

HB-2X2-WWW

~100° wide beam

TECHNICAL SPECIFICATIONS:

Dimensions	50.0 x 50.0 mm
Height	10 mm
Fastening	tape, screw
ROHS compliant	yes ⓘ

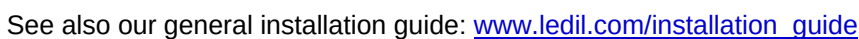
MATERIAL SPECIFICATIONS:

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

ORDERING INFORMATION:

Component	Qty in box	MOQ	MPQ	Box weight (kg)
C14724_HB-2X2-WWW » Box size: 480 x 280 x 300 mm	800	160	160	11.7

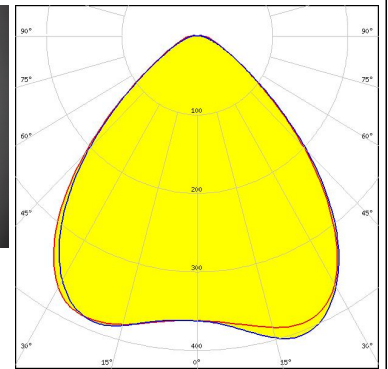
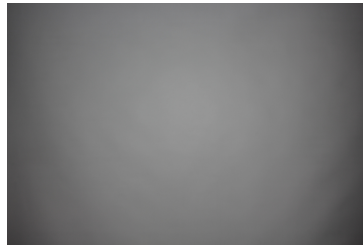




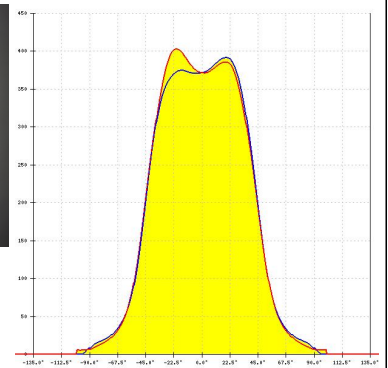
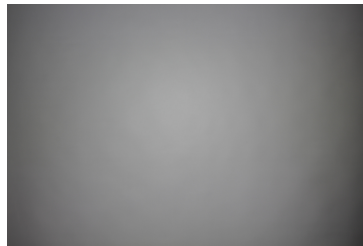
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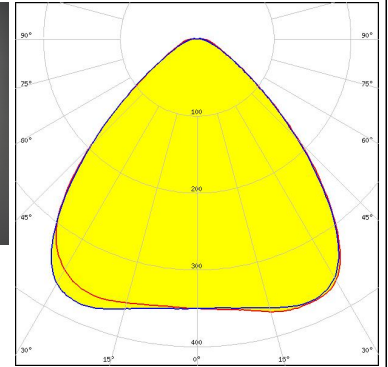
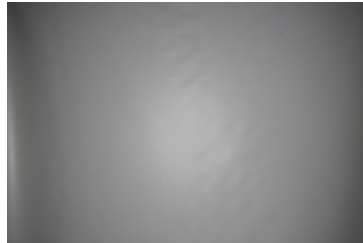
LED Bridgelux SMD 5050
 FWHM / FWTM 94.0° / 133.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



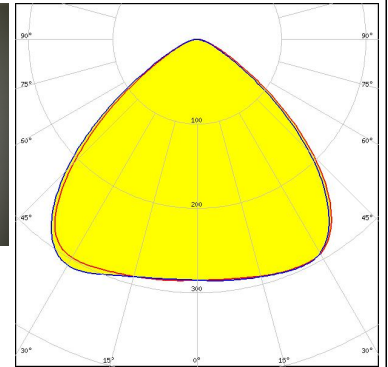
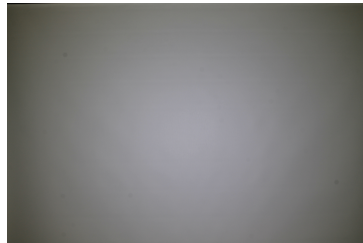
LED XD16
 FWHM / FWTM 92.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 4
 Light colour White
 Required components:



LED XD16
 FWHM / FWTM 93.0° / 132.0°
 Efficiency 91 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XHP35 HD
 FWHM / FWTM 101.0° / 132.0°
 Efficiency 79 %
 Peak intensity 0.3 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



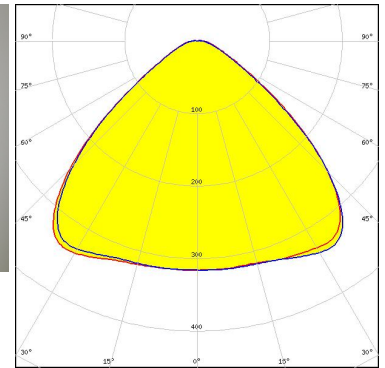
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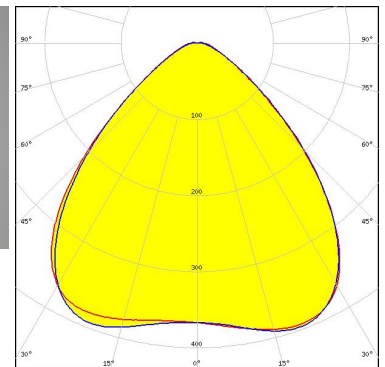
LED XM-L3
FWHM / FWTM 97.0° / 140.0°
Efficiency 91 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



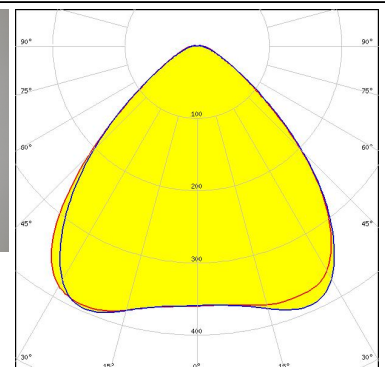
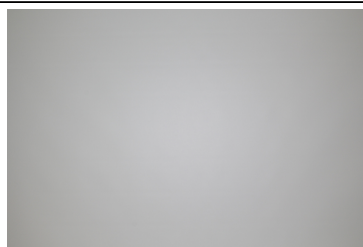
LED XP-G2
FWHM / FWTM 106.0° / 144.0°
Efficiency 92 %
Peak intensity 0.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED LUXEON 5050 Round LES
FWHM / FWTM 93.0° / 133.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



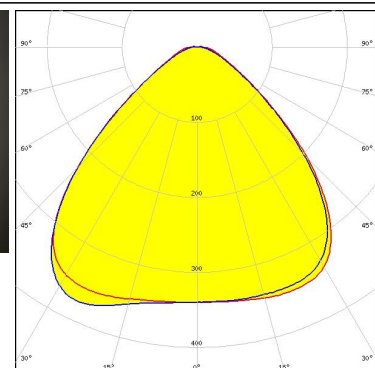
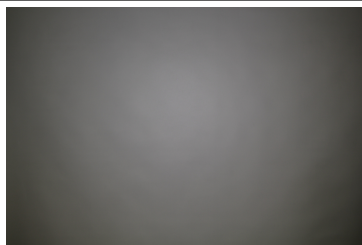
LED LUXEON MZ
FWHM / FWTM 94.0° / 131.0°
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



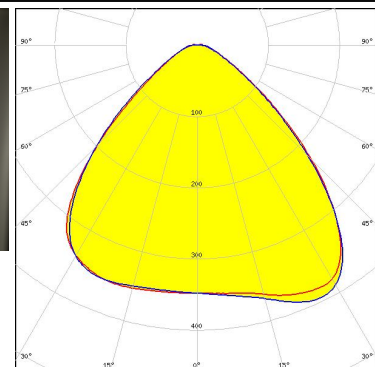
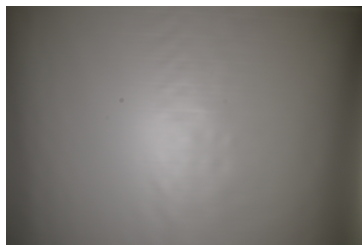
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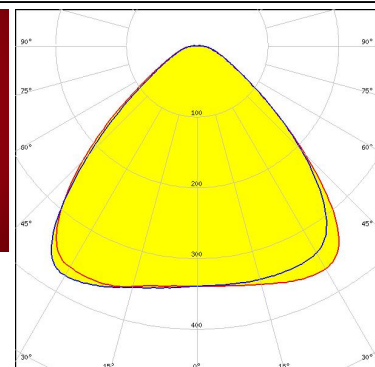
LED LUXEON V
FWHM / FWTM 96.0° / 137.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



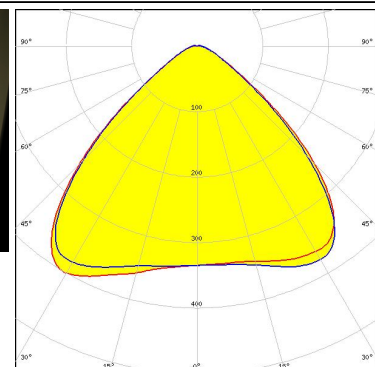
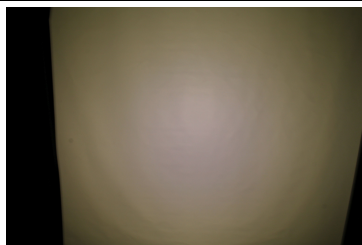
LED LUXEON V2
FWHM / FWTM 95.0° / 134.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED SST-10-B130
FWHM / FWTM 96.0° / 138.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour Deep Red
Required components:



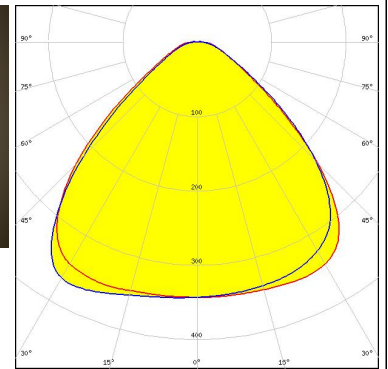
LED RecLED 122x50mm 1900lm 730 2x4 Opt G1
FWHM / FWTM 96.0° / 126.0°
Efficiency 95 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



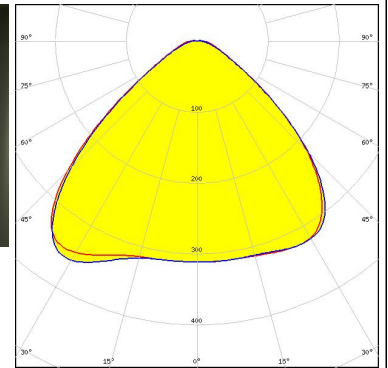
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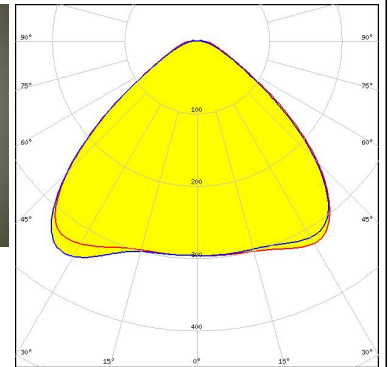
LED NVSW219F
FWHM / FWTM 97.0° / 139.0°
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



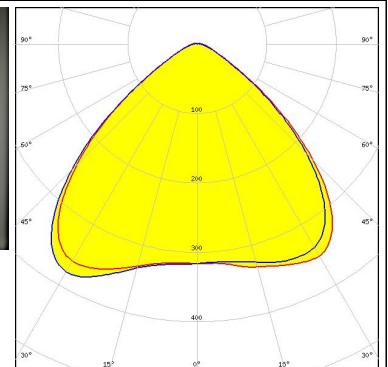
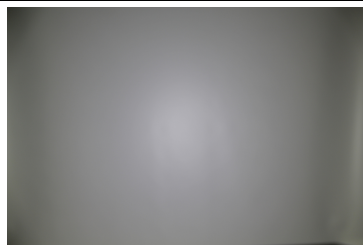
LED NVSW219F
FWHM / FWTM 102.0° / 140.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LED NVSW319B
FWHM / FWTM 104.0° / 144.0°
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



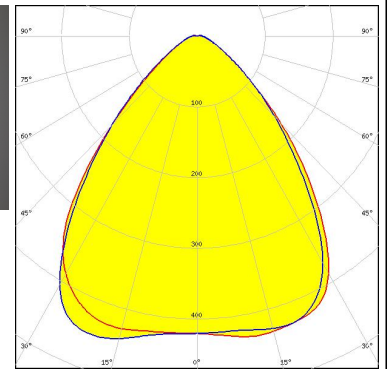
LED NVSW3x9A
FWHM / FWTM 101.0° / 130.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

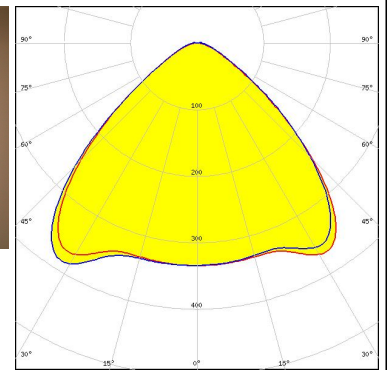
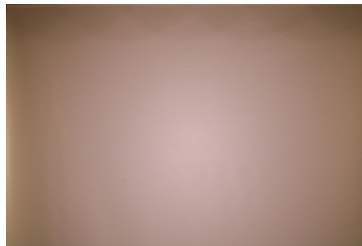


LED NVSxE21A
FWHM / FWTM 85.0° / 124.0°
Efficiency 92 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



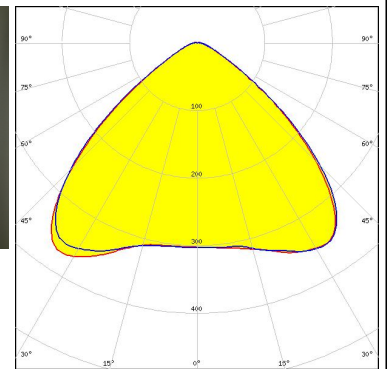
OSRAM

LED PL-BRICK HP 3800 2x8 SSG
FWHM / FWTM 98.0° / 131.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

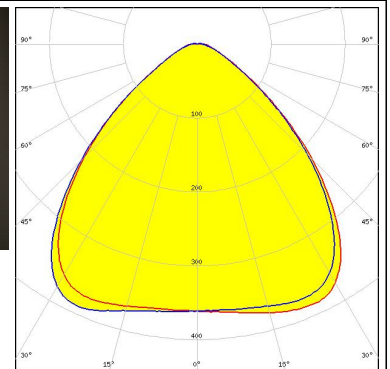
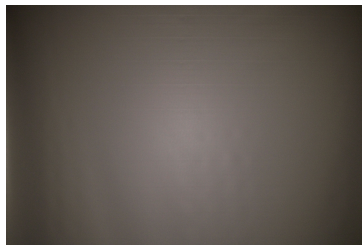
LED PrevaLED Brick HP 2x8
FWHM / FWTM 104.0° / 132.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

LED OSCONIQ P 3737 (3W version)
FWHM / FWTM 94.0° / 132.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

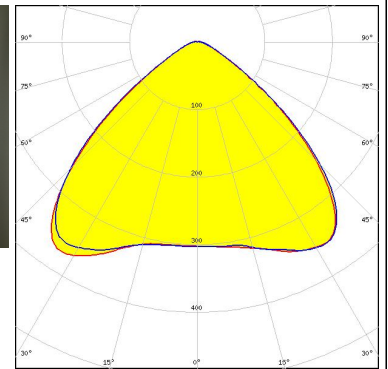


PHOTOMETRIC DATA (MEASURED):

OSRAM

Opto Semiconductors

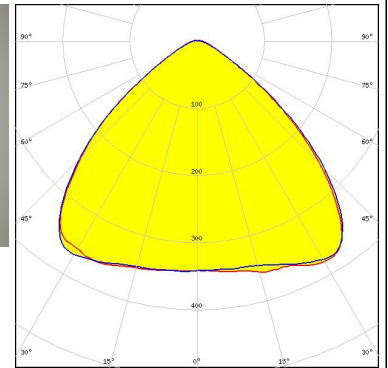
LED OSLON Square CSSRM2/CSSRM3
FWHM / FWTM 104.0° / 132.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

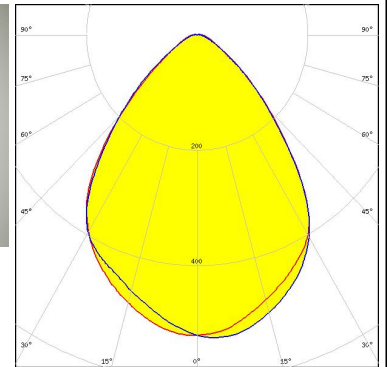
LED OSLON Square PC
FWHM / FWTM 105.0° / 136.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

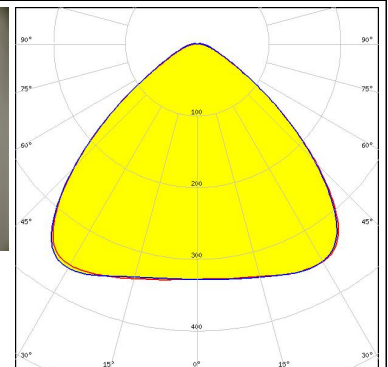
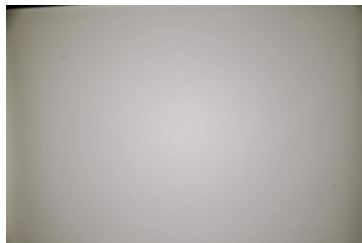
Opto Semiconductors

LED OSLON SSL 80
FWHM / FWTM 82.0° / 124.0°
Efficiency 93 %
Peak intensity 0.5 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHILIPS

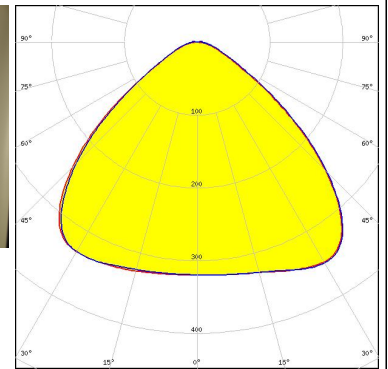
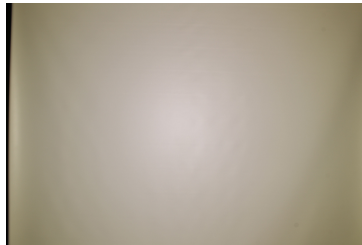
LED Fortimo FastFlex LED 2x8 DA G4
FWHM / FWTM 104.0° / 140.0°
Efficiency 92 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

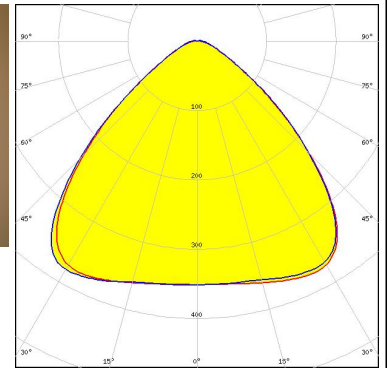
PHILIPS

LED Fortimo FastFlex LED 2x8 DA G4+
 FWHM / FWTM 101.0° / 136.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



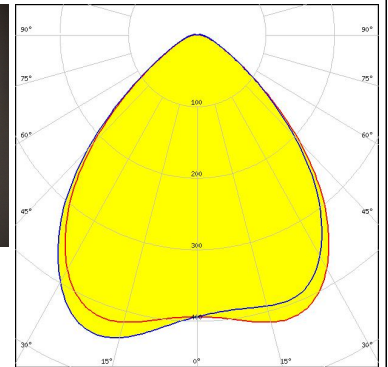
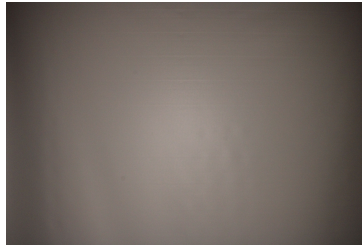
PHILIPS

LED Fortimo FastFlex LED 2x8 DA G5
 FWHM / FWTM 95.0° / 129.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



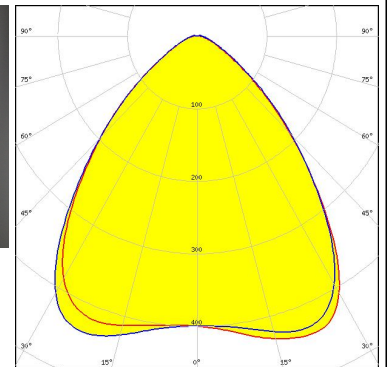
PHILIPS

LED Fortimo FastFlex LED 2x8 DA HE
 FWHM / FWTM 89.0° / 126.0°
 Efficiency 96 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SAMSUNG

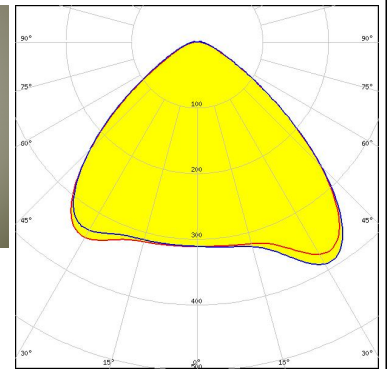
LED HiLOM RC12 Z (LH181B)
 FWHM / FWTM 86.0° / 124.0°
 Efficiency 96 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

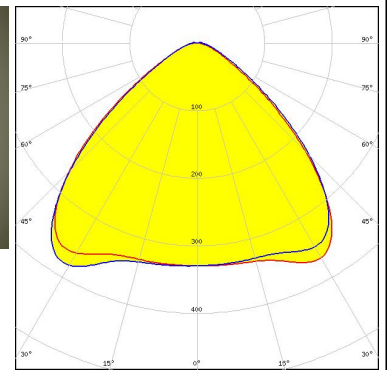
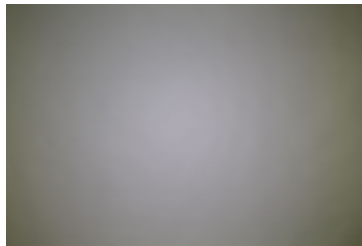
SAMSUNG

LED HiLOM RH12 Z (LH351C)
FWHM / FWTM 98.0° / 133.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



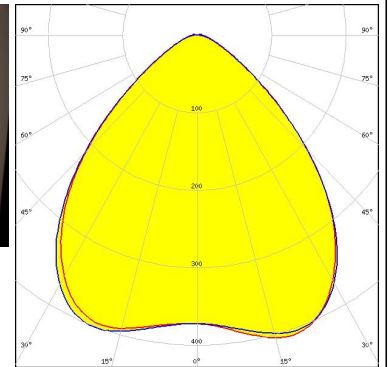
SAMSUNG

LED HiLOM RH16 (LH351C)
FWHM / FWTM 102.0° / 136.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



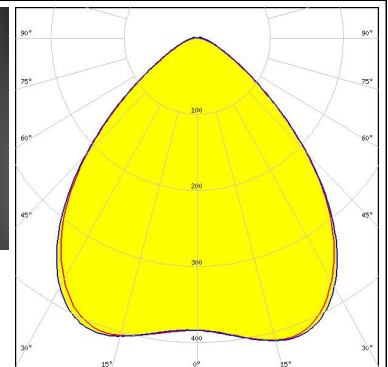
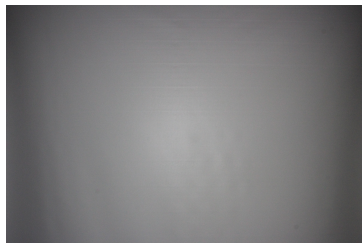
SAMSUNG

LED HiLOM RM12 Z (LH502C)
FWHM / FWTM 91.0° / 129.0°
Efficiency 95 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



SAMSUNG

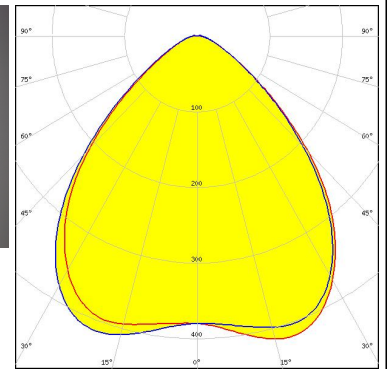
LED HiLOM RM16 Z (LH502C)
FWHM / FWTM 91.0° / 129.0°
Efficiency 95 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

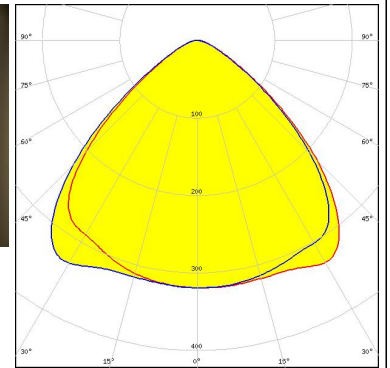
SAMSUNG

LED HiLOM RM8 Z (LH502C)
FWHM / FWTM 91.0° / 129.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



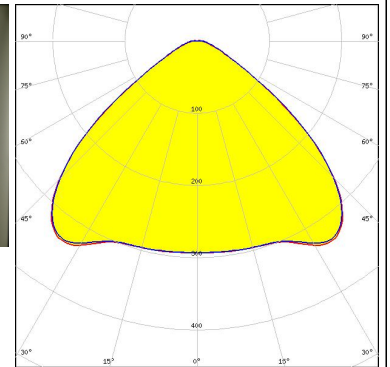
SAMSUNG

LED LH351B
FWHM / FWTM 102.0° / 135.0°
Efficiency 81 %
Peak intensity 0.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:



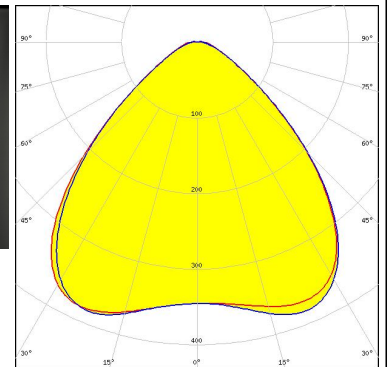
SAMSUNG

LED LH351D
FWHM / FWTM 107.0° / 139.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



SAMSUNG

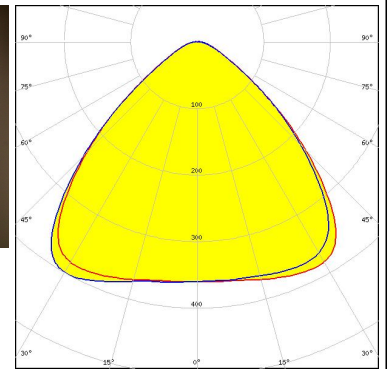
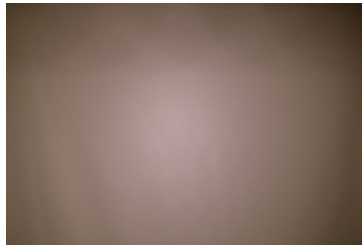
LED LH508A
FWHM / FWTM 95.0° / 136.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

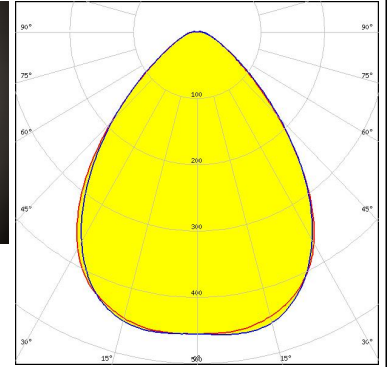


LED LED-Pa-L15c2W11c2-xxx-C050-01
 FWHM / FWTM 94.0° / 129.0°
 Efficiency 95 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



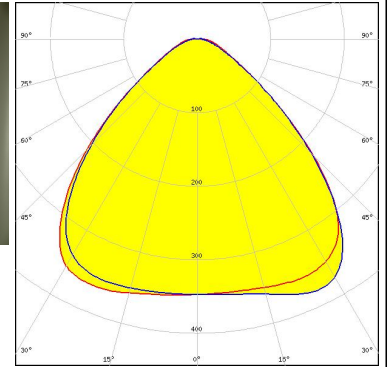
SEOUL SEMICONDUCTOR

LED 2x2 Y22 module - SMJQ-D48W16AA-XX
 FWHM / FWTM 83.0° / 126.0°
 Efficiency 93 %
 Peak intensity 0.5 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



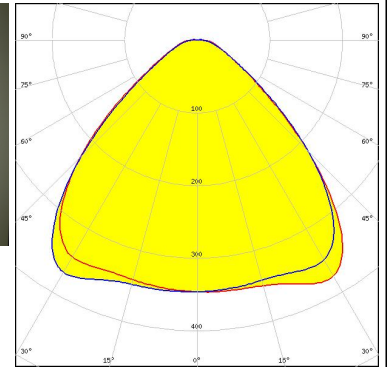
SEOUL SEMICONDUCTOR

LED Z5M3
 FWHM / FWTM 96.0° / 137.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SEOUL SEMICONDUCTOR

LED Z5M4
 FWHM / FWTM 95.0° / 138.0°
 Efficiency 92 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



PHOTOMETRIC DATA (MEASURED):

 SEOUL SEMICONDUCTOR LED Z8Y19 FWHM / FWTM 83.0° / 126.0° Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 4 Light colour White Required components:		
 SEOUL SEMICONDUCTOR LED Z8Y19 FWHM / FWTM 83.0° / 126.0° Efficiency 93 % Peak intensity 0.5 cd/lm LEDs/each optic 4 Light colour White Required components:		
 SEOUL SEMICONDUCTOR LED Z8Y22 FWHM / FWTM 85.0° / 126.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:		
 SEOUL SEMICONDUCTOR LED Z8Y22P FWHM / FWTM 93.0° / 134.0° Efficiency 94 % Peak intensity 0.4 cd/lm LEDs/each optic 1 Light colour White Required components:		

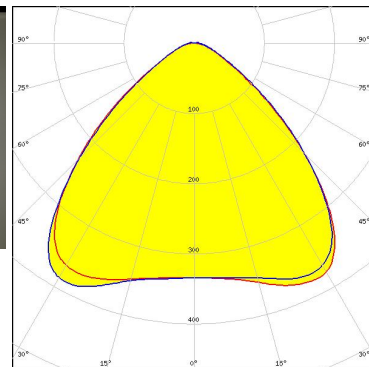
PHOTOMETRIC DATA (MEASURED):

TRIDONIC

LED RLE 2x4 2000lm HP EXC2 OTD
FWHM / FWTM 99.0° / 134.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

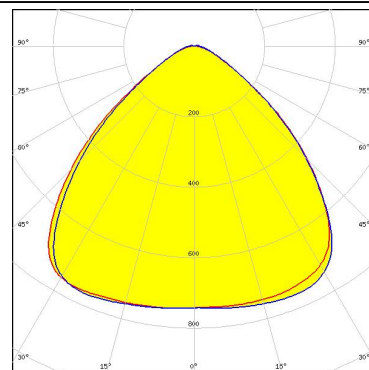
TRIDONIC

LED RLE 2x8 4000lm HP EXC2 OTD
FWHM / FWTM 99.0° / 134.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



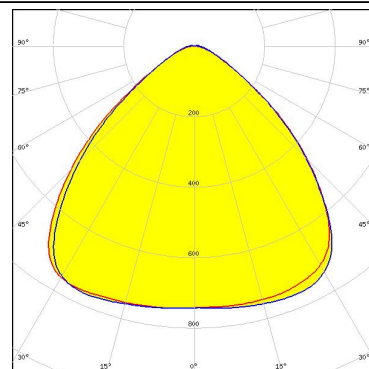
TRIDONIC

LED RLE G1 49x121mm 2000lm xxx EXC OTD
FWHM / FWTM 98.0° / 132.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



TRIDONIC

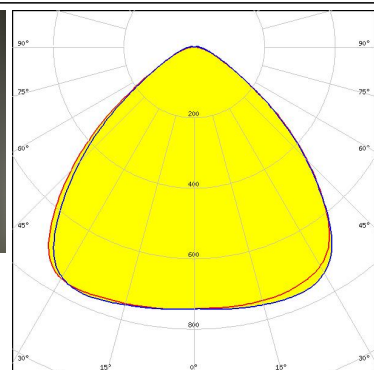
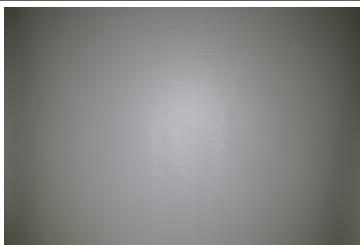
LED RLE G1 49x133mm 2000lm xxx EXC OTD
FWHM / FWTM 98.0° / 132.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (MEASURED):

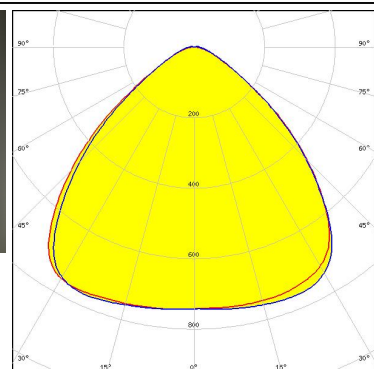
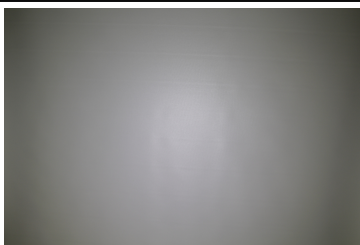
TRIDONIC

LED RLE G1 49x223mm 4000lm xxx EXC OTD
FWHM / FWTM 98.0° / 132.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



TRIDONIC

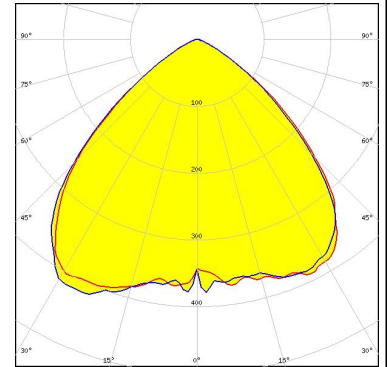
LED RLE G1 49x245mm 4000lm xxx EXC OTD
FWHM / FWTM 98.0° / 132.0°
Efficiency 93 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



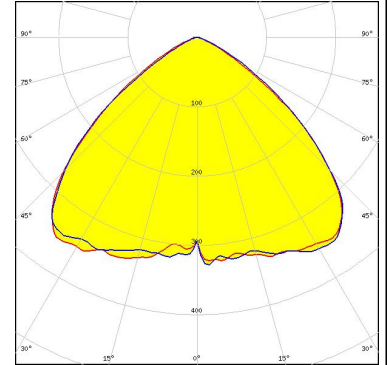
PHOTOMETRIC DATA (SIMULATED):



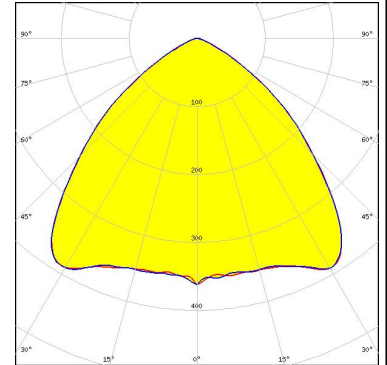
LED J Series 5050 Round LES
 FWHM / FWTM 98.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



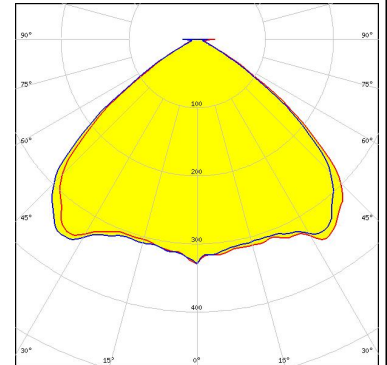
LED XHP35 HI
 FWHM / FWTM 99.0° / 133.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XP-E2
 FWHM / FWTM 98.0° / 128.0°
 Efficiency 96 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XP-G2 HE
 FWHM / FWTM 106.0° / 126.0°
 Efficiency 93 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

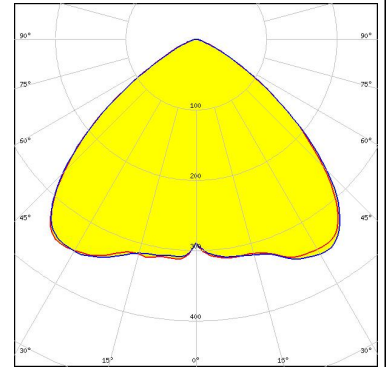


PHOTOMETRIC DATA (SIMULATED):

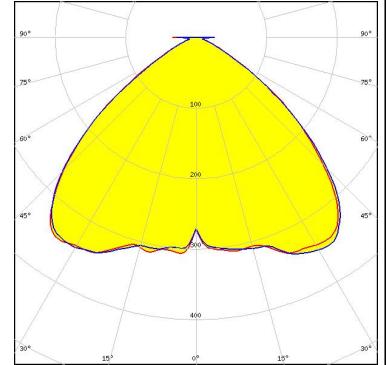


LED XP-G3
 FWHM / FWTM 96.0° / 130.0°
 Efficiency 91 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

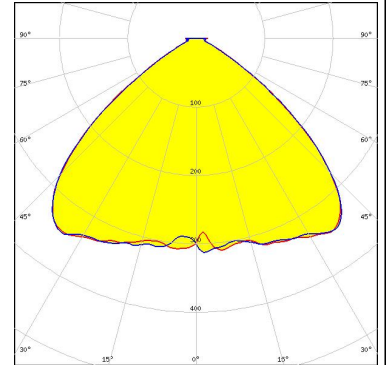
Protective plate, glass



LED XP-G3
 FWHM / FWTM 98.0° / 132.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

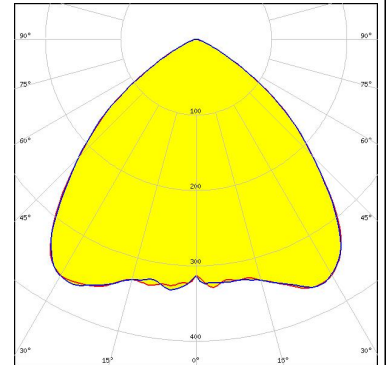


LED XP-L2
 FWHM / FWTM 104.0° / 129.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



LED XT-E
 FWHM / FWTM 96.0° / 126.0°
 Efficiency 89 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

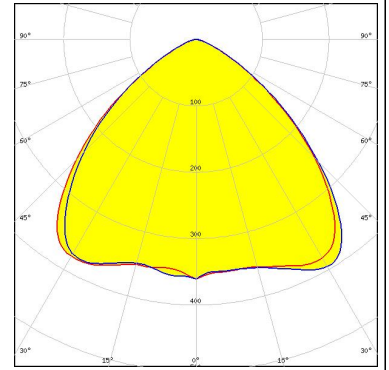
Protective plate, glass



PHOTOMETRIC DATA (SIMULATED):

LUMILEDS

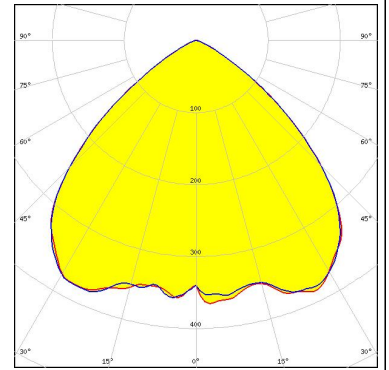
LED LUXEON 3535L
FWHM / FWTM 92.0° / 128.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



LUMILEDS

LED LUXEON 5050 Square LES
FWHM / FWTM 98.0° / 123.0°
Efficiency 90 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

Protective plate, glass

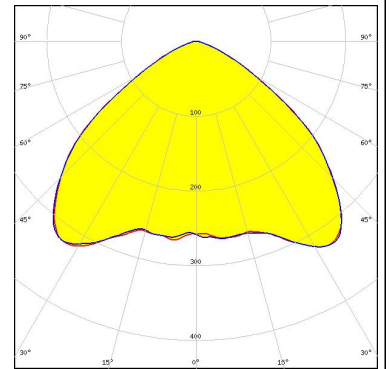


LUMILEDS

LED LUXEON 5050 Square LES
FWHM / FWTM 98.0° / 126.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

LUMILEDS

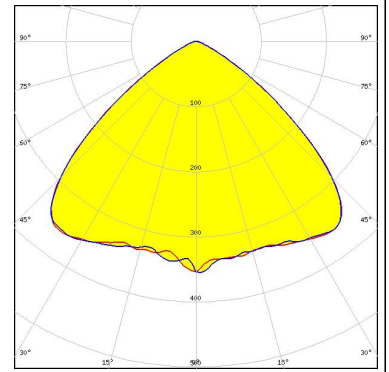
LED LUXEON C
FWHM / FWTM 108.0° / 140.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHOTOMETRIC DATA (SIMULATED):

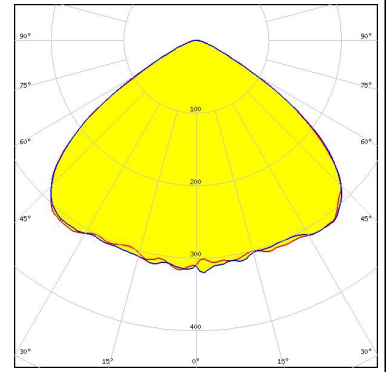
LUMILEDS

LED LUXEON HL2X
FWHM / FWTM 104.0° / 126.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



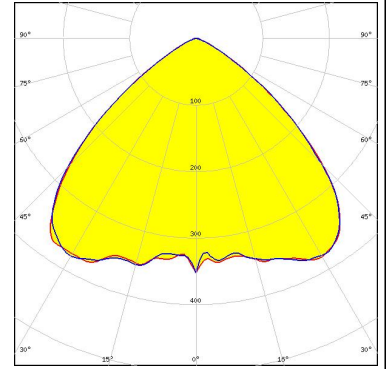
LUMILEDS

LED LUXEON T
FWHM / FWTM 112.0° / 135.0°
Efficiency 92 %
Peak intensity 0.3 cd/lm
LEDs/each optic 1
Light colour White
Required components:



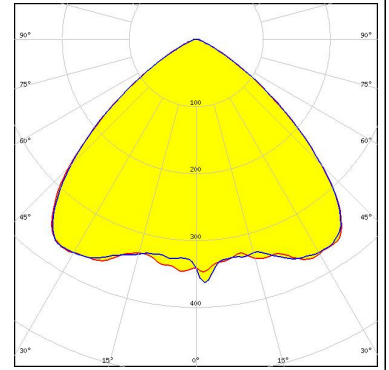
NICHIA

LED NV4WB35AM
FWHM / FWTM 100.0° / 124.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



NICHIA

LED NVSxx19B/NVSxx19C
FWHM / FWTM 100.0° / 127.0°
Efficiency 95 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



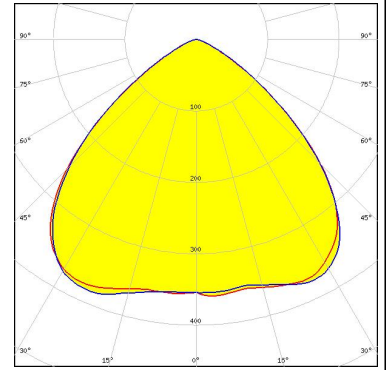
PHOTOMETRIC DATA (SIMULATED):

OSRAM

Opto Semiconductors

LED Duris S8
FWHM / FWTM 100.0° / 125.0°
Efficiency 91 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

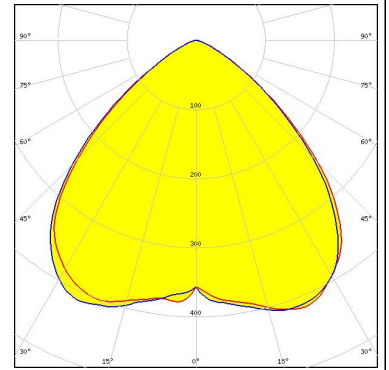
Protective plate, glass



OSRAM

Opto Semiconductors

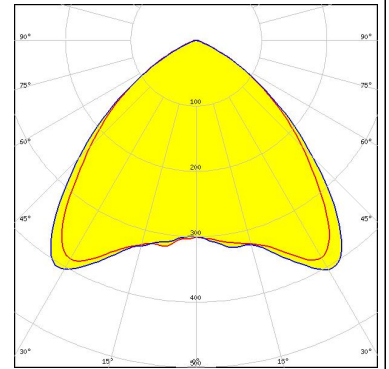
LED Duris S8
FWHM / FWTM 92.0° / 126.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

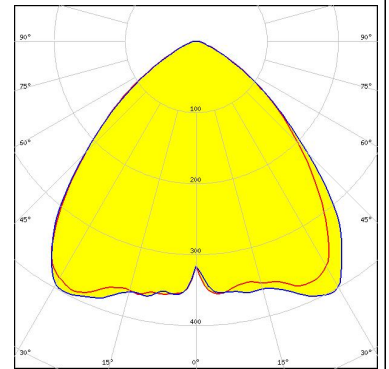
LED OSCONIQ P 3030
FWHM / FWTM 96.0° / 130.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

LED OSCONIQ P 3737 (2W version)
FWHM / FWTM 90.0° / 130.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

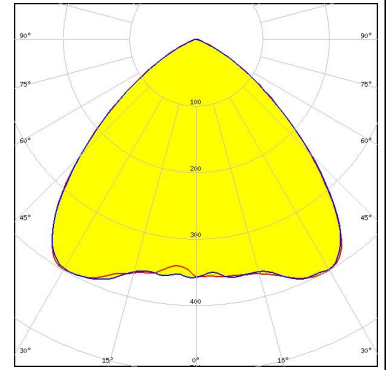


PHOTOMETRIC DATA (SIMULATED):

OSRAM

Opto Semiconductors

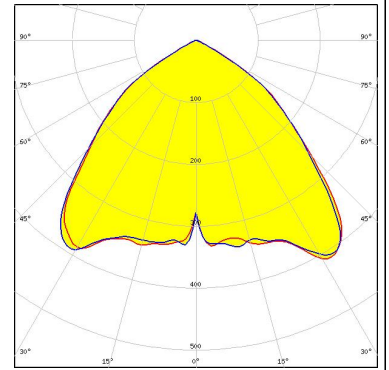
LED OSCONIQ P 3737 Flat
FWHM / FWTM 96.0° / 126.0°
Efficiency 96 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

Opto Semiconductors

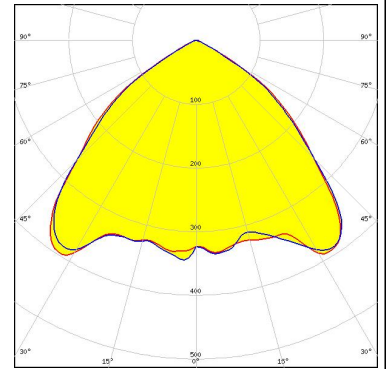
LED OSLON Square Flat
FWHM / FWTM 97.0° / 123.0°
Efficiency 97 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



OSRAM

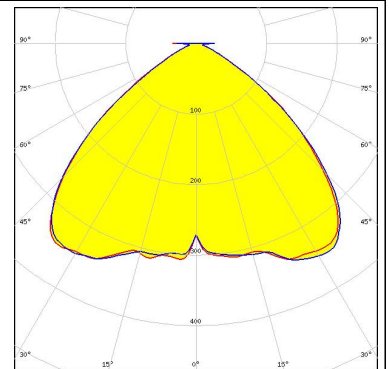
Opto Semiconductors

LED OSTAR Projection Compact (Kx.CSLNM1.xx)
FWHM / FWTM 100.0° / 124.0°
Efficiency 97 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:



PHILIPS

LED Fortimo FastFlex LED 2x8 DAX G4
FWHM / FWTM 98.0° / 132.0°
Efficiency 94 %
Peak intensity 0.4 cd/lm
LEDs/each optic 1
Light colour White
Required components:

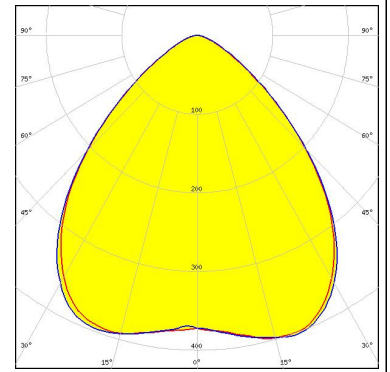


PHOTOMETRIC DATA (SIMULATED):

SAMSUNG

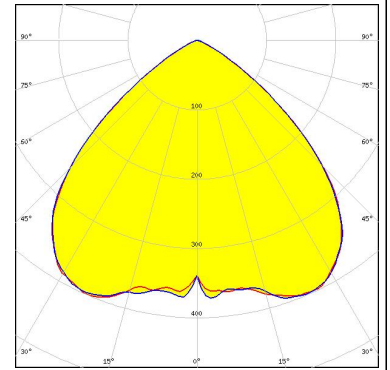
LED HiLOM RM16 Z (LH502C)
 FWHM / FWTM 90.0° / 127.0°
 Efficiency 88 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:

Protective plate, glass



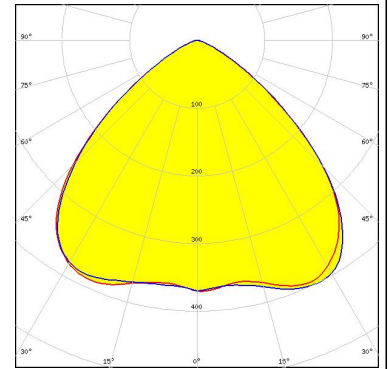
SEOUL SEMICONDUCTOR

LED MJT 5050
 FWHM / FWTM 98.0° / 122.0°
 Efficiency 95 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



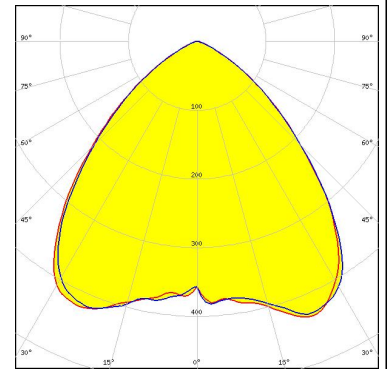
SEOUL SEMICONDUCTOR

LED SEOUL DC 5050 6V
 FWHM / FWTM 94.0° / 126.0°
 Efficiency 94 %
 Peak intensity 0.4 cd/lm
 LEDs/each optic 1
 Light colour White
 Required components:



SEOUL SEMICONDUCTOR

LED Z8Y22T
 FWHM / FWTM 94.0° / 131.0°
 Efficiency 94 %
 Peak intensity 0.5 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.

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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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