

## HB-2X2-M

~25° medium beam

## SPECIFICATION:

Dimensions	50.0 x 50.0 mm
Height	8.5 mm
Fastening	glue, pin, screw
ROHS compliant	yes ⓘ

## MATERIALS:

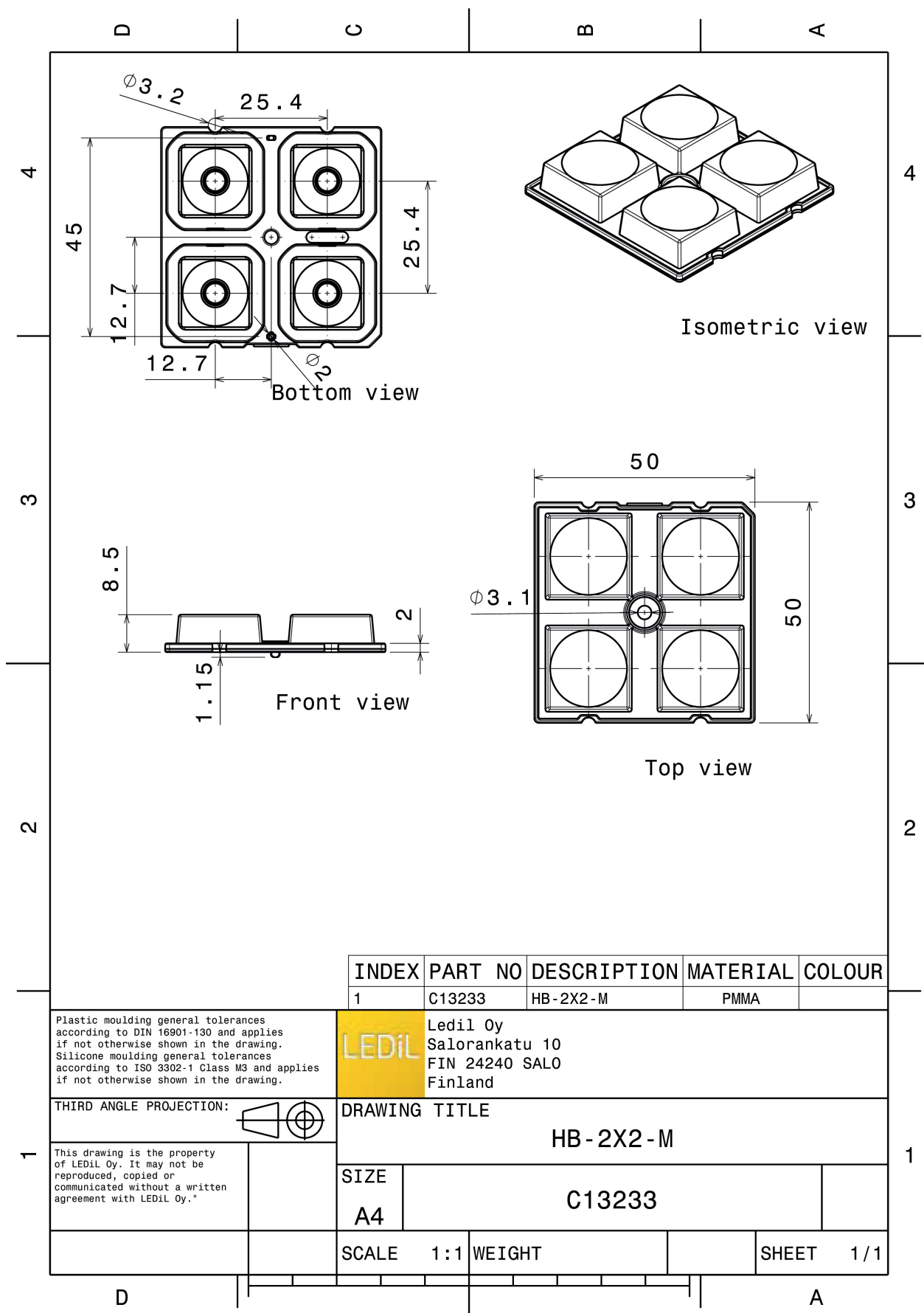
Component	Type	Material	Colour	Finish	Length
HB-2X2-M	Multi-lens	PMMA	clear		50.0

## ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13233_HB-2X2-M » Box size: 480 x 280 x 300 mm	800	160	160	9.2







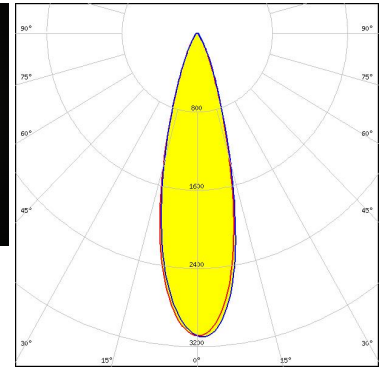
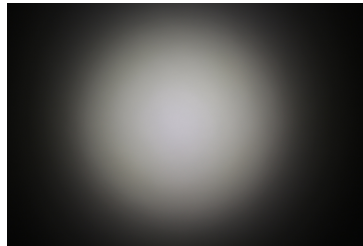
See also our general installation guide: [www.ledil.com/installation\\_guide](http://www.ledil.com/installation_guide)



#### OPTICAL RESULTS (MEASURED):



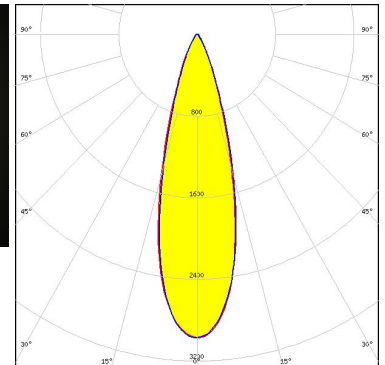
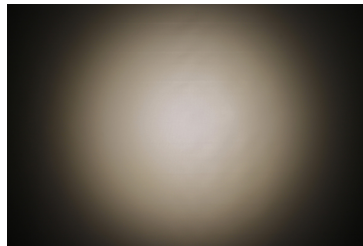
LED QUICK FLUX XTP 2x4 xxx LS G5  
 FWHM / FWTM 28.0° / 52.0°  
 Efficiency 94 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



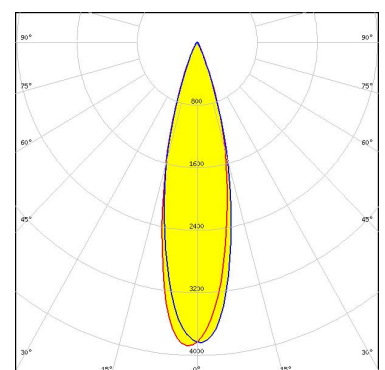
LED QUICK FLUX XTP 2x6 xxx LS G5  
 FWHM / FWTM 29.0° / 52.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED XB-D  
 FWHM / FWTM 26.0° / 47.0°  
 Efficiency 94 %  
 Peak intensity 3.9 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



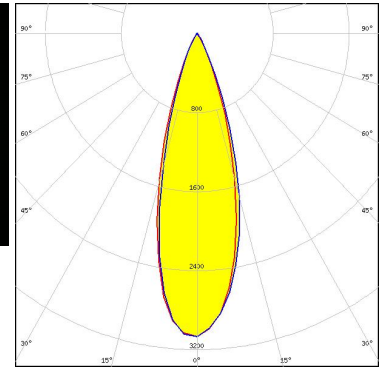
Light distribution files



#### OPTICAL RESULTS (MEASURED):



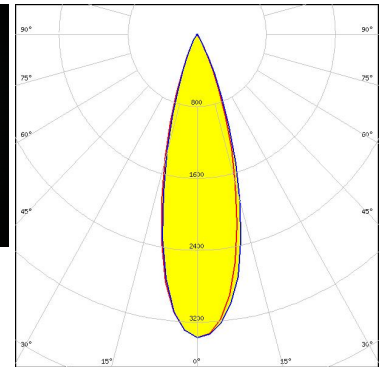
LED XP-G  
FWHM / FWTM 31.0° / 54.0°  
Efficiency 91 %  
Peak intensity 3.1 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



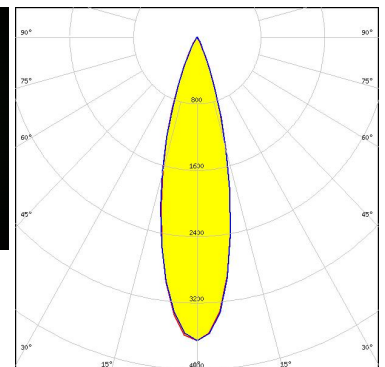
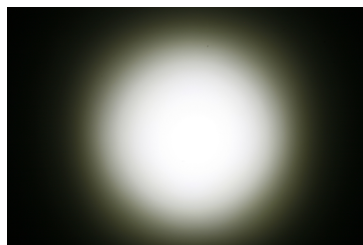
LED XP-G2  
FWHM / FWTM 33.0° / 54.0°  
Efficiency 93 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XT-E  
FWHM / FWTM 25.0° / 46.0°  
Efficiency 92 %  
Peak intensity 3.7 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



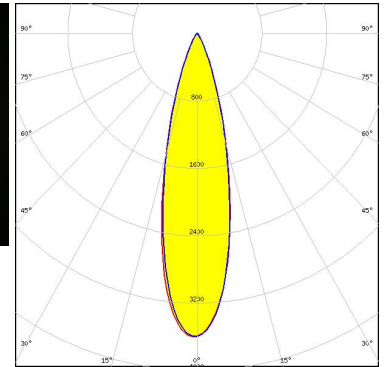
Light distribution files



#### OPTICAL RESULTS (MEASURED):



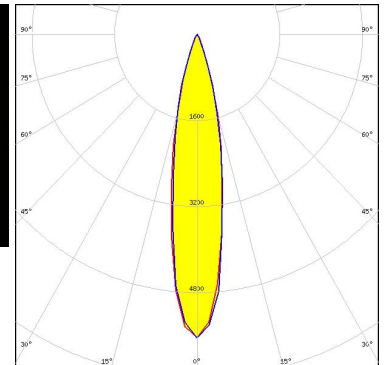
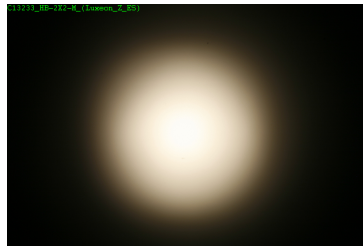
LED LUXEON Q  
FWHM / FWTM 26.0° / 49.0°  
Efficiency 94 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



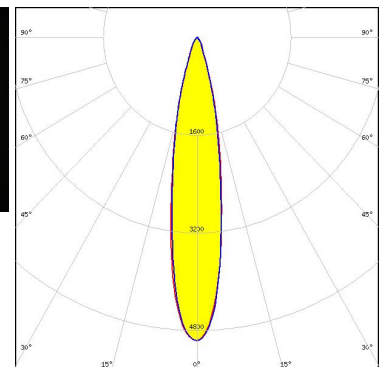
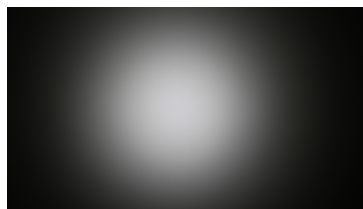
LED LUXEON Z ES  
FWHM / FWTM 21.0° / 42.0°  
Efficiency 91 %  
Peak intensity 5.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED NVSxE21A  
FWHM / FWTM 20.0° / 40.0°  
Efficiency 94 %  
Peak intensity 5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



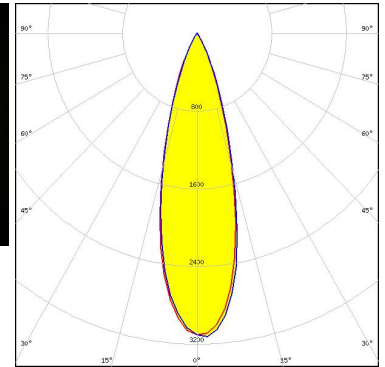
Light distribution files



#### OPTICAL RESULTS (MEASURED):



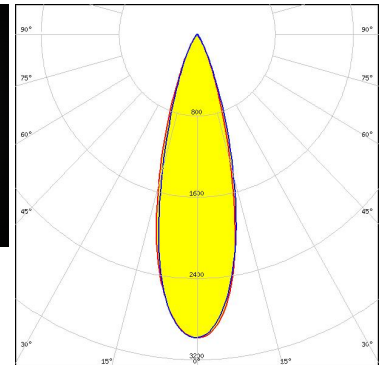
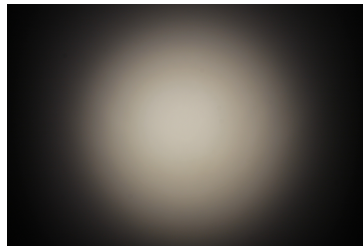
LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 29.0° / 52.0°  
 Efficiency 91 %  
 Peak intensity 3.1 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



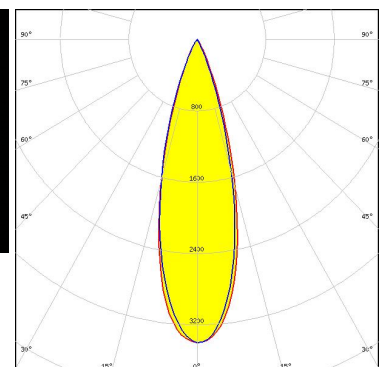
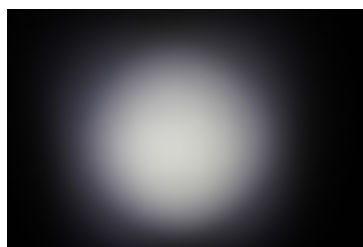
LED NVSxx19B/NVSxx19C  
 FWHM / FWTM 29.0° / 53.0°  
 Efficiency 90 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED PrevaLED Brick HP 2x8  
 FWHM / FWTM 30.0° / 51.0°  
 Efficiency 93 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



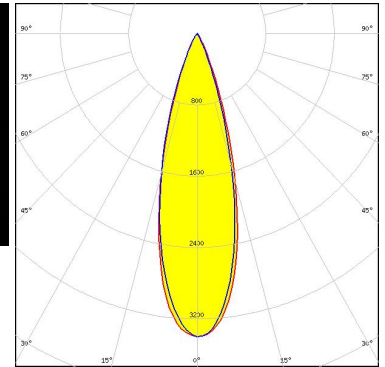
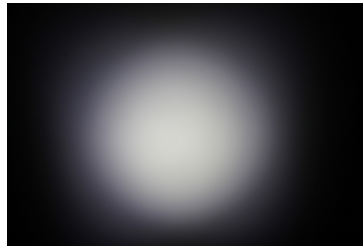
Light distribution files



#### OPTICAL RESULTS (MEASURED):

**OSRAM**  
Opto Semiconductors

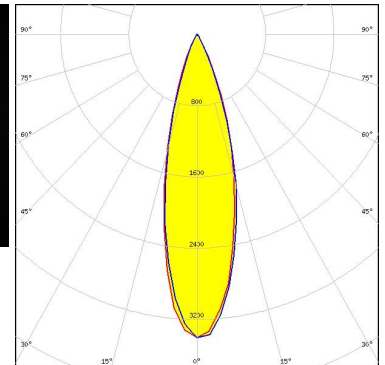
LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 30.0° / 51.0°  
Efficiency 93 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

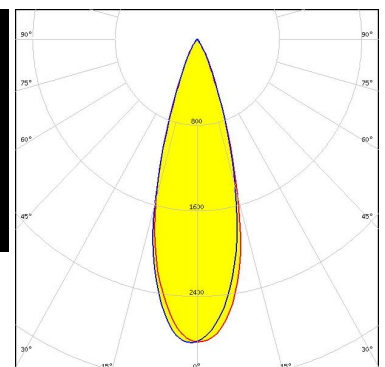
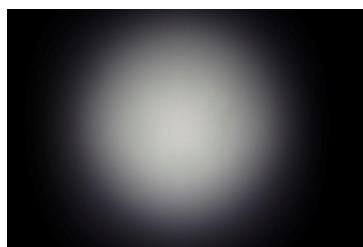
LED OSLON Square PC  
FWHM / FWTM 30.0° / 54.0°  
Efficiency 91 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**SAMSUNG**

LED LH351B  
FWHM / FWTM 31.0° / 53.0°  
Efficiency 94 %  
Peak intensity 2.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



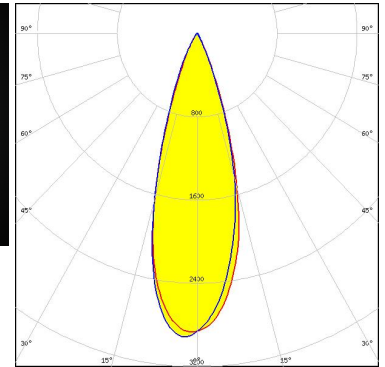
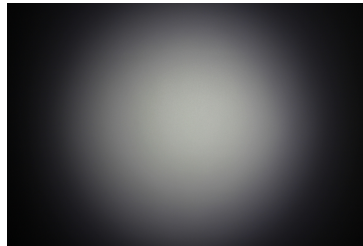
Light distribution files



#### OPTICAL RESULTS (MEASURED):

#### SAMSUNG

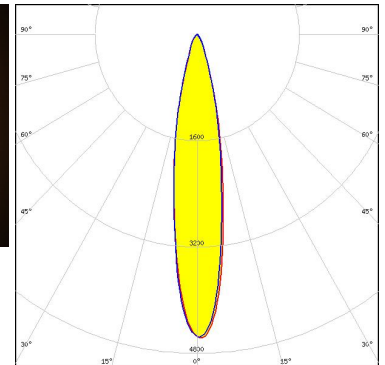
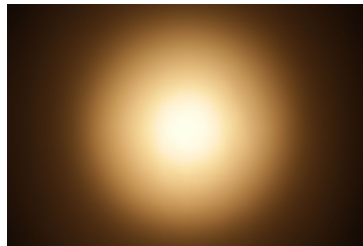
LED LH351Z  
FWHM / FWTM 32.0° / 52.0°  
Efficiency 93 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



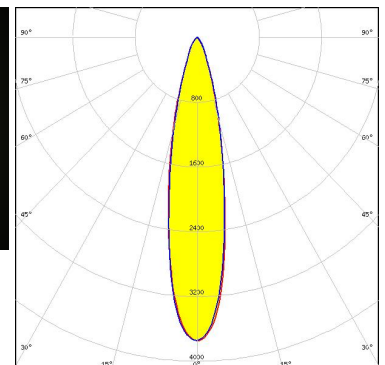
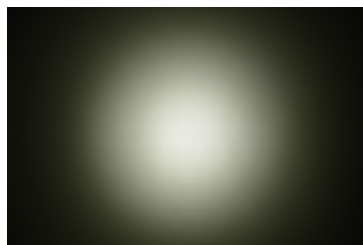
LED Z8Y15  
FWHM / FWTM 20.0° / 41.0°  
Efficiency 89 %  
Peak intensity 4.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED Z8Y19  
FWHM / FWTM 22.0° / 46.0°  
Efficiency 89 %  
Peak intensity 3.8 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



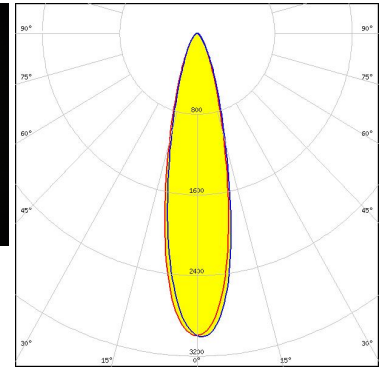
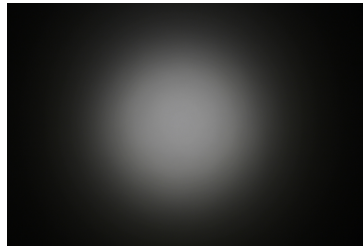
Light distribution files



#### OPTICAL RESULTS (MEASURED):



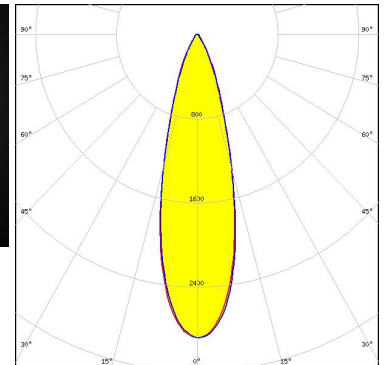
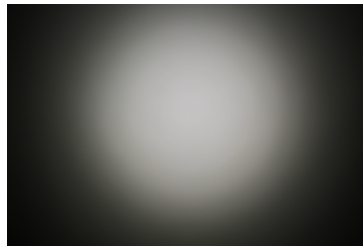
LED Z8Y22  
FWHM / FWTM 24.0° / 53.0°  
Efficiency 94 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



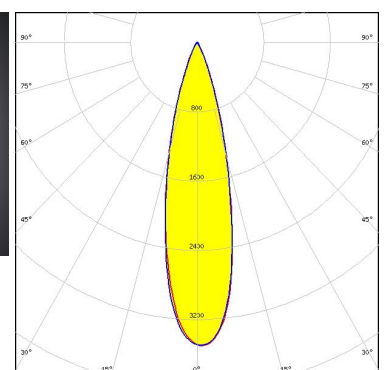
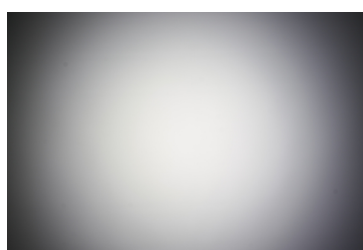
LED Z8Y22P  
FWHM / FWTM 28.0° / 56.0°  
Efficiency 94 %  
Peak intensity 2.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED TL1L4  
FWHM / FWTM 25.0° / 46.0°  
Efficiency 85 %  
Peak intensity 3.5 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



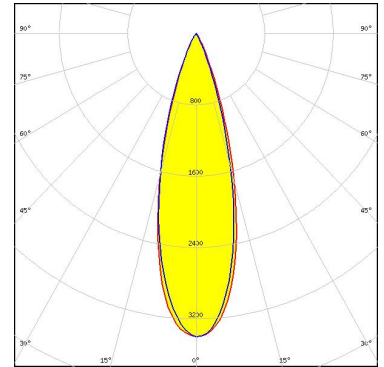
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### TRIDONIC

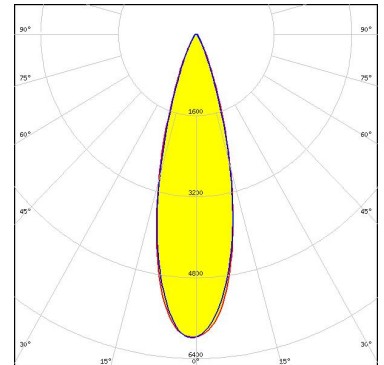
LED RLE 2x4 2000lm HP EXC2 OTD  
FWHM / FWTM 29.0° / 50.0°  
Efficiency 93 %  
Peak intensity 3.4 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### TRIDONIC

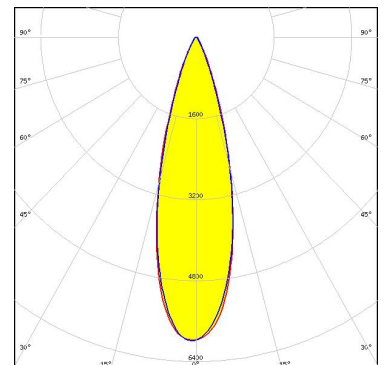
LED RLE G1 49x121mm 2000lm xxx EXC OTD  
FWHM / FWTM 29.0° / 53.0°  
Efficiency 94 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

#### TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD  
FWHM / FWTM 29.0° / 53.0°  
Efficiency 94 %  
Peak intensity 3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



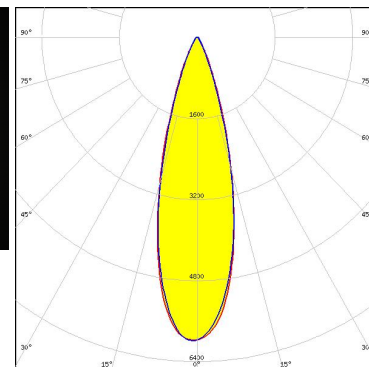
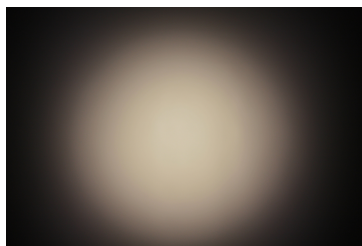
Light distribution files



### OPTICAL RESULTS (MEASURED):

#### TRIDONIC

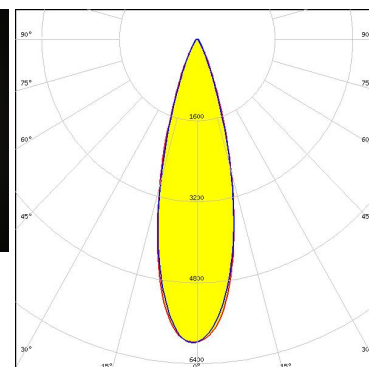
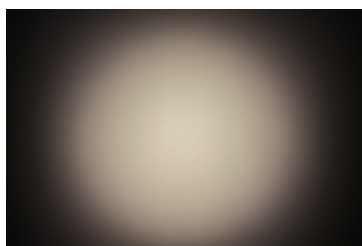
LED RLE G1 49x223mm 4000lm xxx EXC OTD  
 FWHM / FWTM 29.0° / 53.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files

#### TRIDONIC

LED RLE G1 49x245mm 4000lm xxx EXC OTD  
 FWHM / FWTM 29.0° / 53.0°  
 Efficiency 94 %  
 Peak intensity 3 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



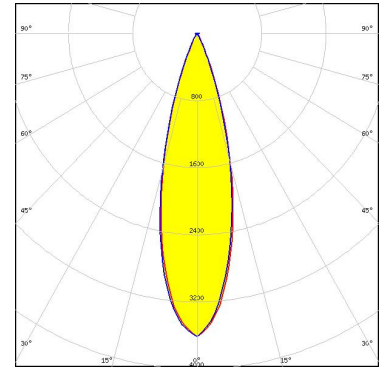
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



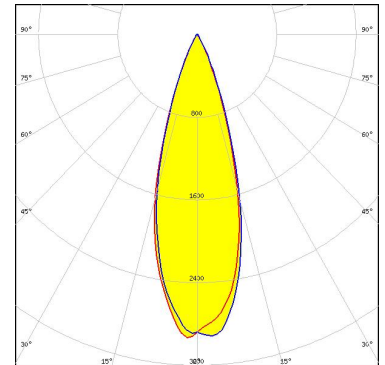
LED XD16  
FWHM / FWTM 28.0° / 48.0°  
Efficiency 95 %  
Peak intensity 3.6 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files



LED XP-G2  
FWHM / FWTM 32.0° / 52.0°  
Efficiency 93 %  
Peak intensity 3 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:

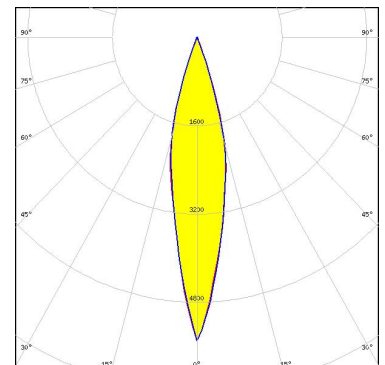


Protective plate, glass

Light distribution files



LED XQ-E HI  
FWHM / FWTM 22.0° / 42.0°  
Efficiency 93 %  
Peak intensity 5.5 cd/Im  
LEDs/each optic 1  
Light colour/type White  
Required components:



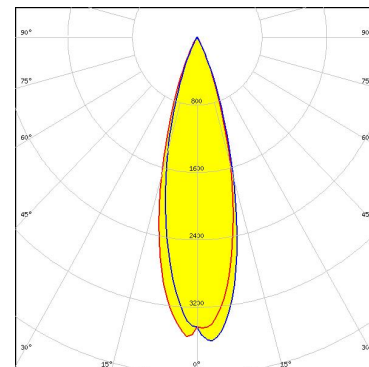
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



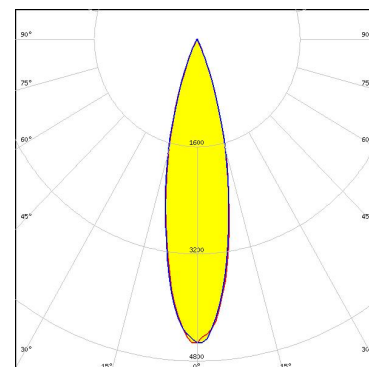
LED LUXEON 3030 2D (Round LES)  
 FWHM / FWTM 28.0° / 49.0°  
 Efficiency 94 %  
 Peak intensity 3.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



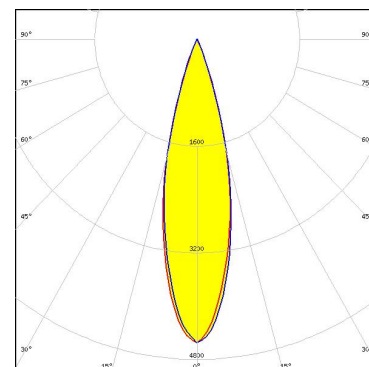
LED LUXEON C  
 FWHM / FWTM 25.0° / 45.0°  
 Efficiency 94 %  
 Peak intensity 4.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED OSCONIQ C 2424  
 FWHM / FWTM 26.0° / 43.0°  
 Efficiency 96 %  
 Peak intensity 4.6 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



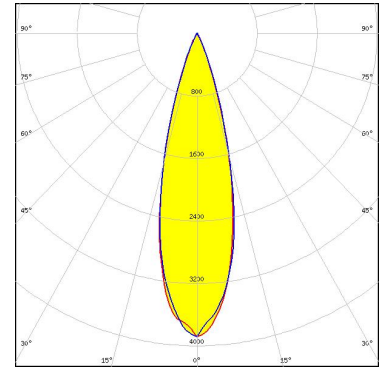
Light distribution files



#### OPTICAL RESULTS (SIMULATED):

**OSRAM**  
Opto Semiconductors

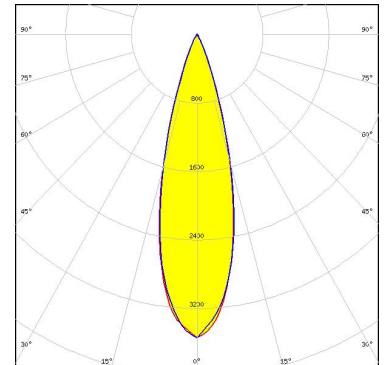
LED OSCONIQ C 3030  
FWHM / FWTM 28.0° / 46.0°  
Efficiency 96 %  
Peak intensity 3.9 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

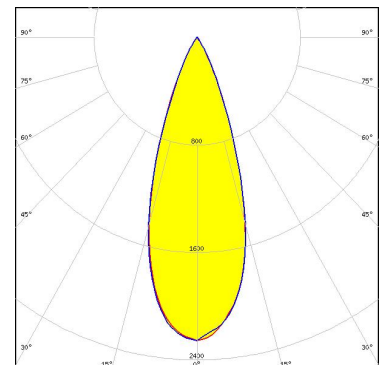
LED OSCONIQ C 3030  
FWHM / FWTM 28.0° / 46.0°  
Efficiency 88 %  
Peak intensity 3.6 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Light distribution files

**OSRAM**  
Opto Semiconductors

LED OSLON Square CSSRM2/CSSRM3  
FWHM / FWTM 36.0° / 56.0°  
Efficiency 87 %  
Peak intensity 2.3 cd/lm  
LEDs/each optic 1  
Light colour/type White  
Required components:



Protective plate, glass

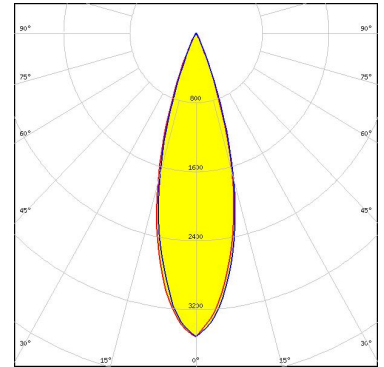
Light distribution files



#### OPTICAL RESULTS (SIMULATED):



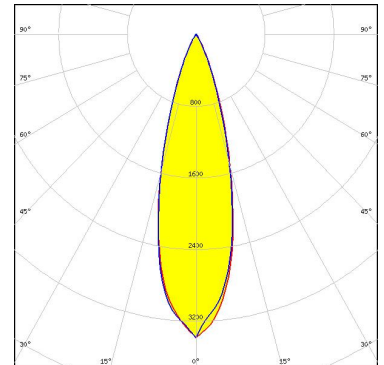
LED OSLOM SSL 80  
 FWHM / FWTM 29.6° / 48.1°  
 Efficiency 94 %  
 Peak intensity 3.5 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



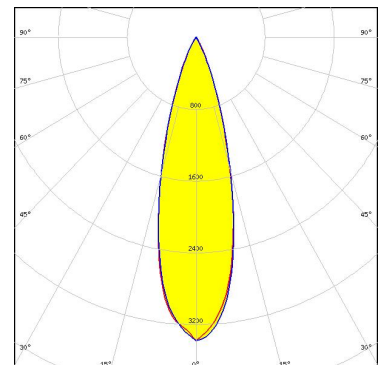
LED LH231B  
 FWHM / FWTM 28.0° / 50.0°  
 Efficiency 94 %  
 Peak intensity 3.4 cd/lm  
 LEDs/each optic 1  
 Light colour/type White  
 Required components:



Light distribution files



LED Z8Y22T  
 FWHM / FWTM 28.0° / 51.0°  
 Efficiency 94 %  
 Peak intensity 3.4 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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