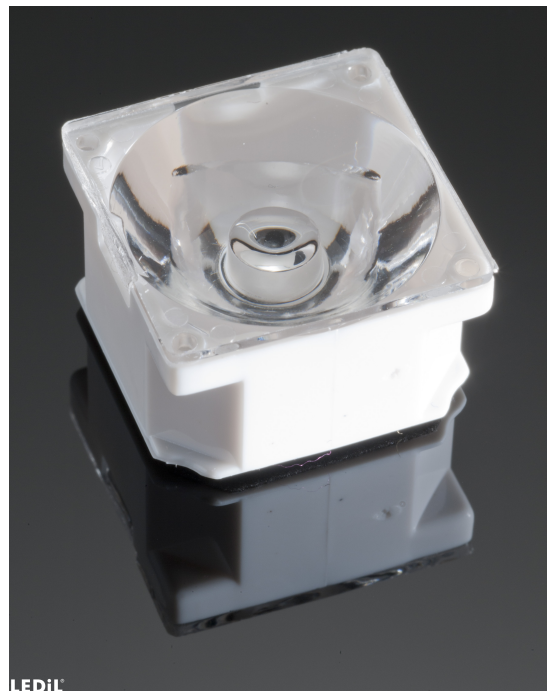


## LAURA-RS-PIN

~8° spot beam optimized for CREE XP-E.  
Assembly with white holder, installation tape  
and location pins.

## SPECIFICATION:

Dimensions	21.6 x 21.6
Height	13.1 mm
Fastening	tape, pin
ROHS compliant	yes ⓘ

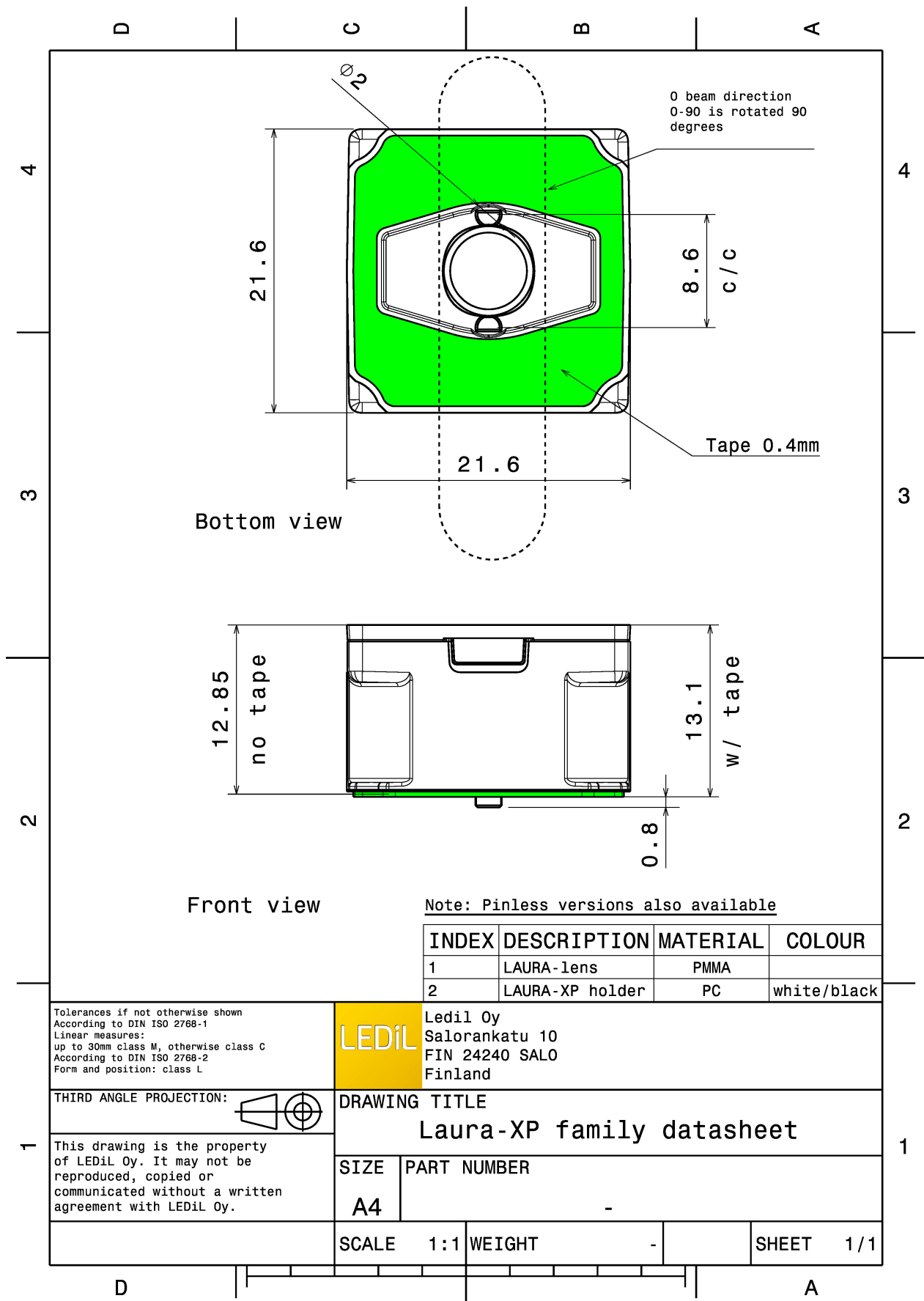


## MATERIALS:

Component	Type	Material	Colour	Finish	Length (mm)
LAURA-RS	Single lens	PMMA	clear		
LAURA-PIN-XP-HLD-WHT	Holder	PC	white		
ROSE-TAPE	Tape	Acrylic foam tape	grey		

## ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
CA11959_LAURA-RS-PIN	1440	360	180	7.6
» Box size:				



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

## OPTICAL RESULTS (MEASURED):



LED	XP-E
FWHM / FWTM	8.0° / 16.0°
Efficiency	93 %
Peak intensity	33.2 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



LED	XP-G
FWHM / FWTM	11.0°
Efficiency	93 %
LEDs/each optic	1
Light colour/type	White
Required components:	

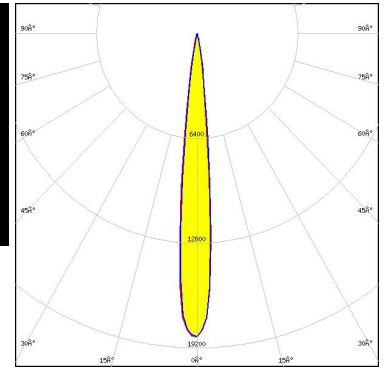


LED	LUXEON Rebel
FWHM / FWTM	7.0° / 16.0°
Efficiency	93 %
Peak intensity	34 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

#### OPTICAL RESULTS (MEASURED):



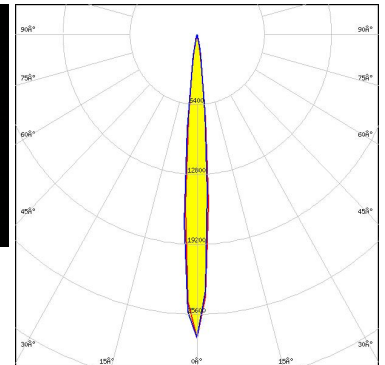
LED LUXEON T  
FWHM / FWTM 11.0° / 21.0°  
Efficiency 92 %  
Peak intensity 18.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NCSxx19B  
FWHM / FWTM 10.0° / 19.0°  
Efficiency 91 %  
Peak intensity 27.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

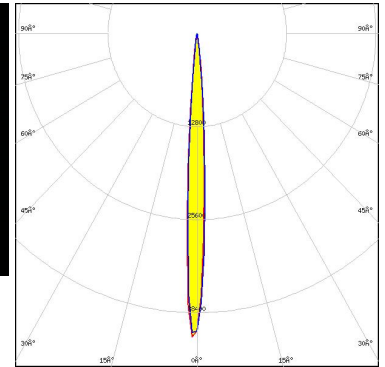
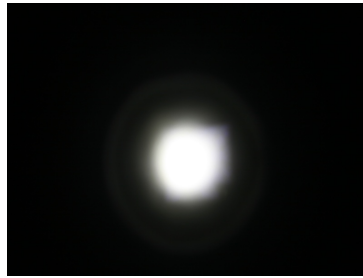


LED OSLOM Square EC  
FWHM / FWTM 9.0° / 18.0°  
Efficiency 93 %  
Peak intensity 20 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

LED OSLON SSL 150  
FWHM / FWTM 7.0° / 14.0°  
Efficiency 92 %  
Peak intensity 42 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4725S  
FWHM / FWTM 10.0° / 21.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:

Light distribution files

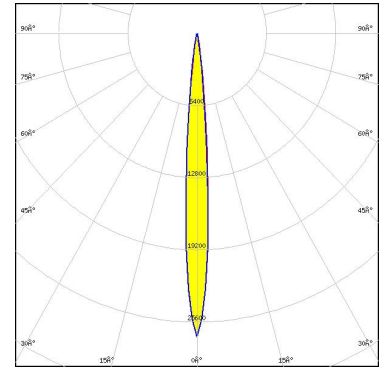
**SEKUL**  
SEOUL SEMICONDUCTOR

LED Z5  
FWHM / FWTM 7.0°  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:

#### OPTICAL RESULTS (SIMULATED):



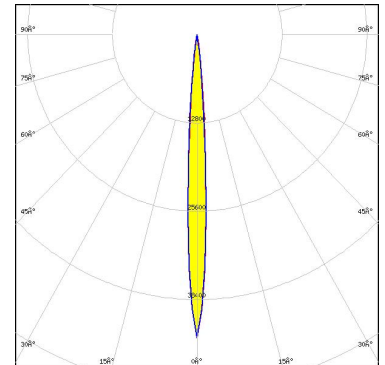
LED XD16  
 FWHM / FWTM 8.6° / 18.0°  
 Efficiency 94 %  
 Peak intensity 26.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



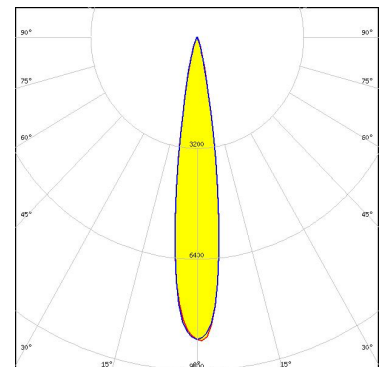
LED XP-E2  
 FWHM / FWTM 8.0° / 14.0°  
 Efficiency 95 %  
 Peak intensity 44 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XP-L2  
 FWHM / FWTM 16.0° / 30.0°  
 Efficiency 92 %  
 Peak intensity 8.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

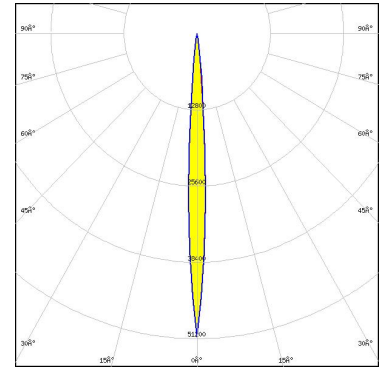


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



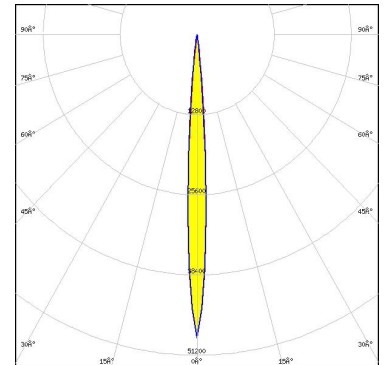
LED XP-P  
 FWHM / FWTM 6.0° / 14.0°  
 Efficiency 96 %  
 Peak intensity 50.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



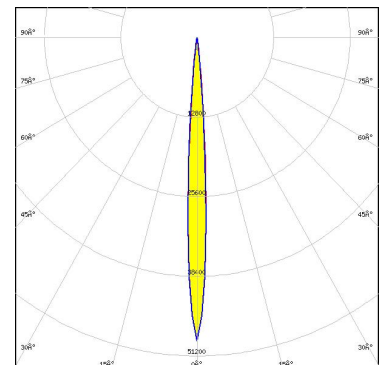
LED XQ-E HD  
 FWHM / FWTM 6.0° / 14.0°  
 Efficiency 94 %  
 Peak intensity 48.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XQ-E HD  
 FWHM / FWTM 8.0° / 14.0°  
 Efficiency 93 %  
 Peak intensity 48.8 cd/lm  
 LEDs/each optic 1  
 Light colour/type Green  
 Required components:

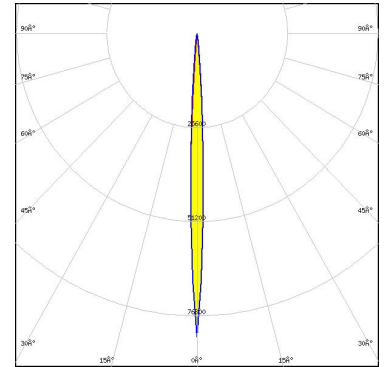


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



LED XQ-E HI  
 FWHM / FWTM 6.0° / 10.0°  
 Efficiency 93 %  
 Peak intensity 82.6 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



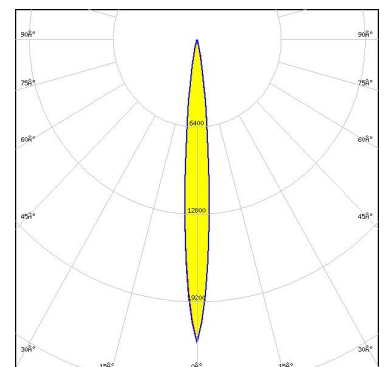
Light distribution files



LED LUXEON H50-2  
 FWHM / FWTM 12.0° / 23.0°  
 Efficiency 92 %  
 Peak intensity 16.3 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



LED LUXEON HL2Z  
 FWHM / FWTM 10.0° / 20.0°  
 Efficiency 96 %  
 Peak intensity 22.2 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



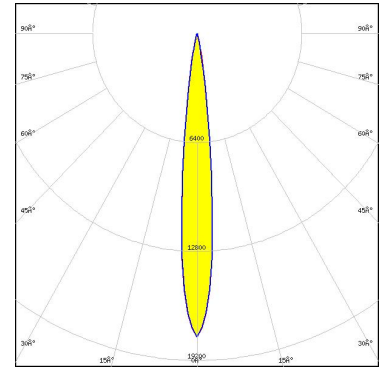
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



LED LUXEON HL4Z  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 96 %  
 Peak intensity 17.8 cd/m  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED LUXEON IR Domed 150 (L110-0xxx150000000)  
 FWHM / FWTM 9.0° / 18.0°  
 Efficiency 0 %  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



LED LUXEON IR Domed 60 (L110-0xxx060000000)  
 FWHM / FWTM 9.2° / 20.0°  
 Efficiency 94 %  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

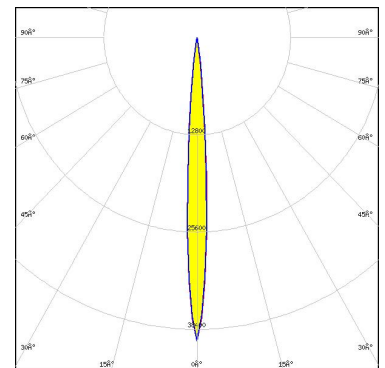
#### OPTICAL RESULTS (SIMULATED):



LED	LUXEON IR Domed 90 (L110-0xxx090000000)
FWHM / FWTM	9.0° / 18.0°
Efficiency	94 %
LEDs/each optic	1
Light colour/type	White
Required components:	



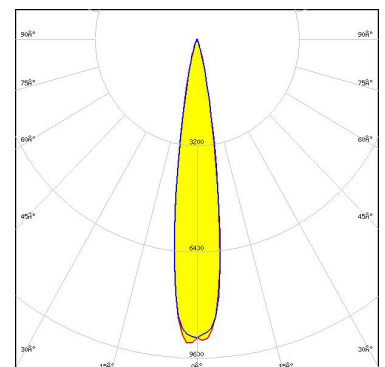
LED	LUXEON Z ES
FWHM / FWTM	8.0° / 15.0°
Efficiency	95 %
Peak intensity	39.9 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	



Light distribution files



LED	NV4WB35AM
FWHM / FWTM	16.0° / 30.0°
Efficiency	96 %
Peak intensity	9.1 cd/lm
LEDs/each optic	1
Light colour/type	White
Required components:	

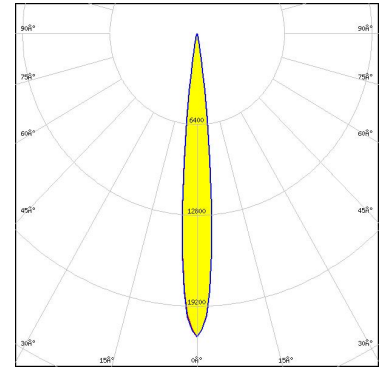


Light distribution files

#### OPTICAL RESULTS (SIMULATED):



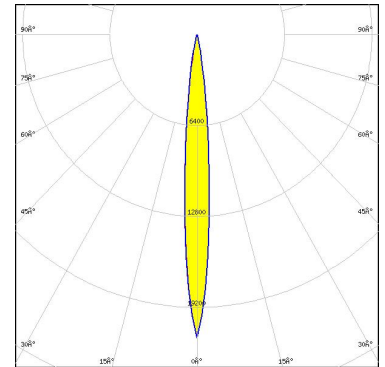
LED NVSW719AC  
 FWHM / FWTM 10.0° / 20.0°  
 Efficiency 96 %  
 Peak intensity 21.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



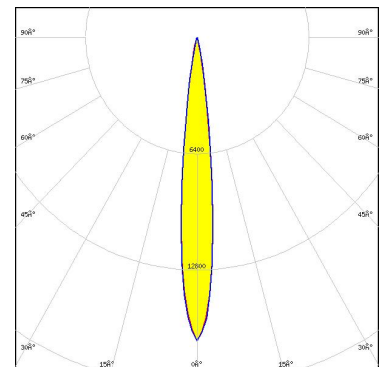
LED NVSxE21A  
 FWHM / FWTM 10.0° / 21.0°  
 Efficiency 94 %  
 Peak intensity 21.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 12.0° / 22.0°  
 Efficiency 94 %  
 Peak intensity 16.7 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:

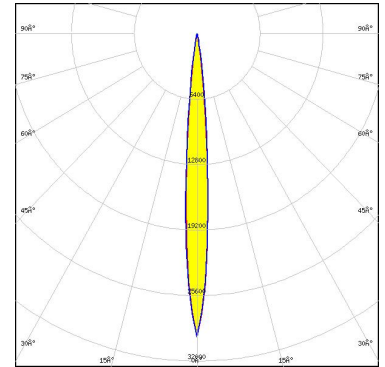


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

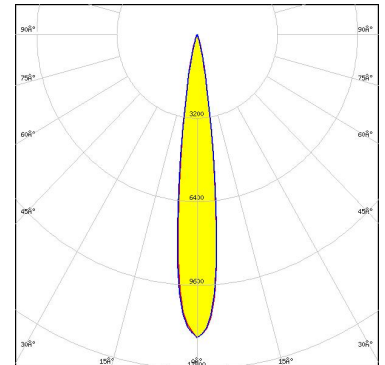
LED OSCONIQ C 2424  
FWHM / FWTM 8.0° / 18.0°  
Efficiency 96 %  
Peak intensity 29.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

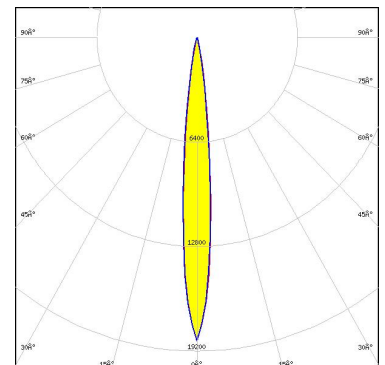
LED OSCONIQ P 3737 (3W version)  
FWHM / FWTM 14.0° / 27.0°  
Efficiency 94 %  
Peak intensity 11.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSCONIQ P 3737 Flat  
FWHM / FWTM 10.0° / 22.0°  
Efficiency 96 %  
Peak intensity 18.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:

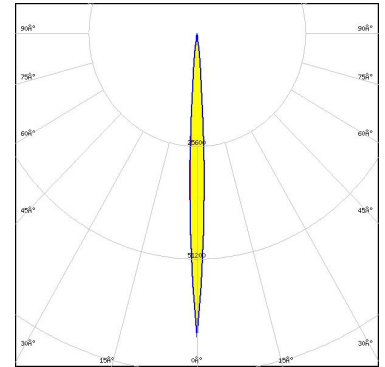


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

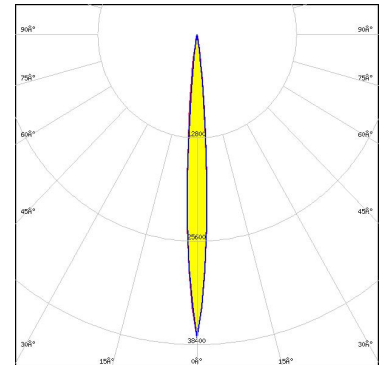
LED OSLON Black Flat (LUW HWQP)  
FWHM / FWTM 6.0° / 12.0°  
Efficiency 95 %  
Peak intensity 68.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

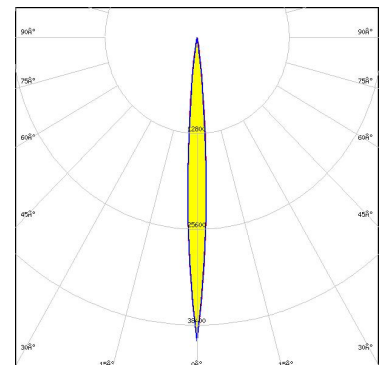
LED OSLON Boost HX (KW CULPM1.TG)  
FWHM / FWTM 8.0° / 16.0°  
Efficiency 96 %  
Peak intensity 37.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON Signal  
FWHM / FWTM 8.0° / 16.0°  
Efficiency 95 %  
Peak intensity 40.5 cd/lm  
LEDs/each optic 1  
Light colour/type Red  
Required components:

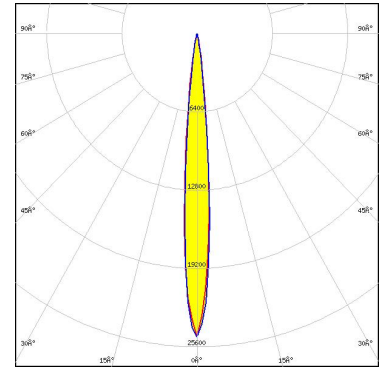


Light distribution files

#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

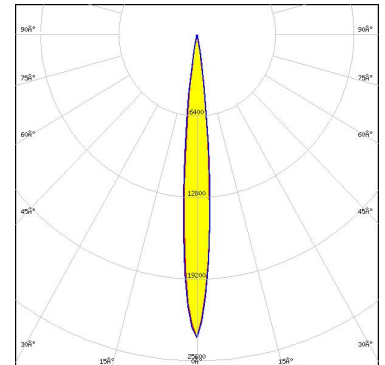
LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 9.5° / 19.0°  
Efficiency 94 %  
Peak intensity 24.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4715AS  
FWHM / FWTM 10.0° / 19.0°  
Efficiency 94 %  
Peak intensity 23.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED SFH 4715S  
FWHM / FWTM 9.5°  
Efficiency %  
LEDs/each optic 1  
Light colour/type White  
Required components:

## OPTICAL RESULTS (SIMULATED):

### OSRAM

Opto Semiconductors

LED	SFH 4770S
FWHM / FWTM	10.0° / 23.0°
Efficiency	94 %
LEDs/each optic	1
Light colour/type	White
Required components:	

### SAMSUNG

LED	LM301B
FWHM / FWTM	9.0° / 19.0°
Efficiency	94 %
Peak intensity	24.5 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.

LEDiL Oy assumes neither warranty, nor guarantee nor any other liability of any kind for the contents and correctness of the provided data. The provided data has been generated with highest diligence but the provided data may in reality not represent the complete possible variation range of all intrinsic parameters. Therefore, in certain cases a deviation from the provided data could occur.

LEDiL Oy reserves the right to undertake technical changes of its products without further notification which could lead to changes in the provided data. LEDiL Oy assumes no liability of any kind for the possible deviation from any provided data or any other damage resulting from the usage of the provided data.

The user agrees to this disclaimer and user agreement with the download or usage of the provided files.

#### 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

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)

#### Shipping locations

Poznan, Poland  
Hong Kong, China

#### Distribution Partners

[www.ledil.com/  
where\\_to\\_buy](http://www.ledil.com/where_to_buy)