

HB-2X2-M

~25° medium beam

TECHNICAL SPECIFICATIONS:

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

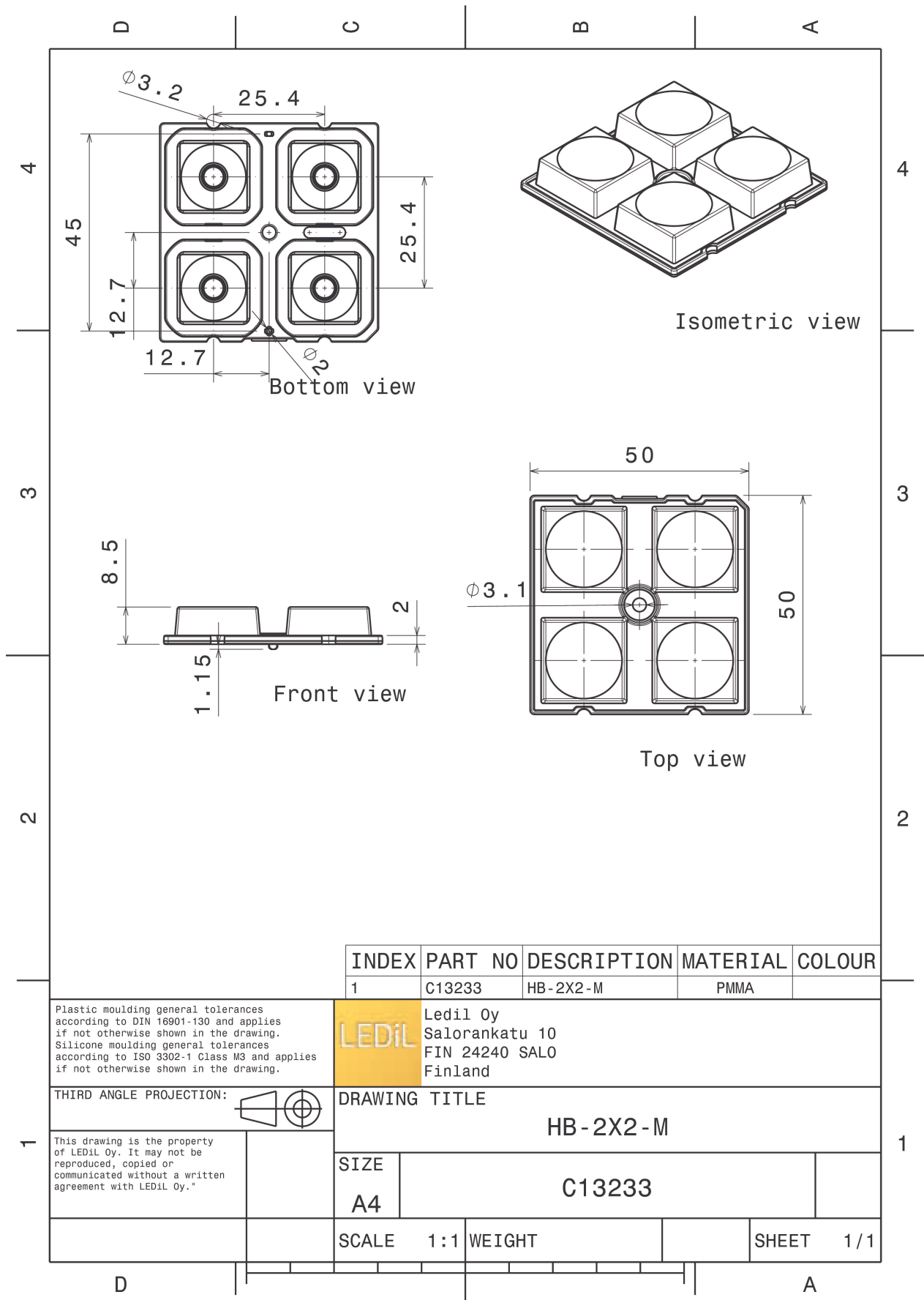
MATERIAL SPECIFICATIONS:

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



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



INDEX	PART NO	DESCRIPTION	MATERIAL	COLOUR
1	C13233	HB-2X2-M	PMMA	

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.

LEDiL LediL Oy
Salorankatu 10
FIN 24240 SALO
Finland

THIRD ANGLE PROJECTION:

DRAWING TITLE
HB-2X2-M


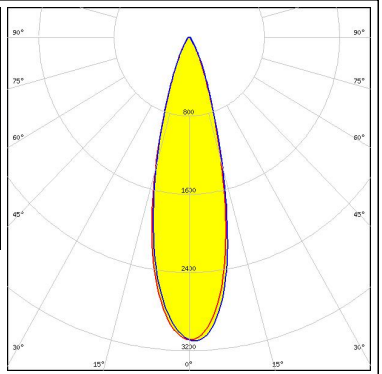

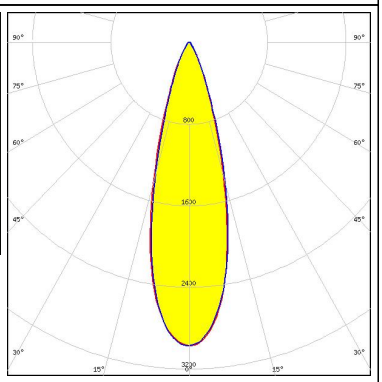

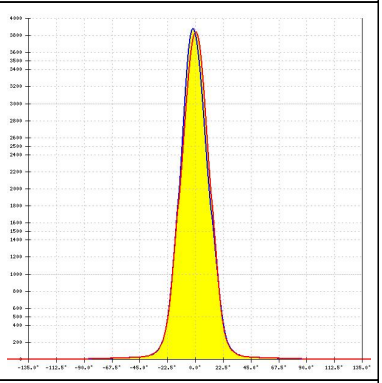

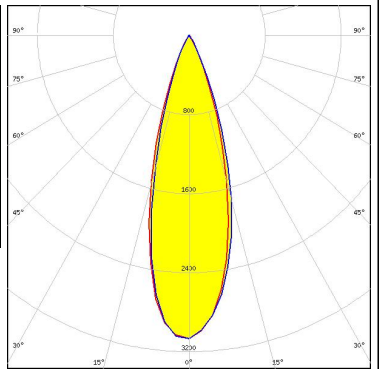
This drawing is the property of LEDiL Oy. It may not be reproduced, copied or communicated without a written agreement with LEDiL Oy."

SIZE
A4 **C13233**

SCALE 1:1 WEIGHT SHEET 1/1

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

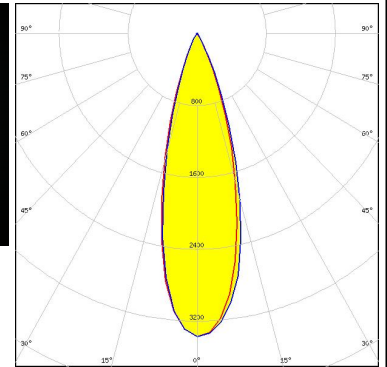
PHOTOMETRIC DATA (MEASURED):

<p>COMET ELECTRONICS</p> <p>LED QUICK FLUX XTP 2x4 xxx LS G5</p> <p>FWHM / FWTM 28.0° / 52.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>COMET ELECTRONICS</p> <p>LED QUICK FLUX XTP 2x6 xxx LS G5</p> <p>FWHM / FWTM 29.0° / 52.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>CREE LED</p> <p>LED XB-D White</p> <p>FWHM / FWTM 26.0° / 47.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>CREE LED</p> <p>LED XP-G</p> <p>FWHM / FWTM 31.0° / 54.0°</p> <p>Efficiency 91 %</p> <p>Peak intensity 3.1 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

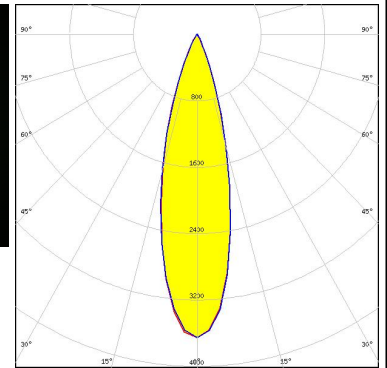
CREE LED

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



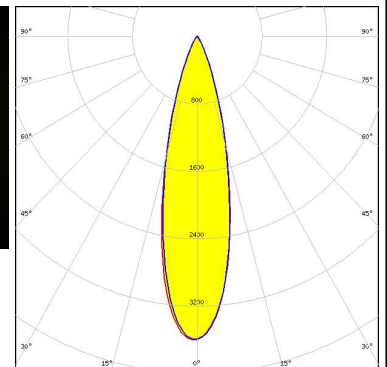
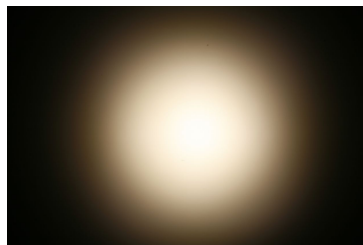
CREE LED

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



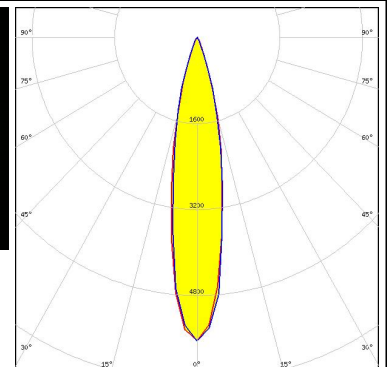
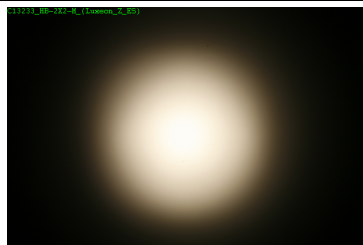
LUMILEDS

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


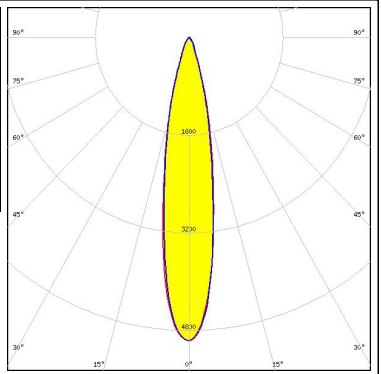

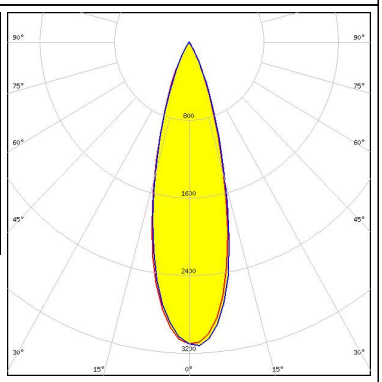

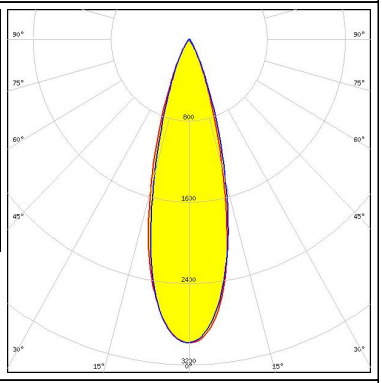

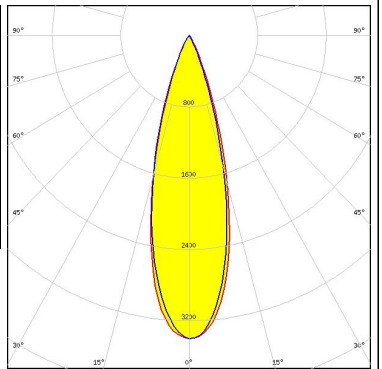


LUMILEDS

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



PHOTOMETRIC DATA (MEASURED):

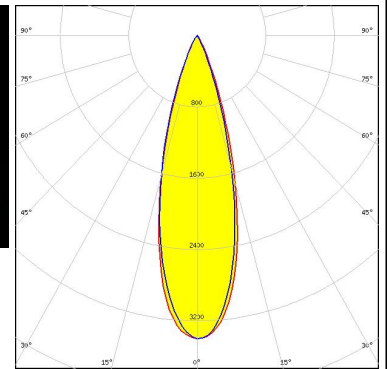
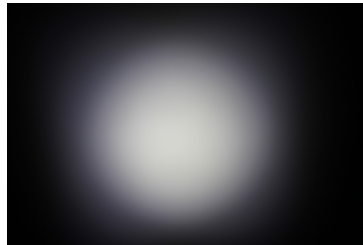
<p>NICHIA</p> <p>LED NVSxxE21A FWHM / FWTM 20.0° / 40.0° Efficiency 94 % Peak intensity 5 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM 29.0° / 52.0° Efficiency 91 % Peak intensity 3.1 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>NICHIA</p> <p>LED NVSxx19B/NVSxx19C FWHM / FWTM 29.0° / 53.0° Efficiency 90 % Peak intensity 3 cd/lm LEDs/each optic 1 Light colour White Required components:</p>		
<p>OSRAM</p> <p>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 White Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

OSRAM

Opto Semiconductors

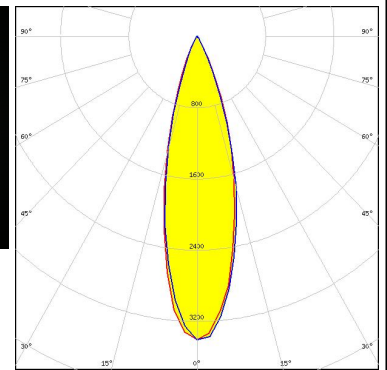
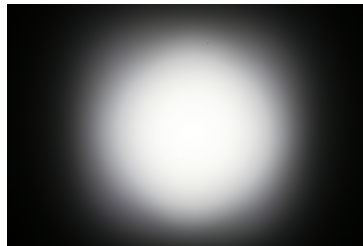
LED OSLON Square CSSRM2/CSSRM3
 FWHM / FWTM 30.0° / 51.0°
 Efficiency 93 %
 Peak intensity 3.4 cd/m
 LEDs/each optic 1
 Light colour White
 Required components:



OSRAM

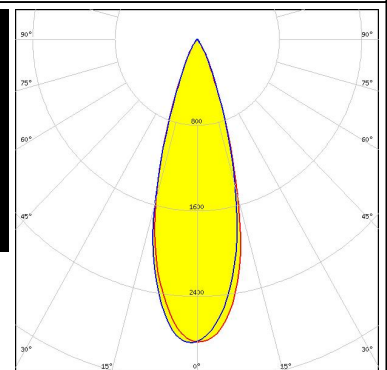
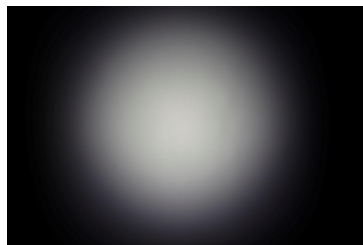
Opto Semiconductors

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



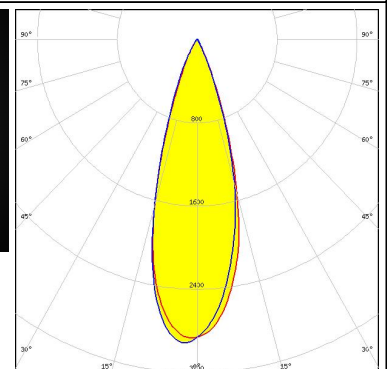
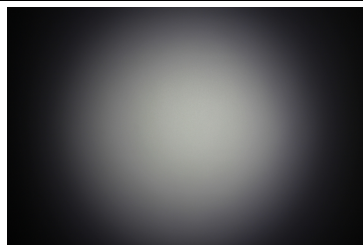
SAMSUNG

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


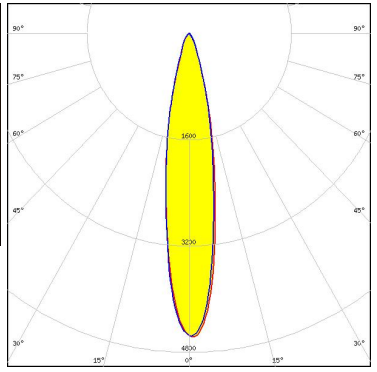

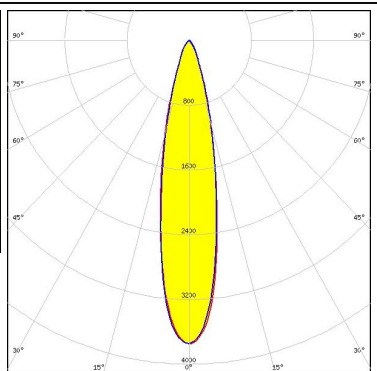

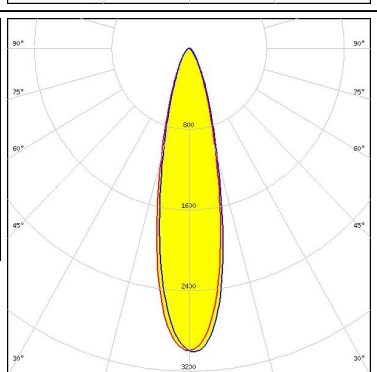

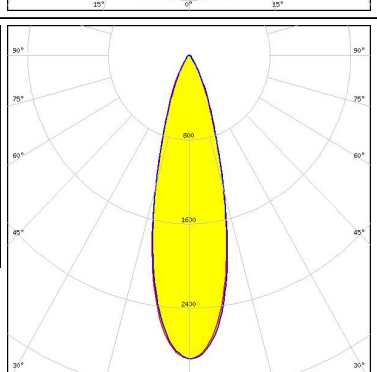


SAMSUNG

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



PHOTOMETRIC DATA (MEASURED):

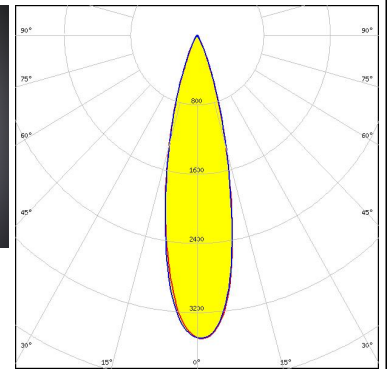
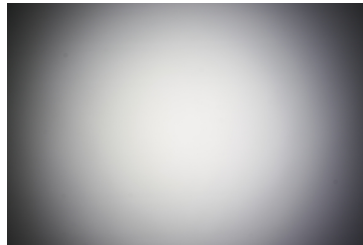
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y15</p> <p>FWHM / FWTM 20.0° / 41.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 4.6 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y19</p> <p>FWHM / FWTM 22.0° / 46.0°</p> <p>Efficiency 89 %</p> <p>Peak intensity 3.8 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22</p> <p>FWHM / FWTM 24.0° / 53.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 3 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		
<p>SEOUL SEMICONDUCTOR</p> <p>LED Z8Y22P</p> <p>FWHM / FWTM 28.0° / 56.0°</p> <p>Efficiency 94 %</p> <p>Peak intensity 2.9 cd/m</p> <p>LEDs/each optic 1</p> <p>Light colour White</p> <p>Required components:</p>		

PHOTOMETRIC DATA (MEASURED):

TOSHIBA

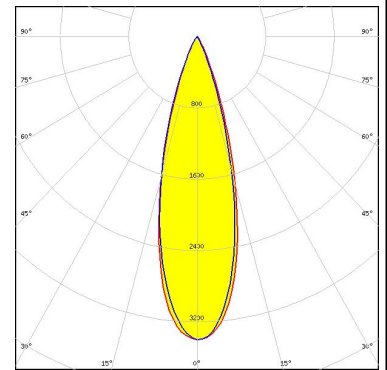
Leading Innovation >>>

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



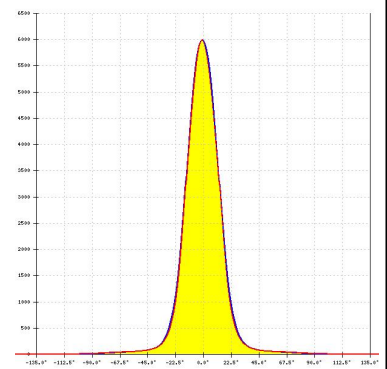
TRIDONIC

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 White
 Required components:



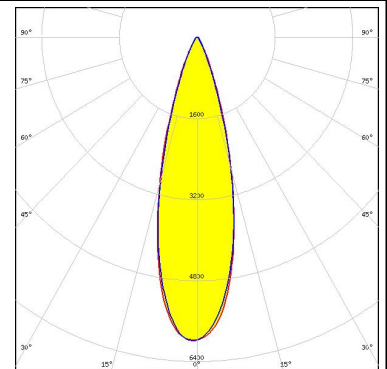
TRIDONIC

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 White
 Required components:



TRIDONIC

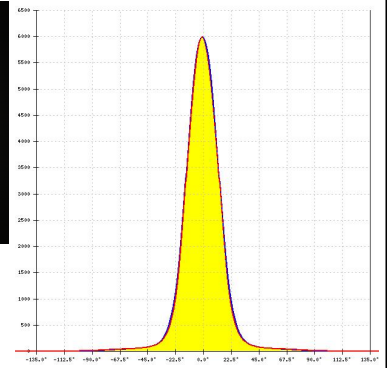
LED RLE G1 49x133mm 2000lm xxx EXC OTD
 FWHM / FWTM 29.0° / 53.0°
 Efficiency 94 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

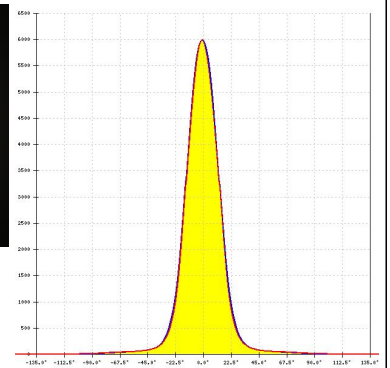
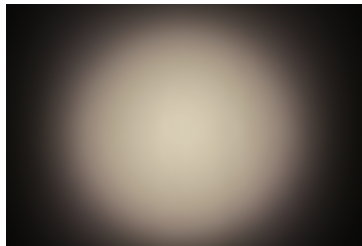
TRIDONIC

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 White
Required components:



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 White
Required components:



PHOTOMETRIC DATA (SIMULATED):

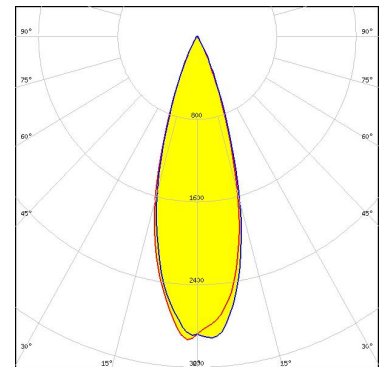
CREE LED

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

CREE LED

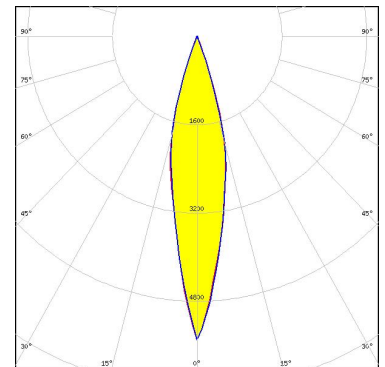
LED XP-G2
 FWHM / FWTM 32.0° / 52.0°
 Efficiency 93 %
 Peak intensity 3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



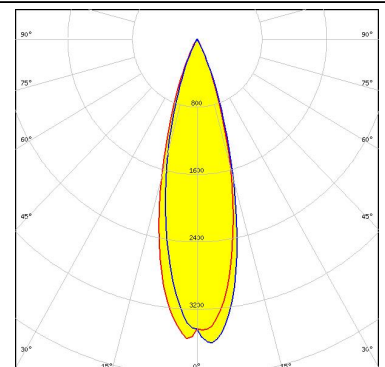
CREE LED

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



LUMILEDS

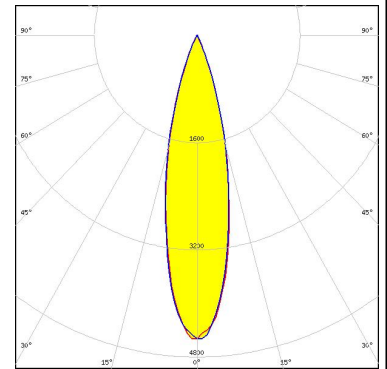
LED LUXEON 3030 2D (Round LES)
 FWHM / FWTM 28.0° / 49.0°
 Efficiency 94 %
 Peak intensity 3.6 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (SIMULATED):

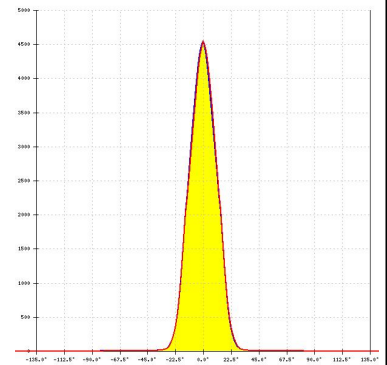
LUMILEDS

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



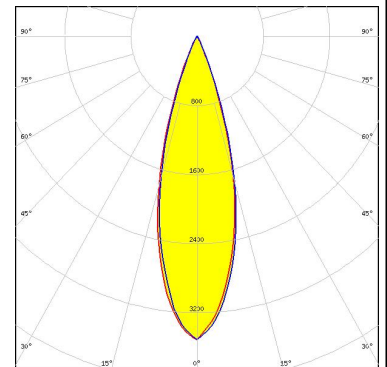
OSRAM

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



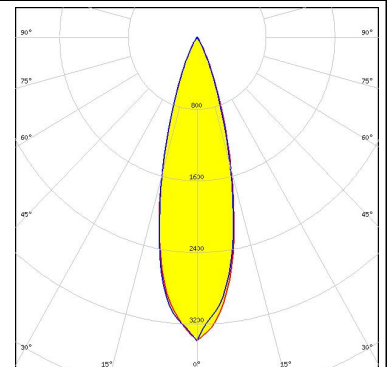
OSRAM

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



SAMSUNG

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



PHOTOMETRIC DATA (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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[LL01ED-AKY24R49](#) [LL01CR-AYG15R49](#) [LL01CR-OT32L06-M2](#) [LL01ZZ-AAA24L49](#) [LL01CR-CEN38L02](#) [LL01ZZ-AAA55L49](#)
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[LL01ED-ALI24R49](#) [LL01CR-AYG38R49](#) [C17171_DAISSY-8X1-SHD-MATT](#) [F16859_LINDA-ZT25](#) [C17295_ILONA-ZOOM](#)
[F16636_LINDA-W60](#) [C17362_DAISSY-7X1-W-D](#) [C17361_DAISSY-7X1-WW-D](#) [10003](#) [10003/15](#) [10048](#) [10049](#) [10108](#) [10510](#)
[F14487_FLORENCE-1R-MAXI-WG](#) [12667](#) [C14165_STRADA-2X2-ME-WIDE2](#) [C14605_HB-2X2-RW](#) [C14642_FLORENCE-1R-UP](#)
[CAY033](#) [CAY046/55](#) [FCX11157_RES-O-90](#) [OS-LRI2015X45S](#) [OSOLRA2015M](#) [PG1C-NX36](#) [PG1C-SX17](#) [PM2A-SXV1](#) [PM2B-NX55-](#)
[AW](#) [PM6A-FN25](#) [FC2231-0000-0050-L](#) [FC2231-0000-0100-L](#) [C14116_STRADA-2X2-PX](#)