

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 ⓘ

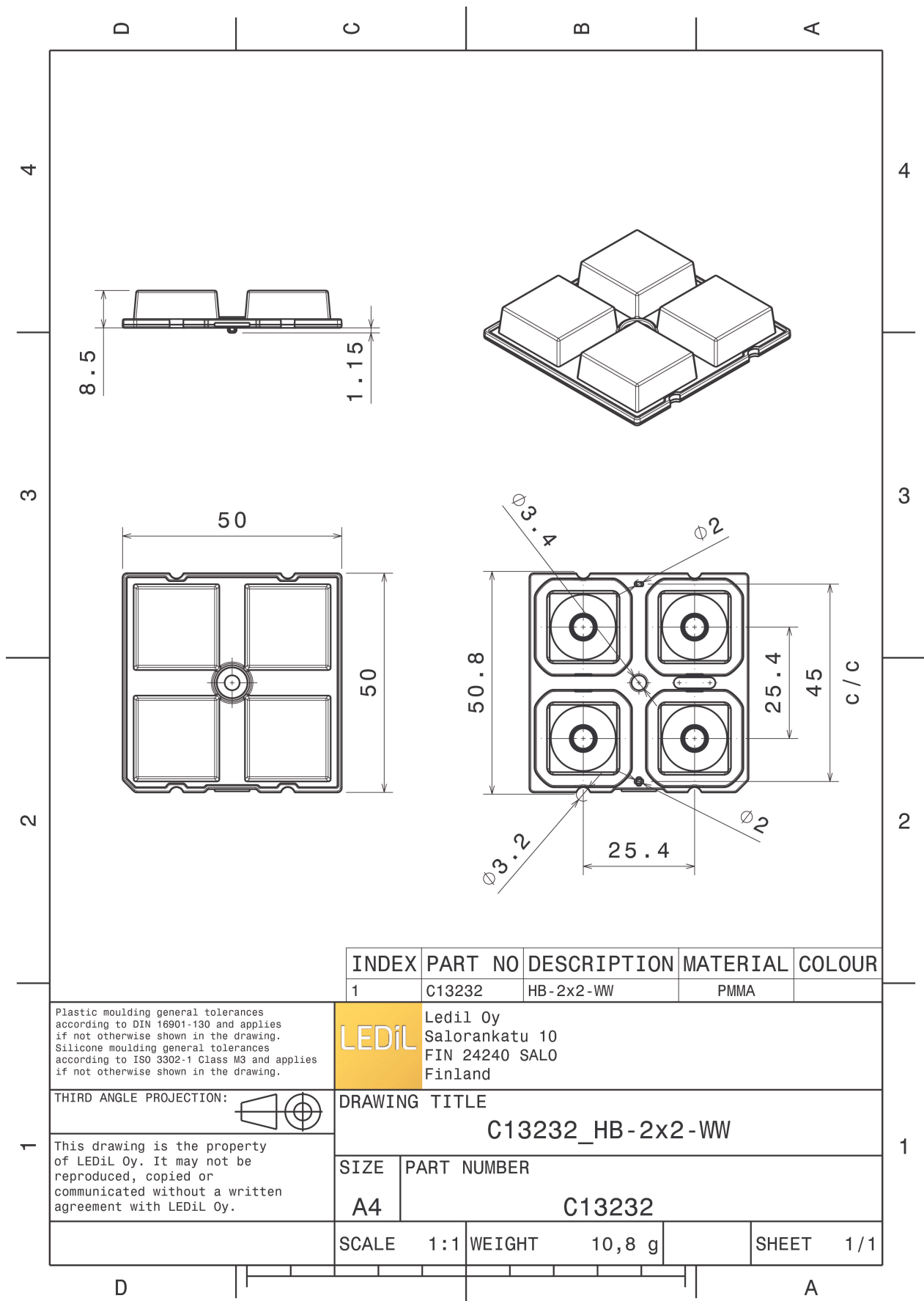
MATERIALS:

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

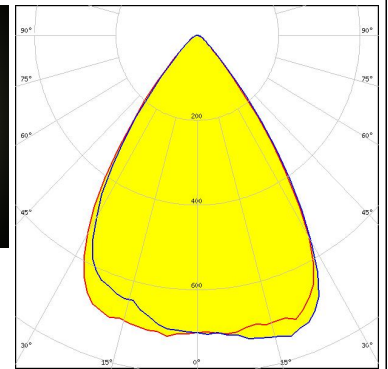
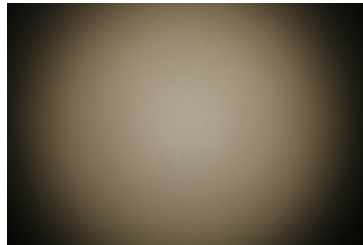


See also our general installation guide: www.ledil.com/installation_guide

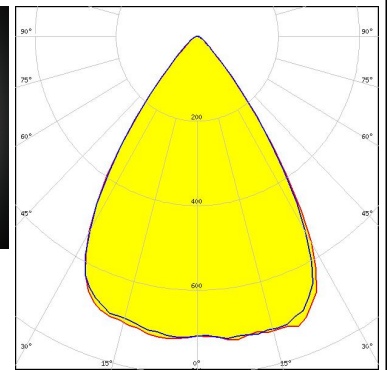
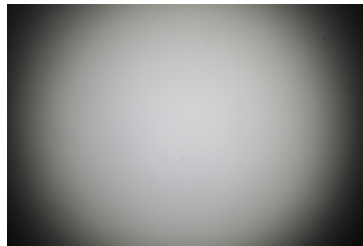
OPTICAL RESULTS (MEASURED):



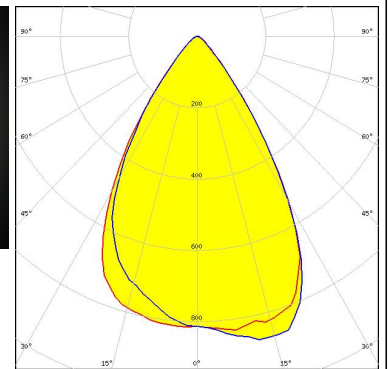
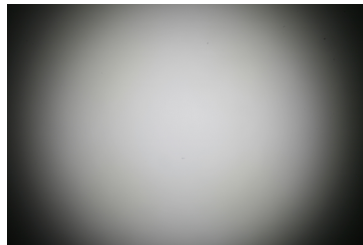
LED XP-G
FWHM / FWTM 69.0° / 92.0°
Efficiency 91 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



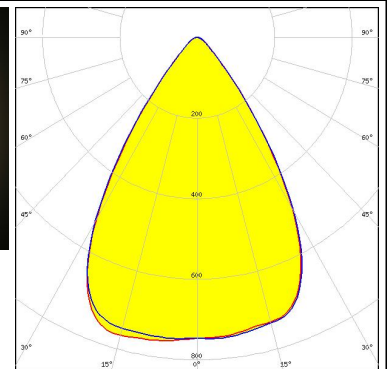
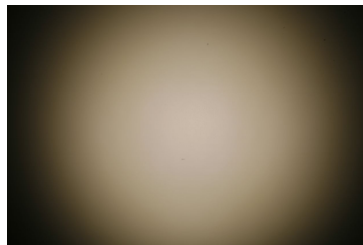
LED XP-G2
FWHM / FWTM 69.0° / 92.0°
Efficiency 91 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



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



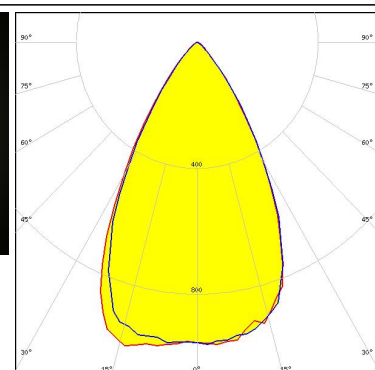
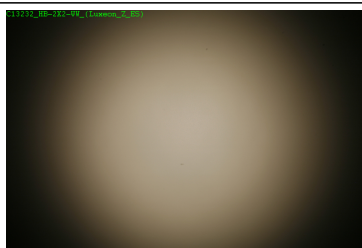
LED LUXEON Q
FWHM / FWTM 67.0° / 92.0°
Efficiency 91 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



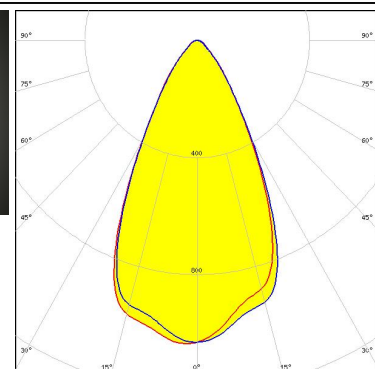
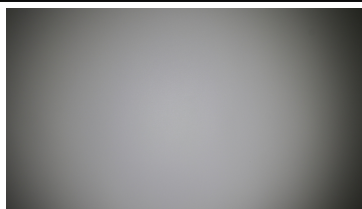
OPTICAL RESULTS (MEASURED):



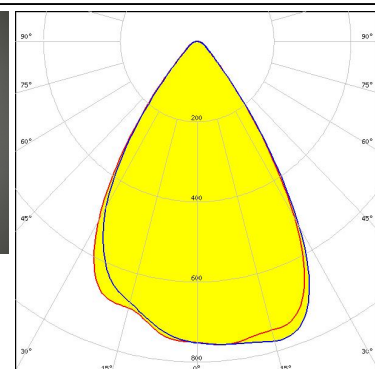
LED LUXEON Z ES
FWHM / FWTM 59.0° / 87.0°
Efficiency 90 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour White
Required components:



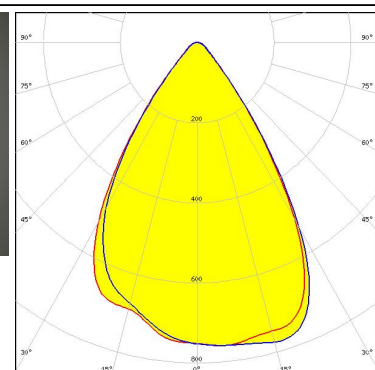
LED NVSxE21A
FWHM / FWTM 54.0° / 89.0°
Efficiency 94 %
Peak intensity 1.1 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED PrevaLED Brick HP 2x8
FWHM / FWTM 67.0° / 92.0°
Efficiency 92 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED OSLOM 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:

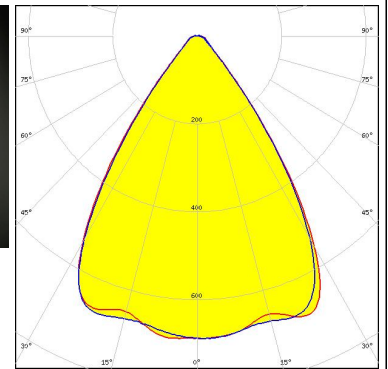
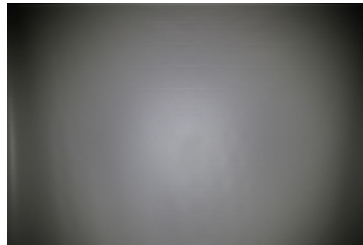


OPTICAL RESULTS (MEASURED):

OSRAM

Opto Semiconductors

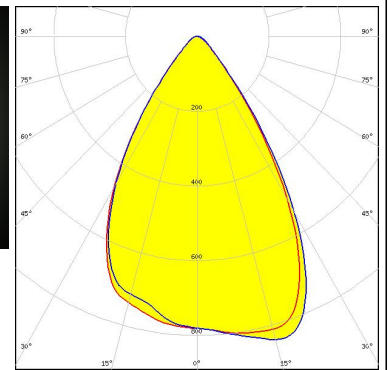
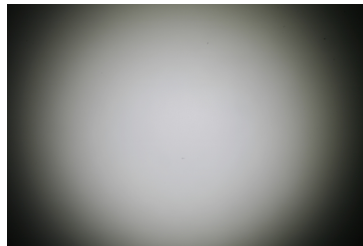
LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 71.0° / 94.0°
Efficiency 94 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

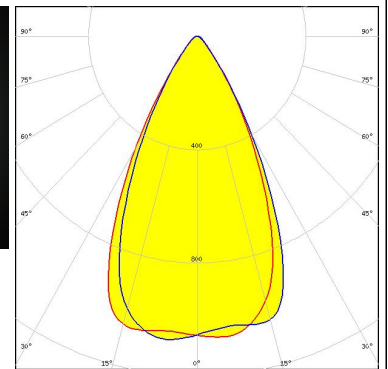
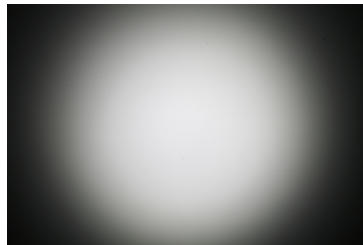
LED OSLON Square PC
FWHM / FWTM 63.0° / 90.0°
Efficiency 91 %
Peak intensity 0.9 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

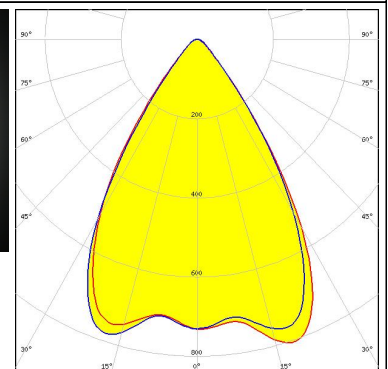
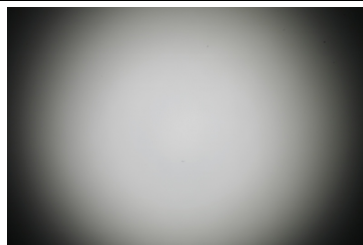
Opto Semiconductors

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

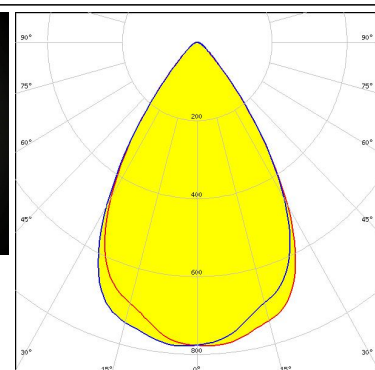
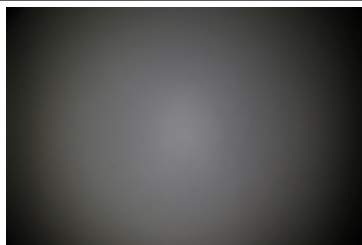
LED LH351A
FWHM / FWTM 68.0° / 91.0°
Efficiency 92 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OPTICAL RESULTS (MEASURED):

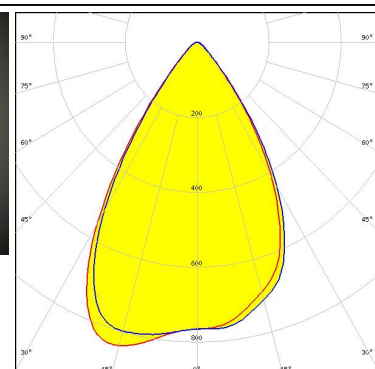
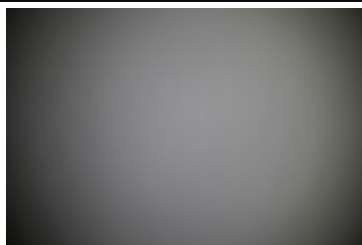
SAMSUNG

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:



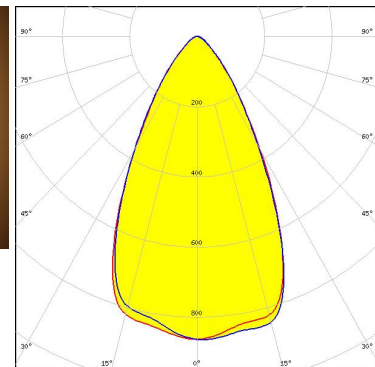
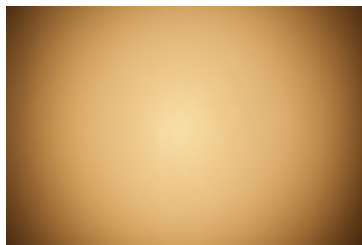
SAMSUNG

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:



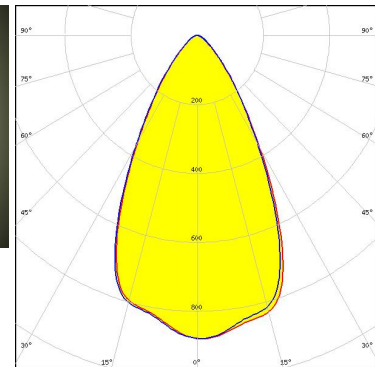
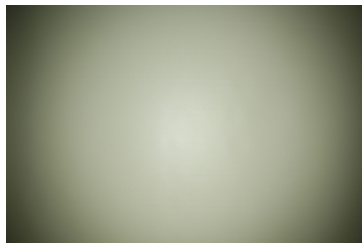
SEOUL SEMICONDUCTOR

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:

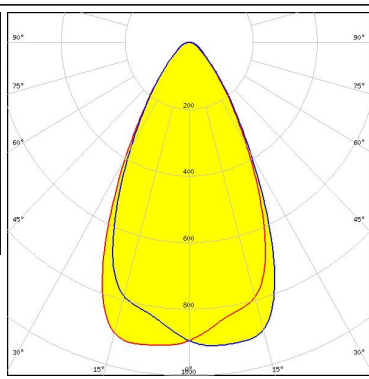
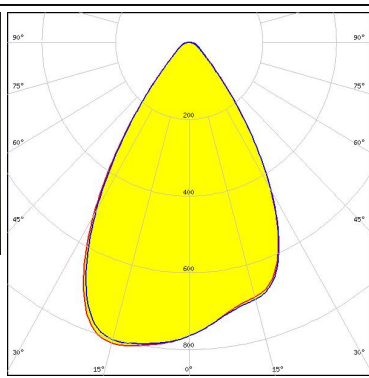
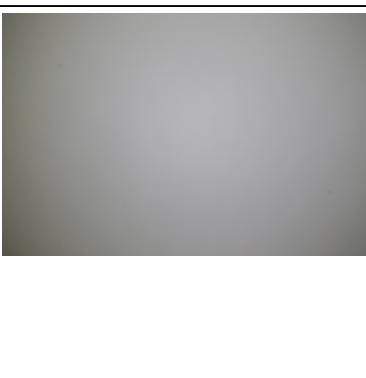
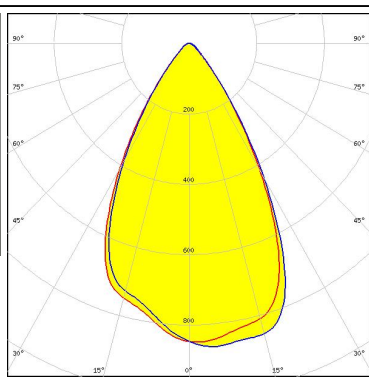
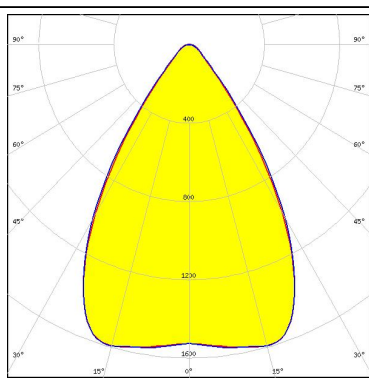


SEOUL SEMICONDUCTOR

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:



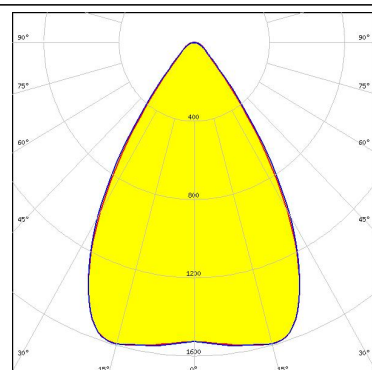
OPTICAL RESULTS (MEASURED):

SEOUL SEMICONDUCTOR LED Z8Y22 FWHM / FWTM 55.0° / 94.0° Efficiency 94 % Peak intensity 1 cd/lm LEDs/each optic 1 Light colour White Required components:		
SEOUL SEMICONDUCTOR 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:		
TOSHIBA Leading Innovation >>> 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:		
TRIDONIC 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:		

OPTICAL RESULTS (MEASURED):

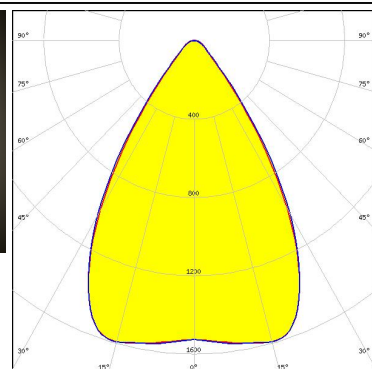
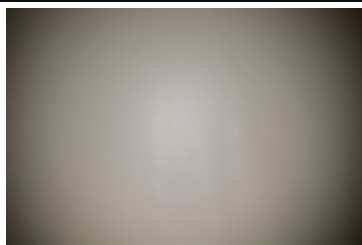
TRIDONIC

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:



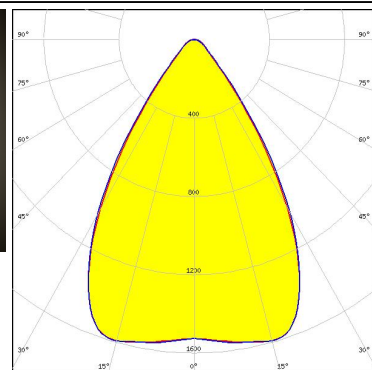
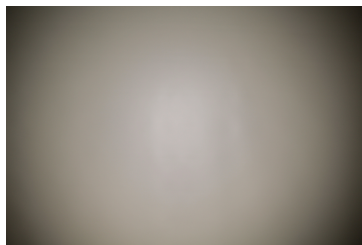
TRIDONIC

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

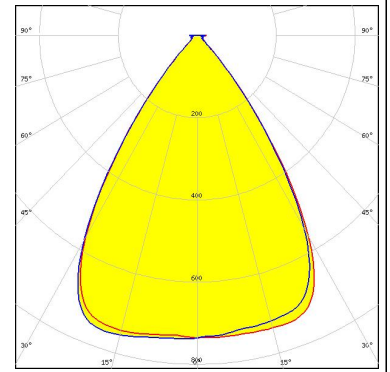
LED RLE G1 49x245mm 4000lm xxx EXC OTD
 FWHM / FWTM 67.0° / 93.0°
 Efficiency 94 %
 Peak intensity 0.9 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



OPTICAL RESULTS (SIMULATED):

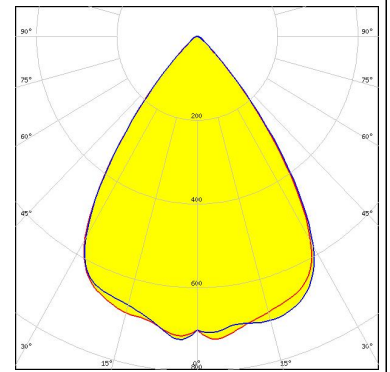


LED XD16
FWHM / FWTM 69.0° / 90.0°
Efficiency 95 %
Peak intensity 0.8 cd/lm
LEDs/each optic 1
Light colour White
Required components:

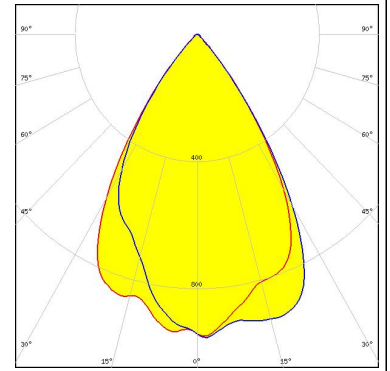


LED XP-G2
FWHM / FWTM 72.0° / 94.0°
Efficiency 92 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:

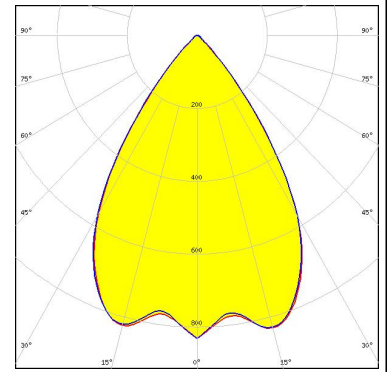
Protective plate, glass



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:

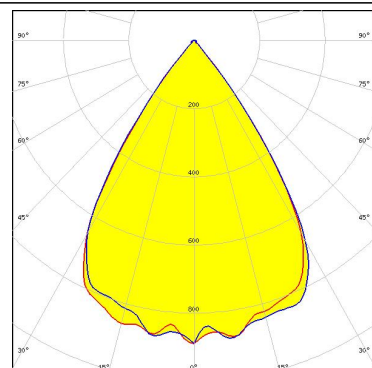


OPTICAL RESULTS (SIMULATED):

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:

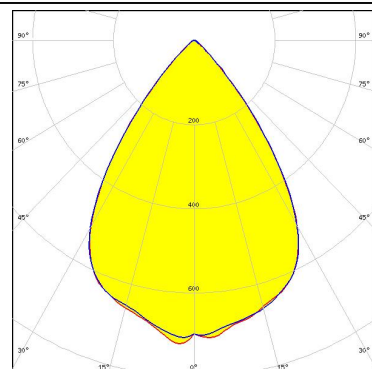


OSRAM

Opto Semiconductors

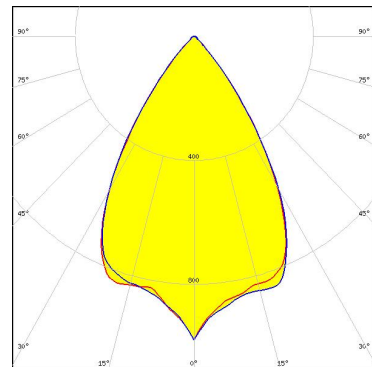
LED OSLOM Square CSSRM2/CSSRM3
FWHM / FWTM 70.0° / 94.0°
Efficiency 88 %
Peak intensity 0.7 cd/lm
LEDs/each optic 1
Light colour White
Required components:

Protective plate, glass



SEOUL SEMICONDUCTOR

LED Z8Y22T
FWHM / FWTM 63.0° / 86.0°
Efficiency 94 %
Peak intensity 1 cd/lm
LEDs/each optic 1
Light colour White
Required components:



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 13
FI-24240 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

Salo, Finland
Hong Kong, China

Distribution Partners

[www.ledil.com/
where_to_buy](http://www.ledil.com/where_to_buy)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Ledil:

[C13232_HB-2X2-WW](#)