

## 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-HLD	Holder	PC	black	gloss	
TINA-Y-SS	Single lens	PMMA	clear	gloss	
TINA-Y-TAPE	Tape	Acryl tape			

## ORDERING INFORMATION:

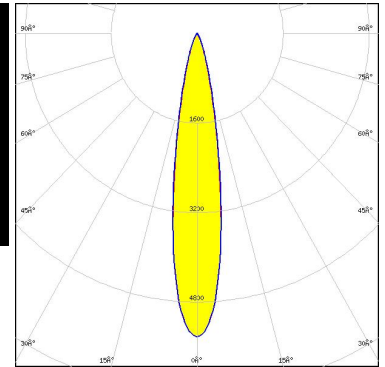
Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA18103_TINA-Y-SS » Box size: 476 x 273 x 197 mm	3900	300	300	5.7



### OPTICAL RESULTS (MEASURED):



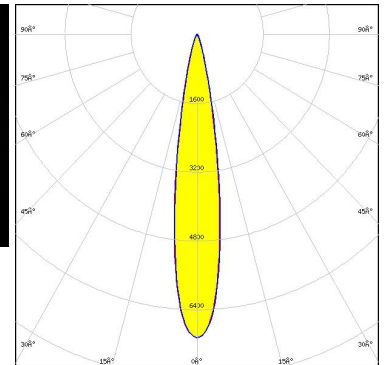
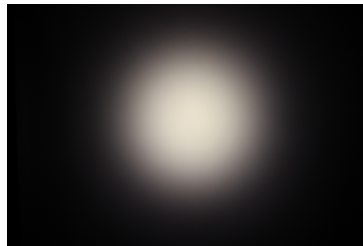
LED XP-G3  
FWHM / FWTM 18.0° / 37.0°  
Efficiency 81 %  
Peak intensity 5.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



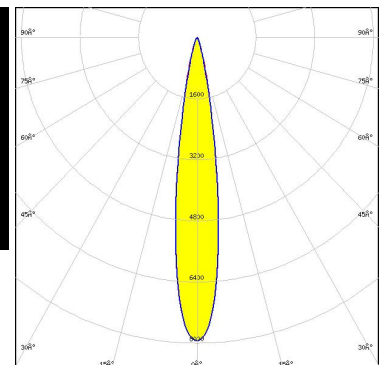
LED XP-G4  
FWHM / FWTM 17.0° / 33.0°  
Efficiency 87 %  
Peak intensity 7.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



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:

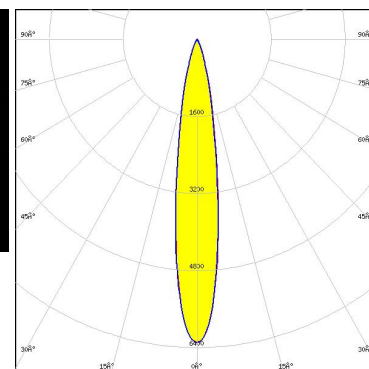
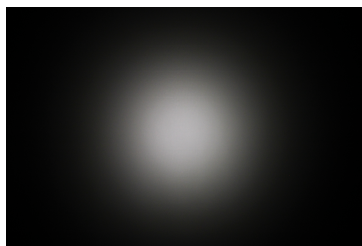


Light distribution files

### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

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



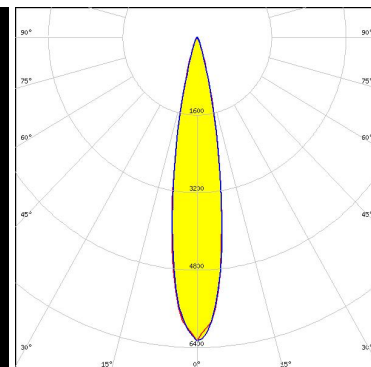
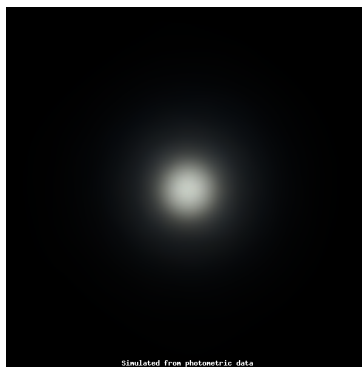
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



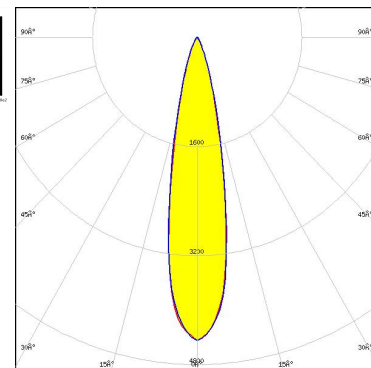
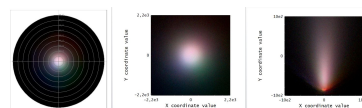
LED Bridgelux SMD 3535 (3B1)  
 FWHM / FWTM 18.0° / 35.0 + 34.0°  
 Efficiency 88 %  
 Peak intensity 6.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



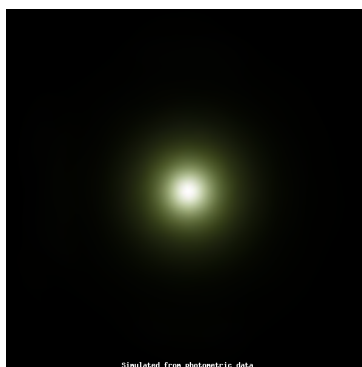
LED CLR6A-TKW  
 FWHM / FWTM 21.0° / 42.0°  
 Efficiency 86 %  
 Peak intensity 4.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



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:

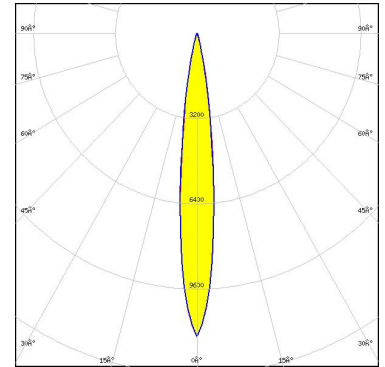


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



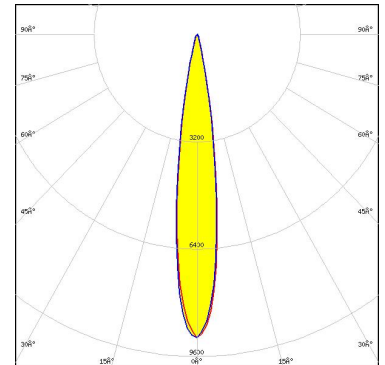
LED XD16 Premium  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 86 %  
 Peak intensity 11.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



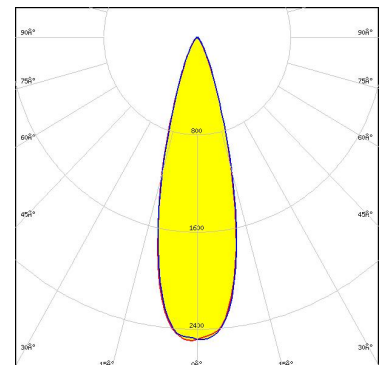
LED XE-G  
 FWHM / FWTM 16.0° / 28.0°  
 Efficiency 87 %  
 Peak intensity 9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



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:

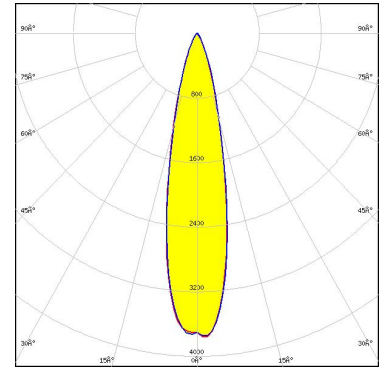


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



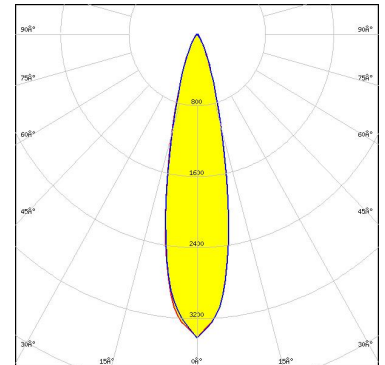
LED XHP35.2 HI  
FWHM / FWTM 22.0° / 46.0°  
Efficiency 83 %  
Peak intensity 3.8 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



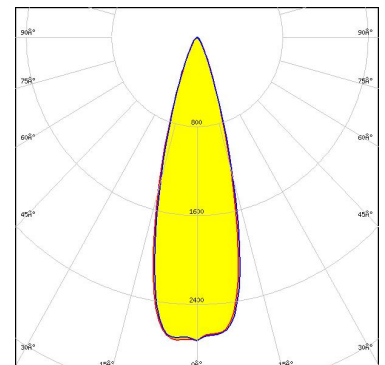
LED XHP50.3 HI  
FWHM / FWTM 24.0° / 48.0°  
Efficiency 82 %  
Peak intensity 3.4 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



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:

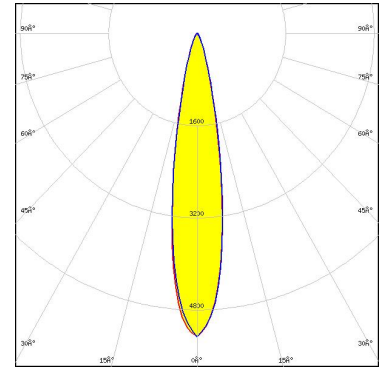


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



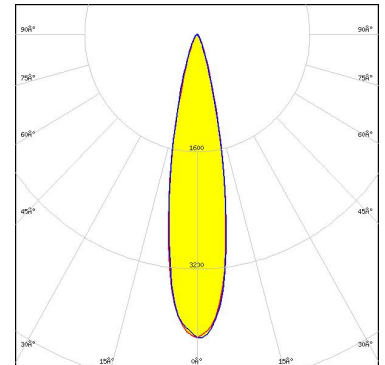
LED XM-L RGBW (XMLDCL HI)  
 FWHM / FWTM 20.0° / 38.0°  
 Efficiency 85 %  
 Peak intensity 5.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



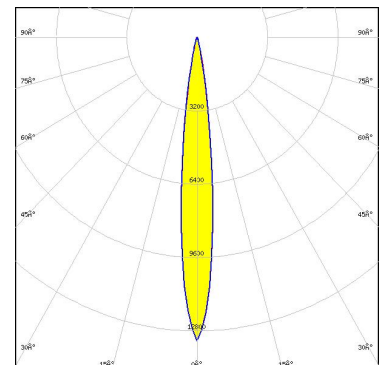
LED XM-L3  
 FWHM / FWTM 21.0° / 42.0°  
 Efficiency 80 %  
 Peak intensity 4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



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

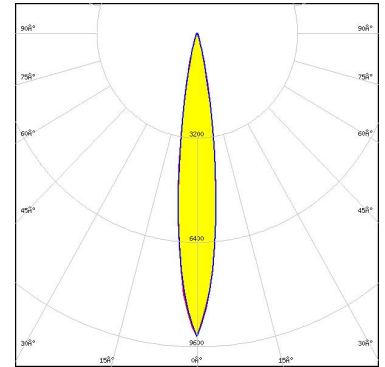


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



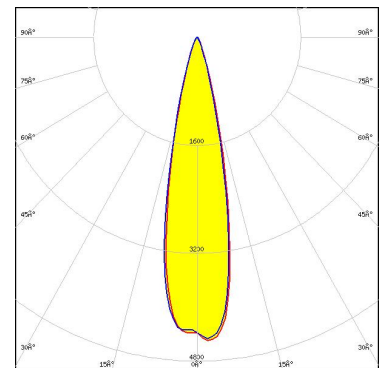
LED XP-G2  
 FWHM / FWTM 15.0° / 28.0°  
 Efficiency 87 %  
 Peak intensity 9 cd/Im  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



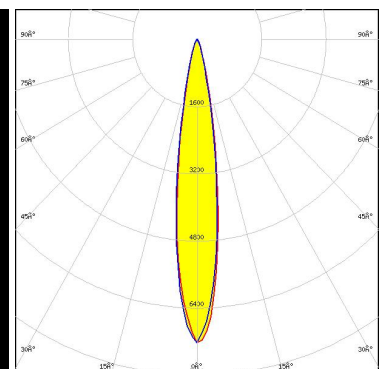
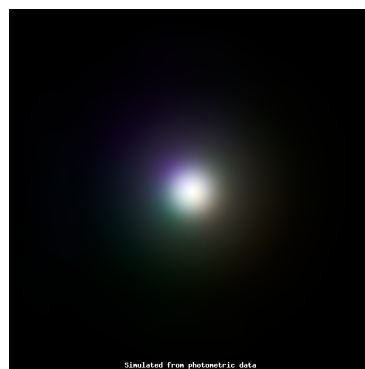
LED XP-L RGBW HD  
 FWHM / FWTM 23.0° / 39.0°  
 Efficiency 87 %  
 Peak intensity 4.6 cd/Im  
 LEDs/each optic 1  
 Light colour/type RGBW  
 Required components:



Light distribution files



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

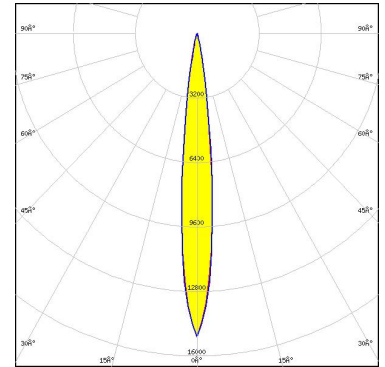


Light distribution files

### OPTICAL RESULTS (SIMULATED):



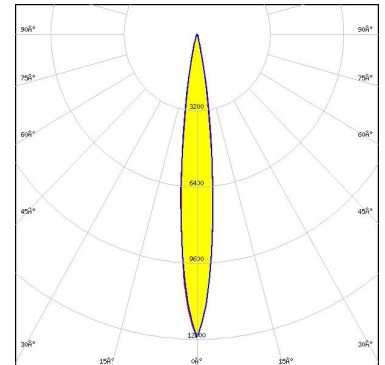
LED XP-P  
FWHM / FWTM 12.0° / 22.0°  
Efficiency 89 %  
Peak intensity 15.1 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



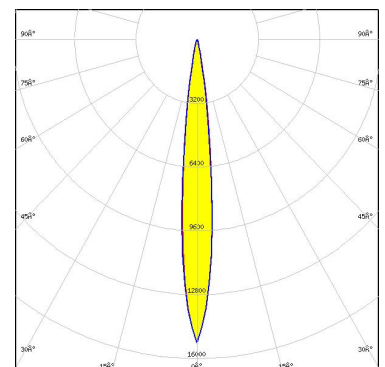
LED XQ-E HD  
FWHM / FWTM 12.0° / 24.0°  
Efficiency 87 %  
Peak intensity 12.7 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



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:

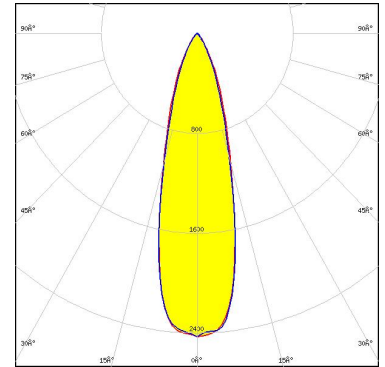


Light distribution files

### OPTICAL RESULTS (SIMULATED):



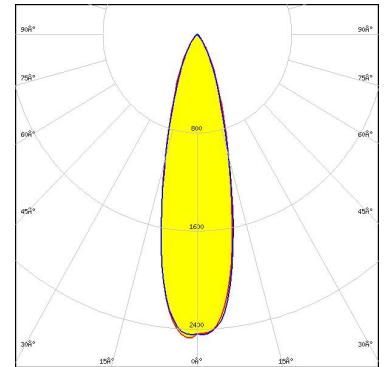
LED LUXEON 5050 Round LES  
FWHM / FWTM 28.0° / 56.0°  
Efficiency 80 %  
Peak intensity 2.4 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



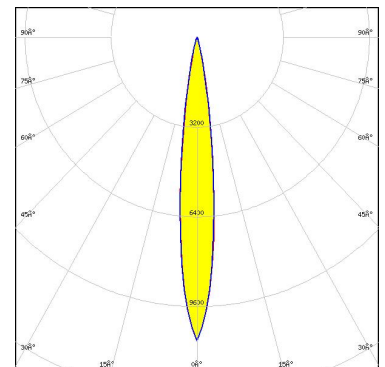
LED LUXEON 5050 Square LES  
FWHM / FWTM 26.0° / 56.0°  
Efficiency 78 %  
Peak intensity 2.5 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



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:

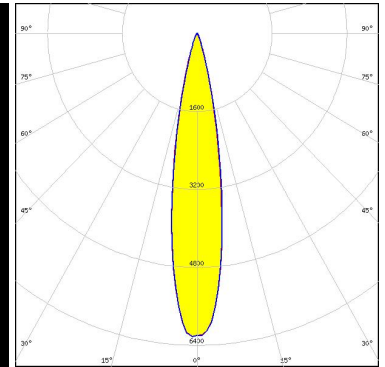
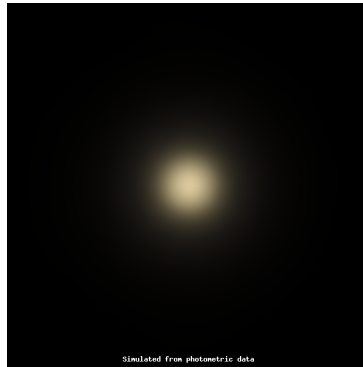


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



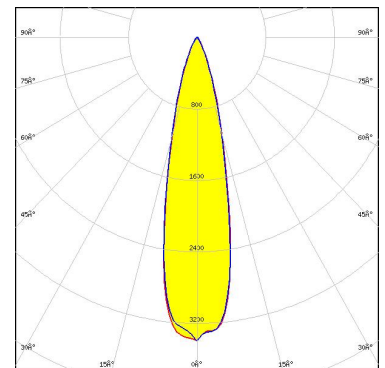
LED LUXEON HL2X-V  
 FWHM / FWTM 19.0 + 20.0° / 35.0 + 34.0°  
 Efficiency 89 %  
 Peak intensity 6.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



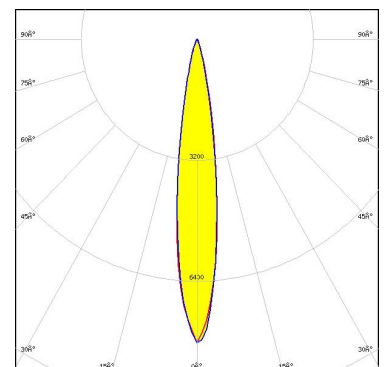
LED LUXEON MZ  
 FWHM / FWTM 24.0° / 47.0°  
 Efficiency 81 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



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:



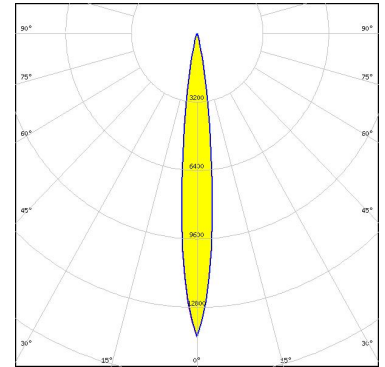
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



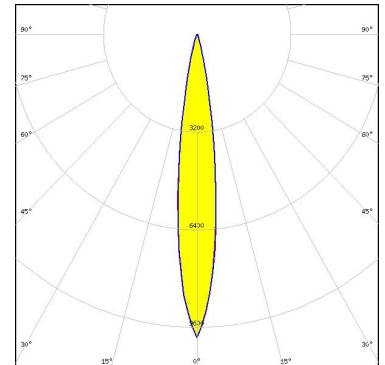
LED SFT-25R-W-A  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 89 %  
 Peak intensity 14.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



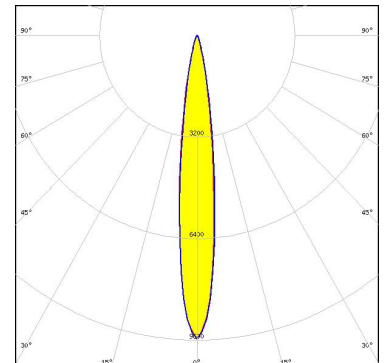
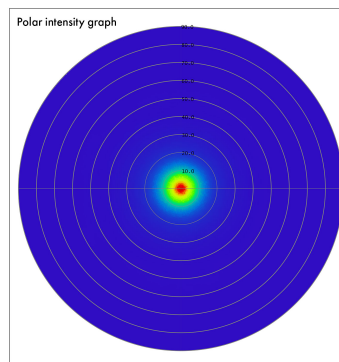
LED SFT-40 Gen2  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 90 %  
 Peak intensity 9.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



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

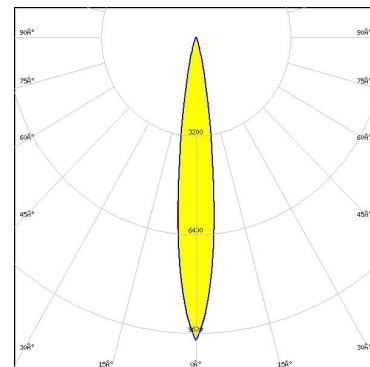


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



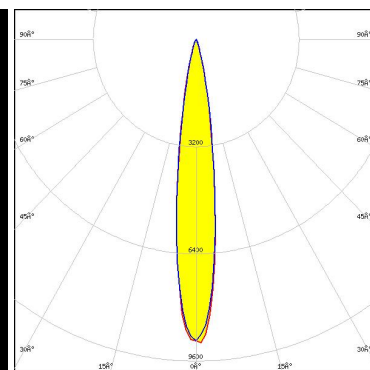
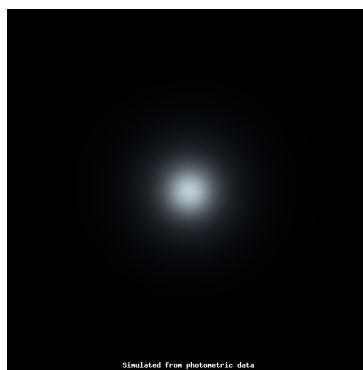
LED SST-20 Gen1  
 FWHM / FWTM 14.0° / 28.0°  
 Efficiency 86 %  
 Peak intensity 9.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



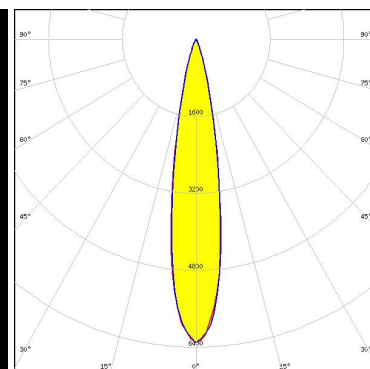
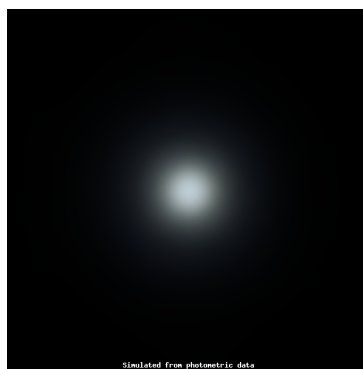
LED SST-20 Gen2  
 FWHM / FWTM 14.0 + 15.0° / 30.0 + 29.0°  
 Efficiency 86 %  
 Peak intensity 9.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



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:

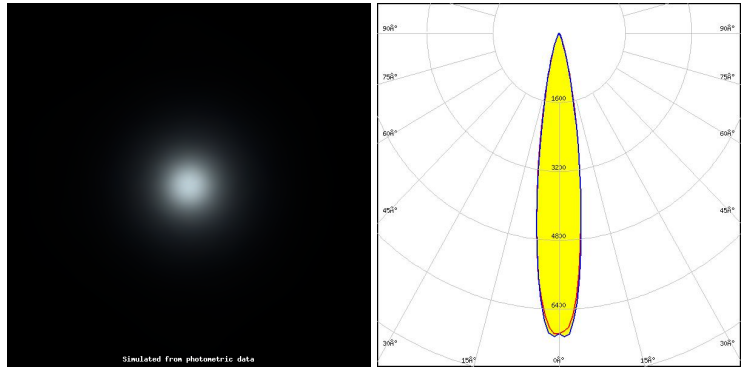


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



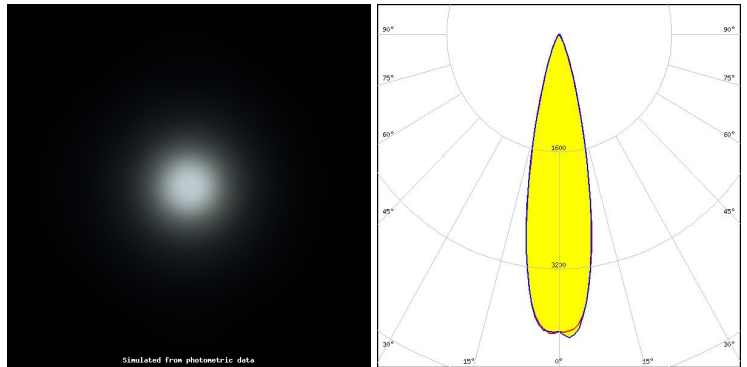
LED SST-25-W  
 FWHM / FWTM 18.0 + 16.0° / 34.0°  
 Efficiency 86 %  
 Peak intensity 7.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



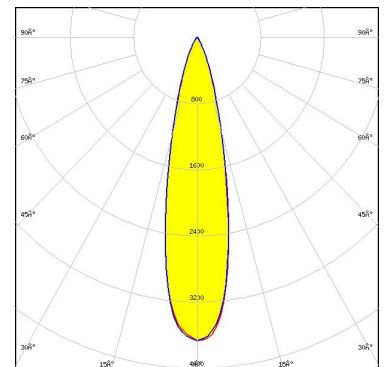
LED SST-36F-W  
 FWHM / FWTM 24.0° / 43.0 + 44.0°  
 Efficiency 87 %  
 Peak intensity 4.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



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:

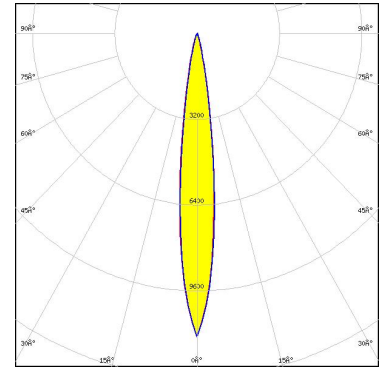


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



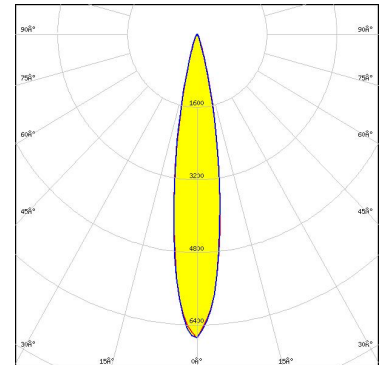
LED NVSW219C-V2  
 FWHM / FWTM 14.0° / 26.0°  
 Efficiency 88 %  
 Peak intensity 11.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



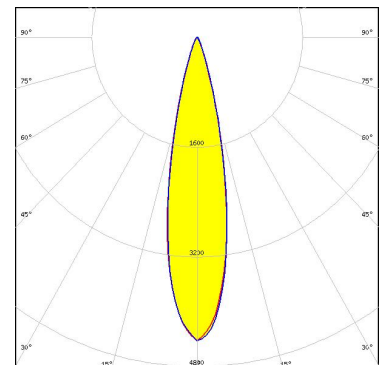
LED NVSW219F-V2  
 FWHM / FWTM 18.0° / 33.0°  
 Efficiency 87 %  
 Peak intensity 6.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



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:

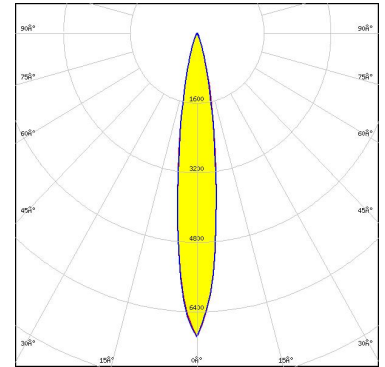


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



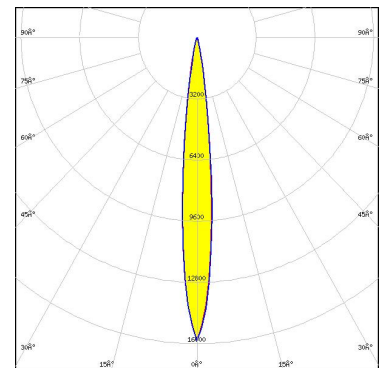
LED NVSxE21A  
 FWHM / FWTM 16.0° / 34.0°  
 Efficiency 79 %  
 Peak intensity 7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



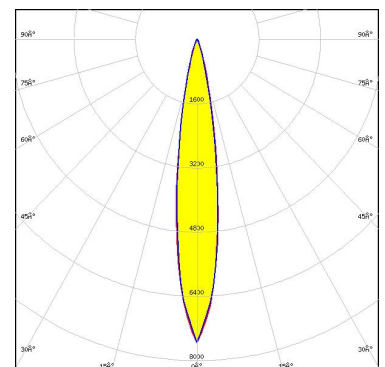
LED OSLO Pure 1414  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 89 %  
 Peak intensity 15.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSLO 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:

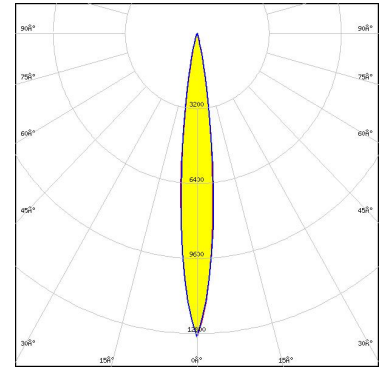


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

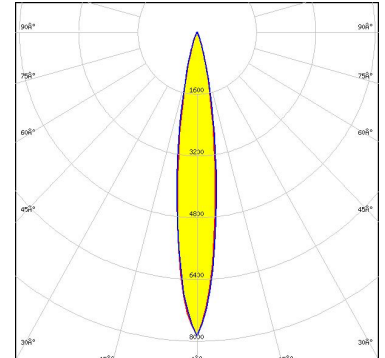
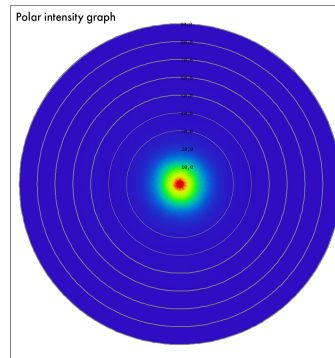
LED OSLON SSL 150  
FWHM / FWTM 13.0° / 25.0°  
Efficiency 88 %  
Peak intensity 13 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

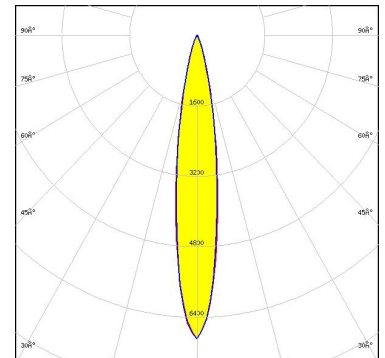
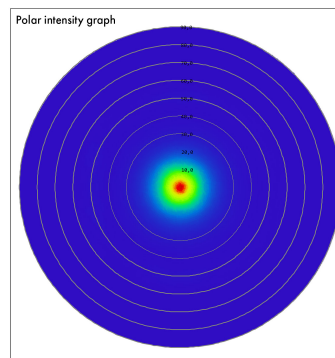
LED SFH 4715AS  
FWHM / FWTM 16.0° / 33.0°  
Efficiency 86 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

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

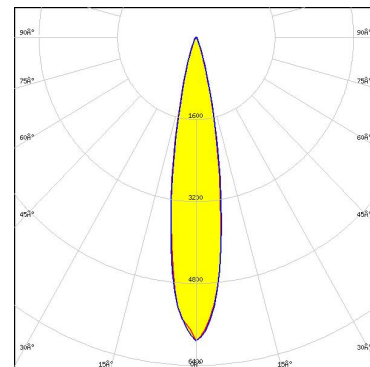


Light distribution files

## OPTICAL RESULTS (SIMULATED):

## 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:

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#### LEDiL Oy

Joensuunkatu 7  
FI-24100 SALO  
Finland

#### LEDiL Inc.

228 West Page Street  
Suite D  
Sycamore IL 60178  
USA

#### Ledil Optics Technology (Shenzhen) Co., Ltd.

# 405 , Block B  
Casic Motor Building  
Shenzhen 518057  
P.R.CHINA

#### Local sales and technical support

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