

HB-2X2-WW

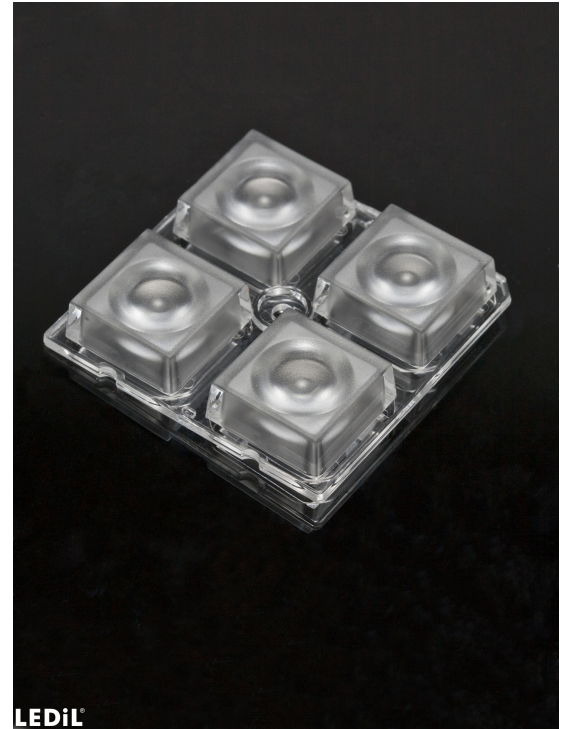
~65° wide beam

SPECIFICATION:

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

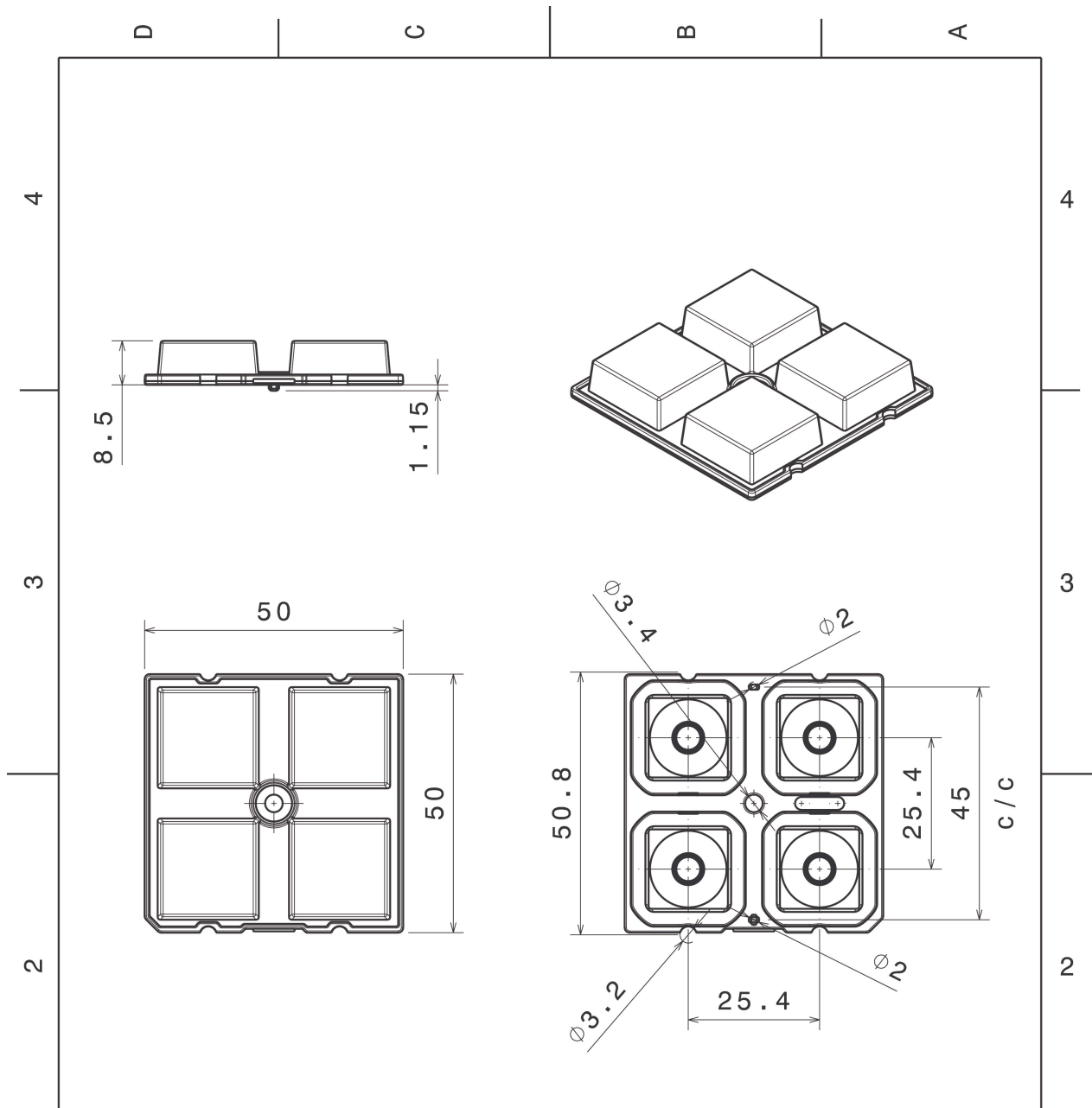
MATERIALS:


Component	Type	Material	Colour	Finish
HB-2X2-WW	Multi-lens	PMMA	clear	



ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C13232_HB-2X2-WW » Box size: 480 x 280 x 300 mm	800	160	160	9.5



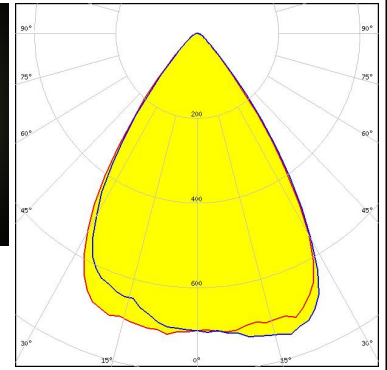
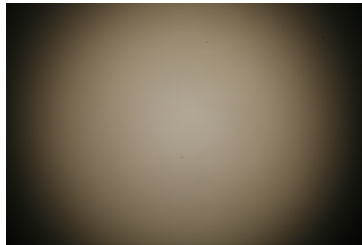
INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C13232	HB-2x2-WW	PMMA	
<p>Plastic moulding general tolerances according to DIN 16901-130 and applies if not otherwise shown in the drawing. Silicone moulding general tolerances according to ISO 3302-1 Class M3 and applies if not otherwise shown in the drawing.</p>		<p>LEDiL Ledil Oy Salorankatu 10 FIN 24240 SALO Finland</p>		
<p>THIRD ANGLE PROJECTION: </p>		<p>DRAWING TITLE C13232_HB-2x2-WW</p>		
<p>This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy.</p>		<p>SIZE A4</p>	<p>PART NUMBER C13232</p>	
<p>SCALE 1:1</p>		<p>WEIGHT 10,8 g</p>	<p>SHEET 1/1</p>	

See also our general installation guide: www.ledil.com/installation_guide

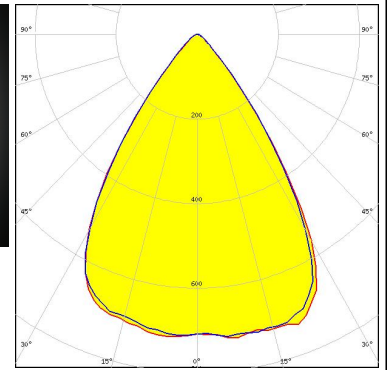
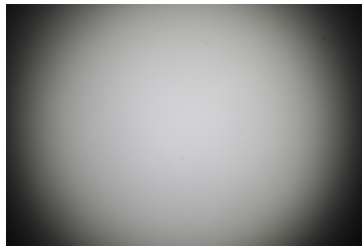
OPTICAL RESULTS (MEASURED):



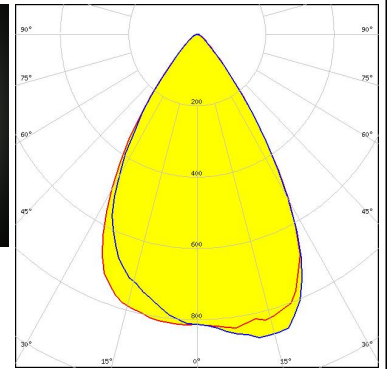
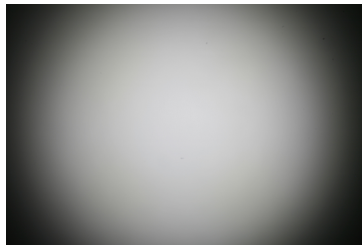
LED XP-G
 FWHM / FWTM 69.0° / 92.0°
 Efficiency 91 %
 Peak intensity 0.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



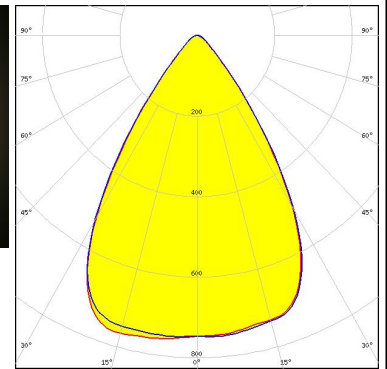
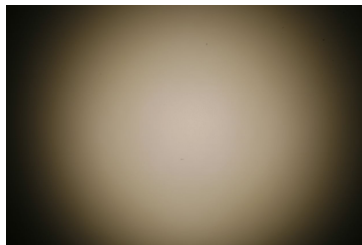
LED XP-G2
 FWHM / FWTM 69.0° / 92.0°
 Efficiency 91 %
 Peak intensity 0.7 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:




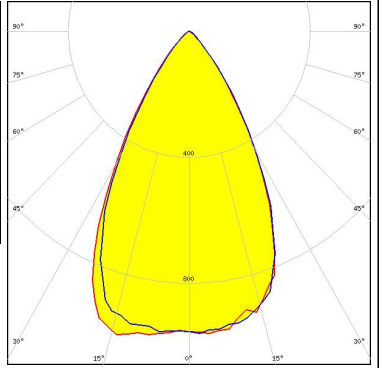

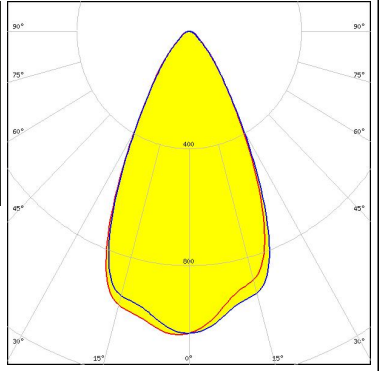

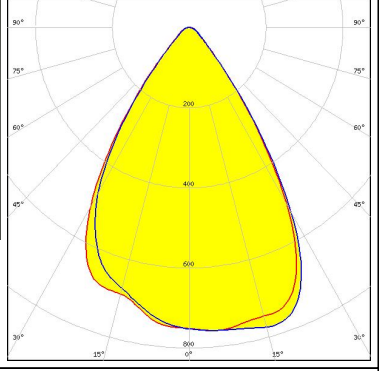

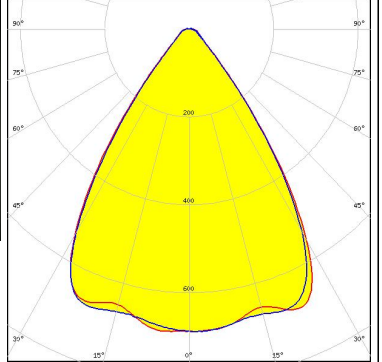
LED XT-E
 FWHM / FWTM 65.0° / 89.0°
 Efficiency 91 %
 Peak intensity 0.9 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON Q
 FWHM / FWTM 67.0° / 92.0°
 Efficiency 91 %
 Peak intensity 0.8 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

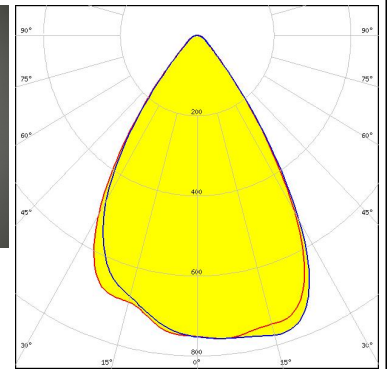
<p>LUMILEDS</p> <p>LED LUXEON Z ES</p> <p>FWHM / FWTM 59.0° / 87.0°</p> <p>Efficiency 90 %</p> <p>Peak intensity 1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>NICHIA</p> <p>LED NVSxE21A</p> <p>FWHM / FWTM 54.0° / 89.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 1.1 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>OSRAM</p> <p>LED PrevaLED Brick HP 2x8</p> <p>FWHM / FWTM 67.0° / 92.0°</p> <p>Efficiency 92 %</p> <p>Peak intensity 0.8 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>OSRAM Opto Semiconductors</p> <p>LED OSOLON Square CSSRM2/CSSRM3</p> <p>FWHM / FWTM 71.0° / 94.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 0.7 cd/lm</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

OPTICAL RESULTS (MEASURED):

OSRAM

Opto Semiconductors

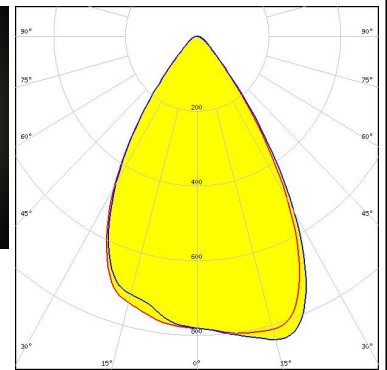
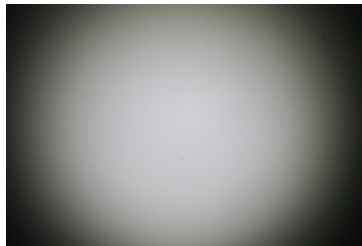
LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM 67.0° / 92.0°
 Efficiency 92 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

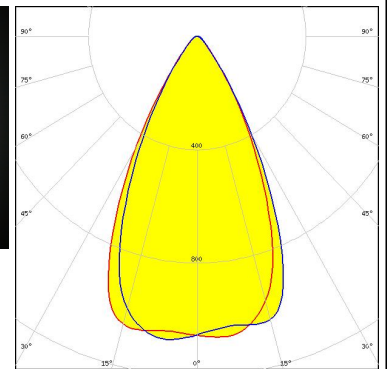
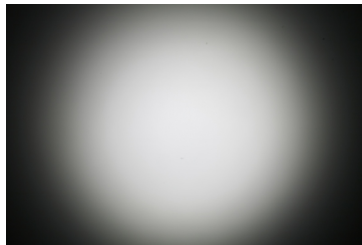
LED OSLON Square PC
 FWHM / FWTM 63.0° / 90.0°
 Efficiency 91 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

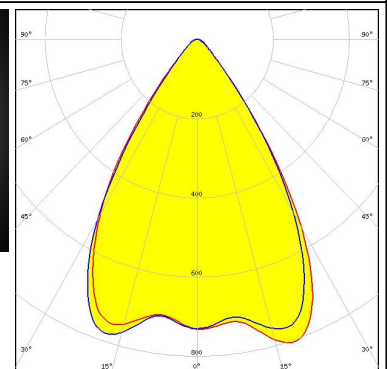
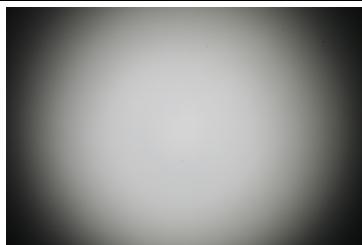
Opto Semiconductors

LED OSLON SSL 80
 FWHM / FWTM 54.0° / 80.0°
 Efficiency 92 %
 Peak intensity 1.1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

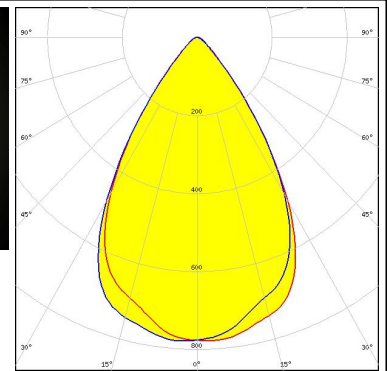
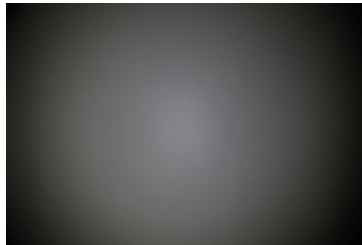
LED LH351A
 FWHM / FWTM 68.0° / 91.0°
 Efficiency 92 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (MEASURED):

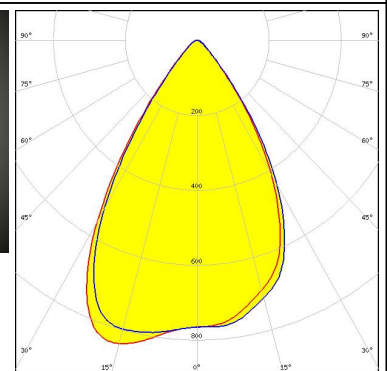
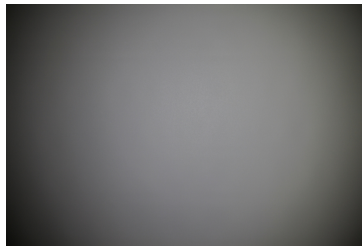
SAMSUNG

LED LH351B
 FWHM / FWTM 65.0° / 92.0°
 Efficiency 89 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

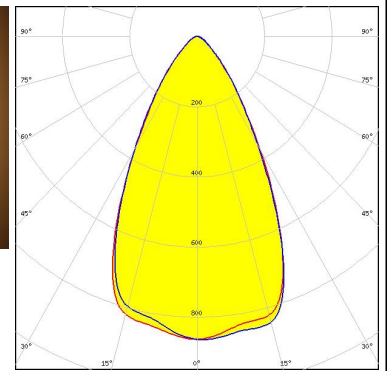
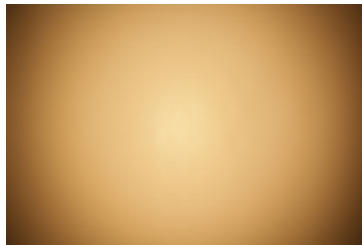


SAMSUNG

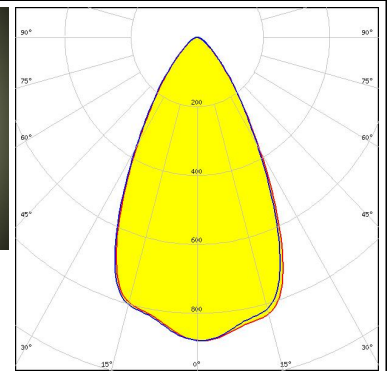
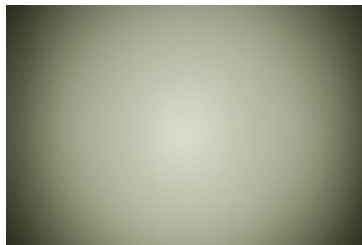
LED LH351Z
 FWHM / FWTM 63.0° / 89.0°
 Efficiency 89 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



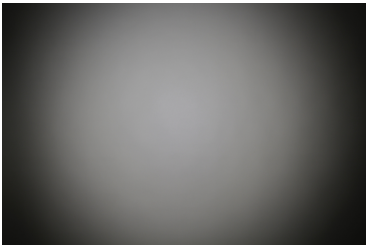
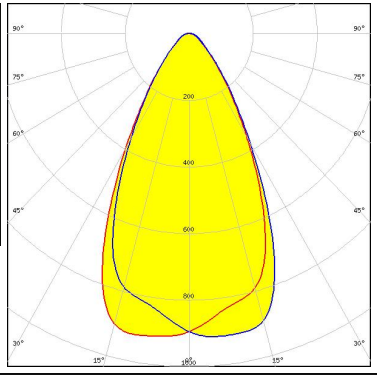
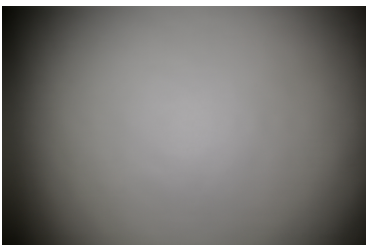
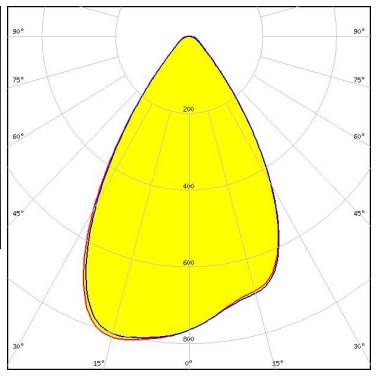
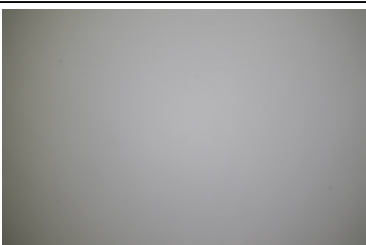
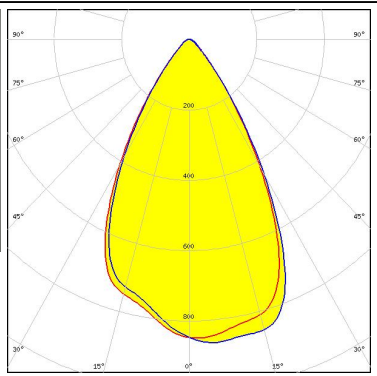

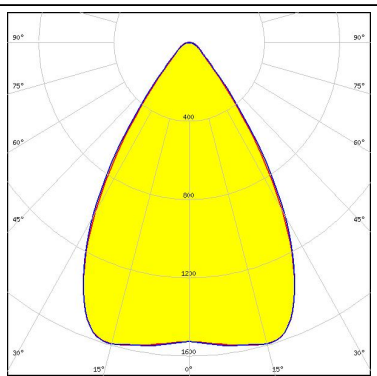
SEOUL SEMICONDUCTOR
 LED Z8Y15
 FWHM / FWTM 56.0° / 92.0°
 Efficiency 85 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SEOUL SEMICONDUCTOR
 LED Z8Y19
 FWHM / FWTM 56.0° / 92.0°
 Efficiency 85 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



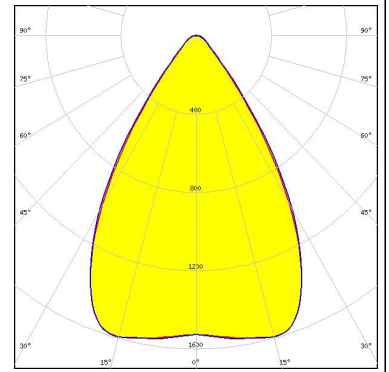
OPTICAL RESULTS (MEASURED):

<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22 FWHM / FWTM 55.0° / 94.0° Efficiency 94 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>SEOL SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P FWHM / FWTM 65.0° / 95.0° Efficiency 94 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>TOSHIBA Leading Innovation >>></p> <p>LED TL1L4 FWHM / FWTM 60.0° / 87.0° Efficiency 84 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>TRIDONIC</p> <p>LED RLE G1 49x121mm 2000lm xxx EXC OTD FWHM / FWTM 67.0° / 93.0° Efficiency 94 % Peak intensity 0.9 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		

OPTICAL RESULTS (MEASURED):

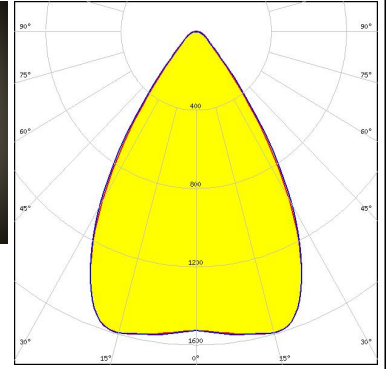
TRIDONIC

LED RLE G1 49x133mm 2000lm xxx EXC OTD
FWHM / FWTM 67.0° / 93.0°
Efficiency 94 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



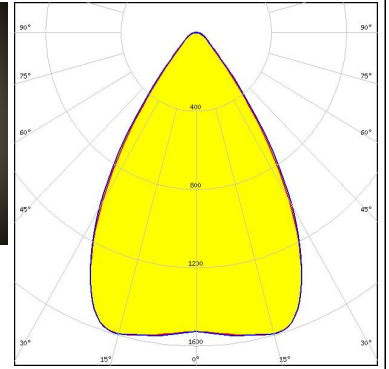
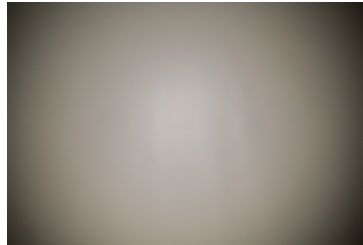
TRIDONIC

LED RLE G1 49x223mm 4000lm xxx EXC OTD
FWHM / FWTM 67.0° / 93.0°
Efficiency 94 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



TRIDONIC

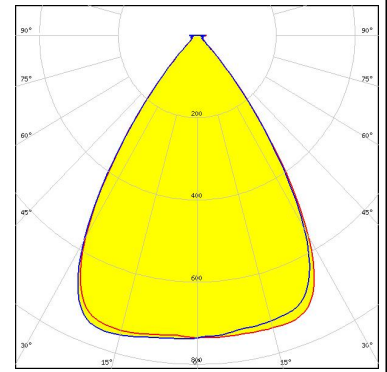
LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM / FWTM 67.0° / 93.0°
Efficiency 94 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



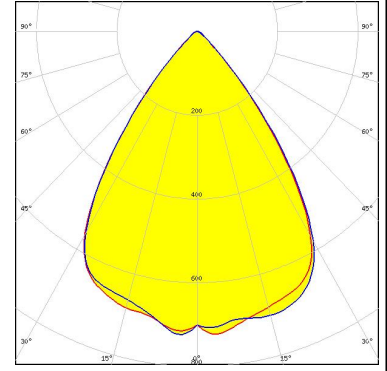
OPTICAL RESULTS (SIMULATED):



LED XD16
 FWHM / FWTM 69.0° / 90.0°
 Efficiency 95 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



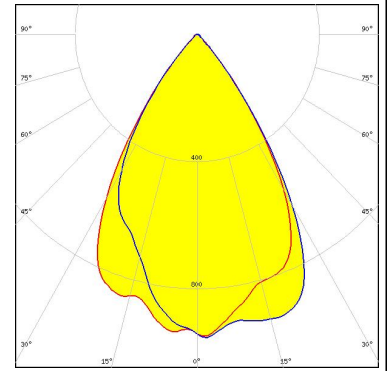
LED XP-G2
 FWHM / FWTM 72.0° / 94.0°
 Efficiency 92 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



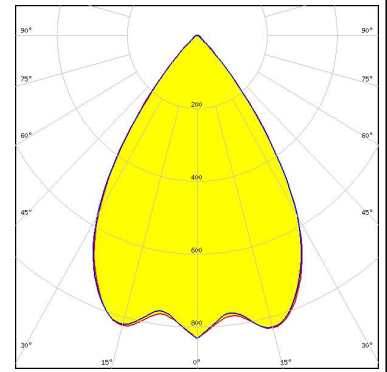
Protective plate, glass



LED LUXEON 3030 2D (Round LES)
 FWHM / FWTM 64.0° / 82.0°
 Efficiency 94 %
 Peak intensity 1 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED LUXEON C
 FWHM / FWTM 65.0° / 88.0°
 Efficiency 94 %
 Peak intensity 0.8 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

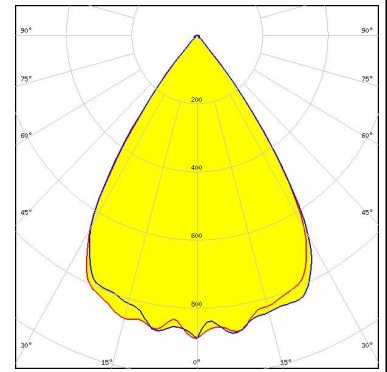


OPTICAL RESULTS (SIMULATED):

OSRAM

Opto Semiconductors

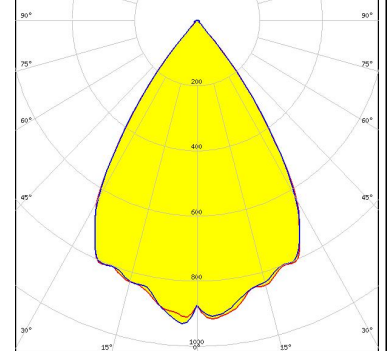
LED OSCONIQ C 2424
 FWHM / FWTM 68.0° / 82.0°
 Efficiency 97 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

Opto Semiconductors

LED OSCONIQ C 3030
 FWHM / FWTM 68.0° / 84.0°
 Efficiency 97 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

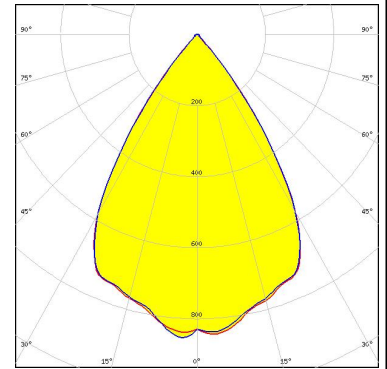


OSRAM

Opto Semiconductors

LED OSCONIQ C 3030
 FWHM / FWTM 68.0° / 84.0°
 Efficiency 89 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass

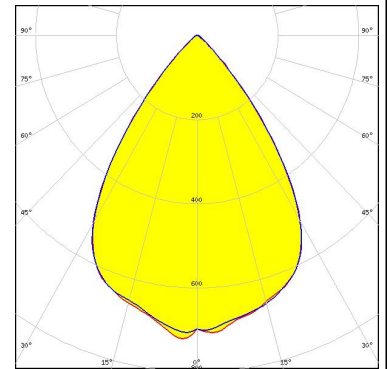


OSRAM

Opto Semiconductors

LED OSLOM Square CSSRM2/CSSRM3
 FWHM / FWTM 70.0° / 94.0°
 Efficiency 88 %
 Peak intensity 0.7 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



OPTICAL RESULTS (SIMULATED):



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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LEDiL Oy

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P.R.CHINA

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Hong Kong, China

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