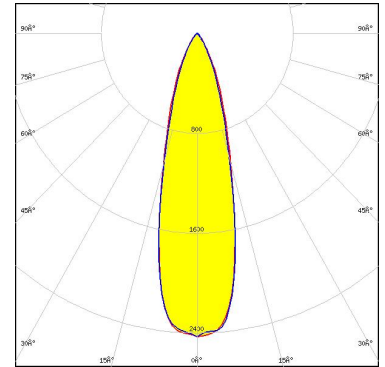


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



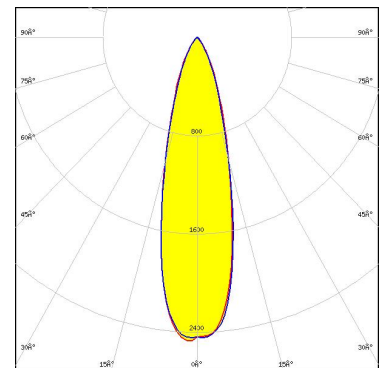
LED LUXEON 5050 Round LES  
 FWHM / FWTM 28.0° / 56.0°  
 Efficiency 80 %  
 Peak intensity 2.4 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



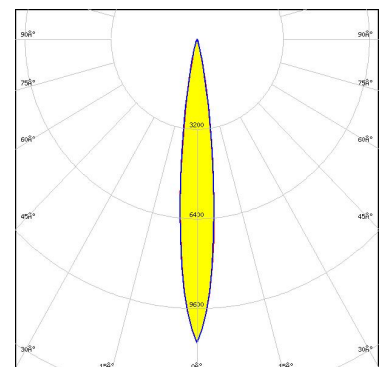
LED LUXEON 5050 Square LES  
 FWHM / FWTM 26.0° / 56.0°  
 Efficiency 78 %  
 Peak intensity 2.5 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON C  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 79 %  
 Peak intensity 10.8 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

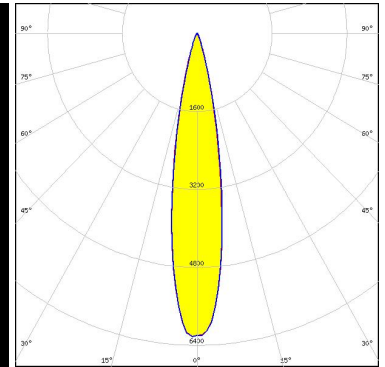
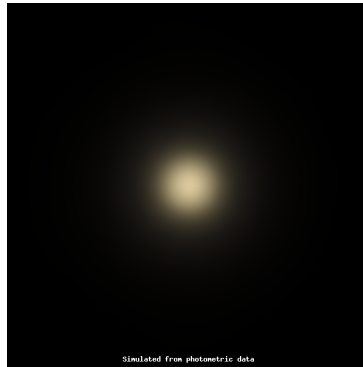


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



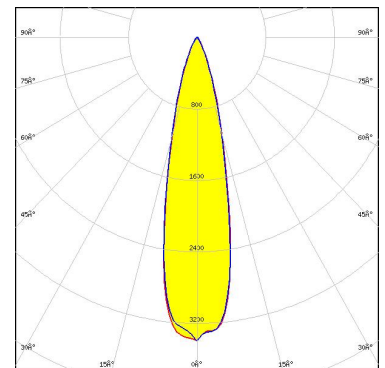
LED LUXEON HL2X-V  
 FWHM / FWTM 19.0 + 20.0° / 35.0 + 34.0°  
 Efficiency 89 %  
 Peak intensity 6.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



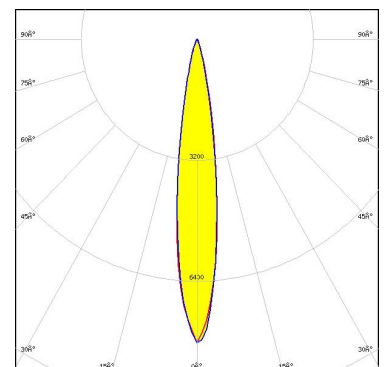
LED LUXEON MZ  
 FWHM / FWTM 24.0° / 47.0°  
 Efficiency 81 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON TX  
 FWHM / FWTM 15.0° / 30.0°  
 Efficiency 84 %  
 Peak intensity 8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



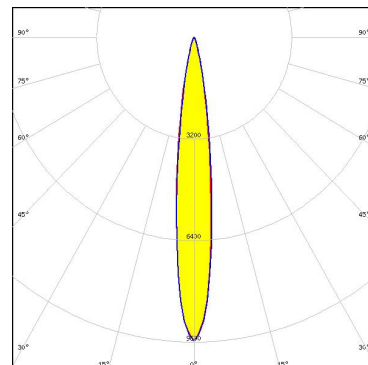
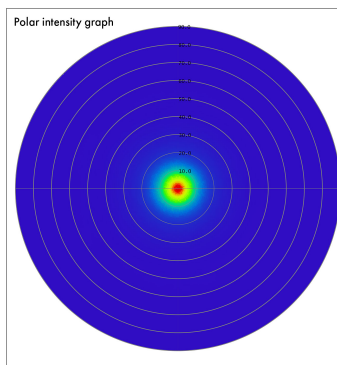
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



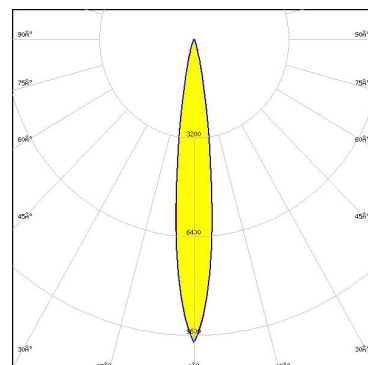
LED SST-10-IR-B90  
 FWHM / FWTM 13.0° / 28.0°  
 Efficiency 87 %  
 LEDs/each optic 1  
 Light colour/type IR  
 Required components:



Light distribution files



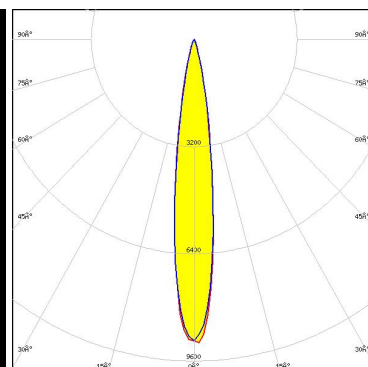
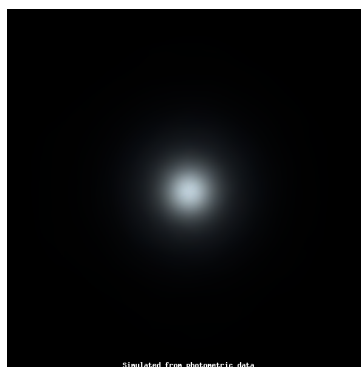
LED SST-20 Gen1  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 86 %  
 Peak intensity 9.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SST-20 Gen2  
 FWHM / FWTM 14.0 + 15.0° / 30.0 + 29.0°  
 Efficiency 86 %  
 Peak intensity 9.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

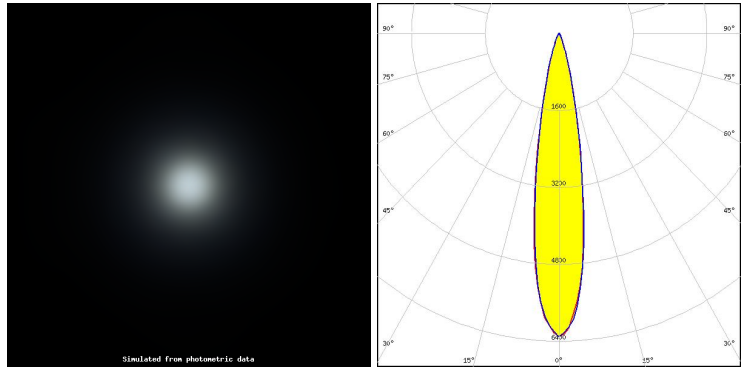


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



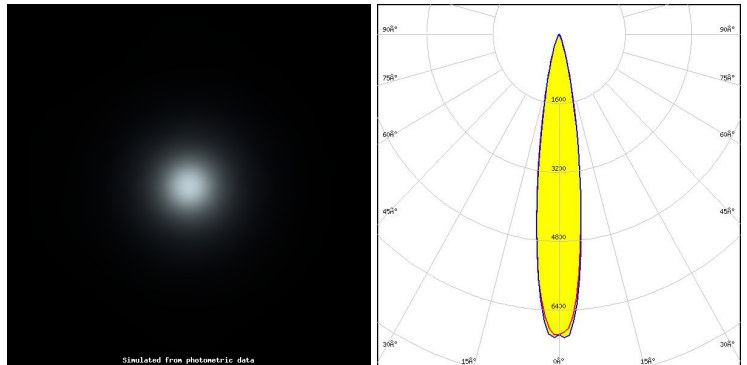
LED SST-20F-W  
 FWHM / FWTM 18.0° / 36.0°  
 Efficiency 89 %  
 Peak intensity 6.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



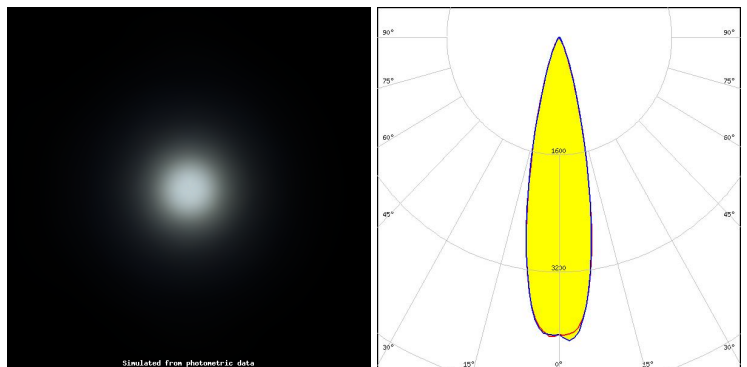
LED SST-25-W  
 FWHM / FWTM 18.0 + 16.0° / 34.0°  
 Efficiency 86 %  
 Peak intensity 7.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED SST-36F-W  
 FWHM / FWTM 24.0° / 43.0 + 44.0°  
 Efficiency 87 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

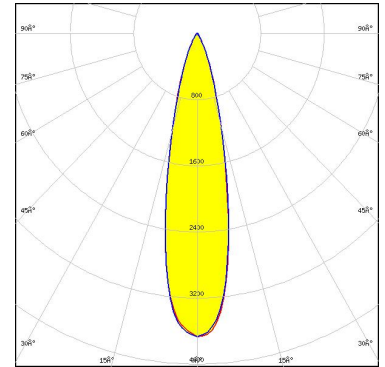


Light distribution files

### OPTICAL RESULTS (SIMULATED):



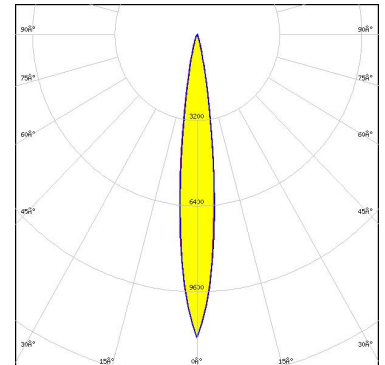
LED NV4WB35AM  
FWHM / FWTM 24.0° / 46.0°  
Efficiency 85 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



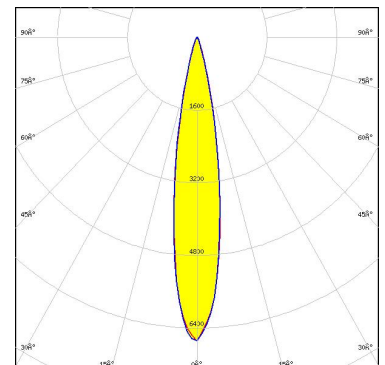
LED NVSW219C-V2  
FWHM / FWTM 14.0° / 26.0°  
Efficiency 88 %  
Peak intensity 11.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NVSW219F  
FWHM / FWTM 18.0° / 33.0°  
Efficiency 87 %  
Peak intensity 6.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

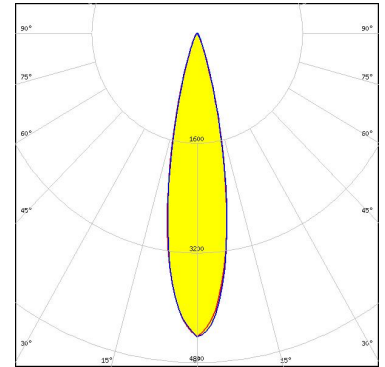


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



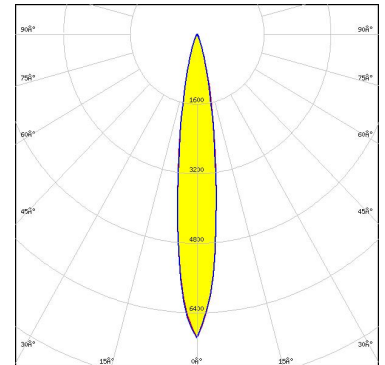
LED NVSW519A  
 FWHM / FWTM 22.0° / 40.0°  
 Efficiency 83 %  
 Peak intensity 4.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



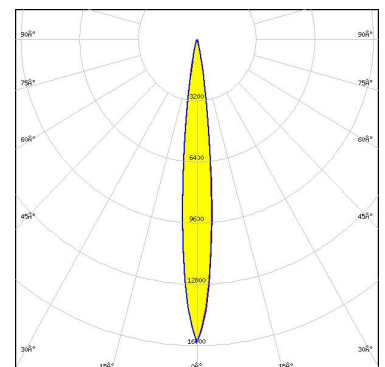
LED NVSxE21A  
 FWHM / FWTM 16.0° / 34.0°  
 Efficiency 79 %  
 Peak intensity 7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSLO Pure 1414  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 89 %  
 Peak intensity 15.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

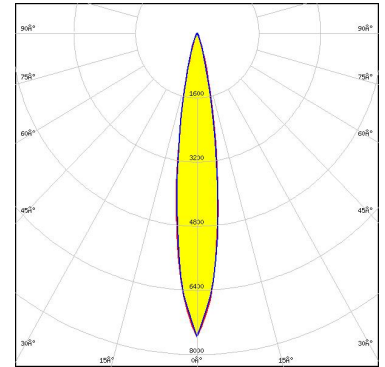


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

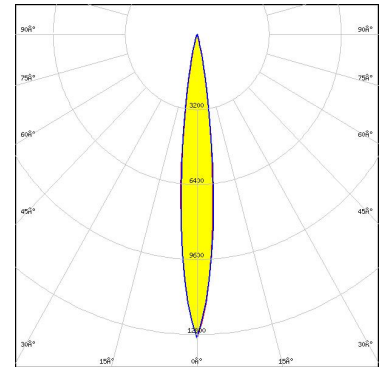
LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 16.0° / 32.0°  
Efficiency 86 %  
Peak intensity 7.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

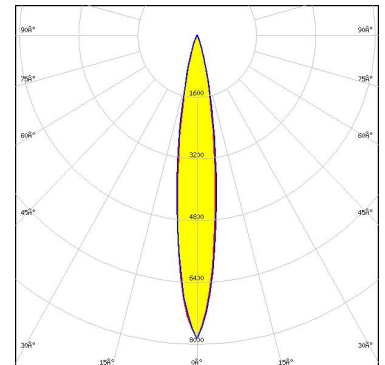
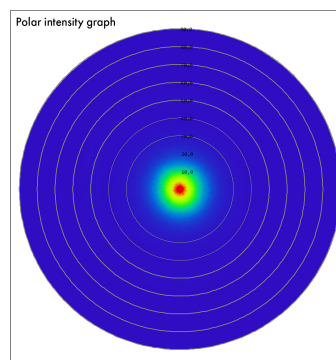
LED OSLON SSL 150  
FWHM / FWTM 13.0° / 25.0°  
Efficiency 88 %  
Peak intensity 13 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4715AS  
FWHM / FWTM 16.0° / 33.0°  
Efficiency 86 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

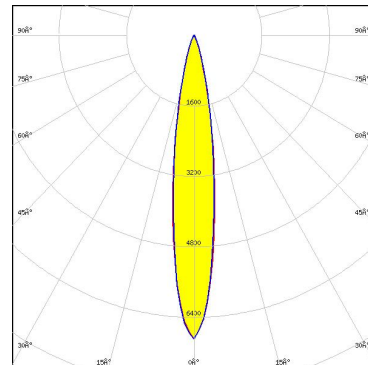
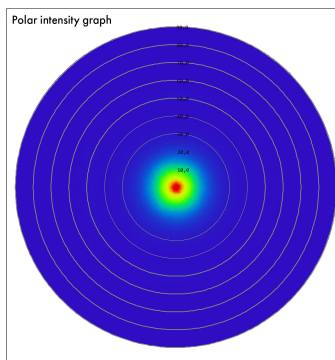


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

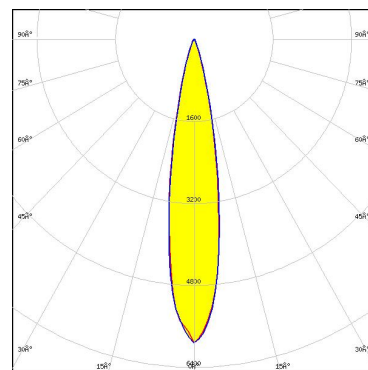
LED SFH 4725AS  
FWHM / FWTM 16.0° / 34.0°  
Efficiency 86 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**SAMSUNG**

LED LH351C  
FWHM / FWTM 19.0° / 36.0°  
Efficiency 87 %  
Peak intensity 5.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### 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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