

## TINA2-D

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

## SPECIFICATION:

Dimensions	Ø 16.0
Height	9.5 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

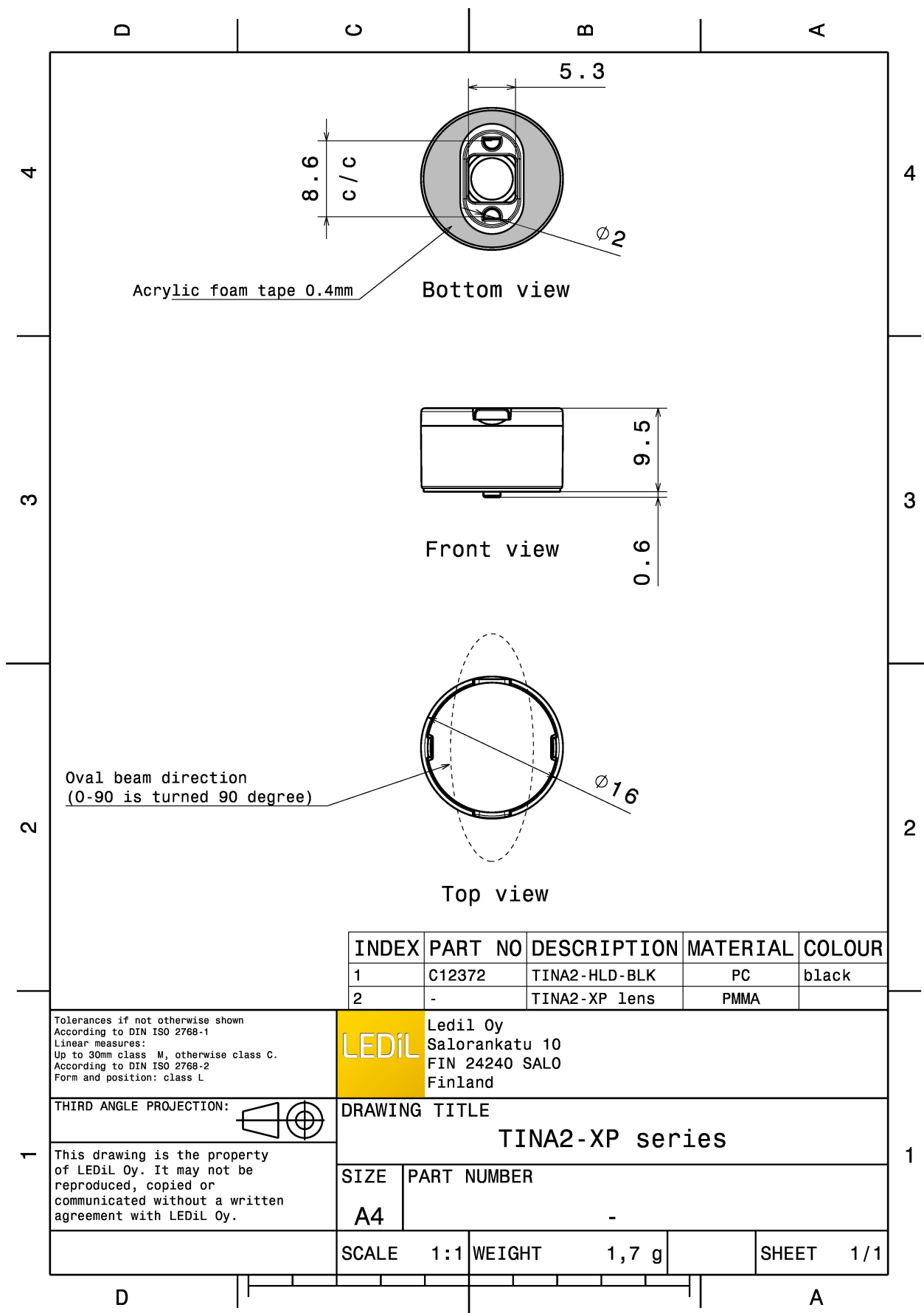


## MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA2-XP-D	Single lens	PMMA	clear		
TINA2-HLD-BLK	Holder	PC	black		
TINA-TAPE3	Tape	Acrylic foam	black		

## ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA12375_TINA2-D » Box size: 451 x 241 x 298 mm	4140	230	230	8.1

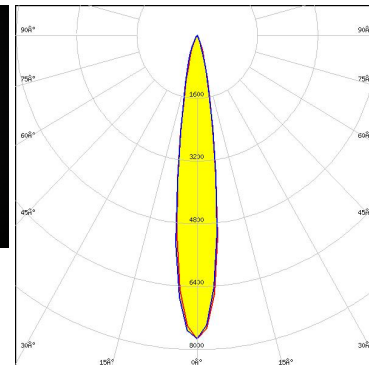
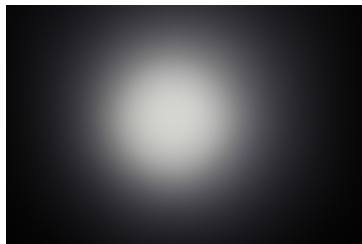


See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

### OPTICAL RESULTS (MEASURED):



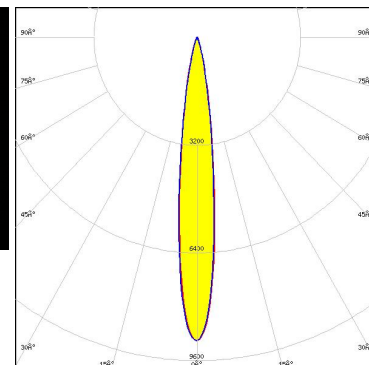
LED XB-H  
FWHM / FWTM 16.0° / 34.0°  
Efficiency 86 %  
Peak intensity 7.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XD16  
FWHM / FWTM 14.0° / 29.0°  
Efficiency 82 %  
Peak intensity 9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON Z ES  
FWHM / FWTM 12.0° / 27.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:

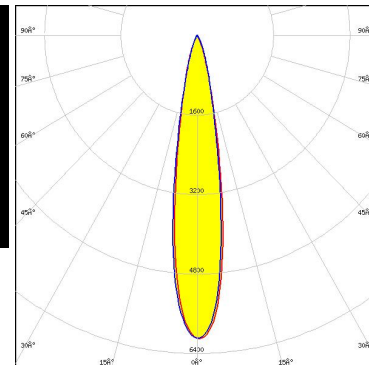
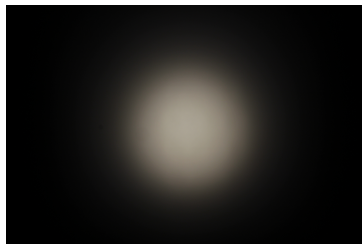


Light distribution files

#### OPTICAL RESULTS (MEASURED):



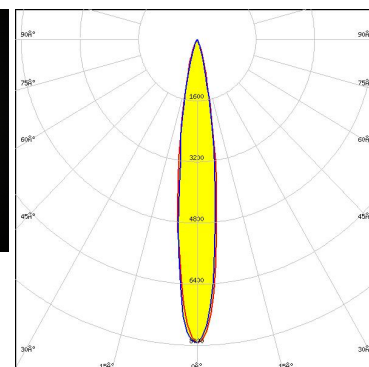
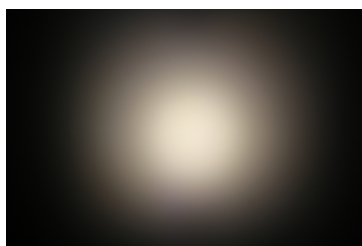
LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 18.0° / 36.0°  
 Efficiency 87 %  
 Peak intensity 6.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSLOM Square EC  
 FWHM / FWTM 16.0° / 33.0°  
 Efficiency 82 %  
 Peak intensity 7.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSLOM Square EC  
 FWHM / FWTM 16.0° / 34.0°  
 Efficiency 87 %  
 Peak intensity 6.2 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

Light distribution files



### OPTICAL RESULTS (MEASURED):

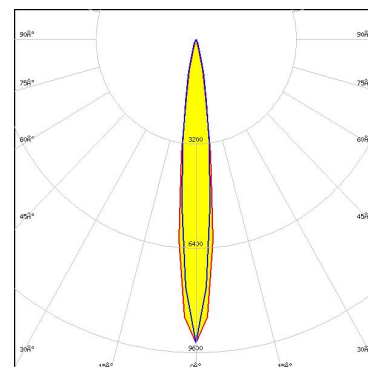
**OSRAM**  
Opto Semiconductors

LED OSLON Square PC  
FWHM / FWTM 13.0° / 32.0°  
Efficiency 87 %  
Peak intensity 6.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

**OSRAM**  
Opto Semiconductors

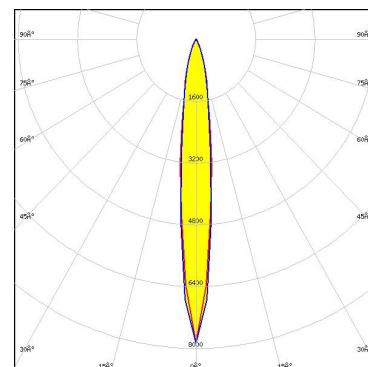
LED OSLON SSL 150  
FWHM / FWTM 14.0° / 28.0°  
Efficiency 89 %  
Peak intensity 9.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM 12.0° / 35.0°  
Efficiency 87 %  
Peak intensity 7.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

### OPTICAL RESULTS (MEASURED):



LED SFH 4170S  
FWHM / FWTM 8.0° / 20.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

Light distribution files

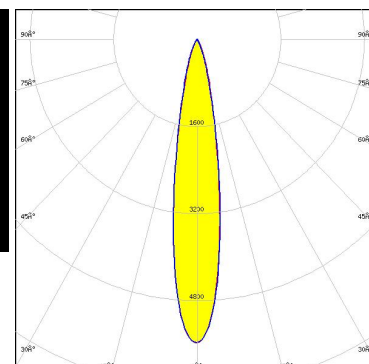


LED SFH 4180S  
FWHM / FWTM 8.0° / 20.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

Light distribution files



LED Z5M3  
FWHM / FWTM 18.0° / 38.0°  
Efficiency 86 %  
Peak intensity 5.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

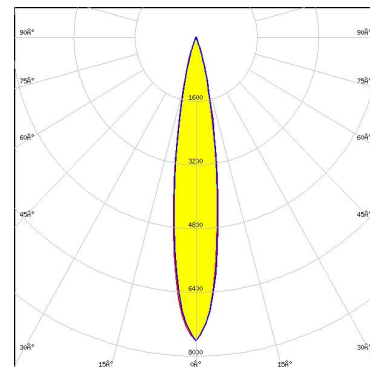


Light distribution files

### OPTICAL RESULTS (SIMULATED):



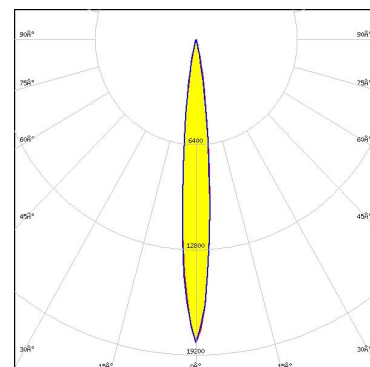
LED XB-D  
FWHM / FWTM 18.0° / 34.0°  
Efficiency 88 %  
Peak intensity 7.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



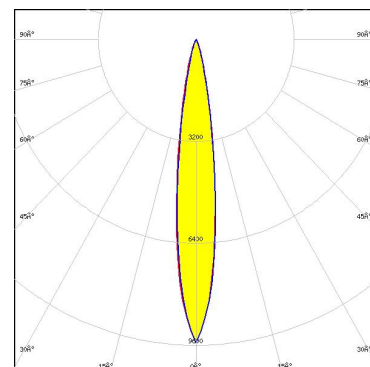
LED XQ-E HI  
FWHM / FWTM 11.0° / 23.0°  
Efficiency 91 %  
Peak intensity 18.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED LUXEON 2835 Line  
FWHM / FWTM 15.0° / 31.0°  
Efficiency 96 %  
Peak intensity 9.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

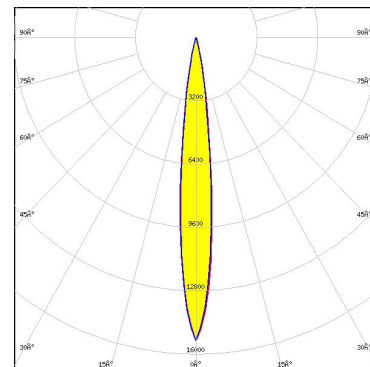


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



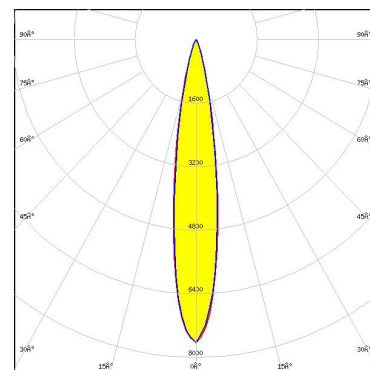
LED LUXEON Z ES  
 FWHM / FWTM 12.0° / 24.0°  
 Efficiency 92 %  
 Peak intensity 15.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



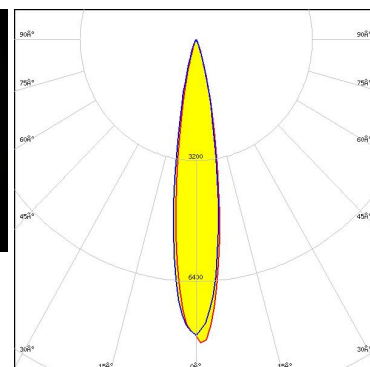
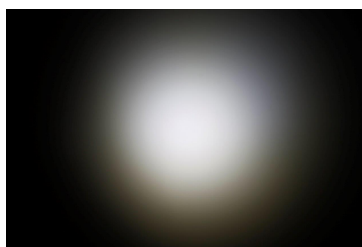
LED Duris E 2835  
 FWHM / FWTM 17.0° / 34.0°  
 Efficiency 92 %  
 Peak intensity 7.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED Duris S5 (2 chip)  
 FWHM / FWTM 17.0° / 33.0°  
 Efficiency 92 %  
 Peak intensity 8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

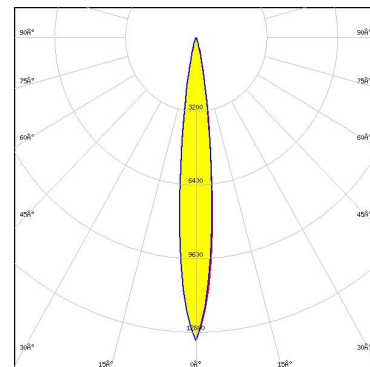


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

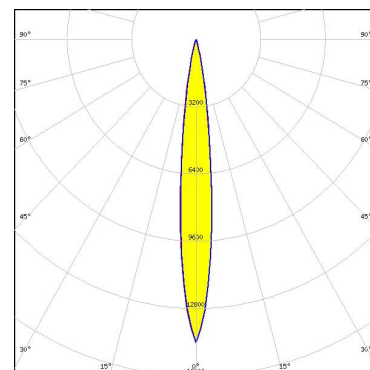
LED: OSCONIQ P 3030  
FWHM / FWTM: 12.0° / 26.0°  
Efficiency: 91 %  
Peak intensity: 13.2 cd/lm  
LEDs/each optic: 1  
Light colour/type: Blue  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

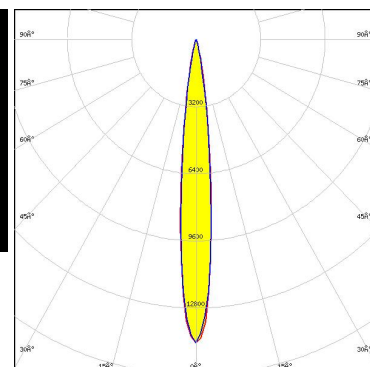
LED: OSLOM Signal  
FWHM / FWTM: 12.0° / 26.0°  
Efficiency: 92 %  
Peak intensity: 14.4 cd/lm  
LEDs/each optic: 1  
Light colour/type: Blue  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED: OSLOM Square Flat  
FWHM / FWTM: 12.0° / 24.0°  
Efficiency: 91 %  
Peak intensity: 14.5 cd/lm  
LEDs/each optic: 1  
Light colour/type: White  
Required components:

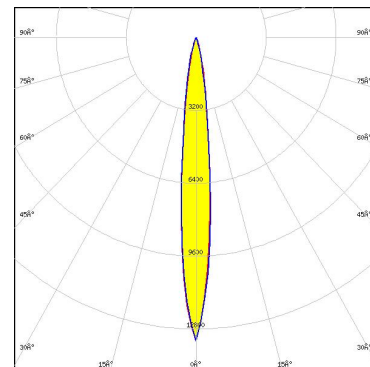


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

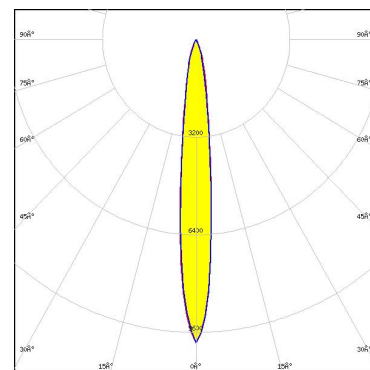
LED OSLON SSL 80  
FWHM / FWTM 12.0° / 26.0°  
Efficiency 91 %  
Peak intensity 13.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

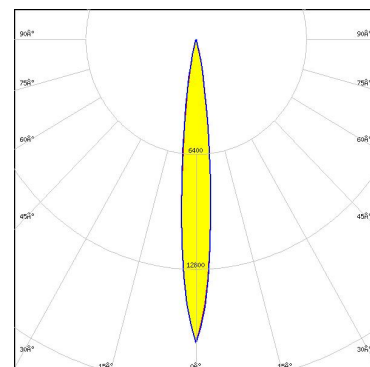
LED OSLON SSL 80  
FWHM / FWTM 12.0° / 31.0°  
Efficiency 90 %  
Peak intensity 9.9 cd/lm  
LEDs/each optic 1  
Light colour/type Far Red  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSTAR Projection Compact (KW.CSLNM1.TG)  
FWHM / FWTM 12.0° / 24.0°  
Efficiency 92 %  
Peak intensity 16.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

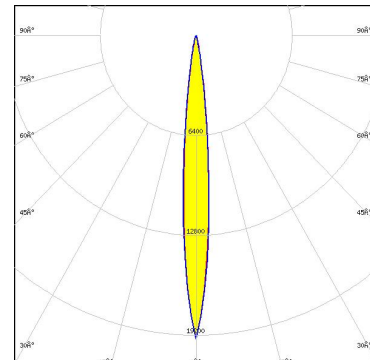
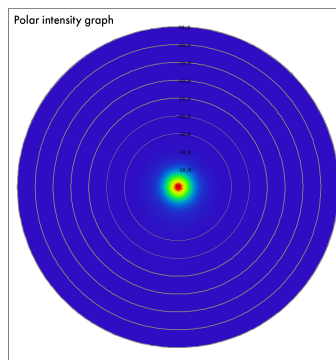


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

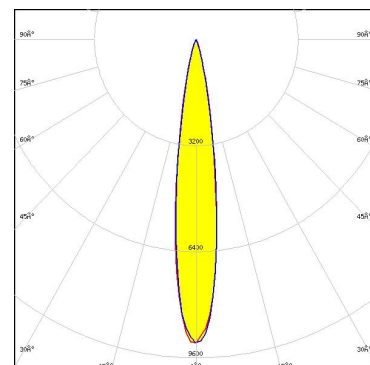
LED SFH 4770S  
FWHM / FWTM 10.0° / 22.0°  
Efficiency 91 %  
LEDs/each optic 1  
Light colour/type IR  
Required components:



Light distribution files

**SAMSUNG**

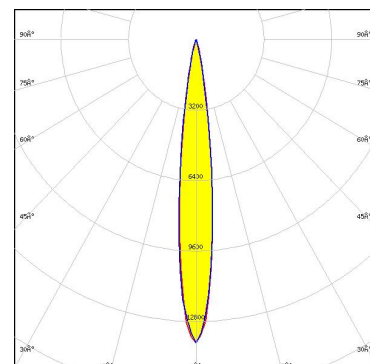
LED LH181B  
FWHM / FWTM 16.0° / 30.5°  
Efficiency 92 %  
Peak intensity 9.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SEKUL**  
SEOUL SEMICONDUCTOR

LED Z8Y15  
FWHM / FWTM 13.0° / 25.0°  
Efficiency 90 %  
Peak intensity 13.8 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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