



**THE DATASHEET OF  
CA12379\_TINA2-0**

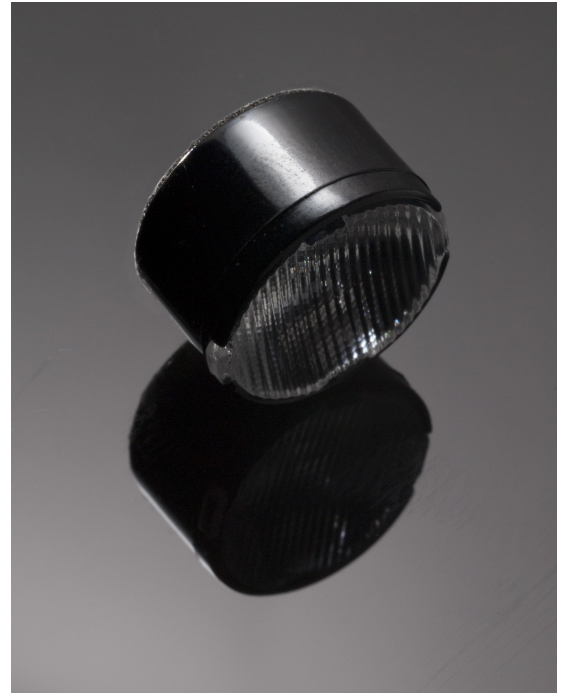


## TINA2-O

~35° + 15° oval beam. Assembly with holder, installation tape and location pins.

### SPECIFICATION:

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

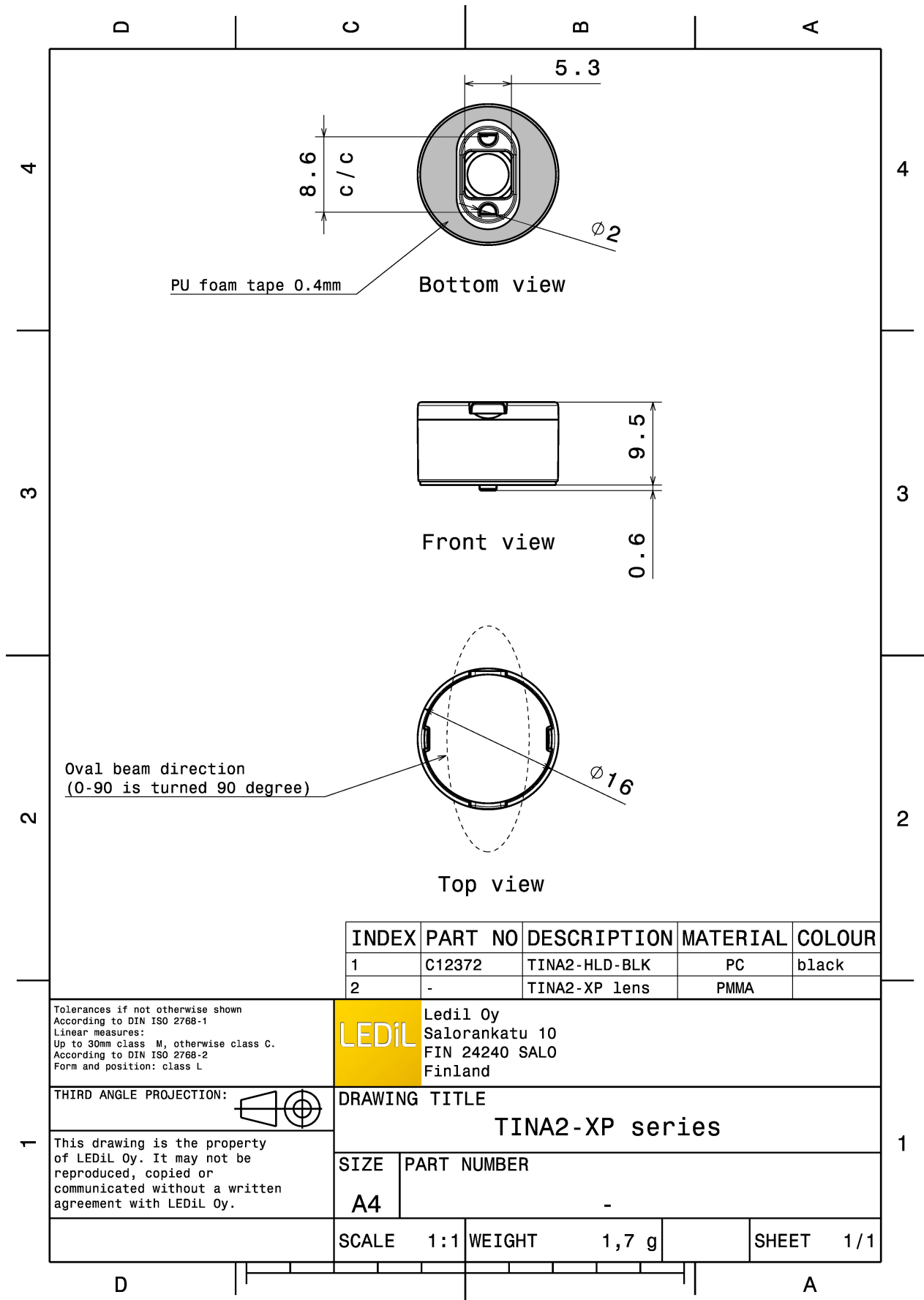


### MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
TINA2-XP-O	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)
CA12379_TINA2-O » Box size: 451 x 241 x 298 mm	4140	230	230	8.5



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C12372	TINA2-HLD-BLK	PC	black
2	-	TINA2-XP lens	PMMA	

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** Ledil Oy  
Salorankatu 10  
FIN 24240 SALO  
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE  
**TINA2-XP series**

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SIZE	PART NUMBER
A4	-

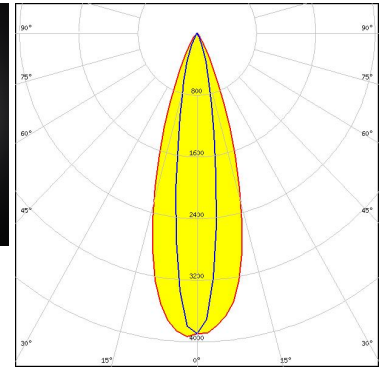
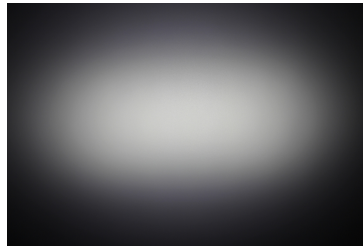
SCALE	1:1	WEIGHT	1,7 g	SHEET	1/1
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See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)

#### OPTICAL RESULTS (MEASURED):



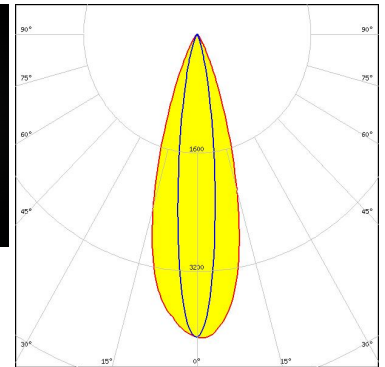
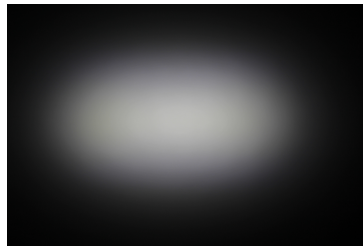
LED XB-H  
 FWHM / FWTM 34.0 + 17.0° / 57.0 + 39.0°  
 Efficiency 84 %  
 Peak intensity 3.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



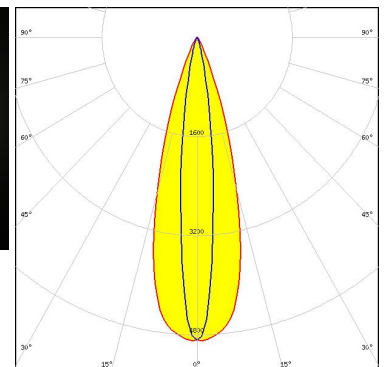
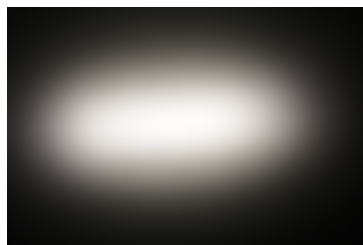
LED XD16  
 FWHM / FWTM 32.0 + 15.0° / 54.0 + 32.0°  
 Efficiency 80 %  
 Peak intensity 4.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XQ-E HI  
 FWHM / FWTM 33.0 + 13.0° / 51.0 + 28.0°  
 Efficiency 80 %  
 Peak intensity 5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

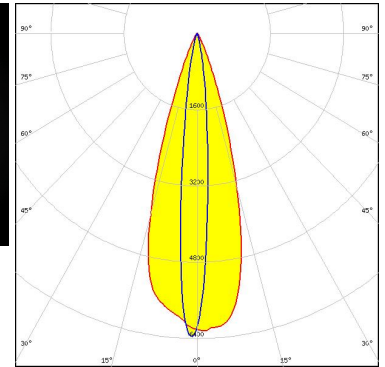


Light distribution files

### OPTICAL RESULTS (MEASURED):



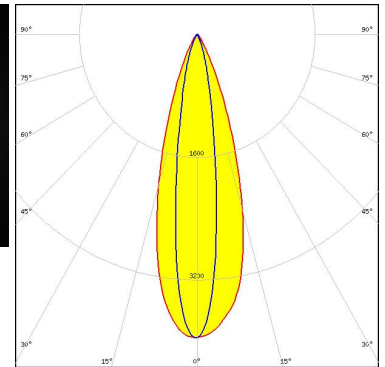
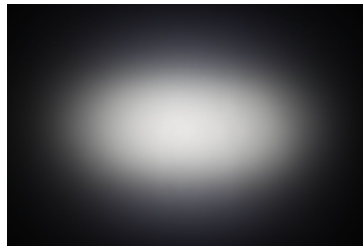
LED LUXEON CZ  
 FWHM / FWTM 32.0 + 10.0° / 49.0 + 23.0°  
 Efficiency 88 %  
 Peak intensity 6.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



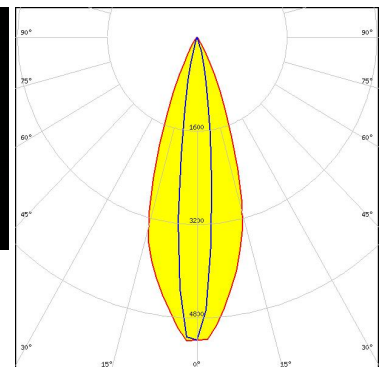
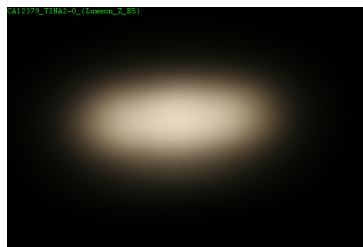
LED LUXEON TX  
 FWHM / FWTM 32.0 + 16.0° / 55.0 + 37.0°  
 Efficiency 85 %  
 Peak intensity 4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON Z ES  
 FWHM / FWTM 36.0 + 13.0° / 56.0 + 28.0°  
 Efficiency 85 %  
 Peak intensity 5.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

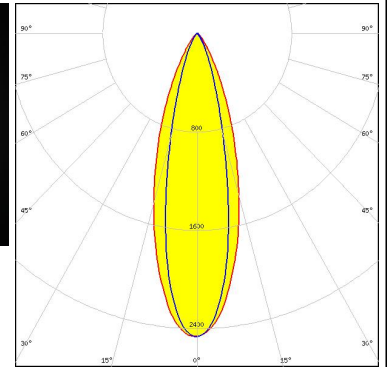


Light distribution files

### OPTICAL RESULTS (MEASURED):



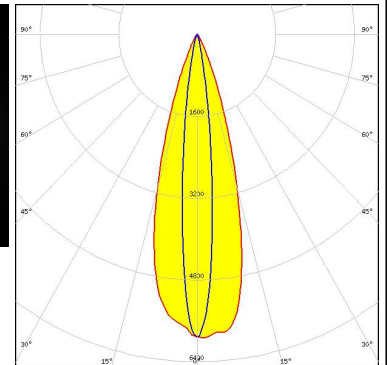
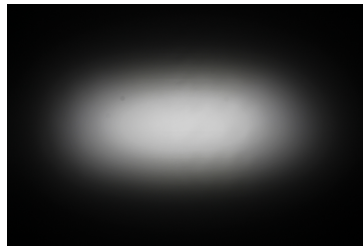
**LED** NWSx229A  
**FWHM / FWTM** 33.0 + 24.0° / 65.0 + 49.0°  
**Efficiency** 82 %  
**Peak intensity** 2.5 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



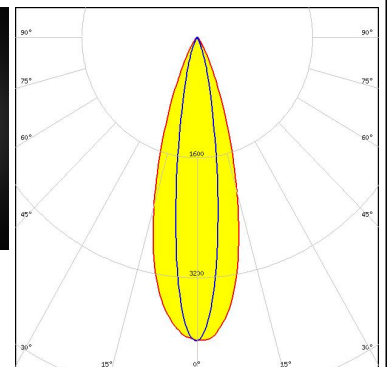
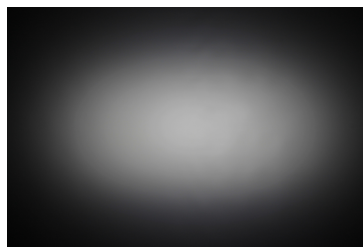
**LED** OSOLON Black Flat (LUW HWQP)  
**FWHM / FWTM** 31.0 + 12.0° / 50.0 + 24.0°  
**Efficiency** 87 %  
**Peak intensity** 6 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**



Light distribution files



**LED** OSOLON Square CSSRM2/CSSRM3  
**FWHM / FWTM** 32.0 + 16.0° / 55.0 + 36.0°  
**Efficiency** 87 %  
**Peak intensity** 4 cd/lm  
**LEDs/each optic** 1  
**Light colour/type** White  
**Required components:**

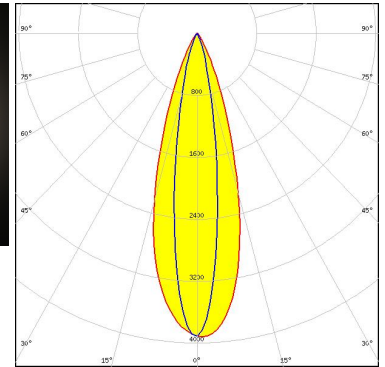
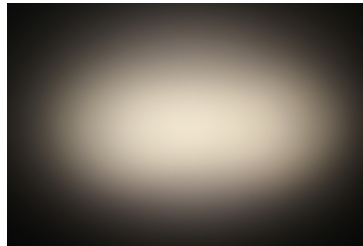


Light distribution files

### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

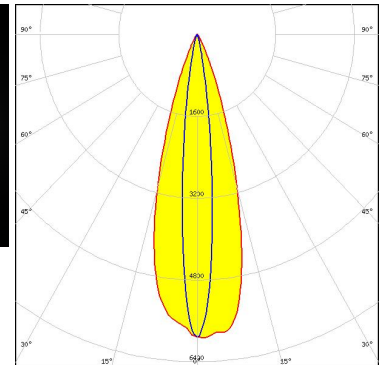
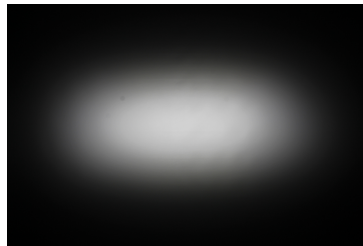
LED OSLON Square EC  
FWHM / FWMTM 33.0 + 17.0° / 57.0 + 37.0°  
Efficiency 84 %  
Peak intensity 3.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON Square Flat  
FWHM / FWMTM 31.0 + 12.0° / 50.0 + 24.0°  
Efficiency 87 %  
Peak intensity 5.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON Square PC  
FWHM / FWMTM 33.0 + 13.0° / 56.0 + 34.0°  
Efficiency 87 %  
Peak intensity 3.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

#### OPTICAL RESULTS (MEASURED):

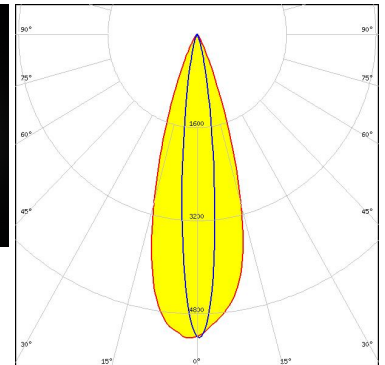
**OSRAM**  
Opto Semiconductors

LED OSLON SSL 150  
FWHM / FWTM 38.0 + 13.0° / 59.0 + 30.0°  
Efficiency 87 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON SSL 150  
FWHM / FWTM 33.0 + 13.0° / 52.0 + 28.0°  
Efficiency 86 %  
Peak intensity 5.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON SSL 80  
FWHM / FWTM 35.0 + 12.0° / 56.0 + 30.0°  
Efficiency 86 %  
Peak intensity 3.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

LED SFH 4170S  
FWHM / FWTM 30.0 + 10.0° / 50.0 + 26.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

Light distribution files

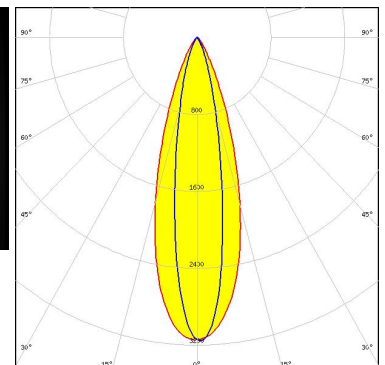
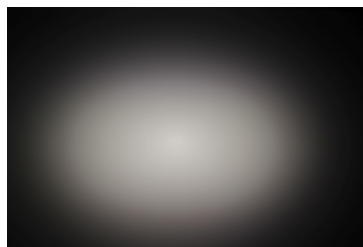
**OSRAM**  
Opto Semiconductors

LED SFH 4180S  
FWHM / FWTM 31.0 + 10.0° / 50.0 + 27.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type IR  
Required components:

Light distribution files

**SEUL**  
SEOUL SEMICONDUCTOR

LED Z5M3  
FWHM / FWTM 33.0 + 19.0° / 59.0 + 42.0°  
Efficiency 82 %  
Peak intensity 3.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

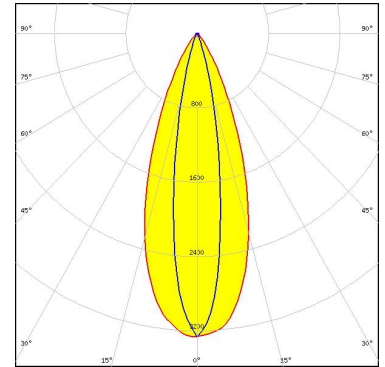


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



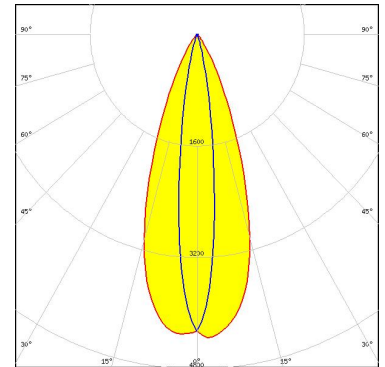
LED XB-D  
 FWHM / FWTM 39.0 + 18.0° / 67.0 + 36.0°  
 Efficiency 86 %  
 Peak intensity 3.3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



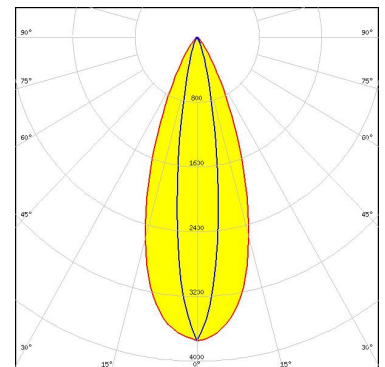
LED XE-G  
 FWHM / FWTM 38.0 + 14.0° / 62.0 + 28.0°  
 Efficiency 89 %  
 Peak intensity 4.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON 2835 Line  
 FWHM / FWTM 38.0 + 16.0° / 66.0 + 34.0°  
 Efficiency 96 %  
 Peak intensity 3.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

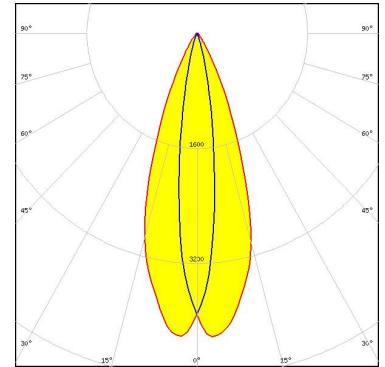


Light distribution files

### OPTICAL RESULTS (SIMULATED):



LED LUXEON C  
FWHM / FWTM 14.0 + 37.0° / 30.0 + 60.0°  
Efficiency 93 %  
Peak intensity 4.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

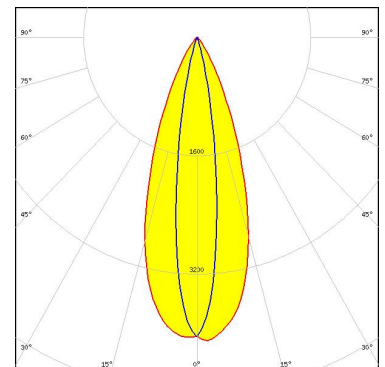


LED LUXEON IR Compact  
FWHM / FWTM 37.0 + 13.0° / 60.0 + 27.0°  
Efficiency 82 %  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files



LED LUXEON Rubix  
FWHM / FWTM 38.0 + 16.0° / 65.0 + 30.0°  
Efficiency 91 %  
Peak intensity 4.1 cd/lm  
LEDs/each optic 1  
Light colour/type Red  
Required components:

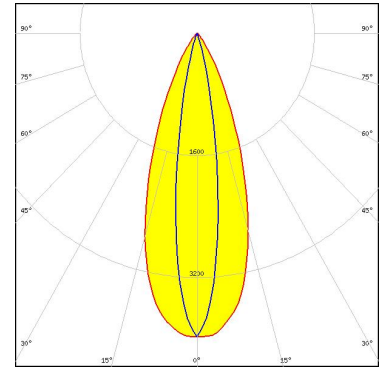


Light distribution files

### OPTICAL RESULTS (SIMULATED):



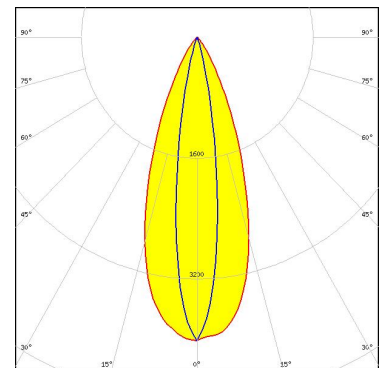
LED LUXEON Rubix  
FWHM / FWTM 38.0 + 16.0° / 65.0 + 31.0°  
Efficiency 90 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



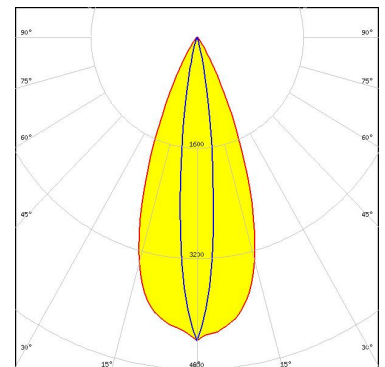
LED LUXEON Rubix  
FWHM / FWTM 38.0 + 16.0° / 66.0 + 30.0°  
Efficiency 91 %  
Peak intensity 4 cd/lm  
LEDs/each optic 1  
Light colour/type Blue  
Required components:



Light distribution files



LED NCSxE17A  
FWHM / FWTM 42.0 + 13.0° / 62.0 + 26.0°  
Efficiency 87 %  
Peak intensity 4.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

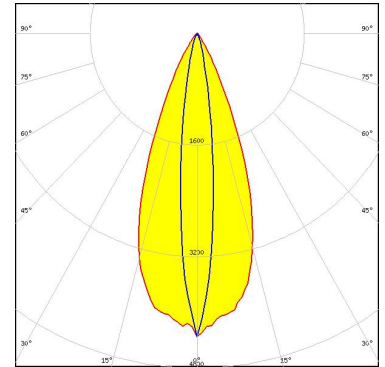


Light distribution files

### OPTICAL RESULTS (SIMULATED):



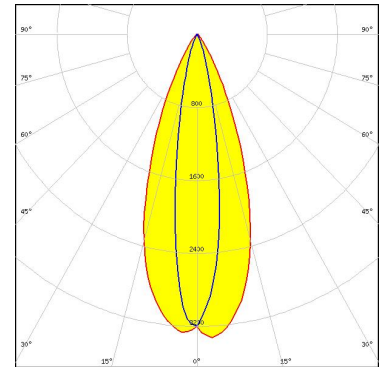
LED NFSx757G  
FWHM / FWTM 41.0 + 13.0° / 63.0 + 29.0°  
Efficiency 90 %  
Peak intensity 4.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



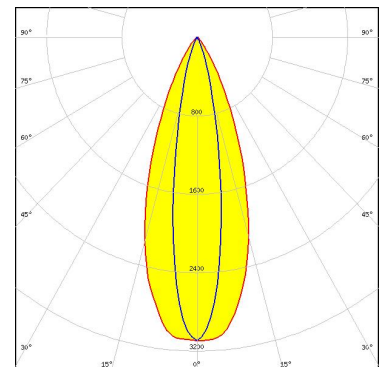
LED NVSxx19B/NVSxx19C  
FWHM / FWTM 39.0 + 17.0° / 66.0 + 36.0°  
Efficiency 86 %  
Peak intensity 3.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NVSxx19B/NVSxx19C  
FWHM / FWTM 39.0 + 18.0° / 68.0 + 39.0°  
Efficiency 85 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

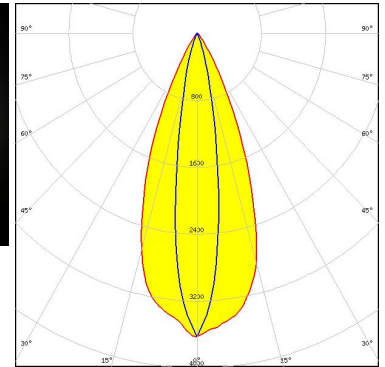
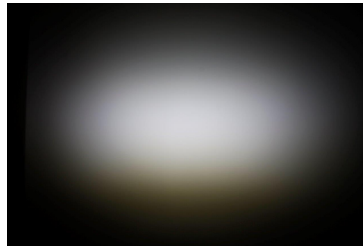


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

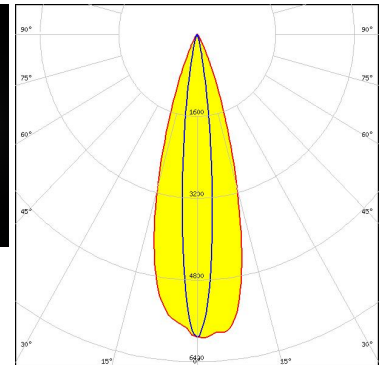
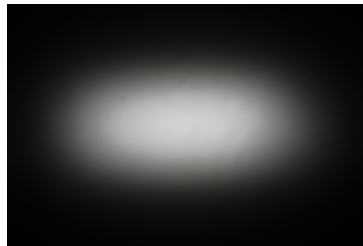
LED Duris S5 (2 chip)  
FWHM / FWTM 41.0 + 17.0° / 64.0 + 34.0°  
Efficiency 91 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

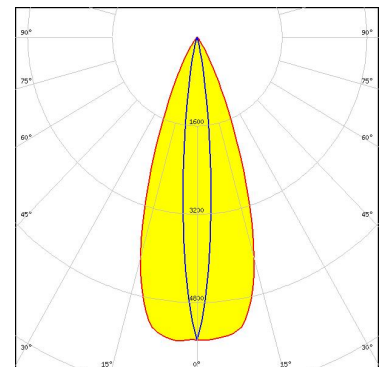
LED OSLON Black Flat (LUW HWQP)  
FWHM / FWTM 31.0 + 12.0° / 50.0 + 24.0°  
Efficiency 87 %  
Peak intensity 6.2 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON Pure 1414  
FWHM / FWTM 38.0 + 12.0° / 60.0 + 24.0°  
Efficiency 91 %  
Peak intensity 5.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### OPTICAL RESULTS (SIMULATED):

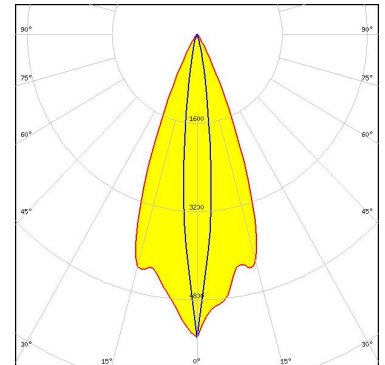
**OSRAM**  
Opto Semiconductors

LED SFH 4770S  
 FWHM / FWTM 41.0 + 16.0° / 63.0 + 33.0°  
 Efficiency 85 %  
 Peak intensity 3.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

Light distribution files

**OSRAM**  
Opto Semiconductors

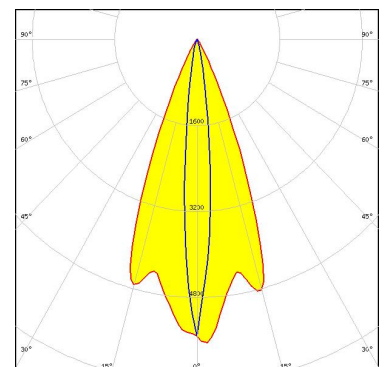
LED Synios P2720 1 mm  
 FWHM / FWTM 41.0 + 11.0° / 57.0 + 23.0°  
 Efficiency 91 %  
 Peak intensity 5.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED Synios P2720 1/2 mm  
 FWHM / FWTM 41.0 + 10.0° / 56.0 + 23.0°  
 Efficiency 91 %  
 Peak intensity 5.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

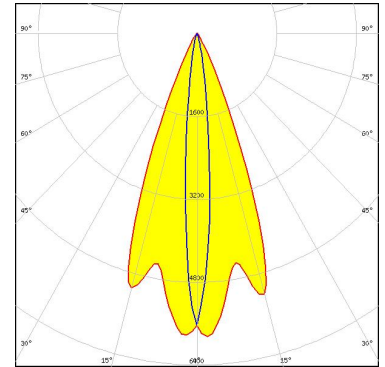


Light distribution files

### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

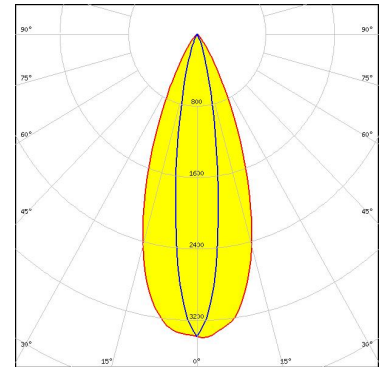
LED Synios P2720 1/4 mm  
FWHM / FWTM 41.0 + 9.0° / 56.0 + 22.0°  
Efficiency 91 %  
Peak intensity 6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SAMSUNG**

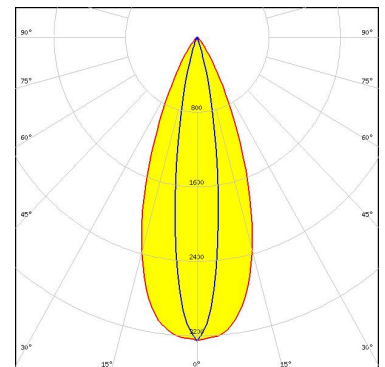
LED LM302D  
FWHM / FWTM 40.0 + 16.0° / 66.0 + 36.0°  
Efficiency 88 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SEMI**  
SEOUL SEMICONDUCTOR

LED Z8Y15  
FWHM / FWTM 40.0 + 17.0° / 66.0 + 32.0°  
Efficiency 82 %  
Peak intensity 3.3 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.

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